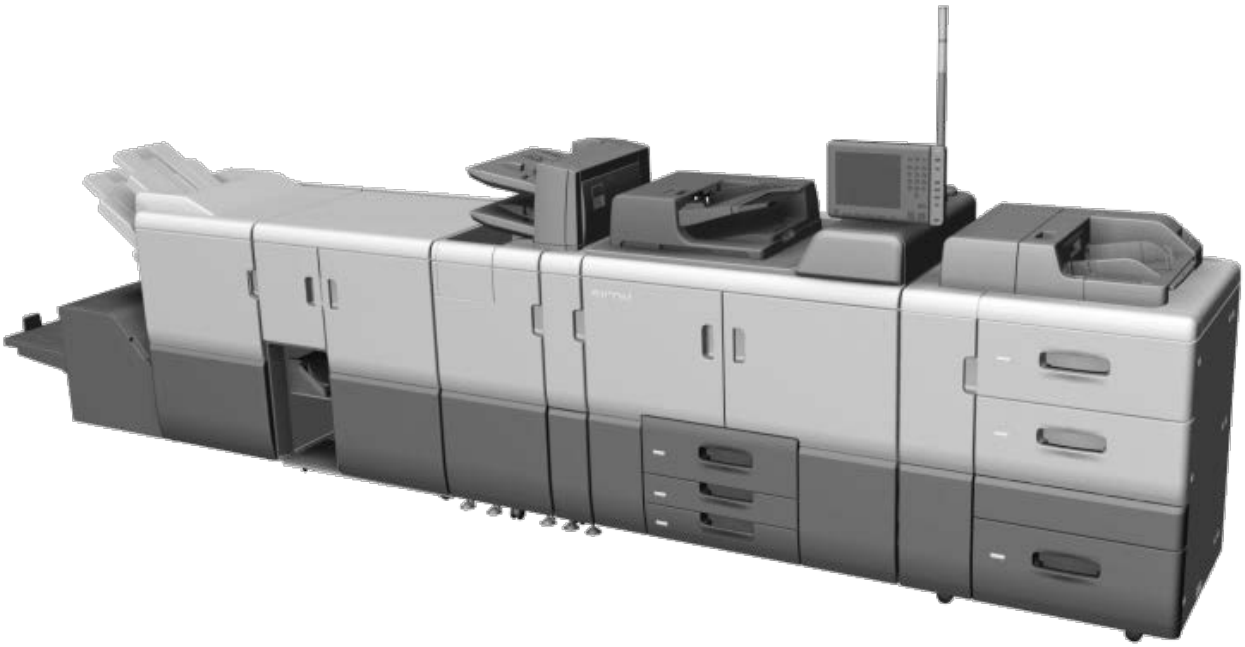
RICOH UNIVERSITY
Learning ◆ Knowledge ◆ Performance



D179/D180/D181
SERVICE MANUAL

LANIER RICOH savin

It is the reader's responsibility when discussing the information contained within this document to maintain a level of confidentiality that is in the best interest of Ricoh Americas Corporation and its member companies.

NO PART OF THIS DOCUMENT MAY BE REPRODUCED IN ANY FASHION AND DISTRIBUTED WITHOUT THE PRIOR PERMISSION OF RICOH AMERICAS CORPORATION.

All product names, domain names or product illustrations, including desktop images, used in this document are trademarks, registered trademarks or the property of their respective companies.
They are used throughout this book in an informational or editorial fashion only and for the benefit of such companies. No such use, or the use of any trade name, or web site is intended to convey endorsement or other affiliation with Ricoh products.

© 2013 RICOH Americas Corporation. All rights reserved.

WARNING

The Service Manual contains information regarding service techniques, procedures, processes and spare parts of office equipment distributed by Ricoh Americas Corporation. Users of this manual should be either service trained or certified by successfully completing a Ricoh Technical Training Program.

Untrained and uncertified users utilizing information contained in this service manual to repair or modify Ricoh equipment risk personal injury, damage to property or loss of warranty protection.

Ricoh Americas Corporation

LEGEND

PRODUCT CODE	COMPANY		
	LANIER	**RICOH**	**SAVIN**
D179	Pro 8100EX	Pro 8100EX	Pro 8100EX
D180	Pro 8110S	Pro 8110S	Pro 8110S
D181	Pro 8120S	Pro 8120S	Pro 8120S

DOCUMENTATION HISTORY

REV. NO.	DATE	COMMENTS
*	08/2013	Original Printing

D179/D18/D181

TABLE OF CONTENTS

1. PRODUCT INFORMATION 1-1

1.1 PRODUCT OVERVIEW 1-1

1.1.1 LAYOUT 1-1

1.1.2 PAPER PATHS 1-3

1.1.3 DRIVE LAYOUT 1-4

Front 1-4

Rear 1-5

1.2 MAIN MACHINE AND PERIPHERALS 1-7

1.2.1 MAIN MACHINE 1-7

Key 1-7

Main Machine 1-7

1.2.2 OPTIONS 1-8

Peripheral Devices 1-8

Controller Options 1-8

Consumables 1-9

1.2.3 PERIPHERAL CONFIGURATION RULES 1-10

1.2.4 EXAMPLE CONFIGURATIONS 1-12

Example 1 1-12

Example 2 1-13

Example 3 1-14

Example 4 1-15

Example 5 1-15

1.3 SPECIFICATIONS 1-16

1.4 GUIDANCE FOR THOSE FAMILIAR WITH PREDECESSOR PRODUCTS 1-17

1.4.1 SPECIFICATION HIGHLIGHTS 1-17

Print Area, Warm-up Time 1-17

ADF 1-18

Laser Unit 1-18

1.4.2 COMPARISON WITH PREVIOUS MACHINES 1-19

Power Switch 1-19

ITB Centering Control 1-19

PTB Unit 1-20

Cooling Belt 1-20

Main, LCT Relay Rollers 1-21
Skew and Paper Registration 1-21
Paper Bank Heaters 1-22
Common Cleaning Mechanisms 1-23
Drum Charge 1-23
ITB Separation 1-24
Drawer 1-24
Paper Feed Units 1-25
Fusing Unit 1-25
Process Control 1-26
1.4.3 PERIPHERALS 1-27
LCT Units 1-27
Multi Fold Unit 1-27
Booklet Finishers 1-28

2. INSTALLATION 2-1
2.1 INSTALLATION REQUIREMENTS 2-1
2.1.1 OPERATING ENVIRONMENT 2-1
2.1.2 POWER REQUIREMENTS 2-2
Input voltage level 2-3
Breaker Switch 2-3
2.1.3 MACHINE LEVEL 2-4
2.1.4 SPACE REQUIREMENTS 2-4
Space Around the Main Machine 2-4
2.1.5 SYSTEM DIMENSIONS 2-6
Top and Side Views 2-6
Perfect Binder and Ring Binder 2-6
2.1.6 MAIN POWER AND OPERATION POWER SWITCH 2-7
Main Power Switch 2-7
Operation Switch 2-7
2.2 MAIN MACHINE 2-8
2.2.1 ACCESSORIES 2-8
2.2.2 INSTALLATION FLOW 2-10
2.2.3 RATING VOLTAGES FOR CONNECTION POINTS 2-11
Right Side 2-11
Left Side 2-11
Left Rear 2-12
2.2.4 REMOVE TAPES, SHIPPING MATERIALS 2-13
2.2.5 INSTALL OPERATION PANEL 2-16
Standard Installation 2-16

Easy Access Installation 2-20
2.2.6 STATUS LIGHT 2-25
2.2.7 POWER CORD, CABLE CLAMP 2-26
2.2.8 FUSING ROLLER KNOB HOLDER, ITB LEVER, CLEANING CLOTH 2-26
2.2.9 NAME PLATE, DECALS 2-28
2.2.10 CLEAN EXPOSURE GLASS 2-29
2.2.11 LEVEL THE MAIN MACHINE 2-29
2.2.12 VENT COVER 2-30
2.2.13 BREAKER SWITCH TEST 2-31
2.2.14 TURNING THE MACHINE ON/OFF 2-32
Turning the Machine On 2-32
Turning the Machine Off 2-33
2.2.15 INSTALL TONER BOTTLES 2-34
Bottle Installation and Initialization 2-34
Problem During Bottle Installation? 2-35
2.2.16 PAPER LIBRARY DATA INSTALLATION 2-35
2.2.17 PAPER TRAYS 2-37
Loading the Paper Trays 2-37
Paper Tray Settings 2-37
2.2.18 SMC REPORT 2-38
2.2.19 TEST PRINT 2-38
2.2.20 CHECK AND ADJUST IMAGE AREAS AFTER INSTALLATION OR MOVING 2-38
Front/Back Alignment (Magnification Adjustment) 2-38
Main Scan/Sub Scan Registration Adjustment 2-41
2.2.21 CONNECT ETHERNET CABLE 2-44
2.2.22 MOVING AND TRANSPORTING THE MACHINE 2-45
Preparing the Machine 2-45
If Peripheral Devices Are Installed 2-46
2.2.23 HEATER OPTIONS 2-47
Paper Bank Heater 2-47
Scanner Unit Heater 2-54
2.2.24 TCRU SET B 2-57
2.3 DECURL UNIT DU5030 2-58
2.3.1 ACCESSORIES 2-58
2.3.2 INSTALLATION 2-59
Mounting Decurl Unit 2-59
Entrance Guide Plate 2-64

SP Settings 2-66
Connecting Peripheral Units 2-66
Adjustments 2-66
2.3.3 CURL CORRECTION 2-68
SP Mode Adjustments 2-68
Tray Heaters 2-69
2.4 MULTI BYPASS TRAY BY5010 2-70
2.4.1 ACCESSORIES 2-70
2.4.2 INSTALLATION 2-71
Before You Begin 2-71
Unpacking 2-71
Prepare the Unit 2-72
LCIT RT5070 2-73
LCIT RT5080 2-78
End Fence, Tab Sheet Fence 2-83
Attaching the Tray Number Decals 2-84
2.5 LCIT RT5070 2-86
2.5.1 ACCESSORIES 2-86
2.5.2 INSTALLATION 2-87
Tapes, Retainers 2-87
Ground Plate 2-88
Docking to Main Machine 2-89
Height Adjustment 2-92
2.5.3 TRAY HEATERS 2-92
Accessories 2-92
Installation 2-93
2.5.4 MOVING THE LCT 2-97
2.6 LCIT RT5080 2-99
2.6.1 ACCESSORIES 2-99
2.6.2 INSTALLATION 2-100
Tapes, Retainers 2-100
Ground Plate 2-101
Docking to Main Machine 2-102
Height Adjustment 2-105
2.6.3 TRAY HEATERS 2-106
Accessories 2-106
Installation 2-107
2.6.4 MOVING THE LCT 2-110
2.7 COVER INTERPOSER TRAY CI5030 2-112

2.7.1 ACCESSORIES 2-112
2.7.2 INSTALLATION 2-113
Tapes 2-113
2.8 FINISHERS SR5050/SR5060 2-121
2.8.1 ACCESSORIES 2-121
2.8.2 INSTALLATION 2-123
Tapes, Retainers, Shipping Plates 2-123
Ground Plate 2-127
Sponge Strips 2-128
Paper Guide 2-128
Shift Tray 2-129
Booklet Tray 2-129
Docking 2-131
Auxiliary Tray 2-134
Finishing the Installation 2-134
2.8.3 PUNCH UNIT PU5020 NA, EU, SC 2-135
Accessories 2-135
2.8.4 INSTALLATION 2-136
2.8.5 MOVING THE FINISHER 2-143
2.9 MULTI-FOLDING UNIT FD5020 2-145
2.9.1 ACCESSORIES 2-145
2.9.2 INSTALLATION 2-145
Tapes 2-146
Paper Guide, Sponge Strips 2-147
Ground Plate 2-147
Docking 2-148
Removing Parts for the Cover Interposer Tray 2-149
Power Cord 2-150
Finishing the Installation 2-151
Auxiliary Tray, Fold Depressor 2-152
2.9.3 MOVING THE MULTI-FOLDING UNIT 2-152
2.10 COVER INTERPOSER TRAY FOR PERFECT BINDER TYPE S1 . 2-154
2.10.1 INSERTER ACCESSORIES 2-154
2.10.2 INSERTER INSTALLATION 2-155
Mounting the Inserter 2-155
Adjusting the position of the hinge plate 2-157
Connecting the Inserter 2-158
Inserter Gap Measurement 2-158
Inserter Gap Adjustment 2-159

Inserter Limiter Brace 2-161
2.11 PERFECT BINDER GB5010 2-164
2.11.1 BOOKBINDER ACCESSORIES 2-164
2.11.2 BOOKBINDER INSTALLATION 2-164
Before You Begin 2-164
Unloading the Bookbinder 2-165
Bookbinder Exterior Tape, Braces 2-169
Bookbinder Interior Tape, Braces 2-173
Main Grip, Cover Transport Tape, Braces, etc. 2-180
Trimming Unit Tape 2-187
Book Stacking Tray Tape 2-192
Confirming Removal, and Storing Braces, Cushions, Screws 2-192
Check List 2-195
2.11.3 DOCKING THE BOOKBINDER 2-196
2.11.4 FILLING BOOKBINDER GLUE SUPPLY UNIT 2-199
Handling and Storing the Glue Pellet Supply 2-200
2.11.5 TESTING THE BREAKER SWITCH 2-201
2.11.6 FINAL CHECK 2-201
2.11.7 SETTING THE BOOKBINDER FOR MOVING 2-202
Same Floor 2-205
Gluing Unit 2-205
Sub Grip Unit 2-206
Another Floor (by Elevator) 2-206
Left Side (Paper Exit) 2-207
Right Side (Paper Entrance) 2-208
2.11.8 SHIPPING THE BOOKBINDER 2-208
2.12 TRANSIT PASS UNIT FOR PERFECT BINDER TYPE S1 2-209
2.12.1 RELAY UNIT ACCESSORIES 2-209
2.12.2 RELAY UNIT INSTALLATION 2-210
Testing the Breaker Switch 2-216
2.13 RING BINDER RB5020 2-217
2.13.1 OPERATING ENVIRONMENT 2-217
2.13.2 MACHINE LEVEL 2-218
2.13.3 MINIMUM SPACE REQUIREMENTS 2-218
2.13.4 POWER SUPPLY 2-218
2.13.5 ACCESSORIES 2-218
2.13.6 BEFORE YOU BEGIN 2-219
2.13.7 INSTALLATION PROCEDURE 2-220
Remove All Shipping Materials 2-220

Prepare the Unit for Docking 2-222
Prepare the Main Machine for Docking 2-222
Dock the Unit to the Main Machine 2-223
Install the Shoes and Level the Unit 2-223
Attach Ring Supply Level Indicator 2-224
Test the Breaker Switch 2-224
2.13.8 CENTERING PAPER IN THE PAPER PATH 2-225
Checking and Correcting Side-to-Side Registration 2-225
Checking and Correcting Skew 2-228
2.13.9 AFTER INSTALLATION 2-230
2.14 TRIMMER UNIT TR5040 2-232
2.14.1 ACCESSORIES 2-232
2.14.2 INSTALLATION 2-233
Tapes, Stopper Plate 2-233
Output Tray 2-234
Ground Plate 2-235
Preparing the Booklet Finisher for Docking 2-235
Docking 2-237
2.15 COPY CONNECTER TYPE 3260 2-239
2.15.1 ACCESSORY CHECK 2-239
2.15.2 INSTALLATION 2-240
2.16 CONTROLLER OPTIONS 2-245
2.16.1 PRINTER/SCANNER UNIT TYPE S1 (NA BASIC MODEL ONLY) 2-246
Accessories 2-246
Installation Procedure 2-247
Configuring the Function Keys 2-248
2.16.2 IEEE 1284 INTERFACE BOARD TYPE A 2-249
Accessories 2-249
Installation 2-250
2.16.3 IEEE 802.11A/G/N INTERFACE UNIT TYPE M3 2-251
Accessories 2-251
Before You Begin 2-251
Installation 2-253
User Tool Settings 2-259
SP Mode, User Tool Settings 2-260
2.16.4 BLUETOOTH INTERFACE UNIT TYPE D 2-261
Accessories 2-261
Installation 2-261

2.16.5 POSTSCRIPT3 UNIT TYPE S1 2-262
Accessories 2-262
Installation 2-263
2.16.6 IPDS UNIT TYPE S1 2-264
Accessories 2-264
Installation 2-265
2.16.7 FILE FORMAT CONVERTER TYPE E 2-266
Accessories 2-266
Installation 2-266
2.16.8 COPY DATA SECURITY UNIT TYPE G 2-267
Accessories 2-267
Installation 2-268
User Tool Setting 2-269
Check All Connections 2-270
2.16.9 BROWSER UNIT TYPE S1 2-270
Accessories 2-270
Installation 2-271
Ricoh JavaScript 2-272
Browser/EXJS Firmware Update 2-272
Uninstalling EXJS Firmware 2-274
2.16.10 DATA OVERWRITE SECURITY UNIT TYPE H 2-275
Accessories 2-275
Before You Begin 2-275
Installation 2-275
2.16.11 SD CARD FOR NETWARE PRINTING TYPE S1 2-276
Accessories 2-276
Installation 2-277
2.16.12 OCR UNIT TYPE M2 2-278
What is Searchable PDF? 2-278
Accessories 2-278
Installation 2-279
Restoration 2-280
When the original SD card exists 2-281
If Original SD Card is Lost 2-281
2.16.13 SD CARD APPLI MOVE 2-281
Overview 2-281
Move Exec 2-282
Undo Exec 2-283
2.17 KEY COUNTER, OPTIONAL COUNTER I/F UNIT 2-285

2.17.1 KEY COUNTER BRACKET TYPE 1027 2-285
Installation 2-285
2.17.2 OPTIONAL COUNTER I/F UNIT TYPE A 2-286
Accessories 2-286
Installation 2-287
2.18 COMMON ADJUSTMENTS 2-290
2.18.1 HEIGHT AND LEVEL ADJUSTMENT 2-290
Before you begin: 2-290
Setting the Leveling Shoes 2-291
2.18.2 SKEW AND SIDE-TO-SIDE REGISTRATION 2-293
Overview 2-293
Checking Side-to-Side Registration 2-296
Correcting Side-to-Side Registration 2-297
Detecting Paper Skew 2-298
Correcting Skew 2-299

3. PREVENTIVE MAINTENANCE 3-1
3.1 PREVENTIVE MAINTENANCE TABLES 3-1
3.2 IMAGE QUALITY STANDARDS 3-2
3.2.1 CHECKING IMAGE QUALITY 3-2
Resolution 3-2
Even Density 3-2
Magnification Errors 3-3
Magnification Error Variation 3-4
3.3 PAPER TRANSFER 3-5
3.3.1 PAPER TRANSFER QUALITY STANDARDS 3-5
Registration 3-5
Skew 3-6
LCIT RT5070/RT5080 3-8
Cover Interposer Tray CI5030 3-8
3.4 PM PARTS SETTINGS 3-9
3.4.1 BEFORE REMOVING OLD PM PARTS 3-9
3.4.2 AFTER INSTALLING NEW PM PARTS 3-9
3.5 CLEANING POINTS 3-10
3.5.1 INSPECTION AND CLEANING 3-10
3.5.2 ADF CLEANING 3-11
3.5.3 SCANNER UNIT 3-13
3.5.4 BEFORE YOU BEGIN 3-16
3.5.5 PFU ROLLERS 3-16
3.5.6 VERTICAL TRANSPORT UNIT (VTU) ROLLERS, SENSORS 3-17

3.5.7 DRAWER: RIGHT SIDE 3-18
Entrance Rollers 3-18
LCIT Relay Sensor 3-18
Double-Feed Sensors 3-19
Registration Timing Sensor 3-20
Registration Timing Roller 3-20
Dust Collection Tray 3-21
CIS 3-22
Transfer Timing Sensor 3-23
3.5.8 DRAWER: CENTER 3-23
Paper Transfer Roller 3-23
Transfer Timing Roller: Upper 3-24
Transfer Timing Roller: Lower 3-24
PTB Sensor 3-25
3.5.9 FUSING UNIT 3-26
Entrance Plates 3-26
Fusing Exit Sensor 3-26
Pressure Roller Strippers 3-27
Fusing Belt, Pressure Roller 3-27
Cooling Pipe Roller 3-28
3.5.10 DRAWER LEFT: EXIT 3-28
Exit Cooling Belt 3-29
Exit JG Sensor 3-29
Exit Sensor 3-30
Exit Relay Rollers 3-30
Exit Idle Rollers, Exit Relay Idle Rollers 3-30
Exit Roller 3-31
Exit Anti-Static Brush 3-31
3.5.11 DRAWER LEFT: INVERT UNIT 3-31
Invert Rollers 3-32
Inverter Anti-Static Brush 3-32
Purged Paper Sensor 3-32
3.5.12 DRAWER: FRONT COVERS OFF 3-33
LCIT, Registration Roller, Main Relay HP Sensors 3-33
Exit JG, Invert Exit HP Sensors 3-34
3.5.13 TRANSPORT ROLLERS, SENSORS 3-34
3.6 LUBRICATION POINTS 3-37
3.6.1 FUSING UNIT 3-37
Drive Gears 3-37

Heating Roller, Hot Roller Bearings 3-38
PTR Unit..... 3-38

4. REPLACEMENT AND ADJUSTMENT..... 4-1
4.1 GENERAL CAUTIONS 4-1
4.1.1 POWER ON/OFF..... 4-1
4.1.2 DRUM 4-1
4.1.3 DRUM UNIT..... 4-1
4.1.4 TRANSFER BELT UNIT 4-2
4.1.5 SCANNER UNIT..... 4-2
4.1.6 LASER UNIT..... 4-2
4.1.7 CHARGE CORONA..... 4-2
4.1.8 DEVELOPMENT..... 4-3
4.1.9 CLEANING 4-3
4.1.10 FUSING UNIT 4-3
4.1.11 PAPER FEED 4-4
4.1.12 USED TONER..... 4-4
4.2 CAUTIONS FOR THIS MACHINE 4-5
4.2.1 GENERAL..... 4-5
4.2.2 REAR CONTROLLER BOX..... 4-5
4.2.3 DRUM 4-5
4.2.4 PCDU..... 4-6
4.2.5 ITB UNIT..... 4-7
4.2.6 SCANNER UNIT..... 4-8
4.2.7 DEVELOPMENT..... 4-9
4.2.8 CLEANING 4-9
4.2.9 FUSING UNIT..... 4-9
4.2.10 PAPER FEED 4-9
4.2.11 USED TONER..... 4-10
4.2.12 PAPER TIPS..... 4-10
General 4-10
Moisture Prevention 4-10
Thin Paper..... 4-11
Translucent Paper, Tracing Paper 4-11
Transparencies (OHP) 4-11
Postcards..... 4-11
Tab Sheets..... 4-12
Inkjet and Gel Jet Paper..... 4-12
Coated Paper..... 4-12
Peel-off Paper 4-12

Color Paper, Pre-printed Forms 4-12
4.2.13 SAFETY LABELS FOR THIS MACHINE AND PERIPHERALS 4-12
Main Machine 4-13
LCIT RT5080 4-13
Multi Bypass Tray BY5010 4-14
Finisher SR5050 4-14
Booklet Finisher SR5060 4-15
Multi-Folding Unit FD5020 4-16
Trimmer Unit TR5040 4-16
Ring Binder RB5020 4-17
Perfect Binder GB5010 4-18
4.3 SPECIAL TOOLS AND LUBRICANTS 4-19
4.3.1 SPECIAL TOOLS 4-19
4.3.2 LUBRICANTS 4-19
4.4 COMMON PROCEDURES 4-20
4.4.1 BEFORE YOU BEGIN 4-20
4.4.2 TURNING THE MACHINE ON/OFF 4-20
Turning the Machine On 4-20
Turning the Machine Off 4-21
4.4.3 EXTERNAL COVERS, DOORS 4-22
Front Edge Cover 4-22
Right Cover 4-22
Left Cover 4-23
Rear Cover 4-23
Doors 4-24
4.4.4 DRAWER 4-25
Drawer Right Cover 4-26
4.4.5 CONTROLLER BOX, CONTROLLER BOX COVER 4-27
Opening the Controller Box 4-27
Removing the Controller Box Cover, Inner Cover 4-30
4.4.6 LOWER IOB BRACKET 4-32
4.4.7 CONTROLLER BOX REMOVAL 4-33
4.4.8 CANOPY COVER REMOVAL 4-36
4.5 OPERATION PANEL 4-43
4.5.1 TOUCH PANEL 4-43
4.5.2 OPU, LCDC, SD/USB 4-47
OPU: TP 4-47
LCDC (LCD Controller) 4-48
OPU: IO 4-49

SD Card/USB 4-50
4.5.3 OPERATION PANEL LED PCB, KEY PCBS 4-51
LED PCB 4-51
Key PCB 1 4-52
Key PCB 2 4-54
4.5.4 TOUCH PANEL POSITION ADJUSTMENT 4-55
4.6 ADF 4-56
4.6.1 ADF REMOVAL 4-56
Removal 4-56
4.6.2 AFTER ADF REPLACEMENT 4-58
CIS RGB Adjustment 4-58
Checking for Skew 4-59
Platen Adjustment 4-1
4.6.3 ADF COVERS 4-3
ADF Rear Cover 4-3
ADF Front Cover 4-4
Feed Cover 4-5
Original Feed Unit 4-6
4.6.4 PICKUP ROLLER, FEED BELT 4-7
Pickup Roller 4-7
Feed Belt 4-9
4.6.5 ADF SEPARATION ROLLER 4-10
4.6.6 ADF SENSORS 4-11
Original Registration Sensor 4-11
Original Width Sensors 4-12
Original Exit Sensor 4-13
4.6.7 BOARDS 4-15
ADF Control Board 4-15
Double-feed Sensor Board 4-16
4.6.8 SENSORS, SWITCHES 4-17
Separation Sensor, Skew Correction Sensor, Double-Feed Sensor 2 4-17
Double-feed Sensor 1, Interval Sensor, Original Width Sensors 4-20
APS Feeler 4-23
ADF Lift Interlock SW 4-24
Lift-up Sensor 4-24
Original Set Sensor 4-25
A4/LT SEF Sensor 4-26
Bottom Plate HP Sensor 4-27
Bottom Plate Position Sensor 4-28

ADF Feed Cover Interlock SW 4-28
Pickup Roller HP Sensor 4-30
4.6.9 MOTORS 4-31
Before You Begin 4-31
ADF Entrance Motor 4-32
ADF Scan Motor 4-33
ADF Relay Motor 4-34
ADF Bottom Plate Lift Motor 4-35
ADF Feed Motor 4-37
ADF Transport Motor 4-38
ADF Pick-up Roller Motor 4-39
4.6.10 CIS UNIT 4-41
CIS Removal 4-41
4.6.11 ADF CLEANING 4-44
4.7 SCANNER UNIT 4-48
4.7.1 EXPOSURE GLASS 4-48
4.7.2 SCANNING GLASS 4-49
4.7.3 ORIGINAL SIZE SENSOR, IDB 4-50
4.7.4 LENS BLOCK 4-51
Sub Scan Magnification Adjustment 4-53
Sub Scan Registration Adjustment 4-54
Main Scan Registration Adjustment 4-54
4.7.5 EXPOSURE LAMP 4-54
Exposure Lamp Removal 4-54
Exposure Lamp Re-installation 4-56
4.7.6 SCANNER MOTOR 4-57
4.7.7 SIOB 4-60
4.7.8 SCANNER UNIT 4-61
4.7.9 DOOR SWITCHES 4-66
4.7.10 ADF POSITION SENSOR 4-69
4.7.11 EXPOSURE LAMP HP SENSOR 4-70
4.7.12 SCANNER WIRE 4-72
Preparation 4-72
Wire Replacement 4-73
Preparation for Re-assembly 4-75
Re-assembly 4-75
4.7.13 SCANNER UNIT CLEANING 4-77
4.8 LASER UNIT 4-80
4.8.1 BEFORE YOU BEGIN 4-80

4.8.2 CAUTION DECALS 4-80
Top of Laser Unit 4-80
PCDU Cover 4-81
Flywheel 4-81
4.8.3 LASER UNIT 4-81
Laser Unit Re-installation 4-84
After Laser Unit Replacement 4-84
4.8.4 TONER SHIELD GLASS 4-85
4.9 TONER SUPPLY 4-88
4.9.1 TONER SUPPLY UNIT 4-88
Before You Begin 4-88
Canopy Cover Removal 4-88
Remove Toner Bank Cover 4-95
Remove Toner Bottle Cradles 4-96
Sub Hopper 4-101
Toner Supply Unit Re-installation 4-104
4.9.2 TONER SUPPLY MOTORS 4-105
Toner Feed Motor 4-105
Toner Agitator Motor 4-105
4.9.3 TONER BANK 4-106
Toner Bottle Motor 4-107
Toner Bottle Cap Motor 4-109
4.9.4 TONER SUPPLY SENSORS 4-111
Toner Bottle Cap Sensor 4-111
Toner Bottle Set Sensor 4-111
4.10 AROUND THE DRUM 4-113
4.10.1 PCDU DISASSEMBLY FOR REPLACEMENT 4-113
PCDU Removal 4-113
Drum Cleaning Unit 4-115
Drum 4-116
Development Unit 4-117
Drum Cleaning Unit, Drum, PCDU Re-installation 4-118
4.10.2 DRUM REPLACEMENT 4-120
Drum Removal 4-120
Installing a New Drum 4-121
After Drum Replacement 4-123
4.10.3 DRUM CLEANING UNIT 4-124
Drum Cleaning Unit Gears 4-124
Drum Cleaning Blade 4-125

Drum Lubricant Blade 4-127
Drum Lubricant Bar 4-128
Drum Lubricant Roller 4-129
After Replacement 4-131
Drum Cleaning Unit Service Parts Lubrication Summary 4-131
4.10.4 DRUM MOTORS 4-132
Drum Motor 4-132
Drum Cleaning Motor 4-133
Development Motor 4-135
Cleaning Pad Motor 4-141
4.10.5 QL, SENSORS 4-142
Quenching Lamp 4-142
PCDU Temperature/Humidity Sensor 4-144
Potential Sensor 4-145
Cleaning Pad HP Sensor 4-148
4.10.6 CHARGE CORONA WIRES, GRID, CUSHIONS, WIRE CLEANER 4-149
After Charge Corona Unit Replacement 4-153
4.10.7 DEVELOPMENT UNIT REPLACEMENT 4-154
Draining Developer 4-154
Filling the New Unit with Developer 4-155
4.10.8 DEVELOPER REPLACEMENT 4-157
Draining Developer 4-157
Adding New Developer 4-159
4.10.9 CLEANING DOCTOR BLADE, DEVELOPMENT ROLLER CLEANING 4-160
4.10.10 VENT FILTER 4-165
4.11 ITB UNIT 4-169
4.11.1 ITB UNIT REMOVAL 4-169
ITB Cleaning Unit 4-169
ITB Unit 4-173
ITB Cleaning Unit, ITB Unit Re-installation 4-176
4.11.2 BELT REPLACEMENT 4-177
Belt Removal 4-177
Belt Re-installation 4-182
After Replacement of ITB 4-184
4.11.3 PTR SEPARATION MOTOR 4-186
4.11.4 BELT CENTERING MOTOR 4-187
4.11.5 TDRB 4-188

4.11.6 TRANSFER POWER PACK 4-189
4.11.7 TRANSFER ROLLER 4-192
After Transfer Roller Replacement 4-193
4.11.8 BIAS ROLLER 4-194
4.11.9 BELT CENTERING ROLLER HP SENSOR 4-196
4.11.10 CLEANING UNIT SET SWITCH 4-197
4.11.11 PTR SEPARATION SENSOR 4-198
4.11.12 ID SENSOR 4-199
4.11.13 BELT CENTERING SENSOR 4-201
4.11.14 ID SENSOR FAN 4-203
4.11.15 TRANSPORT BELT MOTOR 4-204
4.11.16 ITB UNIT THERMOSTAT 4-206
4.11.17 ITB HEATER 4-207
4.12 ITB CLEANING UNIT 4-209
4.12.1 ITB CLEANING UNIT DISASSEMBLY 4-209
Before You Begin 4-209
Cleaning Blade 4-209
Lubricant Roller 4-210
Lubricant Bar 4-212
Lubricant Blade 4-213
Notes about Lubrication 4-213
Cleaning Roller 4-214
ITB Cleaning Unit Re-installation 4-217
4.12.2 ITB/PTR CLEANING MOTOR 4-219
4.13 PAPER TRAYS 1, 2, 3 4-225
4.13.1 PAPER TRAY REMOVAL 4-225
Remove Paper Tray 1 4-225
Remove Paper Tray 2, Tray 3 4-227
4.13.2 TRAY 1 SENSORS, SOLENOIDS, WIRE 4-227
Rear Fence Return Sensor (Left Tandem Tray) 4-227
Rear Fence HP Sensor (Left Tandem Tray) 4-228
Right Tray Paper Sensor (Right Tandem Tray) 4-228
Right Tray Lock Solenoid 4-229
Left Tray Lock Solenoid 4-230
Bottom Plate Lift Wire 4-231
4.13.3 TRAY 1 MOTORS 4-232
Before You Begin 4-232
Tray 1 Grip Motor 4-233
Tray 1 Feed Motor 4-234

Tray 1 Lift Motor 4-235
4.13.4 TRAY 2 MOTORS 4-236
Before You Begin 4-236
Tray 2 Grip Motor 4-237
Tray 2 Feed Motor 4-238
Tray 2 Lift Motor 4-239
4.13.5 TRAY 3 MOTORS 4-240
Before You Begin 4-240
Tray 3 Grip Motor 4-240
Tray 3 Feed Motor 4-241
Tray 3 Lift Motor 4-243
4.13.6 PFU 1, 2, 3 REMOVAL 4-244
Tray 1 PFU 4-245
Tray 2 PFU 4-247
Tray 3 PFU 4-249
4.13.7 PFU ROLLERS, SENSORS, SOLENOID 4-251
Before You Begin 4-251
Pick-up, Feed, Separation Rollers 4-251
Paper End Sensor 4-252
Pickup Roller Lift Sensor 4-253
Paper Feed Sensor 4-254
Pickup Roller Solenoid 4-255
4.14 VERTICAL TRANSPORT UNIT 4-257
4.14.1 OPENING THE VTU 4-257
4.14.2 TRANSPORT SENSORS 4-260
4.14.3 VTU REMOVAL 4-261
4.14.4 BANK EXIT MOTOR, VERTICAL TRANSPORT MOTOR 4-267
Bank Exit Motor 4-268
Vertical Transport Motor 4-269
4.14.5 VERTICAL TRANSPORT SENSORS 4-270
1st Transport Sensor (F1) 4-270
4.15 REGISTRATION UNIT 4-272
4.15.1 PAPER DUST TRAY 4-272
4.15.2 MOTORS 4-273
4.15.3 REGISTRATION ENTRANCE MOTOR 4-274
4.15.4 REGISTRATION TIMING MOTOR 4-277
4.15.5 REGISTRATION GATE ROLLER MOTOR 4-282
4.15.6 TRANSFER TIMING MOTOR 4-285
4.15.7 MAIN RELAY MOTOR 4-290

4.15.8 LCIT RELAY MOTOR 4-292
4.15.9 LE SHIFT UNIT MOTOR, CIS FAN 4-294
CIS Fan 4-301
LE Shift Unit Motor, LE Shift Unit HP Sensor 4-302
4.15.10 MAIN RELAY HP SENSOR 4-304
4.15.11 MAIN RELAY SENSOR 4-306
4.15.12 LCIT RELAY HP SENSOR 4-307
4.15.13 REGISTRATION GATE ROLLER HP SENSOR 4-308
4.15.14 LCIT RELAY SENSOR 4-309
4.15.15 REGISTRATION TIMING SENSOR 4-311
4.15.16 DOUBLE-FEED SENSOR 1, DOUBLE-FEED SENSOR 2 .. 4-312
4.15.17 CIS 4-317
CRB (CIS Relay Board) 4-317
CIS Element 4-318
4.15.18 TRANSFER TIMING SENSOR 4-321
4.15.19 REGISTRATION ENTRANCE SENSOR 4-322
4.15.20 DRB, TE SHIFT UNIT MOTOR, TE SHIFT UNIT HP SENSOR 4-325
DRB 4-330
TE Shift Unit Motor 4-331
TE Shift Unit HP Sensor 4-333
4.16 PAPER TRANSFER ROLLER (PTR) UNIT 4-335
4.16.1 PTR UNIT REMOVAL 4-335
4.16.2 PTR DISASSEMBLY 4-336
Separation Plate 4-336
Entrance Guide Plate 4-337
Lubricant Bar 4-338
Cleaning Blade 4-339
Lubricant Roller 4-341
Paper Transfer Roller (PTR) 4-343
Cleaning Roller 4-344
After Parts Replacement 4-348
Notes about Lubrication 4-348
4.16.3 FANS 4-349
PTR Fan (Front) 4-349
PTR Fan (Rear) 4-350
4.16.4 PAPER SEPARATION POWER PACK 4-351
4.16.5 ITB/PTR CLEANING MOTOR 4-354
4.17 PAPER TRANSPORT BELT (PTB) UNIT 4-357

4.17.1 PTB UNIT REMOVAL 4-357
PTR Unit Re-installation 4-361
4.17.2 PTB MOTOR 4-361
4.17.3 PAPER TRANSFER BELTS (PTB) 4-363
4.17.4 PTB SENSOR, FANS 4-365
PTB Sensor 4-366
PTB Fan (Front) 4-367
PTB Fan (Rear) 4-368
4.18 FUSING UNIT 4-369
4.18.1 FUSING UNIT, FUSING CLEANING UNIT REMOVAL 4-369
Removing the Fusing Unit 4-369
New Fusing Unit 4-371
Removing the Fusing Cleaning Unit 4-371
Fusing Unit Re-installation 4-372
4.18.2 PERIODIC CLEANING 4-372
Fusing Belt Stripper Plate 4-373
Pressure Roller Stripper Plate 4-373
Entrance Guide Plate 4-374
4.18.3 PERIODIC LUBRICATION 4-374
4.18.4 HEATING ROLLER FUSING LAMPS 4-375
Heating Roller Lamp Re-installation Points 4-385
4.18.5 HOT ROLLER, HEATING ROLLER, FUSING BELT 4-387
4.18.6 CLEANING, LUBRICATION BEFORE RE-ASSEMBLY 4-390
Heating Roller 4-390
Hot Roller 4-391
Fusing Belt 4-391
Heating Roller Thermistor 4-392
Heating Roller, Hot Roller Bearings 4-392
4.18.7 PRESSURE ROLLER STRIPPERS, FUSING PATH SENSORS 4-393
Pressure Roller Stripper Pawls 4-395
4.18.8 PRESSURE ROLLER FUSING LAMP, PRESSURE ROLLER 4-398
Pressure Roller Cleaning, Lubrication 4-403
Pressure Roller Re-installation 4-405
Separation Plate 4-408
4.18.9 THERMOSTATS, THERMISTORS, NC SENSORS 4-409
Hot Roller Heating Roller Sensors, Heating Roller Thermistor 4-409
Re-installation: Heating Roller Thermistor 4-413
Pressure Roller Thermistor and NC Sensor 4-414

Pressure Roller Thermostat 4-419
Heating Roller Thermostats..... 4-422
4.18.10 THERMOPILE 4-423
4.18.11 PRESSURE ROLLER LIFT SENSORS..... 4-427
4.18.12 FUSING MOTOR, PRESSURE ROLLER LIFT MOTOR 4-428
Remove EDRB..... 4-428
Fusing Motor 4-429
Fusing Motor Drive Gear Lubrication 4-432
Pressure Roller Lift Motor..... 4-432
Re-installation 4-434
4.18.13 FUSING CLEANING UNIT 4-435
Cleaning Unit Disassembly 4-435
Web End Sensor 4-444
Web Motor..... 4-444
4.19 INVERT, DUPLEX, EXIT UNIT 4-445
4.19.1 EXIT SENSOR 4-445
4.19.2 EXIT JUNCTION GATE SENSOR 4-446
4.19.3 PURGE RELAY SENSOR..... 4-447
4.19.4 INVERT JUNCTION GATE SOLENOID..... 4-448
4.19.5 PURGED PAPER SENSOR..... 4-450
4.19.6 INVERT EXIT MOTOR, INVERT EXIT HP SENSOR..... 4-451
Invert Exit Motor 4-452
Invert Exit HP Sensor..... 4-453
4.19.7 INVERT ENTRANCE MOTOR 4-454
4.19.8 EXIT INVERT SENSOR 4-457
4.19.9 DUPLEX TRANSPORT MOTOR 1..... 4-461
4.19.10 DUPLEX INVERT SENSOR 4-463
4.19.11 DUPLEX TRANSPORT SENSOR 1 4-465
4.19.12 DUPLEX TRANSPORT SENSOR 2, 3 4-467
4.19.13 EXIT JUNCTION GATE MOTOR, EXIT JUNCTION GATE HP SENSOR 4-469
Exit Junction Gate Motor..... 4-470
Exit Junction Gate HP Sensor..... 4-472
4.19.14 DUPLEX TRANSPORT MOTOR 2 4-473
4.19.15 DUPLEX TRANSPORT SENSOR 4, 5, 6, DUPLEX EXIT SENSOR 4-475
4.19.16 EXIT MOTOR 4-477
4.19.17 EXIT/INVERT MOTOR 4-479
4.19.18 DUPLEX/INVERT MOTOR..... 4-481

Large Horizontal Duct 4-481
Duplex/Invert Motor 4-483
4.20 USED TONER PATH 4-484
4.20.1 USED TONER PATH, USED TONER TRANSPORT MOTOR 4-484
4.20.2 USED TONER BOTTLE UNIT 4-502
Used Toner Bottle Unit Removal 4-502
Used Toner Transport Motor 4-505
Used Toner Bottle Full Sensor 4-505
Used Toner Bottle Near-Full Sensor 4-506
Used Toner Bottle Set Switch 4-506
4.21 FILTERS, FANS 4-507
4.21.1 FILTERS 4-507
Fusing Exhaust Filters 4-507
Air Filters 4-508
Right Cover Air Intake Filers 4-509
Right Cover Base Filters 4-509
Toner Supply Filter 4-509
4.21.2 FANS 4-510
Before You Begin 4-510
Laser Unit Cooling Fan 4-512
Development Unit Cooling Fan: Front 4-513
Development Unit Cooling Fan: Rear 4-513
Belt Cooling Fan 4-514
Ozone Air Intake Fan 4-517
Ozone Air Exhaust Fan 4-518
4.21.3 HORIZONTAL DUCT FANS 4-519
Fusing Transport Exhaust Fan 4-519
Fusing Exhaust Fan: Upper 4-520
Fusing Exhaust Fan: Lower 4-521
4.21.4 REAR EXHAUST FANS 4-523
4.21.5 HP (HEAT PIPE) COOLING FANS 4-525
4.21.6 CONTROLLER BOX FANS 4-528
PSU Cooling Fan: T Right, T Left 4-528
Control Board Air Intake Fan 4-530
PSU Air Exhaust Fan: M1 Left 4-531
PSU Air Exhaust Fan: M2 Left 4-533
PSU Air Intake Fan: M1 Right 4-534
PSU Air Intake Fan: M2 Right 4-535
Thermistor Mechatron 4-537

4.21.7 RIGHT COVER FANS 4-538
Right Air Intake Fan: Front 4-540
Right Air Intake Fan: Center 4-540
Right Air Intake Fan: Rear 4-541
4.22 BOARDS, HDD, BREAKER SWITCH 4-542
4.22.1 MAIN UNIT 4-543
AC Drive 4-543
CGB Power Pack 4-548
EDRB 4-550
IOB 4-551
RYB (Relay Board) 4-552
4.22.2 PSU-A, B, C 4-554
Before You Begin 4-554
PSU-A 4-555
PSU-B 4-556
PSU-C 4-557
4.22.3 AROUND THE CONTROL BOARD 4-559
Before You Begin 4-559
IPU Sub Board 4-561
IPU-Controller Board 4-562
Precautions When Replacing the Controller Board 4-564
BCU 4-565
4.22.4 NVRAM REPLACEMENT 4-566
Controller Board NVRAM Replacement 4-566
BCU NVRAM Replacement 4-568
4.22.5 CNB 4-569
4.22.6 HDD 4-570
After Installing a New HDD Unit 4-573
Disposal of HDD Unit 4-573
Reinstallation 4-573
4.22.7 BREAKER SWITCH 4-573

5. SYSTEM MAINTENANCE REFERENCE 5-1
5.1 TYPES OF SP MODES 5-1
5.2 SERVICE PROGRAM MODE 5-3
5.3 UPDATING THE FIRMWARE 5-4
5.3.1 SOFTWARE UPDATE 5-4
Software Update Procedure 5-4
Doing the Software Update Procedure 5-5
Errors During Firmware Update 5-8

Updating the LCDC for the Operation Panel 5-10
Downloading Stamp Data..... 5-10
5.4 UPLOADING/DOWNLOADING NVRAM DATA 5-11
5.4.1 UPLOADING NVRAM DATA TO AN SD CARD 5-11
5.4.2 DOWNLOADING NVRAM DATA FROM AN SD CARD 5-12
5.5 ADDRESS BOOK UPLOAD/DOWNLOAD..... 5-13
5.5.1 INFORMATION LIST 5-13
5.5.2 DOWNLOAD ADDRESS BOOK 5-14
5.5.3 UPLOAD ADDRESS BOOK 5-15
5.6 CAPTURING THE DEBUG LOGS 5-16
5.6.1 OVERVIEW 5-16
Types of debug logs that can be saved..... 5-16
Operation Log Security..... 5-17
5.6.2 RETRIEVING DEBUG LOGS 5-18
Procedure for Retrieving the Debug Log..... 5-18

6. TROUBLESHOOTING 6-1
6.1 SELF-DIAGNOSTIC MODE..... 6-1
6.1.1 SELF-DIAGNOSTIC MODE AT POWER ON 6-1
6.1.2 SELF-DIAGNOSTIC TEST FLOW 6-1
6.1.3 DETAILED SELF-DIAGNOSTIC MODE 6-2
6.1.4 EXECUTING DETAILED SELF-DIAGNOSIS 6-2
6.2 SC CODE DESCRIPTIONS..... 6-3
6.2.1 SUMMARY 6-3
6.2.2 SC CODE DESCRIPTIONS..... 6-4
6.3 SC100 6-6
6.4 SC200 6-12
6.5 SC300 6-16
6.6 SC400 6-22
6.7 SC500 6-30
6.8 SC600 6-61
6.9 SC700 6-71
6.10 SC800 6-219
6.11 SC900 6-242
6.12 JAM DETECTION 6-249
6.12.1 DISPLAY 6-249
6.12.2 JAM REMOVAL 6-249
6.12.3 PAPER JAM CODE LOGS..... 6-250
Checking Logs 6-250
Jam Display..... 6-250

6.12.4 JAM CODE DESCRIPTIONS 6-250
ADF 6-251
Main Machine 6-251
Finisher SR5060/5050 6-255
Multi Fold Unit FD5020 6-257
Cover Interposer Tray CI5030 6-258
Perfect Binder GB5010 6-259
Ring Binder RB5020 6-261
Trimmer TR5040 6-263
6.12.5 PAPER SIZE MISMATCH CODES 6-264
6.13 FUSES 6-266
6.13.1 RYB (RELAY BOARD) 6-266
6.13.2 AC DRIVE 6-266
6.13.3 PSU-A 6-267
6.13.4 PSU-B 6-267
6.13.5 PSU-C 6-268
6.14 LEDS 6-269
6.14.1 IOB 6-269
6.14.2 BCU 6-270
6.14.3 SIO 6-270
6.14.4 ADF 6-271
6.14.5 IPU 6-271

7. ENERGY AND PAPER SAVING 7-1
7.1 ENERGY SAVE 7-1
7.1.1 ENERGY SAVER MODES 7-1
Timer Settings 7-1
Return to Stand-by Mode 7-2
Recommendation 7-2
7.1.2 ENERGY SAVE EFFECTIVENESS 7-3
7.2 PAPER SAVE 7-5
7.2.1 EFFECTIVENESS OF DUPLEX/COMBINE FUNCTION 7-5
Paper Savings and Counter 7-6

READ THIS FIRST

Important Safety Notices

General Safety Instructions

For your safety, please read this manual carefully before you use this product. Keep this manual handy for future reference.

Safety Information

Always obey the following safety precautions when using this product.

Safety During Operation

In this manual, the following important symbols and notations are used.

Switches and Symbols

Where symbols are used on or near switches on machines for Europe and other areas, the meaning of each symbol conforms with IEC60417.

Responsibilities of the Customer Engineer

Customer Engineer

Maintenance shall be done only by trained customer engineers who have completed service training for the machine and all optional devices designed for use with the machine.

Reference Material for Maintenance

- Maintenance shall be done using the special tools and procedures prescribed for maintenance of the machine described in the reference materials (service manuals, technical bulletins, operating instructions, and safety guidelines for customer engineers).
- In regard to other safety issues not described in this document, all customer engineers shall strictly obey procedures and recommendations described the "CE Safety Guide".
- Use only consumable supplies and replacement parts designed for use with the machine.

Before Installation, Maintenance

Shipping and Moving the Machine

⚠CAUTION

- Work carefully when lifting or moving the machine. If the machine is heavy, two or more customer engineers may be required to prevent injuries (muscle strains, spinal injuries, etc.) or damage to the machine if it is dropped or tipped over.
- Personnel moving or working around the machine should always wear proper clothing and footwear. Never wear loose fitting clothing or accessories (neckties, loose sweaters, bracelets, etc.) or casual footwear (slippers, sandals, etc.) when lifting or moving the machine.
- Always unplug the power cord from the power source before you move the machine. Before you move the product, arrange the power cord so it will not fall under the machine.

Power

⚠WARNING

- Always disconnect the power plug before doing any maintenance procedure. After switching off the machine, power is still supplied to the main machine and other devices. To prevent electrical shock, switch the machine off, wait for a few seconds, then unplug the machine from the power source.
- Before you do any checks or adjustments after turning the machine off, work carefully to avoid injury. After removing covers or opening the machine to do checks or adjustments, never touch electrical components or moving parts (gears, timing belts, etc.).
- After turning the machine on with any cover removed, keep your hands away from electrical components and moving parts. Never touch the cover of the fusing unit, gears, timing belts, etc.

Important

- The work area where the machine is installed must have the required breaker for the power line. North America: Listed circuit breaker, rating 240V 20A, double pole.

Installation, Disassembly, and Adjustments

⚠CAUTION

- After installation, maintenance, or adjustment, always check the operation of the machine to make sure that it is operating normally. This ensures that all shipping materials, protective materials, wires and tags, metal brackets, etc., removed for installation, have been removed and that no tools remain inside the machine. This also ensures that all release interlock switches have been restored to normal operation.
- Never use your fingers to check moving parts causing spurious noise. Never use your fingers to lubricate moving parts while the machine is operating.

Special Tools

⚠CAUTION

- Use only standard tools approved for machine maintenance.
- For special adjustments, use only the special tools and lubricants described in the service manual. Using tools incorrectly, or using tools that could damage parts, could damage the machine or cause injuries.

During Maintenance

General

⚠CAUTION

- Before you begin a maintenance procedure: 1) Switch the machine off, 2) Disconnect the power plug from the power source, 3) Allow the machine to cool for at least 10 minutes.
- Avoid touching the components inside the machine that are labeled as hot surfaces.

Safety Devices

⚠WARNING

- Never remove any safety device unless it requires replacement. Always replace safety devices immediately.
- Never do any procedure that defeats the function of any safety device. Modification or removal of a safety device (fuse, switch, etc.) could lead to a fire and personal injury. Always test the operation of the machine to ensure that it is operating normally and safely after removal and replacement of any safety device.
- For replacements use only the correct fuses or circuit breakers rated for use with the machine. Using replacement devices not designed for use with the machine could lead to a fire and personal injuries.

Organic Cleaners

⚠CAUTION

- During preventive maintenance, never use any organic cleaners (alcohol, etc.) other than those described in the service manual.
- Make sure the room is well ventilated before using any organic cleaner. Use organic solvents in small amounts to avoid breathing the fumes and becoming nauseous.
- Switch the machine off, unplug it, and allow it to cool before doing preventive maintenance. To avoid fire or explosion, never use an organic cleaner near any part that generates heat.
- Wash your hands thoroughly after cleaning parts with an organic cleaner to contamination of food, drinks, etc. which could cause illness.
- Clean the floor completely after accidental spillage of silicone oil or other materials to prevent slippery surfaces that could cause accidents leading to hand or leg injuries. Use "My Ace" Silicone Oil Remover (or dry rags) to soak up spills.

Lithium Batteries

⚠WARNING

- Always replace a lithium battery on a PCB with the same type of battery prescribed for use on that board. Replacing a lithium battery with any type other than the one prescribed for use on the board could lead to an explosion or damage to the PCB.
- Never discard used batteries by mixing them with other trash. Remove them from the work site and dispose of them in accordance with local laws and regulations regarding the disposal of such items.

Ozone Filters

⚠CAUTION

- Always replace ozone filters as soon as their service life expires (as described in the service manual).
- An excessive amount of ozone can build up around machines that use ozone filters if they are not replaced at the prescribed time. Excessive ozone could cause personnel working around the machine to feel unwell.
- To avoid possible accumulation of ozone in the work area, locate the machine in a large well ventilated room that has an air turnover rate of more than 50 m3/hr/person.

Power Plug and Power Cord

⚠WARNING

- Before servicing the machine (especially when responding to a service call), always make sure that the power plug has been inserted completely into the power source. A partially inserted plug could lead to heat generation (due to a power surge caused by high resistance) and cause a fire or other problems.
- Always check the power plug and make sure that it is free of dust and lint. Clean it if necessary. A dirty plug can generate heat which could cause a fire.
- Inspect the length of the power cord for cuts or other damage. Replace the power cord if necessary. A frayed or otherwise damaged power cord can cause a short circuit which could lead to a fire or personal injury from electrical shock.
- Check the length of the power cord between the machine and power supply. Make sure the power cord is not coiled or wrapped around any object such as a table leg. Coiling the power cord can cause excessive heat to build up and could cause a fire.
- Make sure that the area around the power source is free of obstacles so the power cord can be removed quickly in case of an emergency.
- Make sure that the power cord is grounded (earthed) at the power source with the ground wire on the plug.
- Connect the power cord directly into the power source. Never use an extension cord.
- When you disconnect the power plug from the power source, always pull on the plug, not the cable.

After Installation, Servicing

Disposal of Used Items

⚠WARNING

- Never incinerate used toner, toner cartridges, or toner bottles.
- Toner, toner cartridges, or toner bottles thrown into a fire can ignite or explode and cause serious injury. At the work site always carefully wrap used toner and toner cartridges with plastic bags to avoid spillage before disposal or removal.

⚠CAUTION

- Always dispose of used items (developer, toner, toner cartridges, OPC drums, etc.) in accordance with the local laws and regulations regarding the disposal of such items.
- To protect the environment, never dispose of this product or any kind of waste from consumables at a household waste collection point. Dispose of these items at one of our dealers or at an authorized collection site.
- Return used selenium drums to the service center for handling in accordance with company policy regarding the recycling or disposal of such items.

Points to Confirm with Operators

At the end of installation or a service call, instruct the user about use of the machine. Emphasize the following points.

- Show operators how to remove jammed paper and troubleshoot other minor problems by following the procedures described in the operating instructions.
- Point out the parts inside the machine that they should never touch or attempt to remove.
- Confirm that operators know how to store and dispose of consumables.
- Make sure that all operators have access to an operating instruction manual for the machine.
- Confirm that operators have read and understand all the safety instructions described in the operating instructions.
- Demonstrate how to turn the machine off with the power button on the left front corner of the machine. A message alerts the operator that there will be a slight delay until the machine shuts down. This gives the hard disk time to stop rotating and shut down normally before the machine loses power.
- Demonstrate how to disconnect the power plug quickly (by pulling the plug, not the cord) if any of the following events occur: 1) something has spilled into the product, 2) service or repair of the product is necessary, 3) the product cover has been damaged.
- Caution operators about removing paper fasteners around the machine. They should never allow paper clips, staples, or any other small metallic objects to fall into the machine.

Special Safety Instructions for Toner

Accidental Physical Exposure

⚠CAUTION

- Work carefully when removing paper jams or replacing toner bottles or cartridges to avoid spilling toner on clothing or the hands.
- If toner is inhaled, immediately gargle with large amounts of cold water and move to a well ventilated location. If there are signs of irritation or other problems, seek medical attention.
- If toner gets on the skin, wash immediately with soap and cold running water.
- If toner gets into the eyes, flush the eyes with cold running water or eye wash. If there are signs of irritation or other problems, seek medical attention.
- If toner is swallowed, drink a large amount of cold water to dilute the ingested toner. If there are signs of any problem, seek medical attention.
- If toner spills on clothing, wash the affected area immediately with soap and cold water. Never use hot water! Hot water can cause toner to set and permanently stain fabric.

Handling and Storing Toner

⚠WARNING

- Toner, used toner, and developer are extremely flammable.
- Never store toner, developer, toner cartridges, or toner bottles (including empty toner bottles or cartridges) in a location where they will be exposed to high temperature or an open flame.

⚠CAUTION

- Always store toner and developer supplies such as toner and developer packages, cartridges, and bottles (including used toner and empty bottles and cartridges) out of the reach of children.
- Always store fresh toner supplies or empty bottles or cartridges in a cool, dry location that is not exposed to direct sunlight.

Toner Disposal

⚠WARNING

- Never attempt to incinerate toner, used toner, or empty toner containers (bottles or cartridges). Burning toner can explode and scatter, causing serious burns.
- Always wrap used toner and empty toner bottles and cartridges in plastic bags to avoid spillage. Follow the local laws and regulations regarding the disposal of such items.
- Dispose of used toner and toner cartridges at one of our dealers or at an authorized collection site. Always dispose of used toner cartridges and toner bottles in accordance with the local laws and regulations regarding the disposal of such items.

Safety Instructions for this Machine

Prevention of Physical Injury

1. Before disassembling or assembling parts of the machine and peripherals, make sure that the machine and peripheral power cords are unplugged.
2. The plug should be near the machine and easily accessible.
3. Note that some components of the machine and the paper tray unit are supplied with electrical voltage even if the main power switch is turned off.
4. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
5. If the [Start] key is pressed before the machine completes the warm-up period (the [Start] key starts blinking red and green), keep hands away from the mechanical and the electrical components as the machine starts making copies as soon as the warm-up period is completed.
6. The inside and the metal parts of the fusing unit become extremely hot while the machine is operating. Be careful to avoid touching those components with your bare hands.

7. To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.

Health Safety Conditions

⚠CAUTION

- Never operate the machine without the ozone filters installed.

1. Always replace the ozone filters with the specified types at the proper intervals.
2. Toner and developer are non-toxic, but if you get either of them in your eyes by accident, it may cause temporary eye discomfort. Try to remove with eye drops or flush with water as first aid. If unsuccessful, get medical attention.
3. To avoid possible accumulation of ozone in the work area, locate the machine in a large well ventilated room that has an air turnover rate of more than 50 m^3/hr/person.

Observance of Electrical Safety Standards

1. The machine and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models.
2. The NVRAM on the system control board has a lithium battery which can explode if replaced incorrectly. Replace the NVRAM only with an identical one. The manufacturer recommends replacing the entire NVRAM. Do not recharge or burn this battery. Used NVRAM must be handled in accordance with local regulations.

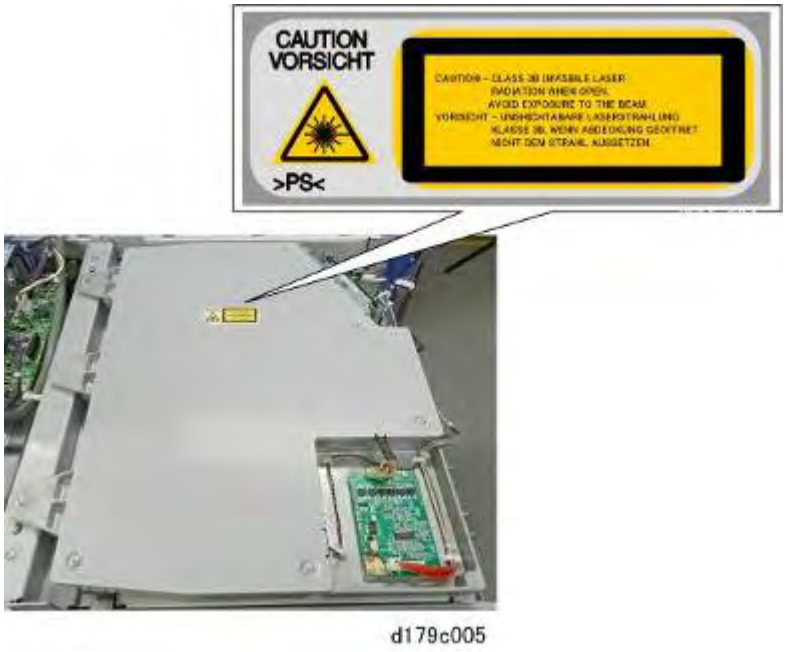
Safety and Ecological Notes for Disposal

1. Never incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
2. Dispose of used toner, developer, and organic photoconductors in accordance with local regulations. (These are non-toxic supplies.)
3. Dispose of replaced parts in accordance with local regulations.
4. When keeping used lithium batteries in order to dispose of them later, do not put more than 100 batteries per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.

⚠CAUTION

- The danger of explosion exists if a battery of this type is incorrectly replaced.
- Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer's instructions.

Laser Safety



1. A laser safety label is attached to the top of the laser unit.
   Note: The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical units in the field.
2. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment.
3. The laser subsystem is replaceable in the field by a qualified Customer Engineer.
4. The laser chassis is not repairable in the field.
5. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement of the optical subsystem is required.

⚠WARNING

- Use of controls, or adjustment, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.
- Turn off the main switch before attempting any of the procedures in the Laser Unit section. Laser beams can seriously damage your eyes.

Trademarks

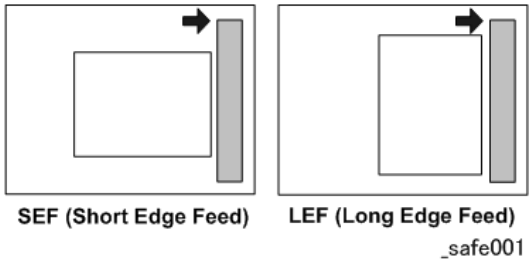
- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

Symbols, Abbreviations and Trademarks

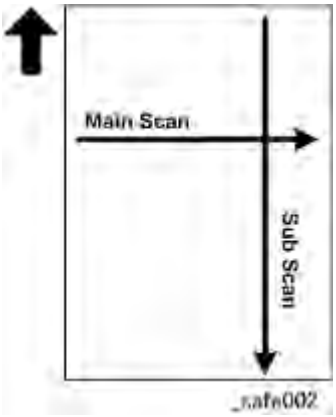
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver
	Shoulder screw
	Shoulder screw (black)

Symbol	What it means
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

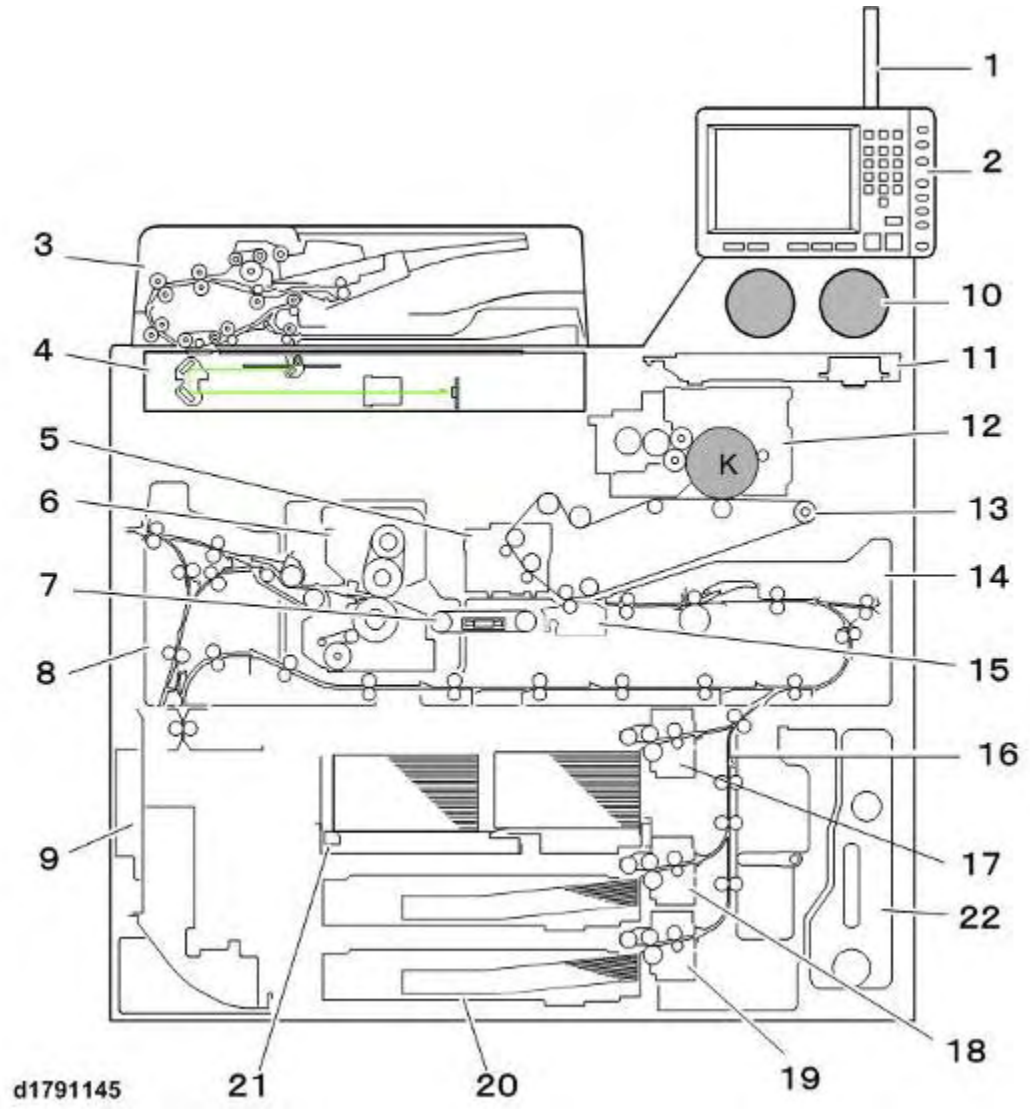
PRODUCT INFORMATION

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

1. PRODUCT INFORMATION

1.1 PRODUCT OVERVIEW

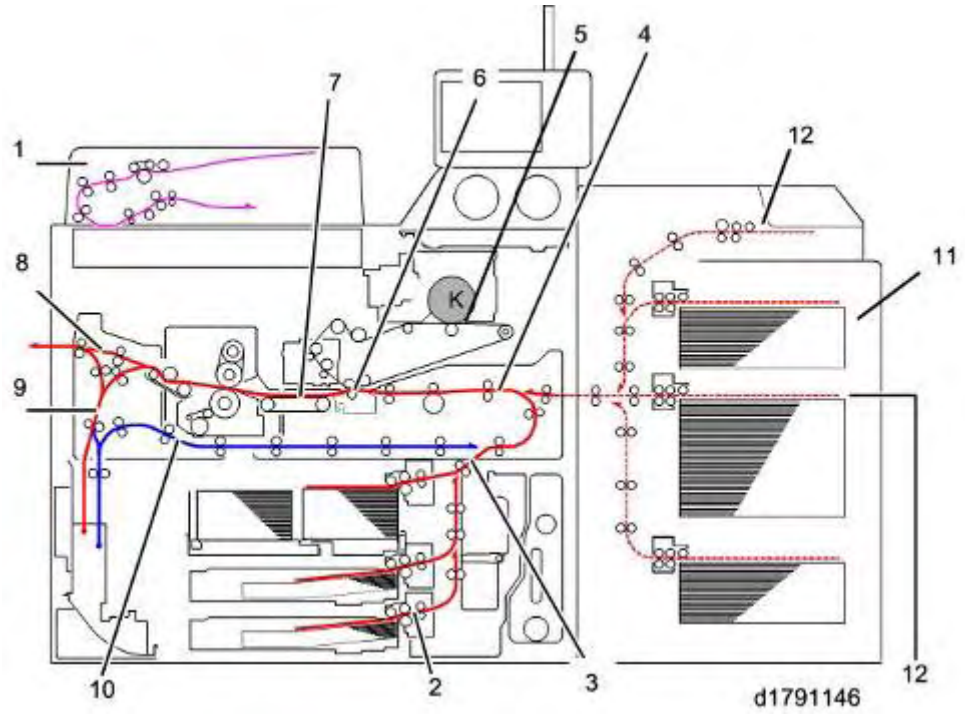
1.1.1 LAYOUT



No.	Name	No.	Name
1	Status Light	12	PCDU
2	Operation Panel	13	ITB Unit
3	ADF	14	Registration Unit (Main Path)
4	Scanner	15	PTR Unit (Paper Transfer Roller)

No.	Name	No.	Name
5	ITB Cleaning Unit	16	Vertical Transfer Unit (VTU)
6	Fusing Unit	17	Tray 1 (FM 1)
7	PTB (Paper Transport Belt)	18	Tray 2 (FM 2)
8	Invert/Exit Unit	19	Tray 3 (FM 3)
9	Purge Path	20	Universal Trays (x2)
10	Toner Supply Unit	21	Tandem Tray
11	Laser Unit	22	Used Toner Bottle

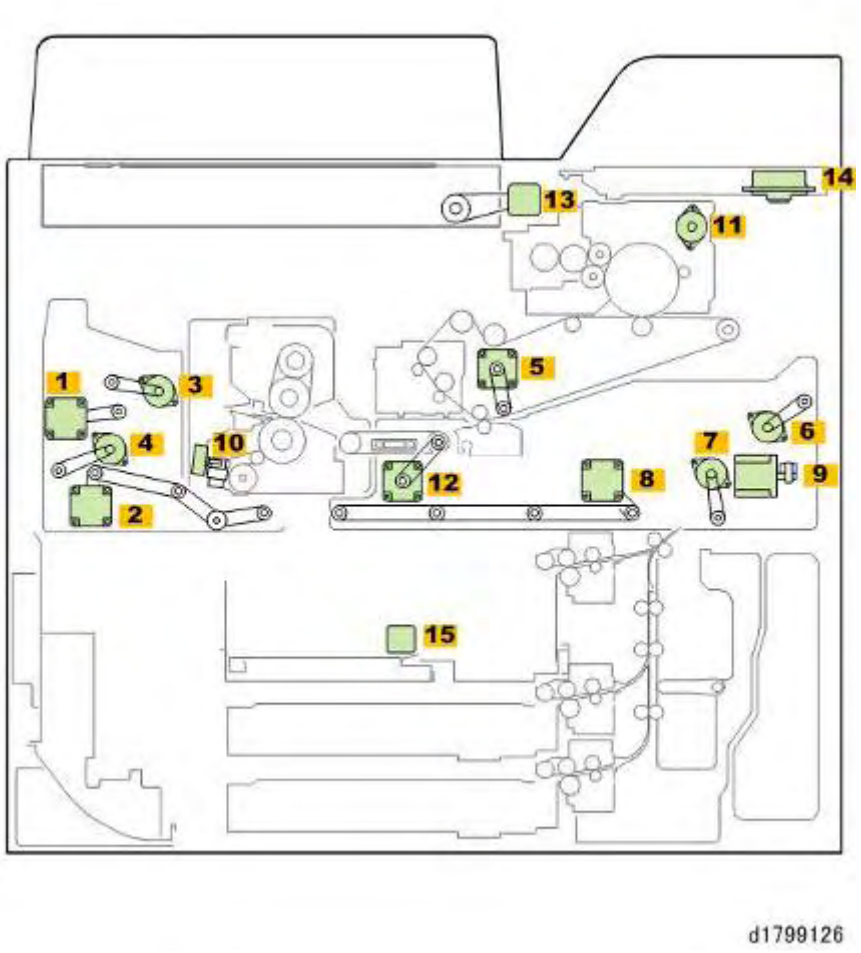
1.1.2 PAPER PATHS



No.	Name	No.	Name
1	ADF	7	Paper Transport Belt
2	Paper Bank	8	Straight-through Path Exit
3	Vertical Transport Unit	9	Invert Exit
4	Registration Unit	10	Duplex Return Path
5	ITB Unit (Image Transfer)	11	LCIT (Option)
6	PTR Unit (Paper Transfer)	12	Multi Bypass Tray (Option)

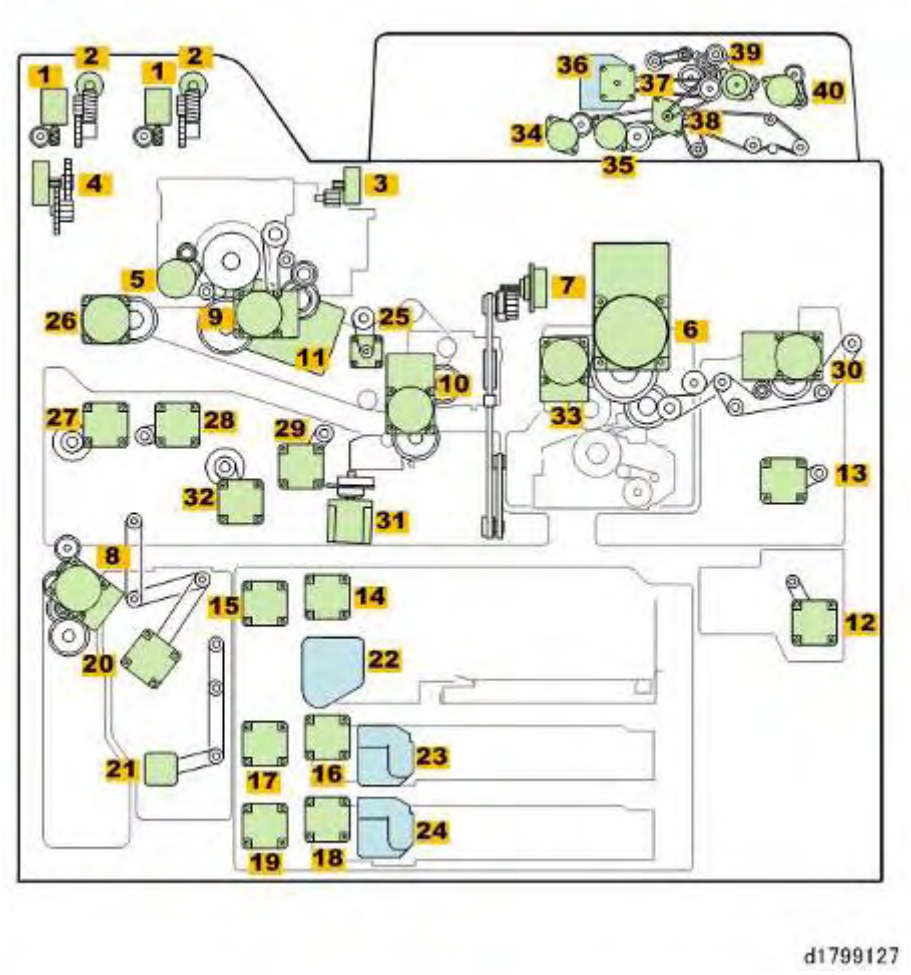
1.1.3 DRIVE LAYOUT

Front



No.	Name	No.	Name
1	Inverter Entrance Motor	9	Trailing Edge Shift Motor
2	Duplex Transport Motor 1	10	Web Cleaning Motor
3	Exit Junction Gate Motor	11	Cleaning Pad Motor
4	Exit Invert Motor	12	PTB Motor
5	PTR Lift Motor	13	Scanner Motor
6	LCT Relay Separation Motor	14	Polygon Motor
7	Main Relay Separation Motor	15	Tandem Transport Motor
8	Duplex Transport Motor 2		

Rear



No.	Name	No.	Name
1	Toner Bottle Motors (x2)	21	Vertical Transport Motor
2	Toner Bottle Cap Motors (x2)	22	Tray 1 (F1) Lift Motor
3	Toner Feed Motor	23	Tray 2 (F2) Lift Motor
4	Toner Agitator Motor	24	Tray 3 (F3) Lift Motor
5	Drum Cleaning Motor	25	Belt Centering Motor
6	Fusing Motor	26	Transport Belt Motor
7	Used Toner Collection Motor	27	Registration Entrance Motor
8	Used Toner Bottle Motor	28	Registration Timing Motor
9	Drum Motor	29	Transfer Timing Motor

No.	Name	No.	Name
10	ITB/PTR Motor	30	Exit Motor
11	Development Motor	31	Registration Gate Motor
12	Invert Duplex Motor	32	Registration Shift Motor
13	Invert Exit Motor	33	Pressure Roller Lift Motor
14	Tray 1 (F1) Feed Motor	34	ADF Exit Motor
15	Tray 1 (F1) Transport Motor	35	ADF Scan Motor
16	Tray 2 (F2) Feed Motor	36	ADF Bottom Plate Lift Motor
17	Tray 2 (F2) Transport Motor	37	ADF Feed Motor
18	Tray 3 (F3) Feed Motor	38	ADF Pickup Roller Motor
19	Tray 3 (F3) Transport Motor	39	ADF Transport Motor
20	Bank Exit Motor	40	ADF Relay Motor

1.2 MAIN MACHINE AND PERIPHERALS

1.2.1 MAIN MACHINE

Key

Code	Area	Power
-17	North America/Central, South America	208-240V, 20A, 50/60 Hz
-57	North America/Central, South America	208-240V, 20A, 50/60 Hz
-61	China	220-240V, 16A, 50/60 Hz
-67	Asia/Pacific, Europe/Russia/Middle, Near East/Taiwan	220-240V, 16A, 50/60 Hz

Main Machine

Name	Production Name
Pro 8100EX	Baron-C1a D179-17 (95 ppm)
Pro 8100S	Baron-C1SPa D179-57, -61, -67 (95 ppm)
Pro 8110S	Baron-C1SPb D180-57, -61, -67 (110 ppm)
Pro 8120S	Baron-C1SPc D181-57, -61, -67 (135 ppm)

1.2.2 OPTIONS

Peripheral Devices

- Booklet Finisher SR5060 (D734) (Booklet, corner stapling both)
- Card Reader Tray Type 1075 (B498-01)
- Copy Connecter Type 3260 (B328-11)
- Cover Interposer Tray CI5030 (D738)
- Cover Interposer Tray for Perfect Binder Type S1 (D736)
- Decurl Unit DU5030 (D741)
- Finisher SR5050 (D735) (Corner stapling only)
- Key Counter Bracket Type 1027 (B452-57)
- LCIT RT5070 (D733)
- LCIT RT5080 (D732)
- Multi Bypass Tray BY5010 (D517)
- Multi-Folding Unit FD5020 (D740)
- Optional Counter Interface Unit Type A (B878-11)
- Perfect Binder GB5010 (D736)
- Printer Controller EB-32 (D726)
- Punch Unit PU5020 NA, EU, SC
- Ring Binder RB5020 (D737)
- Transit Pass Unit for Perfect Binder Type S1 (D736)
- Trimmer Unit TR5040 (D520)

Controller Options

Item	Comment
Bluetooth Interface Unit	Hardware (PCB, etc.)
Browser Unit Type S1	SD card
Copy Data Security Unit Type G	SD card
Data Overwrite Security Unit Type H	SD card
File Format Converter Type E	Hardware (PCB, etc.)
IEEE 1284 Interface Board Type A	Hardware (PCB, etc.)
IEEE 802.11a/g/n Interface Unit Type M3	Hardware (PCB, etc.)
IPDS Unit Type S1	SD card

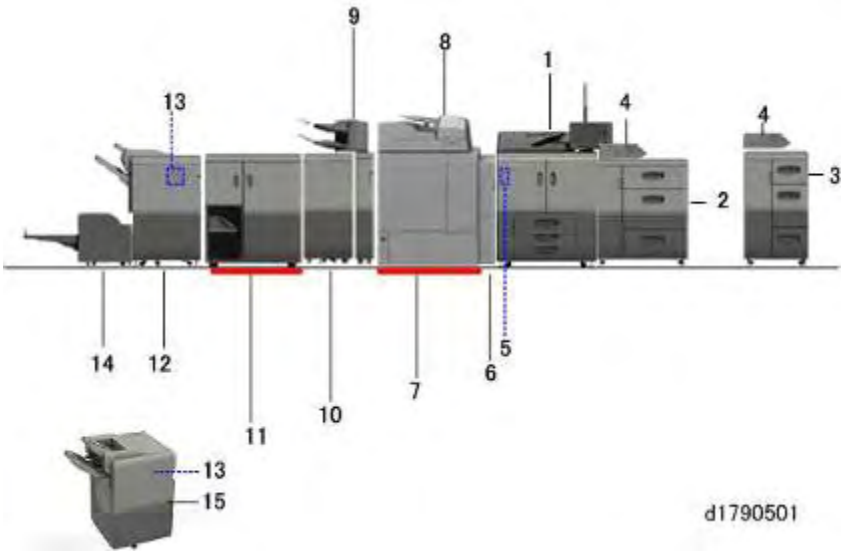
Item	Comment
OCR Unit Type M2	SD card
PostScript3 Unit Type S1	SD card
Printer/Scanner Unit Type S1	SD card
SD Card for Fonts Type D (Near, Middle East Only)	SD card
SD card for NetWare printing Type S1	SD card
Unicode Font Package for SAP(R) 1 License	SD card
Unicode Font Package for SAP(R) 10 License	SD card
Unicode Font Package for SAP(R) 100 License	SD card

Consumables

Item	For
Glue Supply Type A (B917-01)	Perfect Binder GB5010 (D736)
Refill Staple Type M	Finisher SR5050 (D735) (Corner stapling only)
Refill Staple Type T	Booklet Finisher SR5060 (D734) (Booklet, corner stapling both)
Ring Cartridge A4 Type RB5000 D421-02	Ring Binder RB5020 (D737)
Ring Cartridge LT Type RB5000 D421-01	Ring Binder RB5020 (D737)
Ring Opener Type A D419-17	Ring Binder RB5020 (D737)
Ring Supply A4 Black 100 Type A D392-35	Ring Binder RB5020 (D737)
Ring Supply A4 Black 50 Type A D392-47	Ring Binder RB5020 (D737)
Ring Supply A4 White 50 Type A D392-36	Ring Binder RB5020 (D737)
Ring Supply LT Black 100 Type A D392-39	Ring Binder RB5020 (D737)
Ring Supply LT Black 50 Type A D392-41	Ring Binder RB5020 (D737)
Ring Supply LT White 100 Type A D392-38	Ring Binder RB5020 (D737)

Item	For
Ring Supply LT White 50 Type A D392-40	Ring Binder RB5020 (D737)
Staple Type M	Finisher SR5050 (D735) (Corner stapling only)
Staple Type U	Booklet Finisher SR5060 (D734) (Booklet, corner stapling both)
TCRU Type 8100 (Set B), ORU Type 8100 (Set B) (D752-17)	TCRU
TCRU/ORU Type 8100 (Set A) (D752-00)	TCRU

1.2.3 PERIPHERAL CONFIGURATION RULES



1	Main Machine D179/D180/D181
2	LCIT RT5080 D732
3	LCIT RT5070 D733
4	Multi Bypass Tray BY5010 D517
5	Decurl Unit DU5030 D741
6	Transit Pass Unit D391
7	Perfect Binder GB5010 D736

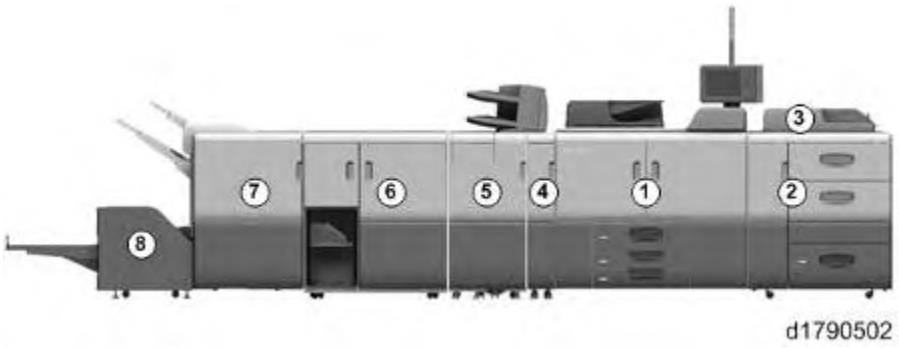
8	Cover Interposer Tray for Perfect Binder Type S1 D736
9	Cover Interposer Tray CI5030 D738
10	Multi-Folding Unit FD5020 D740
11	Ring Binder RB5020 D737
12	Booklet Finisher SR5060 D734 (Corner, center stapling)
13	Punch Unit PU 5020 – NA/EU/SC
14	Trimmer Unit TR5040 D520
15	Finisher SR5050 D735 (Corner stapling only)

1. Either LCIT (12) can be installed on the right side of the main machine.
2. The Multi Bypass Tray (3) can be installed on top of either LCIT
3. The Decurl Unit (5) is installed inside the main machine.
4. Either the Perfect Binder (7) or the Ring Binder (11) can be installed, **but these units cannot be installed together in the same line**.
5. If Multi Folding Unit (10) is installed, the Booklet Finisher or Finisher (12) must be installed as the last unit downstream.
6. The Trimmer Unit (14) can be attached only to the Booklet Finisher not the Finisher (12).
7. The booklet tray of the Booklet Finisher () must be removed in order to install the Trimmer unit ().

- If the Trimmer Unit (14) is not installed, the booklet tray of the Booklet Finisher (12) must be installed.

1.2.4 EXAMPLE CONFIGURATIONS

Example 1



①	Main Machine
②	LCIT RT5080 (A3)
③	Multi Bypass Tray BY5010
④	Cover Interposer Tray CI5030
⑤	Multi-Folding Unit FD5020
⑥	Ring Binder RB5020
⑦	Booklet Finisher SR5060
⑧	Trimmer Unit TR5040

Example 2

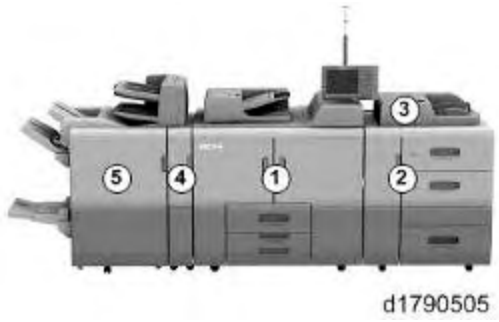
d1790503

①	Main Machine
②	LCIT RT5080 (A3)
③	Multi Bypass Tray BY5010
④	Transit Pass Unit for Perfect Binder Type S1
⑤	Perfect Binder GB5010
⑥	Cover Interposer Tray for Perfect Binder Type S1
⑦	Booklet Finisher SR5060

Example 3

①	Main Machine
②	LCIT RT5080 (A3)
③	Multi Bypass Tray BY5010
④	Multi-Folding Unit FD5020
⑤	Booklet Finisher SR5060
⑥	Trimmer Unit TR5040

Example 4



d1790505

①	Main Machine
②	LCIT RT5080 (A3)
③	Multi Bypass Tray BY5010
④	Cover Interposer Tray CI5030
⑤	Booklet Finisher SR5060

Example 5

d1790506

①	Main Machine
②	LCIT RT5070
③	Finisher SR5050

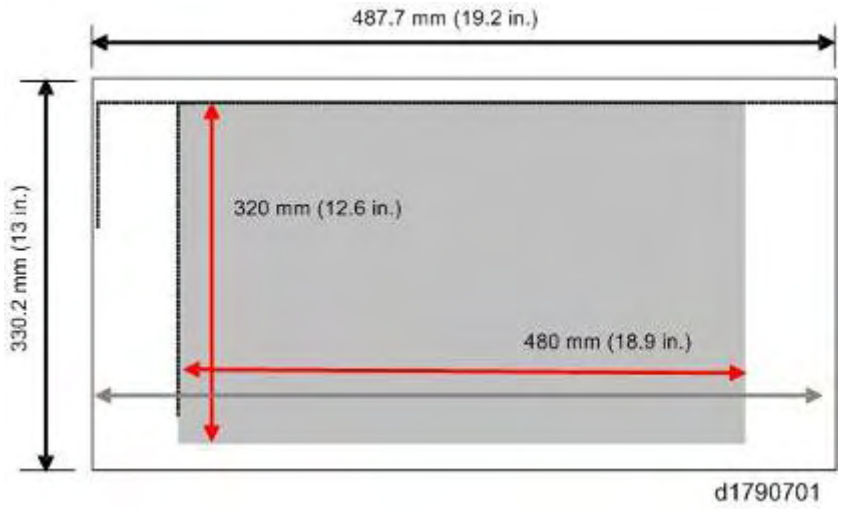
1.3 SPECIFICATIONS

See the “Appendices” for the main machine and peripheral specifications.

1.4 GUIDANCE FOR THOSE FAMILIAR WITH PREDECESSOR PRODUCTS

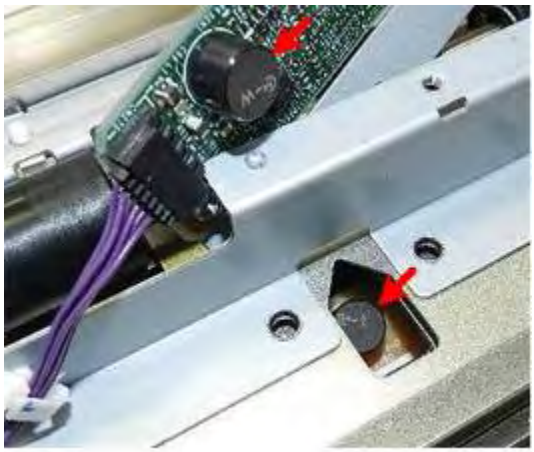
1.4.1 SPECIFICATION HIGHLIGHTS

Print Area, Warm-up Time



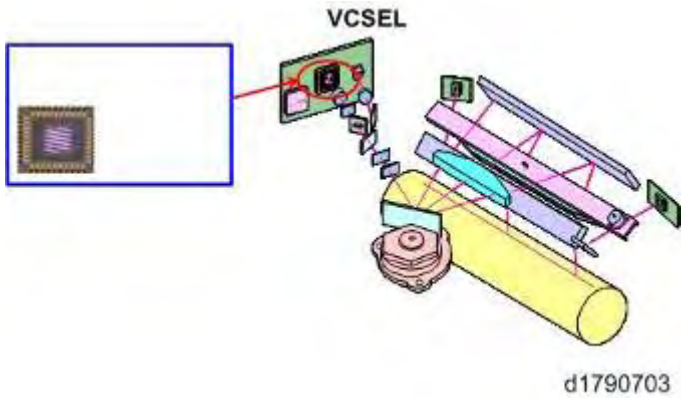
Max. print area	320 x 480 mm (12.6 x 18.9 in.)
Warm-up time	Less than 360 sec. (23C, 73.4F)

ADF



Basically the same as the B135 Series with the addition of a double-feed sensor pair. These sensors use ultra-sound to monitor the thickness of the paper that passes between them. If the reading exceeds threshold for the paper in use, the sensors detect double-feed.

Laser Unit



This machine also employs VCSEL technology. VCSEL (Vertical Cavity Surface Emitting Laser' 1200 x 4800 dpi carries 40 beams in two dimensions. During duplexing some paper may shrink or swell due to heat after passing through the fusing unit on the first pass. This small change in the paper size can cause inaccurate registration on the 2nd side. VCSEL compensates for this in two ways:

- **Magnification correction (sub scan direction).** Image magnification adjustment for the back side can be set by the operator. This feature is new parameter in the Paper Library.
- **Pixel clock frequency (main scan direction)**. The image can be adjusted front-to-back in increments 1/48 dot-size steps to avoid mismatch between front/back registration.

VCSEL also keeps the strength of the laser beams at a constant level by regulating the strength of the beams with optical waveform correction. This correction is especially important for the reproduction of thin diagonal lines.

The machine calculates the optimum optic settings for each color and uses an ND filter to adjust the settings.

1.4.2 COMPARISON WITH PREVIOUS MACHINES

This machine most resembles the Pro C651EX, Pro C751EX, Pro C751 series color printing machines (hereafter "predecessor"). This machine reproduces digital black-and-white only, and although many of the units show many similarities with its larger predecessor there are also important differences.

Power Switch

d1790712

This machine has a power indicator (LED) on the operation panel, but the operation power switch has been removed from the operation panel. The operation power switch of this machine is located at the left, front corner of the machine.

ITB Centering Control

d1790704

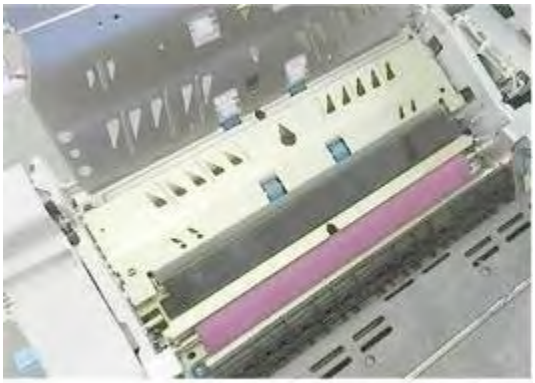
A centering control sensor at the upper right corner of the ITB unit monitors the rear edge of the belt to check its position. If the belt goes off center, a motor, roller, cable mechanism corrects the position of the belt. This is the same as the predecessor. However, the overrun sensors at the front and rear edges of the belt have been eliminated, along with the ITB speed sensor.

PTB Unit

d1790705

The number of paper transport belts and transport fans has been reduced from three to two.

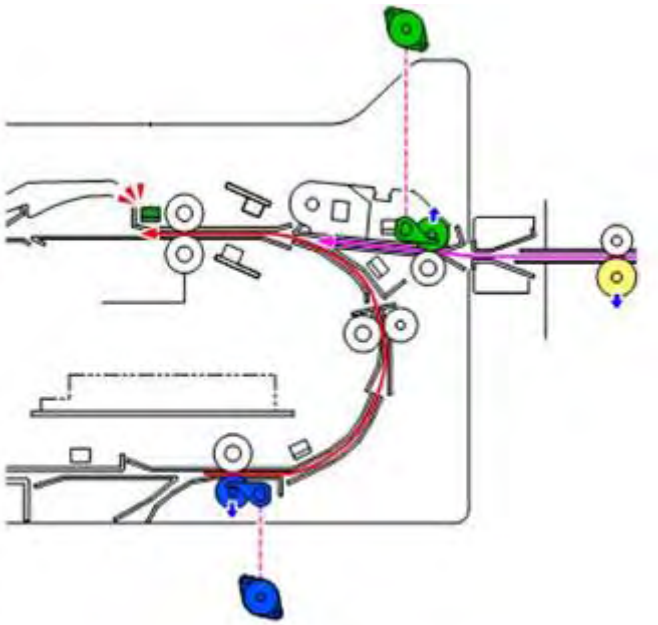
Cooling Belt



d1790706

The number of cooling belts on the left side of the fusing unit has been reduced to one.

Main, LCT Relay Rollers



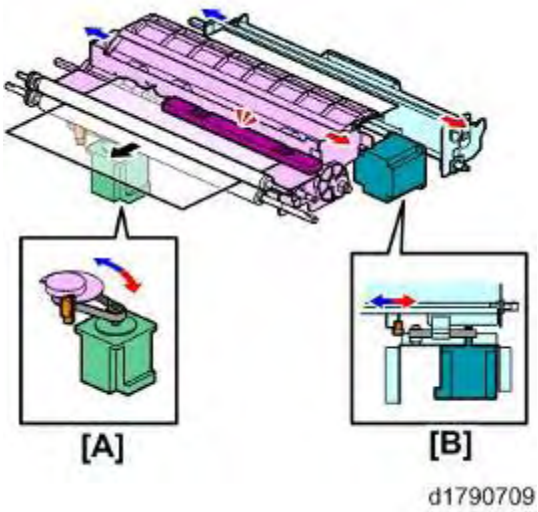
d1790707

The opening and closing of the main relay rollers and LCT relay rollers is controlled by two separate motors, not solenoids. These rollers are separated to free the paper for skew correction and image registration.

Skew and Paper Registration

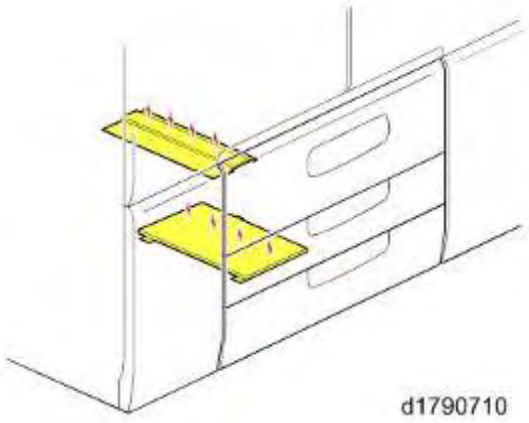
d1790708

The gates raised to stop paper for skew correction are mounted on a rotary that is raised and lowered by a registration timing motor. This replaces the vertical "elevator" gate.



There are two shift units used to position the paper for image registration. The LE shift unit [A], located near the leading edge of the paper at the registration gate roller, grips the paper and adjusts the position in the main scan direction (front-to-rear). The TE shift unit [B] (at the right toward the trailing edge) performs the same function. However, the TE shift unit operates only for paper larger than A4 SEF.

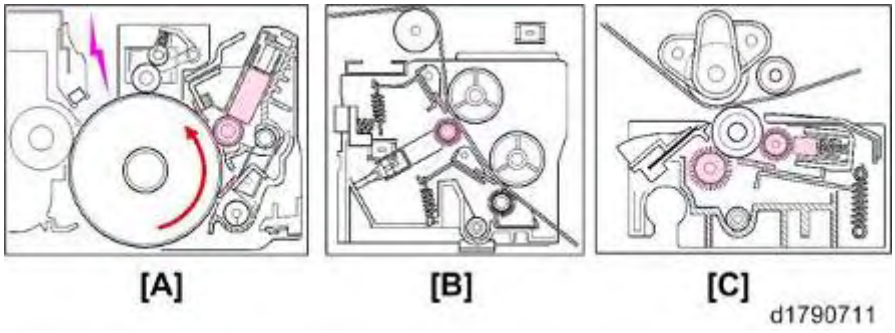
Paper Bank Heaters



Two paper bank heaters are available. Both heaters require installation:

- One is below Tray 1 and the other below Tray 3.
- This is the same as the predecessor, but unlike the predecessor, this machine has no switches at the front.
- Installation and connection of the heaters for this machine require removal of the rear cover.
- The heaters can be connected to remain on always, or to switch on only when the main machine has been switched off. For more details, please refer to the main machine installation section.

Common Cleaning Mechanisms

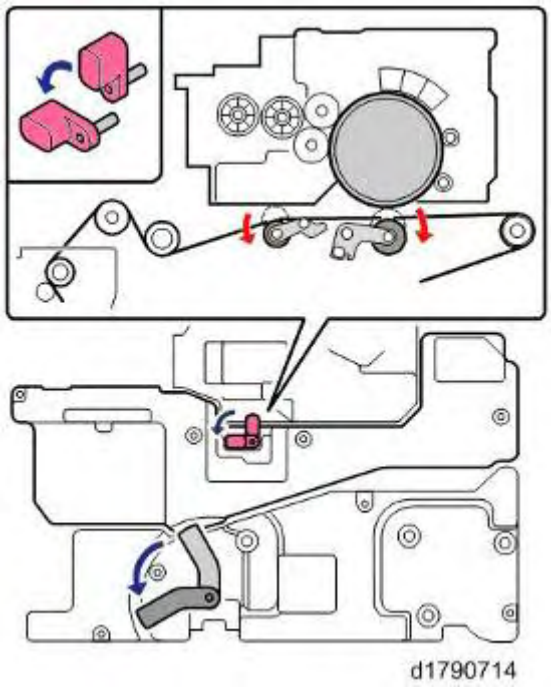


This machine, like the predecessor, employs the same cleaning mechanisms for [A] Drum cleaning unit, [B] ITB cleaning unit, and [C] PTR cleaning unit. Although the configuration of each unit is different, they all use a dry lubricant (Zinc Stearate) supplied from a lubrication bar and applied with a lubricant (brush) roller. The PTR unit uses an additional cleaning brush roller.

Drum Charge

This machine does not use a charge roller. It uses a CGB (Charge, Grid, Bias) charge unit, identical to the charge units that employ the Scorotron method to charge the surface of the drum in other monochrome machines.

ITB Separation



Rotating a lever up and down raises and lowers the ITB against and away from the drum. There is no motor or separation mechanism to separate the belt and drum when the machine is idle.

Drawer

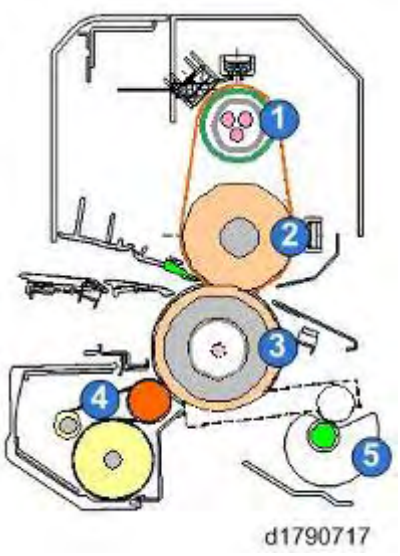
The predecessor has two separate drawers (left and right) which can be opened separately. This machine has a single drawer (also opened from the front) that contains all the paper path units for registration, paper separation, paper transport to fusing unit, fusing unit, cooling, and then finally exit/invert unit.

Paper Feed Units

d1790716

The predecessor machine uses solenoids to raise and lower the separation rollers in the paper feed units. However, this machine has no solenoid for the separation roller in the paper feed units. When a tray is opened and closed a lever lowers and raises the separation roller. As long as the tray is closed, the nip of the separation roller and feed roller is closed.

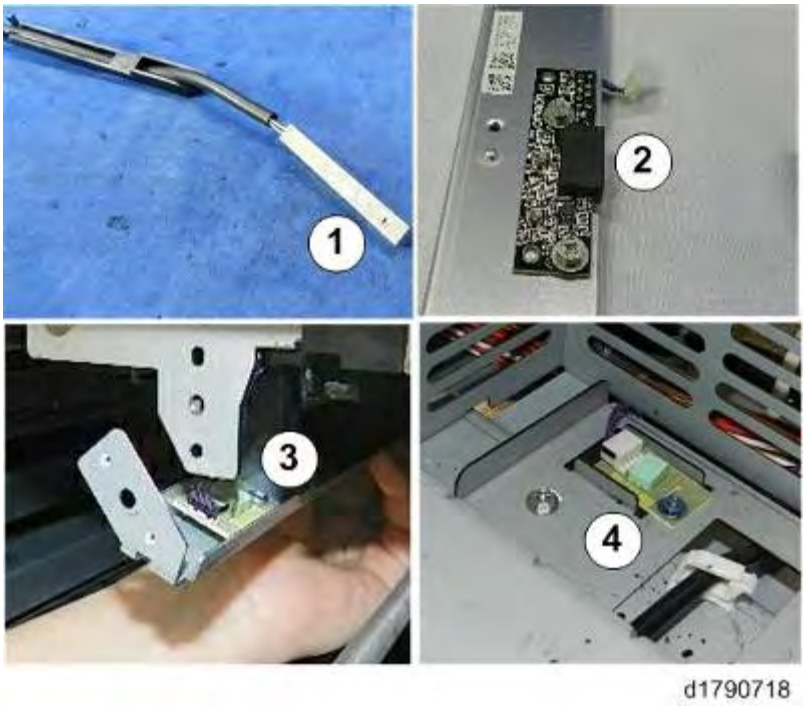
Fusing Unit



d1790717

This machine and the predecessor both use a belt transfer system in the fusing unit. A heating roller (1) heats the fusing belt which transfers heat to the hot roller (2) which applies heat to the paper and toner in the nip of the hot roller and pressure roller (3). Web fabric (4) is used to both clean and lubricate the surface of the fusing belt. Two cams (5) on a shaft driven by a stepper motor raise and lower the pressure belt to both vary pressure and to separate the pressure roller from the hot roller when the machine is idle.

Process Control



①	Potential Sensor
②	ID Sensor
③	Temperature/Humidity Sensor – PCDU
④	Temperature/Humidity Sensor – Used Toner Bottle

This machine and the predecessor use nearly identically electrical components for process control. This machine has only one potential sensor, and the Music sensors for color registration correction on the ITB have been eliminated. The ID sensor is the only sensor above the ITB.

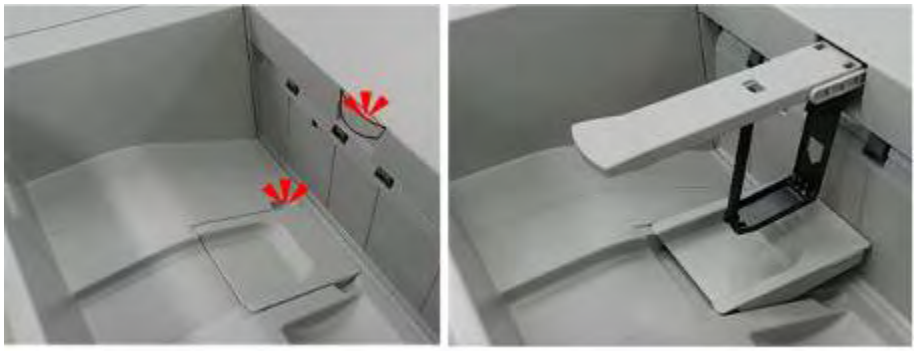
1.4.3 PERIPHERALS

LCT Units

d1790719

The LCIT RT5070 (left) and LCIT RT5080 are both the same height as the main machine. This makes LCT installation and installation of the Multi Feed unit on top of either LCT much easier.

Multi Fold Unit



d1790720

The auxiliary tray and flexible page depressor are no longer accessories; they are built into the unit. The auxiliary tray keeps Z-folded paper flat in the tray so that the trailing edges do not trigger an early tray full alert in the top tray. The flexible page depressor prevents folded paper from opening out and triggering an early tray full alert in the top tray.

Booklet Finishers

The booklet tray ① of the previous finisher required installation and harness connection. The tray ② of the Booklet Finisher SR5060 for this machine can be attached and detached as required. No installation is needed.

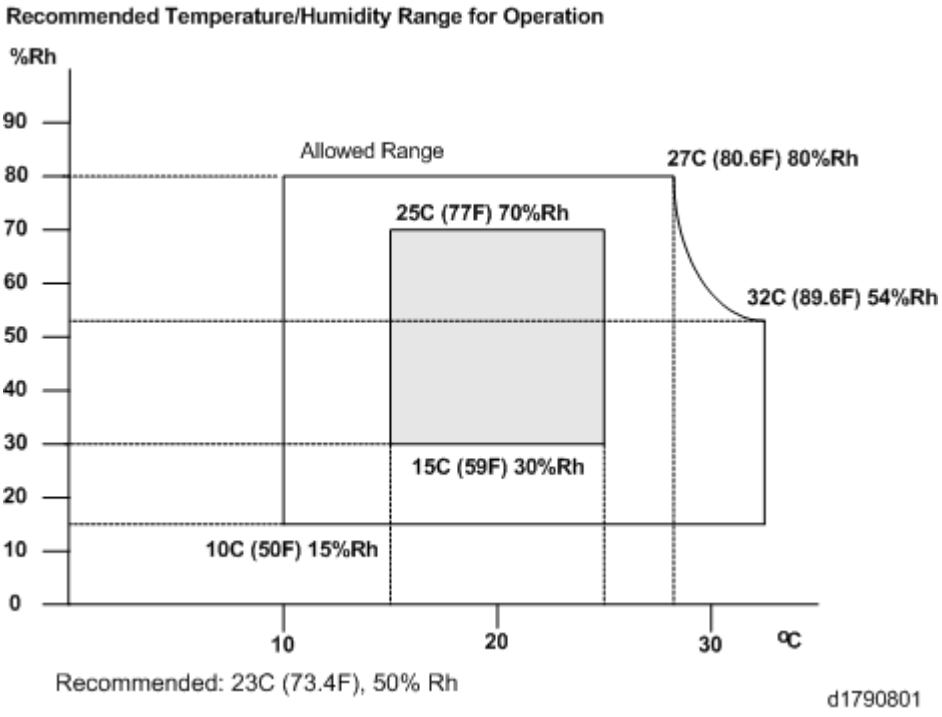
INSTALLATION

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
2	03/24/2014	Updated note
7	01/23/2014	Added Power Off Caution
8	01/22/2014	Accessories
16 ~ 25	01/30/2014	Updated "*Install Operation Panel*".
32	01/23/2014	Added Power Off Caution
42 ~ 44	04/09/2014	Main scan/sub scan registration adjustment
302 ~ 308	04/10/2014	Added GBC StreamPunch (VR41)

2. INSTALLATION

2.1 INSTALLATION REQUIREMENTS

2.1.1 OPERATING ENVIRONMENT



Item	Details
Target Temperature & Humidity	23°C (73.4°F), 50% RH
Temperature range	10° to 32°C (50° to 90°F) Perfect Binder: 15° to 32°C (59° to 90°F)
Humidity range	15 to 80% RH
Ambient illumination	Less than 1500 lux
Ventilation	Air turnover rate of more than $30m^3$/hr/person
Ambient dust	Less than 0.10 mg/m^3

Important

⇒
- If the machine is installed in a location where the ambient temperature is more than 30°C (86°F), do not run longer than 2 hours, and never turn the main power switch off immediately after a long print job. Leave the machine on so that the fans can expel the hot air from the machine and cool the electronic components.
- If this machine is to be used in a location where both temperature and humidity are high, the tray heaters (options) should be installed and connected. For details, please refer to "Main Machine" in the "Installation" section.

⚠CAUTION

- Make sure that the power cord is rated 240V 20A for the Pro8120EX, or 240V 15A for the Pro8100EX and Pro8110 EX for the main machine breaker switch.

1. If the installation site has air-conditioners or heaters, put the machine in a location that agrees with these conditions:
   - Where there are no sudden temperature changes from low to high, or high to low.
   - Where the machine will not be directly exposed to cool air from an air conditioner in the summer.
   - Where the machine will not be directly exposed to reflected heat from a heater in the winter
2. Do not put the machine where it will be exposed to gases like ammonia that can cause corrosion.
3. Put the machine on a strong level surface. The front and rear of the machine must be level ±2.5 mm (0.1").
4. Never put the machine where it can be subjected to strong vibration.
5. Never connect the machine to a power source shared with other electrical devices.
6. The machine can generate an electromagnetic field which can cause interference with radio or television reception.

2.1.2 POWER REQUIREMENTS

Important

- Make sure that the wall outlet is near the mainframe.
- Keep the area around the power outlet open and free of clutter so the operator can get to it easily and quickly.
- Make sure the plug connection to the power outlet is tight.
- Do not connect more than one electrical device to the same power outlet.
- Be sure to ground the machine.
- Never place anything on the cord and never wrap the cord around itself or around another object.

Input voltage level

North America	208 to 240V, 50/60 Hz: More than 20 A
Europe/Asia	220/230/240V, 50/60 Hz: More than 16 A

Permissible voltage fluctuation: ±10%

Breaker Switch

The machine is equipped with a breaker switch located at the rear, lower right corner. Inspect and test the breaker switch at least once a year.

d1790802

Important

- If the breaker switch appears dirty and covered with soot, it probably requires replacement.

2.1.3 MACHINE LEVEL

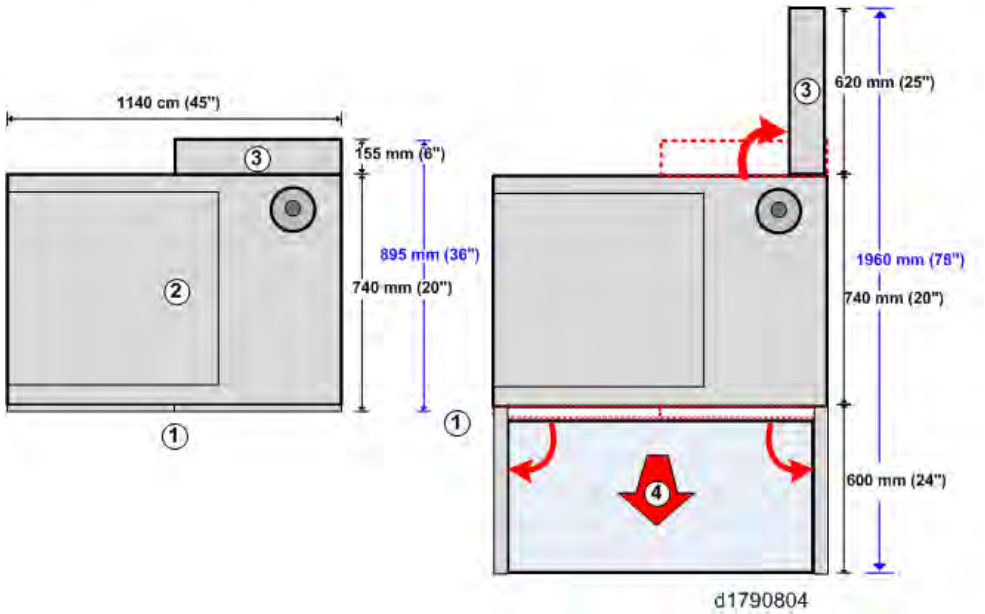
d1790917

- The machine must be leveled (right to left) within 5 mm (0.2”)
- The machine feet can be rotated to raise and lower each corner of the machine until it is level.

2.1.4 SPACE REQUIREMENTS

Put the mainframe near the power source. Consideration should be given not only to machine operation, but servicing the machine as well, with front doors and rear boxes fully open.

Space Around the Main Machine



d1790804

The illustration above is a top view of the main machine. This illustration is not drawn to scale. Measurements are rounded up slightly, but they will allow you to estimate how much space will required to work around the machine and service the machine without moving it.

- Approximately 620 mm (25 in.) clearance required behind the machine with the control box open.
- Approximately 600 mm (24 in.) at the front of the machine with both front doors open and the drawer pulled out.

No.	Part	Range of Movement
①	Front Doors	Both doors swing open to the front
②	Main Machine	Remains stationary.
③	Controller Box	Swings open to the rear
④	Front Drawer	Pulls out to the front for servicing (fusing unit, registration unit, PTR unit, PTB unit etc.)

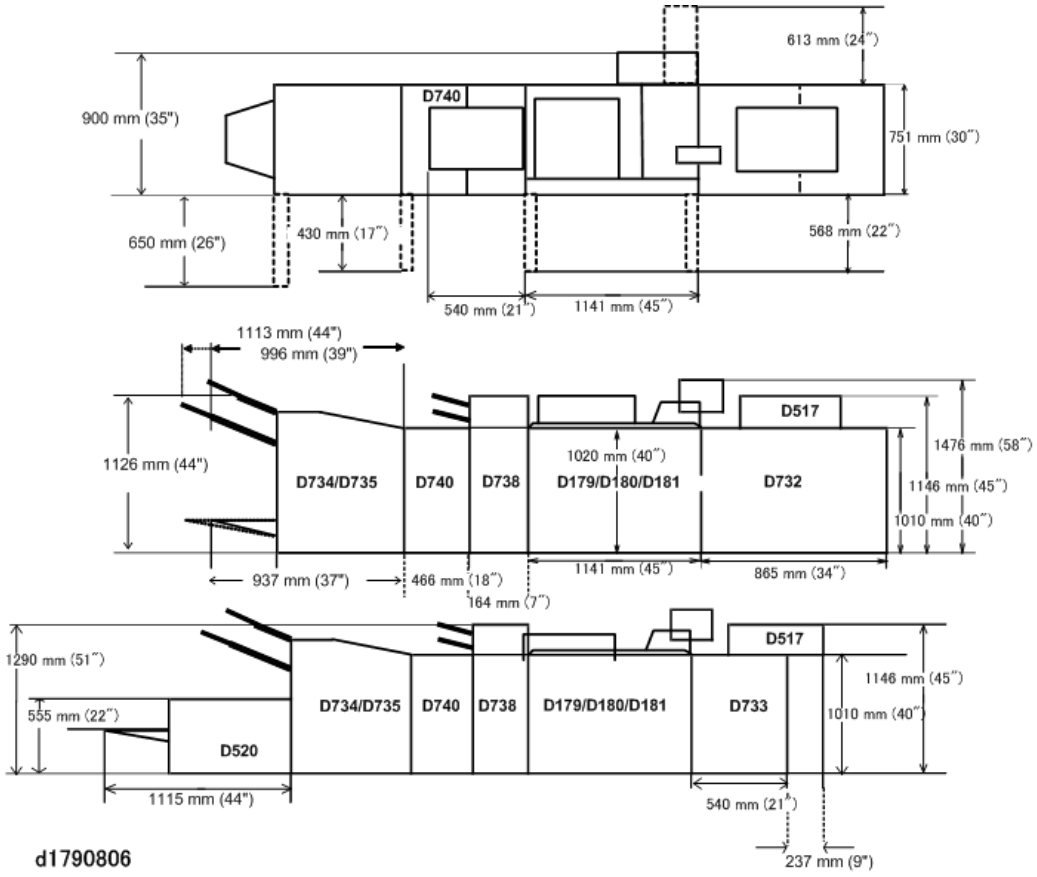
- The controller box is on hinges and can be swung open to the rear in order to service parts on the back of the machine (motors, sensors, etc.).
- The front doors swing open to the front, and then the front drawer can be pulled out the front of the machine on rails for servicing.

Note

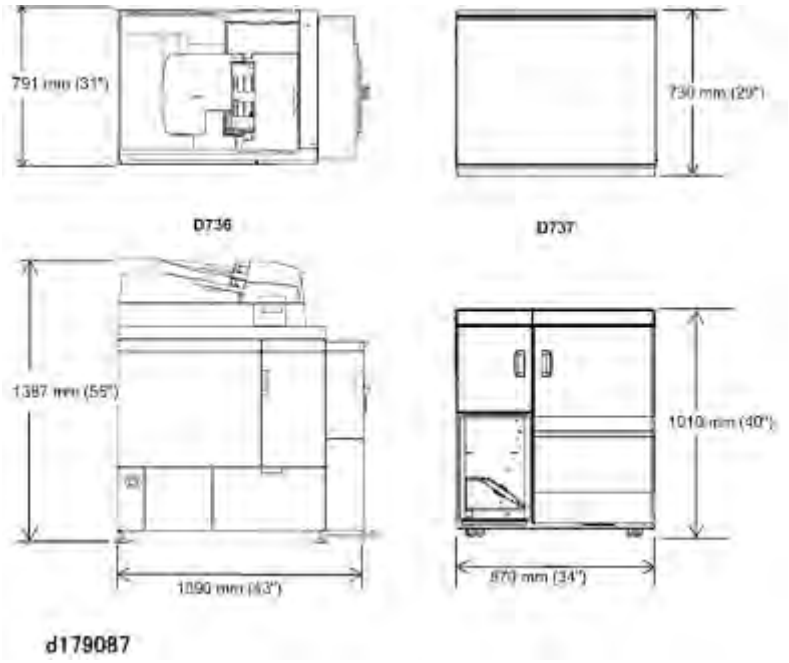
- According to specifications, at installation there must be at least 200 mm (8 in.) between a wall and the back of the machine. However, please remember that at least 650 mm (25 in) of space is required in order to open the control box for servicing.

2.1.5 SYSTEM DIMENSIONS

Top and Side Views



Perfect Binder and Ring Binder



2.1.6 MAIN POWER AND OPERATION POWER SWITCH

Main Power Switch

The main power switch is located inside the front left door. This machine should be left on at the end of the work day.

⚠CAUTION

⇒However, the main power switch should always be turned **OFF** before servicing the machine. Before working on any electronics in this machine, perform the following.

1. Turn OFF the Main Power Switch. Wait until the machine is completely turns OFF.
2. Unplug the machine from the Electrical Power Outlet.
3. Press the Main Power Switch again to discharge the machine.

If any adjustment or operation check has to be made with exterior covers off or open when the main switch is turned ON, keep hands away from electrified or mechanically driven components.

Operation Switch

Always follow this procedure to shut down the machine before servicing.

⚠WARNING

- Never power on the machine with the LD unit or the plastic canopy removed.

1. Push the operation power switch [A] on the front left corner of the machine.
2. A message appears and tells you to wait until the machine powers down completely. This gives the hard disk drive enough time to stop rotating and to shut down safely before the machine loses power.
3. Wait for the operation panel to switch off.

Important

- Before the machine leaves the factory, the main power switch is wet to ON. If this switch is OFF, it must be set to ON. As a safety precaution set both switches to OFF and disconnect the main machine power cord before servicing the machine. After servicing the machine, be sure to set the main power switch back to ON. Wait for the operation panel to switch off.

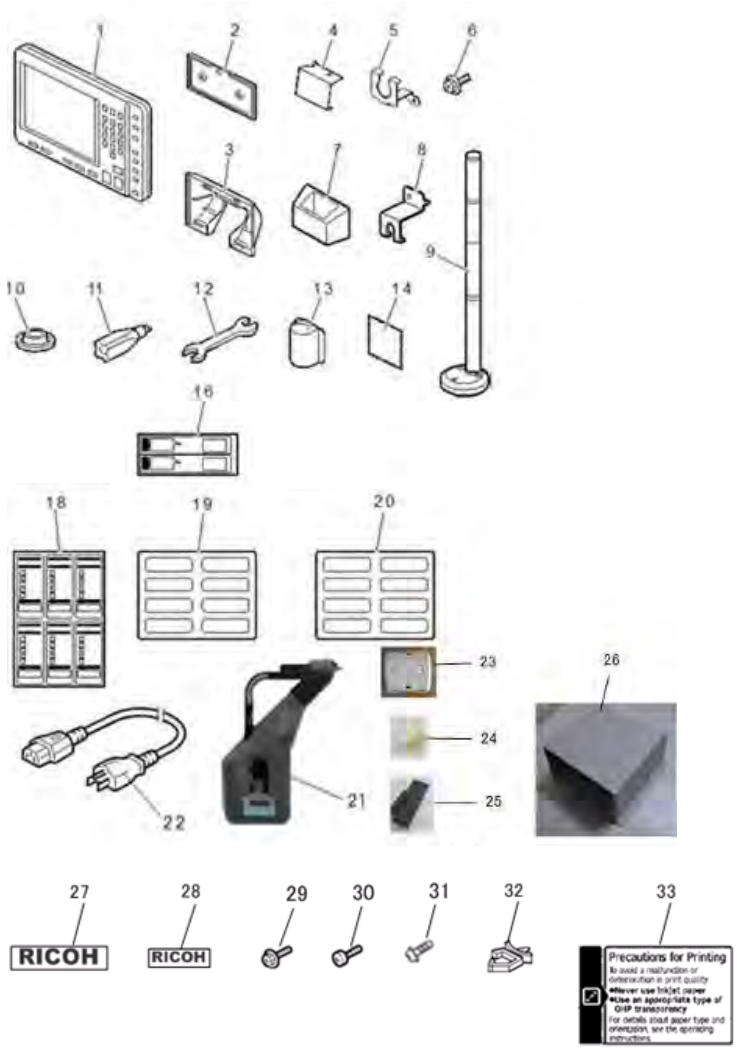
4. Allow the machine to cool for a few minutes.
   - The polygon motor may continue to rotate for approximately one to three minutes after the machine has been switched off.

This also allows time for the fusing unit to cool.

⇒ 2.2 MAIN MACHINE

2.2.1 ACCESSORIES

Check the items in the box to make sure that you have all the accessories shown below.



No.	Description	Q'ty
1	Operation panel	1
2	Flat Plate	1
3	Curved Bracket	1
4	Harness Bracket	1
5	Power Cord Bracket	1
6	Tapping Screw with Washer M4x8	2
7	Cleaning Cloth Holder	1
8	Bracket (Engine NIC)	1

No.	Description	Q'ty
9	Status Lamp	1
10	Shoes	4
11	Fusing Unit Knob	1
12	Wrench	1
13	Fusing Knob Holder	1
14	Cleaning Cloth	1
	Deleted	
16	Paper Size Decals	3
	Deleted	
18	Precautions Decals	1
19	Operation Panel Decals	1
20	Operation Panel Decals - Blank	1
21	Developer Bottle	1
22	Power Cord	1
23	Ferrite Core	2
24	ITB Jig – ITB Drive Roller	1
25	ITB Jig – Cleaning Belt	1
26	Vent Cover	1
27	Name Plate – Large (NA only)	1
28	Name Plate - Small (Operation Panel)	1
29	Screw with Washer M4x6	4
30	Bind Screw - Small M4x6	4
31	Tapping Screw with Washer M3x6	1
32	Locking Clamp: LWSM-0605	1
33	Ink Jet Caution Decal (NA only)	1
-	EMC:ADDRESS:RIC Sheet (EU only)	1
-	EULA Sheet	1
-	CAUTION Seal	1
-	User Manual CD-ROM	1
-	User Manual : User Guide (NA only)	1
-	User Manual : Read This First (NA only)	1
-	Security Device Password Sheet	1

2.2.2 INSTALLATION FLOW

1	Rating Voltages for Connection Points
2	Remove Tapes, Shipping Materials
3	Install Operation Panel
4	Status Light
5	Power Cord, Cable Clamp
6	Fusing Roller Knob Holder, ITB Lever, Cleaning Cloth
7	Name Plate, Decals
8	Clean Exposure Glass
9	Level the Main Machine
10	Vent Cover
11	Breaker Switch Test
12	Turning the Machine On/Off
13	Install Toner Bottles
14	Paper Library Data Installation
15	Paper Trays
16	SMC Report
17	Test Print
18	Check and Adjust Image Areas
19	Connect Ethernet Cable
20	Moving and Transporting the Machine
21	Check Image Quality after Moving or Transporting
22	Heater Options
23	TCRU Set B

2.2.3 RATING VOLTAGES FOR CONNECTION POINTS

Important

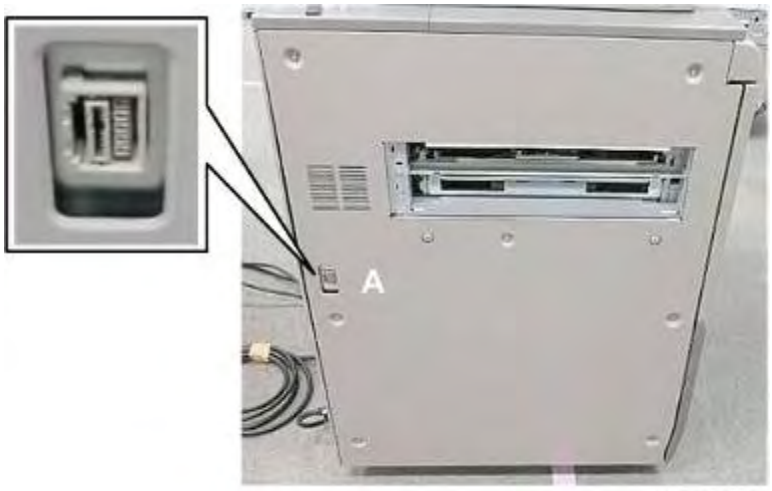
- Be sure to plug cable connectors into the correct sockets.

Right Side

d1790901

A	LCIT Max. DC24V
B	LCIT Anti-condensation heaters Max. AC230V±10%

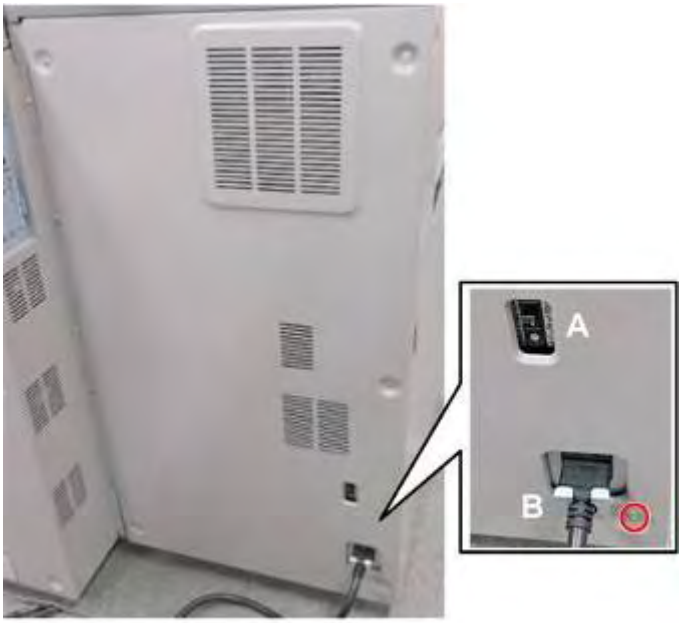
Left Side



d1790902

A	1st downstream device max. DC24V

Left Rear



d1790903

A	Breaker switch, tested at installation
B	Power plug, 208-240V 20A 50/60 Hz Attached with reinforced clamp secured with a screw

2.2.4 REMOVE TAPES, SHIPPING MATERIALS

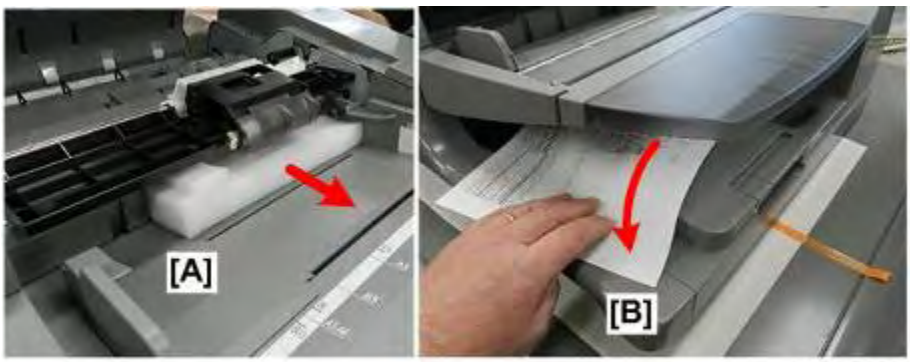
d1797025

Note

- The decal pack is inside the vinyl sheet covering the main machine.

d1790951

1. Remove all tape from the surfaces of the machine.



d1790952

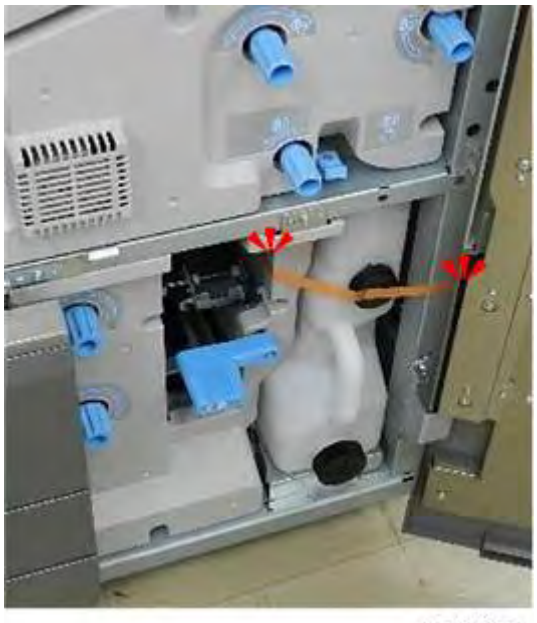
2. Raise the ADF and remove sponge pad [A].
3. Remove data sheet [B] from under original tray.

d1797023

4. Open the right door and store the data sheet inside the machine.

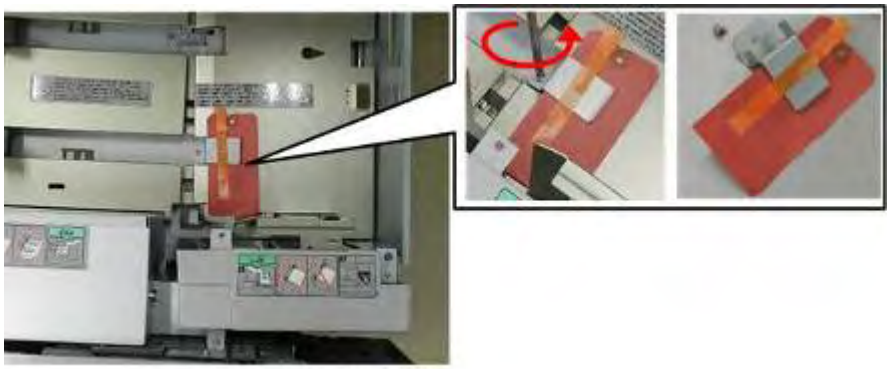
d1790953

5. Raise the ADF and remove the paper and tapes from under the ADF and from the exposure glass.



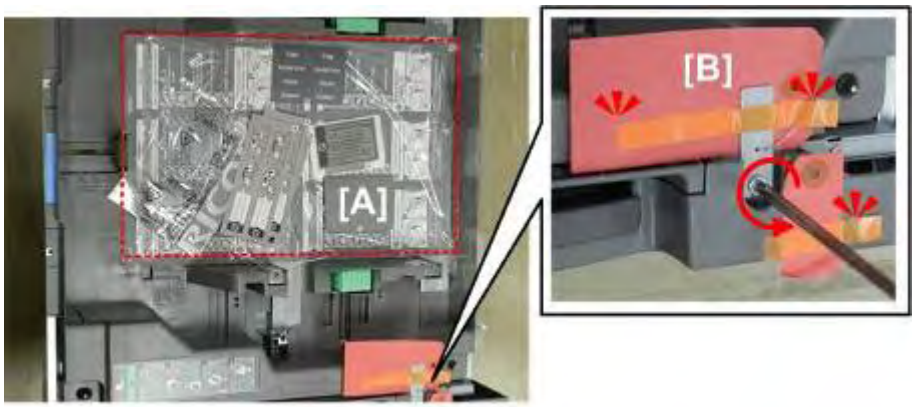
d1790954

6. Open the right front door, and them remove the tape from the used toner bottle.



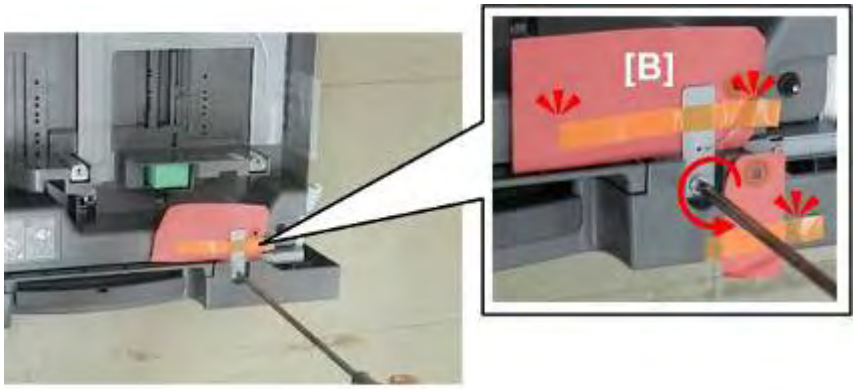
d1790955

7. Open Tray 1 (top tray).
8. Remove clamp, tag, tape (x1).
9. Discard the clamp, tag, tape, and screw.



d1790956

10. Open Tray 2 (middle tray).
11. Remove decal pack [A].
12. Remove tag, tape, clamp (x1).
13. Re-attach the screw at the same place. **Do not discard this screw.**



d1790957

14. Open Tray 3 (bottom tray).
15. Remove tag, tape, clamp (x1).
16. Re-attach the screw at the same place. **Do not discard this screw.**

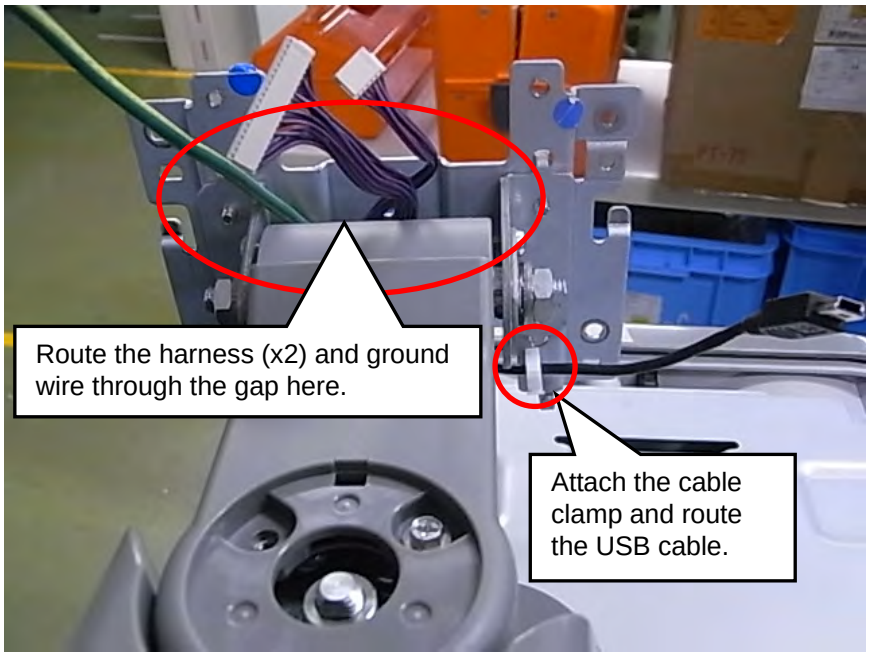
2.2.5 INSTALL OPERATION PANEL

There are two ways to install the operation panel.

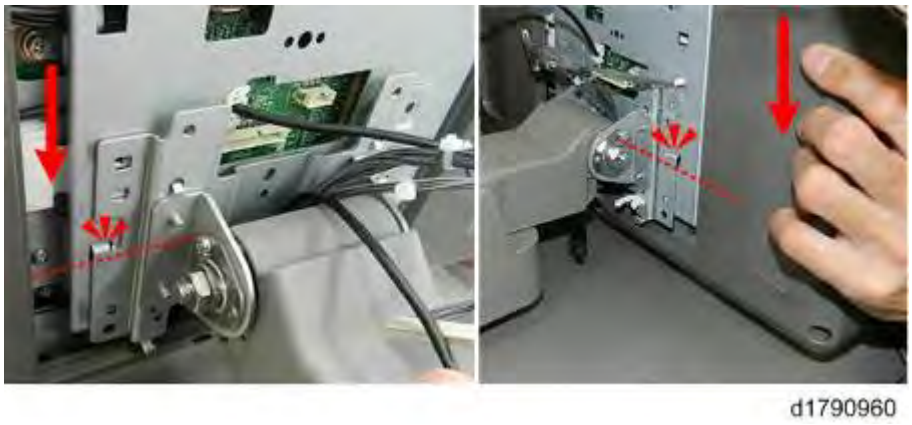
- **Standard installation**. The operation panel is high enough for a person of average height to operate the machine standing at the front of the machine.
- **Easy access installation**. The operation panel is extended forward and hung lower for a person to operate the machine from a sitting position.

⇒ *Standard Installation*

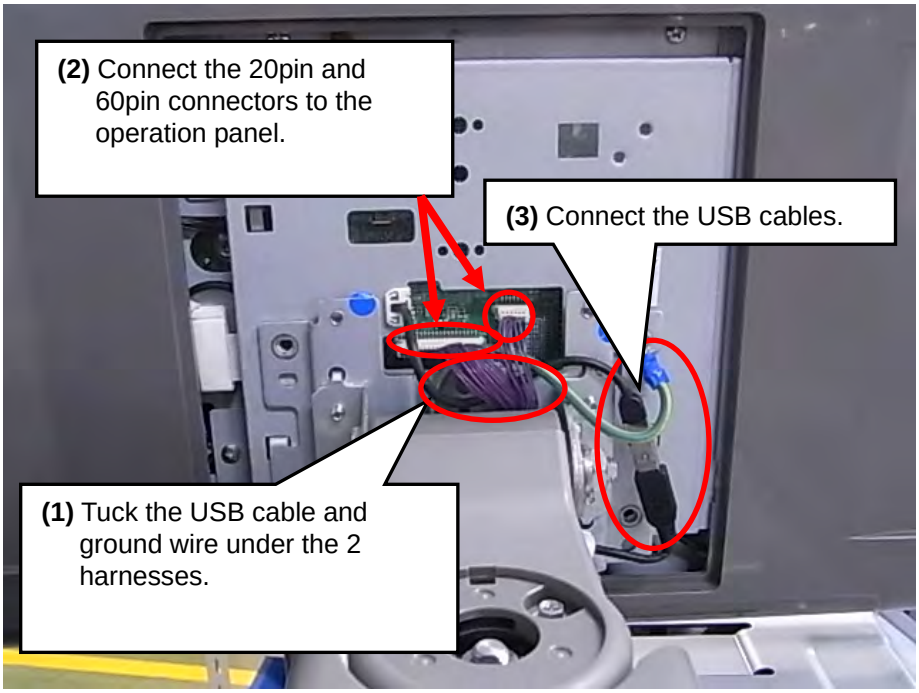
1. The machine is shipped with the arm pre-installed.



2. Route the 2 harnesses and USB cable up between the bracket and the arm.
3. Attach the white cable clamp to the bracket and route the USB cable.



4. Hang the operation panel on the bracket at the lower holes on the back of the panel.



5. Connect the connectors in the order (1), (2), (3).

Important

- Make sure the USB cable and ground wire are tucked under the 20pin and 60pin harnesses.

6. Attach the ground wire at the upper right corner.
   - The ground wire should be attached at a 45 degree angle.
   - Secure enough slack so that the wire is curved.

Important

- You must use the accessory short, flathead screws here. If you use longer screws they may damage the operation panel in front of the plate.

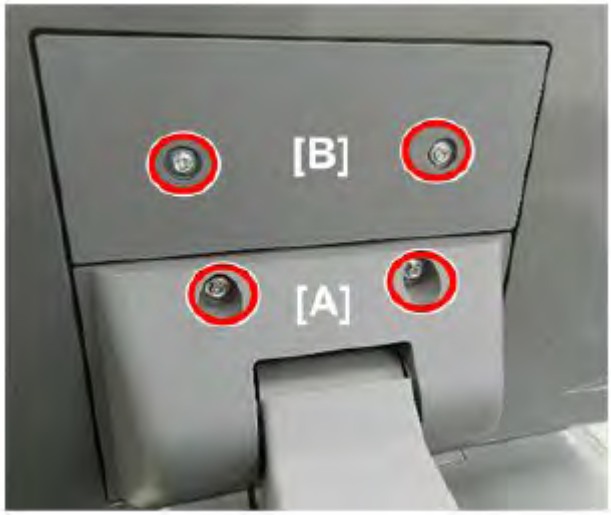
7. Use flathead screws to fix the operation panel.
   [A] Right side (x1)
   [B] Left side (x2)

Important

- You must use the accessory short, flathead screws here. If you use longer screws they may damage the operation panel in front of the plate.

8. Set the holes on the edge of the curved bracket [A] onto the metal post, and then bring the bracket up against the back of the operation panel.

9. Check around the edges of the bracket to make sure there are no harnesses pinched between the bracket and the back of the operation panel.



10. Attach the curved bracket [A] (x2).
    Attach the flat bracket [B] (x2).

Note

- Use the same screws here. These are the longer accessory screws, not the flathead screws.

⇒*Easy Access Installation*

1. Remove right cover [A] (x8).
2. Open clamps [B] (x2).

d1790970

3. Disconnect operation panel arm cover:
   [A] Top (cap x1, x1)
   [B] Left side (x1)

d1790971

4. Remove cover [A].
5. Remove arm lock screws (x4). **Save these screws.**

d1790972

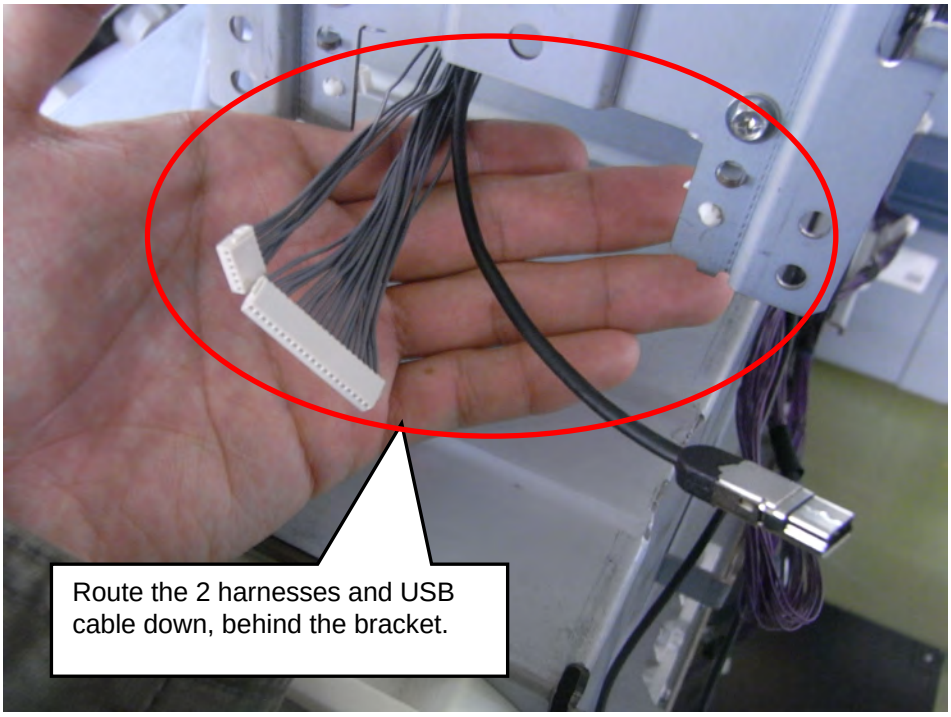
6. At the back of the arm [A], slowly, pull the harnesses ❩ out of the machine as you use your other hand to push the operation panel extension ❨ forward.
7. When you see the four holes where you just removed the screws [B] line up with four holes on the arm below, stop,

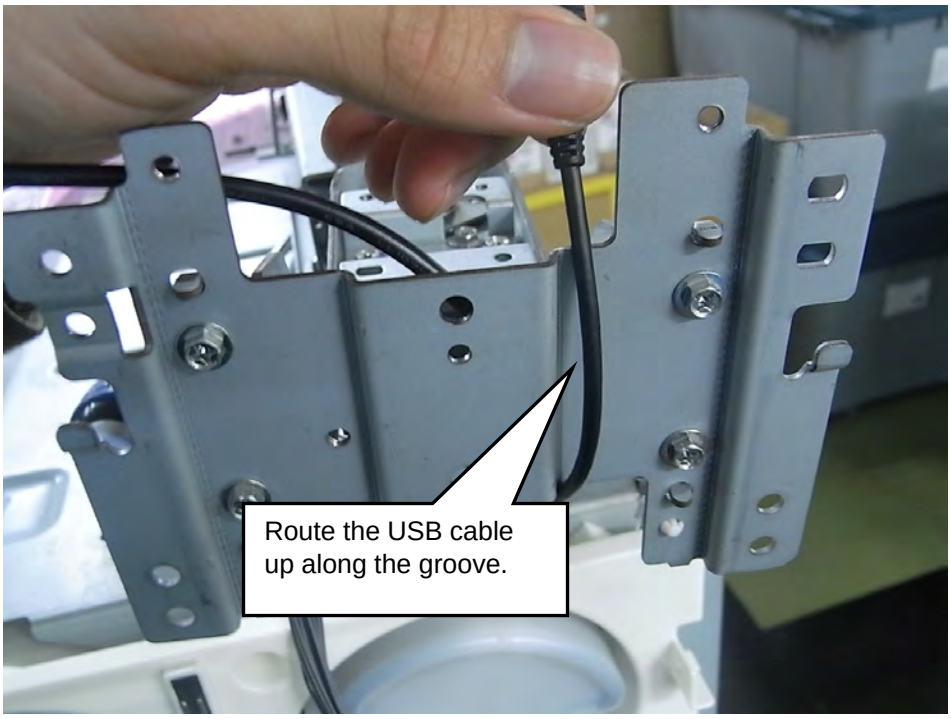
d1790973

8. Re-attach the four screws at the new position (x4).

d1790974

9. Place the cover you removed at Step 4 onto the exposed part of the arm.
10. At the end of the arm, route the 2 harnesses and USB cable down. Then, route the USB cable upward along the groove on the bracket.

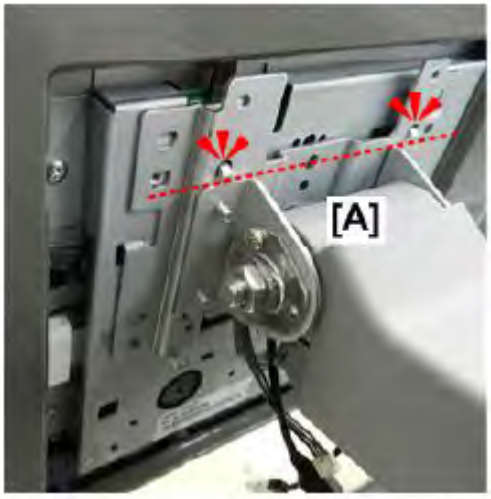




11. Hang the operation panel [A] at the high holes on the back of the panel. (This makes the panel hang lower.)

Note

- Work carefully to avoid pinching the USB cable.



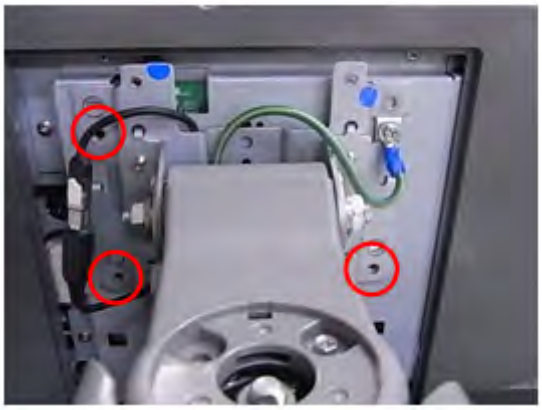
12. Attach the ground wire at the upper right corner.
    - The head of the ground wire should be positioned at a 45 degree angle from the screw.
    - The harness should have enough slack to curve below as shown.

d1790918

Important

- You must use the accessory short, flathead screws here. If you use longer screws they may damage the operation panel in front of the plate.

13. Used flathead screws to fasten the operation panel.
    [A] Right side (x1)
    [B] Left side (x2)

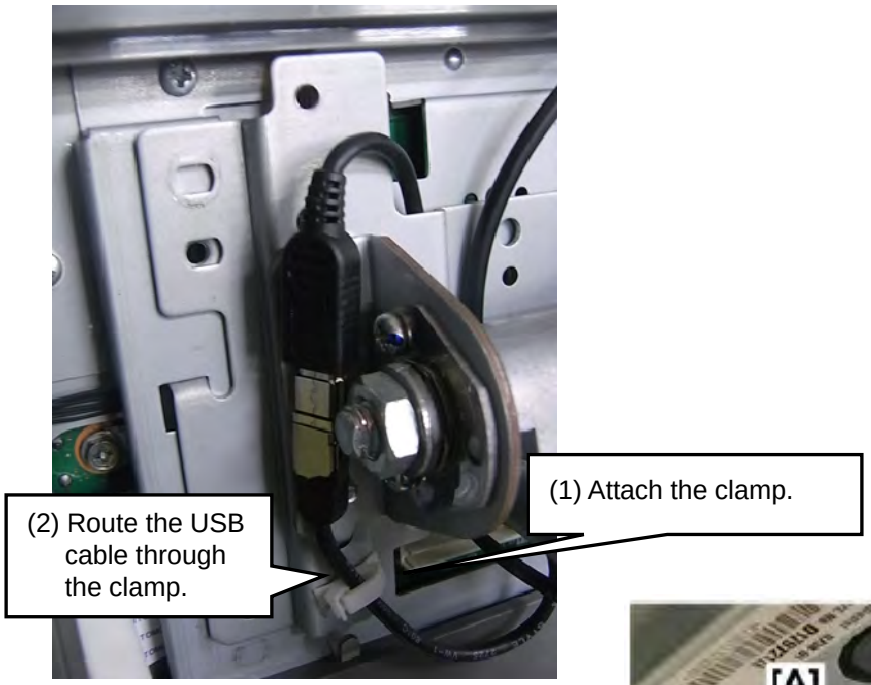


Important

- You must use the accessory short, flathead screws here. If you use longer screws they may damage the operation panel in front of the plate.

14. Connect the 20 pin and 6 pin harnesses to the operation panel.

15. Attach the white clamp to the bracket and route the USB cable and connect the USB cables.



16. Use a stubby driver to fix the harness shield plate [A] (x2).

17. Check behind the operation panel to make sure that the harnesses are neatly tucked behind the shield plate.
18. Fix the curved bracket [A] on the top (x2).

19. Use a stubby driver to fasten the flat bracket on the bottom (x2).

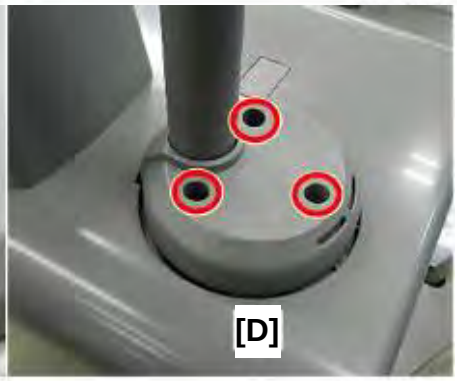
d1790982

20. Before you re-attach the right cover, be sure to re-fasten the clamps (x2).

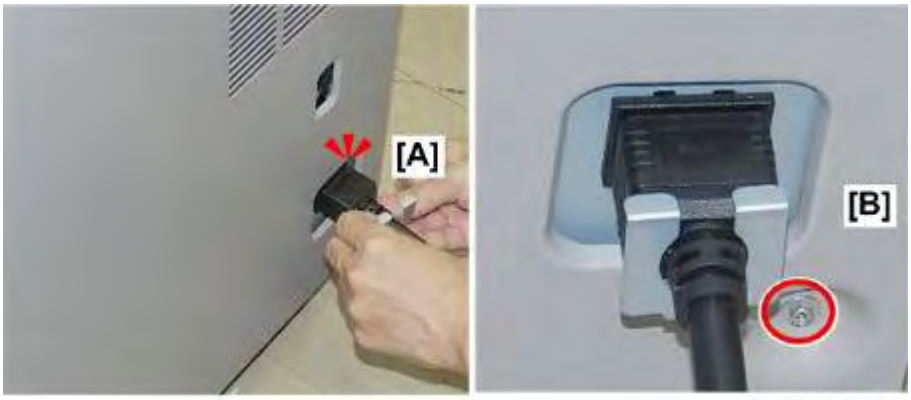
2.2.6 STATUS LIGHT

1. Remove status lamp screws [A] (x3).
2. Connect base of status lamp [B] (x1).

3. Set base of lamp [C] in the notch.
4. Fasten lamp base D] (x3).



2.2.7 POWER CORD, CABLE CLAMP



d1790984

1. Attach power cord bracket to the head of the power cord [A], and then connect power cord to the AC connection point at the rear, lower left corner of the machine.
2. Fasten bracket [B] to the back of the machine.

d1790985

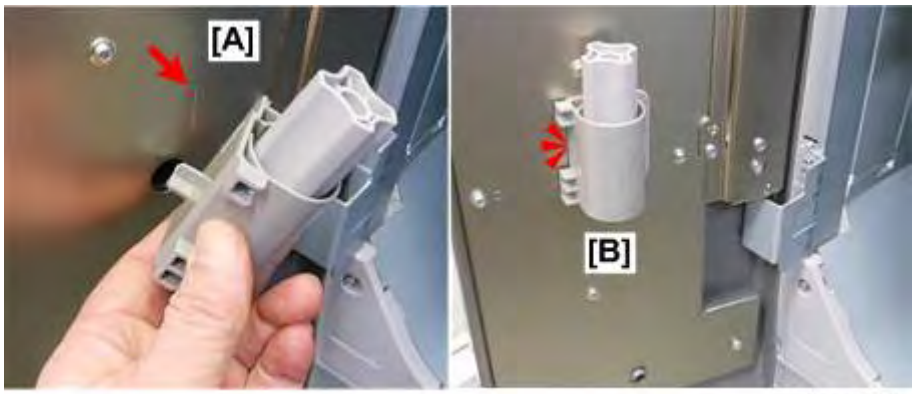
3. Fasten the cable clamp to the controller box (x1).

2.2.8 FUSING ROLLER KNOB HOLDER, ITB LEVER, CLEANING CLOTH

d1790986

1. Open left front door [A].
2. Locate the hole and faint vertical line where the holder will be installed.

3. Clean the area around the hole with a clean cloth dampened with alcohol.
4. Peel the cover off the tape on the back of the holder [B].



d1790987

5. Align the holder with the vertical line [A] stamped into the sheet metal of the cover.
6. Press the holder [B] onto the inside cover.
7. Open the right front door, and then remove the tape.

d1800901

8. Attach the ITB lift lever, and rotate it up (It is not attached to the machine before it is shipped.)
9. Make sure that this lever is up. (The right front door will not close if this lever is down.)

d1790989

10. Remove the cover from the tape on the back of the exposure glass cleaning cloth holder.
11. Attach the holder to the left rear corner of the ADF.

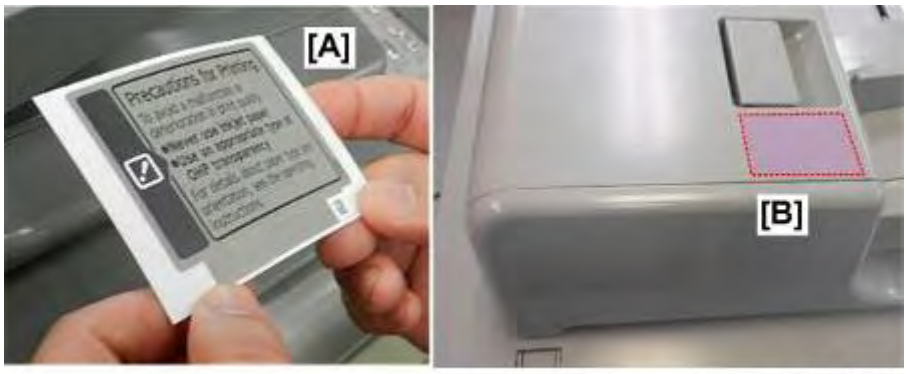
2.2.9 NAME PLATE, DECALS

d1790990

1. Attach the name plate [A] to the left, front corner of the machine.
2. Peel the decals from the sheet and affiix them to the operation panel in this order from left to right:
   Copy > Document Server > Printer > Scanner

d1790991

3. Peel the "Original Precautions" decal and affix it to the top of the ADF feeder cover.



d1790992

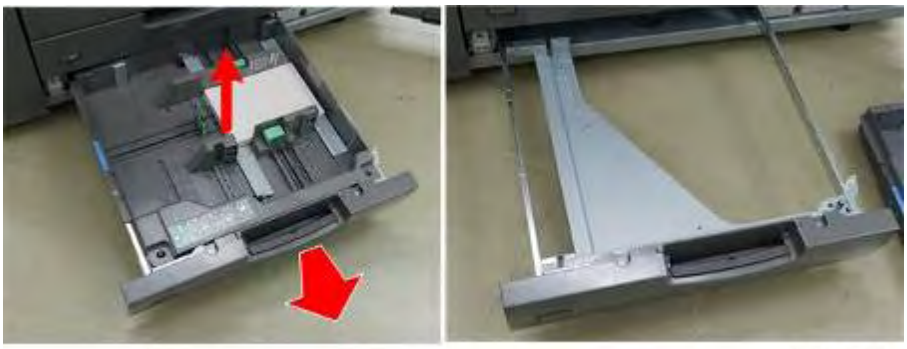
4. Peel the "Precautions for Printing" decal and affix it to the front of the ADF cover feeder.

2.2.10 CLEAN EXPOSURE GLASS

d1790915

1. Raise the ADF.
2. Clean the exposure glass with some glass cleaner and a clean cloth, or use the accessory cleaning cloth.

2.2.11 LEVEL THE MAIN MACHINE

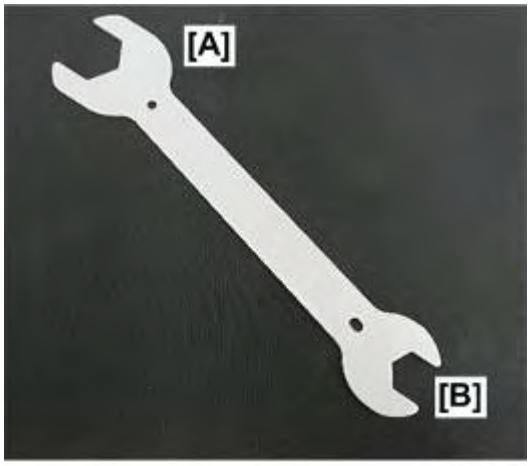


d1790916

1. Pull out the bottom tray and then remove the feed tray.

d1790917

2. Set a level on the machine frame.



d1790999

3. Use the wide end [A] of the accessory wrench to adjust the front and rear feet to within less than 5 mm of level front-to-back. (The narrow end of the wrench [B] is for the feet of the peripheral units.)

Note

- The wide end of the wrench is for the main machine, and the smaller end for adjusting the height of the peripheral units.

2.2.12 VENT COVER

Install the vent cover on the back of the main machine if it is needed.

d1797026

1. Set the vent cover on the pre-installed shoulder screws.
2. Slide the cover down.

2.2.13 BREAKER SWITCH TEST

d1790802

The breaker switch is left rear corner of the machine. The breaker switch should be tested at installation, and then inspected, cleaned, and tested at least once a year thereafter.

- After prolonged use, if you see the breaker switch covered with soot, this could indicate that the switch has malfunctioned or been damaged.
- To prevent damage to the breaker switch, installation of a voltage stabilizer (constant voltage transformer) is recommended for work sites where there is significant fluctuation in the AC power source.

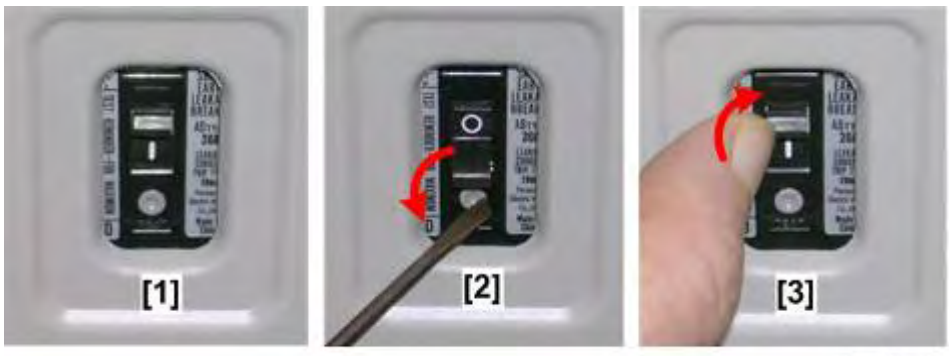
Important

- The Ring Binder and Perfect Binder also have breaker switches. These breaker switches should also be tested at installation, and then inspected, cleaned, and tested at least once a year.

1. Plug the power cord into its power source.

Important

- Do not turn on the main machine. The main machine must be off.



d1790910

2. To test the breaker switch:.
   - [1] is the normal position of the breaker switch test button.

- Use the tip of a small screwdriver or pen to push the breaker test button. The breaker switch should flip to the "**O**" position [2]. This indicates that the breaker switch is operating normally.
- If the breaker switch does not flip to the "**O**" position, the switch must be replaced.
- Push the switch up to the "**|**" position [3] for normal operation.

Important

- The main machine will not turn on if the breaker switch is not returned to the "**|**" position as shown at [1].

2.2.14 TURNING THE MACHINE ON/OFF

Important

- Before the machine leaves the factory, the main power switch is set to ON. If this switch is OFF, it must be set to ON.
- As a safety precaution set both switches to OFF and disconnect the main machine power cord before servicing the machine.
- After servicing the machine, be sure to set the main power switch back to ON.

Note

- The operator should use the operation power switch to turn the machine ON and OFF, not the main power switch.
- However, the operator may not be able to switch the machine OFF after a serious error occurs (a fatal error in the fusing unit, for example), so the operator can use the main power switch to switch the machine OFF. This is the only time the operator should use the main power switch.
- The service technician should switch off both switches (and disconnect the power cord) before servicing the machine.

⇒ *Turning the Machine OFF*

Before working on any electronics in this machine, perform the following.

1. Turn OFF the Main Power Switch. Wait until the machine is completely turns OFF.
2. Unplug the machine from the Electrical Power Outlet.
3. Press the Main Power Switch again to discharge the machine.

If any adjustment or operation check has to be made with exterior covers off or open when the main switch is turned ON, keep hands away from electrified or mechanically driven components.

Turning the Machine ON

1. Plug the machine into the power source.

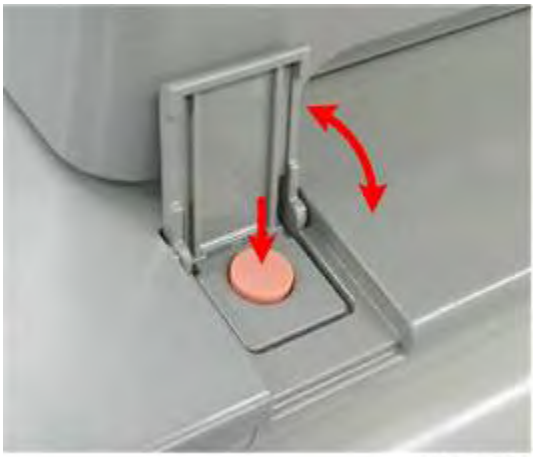
Note

- There is no power switch on the operation panel of this machine.

d1790405

2. At the front left corner of the machine, open the cover, and then push the operation power switch.
3. After the "Please Wait" message, touch "Copier" on the operation panel to display the initial copy screen.

Turning the Machine Off



d1792202

1. At the front left corner of the machine, open the cover, press the operation power switch, and then close the cover.
2. A message appears and tells you to wait at least 2 min. until the machine powers down completely. This gives the hard disk drive enough time to stop rotating and to shut down safely before the machine loses power.

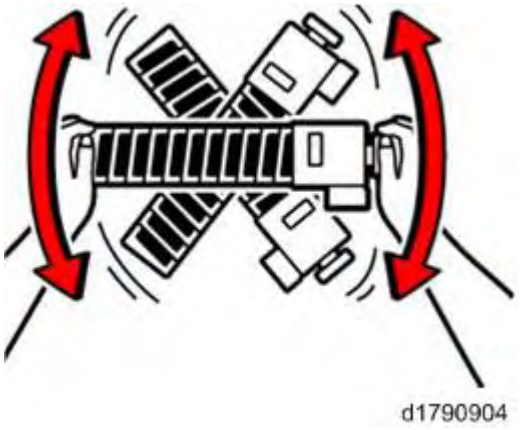
2.2.15 INSTALL TONER BOTTLES

Bottle Installation and Initialization

Important

- Before you begin this procedure, confirm that the machine is off.
- If the machine is on, press the operation power switch on the left front corner of the machine, and then wait at least 2 min. before you do the procedure below.
- Open the left front door and turn off the main power switch.

1. Make sure the machine is off, and then **open the left front door**.
2. Turn on the main power switch (ignore the door open alert).
3. Remove the two toner bottles from the packing.



4. Rotate each bottle at least 10 times to make sure that the toner inside is loose.
5. Open the toner bank door, insert both toner bottles, and then close the toner bank door.
6. Enter the SP mode
7. Do **SP7628-002** (Clear PM Counter).
8. Exit the SP mode.
9. Close the left front door.
10. Toner fill will begin automatically after closing the left front door.
11. As soon as toner fill completes, the machine will automatically start process control. (If there is a problem, go to the next section below.)
12. Process control executes.
13. As soon as process control completes, a message on the operation panel tells you that copying can begin. (If there is a problem, go to the next section below.)
14. Enter the SP mode.
15. Do **SP3012-001** (ProCon OK?) to confirm that the process control execution succeeded.
    - If process control executed normally, you should see "11" displayed.
    - If you see any other numbers displayed, go to the next section below.
16. Exit the SP mode.
17. You are finished, and the machine is ready to use.

Problem During Bottle Installation?

Here is a summary of how to solve problems in the above procedure.

Toner Fill Failed at Step 11

1. Open the toner bank door, and remove the toner bottles.
2. Rotate each bottle at least 10 times to make sure that the toner inside is loose.
3. Insert both toner bottles, and then close the toner bank door.
4. Make sure the left front door is open.
5. Cycle the machine off/on.
6. Close the left front door.
7. Go to **Step 10** in the previous section to complete the procedure.

Process Control Failed at Step 13

1. If the machine returned an SC error, refer to the SC error list and do the procedure recommended to solve the problem.
2. Make sure that the left front door is open.
3. Cycle the machine off/on.
4. Close the left front door.
5. Go to **Step 12** in the previous section to complete the procedure.

SP3012-001 Did Not Return "11" at Step 15

1. Refer to the Troubleshooting Section.
2. Do the procedure recommended for the displayed number code to solve the problem.

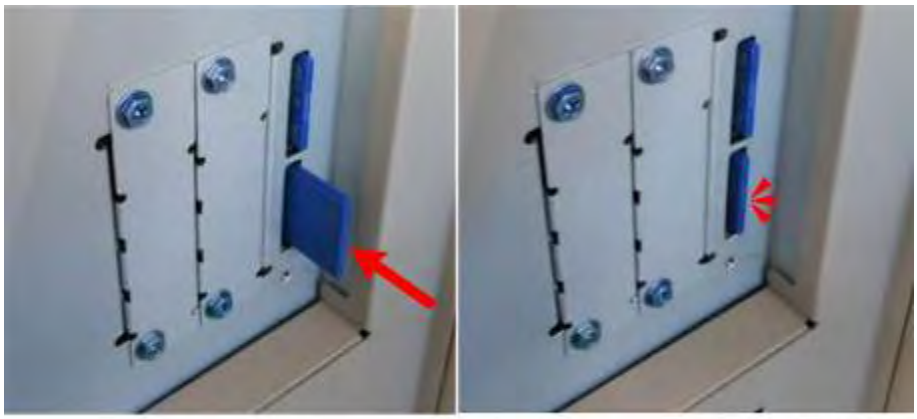
2.2.16 PAPER LIBRARY DATA INSTALLATION

Follow this procedure to install the Paper Library data.

1. Create a folder in the root directory of an SD card and name the folder "mqp".
2. Copy the paper database file into the "mqp" folder, and then rename the copied file "library.mqp".
3. Make sure that the machine is turned off.

d1791200

4. Remove the SD card slot cover. (x 1).



d1791213

5. Insert the SD card which has the "library.mqp" file into SD card Slot 2 (lower slot) on the right side of the controller box.
6. Turn on the machine.
7. Make sure that the data version of the SD card is newer than the data version of the flash ROM on the controller. If not, prepare the latest data version of the Paper Library on an SD card.
   - The version of the data on the SD card can be checked with **SP5711-202.**
   - The version of the data in the flash ROM on the controller can be checked with **SP5711-201.**

d1790911

8. Enter SP5-711-001, and then touch [EXECUTE].

d1790912

9. Next, touch [EXECUTE] again.

d1790913

10. When the machine displays "Completed" and prompts you to re-boot, touch [Exit] to leave the SP mode.
11. Turn off the machine and remove the SD card from SD card Slot 2.
12. Turn on the machine.
13. Check the Paper Library data version with SP5-711-201 (Flash ROM) to confirm that the Paper Library data has been updated.

2.2.17 PAPER TRAYS

Loading the Paper Trays

1. Load each paper tray.
2. Move the side fence and bottom fence to the correct positions for the paper.
3. Attach the paper size decals to the front of the paper cassette trays and the tandem tray.
4. Load the left side of Tray 1 (tandem tray).
5. Close Tray 1 and confirm that the machine moves the stack in the left side of the tray to the empty right side of the tray.
6. Fill Tray 1 and Tray 2 with paper with the A4/LT paper provided with the machine. The size of the paper in Tray 2 is detected automatically.

Paper Tray Settings

1. Press the [Paper Settings] key on the operation panel.
2. Select the Tray icon.

d1790914

3. Select the paper type and paper weight for each tray.

Important

- The paper type and paper weight for the paper provided with the machine should be set to "Plain Paper" and "Weight 2".

2.2.18 SMC REPORT

Print the SMC report. This is a complete list of all SP settings and defaults.

1. Go into the SP mode.
2. Do **SP5990-6** to print a list of the non-default SP code settings for future reference.
   - The SP5990-1 (All) printout is about 140 pages single-sided.
   - SP5990-6 (non-default) requires only about 5 sheets.
3. Keep the SMC report in a safe location with the factory setting sheet on the right side of the used toner bottle.

2.2.19 TEST PRINT

1. Make sure that A3 or DLT paper is in one of the trays. Use the same type of paper that the customer normally uses for output.
2. Place a Test Chart on the exposure glass.
3. Print one copy of the chart.
4. Check the test print.

2.2.20 CHECK AND ADJUST IMAGE AREAS AFTER INSTALLATION OR MOVING

Do these adjustments in the order described below:

- Front/Back Alignment (Magnification Adjustment)
- Main Scan/Sub Scan Registration Adjustment

Front/Back Alignment (Magnification Adjustment)

This check and adjustment ensures that the image areas on both the front and back sides of the paper are the same size and aligned with one another. This adjustment is done before the machine leaves the factory, and can also be done at machine installation.

To do this adjustment you will need to:

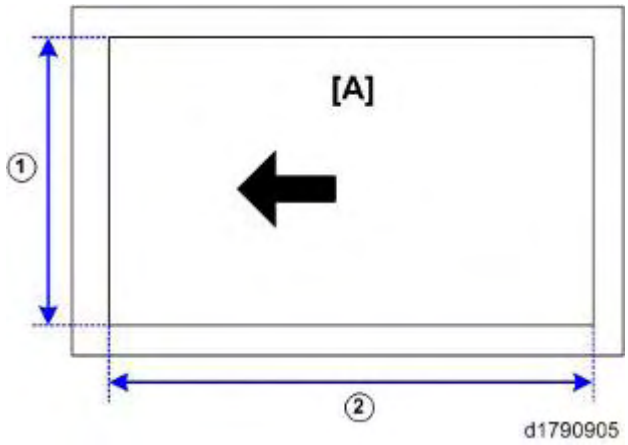
- Set Tray 2 for normal paper, thickness 2
- Load A3 normal paper in Tray 2
- Print the Trim Pattern
- Do some simple calculations, based on measurements of the Trim Patterns, and then do some adjustments

1. Set the A3 Normal paper in Tray 2.
2. Enter the SP mode, and then check and set the following SP codes.

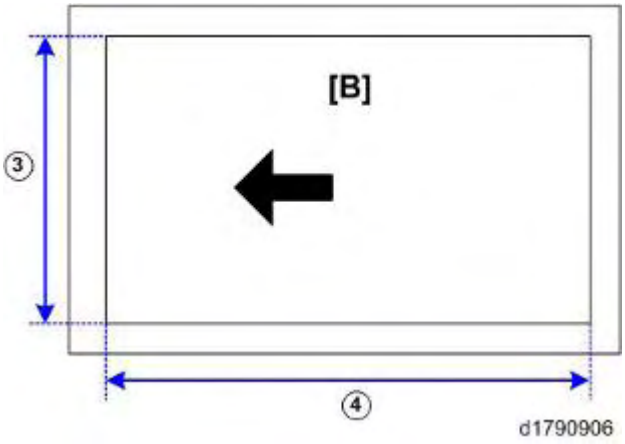
2103-001	▪ Note the setting. ▪ If it is not “4.0”, set to “4.0”. ▪ Restore the original setting after adjustment.

2122-112	▪ Note the setting. ▪ If it is not “0”, set to “0”. ▪ Restore the original setting after adjustment.
2103-002	▪ Note the setting. ▪ If it is not “4.0”, set to “4.0”. ▪ Restore the original setting after adjustment.
2103-003	▪ Note the setting. ▪ If it is not “2.0”, set to “2.0”. ▪ Restore the original setting after adjustment.
2103-004	▪ Note the setting. ▪ If it is not “2.0”, set to “2.0”. ▪ Restore the original setting after adjustment.
1004-001 to 003	▪ Note the settings. ▪ Make sure that all these SP codes are set to their defaults. ▪ Do not restore the original settings after adjustments.
1005-001 to 004	
2102 - 041 to 044	▪ Set all of these SP codes to “0”.

3. Do SP2109-003 Pattern #14, and then print 5 Trimming Area patterns **on both sides** of each A3 sheet.



4. On the front side [A] of each A3 sheet record the measurements of ① and ② at the leading edge and left edge, and then calculate the average value of the 5 measurements.



1. On the back side [B] of each A3 sheet record the measurements of ③ and ④ at the leading edge and left edge, and then calculate the average value of the 5 measurements. You can fill in the table below to record the measurements and averaged results.

Print	①	②	③	④
1st				
2nd				
3rd				
4th				
5th				
Ave.				

1. Use the average values you calculated for ①,②,③,④ above in the following calculations to determine the magnification rates.
   Front, Main Scan (%) = Ave. ① mm / 293 mm x100
   Front, Sub Scan (%) = Ave. ② mm / 412 mm x100
   Back, Main Scan (%) = Ave. ③ mm / 293 mm x 100
   Back, Sub Scan (%) = Ave. ④ mm / 412 mm x 100
   Theoretical Trim Pattern Values

	A3	**DLT**
①, ③	293 mm	275.4 mm
②, ④	412 mm	423.8 mm

2. Enter the results calculated in Step 6 into SP2102-041, 042, 043, 044 (front/back, main/sub scan)to adjust magnification for both the front and rear sides of the paper (0.025% Steps).
3. After entering the calculated values, print another 5 Trim Patterns (front/back sides) with SP2109-003 Pattern #14, and then do the measurements again at Step 4 and Step 5 to confirm the magnification rates for the front and back side of the paper.

Main Scan/Sub Scan Registration Adjustment

These adjustments achieve the optimum settings for paper registration in the Main Scan and Sub Scan directions.

To do this adjustment you will need to:

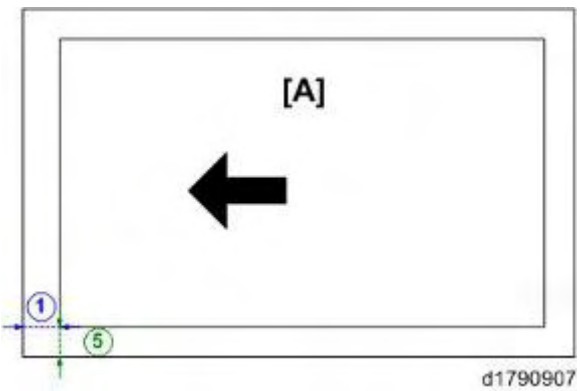
- Set Tray 2 for normal paper, thickness 2
- Load A3 normal paper in Tray 2
- Print the Trim Pattern
- Do some simple calculations, based on measurements of the Trim Patterns, and then do some adjustments

1. Set the A3 Normal paper in Tray 2.
1. Enter the SP mode, and then check and set the following SP codes.

1001-001 to 009	▪ Check each setting. ▪ If it is not “0”, set to “0”. ▪ Do not restore the original settings after adjustment.
1003-001 to 008	▪ Check each setting. ▪ If it is not “0”, set to “0”. ▪ Do not restore the original settings after adjustment.

2. Do SP2109-003 Pattern #14, and then print 5 Trimming Area patterns **on one side** of each A3 sheet.

Front [A]

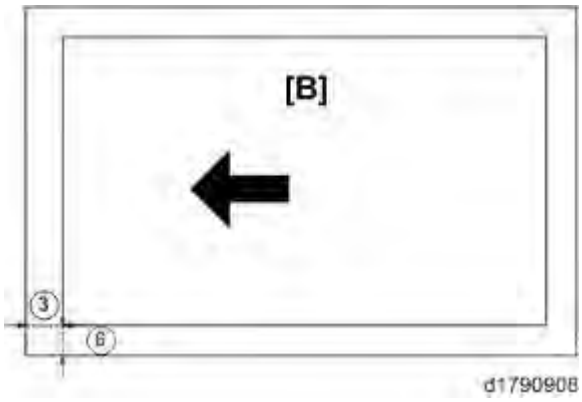


3. Measure ① and ⑤ on each sheet, and then average the values. You can fill in the table below to record the measurements and averaged results.

Print	① (X)	⑤ (Y)
1st		
2nd		
3rd		
4th		
5th		
Ave.		
X, Y		

4. Use the average value of ① to calculate the sub scan adjustment (X) with this equation:
   4 mm – Ave. ① mm = X mm
5. Use the averaged value calculated in Step 4 to adjust the setting of SP1501-001.
   - The calculated value is added to the current setting of SP1501-001.
   - For example, if the current value of SP1501-001 is “1.0” mm, and the calculated value is “-0.2”, then you should enter “0.8” (mm).
6. Use the average value of ⑤ to calculate the main scan adjustment (Y) with this equation:
   2 mm – Ave. ⑤ mm = Y mm

⇒ 7. Use the averaged value calculated in Step 6 to adjust the setting of SP1502-001.
   - The calculated value is added to the current setting of SP1502-001.
   - For example, if the current value of SP1502-001 is “1.0” mm, and the calculated value is “0.2”, then you should enter “1.2” (mm).



Front [B]

Front [B]

Print	① (X)	⑤ (Y)
1st		
2nd		
3rd		
4th		
5th		
Ave.		
Adjustment		
X, Y		

Back Calculations

Print	① (X)	⑤ (Y)
1st		
2nd		
3rd		
4th		
5th		
Ave.		
Adjustment		
X, Y		

⇒ 1. After completing the adjustments, do SP2109-003 Pattern #14, and then print 5 Trimming Area patterns **on both sides** of each A3 sheet.

- Measure ① and ⑤ for the front side, just as you did above, and then measure ③ and ⑥ for the back side as shown in the diagram above.
- The measurements for ①,③ should be 4±0.3 mm.
- If each value for ⑤, ⑥ is 2.0±0.1 and the averaged value 2.0±0.3, this is ideal and no

further adjustment is required.

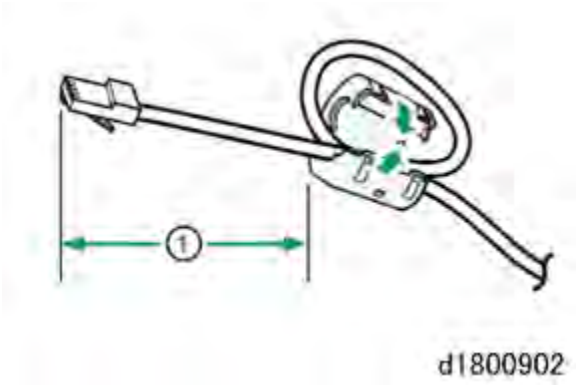
- If ①,⑤ are not within these ranges, repeat this procedure from Step 2 on pg 2-41.
- If 3,6 are not within range, go to the next step.

2. If the averaged value of ③ is not within 2.0±0.1 mm, or if all the values of ③ are not within 2.0±0.3 (recommended), calculate the offset for the sub scan registration value for the average value of ③
   2 mm – ⑥ mm = X mm
3. Enter SP mode and **add** the offset value for the sub scan adjustment on the back page to the current setting of SP1501-002.
4. If the averaged value of ⑥ is not within is not within 2.0±0.1 mm, or if all the values of ⑥ are not within 2.0±0.3 (recommended), calculate the offset for the main scan registration value for the average value of ⑥.
   2 mm – ⑥ mm = Y mm
5. Enter SP mode and **add** the offset value for the main scan adjustment on the back page to the current setting of SP1502-002.
6. Do SP2109-003 Pattern #14, and then print 5 Trimming Area patterns **on both sides** of each A3 sheet, and then measure the results.
   - The averaged result for ③ should be 4.0±0.1 mm, and each value should be in the range 4.0±0.3.
   - The averaged result for ⑥ should be 2.0±0.1 mm, and each value should be in the range 2.0±0.3.

2.2.21 CONNECT ETHERNET CABLE

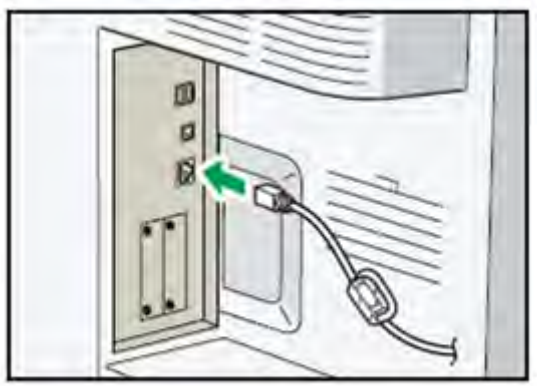
Important

- The machine must be switched off before you connect the Ethernet cable.



d1800902

1. Loop the cable as shown, and then clamp the ferrite core about 5 cm (2 in.) ① from the connector.
2. Make sure that the machine is switched off.



d1800903

3. Plug the cable into the Ethernet interface connection point.

2.2.22 MOVING AND TRANSPORTING THE MACHINE

Preparing the Machine

The procedure is the same, whether you are shipping the machine by truck, or just moving the machine to another room, another building, or to another floor of the same building.

- Switch the machine off.
- Grip the power cord by its head, and then unplug the power cord.
- Make sure all doors and trays are closed.
- The machine is heavy. To avoid damaging the machine, place your hands at the corners of the main frame and push it slowly and straight.

Important

- If the passageway is too narrow for the machine, the controller box can be removed. See “Controller Box Removal” in “Common Procedures”.

1. Clear the waste toner path
   - Make sure that the waste toner bottle is set in the machine.
   - Close both front doors.
   - Enter the SP mode and do SP5805-067 to turn on the toner feed motor.
   - While the toner feed motor is running, do SP5804-168 to turn on the waste toner transport motor. These two SP codes should execute at the same time.
   - Wait at least 2 min. and then switch off SP5805-067 and SP5804-168.
2. Remove toner supply bottles (machine should be moved with the bottles removed)
   - Make sure that the toner supply bottles are set correctly, and then remove them. If either bottle will not release at the touch of the release lever:
     - If there is a toner bottle on the left side of the toner bank, enter the SP mode, open SP2780-001 and then set it to “0” (Off).
     - If there is a toner bottle on the right side of the toner bank, enter the SP mode, open SP2780-002, and then set it to “0” (Off).
3. The transfer roller of the ITB unit should be separated from the drum.

- Open the front door, and then rotate the ITB lift lever down to the left.
- Remove the lever (the door will not close if the lever is down).
- Close the front door.

4. When you arrive at the new site:
   - Turn the machine on.
   - Open the toner bank door and insert the toner supply bottles.
   - Close the toner bank door.

If Peripheral Devices Are Installed

Important

- If an LCT is connected to the right side of the machine, pull the LCT away from the machine and then disconnect the ground wire.
- Always disconnect the ground wire before you pull the LCT completely away from the side of the machine.

If a finisher is installed in the system, do the following procedure:

1. First, turn the main machine off.
2. Grip the head of the power cord, and then disconnect the main machine from its power source.
3. Disconnect all the I/F cables in the system.
4. Make sure the front doors of the main machine and all other peripherals are closed.
5. Loosen the screw of the caster of the stack/staple unit of the finisher, raise the caster so it is not in contact with the floor, and then tighten the screw.
   - Normally, the lowered caster supports the stack/staple unit of the finisher from sagging when it is pulled out of the finisher.
   - However, the caster should be raised before the finisher is moved. This prevents the caster from snagging on a carpet or door jam when the finisher is moved.
   - Be sure to lower the caster again after the finisher reaches its next location.

2.2.23 HEATER OPTIONS

Paper Bank Heater

There are two tray heaters for the paper bank, an upper heater for Tray 1 and a lower heater for Tray 2 and 3.

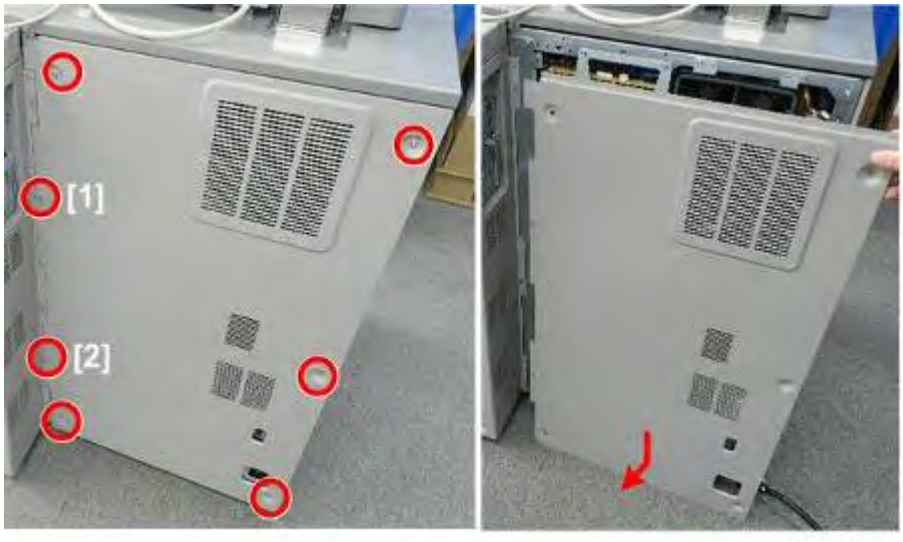
Note

- These heaters are options and require installation.

- There are no switches for these tray heaters.
- Their operation depends on how they are connected to the AC drive board.
- Please explain to the operator that while the heaters can effectively reduce collection of moisture in the paper trays, they will consume slightly more power.

d1792207

1. Remove power cord bracket (x1).



d1792208

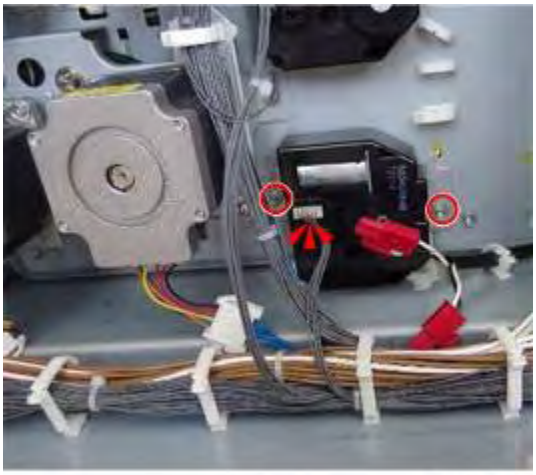
2. Remove the rear cover (x7)

Note

- Screws [1] and [2] are the 3rd and 5th screws from the top.

1. Open the controller box. page 4-27

Lower Heater

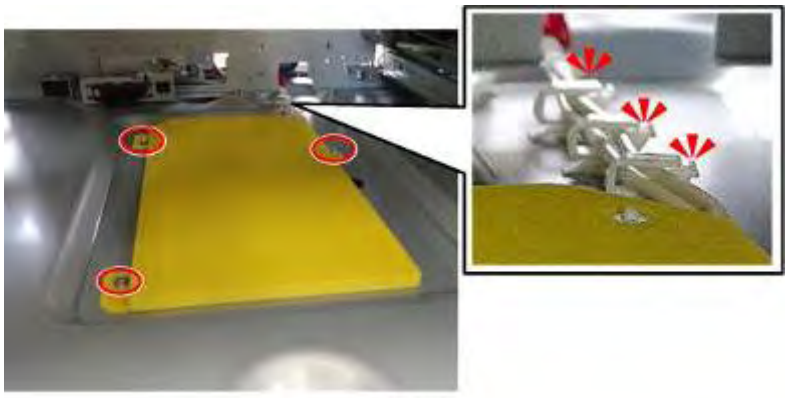


d1800910

1. Remove Tray 3 lift motor (x2, x1).

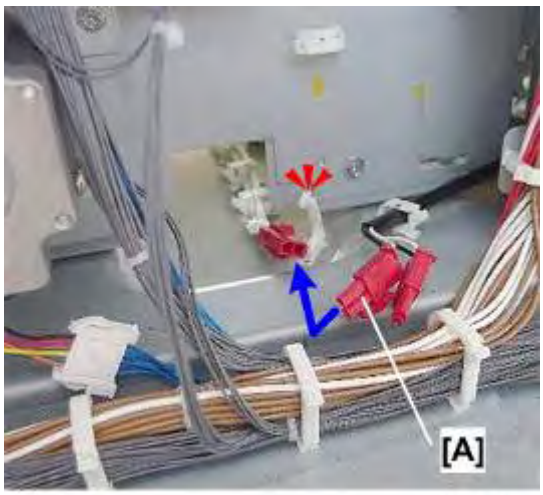
d1800911

2. Remove universal inner trays from Tray 2 and Tray 3.



d1800912

3. Attach the large heater inside the machine (x3, x3).



d1800913

4. At the rear, connect the harness [A] (x1, x1).
5. Re-attach the lift motor (x2, x1).

Upper Heater

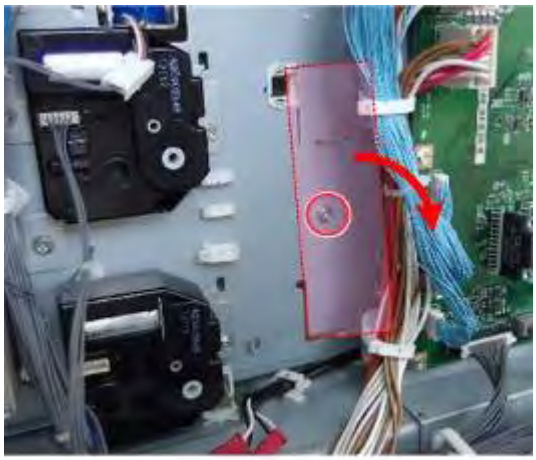
1. Remove the tandem tray (Tray 1). page 4-225

d1800914

2. Set the clamp of the small heater (x1).

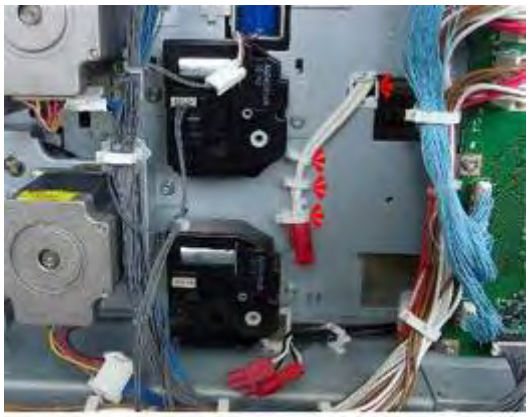
d1800915

3. Fasten the small heater (x1).



d1800916

4. Remove the bracket (x1).



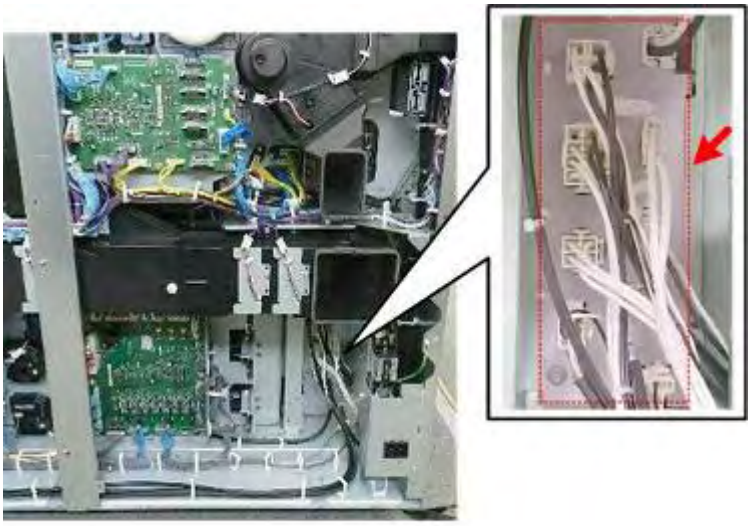
d1800917

5. Route the harness and clamp it (x4).

d1800918

6. Connect the harness (x1).
7. Be sure to re-attach the bracket (x1).

Heater Connections



d1790993

1. Locate the bank of white connectors on the back of the AC drive board.

d1790994

2. Locate the harness for the bank heaters and LCIT heater.
3. Plug the connector into plug [B].

Note

- The plug can be plugged into either [A] or [B]. The plug you choose determines how the two paper bank tray heaters and LCIT tray heater work together.

d1790996

Plug B: Heaters ON Only When Machine Power OFF

- At machine power ON, both paper bank heaters and the LCIT heater go OFF. (However, the three heaters go ON when machine is in sleep mode, or if the machine is powered OFF with the main power switch.)
- At machine power OFF, both paper bank heaters and the LCIT heater remain ON.

d1790995

Plug A: Heaters Always ON

- At machine power ON, both paper bank heaters and the LCIT heater switch ON.
- At machine power OFF, the three heaters remain ON.

Important

- Plug the connector into [A] only if the work site is extremely humid.

More about AC Drive Board Connectors

Here is a summary of the function of all these connectors on the end of the AC drive board.

d1790920

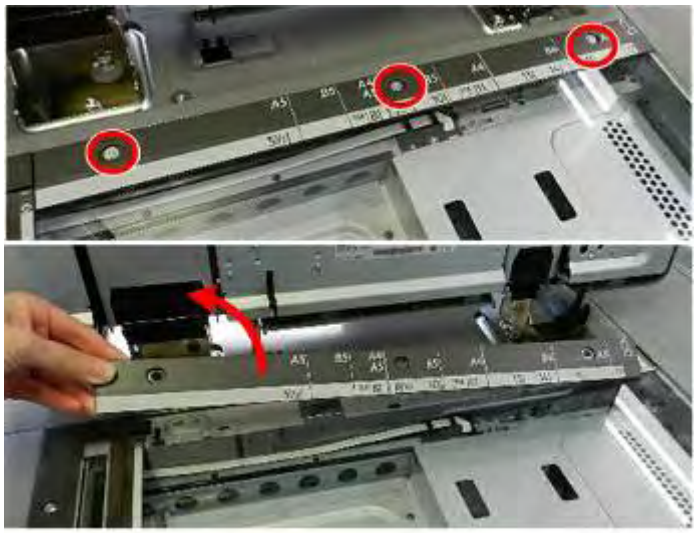
1	Main SW_IN
2	Main SW_OUT
3	PSU: PSU-A, PSU-B, PSU-C
4	Fusing Lamps 1-4 (H)
5	Fusing Lamp 4 (N): White
6	Fusing Lamp 3 (N): White
7	Fusing Lamp 1 (N): White
8	Fusing Lamp 2 (N): White
9	Anti-condensation heater (RLY switching): Paper bank upper, Paper bank lower, LCT heater
10	Anti-condensation heater (always ON): Paper bank upper, Paper bank lower, LCT heater
11	ITB unit anti-condensation heater
12	Scanner anti-condensation heater

Scanner Unit Heater

The scanner unit heater is an option and requires installation.

d1792206

1. Remove the left cover (x7).
2. Raise ADF



d1792621

3. Remove rear scale (x3).

d1792622

4. Remove left cover (x2).

d1792643

5. Remove front “L” cover (cap x1, x1, x 2)

d1792624

6. Remove exposure glass.

d1790997

7. Turn the scanner motor belt to move the 1st scanner carriage from left to right as far as the lens block cover.

d1792695

8. Position the heater and fasten the right end (x1).

d1792696

9. Align the hole of the heater with the hole [A] in the plate.
10. Pass a screwdriver through the hole and fasten the screw [B] (x1).

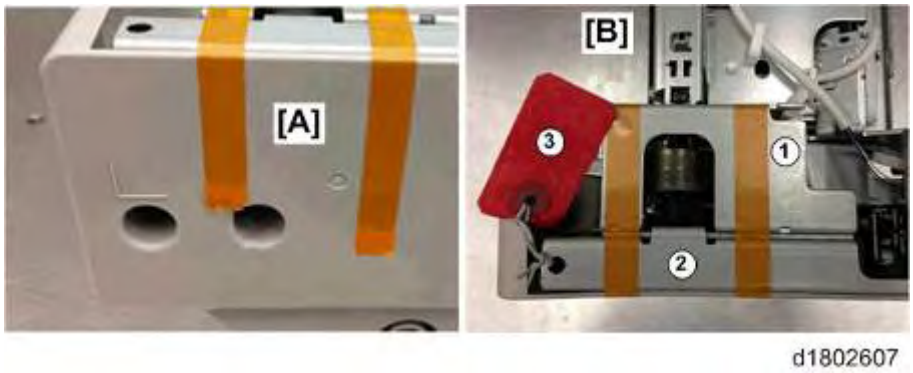
d1792697

11. Pass the heater harness through the hole in the frame [A].
12. Fasten the connectors on the right side of the machine [B].

2.2.24 TCRU SET B

If the customer has ordered TCRU Set B (a fusing unit), remove the shipping brackets.

1. Open the TCRU Set B box, and then remove the fusing unit.



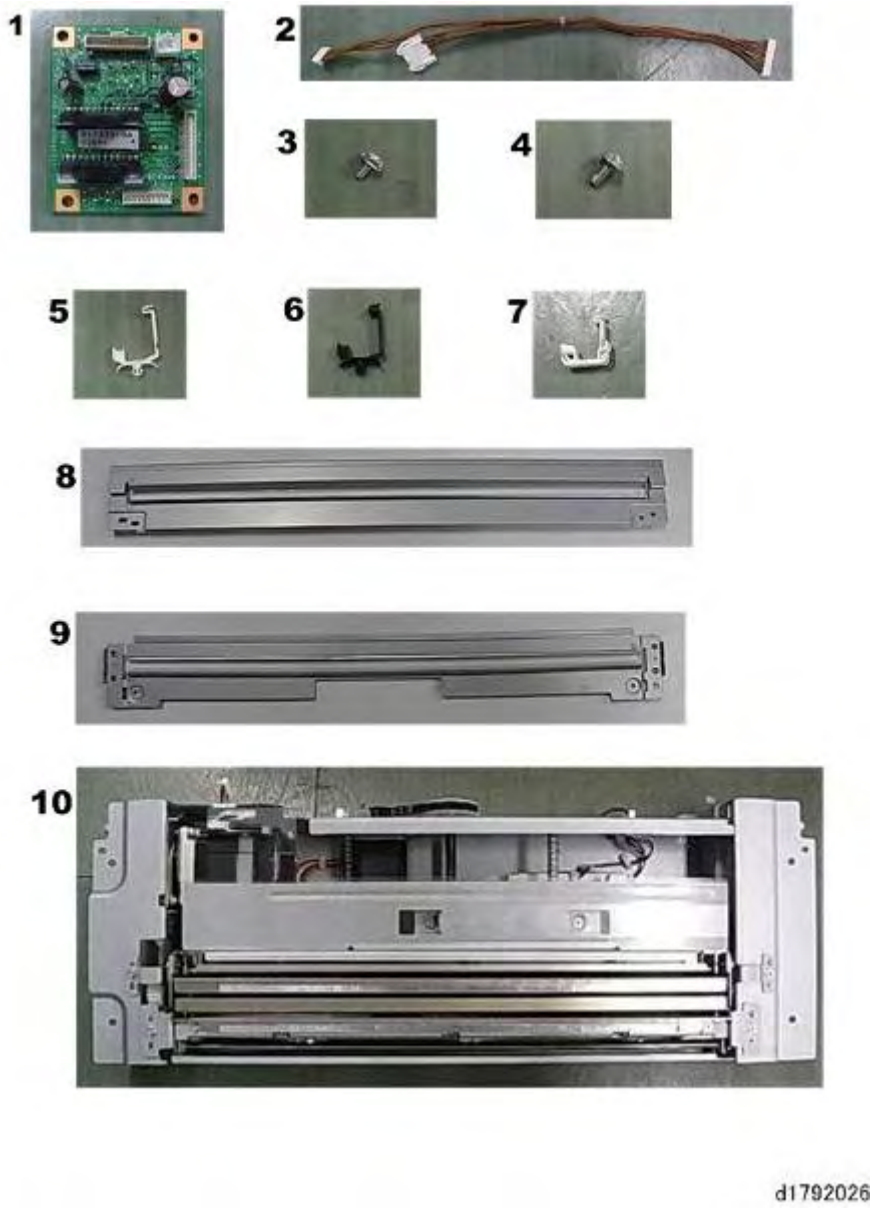
d1802607

2. Two strips of tape are attached to the front of the fusing unit [A].
3. From the top [B], pull off both strips of tape, and then remove shipping bracket ① and bracket ② with the red tag ③ attached.
4. Re-pack the unit in its original box so the customer can store it at the job site.

2.3 DECURL UNIT DU5030

2.3.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1	DDRB (Main Board)	1
2	Motor Harness	1
3	Screw M3x6 (with washer)	4
4	Hex Screw (M4x8)	8
5	Harness Clamp (White)	2
6	Harness Clamp (Black)	4
7	Edge Saddle	1
8	Connector Guide Plate A	1
9	Connector Guide Plate C	1
10	Decurl Unit	1

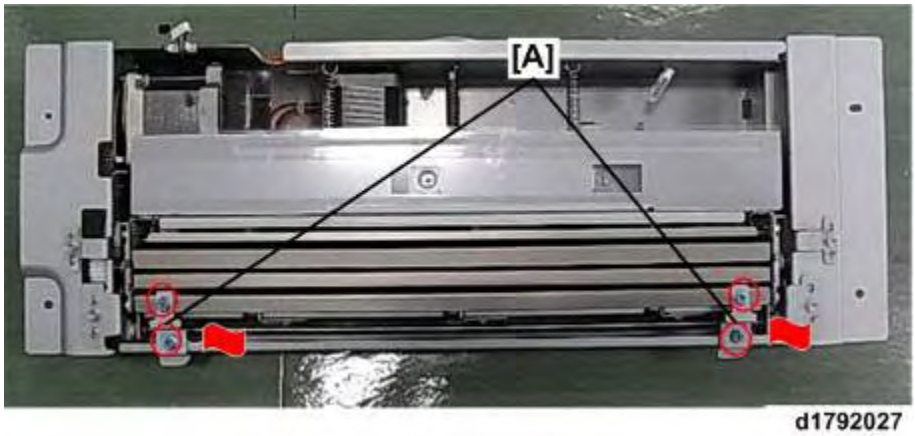
2.3.2 INSTALLATION

⚠CAUTION

- Make sure that the main machine is switched off and unplugged from its power source before installation of the Decurl Unit.

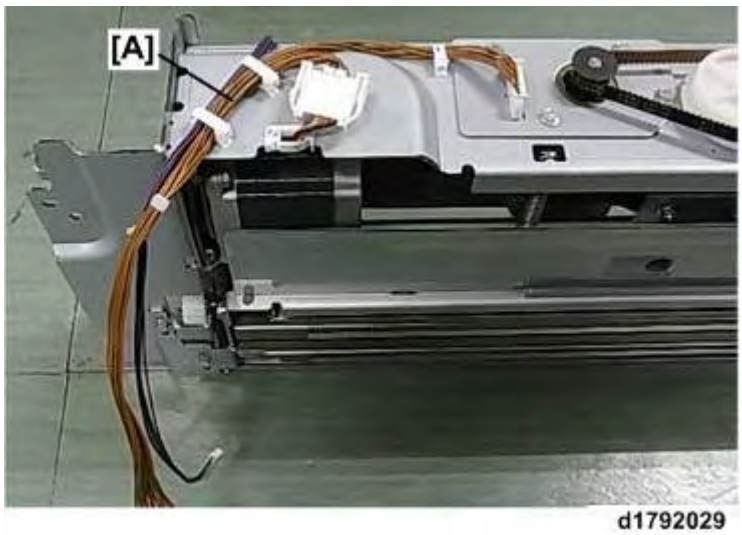
Mounting Decurl Unit

1. Remove the unit from the box and separate the accessories.



2. Remove tagged shipping clamps [A] (x4).

3. Attach clamps [A] (x2).

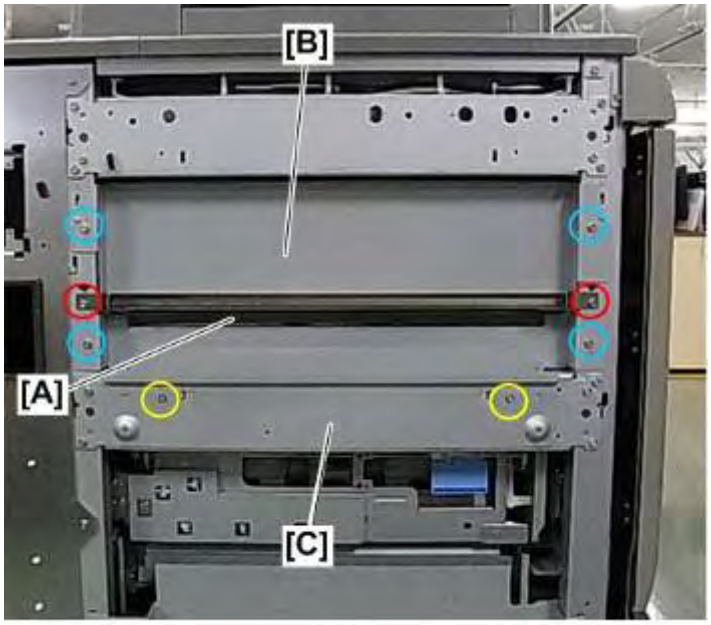


4. Connect motor harness [A] (x1,x2)

Note

- The connector with the longer harness is connected to the side toward the center motor.

5. Remove left cover [A] and rear cover [B] (x7 each).



d1792031

6. Remove:

[A] Exit guide (x2) (red circles)

[B] Safety plate (x4) (blue circles)

[C] Bracket (x2) (yellow circles)

Note

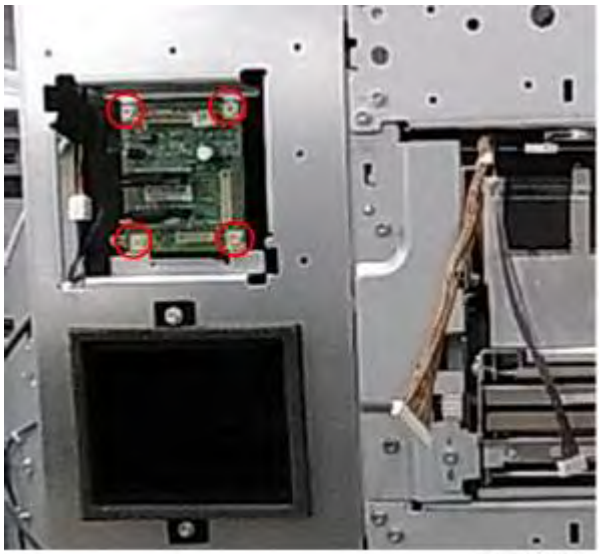
- Bracket [C] must be re-attached to the main machine at Step 8.

d1792032

7. Hang the unit [A] onto the main machine by rear hook [B] and front hook [C].

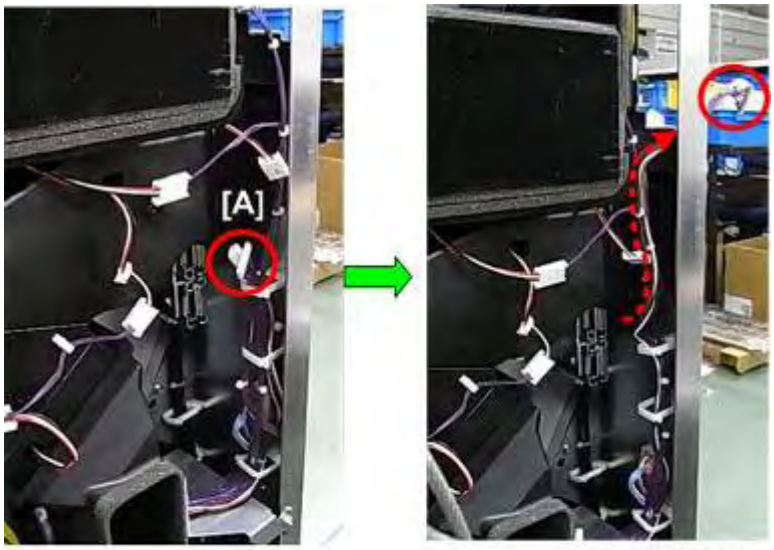
d1792033

8. Attach:
   - Main unit to the main machine (x4 M4x8)
   - Bracket removed at Step 6. (x4)

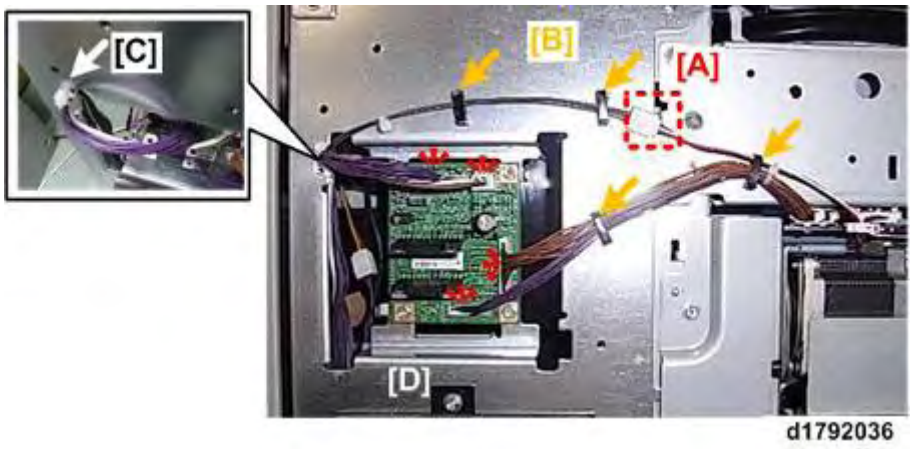


d1792034

9. Attach the DDRB (main board) (x4 M3x6).



10. Locate the harness [A] in the main machine, and then pull it up toward the board.



11. Connections:
    - [A] Fan harness to main machine harness
    - [B] Black harness clamps to frame (x4)
    - [C] Edge saddle to frame (x1)
    - [D] Board (x4)

Important

- When you clamp the harnesses from the main machine with the edge saddle [P], make sure that the harness band [Q] is to the outside of the edge saddle.

12. Re-attach the right and left covers of the main machine (x7 each)

13. Attach connection bracket of the downstream unit (x4 M4x8).

Entrance Guide Plate

Two guide plates are provided for the connection between the Decurl Unit and entrance of the downstream unit. You must select the correct guide plate for the downstream peripheral unit (refer to the table below).

Peripheral Unit	Guide Plate
Multi Fold Unit FD5020	A
Cover Interposer Tray CI5030	
Ring Binder RB5020	
Perfect Binder GB5010	
Booklet Finisher SR5060	C
Finisher SR5050	

1. Remove the guide plate from the right side of the downstream unit (x2).

2. Select either entrance guide [A] or entrance guide [C] for attachment to the left side of the main machine. (See table above.)

3. Use the screws removed in Step 1 to fasten the entrance guide to the main machine (x2).

4. If the first downstream unit is the Multi Feed Unit:
   - Fasten the screws at the outer (wide) holes (this is for the Multi Feed Unit only).
   - This is not done for either the Cover Interposer Tray or the Ring Binder.

SP Settings

1. Plug the main machine into its power source, and then switch the machine on.

2. Enter the SP mode, and then enter the settings for SP1927-001 and SP1928-001 written on the attached label.
3. Leave the SP mode.
4. Turn the machine off, and then unplug it from its power source.

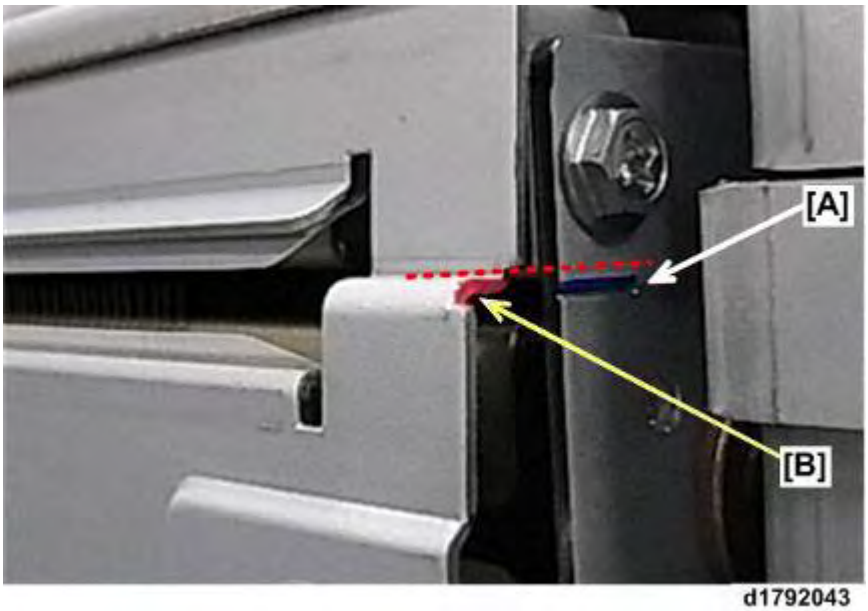
Connecting Peripheral Units

1. Connect the I/F cable to the main machine.
2. Connect the peripheral to the left side of the machine.
3. Plug the main machine into its power source, and then switch the machine on.
4. Enter the SP mode, and then do SP5-804-128 (Output Check De-curler Unit Move: Upper Default).
5. Send a sheet of paper through the Decurl Unit (the upper path is the default).
6. Turn the machine off, and then unplug it from its power source.
   If the output check is not successful, do the procedure in the next section below to change the unit path.

Adjustments

1. Do SP1-906-001 (De-curler Setting Tray 1: Paper Path Selection) to confirm that the upper path is selected at the default path.
2. Switch to the COPY WINDOW, select one-side copy from Tray 1, and then press [Start].
3. Make sure that the paper exits the machine through the default upper path of the Decurl Unit, and then open the front door to interrupt operation of the machine.
4. Turn the machine off, and then unplug it from its power source.

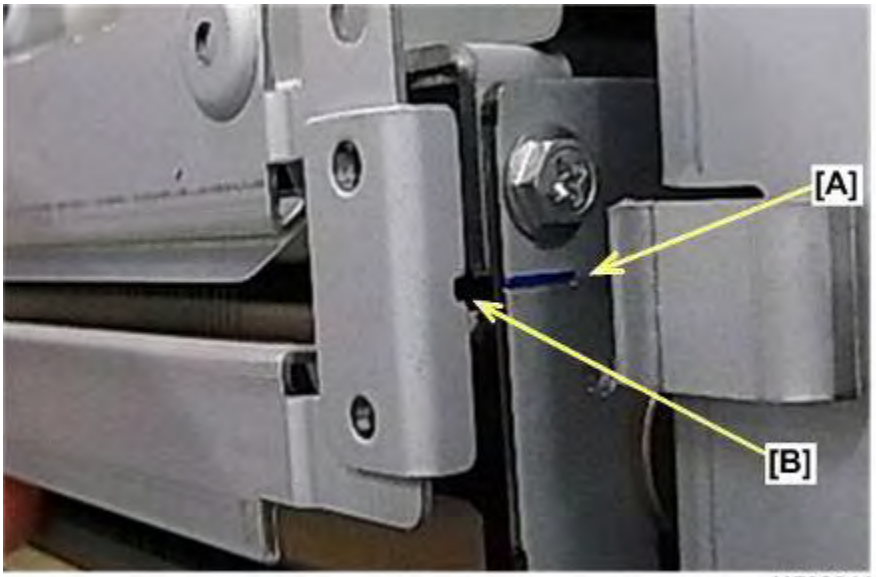
If Guide Plate A is Attached



d1792043

1. Check the red and blue marks between the main machine and the downstream unit.
2. Remove the rear cover of the peripheral.
3. Check to see if the blue mark [A] at the front and back of the Decurl Unit is at the same height as the red mark [B] at the front and back of the downstream peripheral.

If Guide Plate C is Attached



d1792044

1. Check the blue marks between the main machine and the first downstream unit.
2. Remove the rear cover of the peripheral.
3. Check the blue mark [A] at the front and back of the Decurl Unit with the cut-outs [B] of guide plate C, and then turn the leveling bolts until they are at the same height.

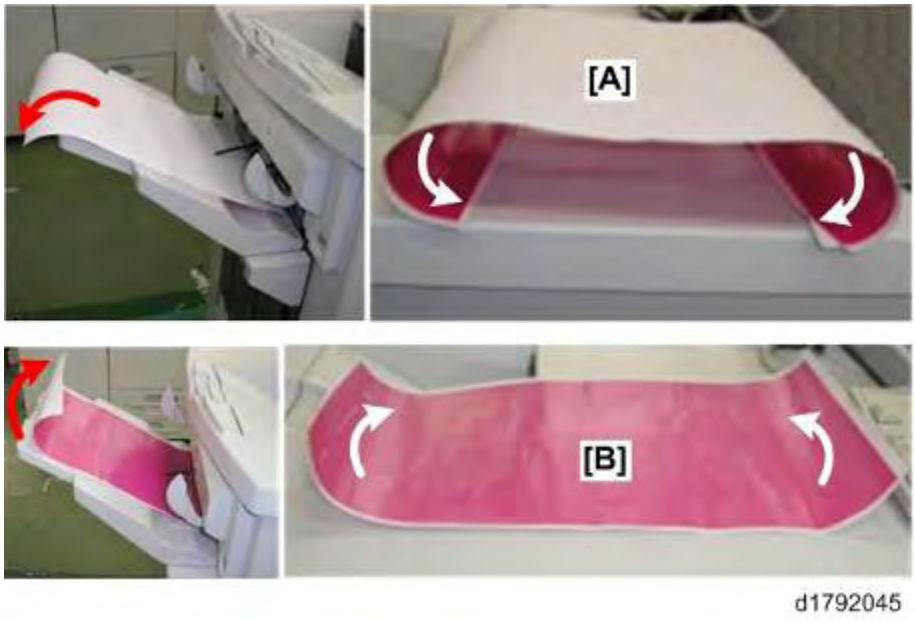
2.3.3 CURL CORRECTION

SP Mode Adjustments

Turn on the machine and do some test prints and check for excessive curling.

Important

- Do test prints with paper feed from each paper tray.



Back Curl [A]

Back curling (convex curling) occurs when the leading and trailing edges of the sheets curl under.

Face Curl [B]

Face curling (concave curling) occurs when the leading and trailing edges of the sheets curl up.

Curl Correction

Curl correction is done with settings in the SP mode. There are six SP codes for curl correction, one for each paper tray.

Paper Source		SP	Range
Tray 1	1st Tray: Main Machine	1906 001	[0 to 5 / **3** / 1]
Tray 2	2nd Tray: Main Machine	1906 002	
Tray 3	3rd Tray: Main Machine	1906 003	
Tray 4	Top Tray: LCIT	1906 004	
Tray 5	Middle Tray: LCIT	1906 005	
Tray 6	Bottom Tray: LCIT	1906 006	
Tray 7	Multi Bypass Tray: On top of LCIT	1906 007	

1st Tray Main Machine: SP1906 001

This is the list of settings (range) for Tray 1. These settings are identical for each paper tray.

Setting	Used For	Sample
1	Slight Face Curl	Sample [B] in previous illustration.
2	Excessive Face Curl	
3	None. This is the normal default setting.	No pressure applied by soft roller.
4	Slight Back Curl	Sample [A] in previous illustration.
5	Excessive Back Curl	

Tray Heaters

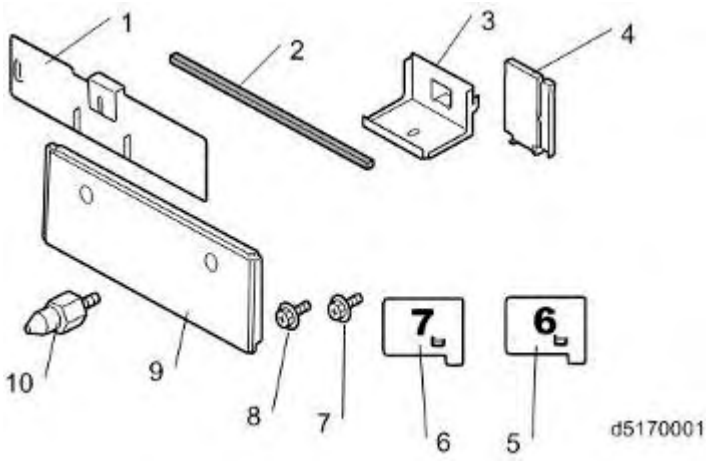
If the machine is being used where humidity is high:

- Turn on the tray heaters of the main unit. This will prevent moisture from collecting around and in the paper trays while the machine is idle or switched off.
- If an LCIT is installed, we recommend installing the optional tray heaters in the LCIT. This will prevent moisture from collecting around and the paper trays in the LCIT while the machine is idle or switched off.

2.4 MULTI BYPASS TRAY BY5010

2.4.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Tab Sheet Fence	1
2.	Sponge Strip*[1]	1
3.	Bracket	1
4.	End Fence	1
5.	Decal (Tray 6)	1
6.	Decal (Tray 7)	1
7.	Screws (M4x8)	2
8.	Screws (M4x6)	4
9.	Left Cover	1
10.	Joint Pins	2

*[1] Not used for this installation.

2.4.2 INSTALLATION

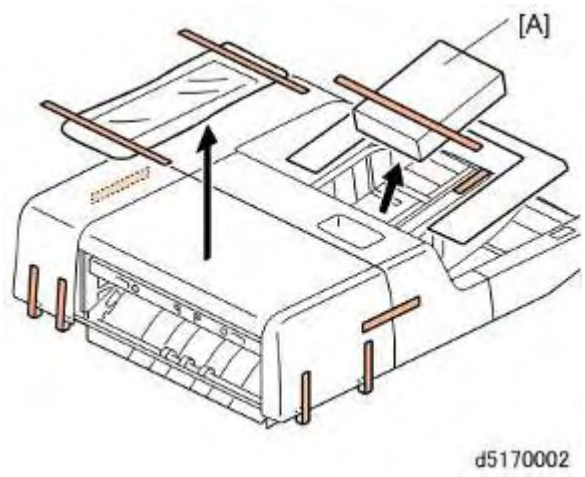
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedures.

Before You Begin...

- These instructions describe how to install the Multi Bypass DU5010 on either the LCIT RT5070 or LCIT RT5080.
- The Multi Bypass Unit must be installed on the LCIT before the LCIT is docked to the mainframe.
- If the LCIT is already installed, it must be disconnected from the mainframe before installation of the Multi Bypass Unit.

Unpacking



1. Remove the accessory packet [A] and open it.
2. Remove all tape and shipping materials.

Prepare the Unit

1. Lay the unit on a flat, clean surface.

d5170014

2. Open the unit.

d5170015

3. Remove the front cover (x1).

d5170016

4. Remove the rear cover (x2).

LCIT RT5070

These are the instructions for installing the unit on the LCIT RT5070. If you are doing this installation for the LCIT RT5080, go to the next section below.

d5170003

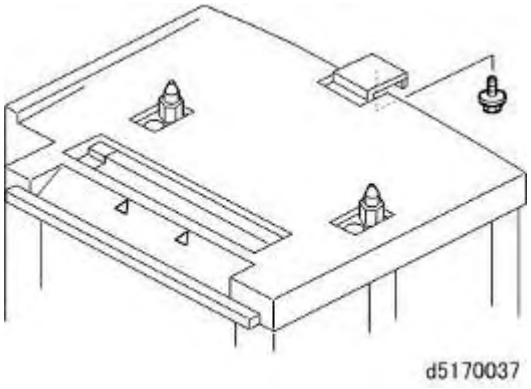
1. Remove the right edge cover (x2).

d5170004

2. Next, remove the top cover (x2).

d5170005

3. Install the joint pins.
4. Turn the pins clockwise until they are snug against the frame.

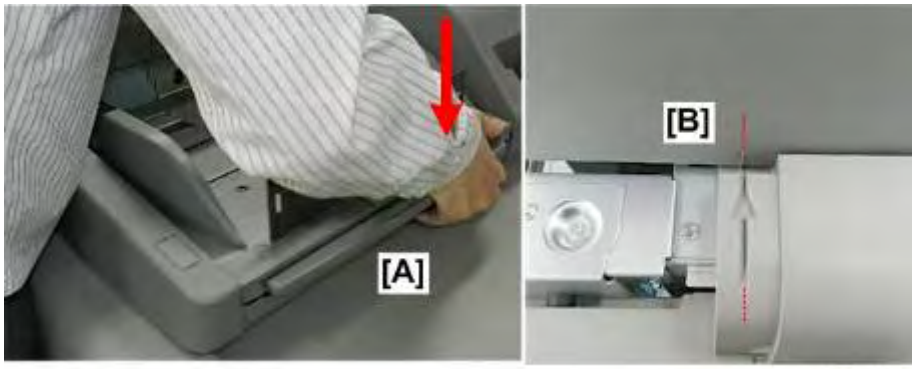


d5170037

5. Attach the accessory support plate (x1).

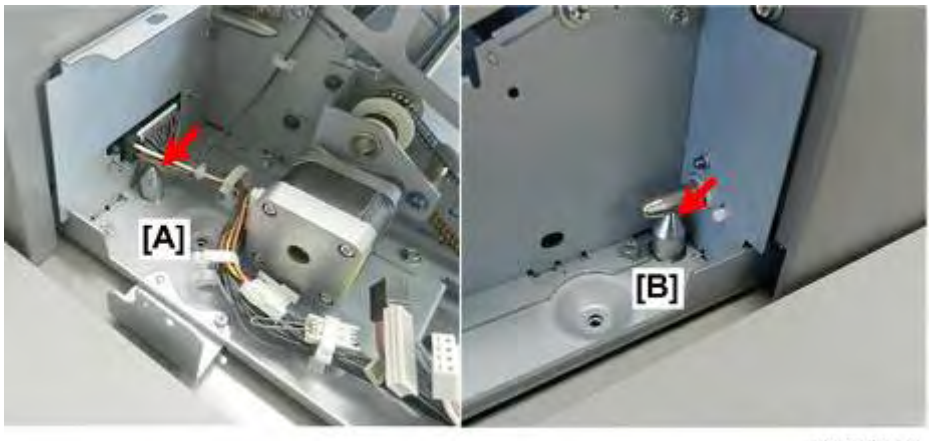
Note

- The Multi Bypass Unit weighs about 20 kg. (44 lb.).



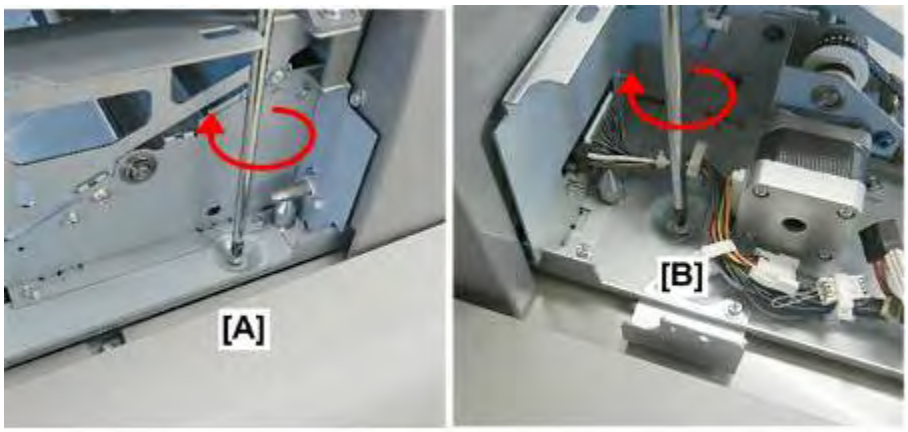
d5170016

6. Lift the bypass tray and set it on top of the joint pins. The pins should slide into holes on the bottom of the tray.
7. On the right, secure the tray with one screw at the accessory support plate attached in Step 5 (x1).l



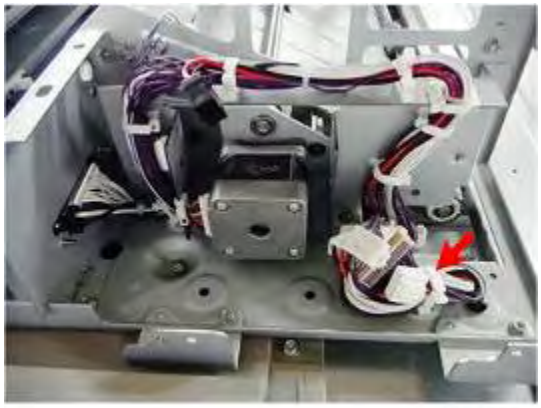
d5170018

8. Check the rear [A] and front [B].
9. Make sure the tray is flat on top of the LCIT, and that the joint pins are visible.



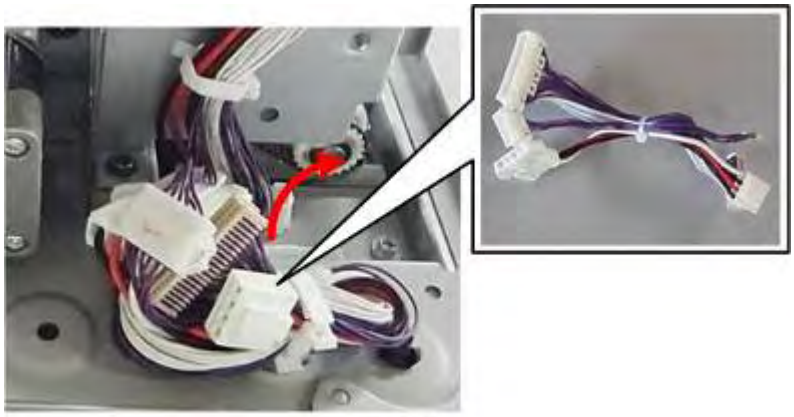
d5170019

10. Fasten the tray at the front [A] and rear [B] (x2).



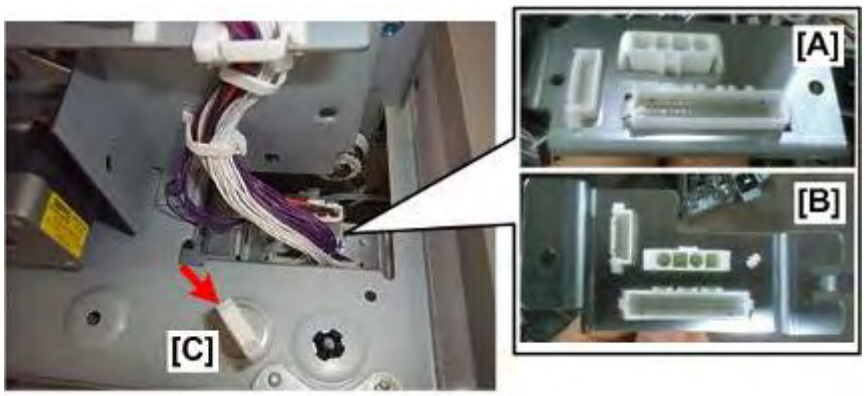
d5170038

11. At the rear, open the clamp to free the three harness cables.



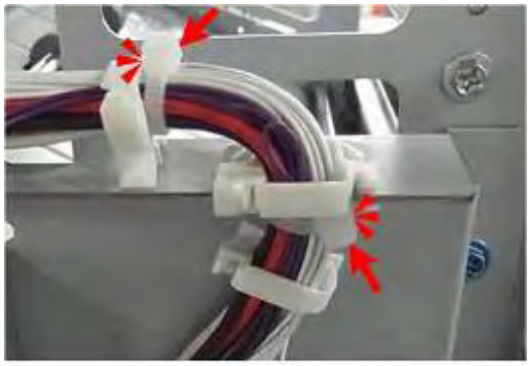
d5170039

12. Open the clamp, and then remove the short harnesses. These harnesses are not used for this installation.



d5170041

13. Locate the three connection points inside the tray, and then connect the harnesses (x3).
    - [A] shows the connection points inside LCIT RT5080
    - [B] shows the connection points inside LCIT RT5070
    - [C] is not used for this installation



d5170040

14. When you close the harnesses, make sure that the two lock bands are positioned as shown above.

d5170022

15. Next, install the left cover (x2).

d5170023

16. Attach the rear cover (x2).

d5170024

17. If the tray is closed, open it.

d5170025

18. Attach the front cover (x1).
19. This completes installation of the Multi Bypass Tray.
20. Dock the LCIT to the side of the main machine.

LCIT RT5080

d5170006

1. Open the front door.
2. Disconnect front side of left tray [B] (x2).

d5170007

3. At the rear [A] disconnect left tray [B] and remove it (x2).

d5170008

4. Remove 1st flat plate (x2).

d5170009

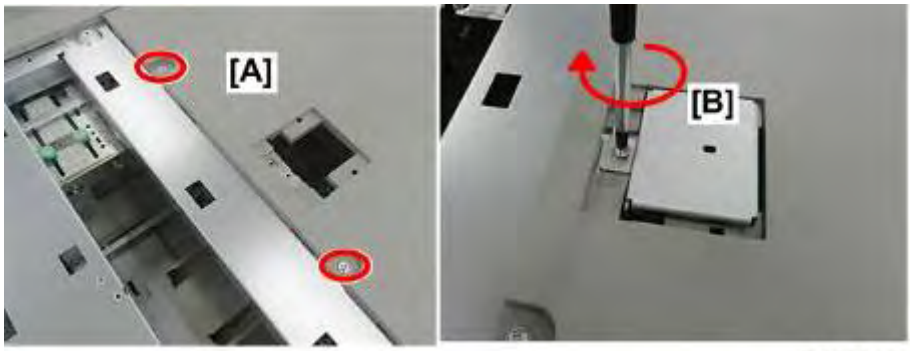
5. Remove 2nd flat plate (x2).

d5170010

6. Remove 3rd flat plate (x2).

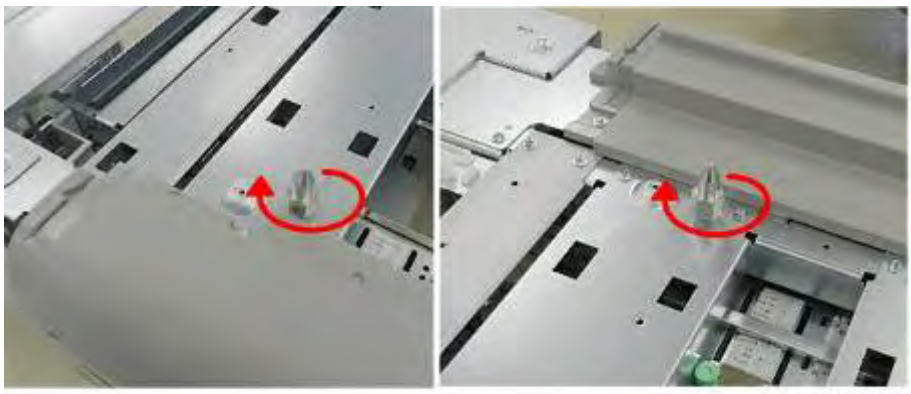
d5170011

7. Next, set the flat plate with the cutout where you just removed the 3rd flat plate.



d5170012

8. Fasten plate [A] (x2).
9. Set bracket [B] and fasten (x1).

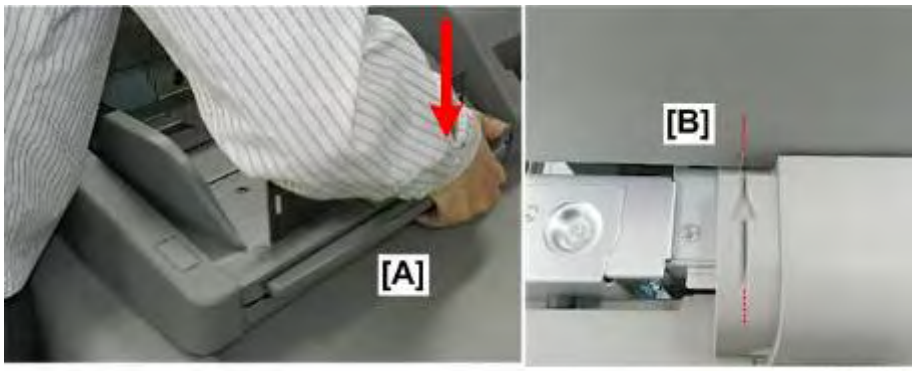


d5170013

10. Install the joint pins, one at the front and one at the rear.
11. Turn the pins clockwise until they are snug against the frame.

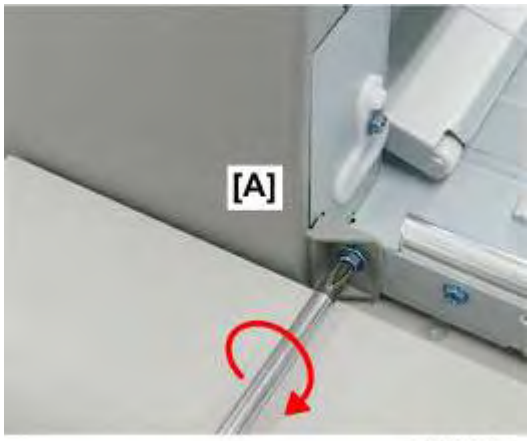
Note

- The Multi Bypass Unit weighs about 20 kg. (44 lb.).



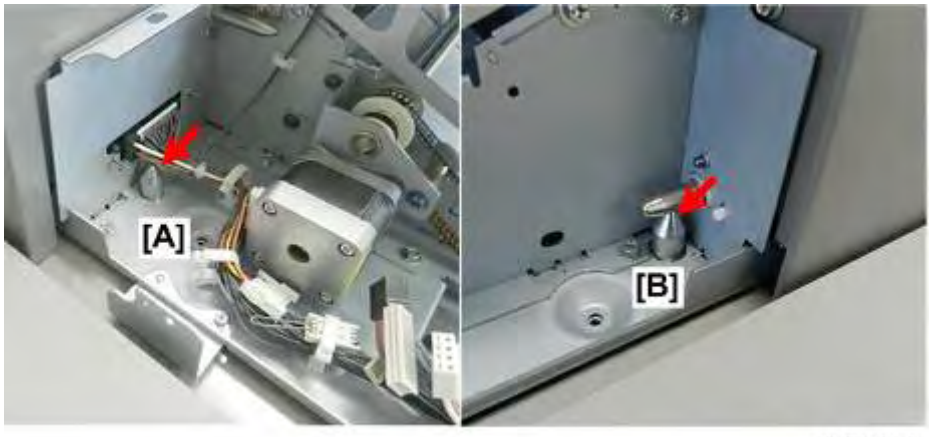
d5170016

12. Lift the bypass tray [A] and set it on top of the joint pins.
    - Use the arrow on the cover and line on the side of the unit [B] to align the tray as you lower it.
    - The pins will slide easily into holes on the bottom of the tray when these marks are aligned.



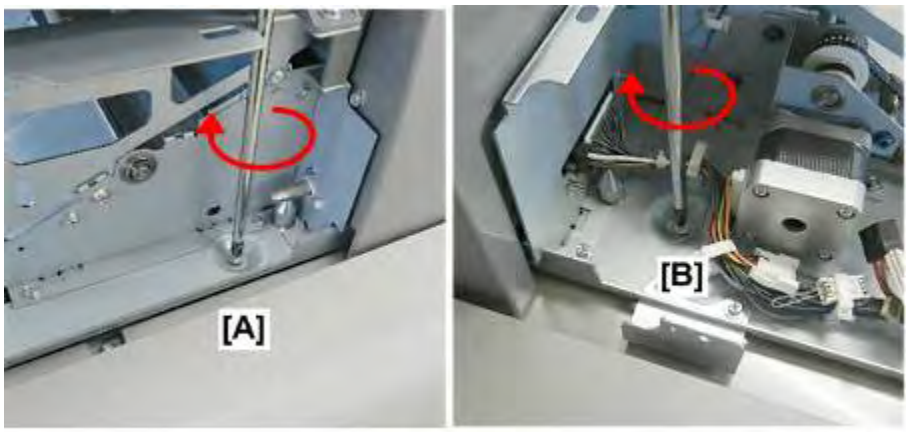
d5170028

13. Fasten the screw [A].



d5170018

14. Check the rear [A] and front [B].
15. Make sure the tray is flat on top of the LCIT, and that the joint pins are visible.

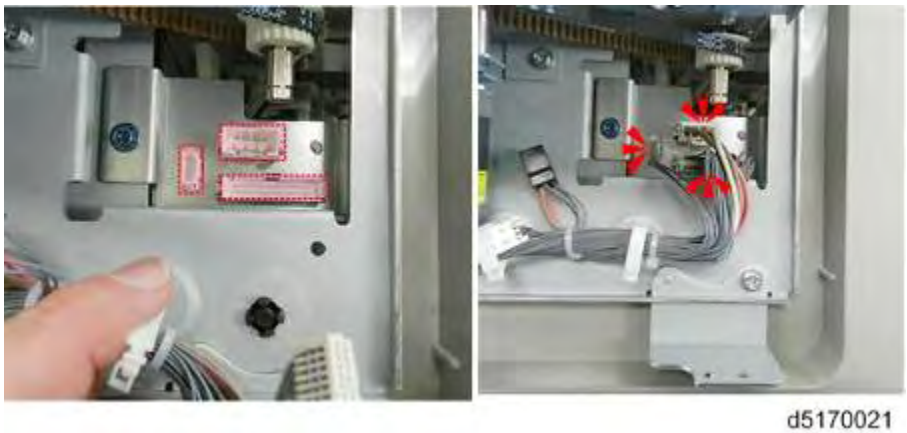


d5170019

16. Fasten the tray at the front [A] and rear [B] (x2).

d5170020

17. At the rear, open the clamp to free the three harness cables.



d5170021

18. Locate the three connection points inside the tray, and then connect the harnesses (x3).

d5170026

19. Next, install the left cover (x2).

d5170029

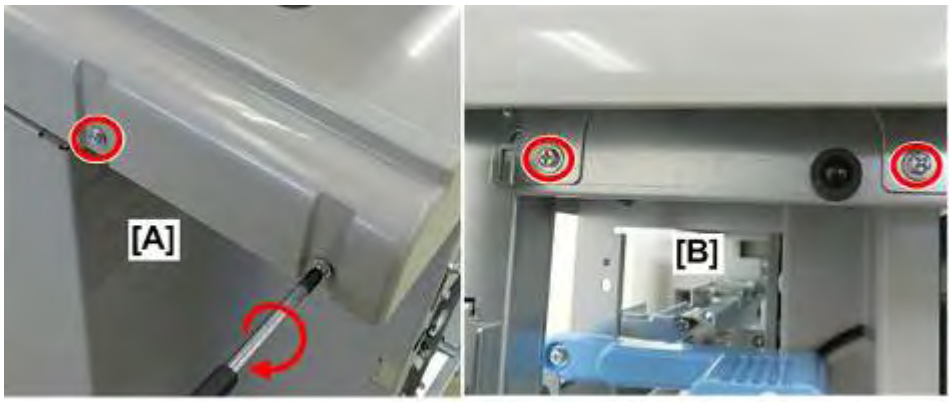
20. Attach the rear cover (x2).

d5170027

21. If the tray is closed, open it.

d5170030

22. Set the left cover. (This was the first cover that you removed at the beginning of the procedure.)



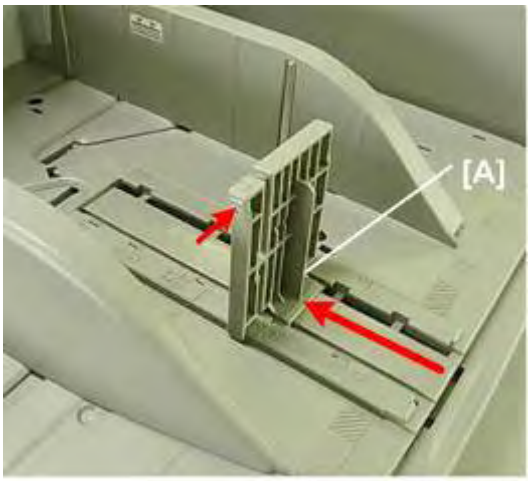
d5170031

23. Fasten left cover at the rear [A] and at the front [B] (x4).
24. This completes installation of the Multi Bypass Tray.
25. Dock the LCIT to the side of the main machine.

End Fence, Tab Sheet Fence

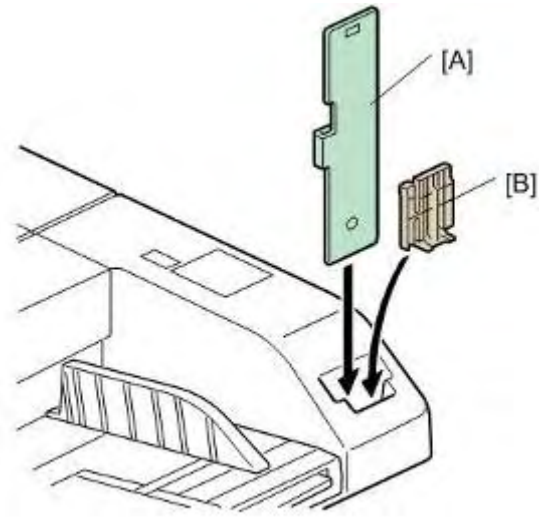
Note

- The items in this section are bypass unit accessories.



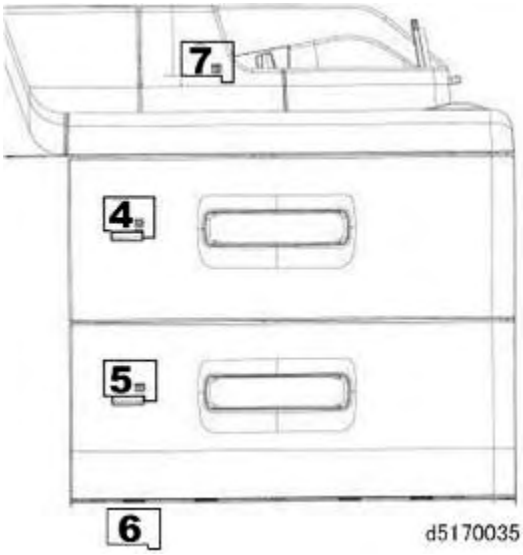
d5170033

1. Set the end fence [A].

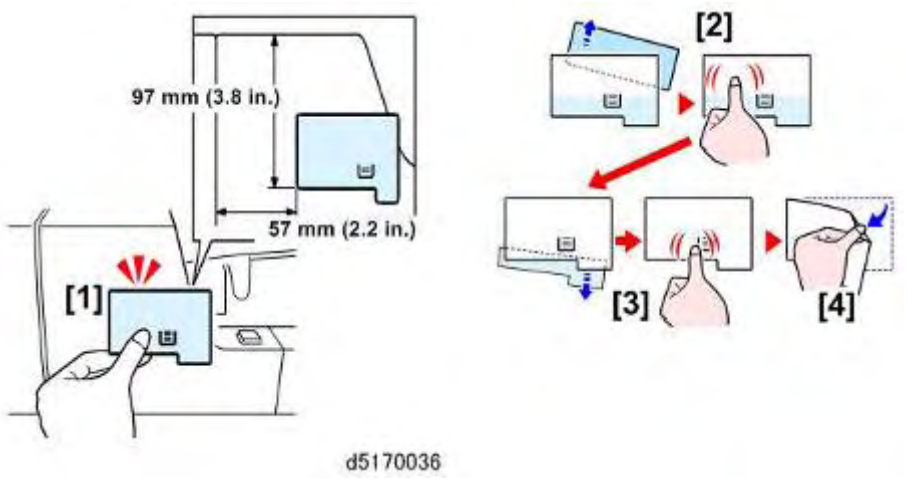


2. Store the tab sheet fence [A] as shown. Also store the end fence [B] here if the customer does not need to use it at this time.

Attaching the Tray Number Decals



1. Attach the number decals to the front of the unit as shown above.

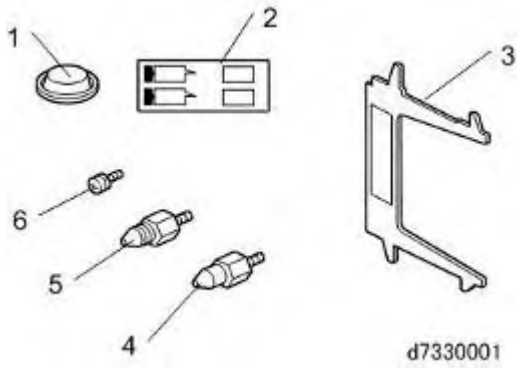


1. First, attach the "6" decal [1] at the position shown.
2. Pull the back strip [2] from behind the upper part of the decal, and then press where the strip was removed.
3. Pull the back strip [3] from behind the lower part of the decal, and then press where the strip was removed.
4. Pull the clear sheet [4] from the surface of the decal.
5. Follow the same procedure to attach the "3" and "4" decals.

2.5 LCIT RT5070

2.5.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list:



No.	Description	Q'ty
1.	Leveling Shoes	3
2.	Decal – Paper Set	3
3.	Tab Paper End Fence	1
4	Lower Joint Pin (smooth)	1
5	Upper Joint Pins (notched)	2
6	Screw M4 x10 with lock washer	1

Note

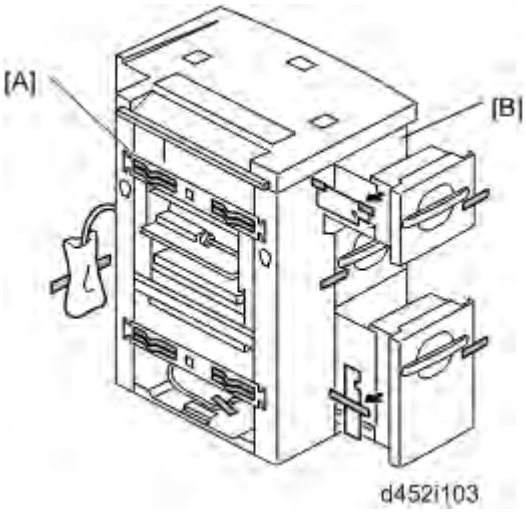
- The tab paper end fence (3) is located in the LCIT unit, mounted on hooks behind the front door.

2.5.2 INSTALLATION

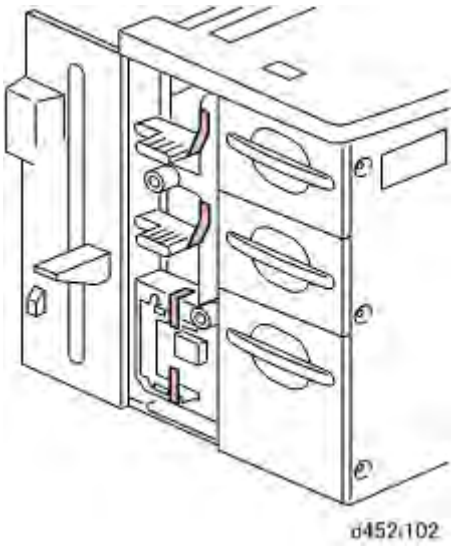
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

Tapes, Retainers



1. From the left side [A], remove the visible tape and other items.
2. At the front [B], open the trays and remove the tapes and retainers.



3. Open the front door and remove the tapes attached to the levers.

Ground Plate

d7330002

1. Locate the ground plate on the bottom, left edge of the unit.

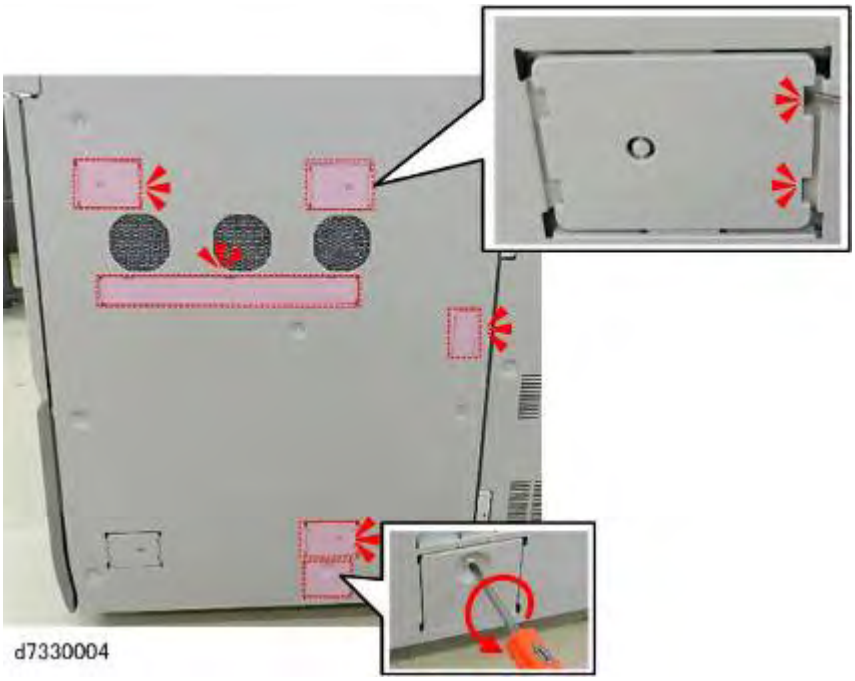
d7330003

2. Remove ground plate [A] (x2).
3. Turn the plate over so the tines are down [B], and then attach it to the same holes with the same screws (x2).

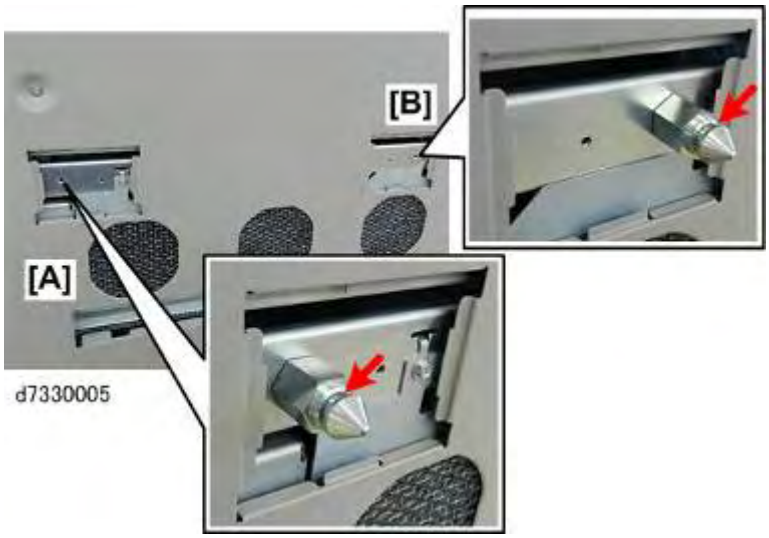
Important

- If you are going to install the Multi Bypass Tray, the tray heaters, or both, install it them now. These must be installed before the unit is docked to the main machine.

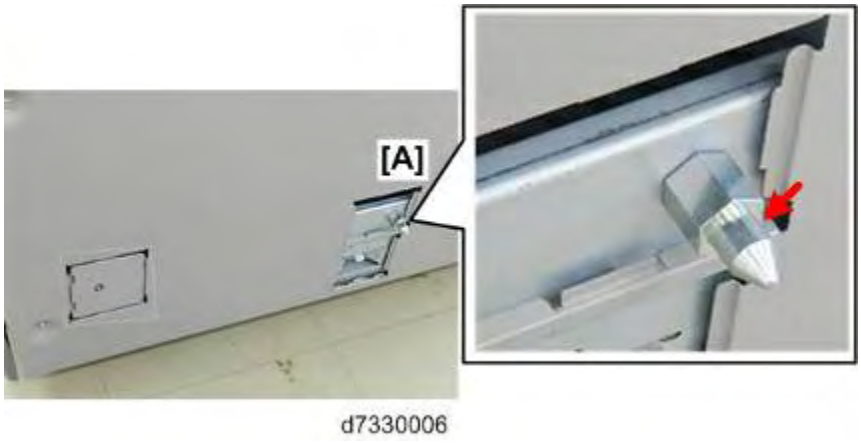
Docking to Main Machine



1. Remove six plates on the right side of the main machine (x all, x1)



2. There are two **notched** joint pins with the accessories.
3. Attach one notched pin on the right side of the main machine at the rear [A], and the other notched pin at the front [B].



d7330006

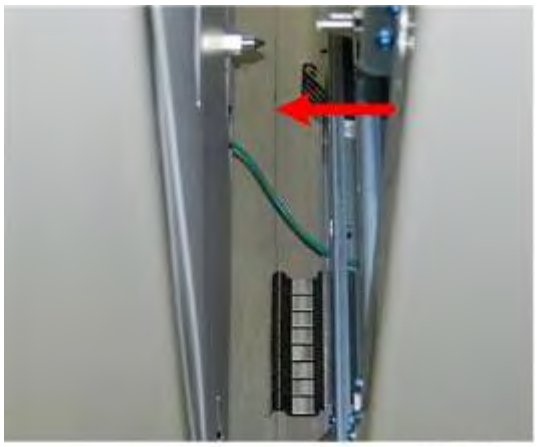
4. Attach the smooth joint pin to the right rear edge [A] of the machine.
   - There is only one smooth joint pin.
   - The smooth pin must be attached at [A].

d7330007

5. Push the unit close to the side of the main machine.
6. Pull ground wire [A] out of the unit.
7. Use the accessory screw to fasten the ground wire [B] to the left, bottom edge of the main machine.

Important

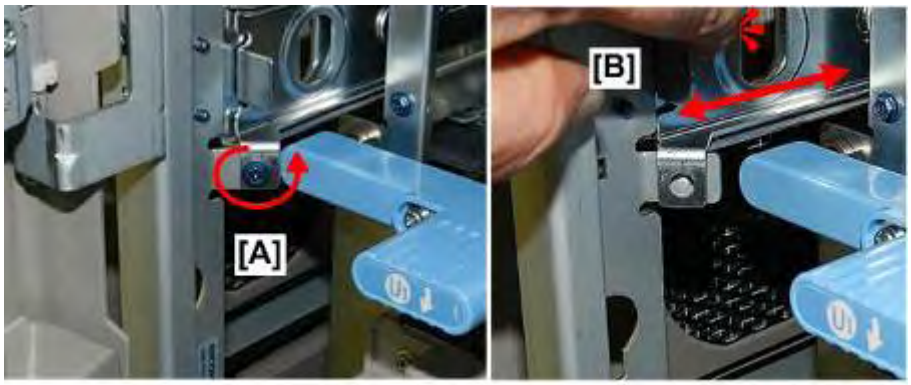
- Remember to always disconnect the ground wire before pulling the unit away from the main machine.



d7330008

8. Align the unit with the right side of the main machine.

9. Push the unit toward the right side of the main unit until they are about 15 cm (6 in.) apart.



d7330009

10. Open the front door of the unit.
11. Remove screw [A] (x1).
12. Pull the spring-loaded lock lever [B] forward and release it to make sure that it is free and moves easily.

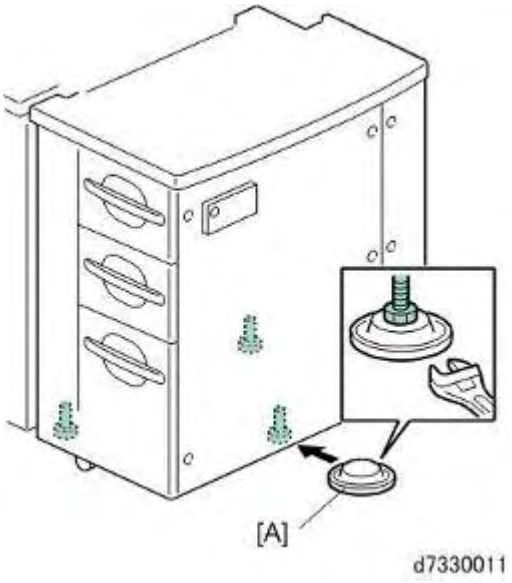
d7330010

13. Slowly, push the unit [A] onto the right side of the main machine. You should hear two clicks as the lock lever connects with the two upper joint pins.
14. Behind the door, re-attach screw [B] to fasten the lock lever.

d7330012

15. At the rear, attach the unit I/F connector to the side of the main machine.

Height Adjustment



1. Set the leveling shoes [A].
2. Adjust the height of the unit and make sure that it is level.

2.5.3 TRAY HEATERS

Accessories

Check the accessories against the list below.

No.	Description	Qty
1	PTC Heater	1

No.	Description	Qty
2	Heater Relay Harness	1
3	Heater Cover	2
4	Screws M4x8	7
5	Saddle Clamps	2
6	Harness Clamps	2

Installation

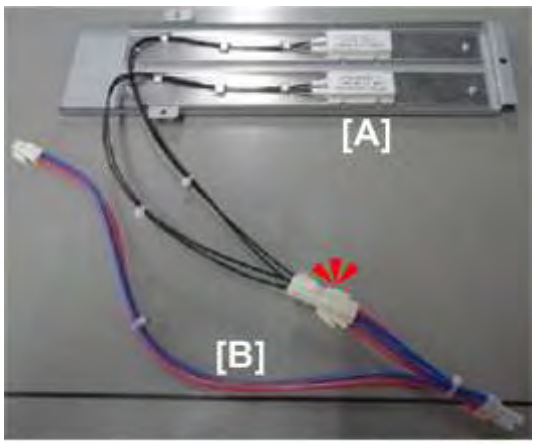
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

1. If the LCT is already installed, disconnect it and pull it away from the side of the machine.
   - Lock lever (x1)
   - Interface cable (x1
   - Ground screw (x1)

d4530004

2. Remove the screws from the right cover of the LCIT (x6).
3. Hold the bottom of the right cover, push it to the left to disconnect the hooks at the top edge of the cover, and pull it away.

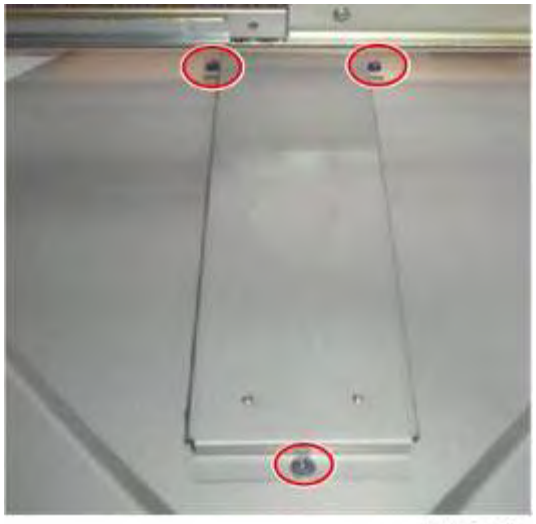


d7320041

4. Connect heater assembly [A] and cable [B] (x1).

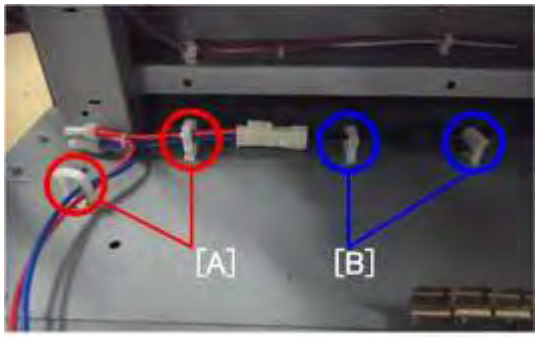
d7320042

5. Pull out each tray until it stops. You do not need to remove them.



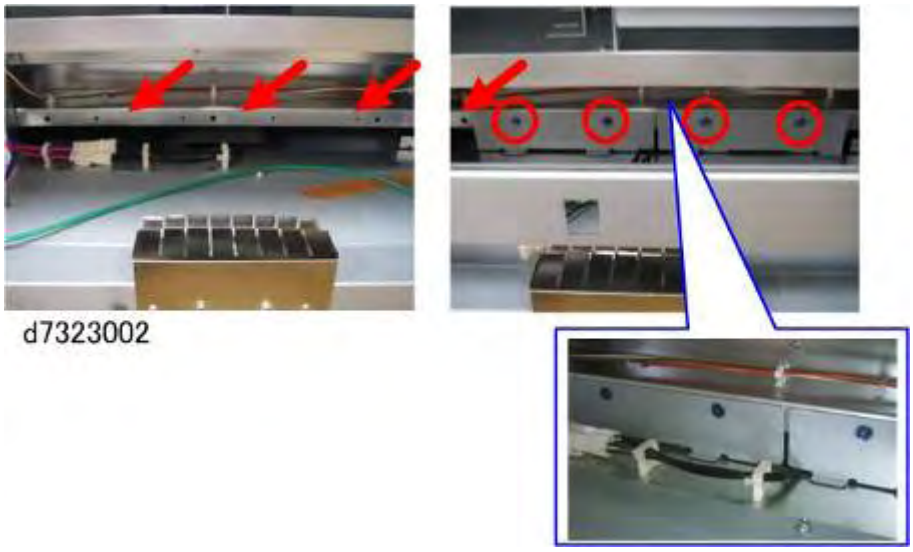
d7320043

6. Attach heater assembly to bottom plate of the LCT (x3).



d7323001

7. Attach clamp [A] and saddle clamp [B], and then close the clamps around the harness (x4).
8. Re-attach the right cover (x6).

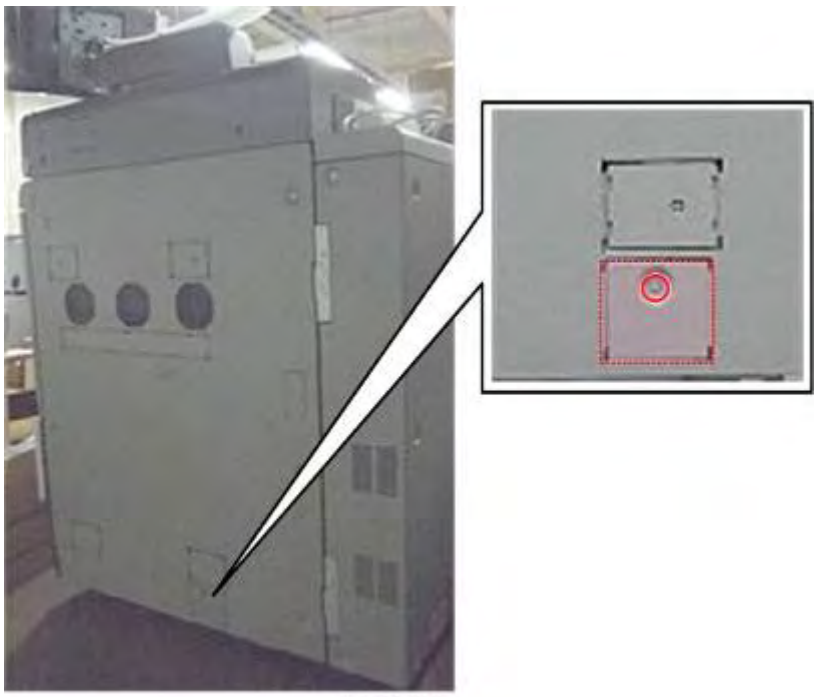


d7323002

9. Attach the two heater covers at the bottom of the LCT (x4).

CAUTION

- The heater harnesses must pass between the two covers.
- Make sure that the harnesses are not pinched between the covers.



d7320046

10. Remove connector plate from bottom edge of the main machine (x1).
11. Push the LCT close to the main machine.

d7320047

12. Re-connect green ground wire (x1).
13. Connect the heater cable (x1).

Important

- Confirm that the relay harness and the ground wire are not pinched between the mainframe and the LCIT.

2.5.4 MOVING THE LCT

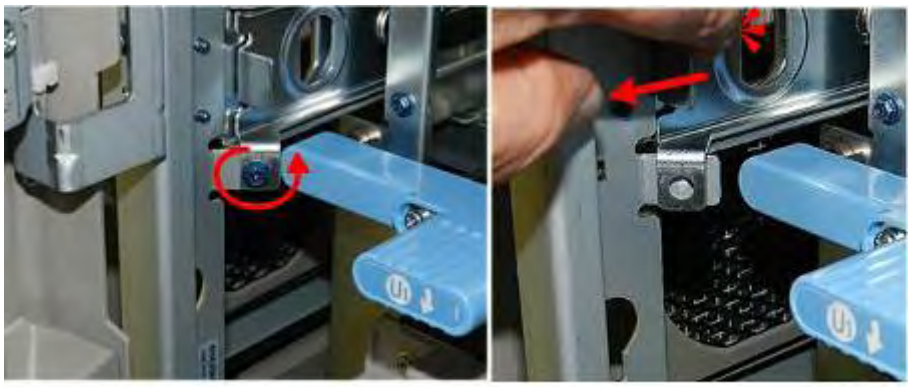
Always follow this procedure before moving the LCT.

Important

- To prevent damage to the ground wire (and the heater connector if the heater is installed) never attempt the move or change the position of the main machine with the LCT connected to the right side of the machine.

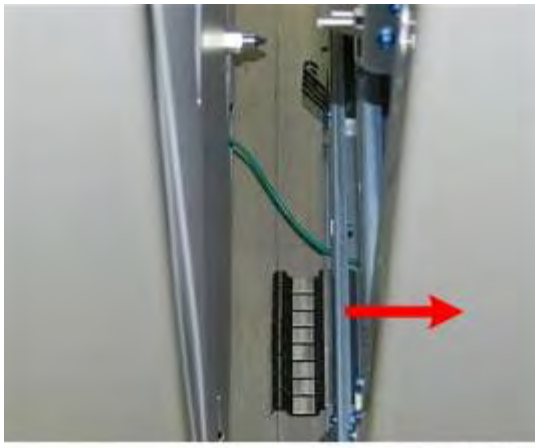
d7330014

1. At the rear, disconnect the unit I/F connector.



d7330015

2. Open the front door of the unit.
3. Remove the screw (x1).
4. Pull the spring-loaded lock lever forward to separate it from the joint pins on the side of the main machine.



d7330016

5. Slowly, pull the LCT a short distance away from the machine.

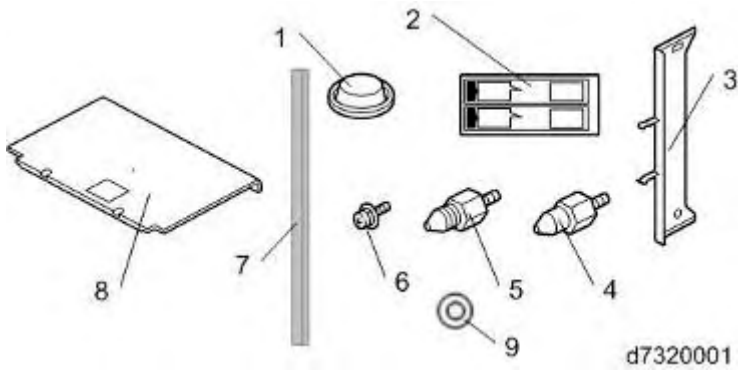
d7330017

6. Disconnect the ground wire (x1).
7. Disconnect the heater connector, if the heaters (option) have been installed (x1).
8. Pull the LCT away from the side of the main machine.

2.6 LCIT RT5080

2.6.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1	Leveling Shoes	4
2	Decals - Paper Set	3
3	Tab Fence	1
4	Lower Joint Pins (Smooth)	2
5	Upper Joint Pins (Grooved)	2
6	Screws M4 x 10 with Lock Washer	1
7	Sponge Strip	1
8	Right Middle Cover	1
9	Flat Washer	1

Note

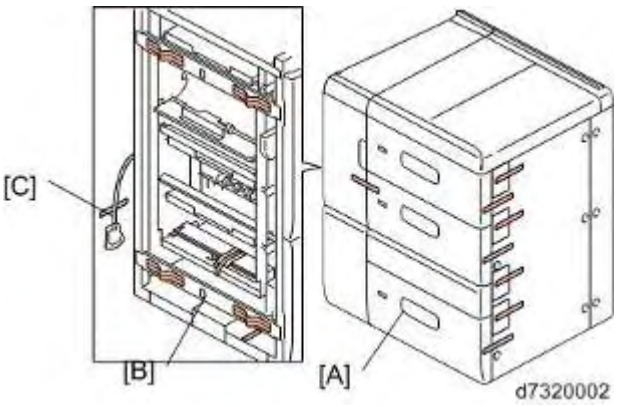
- Item 8 is required for installation of the Multi Bypass Unit BY5010 only

2.6.2 INSTALLATION

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedures.

Tapes, Retainers



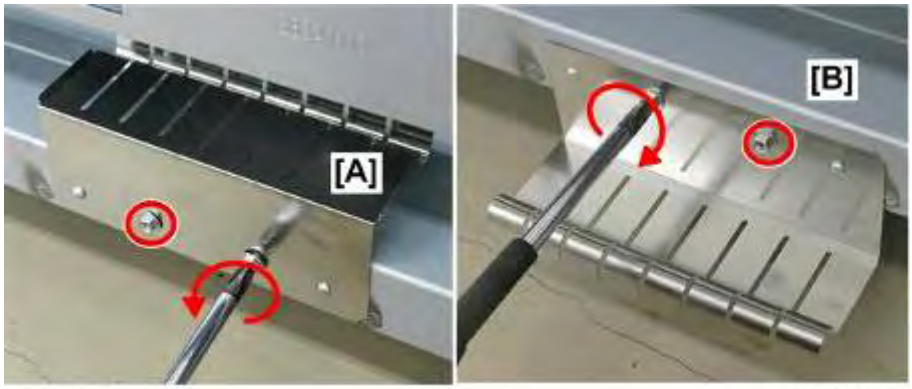
1. At the front [A] and right, remove all visible tapes.
2. On the left [B], remove visible tapes.
3. Remove tape and cover from the I/F connector [C].

4. Open each drawer and remove the tape.

Ground Plate

d7320004

1. Locate the ground plate on the bottom, left edge of the unit.



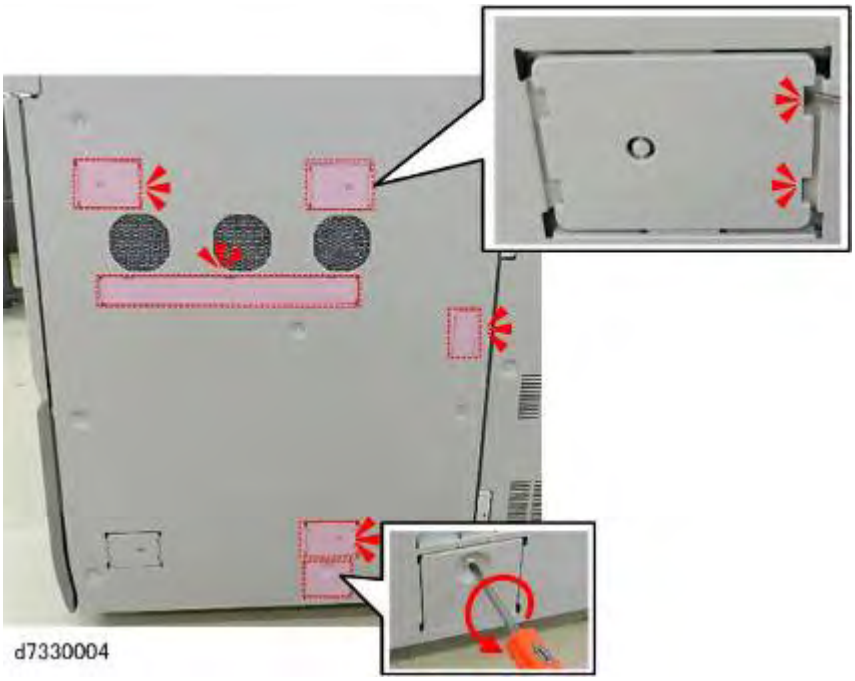
d7320005

2. Remove ground plate [A] (x2).
3. Turn the plate over so the tines are down [B], and then attach it to the same holes with the same screws (x2).

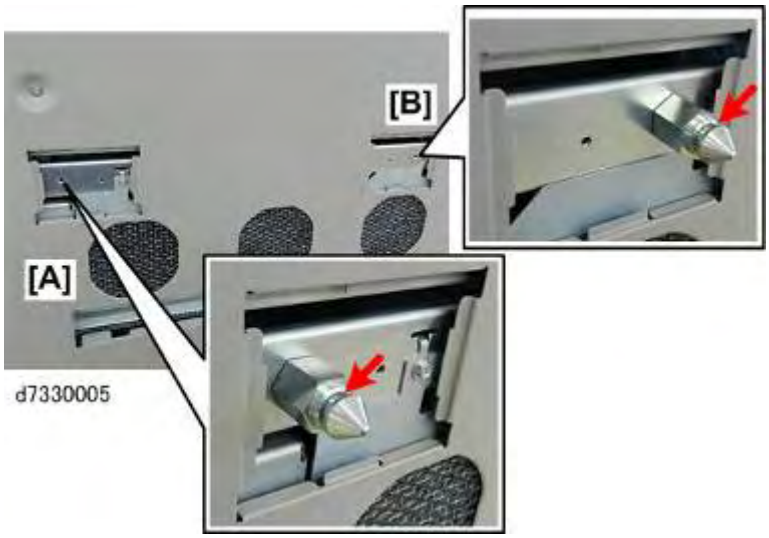
Important

- If you are going to install the Multi Bypass Tray, the tray heaters, or both, install it them now. These must be installed before the unit is docked to the main machine.

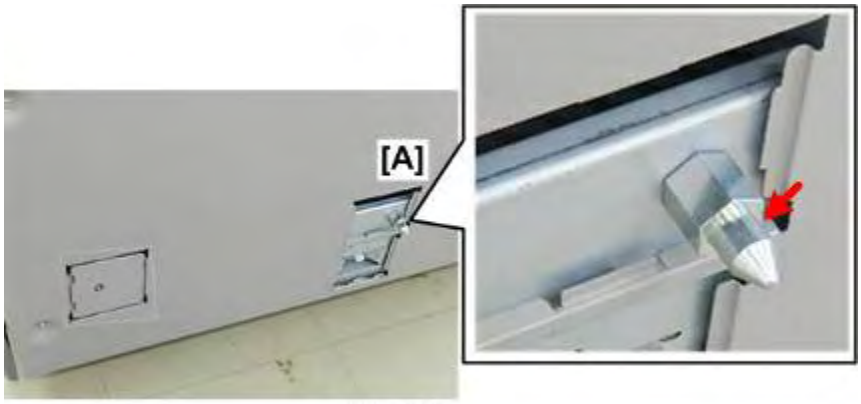
Docking to Main Machine



1. Remove all plates on the right side of the main machine (x all, x1)



2. There are two **notched** joint pins with the accessories.
3. Attach one notched pin on the right side of the main machine at the rear [A], and the other notched pin at the front [B].

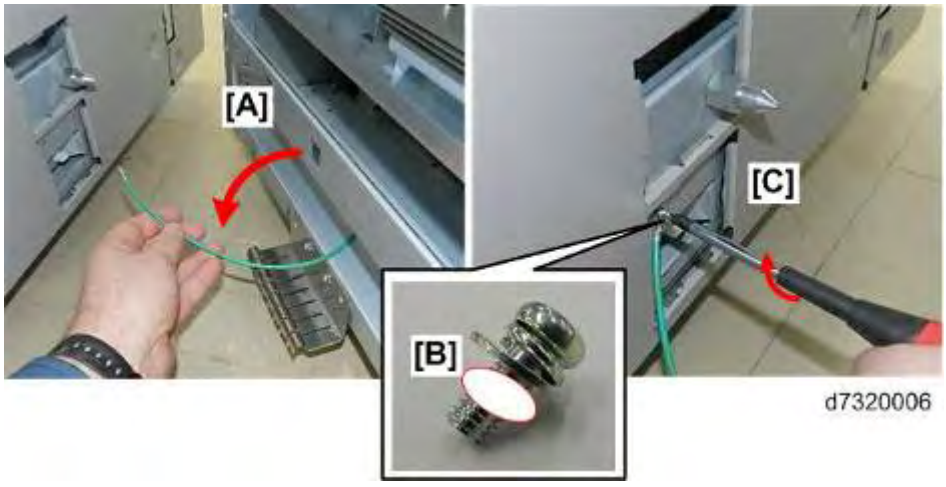


d7330006

4. Attach the smooth joint pin to the right rear edge [A] of the machine.
   - There is only one smooth joint pin.
   - The smooth pin must be attached at [A].

d7330013

5. Peel the tape from the back of the sponge strip.
6. Attach the sponge strip [A] to the top left edge of the unit.

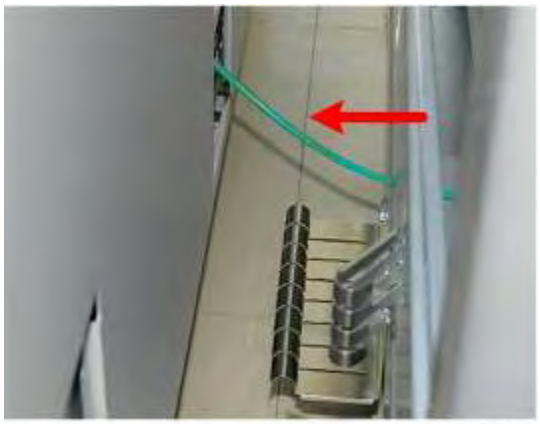


d7320006

7. Push the unit close to the side of the main machine.
8. Pull ground wire [A] and out of the unit.
9. Use the accessory screw and flat washer [B] to fasten the ground wire to the left, bottom edge of the main machine at [C].

Important

- Remember to always disconnect the ground wire before pulling the unit away from the main machine.

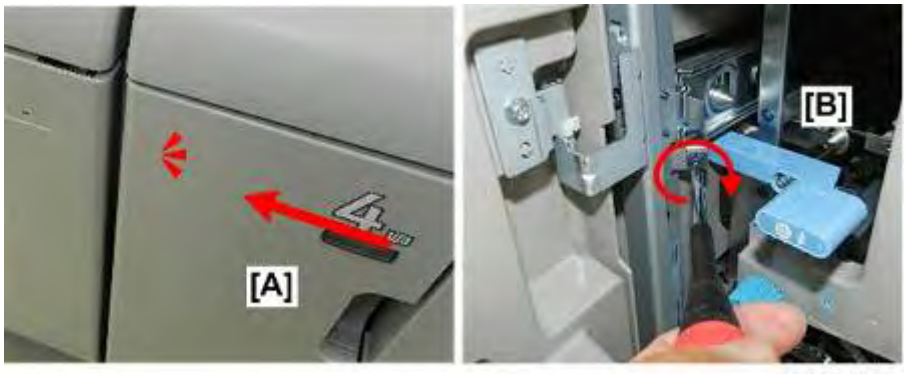


d7320007

10. Align the unit with the right side of the main machine.
11. Push the unit toward the right side of the main unit until they are about 15 cm (6 in.) apart.

d7320008

12. Open the front door of the unit.
13. Remove screw [A] (x1).
14. Pull the spring-loaded lock lever [B] forward and release it to make sure that it is free and moves easily.



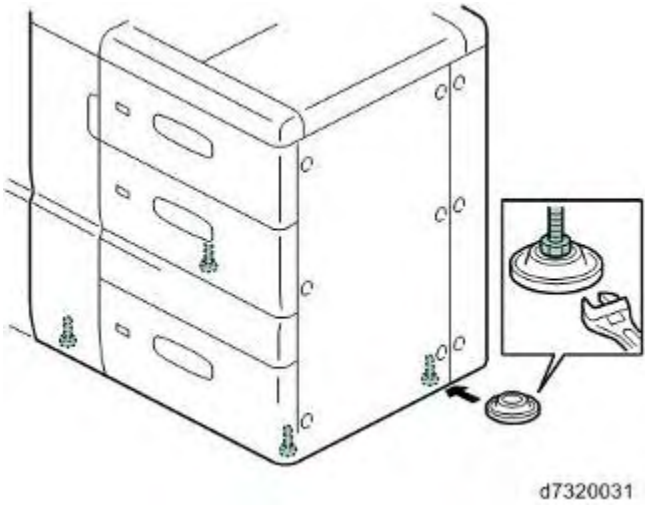
d7320009

15. Slowly, push the unit [A] onto the right side of the main machine. You should hear two clicks as the lock lever connects with the two upper joint pins.
16. Behind the door, re-attach screw [B] to fasten the lock lever.

d7330012

17. At the rear, attach the unit I/F connector to the side of the main machine.

Height Adjustment



d7320031

1. Set the leveling shoes [A].
2. Adjust the height of the unit and make sure that it is level.

2.6.3 TRAY HEATERS

Accessories

Check the accessories against the list below.

No.	Description	Qty
1	PTC Heater	1
2	Heater Relay Harness	1
3	Heater Cover	2
4	Screws M4x8	7
5	Saddle Clamps	2
6	Harness Clamps	2

Installation

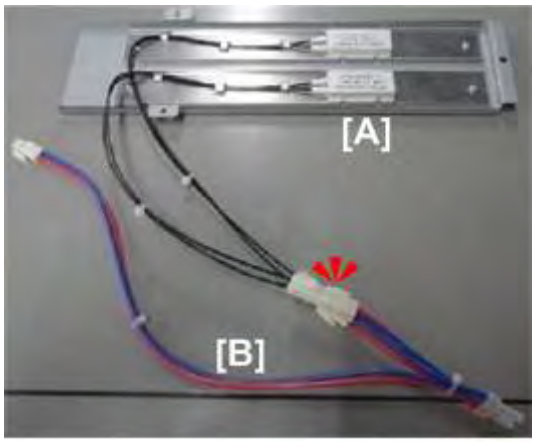
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

1. If the LCT is already installed, disconnect it and pull it away from the side of the machine.
   - Lock lever (x1)
   - Interface cable (x1
   - Ground screw (x1)

d4530004

2. Remove the screws from the right cover of the LCIT (x6).
3. Hold the bottom of the right cover, push it to the left to disconnect the hooks at the top edge of the cover, and pull it away.



d7320041

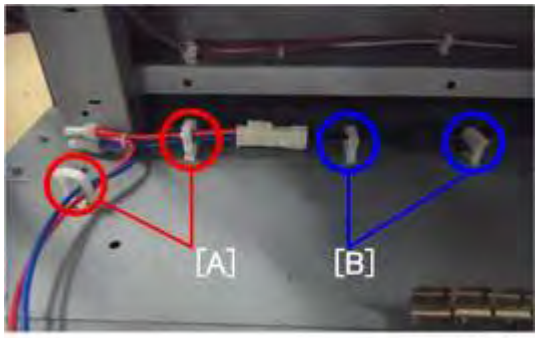
4. Connect heater assembly [A] and cable [B] (x1).

d7320042

5. Pull out each tray until it stops. You do not need to remove them.

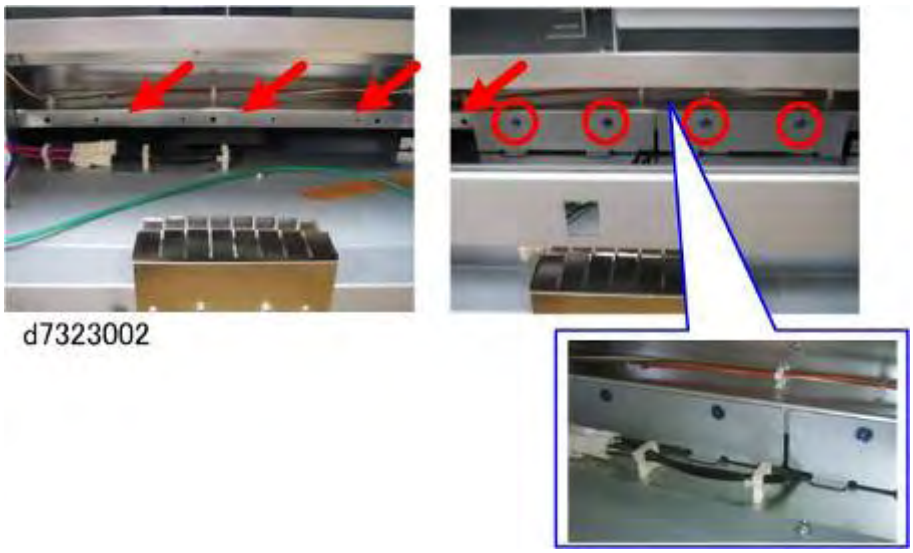
d7320043

6. Attach heater assembly to bottom plate of the LCT (x3).



d7323001

7. Attach clamp [A] and saddle clamp [B], and then close the clamps around the harness (x4).
8. Re-attach the right cover (x6).

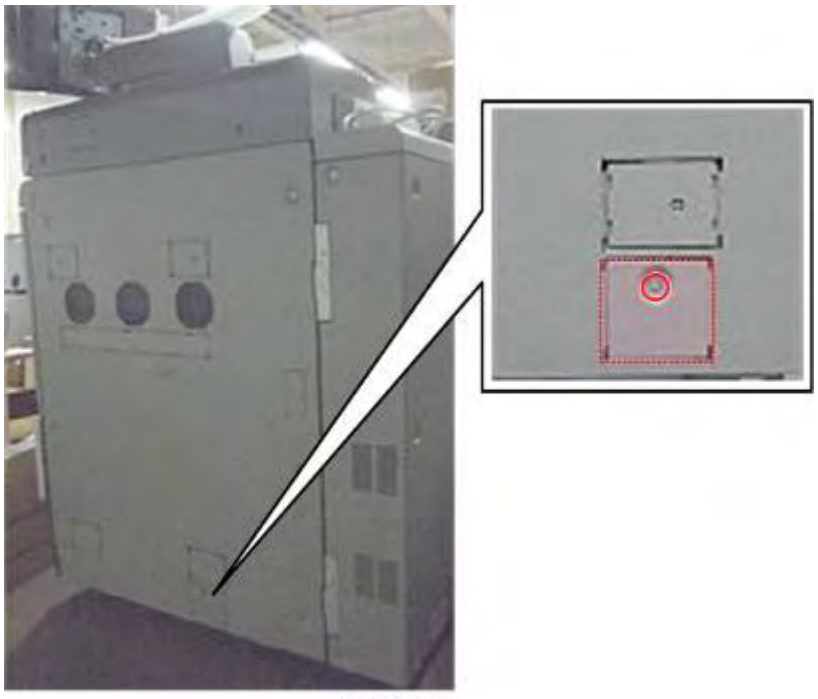


d7323002

9. Attach the two heater covers at the bottom of the LCT (x4).

CAUTION

- The heater harnesses must pass between the two covers.
- Make sure that the harnesses are not pinched between the covers.



d7320046

10. Remove connector plate from bottom edge of the main machine (x1).
11. Push the LCT close to the main machine.

d7320047

12. Re-connect green ground wire (x1).
13. Connect the heater cable (x1).

Important

- Confirm that the relay harness and the ground wire are not pinched between the mainframe and the LCIT.

2.6.4 MOVING THE LCT

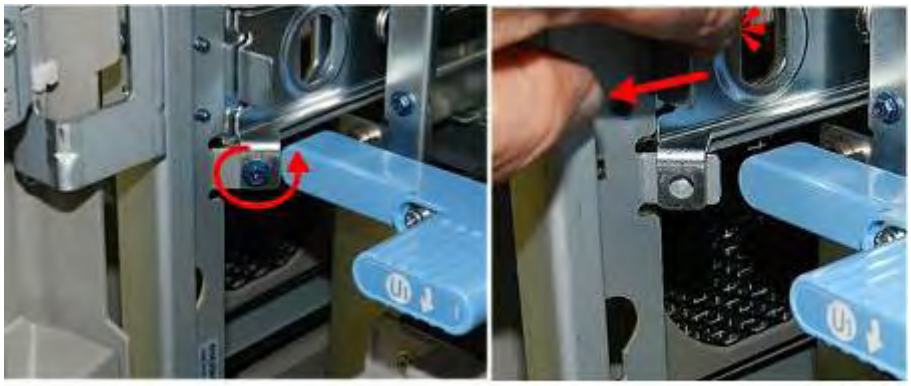
Always follow this procedure before moving the LCT.

Important

- To prevent damage to the ground wire (and the heater connector if the heater is installed) never attempt the move or change the position of the main machine with the LCT connected to the right side of the machine.

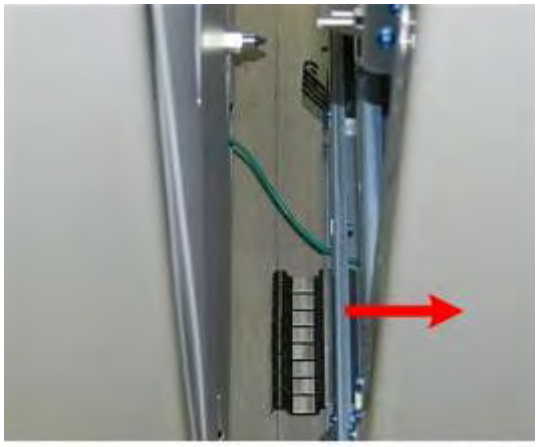
d7330014

1. At the rear, disconnect the unit I/F connector.



d7330015

2. Open the front door of the unit.
3. Remove the screw (x1).
4. Pull the spring-loaded lock lever forward to separate it from the joint pins on the side of the main machine.



d7330016

5. Slowly, pull the LCT a short distance away from the machine.

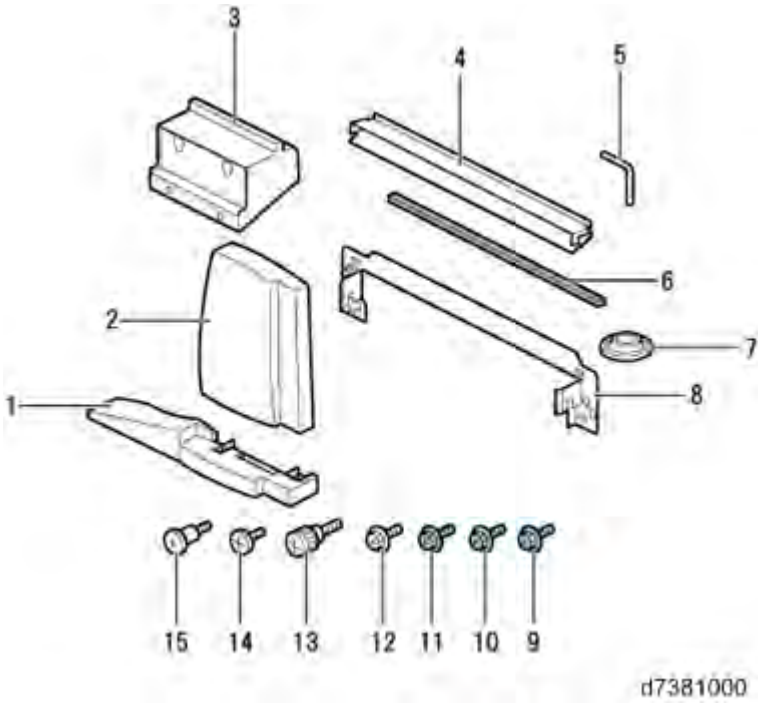
d7330017

6. Disconnect the ground wire (x1).
7. Disconnect the heater connector, if the heaters (option) have been installed (x1).
8. Pull the LCT away from the side of the main machine.

2.7 COVER INTERPOSER TRAY CI5030

2.7.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Base Cover (Tray Unit)	1
2.	Front Cover	1
3.	Spacer	1
4.	Relay Guide Plate	1
5.	“L” Hinge Pins (Tray Unit Front Cover)	2
6.	Sponge Strip	1
7.	Leveling Shoes	4
8.	Joint Bracket	1
9.	Screw (M4x8)	2
10.	Screw (M3x8)	1

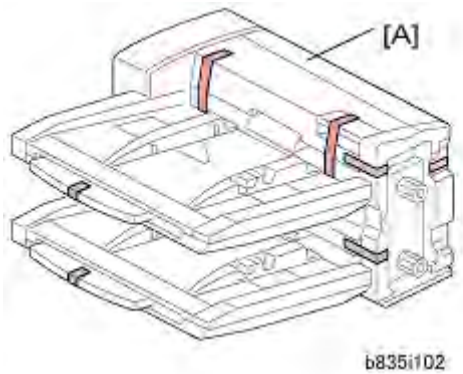
No.	Description	Q'ty
11.	Screw (M3x6)	2
12.	Screw (M4x8)	4
13.	Knob Screw	2
14.	Flat Knob Screw (M3x10)	3
15.	Shoulder Screw	1

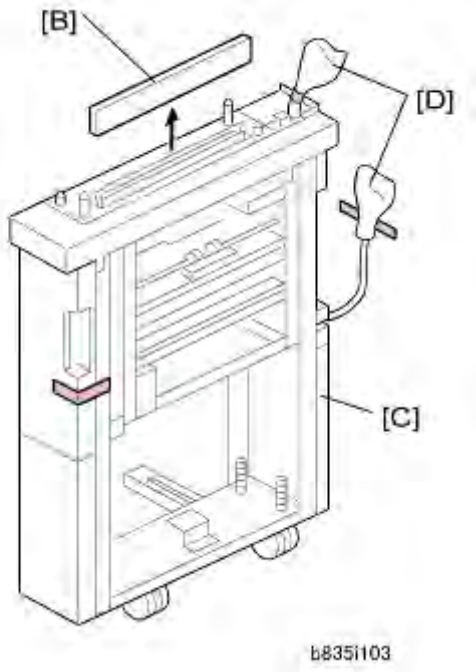
2.7.2 INSTALLATION

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

Tapes

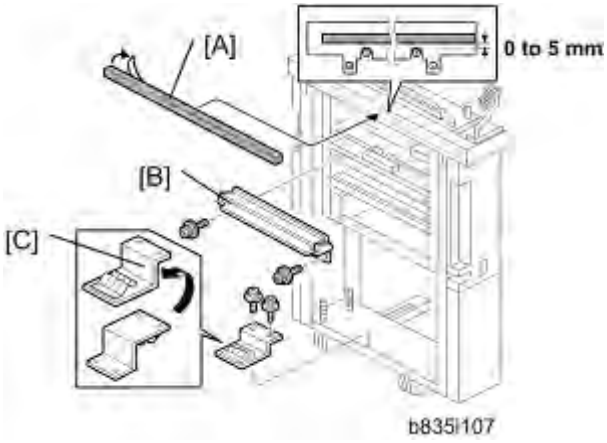




1. Remove all the tape and shipping materials from the tray unit [A].
2. Remove cover [B].
3. Remove all tape and shipping materials from the transport unit [C].
4. Remove tape and covers from both connectors [D].

d7381001

5. Attach accessory bracket [A] to the downstream unit (x4 M6x8).



b835l107

1. Peel the tape off cushion [A] and attach it.

Note

- Two yellow cushions are provided as accessories with the main machine. Use these cushions only if the cover interposer tray will be connected directly to the main machine.
- The gray cushion provided with the cover interposer tray should be attached to the cover interposer tray.

2. Attach paper guide [B] (x2).

d7381002

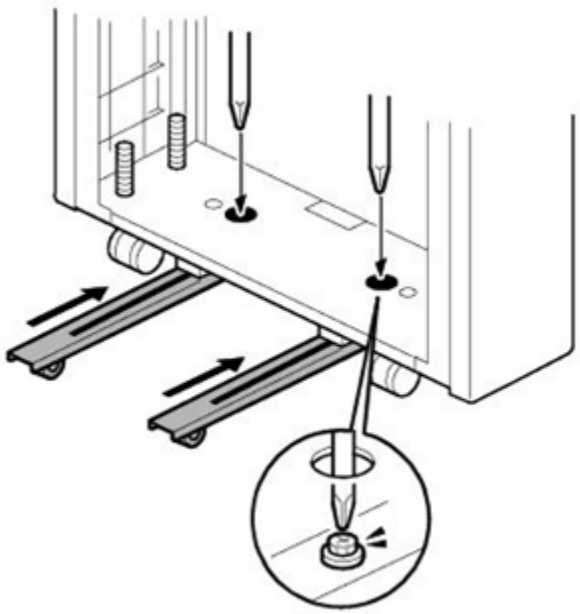
Important

- If the decurl unit is installed in the main machine, attach a screw at the hole marked by the red circle (marked [A]) on the guide provided with the main machine.
- If the decurl unit is not installed in the main machine, attach the guide provided with the cover interposer tray.

3. Remove ground plate [C] from the bottom rail, turn it over, and then attach it at the same location (x2).

d7381003

4. Attach the joint bracket [A] provided with the cover interposer tray (x4 M4x8).

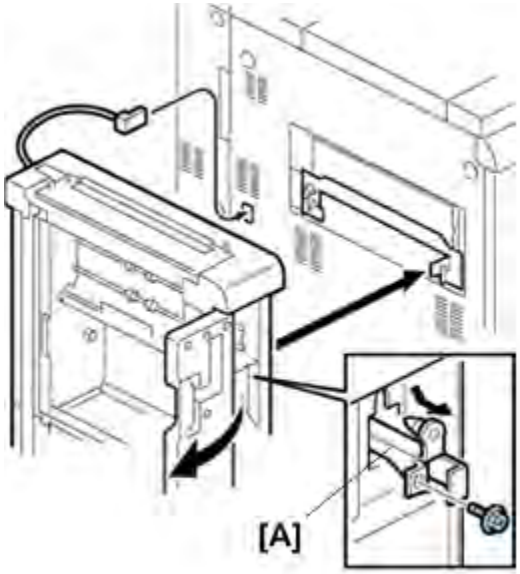


d7381004

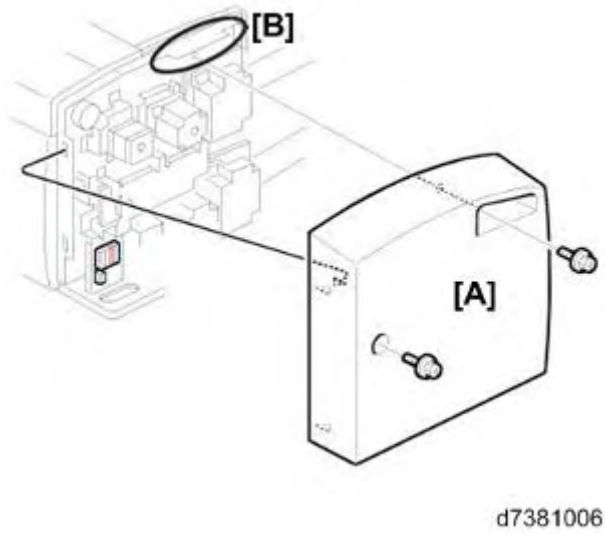
5. Loosen the screws to unlock the casters, carefully move the unit to the side of the downstream unit, and then push both casters under the unit.

CAUTION

- The unit is top heavy and can tip easily once the casters are unlocked and pushed under the unit.



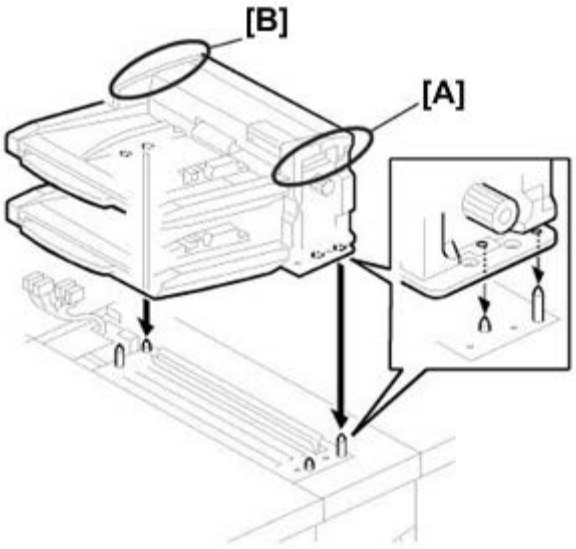
6. Release lock lever [A], push the unit against the side of the side of the machine, push in the lock lever, and then re-attach the screw (x1).l
7. Connect the I/F connector (x1).



8. Remove the rear cover of the feed unit [A] (x2).

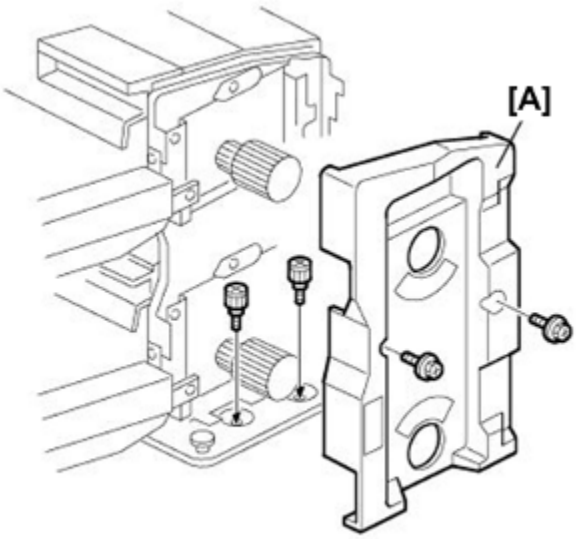
Note

- When you re-attach the cover, be sure that it engages correctly with the catch at [B].



d7381007

9. While holding the feed unit by the handles [A] and [B], lower the unit onto the pins below.

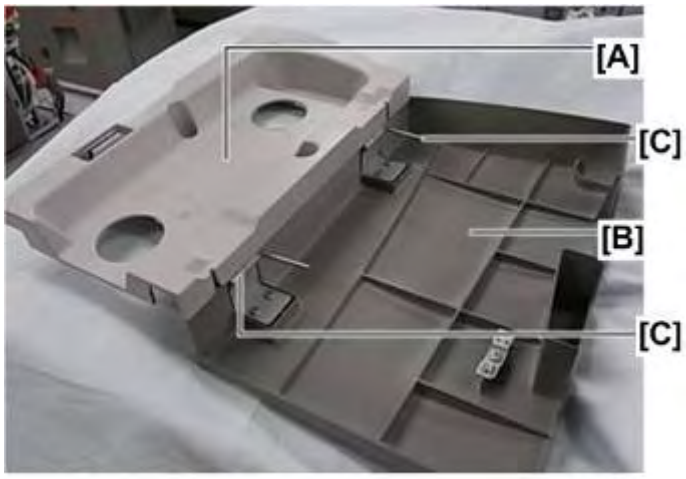


d7381008

10. Remove cover [A], attach the knob screws, and then re-attach the cover (x2, x2).

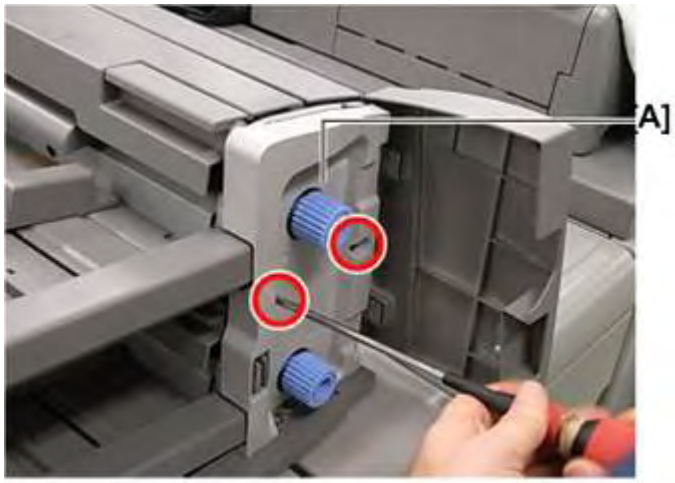
d7381009

11. Attach front spacer [A] (x1 M4x10)



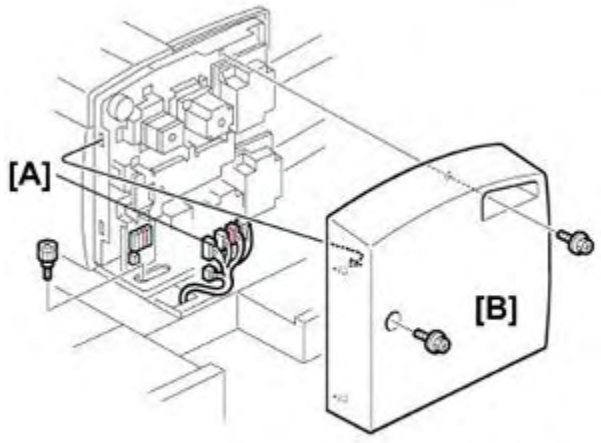
d7381010

12. Attach cover [A] to the front door [B] with “L” pins [C].



d7381011

13. Attach front cover [A] (x2).



d7381012

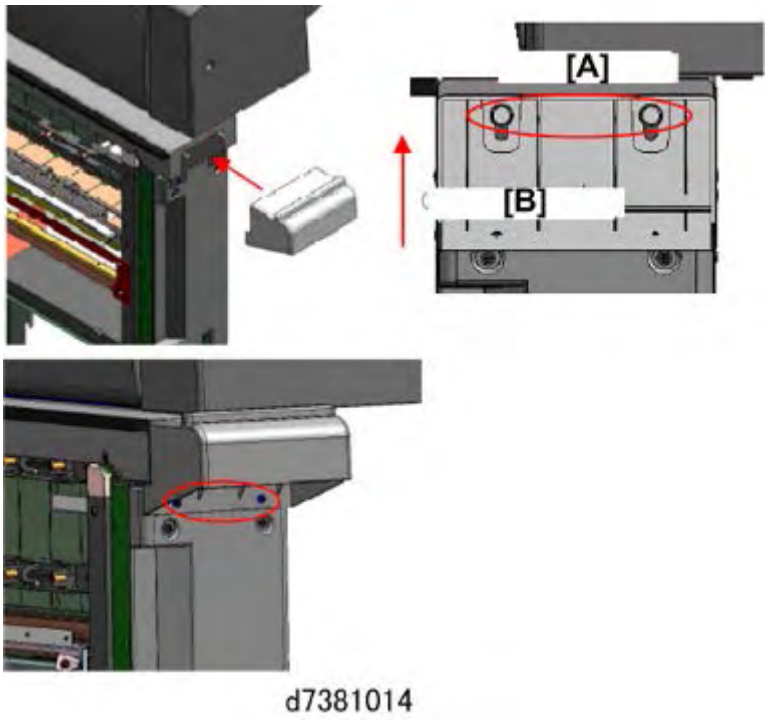
14. Connect the back of the feed unit (x1, x5).
15. Attach rear cover [B] (x2).

Important

- Check the harnesses and make sure that they are not pinched.

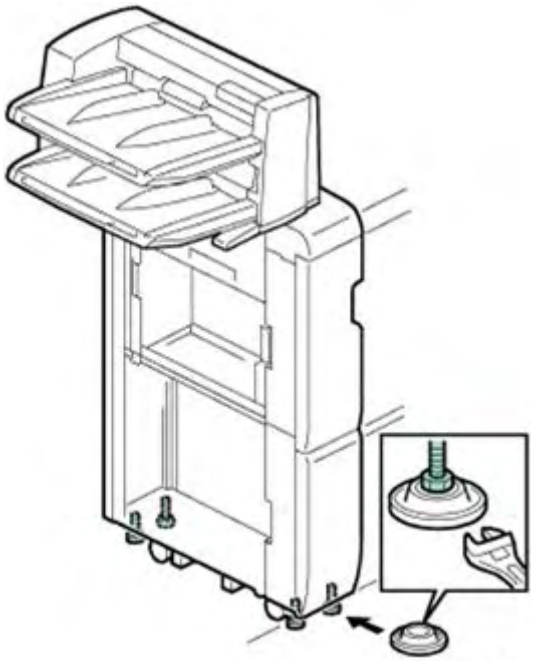
d7381013

16. Attach the step screws (x2).



d7381014

17. Set the auxiliary tray on the four shoulder screws [A], slide the tray up [B], and then fasten the tray (x2).

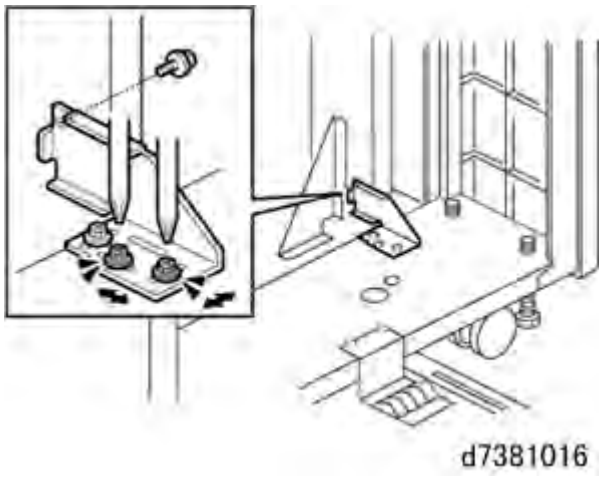


d7381015

18. Install the four shoes, and then adjust the height of the unit so it is level

Note

- Make sure that the unit is level with the main machine.



d7381016

19. Connect the base of the cover interposer tray to the downstream unit.

Note

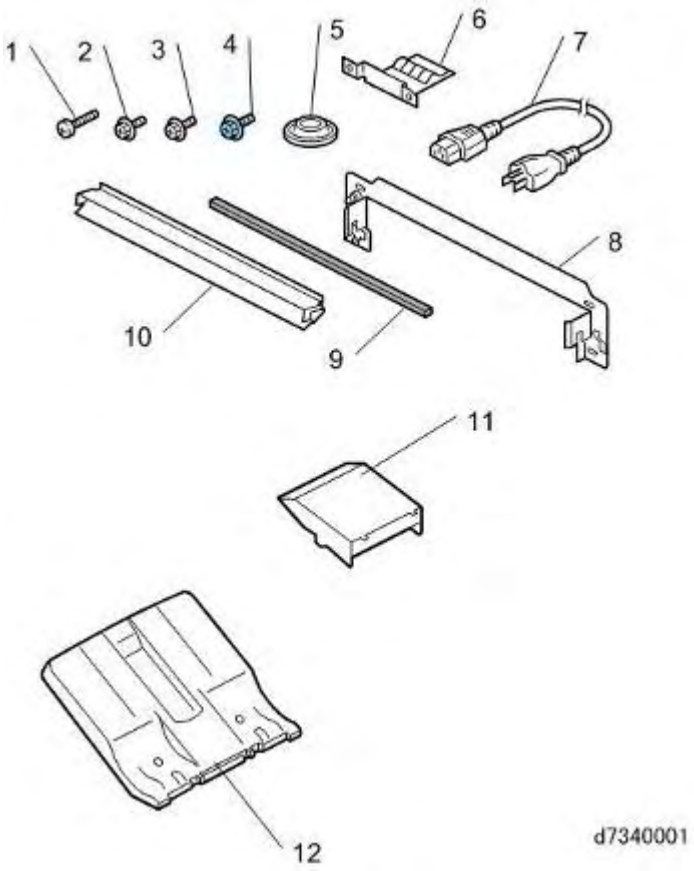
- Do this after you have installed the downstream unit.
- Remove the rear cover of the downstream unit, then use the accessory screws for the base of the cover inserter tray.
- Be sure to tighten the screws so there is no slippage between the units.

2.8 FINISHERS SR5050/SR5060

- Finisher SR5050
- Booklet Finisher SR5060
- Punch Unit PU5020 NA, EU, SC

2.8.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Screws M4x14 (Joint Bracket)	4
2.	Screws M3x8 (Shift Tray)	4
3.	Screws M3x6 (Ground Plate)	2
4.	Screws M3x6 (Paper Guide)	2
5.	Leveling Shoes	4

No.	Description	Q'ty
6.	Ground Plate	1
7.	Power Cord*1	1
8.	Joint Bracket	1
9.	Sponge Strip	1
10.	Paper Guide	1
11.	Auxiliary Tray – Z-Fold Paper	1
12.	Shift Tray	1

*1: In China, do not use this power cord provided with this unit's accessories. Contact your supervisor and use the power cord specified for use in China.

No.	Description	Q'ty
13.	Booklet Tray (SR5060)	1
14.	Front Cover	1
15.	Rear Cover	1
16.	Screw M4x14	2
17.	Screw M3x8	2

2.8.2 INSTALLATION

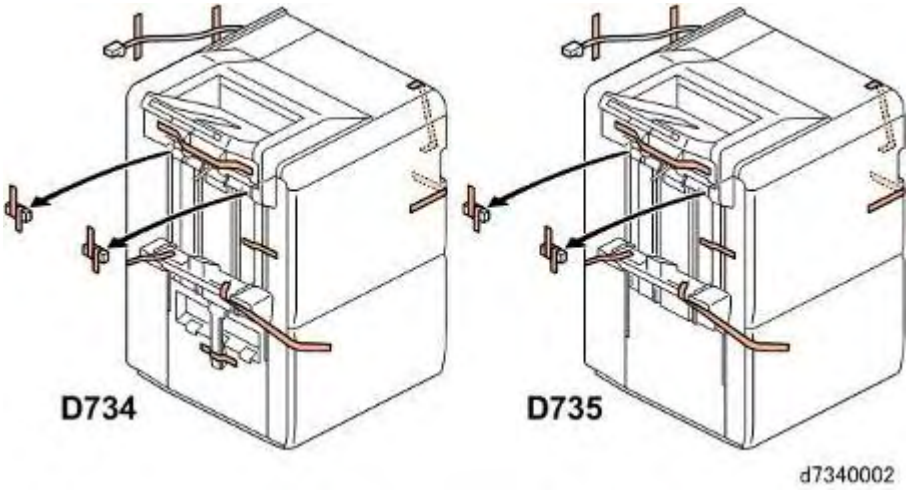
⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

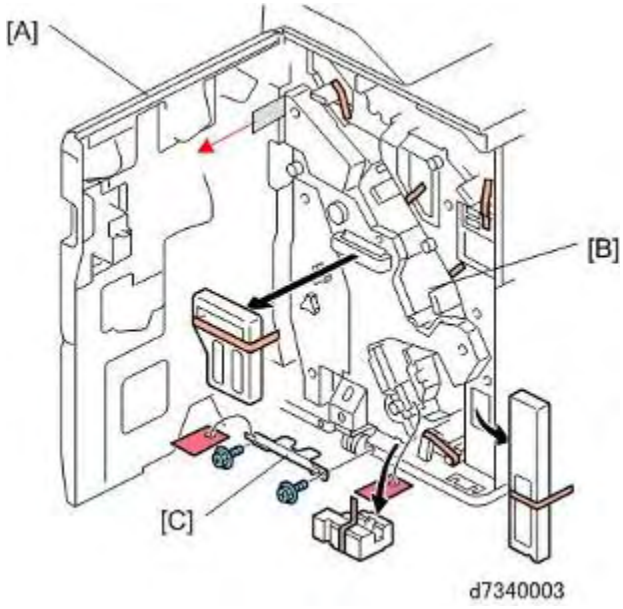
Tapes, Retainers, Shipping Plates

Important

- The shipping plates prevent the staple unit from moving during transport. The plates should be kept and re-attached before the unit is transported to another location.



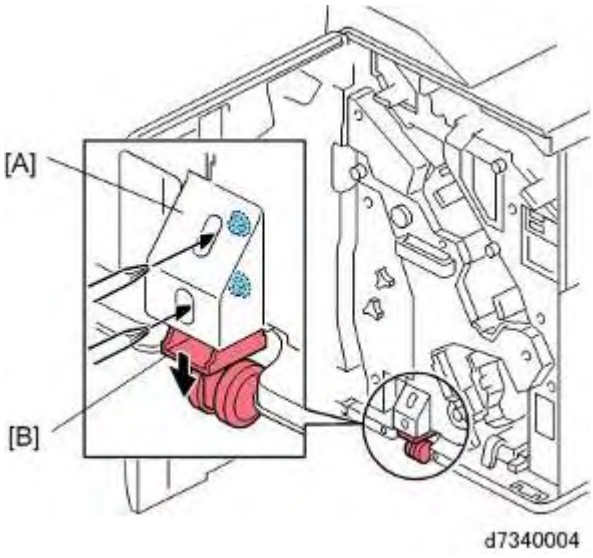
1. Remove all tapes and packing material from the external coves.



2. Open the front door [A].
3. Remove:

[B] Tapes, retainers inside

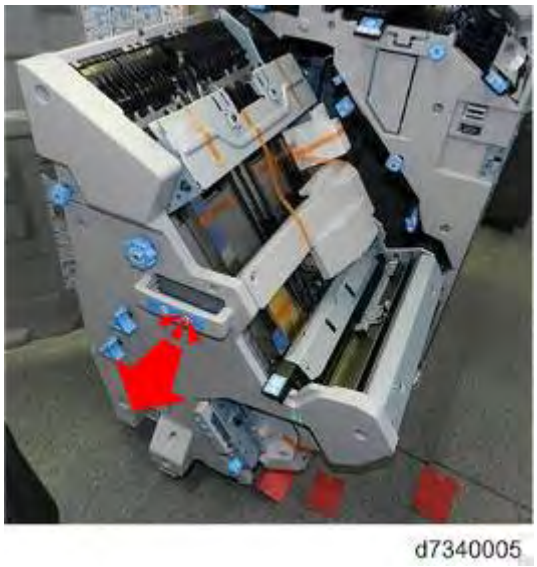
[C] Tag, wire, shipping plate (x2)



4. Loosen the screws of the caster cover [A] (x2).
5. Push the caster [B] down until it touches the floor.
6. With the caster touching the floor, tighten the caster cover screws.

CAUTION

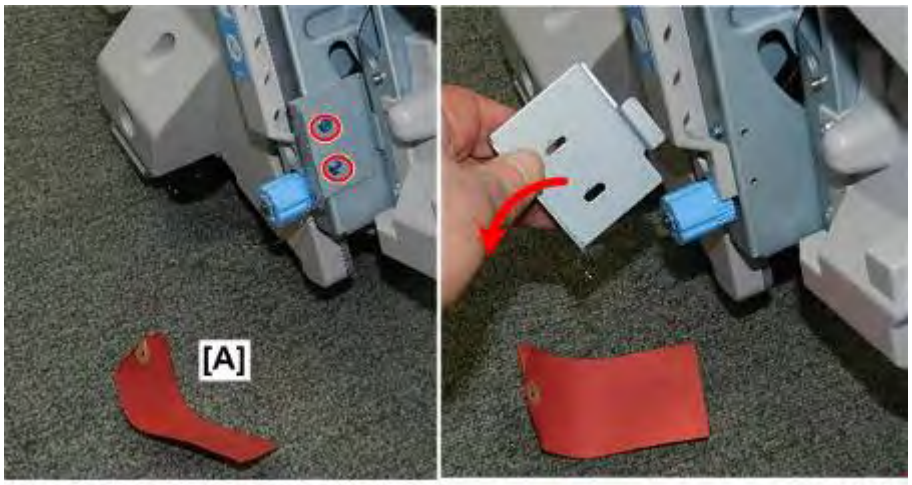
- This relieves stress on the rails of the stacker/stapler unit when it is pulled out of the machine.



7. Slowly, pull the stacker/stapler unit out until it stops.
8. Remove all visible tapes and packing materials.

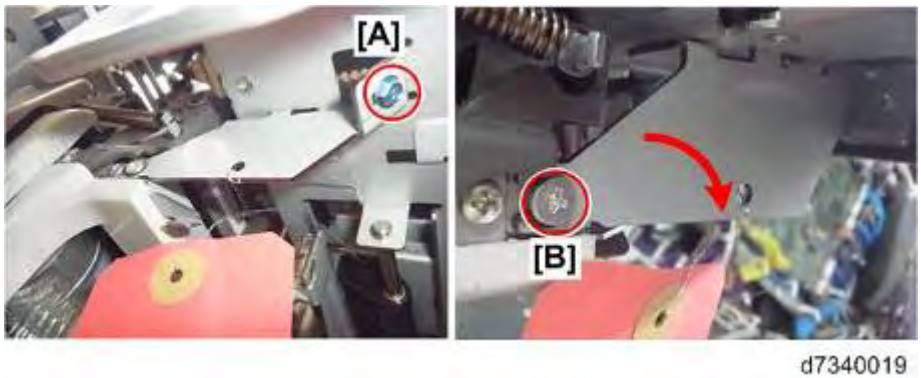
d7340017

9. At the right, front corner remove tag and wire (x1).



d7340018

10. At bottom, front [A], remove plate, wire, and tag (x2). Slide the plate out.

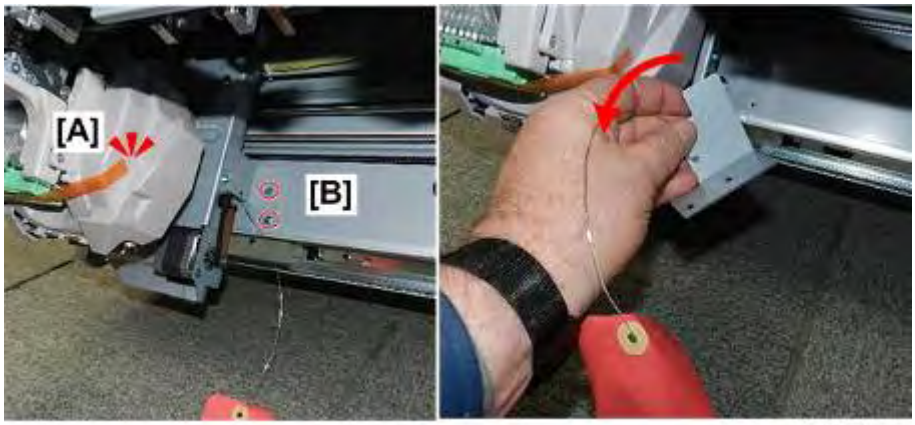


d7340019

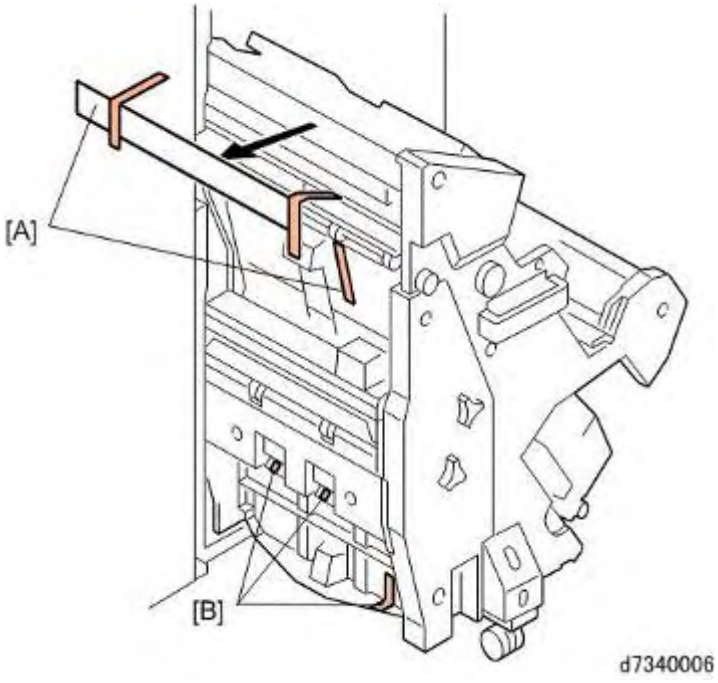
11. At right corner remove plate, wire, and tag.
    - Remove screw [A] (x1).
    - Slide the plate out.

Important

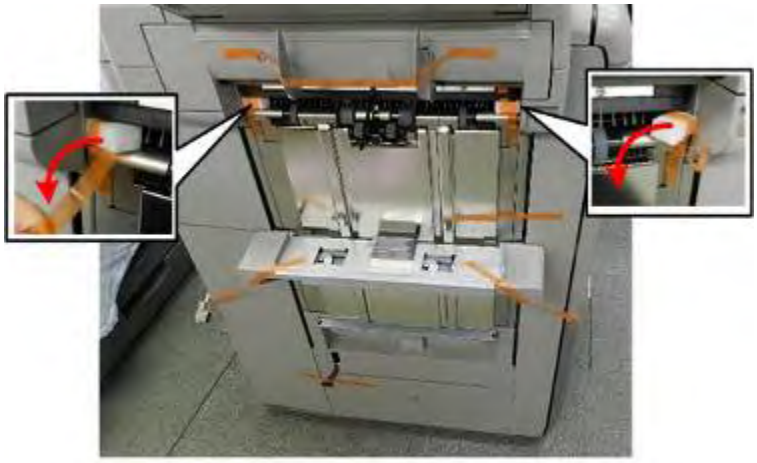
- Do not remove screw [B]. This is a step screw that holds other brackets in place. Screw [B] must remain in the unit.



12. Remove tape from stapler [A].
13. Remove plate, wire, and tab [B] (x2).



14. On left side of the stacker/stapler unit remove:
    [A] Tapes, retainer at top
    [B] Tapes at bottom



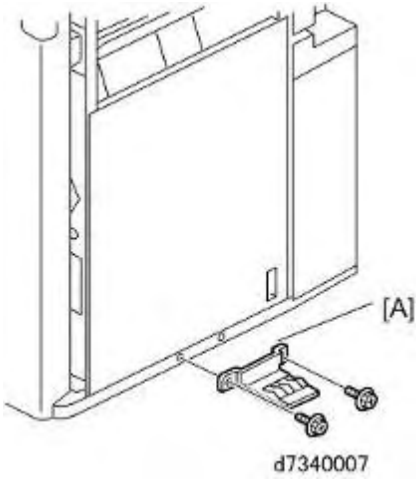
d7340022

15. On left side, remove all tape and cushions.

d7340023

16. At rear, remove tape from power cord.

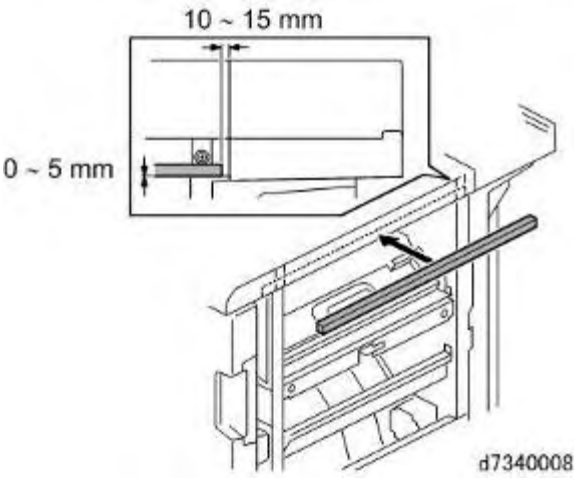
Ground Plate



d7340007

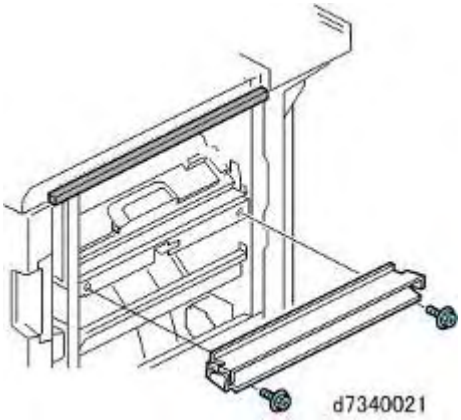
1. Attach the ground plate [A] to the bottom right edge of the unit (x2 M3x6).

Sponge Strips



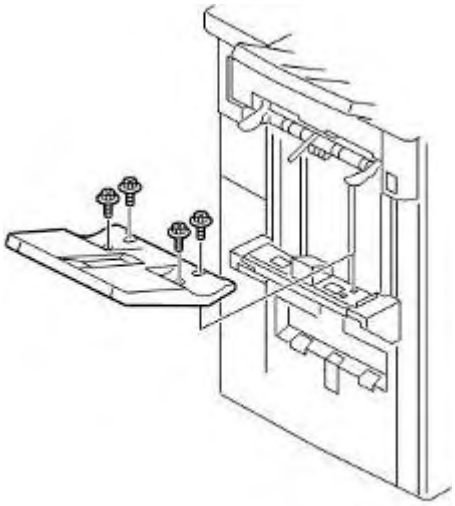
1. Peel the tape from the sponge strip.
2. Attach the strip to the top right edge of the unit.

Paper Guide



1. Attach paper guide to main the finisher (x2).

Shift Tray



d7340010

1. Attach the shift tray to the left side of the unit (x4 M3x8).

Booklet Tray

d7340025

1. On the left side, pull out the interface cable.

d7340026

2. Align the edge of the plate on the tray with the slot on the side of the finisher, and then rotate

the finisher up against the side of the machine.

d7340027

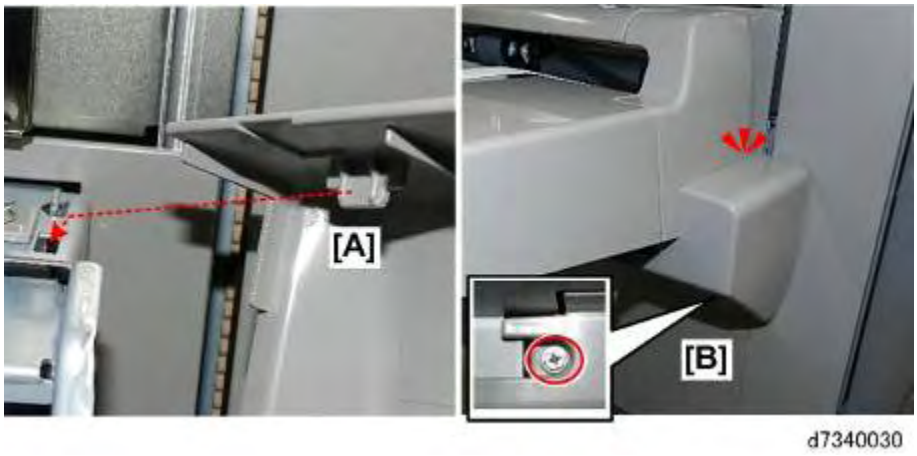
3. Make sure that the tabs at the rear [A] and front [B] are inserted in the slots.

d7340028

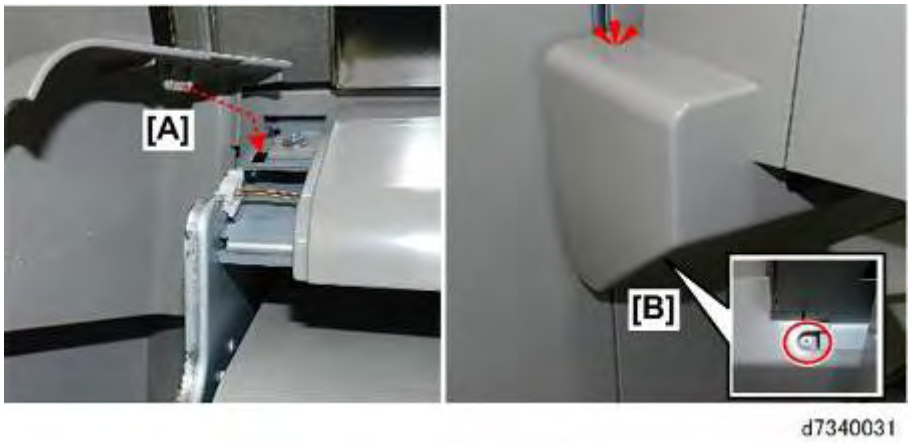
4. Connect the interface cable (x1, x1).

d7340029

5. Fasten the bottom of the tray at the rear [A] and front [B] (x2 M3x8).



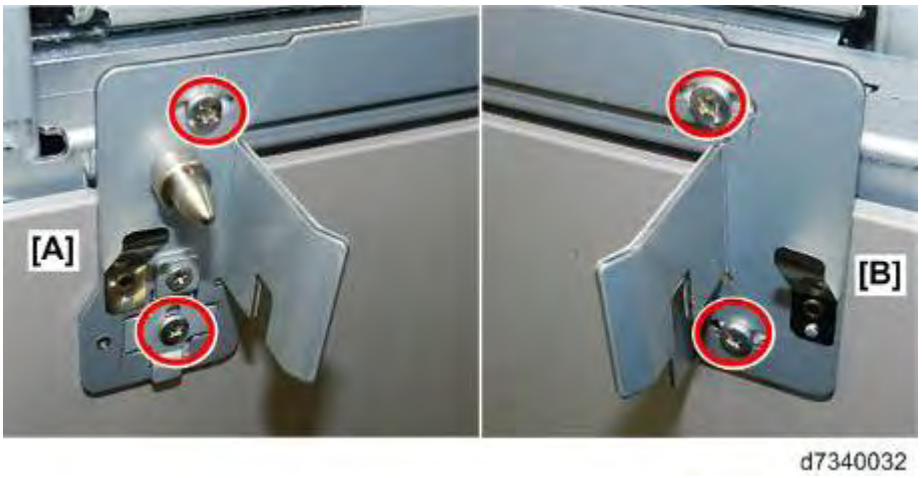
6. Set the tab of the front tray cover [A] into the hole of the tray frame.
7. Fasten the cover at the bottom [B] (x1 M3x8).



8. Set the tab of the rear tray cover [A] into the hole of the tray frame.
9. Fasten the cover at the bottom [B] (x1 M3x8).

   This completes installation of the booklet tray.

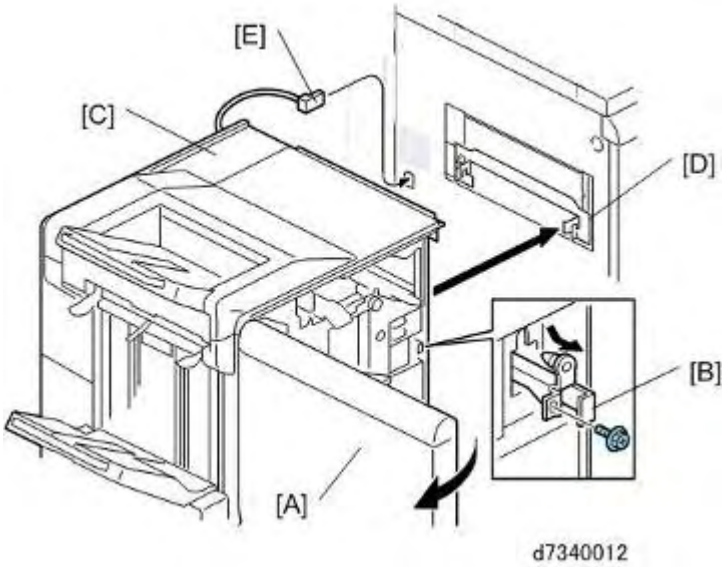
Docking



1. Fasten the joint bracket at rear [A] and front [B] to the upstream unit (x4 M4x14).

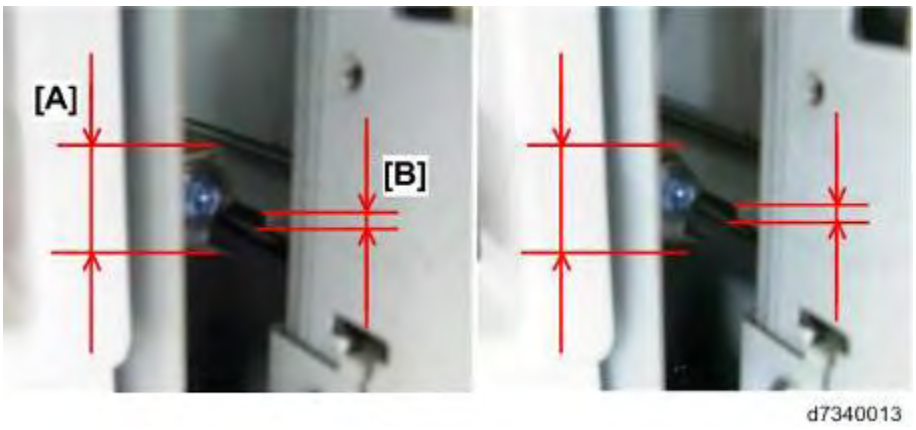
Important

- To prevent interference with the Decurl Unit (if it is installed), remove and use the Decurl Unit screws to attach the upper left and right corner of the bracket (x2).



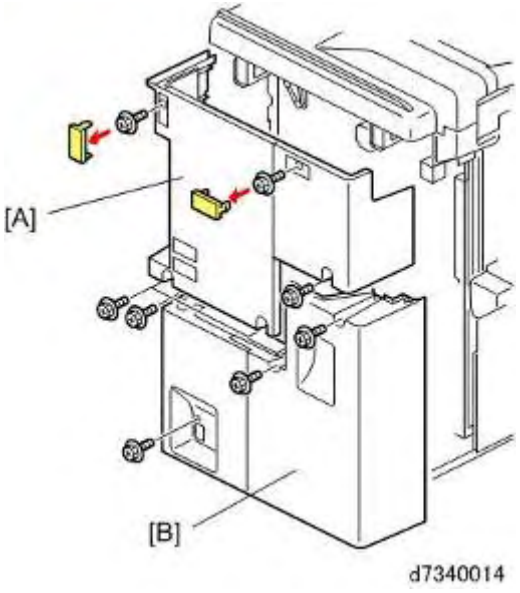
2. Open the front door [A] of the unit.
3. At the front right corner, remove the screw of the lock bar [B] (x1 M3x6). **Keep this screw.**
4. Pull the lock bar toward you until it stops.
5. Slowly push the unit [C] to the left side of the upstream unit (or main machine) so that the lock bar is directly and squarely under the arms of the joint bracket [D].

6. Check the height of the finisher against the side of the machine. If the finisher is not at the same height as the machine, raise or lower the feet [A] with the accessory wrench.
7. Attach the I/F cable [E] to the upstream unit.

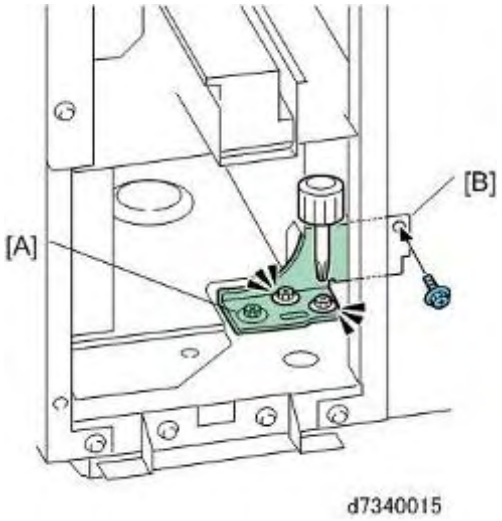


8. Push the finisher close to the side of the upstream unit.

9. Confirm that the height of the finisher entrance [A] is at the same height as the upstream unit's paper exit [B].
10. Push the finisher closer to the side of the upstream unit, and then once again confirm that the height of the finisher entrance still matches the height of the upstream unit exit.
11. If the exit and entrance are not at the same height, adjust the height of the finisher.
12. Push the finisher against the side of the upstream unit.
13. Push the lock bar in completely so that it slides up into the notches in the arms on both ends of the joint bracket.
14. Fasten the lock bar by re-attaching the screw removed in **Step 3**. (x1)



15. Remove:
    [A] Rear upper cover (Capsx2, x5)
    [B] Rear lower cover (x4)

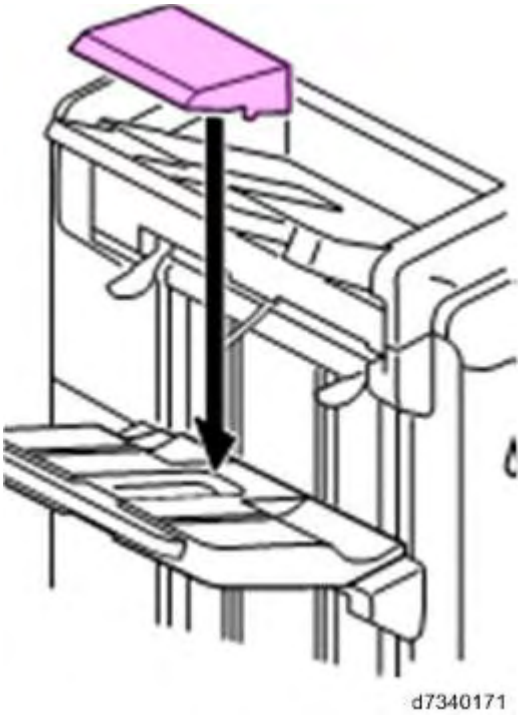


16. Use a short screwdriver to loosen bracket [A] (x3).
17. Fasten the bracket to the upstream unit at [B] (x1).
18. Tighten the screws (x3).

19. Re-attach the rear covers.

Auxiliary Tray

1. Instruct the operator about when to use the auxiliary tray.



2. Before feeding Z-folded paper from the Multi Folding Unit, set the Z-fold auxiliary tray on the shift tray.

Finishing the Installation

1. Connect the power cord to the unit

Important

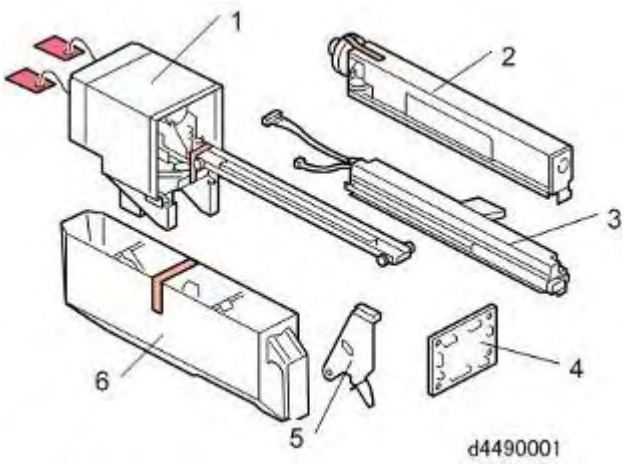
- In China, do not use this power cord provided with this unit's accessories. Contact your supervisor and use the power cord specified for use in China.

2. Check the height of the finisher against the height of the machine, and then adjust the height of the finisher if necessary.
3. Load some B4 paper in the 2nd tray of the main machine, and make several copies.
4. Check paper skew and side-to-side registration and correct if necessary. page 2-290

2.8.3 PUNCH UNIT PU5020 NA, EU, SC

Accessories

Check the quantity and condition of the accessories in the box against the following illustration and list.



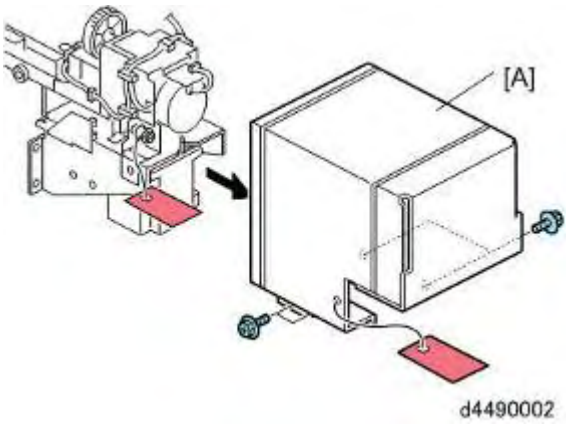
No.	Description	Q'ty
1.	Punch Drive Unit	1
2.	Punch Unit	1
3.	Punch Registration Unit	1
4.	Punch Control Board	1
5.	Sensor Arm and Sensor	1
6.	Punch-out Hopper	1
7.	Harness: Long	1
8.	Harness: Board Relay	1
9.	Spring	1
10.	Step Screw	1
11.	Screws M3x6	9

2.8.4 INSTALLATION

⚠CAUTION

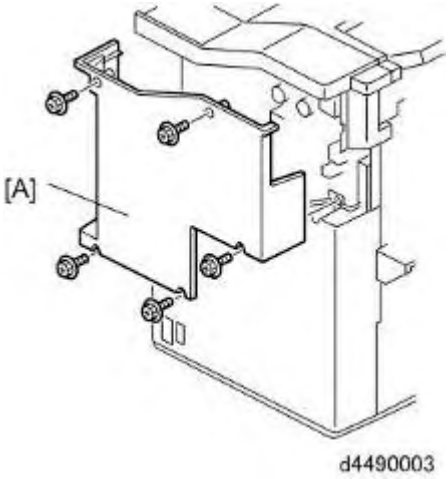
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

Shipping Materials



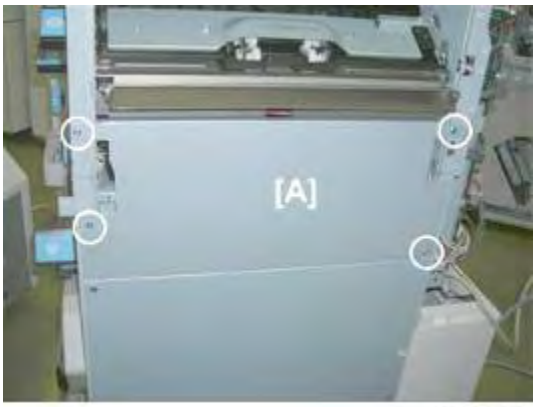
1. Remove motor protector plate [A] (x4).

Rear Cover



1. Remove upper rear cover [A] (x4).

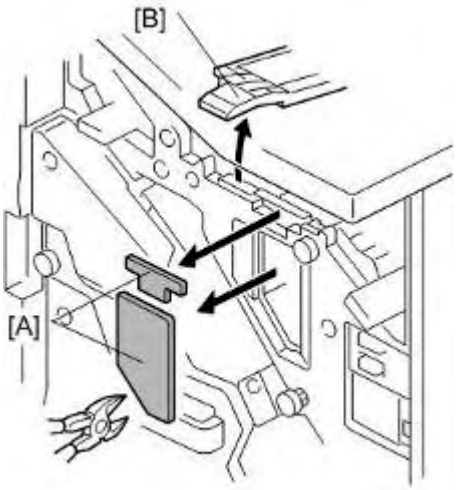
Right Upper Panel



d4490004

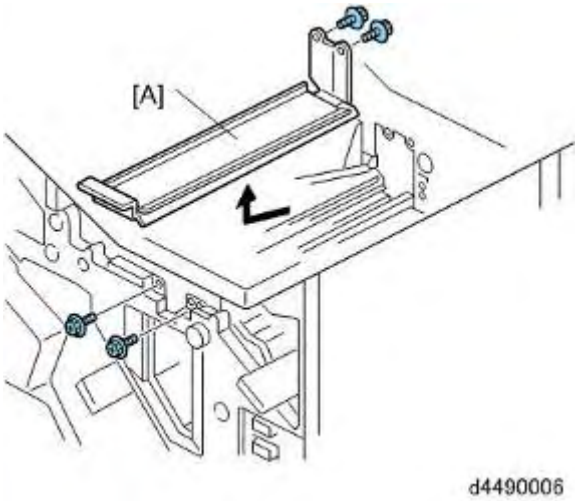
1. Remove the right upper panel [A] (x4).

Punch Registration Unit



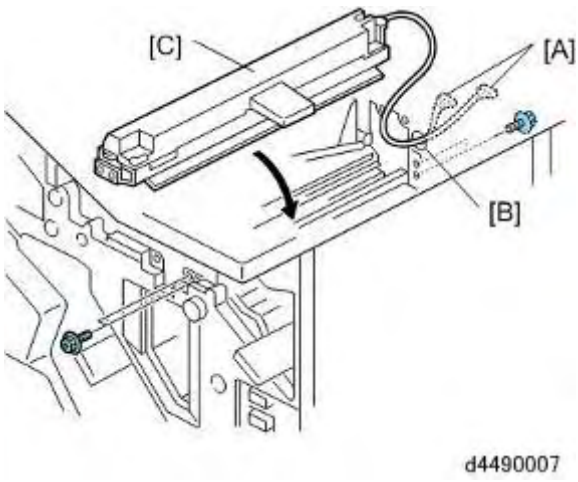
d4490005

1. Use a pair of nippers to remove knockouts [A].
2. Raise and open lever "**RB3**" [B].

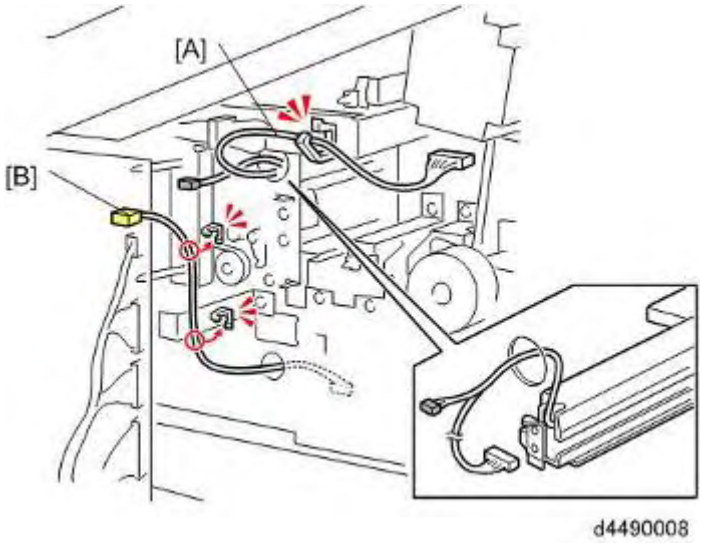


d4490006

3. Remove plate [A] and discard it (x4).

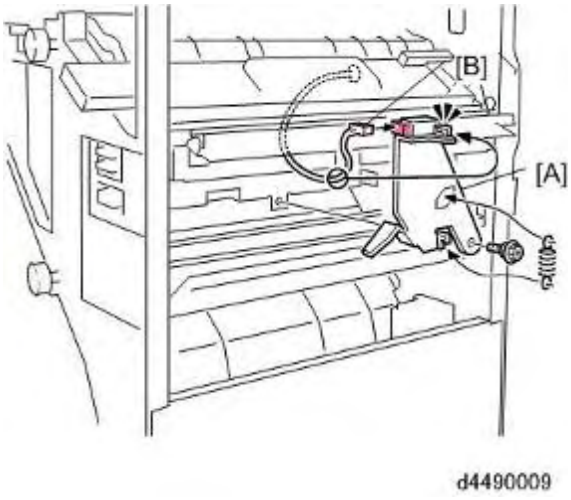


4. Insert the harness connectors [A] through hole [B].
5. Make sure the harness connectors are through the hole completely and visible at the rear of the machine.
6. Set and fasten the punch registration unit [C] (x4, 2 screws each at front and back).



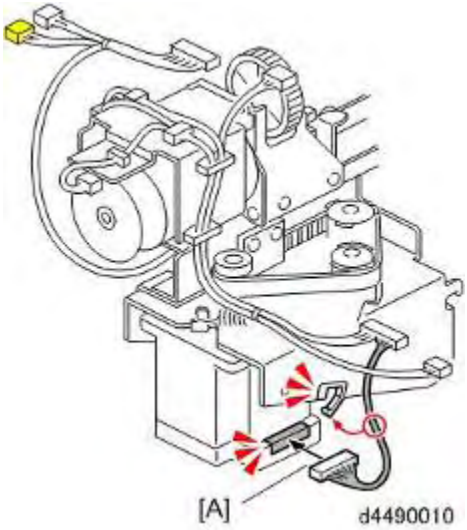
7. Clamp harness [A] (x4).
8. Clamp harness [B] (x2).

Sensor Arm

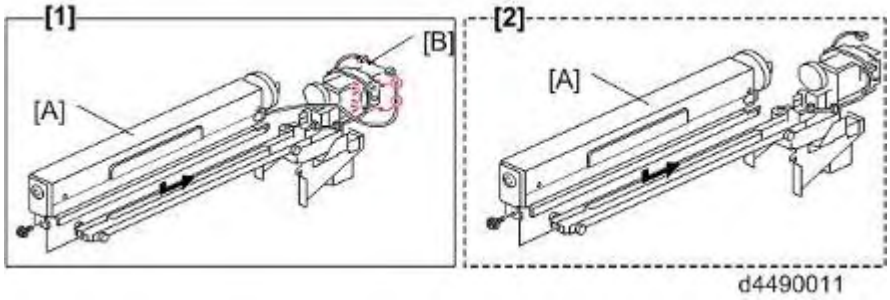


1. Attach sensor arm [A] (x1, x1).
2. Make sure the sensor arm swings freely on the step screw and spring.
3. Attach harness [B] to the sensor on top of the arm.

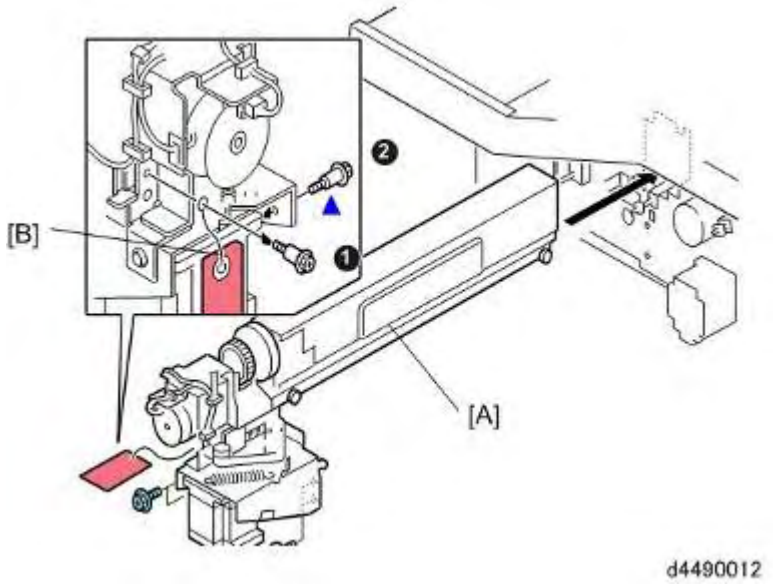
Punch Drive Unit, Punch Unit



1. On the punch unit, connect harness [A] (x1, x1).



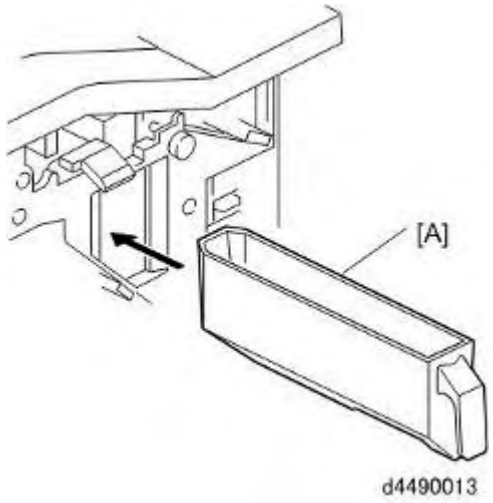
2. Attach the punch mechanism [A] to the rails of the punch unit (x1).
   - If you are installing the punch unit for Europe [1], connect the harness [B] (x1, x2).
   - The punch unit for North America [2] has no punch switching motor, so this harness is not required.



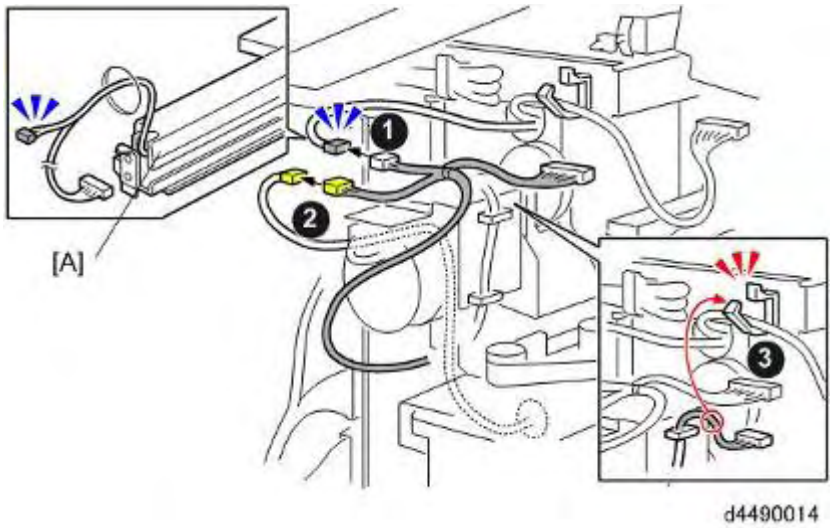
3. At the front, insert the punch unit [A] into the finisher and fasten it (x4).
4. Remove the shoulder screw with red tag [B], and detach the tag and wire.
5. After removing the screw from hole ①, re-attach it at hole ②.

Important

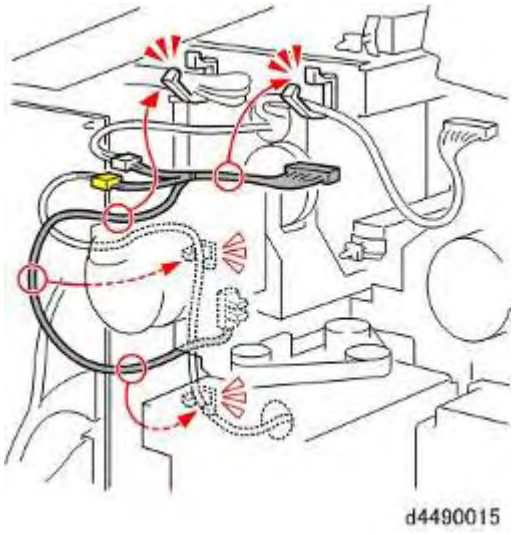
- This screw must remain attached to the punch unit.
- Before removing the punch unit from the finisher, the screw must be removed from hole ② and re-attached at hole ①. This stabilizes the punch unit and prevents it from wobbling from side to side while it is being removed and handled after removal.



6. At the front, slide the punch-out hopper [A] into the finisher.

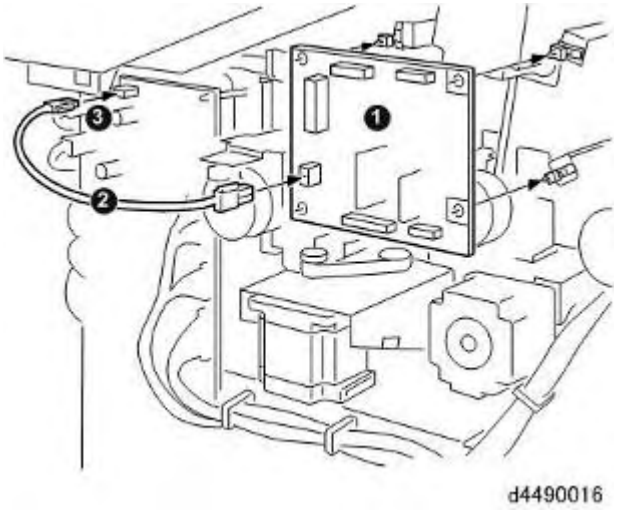


7. Route the harnesses from the CIS unit [A] through the hole.
8. Connect the harnesses at ① and ② (x2).
9. If you are installing the punch unit for Scandinavia, fasten the extra connector (not used) at ③ (x1).



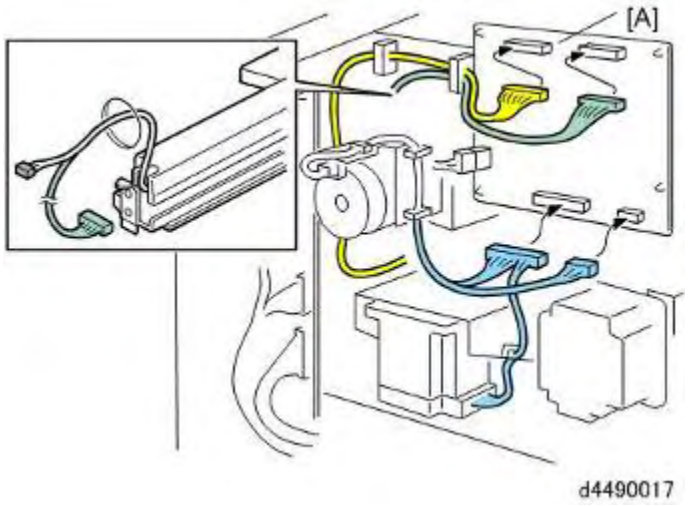
10. Finish clamping the harnesses as shown above.

Punch Control Board

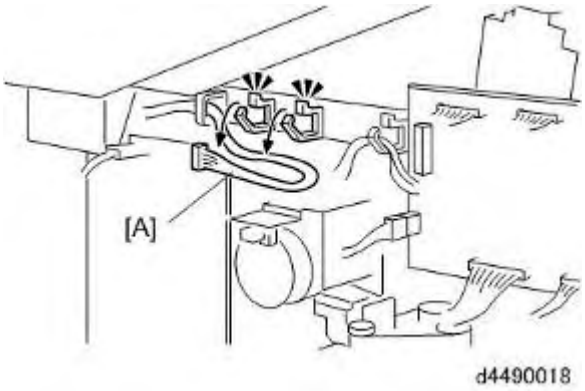


1. Install the punch control board ① (x4).
2. Connect the punch relay harness ② to the punch control board and punch main control board ③.

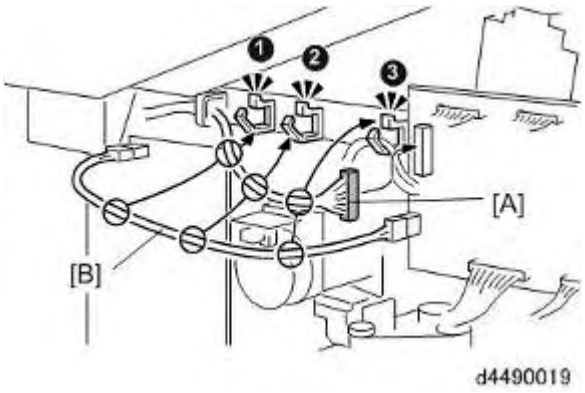
Final Connection



1. Fasten the connectors to the punch unit PCB [A] (x2).



2. Release harness [A] from the frame (x2).



3. Connect harness [A] to the punch control board (x1).
4. Gather harness [A] and the board relay harness [B] and clamp them (x3).

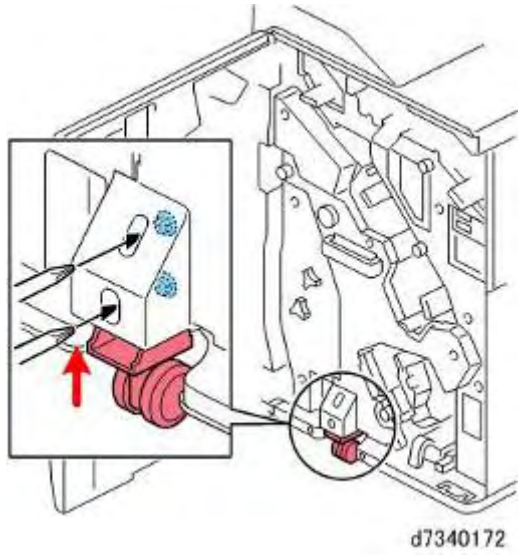
2.8.5 MOVING THE FINISHER

Always observe the following points when moving the finisher.

Important

- To prevent damage to the connection brackets, never attempt to move or change the position of the system with the LCT, the finisher (or any other downstream peripheral) connected.

1. Turn the system off.
   - Press the operation power switch on the left corner of the main machine to turn the machine off.
   - The power-down alert message appears on the operation panel. Wait for the operation panel to go off.
   - Switch off the main power switch.
2. Unplug the main machine from the power source.
   - Grip the head of the plug firmly, and then pull it out.
   - Never pull on the cord.
3. Disconnect the finisher I/F cord from the upstream unit (or main machine).
4. Make sure that the front door of the finisher is closed.

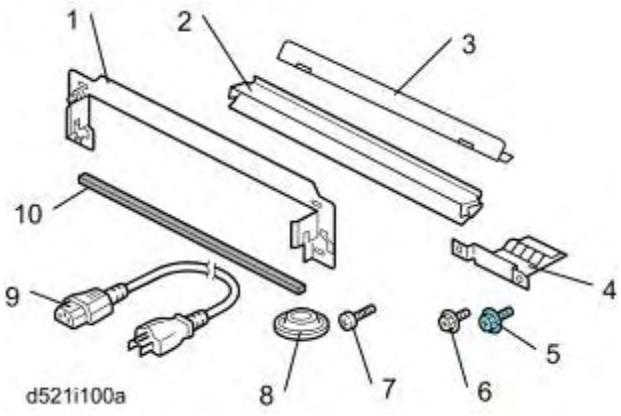


5. Loosen the screws of the caster cover (x2).
6. Push the caster up until it stops and is not touching the floor.
7. Tighten the caster cover screws.
   - This prevents the caster from snagging on a carpet or door jam when the finisher is pushed along the floor.
   - After the finisher has been moved to its new location, lower the caster again and tighten the screws.

2.9 MULTI-FOLDING UNIT FD5020

2.9.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Joint Bracket	1
2.	Paper Guide	1
3.	Mylar (for downstream unit)	1
4.	Ground Plate	1
5.	Screws M3x6	2
6.	Screws M3x6	2
7.	Screws M4x14	4
8.	Leveling Shoes	5
9.	Power Cord*[1]	1
10.	Sponge Strip	1

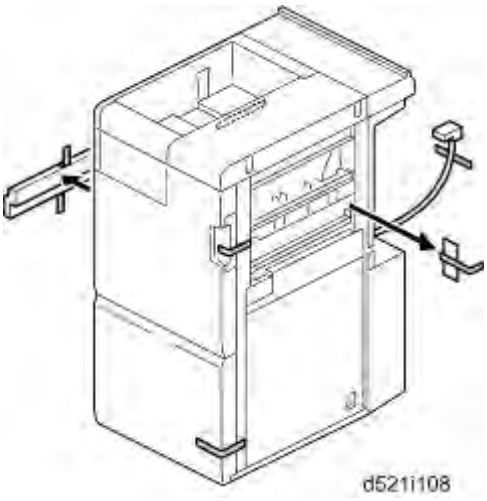
*1: In China, do not use the power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.

2.9.2 INSTALLATION

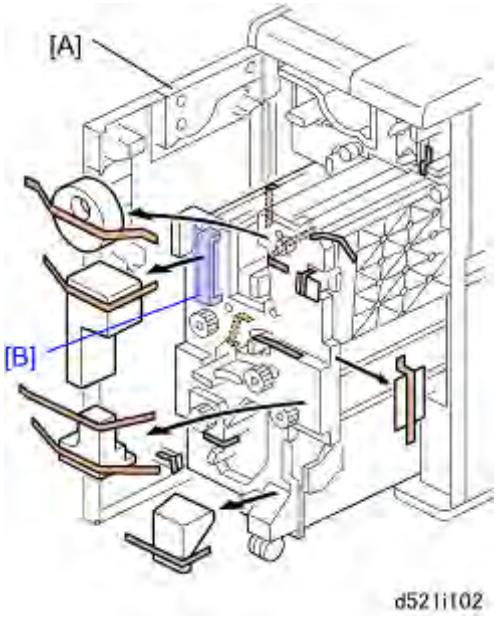
⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedures.

Tapes

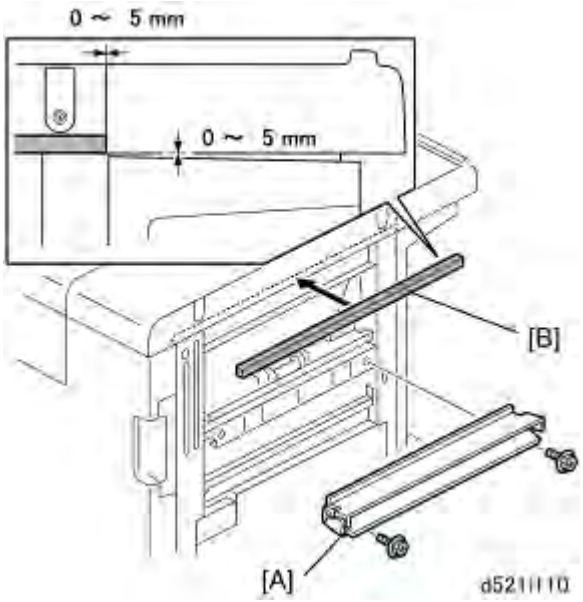


1. Remove all tape and packing material from the front, left, rear, and right sides.



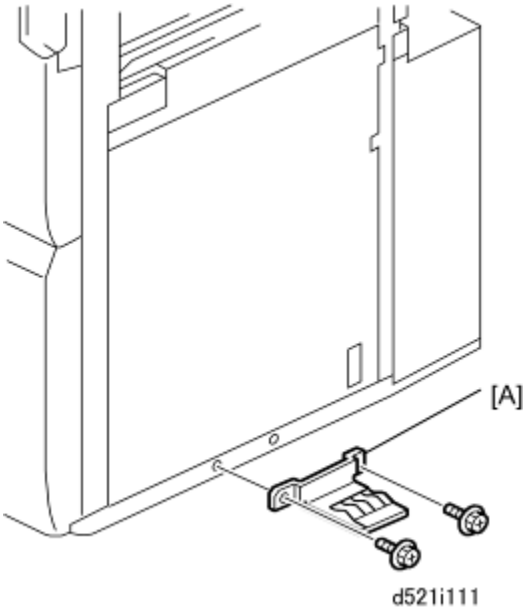
2. Open the front door [A].
3. Grip handle [B] and slowly pull the fold unit out of the machine.
4. Remove all tape and packing material from inside.

Paper Guide, Sponge Strips



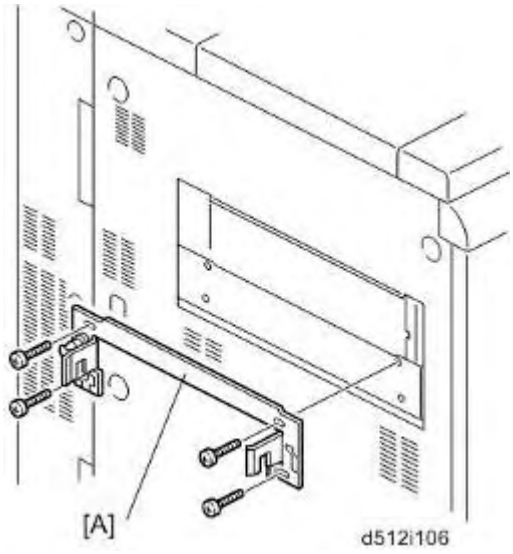
1. Attach the paper guide [A] (x2 M3x6).
2. Peel the tape from the sponge strip [B] and attach the strip to the top right edge of the unit.

Ground Plate

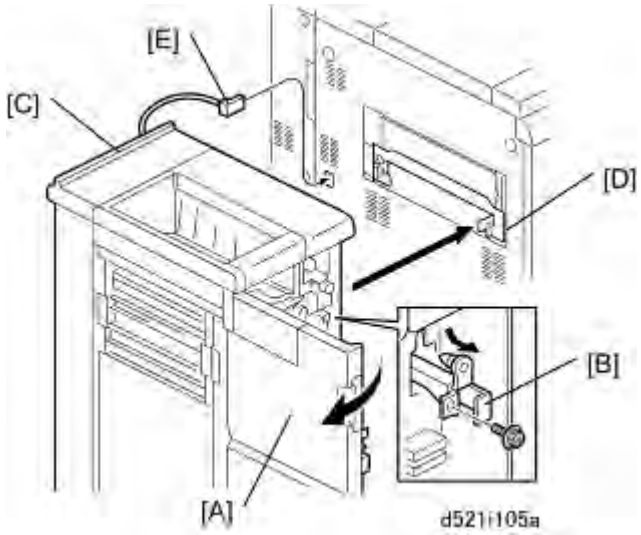


1. Attach the ground plate [A] to the lower right edge of the unit (x2 M3x6).

Docking



1. Fasten the joint bracket [A] to the left side of the upstream unit (x4 M4x14).



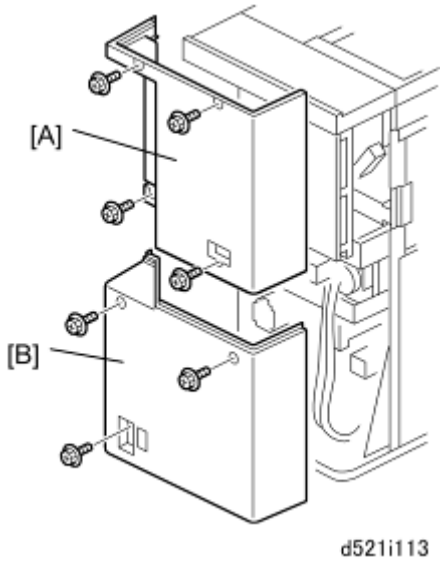
2. Open the front door [A].
3. At the front right corner, remove the screw of the lock bar [B] (x1 M3x6). **Keep this screw.**
4. Pull out the lock bar.
5. Slowly push the unit [C] against the left side of the upstream unit (or main machine) so that the lock bar is directly and squarely under the arms of the joint bracket.
6. Push in the lock bar so it slides up into the notches in the arms on both ends of the joint bracket [D].
7. Fasten the lock bar by re-attaching the screw removed in **Step 3** (x1).
8. Connect the I/F cable [E] to the upstream unit (or main machine).

Note

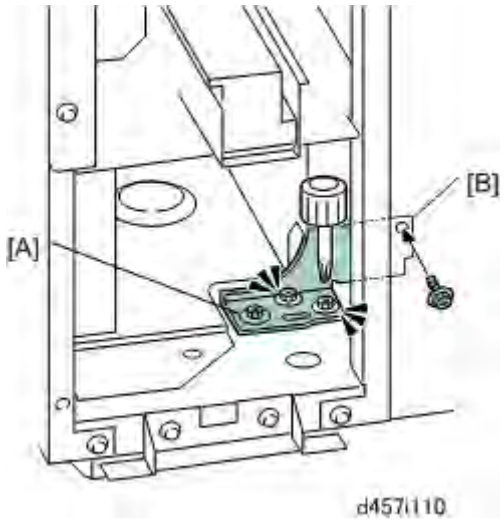
- If you are docking to the main machine, you must first remove the plastic cap at the I/F cable connection point.

Important

- Do the remaining steps only if the Cover Interposer Tray will be installed.



9. Remove:
   [A] Rear upper cover (x4)
   [B] Rear lower cover (x3)



10. Use a short screwdriver to loosen bracket [A] (x2).
11. Fasten the bracket to the upstream unit at [B] (x1).
12. Tighten the screws (x3).
13. Re-attach the rear covers.

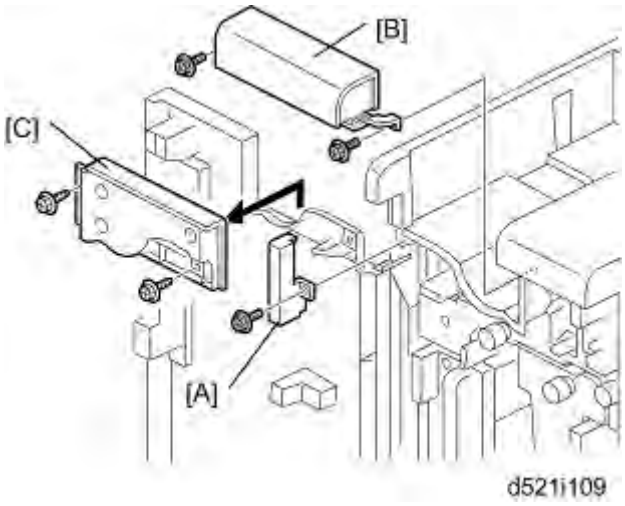
Removing Parts for the Cover Interposer Tray

Three parts must be removed before the tray unit of the cover interposer tray can be mounted on top of the Multi Folding Unit.

1. Open the front door.

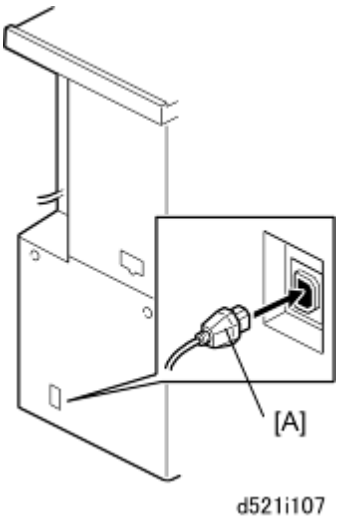
Important

- The following parts require removal only if the upstream unit is the Cover Interposer Tray.
- These parts must be removed so that the tray unit of the Cover Interposer Tray will fit on top of the Multi Folding Unit.



2. Remove:
   [A] Bracket (x1)
   [B] Cross-piece (x2)
   [C] Metal plate from the door (x2)
3. After removing [B] and [C], reattach [A].

Power Cord



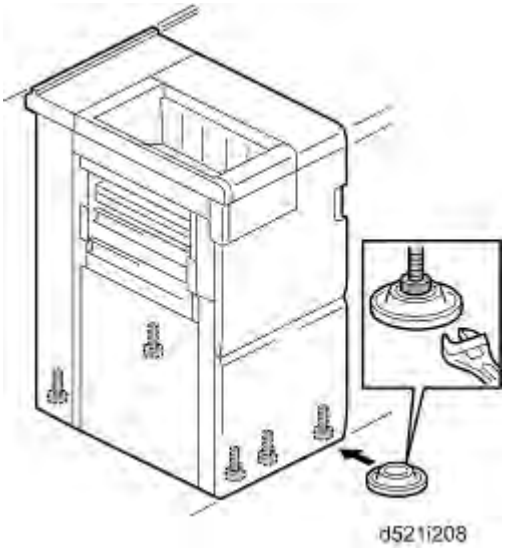
1. Insert the power cord socket [A] into the power connection point.

Important

- In China, do not use this power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.

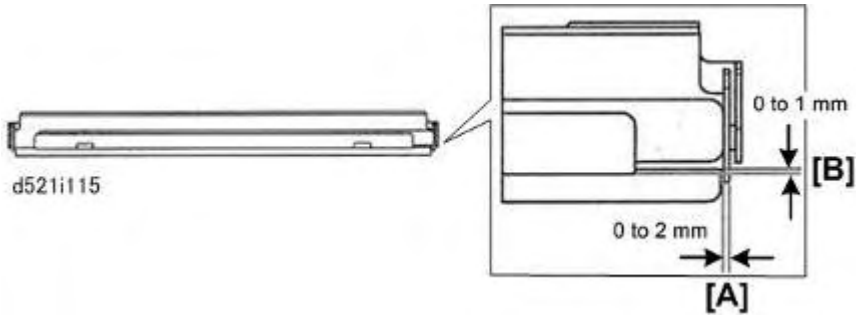
2. Connect the power supply cord plug to a power outlet.

Finishing the Installation



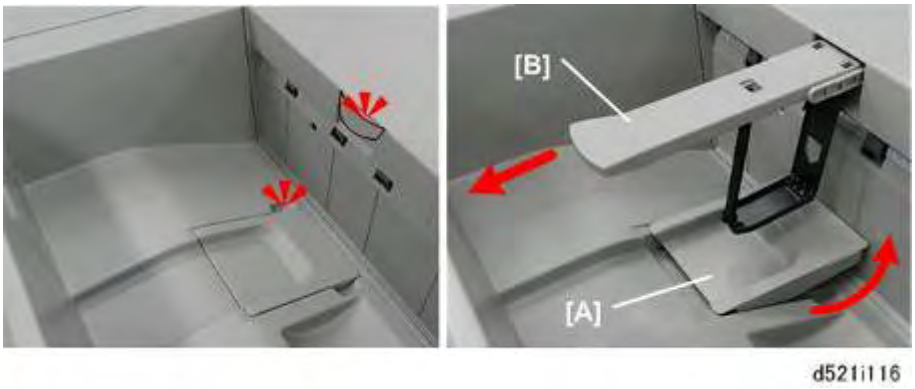
1. Set the leveling shoes and adjust the height of the unit.
2. Load some B4 paper in the 2nd tray of the main machine, and make several copies.
3. Check paper skew and side-to-side registration and correct if necessary.

4. Peel the tape from the accessory mylar strip.



5. Attach the mylar aligned along the edge of the paper guide of the downstream unit.
   - The gap between the mylar and the edge should be within 2 mm at the inside [A].
   - The gap between the mylar and edge should be within 1 mm at the outside [B].

Auxiliary Tray, Fold Depressor



1. Raise the auxiliary tray [A] or pull out the flexible page depressor [B] when required.
   - The auxiliary tray [A] keeps Z-folded paper (FM1) flat in the tray so that the trailing edges do not trigger an early tray full alert in the top tray.
   - The flexible page depressor [B] prevents folded paper (especially FM3 Letter Fold-out sheets) from opening out and triggering an early tray full alert in the top tray.

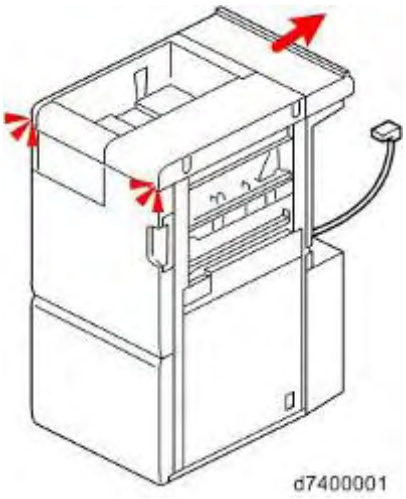
2.9.3 MOVING THE MULTI-FOLDING UNIT

Always observe the following points when moving the Multi-Folding unit.

Important

- To prevent damage to the connection brackets, never attempt to move or change the position of the system with the LCT, the Multi-Folding Unit, (or any other downstream peripheral) connected.

1. Turn the system off.
   - Press the operation power switch on the left corner of the main machine to turn the machine off.
   - The power-down alert message appears on the operation panel. Wait for the operation panel to go off.
   - Switch off the main power switch.
2. Unplug the main machine from the power source.
   - Grip the head of the plug firmly, and then pull it out.
   - Never pull on the cord.
3. Disconnect the unit I/F cord from the upstream unit (or main machine) and downstream unit.
4. Make sure that the front door of the unit is closed.
5. Disconnect the unit power plug.
   - Grip the head of the plug firmly, and then pull it out.
   - Never pull on the cord.
6. When you move the unit:



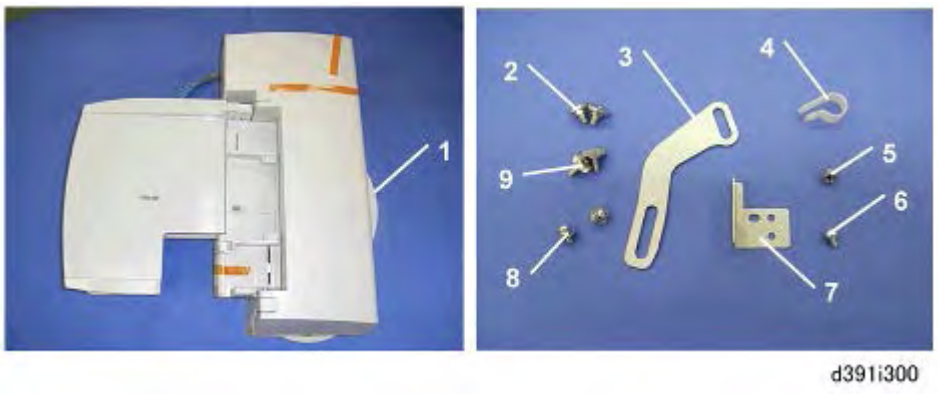
- Place your hands on the front left and right corners of the unit.
- Push the unit in the direction of the arrow.
- Pushing the unit front-to-rear prevents twisting the delicate frame of the unit.

2.10 COVER INTERPOSER TRAY FOR PERFECT BINDER TYPE S1

2.10.1 INSERTER ACCESSORIES

Check the accessories and their quantities against this list.

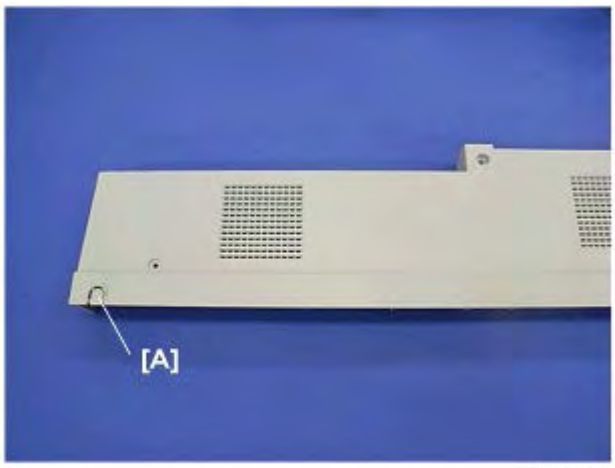
No.	Description	Q'ty
1.	Inserter Unit	1
2.	Shoulder Screws (M5)	2
3.	Limiter Brace	1
4.	Clamp	1
5.	Cap Nut	1
6.	Screw (M4x7)	1
7.	Brace	1
8.	Screws (M4x8)	2
9.	Hinge Lock Screws (M4)	2



2.10.2 INSERTER INSTALLATION

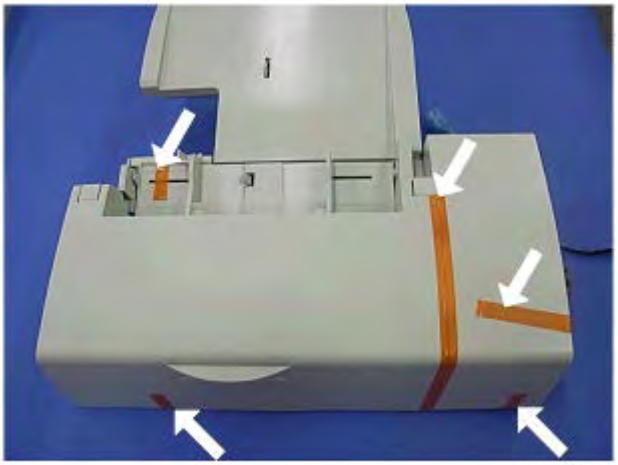
Mounting the Inserter

Bookbinder Rear Upper Cover



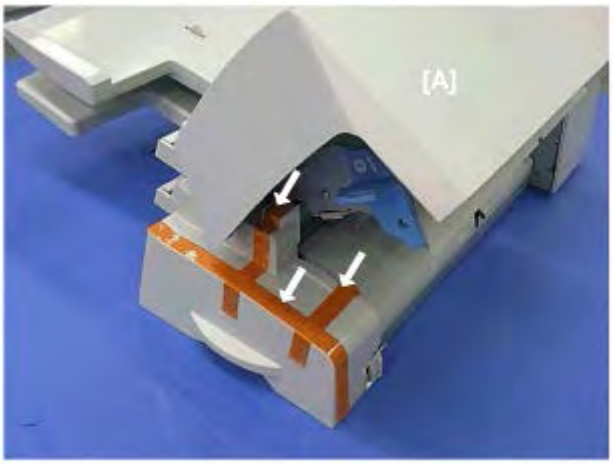
d391i347

1. Use a pair of nippers to remove the knockout [A] covering the interface cable hole.
2. Smooth the edges of the hole with a knife or file to prevent damage to the interface cable.



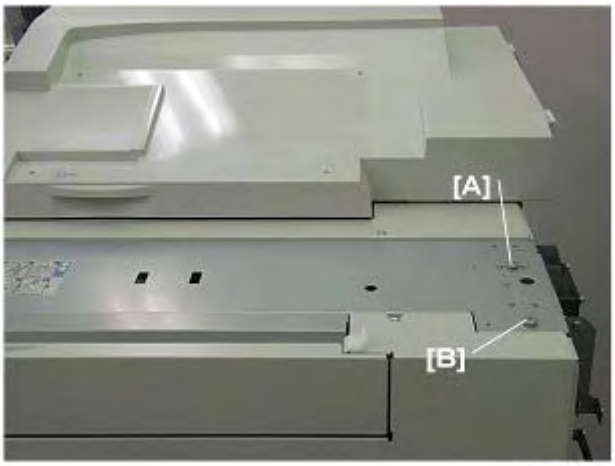
d391i348

3. Remove all visible strips of tape and cushions from the top and sides.



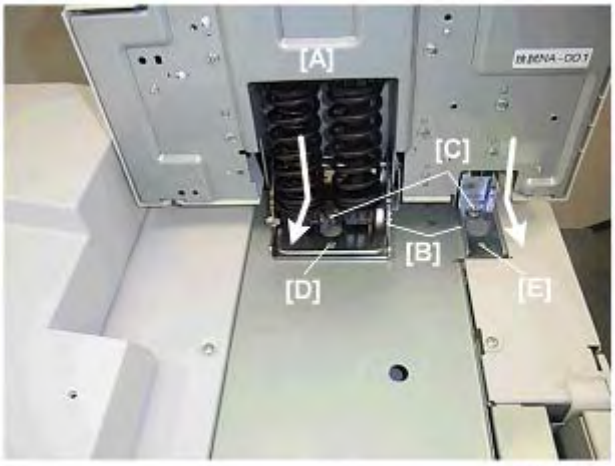
d391i349

4. Open the top cover [A], as well as strips of tape and cushion.



d391i350

5. Attach the shoulder screws [A] and [B] (x2: M4)



d391i351

6. Hold the inserter [A] behind the bookbinder.
7. Set the keyholes of the hinge plates [B] over the heads of the shoulder screws [C].
8. Slide the inserter forward so the hinge plates slide under the heads of the shoulder screws.
9. Secure the hinges with the hinge screws [D] and [E] (x2: M4).

10. Slowly lower the inserter onto the top of the bookbinder.
11. Confirm that positioning pins insert smoothly and completely into holes.
    If the positioning pin fits snugly in the hole, no adjustment is necessary.
    -or-
    If the pin does not insert completely into the hole, do the adjustment procedure described in the next section.

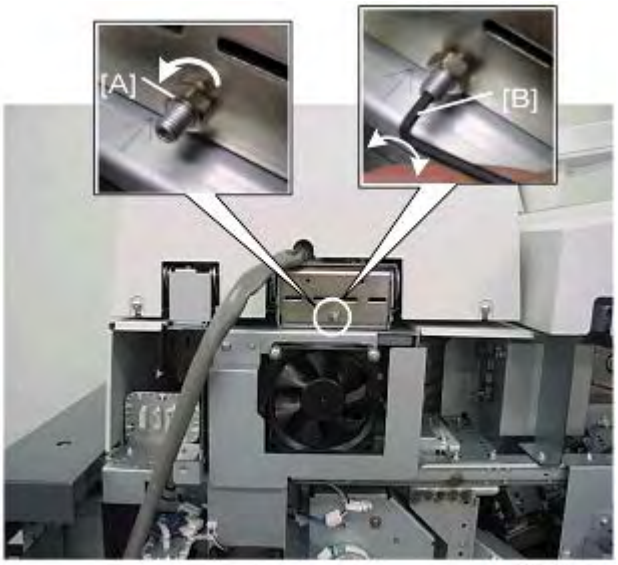
Adjusting the position of the hinge plate

This procedure is not required if the positioning pin slides freely in and out of the hole when the inserter top cover is lowered and raised. Do this procedure only if the pin does not move freely out and into the hole when the inserter top cover is raised and lowered.

1. Raise the inserter.

d391i353

2. Loosen (do not remove) hinge screws [A] (x2: M4).



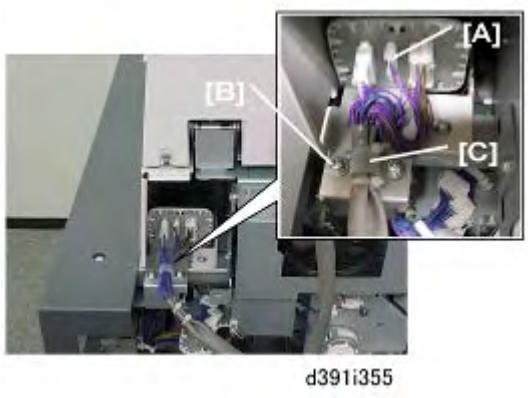
d391i354

3. Use a small wrench to loosen adjustment screw [A] (Do not remove!).
4. Insert a hex wrench (Allen key) [B] into the tip of the adjustment screw.

- Rotating the screw clockwise moves the inserter to the right.
- Rotating the screw counter-clockwise moves the inserter to the left.

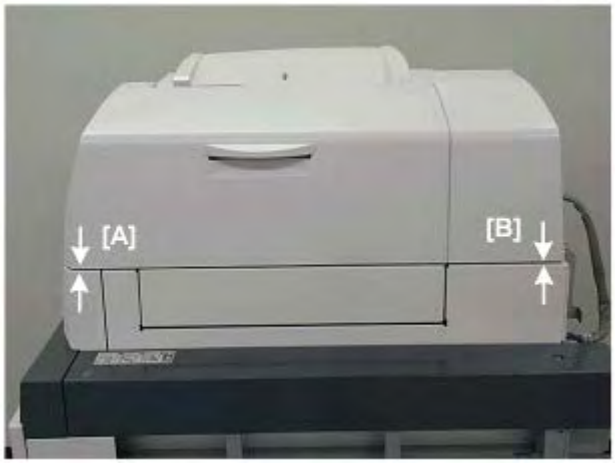
5. Tighten the hinge screws (x2: M4).
6. Lower the inserter again to see if the positioning pin and hole fit snugly.
7. Repeat this procedure until the pin and hole engage and disengage completely and smoothly.

Connecting the Inserter



1. Connect the inserter to the relay panel [A] (x3).
2. Fasten the ground wire [B] (x1: M4 x8).
3. Wrap the clamp [C] around the harnesses and ground wire.
4. Fasten the clamp (x1: M4 x8).

Inserter Gap Measurement

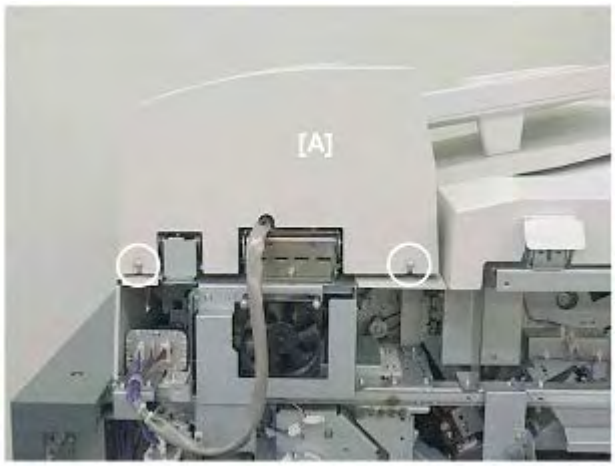


1. Measure the gap between the inserter and bookbinder at [A].
2. Measure the gap between the inserter and bookbinder at [B].
3. Calculate the difference between the two measurements.
   If the difference between the measure gaps is less than 1 mm, no adjustment is necessary. Skip the next section.

-or-

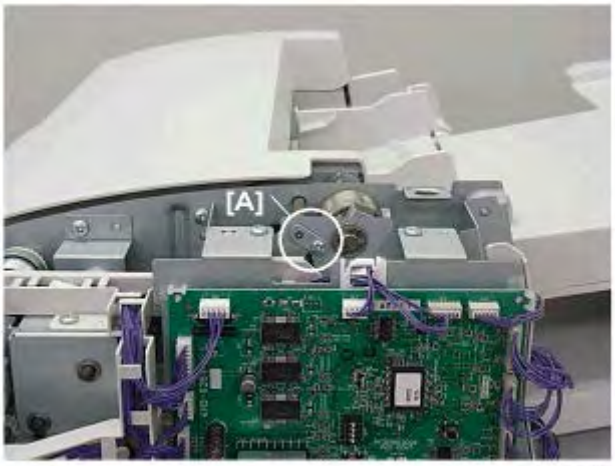
If the difference is more than 1 mm, you must go to the next section and adjust the height.

Inserter Gap Adjustment



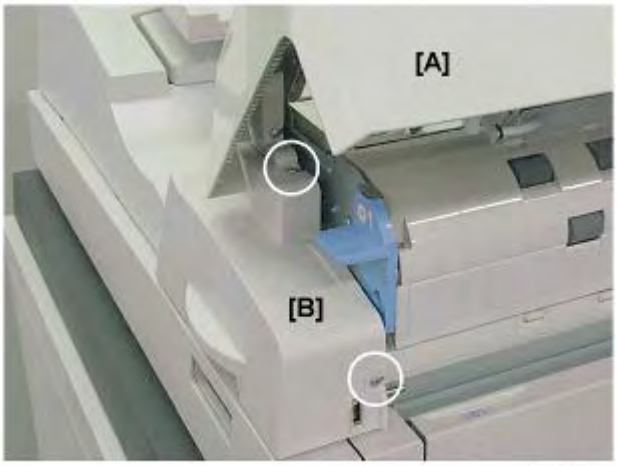
d391i357

1. Remove the inserter rear cover [A] (x2).



d391i358

2. Remove the top cover angle adjustment shaft [A] (x1).



d391i359

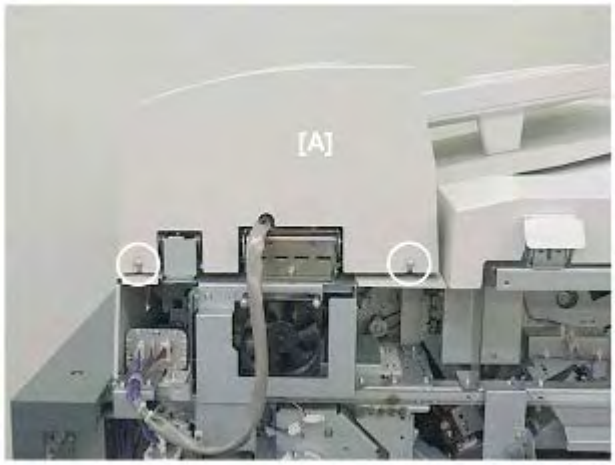
3. Open the top cover [A].
4. Remove the front cover [B] (x2).

d391i360

5. On the right side of the adjustment mechanism, loosen:
   [A] Screw
   [B] Hex nut
   - With a hex wrench turn adjustment screw [C] to adjust the gap by raising or lower the inserter.
   - Turning clockwise raises the inserter.
   - Turning counter-clockwise lowers the inserter
6. On the left side of the adjustment mechanism, adjust the height of the inserter on the left. (The procedure is the same as Step 5.)
7. Reattach:
   - Inserter front cover (x2)
   - Top cover angle adjustment shaft (x1)

Inserter Limiter Brace

The limiter brace limits the movement of the inserter unit when it is opened.

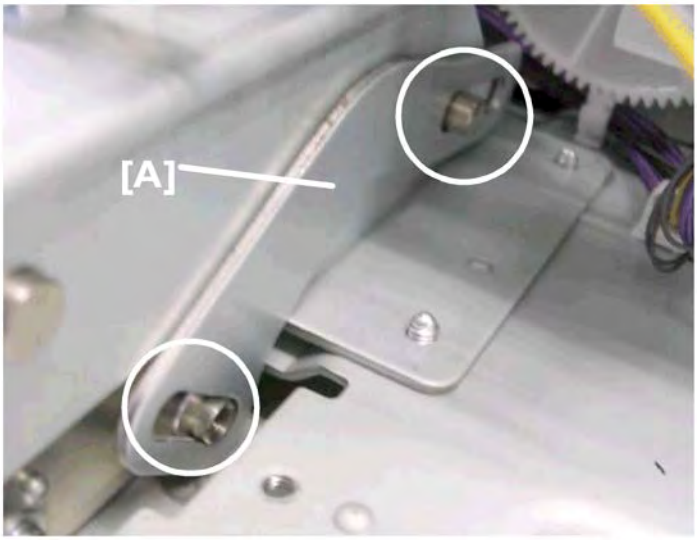


d391i357

1. If the rear cover [A] is attached, remove it (x2)

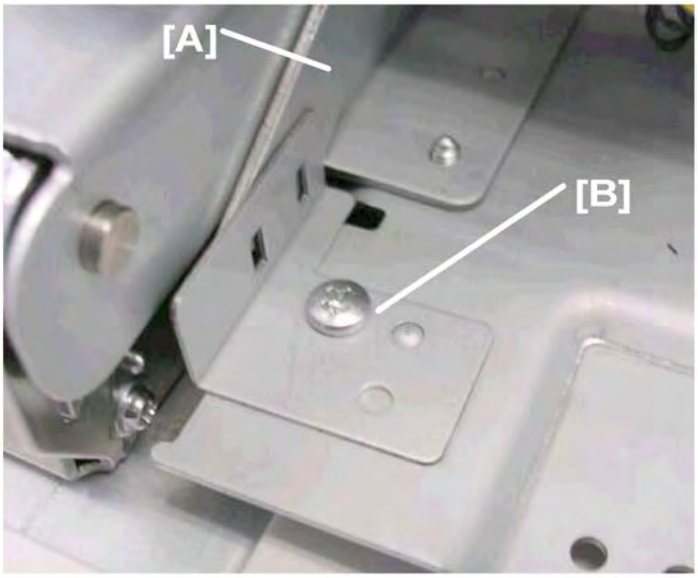
d391i524

2. Retrieve the items shown above from the relay unit accessories.



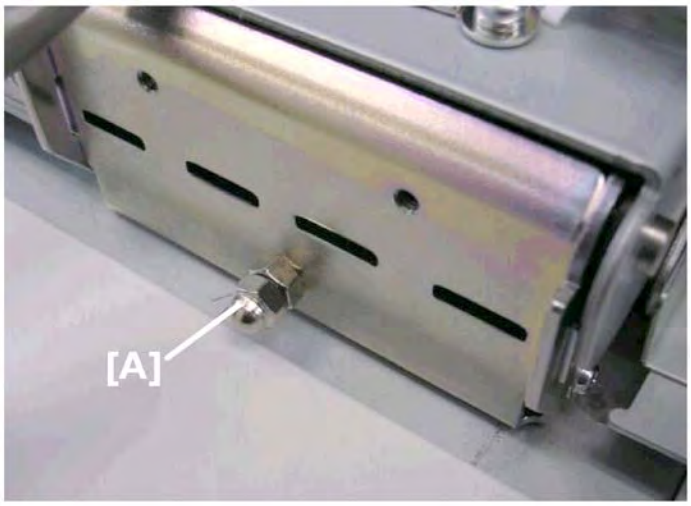
d391i525

3. Set the limiter brace [A] on the two posts (front and back).



d391i526

4. While holding the limiter brace [A] upright so it does not slip off its posts, attach brace [B] (x1). (Make sure that this screw is tight.)



d391i527

5. Attach cap nut [A] to the exposed threads of the screw.
6. Reattach the rear cover of the inserter (x2)

2.11 PERFECT BINDER GB5010

2.11.1 BOOKBINDER ACCESSORIES

There are no accessories provided in the bookbinder box. The required accessories are provided with the relay unit and inserter unit.

2.11.2 BOOKBINDER INSTALLATION

Before You Begin

The bookbinder contains many large moving parts. Braces, cushions, and orange tape are attached inside and outside the bookbinder to immobilize and protect the working parts during handling and shipping.

Large red warning tags are attached with ribbons to braces, cushions, and screws that must be removed at installation. However, these items must not be discarded. Some braces must be reinstalled if the machine needs to be moved to a new location. Due to the large number of braces that must be retained (there are over 20), they should be marked for future reference as they are removed.

Here are some simple rules to follow during removal of the braces, cushions, and screws:

- Use a marker with indelible ink to mark each item or its tag as instructed when it is removed from the bookbinder. This will make it easier for the service technician to identify the brace for reinstallation. This will also help you to confirm that everything has been removed from inside the machine.
- After removing a brace, set the screws in the correct holes and tape them in place. This will make it easier to find the correct screws for reinstallation.
- The red warning tags must remain attached by the ribbons to the braces, cushions, and screws. If they are reattached before moving the machine, they will serve as reminders of the items that must be removed after the machine has been moved to the new location.
- Remove the orange tape carefully and save as much of it as possible.

Note

- The actual color of the new Ring Binder is much darker that the older Ring Binder that appears in the photographs of this section. The installation instructions are the same.

Unloading the Bookbinder

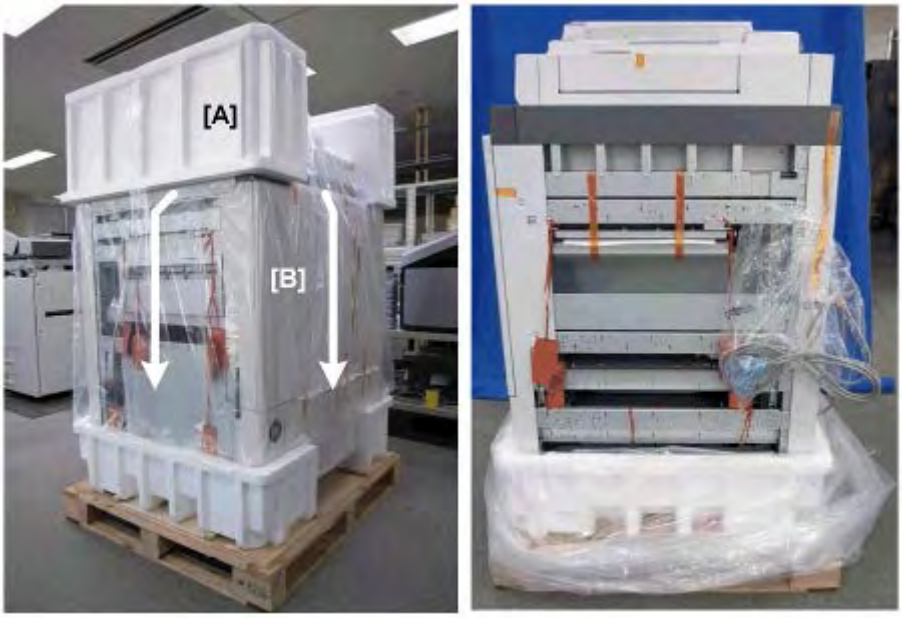
⚠CAUTION

- The bookbinder weighs 316 kg (695 lb.). At least four service technicians are required to unload the bookbinder from its pallet.
- You will need a manual forklift to position the pallet for unloading.

1. Remove the packing straps and cardboard cover.

d391i403

2. Use a manual forklift [A] to position the pallet so there is at least 2 meters (6.5 ft.) of free space to the right side of the bookbinder [B].



d391i404

3. Remove the packing from the top of the machine [A].
4. Pull down the protective plastic cover [B] on all four sides.

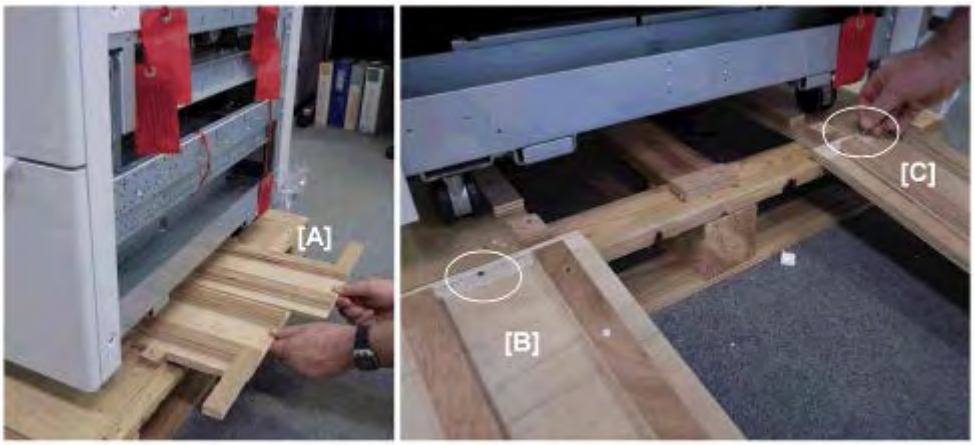
d391i409

Important

- Collapsible metal handles are provided on the right and left side of the bookbinder.
- To avoid physical injury, always use these handles to lift either the right or the left side of the bookbinder.
- Never attempt to raise the left or right side of the bookbinder alone. Two people, one on each handle, should lift one side together.

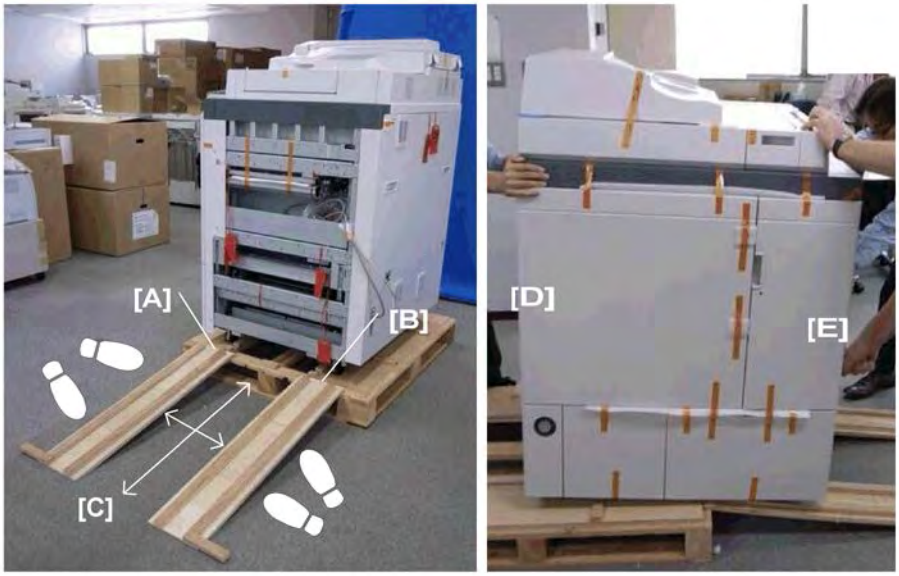
d391i405

5. Position one person at the left to prevent the bookbinder from tipping over.
6. On the right [A], have two people use the handles to lift the machine, while another person removes the Styrofoam block and then pulls the plastic cover under the machine to the left as far as possible.
7. Position one person at the right to prevent the bookbinder from tipping over.
8. On the left [B], have two people use the handles to lift while another removes the Styrofoam block and the plastic cover together.



d391i406

9. Pull out the two ramps [A].
10. Two nails are taped to one of the ramps. Align the holes in the top of each ramp with the holes in the pallet, then insert the nails into the holes to fasten the left ramp [B] and right ramp [C] to the edge of the pallet.



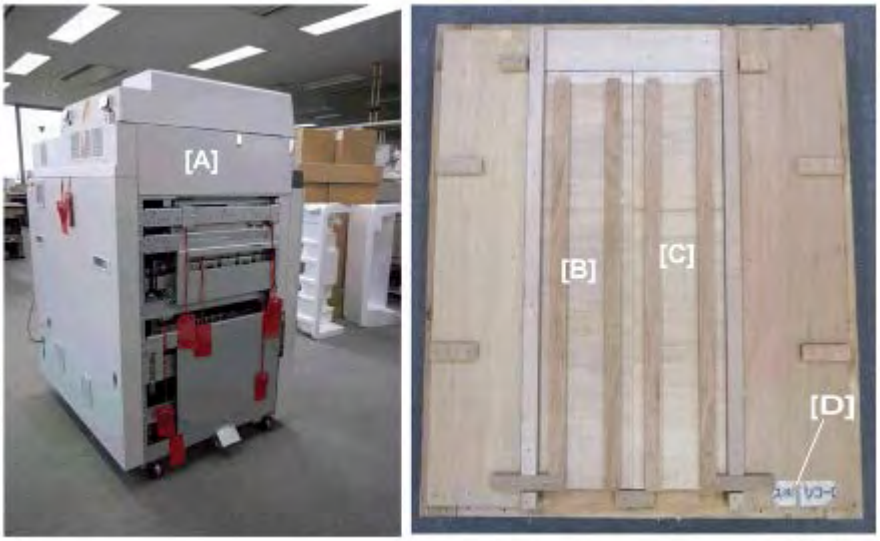
d391i407

11. Confirm that:
    - Both ramps are firmly attached to the edge of the pallet with nails [A] and [B].
    - Both ramps extend straight out from the side of the pallet.
    - Area [C] between the ramps is free of obstacles.

⚠WARNING

- As the bookbinder is being pulled off the pallet, never step across either of the ramps and place your foot in the area between the ramps [C].

12. With one person [D] behind the bookbinder gently pushing, and two people in front pulling the bookbinder by the handles [E], slowly move the bookbinder down the ramps.

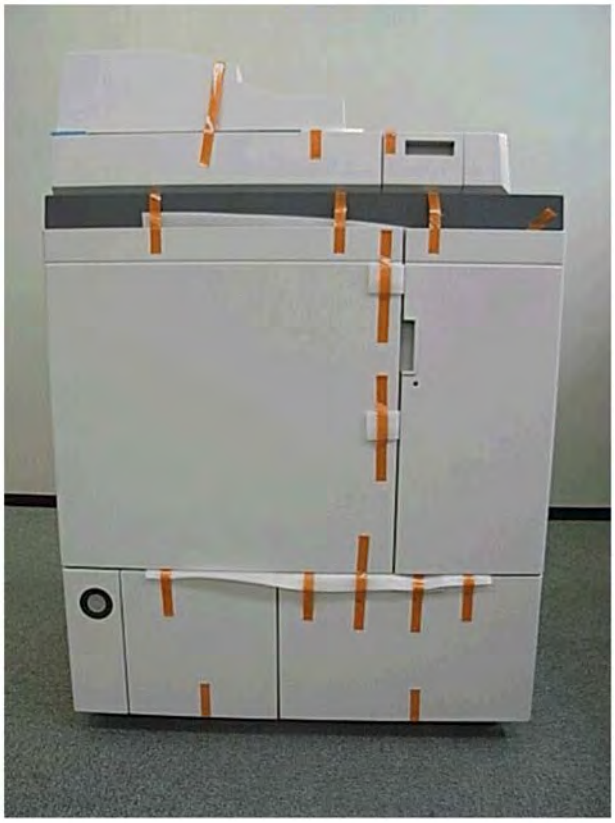


13. Once the bookbinder [A] is off the pallet, it can be pushed or rotated on its casters.
14. Remove the nail from each ramp and reattach the ramps [B] and [C] to the pallet.
15. Tape the nails [D] to the pallet.

Bookbinder Exterior Tape, Braces

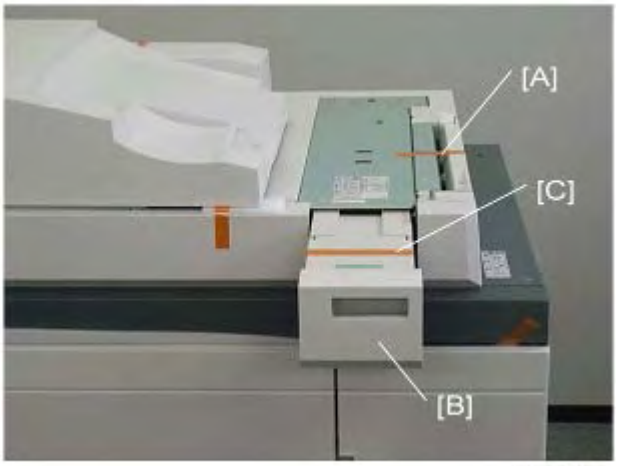
Important

- Braces, cushions, and screws removed from the machine for installation should be retained for reinstallation in the event that the bookbinder must be shipped to a new location.



d391i301

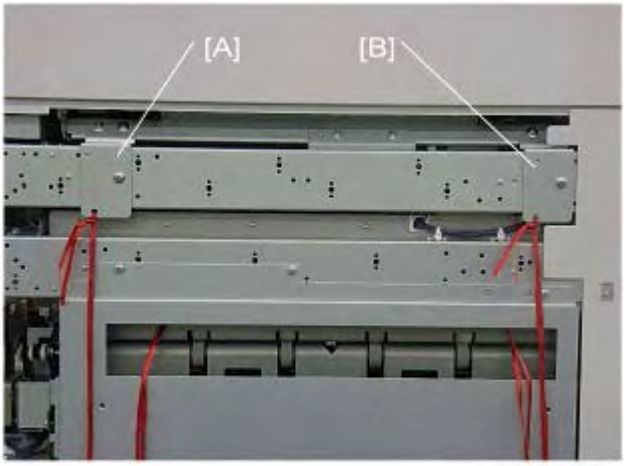
1. Remove all strips of tape and packing from the front and top.



d391i302

2. Remove tape [A].
3. Pull out the glue supply drawer [B] and remove long tape [C].

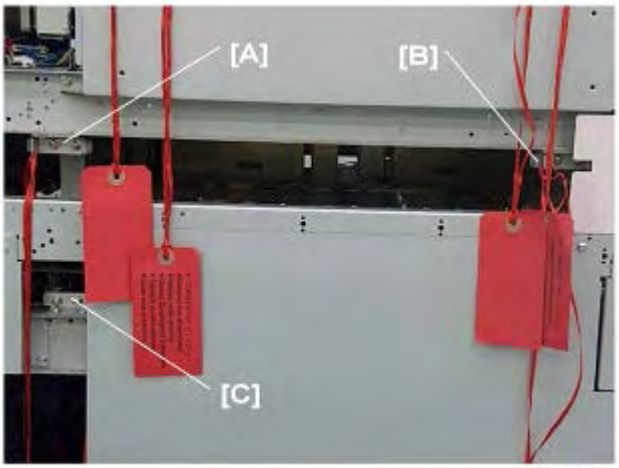
Left Side



d391i303

4. Remove upper braces [A] and [B] (x3 ea.)

Left Side



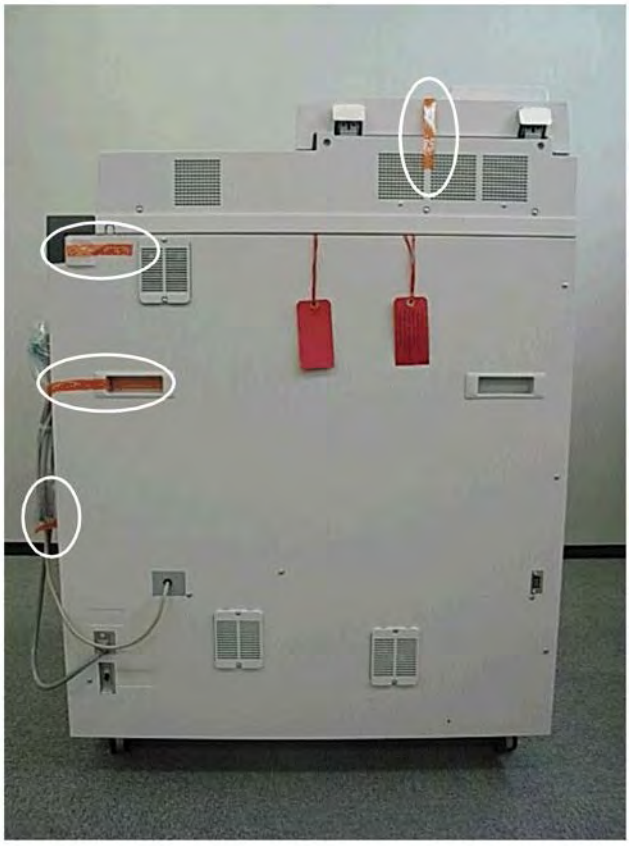
d391i304

5. Remove lower braces [A], [B], [C] (x2 ea.)

d391i006d

6. Mark the two (large) upper braces "**D**".
7. Mark the three (small) lower braces "**H**".

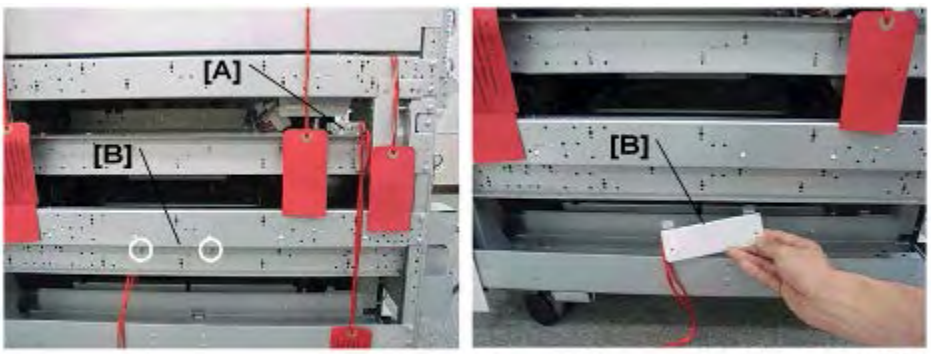
Rear



d391i305

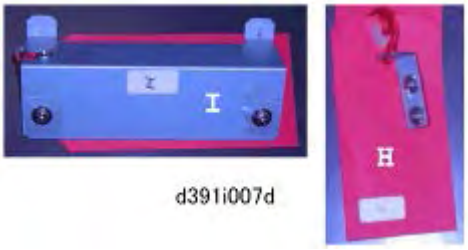
8. At the rear, remove all tape (as shown) from the back, top, power cord and interface cable.

Right Side: Near Bottom



d391i306

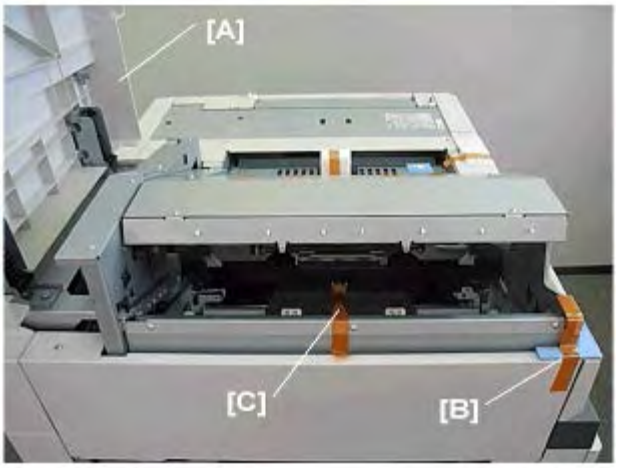
9. Remove brace x1 [A], brace [B] x1 and tags (x2 ea.)



d391i007d

10. Mark the removed large brace "**I**" and mark the removed small brace "**H**".

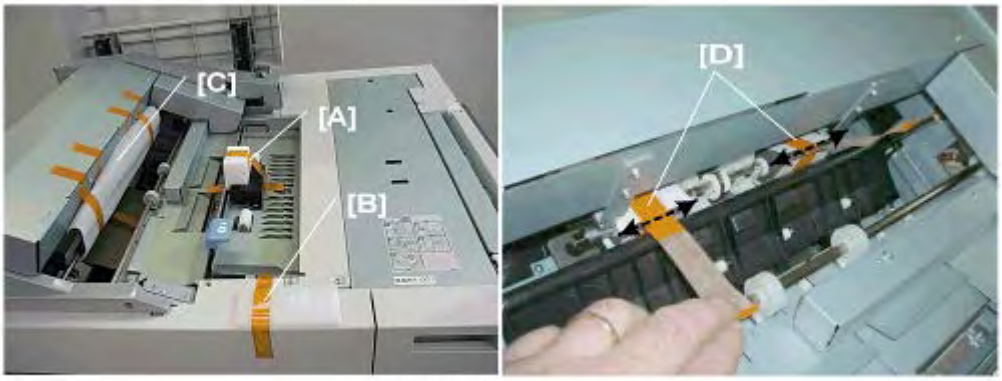
Left Side



d391i307

11. Open the top cover [A].
12. Remove tape, cushions [B] and [C]. Slide the cushion at [C] down to remove it.

Front: Top



d391i308

13. Remove the tape, cushions [A], [B].
14. Disconnect the tape at [C] then lower lever **Mk4**.
15. Carefully cut the strips of tape at [D] then remove the strips of tape and the cushions.

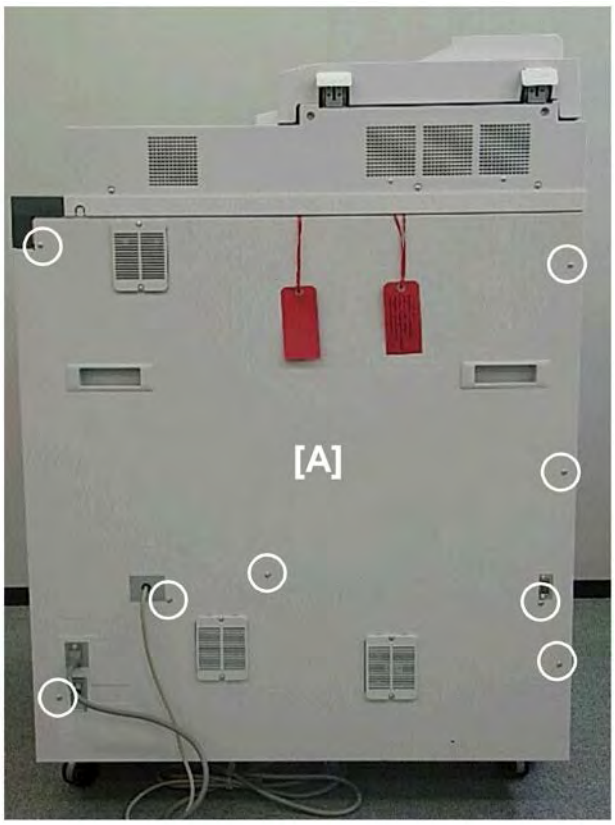
Important

- Pulling on the strips of tape without cutting them could damage the roller shaft.

16. Lower the top cover.

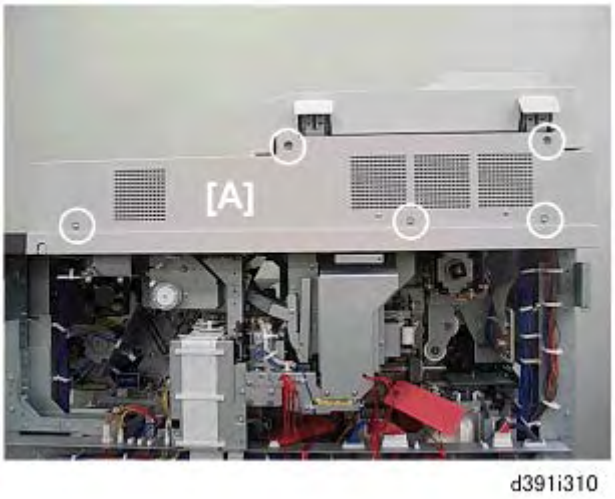
Bookbinder Interior Tape, Braces

Rear



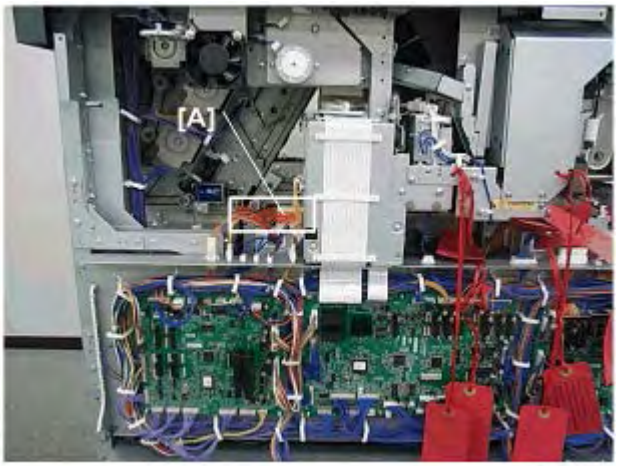
d391i309

1. Remove rear cover [A] (x8)



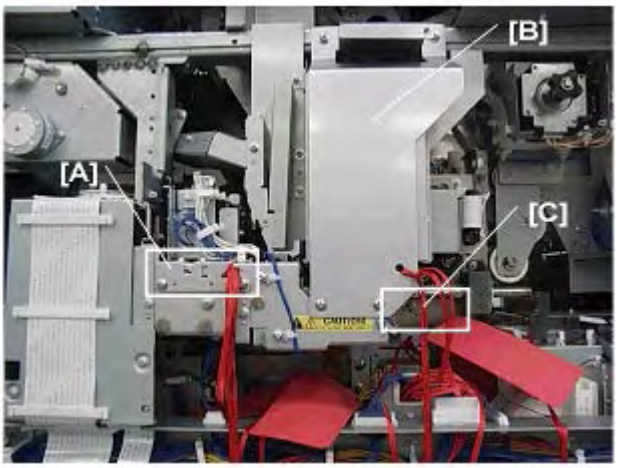
d391i310

2. Remove rear upper cover [A] (x5)



d391i311

3. Remove tape, cushion [A]



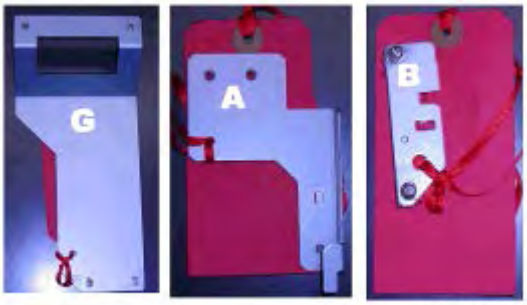
d391i312

4. Remove:

   [A] Brace, tag (x2)

   [B] Brace, tag (x4)

   [C] Brace, tag (x4). (These four screws are tagged with wire.)



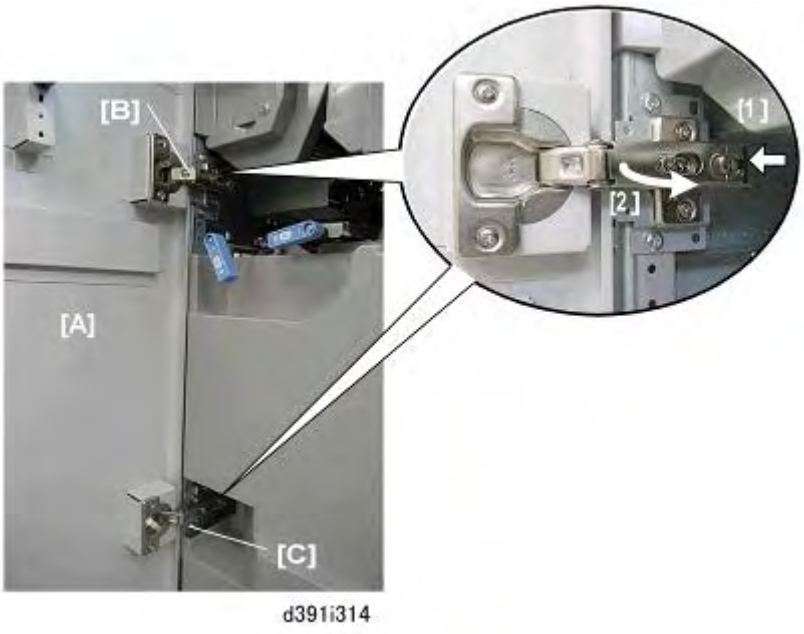
d391i008d

5. Mark the removed braces "**G**", "**A**", "**B**" as shown.

Front

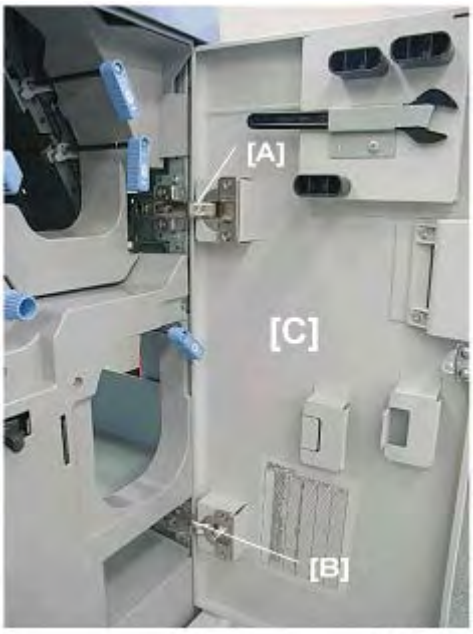
d391i313

6. Open the right front door [A] then left front door [B]



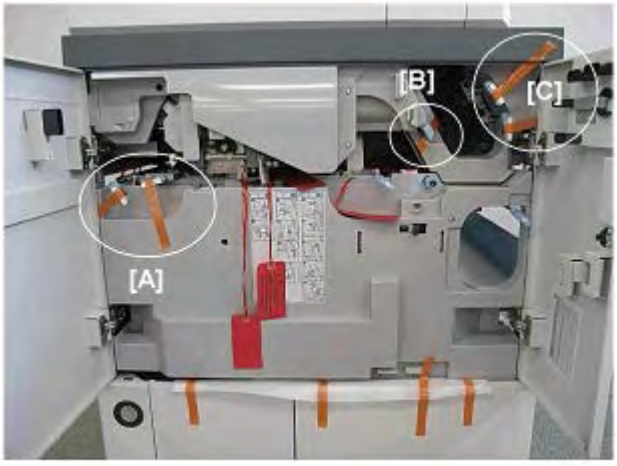
d391i314

7. On the left door [A], remove the top hinge [B] and bottom hinge [C].
   - While holding the left front door with one hand, behind the top hinge [B], push the black lever [1] in the direction of the arrow to release the top hinge.
   - Swing the top hinge [2] out slightly.
   - While still supporting the left door with one hand, repeat the procedure to remove the bottom hinge [C].
   - Remove the left door [A].



d391i315

8. Repeat Step 2 to remove the top hinge [A] and bottom hinge [B] then remove the right front door [C]. (You may have to lower lever **Mk11** so you can remove the right door.)

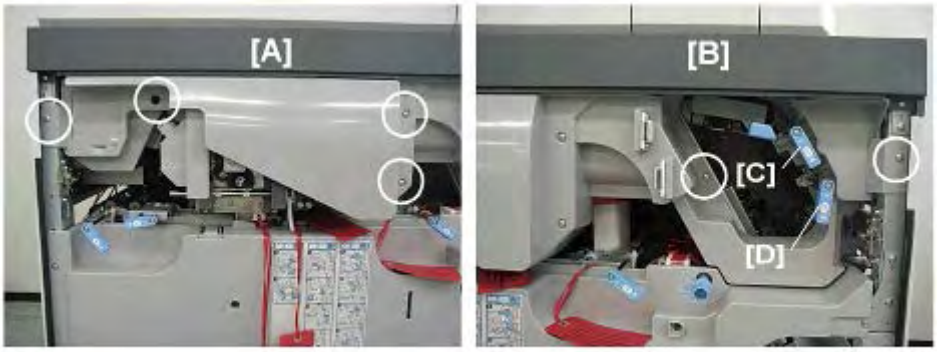


d391i316

9. Remove the strips of tape, and cushions from the jam release levers (x5):
   [A] **Mk7**, **Mk8**
   [B] **Mk12**
   [C] **Mk13**, **Mk14**

d391i317

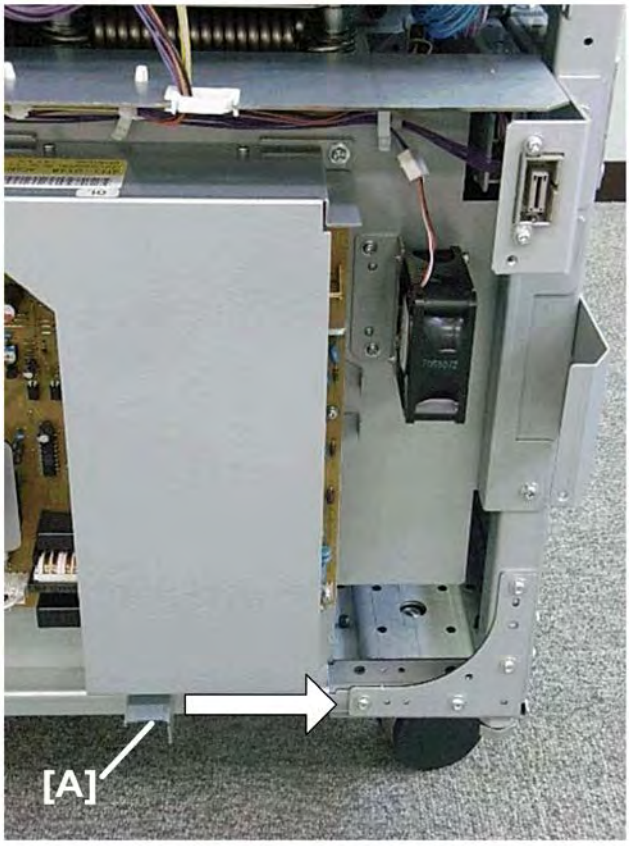
1. Raise lever **Mk12** [A].



d391i318

2. Remove the screws of the upper inner cover on the left side [A] and right side [B] (x6).
3. Release jam release levers [C] and [D], then hold them in the released position as you remove the upper inner cover.

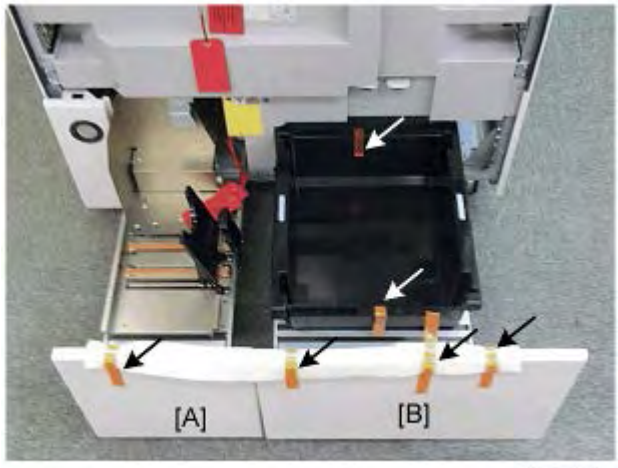
Rear



d391i319

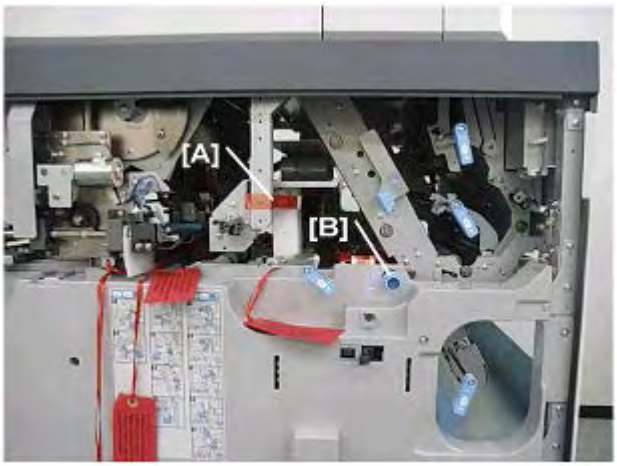
4. At the left rear corner, push the book stack release lever [A] completely to the right to release the book stacking tray.

Front



d391i320

5. Pull out the book stacking tray [A] and trimmings box [B] together.
6. Remove the strips of tape and cushions shown above.



d391i321

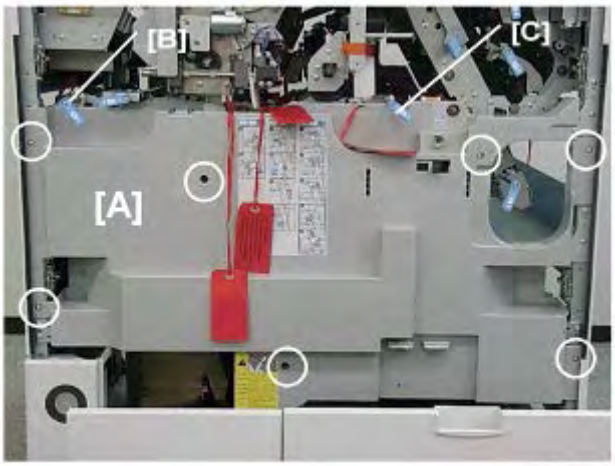
7. Remove:

   [A] Tape, cushion

   [B] Jam clear knob **Mk10**.

   Important

   - Mk10 must be reattached at the end of installation.

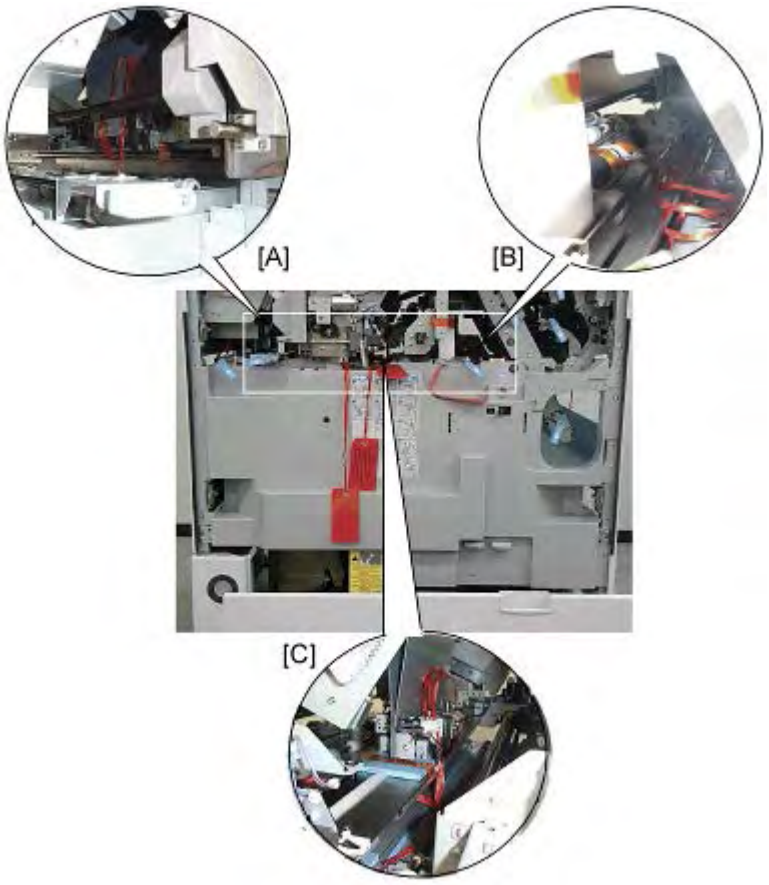


d391i322

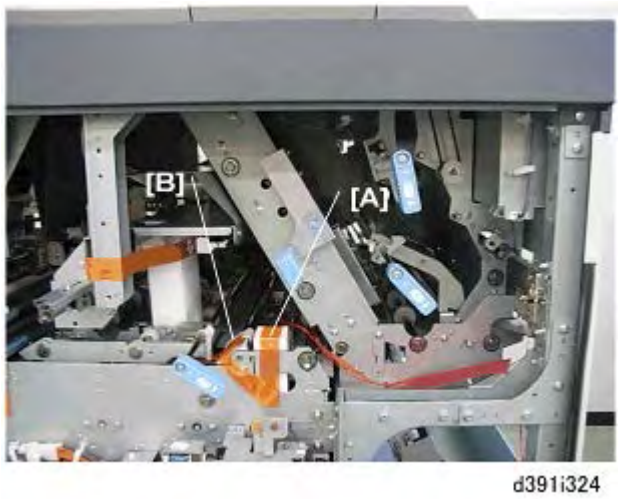
8. Remove the screws of the lower inner cover [A] (x7).
9. Raise the jam clear levers [B] and [C] as you remove the cover [A].
10. Return the jam clear levers [B] and [C] to their original positions.

Main Grip, Cover Transport Tape, Braces, etc.

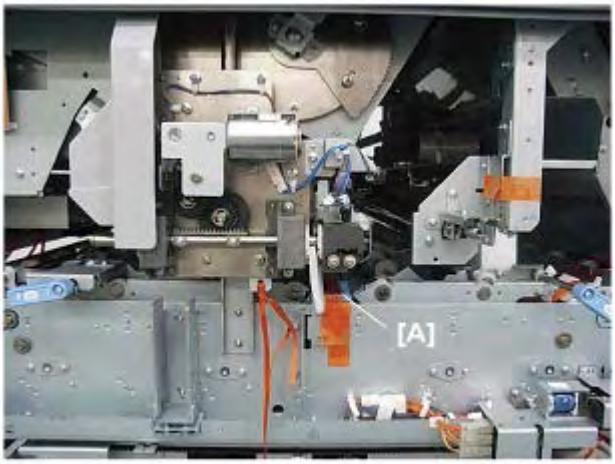
Front



1. Remove the strips of tape and cushions from the horizontal transport unit at the left [A], right [B], and center [C].



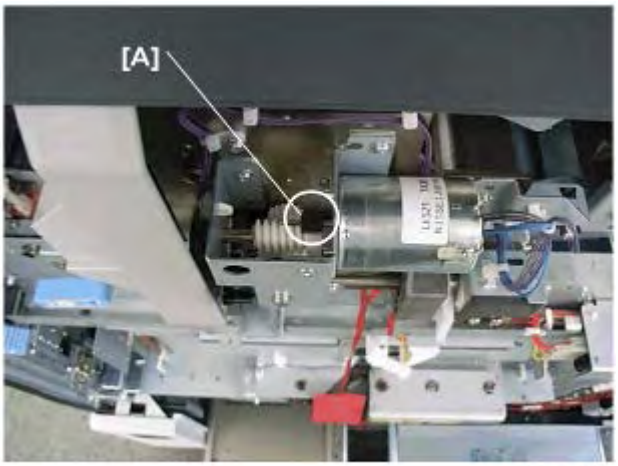
2. Remove tape [A] with tag.
3. Slide the registration unit to the rear then remove tape, cushion [B].



d391i325

4. Remove cushion [A] shown above:

Front



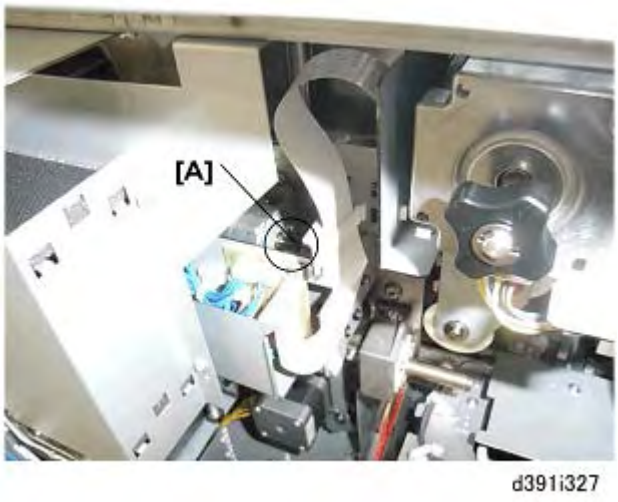
d391i326

- First, at the front, rotate the grip motor pulley [A] counter-clockwise about 3 mm to release the pressure on the cushion.

Important

- Rotate the pulley only enough to release the cushion.

Rear



d391i327

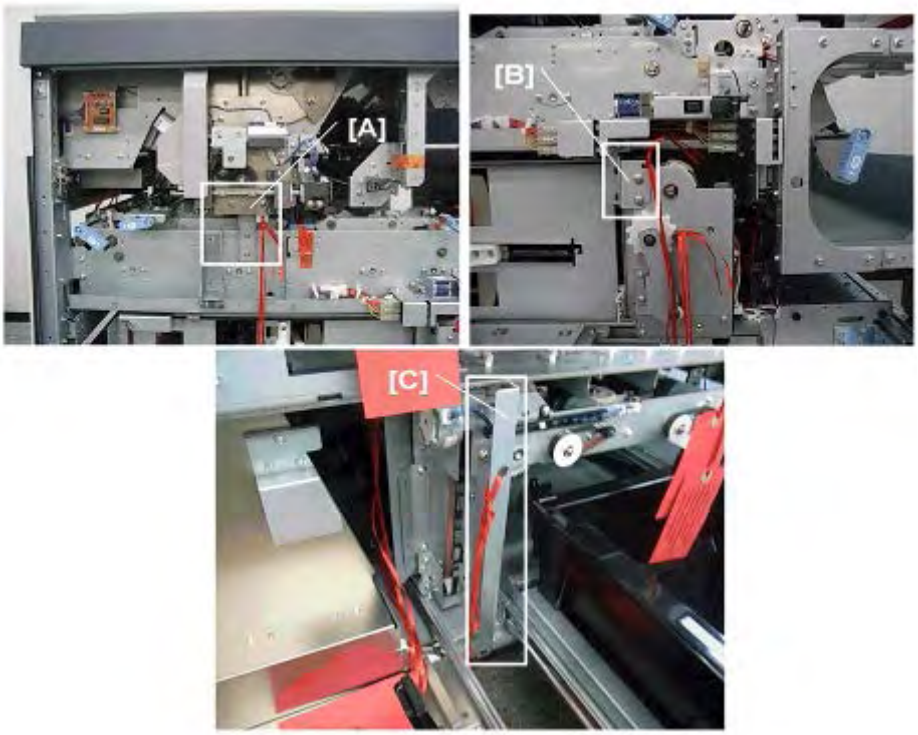
- Second, at the rear, manually rotate the grip motor pulley [A] counter-clockwise about 3 mm to release the pressure on the cushion.

Important

- Rotate the pulley until the gap is about 18 mm (no wider).
- To prevent changing the correct value (15 mm), do not make this gap wider than 18 mm.

5. Remove the cushion at the front.

Front



d391i328

6. Remove:

[A] Brace, tag (x4)

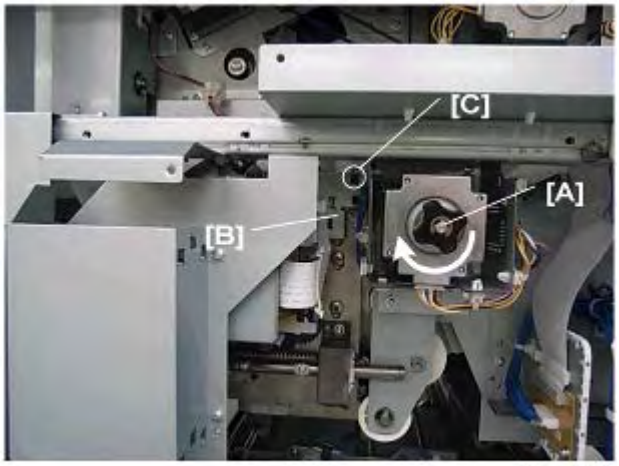
[B] Brace, tag (x3)

[C] Brace, tag (x2)

d391i012c

7. Mark the braces "**F**, "**C**", "**E**" as shown.

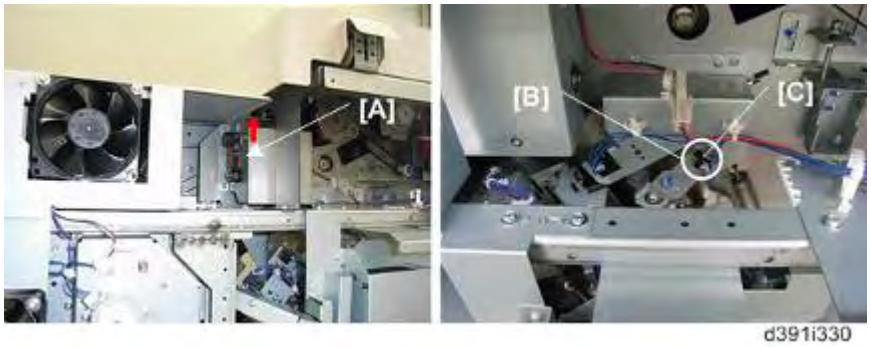
Rear



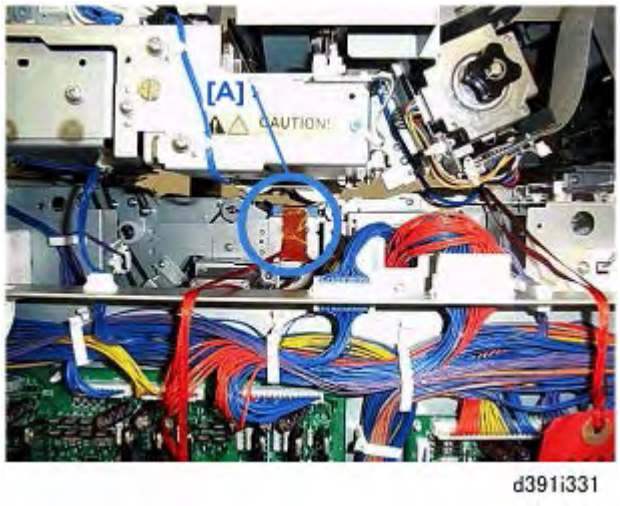
d391i329

8. Rotate knob [A] in the direction of the arrow to raise the grip unit until the actuator [B] reaches sensor[C].

Rear



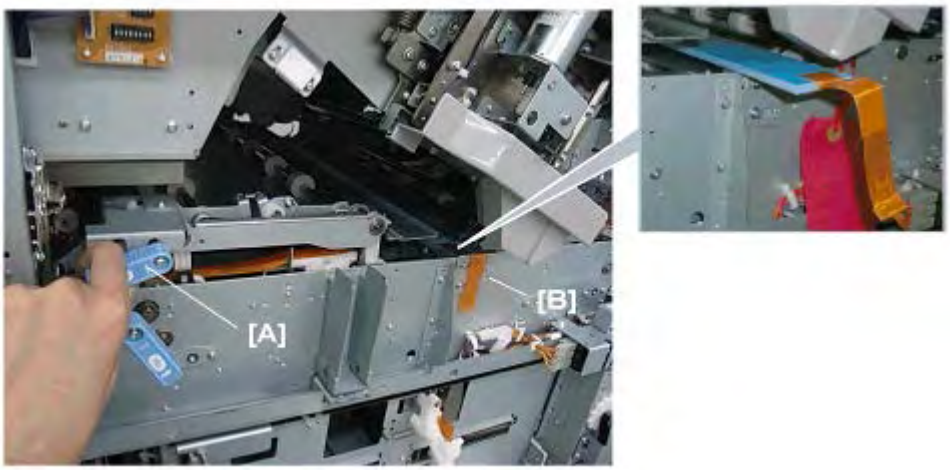
9. Push up the right side of the timing belt [A] to rotate the gear counter-clockwise until the actuator [B] reaches sensor [C].



10. At the rear remove the tape and cushions [A].

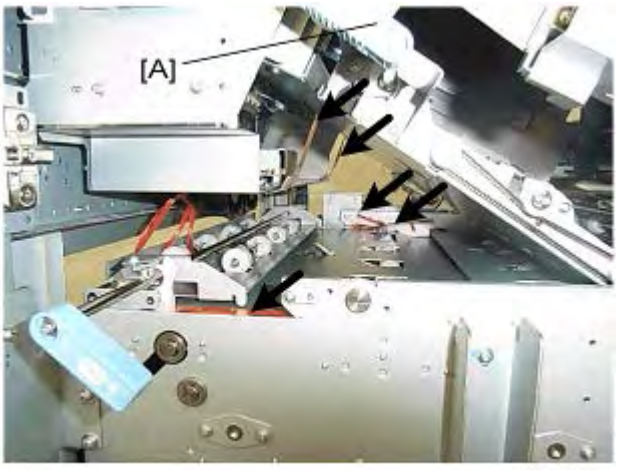
Front

11. At the front remove the tape and cushion [A].



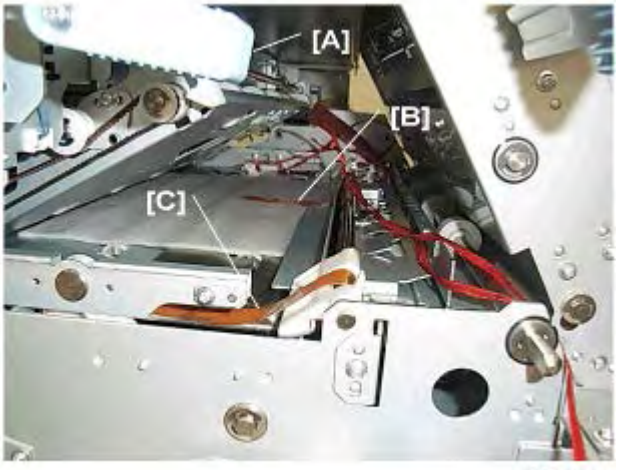
d381i333

12. Lift and push **Mk7** [A] to the left and remove the tape and cushion [B].



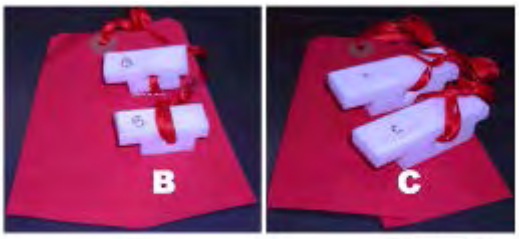
d391i334

13. Raise lever **Mk7** [A].
14. Remove all strips of tape and cushions.
15. Return **Mk7** to its original position.



d391i335

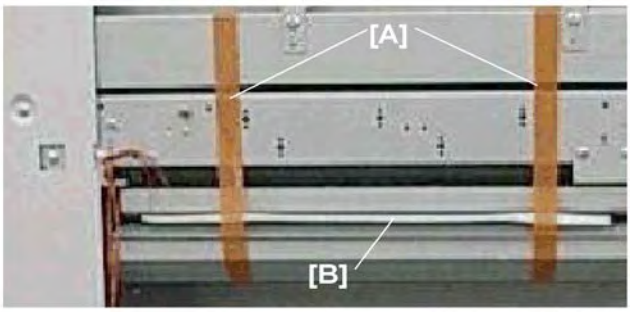
16. Raise **Mk9** [A].
17. Remove the long strips of tape [B] and [C]



d391i014c

18. Label the small cushions "**B**" and the large cushions "**C**".

Right Side

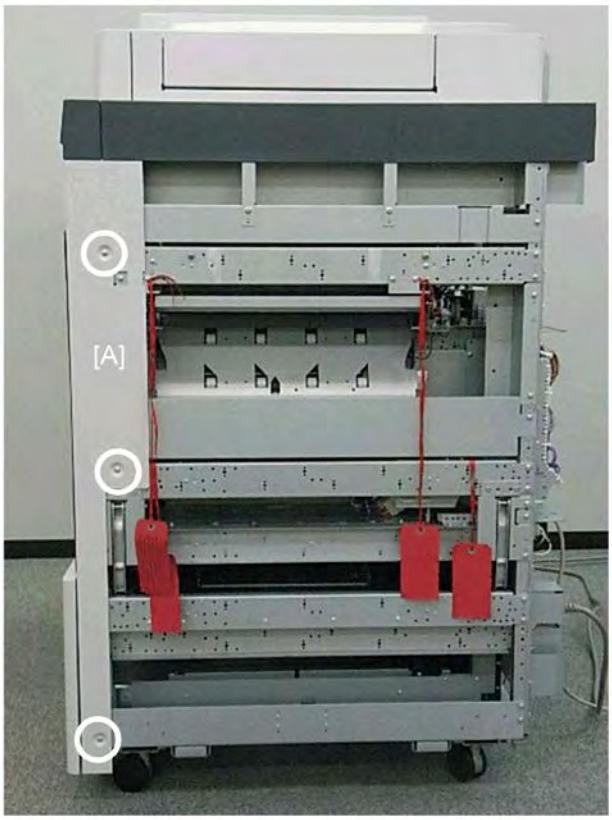


d391i336

19. Remove the two strips of tape [A].
20. At the front lower lever **Mk8**.
21. Remove the cushion [B].
22. Return lever **Mk8** to its original position.

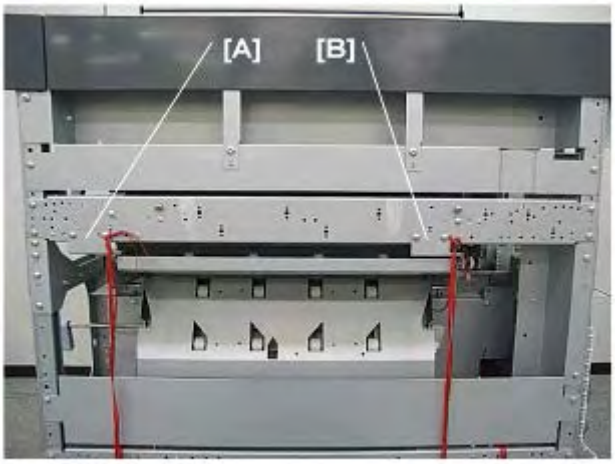
Trimming Unit Tape

Right Side



d391i337

1. Remove front right corner cover (x3).

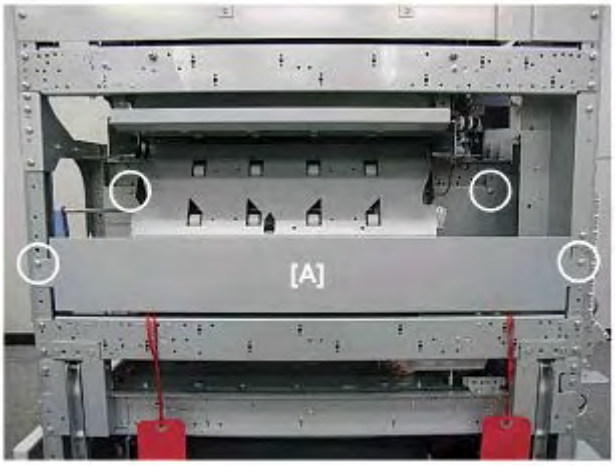


d391i338

2. Remove:

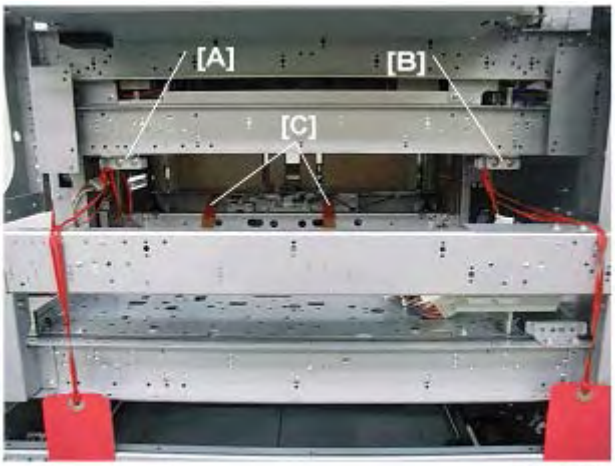
   [A] Brace, tag (x3)

   [B] Brace, tag (x3)



d391i339

3. Remove delivery bracket [A] (x4)



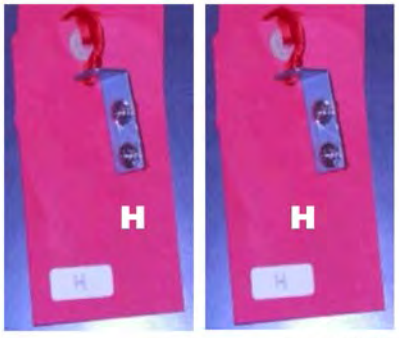
d391i340

4. Remove:

   [A] Brace, tag (x2)

   [B] Brace, tag (x2)

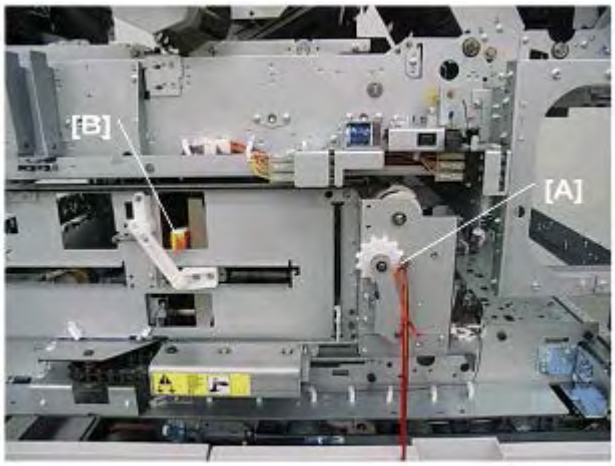
   [C] Long tapes (x2)



d391i015d

5. Label both braces "**H**".

Front



1. Remove stepped screw, tag [A] (x1)

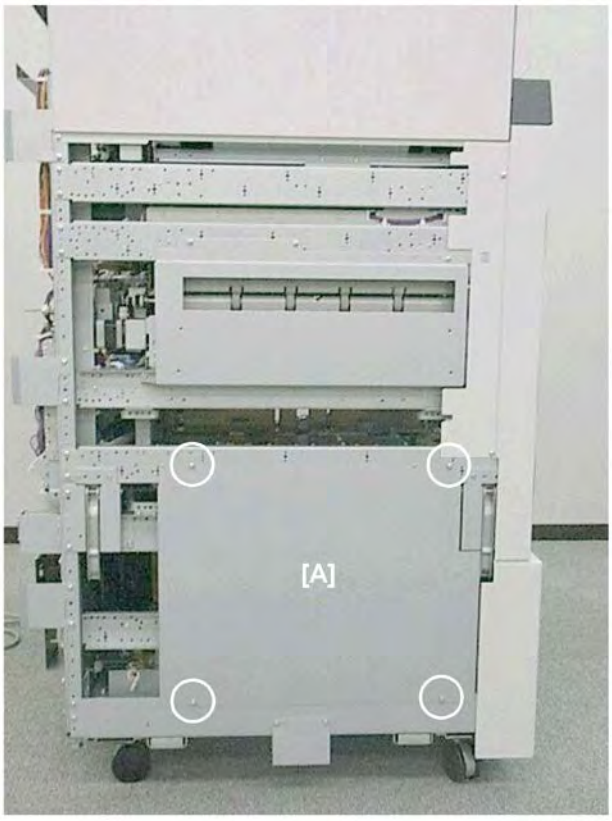
2. Mark the stepped screw "**1**".

Important

- Cushion [B] (shown in the previous illustration) is firmly clamped in place and must be released before it can be removed.

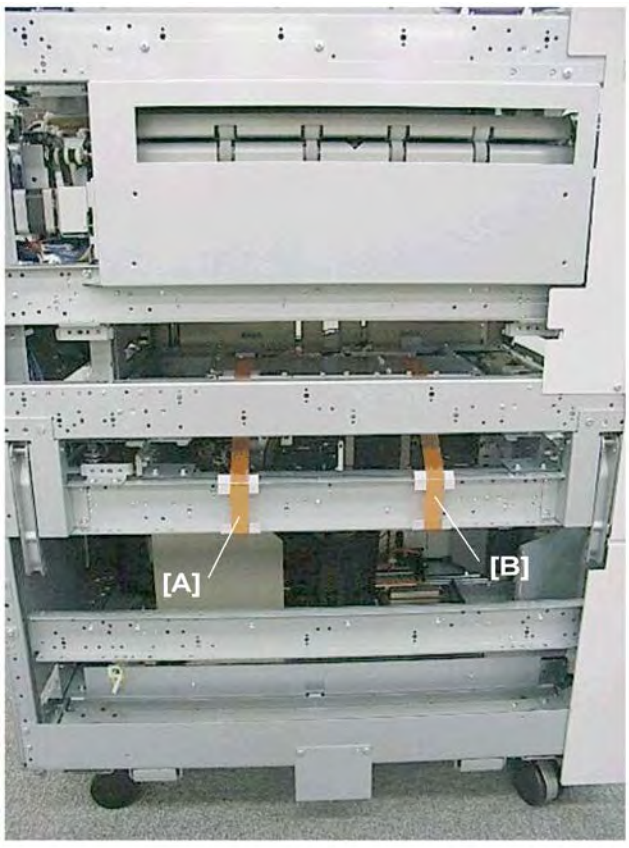
3. To remove cushion [B]:

Left Side



d391i342

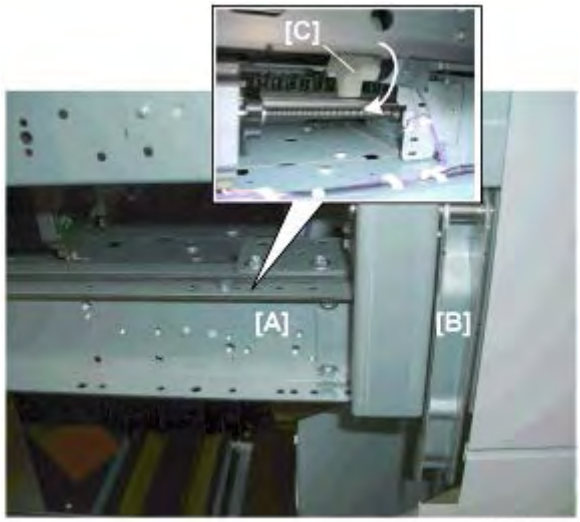
- Remove left flat panel [A] (x4),



d391i343

- Remove tape, cushions [A] and [B].

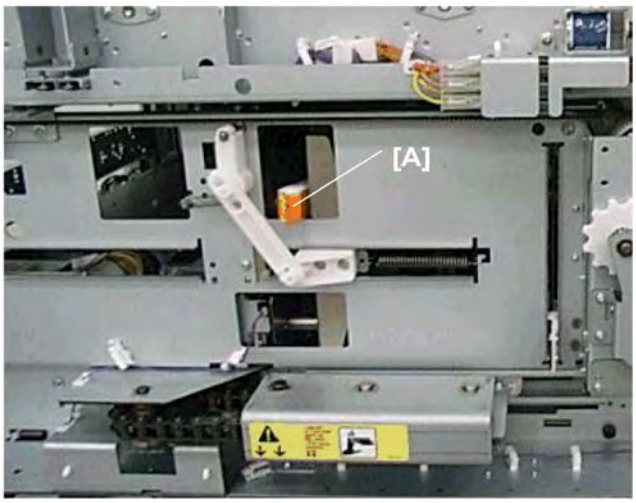
Front Left Corner



d391i344

- Behind the brace [A] near the carrying handle [B], rotate the white knob [C] to release the clamped cushion. (One full rotation should be enough to release the cushion.)

Front

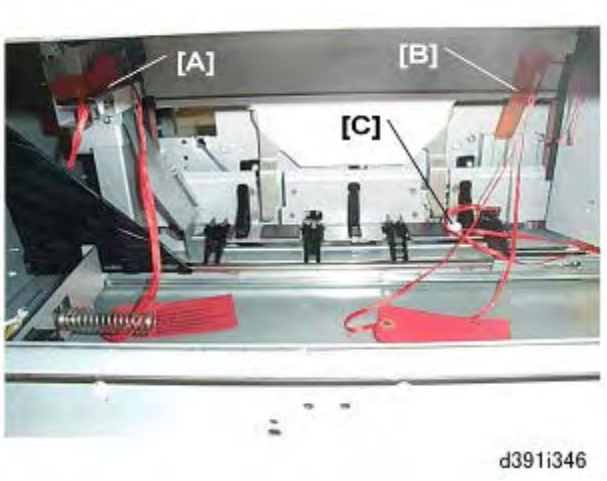


d391i345

- Remove cushion [A].

Book Stacking Tray Tape

Left Side: Book Stacking Delivery Tray Pulled Out



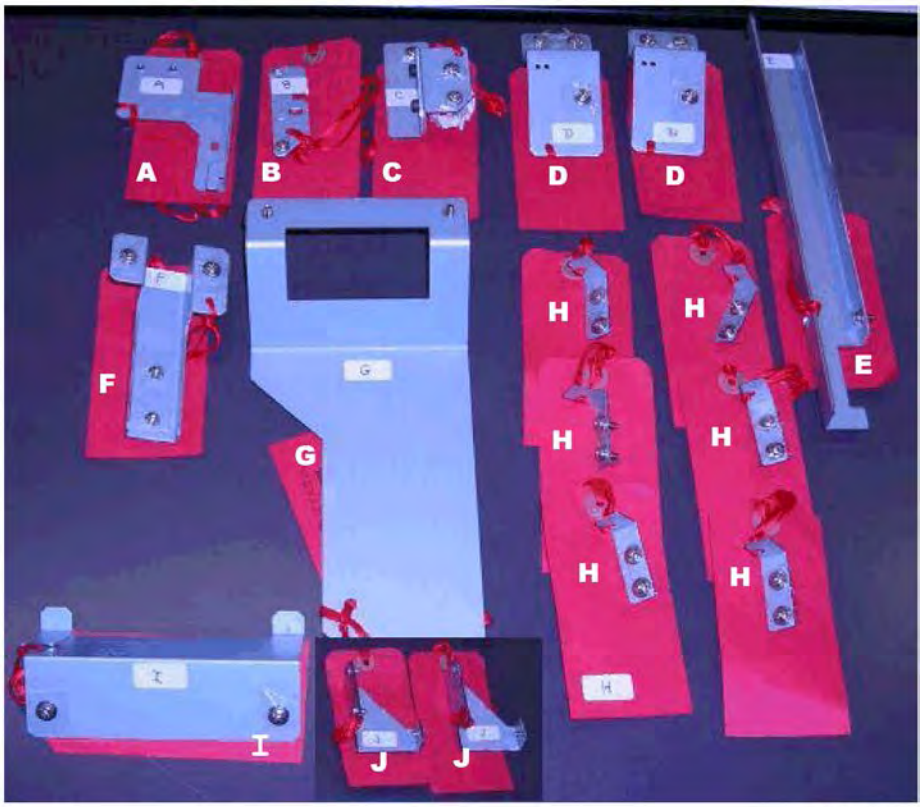
1. Pull out the book stacking delivery tray trimmings box drawer.
2. Remove:
   [A] Tape, tag
   [B] Tape tag
   [C] Knurled head screw (x1). Remove with fingers.

3. Label the screw "**2**".

Confirming Removal, and Storing Braces, Cushions, Screws

1. Visually inspect the machine and confirm that all braces, screws, and cushions with red tags have been removed and marked for storage.

Braces



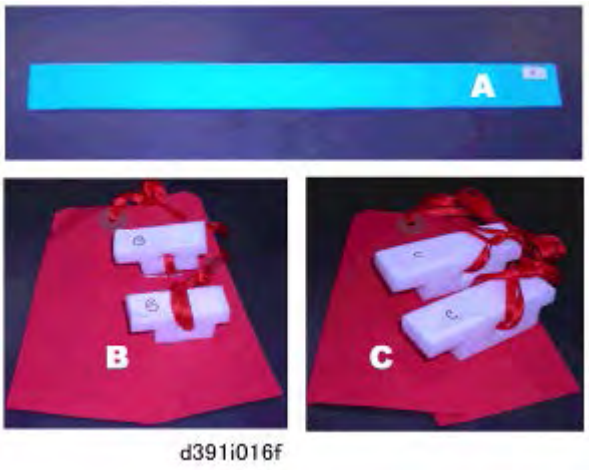
d391i016f

Mark	Item	Quantity
A	Brace A	1
B	Brace B	1
C	Brace C	1
D	Brace D	2
E	Brace E	1
F	Brace F	1
G	Brace G	1
H	Brace H	6
I	Brace I	1
J	Brace J	2

Screws

Mark	Item	Quantity
1	Step Screw	1
2	Plastic-head Screw	1

Cushions



Mark	Item	Quantity
A	Cushion A (Long)	1
B	Cushions B (Short)	2
C	Cushions C (Long)	2

2. All of these items should be retained. Some of these items must be reattached if the bookbinder is moved to a new location. For more details, please refer to "Preparing the Bookbinder for Moving".

Check List

Confirm that the following parts have been reinstalled:

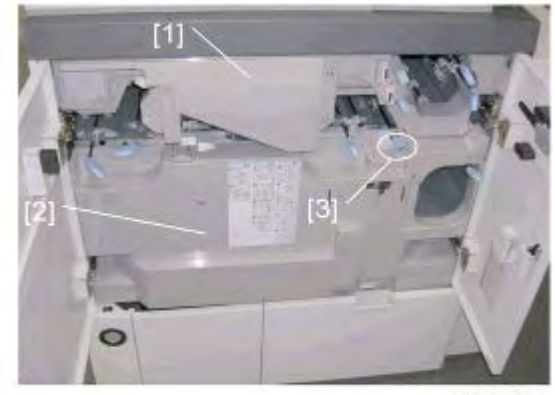
d391i820

[1] Left flat panel

d391i821

[1] Right corner cover

[2] Delivery bracket

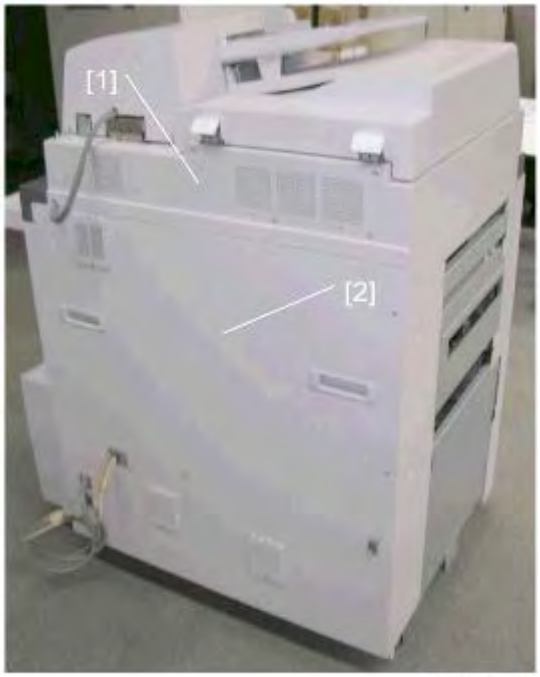


d391i822

[1] Front inner cover (upper)

[2] Front inner cover (lower)

[3] Knob **Mk10**



d391i823

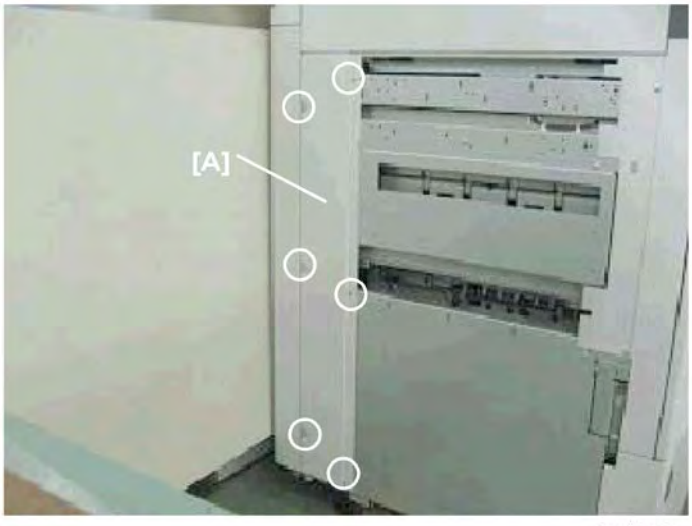
[1] Rear cover (upper)

[2] Rear cover (lower)

Important

- To protect the boards from damage due to accidental short circuiting as result of contact with a metal tool, the rear lower cover should never remain off longer than necessary.

2.11.3 DOCKING THE BOOKBINDER

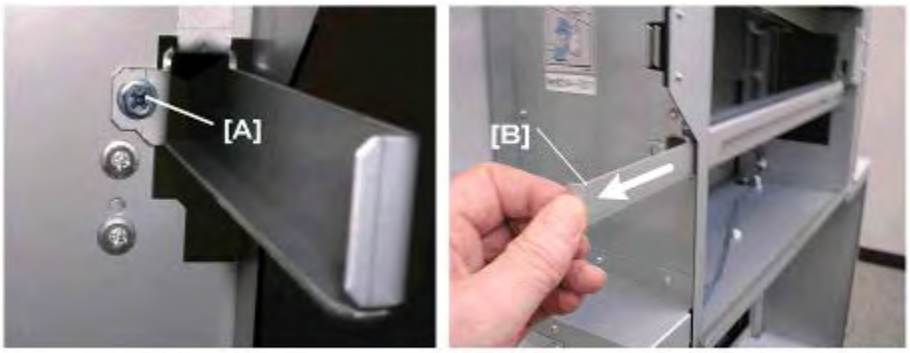


d391i510

1. At the left rear corner of the host machine, confirm that cover [A] has been reattached (x6).

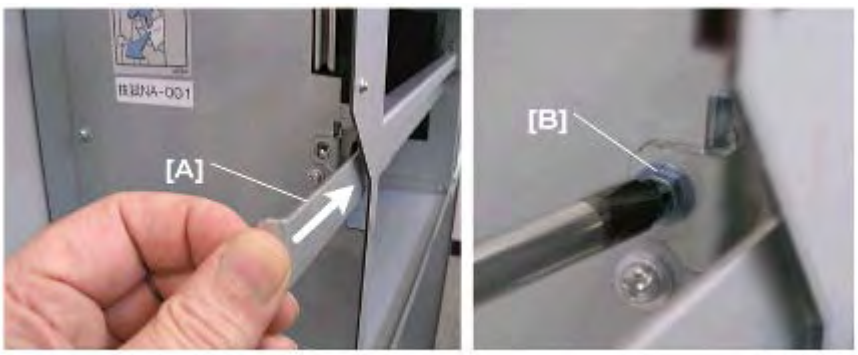
d391i513

2. On the right side of the host machine, attach:
   [A] Left joint bracket ("L") (x2)
   [B] Right joint bracket ("R") (x2)



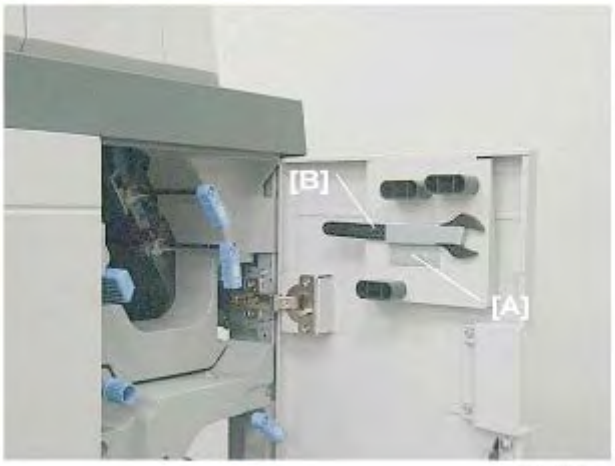
d391i518

3. Open the front door of the relay unit.
4. Remove screw [A].
5. Pull the lock bar [B] out to lower it.
6. Slowly push the bookbinder against the side of the host machine.



d391i519

7. Push in lock bar [A] to raise it and lock it in the cutouts of the joint brackets attached to the host machine.
8. Reattach screw [B] to fasten the lock bar in the raised position.

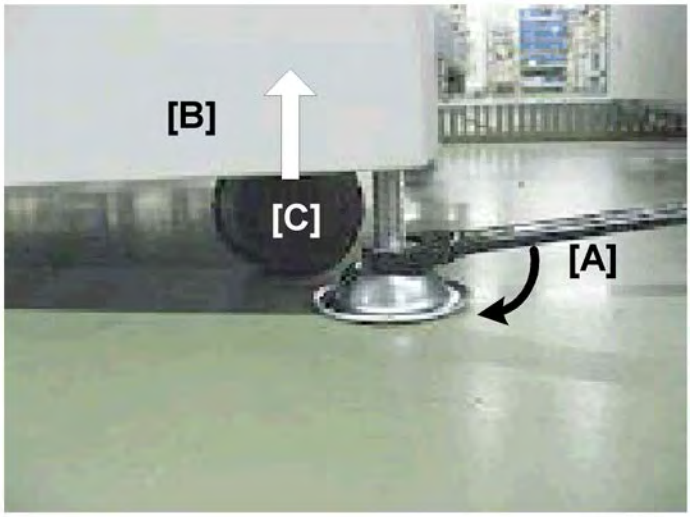


d391i361

9. Remove the brace [A] from the right front door of the bookbinder. (x1)
10. Remove wrench [B].

d391i511

11. Place a shoe [A] under the stoppers at each corner of the bookbinder.
12. Use your fingers (or the wrench) to turn the nut in the direction of the arrow until the nut stops on top of the shoe.



d391i512

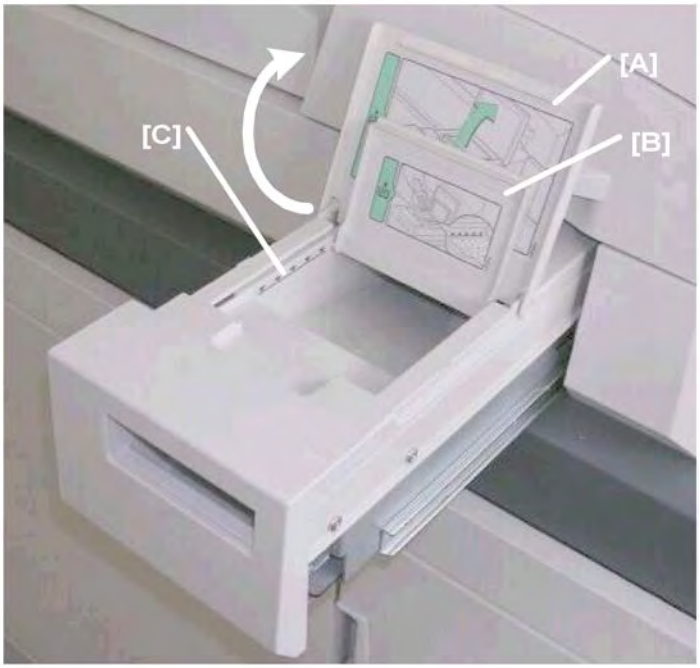
13. At each corner use the wrench [A] to turn the nut in the direction of the arrow to raise the bookbinder [B] until the caster [C] raises off the floor.

14. Place a level on the top edge of the front and right edge of the machine to confirm that the bookbinder is level.
15. Adjust the corner stoppers until the machine is level.
16. Connect the bookbinder interface cable to the host machine.

2.11.4 FILLING BOOKBINDER GLUE SUPPLY UNIT

d391i514

1. Pull out the glue supply drawer until it stops.



d391i515

2. Raise the two covers [A] and [B].
3. Note the load limit marks [C] inside the drawer on both sides.

d391i156

4. Use the scoop [A] to fill the bin with glue pellets as far as the load limit marks on both sides of the drawer.

Important

- Two scoops (about 380 g each) should be sufficient.

5. Close both covers.
6. Push in the glue supply drawer.

Handling and Storing the Glue Pellet Supply

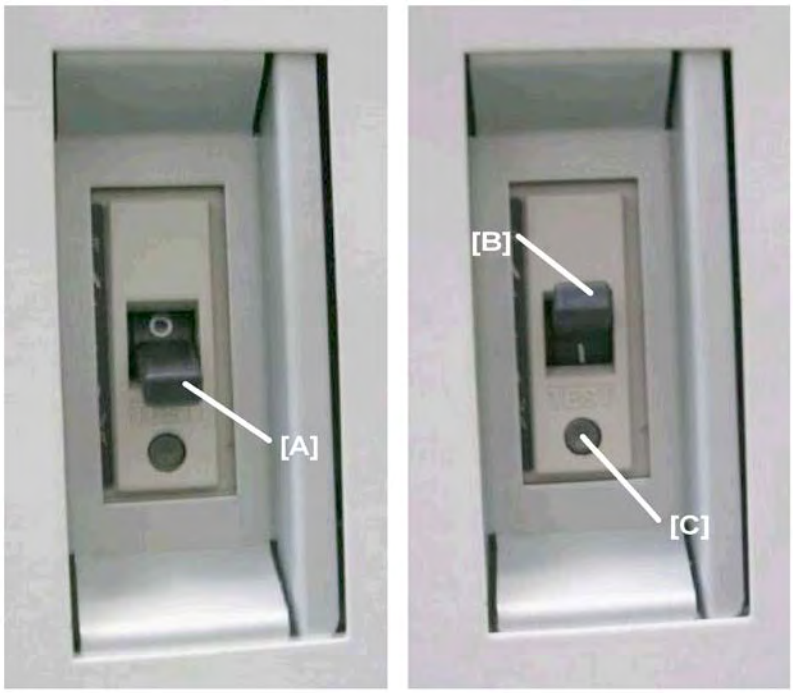
Exercise precaution when choosing a location for storing the glue pellets.

- Store the pellets where they will not be exposed to direct sunlight.
- The storage location should be within this temperature range: -20°C to 40°C.
- Never expose pellets to direct flame.
- Keep the pellets out of the reach of small children. If pellets are accidentally ingested, contact a physician immediately.
- Never dispose of pellets by incinerating them. Obey local laws and regulations that restrict disposal of such items.

When using the glue pellets:

- Use only glue pellets recommended for use with this bookbinder.
- Before the start of a job, press the glue warm-up button on the right front corner of the bookbinder to start heating the glue.
- Never fill the glue pellet supply drawer higher than the load limit marks shown on both sides of the drawer.

2.11.5 TESTING THE BREAKER SWITCH



d391i517

1. Turn off the host machine.

   Important

   - The power supply to the bookbinder must be off.
2. Plug the bookbinder power cord into its power source.
3. Locate the breaker switch [A] at the right lower corner of the machine below the power cord.
4. Raise the breaker switch [B] so you can see the "|" under the switch. This is the ON position. (Ignore this step if the breaker switch is already at the "|" position.)
5. Use the tip of a small screwdriver to push the breaker test button [C].

   The breaker switch should flip to the "**O**" (OFF) position. This indicates that the breaker switch is operating normally.

   If the breaker switch does not flip to the "**O**" position, the switch must be replaced.
6. Reset the switch to the "**|**" (ON) position for normal operation.

   Important

   - The bookbinder will not turn on if the breaker switch is not reset to the "|" position.

2.11.6 FINAL CHECK

1. Connect the power cord of the copier to its power source.
2. Connect the power cord of the bookbinder to its power source.
3. Turn on the host machine.

2.11.7 SETTING THE BOOKBINDER FOR MOVING

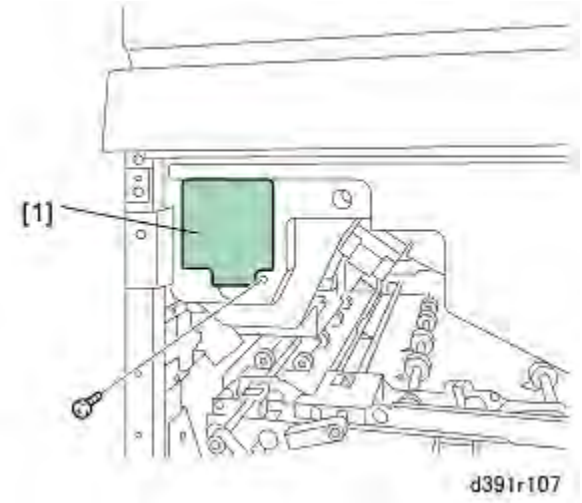
Do this procedure to move the internal units to their home positions before moving the machine.

Important

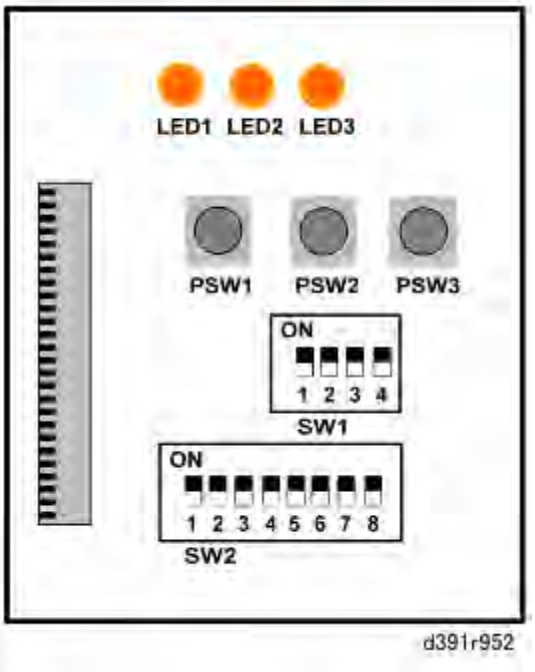
- This procedure must be done before reattaching any braces to the perfect binder.

1. Switch the host machine off.
2. Open the right and left front door.
3. Close the right door.

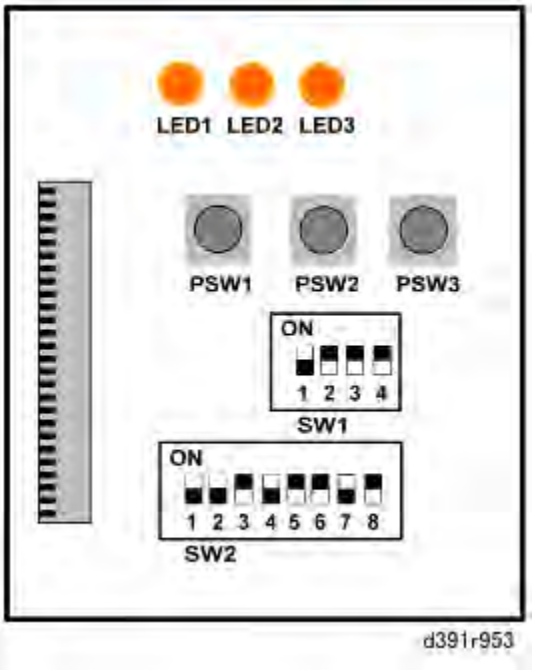
4. Insert piece of cardboard or folded piece of paper into the slot [1] of the left door switch.



5. Remove the service board cover [1] (x1).



6. On the SW1 bank set DIP SW1 to ON.
7. On the SW2 bank set DIP SWs 1, 2, 4, 7 to ON.



8. Turn the host machine on.

⚠CAUTION

- Wait about 30 sec.
- Make sure that you hands and tools are well clear of the parts inside the machine.

9. Slowly push [PSW1] 11 times.
   - Each push on the [PSW1] moves a unit to its shipping position (see table below).
   - After each push LED2 flashes until the task has been completed. Wait for LED2 to go off before you press [PSW1] again.

No.	Operation	Target Unit
1	▪ Moves the blade cradle to its initial position. ▪ Moves the signature press blade to its END position. ▪ Moves inside the trimming unit. ▪ Opens the rotation guide plate. ▪ Lowers the slide to mechanical stopper.	Trimming Unit (This requires more time. Wait for LED2 to go OFF before pressing [PSW1] again.
2	Closes the rotation guide plate.	Cutter Rotation Unit
3	Moves the trimmings buffer into the machine.	Trimmings Unit Cutter
4	Lowers the sub gripper, signature gripper.	Sub Grip Unit
5	Lowers the stacking tray.	Stacking Tray
6	Retracts the right and left cover path guide plates.	Cover Unit
7	Opens the spine fold plate (movable side only)	Cover Unit
8	Closes the right and left cover path guide plates.	Cover Unit
9	Rotates the main gripper.	Main Grip Unit
10	Lowers the main gripper.	Main Grip Unit
11	Closes the main gripper.	Main Grip Unit

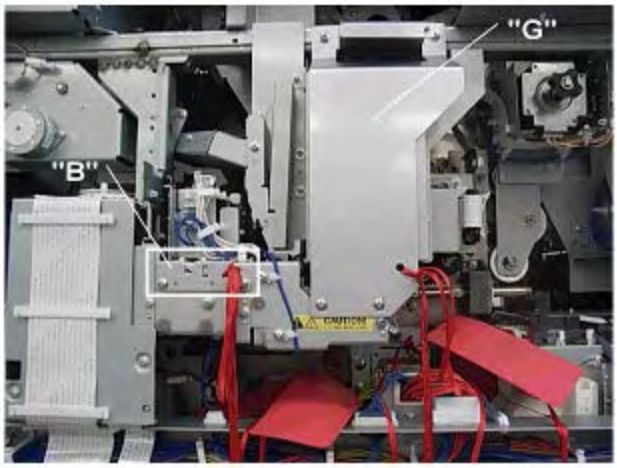
- All three LEDs on the Service Board light after all units have been moved to their shipping positions.

10. Set all the SW1 and SW2 DIP SWs to the down positions.
11. Switch off the host machine.
12. After moving the machine to its new location:
    - Remove any shipping brackets that have been reattached.
    - Connect and turn on the book binder. The internal units will automatically move to their start positions.

Same Floor

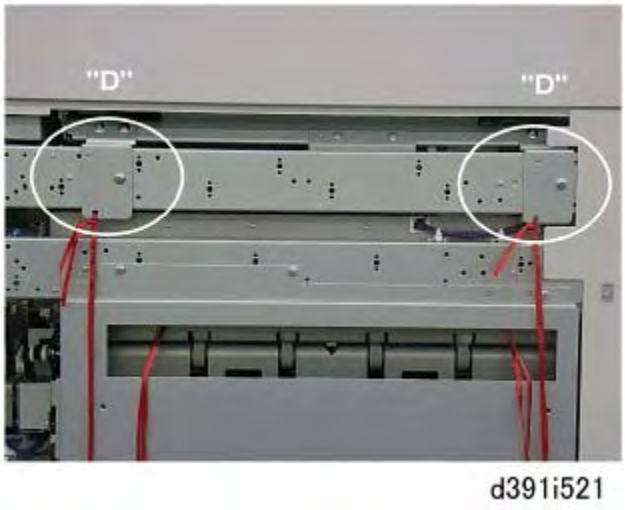
If the bookbinder will be moved to another location on the same floor where there are few bumps or ridges (cable protectors, for example), reattach the braces at two locations to stabilize the gluing unit and sub grip unit.

Gluing Unit



Brace	Quantity
Brace "B" (x4)	1
Brace "G" (x4)	1

Sub Grip Unit

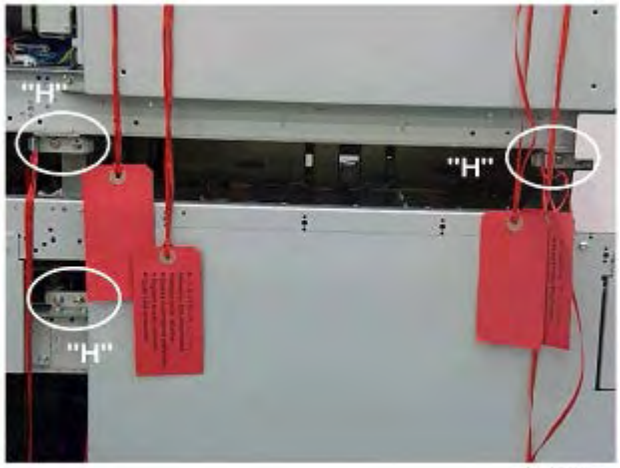


Brace	Quantity
Braces "D" (x3 ea.)	2

Another Floor (by Elevator)

If the bookbinder will be moved by elevator to a different floor in the same building attach the braces to stabilize the gluing unit, sub grip unit (described above) and the two additional locations described below.

Left Side (Paper Exit)



d391i522

Brace	Quantity
Braces "H" (x2 ea.)	3

Right Side (Paper Entrance)

d391i523

Brace	Quantity
Brace "H" (x2)	1

2.11.8 SHIPPING THE BOOKBINDER

Follow the installation instructions in reverse and reattach as many of the braces and cushions as possible.

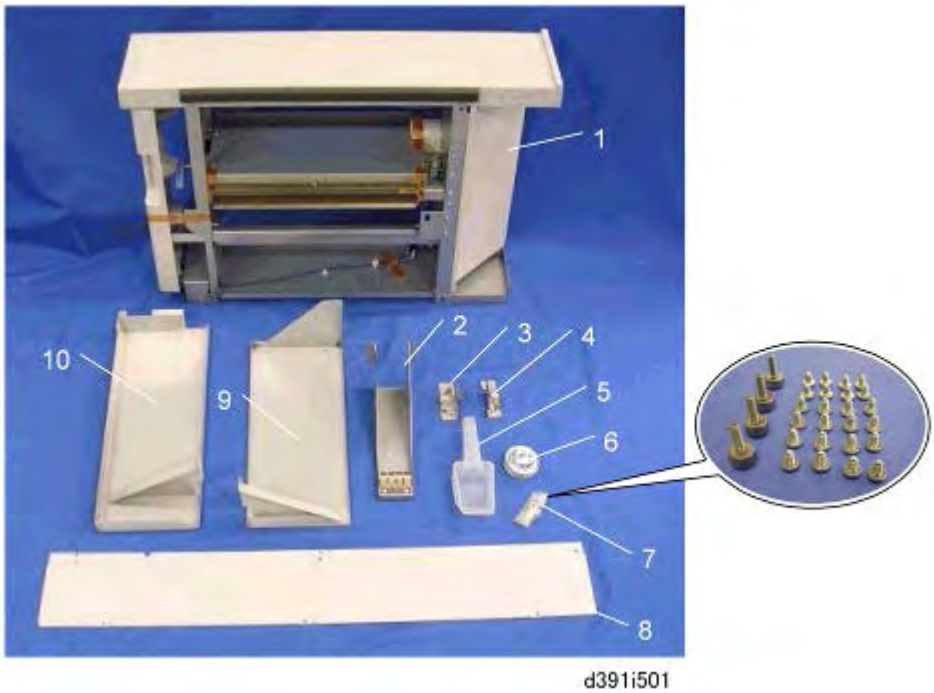
- Use the Service Board DIP SWs to set the components inside the machine to their correct moving positions before you reattach any braces. (See procedure above.)
- Make sure the braces are fastened with their screws and clearly marked for removal with the original red tags (or improvised tags).
- Do not turn on the bookbinder until you have confirmed that all braces have been removed.
- The book binder is extremely heavy. At least four persons will be needed to move the bookbinder onto its pallet.

2.12 TRANSIT PASS UNIT FOR PERFECT BINDER TYPE S1

2.12.1 RELAY UNIT ACCESSORIES

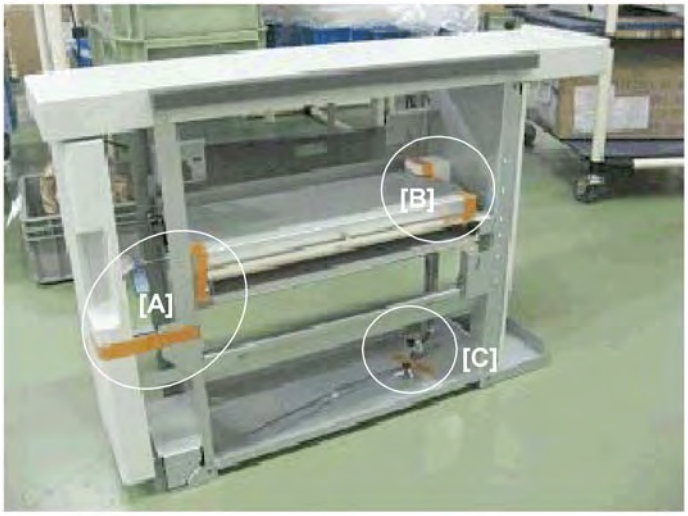
Check the accessories and their quantities against this list.

No.	Description	Q'ty
1.	Transit Pass Unit (Relay Unit)	1
2.	Ground Plate	1
3.	Joint Bracket (Left)	1
4.	Joint Bracket (Right)	1
5.	Scoop (for loading glue pellets)	1
6.	Shoe Plates (for host machine)	4
7.	Screws	28
8.	Cover (Left: Rear for host machine)	1
9.	Front Cover (for relay unit)	1
10.	Rear Cover (for relay unit)	1



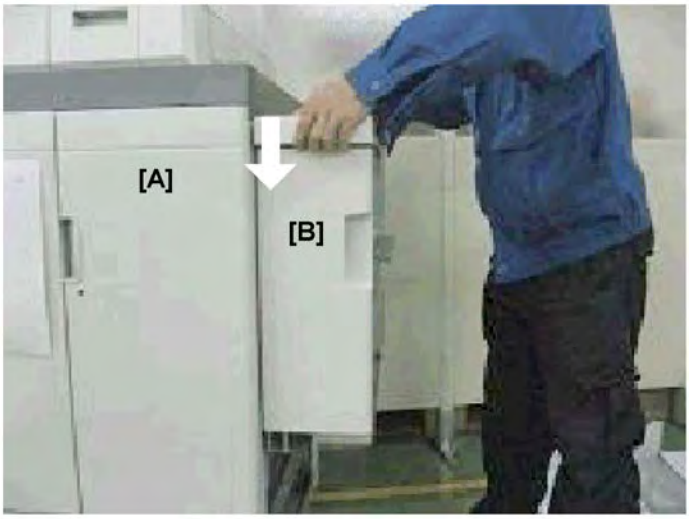
d391i501

2.12.2 RELAY UNIT INSTALLATION



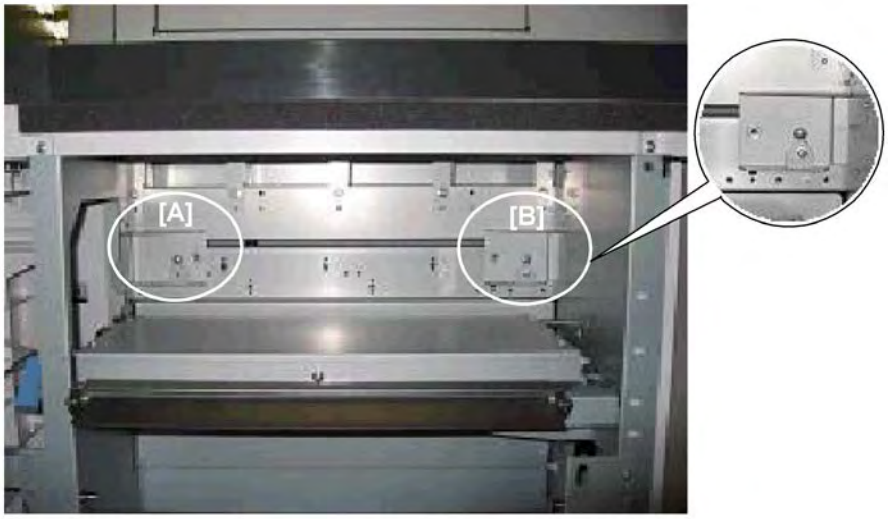
d391i502

1. From the relay unit remove:
   [A] Strips of tape x2
   [B] Strips of tape x3, cushion x1
   [C] Tape x1



d391i503

2. On the right side of the host machine [A], lower the relay unit [B] onto the two shoulder screws (front and rear).

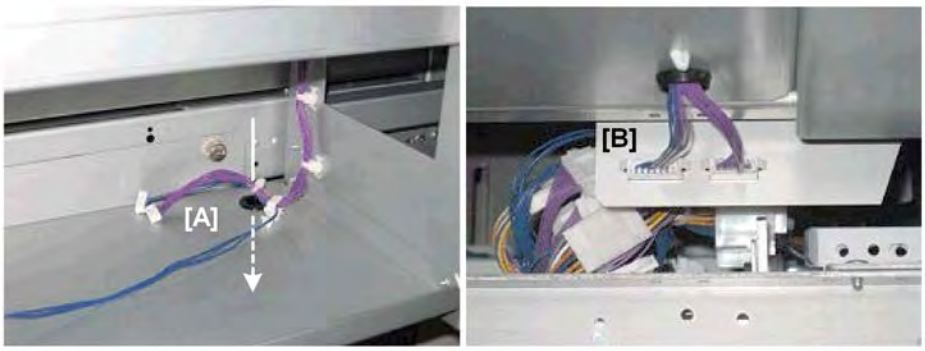


d391i504

3. Confirm that the slots on the left side of the relay unit are both hooked correctly on the heads of the shoulder screws [A] and [B].

d391i505

4. Use the accessory screws (long, knurled heads) to fasten the relay unit to the side of the host machine (x4).



d391i506

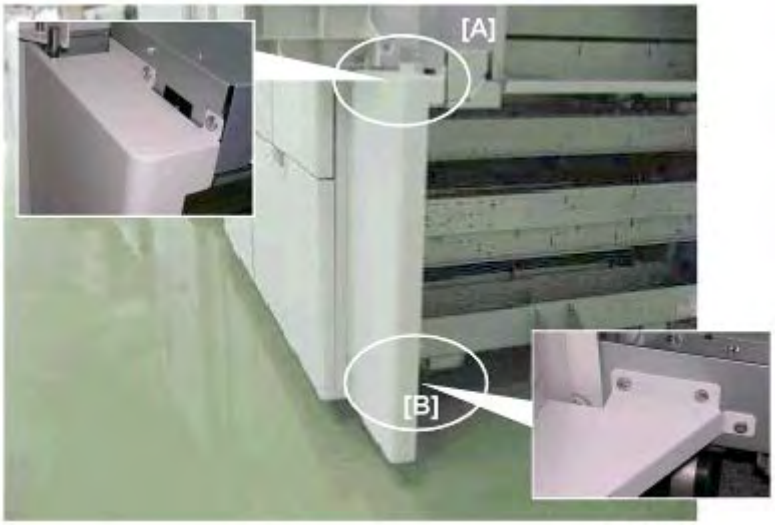
5. Route the two relay unit harnesses through the grommet and hole [A].
6. Attach the harnesses at [B] below.

d391i507

7. Attach the rear cover to the relay unit.
   [A] x2
   [B] x3

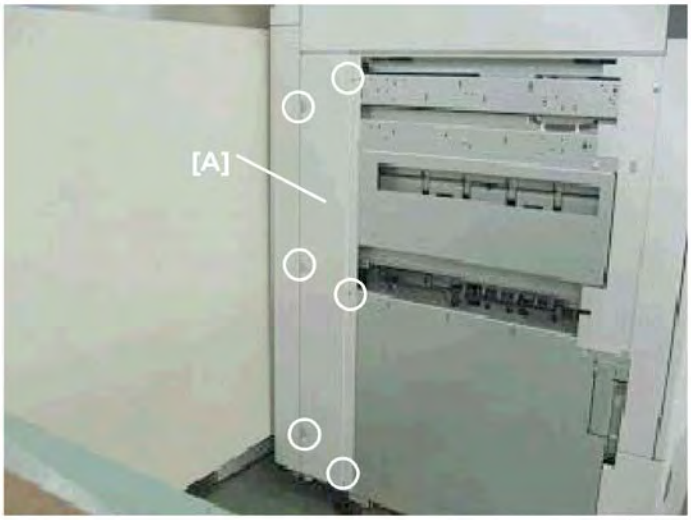
d391i509

8. Attach the ground plate [A] (x4)



d391i508

9. Attach the front cover to the relay unit.
   [A] x2
   [B] x3



d391i510

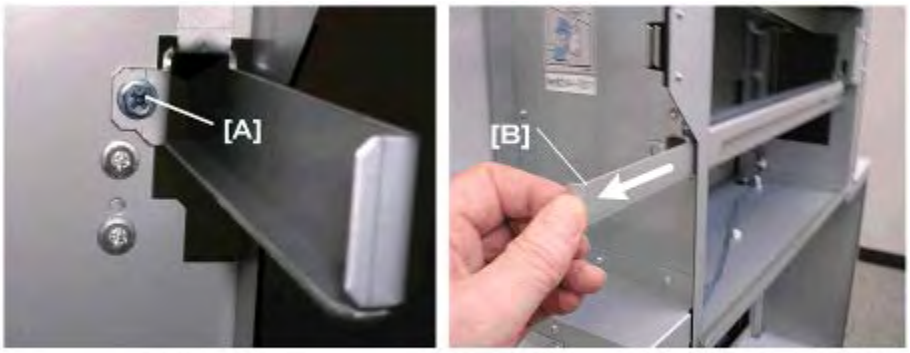
10. At the left rear corner of the host machine, attach the cover [A] (x6).

d391i513

11. On the right side of the host machine, attach:

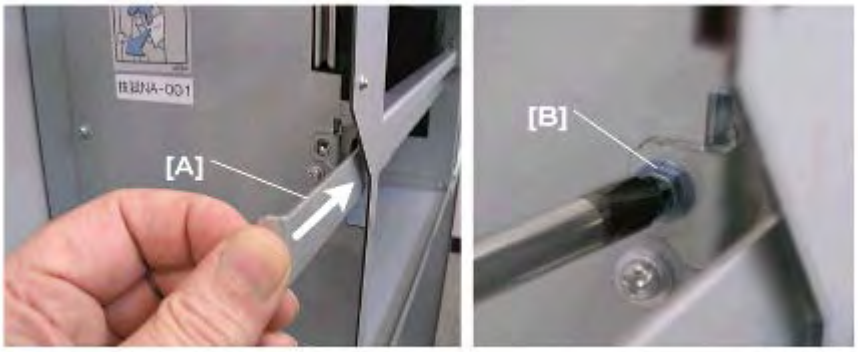
[A] Left joint bracket ("L") (x2)

[B] Right joint bracket ("R") (x2)



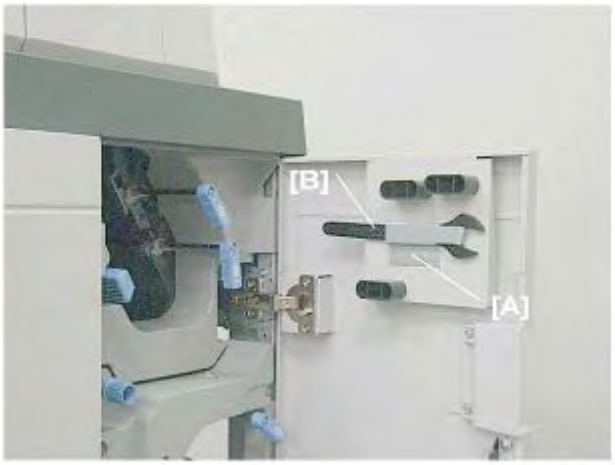
d391i518

12. Open the front door of the relay unit.
13. Remove screw [A].
14. Pull the lock bar [B] out to lower it.
15. Slowly push the bookbinder against the side of the host machine.



d391i519

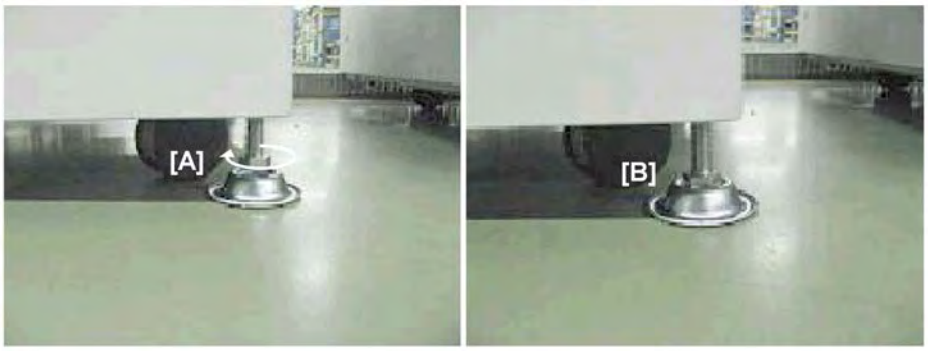
16. Push in lock bar [A] to raise it and lock it in the cutouts of the joint brackets attached to the host machine.
17. Reattach screw [B] to fasten the lock bar in the raised position.



d391i361

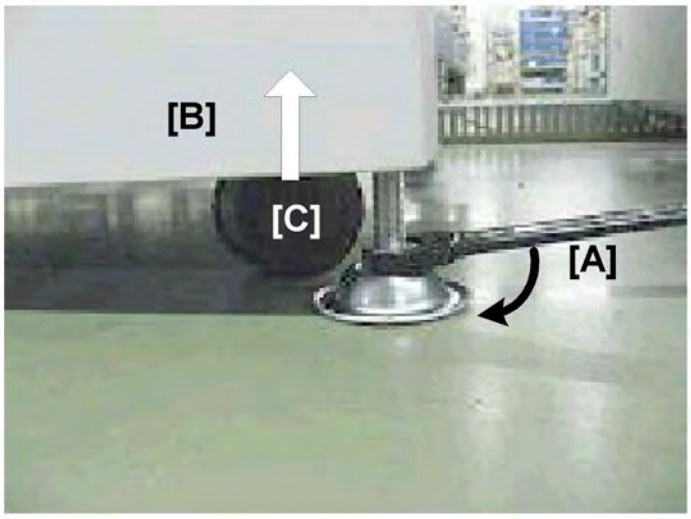
18. Remove the brace [A] from the right front door of the bookbinder. (x1)

19. Remove wrench [B].



d391i511

20. Place a shoe [A] under the stoppers at each corner of the bookbinder.
21. Use your fingers (or the wrench) to turn the nut in the direction of the arrow until the nut stops on top of the shoe.



d391i512

22. At each corner use the wrench [A] to turn the nut in the direction of the arrow to raise the bookbinder [B] until the caster [C] raises off the floor.
23. Place a level on the top edge of the front and right edge of the machine to confirm that the bookbinder is level.
24. Adjust the corner stoppers until the machine is level.
25. Connect the bookbinder interface cable to the host machine.

Testing the Breaker Switch

1. Turn off the host machine.

   Important

   - The power supply to the bookbinder must be off.
2. Plug the bookbinder power cord into its power source.
3. Locate the breaker switch [A] at the right lower corner of the machine below the power cord.
4. Raise the breaker switch [B] so you can see the "|" under the switch. This is the ON position. (Ignore this step if the breaker switch is already at the "|" position.)
5. Use the tip of a small screwdriver to push the breaker test button [C].

   The breaker switch should flip to the "**O**" (OFF) position. This indicates that the breaker switch is operating normally.

   If the breaker switch does not flip to the "**O**" position, the switch must be replaced.
6. Reset the switch to the "**|**" (ON) position for normal operation.

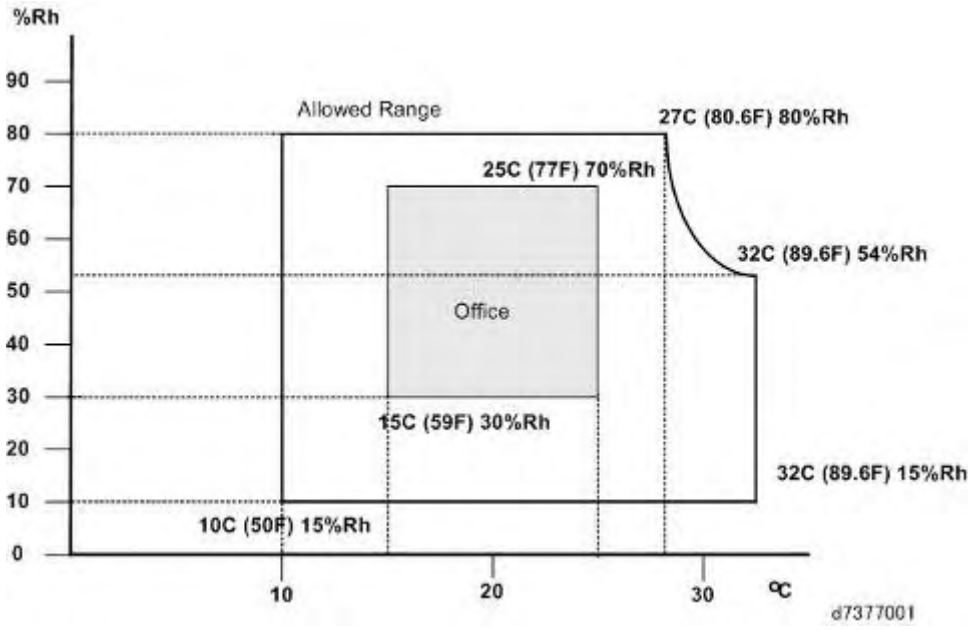
   Important

   - The bookbinder will not turn on if the breaker switch is not reset to the "|" position.

2.13 RING BINDER RB5020

2.13.1 OPERATING ENVIRONMENT

1. Temperature Range
   - Allowed: 10°C to 32°C (50°F to 90°F)
   - Recommended: 15°C to 25°C (59°F to 77°F) Rh 50%
2. Humidity Range:
   - Allowed: 15% to 80% Rh
   - Recommended: 30% to 70%
3. Ambient Illumination: Less than 1,500 lux (do not expose to direct sunlight or strong light.)
4. Ventilation: Air must be replaced a minimum of 3 times per hour
5. Ambient Dust: Less than 0.10 mg/m^3



6. If the installation area has air-conditioners or heaters, put the finisher in a location that agrees with these conditions:
   - Where there are no sudden temperature changes from low to high, or high to low.
   - Where it will not be directly exposed to cool air from an air conditioner in the summer.
   - Where it will not be directly exposed to reflected heat from a heater in the winter
7. Do not put the finisher where it will be exposed to corrosive gases.
8. Put the finisher on a strong and level surface. The front and rear of the machine must be less than 5 mm (0.2") away from level.
9. Do not put the finisher where there could be strong vibrations.
10. Do not connect the finisher to a power supply shared with other electrical devices.
11. The machine generates a strong electromagnetic field. This can cause interference with radio or television reception.

2.13.2 MACHINE LEVEL

1. Front to rear: Less than 5 mm (0.2") away from level
2. Right to left: Less than 5 mm (0.2") away from level

   The finisher legs can be turned to adjust them up or down to make the machine level.

2.13.3 MINIMUM SPACE REQUIREMENTS

The minimum clearances at the front and back are the same as the host machine.

2.13.4 POWER SUPPLY

Input voltage level	100 to 240V 50/60 Hz NA: 120V 50/60 Hz 5A EU: 220 to 240V 50/60 Hz 3A

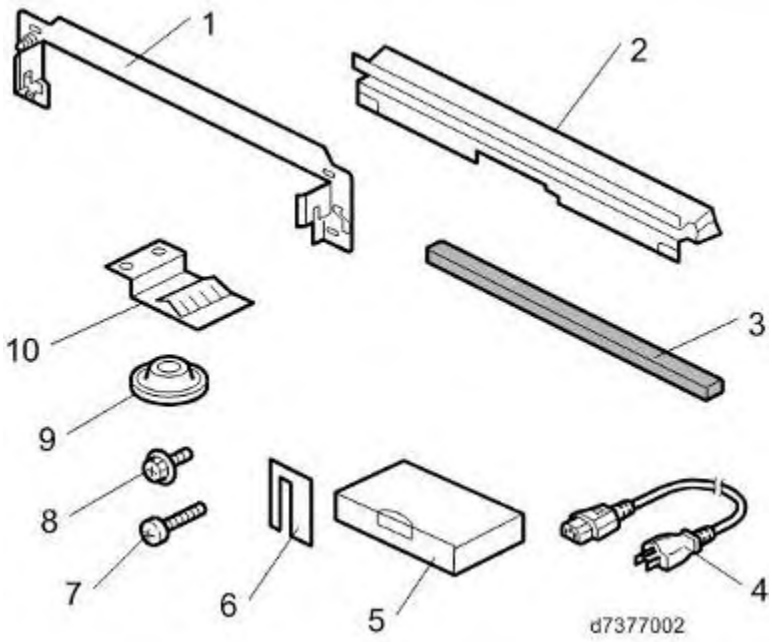
Important

- The finisher must have an independent power source. Avoid multi-wiring.
- The finisher must be properly grounded at the power source.

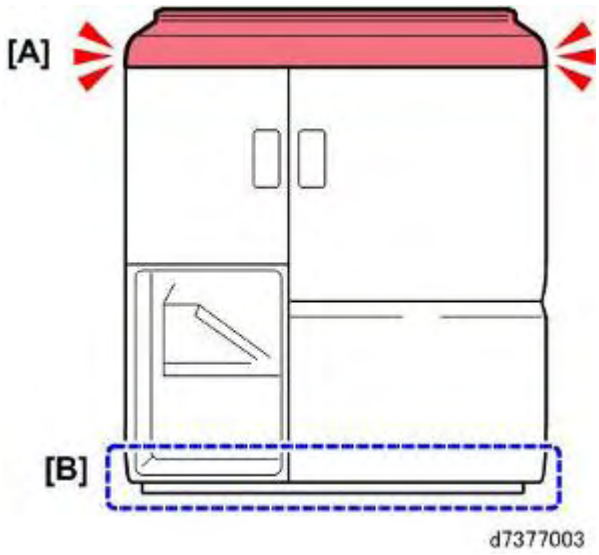
2.13.5 ACCESSORIES

Check each accessory against the list below to make sure that you have everything.

No.	Item	Q'ty
1.	Docking Bracket	1
2.	Entrance Guide Plate	1
3.	Sponge Strip	1
4.	Power Cord	1
5.	Ring Opener	1
6.	Ring Supply Level Indicator	1
7.	Screws (M4 x 14)	4
8.	Tapping Screws (M3 x 6)	4
9.	Leveling Shoes	4
10.	Ground (Earth) Plate	1



2.13.6 BEFORE YOU BEGIN



The ring binder weighs 140 kg (308 lb.).

Important

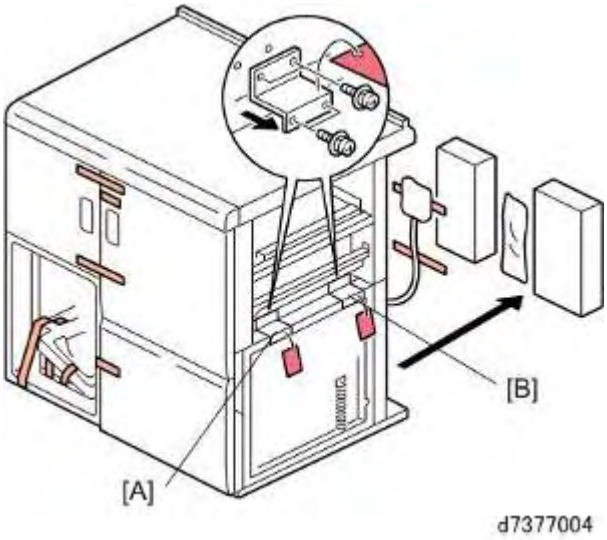
- To prevent bending or breaking the top cover, never lift the unit by its top cover [A]. Always raise the unit from the base [B].

2.13.7 INSTALLATION PROCEDURE

⚠CAUTION

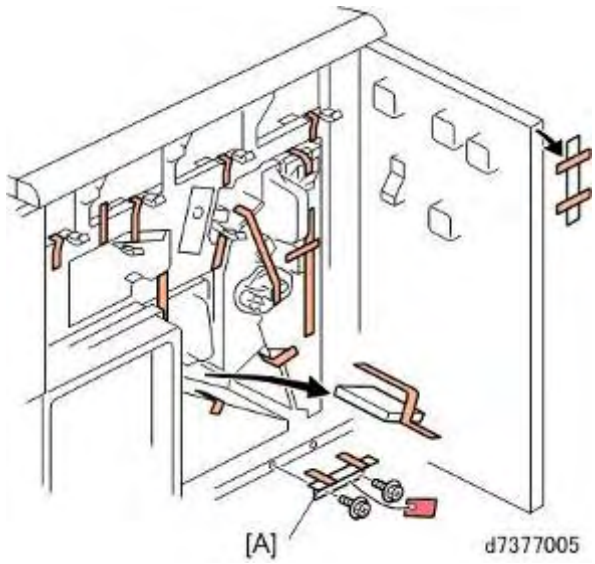
- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.
- If this unit is to be installed to the left of the mainframe, the attachment procedure of additional sponge stripe(s) is required. For details, refer to the Field Service Manual of the main machine.

Remove All Shipping Materials

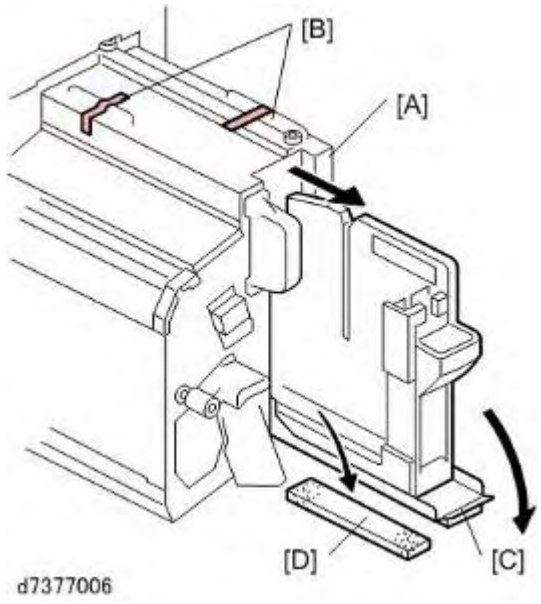


1. Remove all visible tapes, cushion, two accessory boxes, and wrapping material attached to the outside of the unit.
2. Remove:
   [A] Brace x1 (x4)
   [B] Brace x1 (x4)

   Important
   - Do not discard these braces. They must be reattached to the unit before it is moved or shipped to another location.

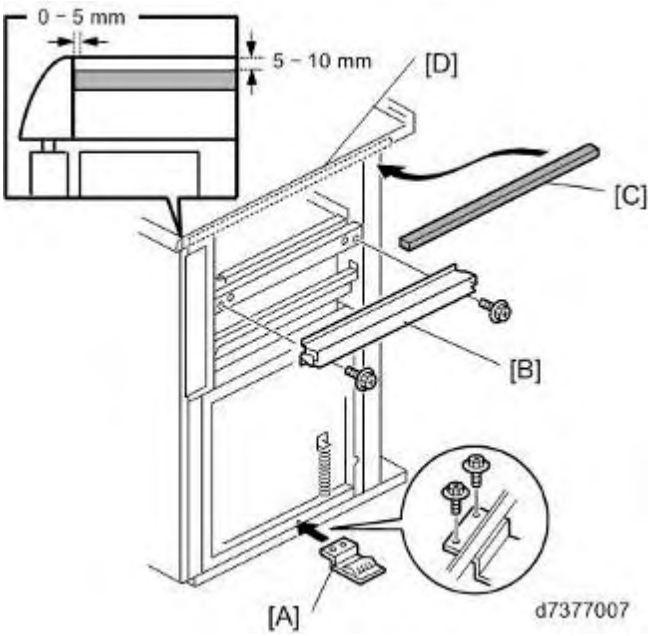


3. Open the right door and left door.
4. Remove all tapes and packing material.
5. Remove the brace and red tag [A] (x2).



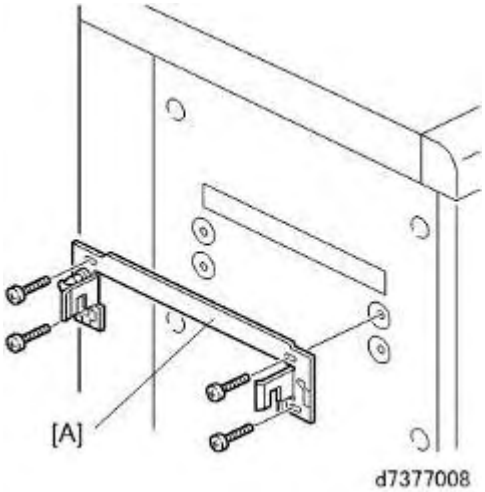
6. Pull the binder unit [A] out of the unit until it stops.
7. Remove the tape [B] on top of the unit.
8. Pull down the ring cartridge handle and cover [C].
9. Pull the ring cartridge out and remove the cushion [D].
10. Push the ring cartridge in and close its cover.
11. Push the binder unit into the unit.
12. Close the left front door and right front door.

Prepare the Unit for Docking



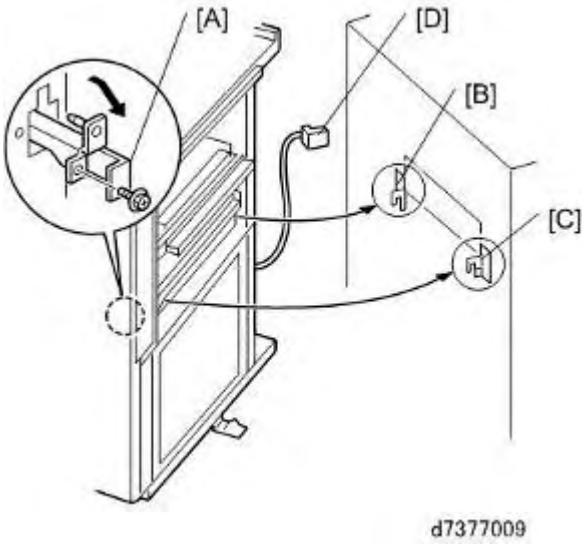
1. Attach the ground plate [A] (x2).
2. Attach the entrance guide plate [B] (x2).
3. Remove the tape from the back of the sponge strip [C].
4. Attach the sponge strip to the top edge [D] of the unit as shown above.

Prepare the Main Machine for Docking



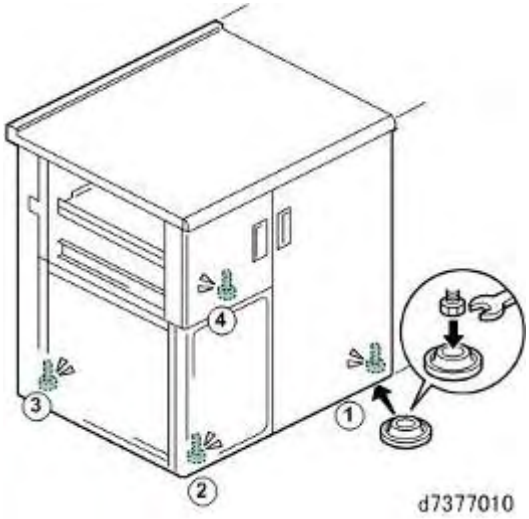
1. Attach the docking bracket [A] (M4x14 x4).

Dock the Unit to the Main Machine



1. Open the right door of the unit.
2. Pull out the locking lever [A] (x1).
3. Align the right side of the unit with the docking brackets [B] and [C] on the left side of the main machine, and then slowly push the unit onto the brackets.
4. Connect the unit's I/F cable [D] to the main machine.
5. Push in the locking lever and check that it slides into the slots of the docking brackets.
6. Check that the top edge of the unit is parallel with the left edge of the main machine.
7. Refasten the locking lever [A] (x1) and close the right front door.

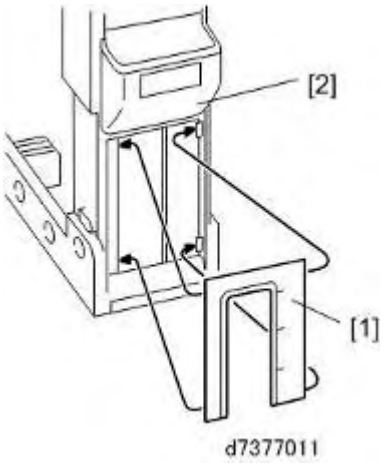
Install the Shoes and Level the Unit



1. Set the four leveling shoes under the feet of the unit.
2. Open the right front door and left front door.
3. Place a level on the frame.
4. Use a wrench to turn the nut at each foot until the machine is level.

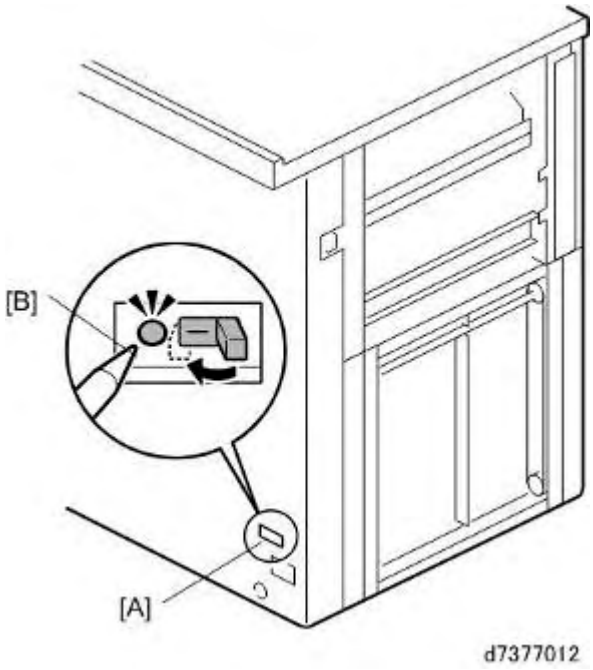
Attach Ring Supply Level Indicator

1. Open the front door.
2. Pull out the ring binder.
3. Lift the ring supply cartridge out of the top of the binder unit.



4. Set the ring supply level indicator [1] behind the tabs on the side of the ring supply cartridge [2].

Test the Breaker Switch



1. If the main machine is on, turn it off.
2. Confirm that the breaker switch [A] is set to the right.

Note

- The breaker switch is at the bottom of the left rear corner near the power cord. When it is set to the right, you should see a straight line (-).

3. Connect the power cord to the finisher, then connect the other end to a power supply outlet.
4. Use the sharp point of a pen [B] or similar tool to push in the breaker switch until it snaps to

the off position. (You should see "**0**".)

5. If the breaker does not snap to the off position:
   - Check that the power cord is correctly connected to the finisher and power supply.
   - Push the breaker switch again to see if it snaps to the off position.
   - If the breaker switch does not snap to the off position, it must be replaced.
6. Be sure to reset the breaker switch to the on (**-**) position.

2.13.8 CENTERING PAPER IN THE PAPER PATH

At installation you must confirm that the paper is exiting the ring binder correctly and do the necessary correction if required. There are two checks:

- The paper should be centered in the paper path.
- The paper should feed straight out of the ring binder.

Checking and Correcting Side-to-Side Registration

Checking Side-to-Side Registration

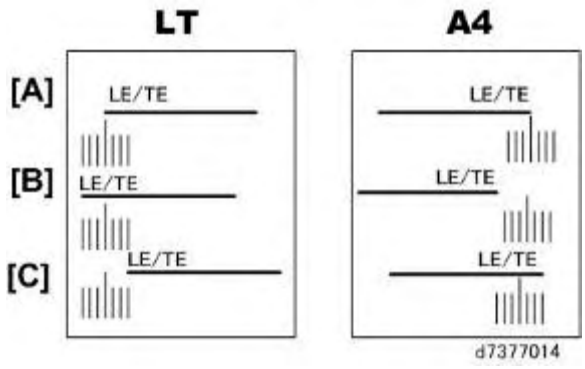
Do this check to confirm that the paper is centered in the paper path.

1. Make sure the I/F cable of the ring binder unit is connected.
2. If the finisher is connected to the left side of the ring binder, separate it and pull it away from the left side of the ring binder. **Do not disconnect the finisher.**
3. Enter the SP mode and temporarily disable side-to-side registration control in the main machine (SP 1206-001).
4. Execute a run by feeding paper (A4 or LT) from Tray 2 of the host machine (punching only, no ring binding).

5. During the run, each sheet of paper briefly protrudes about 5 to 10 mm before it switches back into the ring binder and feeds to the punch unit, as shown above.
   - There are two scales on the left side of the ring binder below the paper exit.
   - The rear scale [1] is for LT-size paper and the front scale [2] is for A4-size paper. Be sure to read the correct scale for the paper size in use.
6. Check the position of the paper on the scale to determine if the paper is centered.

Important

- Read the rear scale for LT-size paper and the front scale for A4-size paper.
- The scale lines are spaced 2 mm apart.
- The edges of the paper should be at the center line and not deviate more than ±2 mm.



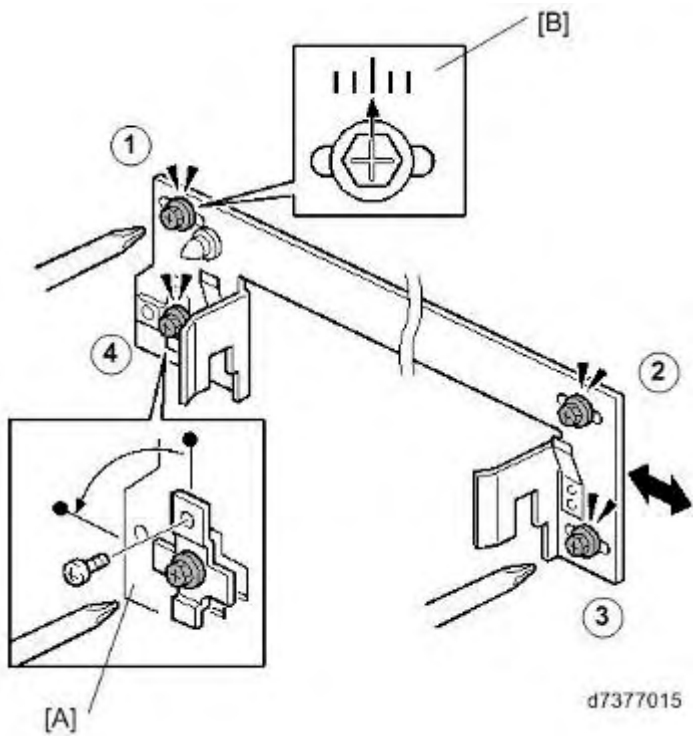
[A]	Leading/trailing edges centered. No adjustment necessary.
[B]	Leading/trailing edges offset to the rear more than 2 mm. Adjustment required.
[C]	Leading/trailing edges offset to the front more than 2 mm. Adjustment required.

7. If the edge of the paper is on the scale at the center [A], no adjustment is required.
   -or-
   If the edge of the paper is ±2 mm off the center line on the scale, adjustment is required. Do the procedure in the next section.

Correcting Side-to-Side Registration: Bracket Adjustment

Important

- Disconnect the ring binder from the upstream unit.



1. On the docking bracket attached to the upstream unit, loosen screws ①, ②, ③, and ④.
2. Remove bracket [A] (x1), rotate it 90 degrees, and re-fasten the screw. Changing the position of this bracket aligns the oval cut-out horizontally and frees the joint bracket so it can slide side-to-side.
3. Look at the scale [B].
4. Slide the bracket to the left or right and tighten the screw.
   If the deviation from center was toward the front, slide the bracket to the rear and tighten the screw (1).
   -or-
   If the deviation from center was toward the rear, side the bracket to the front and tighten screw ①.
5. Tighten screws ②, ③, and ④.
6. Do another test run to check the results of the adjustment.
7. When you are finished checking and correcting side-to-side registration, use the SP code to restore main machine shift control to its original value.

Checking and Correcting Skew

Checking for Paper Skew

Do this check to confirm that the paper is not skewed in the paper path.

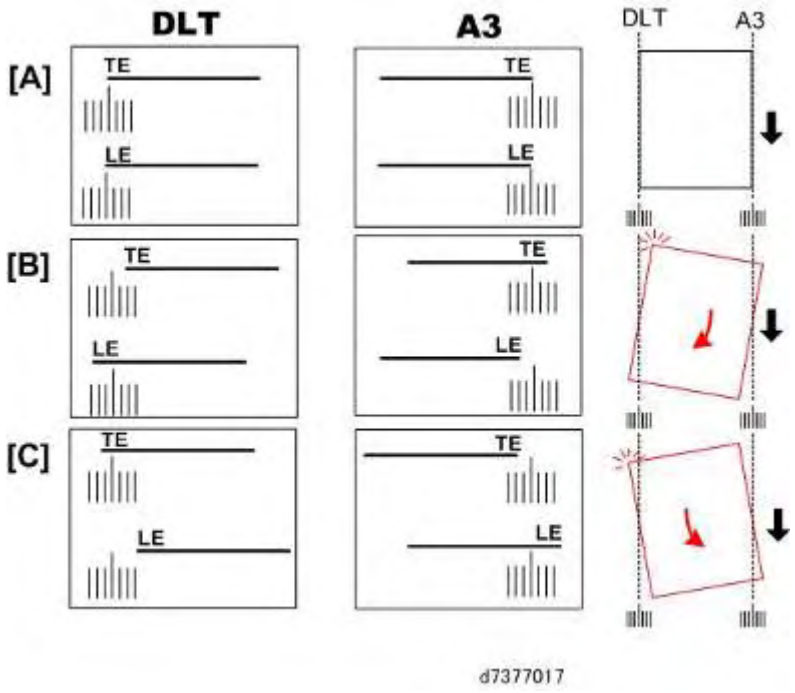
1. Make sure that the I/F cable of the ring binder unit is connected.
2. If the finisher is connected to the left side of the ring binder, separate it and pull it away from the left side of the ring binder. **Do not disconnect the finisher.**
3. Execute a straight-through run (no ring binding, no punching) with A3 or DLT from Tray 2 of the host machine.

d7377016

4. During the run, each sheet of paper exits the side of the ring binder, as shown above.
   - There are two scales on the left side of the ring binder below the paper exit.
   - The rear scale [1] is for DLT-size paper and the front scale [2] is for A3-size paper. Be sure to read the correct scale for the paper size in use.
5. Check the position of the paper on the scale to determine if the paper skews as it exits.

Important

- Read the rear scale for DLT-size paper and front scale for A3-size paper.
- The scale lines are spaced 2 mm apart.
- The paper must not deviate more than ±2 mm on the scale.

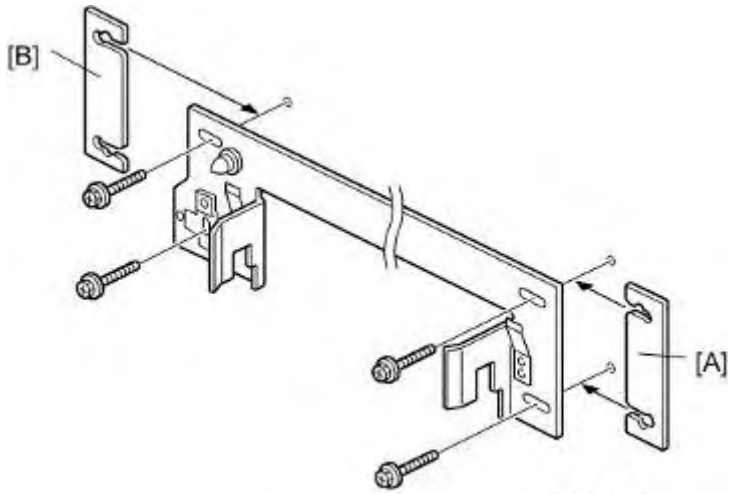


[A]	Centered. No adjustment necessary.
[B]	Trailing edge skew to the front, total skew more than ±2 mm. Adjustment required.
[C]	Trailing edge skew to the rear, total skew more than ±2 mm. Adjustment required.

Correcting Skew

1. Disconnect the ring binder from the upstream unit.

2. Remove the spacers [1] from the right side of the ring binder at the base (x2).



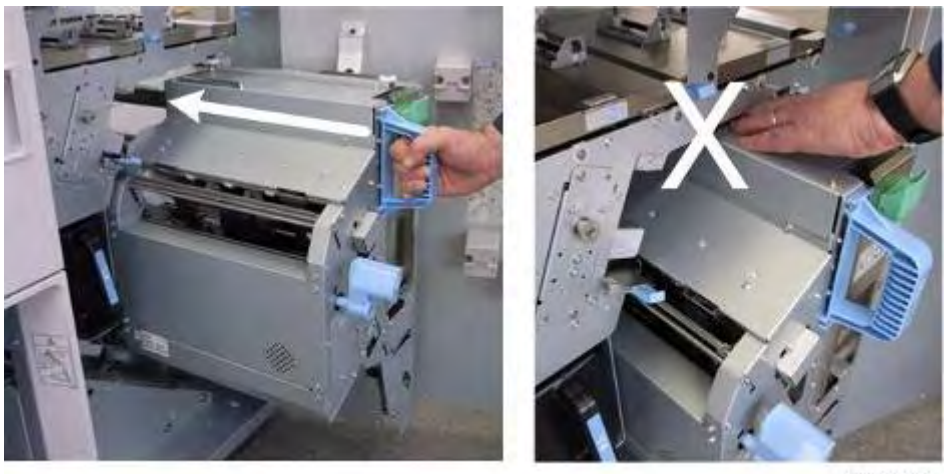
d7377019

3. On the docking bracket attached to the upstream unit, loosen the screws.
4. Insert a spacer and tighten the screws.
   If the trailing edge is skewing toward the **front** of the machine, insert a spacer [A] under the **rear** end of the bracket and tighten the screws.
   -or-
   If the trailing edge is skewing toward the **rear** of the machine, insert a spacer [B] under the **front** end of the bracket and tighten the screws.
5. To another run to check the adjustment. If skew is still present, insert another spacer.

2.13.9 AFTER INSTALLATION

Confirm that the operators understand the following important points:

- Decals attached to the machine provide guidance for removing paper jams. Point out the decal locations.
- Detailed instructions on removing ring jams are provided in the operating instructions under "Removing Jammed Ring Combs".
- When pulling out and pushing in the binder unit on its rails, always grip the binder unit by its handle (**Mc8**).



d7377020

⚠CAUTION

- Always grip handle **Mc8** when pulling out or pushing in the binder unit.
- Never touch any other surface of the binder unit when it is moving on its rails.
- To avoid injury to the fingers, never push on the top of the binder unit to slide it back into the finisher as shown above.

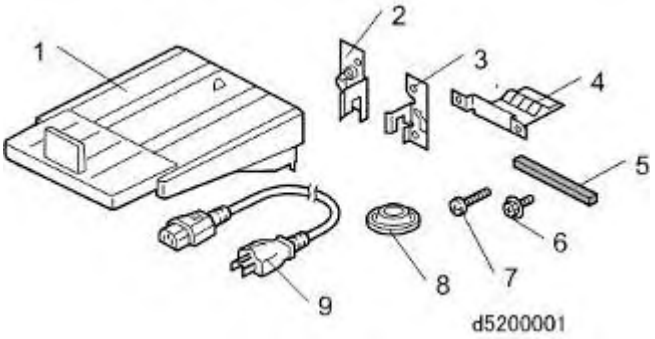
Important

- Never store paper, extra rings, manuals or any other material below the output tray. Obstacles in this area (shown in red in the illustration below) will interfere with the raising and lowering of the tray and cause an error.

2.14 TRIMMER UNIT TR5040

2.14.1 ACCESSORIES

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Output Tray*[1]	1
2.	Joint Bracket – Left (Marked "L")	1
3.	Joint Bracket – Right (Marked "R")	1
4.	Ground Plate	1
5.	Sponges	2
6.	Screws (M3x6 for Ground Plate)	2
7.	Screws (M4x10 for Joint Bracket)	4
8.	Leveling Shoes	4
9.	Power Cord	1

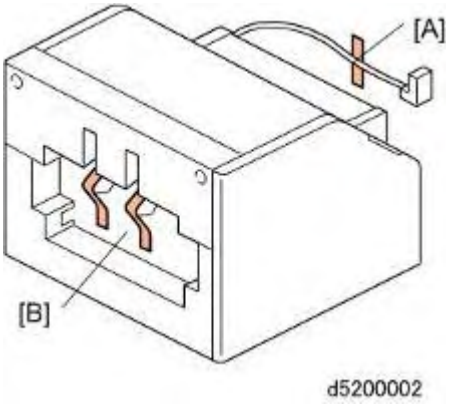
*[1]: Screws (x2) for the output tray are attached to the left side of the unit.

2.14.2 INSTALLATION

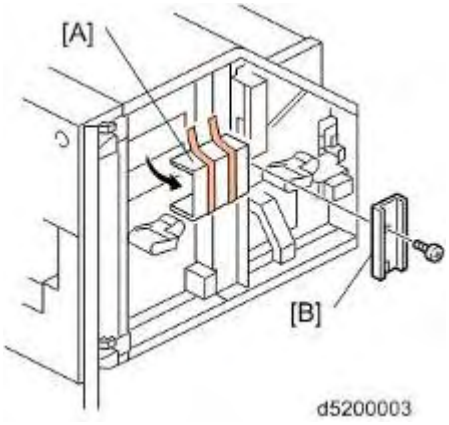
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

Tapes, Stopper Plate



1. Remove the tape on the right side to free the I/F cable [A].
2. Remove the tape from the left side [B].

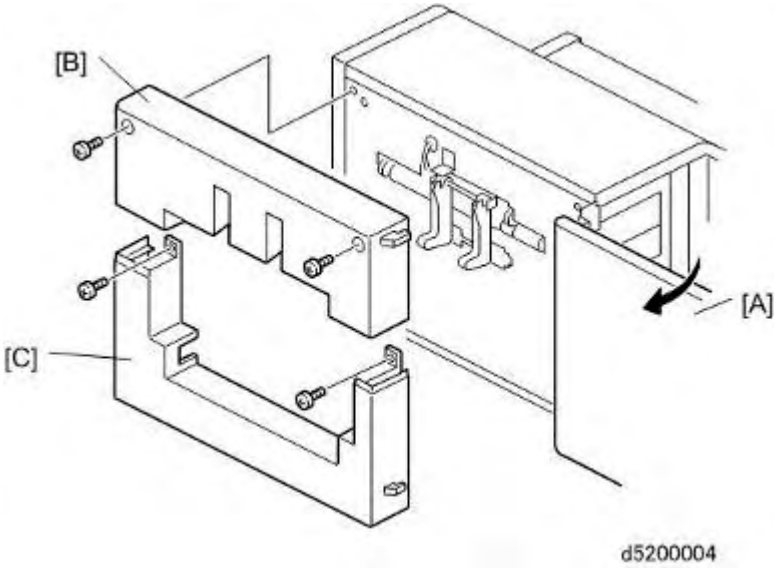


3. Open the front door and remove the retainer [A].
4. Remove the stopper plate [B] (x1).

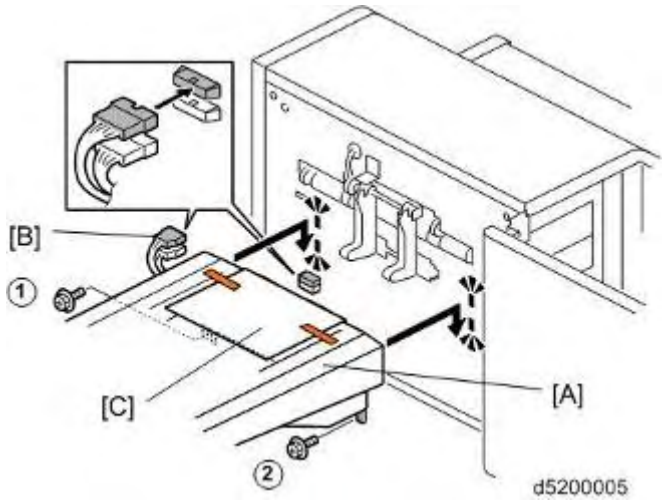
Note

- Keep the stopper plate. It should be re-installed before transporting the unit to a new location.

Output Tray

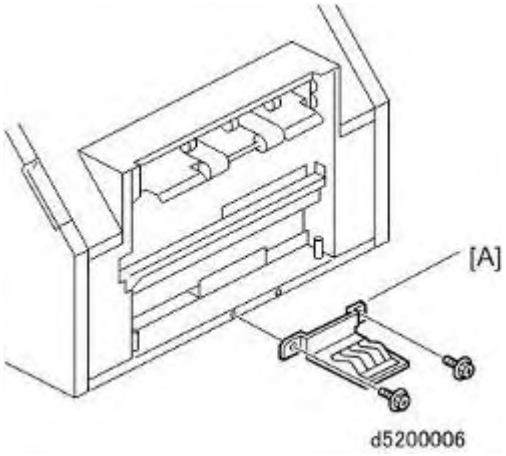


1. Make sure that the front door [A] is open.
2. Remove:
   [B] Left upper cover(x2)
   [C] Left lower cover (x2)



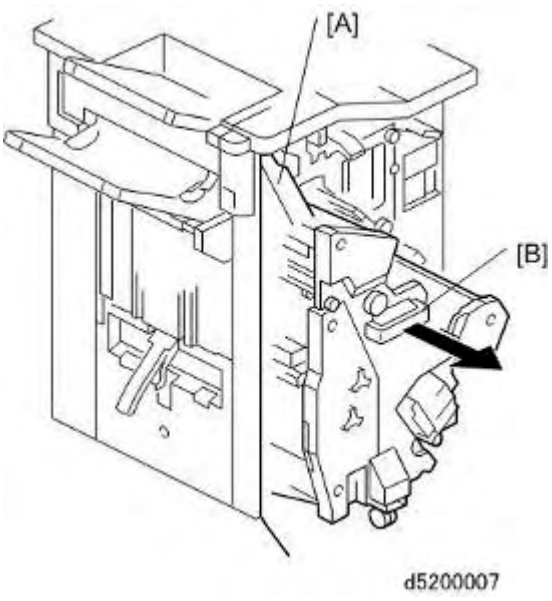
3. Remove the screws ① and ② from the left side.
4. Use the removed screws to attach the output tray [A].
5. Connect the output tray at [B].
6. Remove the sheet [C] of paper.
   - Do not remove this sheet [C] of paper before connecting the output tray to the trimmer unit.
7. Reattach the left lower cover and left upper cover.

Ground Plate

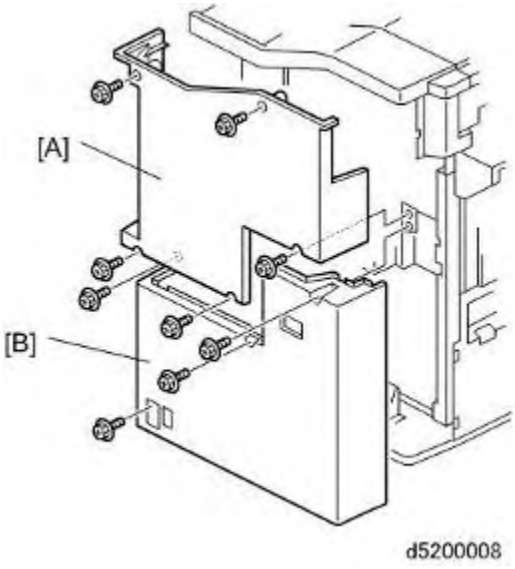


1. Attach the ground plate [A] to the right bottom edge (x2 M3x6).

Preparing the Booklet Finisher for Docking



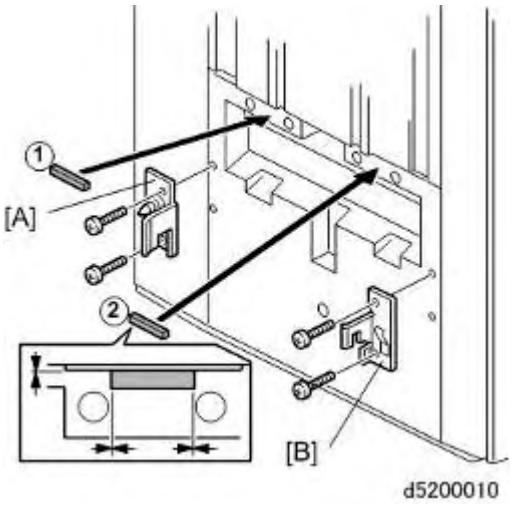
1. Open the front door [A] of the finisher.
2. Pull out the staple unit [B].



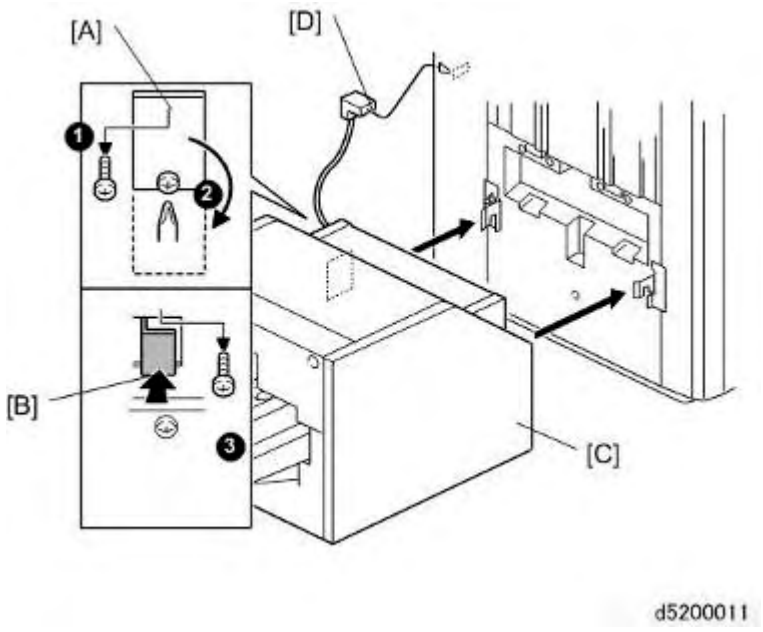
3. At the rear of the finisher, remove:
   [A] Rear upper cover (5)
   [B] Rear lower cover (x4)
4. Remove the booklet tray from the left side of the finisher. (For details, please refer to the Field Service Manual for the Booklet Finisher SR5060.

5. Insert the tray harness into the finisher.

Docking

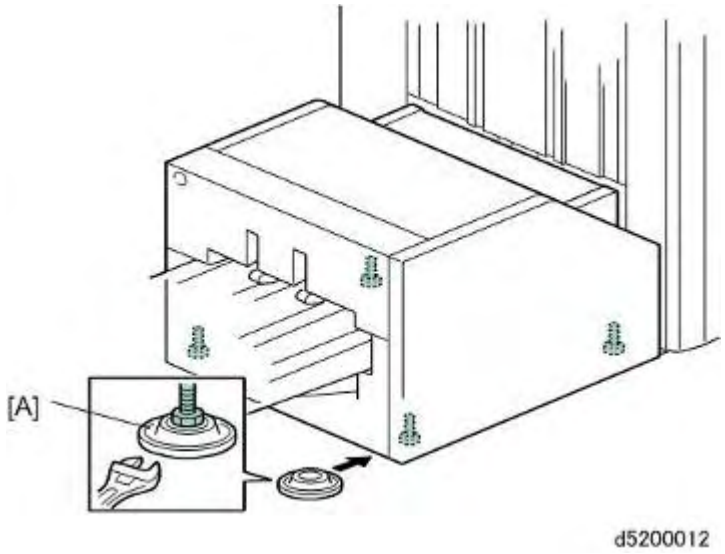


1. Attach:
   [A] Left joint bracket, marked "**L**" (x2, M4x10)
   [B] Right joint bracket, marked "**R**" (x2, M4x10)
2. Peel the tape from the back of the sponges and attach sponge ① and ②.



3. At the rear, remove screw ① from plate [A].
4. Loosen screw ② and lower the plate so you can see the lock bar [B].
5. Remove lock bar screw ③ (x1 M3x6). **Keep this screw.**
6. Push the lock bar [B] until it is unlocked.
7. Slowly push the unit [C] against the left side of the finisher so that the lock bar is directly and squarely under the arms of the joint brackets.
8. At the rear, pull lock bar [B] toward you so that it slides up into the notches in the arms of the joint brackets.
9. Fasten the lock bar by re-attaching the screw removed in Step 5. (x1).

10. Connect the unit I/F cable [D] to the finisher.
11. Connect the plug of the power cord to the power source.



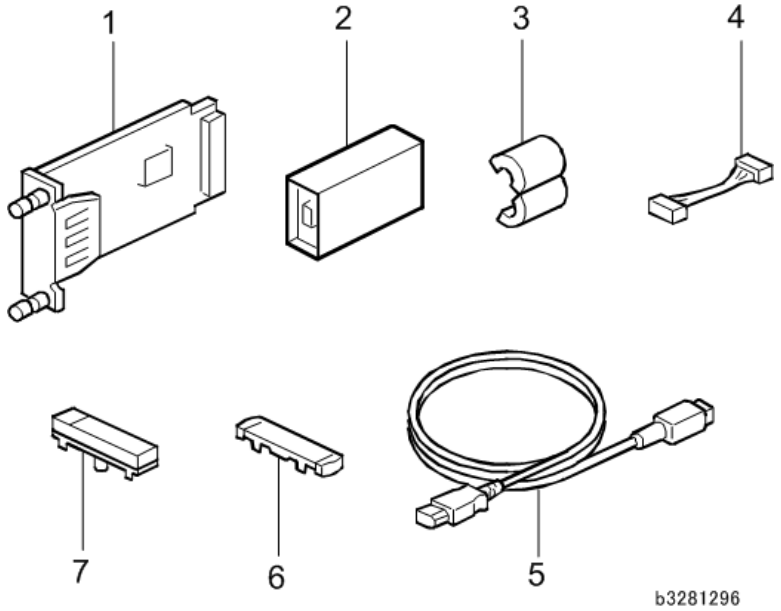
1. Set a leveling shoe [A] under each corner of the unit.
2. At each corner, turn the nut to lower the bolt onto each shoe.
3. Use a level to check each side of the unit.
4. Turn each nut to adjust the height of each corner until each side is level.

2.15 COPY CONNECTER TYPE 3260

2.15.1 ACCESSORY CHECK

Check the quantity and condition of the accessories in the box against the following illustration and list.

No.	Description	Q'ty
1.	Copy Connector Board B328	2
2.	Repeater Hub 1394	2
3.	Ferrite Core	2
4.	Power Repeater Cable	2
5.	Coupling Interface Cable 1394	3
6.	Keytop (not used)	2
7.	Keytop (not used)	2



2.15.2 INSTALLATION

⚠CAUTION

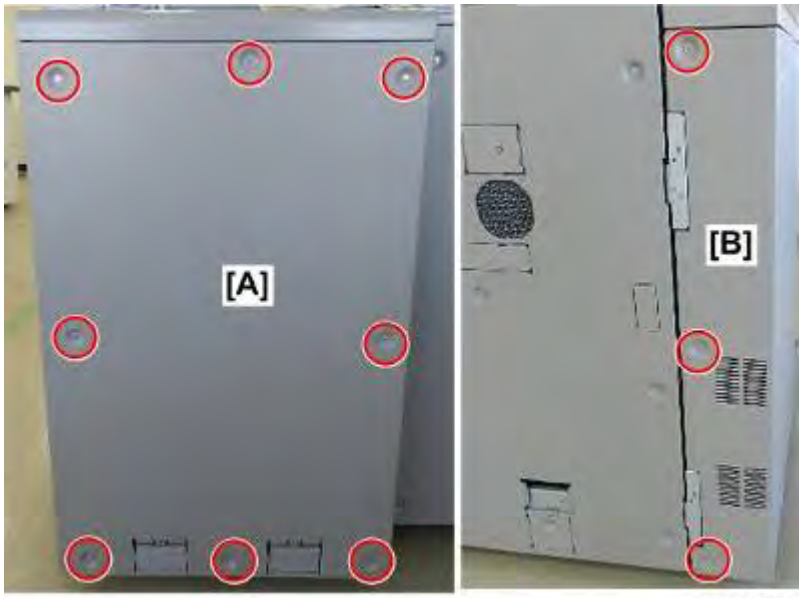
- Always switch the machine off and unplug the machine before doing the following procedure.

1. Measure the distance between the machines to be connected.
2. Determine the number of cables and repeater hubs that are necessary based on the distance measured between the machines.

Distance	Power Repeater Hubs Required	Interface Cables Required
Less than 9.0 m (Less than 29.5 ft)	1	2
9.0 to 13.5 m (29.5 to 112.5 ft.)	2	3

b3281289

3. Unfasten the left side of the controller box cover (x2).

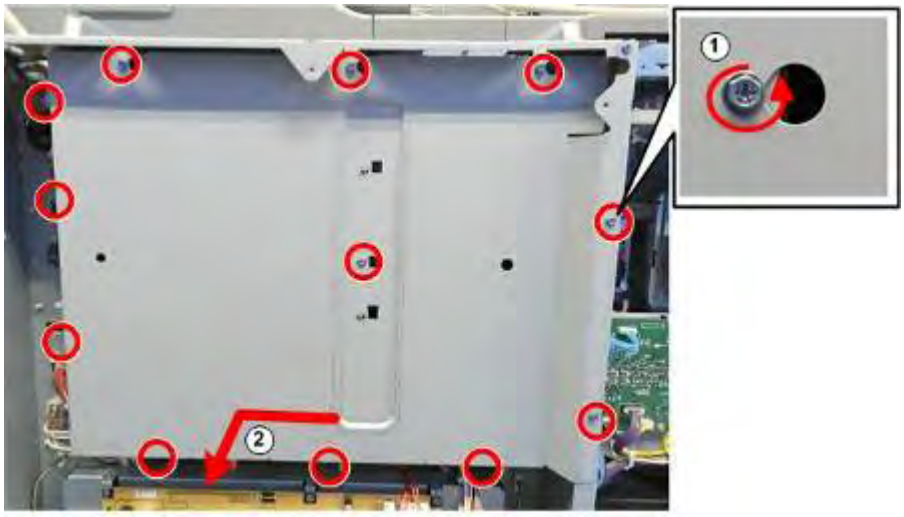


b3281290

4. Unfasten the back of the controller box cover [A] (x8).
5. Unfasten the right side of the cover [B] (x3).

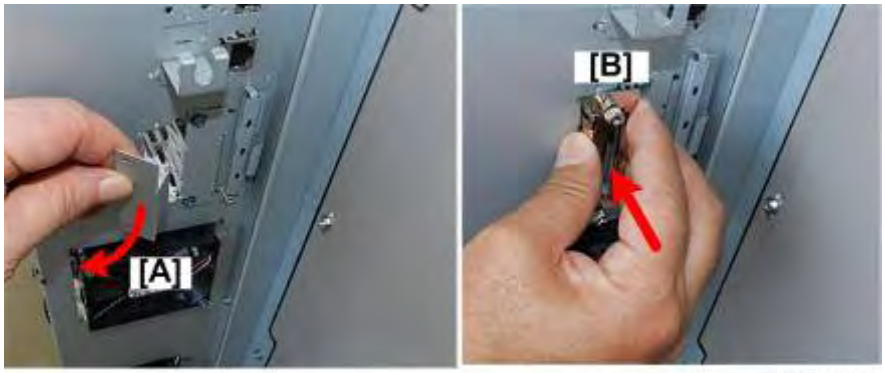
b3281291

6. Slide the cover off the top edges of the controller box, and then remove it.



d1792501

7. Loosen screws of the inner metal cover (x12).
   - Do not remove these screws.
   - Each screw slides into a larger hole ① when the cover is pushed to the left ②.
8. Slide the cover to the left and then remove it.

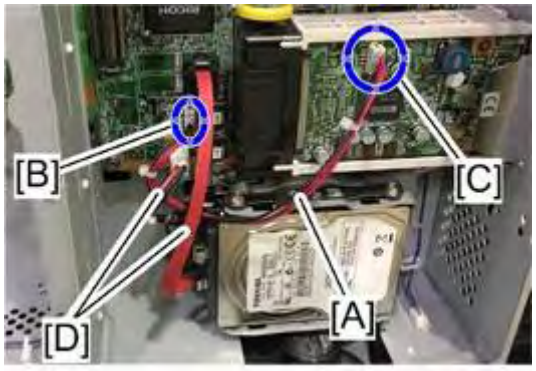


b3281292

9. Remove Slot A cover[A] (x 2)
10. Install the Copier Connection Kit Board B328 [B] in Slot A and fasten it (x2).

Note

- Tighten the board screws with your fingers. Do not tighten these screws with a screwdriver.

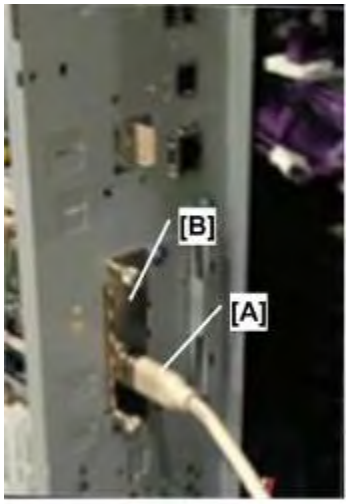


b3281283

11. Connect the power repeater cable [A] to **CN525** [B] on the controller board.
12. Connect the other end of the power repeater cable [A] to **CN4** [C] on the copy connector board.

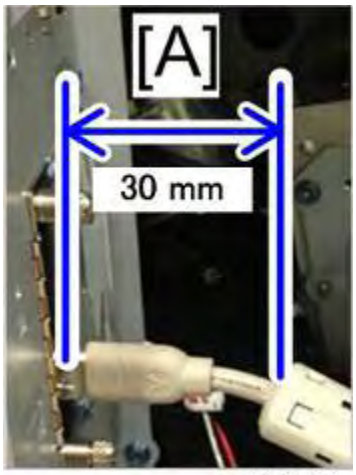
Note

- Pass power repeater cable [A] under harness [D] on the controller board when you connect it to the copy connector board.



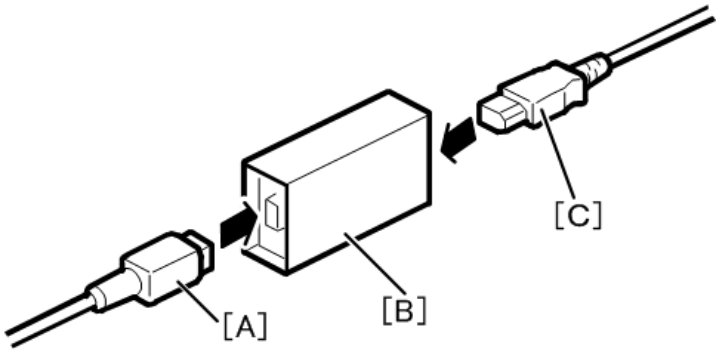
b3281293

13. Connect interface cable [A] to copy connector board [B].



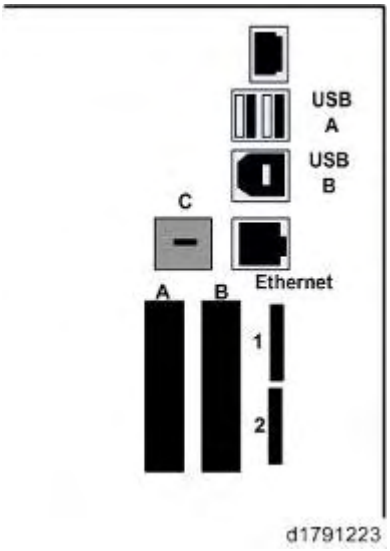
b3281294

14. Clamp ferrite core [A] 30 mm from the end of the cable.



15. Connect the other end of the interface cable [A] and repeater hub [B].
16. Repeat Steps 1 to 15 to install the connector kit on the second machine.
17. Connect the interface cable [C] from the second machine to the repeater hub [B].
18. Reattach the covers.

2.16 CONTROLLER OPTIONS



No.	Name	Slot for Installation
1	Printer/Scanner Unit Type S1	1
2	IEEE 1284 Interface Board Type A	**B**
3	IEEE 802.11a/g/n Interface Unit Type M3	**B**
4	Bluetooth Interface Unit Type D	USB A
5	PostScript3 Unit Type S1	2
6	IPDS Unit Type S1	2
7	File Format Converter Type E	**B**
8	Copy Data Security Type G	Controller Board
9	Browser Unit Type S1	2
10	Data Overwrite Security Unit Type H	2
11	SD Card for Netware Printing Type S1	2
12	OCR Unit Type M2	2

Important

- The IEEE 1284, IEEE802.11 (Wireless LAN), and File Format Converter (2, 3, and 7 in the table) are exclusive. Only one can be installed.

⚠WARNING

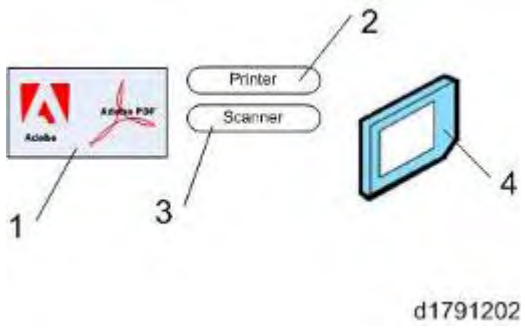
- **Always turn the machine off and unplug the main machine power cord before you do any procedure in this section.**

2.16.1 PRINTER/SCANNER UNIT TYPE S1 (NA BASIC MODEL ONLY)

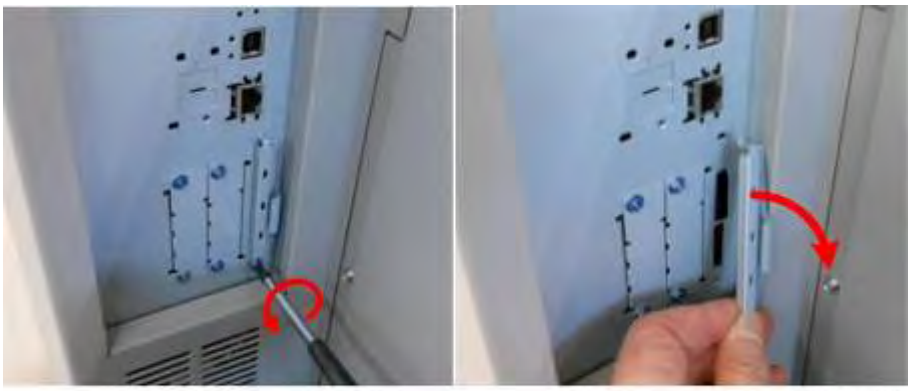
Accessories

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	PDF Decal	1
2	Printer Decal	1
3	Scanner Decal	1
4	P/S Unit SD Card	1



Installation Procedure



d1791228

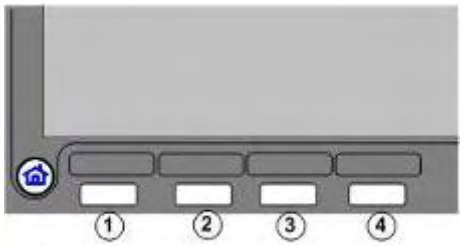
1. Remove the SD-card slot cover from the SD Card slots (x 1).

d1791226

2. Insert the SD card in Slot 1 with its label face towards the front of the machine.
3. Make sure that the machine can recognize the option.: User Tools > Printer Features > List/Test Print > Configuration Page
4. Enable the NIB and/or USB function.
   - To enable the NIB function, enter the SP mode and set SP5985-001 (On Board NIC) to “1” (Enable).
   - To enable the USB function, enter the SP mode and set SP5985-002 (On Board USB) to “1” (Enable)

d1791229

5. Attach the PDF decal to the right front door.
6. Turn the machine on.



d1791227

7. Attach the function key decals. Four function keys are available.

Configuring the Function Keys

Functions and programs can be assigned to the function keys. Functions and programs that can be assigned to function keys include:

- Copier
- Document server
- Printer
- Scanner
- Browser
- Embedded software applications
- Web pages registered for use with Browser function
- Programs registered from copy or scanner functions
- Printer controller

1. Press [User Tools].
2. Make sure that the “General Features” tab is selected.
3. Touch [Function Key Allocation].
4. Select the function key where you want to assign the function.
5. Select the function, and then touch [OK].

Note

- To cancel an assigned function, select “Do Not Allocate” and the touch [OK].

6. Press [User Tools] when you are finished.

Note

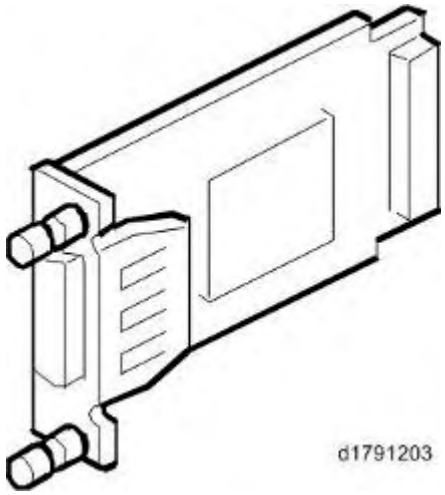
- Only one function can be assigned to a key.
- The same function cannot be assigned to more than one key.
- These settings can also be done from Web Image Monitor.

2.16.2 IEEE 1284 INTERFACE BOARD TYPE A

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	PCB	1



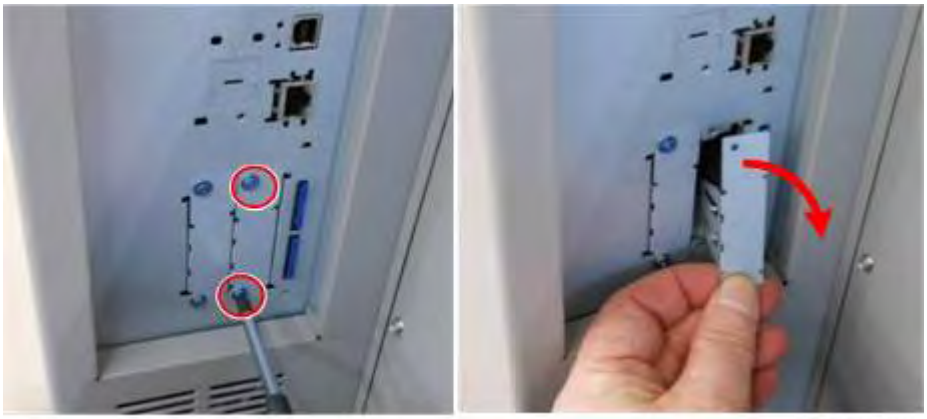
Installation

⚠WARNING

- Unplug the main machine power cord before you do the following procedure.

⚠CAUTION

- To prevent damage to the controller box, always work carefully. Never put your hand or a tool into the box when you remove the controller box or install an option.
- To prevent damage to the circuits on the boards, always touch a metal surface to remove static charge from your hands before you handle a board.



d1791204

1. Remove the slot cover from the Slot B. (x 2)
2. Insert the IEEE1284 interface board into the slot and fasten it with the screws. (x2)
3. Turn on the main machine.
4. Make sure that the machine recognized the option:

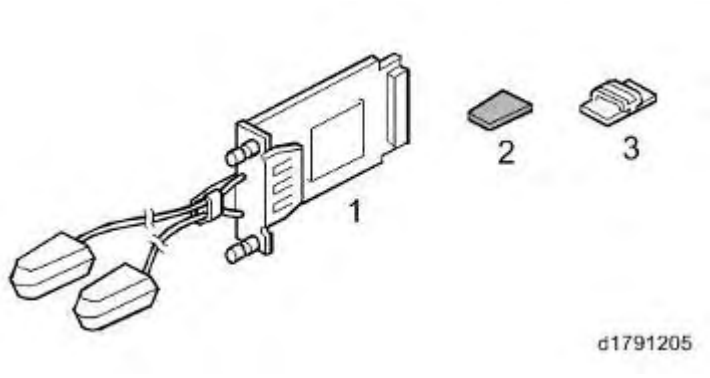
User Tools > Printer Features > List/Test Print > Configuration Page

2.16.3 IEEE 802.11A/G/N INTERFACE UNIT TYPE M3

Accessories

Check the quantity and condition of the accessories in the box against the following list and diagram.

No	Description	Q'ty
1	IEEE802.11a/g/n Unit	1
2	Velcro Fasteners	2
3	Clamps	7



Before You Begin

Observe the following points when installing and using this unit:

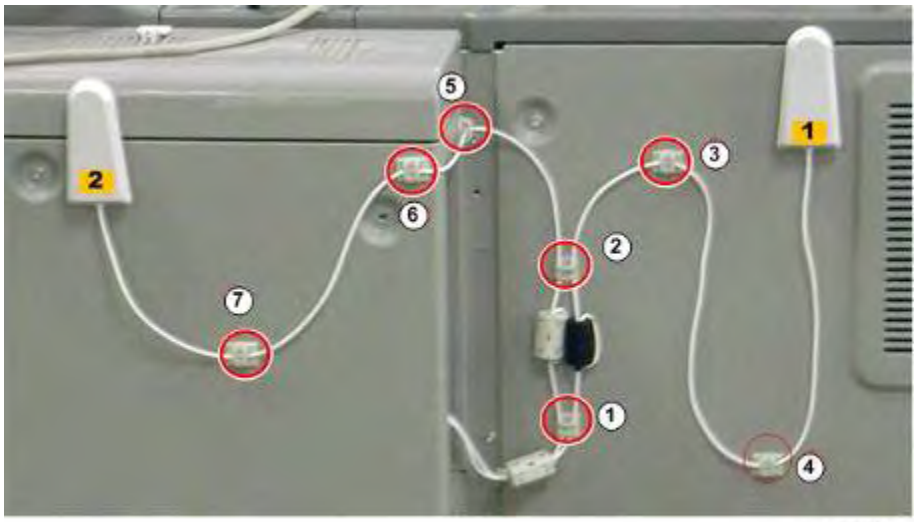
- Never attempt to disassemble the IEEE802.11a/g/n Unit.
- If you need to replace the unit, replace the entire unit.
- Give the Cautions chart to the customer.
- It is illegal to disassemble or modify this product. If illegal modifications are done to this product, we shall not assume any responsibility.
- Depending where you use this product, or the access point you select, restrictions may be imposed on the use of some usable channels. If wireless LAN communications are not possible, check the environment or access point.

Important

- You cannot use this option if you use Ethernet.

Check the markings on the antenna brackets and the ferrite cores of the antenna cables.

- **ANT1**. Antenna 1 transmits and receives. It must be installed on the rear middle side of the main machine. The ferrite core on the Antenna 1 cable is **black**.
- **ANT2**. Antenna 2 only receives. It is installed on the rear right corner of the machine. The ferrite core on Antenna 2 cable is **white**.



d1680001

The illustration above shows both antennas installed on the back of the machine with Antenna 1 (black ferrite core) on the rear cover and antenna 2 (white ferrite core) on the controller box cover.

- The PCB is installed in the controller box.
- Both antennas are held in place by easily installed and removed Velcro fasteners. (The antennas and cables will need to be removed before the covers can be removed to service the machine.)
- The seven clamps are fastened by 2-sided tapes. The clamps can be easily opened to free the cables and then closed to once again clamp the cables.

Installation

⚠WARNING

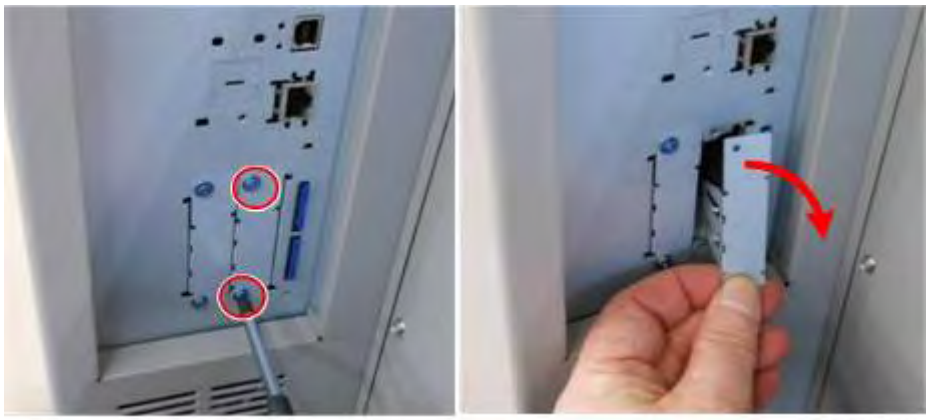
- Unplug the main machine power cord before you do the following procedure.

⚠CAUTION

- To prevent damage to the controller box, always work carefully.
- Never put your hand or a tool into the box when you remove the controller box or install an option.
- To prevent damage to the circuits on the boards, always touch a metal surface to discharge static charge from your hands before you handle a board.
- The usable frequency range of this product may be used by products (industrial, scientific, or medical devices) of other companies.
- Outdoor use of wireless devices may be restricted. Pay attention to where you use this product.

1. Find the best location of the machine.
   - Make sure that the machine is not located near an appliance or any type of equipment that generates strong magnetic fields.
   - Put the machine as close as possible to the access point.
2. Make sure there is no board in Slot A.

   Important
   - This option cannot be installed if there is a board in Slot A.



d1791204

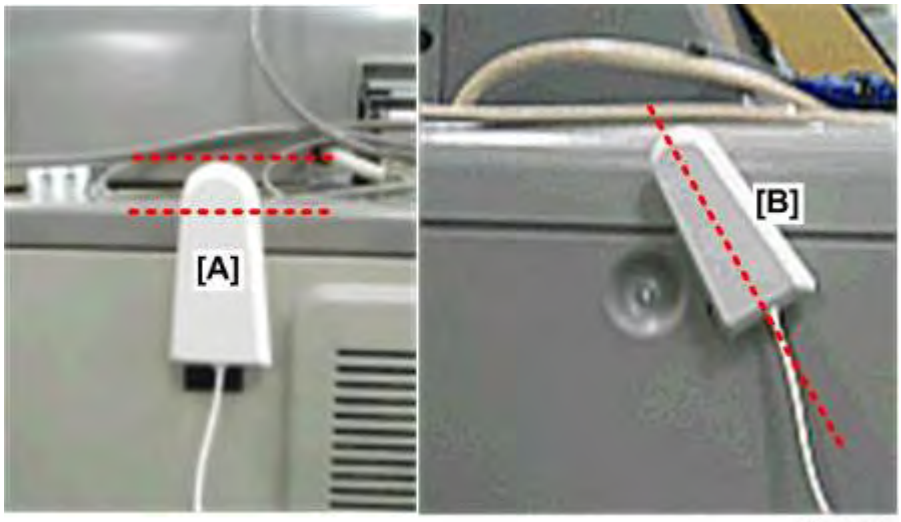
3. Remove the slot cover from the board Slot B. (x 2)
4. Insert the wireless LAN board into the slot and fasten it with the screws. (x 2).

Important

- Confirm that the interface board is firmly connected to the controller board.
- Never pull on either antenna where it is connected when you install the board.

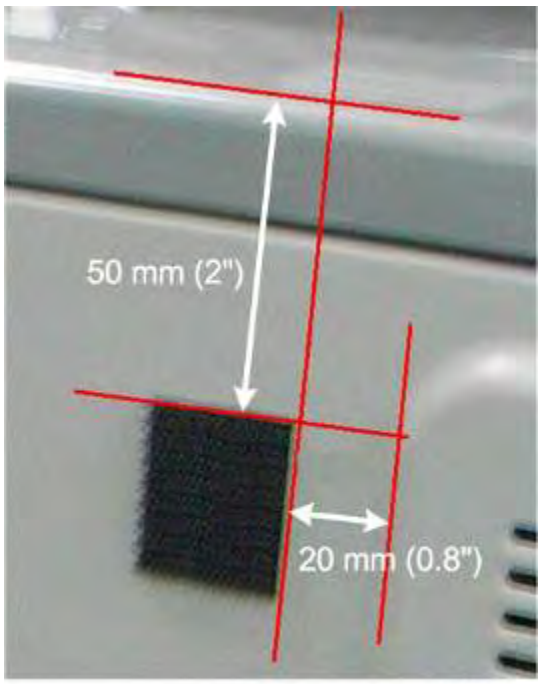
d1680002

- The antenna with the black ferrite core is installed close to the air vent on the back of the machine, with its tip pointing straight up and even with the top plate as shown.



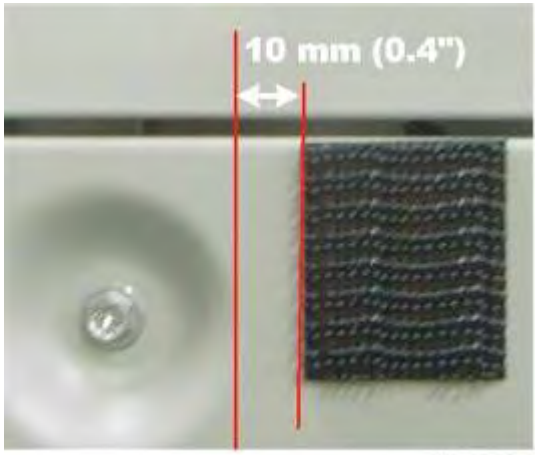
d1680003

- The antenna must be neither above the rear edge [A] nor sa [B].



d1680004

1. Attach one Velcro fastener 20 mm (0.8") to the left of the vent and 50 mm (2") below the top plate.
2. Peel the tape off the back of the antenna with the **black ferrite core**, and then attach it to the Velcro patch.



d1680005

3. Attach another Velcro fastener 10 mm (0.4") to the left of the screw depression near the center of the controller box cover.
4. Peel the tape off the back of the antenna with the **white ferrite core**, and then attach it to the Velcro patch.

Important

- Like the other antenna, the tip of this antenna should be perfectly vertical and not above the rear edge of the cover.

d1680006

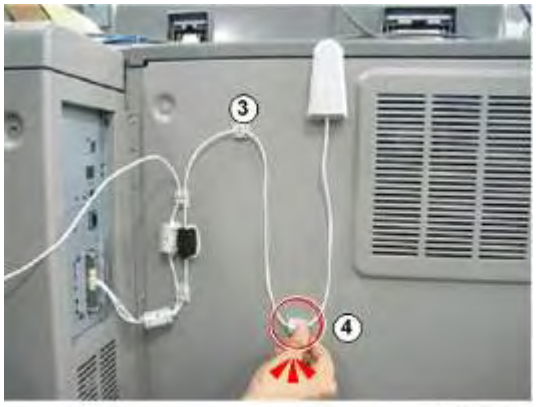
5. About 50 mm (2") away from Slot B, attach clamp ① at the same height where the antenna harnesses are connected to the board, and then close the clamp on both harnesses (x1)

d1680007

6. Set clamp ② directly above clamp above the ferrite cores, and then close the clamp on both harnesses (x1).

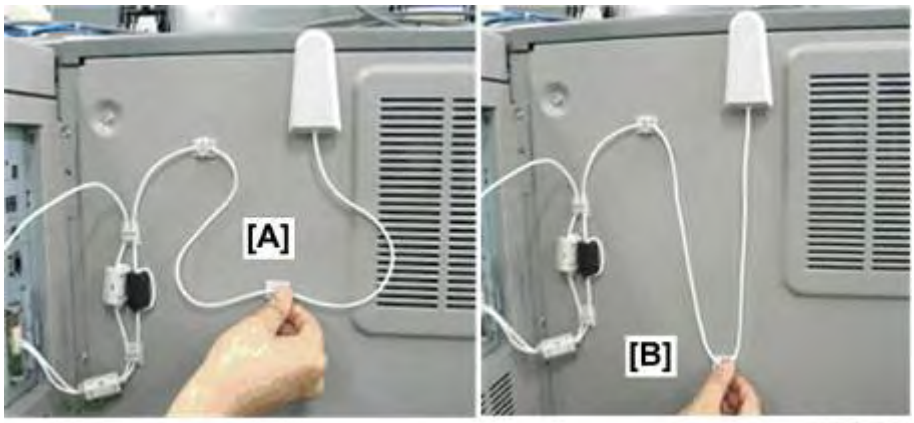
d1680008

7. Attach clamp ③ between the screw depression and the attached antenna with the black ferrite core, and then close the clamp on the harness (x1)



d1680009

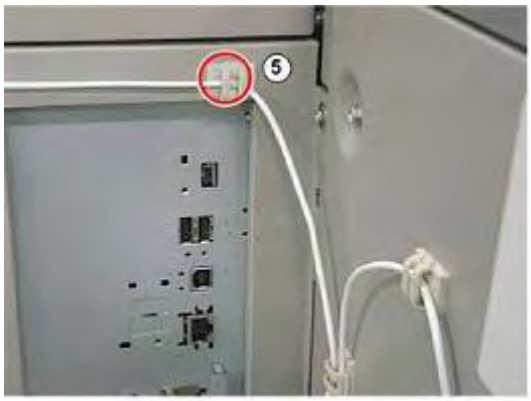
8. Attach clamp ④ down between clamp ③ and the antenna, and then close the clamp on the harness (x1)



d1680010

Important

- The harness should be neither too slack [A] nor too tight [B].

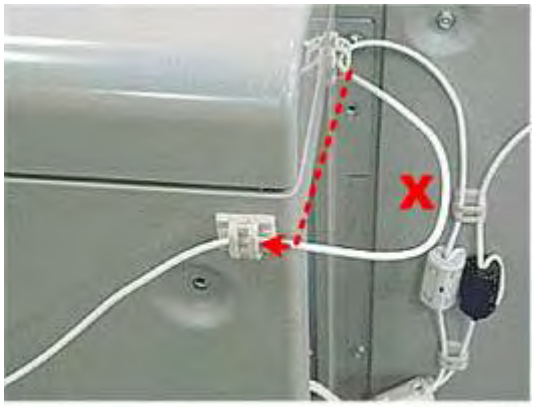


d1680011

9. Attach clamp ⑤ at the inner corner of the plate, and then close the clamp on the harness (x1)

d1680012

10. Attach clamp ⑥ to the rear side of the controller box corner, and then close the clamp on the harness (x1)



d1680013

Important

- There should be no slack in the cable along the side of the controller box.

d1680014

11. Finally, attach clamp ⑦ down between clamp ⑥ and the antenna, and then close the clamp on the harness (x1).

Important

- The clamped harness should be neither too slack nor too tight.

12. Turn on the main machine.
13. Make sure that the machine can recognized the unit:
    User Tools > Printer Features > List/Test Print > Configuration Page
14. If reception is poor, you may need to move the machine.

User Tool Settings

Press [User Tools] and then do the procedure below. These settings take effect every time the machine is turned on.

1. Press the [User Tools¥.
2. On the touch panel, touch “System Settings”.
3. Select Interface Settings> Network > LAN Type.
   The “LAN Type” (default: Ethernet) must be set for "Wireless LAN".
4. Select Interface Settings> Wireless LAN.
   Only the wireless LAN options show.
5. Set the “Communication Mode“.
   - Enter the “SSID setting”. (The setting is case sensitive.)
6. Set the “Ad-hoc Channel”.
   You need this setting when Ad Hoc Mode is selected. The allowed range for the channel settings may vary for different countries.
   - Region A (mainly Europe and Asia)
     2412 - 2462 MHz (1 - 11 channels)
     5180 - 5240 MHz (36, 40, 44 and 48 channels)
     (default: 11)

     Note
     - In some countries, the only channels available are: 2412 - 2462 MHz (1 - 11 channels)
   - Region B (mainly North America)
     2412 - 2462 MHz (1 - 11 channels)
     5180 - 5240 MHz (36, 40, 44 and 48 channels)
     (default: 11)
7. Set the “Security Method”.
   This specifies encryption for Wireless LAN.
   - The “WEP” (Wired Equivalent Privacy) setting is designed to protect wireless data transmission.
   - The same WEP key is required on the receiving side in order to unlock encoded data. There are 64 bit and 128 bit WEP keys.

Range of Allowed Settings:

64 bit: 10 characters

128 bit: 26 characters

- Specify “WPA2” when “Communication Mode” is set to “Infrastructure Mode”. Set the “WPA2 Authent. Method”.
- WPA2 Authent. Method:
  Select either “WPA2-PSK” or “WPA2”.
  If you select “WPA2-PSK”, enter the pre-shared key (PSK) of 8-63 characters in ASCII code.
  When “WPA2” is selected, authentication settings and certificate installation settings are required.

8. Press “Wireless LAN Signal” to check the machine's radio wave status using the operation panel.
9. Press “Restore Factory Defaults” to initialize the wireless LAN settings.

SP Mode, User Tool Settings

The following SP codes can be set for IEEE 802.11

SP	Name	Function
5840-006	Channel MAX	Sets the maximum range of the channel settings for the country.
5840-007	Channel MIN	Sets the minimum range of the channels settings allowed for your country.
5840-008	Transmission Speed	Sets the transmission speed. Auto, 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps (default: Auto).
5840-011	WEP Key Select	Used to select the WEP key (Default: 00).

The following settings can be done in User Tools

UP mode	Name	Function
	SSID	Used to confirm the current SSID setting.
	WEP Key	Used to confirm the current WEP key setting.

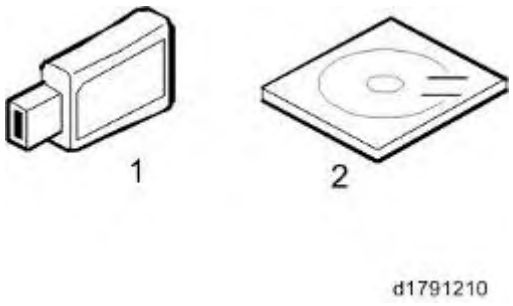
	WEP Mode	Used to show the maximum length of the string that can be used for the WEP Key entry.
	WPA2 Authent. Method	Used to confirm the current WPA authentication setting and preshared key.

2.16.4 BLUETOOTH INTERFACE UNIT TYPE D

Accessories

Check the quantity and condition of the accessories in the box against the following list and diagram.

No	Description	Q'ty
1	Bluetooth Module	1
2	CD-ROM	1



Installation

⚠WARNING

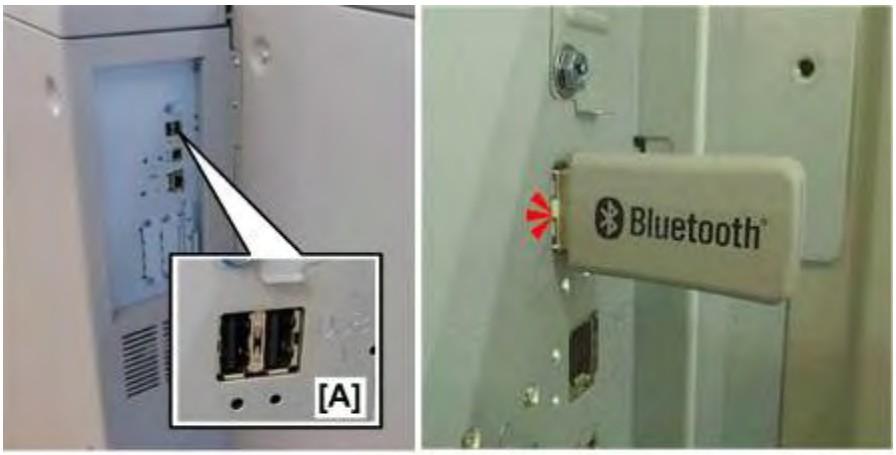
- Unplug the main machine power cord before you do the following procedure.

⚠WARNING

- Turn off the power of the main unit when connecting the Bluetooth unit. Do not attach or remove the Bluetooth unit while the power of the main unit is turned on.

⚠CAUTION

- To prevent damage to the controller box, always work carefully.
- Never put your hand or a tool into the box when you remove the controller box or install an option.
- To prevent damage to the circuits on the boards, always touch a metal surface to discharge static charge from your hands before you handle a board.



d1791211

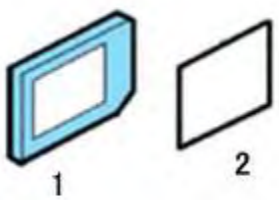
1. Insert the Bluetooth unit into either USB Host Interface socket [A].
2. Make sure that the machine recognizes the option:
   [User Tools] > Printer Features > List/Test Print > Configuration Page

2.16.5 POSTSCRIPT3 UNIT TYPE S1

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1	PostScript3 Emulation SD Card	1
2	Decal	1

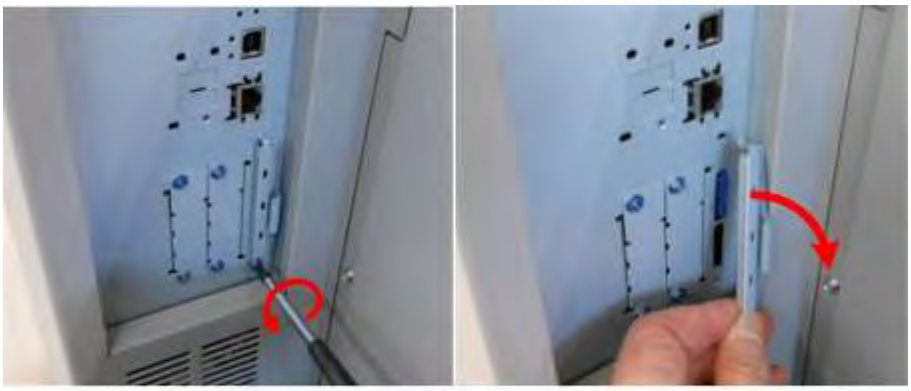


d1791212

Installation

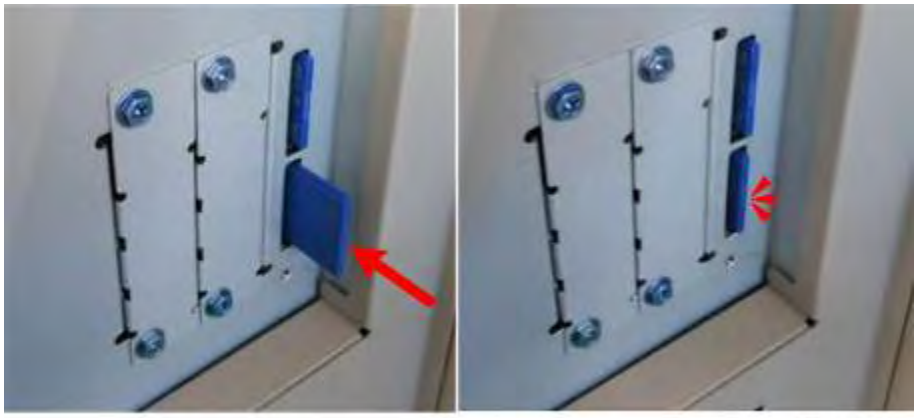
⚠WARNING

- Unplug the main machine power cord before you do the following procedure.



d1791200

1. Remove the SD card slot cover. (x 1).



d1791213

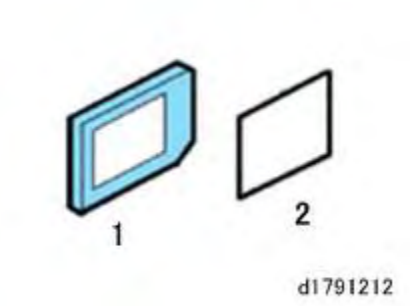
2. Slowly, insert the SD card (PostScript3 Unit) in Slot 2 (lower) with its label face towards the front of the machine.
3. Perform the SD Card Appli Move. (See “SD Card Appli Move” at the end of this section.)
4. After the application move is finished, remove the SD card from Slot 2
5. Turn on the machine (x 1)
   Make sure that the machine can recognize the option.:
   [User Tools] > Printer Features > List/Test Print > Configuration Page
6. Attach the PostScript3 decal on the left side of the PDF decal on the right door.

2.16.6 IPDS UNIT TYPE S1

Check the quantity and condition of the accessories in the box against the following list and diagram.

Accessories

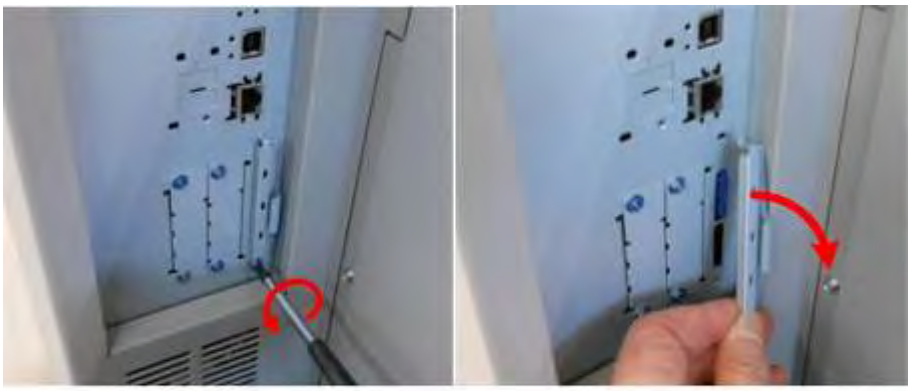
No	Description	Q'ty
1	IPDS Emulation SD Card	1
2	Decal	1



Installation

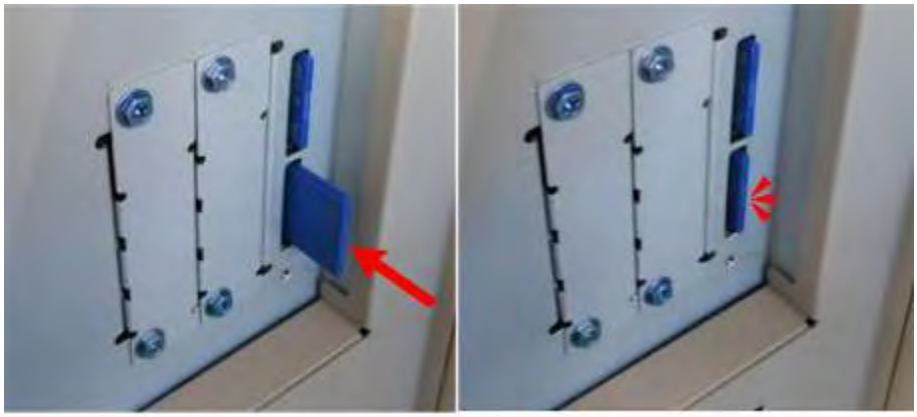
⚠WARNING

- Unplug the main machine power cord before you do the following procedure.



d1791200

1. Remove the SD card slot cover. (x 1)



d1791213

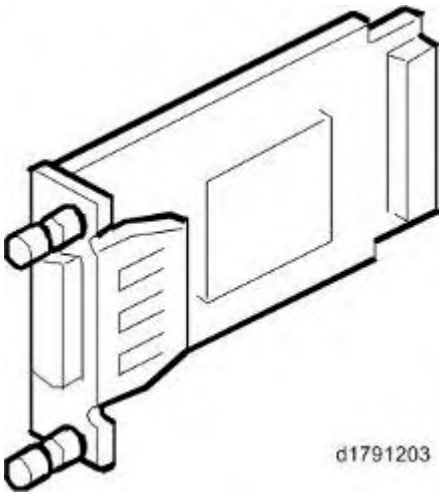
2. Slowly, insert the IPDS SD card in Slot 2 with its label face towards the front of the machine.
3. Perform the SD Card Appli Move. (See “SD Card Appli Move” at the end of this section.)
4. After the application move is finished, remove the SD card from Slot 2
5. Turn on the machine (x 1)
6. Make sure that the machine recognizes the option:
   [User Tools] > Printer Features > List/Test Print > Configuration Page
7. Attach the decal to the left side of the Adobe PDF decal on the right door.

2.16.7 FILE FORMAT CONVERTER TYPE E

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	PCB Unit	1



Installation

⚠WARNING

- Unplug the main machine power cord before you do the following procedure.

⚠CAUTION

- To prevent damage to the controller box, always work carefully.
- Never put your hand or a tool into the box when you remove the controller box or install an option.
- To prevent damage to the circuits on the boards, always touch a metal surface to discharge static charge from your hands before you handle a board.

d1791204

1. Remove the cover from Slot B. (x 2)
2. Insert the file format converter into Slot B and fasten it with the screws. (x 2)
3. Turn on the main machine.
4. Make sure that the machine can recognize the option:
   User Tools > Printer Features > List/Test Print > Configuration Page

2.16.8 COPY DATA SECURITY UNIT TYPE G

Accessories

Check the quantity and condition of the accessories in the box against the following list and diagram.

No.	Description	Q'ty
1	Copy Data Security Board	1
2	Screws M3x8	2

Note

- Some components in this kit are not used for this machine.

d1791214

Installation

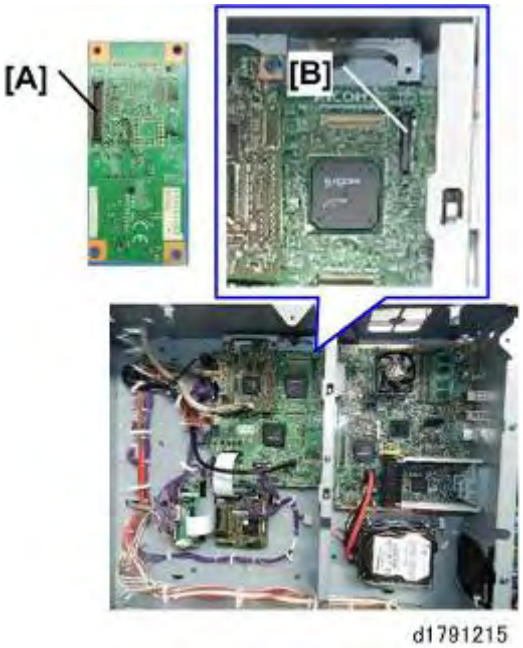
⚠WARNING

- Unplug the main machine power cord before you do the following procedure.

Preparation

Refer to Field Service Manual

- Remove controller box cover and inner cover page 4-30



d1791215

1. Connect the connector [A] on the back of the copy data security unit board to socket [B] on

the IPU board.

d1791216

2. Fasten the board [A] to the IPU board bracket (x 2).
3. Reassemble the machine.

User Tool Setting

1. Plug in and turn on the main power switch.
2. Press [User Tools] and then select:
   System Settings > Administrator Tools > Copy Data Security Option > On
3. Exit User Tools.
4. Check the operation.
   - The machine will issue SC165-00 if the machine is powered on with the Copy Data Security Unit Board removed and the "Data Security for Copying" feature set to "ON".
   - The machine will issue SC165-00 if the machine is powered on with a defective Copy Data Security Unit Board and the "Data Security for Copying" feature set to "OFF".
   - If you remove this option from the machine, first set the setting to "OFF" with the User Tools before removing this board. If you forget to do this, the "Data Security for Copying" feature cannot appear in the User Tool settings, and SC165-00 will appear every time the machine is switched on. The machine cannot be used.
   - Make sure that the machine can recognize the option. (see "Check All Connections" in the next section below.)

Check All Connections

Make sure that the machine recognizes the option.

1. Plug in the power cord.
2. Turn on the main switch.
3. Print the configuration page:
   User Tools > Printer Features > List Test Print > Configuration Page
4. All installed and recognized options are listed under "System Reference".

2.16.9 BROWSER UNIT TYPE S1

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1.	SD Card	

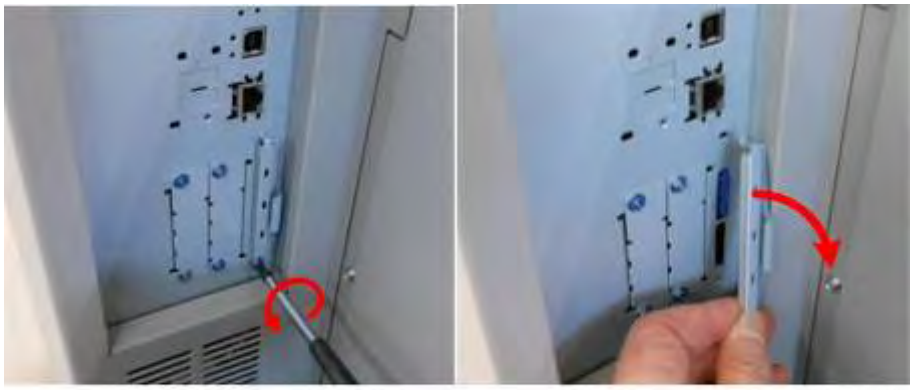
d1791230

Installation

⚠WARNING

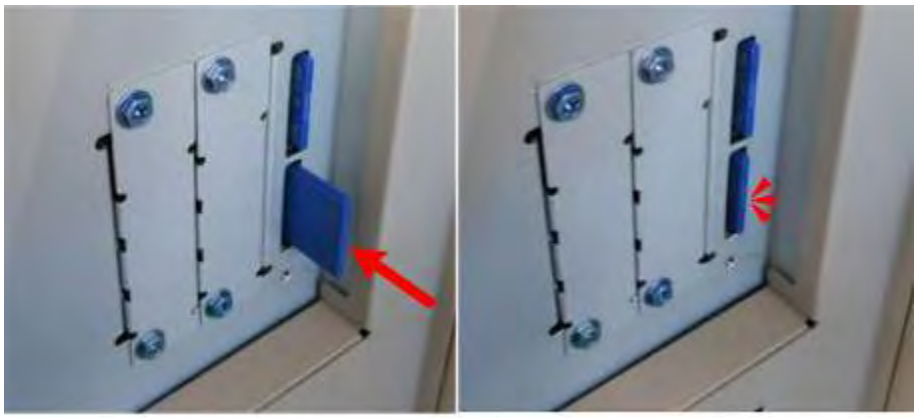
- Unplug the main machine power cord before you do the following procedure.

1. Turn the main off.



d1791200

2. Remove the SD card slot cover. (x 1)



d1791213

3. Insert the Browser SD card in Slot 2.
4. Turn the machine on.
5. Press [User Tools].
6. On the touch panel, touch “Extended Feature settings”.
7. Touch “Extended Feature Settings” in the Extended Feature Settings Menu.
8. Make sure that “Extended JS” application was automatically installed in the Startup Settings tab.
9. Cycle the machine off/on.
10. Perform SD Card Appli Move. (See “SD Card Appli Move” at the end of this section.)
11. Remove the SD Card from Slot 2.
12. Turn the machine on.
13. Press [User Tools] > Printer Features > List/Test Print > Configuration Page
14. Make sure that the Browser application appears in the list.
15. Touch “Edit home”, and then “Add Icon”.

16. Touch “Browse”.
17. Touch a blank square to select the location for the browser icon.
18. Touch “Exit” to activate the Browser icon.
19. Enter the SP mode and do **SP5-801-024** to clear Browser memory.

Ricoh JavaScript

Do the following procedure only if the customer is using the Ricoh JavaScript connected to a Web application developed by Operius/RiDP.

1. Turn the main switch ON.
2. Press [User Tools].
3. Touch “Browser Features”.
4. Touch “JavaScript”.
5. Change the Extended Java Script setting to “Active”.

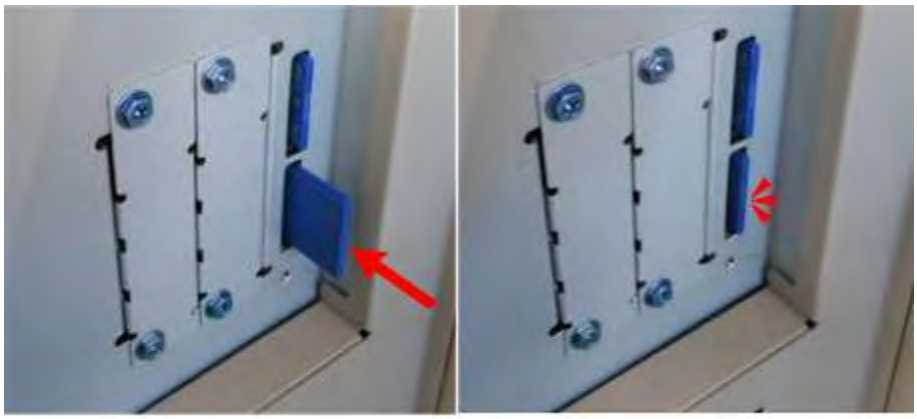
Browser/EXJS Firmware Update

The firmware configuration of the Browser Unit Type S1 has been changed to enhance browsing.

- The Browser Unit Type S1 consists of the Browser firmware and EXJS firmware.
- The EXJS firmware is equivalent to the existing browser firmware. Therefore, it is possible to update the EXJS firmware using the same procedure as that of SDK application firmware.

1. Turn the main switch ON.
2. Press [User Tools].
3. Touch “Extended Feature settings”.
4. Touch “Extended Feature settings” in the Extended Feature Settings Menu.
5. Disable “Extended JS” in the Startup Settings tab.
6. Turn the main switch OFF.

7. Remove the SD card slot cover. (x 1)



d1791213

8. Insert the SD card for Browser firmware update into Slot 2 with its label facing the front of the machine.

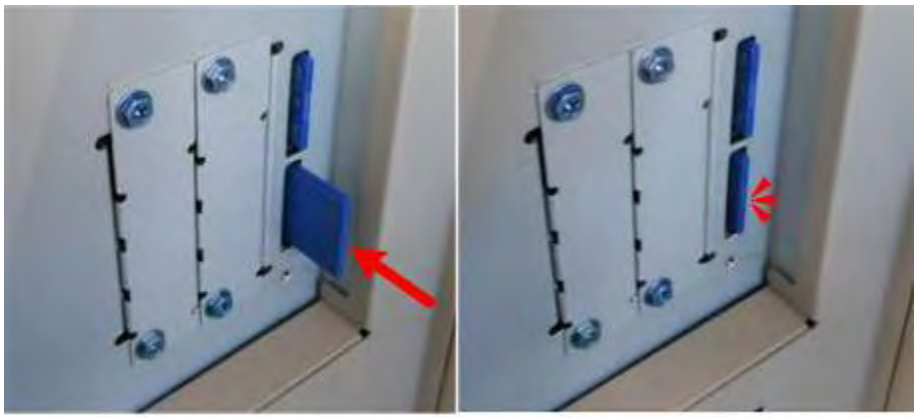
Important

- Make sure that only the Browser firmware is on this SD card
- Do not copy the EXJS firmware.

9. Turn the main switch on.
10. When the Update screen opens, select the “Browser”.
11. Touch “Update (#)”.
12. When you see "Update Done", turn the main off.
13. Remove the SD card from Slot 2.

Important

- Continue with this procedure only if you are updating the Extended JavaScript (EXJS).



d1791213

14. Insert the SD card for EXJS firmware update into Slot 2 with its label facing the front of the machine.
15. Make sure that only the EXJS firmware is on this SD card; do not copy the Browser firmware.
16. Turn the machine on, and then press [User Tools].
17. Touch “Extended Feature Settings”.
18. Touch “Extended Feature Settings” in the Extended Feature Settings Menu.

19. Change the status of “Extended JS” to “Ending” on the Startup Settings tab.
20. Turn the main switch off.
21. Insert the SD card containing the Extended JS firmware into Slot 2.
22. Turn the machine on, and then press [User Tools].
23. Touch “Extended Feature Settings”.
24. Touch “Extended Feature Settings” in the Extended Feature Settings Menu.
25. Touch the “Install” tab.
26. Touch “SD card”, then select “Extended JS” from the list of Extended Features.
27. Select “Machine HDD” as the “Install to” destination, then touch “Next”.
28. Check the Extended Features information on the “Ready to Install” screen, and then press “OK”.
29. After “The following extended feature has already been installed. Are you sure you want to overwrite it?” is displayed, press “Yes”.
30. Change the status of Extended JS to “Waiting” in the Startup Settings tab.
31. Turn the machine off.
32. Remove the SD card from Slot 2.
33. Turn the machine on.
34. Press [User Tools].
35. Touch “Extended Feature Settings”.
36. Touch “Extended Feature settings” in the Extended Feature settings Menu.
37. Make sure that the “Extended JS” has been updated to the latest version in the Startup Settings tab.

Uninstalling EXJS Firmware

1. Turn the machine on.
2. Press [User Tools].
3. Login with the Administrator user name and password.
4. Touch “Extended Feature Settings”.
5. Touch “Extended Feature Settings” in the Extended Feature Settings Menu.
6. Touch “Uninstall”.
7. Touch “Extended JS”, and then touch “Yes” after “Are you sure you want to uninstall the following extended feature?” is displayed. “Uninstalling the extended feature... Please wait” is then displayed on the touch screen.
8. After "Completed" is displayed, turn the machine off.

Note

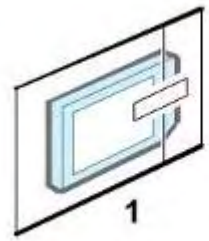
- The Browser firmware is un-installed from the machine when the Browser SD card is removed.

2.16.10 DATA OVERWRITE SECURITY UNIT TYPE H

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1.	SD Card	1



d1791217

Important

- Do not install this option if the seal on the SD card is broken.

Before You Begin

- This option should be installed only for a customer who requires the CC Certified Data Overwrite Security function.
- The function of this option is the same as the Data Overwrite Security in Security Functions, which is standard on this machine.

Installation

d1791200

1. Remove the SD card slot cover. (x 1).

2. Insert the Data Overwrite Security Unit SD card in Slot 2 with its label facing toward the front of the machine.
3. Turn the machine on.
4. Perform SD Card Appli Move. (See “SD Card Appli Move” at the end of this section.)
5. Cycle the machine off/on.
6. Go into the SP mode, and then enable with **SP5-878-001**.

2.16.11 SD CARD FOR NETWARE PRINTING TYPE S1

Accessories

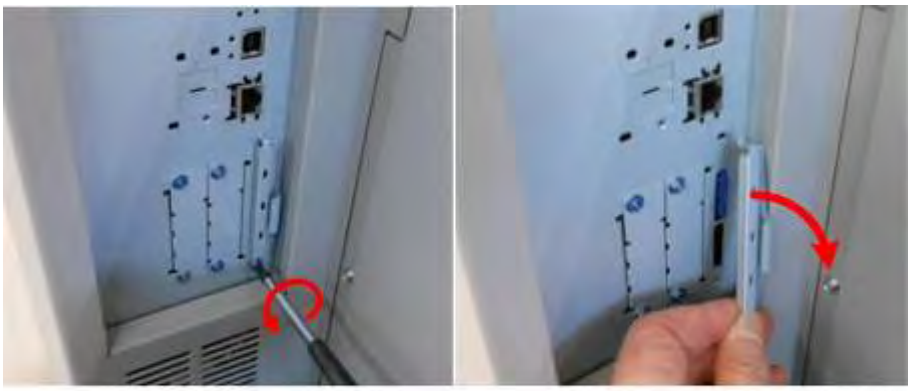
Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1	SD Card	1

Installation

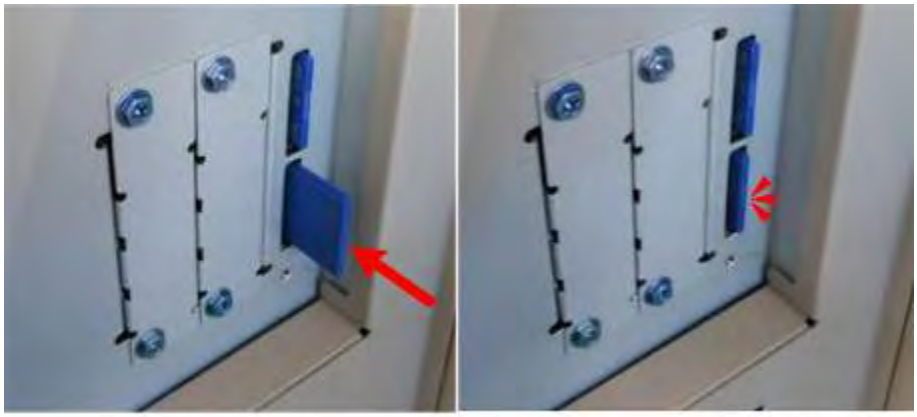
⚠WARNING

- Unplug the main machine power cord before you do the following procedure.



d1791200

1. Remove the SD card slot cover. (x 1)



d1791213

2. Insert the SD card for NetWare printing Slot 2 with its label facing the front of the machine.
3. Perform SD Card Appli Move. (See “SD Card Appli Move” at the end of this section.)
4. Remove the SD Card from Slot 2.
5. Turn on the machine (x 1)
6. Make sure that the machine can recognize the option:
   [User Tools] > Printer Features > List/Test Print > Configuration Page

2.16.12 OCR UNIT TYPE M2

What is Searchable PDF?

- Searchable PDF embeds the text information in the scanned document without processing the data on a computer.
- If this option is installed:
  1. You can search the text in the scanned document.
  2. You can add extra text to the file name.
  3. The orientation of the originals is detected, and the document is automatically rotated.
- The OCR unit is provided on an SD card. By installing the SD card on the main machine, a function key is added to the operation panel. The OCR application does not need to be installed on the computer.
- After OCR installation, you can specify the settings of the searchable PDF function.
- The machine embeds the text information of the scanned document after scanning the originals (after the originals are ejected from the ADF). Therefore, you can remove the originals from the exposure glass or ADF.
- You can use other applications such as copy and printer while the machine embeds the text information of the scanned document.

Accessories

Check the quantity and condition of the accessories in the box against the following list.

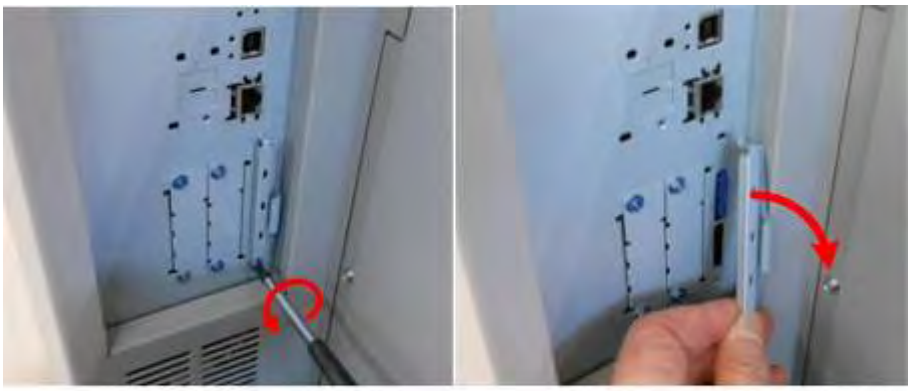
No.	Description	Q'ty
1.	SD Card	1

d1791230

Installation

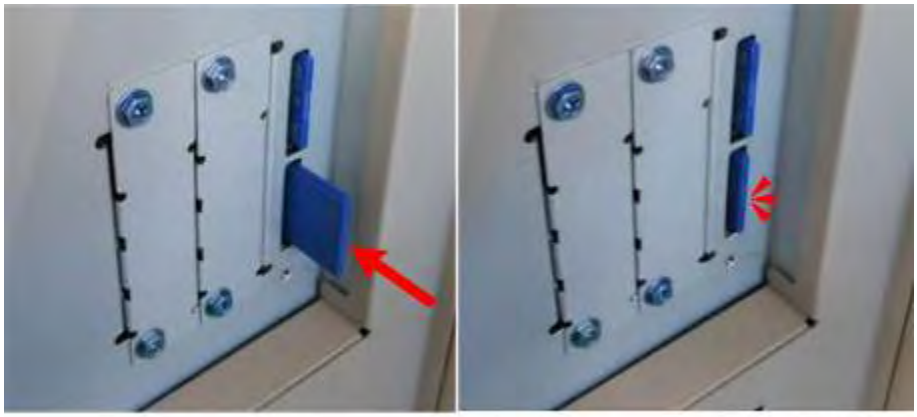
⚠WARNING

- Unplug the main machine power cord before you do the following procedure.



d1791200

1. Remove the SD card slot cover. (x 1)



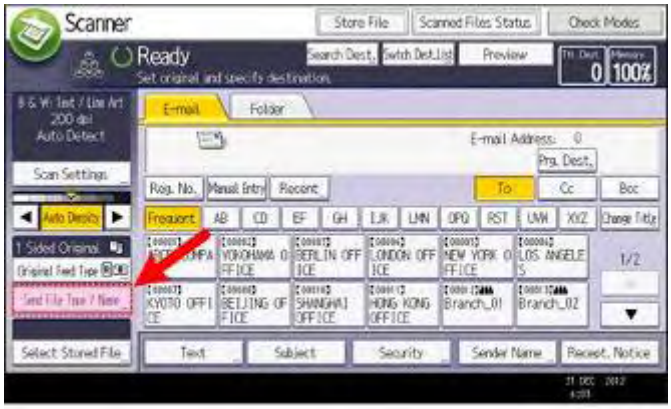
d1791213

2. Insert the OCR SD card in Slot 2 with its label facing the front of the machine.
3. Turn on the machine.
4. Go into the SP mode and do **SP5-878-004**.
   - This records the content of the SD card in NVRAM
   - The machine ID of the main machine is recorded on the SD card.
5. When the display tells you that the execution is completed, touch [Exit].
   - If the machine returns the “Failed” alert, check if the SD card to determine if it has already been used.
   - Turn off the machine and then steps 1 to 5 again.
6. Cycle the machine off/on.
7. Go in the SP mode and do **SP5-878-004** (Option Setup: OCR) and then press [EXECUTE].
   The OCR dictionary is copied to the HDD from the SD card.
   - In the first execution, the SD card and the machine are linked.
   - In the second execution, the OCR dictionary is copied onto the HDD.
8. Turn off the machine, and then remove the SD card.

Important

- Store the SD card in a safe location.
- You will need the original SD card in case the HDD unit ever fails.

9. Turn on the main power switch.



d1791220

10. On the “Scanner” screen touch [Send File Type / Name].

d1791221

11. Check to see if [OCR Settings] is displayed on the [Send File Type / Name] screen.
    - The searchable PDF function can be switched on/off on the [OCR Settings] screen after installing the OCR unit.
    - If you want to use the searchable PDF function, select [On] for [OCR Settings]. (Default: [Off])

Restoration

After installation of the OCR Unit:

- The searchable PDF function is saved on the HDD and the SD card ID is saved in NVRAM.
- After replacement of either the HDD unit or the NVRAM, OCR Unit Type M2 must be installed again.

When the original SD card exists

- **If you replace the HDD**.
  Re-install the OCR Unit Type M2 from the original SD card.
- **If you replace the NVRAM**.
  If you upload / download the NVRAM data, re-install the OCR Unit Type M2 from the original SD card. If you don't upload / download the NVRAM data, order a new SD card (service part) of the OCR Unit Type M2. Then re-install the OCR Unit Type M2 from the new SD card.
- **When you replace the HDD and NVRAM at the same time**.
  Re-install the OCR Unit Type M2 from the original SD card.

If Original SD Card is Lost

- Order a new SD card (service part) of the OCR Unit Type M2, and then re-install from the new SD card.
- When you re-install the OCR Unit Type M2, do the same procedure as the original installation procedure.

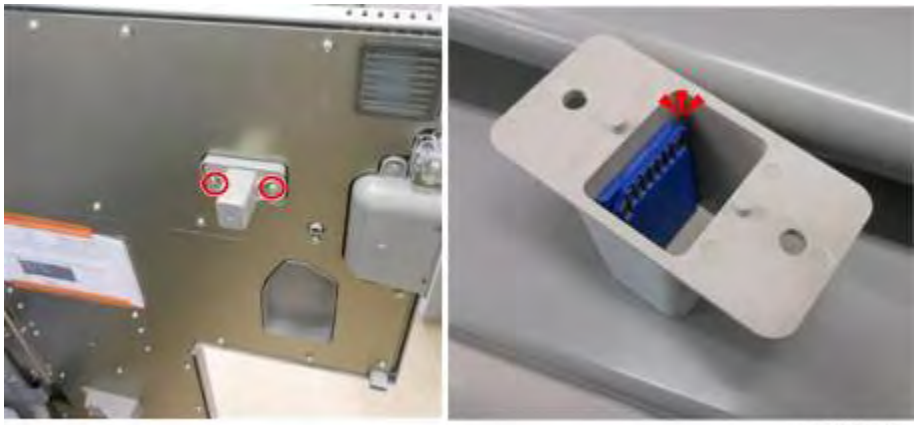
2.16.13 SD CARD APPLI MOVE

Overview

The service program "SD Card Appli Move" (**SP5-873**) lets you move application programs from one SD card to another.

Always observer the following important points:

- The data necessary for authentication is transferred with the application program from an SD card to another SD card.
- Authentication fails if you try to use the SD card after you move the application program from one card to another card.
- Never use SD card if it has been used before for other purposes. Normal operation is not guaranteed when such an SD card is used.



d1791224

1. Open the right front door, and remove the post (x2).

2. Store the original SD cards here after you move the application program from one card to another card.
   - The original SD cards are the only proof that the client is licensed to use the application program.
   - You may need to check the SD card and its data to solve a problem in the future.

Important

   - Do not move OCR Unit Type M2 (optional) to another SD card.

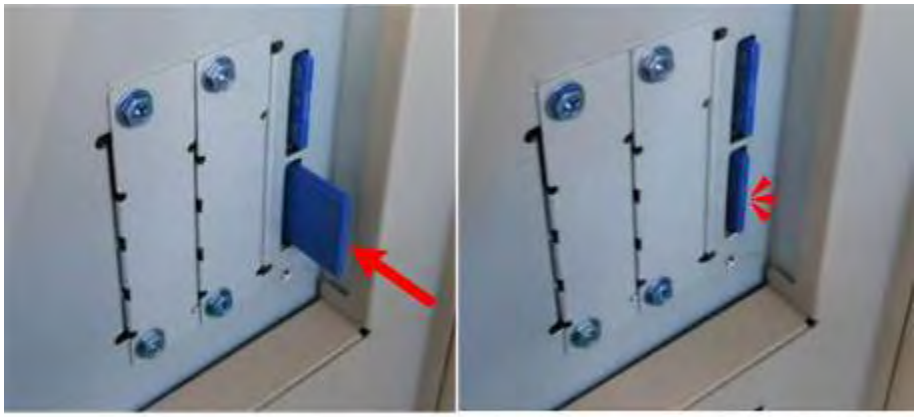
Move Exec

The menu "Move Exec" (**SP5-873-001**) lets you move application programs from the original SD card to another SD card.

Important

- Do not set the write protect switch of the system SD card or application SD card on the machine.
- If the write protect switch is on, a download error, Error Code 44, for example will occur during a firmware upgrade or application merge.

1. Turn the main switch off.
2. Make sure that a **target** SD card is in **Slot 1**. The application program is moved to this SD card.



d1791213

3. Insert the source SD card with the application program in **Slot 2**.The application program is copied from this **source** SD card.
4. Turn the machine on.
5. Go into the SP mode.
6. Select **SP5-873-001** "Move Exec".
7. Follow the messages shown on the operation panel to complete the operation.
8. Turn the machine on.
9. Remove the source SD card from SD Card Slot 2.
10. Turn the machine off.
11. Check that the application programs run normally.

Undo Exec

"Undo Exec" (**SP5-873-002**) lets you move back application programs from an SD card in SD Card Slot 1 to the original SD card in Slot 2 . You can use this program when, for example, you have mistakenly copied some programs by using Move Exec (**SP5-873-001**).

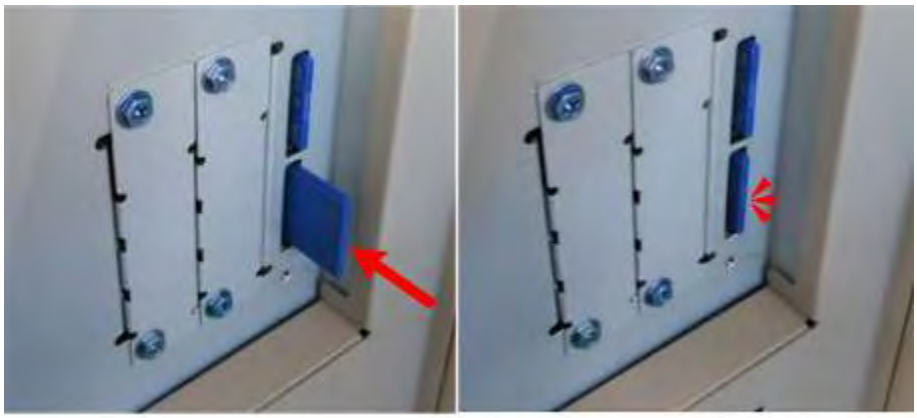
Important

- Do not set the write protect switch on the system SD card or application SD card on the machine.
- If the write protect switch is on, a download error, Error Code 44, for example will occur during a firmware upgrade or application merge.

1. Turn the machine off.

d1791226

2. Insert the SD card with the application program in Slot 1.The application program is moved from this SD card.



d1791213

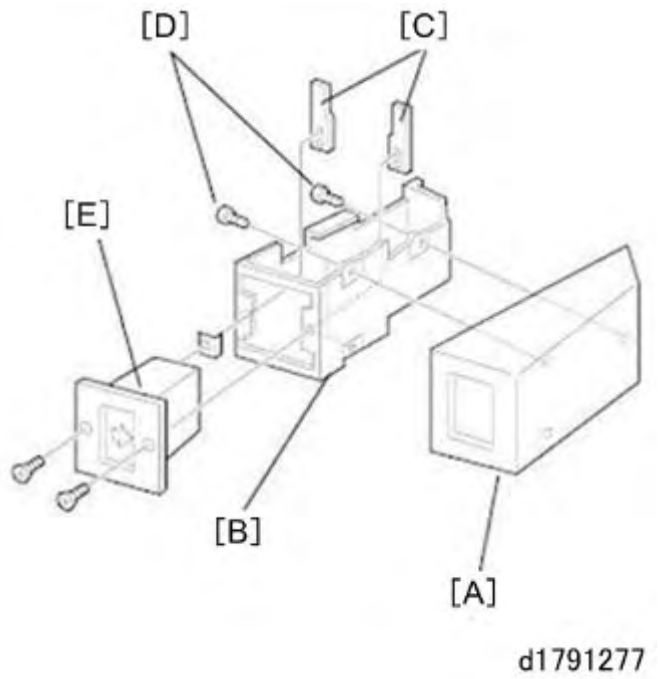
3. Insert the original SD card in Slot 2. The application program is moved back to this card.
4. Turn the machine on.
5. Enter the SP mode.
6. Select **SP5-873-002** "Undo Exec."

7. Follow the messages on screen to complete the operation.
8. Turn the machine off.
9. Remove the SD card from Slot 2.
10. Turn the machine off.
11. Check that the application programs run normally.

2.17 KEY COUNTER, OPTIONAL COUNTER I/F UNIT

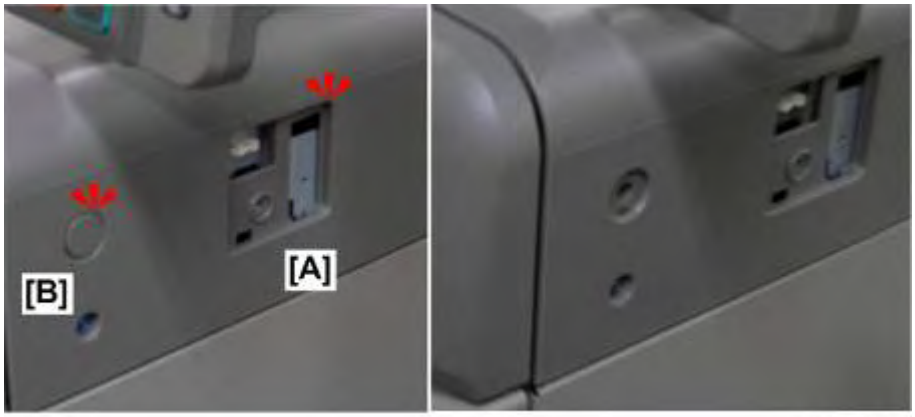
2.17.1 KEY COUNTER BRACKET TYPE 1027

Installation



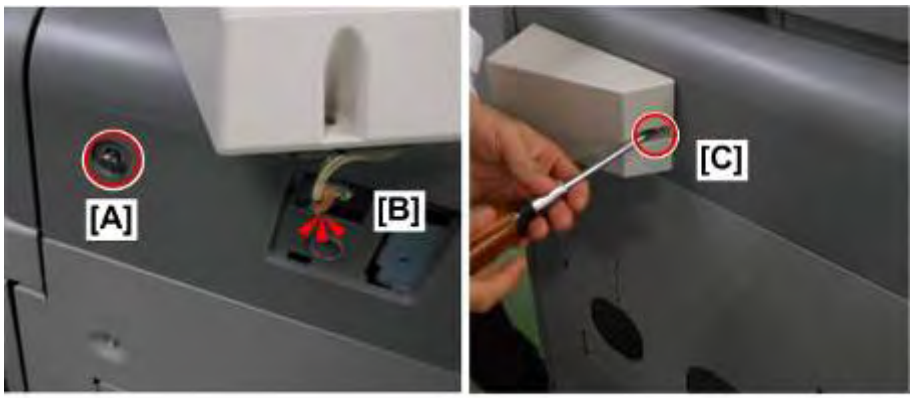
d1791277

1. Assemble the key counter and bracket.



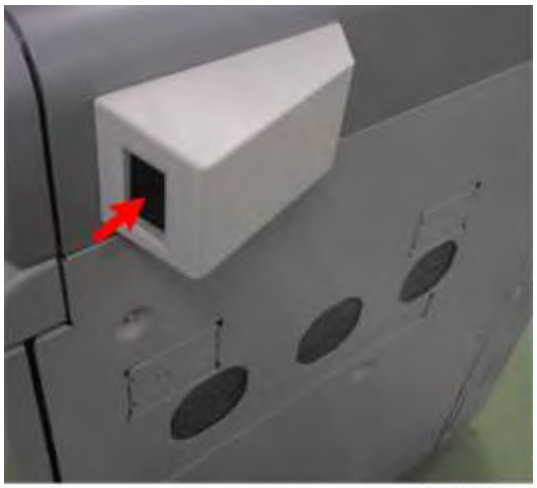
d1791250

2. On the right side of the machine, use the tip of a small screwdriver to remove the square plate [A] and round cap [B].



d1791252

3. Attach screw [A] (x1).
4. Connect the device [B] (x1).
5. Hang the device on the attached screw, and then attach screw [C] (x1).



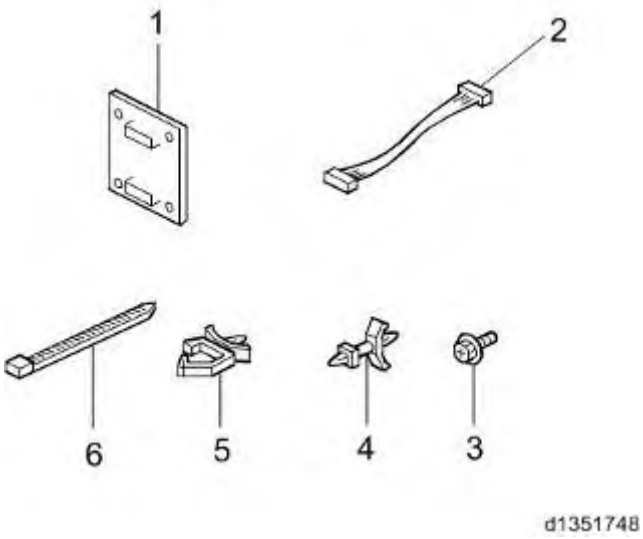
d1791253

6. Insert the counter mechanism into the device.

2.17.2 OPTIONAL COUNTER I/F UNIT TYPE A

Accessories

Check the quantity and condition of the accessories in the box against the following list.



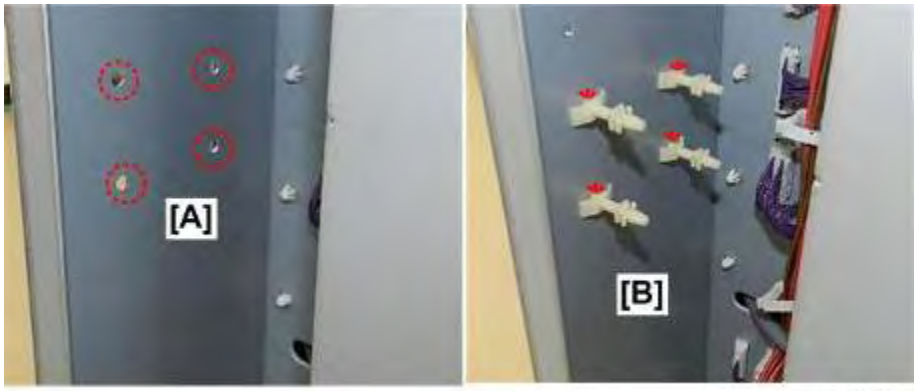
No.	Description	Q'ty
1	Key Counter Interface Board	1
2	Harness	1
3	Tapping Screw M3x6	4
4	Standoff	4
5	Harness Clamp	1
6	Band	1

Installation

1. Remove top cover [A] of the controller box (Caps x2, x2).

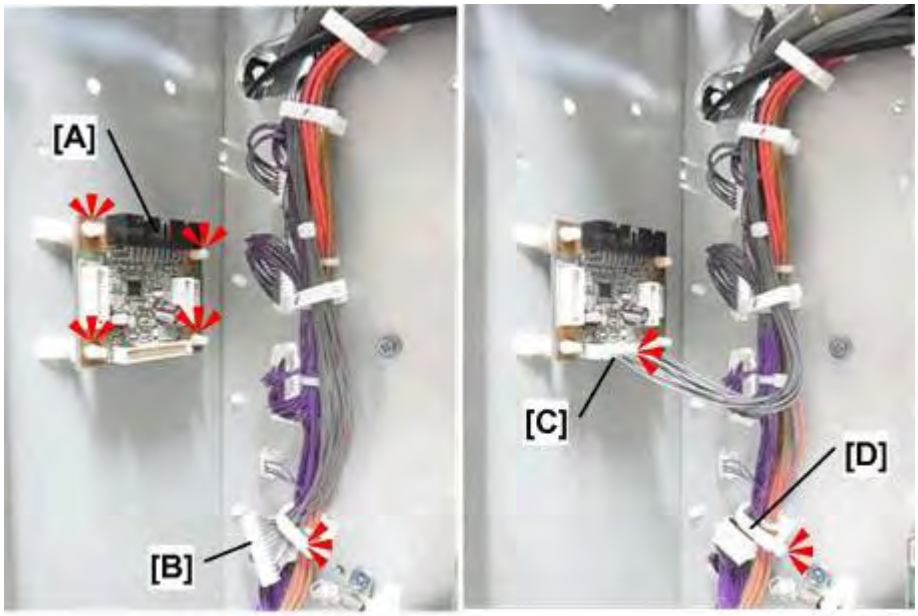
d1791274

2. Remove the back cover of the controller box (x11).



d1791269

3. Locate the four holes [A] on the frame of the controller box.
4. Attach the standoffs [B] (x4).



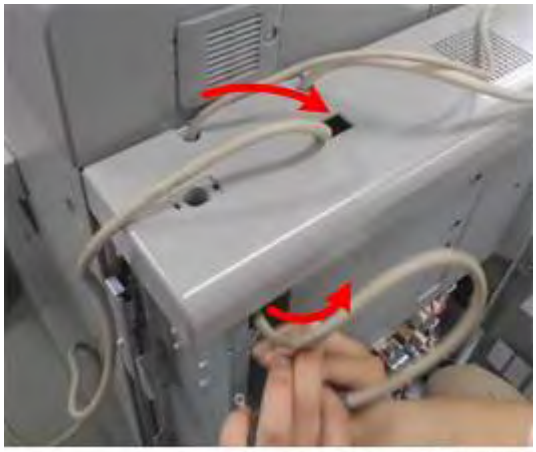
d1791270

5. Attach the connection board [A] to the standoffs.
6. Free harness [B] (x1).

7. Connect the harness at [C] (x1).
8. Be sure to close clamp [D] (x1)

d1791268

9. Use a knife or a pair of nippers to remove the square knock-out from the controller box top cover.



d1791275

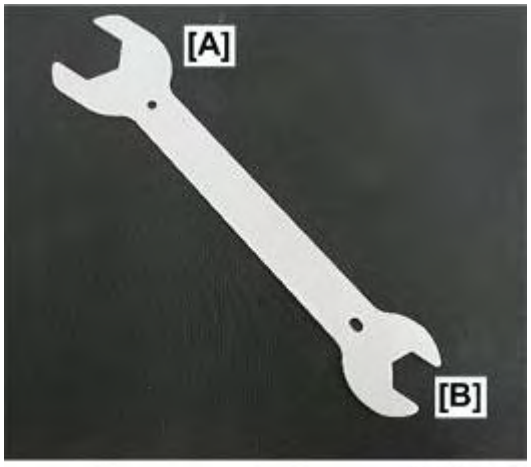
10. Pass the connector of the device harness through the hole where you removed the knock-out.
11. Connect the counter device harness to the interface board.
12. Set the device at a convenient location.
13. If an LCT is installed on the right side of the machine, place the device on the LCT.

2.18 COMMON ADJUSTMENTS

2.18.1 HEIGHT AND LEVEL ADJUSTMENT

Before you begin:

- The main machine should be installed first and adjusted to level front-to-back, and side-to-side.
- Note the settings on the leveling gauge. Due to the length of the paper path with optional peripheral units installed, it is extremely important that every unit be leveled to match the front-to-back and side-to-side measurements of the main machine.
- The height and level of each peripheral unit must be adjusted at installation.
- The height and level of each unit must be adjusted before testing for the presence of skew and checking that side-to-side registration is correct.



d1790999

1. Use the wide end [A] of the accessory wrench provided with the machine to adjust the front and rear feet of the main machine.
2. The narrow end of the wrench [B] is for the feet of the peripheral units.

Setting the Leveling Shoes

Important

- Do this procedure near each caster where an adjustable bolt is provided.
- The number of leveling shoes will differ, depending on which unit you are leveling.

d1795700

1. Turn the lower nut to lower the bolt.

Note

- The upper bold is spot-welded to the frame and does not move.

2. Set a leveling shoe below the bolt.

d1795701

3. Continue to turn the lower nut until it stops against the shoe.
4. Set a level on the front, rear, and side edges to determine if the unit is level.
5. Adjust the height at each corner until the unit is level.

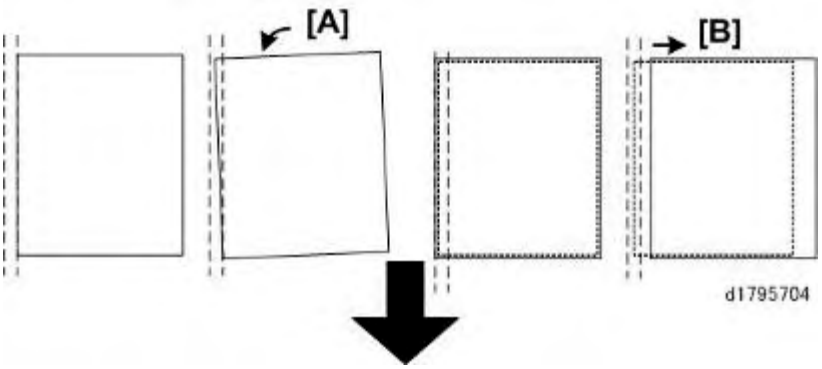
6. Check the results of the adjustments.
   - The top of the first peripheral unit on the left must be at the same height as the left side of the main machine.
   - The tops of the other peripheral units on the left where the units are joined must be at the same height.
   - The top of the LCIT on the right must at the same height as the right side of the main machine.

   - Make sure that the plate at the paper exit on the left side of the main machine [A] moves freely and is not bent. It must be able to move to handle thick paper.
   - Between the right side of the main machine and the LCIT, make sure that the LCIT guide plate moves freely and does not interfere with the main machine guide plate.

2.18.2 SKEW AND SIDE-TO-SIDE REGISTRATION

Overview

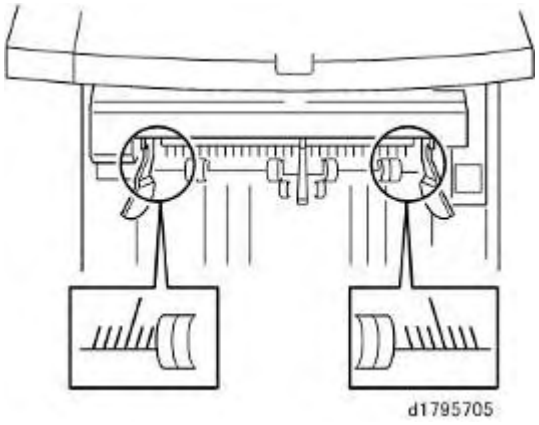
The paper feed path is extremely long when many peripheral units are installed. In such a long path, the cumulative effect of paper skew or deviation in side-to-side registration may require adjustment.



- Skew [A] occurs when the trailing edge of the paper rotates away from the direction of paper feed.
- If side-to-side registration shift [B] occurs, the sheet remains straight but shifts left or right away from center of the paper path.

Important

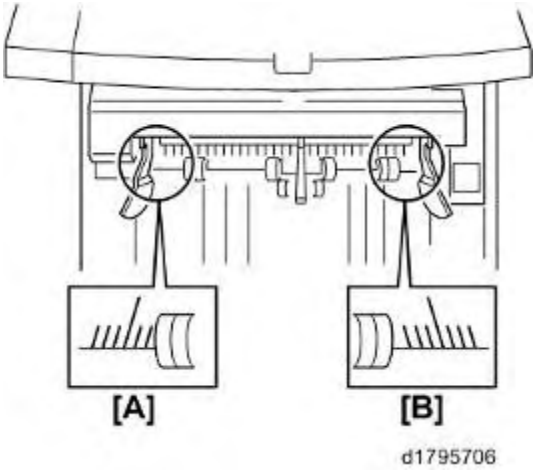
- Before adjusting skew manually, be sure to enter the SP mode and set SP1206 to "2" (OFF). This disables side-to-side registration in the main machine's registration unit.



Scales

- Skew and side-to-side registration are checked with graduated scales (shown above) where paper exits the units.
- The scales are provided so that you can visually check and measure the amount of skew or deviation in side-to-side registration.
- A scale for detecting skew and checking side-to-side registration ("S-to-S") is provided on the following peripheral units.
- Correction for both skew and side-to-side registration are possible.

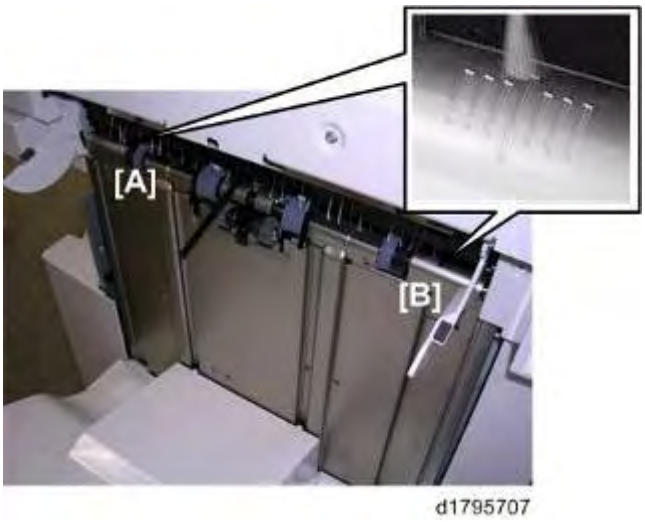
Name	Skew	S-to-S	Comment
LCIT	---	**---**	Correction is done in the registration unit of the main machine.
Other Peripheral Units	**Yes**	**Yes**	Correction for both skew and side-to-side registration are possible when the unit is attached to the upstream unit with the single bracket.



Use either the rear scale or front scale, depending on the type of paper used in your area:

- Rear [A]: **DLT** SEF (LT LEF for Ring Binder)
- Front [B]: **A3** SEF (A4 LEF for Ring Binder)

The illustrations below show where the scale for each peripheral unit is located:



- [A]: DLT/ [B]: A3

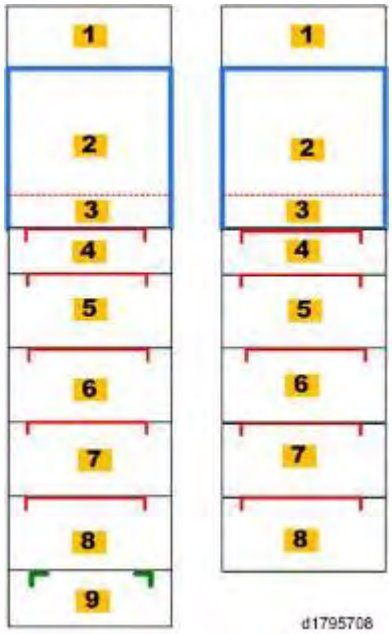
The illustration above shows the scale on the left side of the Booklet Finisher tray. The same scale is at approximately the same position (paper exit) for the following units:

- Multi Folding Unit: Proof Tray, or Left Exit
- Ring Binder: Left Exit

- High Capacity Stacker: Proof Tray

In the illustration below:

- The RED lines indicate the single-piece brackets where adjustments can be done to eliminate skew and to correct side-to-side registration.
- The GREEN lines indicated 2-piece joint brackets where adjustment is not possible between the finisher and trimmer unit.



Unit	Name	Comment
[1]	LCIT	
[2]	Main Machine	
[3]	Decurl Unit (inside main machine)	Inside main machine
[4]	Cover Interposer Tray	
[5]	Multi Folding Unit	
[6]	Ring Binder	
[7]	High Capacity Stacker	
[8]	Finisher	Either finisher
[9]	Trimmer Unit (Joint Brackets x2)	Joint Brackets x2

Note: The Trimmer Unit [9] does not have the single bracket for the upstream unit that allows side-to-side adjustment with shims (described below).

Here are some general rules for testing and adjusting for paper skew or a shift in side-to-side registration.

1. After installation of each peripheral device, do some test prints and check for the presence of skew, and check that side-to-side registration is correct.
2. When you detect a problem with skew or side-to-side registration, do the adjustment on the joint bracket attached to the peripheral unit **upstream of the unit where the problem occurred**.
3. Side-to-side registration is corrected by shifting the upstream joint bracket left or right. (See the next procedure.)
4. Skew is eliminated by inserting spacers (shims) under the rear or front end of the joint bracket. These attached by screws to the peripheral units before they leave the factory.

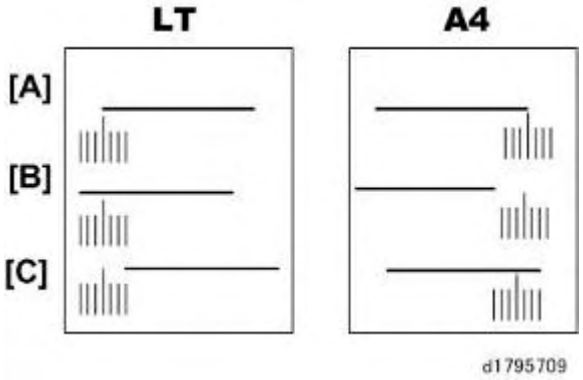
Checking Side-to-Side Registration

Do this procedure to confirm that the paper is centered in the paper path.

1. Make sure that the I/F cable of the unit is connected to the upstream unit.
2. Disconnect the unit to the left of the unit to be tested.
3. Execute a run by feeding paper from Tray 2 of the host machine.

   Note

   - If you are testing the Ring Binder, execute the run by feeding paper (A4 or LT LEF) from Tray 2 of the host machine (punching only, no ring binding). (The Ring Binder cannot accept a larger paper size.) Feed A3 SEF for other units.
4. When each sheet exits, check the position of the paper on the scale to see if the paper is centered.
   - Read the **rear scale** for **DLT**-size paper.
   - Read the **front scale** for **A3**-size paper.
   - If you are testing the ring binder, read the **rear scale** for **LT LEF** paper and the **front scale** for **A4 LEF** paper. With the Ring Binder, the paper does not exit. It will switch back and feed to the punch unit.
   - The scale lines are spaced 2 mm apart.
5. The paper must not deviate more than ±2 mm on the scale.



[A]	Leading/trailing edges centered. No adjustment necessary.
[B]	Leading/trailing edges offset to the rear by more than 2 mm. Adjustment required.
[C]	Leading/trailing edges offset to the front by more than 2 mm. Adjustment required.

If the edge of the paper is on the scale at the center [A], no adjustment is required.

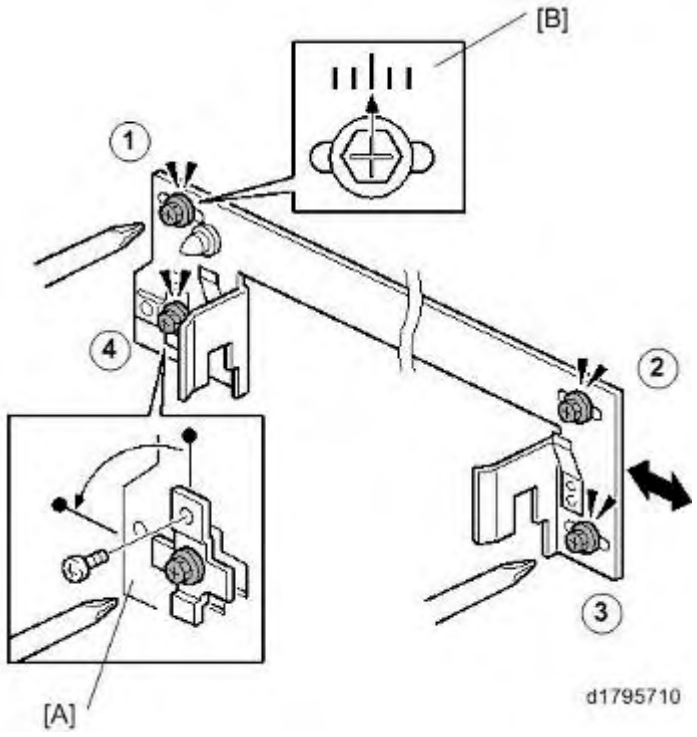
-or-

If the edge of the paper is ±2 mm off the center line on the scale, adjustment is required. Do the procedure in the next section.

Correcting Side-to-Side Registration

Each peripheral unit for this machine has the same single-piece connection bracket shown below. This adjustment can be done for every unit on the connection bracket attached to the upstream unit

1. Enter the SP mode and set SP1206 to "2" (OFF).
2. Disconnect the peripheral unit from the upstream unit.



3. On the joint bracket attached to the upstream unit, loosen screw ①, ②, ③, and ④.
4. Remove bracket [A] (x1), rotate it 90 degrees, and re-fasten the screw. Changing the position of this bracket aligns the oval cut-out horizontally and frees the joint bracket so it can slide from side to side.
5. Look at the scale [B].

6. Slide the bracket to the left or right and tighten the screw.
7. If the deviation from center was toward the front, slide the bracket to the rear and tighten screw ①.

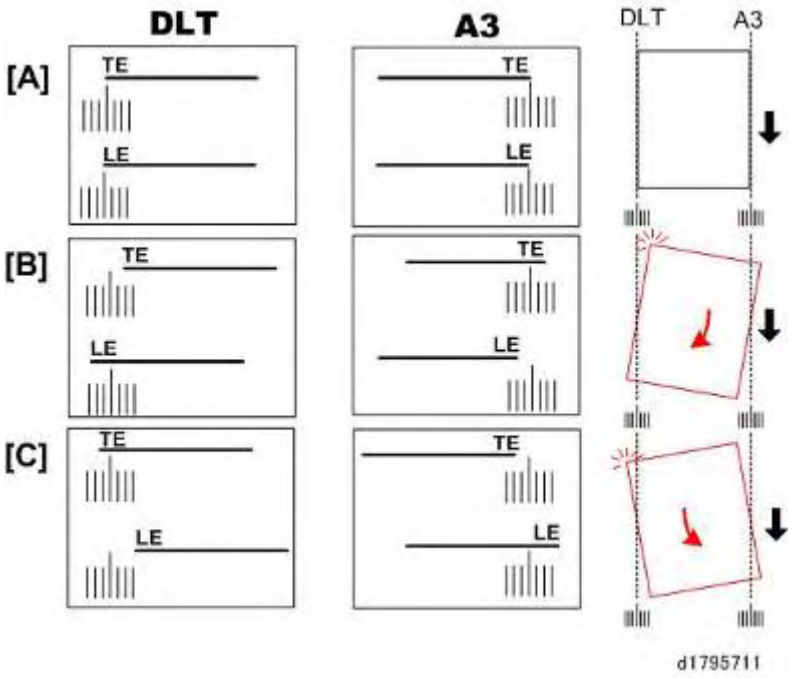
   -or-

   If the deviation from center was toward the rear, side the bracket to the front and tighten screw ①.
8. Tighten screws ②, ③, and ④
9. Do another test run, so that you can check the results of the adjustment.
10. When you are finished, enter the SP mode and re-set SP1206 to "1".

Detecting Paper Skew

Do this check to detect the presence of skew in the paper path.

1. Make sure that the I/F cable of the unit is connected to the upstream unit.
2. If a peripheral unit is connected on the left side, disconnect it and pull it away.
3. Execute a straight-through run.
4. Check the scale where each sheet exits.
   - The **rear scale** is for **DLT**-size paper.
   - The **front scale** [2] is for **A3**-size paper.
   - Be sure to read the correct scale for the paper size in use.



[A]	Centered. No adjustment necessary.
[B]	Trailing edge skew to the front, total skew more than ±2 mm. Adjustment required.
[C]	Trailing edge skew to the rear, total skew more than ±2 mm. Adjustment required.

Correcting Skew

1. Enter the SP mode and set SP1206 to "2" (OFF).
2. Disconnect the peripheral unit from the upstream unit.
3. Locate and remove the spacers from the peripheral unit where the problem occurred.

Locating and Removing Spacers

The photos below show where you can find the spacers for each unit.

Multi Folding Unit

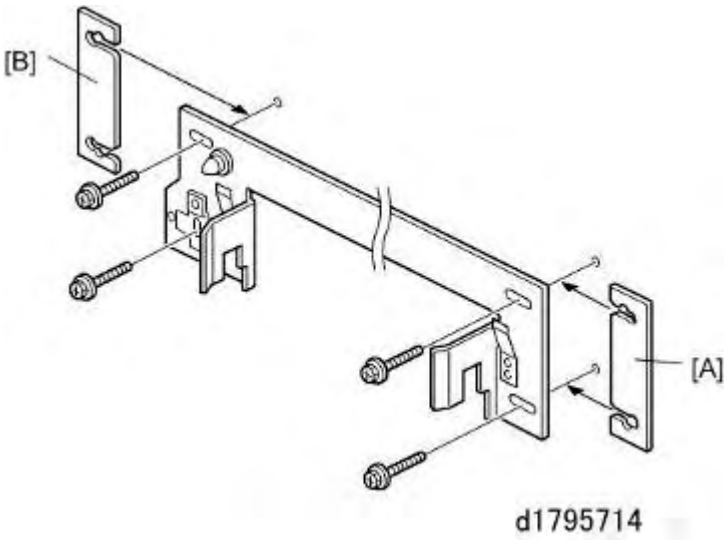
d1795712

Booklet Finisher, Finisher

d1795713

1. Open the front door (x1).
2. Remove the spacers (x1).

Inserting Spacers



d1795714

1. Loosen the screws (x4) of the joint bracket attached to the peripheral upstream of the unit where the problem occurred.
2. Insert a spacer and tighten the screws.
   If the trailing edge of the paper is **skewing toward the front** of the machine, insert a spacer [A] under the **rear end of the bracket** and tighten the screws.
   -or-
   If the trailing edge is **skewing toward the rear** of the machine, insert a spacer [B] under the **front end of the bracket** and tighten the screws.

3. Do another run to check the adjustment. If skew is still present, insert another spacer.
   - Each spacer is 2 mm thick.
   - Only two spacers are provided, so the maximum adjustment is 4 mm (using two SPACERS).
4. Enter the SP mode and re-set SP1206 to "1".

⇒2.19 GBC STREAMPUNCH (VR41)

2.19.1 OVERVIEW

If you wish to install the GBC Stream Punch directly downstream from the D179/D180/D181, do the following:

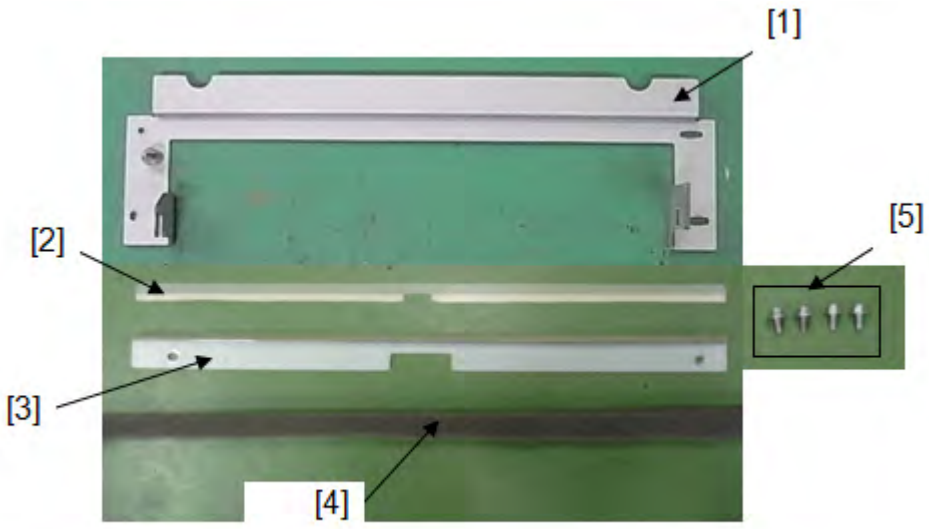
1. Order the special parts described in the next section “2.19.2 Accessories”.
2. Install the special parts according to the procedure described in the section “2.19.3. Installation”.
3. This procedure is the same as D074/D075/M044 copier/printer.

Important

- Never install the punch unit directly downstream from the main machine without using the special parts described in section 2 for the following reasons:
  1. Possible jams.
  2. Possible injuries may result to your hands if the D741 Decurl Unit (Decurl Unit DU5030) is installed and the door or the punch unit is open.

2.19.2 ACCESSORIES

Make sure that you order the following special parts. Install these parts by following the installation procedure described in the next section “2.19.3. Installation.”



No.	Description	Q'ty
1	Bracket: Adapter Section: GBC: Peen (P/N - M0774703) See **NOTE.**	1
2	Sheet: GBC: Upper (P/N - G1785145)	1
3	Guide Plate: GBC: Ass'y (P/N - M0774707)	1
4	Spacer Cushion (P/N - B8321371)	1
5	Tapping Screw: 4X8 (P/N - 04514008N)	4

Note

- Required only when the D741 Decurler Unit is installed.

2.19.3 INSTALLATION

Installation Overview

Step 1. Installing the exclusive bracket(s)

Step 2. Removing the guide plate supplied with the GBC StreamPunch (if installed)

Step 3. Installing the exclusive guide plate

Step 4. Docking the GBC StreamPunch with the mainframe

Step 5. Mainframe height adjustment

Step 1. Installing the exclusive bracket(s)

The bracket(s) you install in this step will differ depending on whether the D741 Decurler unit is installed to the mainframe or not.

- If the D741 Decurler Unit is installed to the main machine, use the special bracket.
  【Case A】
- If the D741 Decurler Unit is not installed, use the brackets supplied with the GBC StreamPunch.
  【Case B】

[Case A]

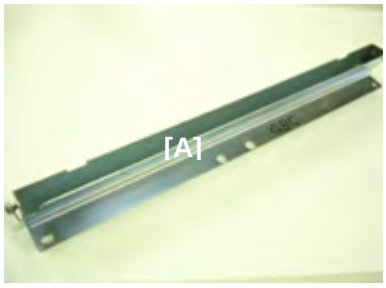
Install the special bracket [A] (4 screws) if the D741 Decurler unit is installed to the main machine.

BRACKET: ADAPTER SECTION: GBC:PEEN (M0774703)

[Case B]

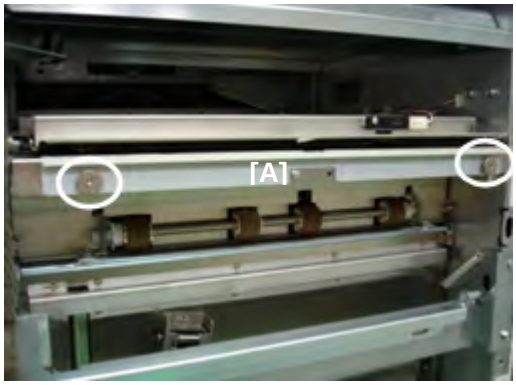
Install the brackets supplied with the GBC StreamPunch if the D741 Decurler unit is not installed. Use [A] for the rear side and [B] for the front side.

Step 2. Removing the guide plate supplied with the GBC Stream Punch

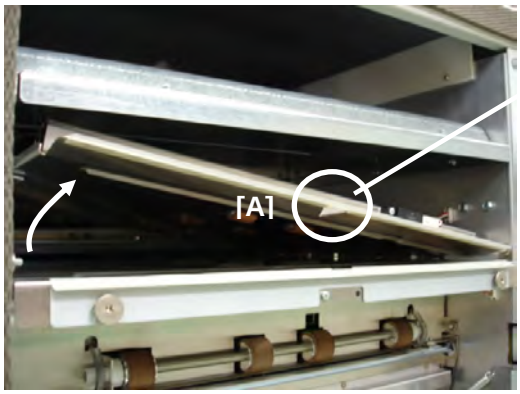


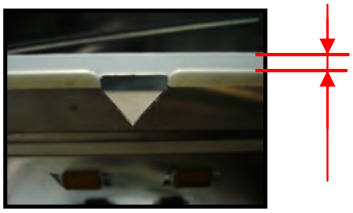
2.1. If installed to the punch unit, remove the guide plate [A] supplied with the GBC Stream Punch. Keep the screws you removed. You will need them to install the special guide plate (Step 3).

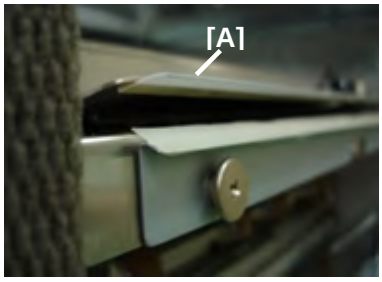
Step 3. Installing the exclusive guide plate (Guide Plate:GBC:ASS'Y M0774707)



3.1. Install the exclusive guide plate [A] (GUIDE PLATE: GBC: ASS'Y: M0774707) (2 screws) so that the oval shaped hole [B] positions to the front side.







3.2. Lift and hold the paper entrance guide to attach the exclusive mylar [A] (SHEET: GBC: UPPER: G1785145).

Note

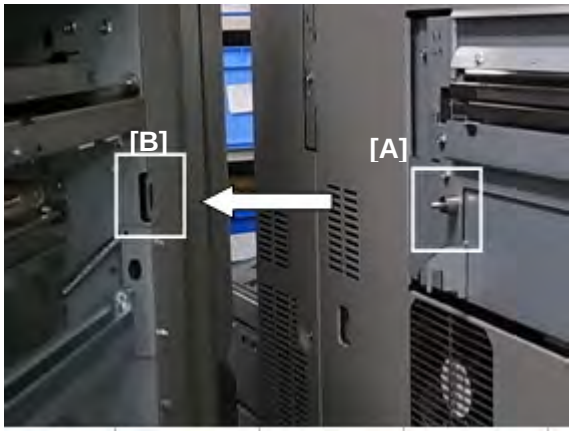
- Make sure to align the center slit on the mylar to the center slit on the entrance guide.

3.3. Attach the spacer cushion [A] (SPACER CUSHION: B8321371) to the top edge of the punch unit.

Note

- Use the special cushion for the top edge. For the remaining edges, use the cushions supplied with the StreamPunch.

Step 4. Docking the GBC StreamPunch with the mainframe



Note

- The mainframe in picture is another model.

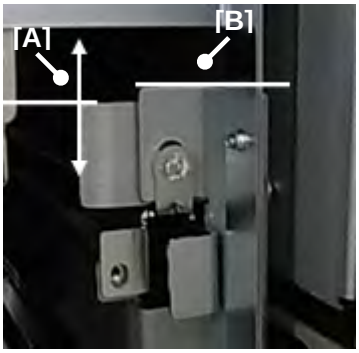
.

4.1. Dock the GBC StreamPunch with the mainframe and set the fixing pin [C].

Note

- Make sure the positioning pin [A] on the mainframe is inserted properly to the location hole [B] on the GBC StreamPunch

Step 5. Mainframe height adjustment



5.1. Adjust the height of the mainframe so that the top edge of mainframe bracket [A] aligns with the top edge of the GBC StreamPunch bracket [B].

5.2. Adjust the height of the mainframe on the rear side as necessary.

Note

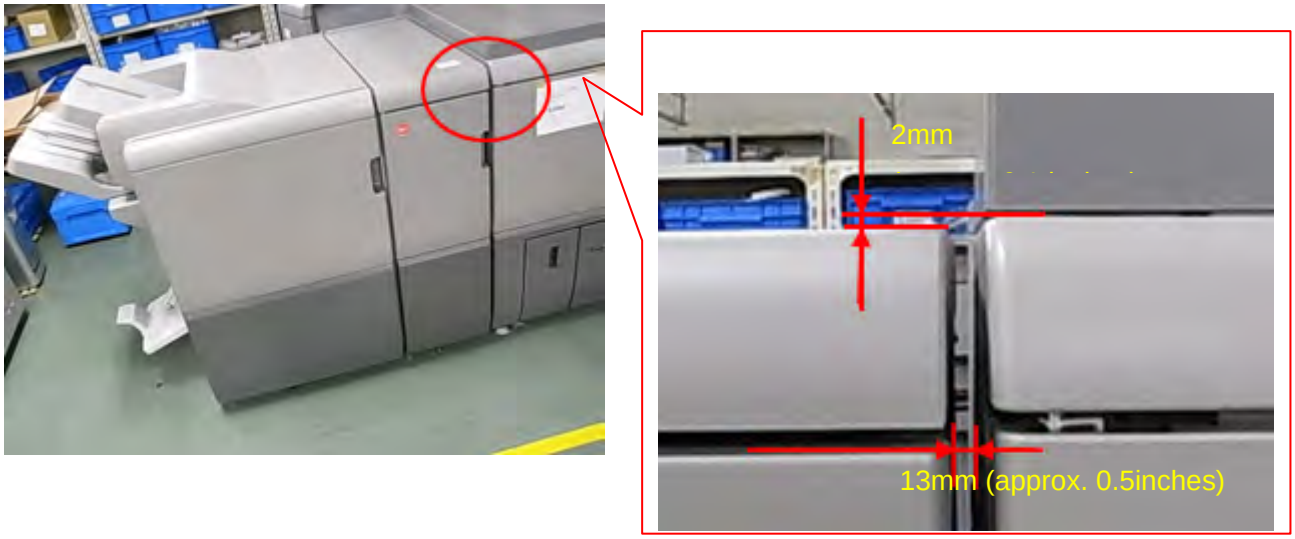
- Make sure the top surface of the mainframe is level after adjusting the height.

5.3. Confirming the height and space after installing the GBC StreamPunch Tray

This confirmation includes the mainframe + the GBC StreamPunch.

Note

- The mainframe and the finisher in pictures below are other models.



PREVENTIVE MAINTENANCE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

3. PREVENTIVE MAINTENANCE

3.1 PREVENTIVE MAINTENANCE TABLES

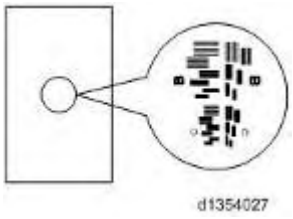
See "Appendices" for the following information:

- PM Parts List
- Other Yield Parts

3.2 IMAGE QUALITY STANDARDS

3.2.1 CHECKING IMAGE QUALITY

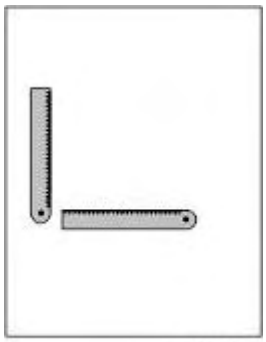
Resolution

Standard	1:1/Enlargement:	4.5 lines/mm or more
	Reduction:	4.5 x M or more mag.
What You Need	S-2-1 Chart	
Method	 Resolution measured after copying in Text Mode at AE5 notch with Normal Paper	

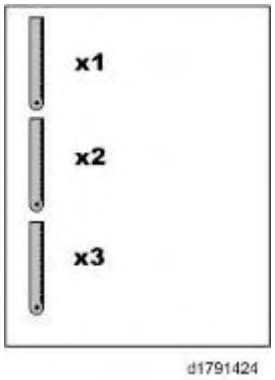
Even Density

Standard	Left, right grayscale within 0.1 at 0.2 to 0.6
What You Need	S-2-1 Chart
Method	Right, left density measured after copying in Text Mode at AE5 notch with Normal Paper.

Magnification Errors

Standards	1:1	Main scan: <±0.5%, Sub scan: <±0.8%
	Magnification	Main scan: <±1.0%, Sub scan: <±1.0%
What You Need	150 mm scale	
Method	 d1791423 1. Set two scales on the exposure glass, and then copy them. 2. Wait at least 10 min. after the paper exits. 3. Measure 100 mm on the copied images with the actual scale.	

Magnification Error Variation

Standard	1:1/Mag.: Sub scan (horizontal, vertical) less than 1.0%
What You Need	150 mm scale
Method	 1. Place three 150 mm scales on the exposure glass, and then copy them. 2. Wait at least 3 min. after the paper exits. 3. Use a scale to measure 100 mm against each scale image (x1, x2, x3) on the paper. 4. Determine the maximum and minimum deviation (%) from the standard. 5. Calculate the difference between the maximum and minimum deviation. Notes ▪ For example, if the three measurements of the scales are 100.4 mm, 99.5 mm, 100.2 mm, then the difference between the maximum and minimum values is 0.9 mm (100.4 – 99.5). ▪ Set the scales in the main scan direction (horizontal), copy them, and then use the same method to determine the variation ▪ For best results, using at least three scales is recommended. ▪ If you have only one scale, then you can make three copies with the scale at different positions. ▪ Please remember that line speed may vary slightly depending on the number of copies in a job.

3.3 PAPER TRANSFER

3.3.1 PAPER TRANSFER QUALITY STANDARDS

Registration

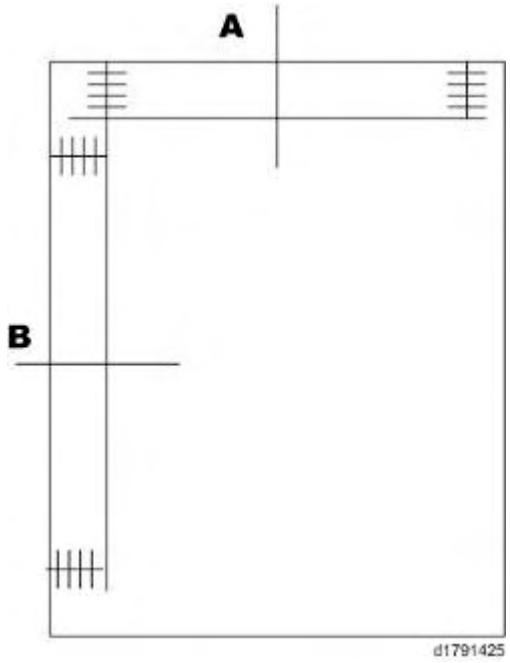
Standard: Main Machine

Simplex	Engine	Sub scan 0±0.5 mm
	Copy	Sub scan 0±1.5 mm
Duplex	Engine	Sub scan 0±0.5 mm
	Copy	Sub scan 0±1.5 mm

Standard: Main Machine + ADF

		Copy Paper (40 to 128 g/m^2)	
		Front Side	**Reverse Side**
Plotter		0±0.5 mm	0±0.5 mm
With ADF			
Front A3 to A5	Main scan 0±1.0 mm	0±2.5 mm	0±2.5 mm
	Sub scan 0±2.0 mm	0±1.5 mm	0±1.5 mm
Reverse A3 to A5	Main scan 0±3.0 mm	0±3.5 mm	0±3.5 mm
	Sub scan 0±1.0 mm	0±1.5 mm	0±1.5 mm

What You Need	S-2-1 Chart, 150 mm scale

Method	 1. Make a 1:1 copy of the S-2-1 chart with normal paper. 2. Use the scale to measure the registration marks at the leading edge. 3. The range is vertical registration A: 5 mm, and horizontal registration B: 4 mm for the front side.

Skew

Standard: Main Machine

	Function	**Specification**	**Feed Length**
Simplex	Engine	Less than 0±0.5 mm/200 mm	More than 270 mm
		Less than 0±0.5 mm/100 mm	Up to 279 mm
	Copy	Less than 0±1.0 mm/200 mm	More than 270 mm
		Less than 0±1.0 mm/100 mm	Up to 279 mm
Duplex	Engine	Less than 0±0.5 mm/200 mm	More than 270 mm
		Less than 0±0.5 mm/100 mm	Up to 279 mm
	Copy	Less than 0±1.0 mm/200 mm	More than 270 mm
		Less than 0±1.0 mm/100 mm	Up to 279 mm

Standard: Main Machine + ADF

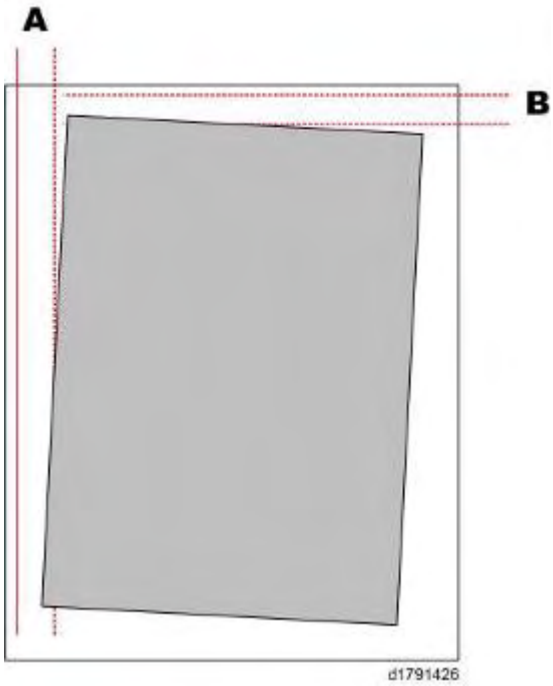
Plotter Copy Paper (40 to 128 g/m^2)

Front Side (mm)		Reverse Side (mm)	
More than 279	**Up to 279**	**More than 279**	**Up to 279**
±0.5 mm/200	±0.5 mm/100	±0.5 mm/200	±0.5 mm/100

ADF: Copy Paper (40 to 128 g/m^2)

	Front Side (mm)			Reverse Side (mm)	
Front	Main scan: ±1.5 mm/200 mm	±2.0/200	±2.5/200	±2.0/200	±2.5/200
	Sub scan: ±1.0 mm/200 mm	±1.5/200	±2.0/200	±1.5/200	±2.0/200
Reverse	Main scan: ±2.0 mm/200 mm	2.5/200	3.0/200	2.5/200	3.0/200

What You Need	S-2-1 Chart, 150 mm scale

Method	 1. Make a 1:1 copy of the S-2-1 chart with normal paper. 2. Use the scale to measure the left and right registration marks at the leading edge.

LCIT RT5070/RT5080

Registration	Leading edge registration	0±2 mm (±1 mm variation per job)
	Horizontal registration	0±2 mm
Skew	A4 SEF, LT SEF and larger	0±1/200 mm
	B5 SEF and smaller	0±1/100 mm

Cover Interposer Tray CI5030

Horizontal registration	0±2 mm	
Skew	A4 LEF, B5 LEF	0±0.63/100 mm
	A3, B4	0±0.83/100 mm

3.4 PM PARTS SETTINGS

3.4.1 BEFORE REMOVING OLD PM PARTS

1. Enter the SP mode.
2. Output the SMC logging data with **SP5990-004**.
3. Press the PM parts counter reset button in the PM Parts display before you turn the power off.
4. Exit the SP mode.

Important

- After the PM count for the fusing cleaning web and the drum lubricant bar expire, the machine stops automatically.
- After replacing developer, the count is cleared by executing **SP3024-001** (Developer Filling), so there is no need to perform a counter clear.

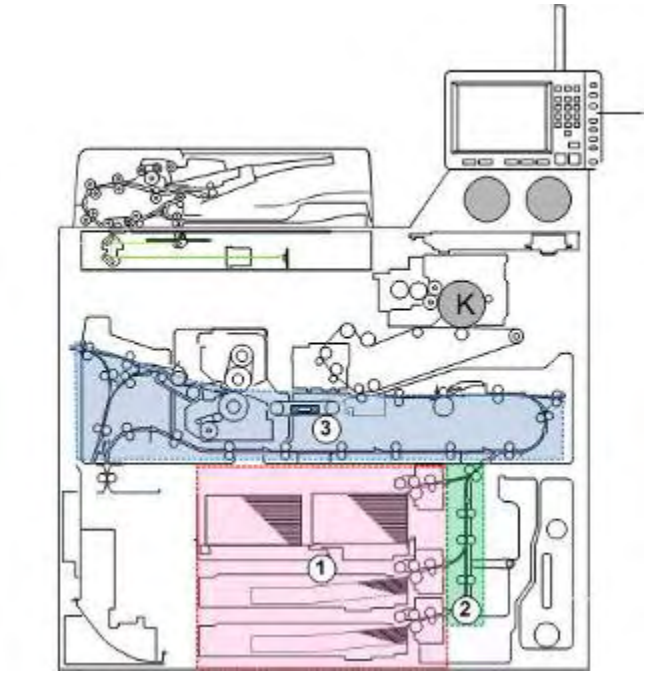
3.4.2 AFTER INSTALLING NEW PM PARTS

1. Turn on the main power switch. The machine will reset the PM counts automatically and initialize default SP code settings.
2. Check the "Initial Adjustment SP Lists". Refer to this list if any SP must be set manually after a part replacement.
3. Output the SMC logging data with **SP5990-004** and check the counter values.
4. Make sure that the PM counters for the replaced parts are "0" in the PM parts display. If the PM counter for a unit has not been reset to zero, reset that counter again.

3.5 CLEANING POINTS

3.5.1 INSPECTION AND CLEANING

This section describes how to clean the rollers and sensors in the paper path with little or no disassembly. Three units comprise the paper path.



①	Paper Bank	Paper supply, 1st, 2nd, 3rd Trays
②	Vertical Transport Unit	Relays paper to the paper registration unit above.
③	Front Drawer	Paper registration, PTR unit, 2nd half of duplex path

Here are some rules to follow for cleaning rollers and sensors.

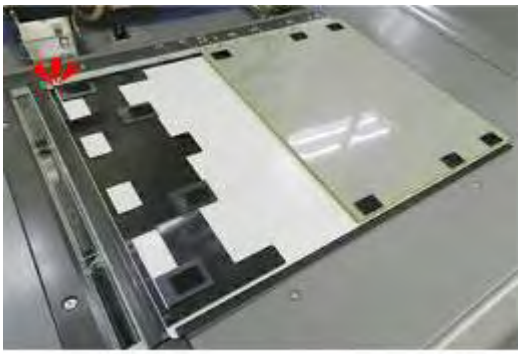
Roller Cleaning

- Clean rollers with a dry cloth.
- Try to avoid touching the surfaces of the rollers with bare hands.

Sensor Cleaning

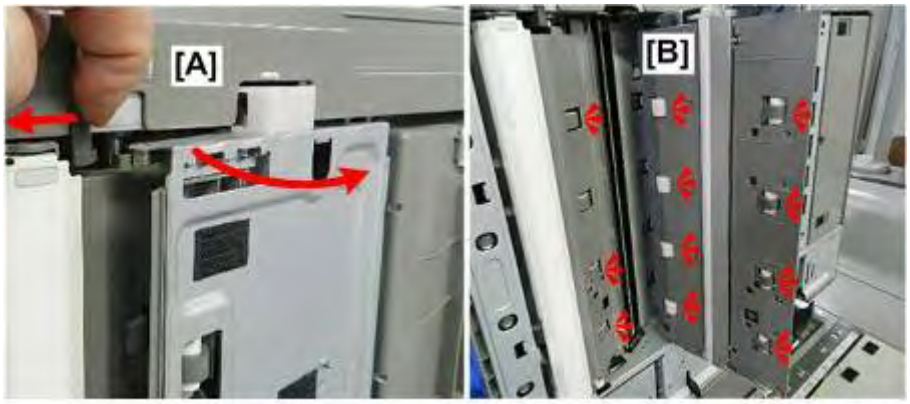
- Clean sensors with a blower brush. Do not use cloth or tissue paper.
- Most of the sensors are below holes in plates so you may not be able to see them.
- Insert tip of the blower brush into the hole and squeeze it to blow any paper dust off the sensor.

3.5.2 ADF CLEANING



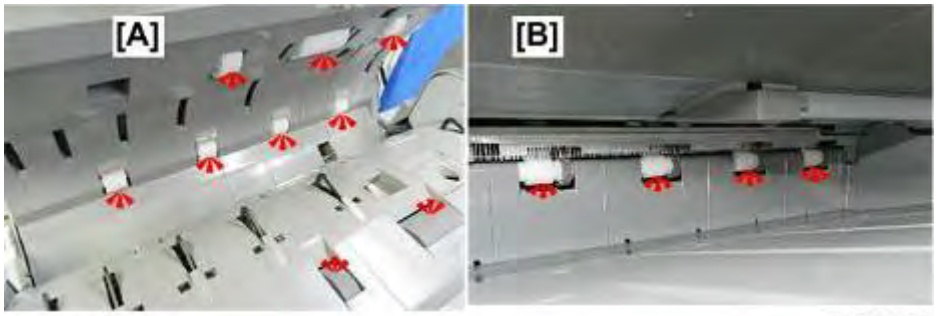
d1802501

1. Clean the white plate with a damp cloth.
2. If you need to remove the white plate, pull it off from the Velcro fasteners.
3. To re-attach the white plate, set the corner of the plate in the upper left corner, and then just lower the ADF.



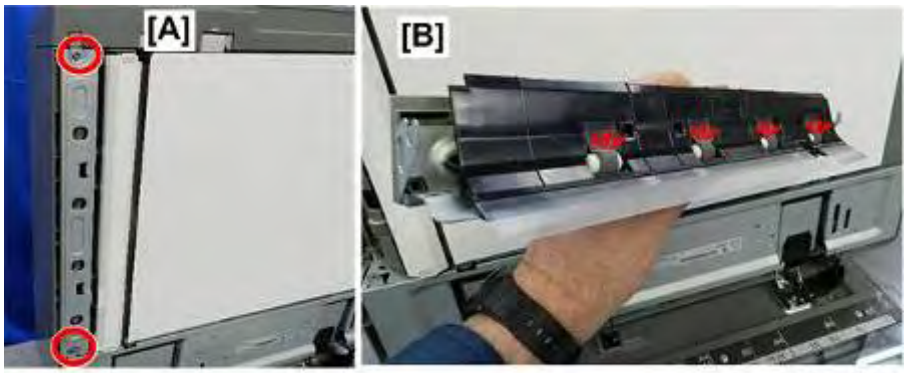
d1802502

4. Push release lever [A] to the left, and then open plate [B].
5. Clean the lower rollers with a water or alcohol dampened cloth.



d1802503

6. Open the feed cover [A].
7. Clean the upper rollers with a water or alcohol dampened cloth.
8. Under original tray [B] clean the rollers with a water or alcohol dampened cloth.



d1802504

9. Raise the ADF [A].
10. Remove left plate (x2).
11. Clean scanner rollers [B] attached to the plate.

d1802505

12. Clean the other rollers where the plate was removed.

3.5.3 SCANNER UNIT

d1792626

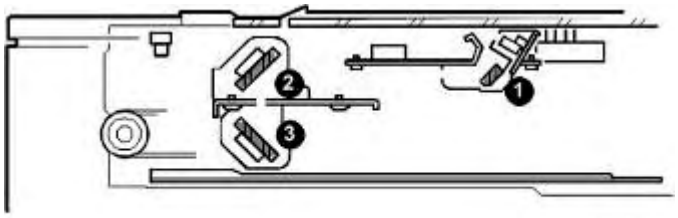
1. Use glass cleaner and a clean cloth to clean the scanner glass.

d1792627

2. Use glass cleaner and a clean cloth to clean exposure glass.

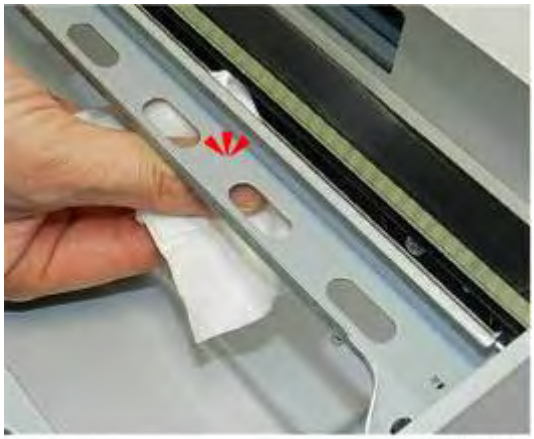
d1792628

3. Turn the scanner motor belt ① counter-clockwise until the exposure lamp assembly ② reaches ③ the cut-out .
4. Use a lens cloth to clean the reflector plate.



d1792629

①	1st Mirror
②	2nd Mirror
③	3rd Mirror



d1792630

5. Use a lens cloth to clean the 1st mirror

d1792631

6. Use a lens cloth to clean the 2nd mirror.

d1792632

7. Use a lens cloth to clean the 3rd mirror.

d1792633

8. When you are finished cleaning the optics, turn the scanner motor belt ① until the exposure lamp unit ② reaches the far left side ③ of the exposure unit.

d1792634

9. Clean the original size sensor with a blower brush.

3.5.4 BEFORE YOU BEGIN

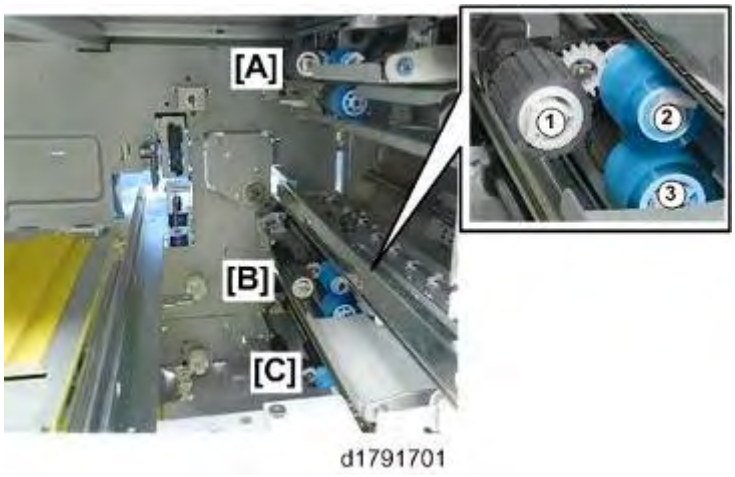
1. Turn off the machine and disconnect it from its power source.
2. Allow the machine to cool for at least 20 min.

⚠CAUTION

- Make sure that the machine is switched off and disconnected from its power source before doing the following procedures.

3.5.5 PFU ROLLERS

1. Remove right half of Tray 1.
2. Remove Tray 2, Tray 3.



3. Locate the paper feed units of each tray [A] PFU 1, [B] PFU 2, [C] PFU 3. Each unit has an identical set of rollers.

①	Pickup Roller
②	Feed Roller
③	Separation Roller

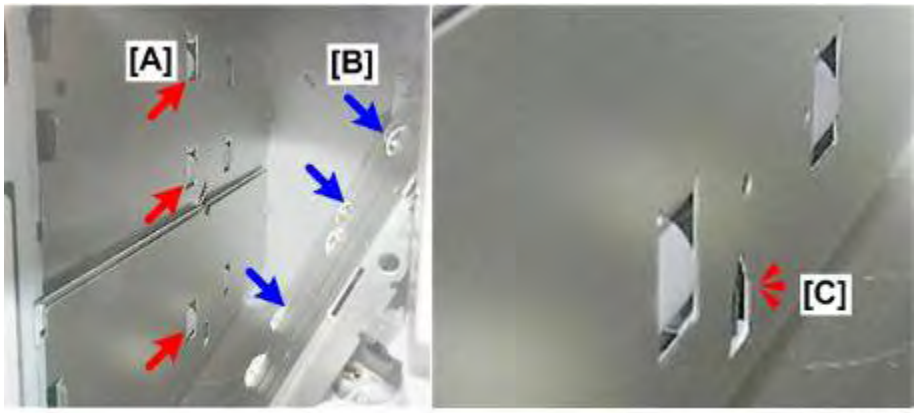
4. Clean the rollers with a dry cloth.
5. Clean sensors with a blower brush.

3.5.6 VERTICAL TRANSPORT UNIT (VTU) ROLLERS, SENSORS

1. Open the right front door.

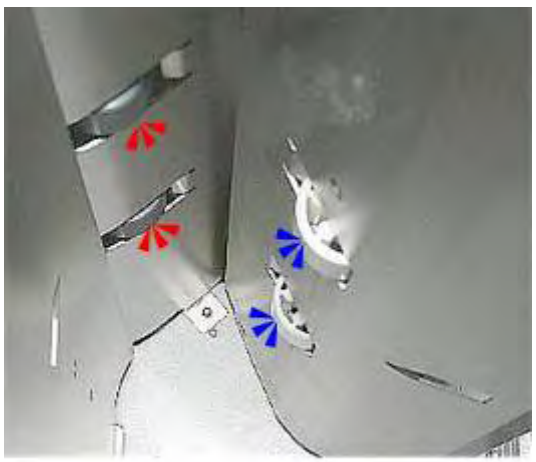
d1791702

2. Lower the lever to release the transport plates.



d1791703

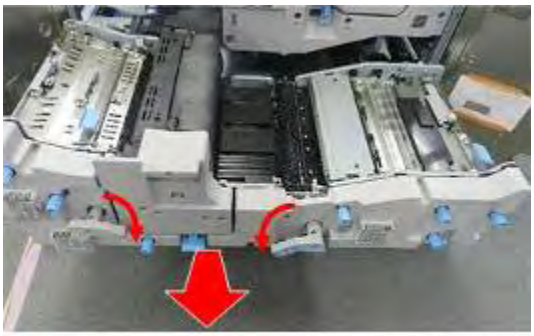
3. Use dry cloth to clean rollers [A] and idle rollers [B].
4. Use blower brush to clean sensor ports [C].



d1791704

5. Use dry cloth to clean exit rollers and idle rollers at the top.

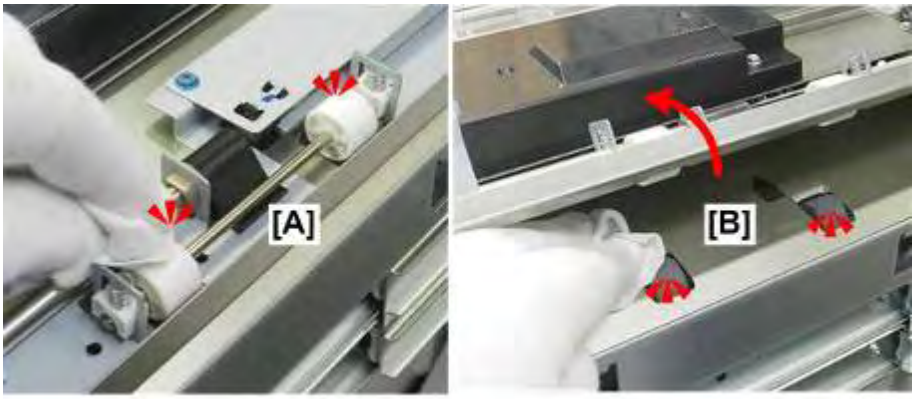
3.5.7 DRAWER: RIGHT SIDE



d1791705

1. Lower both handles and pull the drawer straight out unit it stops.

Entrance Rollers



d1791711

1. At the right edge of the drawer:
   [A] Dry cloth: Idle rollers
   [B] Dry cloth: Entrance rollers

LCIT Relay Sensor

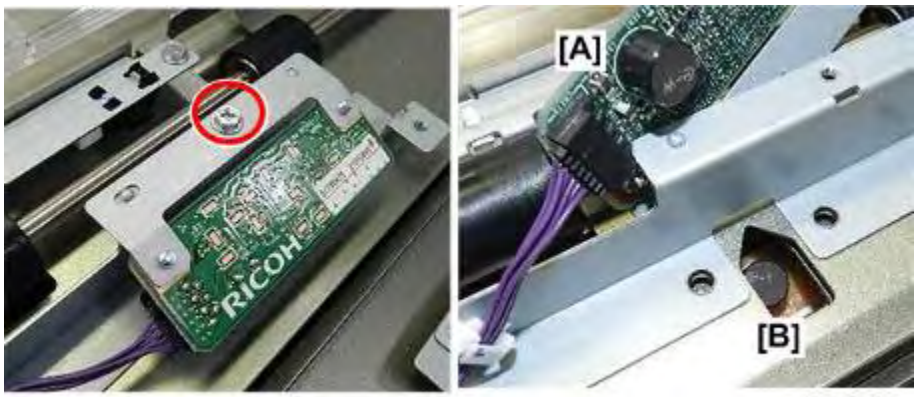
d1791706

1. Disconnect cover (x1).
2. Blower brush: photosensor.

Double-Feed Sensors

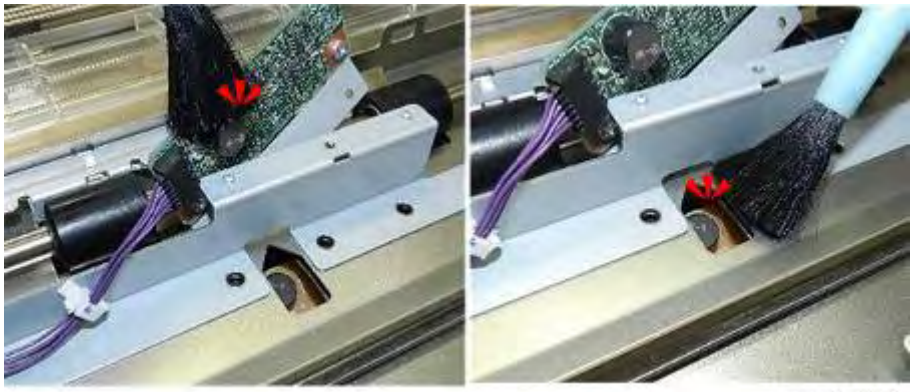
d1791707

1. Remove black cover (x2).



d1791708

2. Disconnect sensor bracket (x1).
3. Lift PCB so you can see double-feed sensor 2 (receiver) [A] and double-feed sensor 1 (emitter) [B].



d1791709

4. Blower brush: both sensors.

Registration Timing Sensor

d1791710

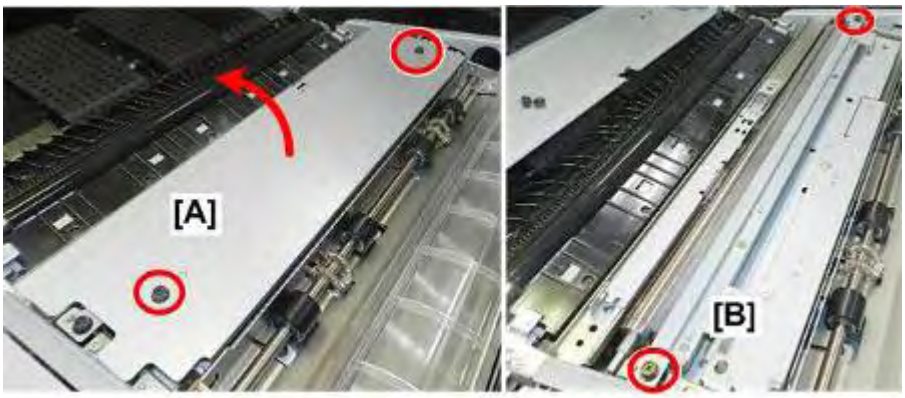
1. Disconnect sensor bracket (x1).
2. Blower brush: photosensor.

Registration Timing Roller

d1791717

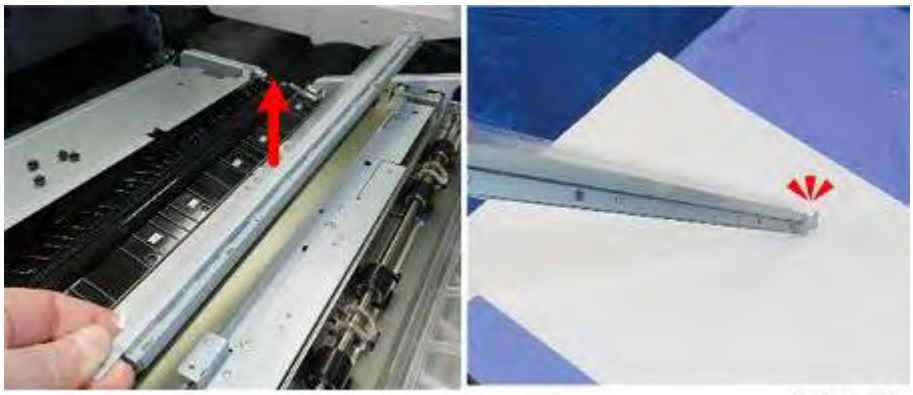
1. Dry cloth: Rollers

Dust Collection Tray



d1791712

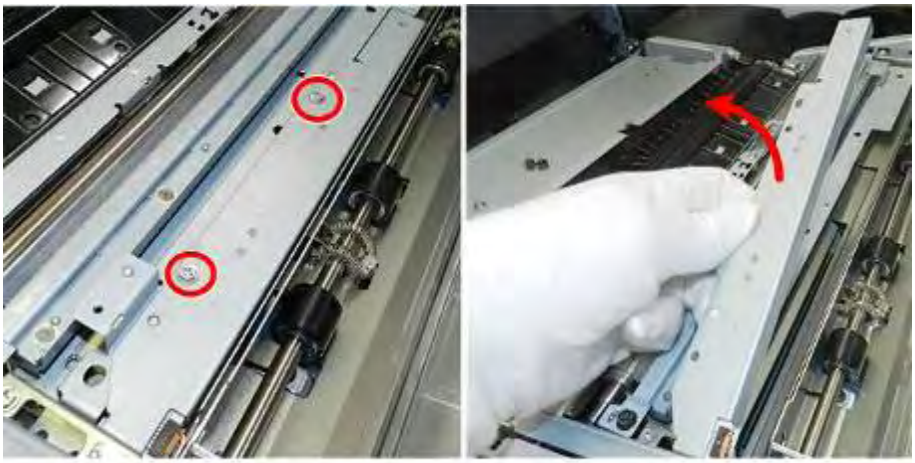
1. Remove flat plate (x2).
2. Disconnect dust tray (x2).



d1791713

3. Tap the end of the tray on a piece of waste paper.
4. Dry cloth: wipe tray clean.

CIS



d1791714

1. Disconnect CIS (x2).

d1791715

2. Lens cloth: Clean the glass.

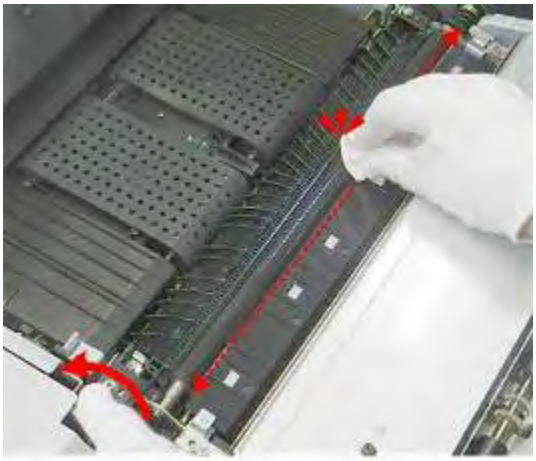
Transfer Timing Sensor

d1791716

1. Disconnect sensor bracket (x1).
2. Blower brush: Photosensor

3.5.8 DRAWER: CENTER

Paper Transfer Roller



d1791718

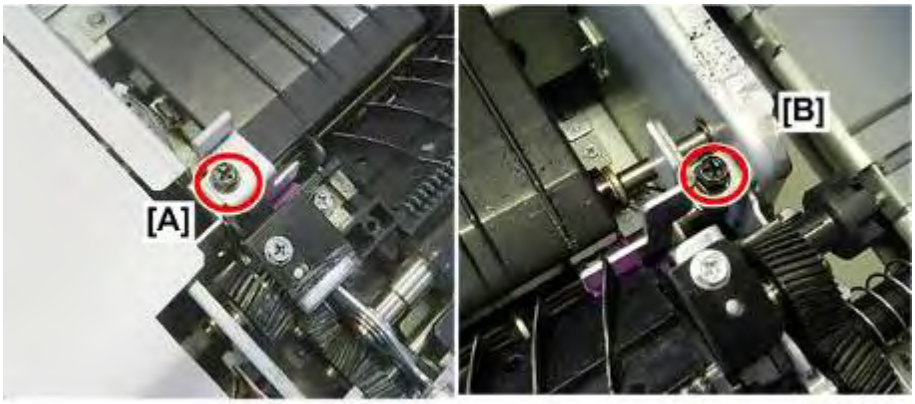
1. Turn gear at the front.
2. Dry cloth: PTR

Transfer Timing Roller: Upper

d1791719

1. Turn gear at the front.
2. Dry cloth: Roller

Transfer Timing Roller: Lower

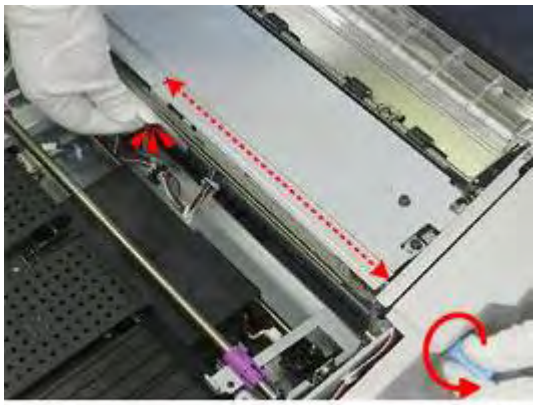


d1791720

1. Disconnect PTR unit:
   [A] Front (x1)
   [B] Rear (x1)

d1791721

2. Push both levers in toward center [A].
3. Remove PTR unit [B].



d1791722

4. Dry cloth: Transfer timing roller. (The roller is up under the edge of the plate.)

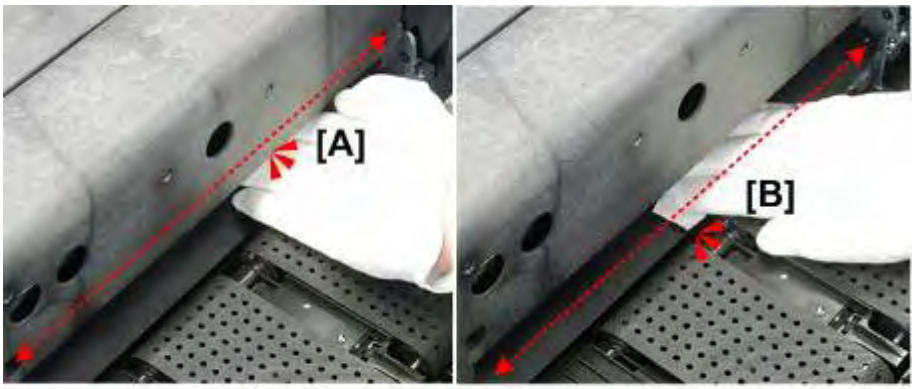
PTB Sensor

d1791723

1. Blower brush: Photosensor

3.5.9 FUSING UNIT

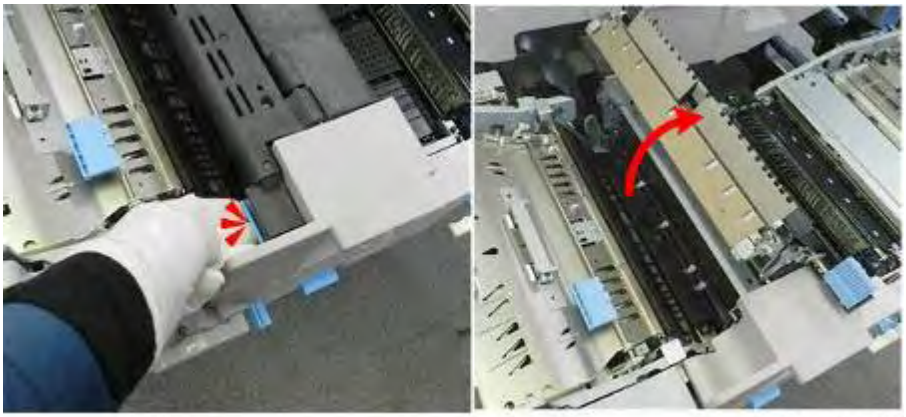
Entrance Plates



d1791724

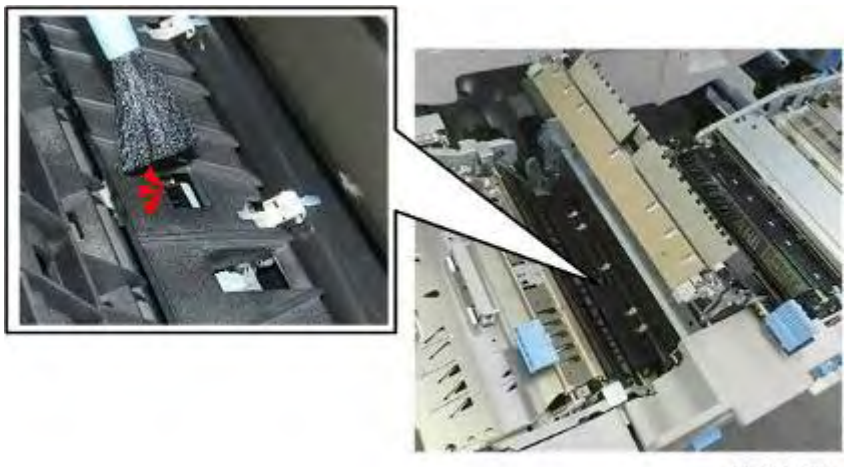
1. Dry cloth: Upper entrance plate
2. Dry cloth: Lower entrance plate.

Fusing Exit Sensor



d1791725

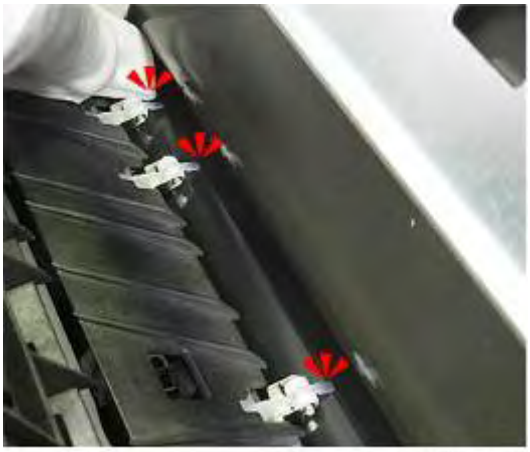
1. Open the fusing unit.



d1791726

2. Blower brush: Photosensor.

Pressure Roller Strippers



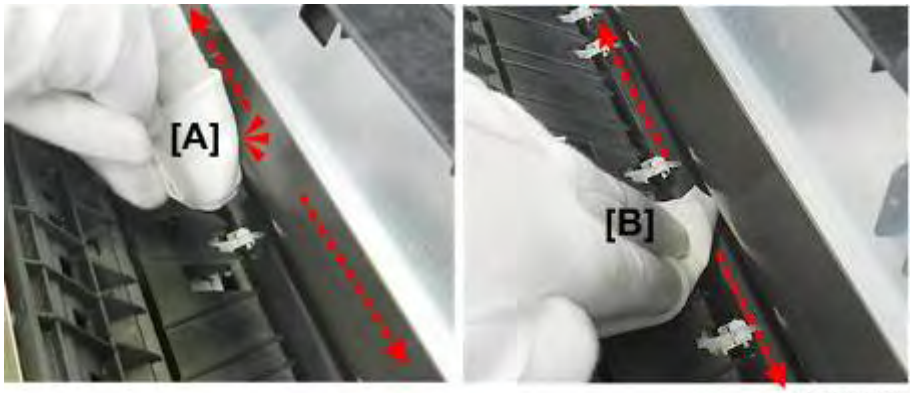
d1791727

1. Dry cloth: Point of each stripper.

Fusing Belt, Pressure Roller

d1791728

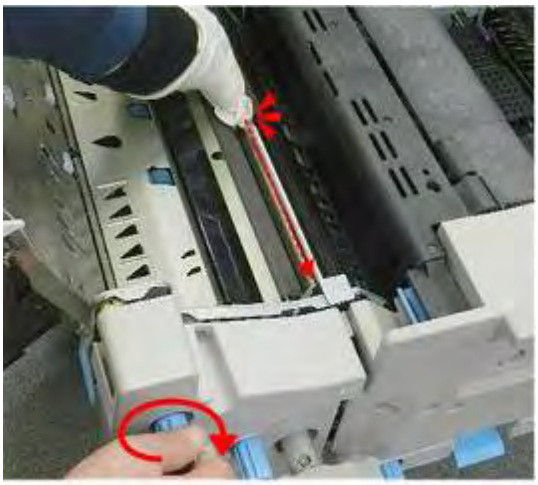
1. Remove knob from holder [A] on inside of left front door.
2. Insert knob [B] into front of fusing unit and turn slowly.



d1791729

3. Dry cloth: Fusing belt.
4. Dry cloth: Pressure roller.

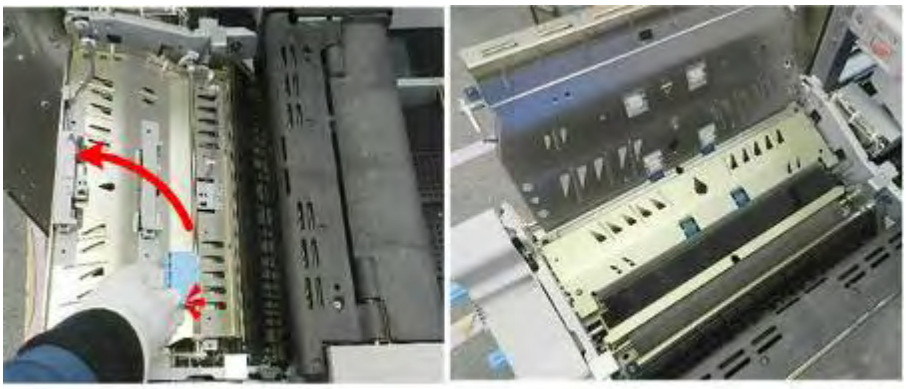
Cooling Pipe Roller



d1791730

1. Turn front knob.
2. Dry cloth: Roller

3.5.10 DRAWER LEFT: EXIT



d1791731

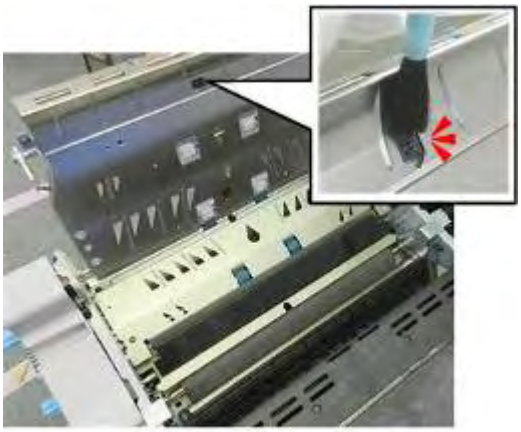
1. Open exit cover.

Exit Cooling Belt

d1791737

1. Turn front knob.
2. Dry cloth: Belt

Exit JG Sensor



d1791732

1. Blower brush: Photosensor

Exit Sensor

d1791733

1. Blower brush: Photosensor

Exit Relay Rollers

d1791734

1. Dry cloth: rollers

Exit Idle Rollers, Exit Relay Idle Rollers

d1791735

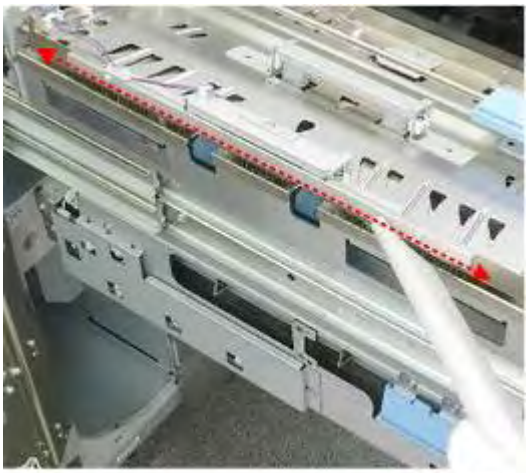
1. Dry cloth: Rollers.

Exit Roller

d1791736

1. Dry cloth: Rollers.

Exit Anti-Static Brush



d1791738

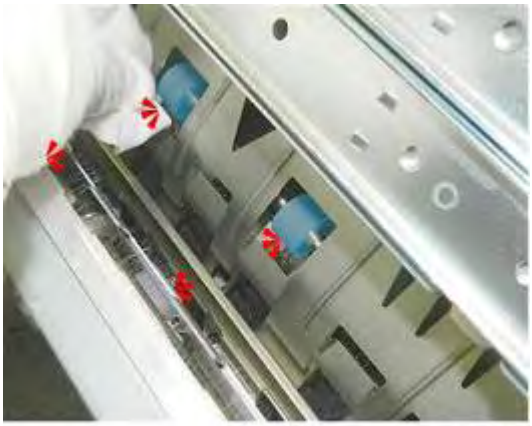
1. Vacuum cleaner (or blower bush) to top edge of exit.

3.5.11 DRAWER LEFT: INVERT UNIT

d1791739

1. Open the inverter unit on the left side of the drawer.

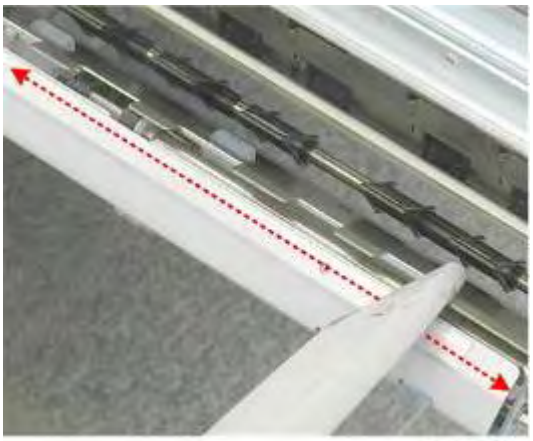
Invert Rollers



d1791740

1. Dry cloth: Roller, idle rollers

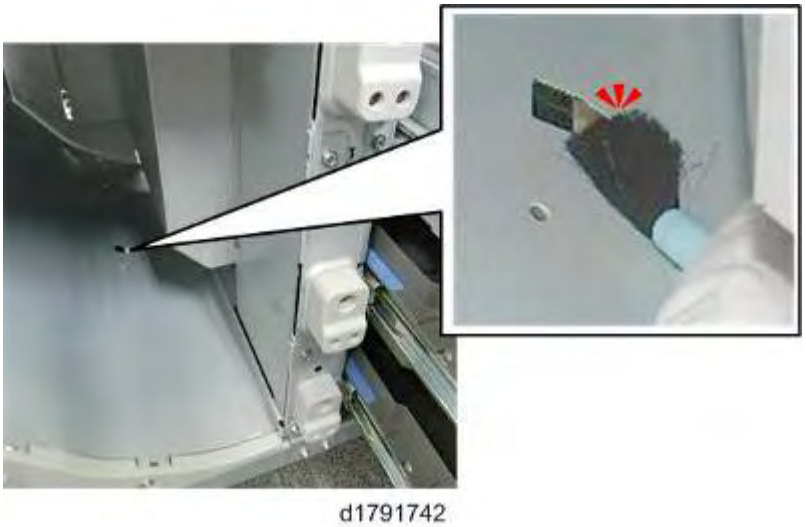
Inverter Anti-Static Brush



d1791741

1. Vacuum cleaner (or blower bush): Edge.

Purged Paper Sensor



d1791742

1. Blower brush: Photosensor.

3.5.12 DRAWER: FRONT COVERS OFF

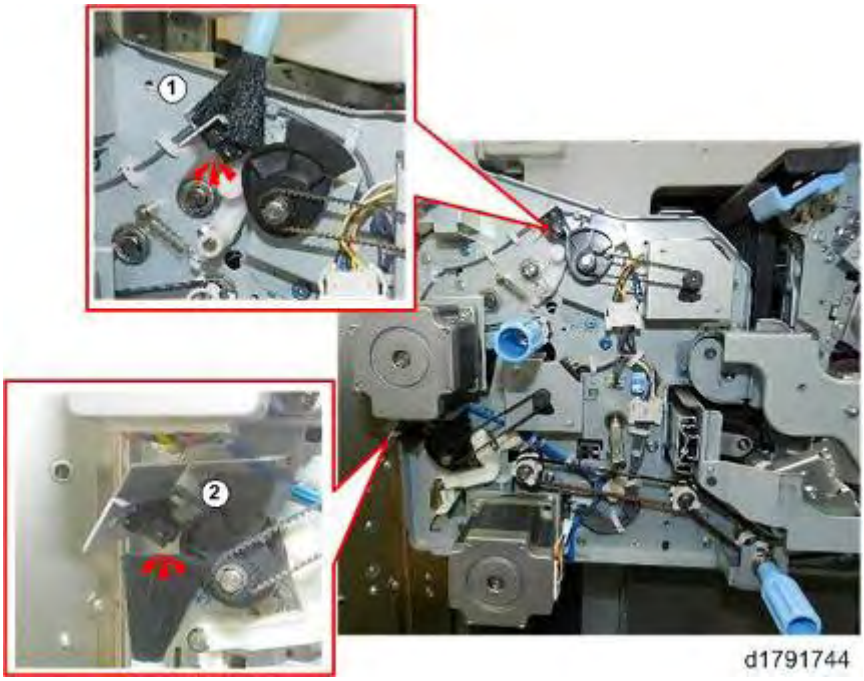
1. Disconnect the left, front cover of the drawer, and then remove it (x2).
2. Disconnect the right, front cover of the drawer, and then remove it (x4).

LCIT, Registration Roller, Main Relay HP Sensors

①	LCIT HP Relay Sensor
②	Registration Roller HP Sensor
③	Main Relay HP Sensor

1. Blower brush: Each interrupt sensor

Exit JG, Invert Exit HP Sensors



①	Exit JG HP Sensor
②	Invert Exit HP Sensor

1. Blower brush: Each interrupt sensor

3.5.13 TRANSPORT ROLLERS, SENSORS

1. At the front edge of the drawer, disconnect the strap clamps and straps (x2).

d1791746

2. Slowly, lower the bottom covers of the transport path.

d1791747

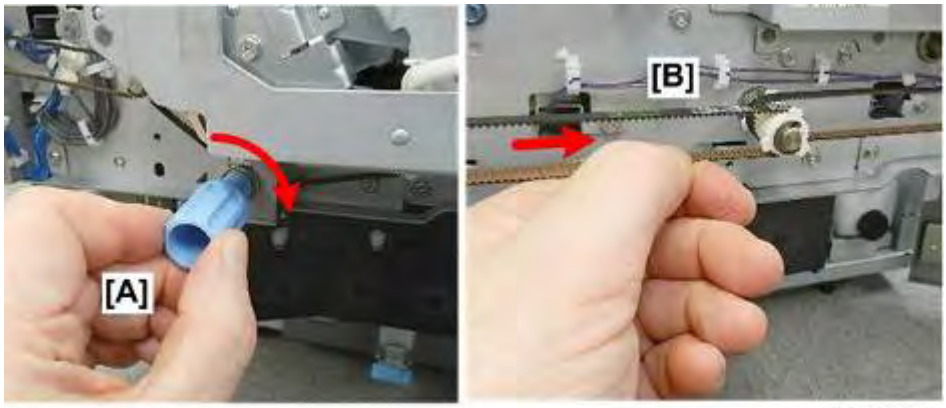
3. Allow both covers to hang vertically.

d1791748

4. There are exposed rollers and sensor ports on the right bottom cover.
5. Dry cloth: Rollers
6. Blower brush: Photosensors (marked by arrows).

d1791749

7. There are exposed rollers and sensor ports on the left bottom cover.
8. Dry cloth: Rollers
9. Blower brush: Photosensors (marked by arrows).



d1791750

10. Turn knob [A] to rotate the rollers of the left bottom plate as you clean them.
11. Rotate gears and belts [B] on front of the drawer to rotate the rollers of the right bottom plate as you clean them.

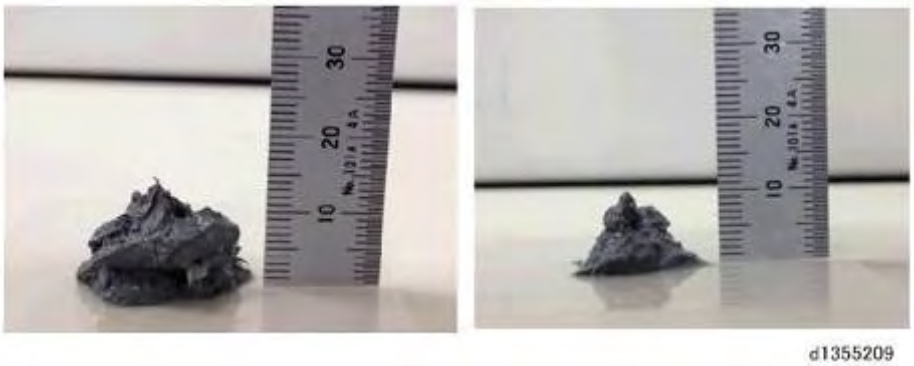
3.6 LUBRICATION POINTS

3.6.1 FUSING UNIT

Drive Gears

d1793811

1. Remove the fusing unit.
2. Remove the rear plate [A] (x3).
3. Apply Fluotribo MG Grease to drive gears ①,②.
   - Apply 1.5±0.3 g to ①
   - Apply 4±0.8g to ②
4. While rotating the gear, lubricate the small gear and all teeth of the circled gear.
5. Make sure that grease is applied to all the gears.



d1355209

6. The photo above shows the maximum and minimum amounts of lubricant to use.
   - Maximum FLUOTRIBO MG Grease 4.0g (on the left)
   - Minimum FLUOTRIBO MG Grease 1.5g (on the right)

Heating Roller, Hot Roller Bearings

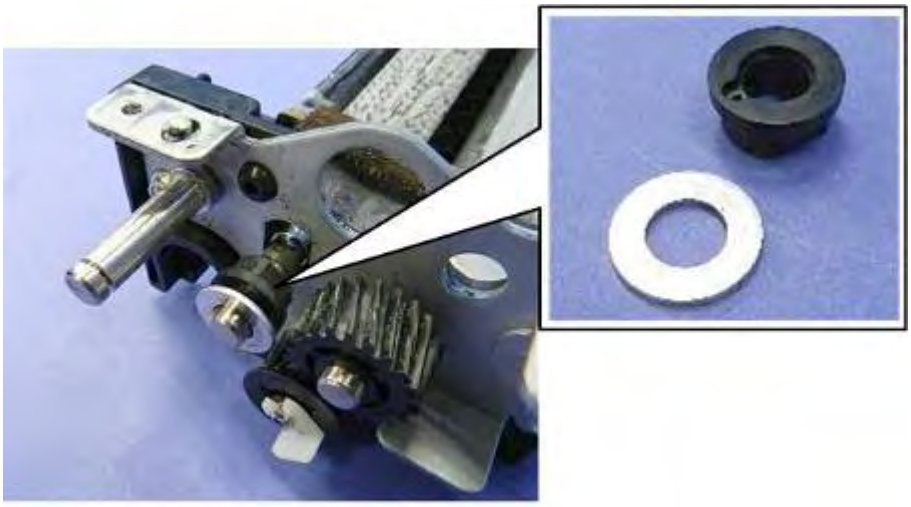
d1803804

1. Separate the bearings and flanges.

d1803805

2. Use a small brush to apply Fluotribo MG Grease to the inner surfaces of the flanges and bearings.

PTR Unit



d1793752

1. This bushing and washer require lubrication with Barrierta S552R.

Note

- In the steps below, the left photo illustrates the minimum amount applied, and the right photo the maximum amount applied.

d1793753

2. First, lubricate the sleeve of the bushing with 0.02 to 0.04 g of grease.

Note

- The grease in the foreground illustrates the total amount to be applied to the entire bushing, not just the sleeve.

d1793754

3. Next, apply grease to the face of the bushing flange.

d1793755

4. Finally, apply grease to the washer.

d1793756

5. After setting the washer and bushing on the shaft, apply a small amount of grease to the tip of the shaft.

REPLACEMENT AND ADJUSTMENT

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
131	12/24/2013	Lubricant (brush) roller
158	3/18/2015	Dev replacement note
160	12/24/2013	Cleaning Doctor Blade Note
160	3/18/2015	Removed unnecessary step
484	01/31/2014	Corrected from Sc448 to SC488.

4. REPLACEMENT AND ADJUSTMENT

4.1 GENERAL CAUTIONS

4.1.1 POWER ON/OFF

- Never turn off either of the power switch while the machine is operating.
- Switching the machine off during operation could damage the transfer belt, drum, development unit, or other units when they are pulled out of or put back into the main machine.

4.1.2 DRUM

An organic photoconductor (OPC) drum is more sensitive to light and ammonia gas than a selenium drum. Follow the cautions below when handling an OPC drum.

1. Never expose the drum to direct sunlight.
2. Never expose the drum to direct light of more than 1,000 Lux for more than a minute.
3. Never touch the drum surface with bare hands. When the drum surface is touched with a finger or becomes dirty, wipe it with a dry cloth or clean it with wet cotton. Wipe with a dry cloth after cleaning with wet cotton.
4. Never use alcohol to clean the drum; alcohol dissolves the drum surface.
5. Store the drum in a cool, dry place away from heat.
6. Take care not to scratch the drum, because the drum layer is thin and is easily damaged.
7. Never expose the drum to corrosive gases such as ammonia gas.
8. Always keep the drum in the protective sheet when keeping the drum unit, or the drum itself, out of the main machine. This avoids exposing it to bright light or direct sunlight, and will protect it from light fatigue.
9. Dispose of used drums in accordance with local regulations.
10. When installing a new drum, execute SP2962 (Auto Process Control Execution).

4.1.3 DRUM UNIT

1. Before pulling out the drum unit, place a sheet of paper under the drum unit to catch any spilt toner.
2. Make sure that the drum unit is set in position and the drum stay is secured with a screw before the main switch is turned on. If the drum unit is loose, poor contact of the drum connectors may cause electrical noise, resulting in unexpected malfunctions (RAM data change is the worst case).
3. To prevent drum scratches, remove the development unit before removing the drum unit.

4.1.4 TRANSFER BELT UNIT

1. Never touch the transfer belt surface with bare hands.
2. Take care not to scratch the transfer belt, because the surface is easily damaged.
3. Before installing the new transfer belt, clean all the rollers and the inner part of the transfer belt with a dry cloth to prevent the belt from slipping.

4.1.5 SCANNER UNIT

1. When installing the exposure glass, make sure that the white paint is at the rear left corner.
2. Clean the exposure glass with alcohol or glass cleaner to reduce the amount of static electricity on the glass surface.
3. Use a cotton pad or optical cloth to clean the mirrors and lens.
4. Do not bend or crease the exposure lamp flat cable.
5. Do not disassemble the lens unit. This will put the lens and the copy image out of focus.
6. Do not turn any of the CCD positioning screws. This will put the CCD out of position.

4.1.6 LASER UNIT

1. Do not loosen the screws that secure the LD drive board to the laser diode casing. This will put the LD unit out of adjustment.
2. Do not adjust the variable resistors on the LD unit, because they are adjusted in the factory.
3. The polygon mirror and F-theta lenses are very sensitive to dust. Do not open the optical housing unit.
4. Do not touch the glass surface of the polygon mirror motor unit with bare hands.
5. After replacing the LD unit, do the laser beam pitch adjustment. Otherwise, an SC condition will be generated.

4.1.7 CHARGE CORONA

1. Clean the corona wires with a dry cloth. Never use sandpaper or solvent.
2. Clean the charge corona casing with water first to remove NOx based compounds. Then clean it with alcohol if any toner still remains on the casing.
3. Clean the end block with a blower brush first to remove toner and paper dust. Then clean with alcohol if any toner still remains.
4. Do not touch the corona wires with bare hands. Oil stains from fingers may cause uneven image density on copies.
5. Make sure that the wires are correctly between the cleaner pads and that there is no foreign material (iron filings, etc.) on the casing.
6. When installing new corona wires, do not bend or scratch the wire surface. Doing so may cause uneven charge. Also be sure that the corona wires are correctly positioned in the end blocks.

7. Clean the grid plate with a blower brush (not with a dry cloth).
8. Do not touch the charge grid plate with bare hands. Also, do not bend the charge grid plate or make any dent in it. Doing so may cause uneven charge.

4.1.8 DEVELOPMENT

1. Be careful not to nick or scratch the development roller.
2. Place the development unit on a sheet of paper after removing it from the main machine.
3. Never disassemble the development roller assembly. The position of the doctor plate is set with special tools and instruments at the factory to ensure the proper gap between the doctor blade and the development roller.
4. Clean the drive gears after removing used developer.
5. Dispose of used developer in accordance with local regulations.
6. Never load types of developer and toner into the development unit other than specified for this model. Doing so will cause poor copy quality and toner scattering.
7. Immediately after installing new developer, the TD sensor initial setting procedure should be performed with SP2801 (TD Sensor Initialization) to avoid damage to the main machine. Do not perform the TD sensor initial setting with used developer. Do not make any copies before doing the TD sensor initial setting.
8. When using a vacuum cleaner to clean the development unit casing, always ground the casing with your fingers to avoid damaging the toner density sensor with static electricity.
9. When replacing the TD sensor, replace the developer, then execute SP2801 (TD Sensor Initialization) and SP2962 (Auto Process Control Execution).

4.1.9 CLEANING

1. When servicing the drum cleaning section, be careful not to damage the edges of the drum cleaning blade and 2nd cleaning blade.
2. Do not touch the cleaning blade with bare hands.
3. Before disassembling the cleaning section, place a sheet of paper under it to catch any toner falling from it.

4.1.10 FUSING UNIT

1. After installing the fusing thermistor, make sure that it is in contact with the hot roller and that it is movable.
2. Be careful not to damage the edges of the hot roller strippers or their tension springs.
3. Do not touch the fusing lamp and rollers with bare hands.
4. Make sure that the fusing lamp is positioned correctly and that it does not touch the inner surface of the hot roller.

4.1.11 PAPER FEED

1. Do not touch the surface of the pick-up, feed, and separation rollers.
2. To avoid paper misfeeds, the side fences and end fence of the paper tray must be positioned correctly to align with the actual paper size.

4.1.12 USED TONER

1. We recommend checking the amount of used toner at every EM.
2. Dispose of used toner in accordance with local regulations. Never throw toner into an open flame, because toner dust may ignite.

4.2 CAUTIONS FOR THIS MACHINE

⚠CAUTION

- To prevent damage to the ITB, drum, or development unit when removing them or putting them back into the machine, never switch off the main power switch or operation power switch while the machine is operating.

4.2.1 GENERAL

There are two types of commonly used screws: blue and sliver.

d1792101

- Always remove and re-install **blue** screws at their original location.
- Always remove and re-install **silver** screws at their original location.
- Do not mix blue and silver screws.

4.2.2 REAR CONTROLLER BOX

Exercise caution when operating the machine with the rear controller box open:

- This machine has many fans and ventilation ducts to expel ozone, paper dust, and hot air from around the PCDUs and other areas inside the machine.
- If you service the machine and then check printing operation with the rear controller box open, dust or gases may adhere to the drum and cause problems with image output (white block patterns for example).
- Normally, process control can handle such minor problems, but if you want to recover the print quality as soon as possible, print several sheets with solid images.

4.2.3 DRUM

The organic photoconductor (OPC) drum is very sensitive to light and ammonia gas. When handling an OPC drum:

1. Never expose a drum to direct sunlight.
2. Never expose a drum to direct light of more than 1,000 lux for more than a minute.

3. Never touch a drum surface with bare hands. If the drum surface is touched or becomes dirty, wipe it with a dry cloth or clean it with a damp cotton ball. Wipe with a dry cloth after cleaning with damp cotton.
4. Never use alcohol to clean a drum. Alcohol can dissolve the drum surface and damage it permanently.
5. Store a drum in a cool, dry place.
6. The photo-conductive layer of a drum is very thin and scratches easily. Always handle a drum with care.
7. Never expose a drum to corrosive gases such as ammonia.
8. Always dispose of used drums in accordance with local laws and regulations.

4.2.4 PCDU

d1792902

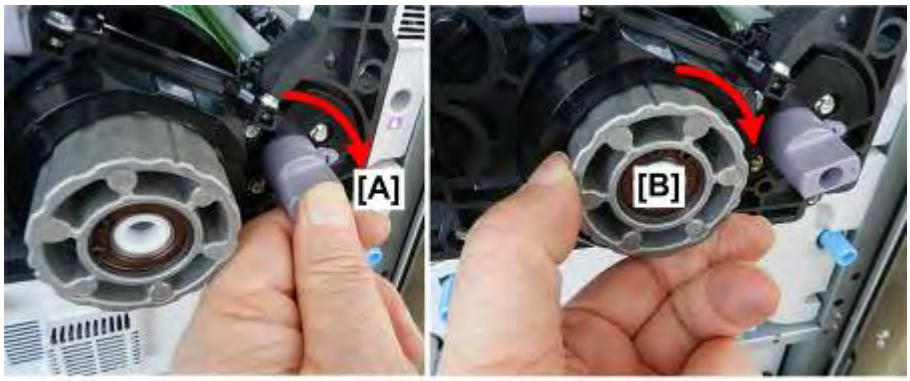
⚠CAUTION

- The charge corona unit must always be removed before pulling out the PCDU.
- Never attempt to pull out the PCDU with the charge corona unit in the machine.
- Pulling out the PCDU without removing the charge corona unit will damage the cleaning pad HP sensor and its harness.

1. Press the tab [A] to release the charge corona unit.
2. Pull charge unit [B] out of the machine.

d1793237

3. To prevent scratching a drum or the ITB, always lower the ITB before you remove the PCDU or pull out the ITB unit.

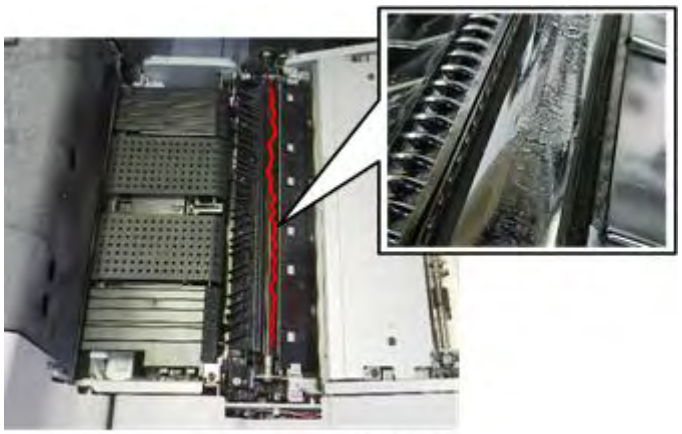


d1792987

4. Before you push the PCU into the machine:
   - Rotate cleaning unit lever [A] clockwise to lock it.
   - Rotate the drum wheel [B] clockwise to lock it.

4.2.5 ITB UNIT

1. Never touch the surface of the ITB surface with bare hands.


d1803101

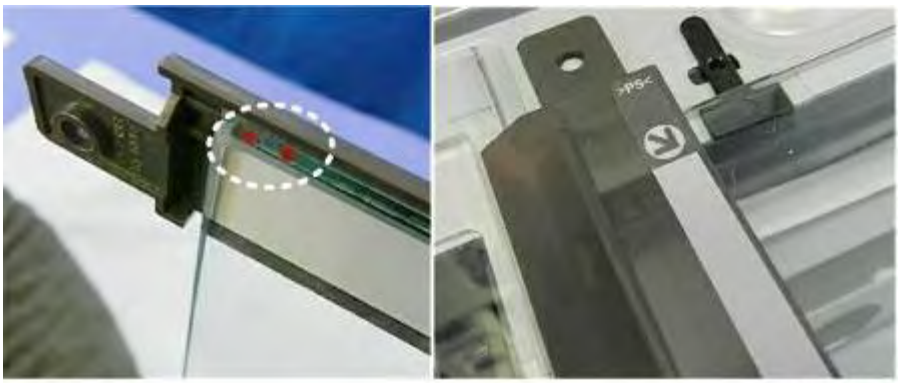
2. The PTR unit must be removed before the ITB unit.

Important

   - If the ITB unit is removed with the PTR unit in the drawer, the edge of the ITB unit will scour and ruin the surface of the PTR below as the ITB unit is pulled from the machine. This can permanently damage the PTR.

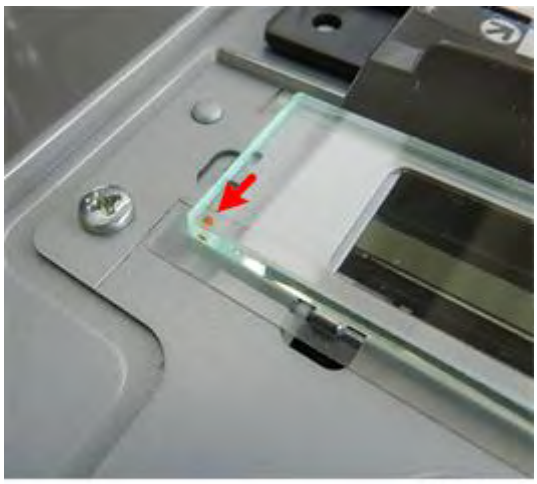
3. Pull the ITB unit out of the machine only when it is absolutely necessary.
4. Always work carefully around the ITB (to avoid dropping tools, screws, etc.) when it is pulled out of the machine.
5. Before installing a new ITB, clean all the rollers and the inner surface of the ITB unit with a dry cloth to prevent the new belt from slipping.

4.2.6 SCANNER UNIT



d1792760

1. When installing a new exposure glass, always make sure that the paint mark is at the rear left corner.
2. Clean the exposure glass with alcohol or glass cleaner to reduce the amount of static electricity on the glass surface.
3. Use a cotton pad dampened with water or a blower brush to clean the scanner optics.
4. Never bend or twist the exposure lamp cables.
5. Never disassemble a lens unit. Attempting to disassemble a lens unit will throw the lens and the copy image out of focus.
6. Never attempt to adjust a CCD positioning screw. Doing so will throw the CCD out of position.



d1792102

7. When replacing or re-installing the scanner glass, always make sure that the paint mark is at the upper left corner.

4.2.7 DEVELOPMENT

1. Avoid nicking or scratching the development roller.
2. Place a development unit on a sheet of paper after removing it.
3. Always clean the drive gears after removing used developer.
4. Always dispose of used developer in accordance with local regulations.
5. Never load any type of developer or toner into the development unit other than those specified for this machine. Doing so will cause poor print quality and toner scattering.
6. Immediately after replacing the developer, be sure to execute the SPs to initialize the developer/toner.
7. Never do SP3030 with used developer.
8. When using a vacuum cleaner to clean the development unit casing, always ground the casing with your fingers to avoid damaging the toner density sensor with static electricity.
9. The TD sensor must be initialized:
   - After replacing developer. (Initialize the TD sensor only for the PCU where the developer was replaced.)
   - Never initialize the TD sensor more than once. Initializing the TD sensor more than once can cause toner scatter inside the machine.

4.2.8 CLEANING

1. When servicing cleaning unit components, avoid nicking the edges of the cleaning blades.
2. Never touch the edges or surfaces of a cleaning blade with bare hands.
3. Before disassembling a cleaning unit, place a sheet of paper under it to catch stray toner or dry lubricant.

4.2.9 FUSING UNIT

1. Never handle fusing lamps and rollers with bare hands.
2. Make sure that the fusing lamps are positioned correctly and do not touch the inner surface of the rollers.

4.2.10 PAPER FEED

When replacing the pick-up, feed, and separation rollers in tray 1 or 2 of the main machine, trays 3, 4, 5 of the LCIT, or tray 6 (bypass tray):

- Use only rollers specified for use with this machine or peripheral unit.
- When handling the new rollers, avoid touching the surfaces of the rollers.

4.2.11 USED TONER

1. Check the level of the used toner in the used toner bottle at every service visit.
2. Always dispose of used toner in accordance with local laws and regulations.
3. Never attempt to incinerate used toner.

4.2.12 PAPER TIPS

Here is a list of points that operators should be reminded of before using the machine.

General

- Do not open a paper package until you are ready to load it; leave paper sealed in its packing until it is ready to be used, especially if it will not be used for a long time.
- Always load paper with the designated print side facing up. If neither side of the paper is designated as the print side, set the paper so the side where the pack was sealed faces up.
- Paper exposed to the air can cause the paper to curl and wrinkle which can lead to paper jams.
- If paper shows a high occurrence of burring or tearing during cutting (more than 0.1 mm), turn the stack over.
- If the paper is frequently jamming or double feeding, remove the stack and fan it to remove static cling.
- Hold the paper by either to and fan it on both ends to allow air between the sheets.
- Do not use paper with curl that exceeds 2 mm.
- Paper that is slightly bent at the corners or on the leading edge can cause paper jams, so turn such paper over before loading it.
- If the surface of the paper is marred by scratches or indentations, turn the paper over before loading it.
- Marred paper can cause more curl in the paper after fusing or lead to more damage by the stripper pawls, junction gates and ribs in the paper feed path of the machine.

Moisture Prevention

- If moisture has a tendency to form in the trays of the paper bank, turn the anti-condensation heater on, and do not unplug the machine from the power source.
- If the AC power cord of the machine is disconnected, the heater will not receive any power and moisture will form in the trays.

Thin Paper

- Load thin paper (52.3 g/m2 or 45K) as SEF not LEF.
- Thin paper fed LEF can cause the paper to jam in the paper path, bend at the corners or edges, or smear the surfaces of images.
- Stack slightly curled paper in a paper tray, with the concave side up.
- If the paper is stacked with the concave side down, this can lead to excessive curl, poor stacking, or misalignment of the stack.

Translucent Paper, Tracing Paper

- Load translucent and tracing paper as SEF, never LEF.
- At paper separation in the PTR unit, thin paper fed LEF can cause the paper to jam in the paper path, bend at the corners or edges, or smear the surfaces of images.
- If the edges of translucent paper or tracing paper cannot be detected even after adjusting the amount of light emitted by the CIS, disable side-to-side registration and skew detection.
- Side-to-side registration can adjusted for image placement for the first or second sides of the paper (SP code, super operator setting, or a used setting).
- If the CIS cannot detect the edges, and the sensitivity of the precision in side-to-side registration is lowered to correct this, this could lead to paper skew.

Transparencies (OHP)

- If double-feeding occurs, remove the stack and fan the edges to remove static cling, or feed one sheet at a time.
- OHP sheets have a tendency to form and hold static charge.
- If the edges of OHP sheets cannot be detected even after adjusting the amount of light emitted by the CIS, disable side-to-side registration and skew detection. Side-to-side registration can adjusted for image placement for the first or second sides of the paper (SP code, super operator setting, or a used setting).
- If the CIS cannot detect the edges, and the sensitivity of the precision in side-to-side registration is lowered to correct this, this could lead to paper skew.

Postcards

- Curl with 5 mm can be corrected in postcards before feeding.
- Postcards must be loaded SEF.
- The LCIT RT 5080 is provided with a side fence designed for postcard feeding.
- Return postcards cannot have folds.

Tab Sheets

- Tab sheets can be fed from a universal tray but this requires the end fence (an option) designed for tab sheet feeding.
- Tab sheets must be loaded in the universal tray with the tab side opposite the direction of feed.

Inkjet and Gel Jet Paper

- Inkjet and Gel Jet paper cannot be used with this machine.

Coated Paper

- Coated paper can be used with this machine, but it must be fanned carefully before loading.
- High temperatures can cause the sheets to cling to one another and cause problems and slight noise during paper separation during feeding.
- The operation level of the air fence and an auxiliary end fence can be used to eliminate double-feeds and clinging at the trailing edge of the sheet above and leading edge of the sheet below.
- If adjustments do not solve the problem, feed one sheet at a time.

Peel-off Paper

- Peel-off paper can be feed from Tray 2 of LCIT RT5080, as long as it is fed straight through (no invert/exit mode).

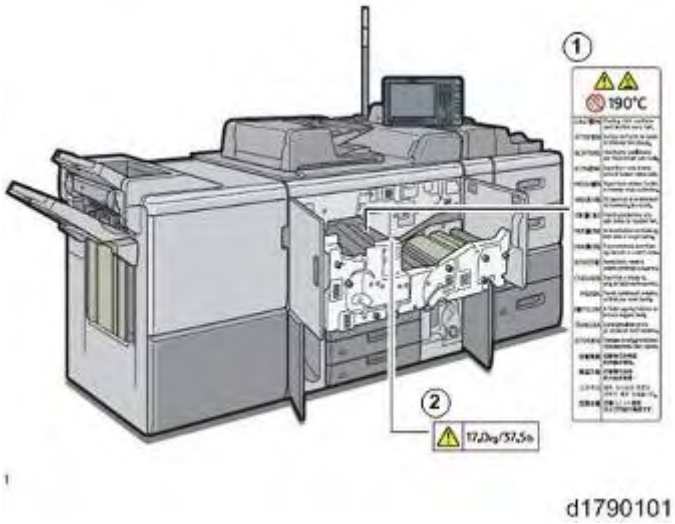
Color Paper, Pre-printed Forms

- If the edges of colored paper or pre-printed forms cannot be detected even after adjusting the amount of light emitted by the CIS, disable side-to-side registration and skew detection. Side-to-side registration can adjusted for image placement for the first or second sides of the paper (SP code, super operator setting, or a used setting).
- If the ink of pre-printed forms melts or runs from the heat, always make sure the ink is dry, make sure the sheets are separated and never use ink that contains toxic materials.
- If the CIS cannot detect the edges, and the sensitivity of the precision in side-to-side registration is lowered to correct this, this could lead to paper skew.

4.2.13 SAFETY LABELS FOR THIS MACHINE AND PERIPHERALS

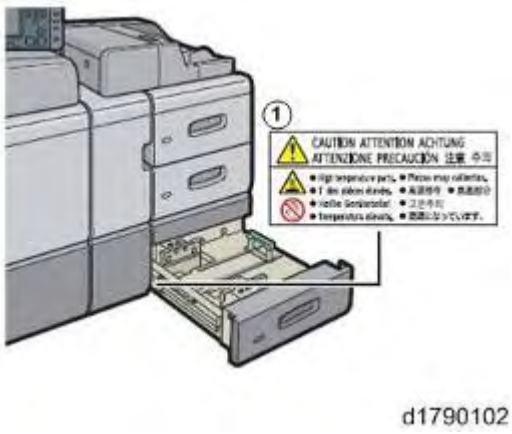
This section describes the location and purpose of the Warning and Caution labels attached to the main machine and peripherals. Pay attention to these labels when servicing and testing the machine. The operators should also be instructed about the location and purpose of the labels so they can operate the machine safely.

Main Machine



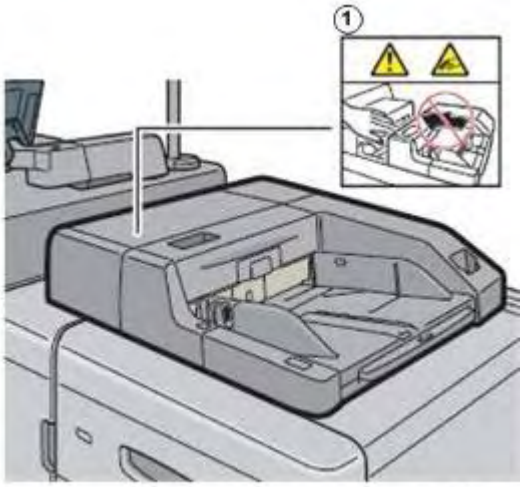
①	Do not touch the parts indicated on the label. The inside and surface of the fusing unit could be very hot, so remove jammed paper carefully.
②	This label indicates the weight of the machine. This is provided for customer engineers and operators who have received special training. Never attempt to lift a unit that has this label.

LCIT RT5080



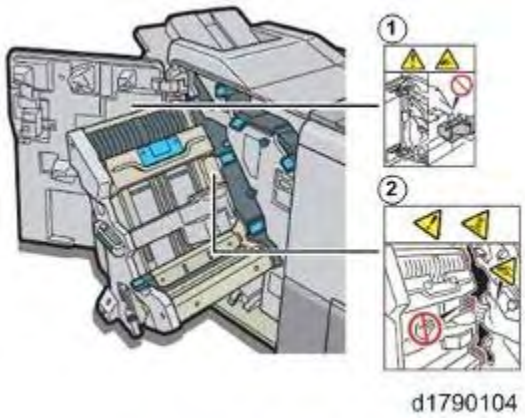
①	This label indicates parts that reach high temperature during operation. To avoid personal injury, do not touch these parts.

Multi Bypass Tray BY5010



①	To avoid injury to your fingers, keep you hands clear of the bypass tray when removing a paper jam.

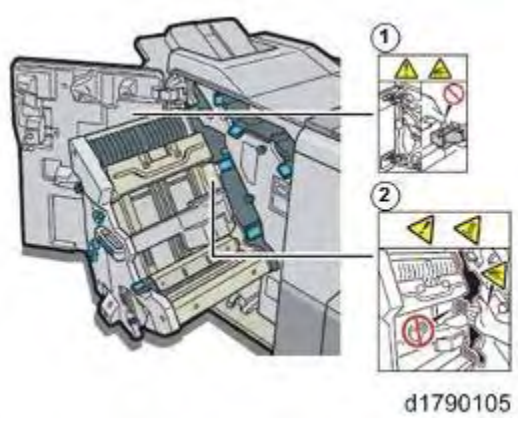
Finisher SR5050



①	To avoid injury, keep your hands clear of the hinges when opening and closing the finisher door.
②	To avoid injury, avoid the indicated parts that become hot during operation and locations where you could pinch your hand or fingers.

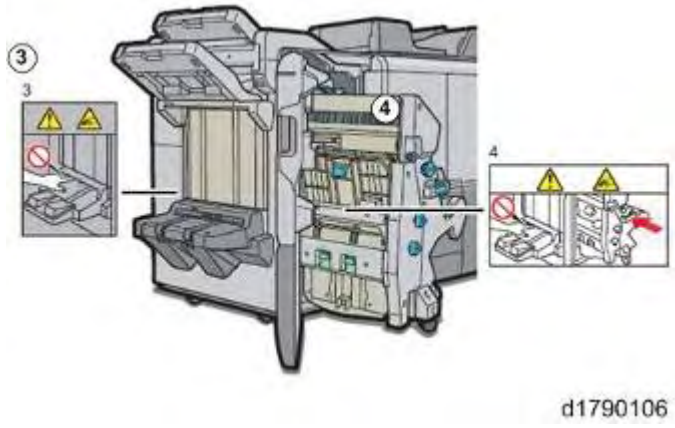
Booklet Finisher SR5060

Front



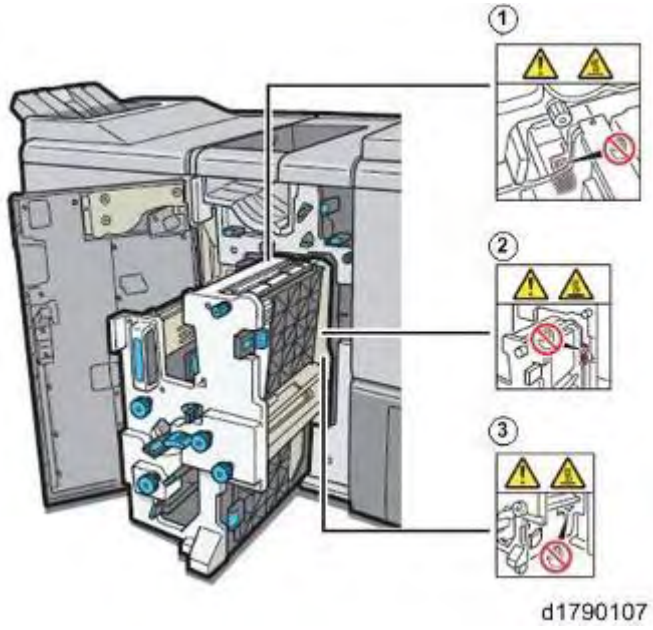
①	To avoid injury, keep your hands clear of the hinges when opening and closing the finisher door.
②	To avoid injury, avoid the indicated parts that become hot during operation and locations where you could pinch your hand or fingers.

Left Side



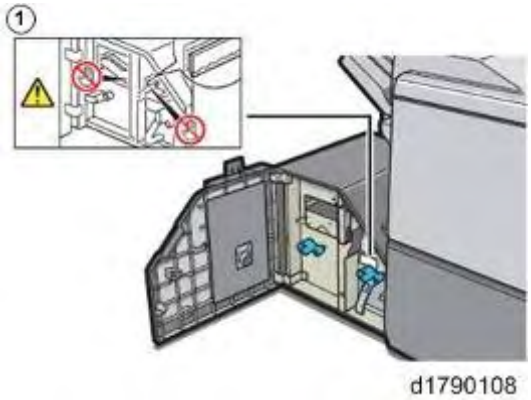
④	To avoid injury, never touch the booklet tray during operation.
⑤	To avoid injury, never touch the booklet tray when removing a paper jam, or when pulling out or pushing in the stacker/stapler unit.

Multi-Folding Unit FD5020



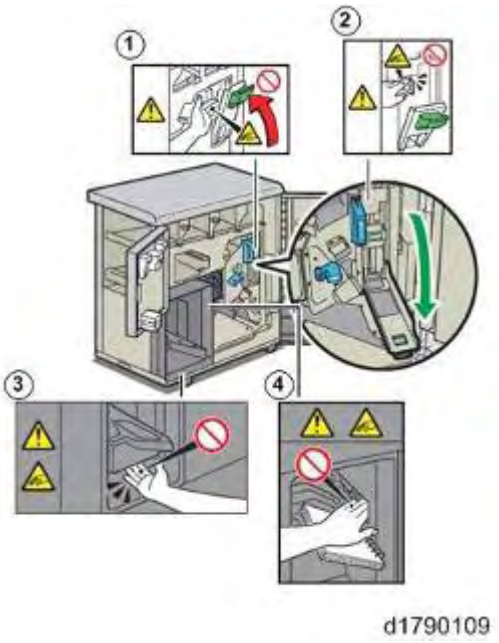
①	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.
②	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.
③	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.

Trimmer Unit TR5040



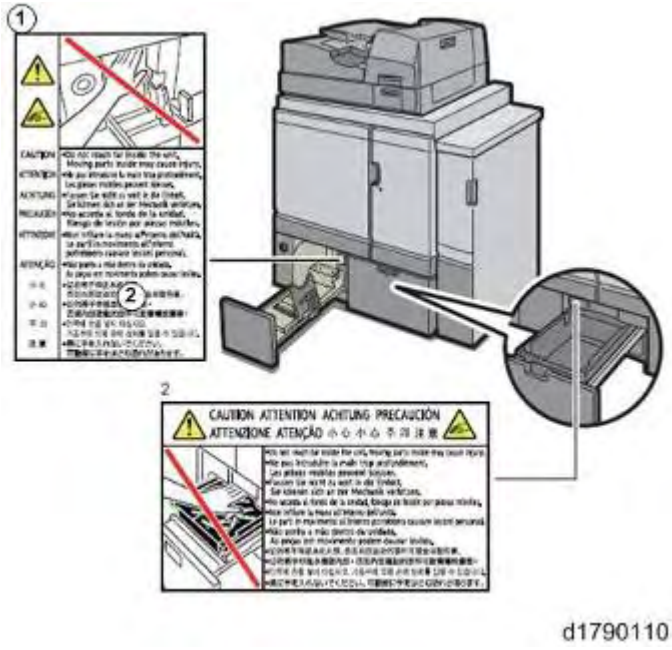
①	To avoid serious injury, work carefully around the cutting blade when removing a paper jam.

Ring Binder RB5020



①	To avoid injury, keep the fingers of your other hand clear of the cartridge cover when you close it.
②	To avoid injury, avoid touching the parts at the indicated location.
③	To avoid injury, never touch the ring binder tray while the ring binder is operating.
④	To avoid injury, never put your hand into the paper exit when removing bound booklets.

Perfect Binder GB5010



①	To avoid personal injury, keep your hand and fingers away from the lower left tray when removing bound booklets.
②	Never reach inside the unit where large moving parts could cause serious injury.

4.3 SPECIAL TOOLS AND LUBRICANTS

4.3.1 SPECIAL TOOLS

Part No.	Description
A0069104	Scanner Positioning Pin (4 pcs./set)
A0929503	Test Chart-C4 (3 pcs./set)
A0299387	Digital Multi-meter: FLUKE 87
B6455010	SD Card
C401 9503	20x Magnification Scope
D1793421	Development Unit Jig Handle
D1793420	Development Doctor Blade Jig Sheet
D1796191	ITB Positioning Jig (Driver Roller Side)
D1796192	ITB Positioning Jig (Belt Cleaning Side)

4.3.2 LUBRICANTS

Part No.	Description
A2579300	Grease Barrierta - S552R
52039502	Silicone Grease G-501
B132 9700	Drum Setting Powder
VSSG 9002	FLUOTRIBO MG Grease
D0159501	Setting Powder
D0159500	Yellow Toner

4.4 COMMON PROCEDURES

4.4.1 BEFORE YOU BEGIN

This section describes simple tasks that service technicians must know before servicing the machine:

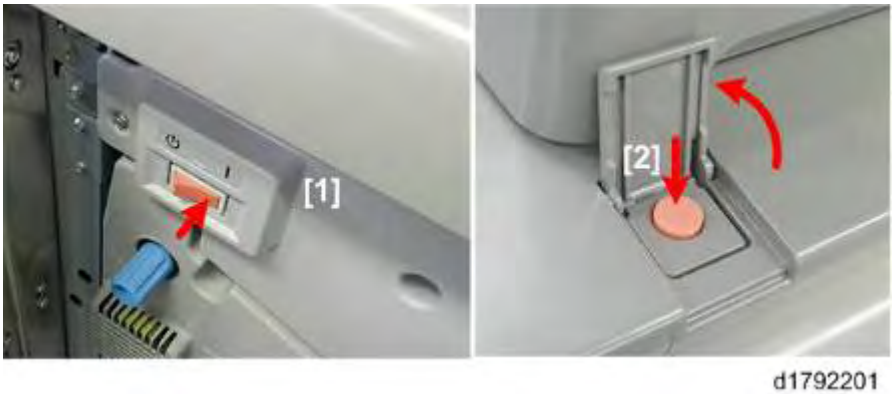
- Turning the machine on/off
- How to remove doors and covers
- Pulling out the drawer
- How to open the controller box, removing its cover

Here is a list of other important, basic procedures (described in other sections) that service technicians must know before servicing the machine:

- PCDU removal page 4-113
- Drum removal page 4-120
- ITB Unit Removal page 4-169
- PTR Unit Removal page 4-335
- PTB Unit Removal page 4-357
- Opening the VTU page 4-257
- PFU 1, 2, 3 Removal page 4-244
- Fusing Unit Removal page 4-369
- Fusing Cleaning Unit Removal page 4-371

4.4.2 TURNING THE MACHINE ON/OFF

Turning the Machine On



1. Plug the machine into the power source.
2. At the left front corner of the machine, lift the switch cover and press the operation power switch [1].

Note

- There is no power switch on the operation panel of this machine.
- The power switch behind the left door [2] is set to ON when the machine is delivered.

3. After the "Please Wait" message, touch "Copier" on the operation panel to display the initial copy screen.

Turning the Machine Off

⚠WARNING

- Always follow this procedure to shut down the machine before servicing.
- Never power on the machine with the LD unit or the plastic canopy over the laser unit removed.

d1792202

1. At the front left corner of the machine, open the cover, press the operation power switch, and then close the cover.
2. A message appears and tells you to wait until the machine powers down completely. This gives the hard disk drive enough time to stop rotating and to shut down safely before the machine loses power.

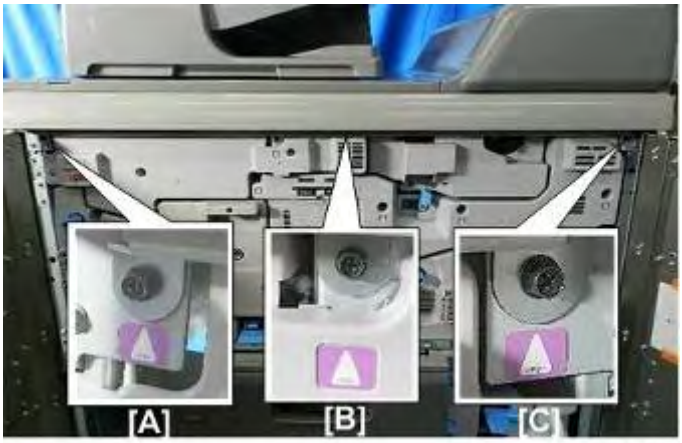
d1792203

3. When the message goes off, open the left front door and then switch the machine off with the main power switch

4. Unplug the machine from the power source.
5. Allow the machine to cool for a few minutes. This allows time for the machine to cool.

4.4.3 EXTERNAL COVERS, DOORS

Front Edge Cover



d1792750

1. Disconnect the front edge cover at [A], [B], [C] (x1).

d1792751

2. Remove the front edge cover.

Right Cover

d1792204

1. Remove the LCIT heater connector cover (x1).

d1792205

2. Remove the right cover (x7).

Left Cover

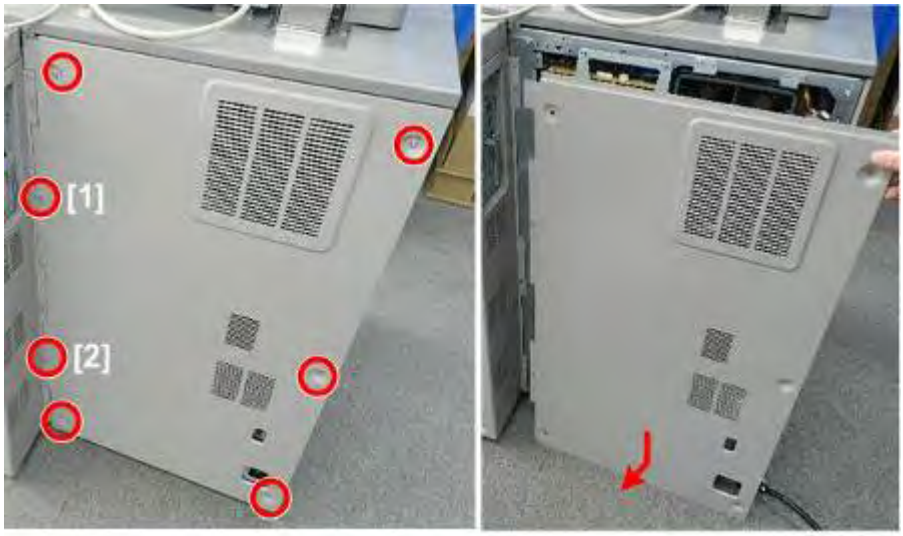
d1792206

1. Remove left cover (x7).

Rear Cover

d1792207

1. Remove power cord bracket (x1).



d1792208

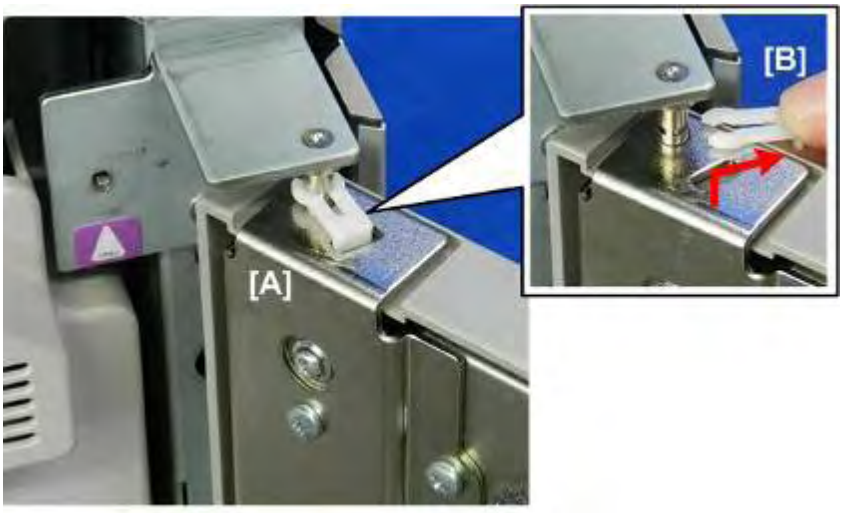
2. Left rear cover (x7).

Note

- Screws [1] and [2] are the 3rd and 5th screws from the top.

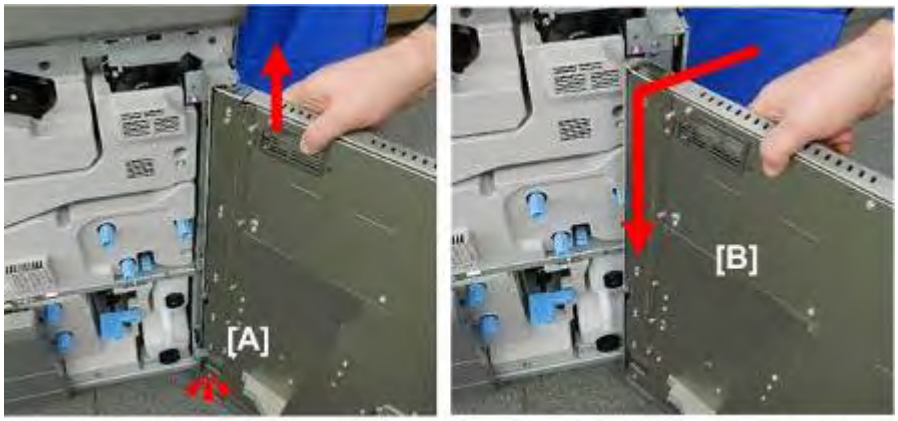
Doors

This procedure is the same for both front doors.



d1792209

1. Open the left or right front door [A].
2. Disconnect the door at the top post [B] (x1).



d1792210

3. Lift the door off the bottom post at [A], and then pull away the top of the door [B].

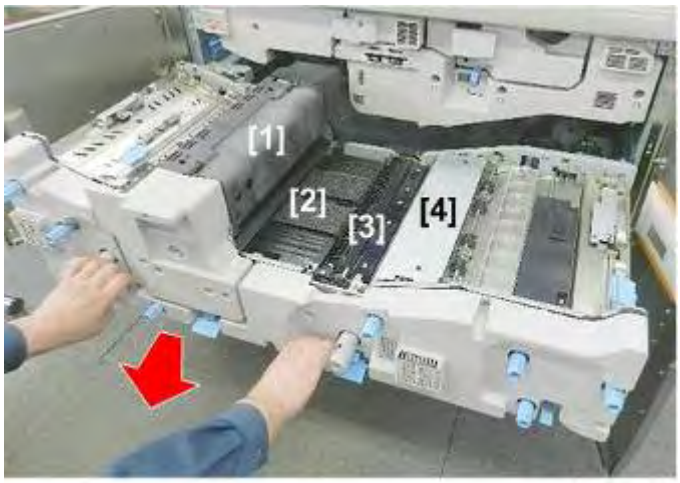
4.4.4 DRAWER

d1792200

The drawer is one piece and opens from the front.

d1792211

1. Open both front doors.
2. Grip both handles, rotate them down.



d1792212

Slowly, pull the drawer out until it stops.

- The drawer is one piece (it is not divided).
- The fusing unit [1], PTB unit [2], and PTR unit must be removed for servicing.
- Removing the registration unit [4] for servicing is not recommended. It should be serviced on the drawer.

d1792213

1. To close the drawer, push it in until it stops, and then raise the handles.

Drawer Right Cover

d1792224

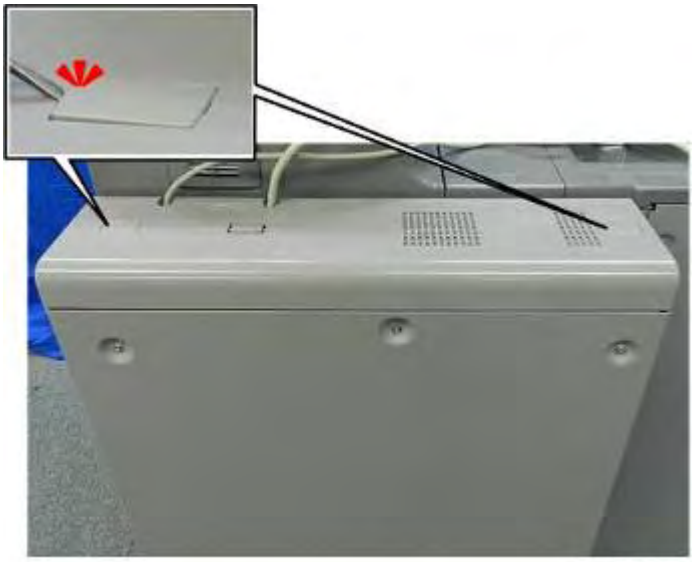
1. Disconnect the drawer right cover, and then remove it (x4).

d1792225

4.4.5 CONTROLLER BOX, CONTROLLER BOX COVER

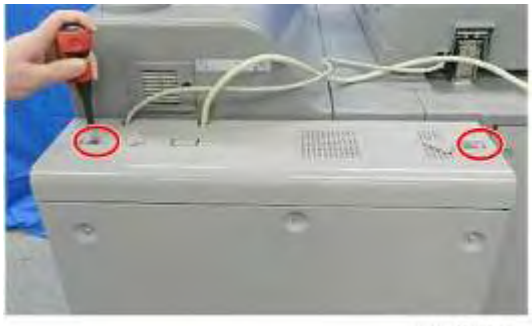
Many procedures require that you open the controller box and remove its cover.

Opening the Controller Box



d1792214

1. Remove the two caps.

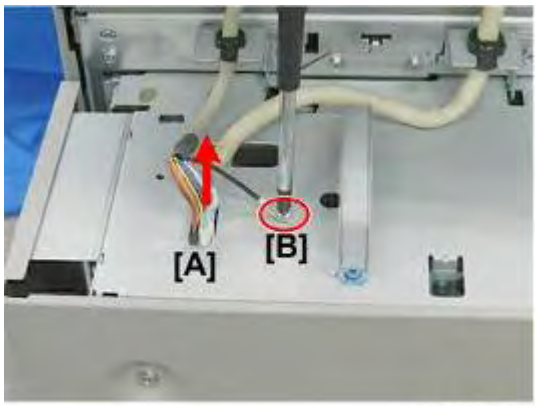


d1792215

2. Disconnect top cover (x2).

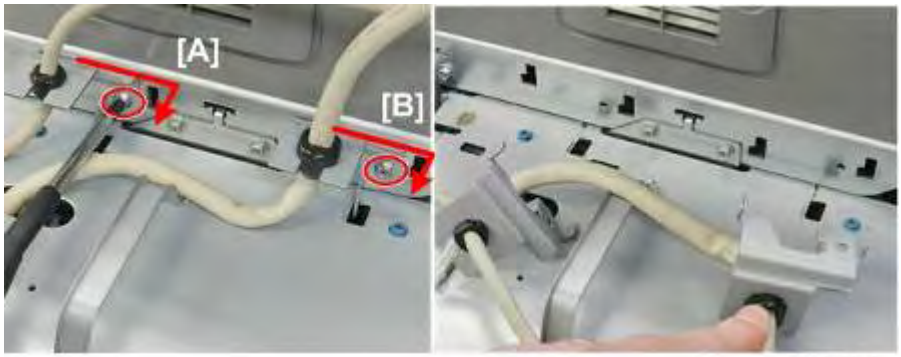
d1792216

3. Remove top cover.



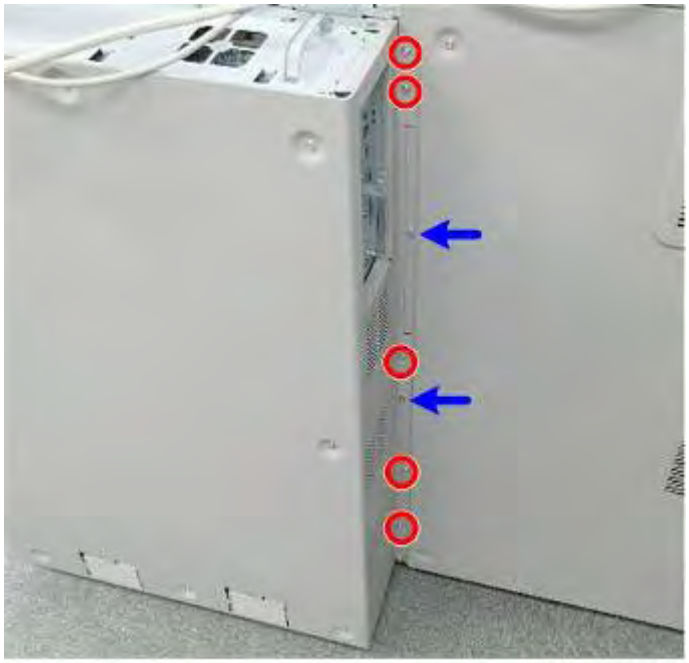
d1792217

4. Disconnect top of controller box at [A] and [B] (x1, x1).



d1792218

5. Disconnect lock plates [A] and [B] (x2).



d1792219

6. Disconnect inside edge (x5). Removal of the 3rd and 5th screws is not necessary.

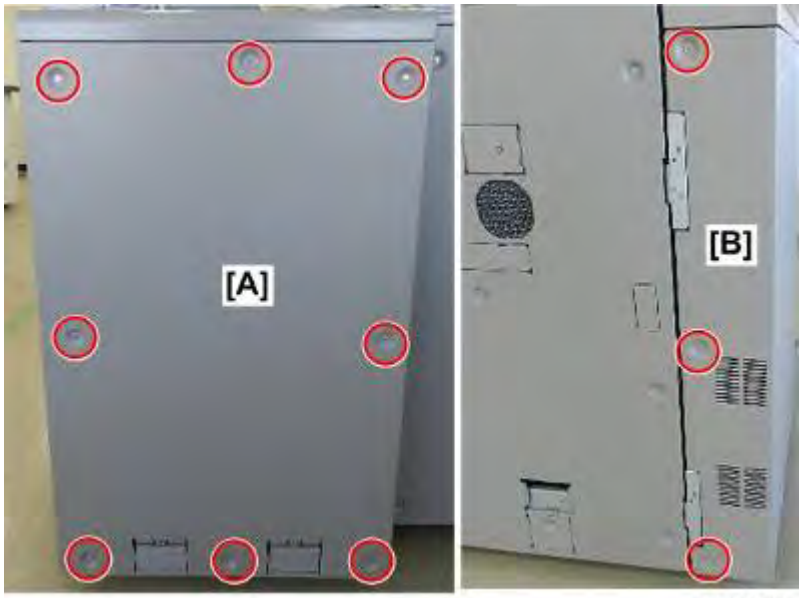
d1792220

7. Swing the controller box open.

Removing the Controller Box Cover, Inner Cover

b3281289

1. Unfasten the left side of the controller box cover (x2).

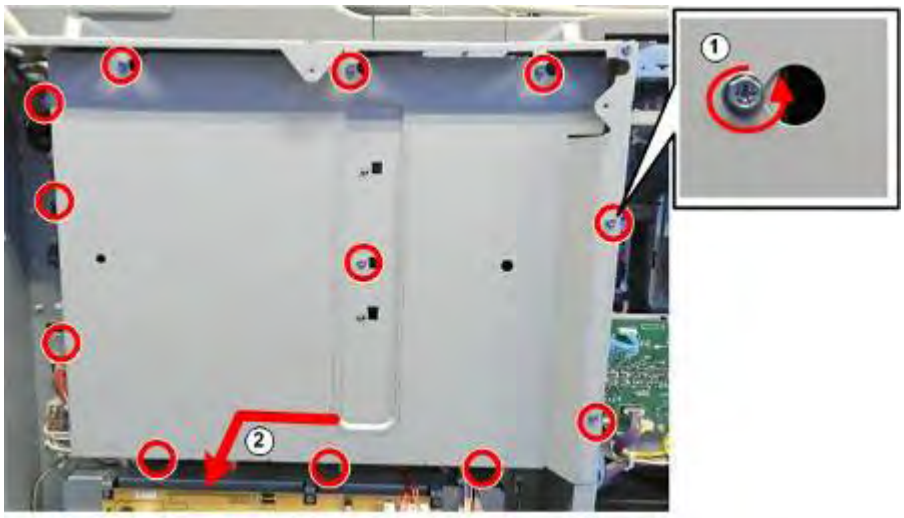


b3281290

2. Unfasten the back of the controller box cover [A] (x8).
3. Unfasten the right side of the cover [B] (x3).

b3281291

4. Slide the cover off the top edges of the controller box, and then remove it.



d1792501

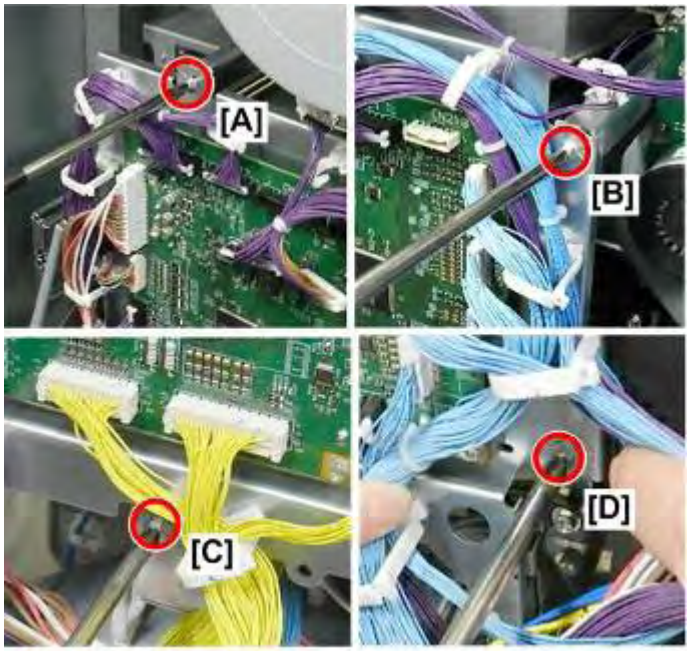
5. Loosen screws of the inner metal cover (x12).
   - Do not remove these screws.
   - Each screw slides into a larger hole ① when the cover is pushed to the left ②.
6. Slide the cover to the left and then remove it.

4.4.6 LOWER IOB BRACKET

Many procedures require that you lower the IOB bracket. This requires the removal of only two clamps, two connectors, and four screws.

d1794006

1. Next, start to lower the IOB at the lower left (x2, x2).



d1794008

2. Disconnect IOB:
   [A] Upper left (x1)
   [B] Upper right (x1)
   [C] Lower left (x1)
   [D] Lower right (x1)

d1794009

3. Lower the IOB bracket (with PCB attached) until it stops.

4.4.7 CONTROLLER BOX REMOVAL

Follow this procedure to remove controller box so the machine can fit more easily through a door or onto a small elevator when it has to be moved.

1. Open the controller box. page 4-27

d1792226

2. Disconnect the scanner cable and ground wire (x1, x1).
3. Remove controller box rear cover. page 4-30

d1792227

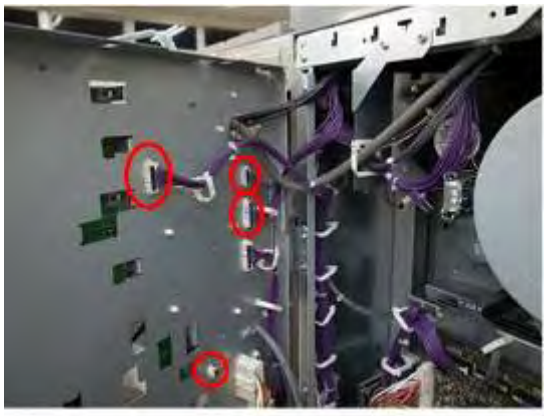
4. Disconnect the nylon clamp, disconnect ADF cable, and then pull the ADF cable out the top of the controller box (x1, x1)

d1792228

5. Remove connectors circled above (x6, x1).

d1792229

6. Disconnect the nylon clamp, disconnect the cable, and then pull the cable out the top of the controller box (x1, x1).

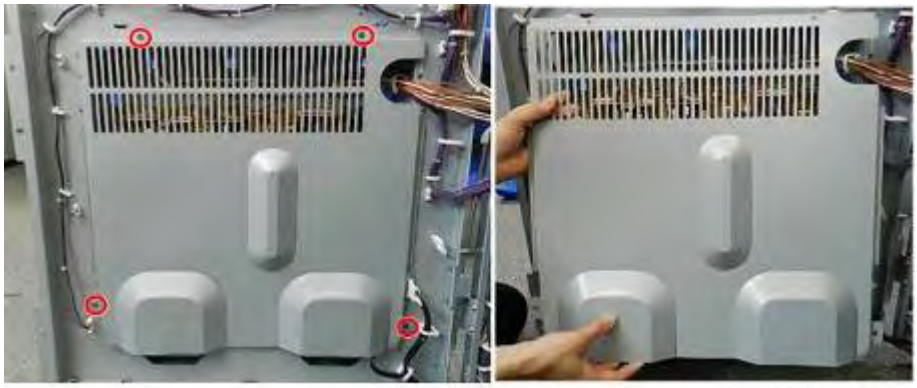


d1792230

7. Disconnect the four connectors above (x4).

d1792231

8. Disconnect the connectors above (x2).

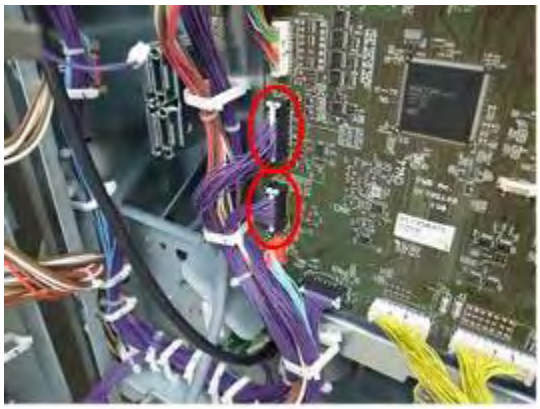


d1794339

9. Remove shield plate (x4).

d1792233

10. Disconnect the PSU (x6, x4).

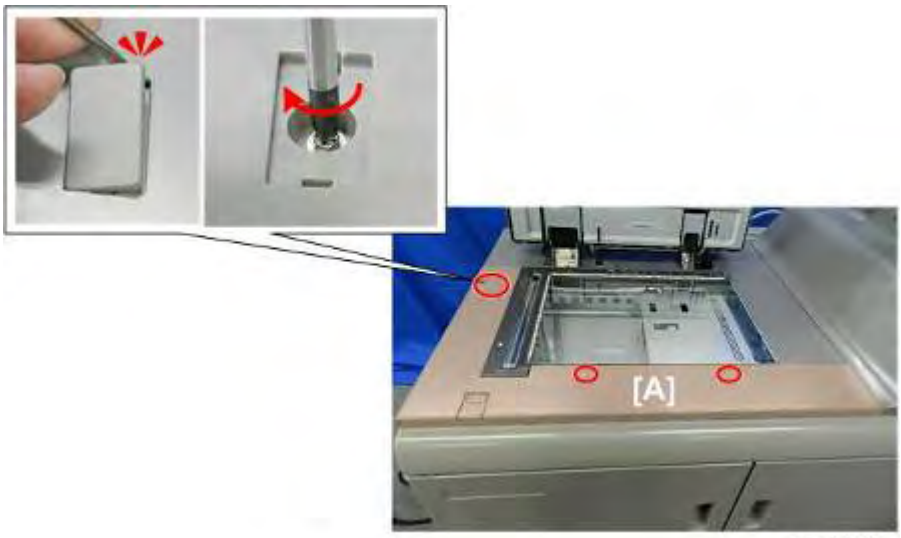


d1792234

11. Disconnect the two connectors from the IOB (x2).
12. Grip the controller box on both sides, lift it off its hinges, and then remove it from the back of the machine.

4.4.8 CANOPY COVER REMOVAL

Several procedures require removal of the canopy over the toner bank. This is a long procedure.



d1792701

1. Raise the scanner unit.
2. Remove the scanner "L" cover [A] (cap x1, x1, x2).

d1792702

3. At the rear, remove exposure glass right cover [A] (cap x1, x1)

d1792703

4. Cover the exposure glass to protect it.

d1792704

5. Disconnect the attention light base [A] (x3).
6. Disconnect the bottom of the attention light [B] and remove the light (x2, x1).

d1792705

7. On the right side, remove LCIT heater connector cover plate [A] (x1).
8. Disconnect right cover [B] (x7).

d1792706

9. Lift the cover base [A] and pull the right cover away from the machine.

d1792707

10. Disconnect top of operation panel arm cover [A] (cap x1, x1).

d1792708

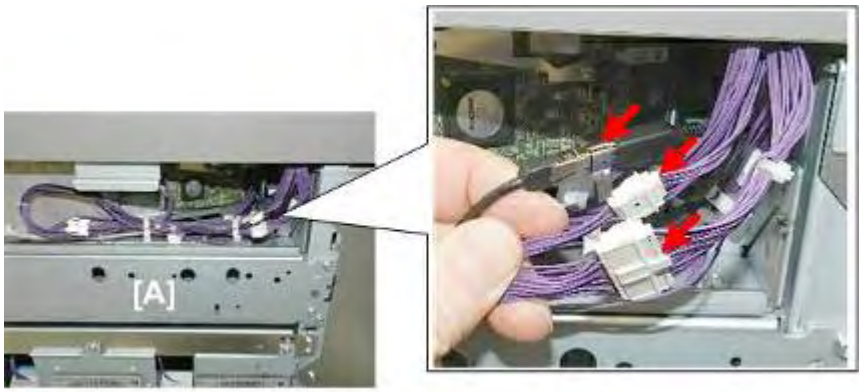
11. Disconnect side of operation panel arm cover [A] and then remove it (x1).

d1792709

12. Disconnect metal base [A] of the operation panel (x3).

Important

- Do not loosen the shoulder screws [B].



d1792710

13. On the right [A], disconnect the three harnesses leading up to the base of the operational panel arm above.

d1792711

14. Push the end of the operation panel arm [A] toward the front of the machine.
15. Remove the base of the arm from the anchor screws [B], and then lay the base down next to the anchor screws.

d1792712

16. Slowly pull the harnesses through the hole.
17. Pick the operation panel up, and then lay it down on a flat clean surface.

d1792713

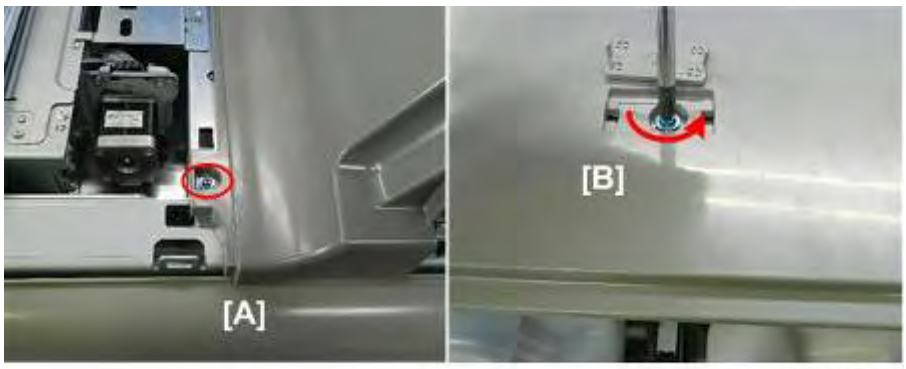
18. Open the toner bank door.

d1792714

19. Pull off the clip and remove the toner bank door [A] (x1).

d1792715

20. Remove toner bank front cover [A] (x3).



d1792716

21. Disconnect front left corner of the canopy [A] (x1).
22. Disconnect the top front of the canopy [B] (cap x1, x1).

d1792717

23. Disconnect the right side of the canopy (x2).

d1792718

24. At the rear [A], remove the filter bracket and filter from the back of the canopy (x1).

Note

- Note the position of the notch on the edge of the filter. It must be re-installed in the same way.

d1792719

25. At the rear, disconnect the top of the canopy [A] (x1).
26. Disconnect the left rear corner of the canopy [B] (x2).

d1792720

27. Remove the canopy [A].

4.5 OPERATION PANEL

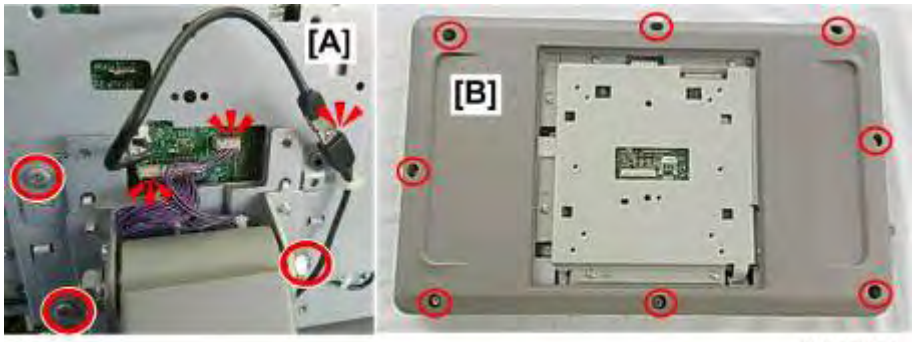
4.5.1 TOUCH PANEL

d1792400

1. Remove both plates on the back of the operation panel.

d1790919

2. Disconnect the ground wire (x1).



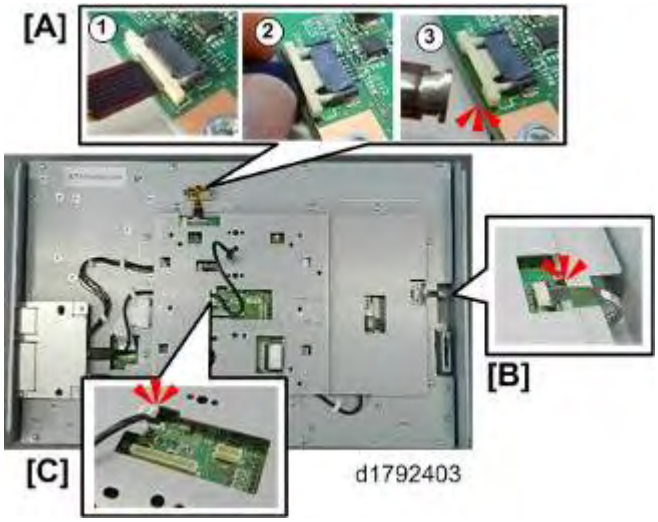
d1792401

3. Disconnect back of operation panel [A] (x3, x3).
4. Lay operation panel [B] face down on a clean flat surface, and then remove back panel [B] (x8).

First Shield Plate

d1792402

1. Unfasten first shield plate (x9).



d1792403

2. Disconnect at [A].
   - The connector at ① is different.
   - First, pull out plastic collar ②.
   - Then, pull out the connector ③.

   Important
   - You must pull out the collar first. If the connector is pulled out without first pulling out the collar, the flat connector will be damaged on both sides.
3. Disconnect flat cable [B].
4. Open clamp [C] (x1).

d1792404

5. Remove 1st shield plate.

2nd Shield Plate

d1792405

1. Disconnect 2nd shield plate (x1, x2).

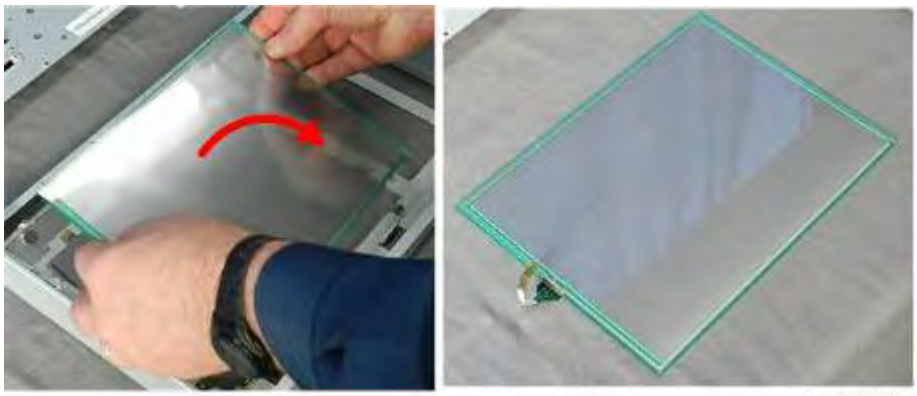
d1792406

2. Remove 2nd shield plate.

LCD unit, Touch Panel

d1792407

3. Disconnect and remove LCD (x4).



d1792408

4. Remove touch panel.

4.5.2 OPU, LCDC, SD/USB

Preparation

- Do the "Touch Panel" procedure above to remove the 1st shield plate.

d1792409

①	OPU: TP
②	LCDC
③	OPU: IO
④	SD Card/USB

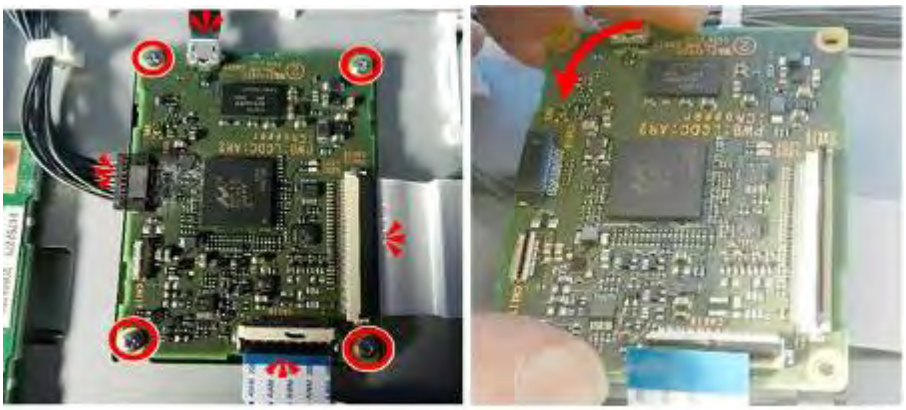
OPU: TP

d1792410

1. Remove the PCB (FFCx2, x2)

d1792411

LCDC (LCD Controller)

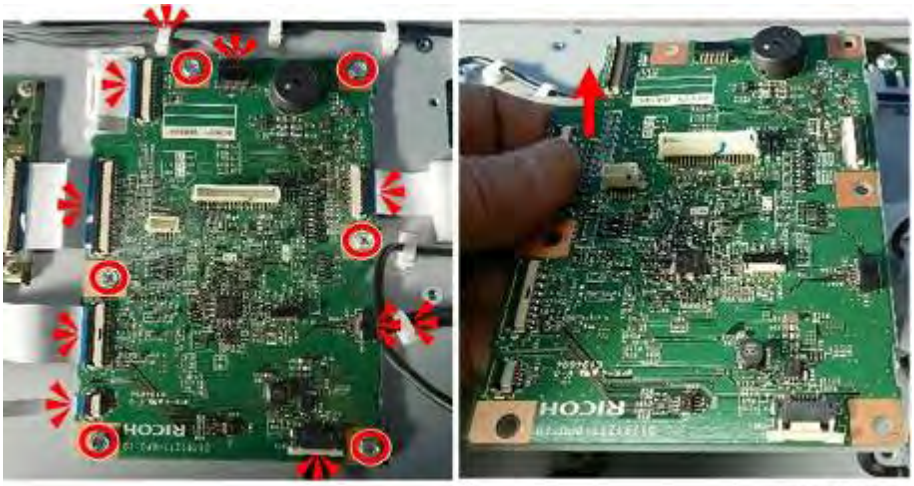


d1792412

1. Remove PCB (FFCx3, x1, x4)

d1792413

OPU: IO

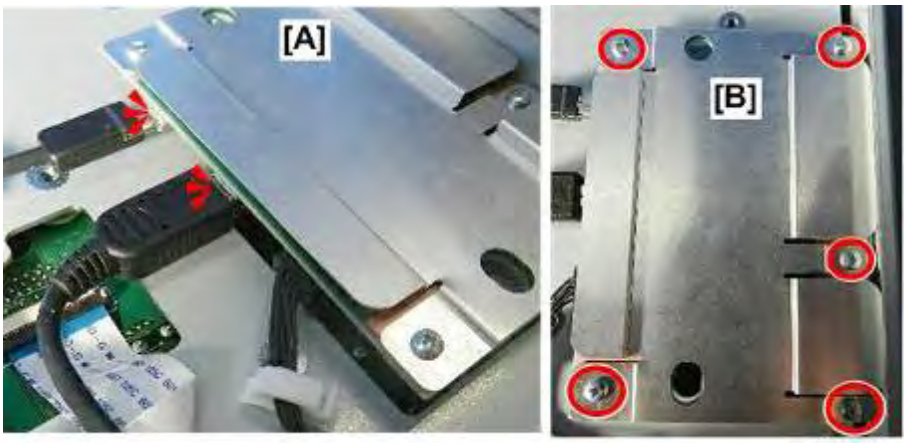


d1792414

1. Remove PCB (x2, FFCx6, x2, x6).

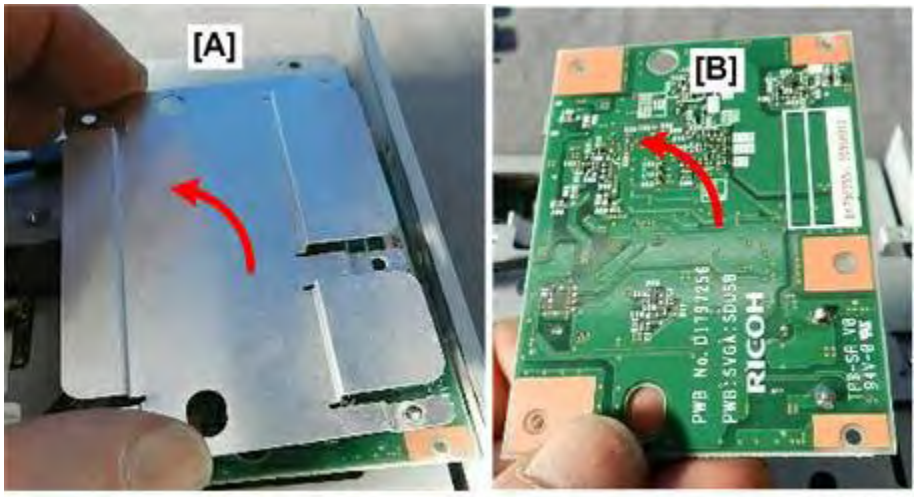
d1792415

SD Card/USB



d1792416

1. Disconnect PCBs [A] (x2).
2. Disconnect shield plate [B] (x5).



d1792417

3. Remove plate [A] and then PCB [B].

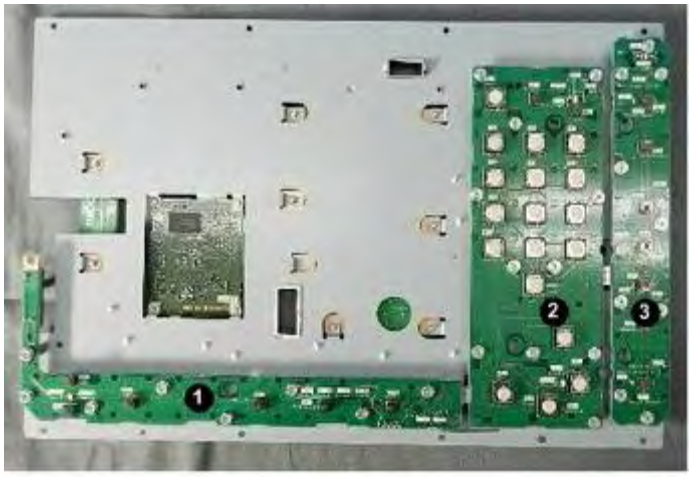
d1792418

4.5.3 OPERATION PANEL LED PCB, KEY PCBS

Preparation

Remove:

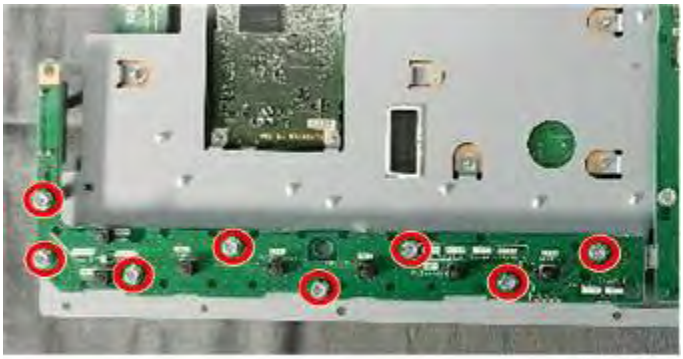
- Operation touch panel page 4-43
- Do the "Touch Panel" procedure above to remove the 1st shield plate.
- Turn the panel over so the front side is facing up.



d1792419

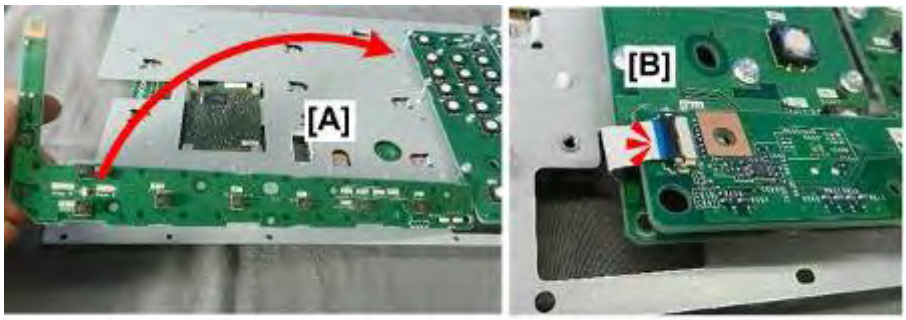
①	LED PCB
②	Key PCB 1
③	Key PCB 2

LED PCB



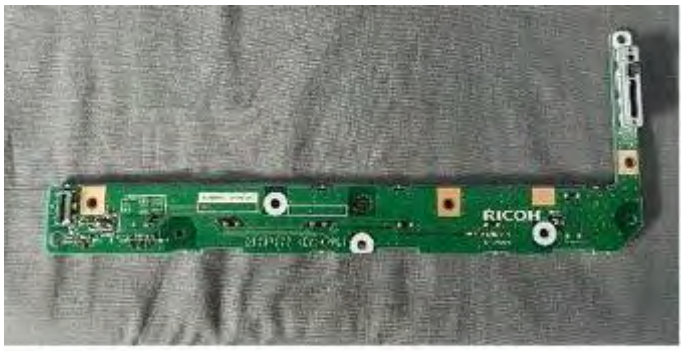
d1792420

1. Disconnect PCB (x8).



d1792421

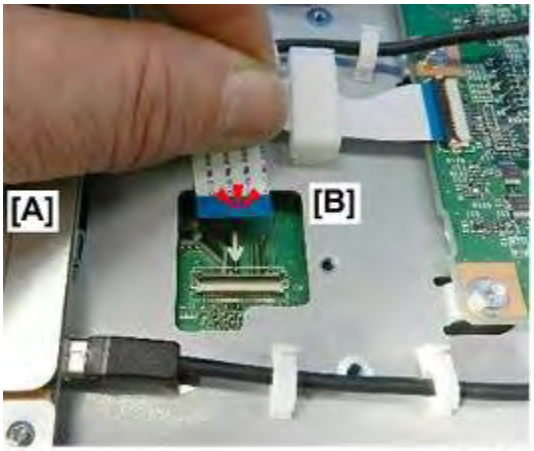
2. Slowly, fold PCB [A] over so you can see connector, and then disconnect [B] (x1).



d1792422

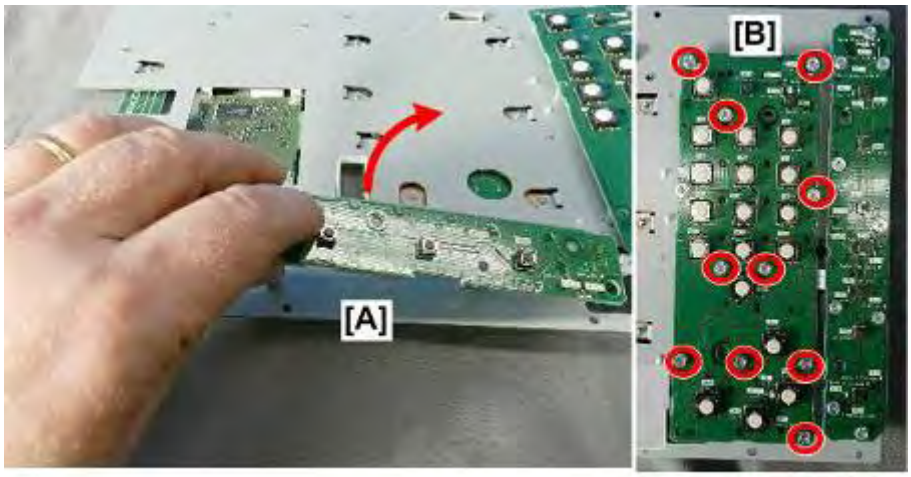
3. Remove PCB.

Key PCB 1



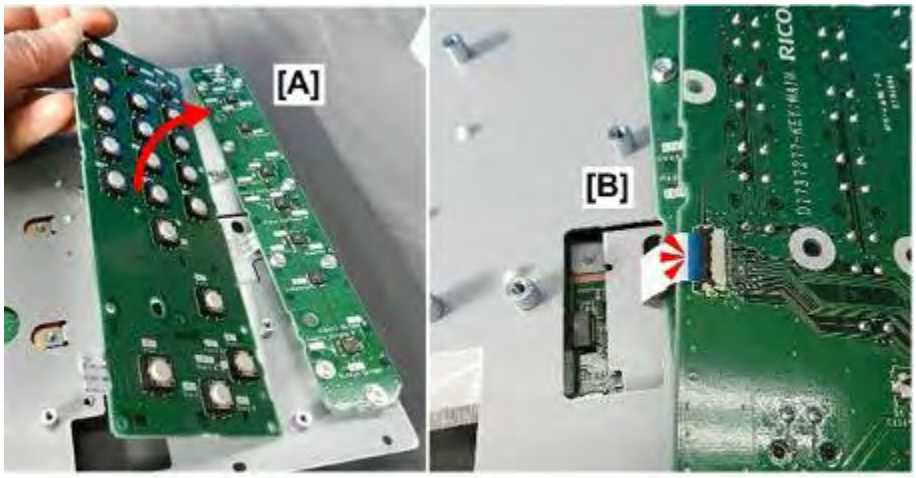
d1792423

1. Turn the panel over so the back side [A] is facing up.
2. Disconnect PCB at [B] (x1).



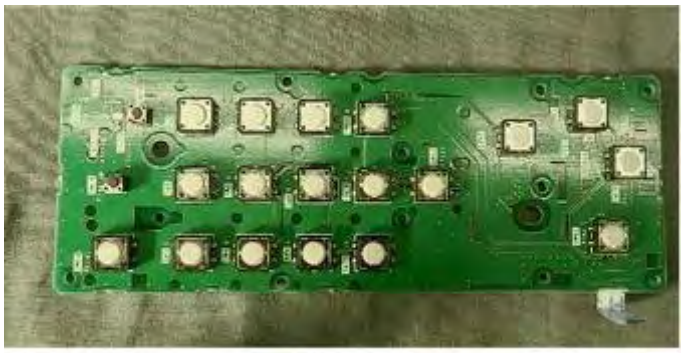
d1792424

3. Remove the LED PCB [A] (see previous section).
4. Disconnect key PCB 1 [B] (x11).



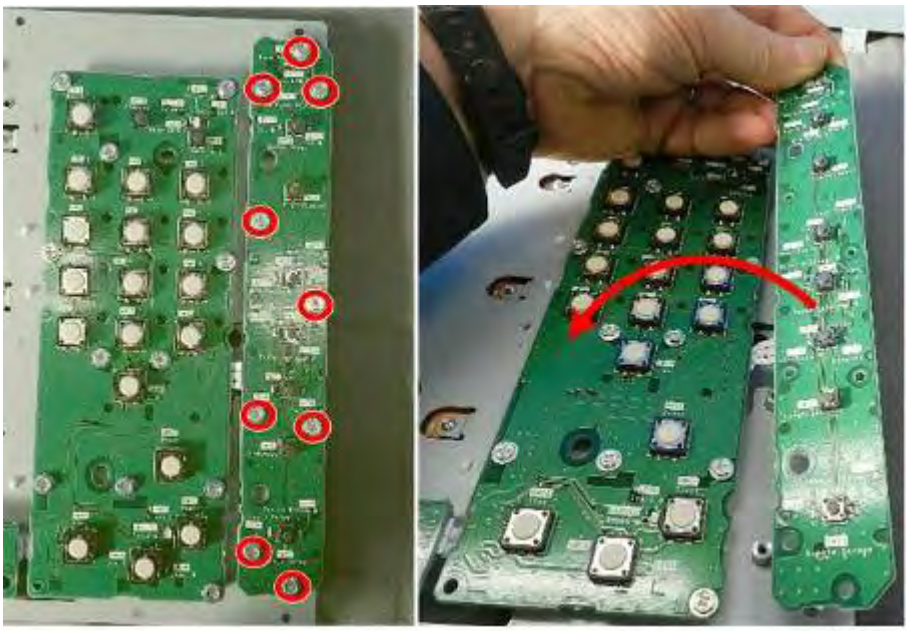
d1792425

5. Slowly, fold PCB [A] over so you can see the connector.
6. Disconnect [B] (x1).



d1792426

Key PCB 2

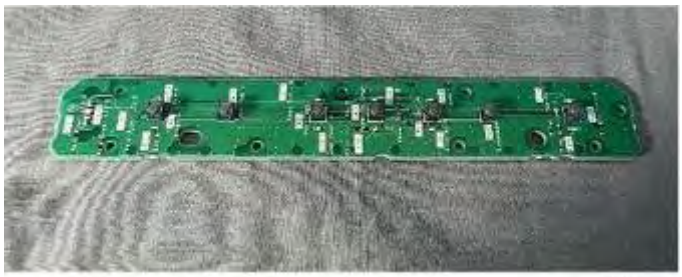


d1792427

1. Disconnect the PCB (x9).
2. Slowly, fold the PCB over so you can see the connector.

d1792428

3. Disconnect PCB and remove it (x1).



d1792429

4.5.4 TOUCH PANEL POSITION ADJUSTMENT

It is necessary to calibrate touch panel:

- After replacing the operation panel.
- After replacing the controller board.
- If the touch panel detection function is not operating correctly.

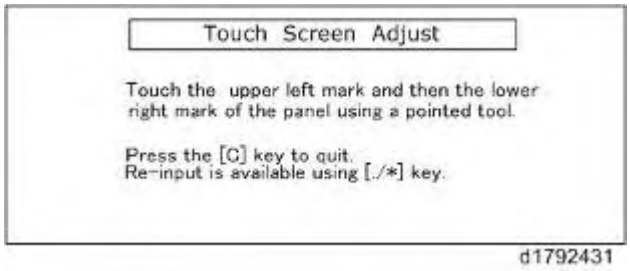
Important

- Do not use items [2] to [9] on the Self-Diagnostic Menu. These items are for design use only.

1. Press [Reset], press [1] [9] [9] [3], and then press [Clear] 5 times to open the Self-Diagnostics menu.

d1792430

2. On the touch screen press "Touch Screen Adjust" (or press "1").
3. Use a pointed (not sharp) tool to press the upper left mark .



d1792431

4. Press the lower right mark when shows.
5. Press [#] OK on the screen when you are finished.
6. Touch [#] Exit on the screen to close the Self-Diagnostic menu. Save the calibration settings.

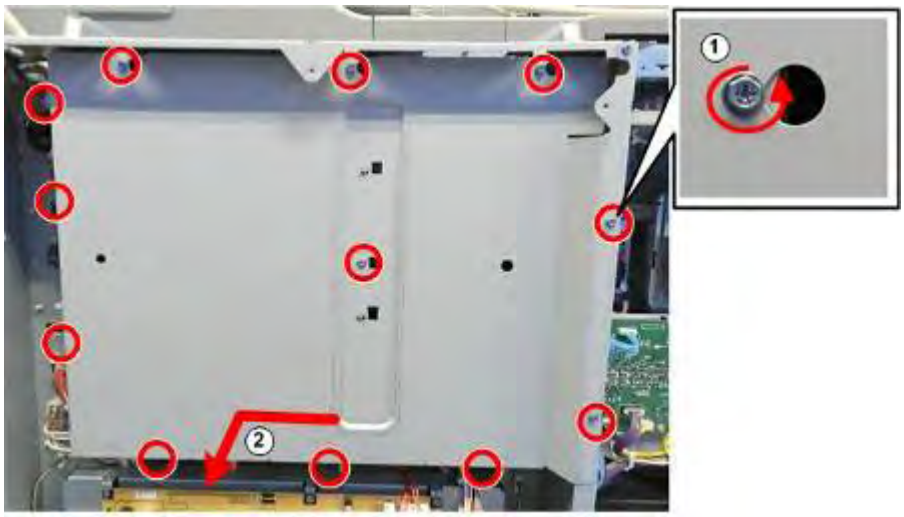
4.6 ADF

4.6.1 ADF REMOVAL

Removal

Preparation

- Controller box open page 4-27
- Controller box cover off page 4-30

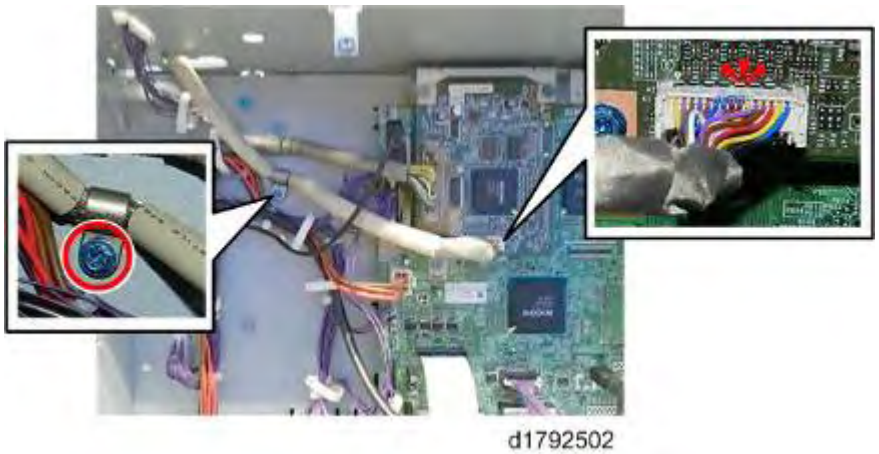


d1792501

1. Loosen screws of the metal cover (x12).
   - Do not remove the screws.
   - Each screw slides into a larger hole ① when the cover is pushed to the left ②.
2. Slowly, slide the cover to the left and then remove it.

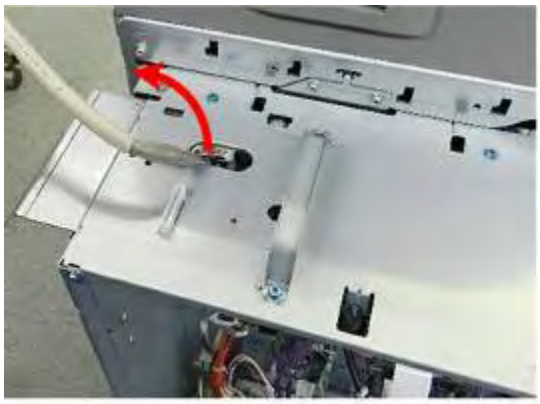
Important

- As you remove the cover, carefully separate any harnesses if they are entangled with the cover.



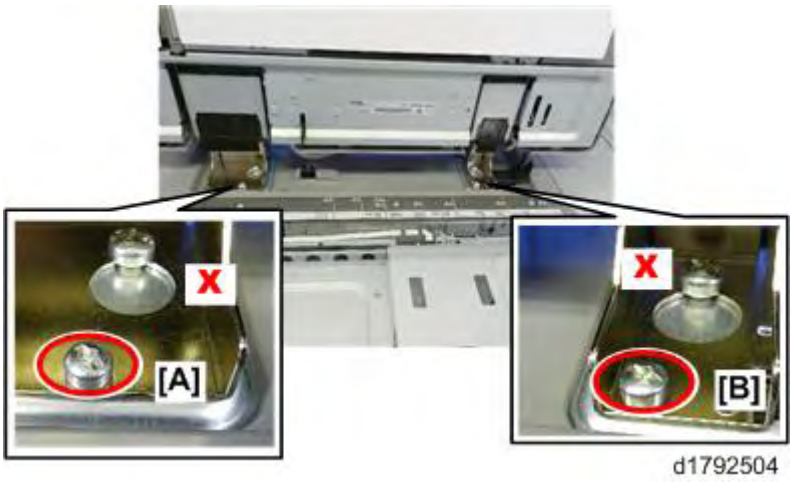
d1792502

3. Disconnect harness (x1, x1).



d1792503

4. Pull disconnected harness through top of the controller box.

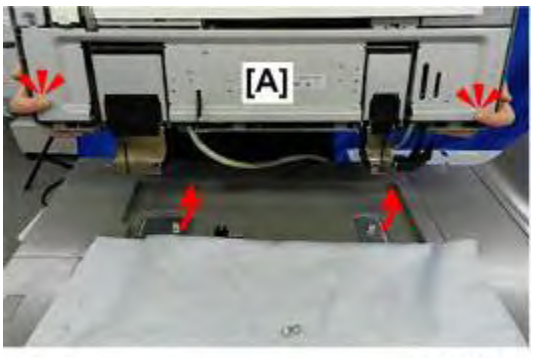


d1792504

1. At the front, disconnect ADF anchor plates [A] and [B] (x2).

Important

- Never try to remove or loosen the large shoulder screws "X".



d1792505

1. Grip the ADF [A] from the rear.

2. Pull it to the rear, lift it straight up, and then set it on the floor behind the machine or on a large table. **Weight**: approx. 14 kg (31 lb.).

4.6.2 AFTER ADF REPLACEMENT

CIS RGB Adjustment

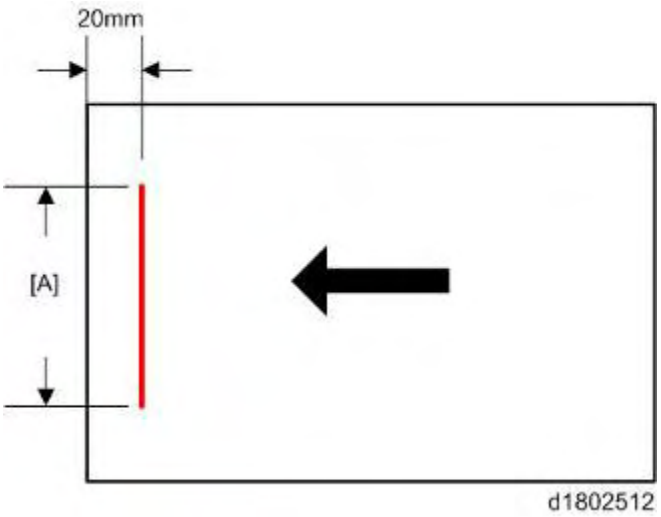
A data sheet is provided with a new ADF unit.

- The sheet lists the following SP codes and the values that must be entered for each SP.
- These SP codes must be set after ADF replacement.

SP	Name
4-712-001	CIS GB Adj Value: R
4-713-001	CIS GB Adj Value: G
4-714-001	CIS GB Adj Value: B

After setting all the SP codes, print an SMC report so you can have a record of the new values in case you need to replace the NVRAM at a later time.

Checking for Skew

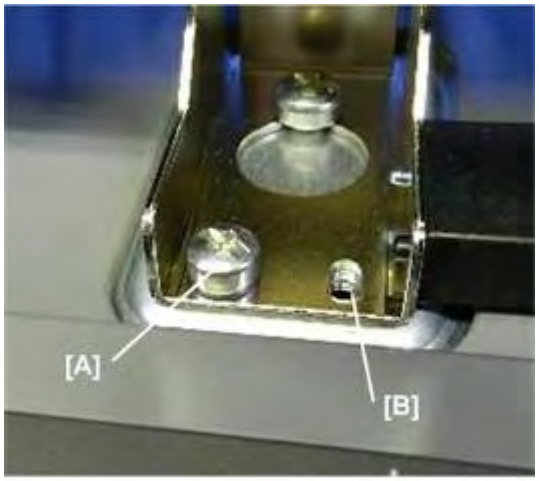


1. Use a blank piece of A3 paper to make an original line the one shown above.

   Note

   - The line should be 20 mm (0.8 in.) from the leading edge and centered.
2. Copy the original.
3. Measure the distances from the end points of the line and the edges of the paper.
4. The distances should be the same 0±2mm (0±0.1 in.).

   If the distances do not match, adjust the position of the ADF.



5. At the right hinge, loosen fixing screw [A] and then shift it to long hole [B]

Platen Adjustment

1. Raise the ADF.

d1802506

2. Insert your hand under the upper right corner, about the width of your palm, to separate the plate.

d1802507

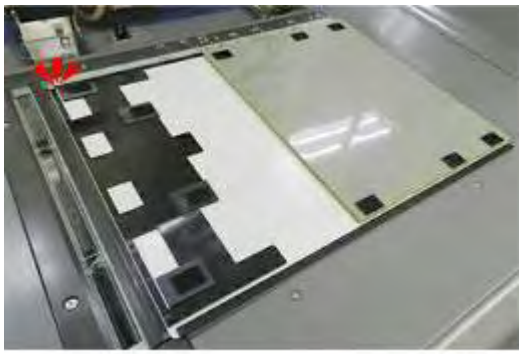
3. Insert your hand about palm-width at the lower right corner.

d1802508

4. In the same way, separate the upper left corner [A] and lower left corner [B].

d1802509

5. Pull both sides of the plate straight off (insert your hand under the center to separate the center).
6. Pull the white plate away from its Velcro fasteners.

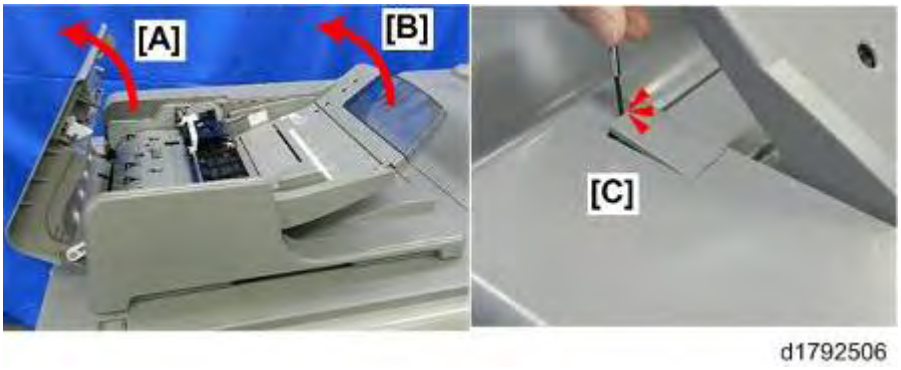


d1802501

7. Position the corner of the white plate in the upper left corner, and then just lower the ADF onto the plate.

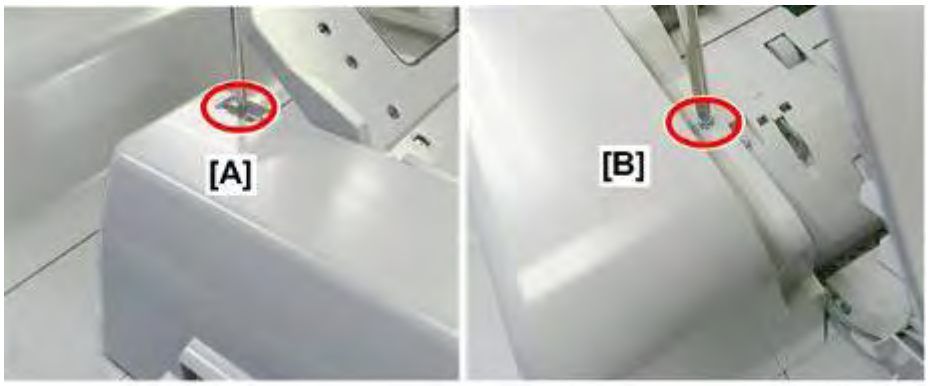
4.6.3 ADF COVERS

ADF Rear Cover



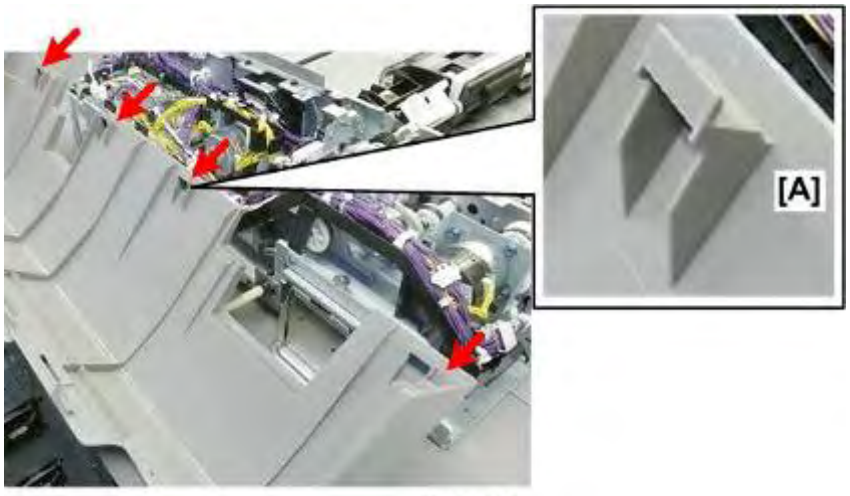
d1792506

1. Open feed cover [A].
2. Raise original extension plate [B].
3. Remove screw cap [C].



d1792507

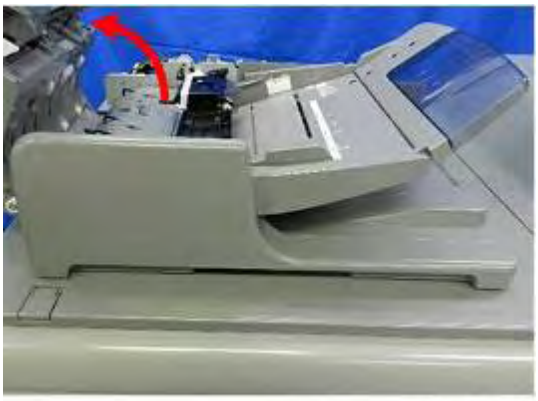
4. Disconnect left side [A] and right side [B] of the cover (x2).



d1792509

5. Remove the cover.
   - Note the tabs [A] and matching holes.
   - The tabs must be inserted in the holes correctly when the cover is re-attached.

ADF Front Cover



d1792510

1. Open the feed cover.

d1792511

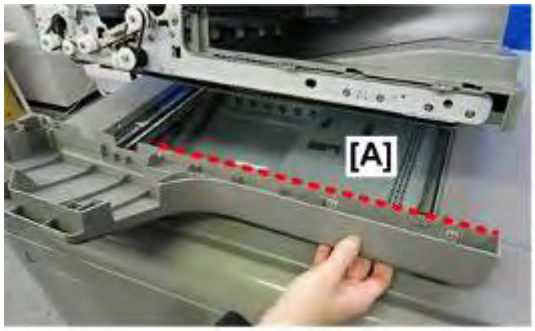
2. Remove screws [A] and [B] (x2).

d1792512

3. Slide the cover to the left to disconnect it.

d1792513

4. Remove the cover.



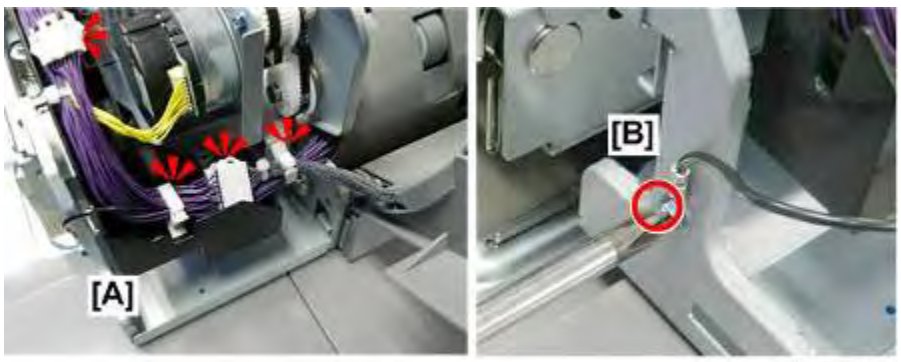
d1792514

5. Before you continue:
   - Note the tabs [A] and matching holes.
   - The tabs must be inserted in the holes correctly when the cover is re-attached.

Feed Cover

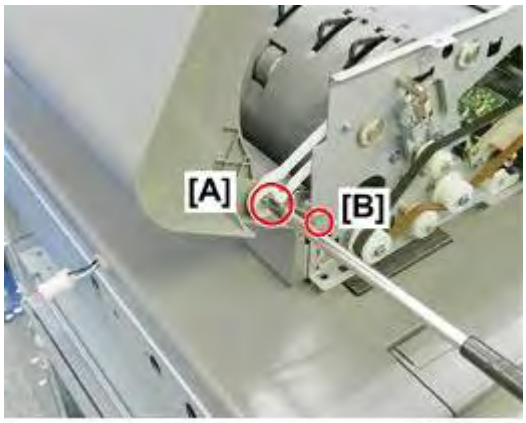
Preparation

- ADF front cover page 4-4
- ADF rear cover page 4-3



d1792515

1. Disconnect harness [A] (x3, x1).
2. Disconnect ground wire [B] (x1).



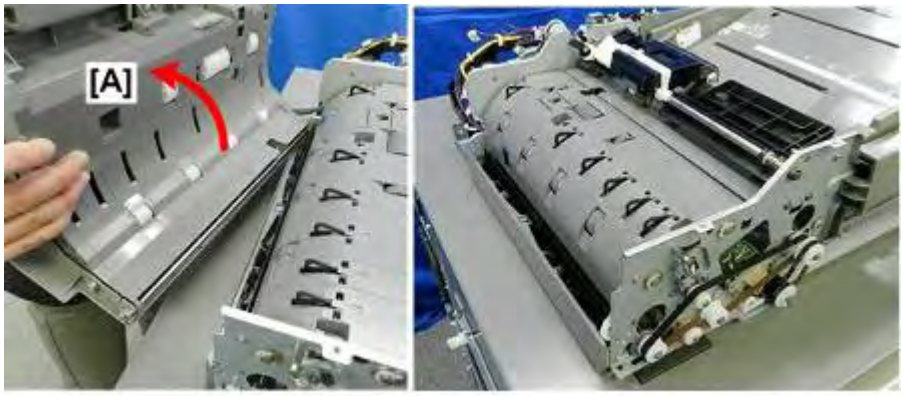
d1792516

3. Disconnect hinge arm [A] (x1).

Note

- Screw [A] is a long pivot screw and it must be re-installed here.

4. Remove screw [B] (x1).



d1792517

5. Remove feed cover [A].

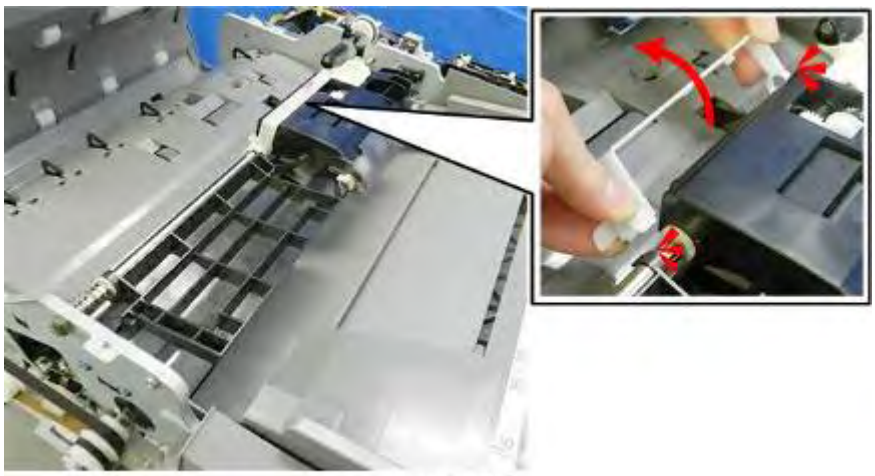
Original Feed Unit

Preparation

- Open feed cover

Remove:

- ADF front cover page 4-4
- ADF rear cover page 4-3



d1792518

1. Spread the white bracket slightly, and then remove it.

d1792519

2. Pull the unit to the front to disconnect it, and then remove it.

4.6.4 PICKUP ROLLER, FEED BELT

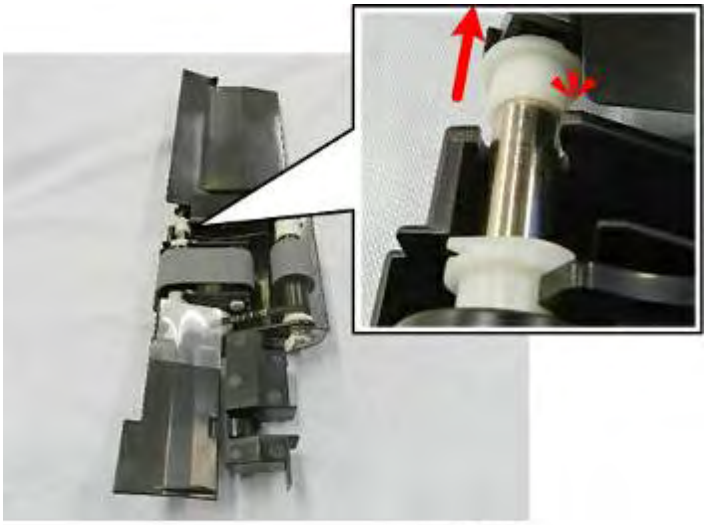
Preparation

- Original feed unit page 4-6

Pickup Roller

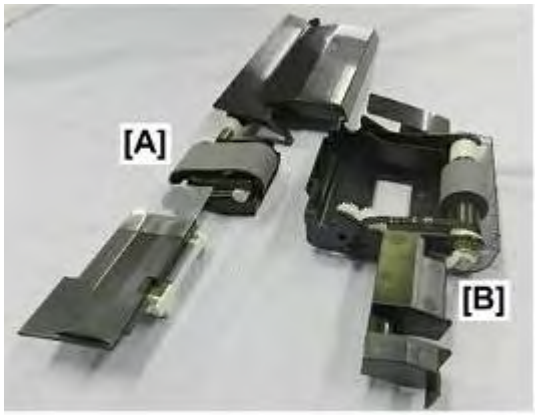
d1792520

①	Pick-up Roller
①	Feed Belt



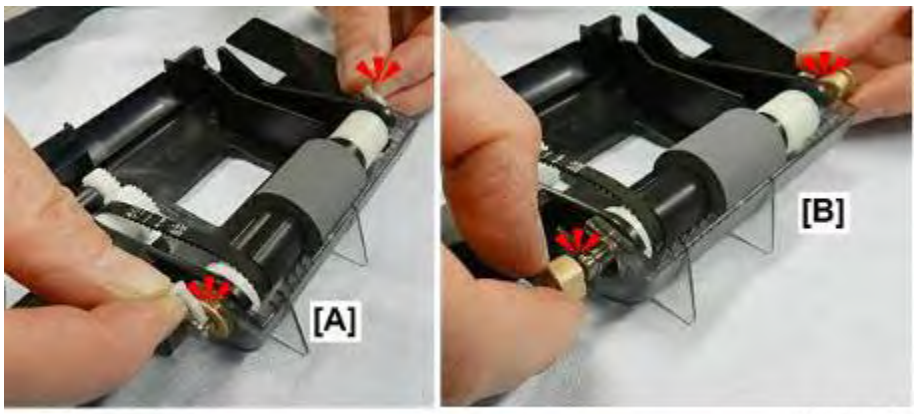
d1792521

1. Slide out the white bushing.



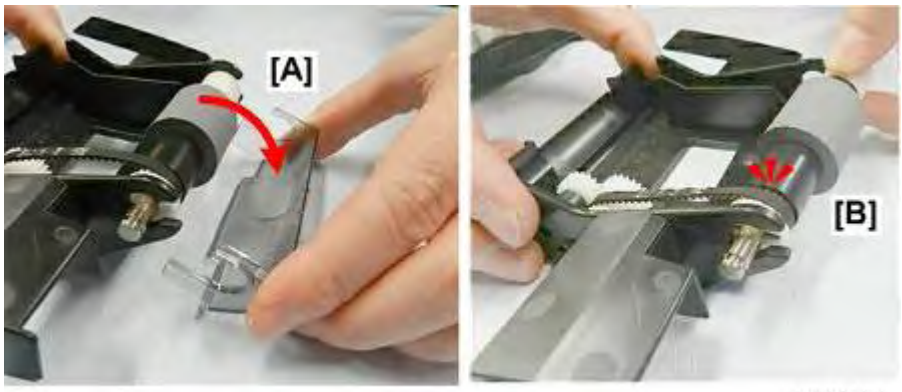
d1792522

2. Separate belt feed holder [A] and pick-up roller holder [B].



d1792523

3. Disconnect both ends of pick-up roller shaft [A] (x2).
4. Remove bushings from both ends [B] (x2).



d1792524

5. Remove:
   [A] Plastic cover
   [B] Belt

   Important

   - Avoid touching the surface of the pick-up roller. Oil from your hands or fingertips could cause the roller to slip during original feed.

d1792525

6. Remove pick-up roller [A] from the shaft.

Feed Belt

d1792526

1. Compress sides ① to release spring tension, and then disconnect belt frame ② from the shaft.

d1792527

Important

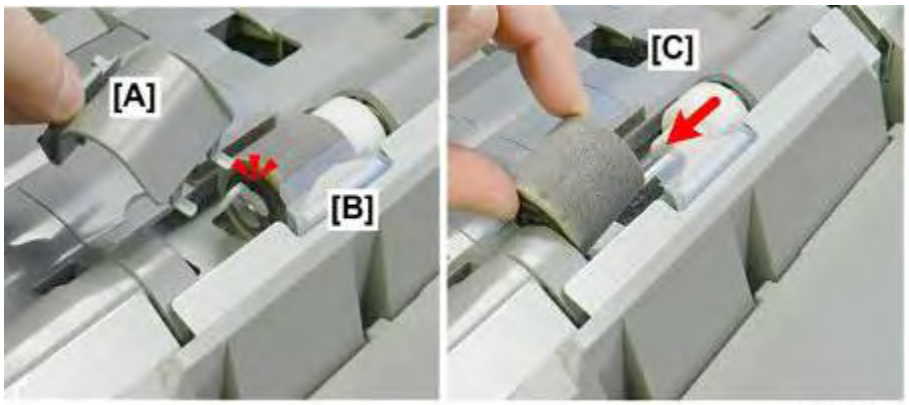
- Avoid touching the surface of the belt. Oil from your hands or fingertips could cause the belt to slip during original feed.

2. Separate belt frame [A] from the belt, then slide off the belt [B].

4.6.5 ADF SEPARATION ROLLER

Preparation

- Open feed cover page 4-5
- Original feed unit page 4-6



d1792529

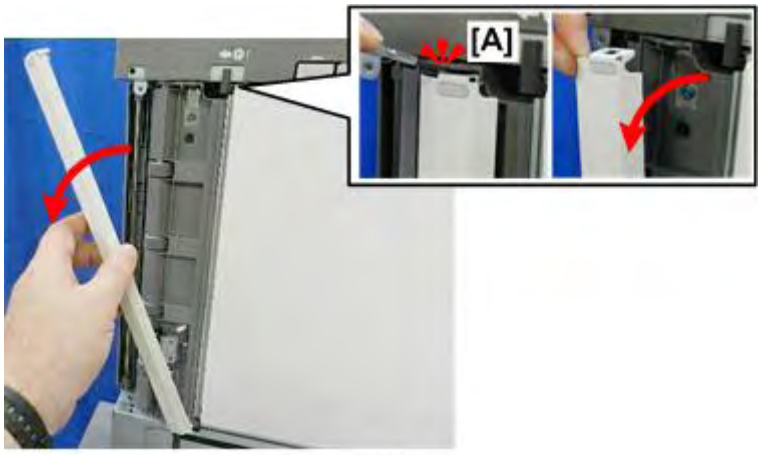
1. Remove cap [A].
2. Disconnect roller [B] (x1).
3. Remove roller [C].

4.6.6 ADF SENSORS

Original Registration Sensor

Preparation

- Raise ADF

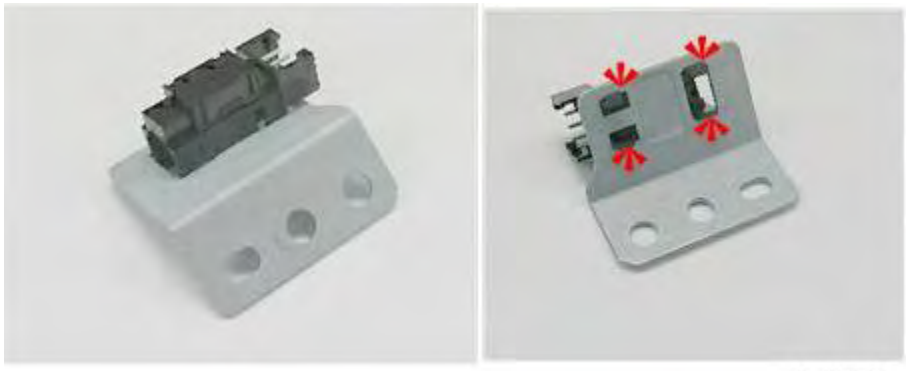


d1792531

1. Disconnect plate at [A], and then remove it.

d1792532

2. Disconnect sensor bracket (x1).

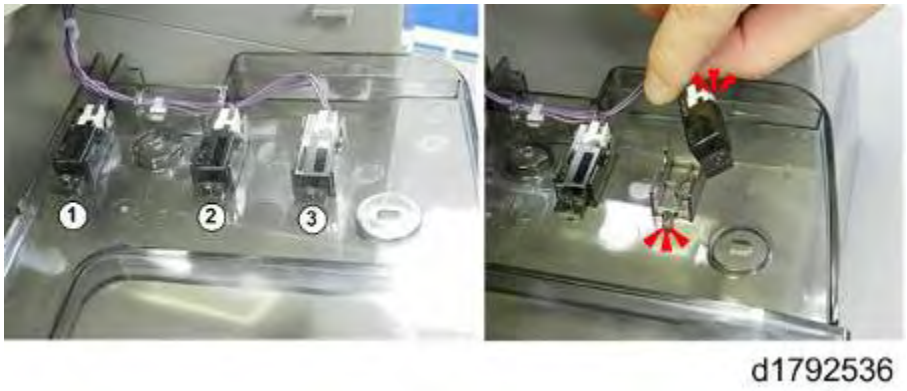


d1792534

3. Remove sensor from bracket (x4).

Original Width Sensors

1. Raise original extension plate [A].
2. Disconnect plate [B] (x4).



The sensors are arrayed at the rear:

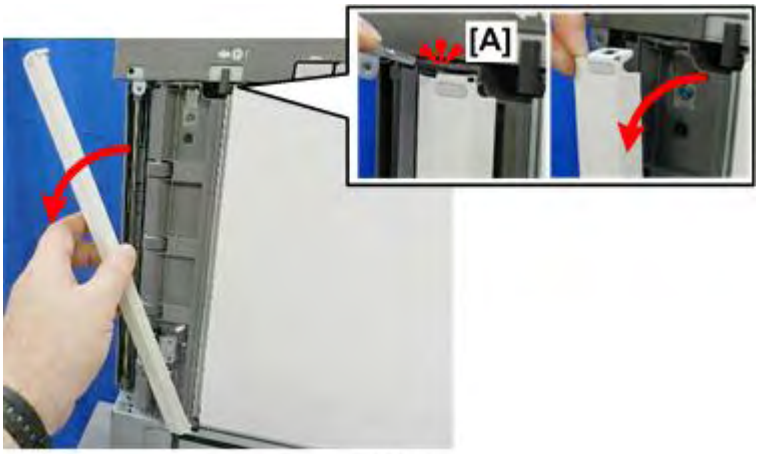
① B5

② A4

③ LG

1. Remove a sensor from its holder (no pawls, no hooks).
2. Disconnect the sensor (x1).

Original Exit Sensor



d1792531

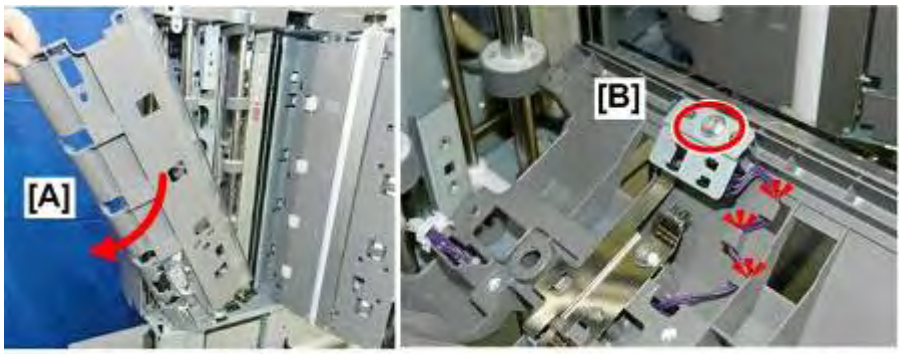
1. Disconnect plate at [A], and then remove it.

d1792537

2. Release white plate holder [A].

d1792538

3. Disconnect cover:
   [A] Top (x3)
   [B] Bottom (x3)

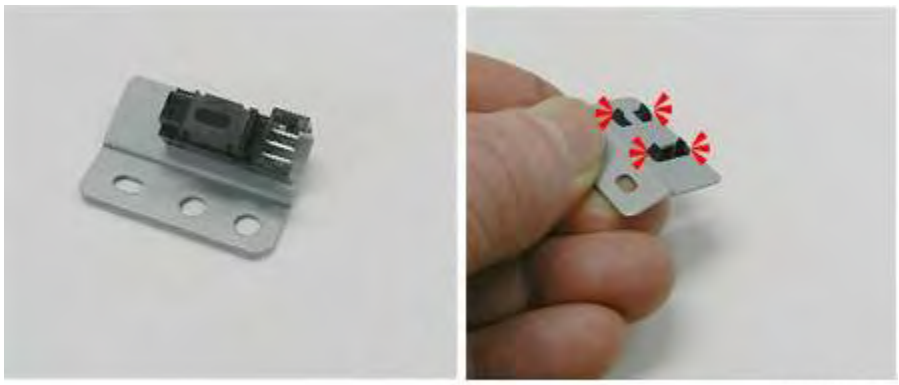


d1792539

4. Remove cover [A].
5. Disconnect sensor bracket [B] and harness (x3, x1).

d1792540

6. Disconnect sensor (x1).



d1792541

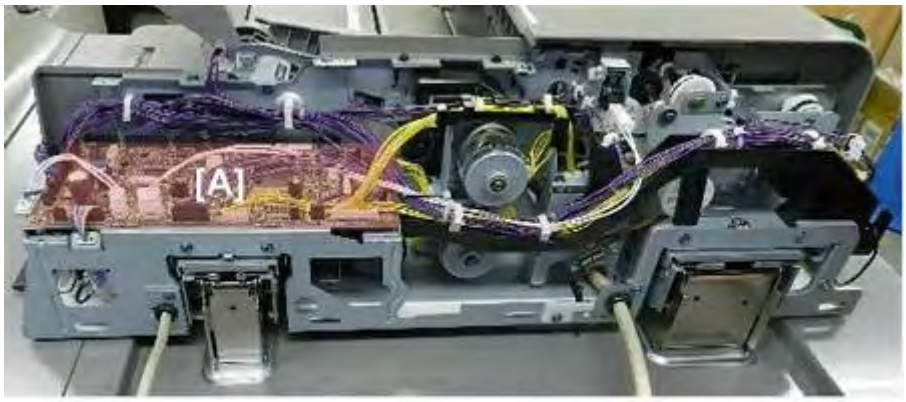
7. Separate sensor and bracket (x4).

4.6.7 BOARDS

ADF Control Board

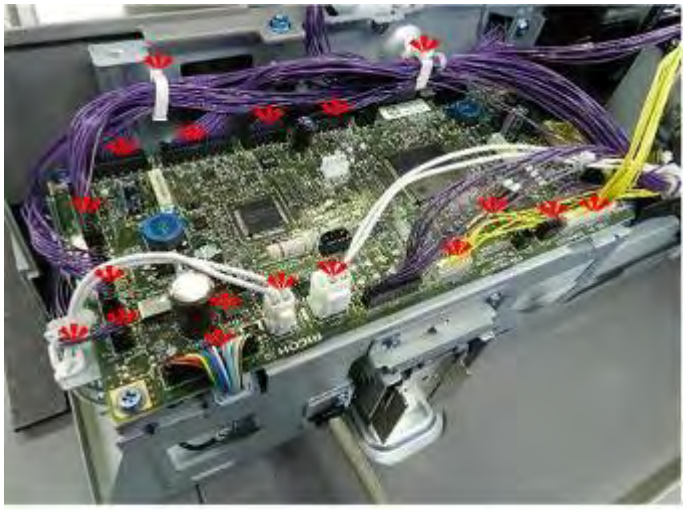
Preparation

- ADF rear cover page 4-3



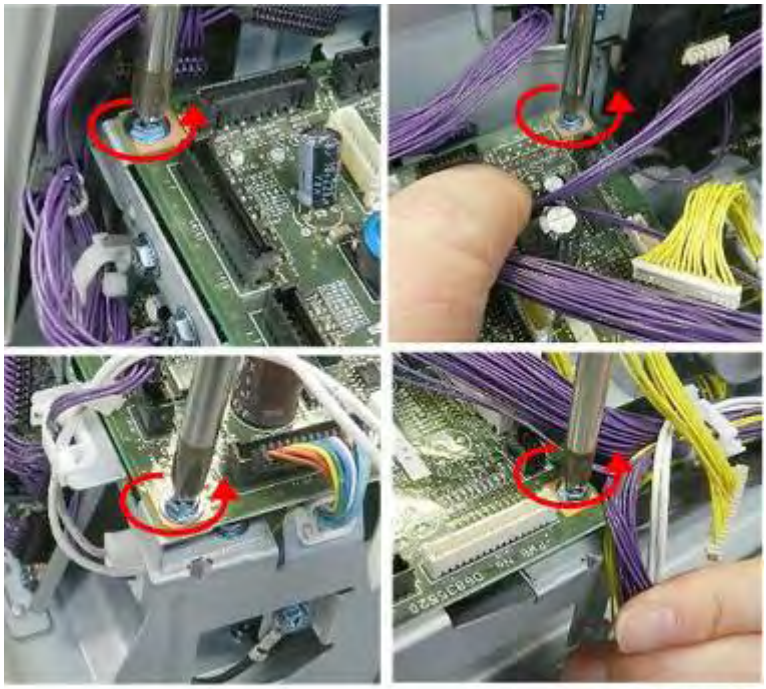
d1792542

1. Locate the ADF control board at [A].



d1792543

2. Disconnect the control board (x17).



d1792544

3. Disconnect each corner of the boards (x4).

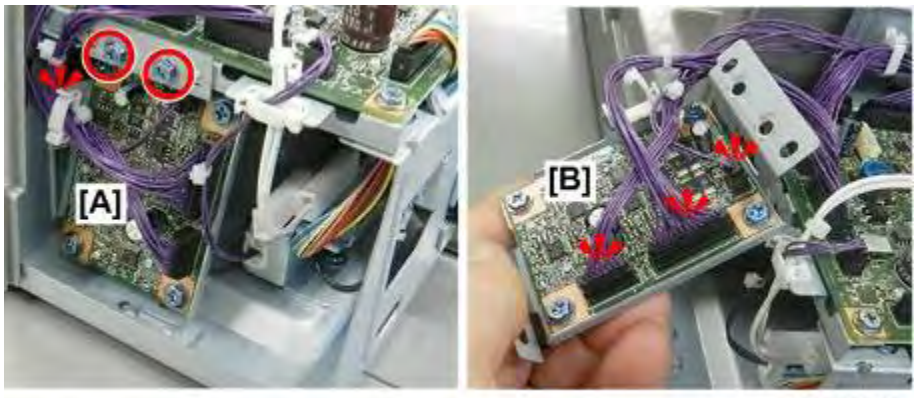
d1792545

4. Remove the board.

Double-feed Sensor Board

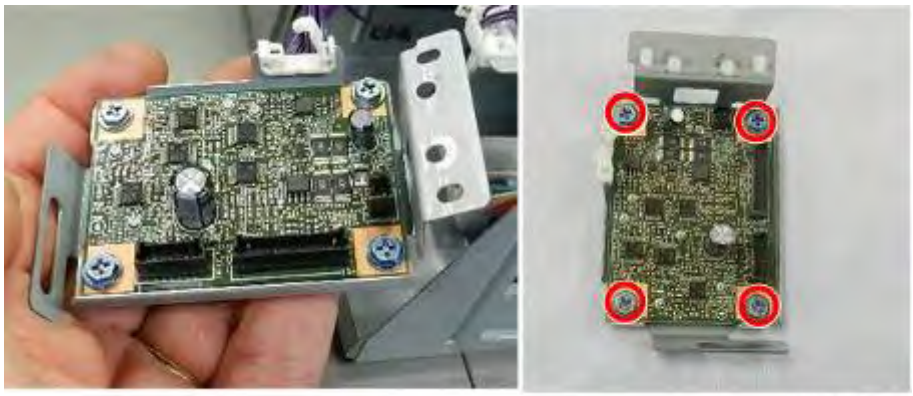
Preparation

- ADF rear cover page 4-3



d1792546

1. Disconnect board bracket [A] (x2).
2. Disconnect harnesses [B] (x3).



d1792547

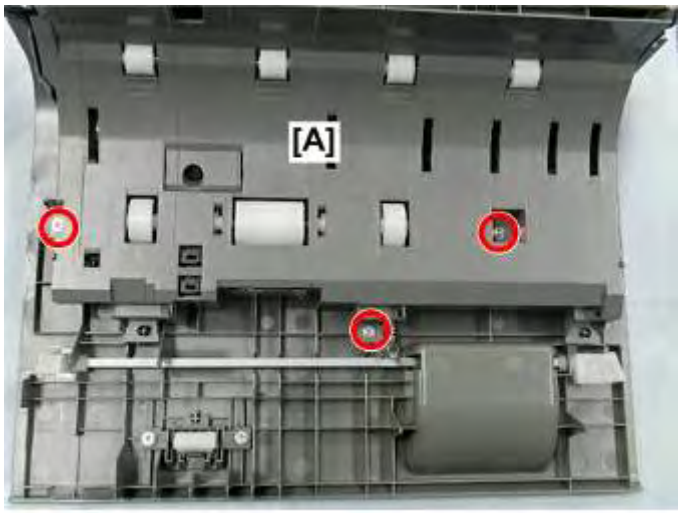
3. Separate board and bracket (x4).

4.6.8 SENSORS, SWITCHES

Separation Sensor, Skew Correction Sensor, Double-Feed Sensor 2

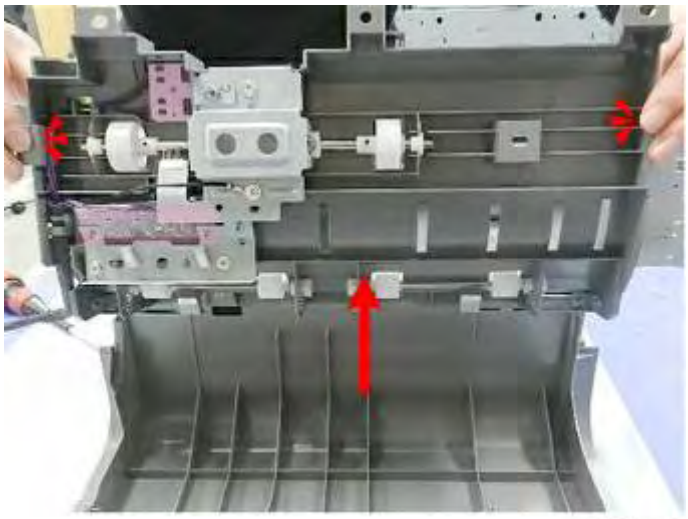
Preparation

- Remove feed cover page 4-5



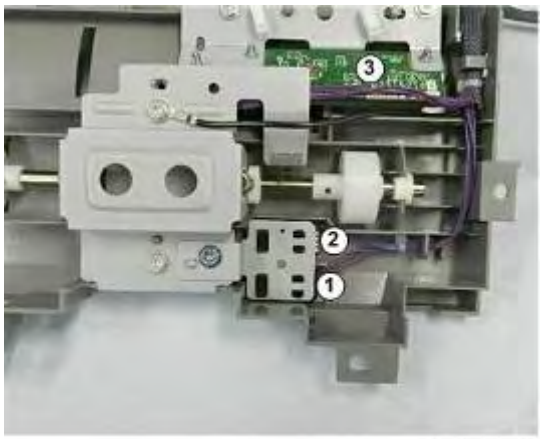
d1792548

1. Remove guide plate [A] (x3).



d1792549

2. Separate the plates.



d1792550

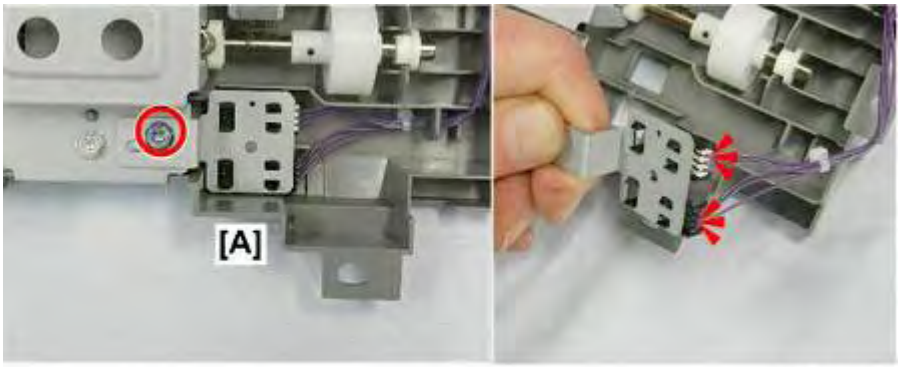
Sensors:

① Separation sensor

② Skew correction sensor

③ Double-feed sensor 2 (receiver)

Separation Sensor, Skew Correction Sensor



d1792551

1. Disconnect sensor bracket [A] (x1).
2. Disconnect sensors (x2, x8).

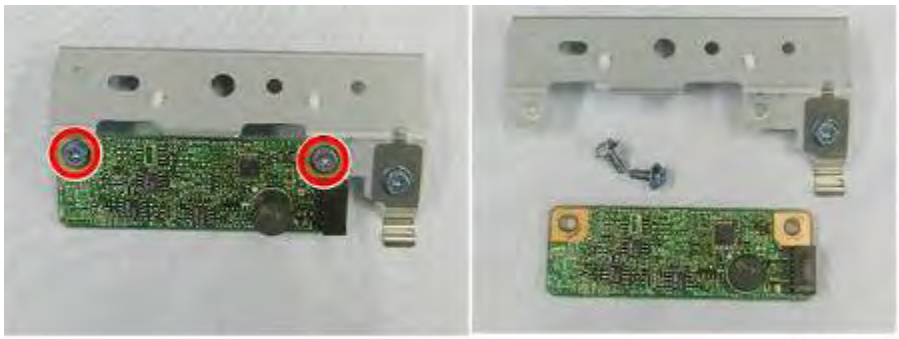
Double-feed Sensor 2 (Receiver)

d1792552

1. Disconnect sensor bracket [A], and then remove it (x2).

d1792553

2. Disconnect sensor (x1).



d1792554

3. Separate sensor board and bracket (x2).

Double-feed Sensor 1, Interval Sensor, Original Width Sensors

Preparation

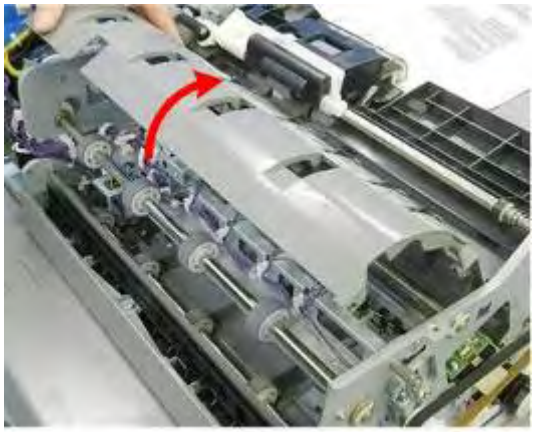
- Feed cover page 4-5

d1792555

1. Disconnect lower guide, in order from rear to front: ① Blue, ②,③ Black step screws (x1, x2).

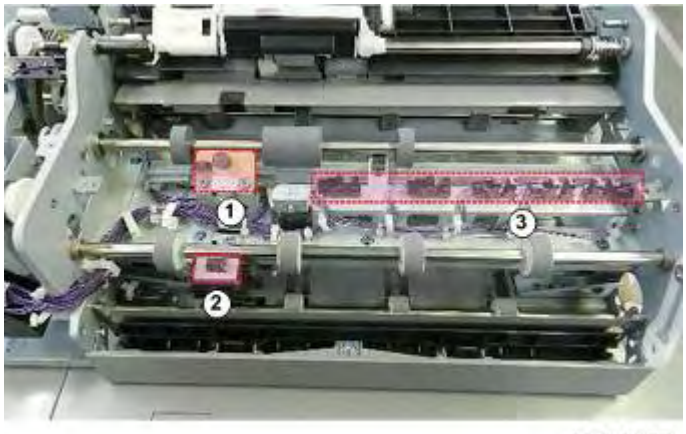
Important

- These screws must be re-installed in the same order: blue screw at the back and the black screws at the center and front.



d1792556

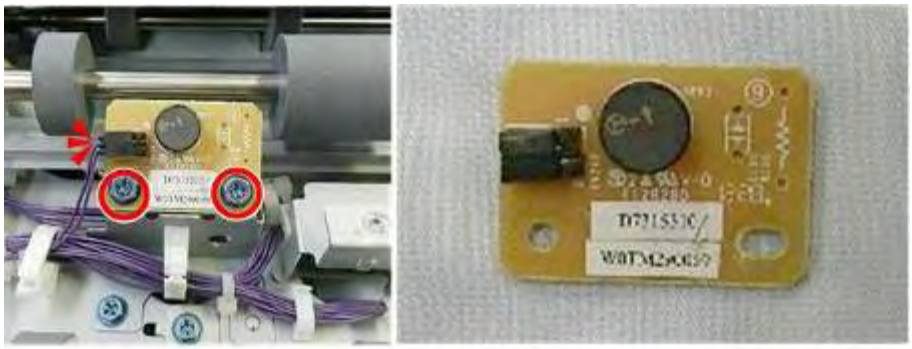
2. Remove the guide.



d1792557

①	Double-feed Sensor 1
②	Interval Sensor
③	Original Width Sensors

Double-feed Sensor 1 (Emitter)



d1792558

1. Disconnect sensor board (x1, x2).
2. Remove the sensor board.

Interval Sensor

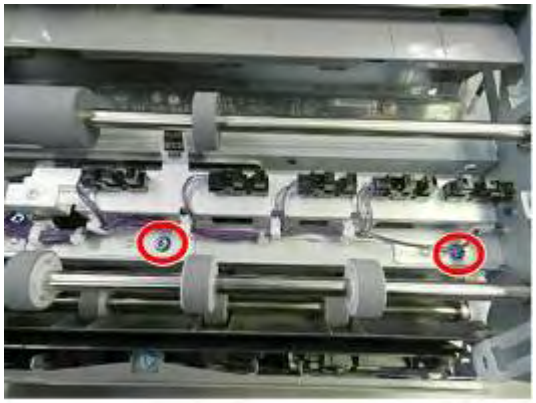
d1792559

1. Disconnect sensor bracket (x1).

d1792560

2. Disconnect sensor (x1, x4).

Original Width Sensors



d1792561

1. Disconnect sensor bracket (x2).

d1792562

2. Disconnect sensor bracket:

[A] Rear (x1, x1)

[B] Front (x1, x1)

d1792563

3. Open and disconnect the remaining clamps and sensors (x4, x3).

d1792564

APS Feeler

Preparation

- Rear cover page 4-3

d1792565

1. Disconnect bracket [A] (x1).
2. Remove bracket with feeler attached.

ADF Lift Interlock SW

Preparation

- ADF control board page 4-15

d1792566

1. Disconnect switch (x2, x2).

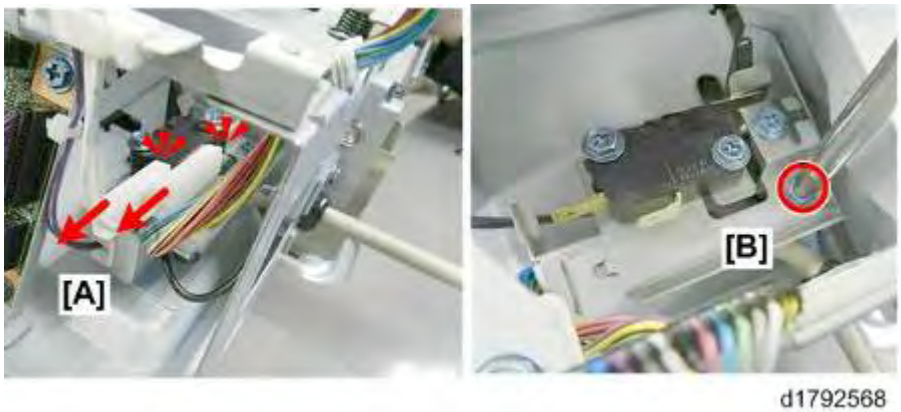
d1792567

2. Remove switch.

Lift-up Sensor

Preparation

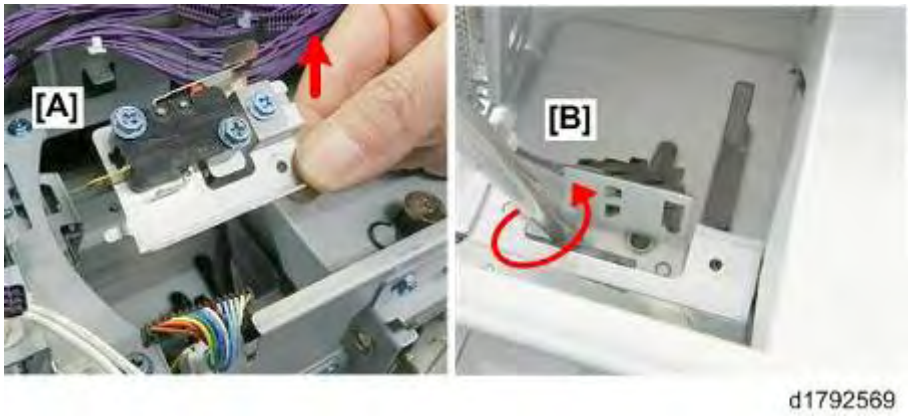
- ADF control board page 4-15



d1792568

1. Disconnect ADF interlock switch [A] (x2).

2. Disconnect switch bracket [B] (x1).



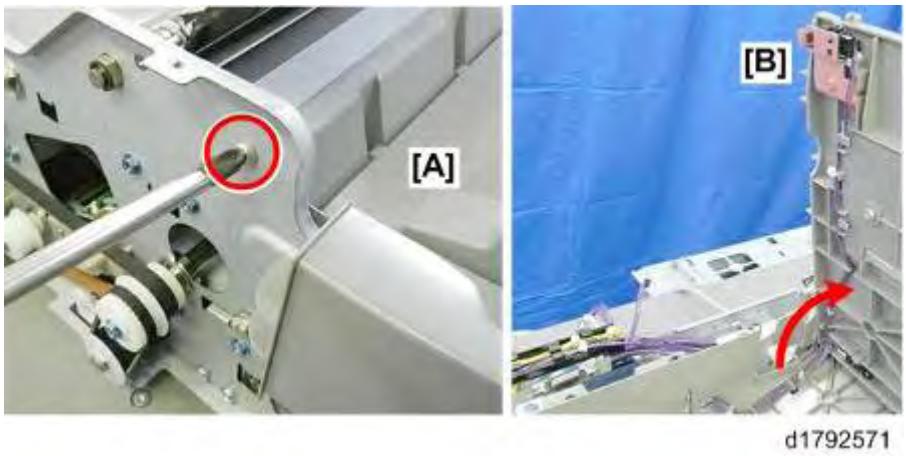
3. Lift out interlock switch bracket [A].
4. Disconnect lift-up sensor bracket [B] (x1).

5. Separate sensor and bracket (x1, x4).

Original Set Sensor

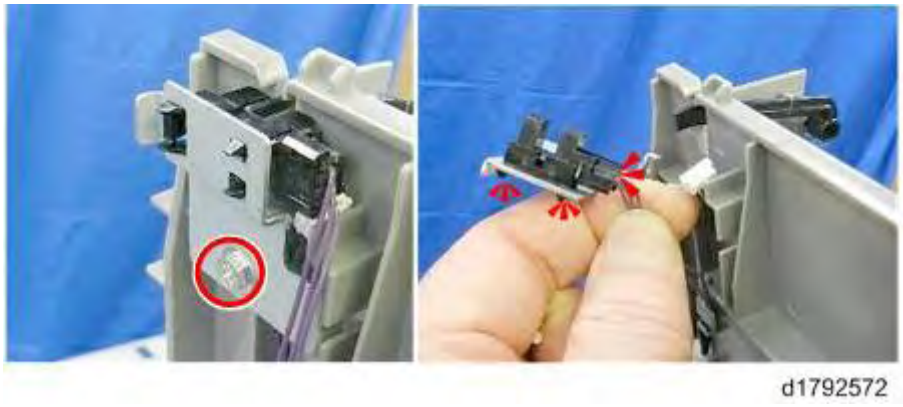
Preparation

- ADF front cover page 4-4



1. Remove screw [A] (x1).

2. Raise plate to the right so you can see original set sensor [B].

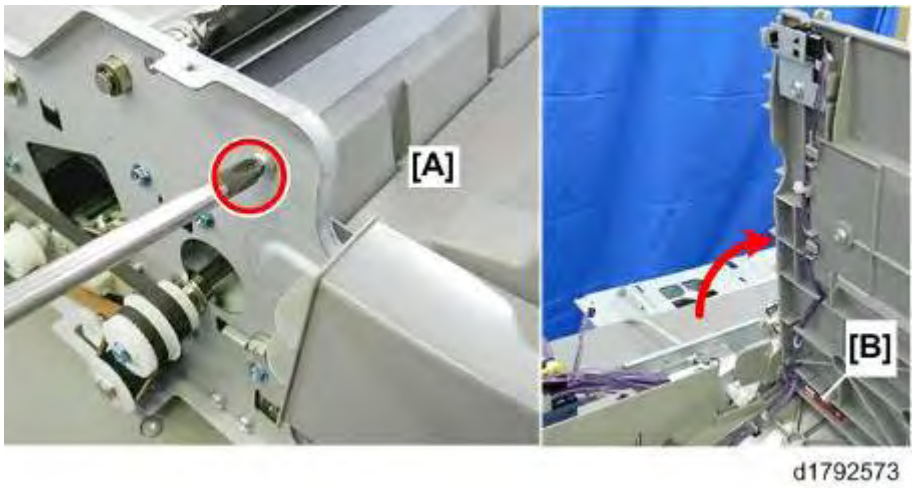


3. Remove sensor bracket (x1).
4. Remove sensor (x1, x4).

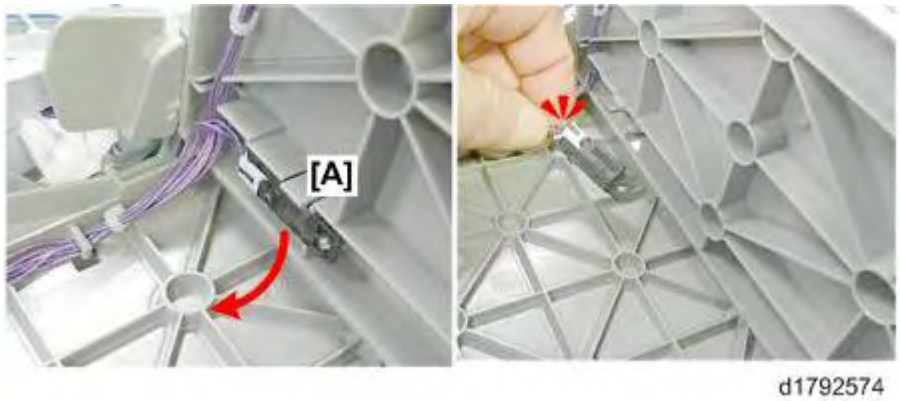
A4/LT SEF Sensor

Preparation

- ADF front cover page 4-4



1. Remove screw [A] (x1).
2. Raise plate to the right so you can see A4/LT SEF sensor [B].

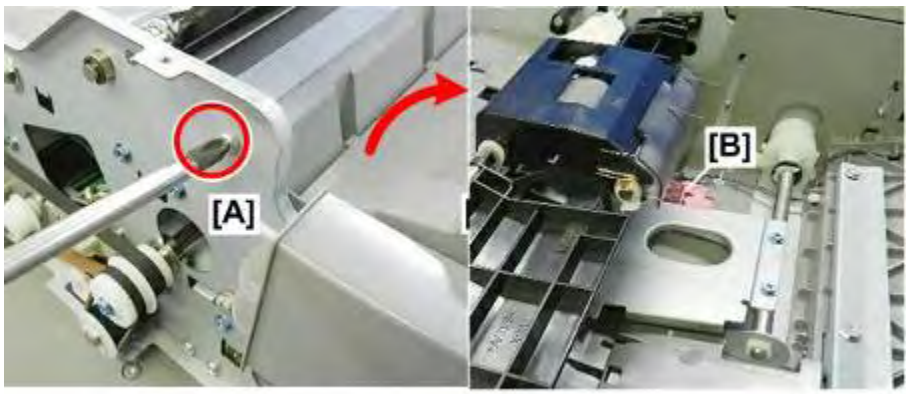


3. Pull the sensor [A] out of its holder and disconnect it (x1).

Bottom Plate HP Sensor

Preparation

- Original feed unit page 4-6
- ADF front cover page 4-4



d1792575

1. Remove screw [A] (x1).
2. Raise plate to the right so you can see bottom plate HP sensor [B].

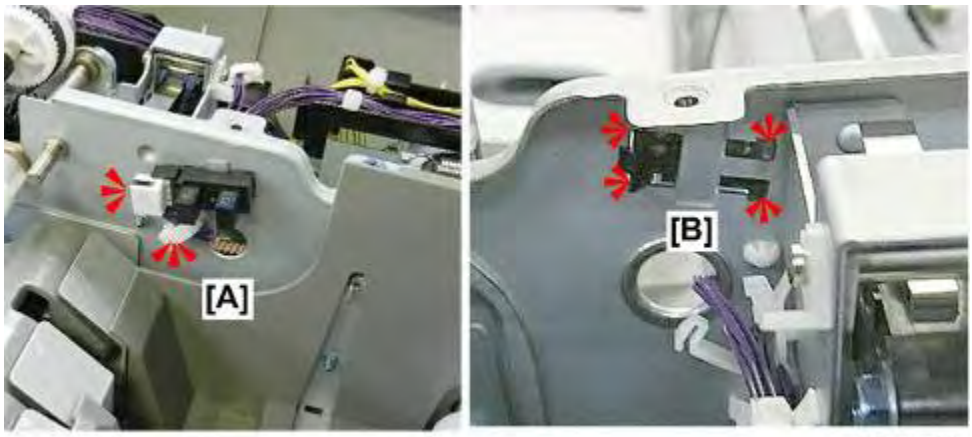
d1792616

3. Remove sensor (x1, x4).

Bottom Plate Position Sensor

Preparation

- ADF rear cover page 4-3
- Original feed unit page 4-6



d1792576

1. Disconnect sensor at the front side [A] (x1, x1).
2. Disconnect sensor at rear side [B] (x4).

ADF Feed Cover Interlock SW

Preparation

- ADF rear cover page 4-3

d1792577

1. Locate the switch at [A].
2. Remove spring [B] (x1).

d1792578

3. Disconnect pin [A] (x1).
4. Pull pin [B] out of bracket.

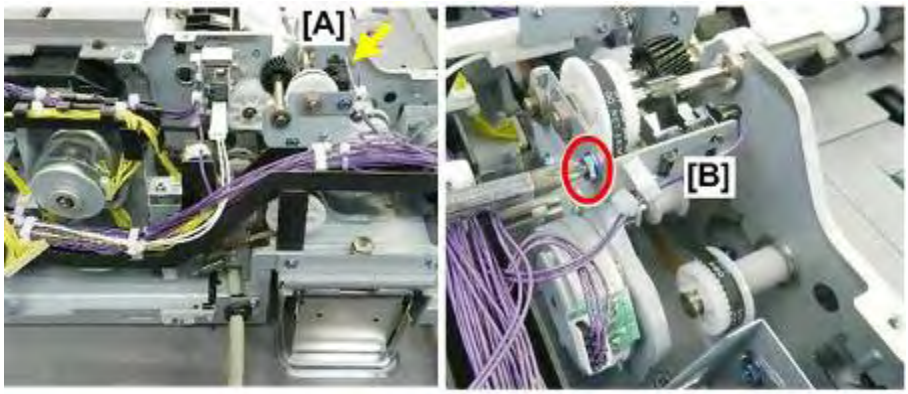
d1792579

5. Disconnect switch (x2).

Pickup Roller HP Sensor

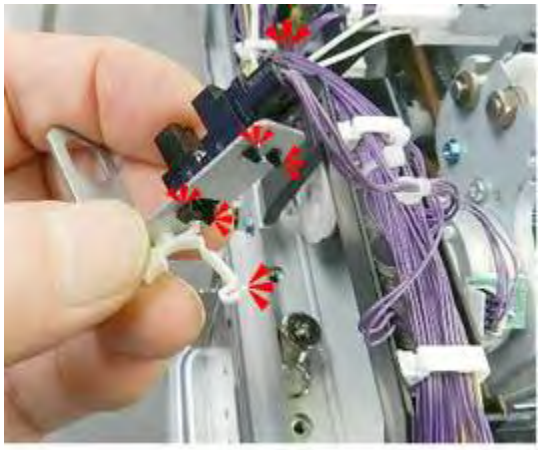
Preparation

- ADF rear cover page 4-3



d1792580

1. Locate the sensor [A] at the back of the machine.
2. Disconnect sensor bracket [B] (x1).



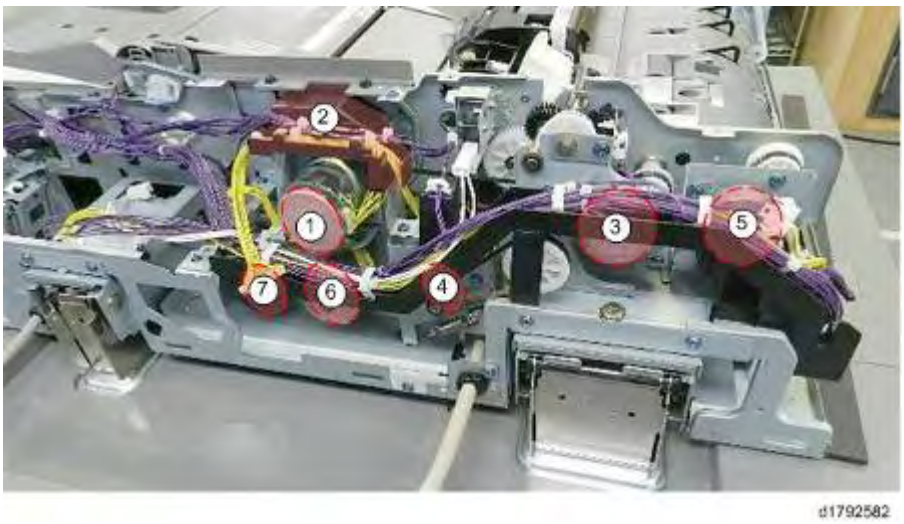
d1792581

3. Disconnect sensor (x2, x1, x4).

4.6.9 MOTORS

Before You Begin

All of the ADF motors are at the rear.



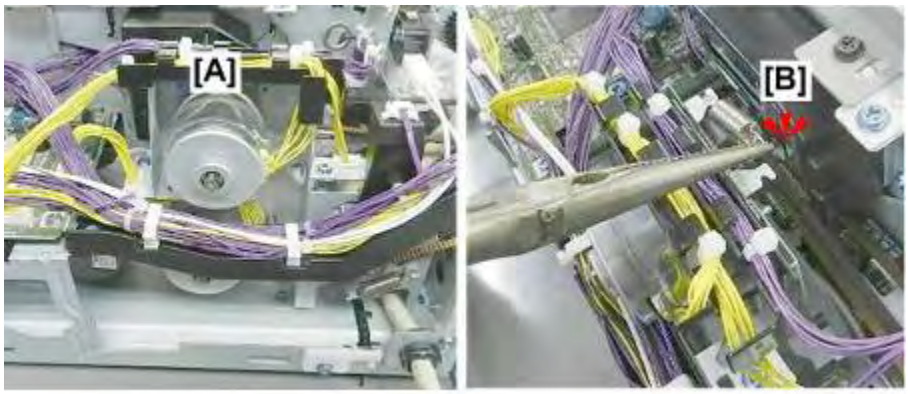
d1792582

①	Entrance motor
②	Bottom plate lift motor
③	Feed Motor
④	Pick-up roller motor
⑤	Transport motor
⑥	Scan motor
⑦	Relay motor

ADF Entrance Motor

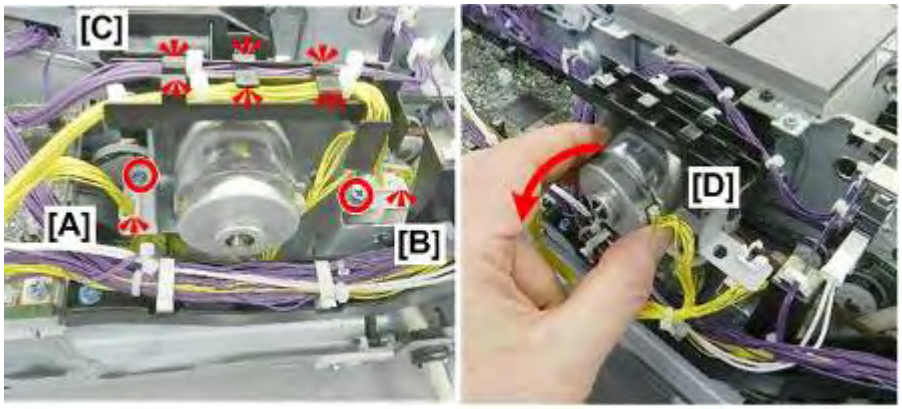
Preparation

- ADF rear cover page 4-3



d1792586

1. Locate the motor below the harness bridge [A].
2. Remove spring [B] (x1).

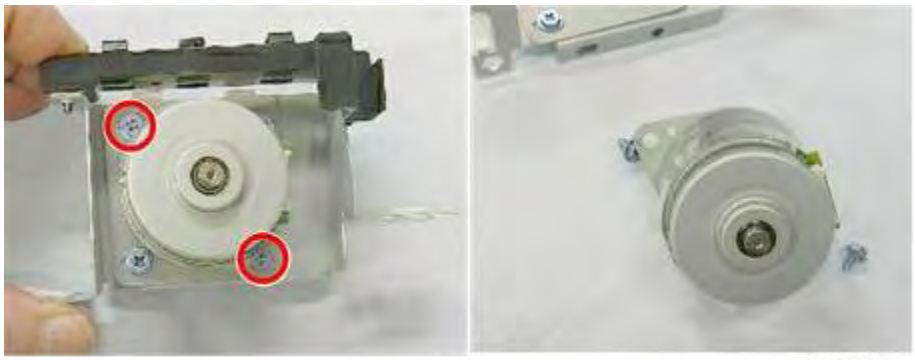


d1792587

3. Disconnect:
   [A] Right side [x1, x1)
   [B] Left side [x1, x1)
4. Free harnesses [C] from the tuck clamps (x6).
5. Pull out the bracket [D] (with motor attached).

d1792588

6. Disconnect motor (x1).



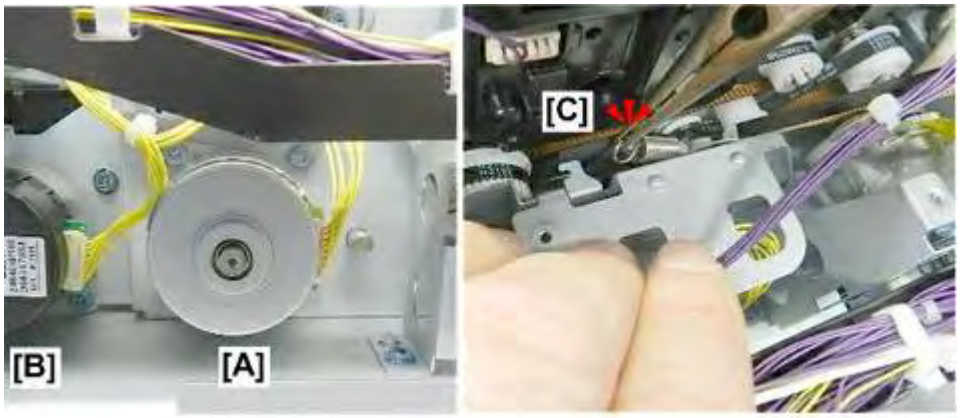
d1792589

7. Separate motor and bracket (x1).

ADF Scan Motor

Preparation

- ADF entrance motor bracket page 4-32



d1792590

1. Locate ADF scan motor [A] at the bottom center, next to the ADF exit motor [B].
2. Disconnect at [C] (x1).

d1792591

3. Disconnect bracket [A] and motor [B] (x2, x1).

d1792592

4. Remove bracket (with motor attached).

d1792593

5. Separate bracket and motor (x2).

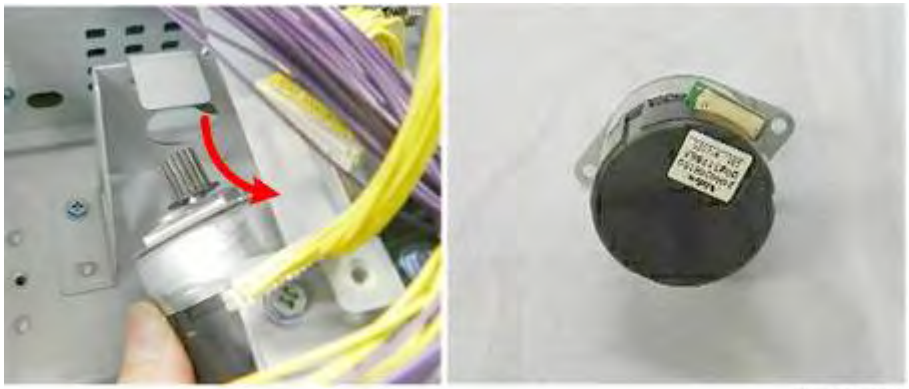
ADF Relay Motor

Preparation

- ADF control board page 4-15

d1792583

1. Disconnect bracket and motor (x2, x1).



d1792584

2. Disconnect at the back and remove motor (x1).

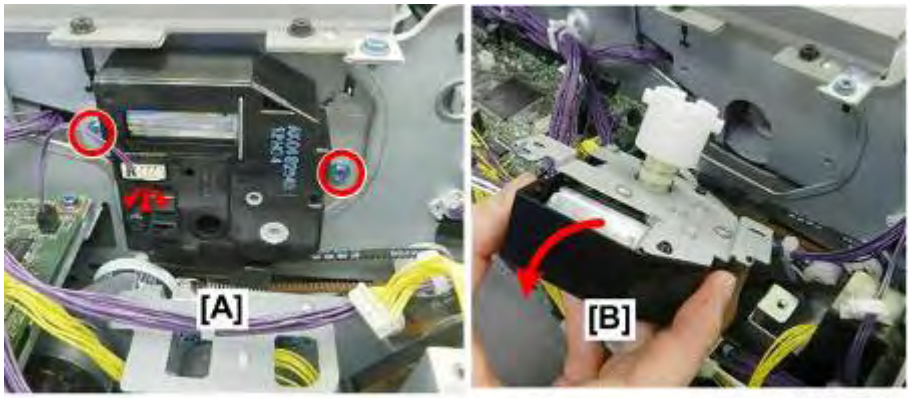
d1792585

3. Separate motor and bracket (x3).

ADF Bottom Plate Lift Motor

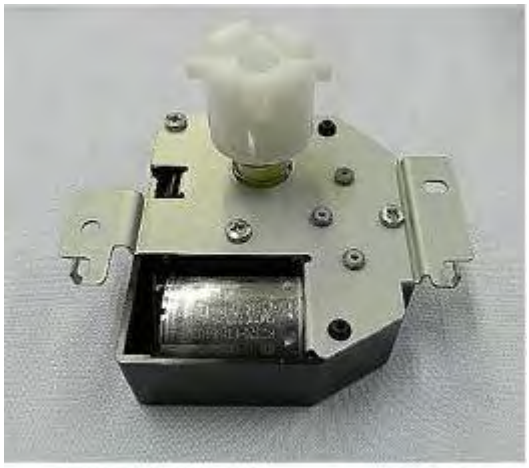
Preparation

- ADF entrance motor bracket page 4-32



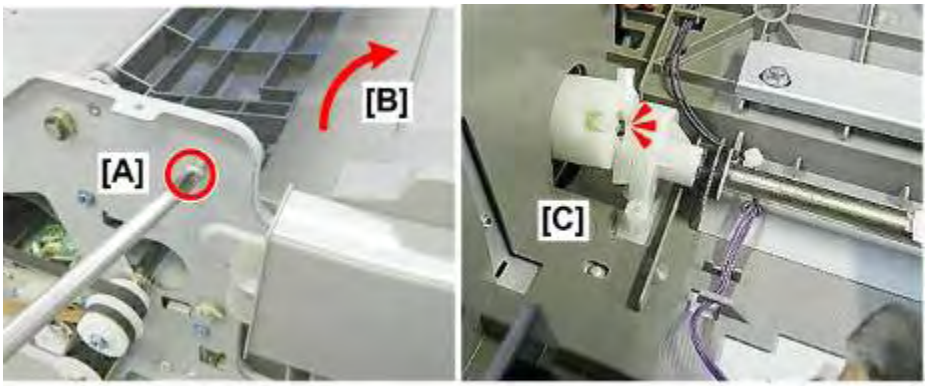
d1792594

1. Disconnect motor [A] (x2, x1).
2. Pull the motor bracket [B] and coupling away from the back of the ADF.



d1792595

Re-installation



d1792596

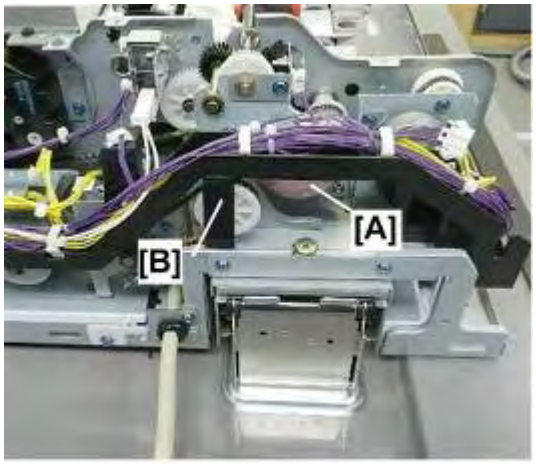
If it is difficult to re-install the ADF bottom plate lift motor:

- Remove screw [A], and them raise plate [B] to the right (x1).
- At the rear, you will be able to see and access the ADF lift motor coupling [C].

ADF Feed Motor

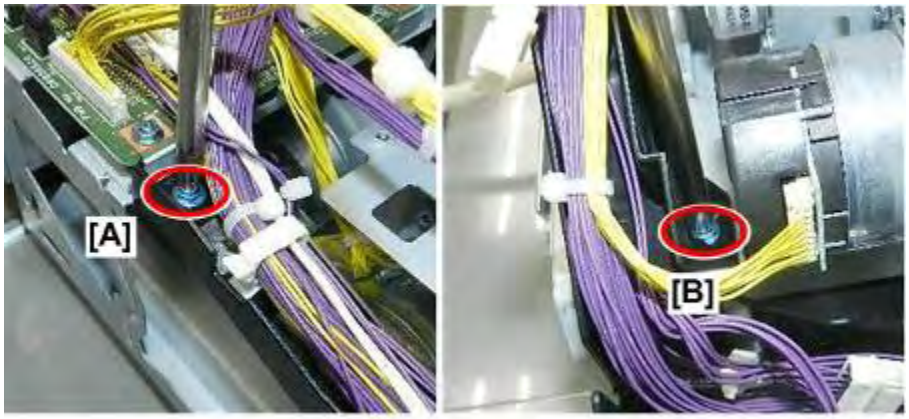
Preparation

- ADF rear cover page 4-3



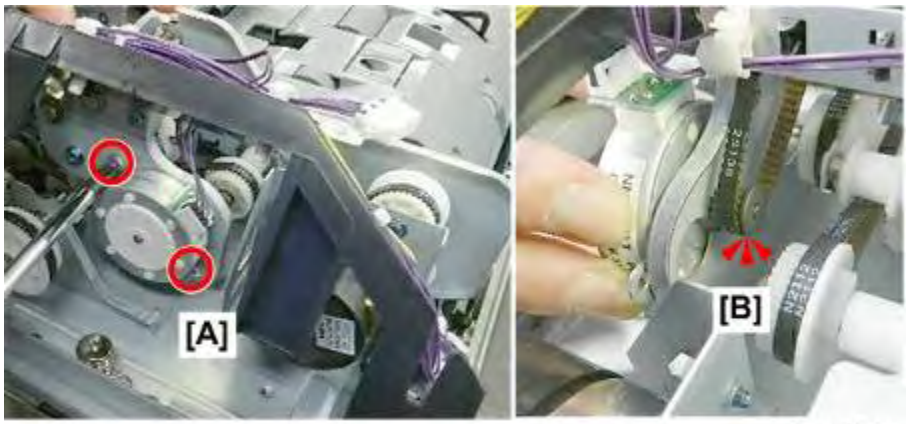
d1792603

1. The motor [A] is behind the stay [B] of the harness bridge.



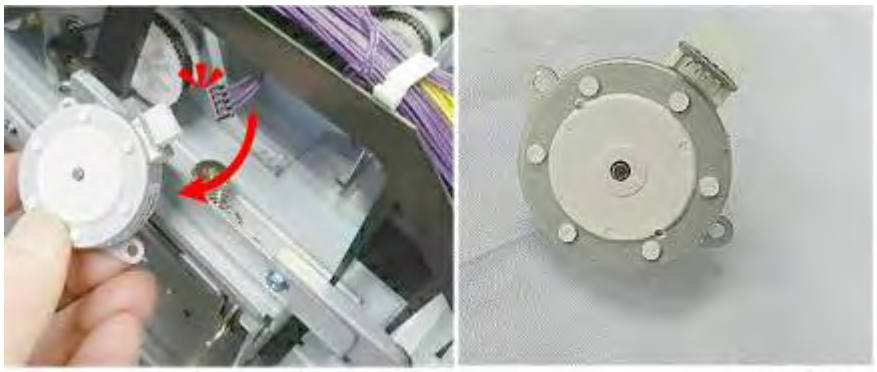
d1792598

2. Remove screw [A] and [B] (x2).



d1792604

3. Disconnect motor bracket [A] (x1).
4. Disconnect belt [B].



d1792605

5. Disconnect and remove motor (x1).

ADF Transport Motor

Preparation

- ADF rear cover page 4-3

d1792606

1. The transport motor [A] is at the rear left corner of the machine frame.
2. Disconnect the motor bracket (x2).

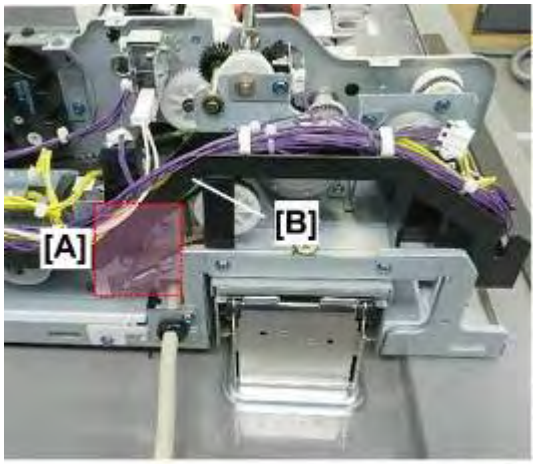
d1792607

3. Separate the motor and bracket (x3).

ADF Pick-up Roller Motor

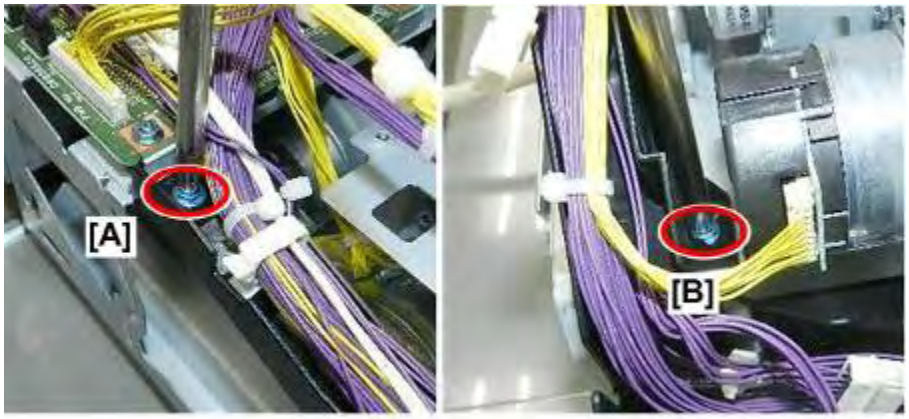
Preparation

- ADF rear cover page 4-3



d1792597

1. The motor [A] is behind the stay [B] of the harness bridge.

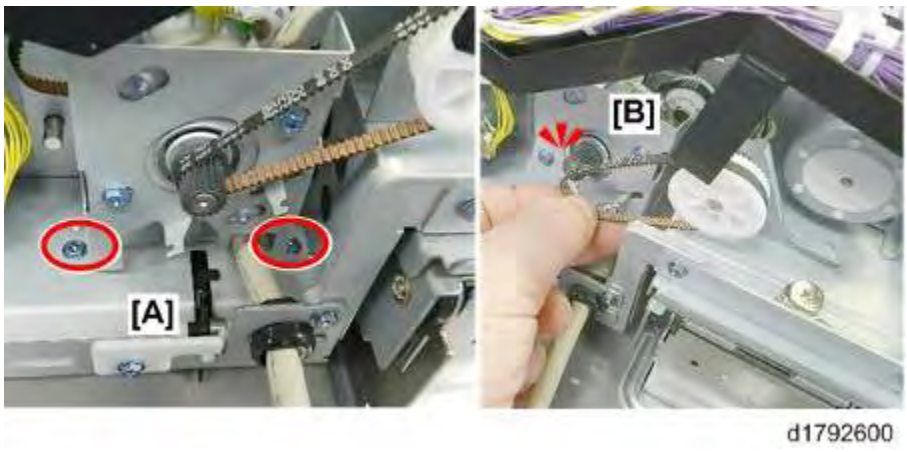


d1792598

2. Remove screw [A] and [B] (x2).

d1792599

3. Raise the harness bridge [A] so you can access he motor.
4. Remove spring [B] (x1).



5. Disconnect base screws of bracket [A] (x2).
6. Disconnect belt [B] (x1).

7. Remove bracket (with motor attached).

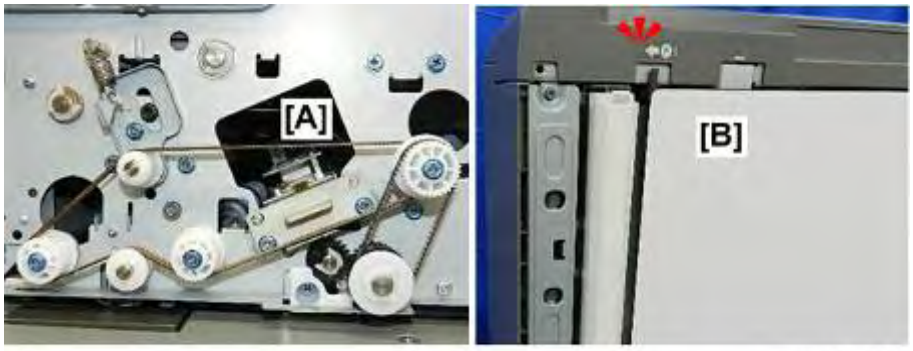
8. Separate motor and bracket (x2).

4.6.10 CIS UNIT

CIS Removal

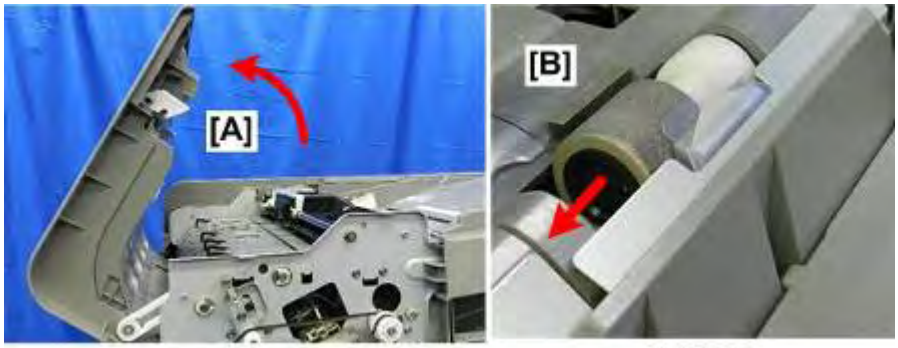
Preparation

- ADF front cover page 4-4
- Original feed unit page 4-6
- ADF separation roller page 4-10



d1792608

1. The CIS is inside the ADF and can be removed through [A].
2. First, open raise the platen cover, and then release the white plate [B].



d1792609

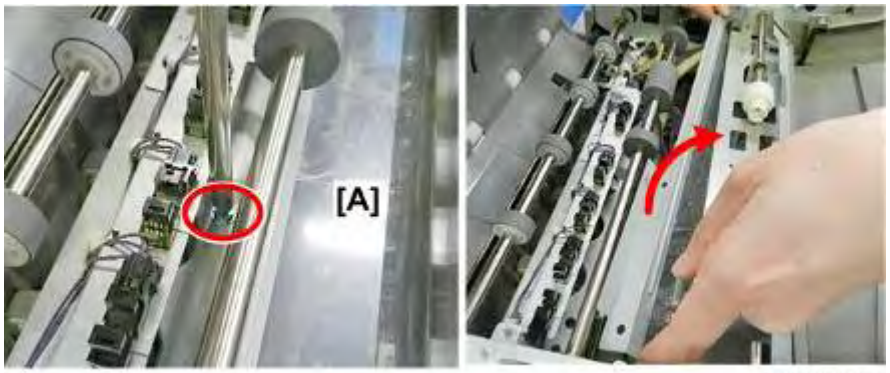
3. Raise the feeder cover [A], and then remove the separation roller [B].

d1792610

4. Disconnect front guide [x2).

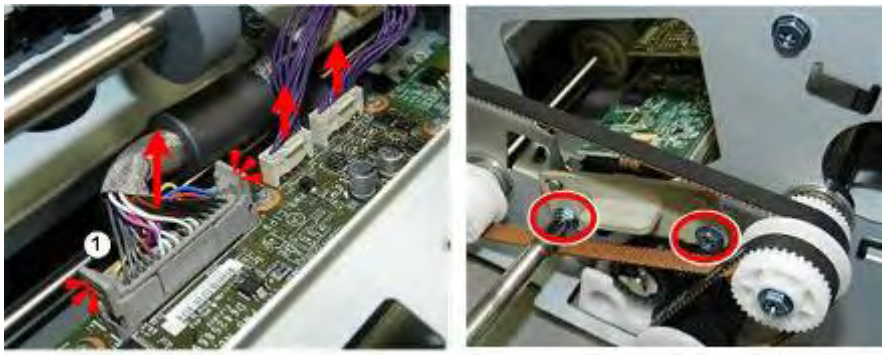
d17926111

5. Remove:
   [A] Front guide
   [B] Guide (x1, x2)



d1792612

6. Remove mylar bracket [A] (x1).



d1792613

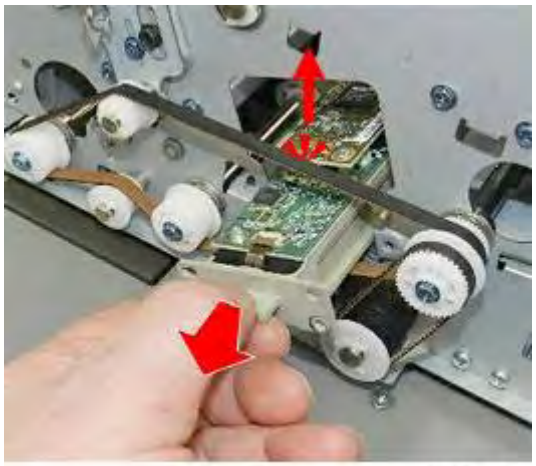
7. Disconnect CIS (x3, x3).

Note

- Release the tabs on both sides of connector ① and them lower them to release the connector for removal.

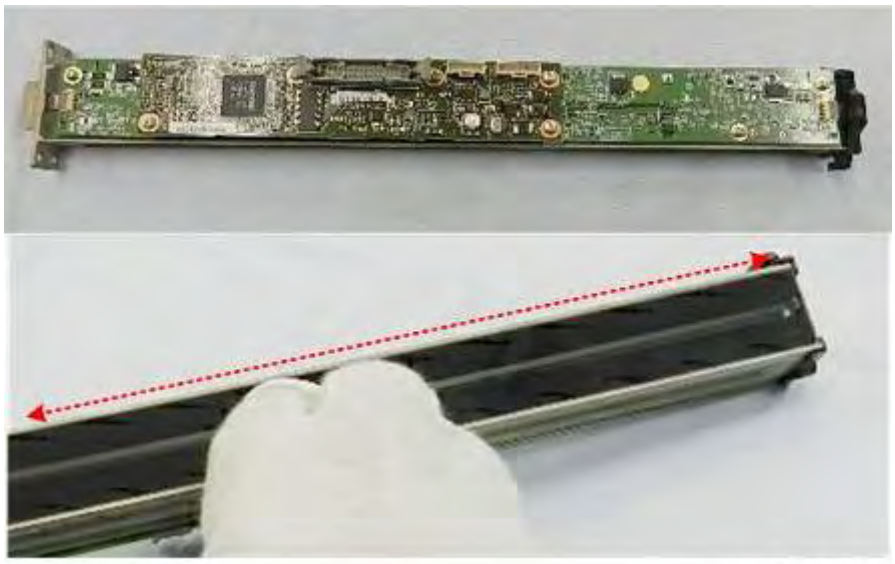
d1792618

8. Raise the ADF slightly and open the white cover. This will prevent scratching the CIS glass when the unit is removed.



d1792614

9. Slowly, and carefully, pull the CIS out of the ADF. You may have to raise the belt to allow the CIS to pass below.



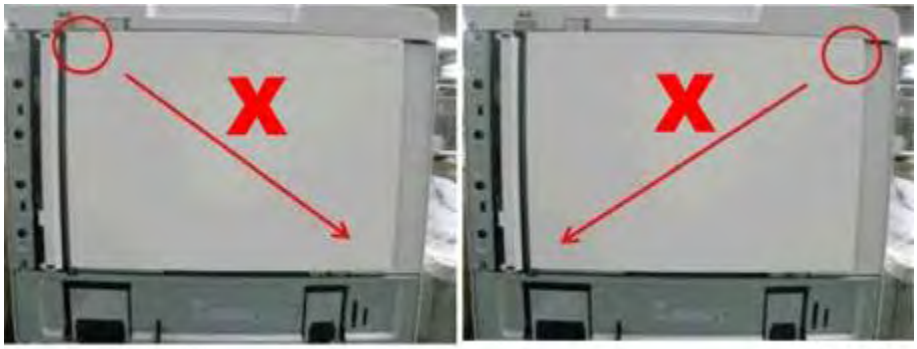
d1792615

10. Clean the surface of the CIS lens with a lens cloth.

Important

- Never clean the surface of the CIS with tissue or any type of solvent.

4.6.11 ADF CLEANING



d1802510

Important

- To avoid damaging the white plate, never try to peel the plate off from the upper right corner or upper left corner as shown above.

1. Clean the white plate with a damp cloth.

d1802506

2. To remove the white plate, first insert your hand under the upper right corner, about the width of your palm, to separate the plate.

d1802507

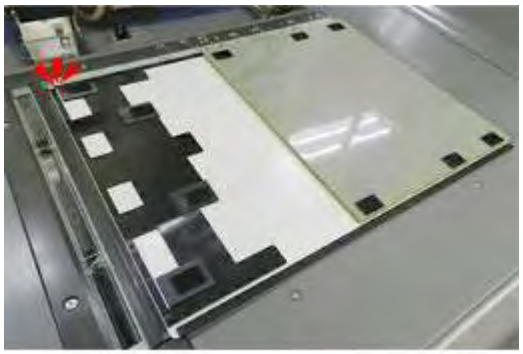
3. Insert your hand about palm-width at the lower right corner.

d1802508

4. In the same way, separate the upper left corner [A] and lower left corner [B].

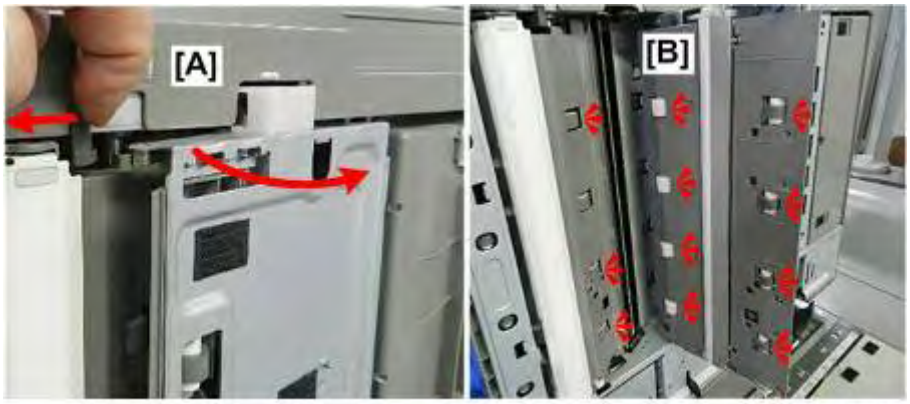
d1802509

5. Pull both sides of the plate straight off (insert your hand under the center to separate the center).
6. If you need to remove the white plate, pull it off from the Velcro fasteners.

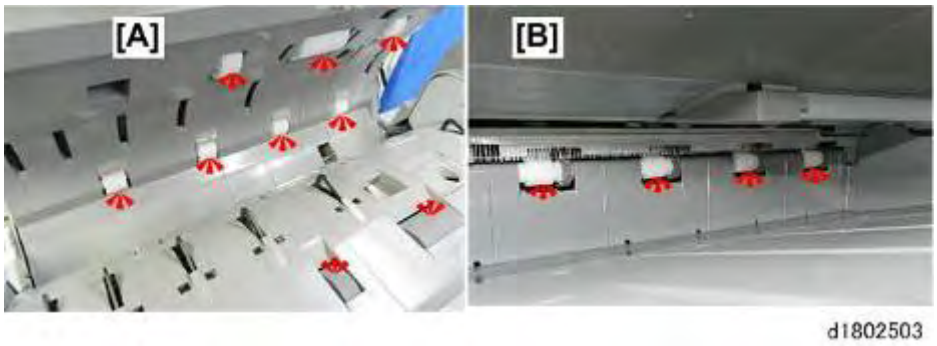


d1802501

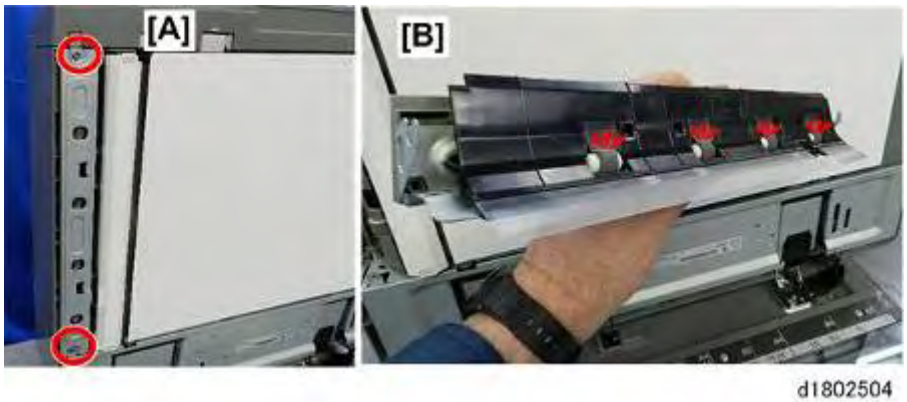
7. To re-attach the white plate, set the corner of the plate in the upper left corner, and then just lower the ADF.



8. Push release lever [A] to the left, and then open plate [B].
9. Clean the lower rollers with a water or alcohol dampened cloth.



10. Open the feed cover [A].
11. Clean the upper rollers with a water or alcohol dampened cloth.
12. Under original tray [B] clean the rollers with a water or alcohol dampened cloth.



13. Raise the ADF [A].
14. Remove left plate (x2).
15. Clean scanner rollers [B] attached to the plate.

d1802505

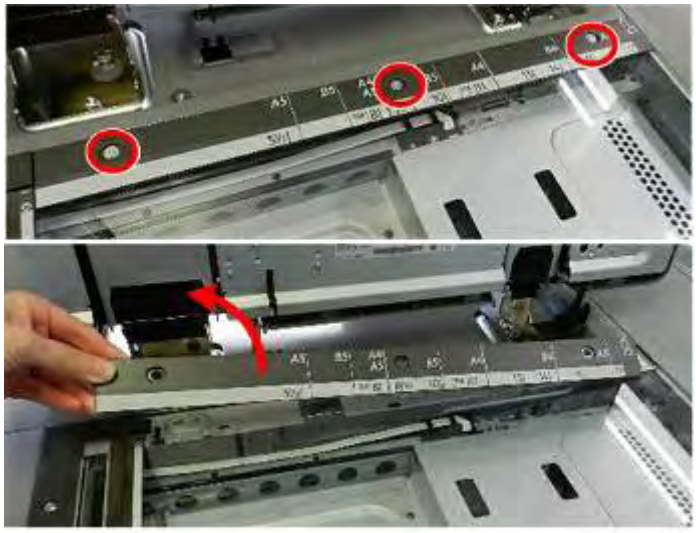
16. Clean the other rollers where the plate was removed.

4.7 SCANNER UNIT

4.7.1 EXPOSURE GLASS

Preparation

- Raise ADF



d1792621

1. Remove rear scale (x3).

d1792622

2. Remove left cover (x2).

d1792623

3. Remove left scale.

d1792624

4. Remove exposure glass.

4.7.2 SCANNING GLASS

d1802602

1. Raise the ADF.
2. Remove the bracket [A] (x2).

d1802603

3. Remove the glass (it is fastened by sticky tape).

d1802604

4. When you re-install the glass, make sure that the paint dot is in the upper left corner.

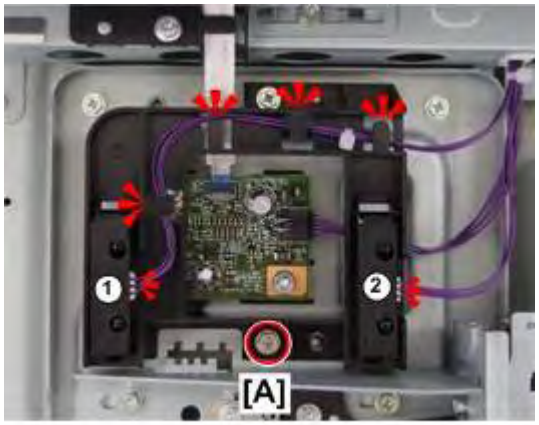
4.7.3 ORIGINAL SIZE SENSOR, IDB

Preparation

- Remove exposure glass page 4-48

d1792635

1. Remove lens block cover (x5).

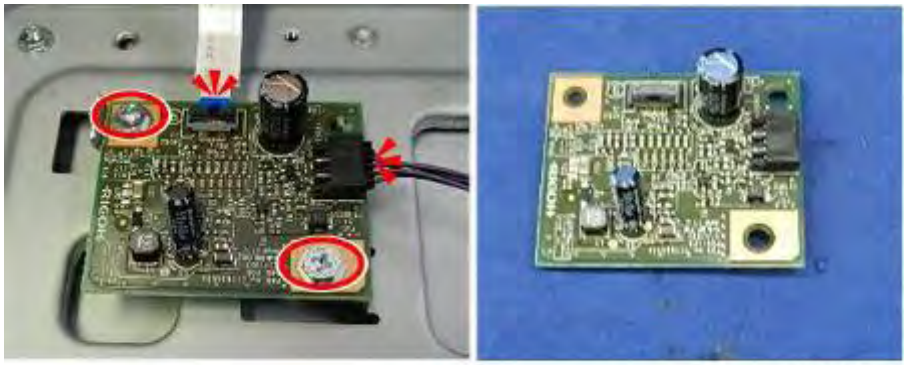


d1792636

2. Free harnesses, and then disconnect sensor bracket [A] (x4, x2).
3. Disconnect sensors ① and ② (x2).

d1792637

4. Separate sensor from bracket.



d1792638

5. Remove IDB (x1, x1, x2)

4.7.4 LENS BLOCK

Preparation

- Exposure glass page 4-48

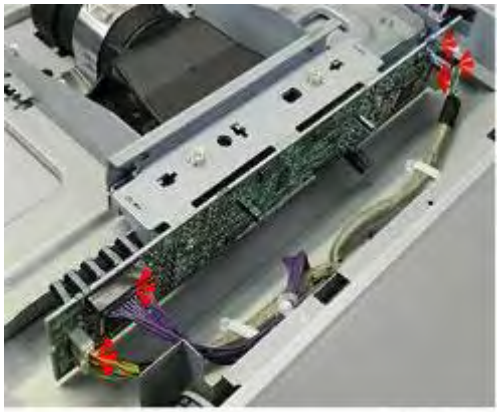
d1792635

1. Remove lens block cover (x5).
2. Remove original sensor bracket and IDB (see previous section).

d1792639

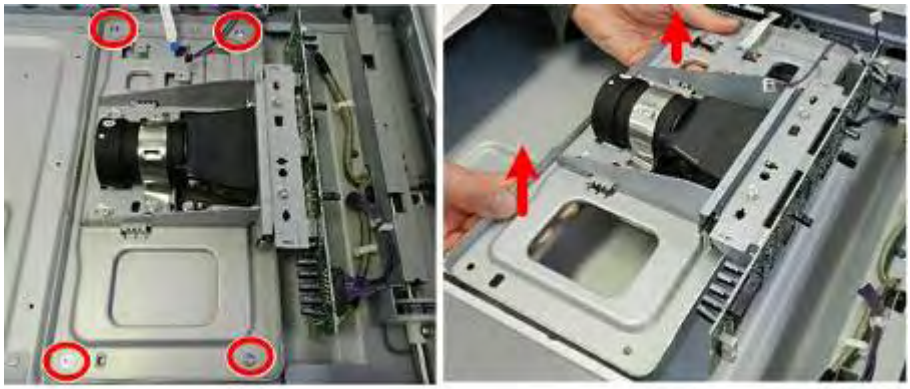
Important

- The lens block cover is always removed and re-installed as a single unit.
- It is never disassembled. If any part fails, the lens block is replaced as a unit.



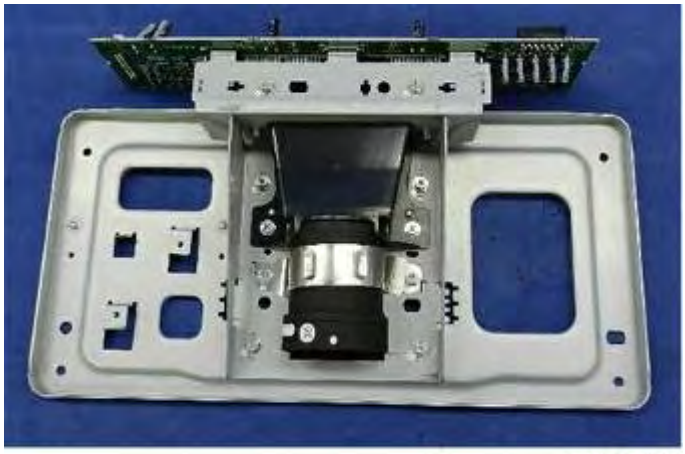
d1792640

3. Disconnect the unit (x5).



d1792641

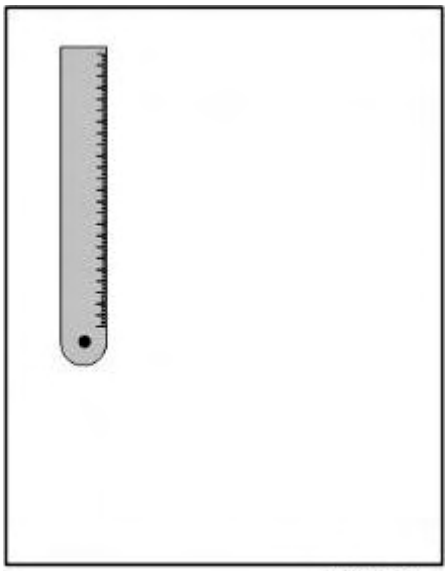
4. Remove lens block unit (x4).



d1792642

Sub Scan Magnification Adjustment

1. You need a 150 mm scale.



d1802601

2. Copy the scale, and then wait 10 min.
3. Check that the length of the 100 mm scale on the copy and confirm that it is the same as the original within ±0.8%.

   If they are the same, you are finished.

   -or-

   If they are not the same, enter the SP mode.
4. Select SP4008.
   - If you decrease the adjustment value, this will increase the scanner speed, and the output image is compressed in the feed direction.
   - If you increase the adjustment value, this will decrease the scanner speed, and the output image is extended in the feed direction.

Sub Scan Registration Adjustment

1. You need the C4 chart.
2. Copy the C4 chart.
3. Check to see if the image is centered in the vertical direction.
   If the image is centered, you are finished.
   -or-
   If the image is not centered, enter the SP mode, open SP4010, and then adjust the value.
   - The image is moved downward by increasing the adjustment value.
   - The image is moved upward by decreasing the adjustment value.

Main Scan Registration Adjustment

1. You need the C4 chart.
2. Copy the C4 chart.
3. Check to see if the image is centered in the horizontal direction.
   If the image is centered, you are finished.
   -or-
   If the image is not centered, enter the SP mode, open SP4011, and then adjust the value.
   - The image is moved to the right by increasing the adjustment value.
   - The image is moved to the left by decreasing the adjustment value.

4.7.5 EXPOSURE LAMP

Exposure Lamp Removal

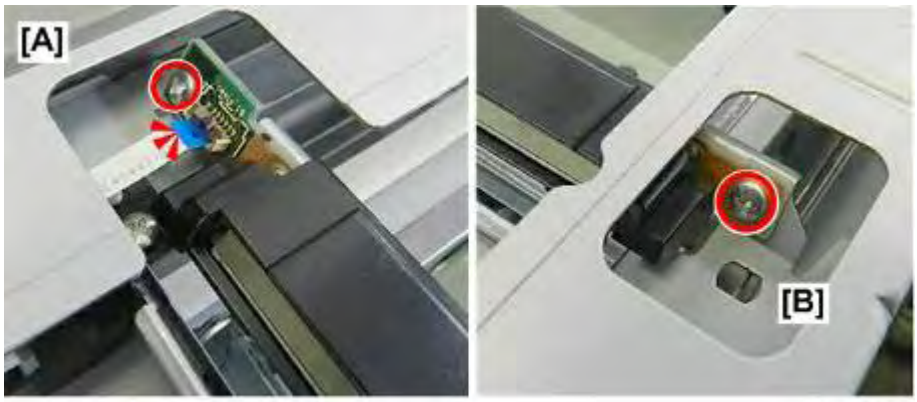
Preparation

- Exposure glass page 4-48

1. Remove front "L" cover (cap x1, x1, x2)

d1792644

2. Turn scanner motor belt ① until the exposure lamp unit ② reaches the cut-out ③ at the rear.



d1792698

3. Disconnect the rear end of the unit [A] x1, x1).
4. Disconnect the front end [B] (x1).

d1792699

5. Remove the exposure lamp.

Exposure Lamp Re-installation

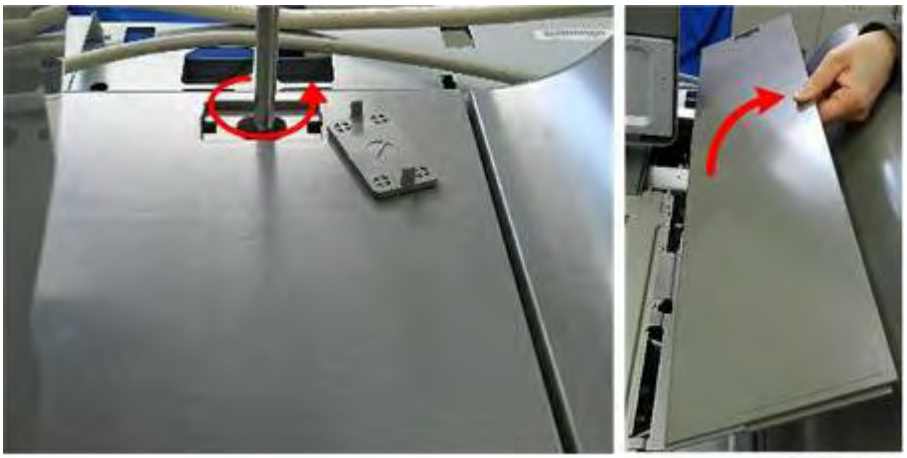
d1792647

1. At the rear, first connect the flat cable at ① (x1).
2. Turn the scanner motor belt counter-clockwise to move the lamp unit to the right ② until you see the tuck clamps ③.
3. Make sure the flat harness is folded flat and tucked into the clamps.

d1792648

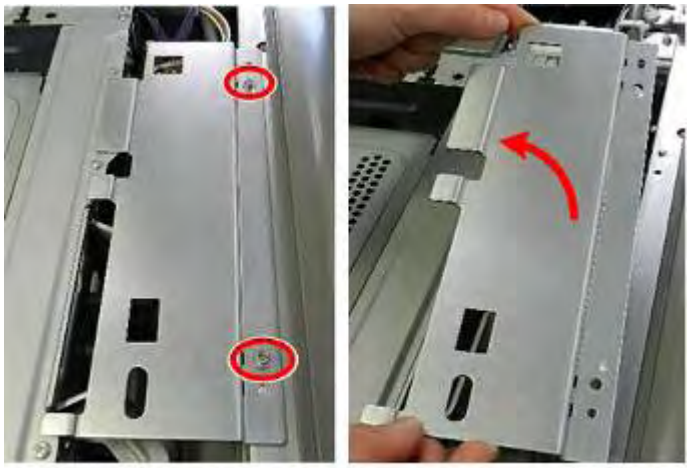
4. Turn the scanner motor belt [A] clockwise to move the exposure lamp [B] all the way to the left until it stops.

4.7.6 SCANNER MOTOR



d1792649

1. Remove right plate cover (cap x1, x1).

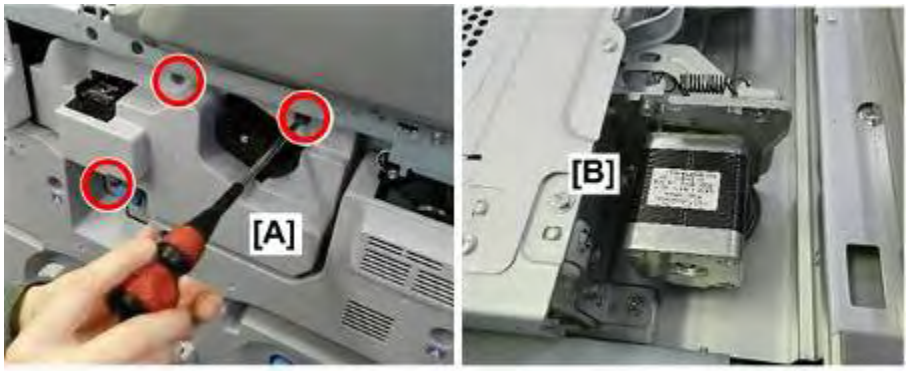


d1792650

2. Remove bridge plate (x2).

d1792651

3. Remove front edge cover (x3).

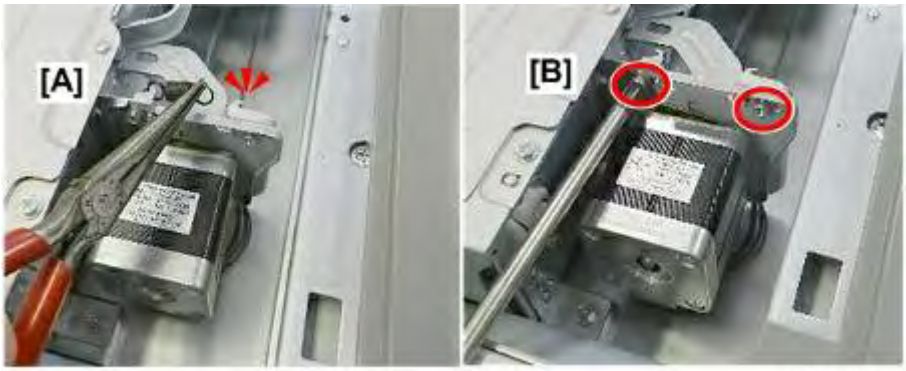


d1792652

4. Remove PCDU cover [A] (x3).
5. Scanner motor [B] is at the right, front corner of the scanner unit.

d1792653

6. Insert a long screwdriver through the hole [A] where you just removed the PCDU cover.
7. Push the drive in until it reaches the back screw of motor [B], and then remove the screw.



d1792654

8. Disconnect spring at [A] (x1).
9. Disconnect top of bracket [B] (x2).

d1792655

10. Pull out the motor slightly, and then disconnect it (x1).

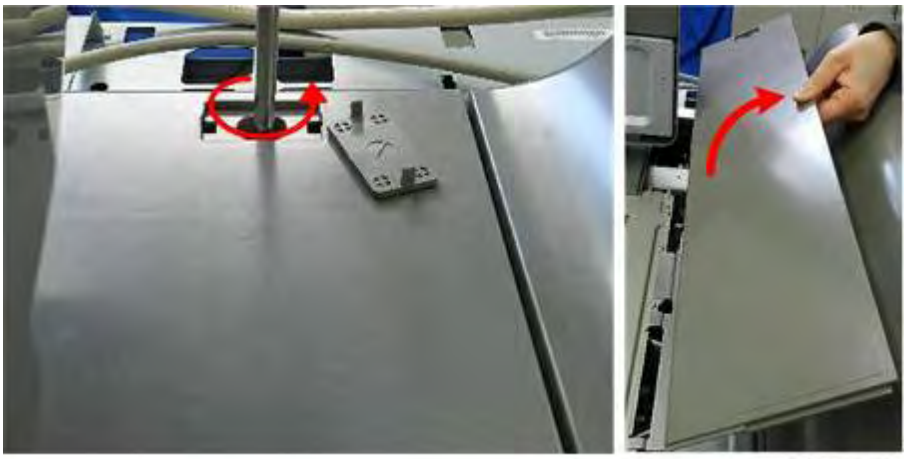
d1792656

11. Separate the motor and flat bracket (x2).

d1792657

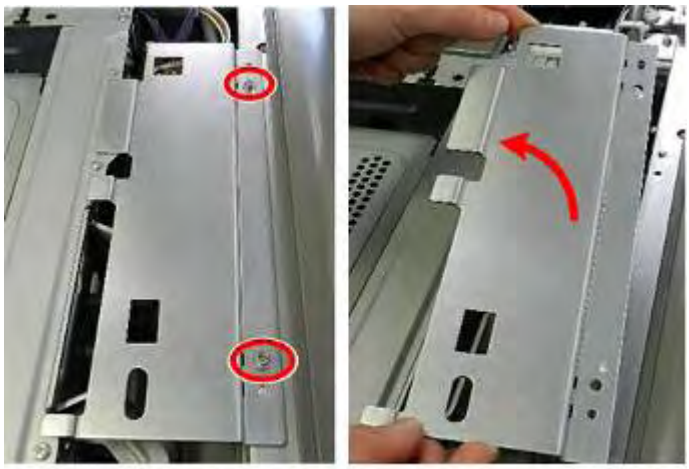
12. Remove collar bracket (x2).

4.7.7 SIOB



d1792649

1. Remove right plate cover (cap x1, x1).



d1792650

2. Remove bridge plate (x2).

d1792658

3. Remove the board (x5, x5).

d1792659

4.7.8 SCANNER UNIT

Preparation

1. Open controller box page 4-27
2. Controller box cover page 4-30
3. Remove ADF page 4-56

d1792661

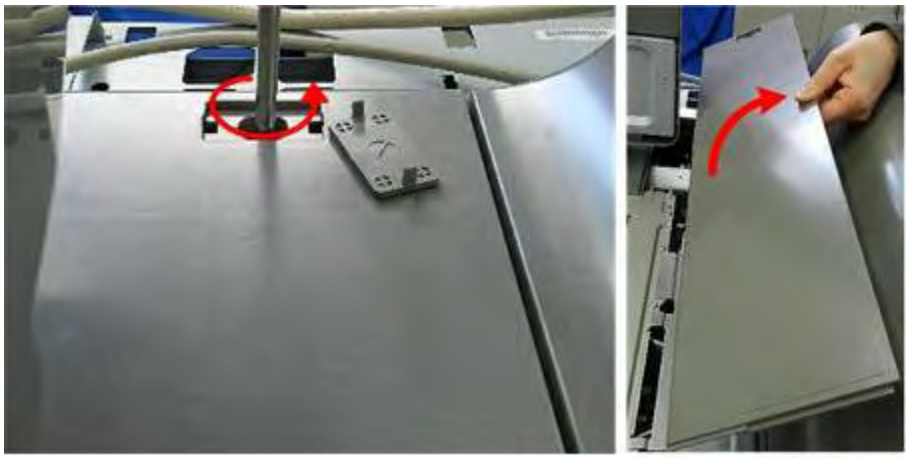
1. Set the ADF on the floor.

d1792662

2. Remove rear flat plate (x5).

d1792643

3. Remove the “L” cover (x1, x2)



d1792649

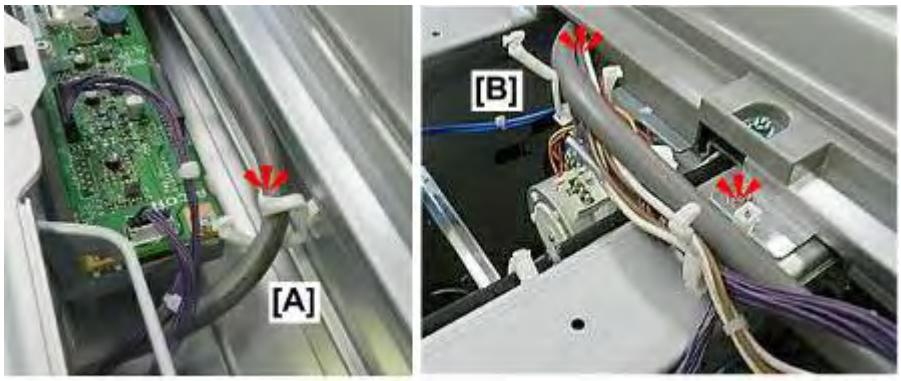
4. Remove the right flat plate (x1).

d1792663

5. Remove right stay (x2).

d1792664

6. Disconnect the ADF cables from the left, rear corner of the SIOB (x2).

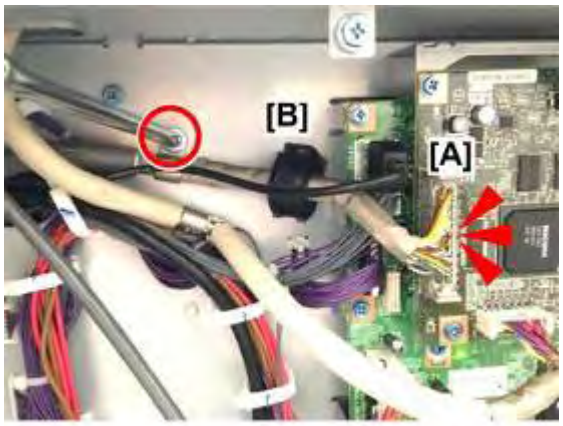


d1792666

7. Above the SIOB, free the ADF harness at [A] and [B] (x3).

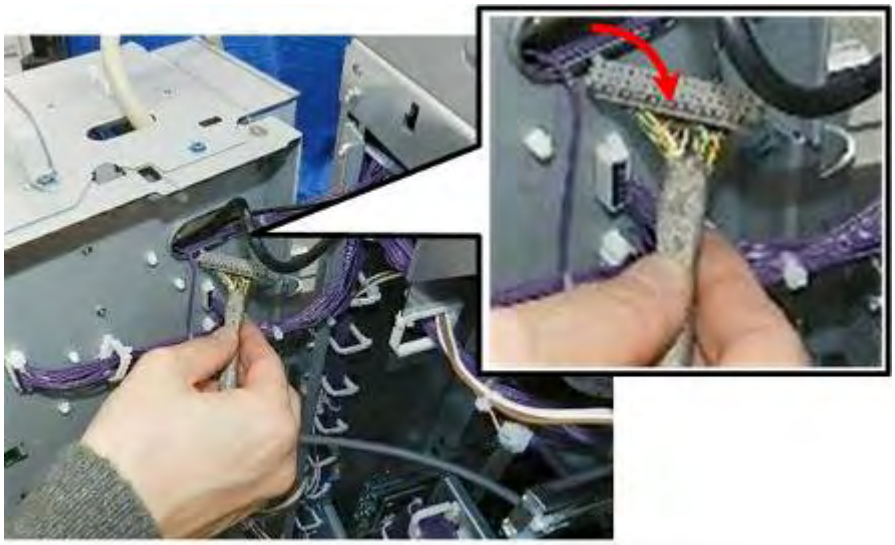
d1792667

8. Free the ADF harnesses under the rear edge of the machine (x3).



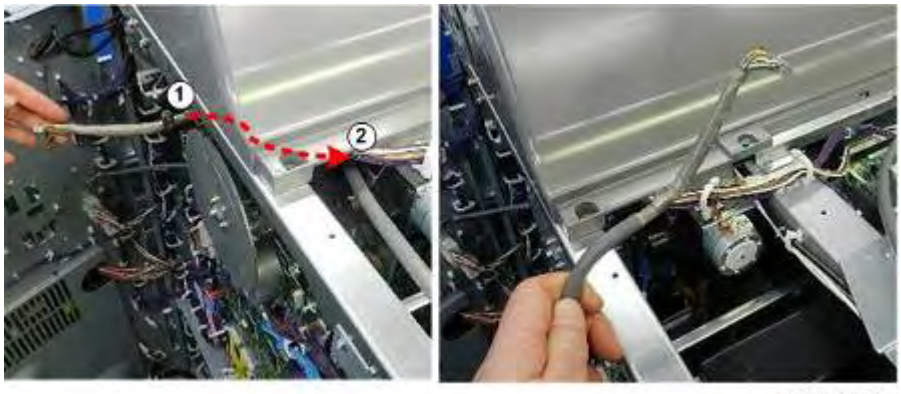
d1792668

9. Disconnect scanner harness [A] (x1, x1).
10. Remove ferrite core [B].



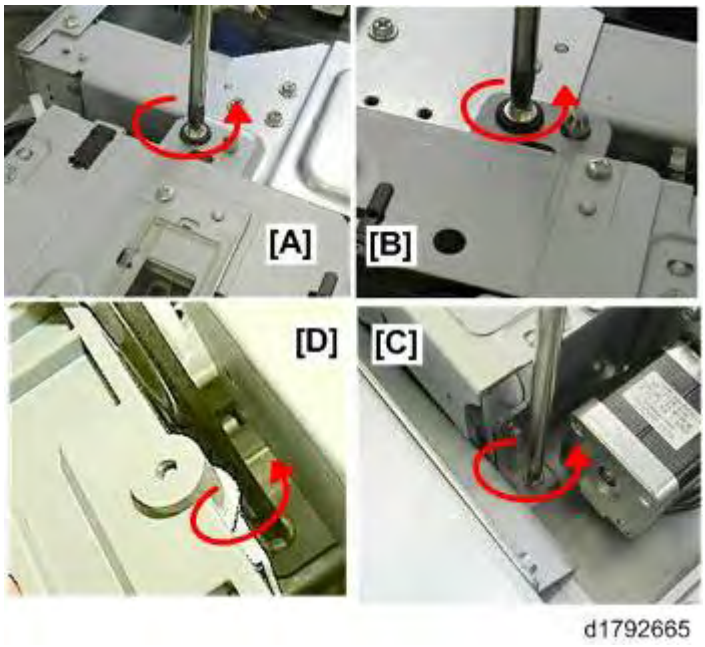
d1792669

11. Pull the ADF harness through the hole and out of the controller box.



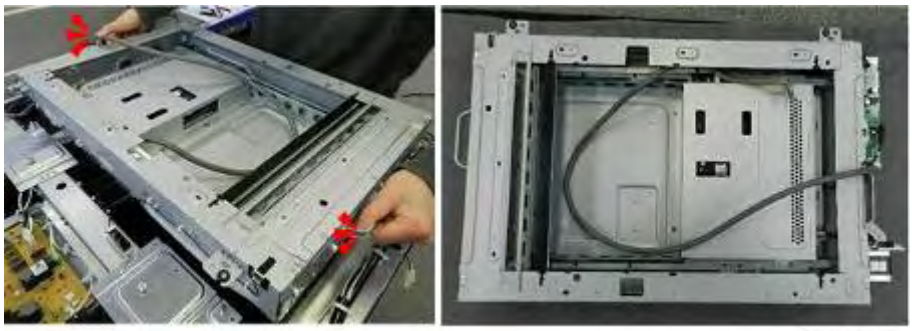
d1792670

12. Push the ADF harness up into the machine ① , and then pull it out ②.



d1792665

13. Remove the large screw from each corner of the scanner unit [A], [B], [C], [D] (x4).



d1792671

14. Lay the free harness in the center of the scanner unit.
15. Lift the scanner unit by its handles on both sides, pull it out of the machine, and then lay it on a clean, flat surface. **Weight**: 8 kg (17.6 lb.).

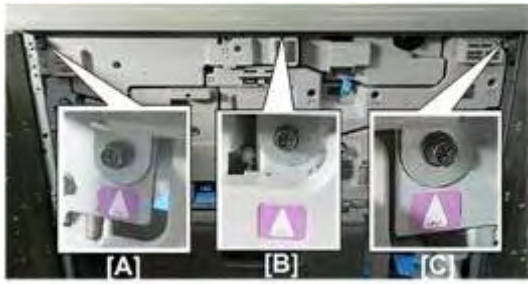
4.7.9 DOOR SWITCHES

Preparation

- Remove scanner unit page 4-61

d1792672

- The safety interlock switches for right door and front door reside behind the front plate of the main unit and under the scanner unit.



d1792761

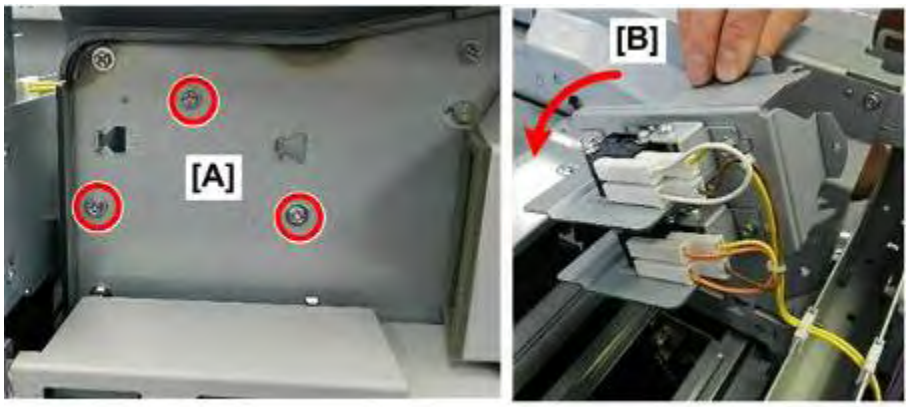
- Disconnect and remove the front edge cover at [A], [B], [C] (x1).

d1792673

- At the front, remove the upper left cover (x4).

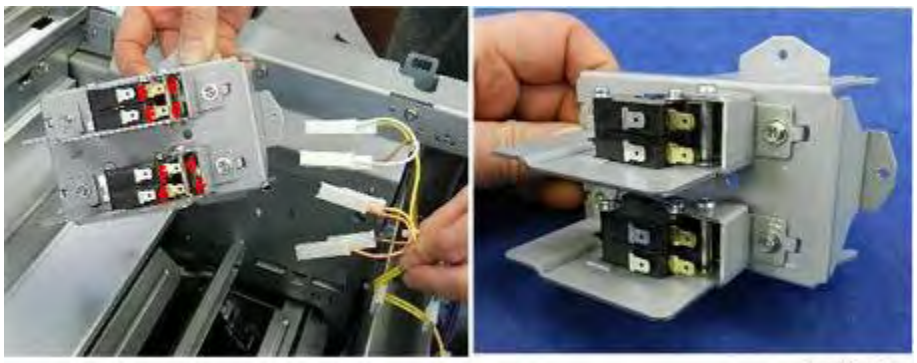
d1792674

- Disconnect fan bracket and then pull away the fan (x2, x2).



d1792675

- Remove the screws from the plate [A] behind the fan just removed (x3).
- Behind the plate, pull the bracket [B] off its hook.



d1792676

- Disconnect the switches (x8)

d1792677

- Remove the first pair of switches (x2).

d1792678

- Remove spring bracket (x2).

d1792679

- Remove the second pair of switches.

4.7.10 ADF POSITION SENSOR

Preparation

- Remove the ADF page 4-56

d1792662

1. Remove rear flat plate (x5).

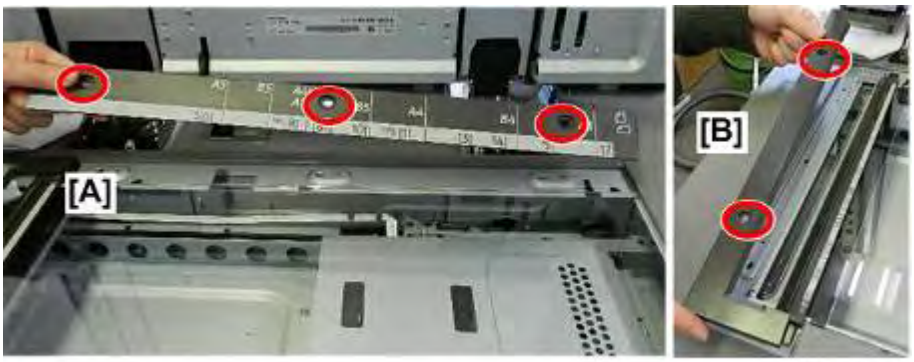
d1802605

2. The sensor is on the rear, top rail.

d1802606

3. Remove the sensor (x1, x1).

4.7.11 EXPOSURE LAMP HP SENSOR

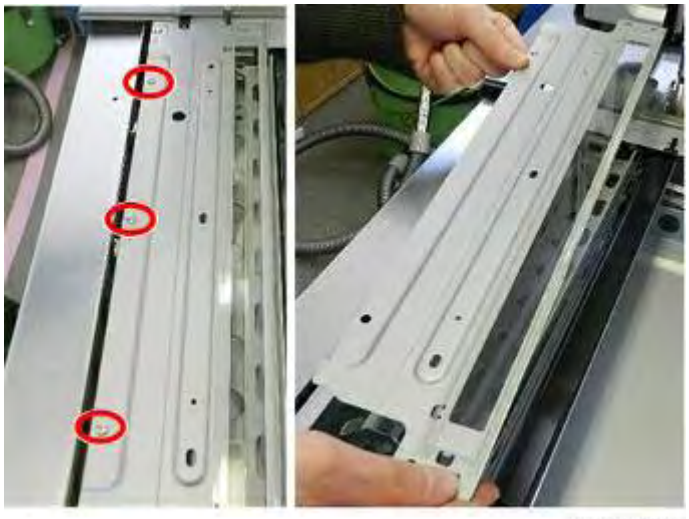


d1792682

- Remove:
  [A] Rear scale (x3)
  [B] Left cover (x2)

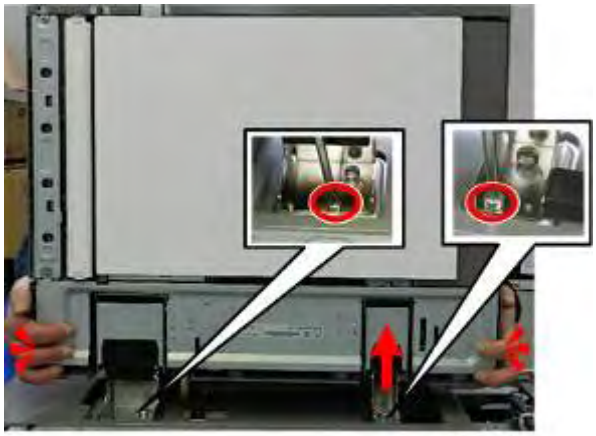
d1792683

- Remove:
  [A] Exposure glass
  [B] Front "L" cover



d1792684

- Remove left stay (x3).



d1792660

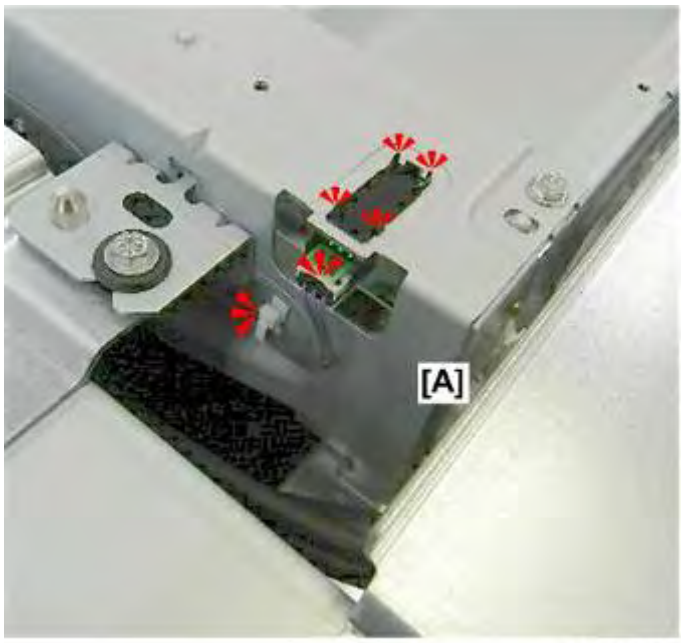
- Remove ADF (x2).

d1792661

- Lay the ADF on the floor.

d1792662

- Remove rear flat plate (x5).



d1792685

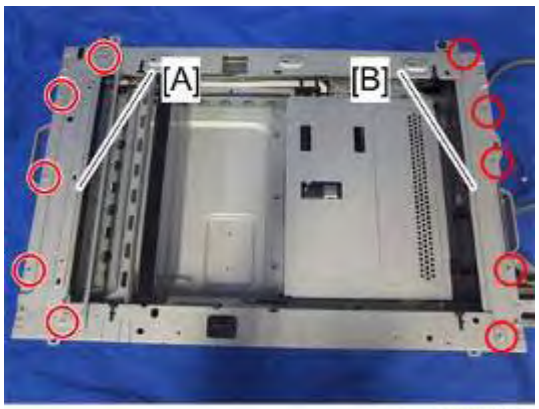
- Disconnect sensor [A] (x1, x1, x4).

4.7.12 SCANNER WIRE

Preparation

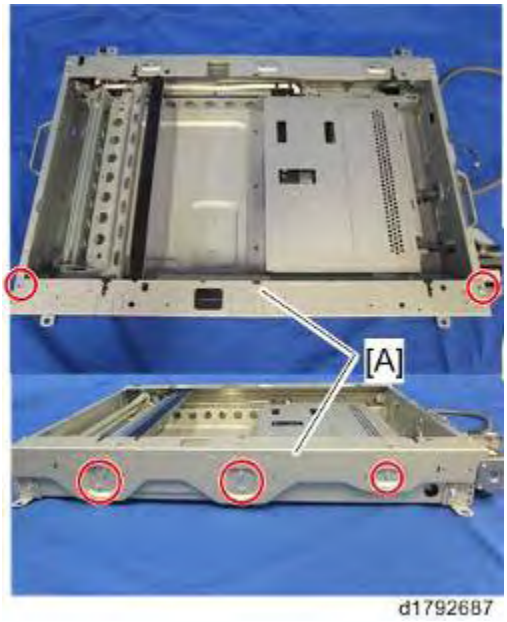
Preparation

- Scanner unit page 4-61



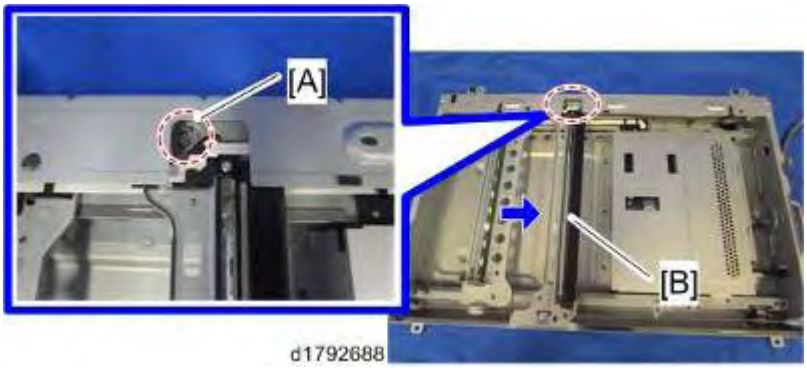
d1792686

1. Remove left stay [A] and right stay [B] (x5 each).

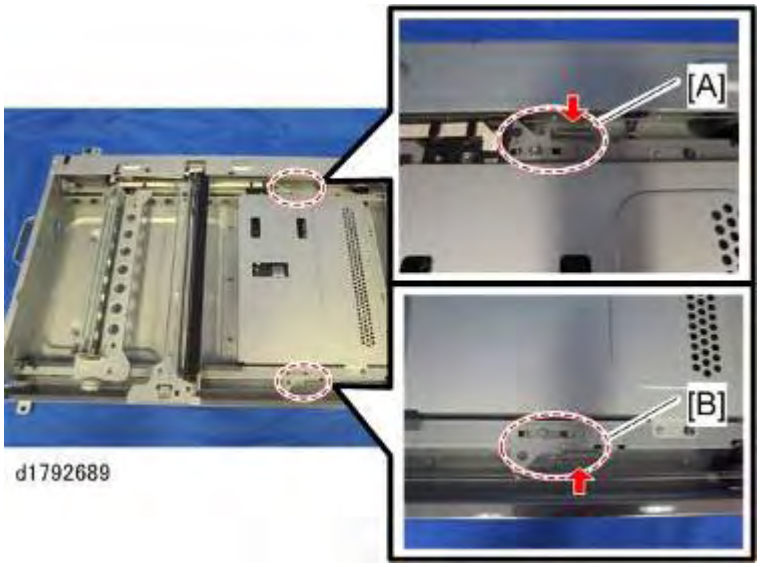


2. Disconnect front frame [A] (x5)

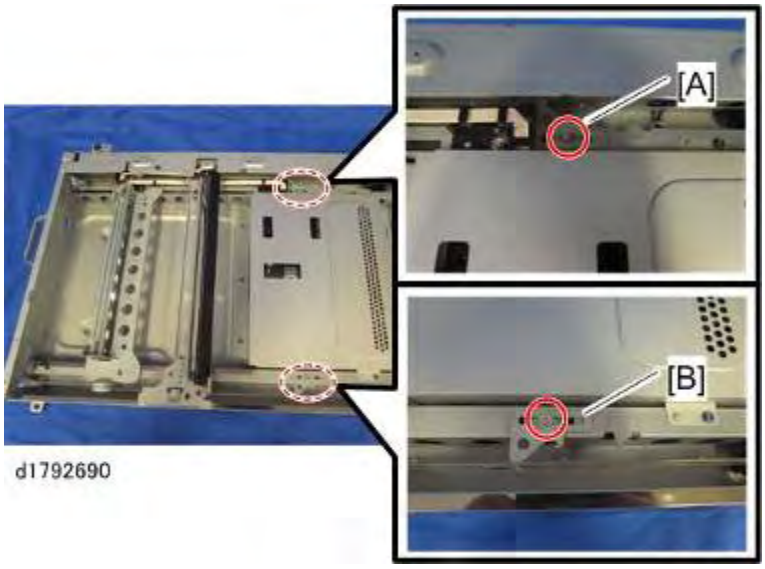
Wire Replacement



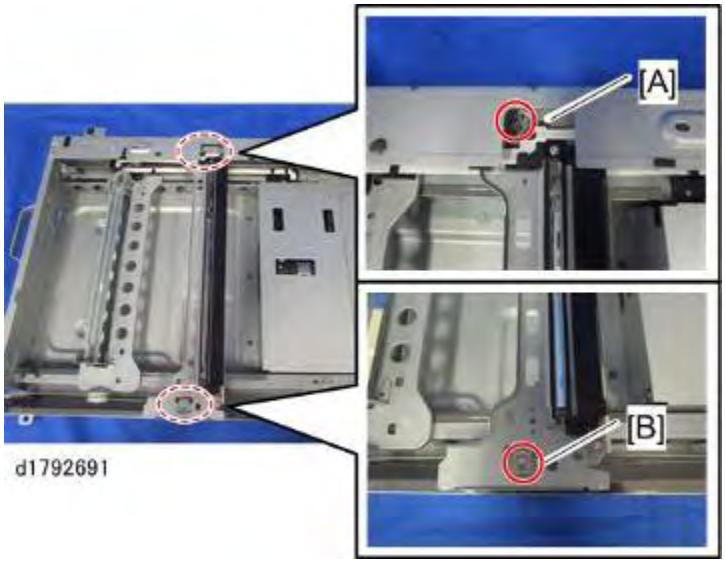
- Move the 1st carriage so screw [A] is visible at [B].



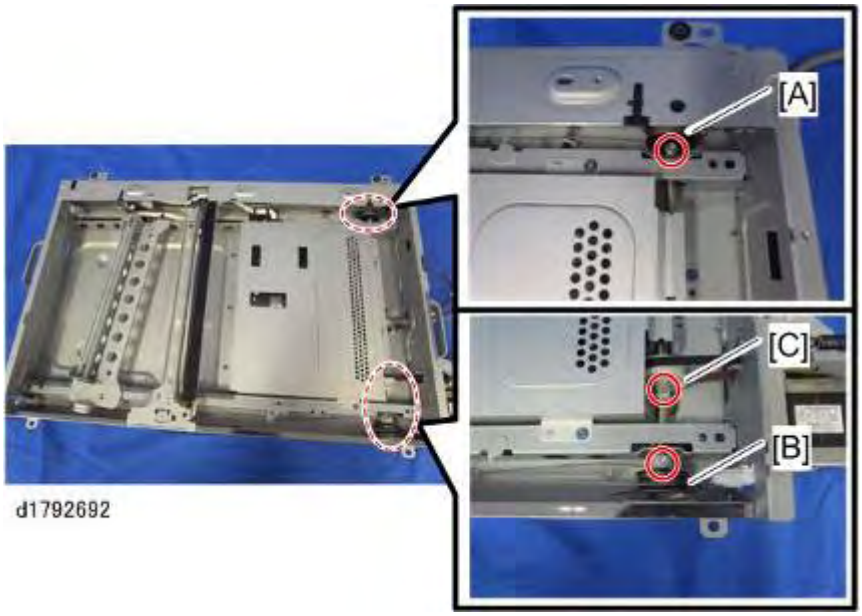
- Remove front and rear springs [A] ands [B] (x2).



- Loosen tension bracket screws at front [A] and rear [B].



- Remove rear and front retaining brackets [A] and [B] (x2).
- Remove tip of the rear end of the wire (rear and front).



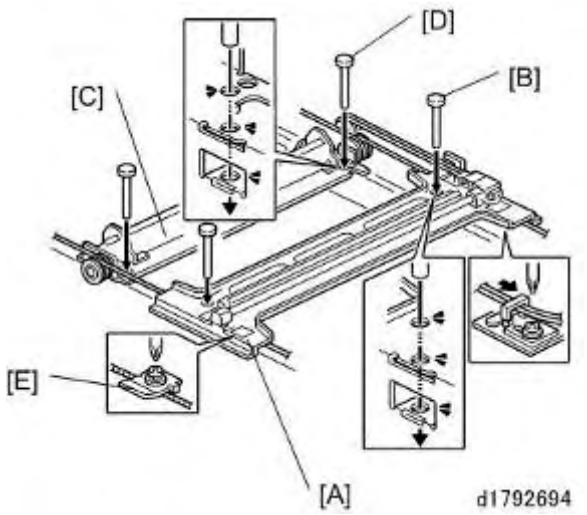
- Unscrew wire pulleys rear and front [A] and [B], and then drive pulley [C].
- Remove wire pulleys from the shaft.

Preparation for Re-assembly

1. Pass the wire from the side of the pulley with no projection [A].
2. Set the beads on the middle of the wire in the groove [A].
3. Attach tape across the pulley to hold the wires [C] in place.

Re-assembly

- Remove the 1st scanner carriage from the scanner unit.
- Position the 2nd scanner carriage with the positioning pins (A1849501).
- Insert the wire pulley through the shaft. Do not tighten the screw of the front side.
- Turn the wire, and then remove the tape.
- Set the spring.
- Tighten the screw of the drive pulley.
- Remove the positioning pins, and then move the 2nd carriage to fit into the wire.
- Set the positioning pins again, and then tighten the screws of the front pulley and tension bracket.



- Position the 1st scanner [A] so the holes are aligned and insert the positioning pins [B] (4 locations).
- Position the 2nd scanner [C] so its holes are aligned and insert the positioning pins [D].
- Attach the lock bracket [E] to fasten the wire to the 1st scanner.
- Tighten the screw of tension bracket.
- Attach the pulley and tighten it lock screw.
- Remove the four positioning pins.
- Remove the tape from the pulley.
- Slowly push the scanner left and right to confirm that the wires are engaged correctly. The 1st and 2nd scanners should move smoothly.

4.7.13 SCANNER UNIT CLEANING

d1792626

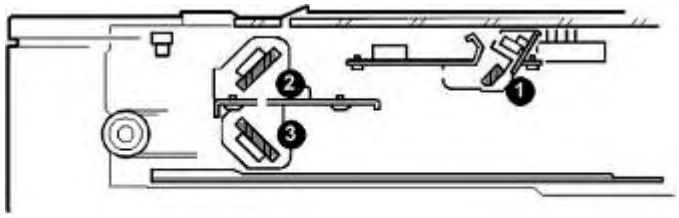
1. Use glass cleaner and a clean cloth to clean the scanner glass.

d1792627

2. Use glass cleaner and a clean cloth to clean exposure glass.

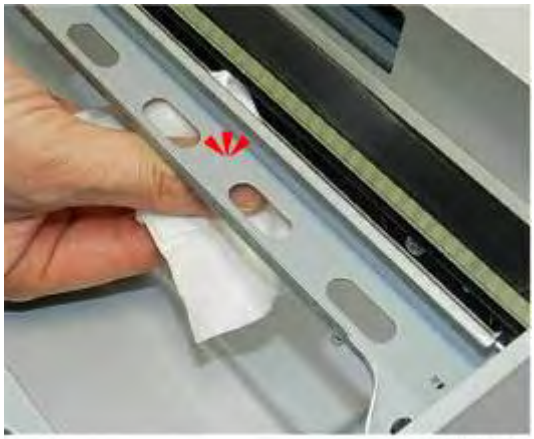
d1792628

3. Turn the scanner motor belt ① counter-clockwise until the exposure lamp assembly ② reaches ③ the cut-out .
4. Use a lens cloth to clean the reflector plate.



d1792629

①	1st Mirror
②	2nd Mirror
③	3rd Mirror



d1792630

5. Use a lens cloth to clean the 1st mirror

d1792631

6. Use a lens cloth to clean the 2nd mirror.

d1792632

7. Use a lens cloth to clean the 3rd mirror.

d1792633

8. When you are finished cleaning the optics, turn the scanner motor belt ① until the exposure lamp unit ② reaches the far left side ③ of the exposure unit.

d1792634

9. Clean the original size sensors with a blower brush.

4.8 LASER UNIT

4.8.1 BEFORE YOU BEGIN

⚠WARNING

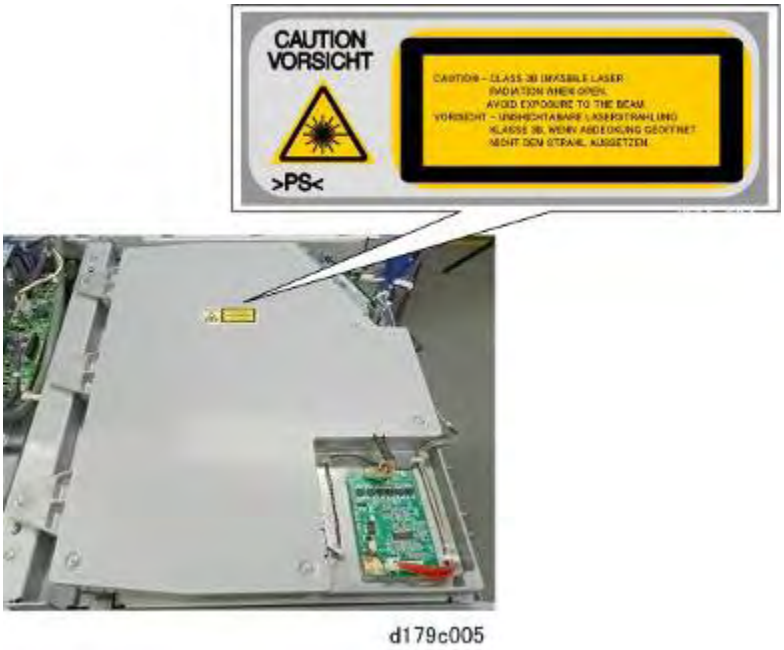
1. Laser beams can seriously damage the eyes and cause permanent blindness.
2. Make sure that the machine switched off and unplugged from the power source before performing any procedure in this section.
3. Turn off the power switch on the left front corner of the machine. A message will prompt you to wait before you switch on the main switch.
4. After the message goes off, switch off the main power switch.
5. Unplug the machine and wait at least 10 min. before performing any procedure.

⚠CAUTION

- An accidental static discharge could damage the laser diode board attached to the lens block unit. Touch a metal surface to discharge any static electricity from your hands.

4.8.2 CAUTION DECALS

Top of Laser Unit



d179c005

PCDU Cover

d179c008

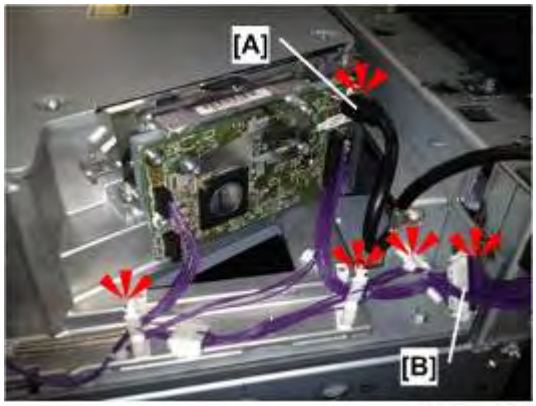
Flywheel

d179c009

4.8.3 LASER UNIT

Preparation

- Remove toner bottle cradles page 4-88



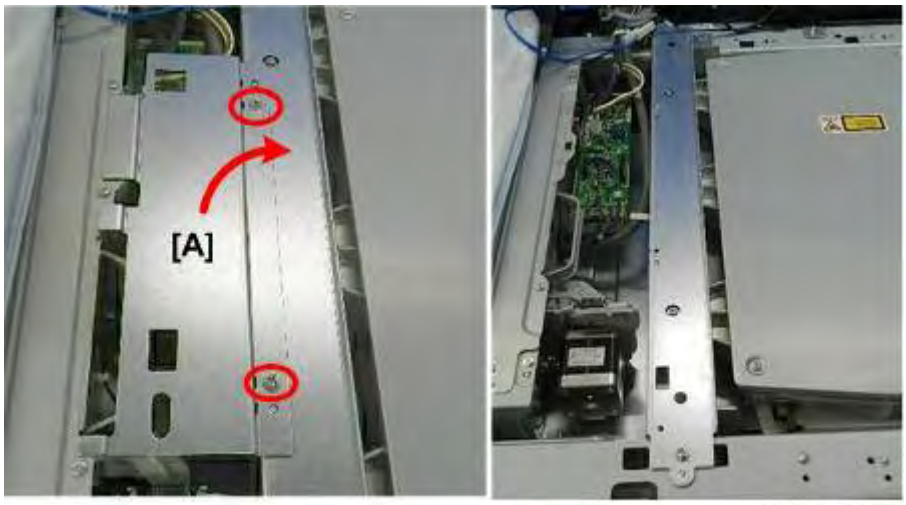
d1792741

1. Disconnect the laser unit at [A] and [B] (x3, x2).

Important

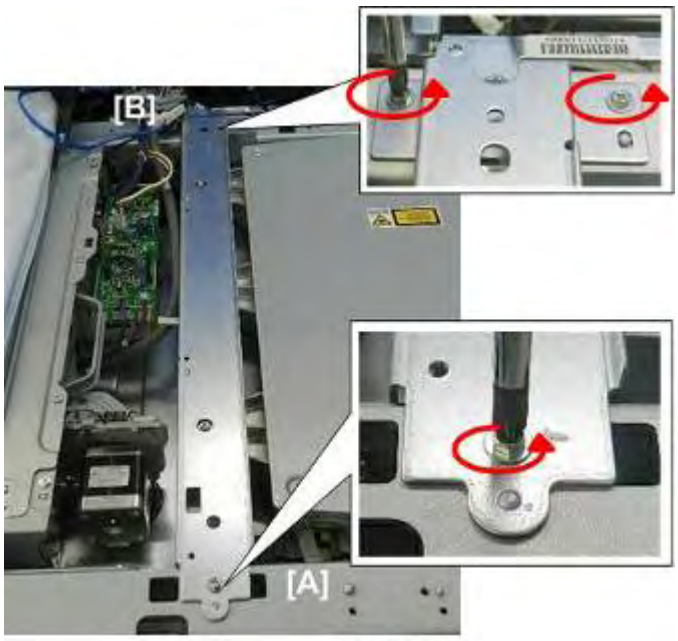
- Make sure that you disconnect the correct USB cable. The laser unit USB cable resembles the operation panel USB cable.

- If you reconnect these cables incorrectly, the next time that you turn the machine on it will display “Please Wait” and freeze (the machine will not boot).



d1792742

2. Remove shield plate [A] (x2).

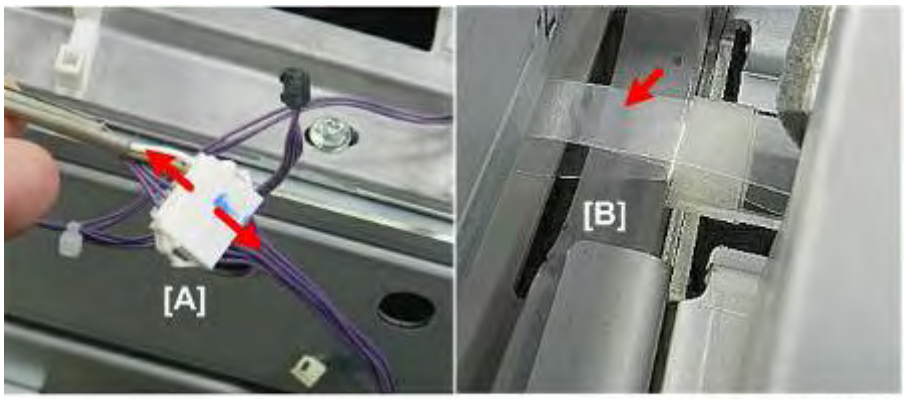


d1792743

3. Disconnect brace at the front [A] and rear [B] (x3).

d1792744

4. Remove brace [A] to expose the laser unit [B].



d1792745

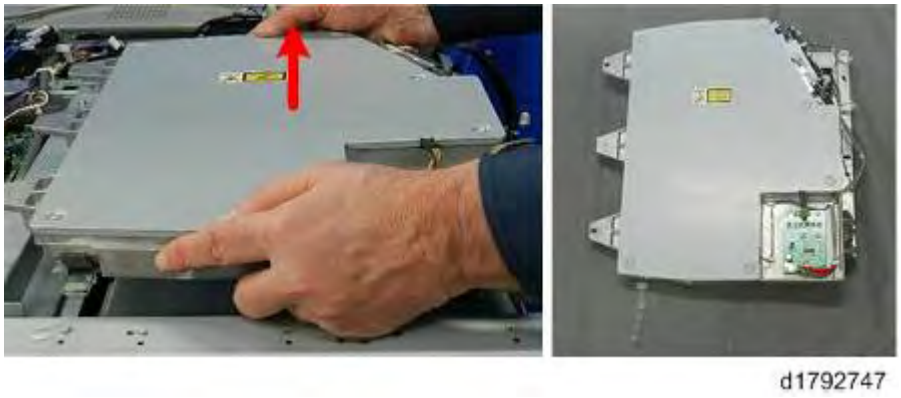
5. Disconnect the laser unit at [A] on the right side.
6. At the front edge of the laser unit [B], note the position of the plastic filament.

Important

- This plastic must be set at the same position when the laser unit is re-installed. It is used to pull out the toner shield glass from the front of the machine.

d1792746

7. Disconnect the laser unit on the right [A] ands the left [B] (x4).



d1792747

8. Lift the laser unit and lay it on a flat clean surface.

Laser Unit Re-installation

d1792748

1. Insert the positioning pin (scanner wire jig) into the hole by the scale to position the unit correctly at the longest vertical mark on the scale.

d1792749

2. At the front of the laser unit [A] fold the plastic strip [B] under itself so it can be pulled easily out of the machine from the front. (This strip is attached to the toner shield glass which must be removed for cleaning.)

Important

1. After the laser unit is replaced, SP2108-001 must be executed for the new laser unit.
2. This SP downloads the operation parameters for the laser unit (main scan registration, main scan magnification, shading, and bow skew adjustment).

After Laser Unit Replacement

- Plug in the power cord, and then turn the machine on.
- Enter the SP mode.
- Do SP2108-001 to download the operation parameters for the laser unit.

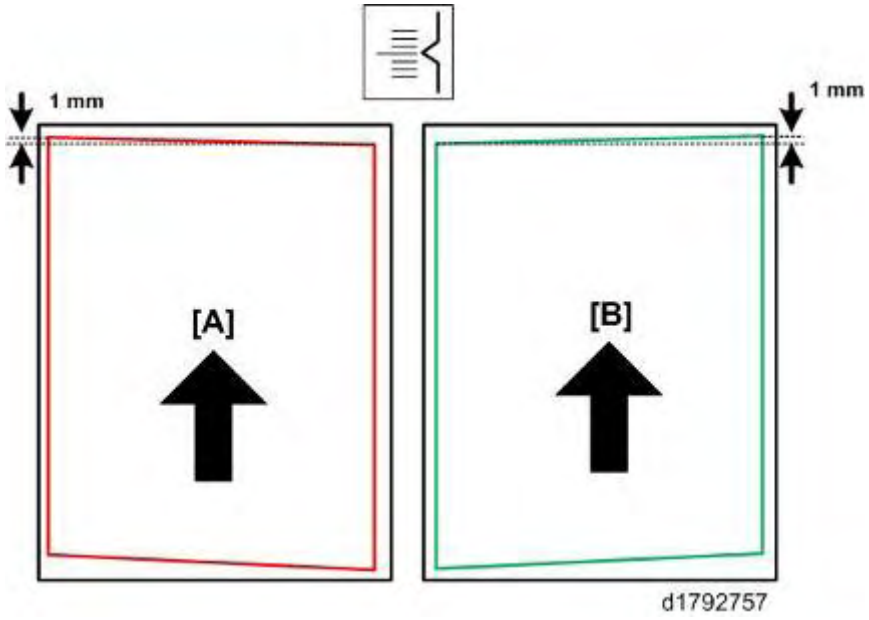
Important

1. Do not open the doors or switch the machine off while the machine is downloading the parameters.
2. If the machines returns an SC code or displays “Failure”, cycle the machine off then execute SP2108-001 again.

- Test for skew and magnification problems, and then correct them if necessary. (See the

"Troubleshooting" section.)

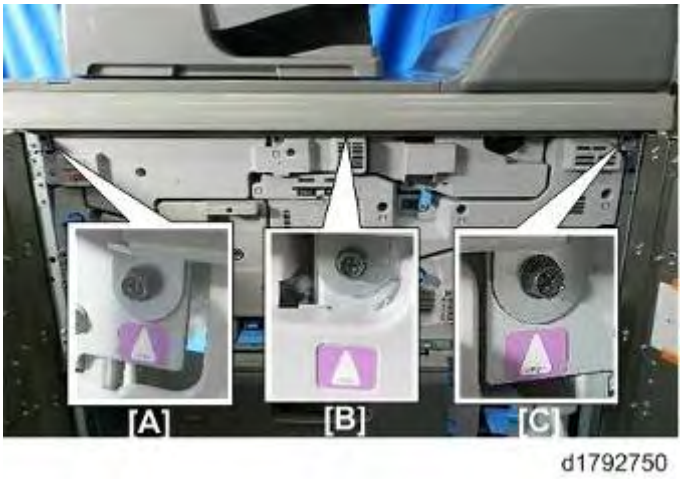
- Do **SP2170-001** and select the number to print the Trimming Pattern.
- Check the borders on the sheet and check if the pattern is perfectly square.



1. If the pattern is down on the right edge [A], the laser unit should be rotated **counter-clockwise** one notch.
   -or-
   If the pattern is up on the right edge [B], the laser unit should be rotated **clockwise** one notch.
2. Disassemble the machine again as far as the laser unit removal.
3. Loosen the screws of the laser unit, and then rotate it the number of notches necessary for the adjustment.

4.8.4 TONER SHIELD GLASS

The toner shield glass should be inspected and cleaned.



- Disconnect the front edge cover at the three points [A], [B], [C] (x3).

d1792751

- Remove the front edge cover.

d1792752

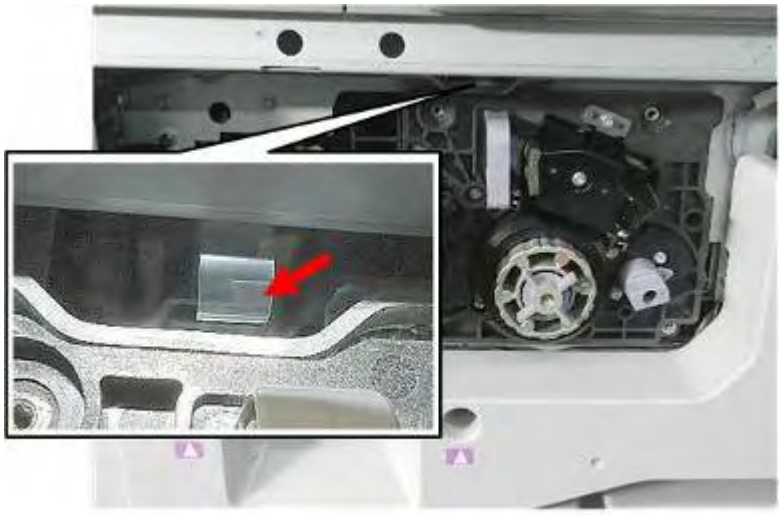
- Lower the image transfer belt.

d1792753

- Remove the PCDU cover (x3).

Important

1. The screws can be removed in any order, but they must be re-installed in the order ① ② ③.



d1792754

- Locate the plastic strip.

d1792755

- Pull out the strip [A], and then slowly pull it to remove the toner shield glass [B].

d1792756

- Lay the toner shield glass on a flat clean surface for inspection and cleaning with a lens cloth.

4.9 TONER SUPPLY

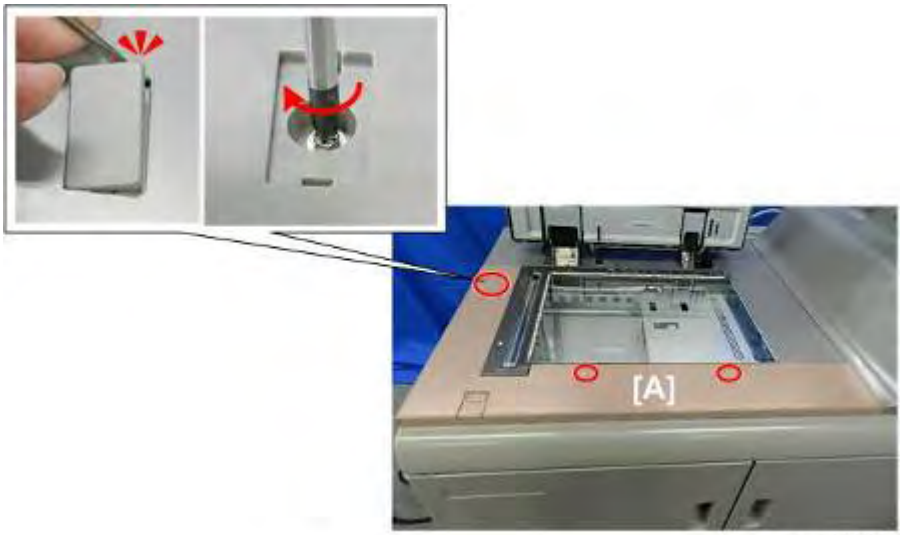
4.9.1 TONER SUPPLY UNIT

Before You Begin

The toner supply unit and toner bank are both under the canopy on the right side of the machine. To service the components described in this section, you must disassemble the machine as far as removal of the laser unit. This includes removing the following items:

- Attention light
- Operation panel
- Canopy
- Toner bank cover
- Left toner bottle cradle
- Right toner bottle cradle

Canopy Cover Removal



1. Raise the ADF
2. Remove the scanner "L" cover [A] (cap x1, x1, x2).

d1792702

3. At the rear, remove exposure glass right cover [A] (cap x1, x1)

d1792703

4. Cover the exposure glass to protect it.

d1792704

5. Disconnect the attention light base [A] (x3).
6. Disconnect the bottom of the attention light [B] and remove the light (x2, x1).

7. On the right side, remove LCIT heater connector cover plate [A] (x1).
8. Disconnect right cover [B] (x7).

9. Lift the cover base [A] and pull the right cover away from the machine.

10. Disconnect top of operation panel arm cover [A] (cap x1, x1).

d1792708

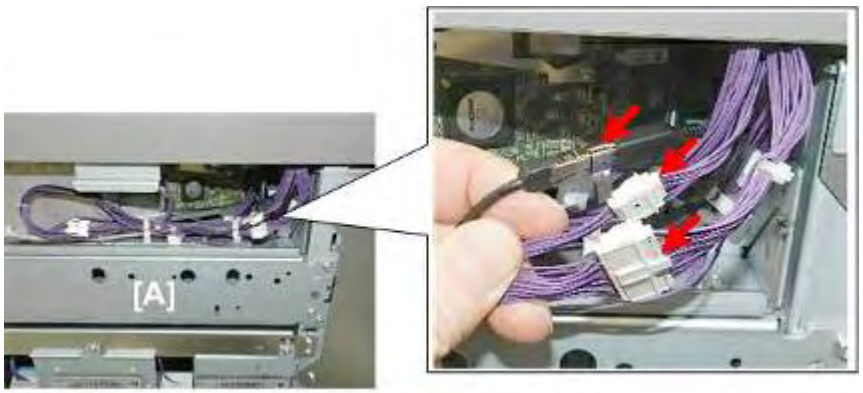
11. Disconnect side of operation panel arm cover [A] and then remove it (x1).

d1792709

12. Disconnect metal base [A] of the operation panel (x3).

Important

- Do not loosen the shoulder screws [B].



d1792710

13. On the right [A], disconnect the three harnesses leading up to the base of the operational panel arm above.

d1792711

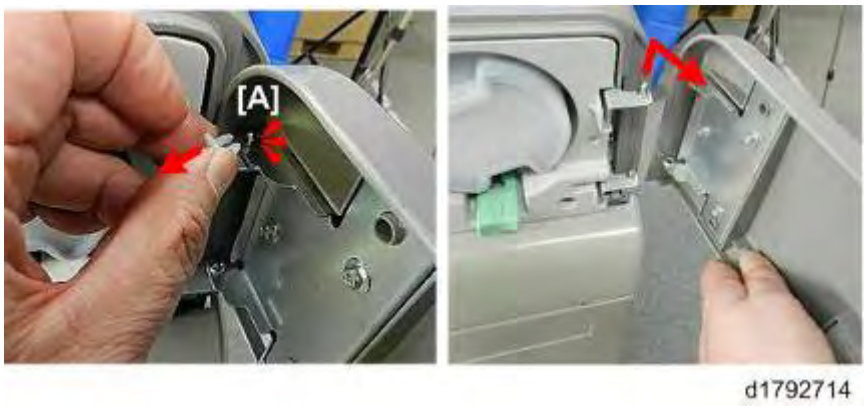
14. Push the end of the operation panel arm [A] toward the front of the machine.
15. Remove the base of the arm from the anchor screws [B], and then lay the base down next to the anchor screws.

d1792712

16. Slowly pull the harnesses through the hole.
17. Pick the operation panel up, and then lay it down on a flat clean surface.

d1792713

18. Open the toner bank door.



d1792714

19. Pull off the clip and remove the toner bank door [A] (x1).

d1792715

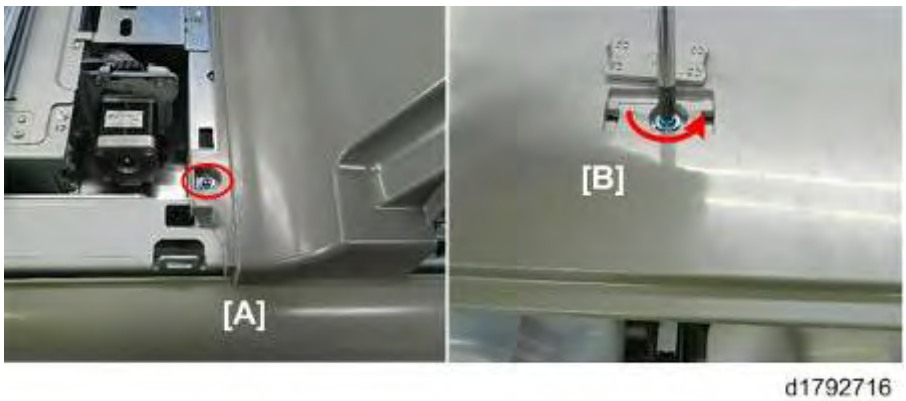
20. Remove toner bank front cover [A] (x3).

d1792718

21. At the rear [A], remove the filter bracket and filter from the back of the canopy (x1).

Note

- Note the position of the notch on the edge of the filter. It must be re-installed in the same way.



d1792716

22. Disconnect front left corner of the canopy [A] (x1).
23. Disconnect the top front of the canopy [B] (cap x1, x1).

d1792717

24. Disconnect the right side of the canopy (x2).

d1792719

25. At the rear, disconnect the top of the canopy [A] (x1).
26. Disconnect the left rear corner of the canopy [B] (x1).

d1792720

27. Remove the canopy [A].

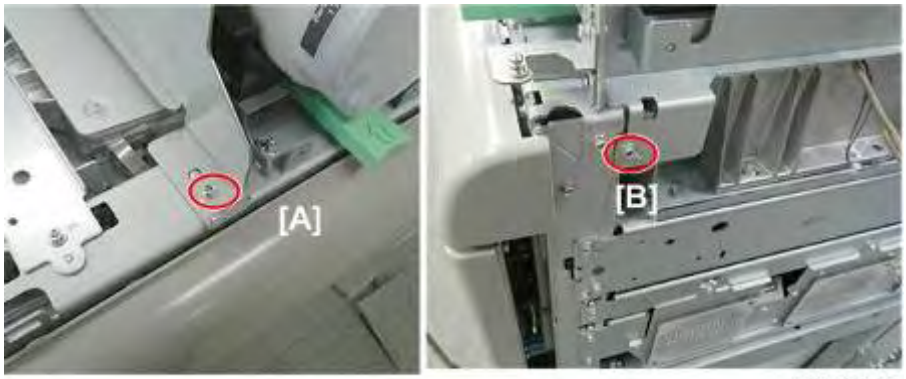
Remove Toner Bank Cover

d1792721

- Disconnect the right side of the toner bank cover [A] and harnesses [B] (x1, x3)

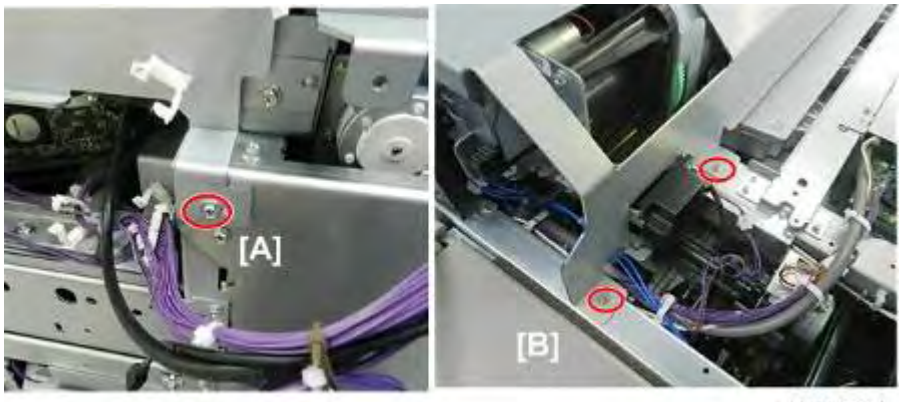
d1792722

- Disconnect right rear corner of the toner bank cover at [A] and [B] (x6).



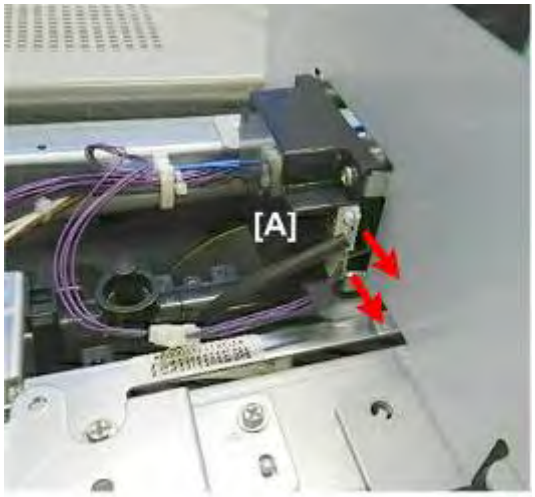
d1792723

- Disconnect left front corner [A] and right front corner [B] of the toner bank cover (x2).



d1792724

- Disconnect right rear cover [A] of the toner bank cover (x1).
- Disconnect left rear cover [B] of the cover (x2).



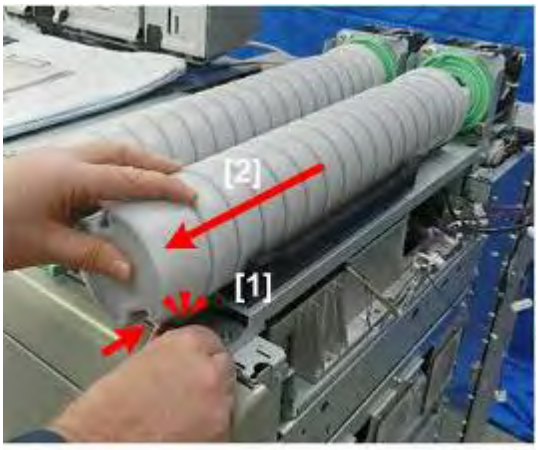
d1792725

- At the left rear corner of the toner bank cover (viewed from the front), disconnect harnesses [A] (x2).

d1792726

- Remove the toner bank cover.

Remove Toner Bottle Cradles



d1792727

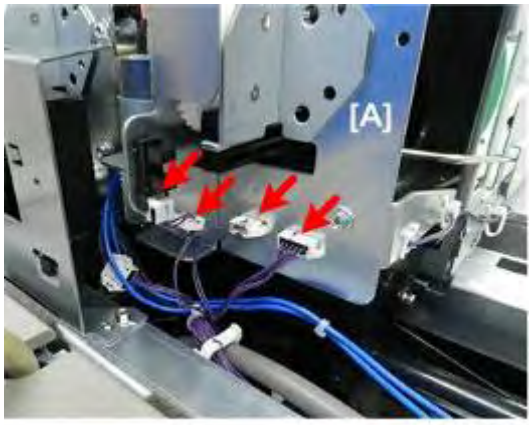
1. Remove the toner bottles.
2. Press in bottle release lever [1] of toner bottle, and then remove the bottle [2].

Important

- If either bottle is locked and cannot be released by pressing the lever, do the following steps to unlock the bottle.

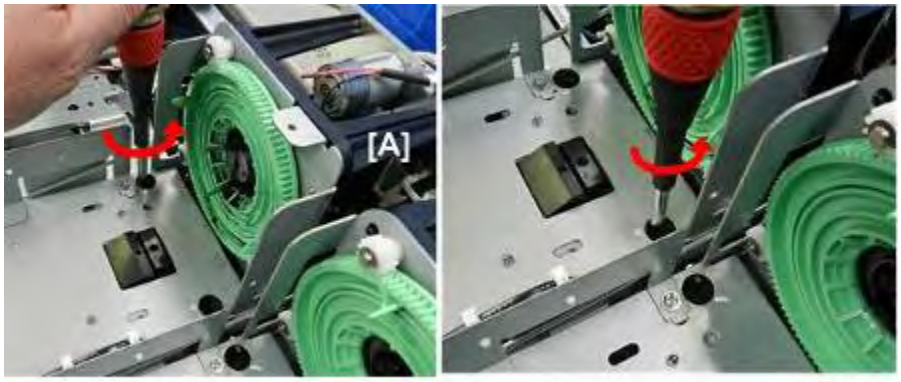
d1792728

3. At the back of the machine [A], insert a small screwdriver into the worm gear shaft [B] of the bottle cap motor of the toner bottle.
4. Turn the screwdriver counter-clockwise until arm [C] moves forward.



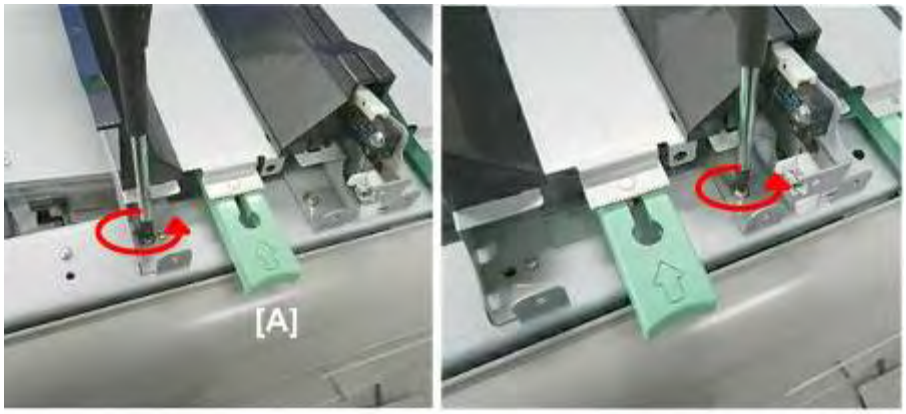
d1792730

5. At the back of the machine, disconnect toner bottle cradle [A] (x3, x1).



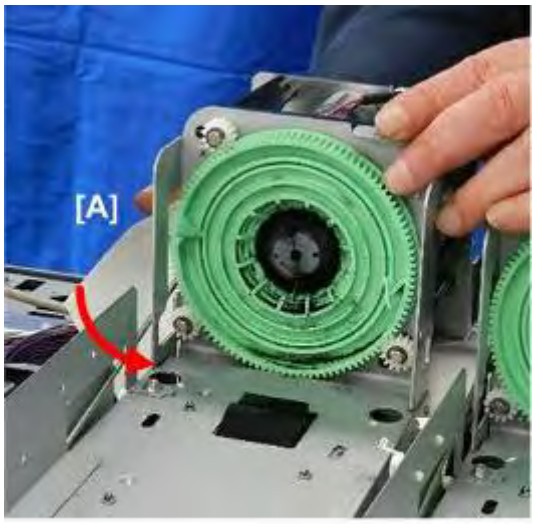
d1792731

6. Disconnect the back of toner bottle [A] (x2).



d1792732

7. Disconnect the front of left toner bottle [A] (x2).

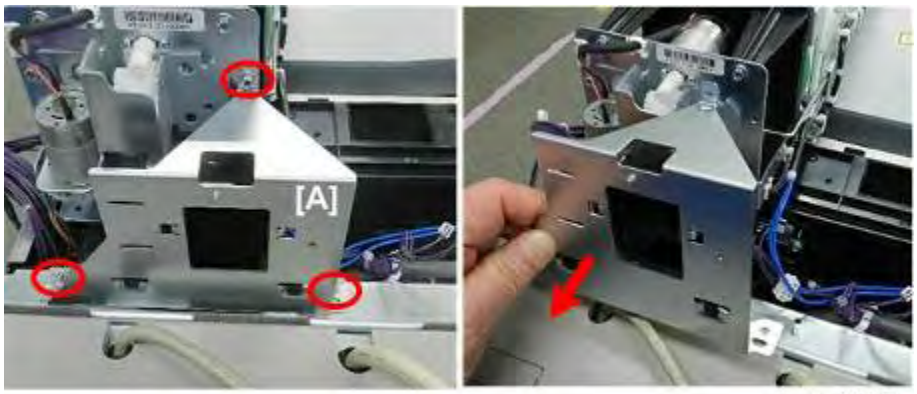


d1792733

8. Slide a sheet of paper under the back of left toner bottle cradle [A].

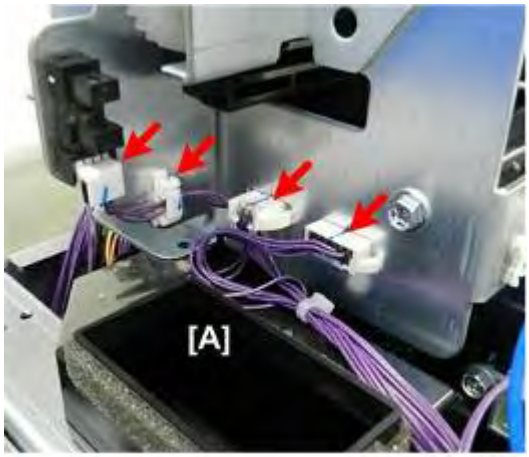
d1792734

9. While holding the paper under the rear end of the cradle, remove the left toner bottle cradle [A].



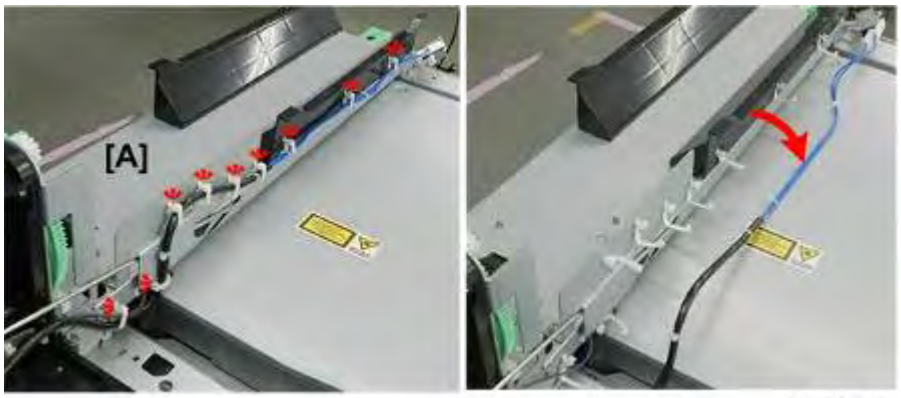
d1792735

10. Remove bracket [A] from the back of the right toner bottle cradle (x3).



d1792736

11. Disconnect the back of the right toner bottle cradle [A] (x1, x3).

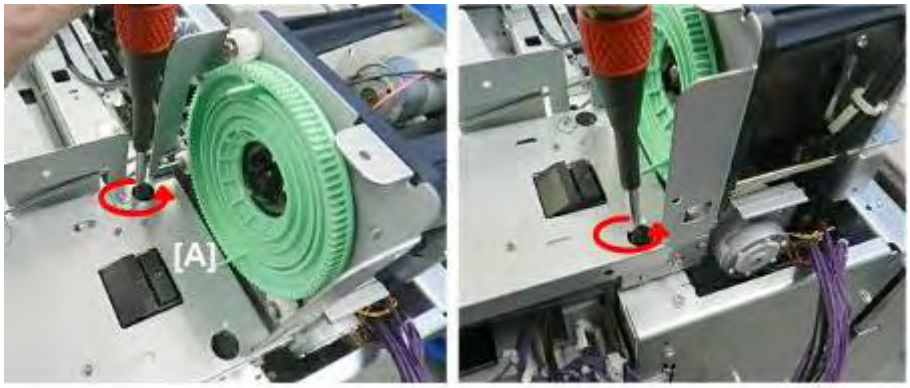


d1792737

12. Disconnect the switch harness from the left side of the cradle [A] (x9).

d1792738

13. Pull the disconnected switch harness [A] to the rear.



d1792739

14. Disconnect the back of the right cradle [A] (x2).

d1792758

15. Disconnect the front of the right cradle (x2).

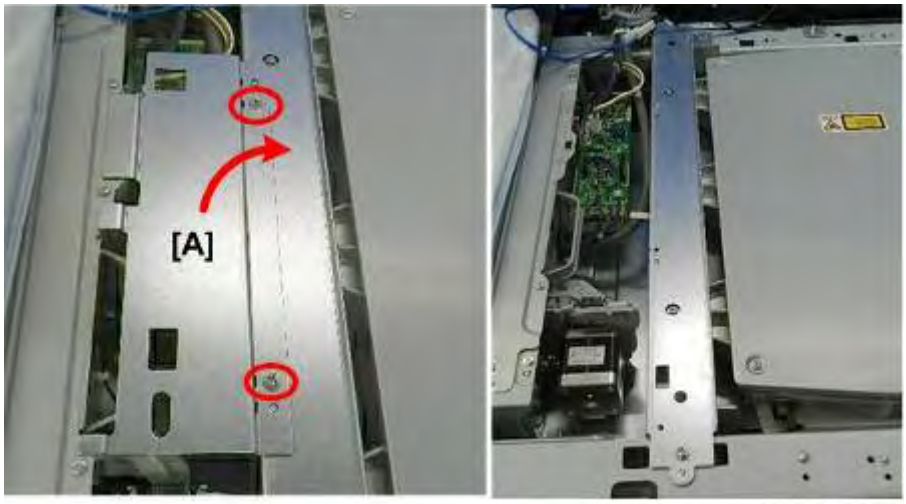
d1792740

16. Slide a sheet of paper under the back of left toner bottle cradle [A].
17. While holding the paper under the rear end of the cradle, remove the right toner bottle cradle [B].

Sub Hopper

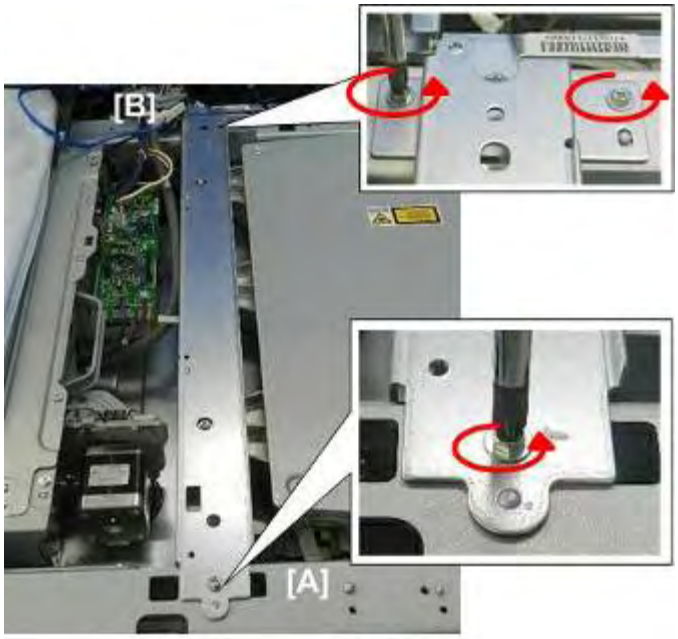
d1792801

1. Toner supply unit [A] is at the rear, behind the laser unit.



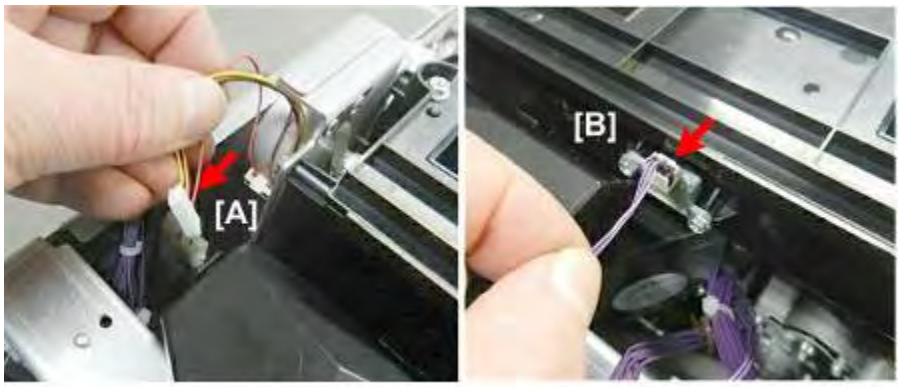
d1792742

2. Remove shield cover [A] (x2).



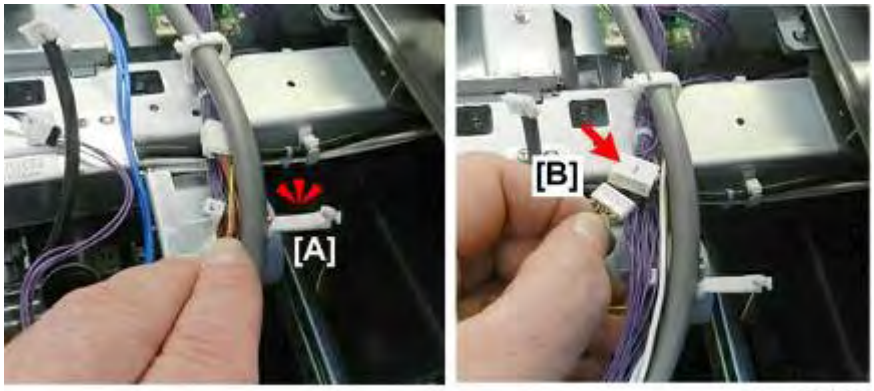
d1792743

3. Disconnect stay at front [A] and rear [B], and then remove it (x3),.



d1792802

4. At right corner of machine, disconnect toner agitator motor [A] (x1).
5. Disconnect TD sensor [B](x1).

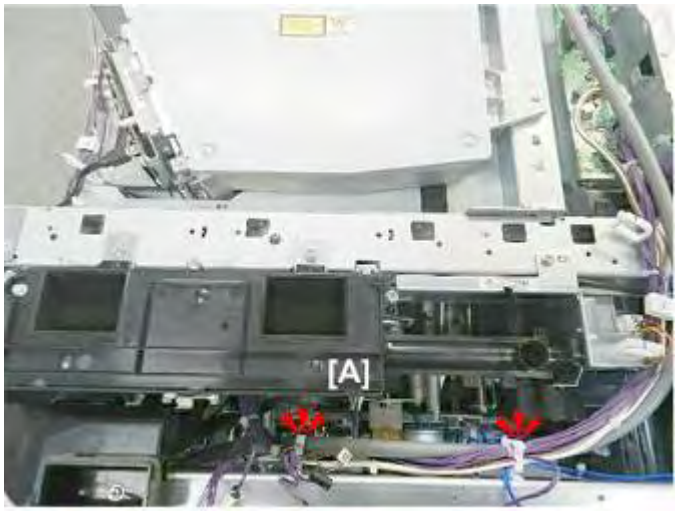


d1792803

6. At other end of toner supply unit, disconnect harness [A] (x1).
7. Disconnect toner supply motor [B] (x1).

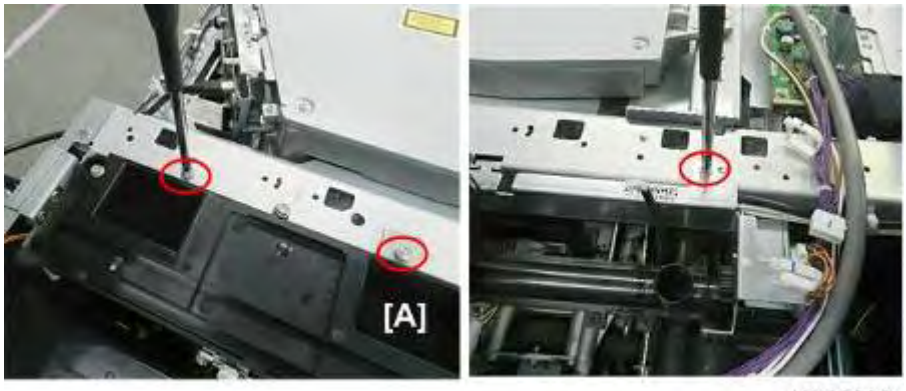
d1792804

8. Disconnect large harness at [A] and [B] (x3).
9. Pull the harness away from the clamps. This will make it easier to remove the toner supply unit.



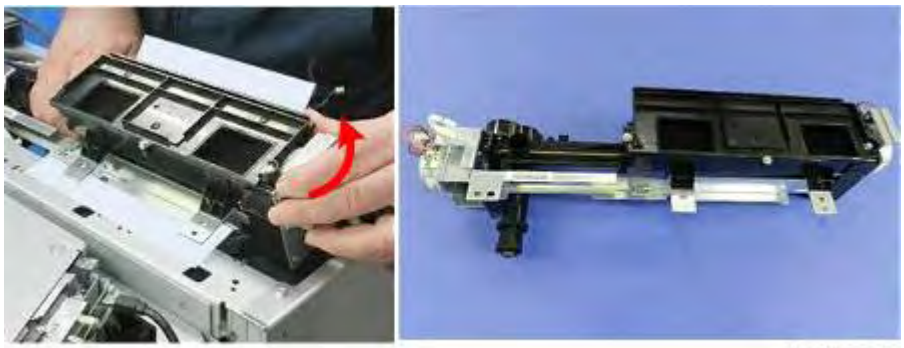
d1792805

10. Disconnect harnesses at [A] and [B] (x2). This will make it easier to remove the toner supply unit.



d1792806

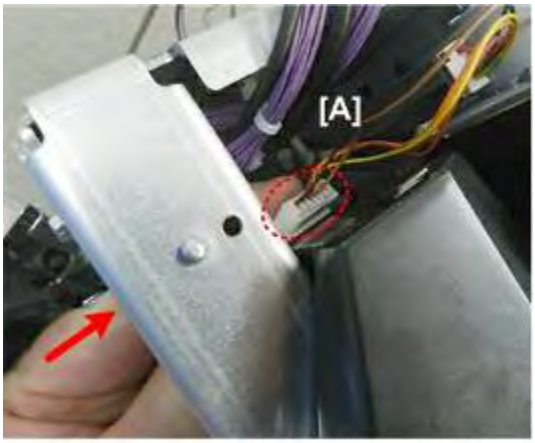
11. Disconnect toner supply unit [A] (x3).



d1792807

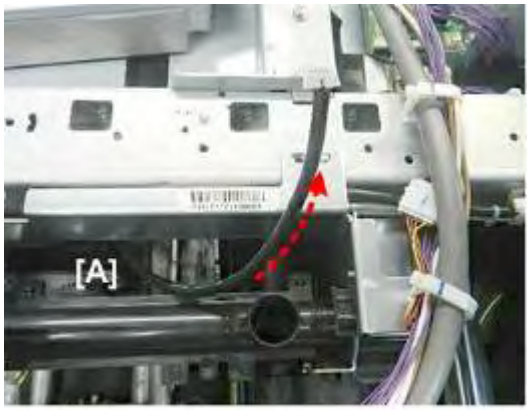
12. Pull the unit up slightly and then slip some paper under it to prevent toner spill.
13. Stand behind the machine, and then rock toner supply unit slightly toward the front of the machine as you remove it.

Toner Supply Unit Re-installation



d1792814

- If it is difficult to re-connect agitator motor [A], open the controller box door, and then re-connect the harnesses.



d1792815

- Make sure that black harness [A] is between the edge of the machine and the duct.

4.9.2 TONER SUPPLY MOTORS

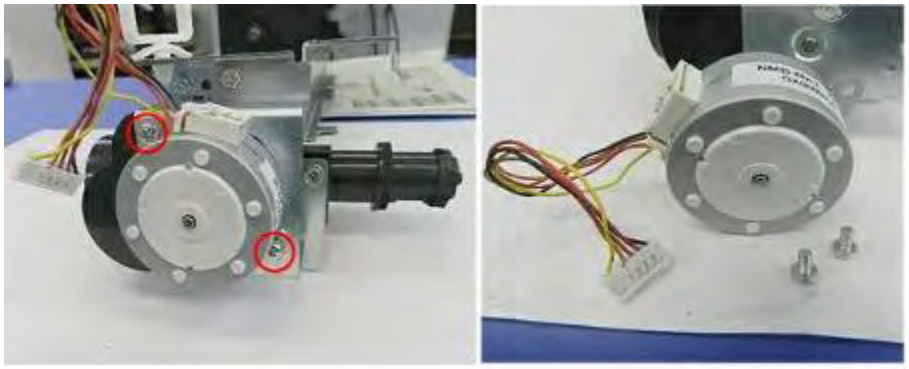
Toner Feed Motor

Preparation

1. Remove toner supply unit page 4-88

d1792808

- The toner supply motor is on the left end of the unit.



d1792809

- Remove motor (x2).

Toner Agitator Motor

Preparation

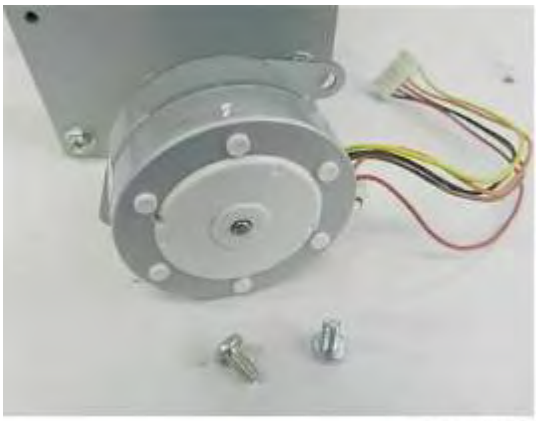
1. Remove toner supply unit page 4-88

d1792810

1. The toner agitator motor is on the right end of the unit.

d1792811

2. Remove motor (x2).



d1792812

4.9.3 TONER BANK

Two toner bottles on separate cradles comprise the toner bank. Each cradle contains:

- Toner bottle
- Toner bottle set sensor
- Toner bottle motor
- Toner bottle cap motor
- Toner bottle cap sensor

d1792820

①	Toner bottle motor (rear view)
②	Bottle cap sensor

③	Bottle cap motor (top view)
④	Bottle set sensor (bottom view)

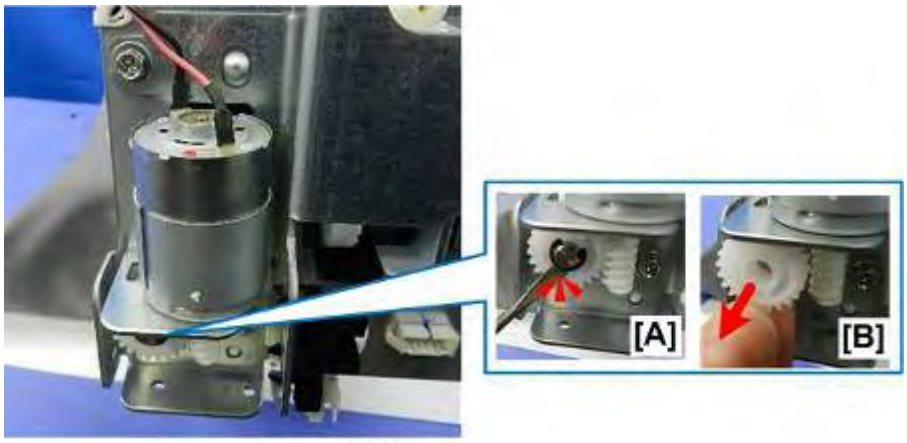
Before you begin:

- Each toner bottle is on a separate cradle where it rotates on a spiral groove to feed toner into the toners supply unit at the rear.
- Each cradle has two motors and two sensors.
- The removal of each motor and sensor is described once. The procedure for each bottle cradle is the same.

Toner Bottle Motor

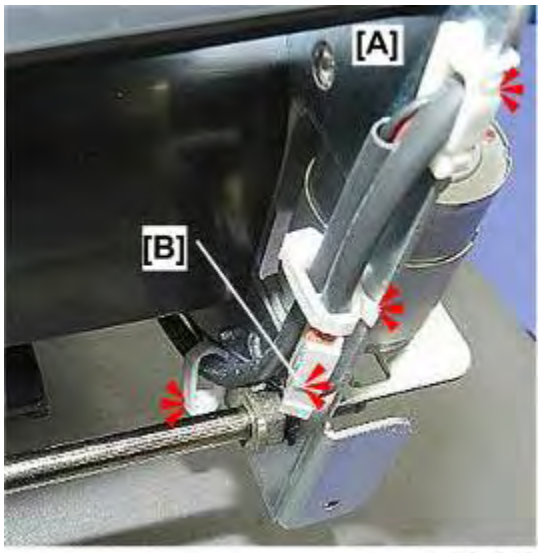
Preparation

- Remove toner bottle cradles page 4-88



d1792821

1. Remove gear [A] (℃x1).
2. Remove gear [B].

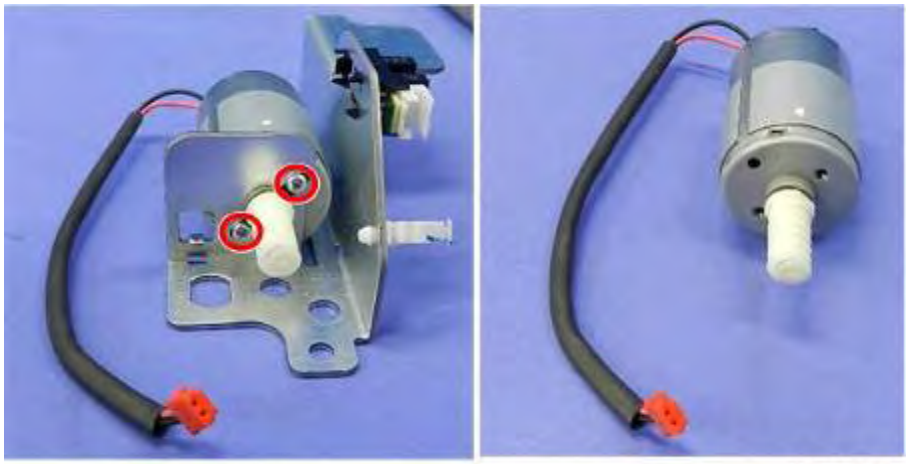


d1792822

3. Free harness [A] (x3).
4. Disconnect motor at [B] (x1).

d1792823

5. Remove motor bracket (with motor attached) (x2).



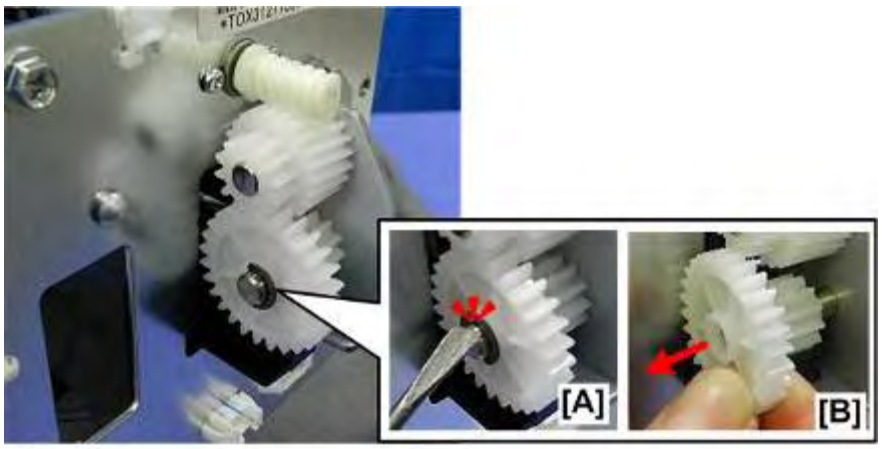
d1792824

6. Separate motor from bracket (x2).

Toner Bottle Cap Motor

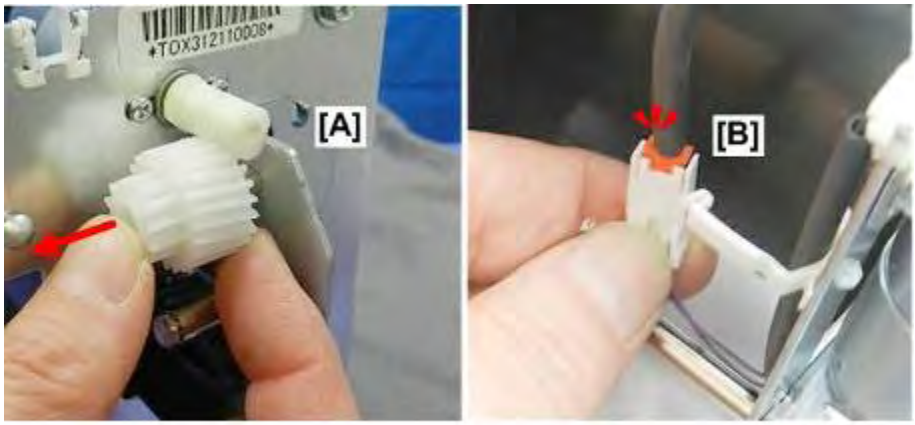
Preparation

1. Remove toner bottle cradles page 4-88
2. Remove toner bottle motor bracket



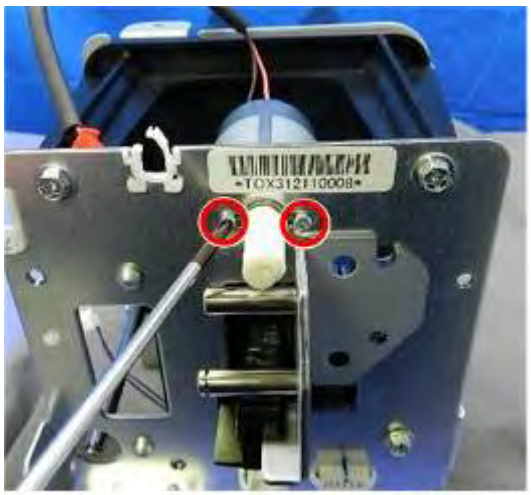
d1792825

1. Remove gear [A] (x1).
2. Remove gear [B].



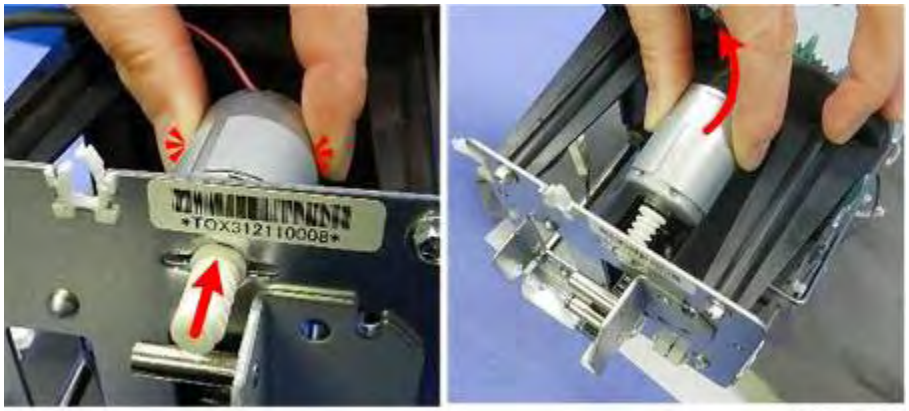
d1792826

3. Remove gear [A].
4. Disconnect motor at [B] (x1).



d1792827

5. Disconnect motor (x2).



d1792828

6. Pull motor to the front as far as possible, then twist it up slightly to remove it.

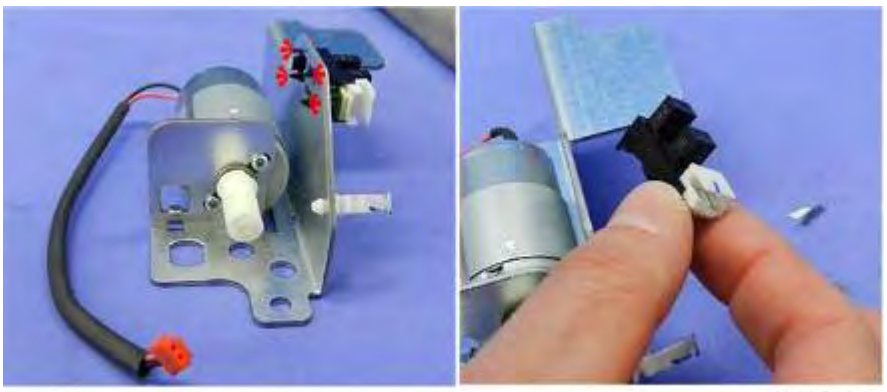
d1792829

4.9.4 TONER SUPPLY SENSORS

Toner Bottle Cap Sensor

Preparation

1. Remove toner bottle cradles page 4-88
2. Remove toner bottle motor bracket



d1792830

1. The bottle cap sensor is attached to the bracket of the toner bottle motor.
2. Remove sensor (☛x4).

Toner Bottle Set Sensor

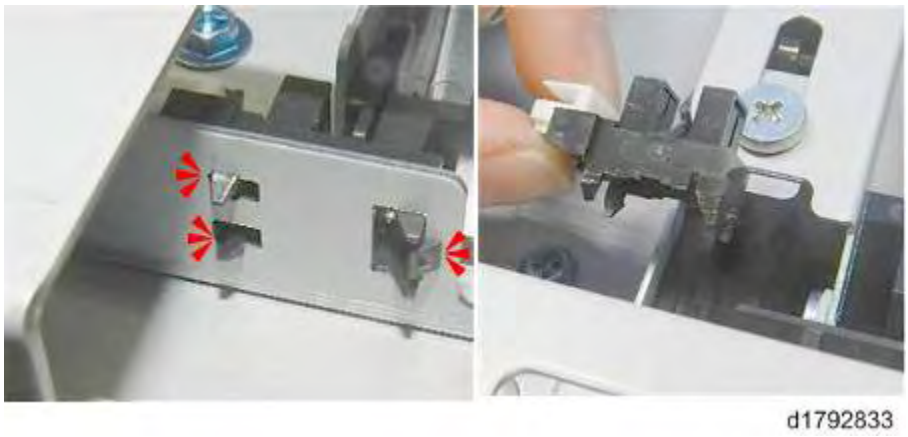
Preparation

- Remove toner bottle cradle

d1792831

- Turn the cradle upside down.
- You can see the set sensor [A] behind the plastic sheet.
- Pull out plastic sheet [B] to uncover the sensor.

- At the front, disconnect sensor [A] (x1).
- At the rear, remove spring [B] (x1).



- At the rear, remove sensor (x3).

4.10 AROUND THE DRUM

4.10.1 PCDU DISASSEMBLY FOR REPLACEMENT

PCDU Removal

1. Remove the front edge cover (x1). page 4-22

d1792900

2. The PCDU is on the upper right,.

d1792752

3. Lower the ITB knob.

⚠CAUTION

1. Now you must remove the charge corona unit.
2. Never attempt to pull out the PCDU with the charge corona unit in the machine.
3. Pulling out the PCDU without removing the charge corona unit will damage the cleaning pad HP sensor and its harness.

d1792902

4. Press the tab [A] to release the charge corona unit.
5. Pull charge unit [B] out of the machine.

d1792903

6. Lay the charge unit on a flat clean surface.

Important

- Always lay the charge unit down with the grid facing up. This prevents damage to the grid wires.

d1792753

Important

1. You can remove the screws in any order, but you should re-attach them in the order ① ② ③.

- Remove PCDU cover [A] (x3).

d1792905

- Turn the spoke cap counter-clockwise and then remove it.

d1792906

- Grip the PCDU by its handle, and then pull it out of the machine until it stops.

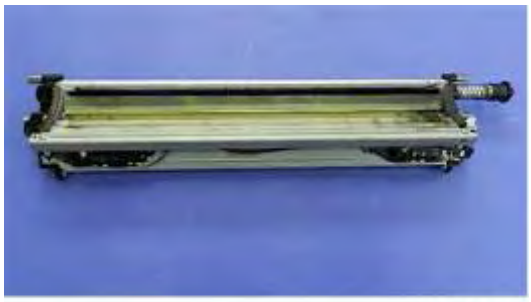
Drum Cleaning Unit

d1792907

- With the PCDU out of the machine, twist the knob counter-clockwise to unlock the drum cleaning unit.

d1792908

- Grip the drum cleaning unit in the center, and then lift it up and around the drum as you pull it out.



d1792909

- Lay the drum cleaning unit on flat clean surface.

Drum

- Remove the drum cleaning unit page 4-115

d1792910

- With the drum cleaning unit out, twist the knob ccw to unlock the drum.

d1792911

- Rotate the lock handle toward you to release the drum.

d1792912

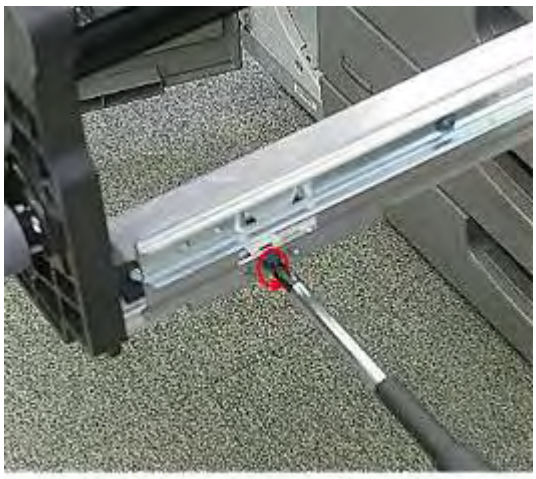
- Pull the drum toward you at a slight angle to remove it.

d1792913

- Lay the drum on a flat clean surface.
- Cover the drum with a piece of paper to protect it from the light.

Development Unit

- Remove the PCDU. page 4-113



d1792914

- With the drum and cleaning unit out, remove the lock plate near the front of the right rail (x1).

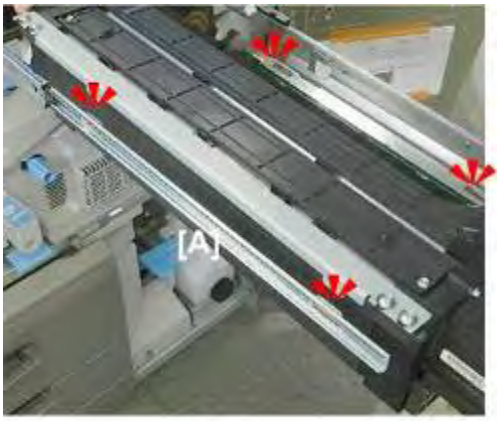
d1792915

- Grip the unit on both ends, and then lift it off both rails.

d1792916

- Lay the unit on a flat clean surface.

Drum Cleaning Unit, Drum, PCDU Re-installation



d1792917

1. Align the tabs of the PCDU frame with the holes [A] on the left rail.

Important

- Be sure to hold the unit with both hands to avoid twisting it.

2. Do not forget to re-attach the lock plate to the left rail (x1).

d1792918

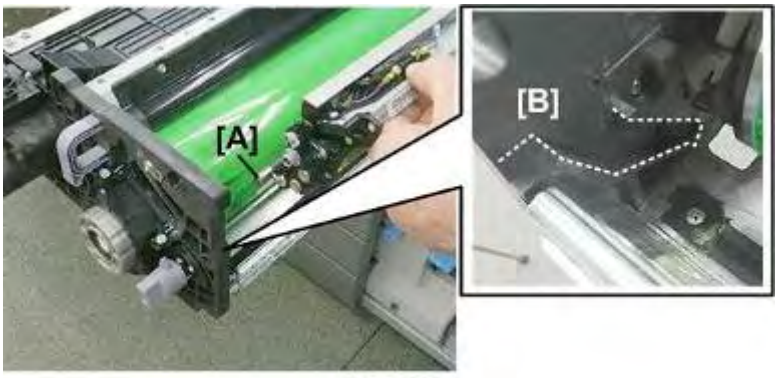
3. Set the drum, and then rotate the handle to the left. This aligns the drum in its cradle for re-installation of the drum cleaning unit.

d1792919a

4. To lock the drum, rotate the knob clockwise until it stops.

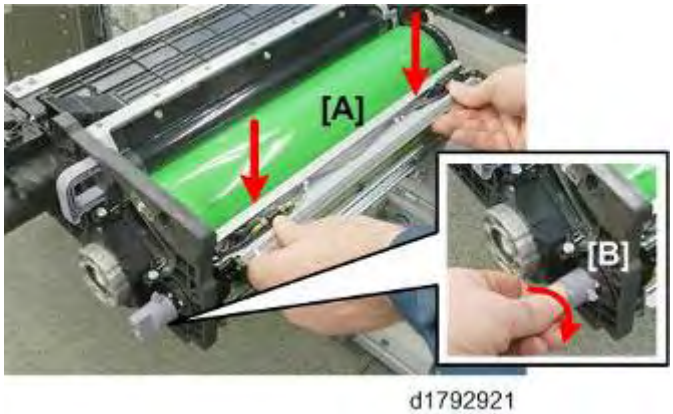
Note

- The drum must be securely locked in place before the drum cleaning unit is re-installed.



d1792920

- To re-install the drum cleaning unit, align the pin [A] with the guide on the inside surface of the cover at [B].

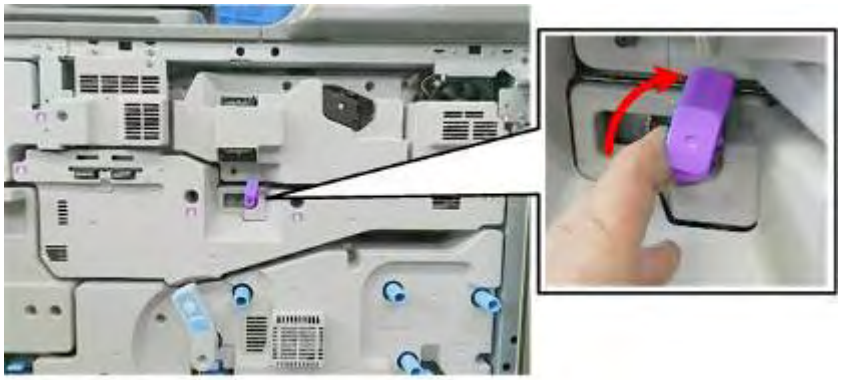


d1792921

- Lower the drum cleaning unit [A], and then make sure that it is straight, against the surface of the drum.
- Turn the knob [B] clockwise to lock the drum cleaning unit in position.
- Re-attach the spoke knob.

d1792923

- Align the charge unit on its left plate and rail [A] before you push it into the machine.
- Push the charge unit into the machine until you hear it click and lock.


d1792924

- Raise the ITB lever. (The door will not close if this lever is down.)

4.10.2 DRUM REPLACEMENT

Drum Removal

1. Turn off the machine and disconnect its power plug.
2. Pull out the PCDU page 4-113
3. Remove: page 4-113
    1. Drum cleaning unit
    2. Drum

Installing a New Drum

d1792929

- Stand the old drum on its end with the drive gear (larger hole) up.
- Disconnect the drum (x1).

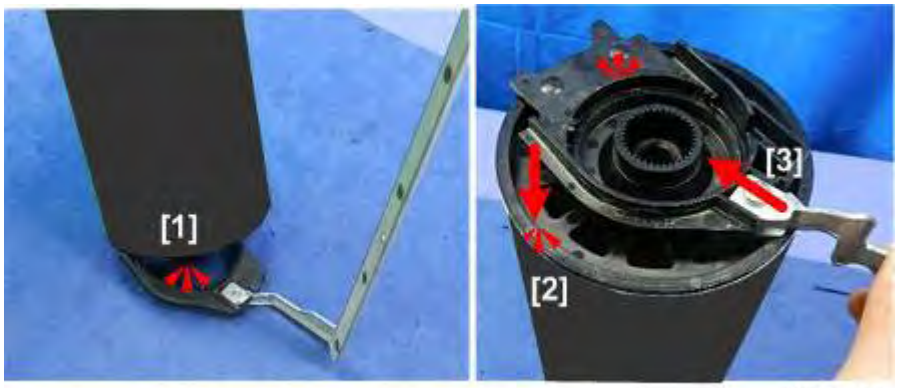
Note

1. You need to remove only one screw.

- While holding the frame steady, depress the drum slightly and separate it from the frame.

Important

- Always hold the drum steady by gripping it at the drum gear.
- Never touch the surface of the drum.

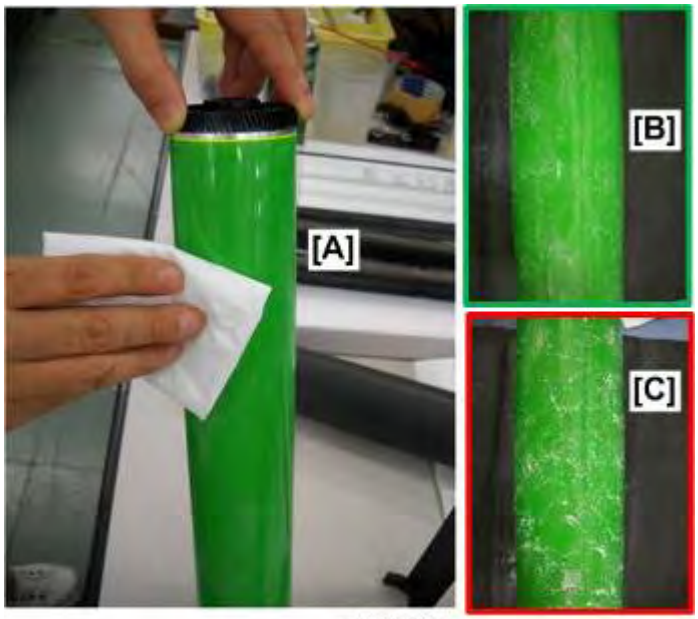


d1792932

- With its protective cover on, set the rear end of the new drum in the frame [1].
- While pressing down slightly on drum [2], frame bracket [3] over the front of the drum.
- Re-attach the screws (x2).

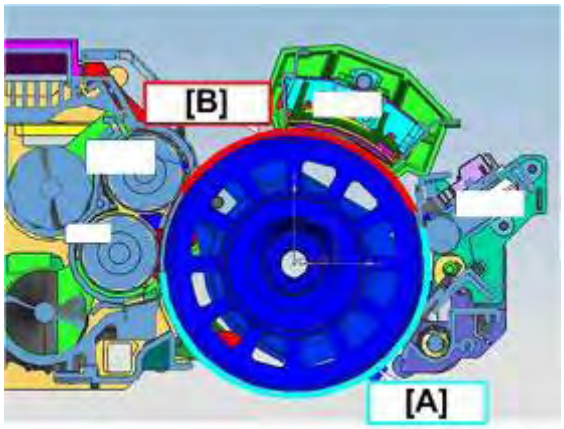
d1792930

- Remove the protective sheet from the new drum.



d1792931

- While holding the drum upright by the drive gear, use the resin pad to dust the drum lightly about half way around the drum.
- Do not apply too much powder to half the drum.
  - [B] shows the correct amount of powder.
  - [C] shows too much powder on the drum.
  - Remove excess powder with a clean dry cloth.
- Inspect the surface of the dusted drum and make sure that there are no scratches, dirt, etc. on the surface.



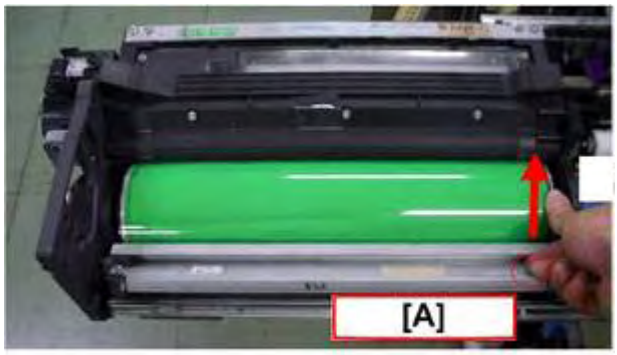
d1802906

- Set the drum with the dusted side [A] down with the bare side [B] up to avoid any setting powder from collecting at the seal.

  Important

  1. If there is setting powder around the seal, this could cause vertical lines to appear in copies.

- Re-attach the drum cleaning unit.



d1802907

- While pressing lightly on the cleaning unit [A], rotate the drum about one-half turn in the direction of the arrow.

After Drum Replacement

- After re-assembling the machine, open the left and front doors.
- Turn the machine on.
- Enter the operator adjust mode.
- In the operator adjust mode, touch [**0515**], and then reset the counter to zero.
- Leave the operator adjust mode

  Note

  - For Steps 3, 4, 5 you can enter the SP mode, open SP7622-018 to set the counter to zero, and then leave the SP mode.

- Close the left and right front doors.
- Process control executes automatically.

- After process control executes, the operation panel will display “Ready”.
  1. If process control fails, you will see “Fail” appear on the operation panel, and then the machine will issue an SC code.
  2. Do the procedure recommended to resolve the problem that triggered the SC code.
  3. You must then execute SP3011-002 to execute process control manually because it will not execute again automatically.
- This completes the procedure.

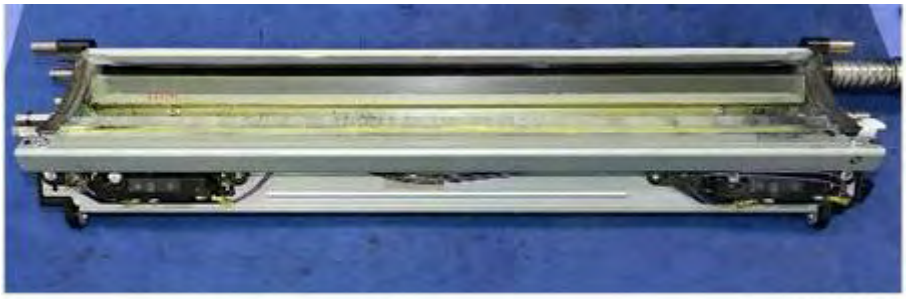
Important

1. If you used the SP mode, enter the SP mode, and then do SP3012-001 to confirm that process control executed successfully.

4.10.3 DRUM CLEANING UNIT

Drum Cleaning Unit Gears

1. Remove the drum cleaning unit. page 4-115



d1792934

2. Set the drum cleaning unit on a flat clean surface.

d1792935

3. First, remove the five gears on the front end of the cleaning unit. Three gears are fastened by snap clips, and two by large screws.

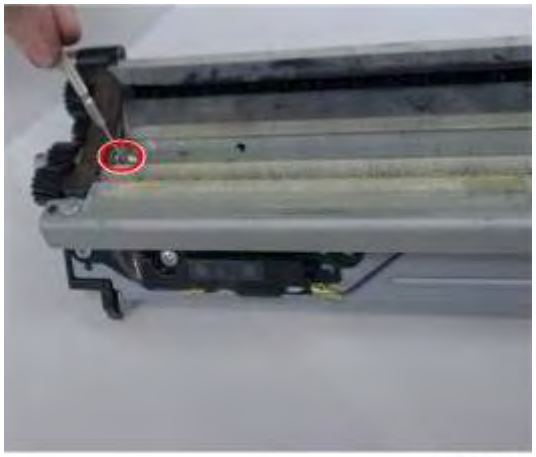
d1792936

4. Remove gears:
   - ① x1
   - ② x1
   - ③ x1
   - ④ x1
   - ⑤ x1

Drum Cleaning Blade

d1802911

- At the rear, remove screw [A] (x1).
- Remove pin [B].

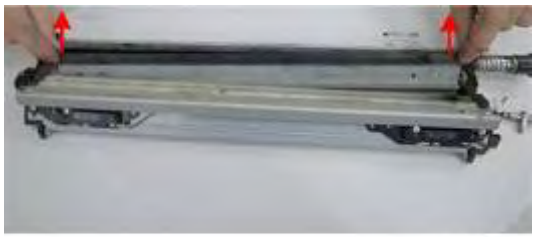


d1802912

- At the front, remove snap ring (x1).

d1802913

- Remove lubricant blade.



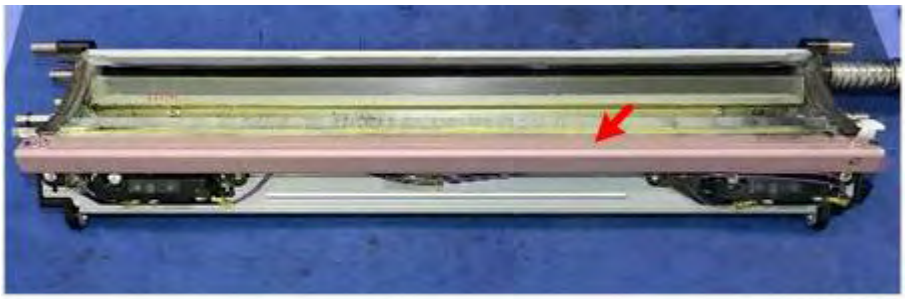
d1802914

- Remove cleaning blade.

Drum Lubricant Blade

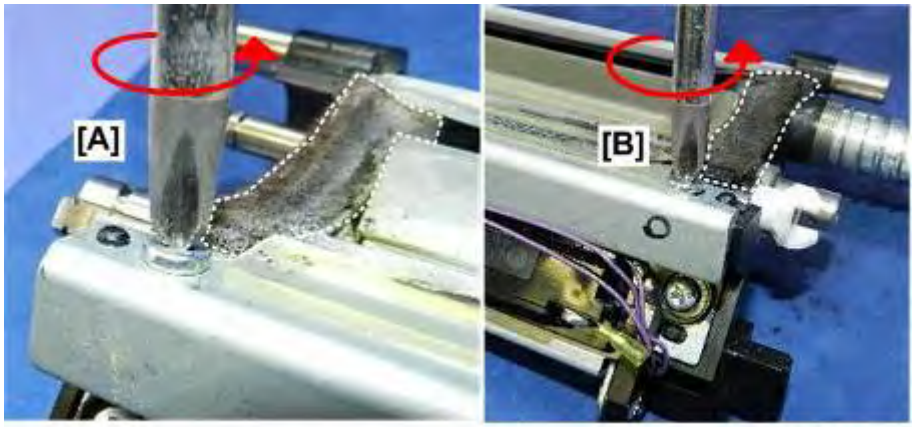
Important

- The lubricant blade, lubricant bar, lubricant roller (brush roller), and lubricant roller coupling are replaced together.



d1792940

1. The lubricant blade is on the right edge of the unit.



d1792941

2. Disconnect blade [A] and [B] (x2)

Important

- The white dotted lines in the photo mark the sponge seals.
- Work carefully around the edges of these sponge seals to avoid damaging them when removing and installing the blade.
- These seals are not service parts and they cannot be replaced.

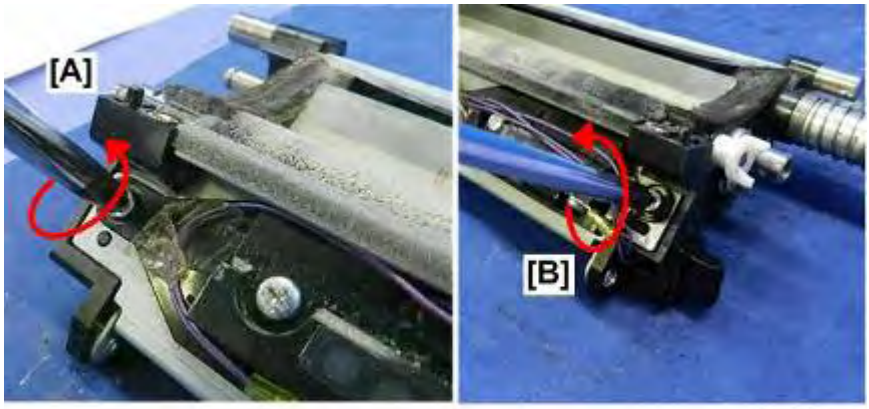
Drum Lubricant Bar

Important

1. The lubricant blade, lubricant bar, lubricant roller (brush roller), and lubricant roller coupling are replaced together.
2. The lubricant bar must be removed before the lubricant roller, and then re-installed after the lubrication roller.

d1792943

- The lubricant bar is behind the bracket of the lubricant near-end sensors (these sensors are not removed).



d1792944

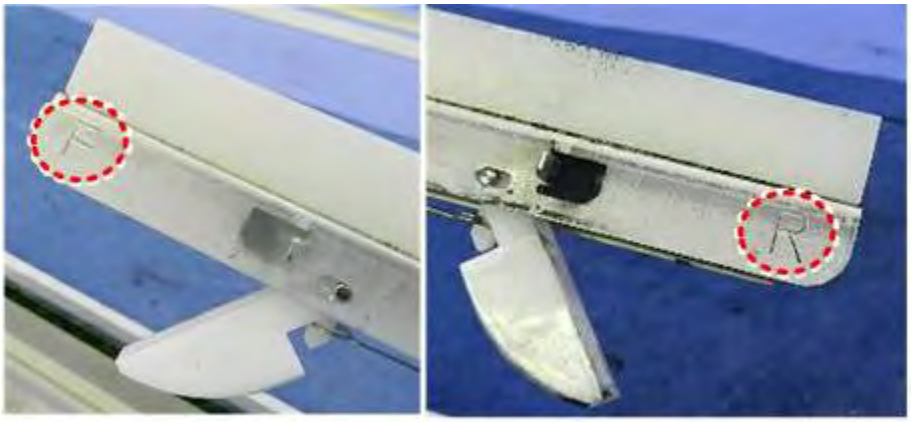
- Disconnect bracket [A] and [B] (x2)

d1792945

- Remove bracket (with harnesses attached).

d1792946

- Remove bar and place it flat on the table.



d1792947

- Note the ends of the bar bracket are marked "F" (Front) and "R" (Rear).

d1792948

- Disconnect the springs [A] and [B] (x2).

Important

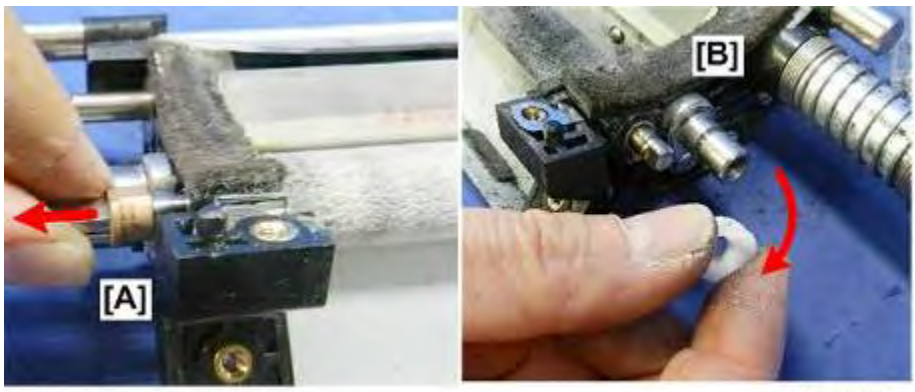
1. Do not discard these springs. They are not provided as service parts and must be re-attached to the new lubrication bar.

Drum Lubricant Roller

Important

1. The lubricant blade, lubricant bar, lubricant roller (brush roller), and lubricant roller coupling are replaced together.
2. The lubricant bar must be removed before the lubricant roller, and then re-installed after the lubrication roller.

- Remove the drum cleaning unit.
- Remove the drive gears.

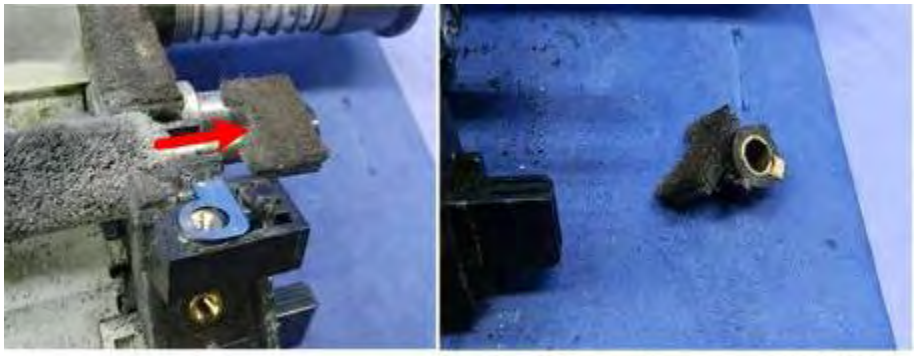


d1792949

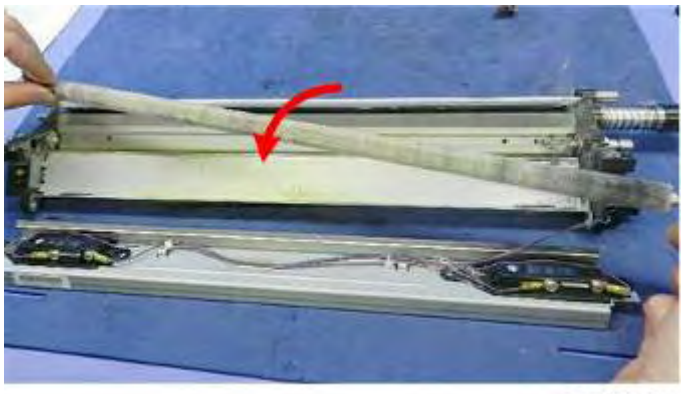
- Disconnect ends of roller shaft:

  [A] Bushing (x1)

  [B] Coupling (x1)


d1792950

- Remove seal coupling.


d1792951

- Remove the roller.

Re-installation

d1802908

1. Before reassembling the unit, apply a 1:1 mixture of yellow toner and setting powder to the brush roller.
2. [A] shows the minimum amount that should be applied, and [B] the maximum amount.

After Replacement

- After re-assembling the machine, open the left and front doors.
- Turn the machine on.
- Enter the SP mode, and then do SP7622-006 to 011 to reset the counters.

Drum Cleaning Unit Service Parts Lubrication Summary

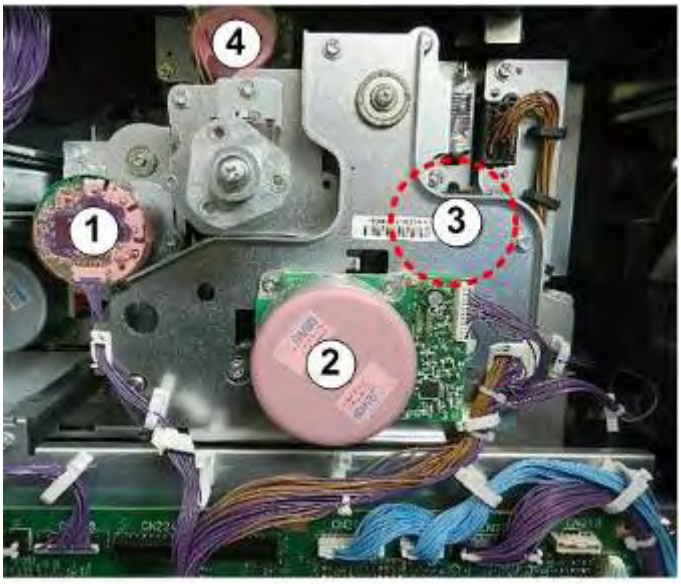
The service parts of the drum cleaning unit are lubricated at the factory before shipping, so they require no further lubrication at installation.

Service Part	Comments
Cleaning blade	Pre-lubricated at the factory with setting powder (zinc stearate). New cleaning blade requires no lubrication.
⇒ Lubricant (brush) roller	Lubricate new roller with both setting powder (zinc stearate) and yellow toner.
Lubricant bar	Requires no lubrication.
Lubricant blade	Pre-lubricated at the factory with setting powder (zinc stearate). A new lubricant blade requires no lubrication.

Note

- The lubricant roller, lubricant bar, and lubricant blade are always replaced together as a set.

4.10.4 DRUM MOTORS



d1792953

①	Drum Cleaning Moor
②	Drum Motor
③	Development Motor (inside motor casement)
④	Cleaning Pad Motor (for Charge Corona Unit)

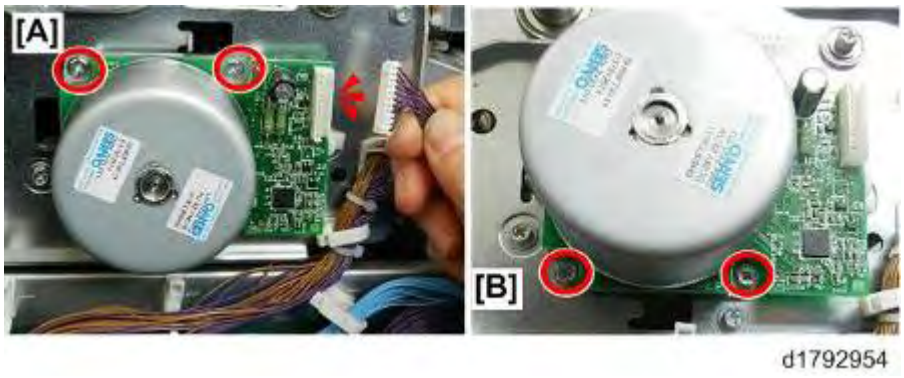
Drum Motor

Preparation

1. Open controller box page 4-27

d1792952

- Remove flywheel (x3).



d1792954

- Disconnect motor:
  [A] Top (x1, x2)
  [B] Bottom (x2)

d1792955

- Remove motor.

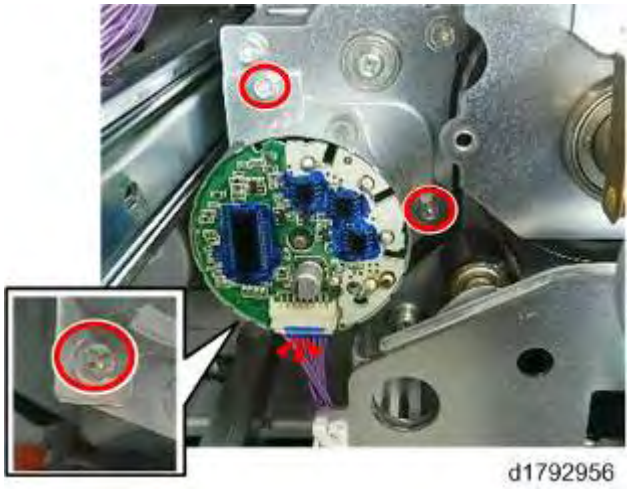
Drum Cleaning Motor

Preparation

1. Open controller box page 4-27

d1792952

- Remove flywheel (x3).


d1792956

- Disconnect motor bracket (x1, x3).

d1792957

- Remove motor.

d1792958

- Separate motor and bracket (x3).

Development Motor

Preparation

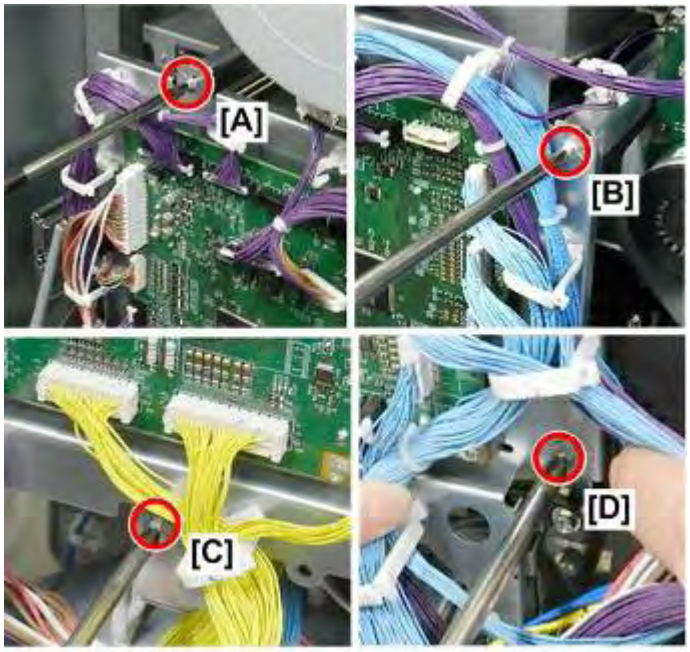
1. Open controller box page 4-27

d1792959

- At the front, remove the cover and pull out the PCDU. This separates the drive shaft from the drum.

d1794006

- Next, at the rear, disconnect the IOB (x2, x2).

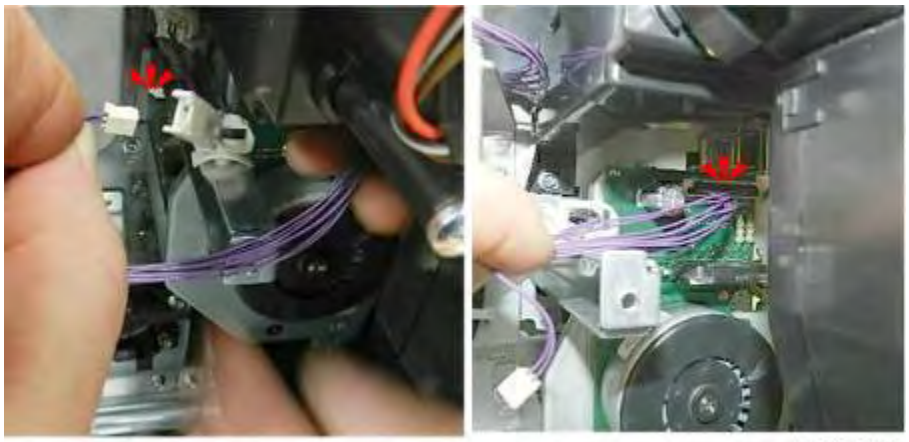


d1794008

- Disconnect IOB [A], [B], [C], [D] (x4).

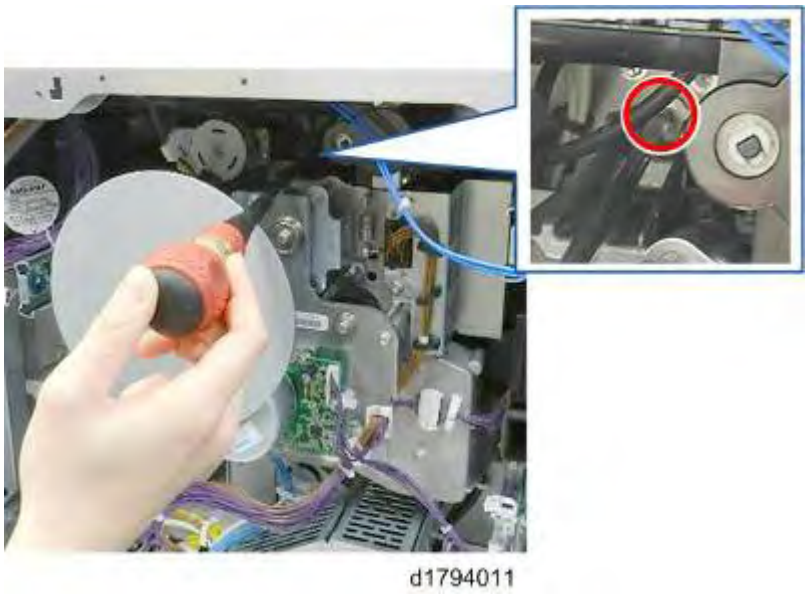
d1794009

- Lower the IOB bracket (with PCB attached) until it stops.



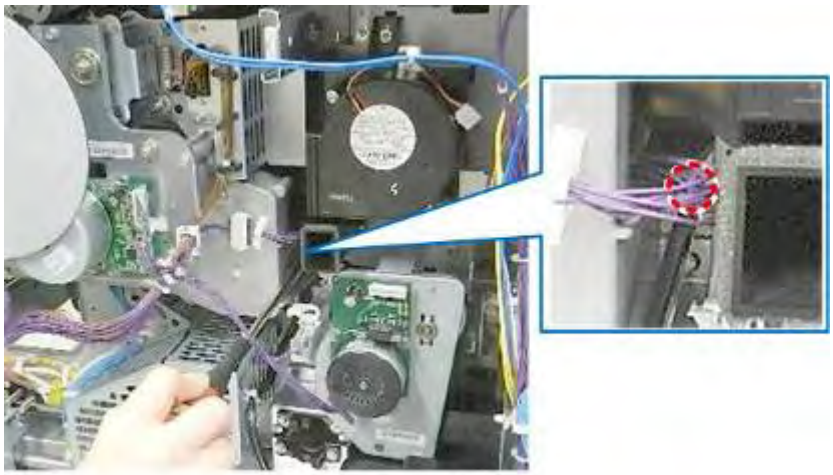
d1792960

- To the right of the flywheel, disconnect two harnesses (x2).



d1794011

- Upper right (x1).



d1794012

- Lower right (x1).

d1794013

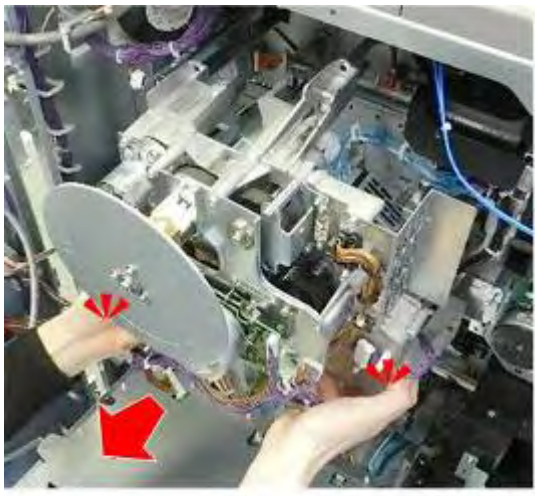
- Bottom (x1).

d1794014

- Bottom, left (x1).

d1794015

- Left (x1).



d1794016

- Remove the main motor unit.

d1792961

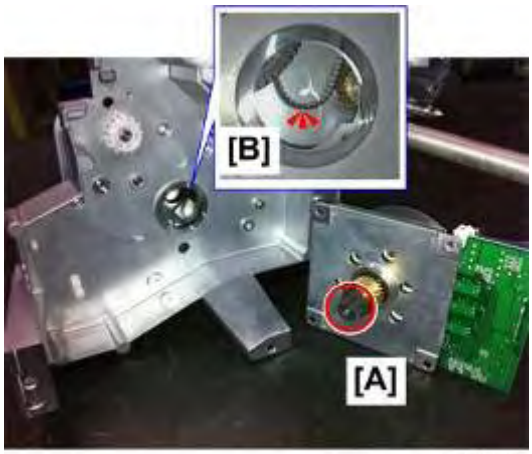
- Lay the motor mount on a flat, clean surface.

d1792962

- Disconnect motor drive board [A] (x1).
- Disconnect motor [B] (x4).

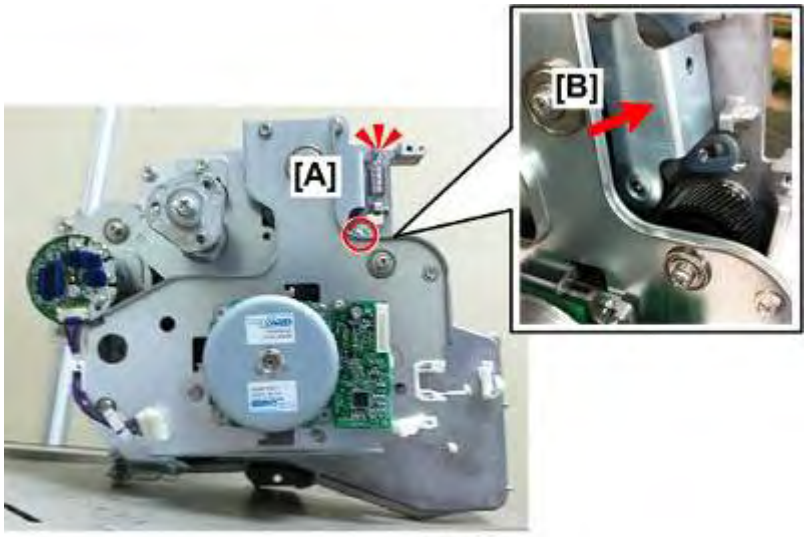
d1792963

Re-installation



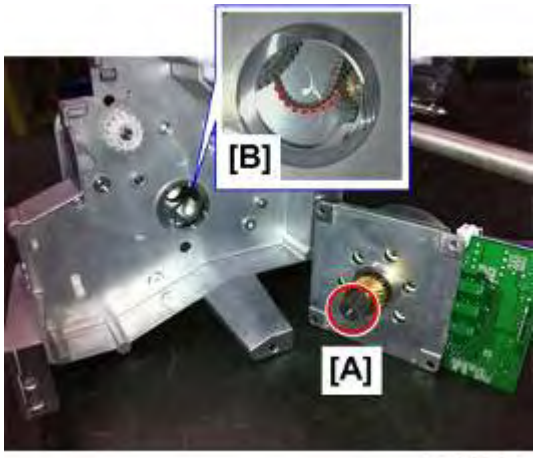
d1802902

- The development motor must be installed carefully to make sure that the driver gear of the motor [A] is correctly engaged with belt [B].



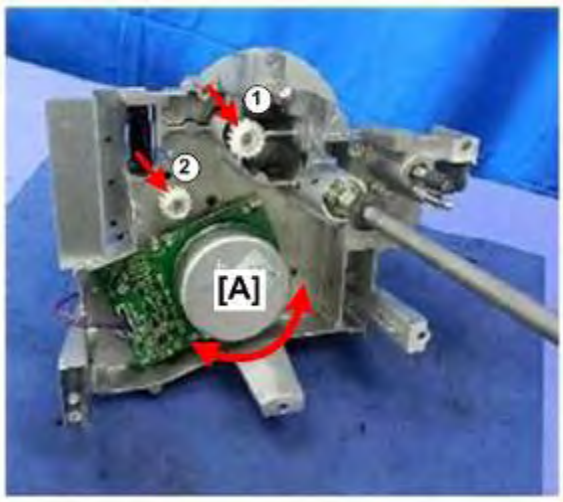
d1802903

- Remove screw and spring at [A] (x1, x1).
- Behind the frame, push the tension bracket in the direction of the arrow to release tension on the belt.



d1802904

- Mount the motor. Be sure that gear [A] engages correctly with the slackened belt [B].
- Attach the motor screws.



d1802905

- Rotate the motor [A] and make sure that gears ① and ② both rotate. If both gears rotate, the motor is engaged with the belt.

Cleaning Pad Motor

Preparation

1. Open controller box page 4-27

d1792964

- Disconnect motor harness (x1).

d1792965

- Disconnect motor (x2).

d1792966

- Remove motor.

4.10.5 QL, SENSORS

Quenching Lamp

Preparation

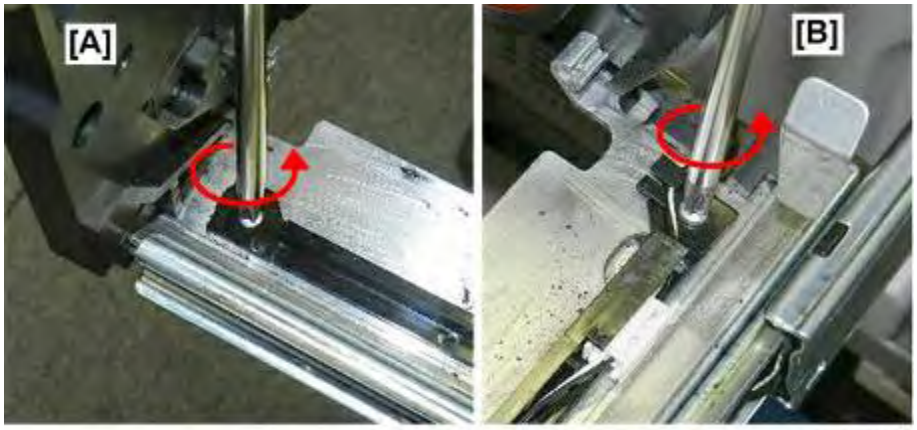
1. Pull out PCDU

Remove:

- Drum cleaning unit page 4-115
- Drum page 4-116

d1792967

1. The QL (Quenching Lamp) lies on the right, bottom edge of the PCDU frame.



d1792968

2. Disconnect QL at:
   [A] Front (x1)
   [B] Rear (x1)

d1792969

3. Disconnect QL at the rear, and then remove it (x1).

d1792970

PCDU Temperature/Humidity Sensor

Preparation

- Remove PCDU page 4-113

d1792971

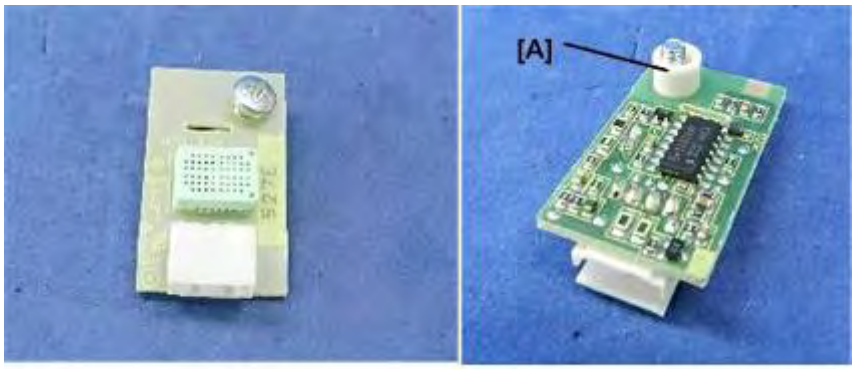
1. The temperature/humidity sensor is mounted on a bracket above the drum.

d1792972

2. Disconnect front end of bracket (x1).

d1792973

3. Lower bracket [A] (with sensor attached).
4. Disconnect sensor [B] with stubby driver, and then remove sensor (x1).



d1792974

5. Handle the temperature/humidity sensor carefully to prevent losing the small plastic spacer [A] on the screw.

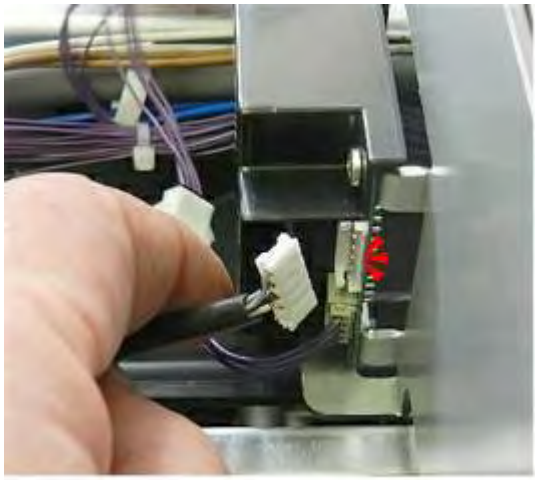
Potential Sensor

Preparation

- Remove the PCDU page 4-113
- Remove the canopy cover page 4-33

d1792979

- Cover the ITB with a sheet of A3 paper to protect it while you are working.
  1. The drum potential sensor is mounted on the same bracket [A] as the temperature/humidity sensor.
  2. The drum potential sensor is connected to a small PCB protected by a plastic cover and mounted on the side of the toner bank cover [B]. (The photo above shows the toner bank canopy removed.)

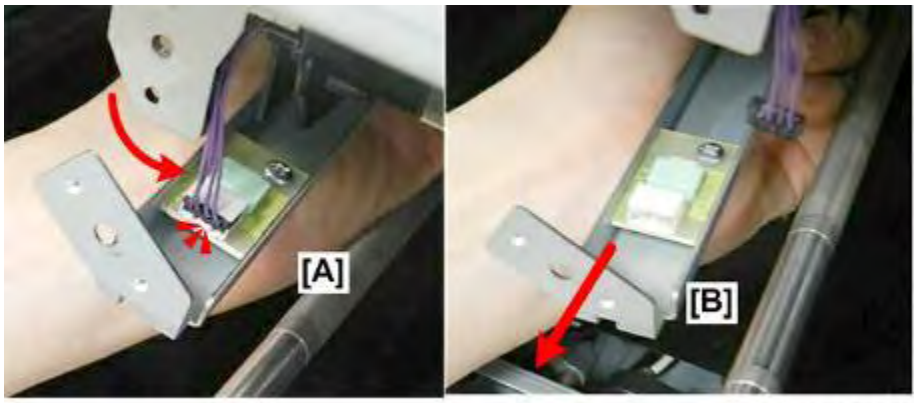


d1792980

- Disconnect sensor at the rear.

d1792981

- Disconnect the front end of the bracket (x1).



d1792982

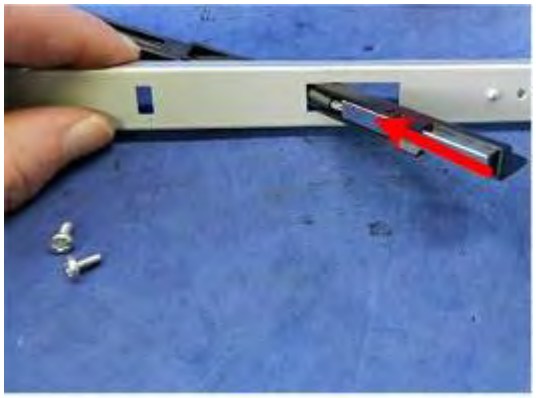
- Lower bracket [A], and then disconnect temperature humidity sensor (x1).
- Pull the bracket [B] out of the machine with the sensors still attached.

d1792983

- Lay the sensor bracket on a clean, flat surface.

d1792984

- Disconnect sensor bracket [A] (x2).
- Separate harness from bracket [B] (x2).



d1792985

- Push bracket and probe through the bracket.

d1792986

- Spread the tabs and separate the sensor from the bracket, but only if the sensor needs to be replaced.
- The potential sensor probe and window should be cleaned with a blower brush and a clean dry cloth. (The sensor probe does not need to be separated from the bracket for cleaning.)

Cleaning Pad HP Sensor

Preparation

- Remove PCDU page 4-113

d1792975

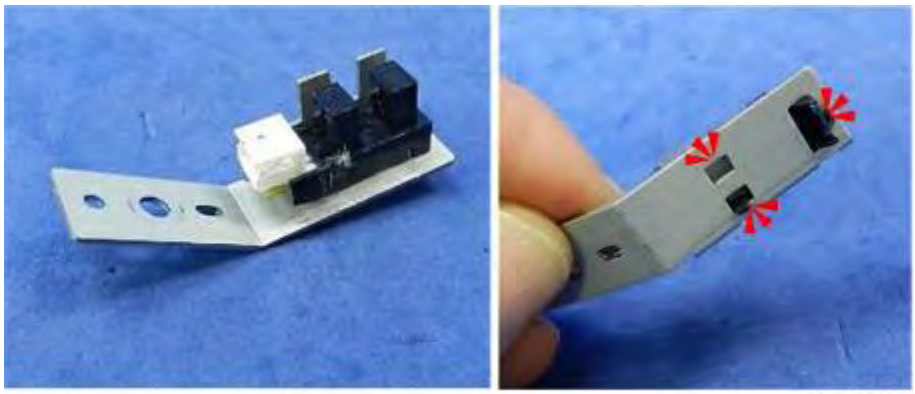
- The cleaning pad HP sensor is mounted on bracket above the drum.

d1792976

- Disconnect sensor (with sensor still attached) with a stubby driver (x1).

d1792977

- Disconnect sensor (x1).



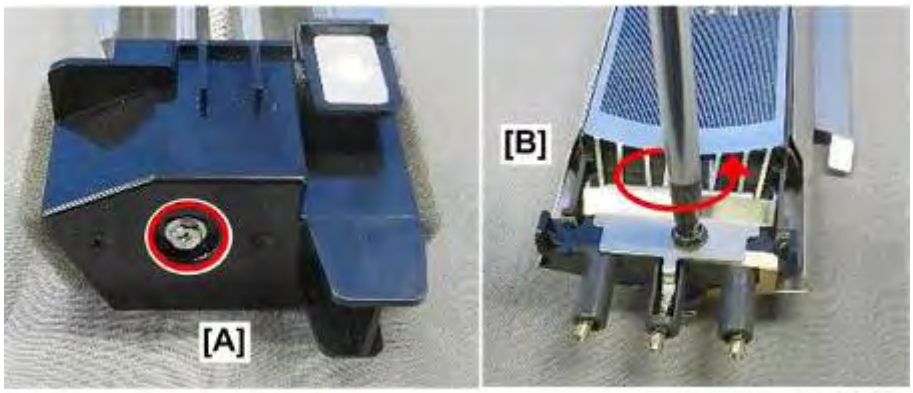
d1792978

- Separate sensor from bracket (x3).

4.10.6 CHARGE CORONA WIRES, GRID, CUSHIONS, WIRE CLEANER

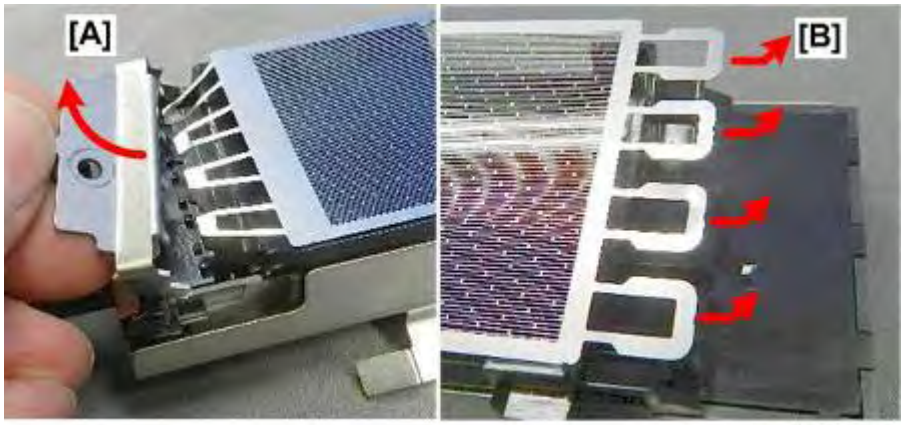
Preparation

- Remove front edge cover (x3).
- Remove the charge unit. page 4-113



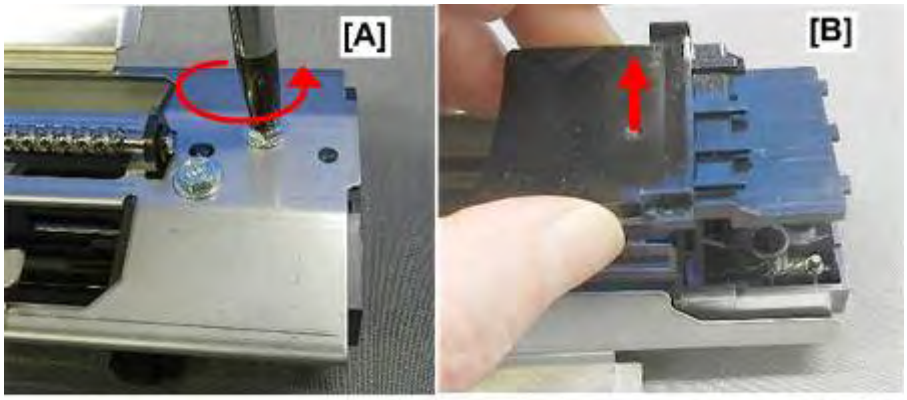
d1792989

1. Remove front cover plate [A], and then remove (x1).
2. Disconnect rear shield plate [B] (x1).



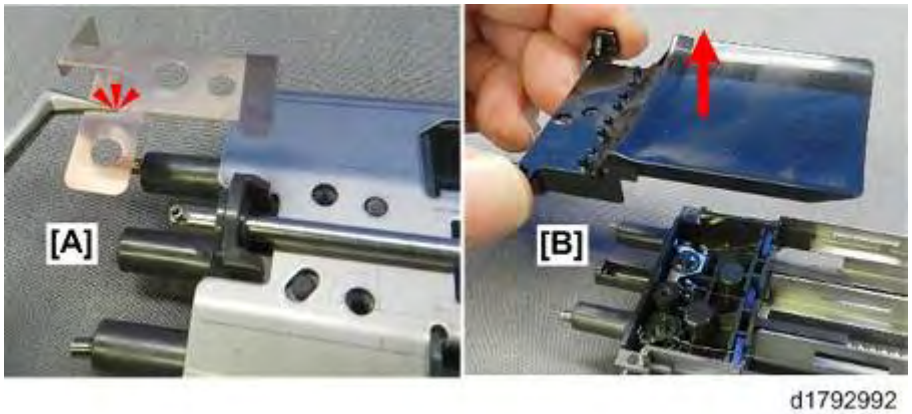
d1792990

3. Slowly, remove shield plate [A]. The tines of the plate are connected to the grid.
4. Disconnect grid [B] on the other end of the unit.
5. Remove the grid.



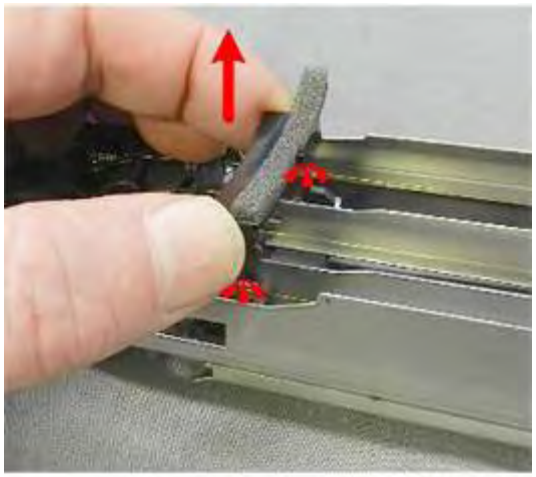
d1792991

6. Turn the unit over, and then remove screw [A] at the front (x1).
7. Turn the unit over again, and then remove cap [B].



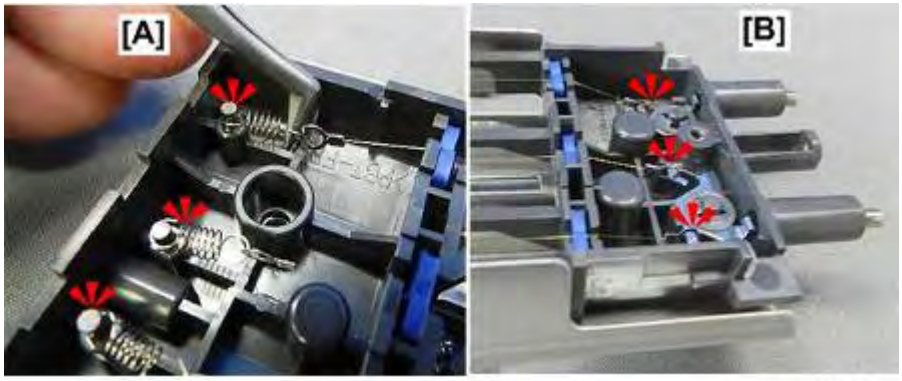
d1792992

8. Turn the unit over and remove ground plate [A] at the rear.
9. Turn the unit over again, and then remove cap [B].



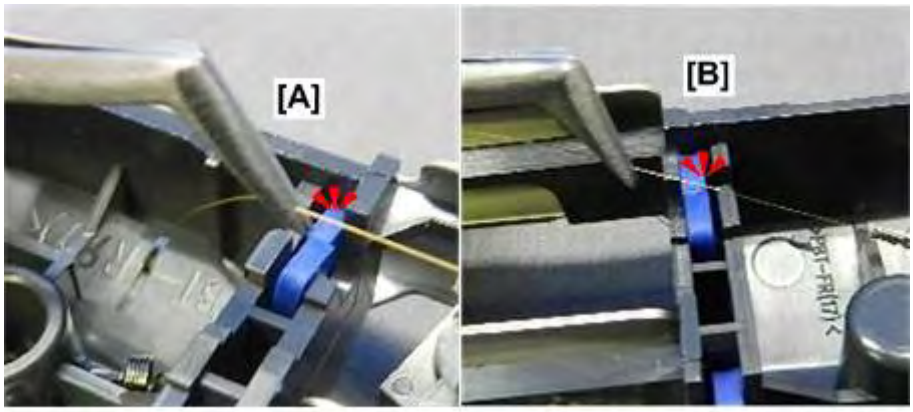
d1792993

10. Pull straight up to release, and then remove sponge bracket.



d1792994

11. At front, disconnect charge corona wires [A] (x3).
12. At rear, disconnect wires from the posts.



d1792995

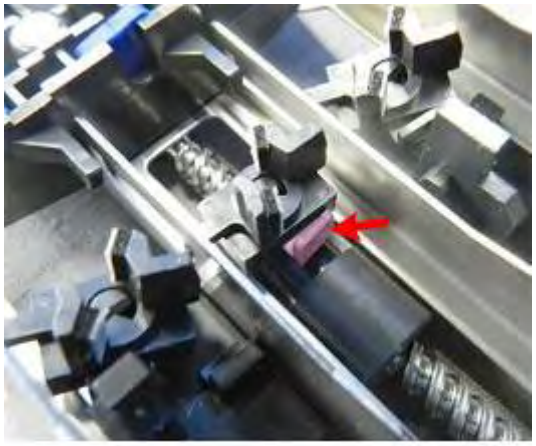
Important

- The charge corona wires are very brittle and break easily.
- Remove and handle them carefully.
- Avoid touching the wires with bare hands.

13. Disconnect each wire from rubber brackets [A] and [B].

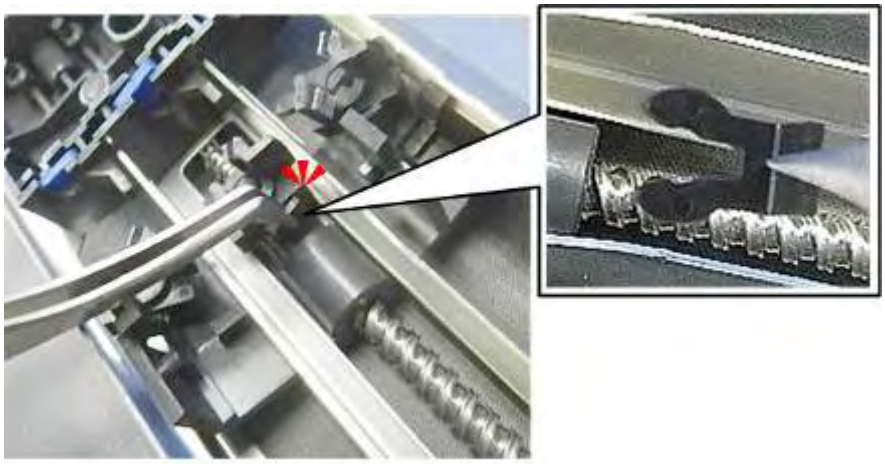
d1792996

14. Remove each rubber bracket (x6).



d1792997

15. Each cleaning pad bracket is held in place by a snap ring.



d1792998

16. Pull off snap ring to disconnect each cleaning pad bracket (x3).

d1792999

17. Remove each cleaning pad bracket.

d1792923

18. When you install the unit in the machine, be sure to align the charge unit on its left plate and rail [A] before you push it into the machine [B].

After Charge Corona Unit Replacement

1. After re-assembling the machine, open the left and front doors.
2. Turn the machine on.
3. Enter the SP mode and do SP7622-013 to 017 to reset the counters.

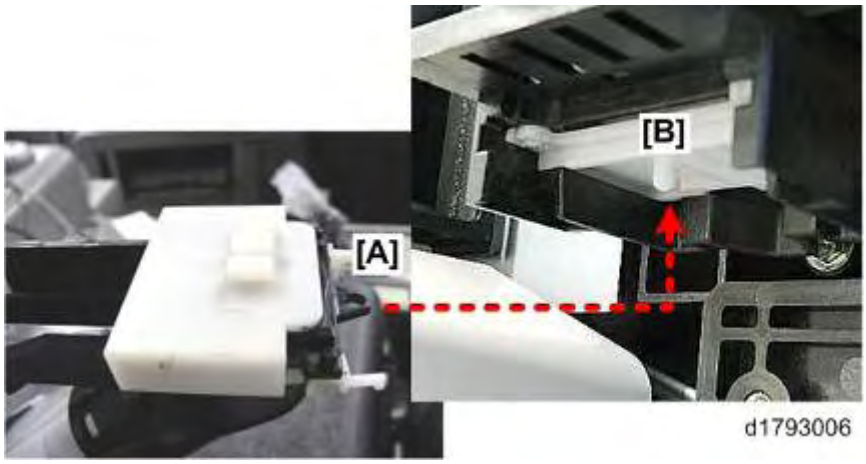
4.10.7 DEVELOPMENT UNIT REPLACEMENT

Note

- This section describes how to replace the development unit. If you need to replace only the developer, see the next section. You will need the empty toner bottle provided with the machine for this procedure.

Draining Developer

- Switch the machine off.
- Open the front doors.



d1793006

- Set hole [A] of the toner bottle on the boss [B].

d1793008

- Push the bottle in until you hear it click.
- With the front doors still open, turn the machine on.
- Enter the SP mode and do SP3022-001 to start draining the developer.

Note

- The developer requires about 150 sec. to drain completely.
- If the operation fails, the machine will alert you with a message. Do SP3023-001 to check the result, and then repeat from Step 3.

- The machine will alert you when the operation is finished.

d1793029

- Switch the machine off. Remove the bottle, and then re-attach its seal to prevent spillage.
- Remove the old development unit, and replace it with the new unit.

Note

1. Do not re-attach the front edge cover.

Filling the New Unit with Developer

d1793021

- Add the contents of the small (145 g) bag of developer that comes as an accessory with the new development unit through the open port [A] of the new development unit.
- Keep the front door open and turn the machine on.
- Enter the SP mode, open SP3029-001 and make sure that it is set to the default value (400).

Note

- This step prevents incorrect detection by the development unit TD sensor.

- Remove the developer bottle from its package, and shake it from side to side 3 times, and then shake up and down about 3 times to loosen the developer.

d1793027

- Attach the developer bottle to the machine. You will hear a click when it locks in place.

d1793028

- Remove the bottle seal.
- Enter the SP mode and do **SP3024-001** to start filling.

Note

1. Filling requires about 60 sec. The machine will alert you with a message after filling is completed. If the operation fails, first make sure that you have removed the seal. Do SP3025-001 to check the result, and then repeat from Step 7.

- Remove the bottle.
- Do SP7622-003 to reset the counter.
- Close the doors.
- The machine automatically initializes the development unit TD sensor.
- After successful initialization of the TD sensor, the machine will automatically execute process control.

Note

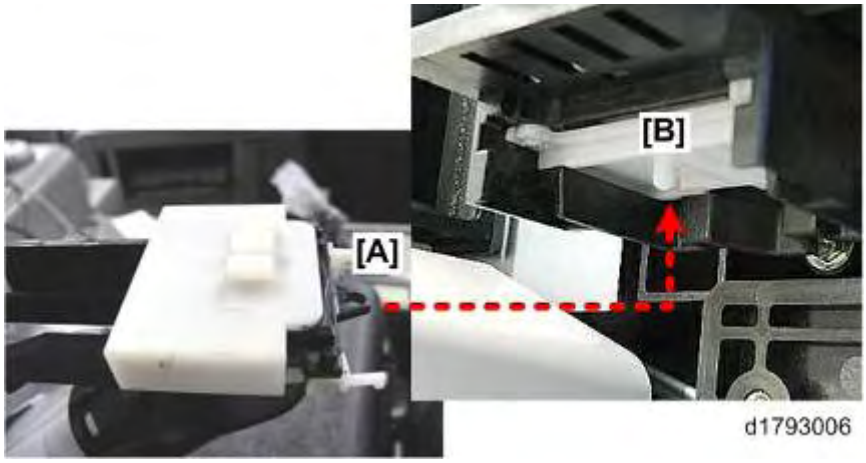
- If a problem occurs, the machine will issue an SC code. Refer to the SC code tables, and then follow the procedure to correct the problem.
- Next, do SP3030-001 to initialize the TD sensor.
- Do SP3011-002 to force process control to execute manually.

- Do SP3012-001 to check the results of the process control execution.

4.10.8 DEVELOPER REPLACEMENT

Draining Developer

- Switch the machine off.
- Open the front doors.



- Set hole [A] of the toner bottle on the boss [B].

d1793008

- Push the bottle in until you hear it click.
- With the front doors still open, turn the machine on.
- Enter the SP mode and do SP3022-001 to start draining the developer.
- ⇒ When developer drain is complete perform SP7622-003 to reset the counter.

  Note

  - The developer requires about 150 sec. to drain completely.
  - If the operation fails, the machine will alert you with a message. Do SP3023-001 to check the result, and then repeat from Step 3.
- Turn the machine off after the machine alerts you when the operation is finished.

d1793029

- Remove the bottle, and then re-attach its seal to prevent spillage.

Adding New Developer

- Make sure that the front doors are still open, and then turn the machine on.
- Shake the new developer bottle up and down and then side to side about 3 times to loosen the developer.

d1793027

- Attach the developer bottle to the machine. You will hear a click when it locks in place.

d1793028

- Remove the bottle seal.
- Enter the SP mode and do **SP3024-001** to start filling.

Note

1. Filling requires about 60 sec. The machine will alert you with a message after filling is completed. If the operation fails, first make sure that you have removed the seal. Do SP3025-001 to check the result, and then repeat from Step 5.

- Remove the bottle.
- Unnecessary step removed.
- Close the doors.
- The machine automatically initializes the development unit TD sensor.
- After successful initialization of the TD sensor, the machine will automatically execute process control.

Note

- If a problem occurs, the machine will issue an SC code. Refer to the SC code tables, and then follow the procedure to correct the problem.
- Next, do SP3030-001 to initialize the TD sensor.
- Do SP3011-002 to force process control to execute manually.

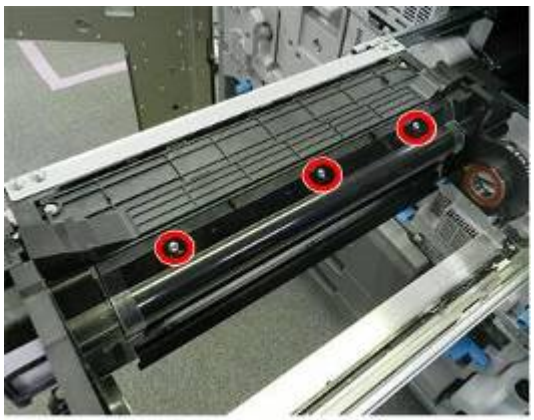
- Do SP3012-001 to check the results of the process control execution.

4.10.9 CLEANING DOCTOR BLADE, DEVELOPMENT ROLLER CLEANING

Note

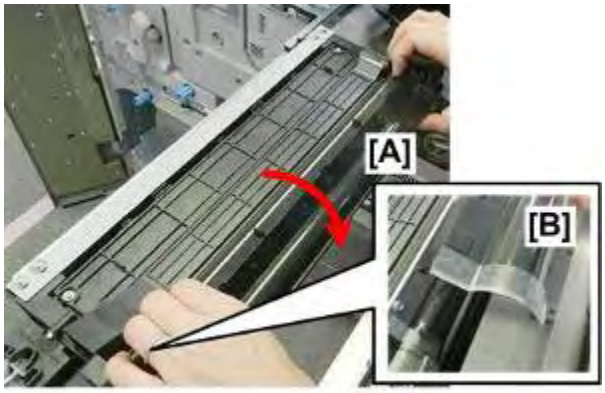
- Do this procedure at 600k PM.
- Do this procedure on EM visits made for image quality problems originating in the PCDU.

- Remove the PCDU. page 4-113
- Remove the drum cleaning unit. page 4-115
- Remove the drum. page 4-116
- Lay a drop cloth under the PCDU.



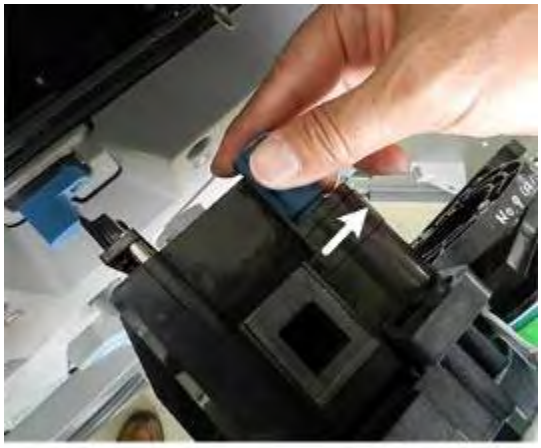
d1793009

- Disconnect cover (x3).



d1793010

- Remove cover [A] carefully to avoid damaging the tape [B] on both ends of the cover.

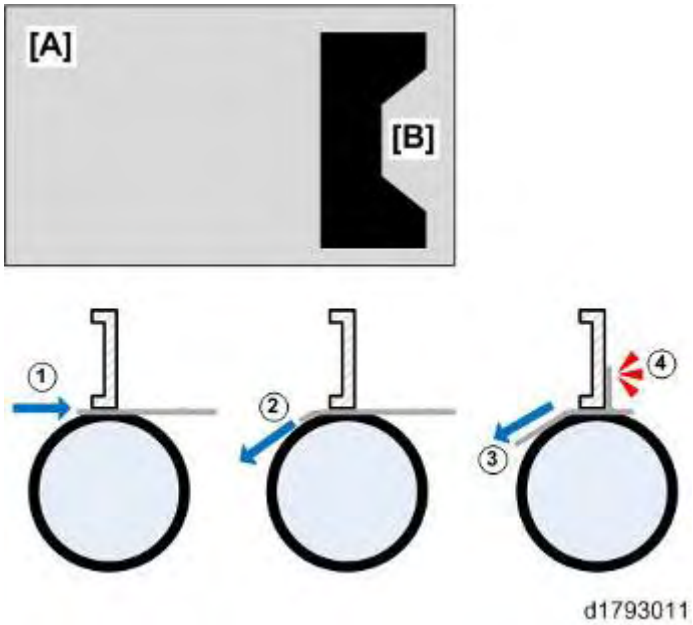


d1793019

- Use the accessory jig handle to rotate the development roller in the direction of the arrow until you see no more developer on the roller.

d1793012

- Insert the jig mylar provided.



d1793011

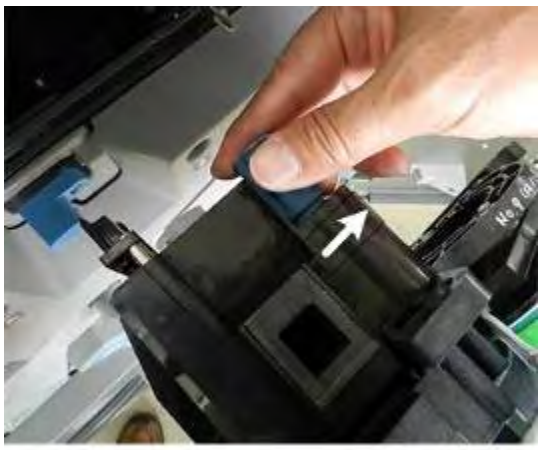
- Jig [A] has a cut-out and flap [B].
- Insert jig ① between the development roller and doctor blade.
- Lower edge of jig to about a 45-degree angle ②.
- Slowly, pull the jig out. As you pull, the flap should catch on the back of the doctor blade and snap to the vertical against the back of the blade ③.

d1793013

- Insert the jig, and then pull it toward you slightly so the flap catches up on the blade.
- Move the jig from side to side to remove toner from the blade.

d1793022

- Turn the flat jig to the side, and then remove it.

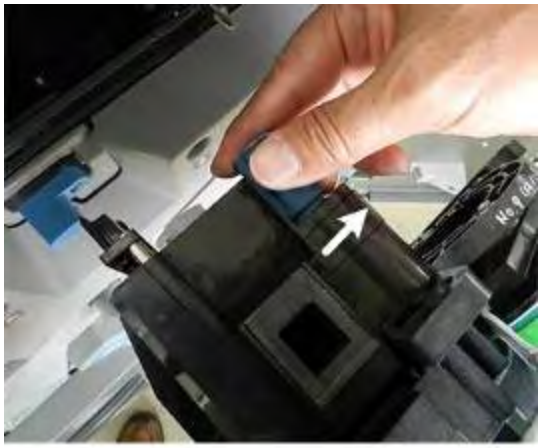


d1793019

- Set the jig handle again, and rotate it about 1/4 turn in the direction of the arrow.

d1793015

- Clean up the loose developer with a vacuum cleaner.
- Repeat Steps 8 to 11 three times.



d1793019

- Finally, set the jig handle again and turn it more than 10 full rotations in the direction of the arrow.

Note

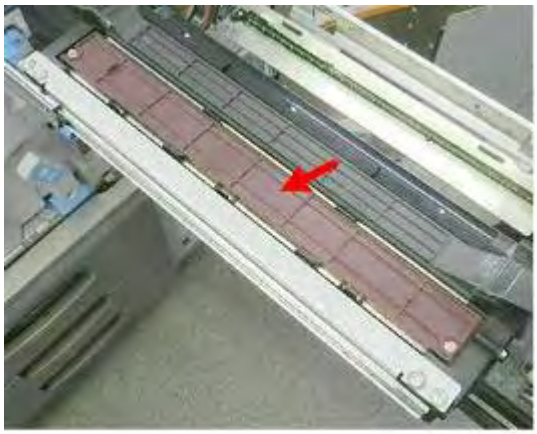
1. If you make a mistake and rotate it in the opposite direction, turn the jig 20 times in the direction of the arrow. If you fail to do Step 14, or if the jig is rotated in the wrong direction and the problem is not corrected, the developer will not be balanced correctly.

d1793020

- Rotate the jig handle one more time. When you see the fresh developer on the development roller, you are finished.

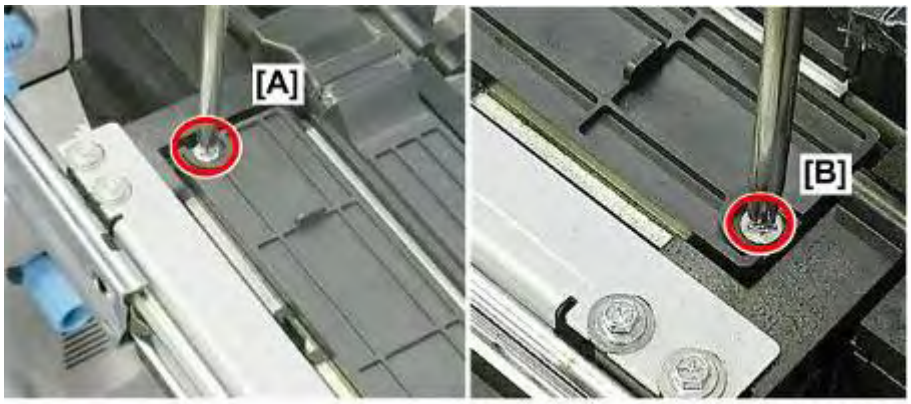
4.10.10 VENT FILTER

- Pull out the PCDU.



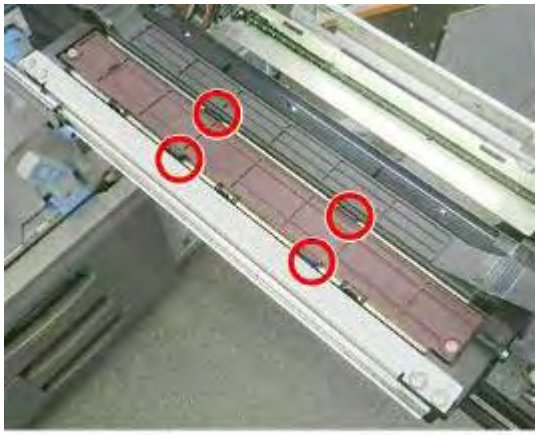
d1793001

- The vent filter is under the flat cover on the left.



d1793002

- Disconnect cover at [A] and [B] (x2)



d1793023

- Free the cover (x4).

d1793003

- Remove cover.

d1793024

- Carefully, use the tip of a flat head screwdriver to free the filter [A] and then remove it. (See note below.)

d1793025

Important

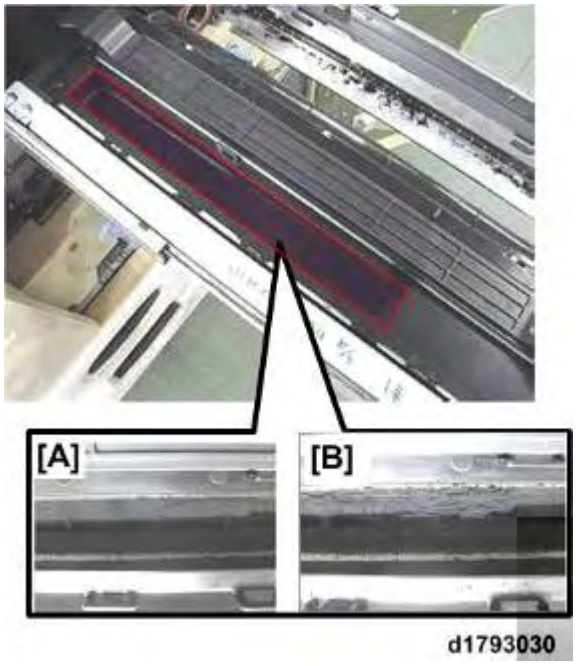
1. Work carefully to avoid damaging the sponge seal.

d1793026

- Hold the filter over a waste bin and gently tap it with the tip of a screwdriver to remove loose developer.

Important

1. To avoid damaging the filter mesh, never use a vacuum cleaner to clean the filter.



d1793030

- Before you re-install the filter, check the casing where the filter was removed:
  - The area should be free of toner [A].
  - There should be no excess toner as shown at [B].

d1793031

- If you see excess toner, use the tip of a screwdriver to lightly tap the sides of the casing so the excess will fall down into the unit.

4.11 ITB UNIT

4.11.1 ITB UNIT REMOVAL

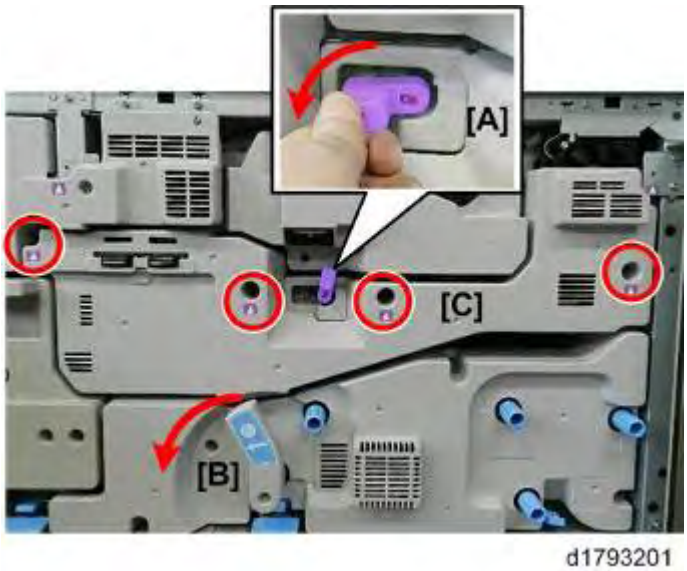
Important

- During removal and installation of the ITB cleaning unit, keep it straight and do not allow it to tip to the right.

ITB Cleaning Unit

d1793200

1. Open the front doors.
2. The ITB cleaning unit and ITB unit (belt unit) comprise the ITB unit.

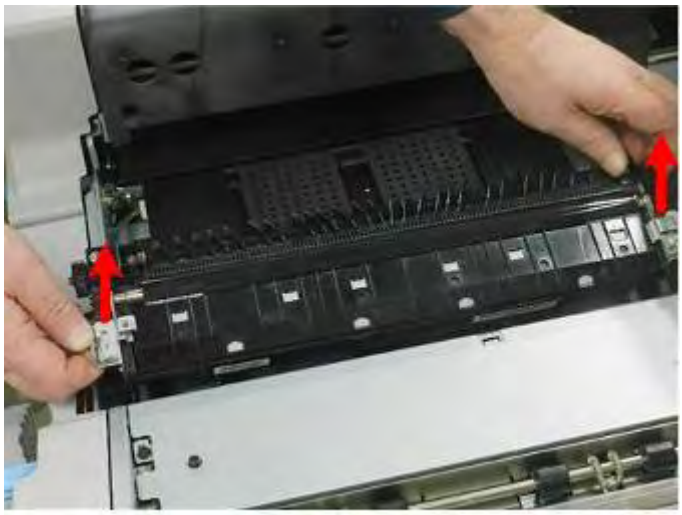


d1793201

3. Lower the ITB lever [A]. This lowers the image transfer belt.
4. Lower lever **C1** [B].
5. Disconnect cover [C] (x4).

d1793202

6. Remove the cover.
7. Pull out the drawer.



d1793704

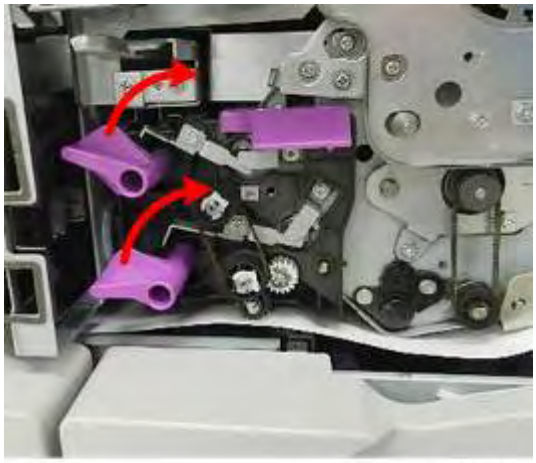
8. Remove the PTR unit. page 4-335

Note

- When removing only the ITB cleaning unit, it is not necessary to remove the PTR unit.

d1793215

9. Pull out the drawer, and then lay a large sheet of paper below the ITB cleaning unit.
10. Push the drawer into the machine.



d1793203

11. Rotate both levers up to the right. This unlocks the ITB cleaning unit.

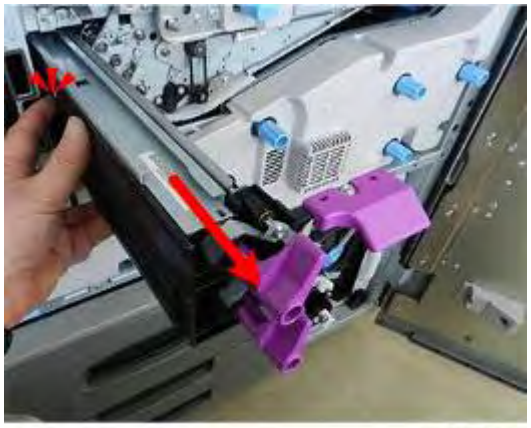
d1793204

12. Disconnect the ITB cleaning unit (x1).

13. Pull out the drawer so the paper catches any toner spill.

d1793205

14. Slowly, pull the unit out until it catches on the left and stops.



d1793206

15. On the left side of the unit, press the release lever, and then pull the unit out of the machine.

d1793207

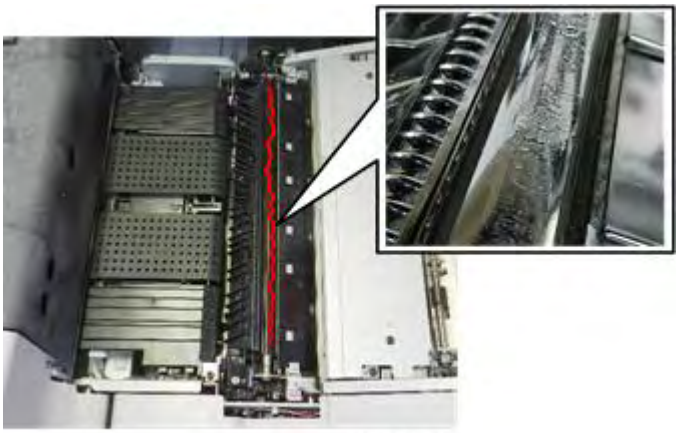
16. Lay the unit on a flat clean surface

ITB Unit

Preparation

Important

- Before removing the ITB unit, be sure to rotate both levers of the ITB cleaning unit and the belt release lever down to the left.

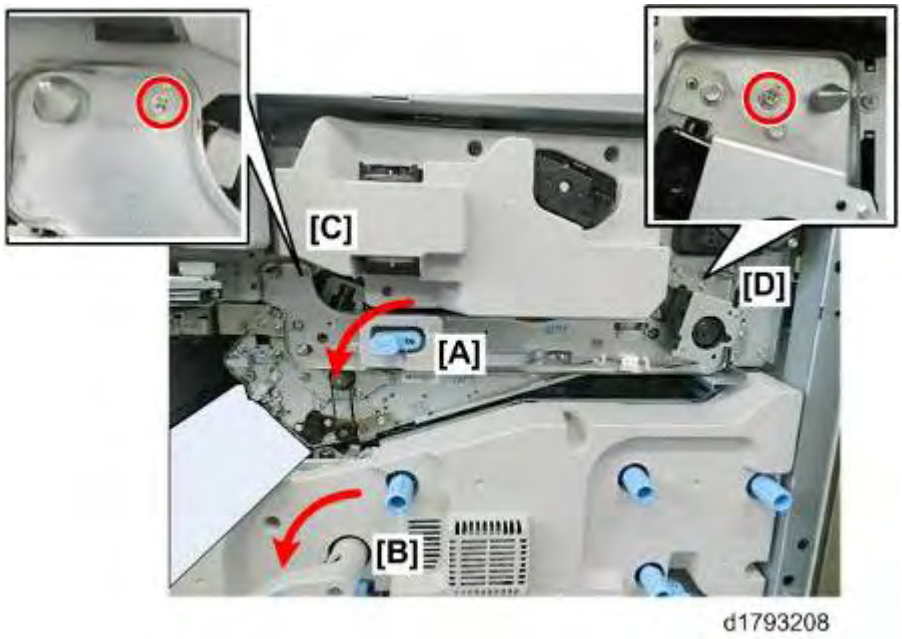


d1803101

Important

- The PTR unit must be removed before removal of the ITB unit. If the ITB unit is removed with the PTR unit in the drawer, the edge of the ITB unit will scour and ruin the surface of the PTR below as the ITB unit is pulled from the machine. This can permanently damage the PTR as shown above.

- Remove the ITB cleaning unit. (See previous section)
- Prepare a clean place to lay the ITB unit. If you are going to lay it on the floor, cover the location with a clean drop cloth or paper.



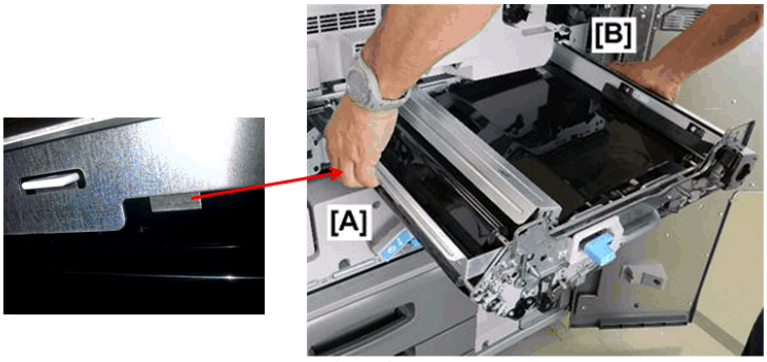
d1793208

1. Make sure that both levers, [A] and [B] are down. These levers must be down before you can remove the ITB unit.
2. Disconnect the ITB unit on the left at [C] (x1).
3. Disconnect the ITB unit on the right at [D] (x1).

4. Grip the handle, and then pull the unit out partially.

CAUTION

- The unit weighs about 12 kg (26 lb.).
- The unit is not on rails and will fall if you pull it out completely with only one hand.



Important

- When pulling out the unit, release the lock on the left side of the rail.

5. Grip the unit firmly at [A] and [B] then slowly pull it out of the machine.

d1793101

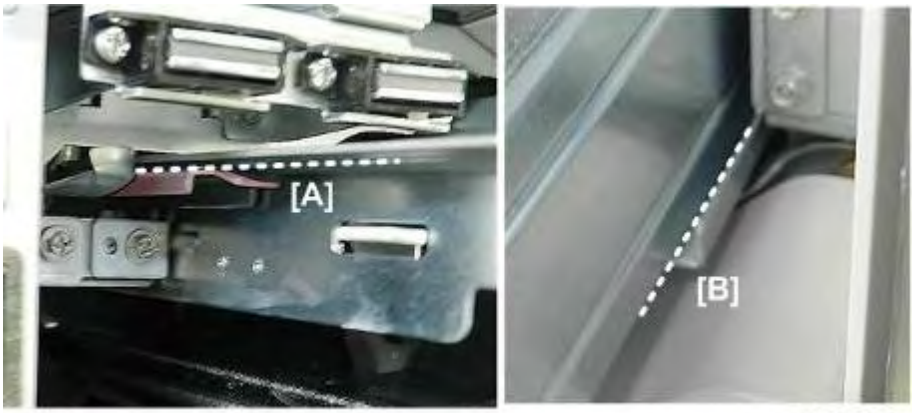
6. Set the ITB unit on a flat clean surface with the front side up.

Re-installation

d1793238

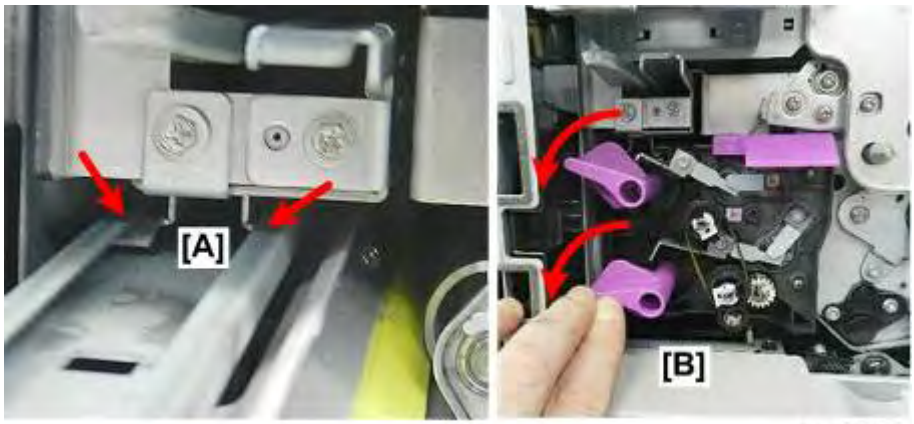
- When you re-install the ITB unit, if the spring catches on the unit push the spring to allow the unit to slide in.

ITB Cleaning Unit, ITB Unit Re-installation



d1793212

1. When you re-install the ITB unit, make sure the rails on the left [A] and on the right [B] are aligned correctly before you push the unit into the machine.



d1793213

2. When you re-install the ITB cleaning unit, make sure that the arms on top of the unit are hung correctly onto the rails [A] before you push the unit into the machine.
3. After installing the cleaning unit, rotate both levers [B] down to lock them.

d1793214

4. Rotate the ITB lever up. (The right front door will not close if this lever is down.)

4.11.2 BELT REPLACEMENT

Belt Removal

Important

- Most procedures for the ITB unit require removing the transfer belt.
- Handle it carefully. Avoid touching the surface of the belt with bare hands.
- Store it carefully while the ITB unit is being serviced.

Preparation

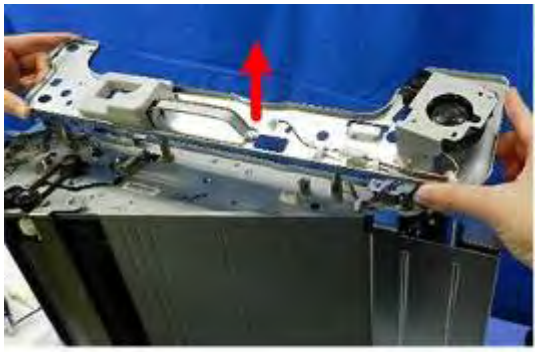
- Remove ITB unit page 4-169

d1793101

1. Set the ITB unit on its back side with the front side up.

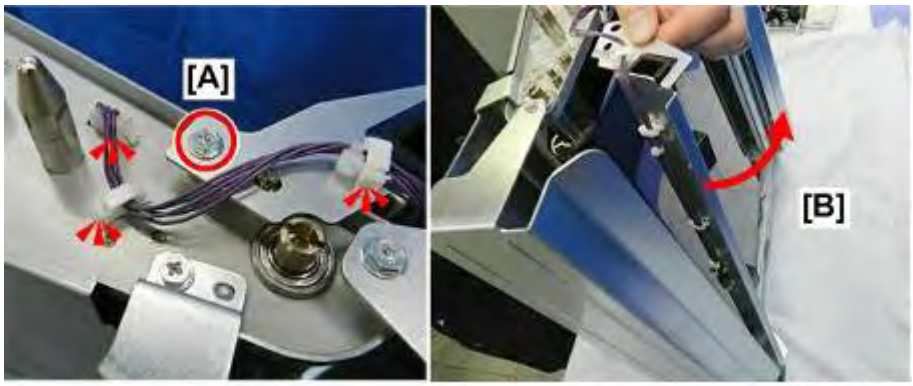
d1793102

2. Disconnect handle plate (x2, x1).



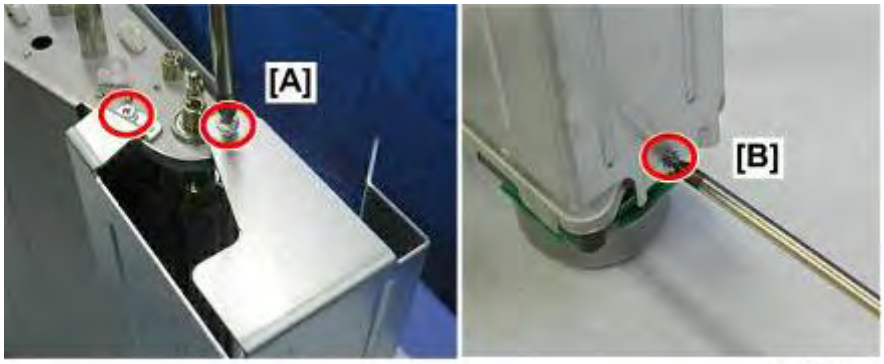
d1793103

3. Remove handle plate.



d1793104

4. Disconnect ID sensor plate at front [A] (x1, x1, x1).
5. Disconnect at [B].



d1793105

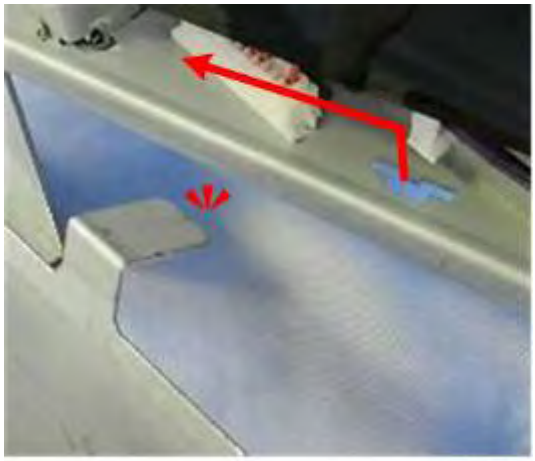
6. Disconnect right end plate at front [A] (x2).
7. Disconnect plate at rear [B] (x1).

d1793106

8. Remove right end plate.

d1793107

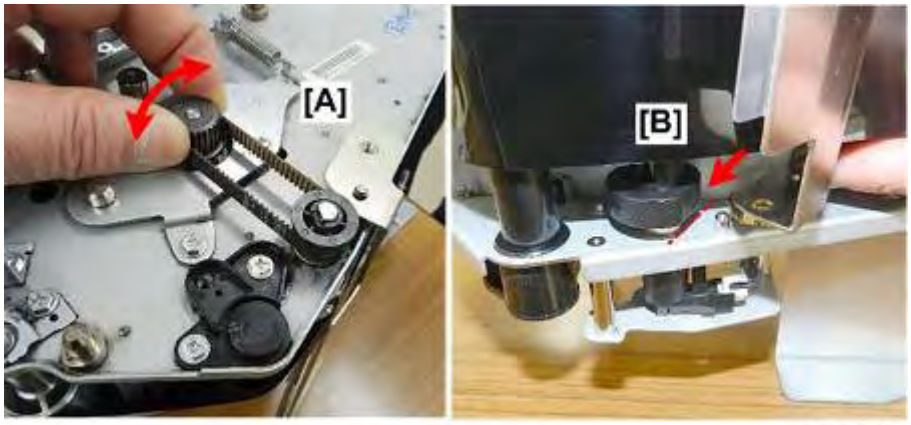
At front, disconnect bottom plate (x2).



d1793108

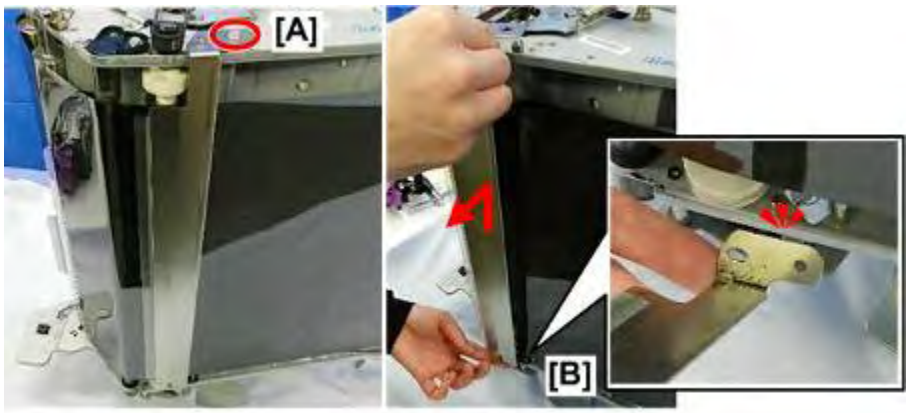
Important

- Note where the tabs must be inserted into the holes for re-assembly.



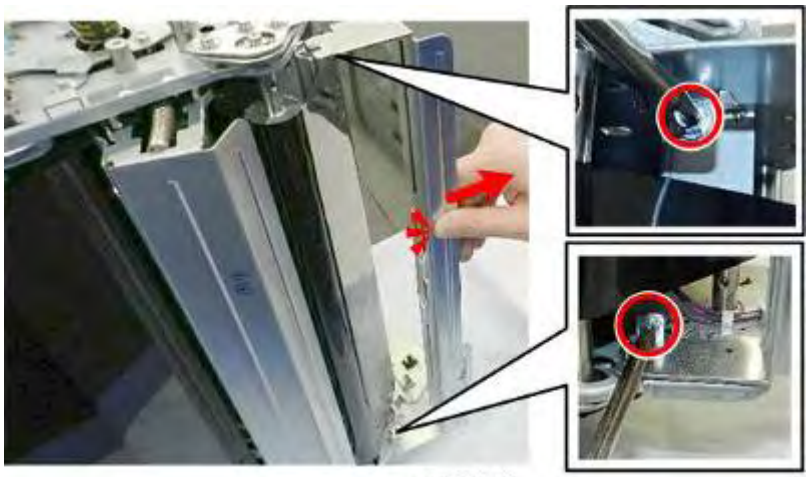
d1803102

9. Before removing the bias roller plate, turn the belt [A] on the front so the flat side of the cam [B] is visible on the right. (This will make the plate easier to remove.)



d1793109

10. At bottom, front, disconnect bias roller plate [A] (x1).
11. At bottom, rear, disconnect the plate holes from pins [B].

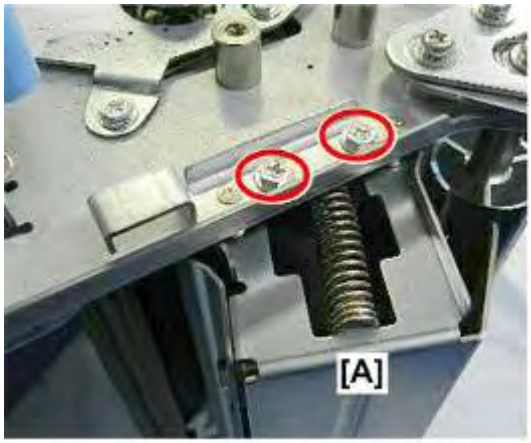


d1793110

12. Hold the brace on the **right** side of the unit as you disconnect the screws to prevent it from falling and damaging the belt (x2).

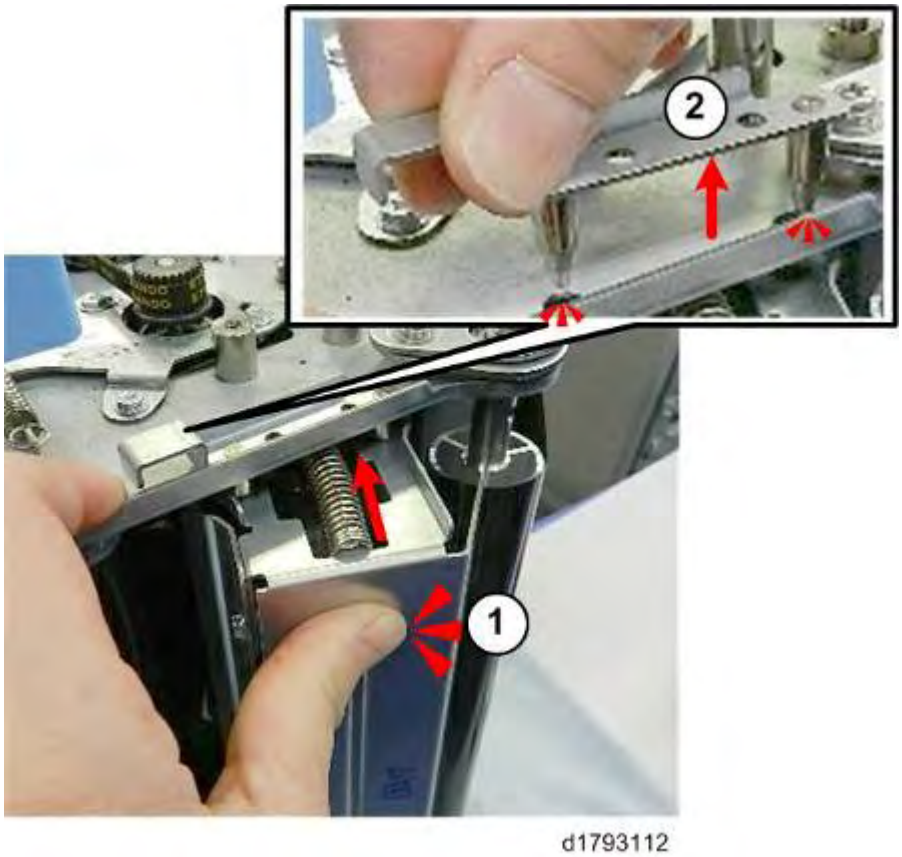
Important

1. Also, hold the brace with one hand when you re-install it to prevent it from damaging the belt.



d1793111

13. At front, disconnect belt tension plate [A] (x2.)



d1793112

14. While pressing firmly down on the plate ①, remove the lock plate ②.

d1793113

15. Remove tension plate unit.

d1793114

16. Slowly, pull the transfer belt up and off the ITB unit.

Important

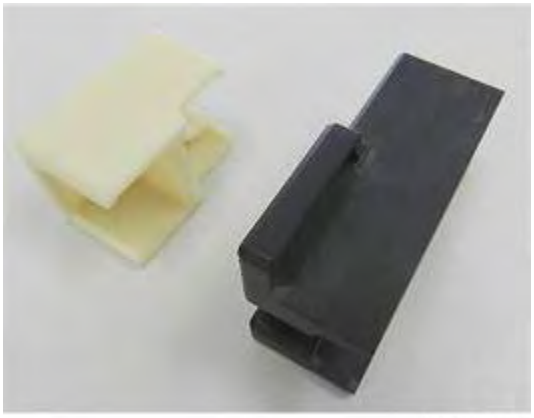
- If the belt is to be discarded, you do not have to be careful about touching the surface of the belt.

17. Either edge of the belt can be installed facing forward.

Belt Re-installation

Note

1. You need the two jigs to position the belt correctly during re-installation.



d1803105

- Two jigs are provided to position the belt correctly for re-installation.

Note

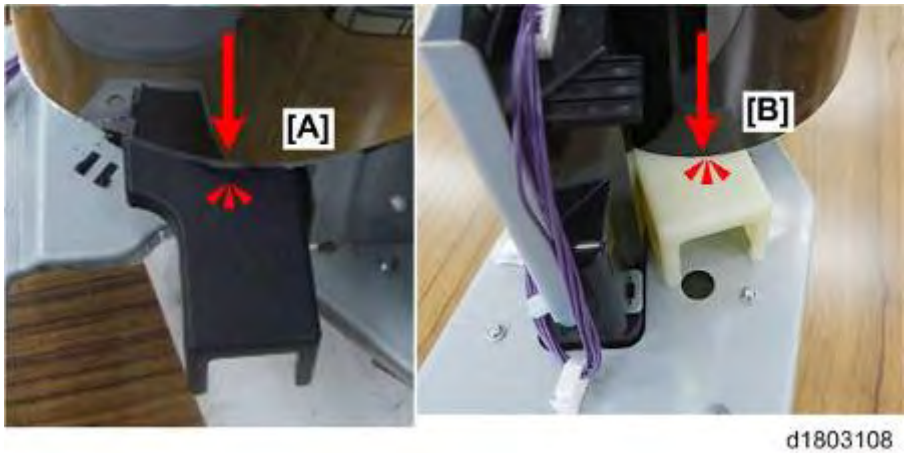
1. The white jig is for the motor side of the ITB unit.
2. The black jig is for the push-switch side of the ITB unit (at the horizontal PTR idle roller).

d1803106

- Set the short jig to the end of the drive roller on the right.

d1803107

- Set the long jig to the front shaft of the roller on the left.

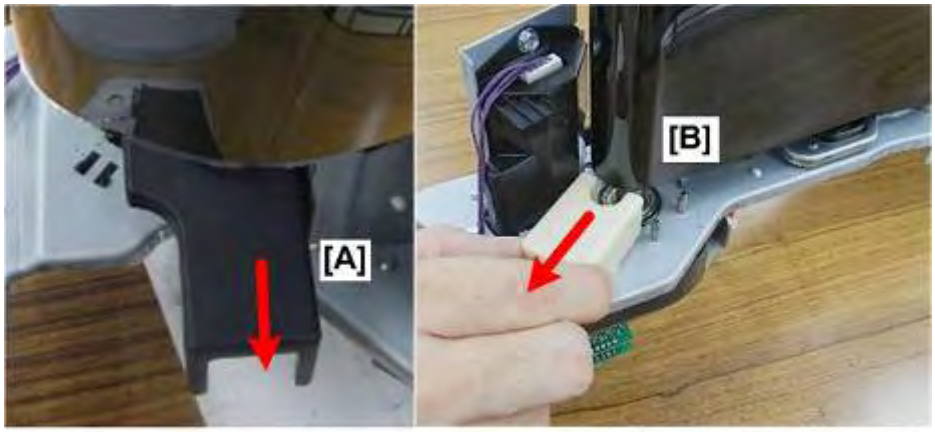


d1803108

Note

- Either edge of the belt can be lowered over the ITB unit.

- When you set the belt, the front edge of the belt will go down as far as the jigs on the left [A] and on the right [B]. This holds the belt at the correct position.



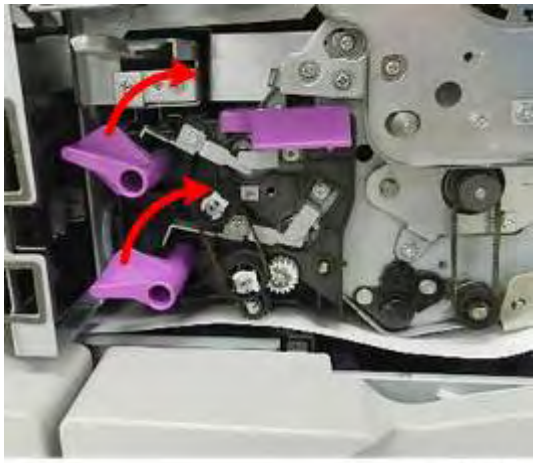
d1803109

- Re-attach the belt tension plate.
- Be sure to remove the jig on the left [A] and right [B].

After Replacement of ITB

Do this procedure after installation of a new ITB.

1. Make sure that the machine is turned off.
2. Open the left and right door of the main machine.



d1793203

3. With the ITB unit and ITB cleaning unit both installed, make sure that the levers of the ITB cleaning unit are up so the lubricant blade and cleaning blade are separated from the belt.
4. Remove the PTR. page 4-335
5. Remove the drum cleaning unit. page 4-115

Note

- Normally the ITB and PTR rotate together because they are driven by the same motor. The PTR must be removed before switching on the belt lubrication mode to prevent the cleaning blade from hanging up and scouring the PTR during idle rotation.
- Similarly, the drum cleaning unit must also be removed before switching on the belt lubrication mode to prevent the cleaning blades of the drum cleaning unit from hanging up and scouring the surface of the bare drum during idle rotation.
- The drum cleaning unit and ITB cleaning unit both have lubricant bars, but toner also acts as a lubricant during normal operation. Due to the absence of toner in the belt lubrication mode, the lubricant alone is not enough to prevent the blades from hanging up on and scouring the drum, so the drum cleaning unit should also be removed.

6. Re-attach the front edge cover.
7. Turn the main machine on.
8. Enter the SP mode, and then do SP2310-001 to enter belt lubrication mode.
9. After touching [EXECUTE] close the left and right doors of the machine.
10. Wait about 5 min. for the machine to lubricate the ITB.
11. A message on the operation panel will tell you when the procedure is finished.
12. Once again, open the left and right door of the machine.
13. Turn the main machine off.
14. Re-install the PTR unit.
15. Re-install the drum cleaning unit.
16. Turn the levers to close the gap between the lubricant blade and cleaning blade.
17. Turn the main machine on.
18. Enter the SP mode, and then reset the PM counters for all the replaced parts.
19. Leave the SP mode, and then close the front doors.
20. Process control will start automatically.
21. The machine will display “Ready” after process control executes successfully.
22. Enter the SP mode, and then do SP3012-001 to confirm successful completion of the process control execution.
23. If process controls fails, correct the problem by following the steps recommended for releasing the SC code.
24. After correcting the problem, service control will not execute automatically, so you will need to execute process control manually with SP3011-002.

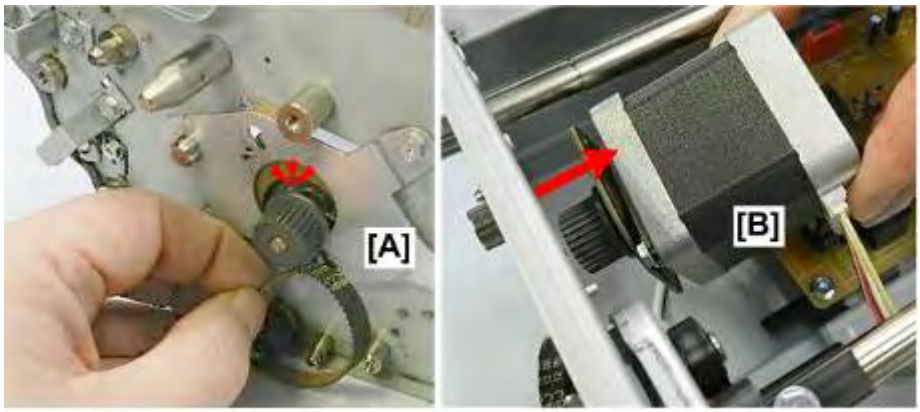
4.11.3 PTR SEPARATION MOTOR

Preparation

1. Remove ITB unit page 4-169
2. Remove transfer belt page 4-177

d1793117

1. Disconnect motor bracket (x2).



d1793118

2. Disconnect belt [A] at front (x1).
3. Pull motor [B] away from the frame.

d1793119

4. Disconnect harness and motor (x1, x1).

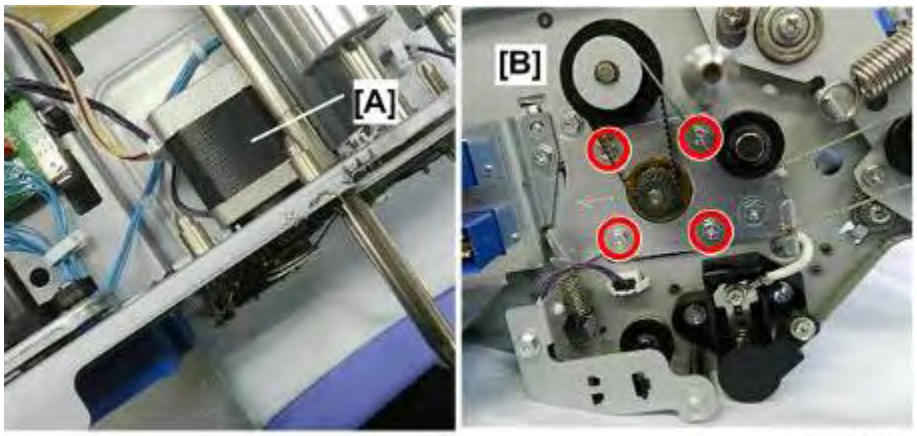
d1793120

5. Separate motor and collar bracket (x2).

4.11.4 BELT CENTERING MOTOR

Preparation

- Remove ITB unit page 4-169
- Remove transfer belt page 4-177



d1793121

1. The motor [A] is at the front right corner of the ITB unit.
2. On the front side, disconnect motor bracket [B] (x4).

d1793122

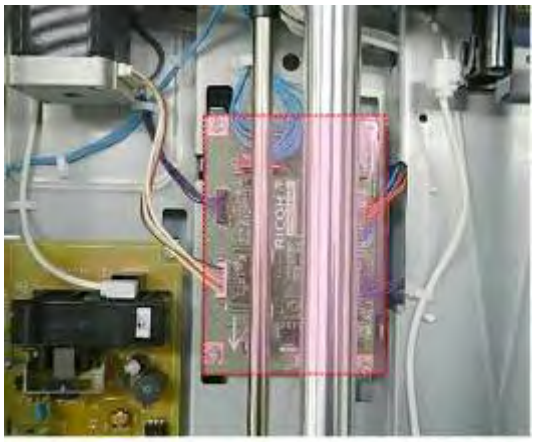
3. Disconnect belt [A] (x1).
4. Disconnect motor [B], and then remove it (x1).

d1793123

4.11.5 TDRB

Preparation

- Remove ITB unit page 4-169
- Remove transfer belt page 4-177



d1793124

- The TDRB is in center of the unit.

d1793125

- Disconnect the board (x8, x4).

d1793126

- Remove the board.

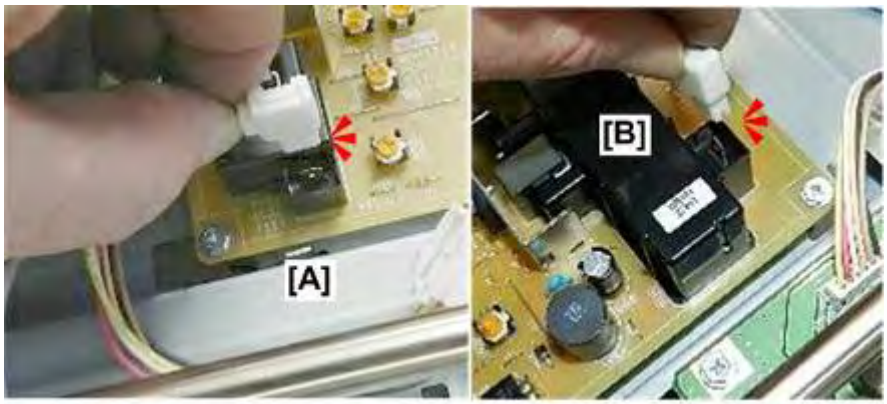
4.11.6 TRANSFER POWER PACK

Preparation

1. Remove ITB unit page 4-169
2. Remove transfer belt page 4-177

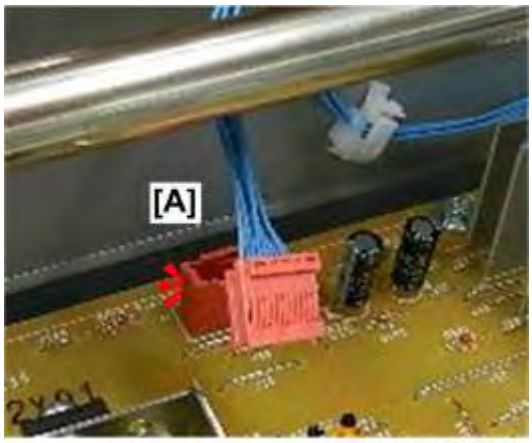
d1793127

- The power pack sits to the left of the TDRB.



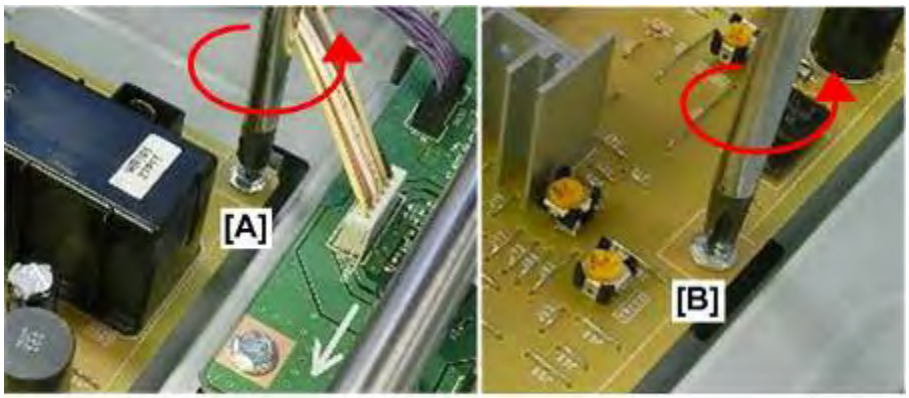
d1793128

- Disconnect the board at the corners [A] and [B] (x2).



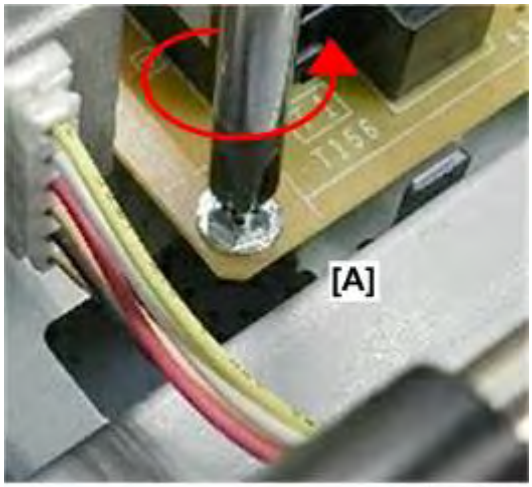
d1793159

- Disconnect the board at left edge [A] (x1)



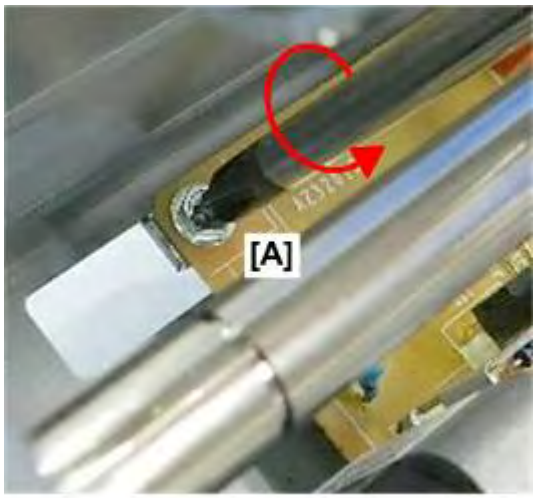
d1793129

- Disconnect upper right corner [A] right edge [B] (x2).



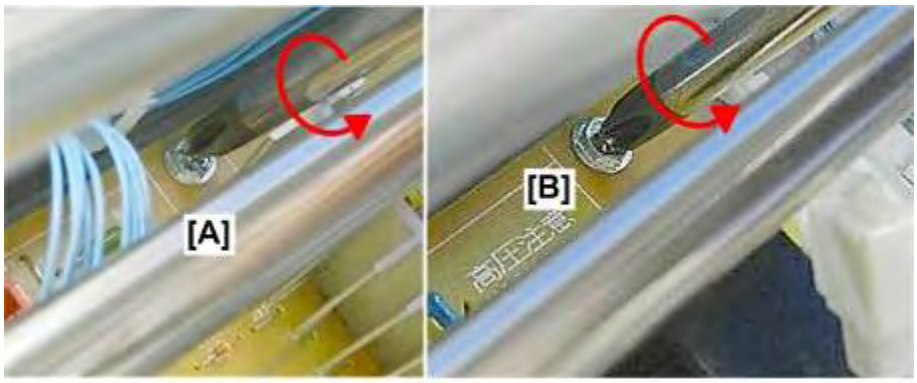
d1793160

- Disconnect lower right corner [A]] (x1).



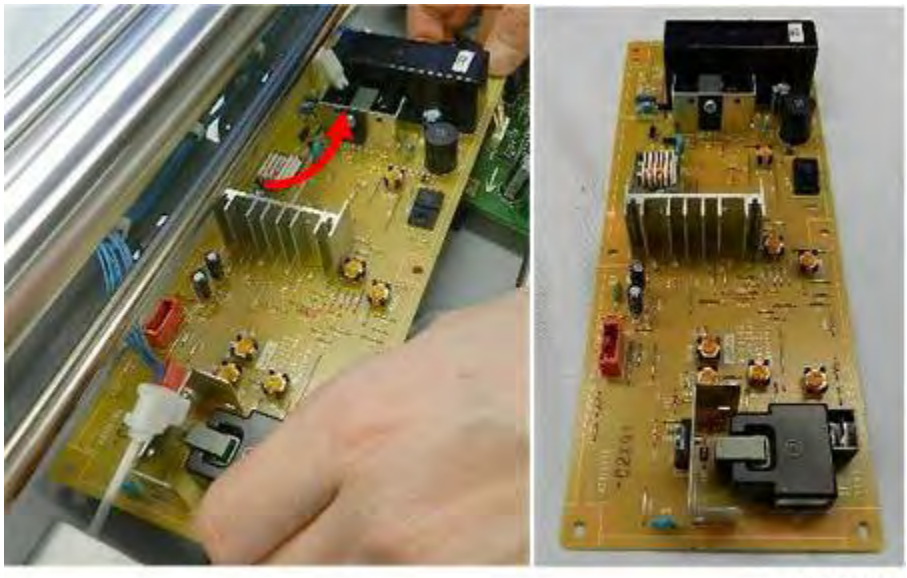
d1793130

- Disconnect lower left corner [A] (x1).



d1793161

- Disconnect left edge [A], [B] (x1).



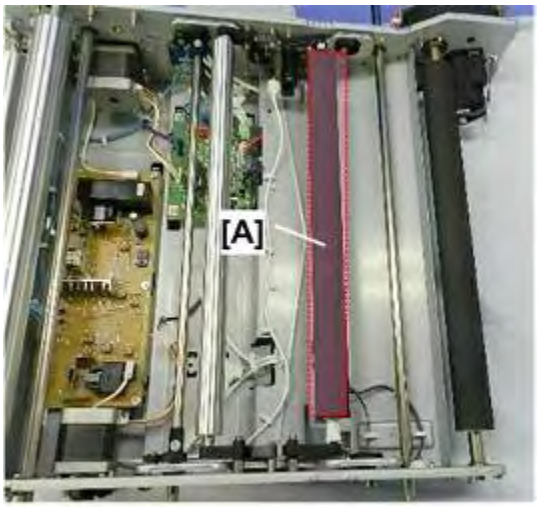
d1793131

- Remove the board.

4.11.7 TRANSFER ROLLER

Preparation

1. Remove ITB unit page 4-169
2. Remove transfer belt page 4-177



d1793132

- [A] is the transfer roller.

d1803104

- Turn the lever to raise the transfer roller. This will make the roller easier to remove.

d1793133

Important

1. To avoid poor image quality, never touch the surface of the transfer roller with bare hands.

- At the rear, disconnect the end of the roller (x1).

- Slide the roller to the rear to disconnect it at the front, and then remove it.

After Transfer Roller Replacement

- Make sure that the machine is off.
- Open the left and right front door of the machine.
- Switch the machine on.
- Enter the SP mode.
- Reset the PM part counter for the transfer roller to zero.
- Leave the SP mode.
- Close the left door and right door of the machine.
- Process control will start automatically.
- A message on the operation panel will tell you that process control has completed.
- Enter the SP mode.
- Do SP3012-001 to confirm that the process control execution completed successfully.
- Leave the SP mode.
- This completes the procedure.

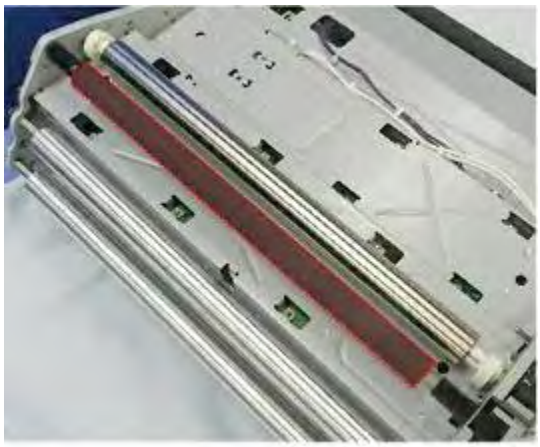
If Process Control Fails

1. If process control did not end successfully, the machine will issue an SC code.
2. Correct the problem by following the steps recommended for releasing the SC code.
3. After correcting the problem, process control will not execute automatically, so you will need to execute process control manually with SP3011-002.

4.11.8 BIAS ROLLER

Preparation

- Remove ITB unit page 4-169
- Remove transfer belt page 4-177



d1793135

1. The bias roller is at the bottom left side of the ITB unit. (Photo above shows ITB bottom side up.)

d1793136

2. At the front, disconnect the cap (x2).

d1793137

3. At the rear, disconnect the cap (x1).

d1793138

4. Remove center screw (x1).

Important

- To avoid poor image quality, never touch the surface of the transfer roller with bare hands.

d1793139

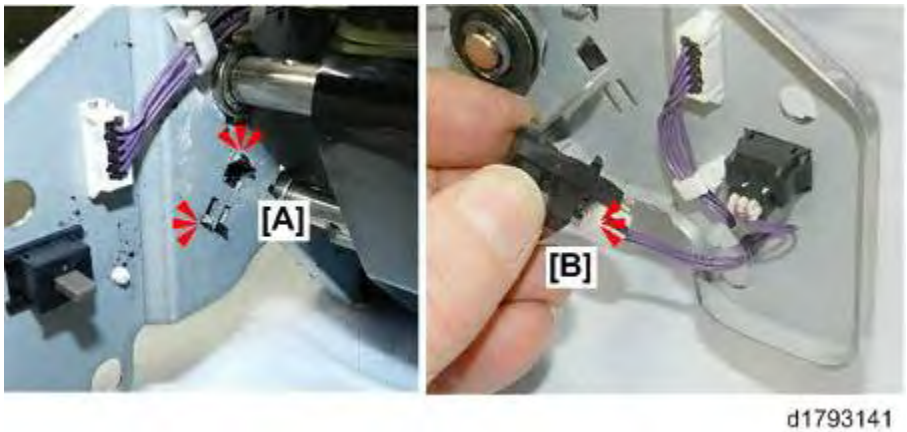
5. Remove the roller, while avoiding to touch the surface of the roller with bare hands.

4.11.9 BELT CENTERING ROLLER HP SENSOR

Preparation

1. Remove ITB unit page 4-169
2. Remove transfer belt page 4-177

- The sensor [A] is located at the left rear corner of the ITB unit,
- Disconnect spring [B].



- On the inner side of the frame, disconnect the sensor (x4).
- Carefully move the lever to make it easier to separate the sensor and its actuator.

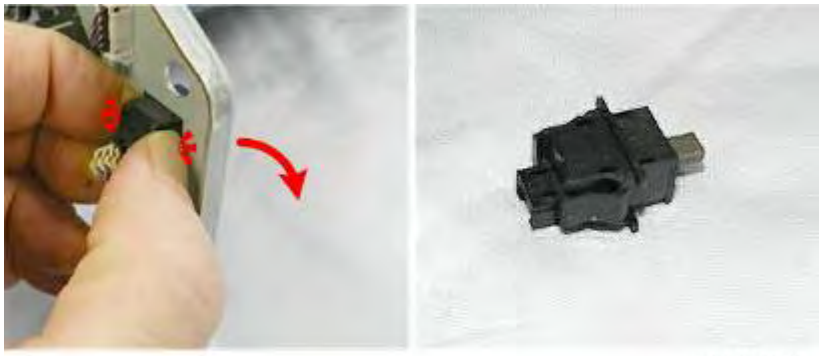
Note

1. If moving the lever loosened the guide wire, restore it to its original position.

4.11.10 CLEANING UNIT SET SWITCH

d1793143

- This switch [A] is on the far left side of the ITB unit. It can be removed after pulling out the front drawer.
- Disconnect the switch [B] (x1).



d1793144

- Pinch the sides of the switch, and then push it through the frame.

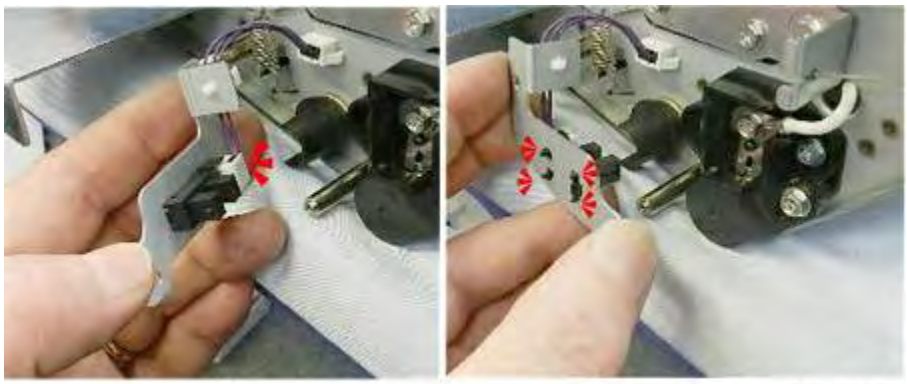
4.11.11 PTR SEPARATION SENSOR

Preparation

1. Remove ITB unit page 4-169

d1793145

- Disconnect bracket, and then pull it away (x2).



d1793146

- Disconnect sensor (x1, x4).

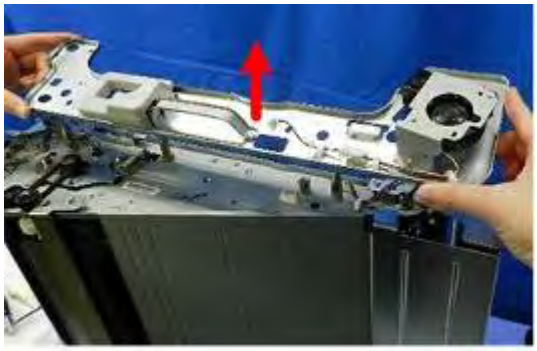
4.11.12 ID SENSOR

Preparation

1. Remove ITB unit page 4-169
2. Remove transfer belt page 4-177

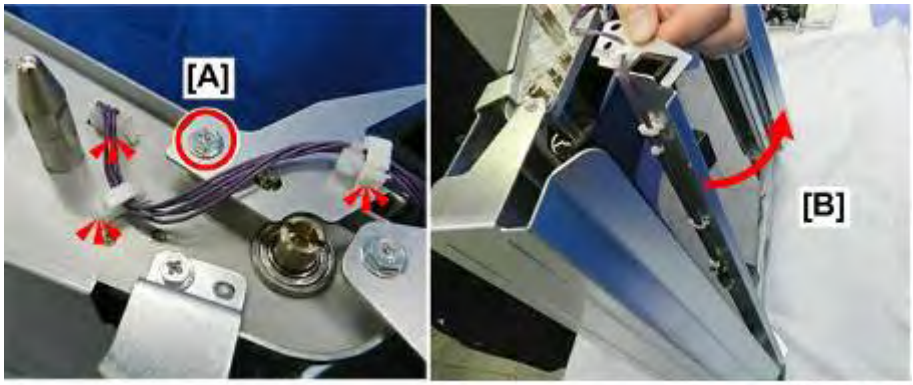
d1793102

- Disconnect handle plate (x2, x1)



d1793103

- Remove handle plate.

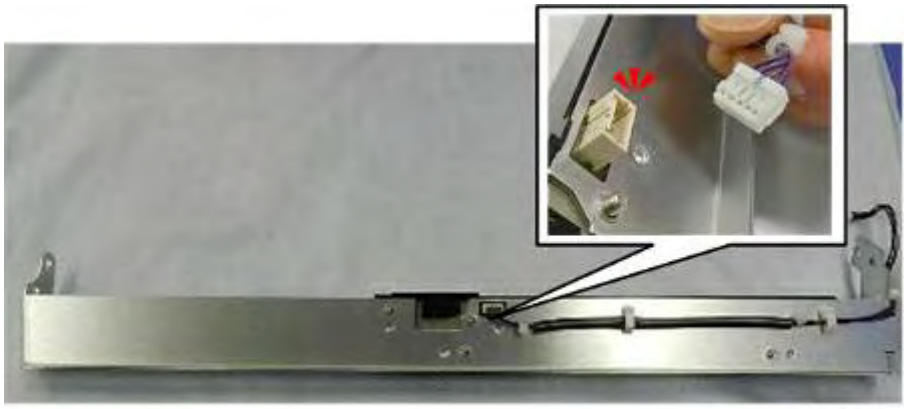


d1793104

- Disconnect ID sensor plate at front [A] (x2, x1, x1).
- Disconnect at [B].

d1803103

- When you remove the plate (and at re-installation) work slowly and hold it to prevent it from falling and damaging the belt.



d1793147

- Disconnect sensor (x1).

d1793148

- Remove sensor cover (x1).

d1793149

- Remove sensor (x2).

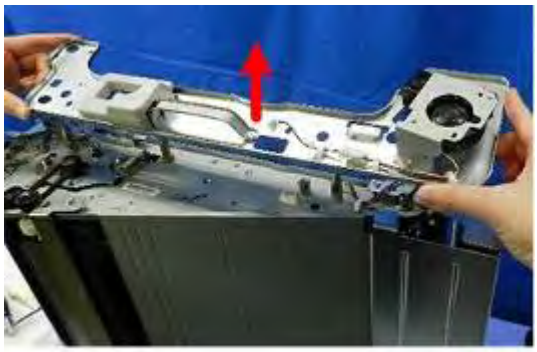
4.11.13 BELT CENTERING SENSOR

Preparation

- Remove ITB unit page 4-169
- Remove transfer belt page 4-177

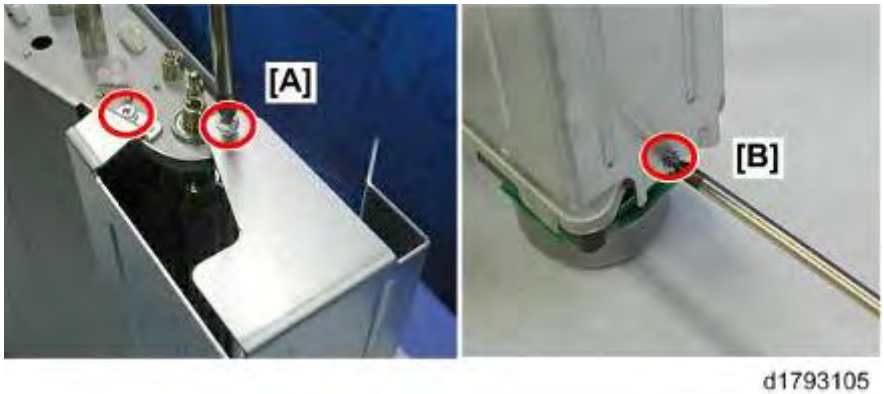
d1793102

- Disconnect handle plate (x2, x1)



d1793103

- Remove handle plate.

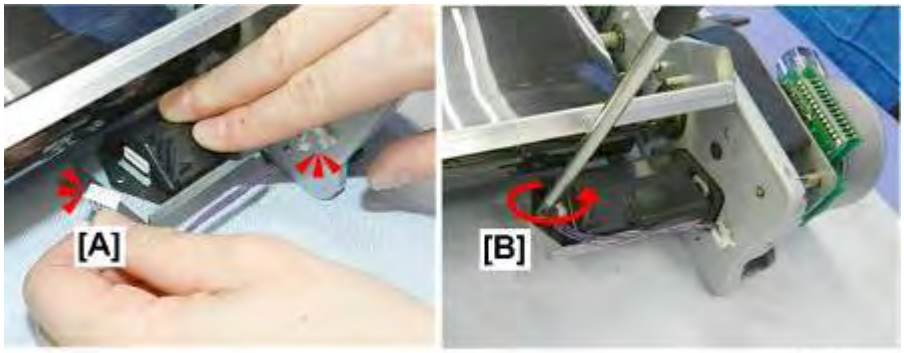


d1793105

- Disconnect right end plate at front [A] (x2).
- Disconnect plate at rear [B] (x1).

d1793106

- Remove plate.



d1793150

- Disconnect harness [A] (x1, x1)
- Remove sensor cover [B] (x1).

d1793151

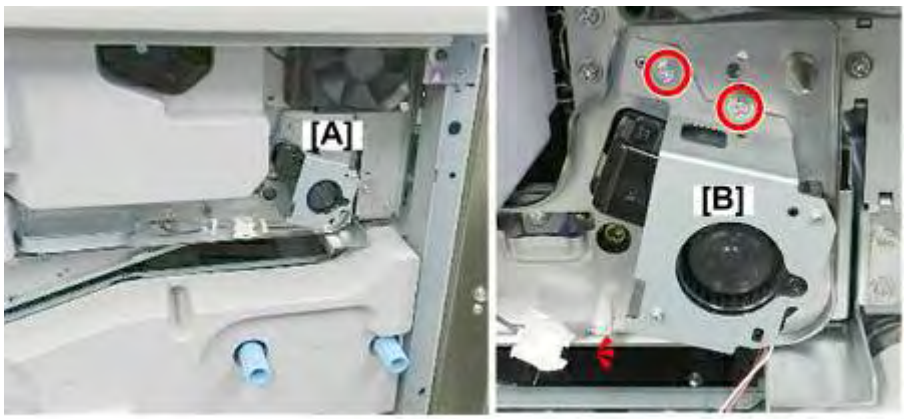
- Disconnect and remove sensor bracket (x1).

d1793152

4.11.14 ID SENSOR FAN

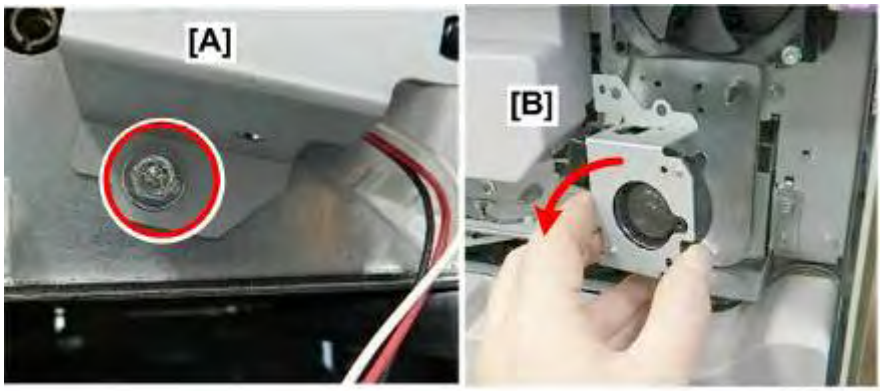
Preparation

1. ITB unit cover page 4-169



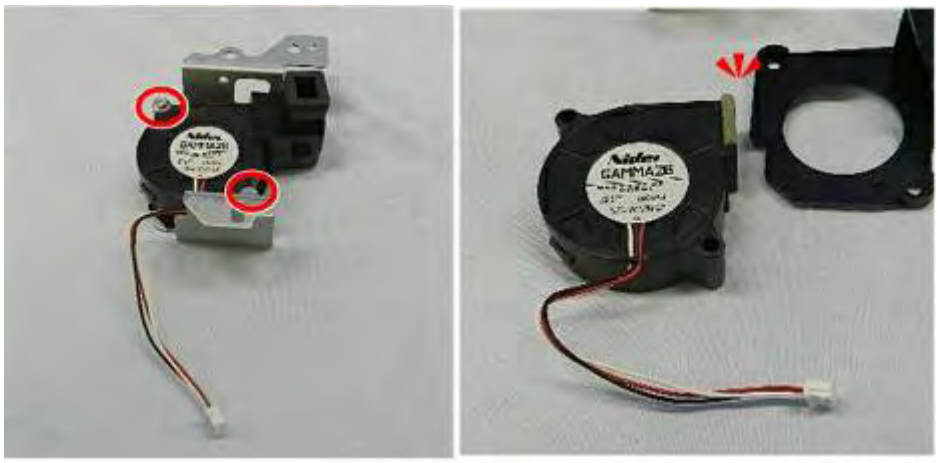
d1793153

- The fan [A] is on the front, right side of the unit.
- Disconnect top of fan bracket and fan [B] (x1, x1).



d1793154

- Disconnect bottom of fan bracket [A] (x1).
- Remove fan bracket [B] (with fan attached).



- Separate fan and bracket (x2).
- Disconnect fan from duct.

4.11.15 TRANSPORT BELT MOTOR

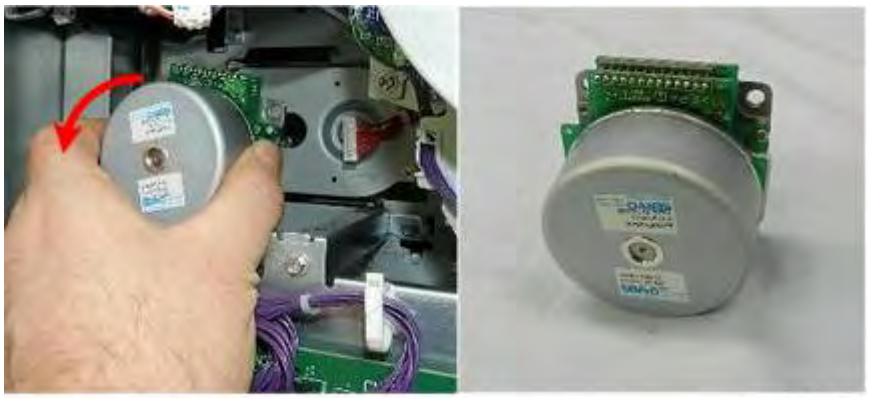
Preparation

- Open controller box page 4-27

1. The motor is down, and to the left of the flywheel.

d1793157

2. Disconnect motor (x1, x4).



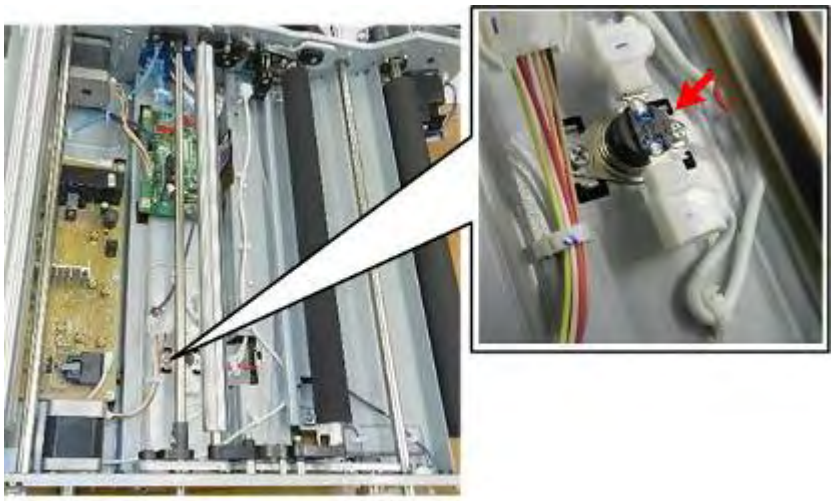
d1793158

3. Remove the motor.

4.11.16 ITB UNIT THERMOSTAT

Preparation

- Remove ITB unit page 4-169



d1803110

- The thermostat is located near the front of the unit.

d1803111

- Remove the thermostat (x1, x2, x2).

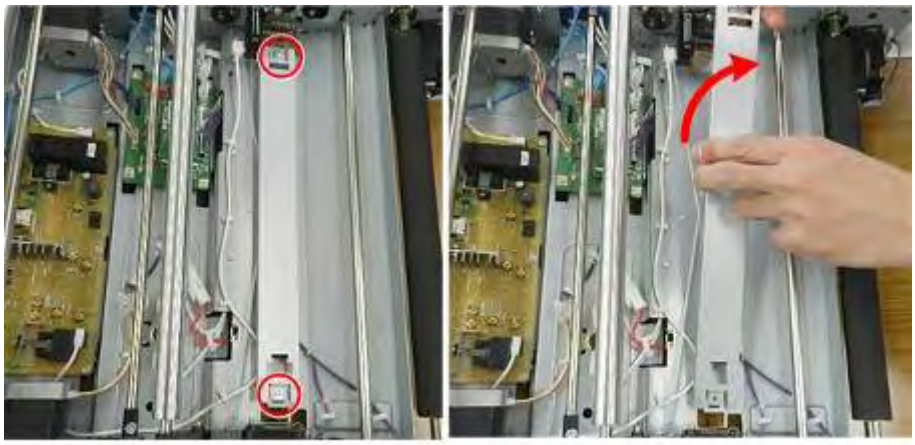
4.11.17 ITB HEATER

Preparation

1. Remove ITB unit page 4-169
2. Remove ITB page 4-177

d1803112

- A heater is installed under the plate.



d1803113

- Disconnect heater plate (x2).

- Disconnect heater (x1, x1).

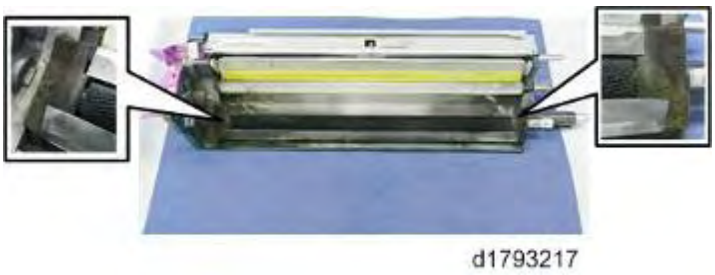
4.12 ITB CLEANING UNIT

4.12.1 ITB CLEANING UNIT DISASSEMBLY

Before You Begin

Note

- The lubricant roller, lubricant bar, and lubricant blade are always replaced as one set.



d1793217

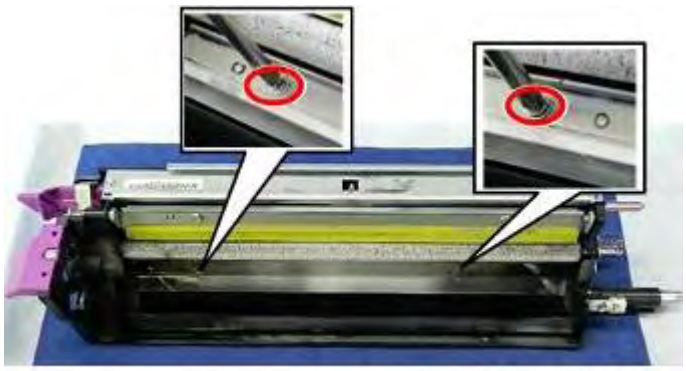
Important

1. When removing and re-installing blades, work carefully to avoid damaging the sponge seals at the ends of the blade. These sponge seals cannot be replaced in the field.

Cleaning Blade

Preparation

- Remove ITB cleaning unit page 4-169



d1793218

- Disconnect cleaning blade (x2).

d1793219

- Remove blade.

Lubricant Roller

Preparation

Remove:

1. ITB cleaning unit page 4-169
2. Cleaning blade page 4-209

Note

- The lubricant roller, lubricant bar, and lubricant blade are always replaced as one set.

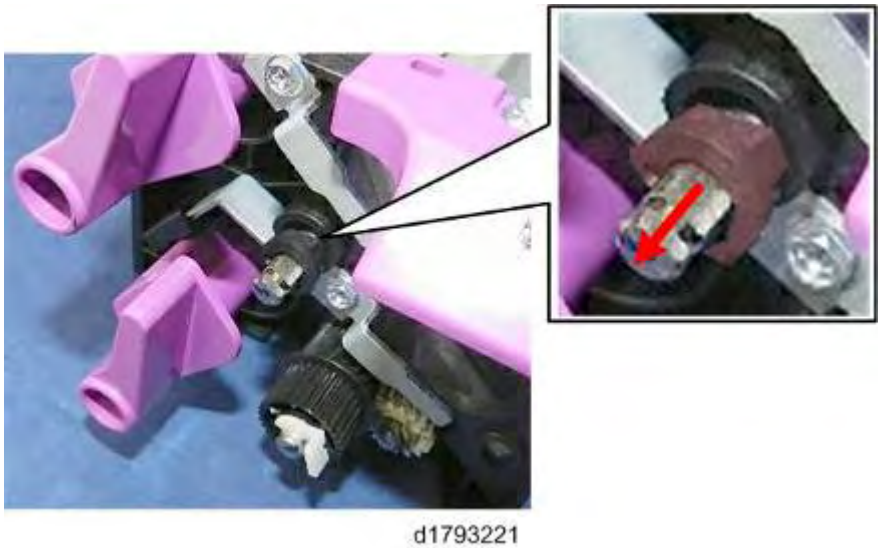
d1793220

- At front remove:

  [A] Clips (x1)

  [B] Belt (x1)

  [C] Gear (x1)

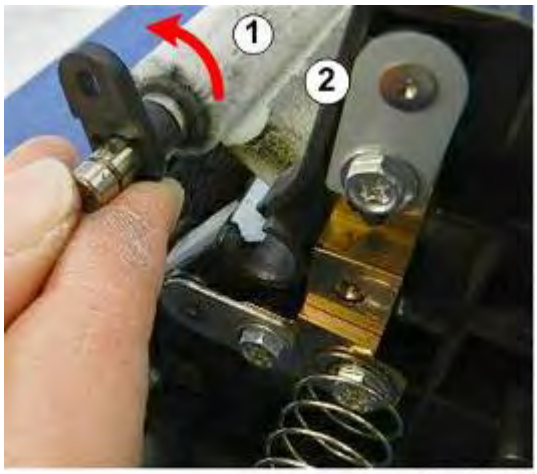


d1793221

- Slide off bushing.

d1793222

- At rear, disconnect end of roller (x1, x1, x1)



d1793223

- Remove roller ①. After roller is removed, you can see lubricant bar ②.

Lubricant Bar

Preparation

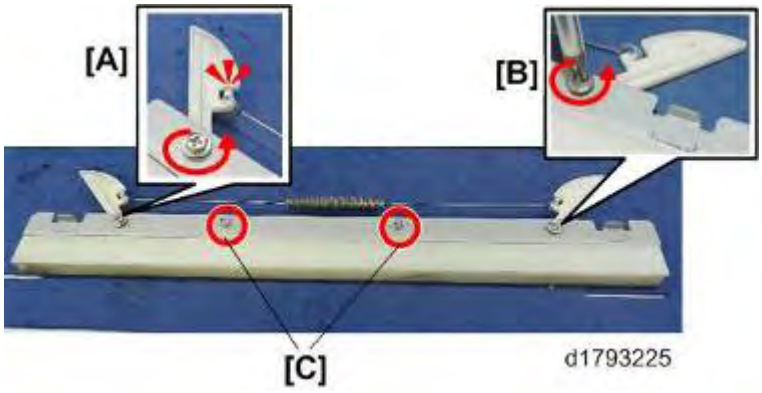
- Remove ITB cleaning unit page 4-169

Note

- The lubricant roller, lubricant bar, and lubricant blade are always replaced as one set.

d1793224

1. Remove lubricant bar.



d1793225

2. Disconnect both arms [A] and [B] (x1, x2)
3. Remove both pins [C].

d1793226

4. Save the arms (x2) ①, spring (x1) ②, screws (x2) ③, and pins (x2) ④. These must be re-attached to the new lubricant bar.

Lubricant Blade

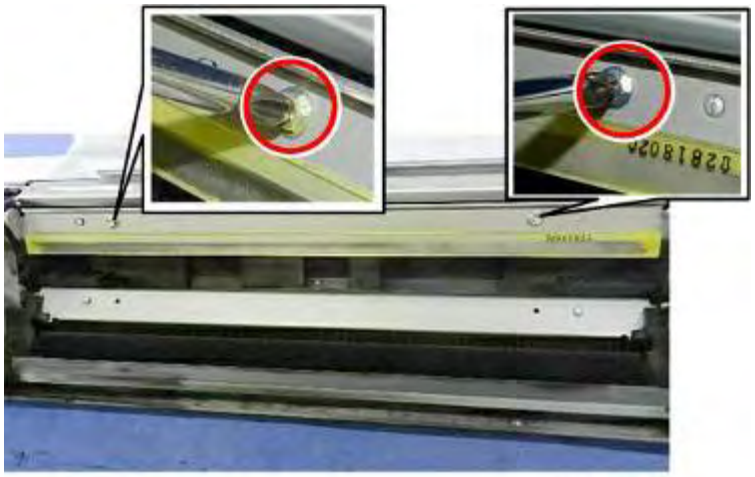
Preparation

Remove:

- ITB cleaning unit page 4-169

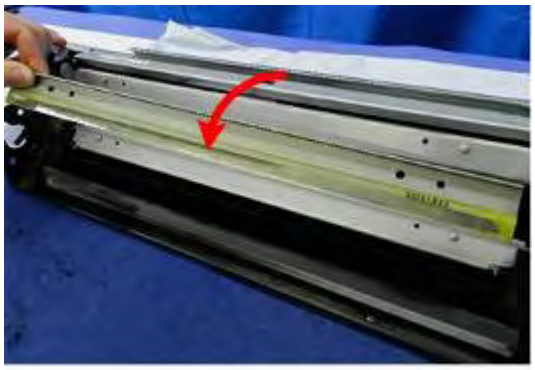
Note

- The lubricant roller, lubricant bar, and lubricant blade are always replaced as one set.



d1793227

- Disconnect lubricant blade (x2).



d1793228

- Remove blade.

Notes about Lubrication

Lubricant is already applied to the following service parts at the factory, so they require no further lubrication (setting powder, yellow toner) before they are installed.

1. However, you must execute SP2310-001 to force lubricant cleaning after they have been installed.
2. The cleaning blade can replaced separately. It requires no lubrication, but SP2310-001 still must be done.
3. The lubricant brush roller, lubricant bar, and lubricant blade are always replaced together, not separately, but SP2310-001 must be done after they are replaced.
4. When the ITB unit is replaced as a unit, SP2310-001 still must be done.

Part	When Replaced Individually	When ITB Unit Replaced as a Unit
Cleaning blade*1	SP2310-001*4	SP2310-001*4
Lubricant brush roller*3	---	
Lubricant bar *3	---	
Lubricant blade*2 *3	SP2310-001*4	

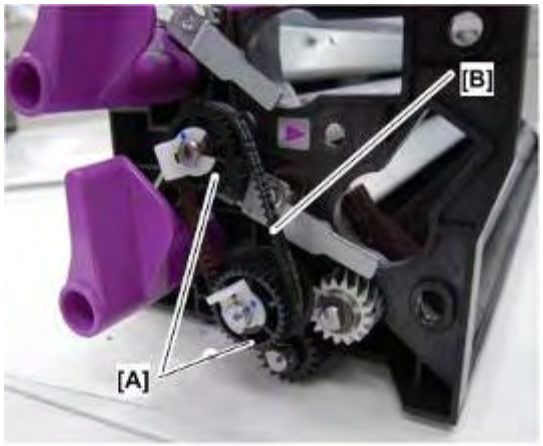
*1	Setting power (zinc stearate) applied before shipping.
*2	Yellow toner applied before shipping
*3	Always replaced together as a set.
*4	After replacing parts, be sure to execute force lubricant cleaning.

Cleaning Roller

Preparation

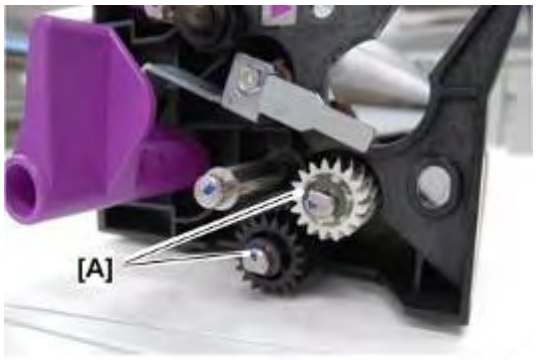
Remove:

1. ITB cleaning unit page 4-169



d1793239

1. Remove snap rings [A] and timing belt [B] (x2, x1)



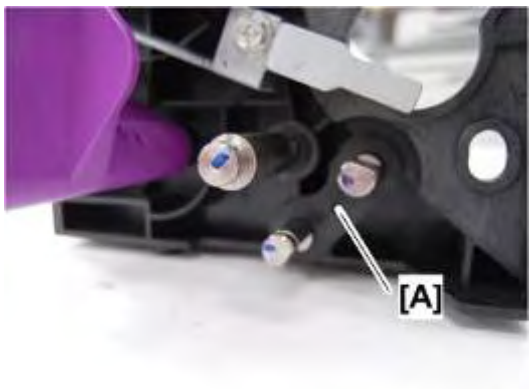
d1793240

2. Remove gears [A] (ℂx2,⊙x2).

d1793241

Important

- When the black gear is re-attached to the end of the coil shaft [A], work carefully. When re-installing the coil shaft in the unit, apply very light pressure on the gear as shown above to avoid scratching the mylar with the protuberances on the coil.

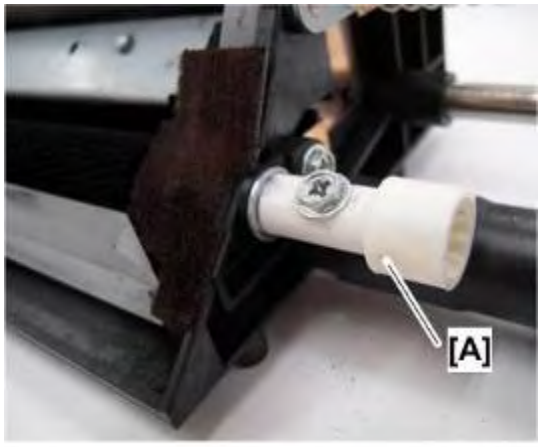


d1793242

3. Remove front bushing [A] while holding the collection coil and cleaning roller steady.

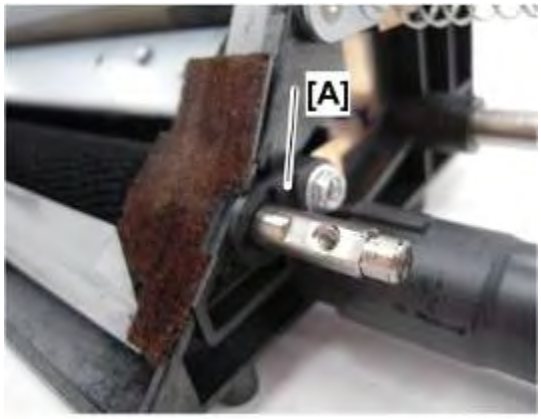
Important

1. When you re-attach the front bushing, try to avoid the protuberance of the lower timing belt that you removed in Step 1.



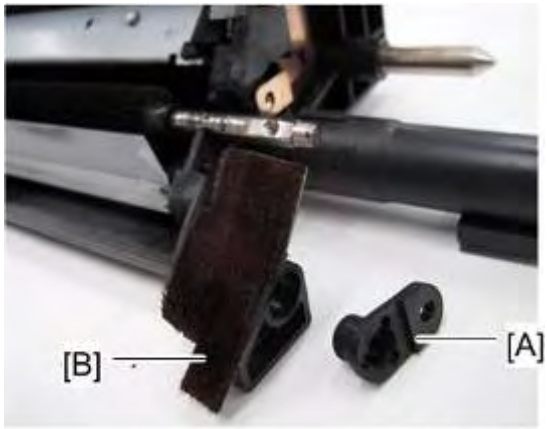
d1793243

4. At the rear, remove the coupling [A] and washer (x1, x1).



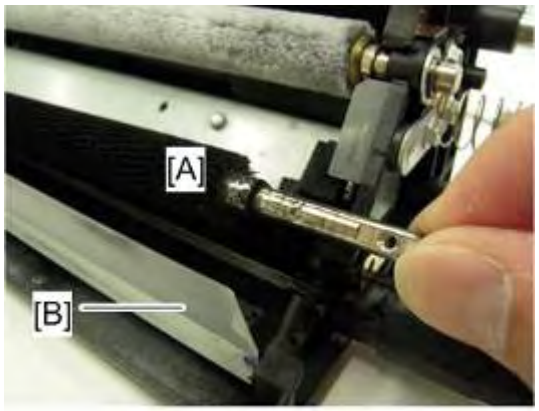
d1793244

5. While holding the cleaning roller steady, disconnect bushing [A] (x1).



d1793245

6. Remove bushing [A] and holder [B].



d1793246

7. Lift the cleaning roller [A] and remove it.

Important

1. Work carefully to avoid damaging the fragile seal [B] near the roller.

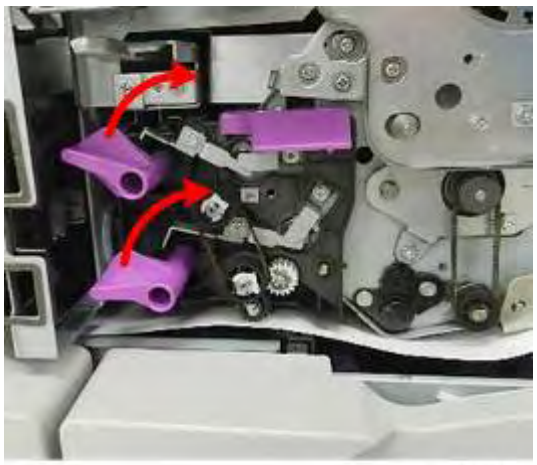
ITB Cleaning Unit Re-installation

Do the procedure below with the belt cleaning mode operation, even if you are replacing only the ITB cleaning unit and not the belt.

Note

- With long use the surface of the belt could deteriorate and become slightly rough, causing its coefficient of friction to increase slightly. Also, the edges of new blades could be sharp. These conditions could cause the blades to catch easily on the belt.
- For these reasons, you must execute the belt cleaning mode (SP2310-001) to reduce the friction between the belt and replaced blades of the ITB cleaning unit.

- Make sure that the machine is off.
- Open both front doors.



d1793203

- Open the lubricant blade and cleaning blade by rotating the two levers up.
- Remove the PTR. page 4-335

Note

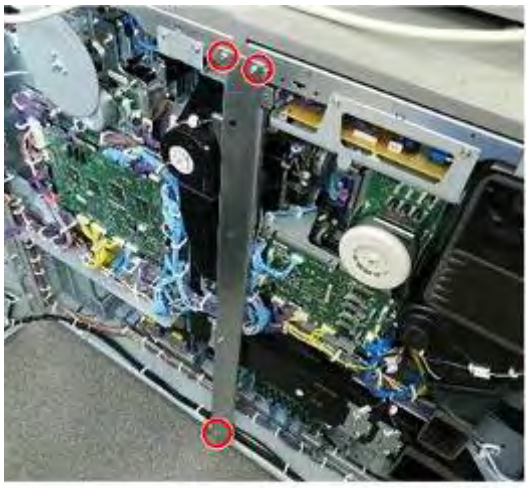
1. Leave the PTR unit out of the machine.

- Remove the drum cleaning unit. page 4-115
- Remove the front edge cover (x2).
- Turn the machine on and enter the SP mode.
- Do SP2310-1 (Force Lubricant - Belt Cleaning).
- After lubrication and cleaning is finished, close the front doors.
- Wait for about 5 minutes.
- The machine will display a message to alert you that the process is finished.
- Open the front doors.
- Turn the main machine off.
- Install the PTR unit.
- Install the drum cleaning unit.
- Lower and lock the levers that were opened in Step 3.
- Turn the main machine on.
- Reset the counters for the replaced unit or parts
  1. SP 7-622-021 for ITB cleaning unit
  2. SP 7-622-022 for ITB cleaning blade
  3. SP 7-622-023 for ITB lubricant brush roller
  4. SP 7-622-024 for ITB lubricant bar
  5. SP 7-622-025 for ITB lubricant blade
- Exit the SP mode and close the front doors.

4.12.2 ITB/PTR CLEANING MOTOR

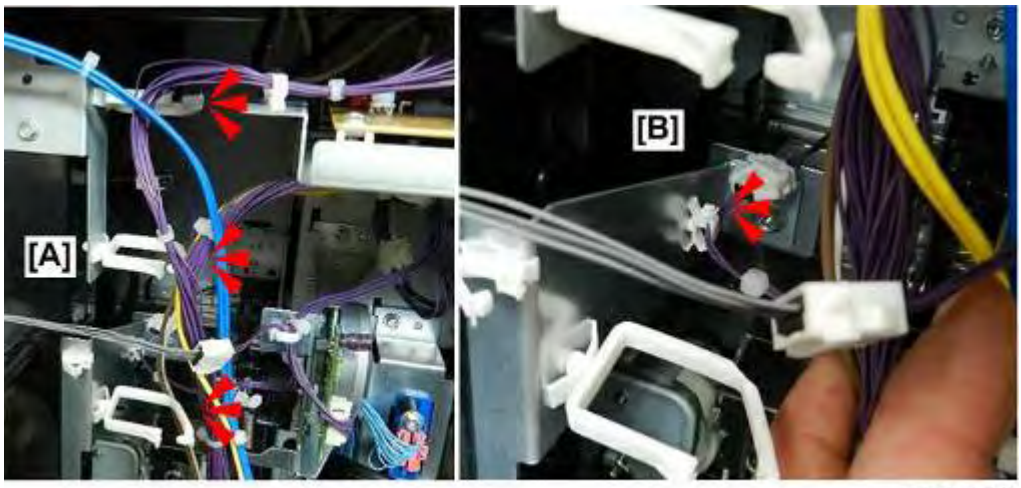
Preparation

1. Remove rear cover page 4-23
2. Open controller box page 4-27



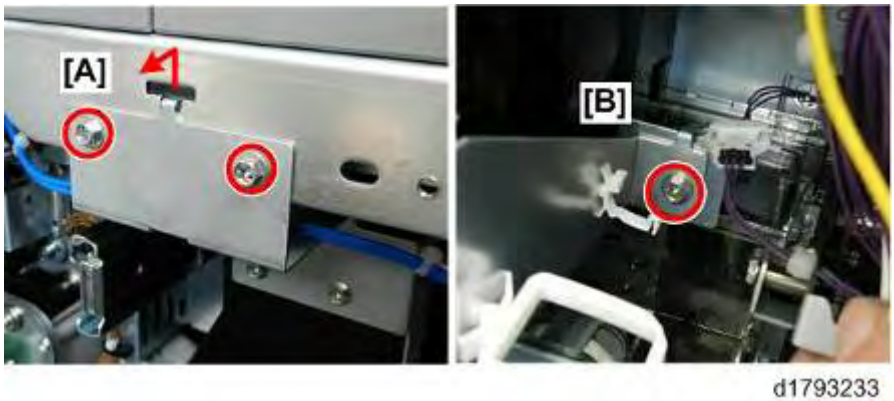
d1793231

1. Remove vertical stay (x3).



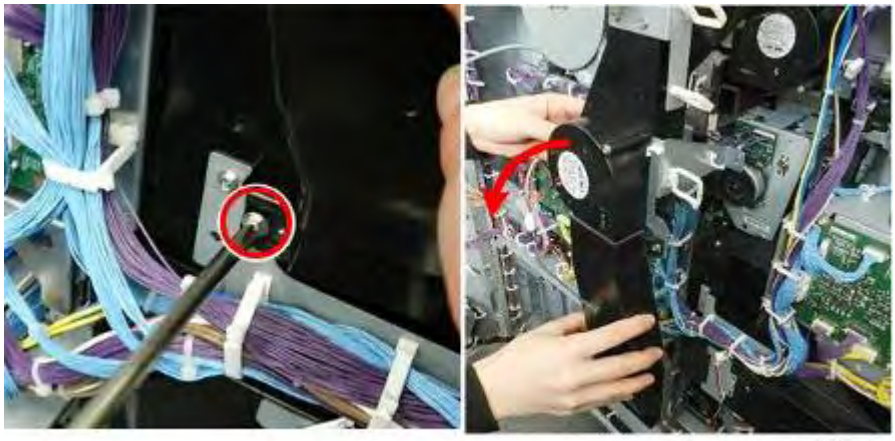
d1793232

2. Free the harnesses [A] on the right side of the fan (x3).
3. Free harness [B] (x1).



d1793233

4. Remove vertical stay bracket [A] (x2),

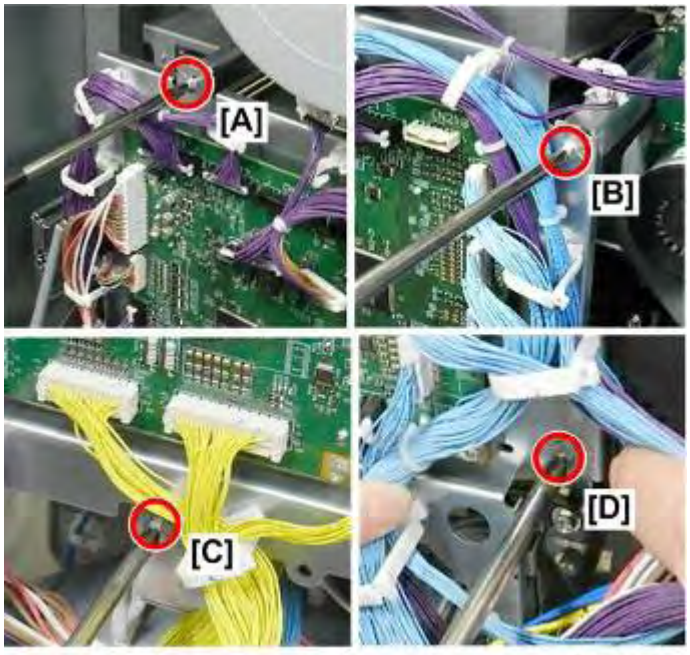


d1793234

5. Disconnect bottom of fan duct, and then remove the duct (x1).

d1794006

- Next, start to lower the IOB at the lower left side of the machine (x2, x2).



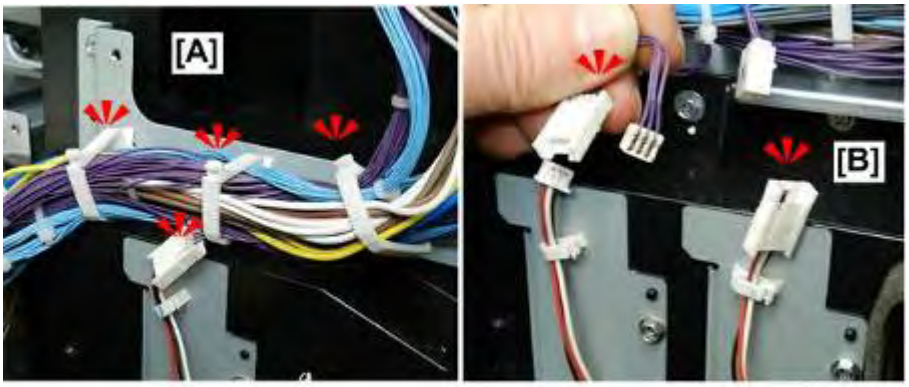
d1794008

- Disconnect IOB [A], [B], [C], [D] (x4).

d1794009

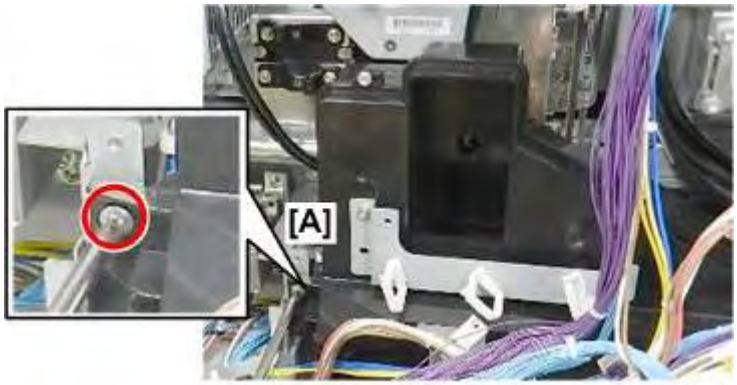
- Lower the IOB bracket (with PCB attached) until it stops.

Large Horizontal Duct



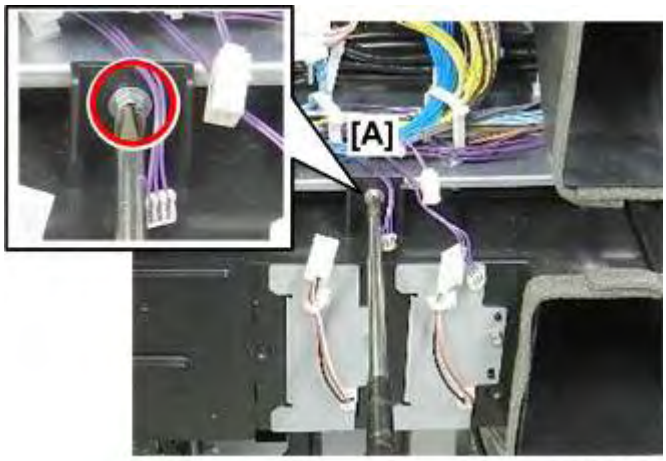
d1793235

1. Remove the large horizontal duct [A] at the bottom right side of the machine.
2. Free top of duct (x5, x3).



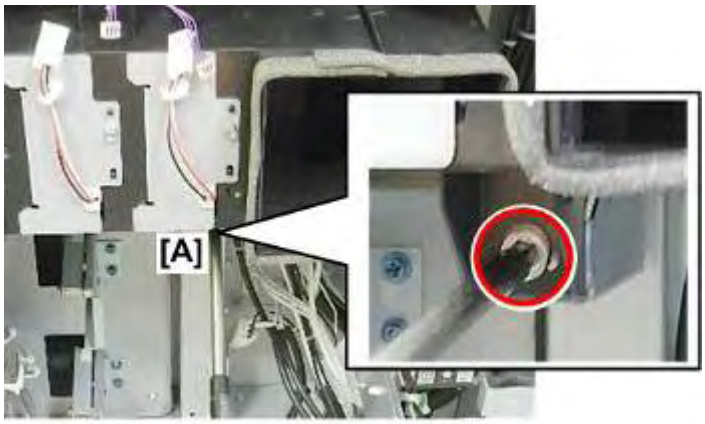
d1794027

3. Unfasten the duct at three points.
4. Lower left [A] (x1).



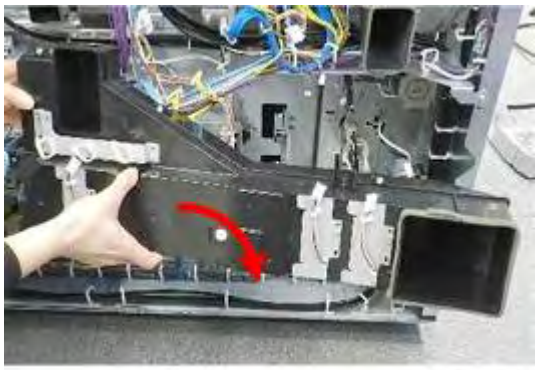
d1794028

5. Center [A] (x1).



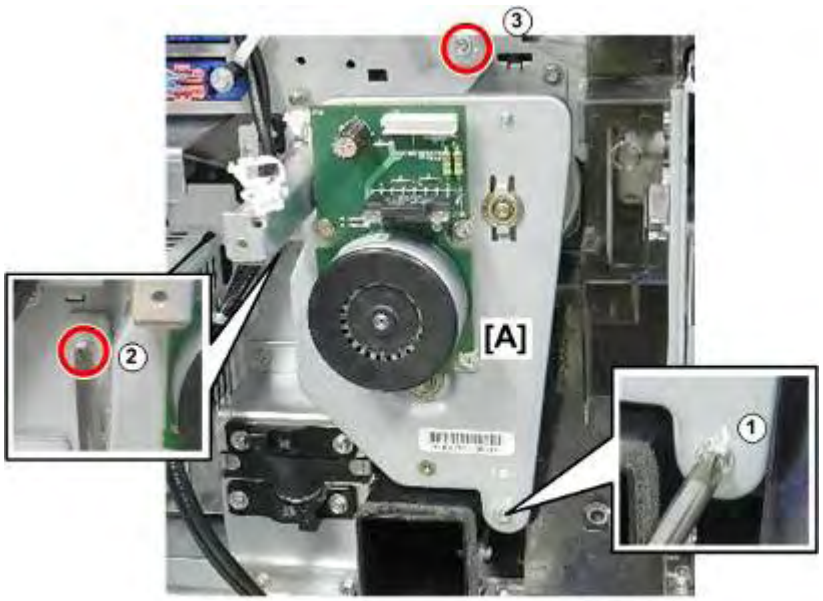
d1794029

6. Bottom right [A] (x1).



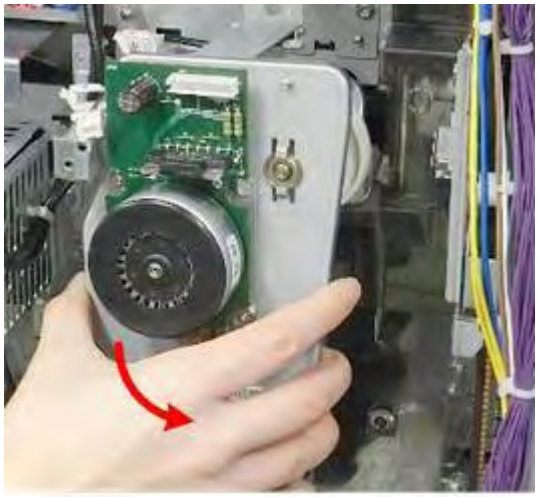
d1794030

7. Remove the duct.



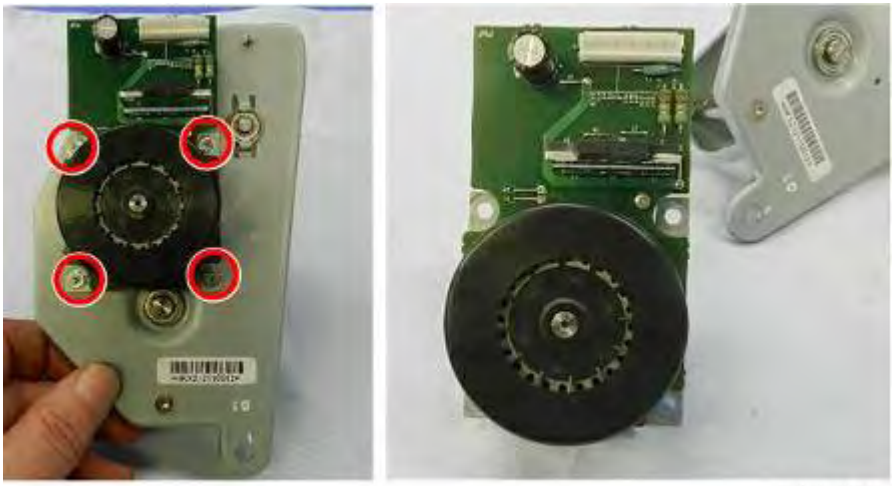
d1794031

8. Next, remove the ITB/PTR cleaning motor bracket [A] (x3).
   - ① is a small screw.
   - ② and ③ are larger screws (the same size).



d1794032

9. Remove the bracket (with motor attached).



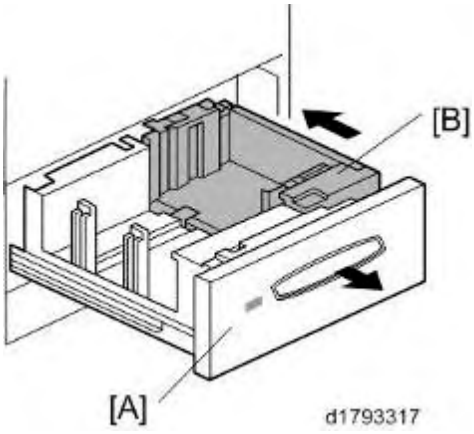
d1793236

1. Separate motor and bracket (x4).

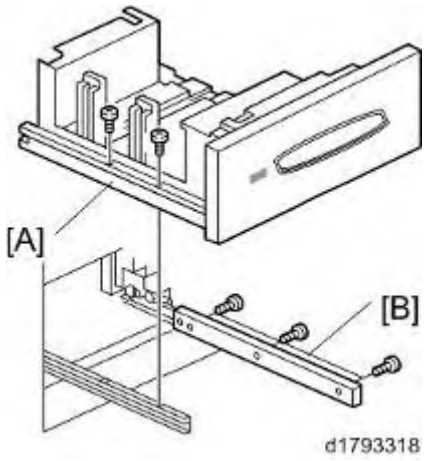
4.13 PAPER TRAYS 1, 2, 3

4.13.1 PAPER TRAY REMOVAL

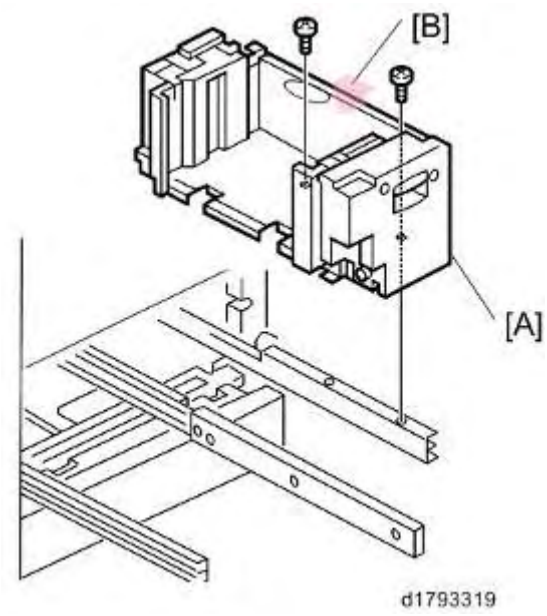
Remove Paper Tray 1



- Pull out Tray 1 [A] completely so that the right tandem tray [B] separates from the left side.
- Push the right tandem tray [B] into the machine.



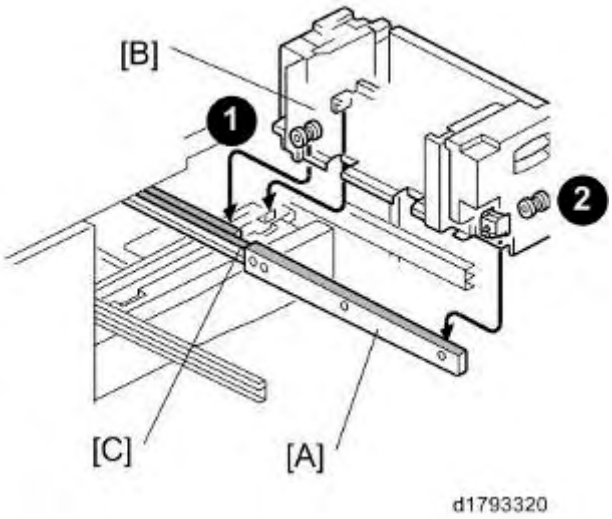
- Disconnect the left rail [A] (x2 M4x4)
- Disconnect the right rail [B] and remove the tray (x3 M4x6).



- Pull out the right tandem tray [A] and remove it (x2).

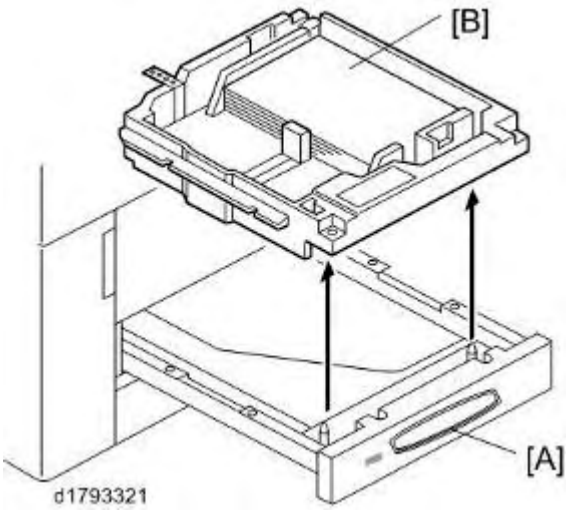
Important

1. Work carefully to avoid bending or damaging the mylar [B] on the side plate of the tray. This mylar prevents paper in the tray from hitting the reverse roller before it is ready to feed.



- When you re-install the right tandem tray, make sure that the wheels ride on slide rail [A].
- Also, make sure that the tandem tray stopper [B] is set behind stopper [C] (inside the machine).

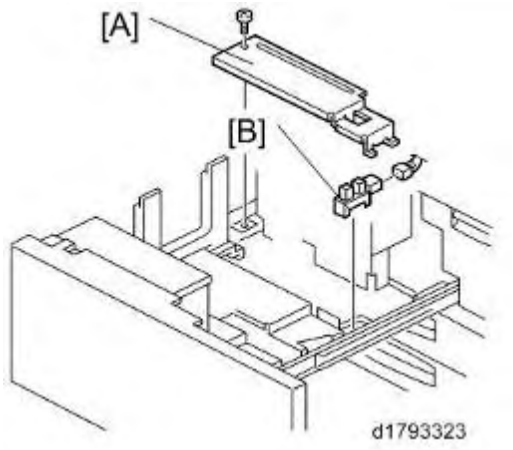
Remove Paper Tray 2, Tray 3



1. Pull out Tray 2 [A].
2. Lift the inner tray [B] out of the tray.

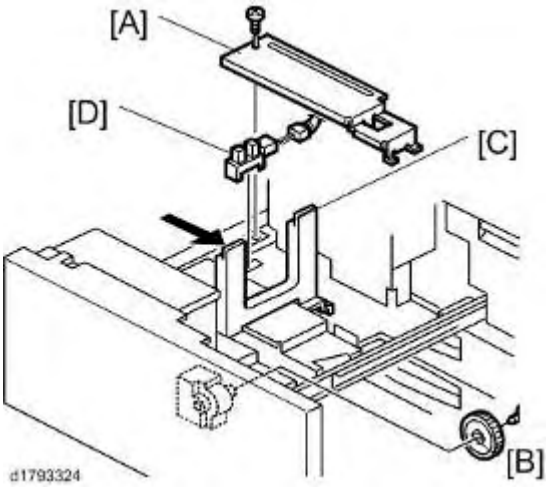
4.13.2 TRAY 1 SENSORS, SOLENOIDS, WIRE

Rear Fence Return Sensor (Left Tandem Tray)



1. Pull out Tray 2 [A].
2. Lift the inner tray [B] out of the tray.

Rear Fence HP Sensor (Left Tandem Tray)

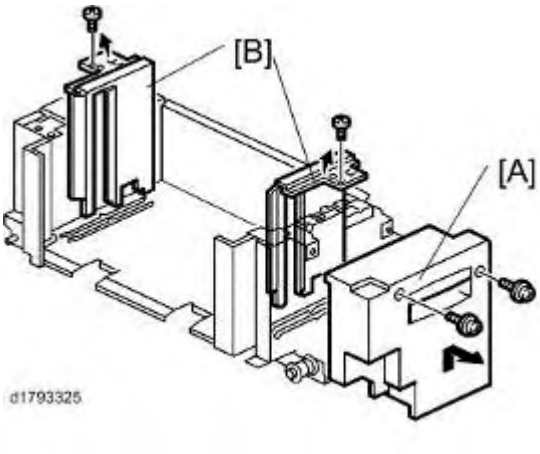


- Pull out Tray 1.
- Push the right tandem tray into the machine.
- Remove:

  [A] Rear bottom plate

  [B] Rear fence transport gear
- Push the left fence [C] to the right.
- Remove the rear fence HP sensor [D] (x1).

Right Tray Paper Sensor (Right Tandem Tray)



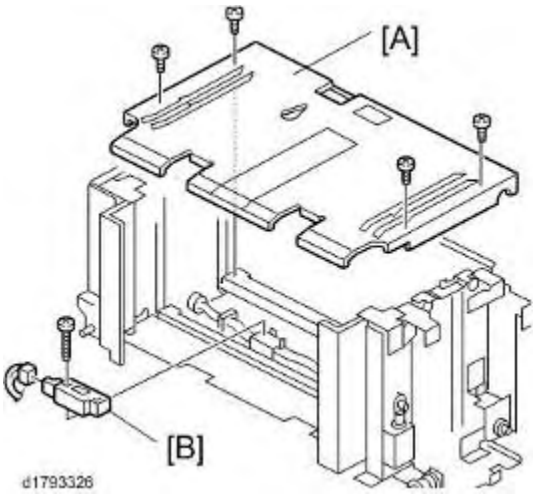
1. Remove right tandem tray
2. Remove:

   [A] Cover (x2)

   [B] Side fences (x2)

   Note

   1. When re-installing the side fences, make sure that they are positioned correctly (A4: Outer, LT: Inner)



1. Remove:
   [A] Bottom plate (x4)
   [B] Right tray paper sensor (x1, x1)

Right Tray Lock Solenoid

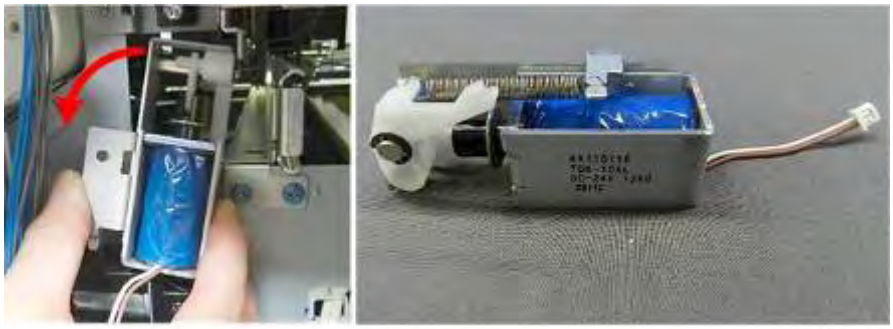
Preparation

1. Open controller box page 4-27
2. Remove left rear cover page 4-23

- Locate the solenoid.

d1793349

- Disconnect solenoid and bracket (x1, x1).



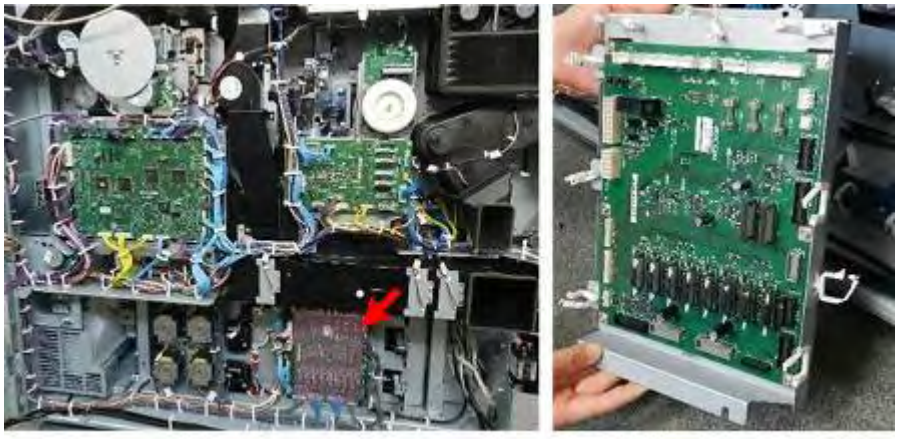
d1793350

- Remove solenoid.

Left Tray Lock Solenoid

Preparation

1. Open controller box page 4-27
2. Remove left rear cover page 4-23



d1793351

1. To access the solenoid, you must first remove the IOB. page 4-551

2. Disconnect solenoid and bracket (x1, x1).

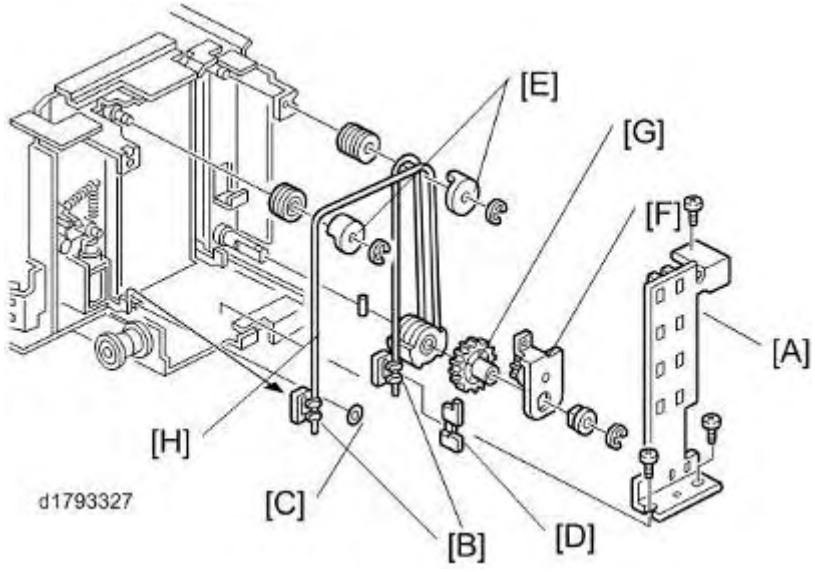
3. Remove solenoid.

Bottom Plate Lift Wire

Note

1. Before you remove the rear bottom plate lift wire, you must remove the front bottom plate lift wire. The removal procedure is the same for both wires.

- Remove right tandem tray.
- Remove the right tandem tray cover (x2).



- At the front, remove sensor assembly [A] (x3).
- Lift the front bottom plate slightly, unhook the wire stoppers [B], and then remove stopper [C] and actuator [D].
- Remove:

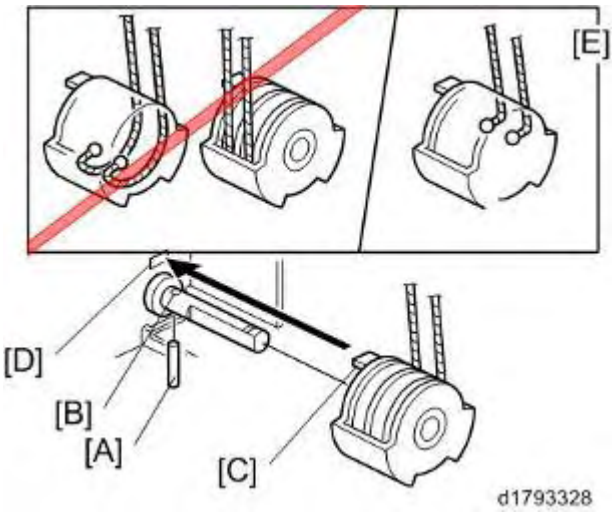
  [E] Wire covers (x2).

  [F] Bracket (front only) (x1, x1, x1)

  [G] Gear (front only)

  [H] Bottom plate lift wire

Re-installation (Bottom Plate Lift Wire)



1. Set positioning pin [A] in hole [B].
2. Set projection [C] in hole [D].
3. Position the wire [E] correctly without crossing the wires.

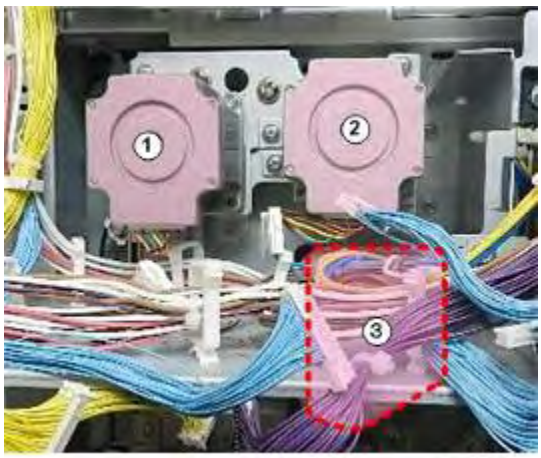
4.13.3 TRAY 1 MOTORS

Before You Begin

Preparation

1. Open controller box page 4-27
2. Remove left rear cover page 4-23

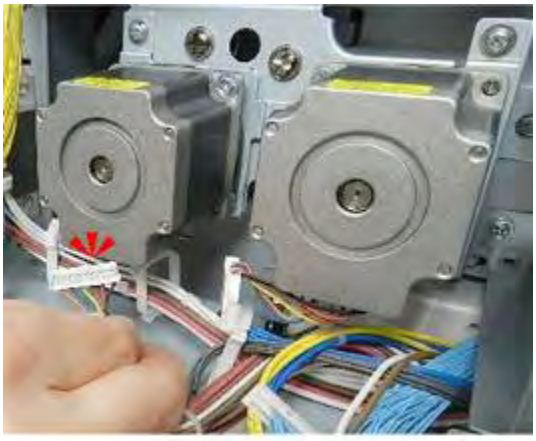
1. To access these motors, you must first remove the IOB. page 4-551



d1793355

①	Tray 1 Grip Motor
②	Tray 1 Feed Motor
③	Tray 1 Lift Motor

Tray 1 Grip Motor



d1793356

1. Disconnect motor (x1).

d1793357

2. Disconnect motor (x2).

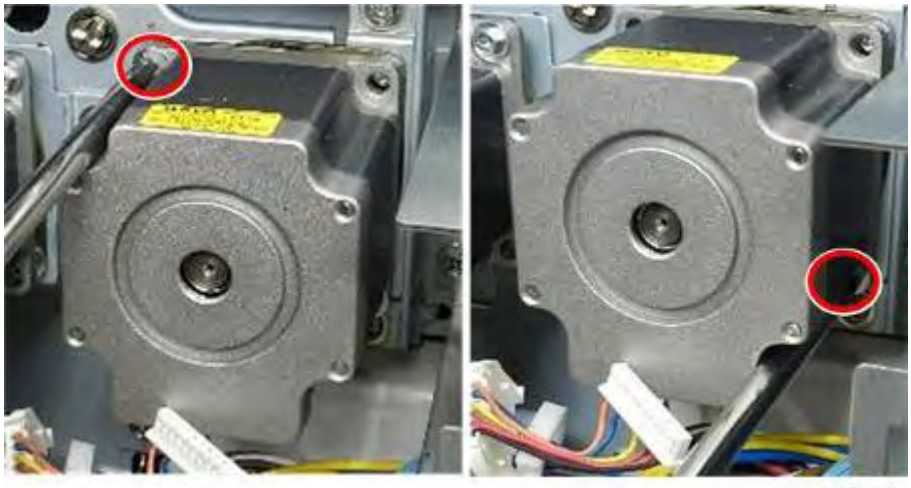
d1793358

3. Remove motor.

Tray 1 Feed Motor

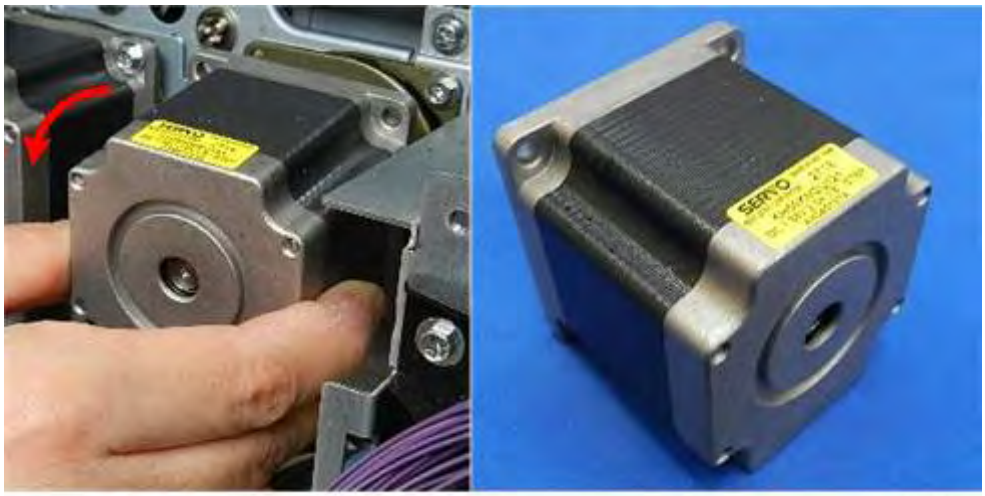
d1793359

- Disconnect motor (x1).



d1793360

- Disconnect motor (x2).



d1793361

- Remove motor.

Tray 1 Lift Motor

d1793362

- Disconnect motor:
  [A] (x1, x2)
  [B] (x1)

d1793363

- Grasp the motor from below plate [A].
- Remove motor [B].

d1793365

- Separate motor from bracket (x3).

4.13.4 TRAY 2 MOTORS

Before You Begin

Preparation

- Open controller box page 4-27
- Remove left rear cover page 4-23

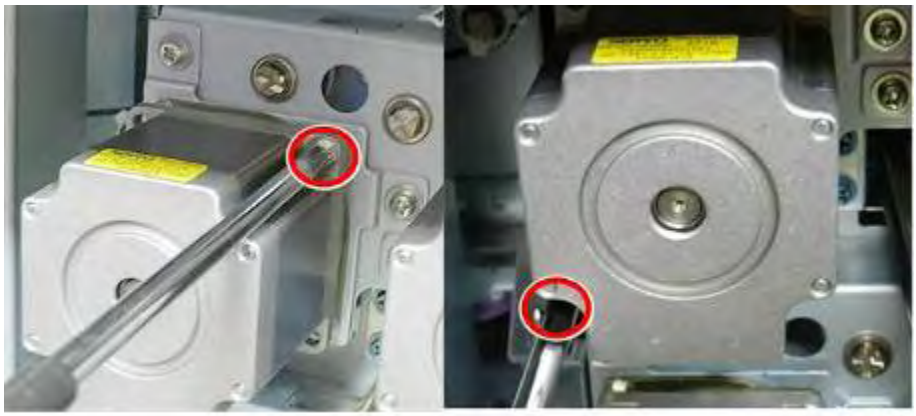
d1793330

①	Tray 2 Grip Motor
②	Tray 2 Feed Motor
③	Tray 2 Lift Motor

Tray 2 Grip Motor

d1793340

- Disconnect motor (x1).



d1793341

- Disconnect motor (x2).

d1793342

- Remove motor.

Tray 2 Feed Motor

d1793343

1. Disconnect motor (x1).

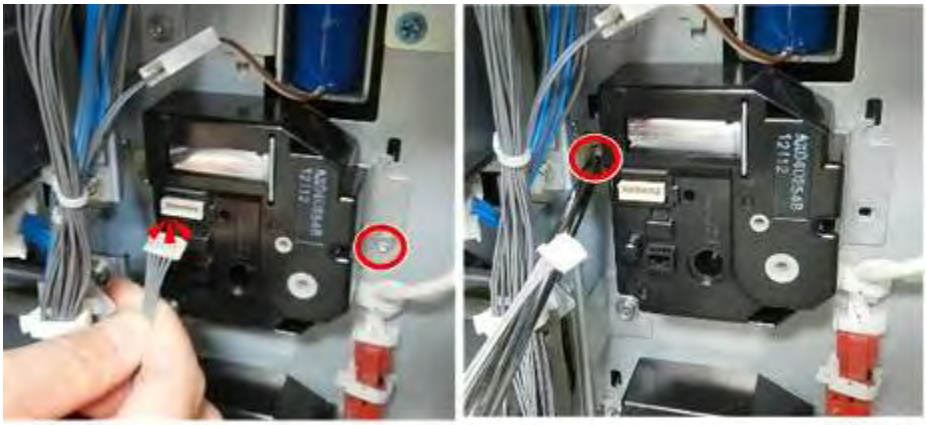
d1793344

2. Disconnect motor (x2).

d1793345

3. Remove motor.

Tray 2 Lift Motor



d1793346

- Disconnect motor (x1, x2).

d1793347

- Remove motor.

4.13.5 TRAY 3 MOTORS

Before You Begin

Preparation

- Open controller box page 4-27
- Remove left rear cover page 4-23

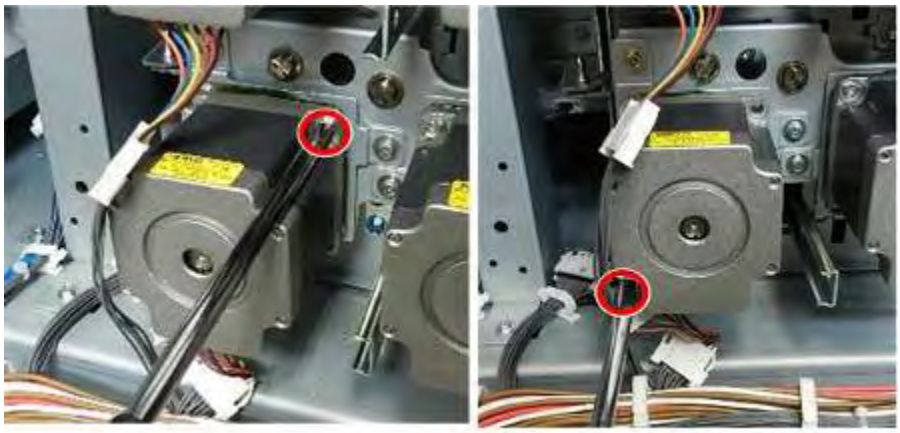
d1793331

①	Tray 3 Grip Motor
②	Tray 3 Feed Motor
③	Tray 3 Lift Motor

Tray 3 Grip Motor

d1793332

1. Disconnect motor (x1).



d1793333

2. Disconnect motor (x2).

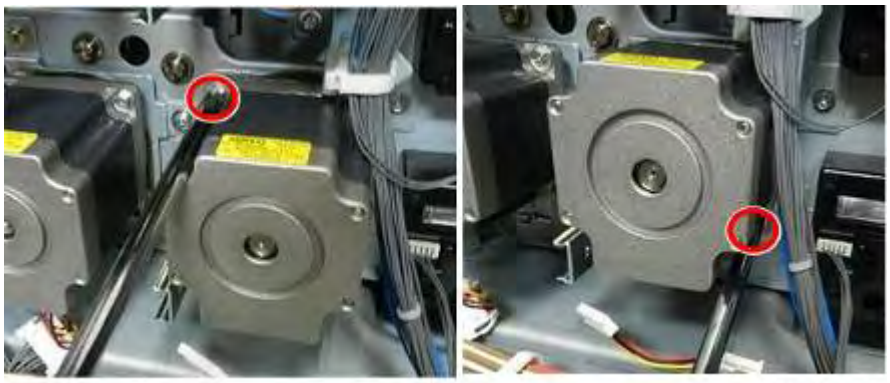
d1793334

3. Remove motor.

Tray 3 Feed Motor

d1793335

1. Disconnect motor (x1).



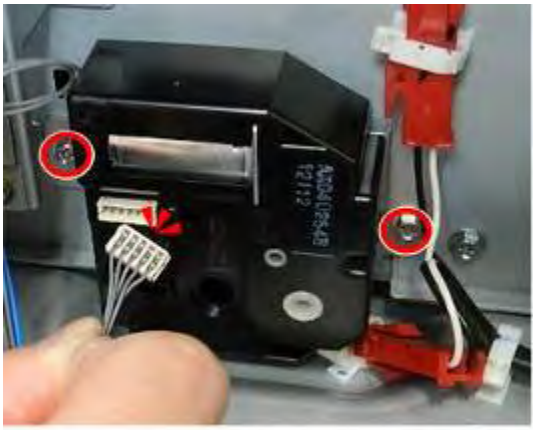
d1793336

2. Disconnect motor (x2).

d1793337

3. Remove motor.

Tray 3 Lift Motor



d1793338

- Disconnect motor (x1, x2).

d1793339

- Remove motor.

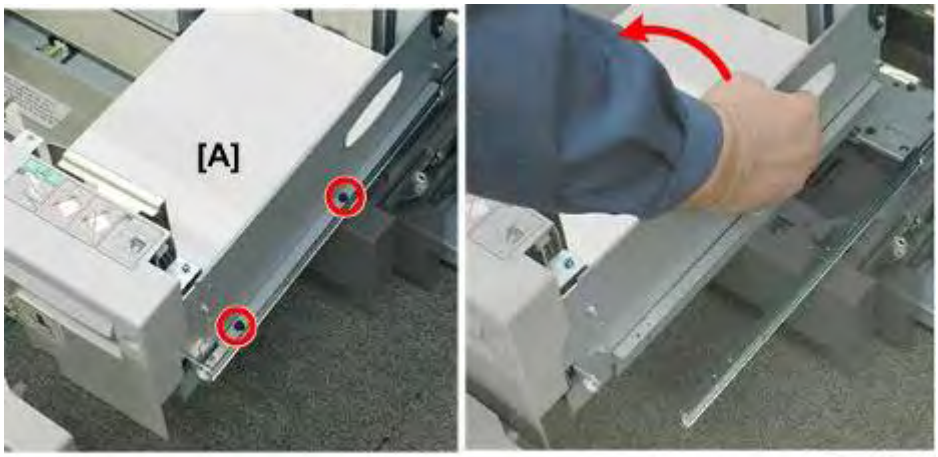
4.13.6 PFU 1, 2, 3 REMOVAL

Preparation

- Remove right, left trays of Tray 1 (tandem tray)

Note

1. Removing these trays is not absolutely necessary, but this will create more space for removing and re-installing the PFUs.



d1793301

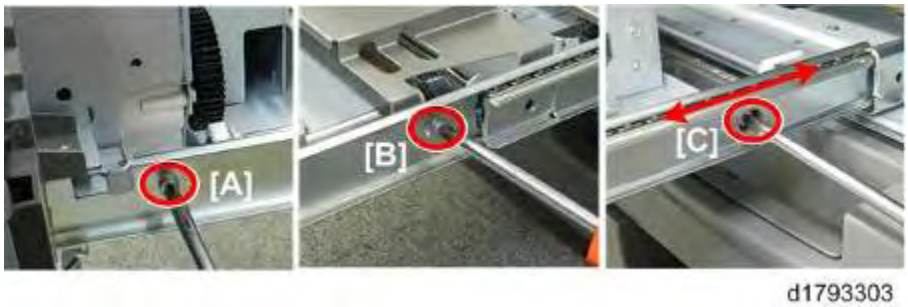
- Remove the right tray of Tray 1 (x2).

Important

1. When removing and inserting the tray, work carefully to avoid bending the mylar sheet on the right side of the tray.

d1793302

- Disconnect the left tray of Tray 1 (x2).



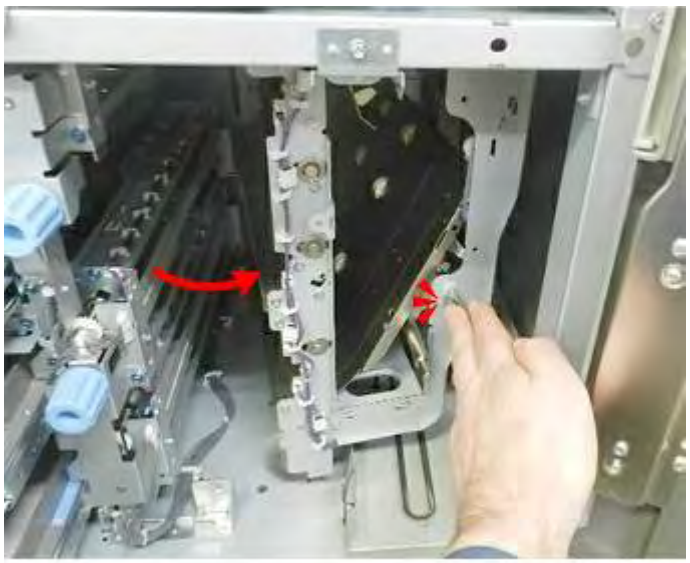
d1793303

- Disconnect the left tray from its right rail, and then remove it (x3).

Tray 1 PFU

Preparation

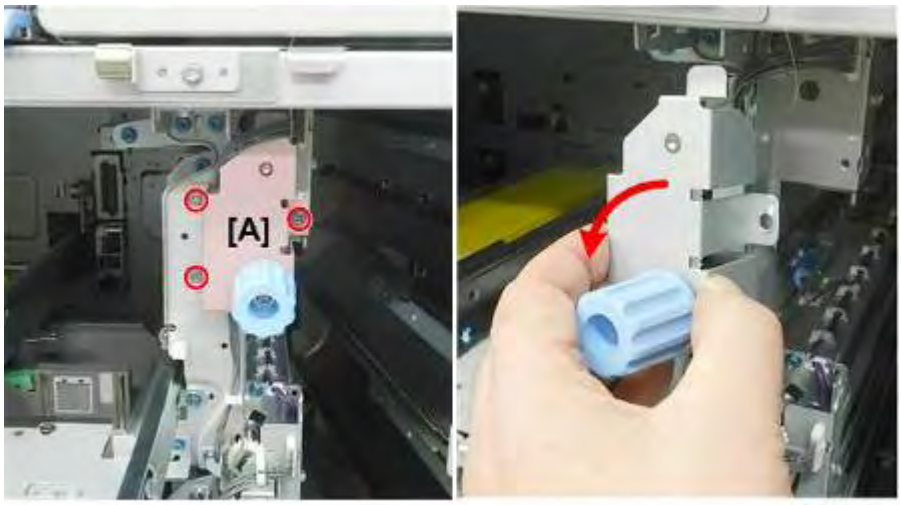
- Open the VTU page 4-257



d1793445

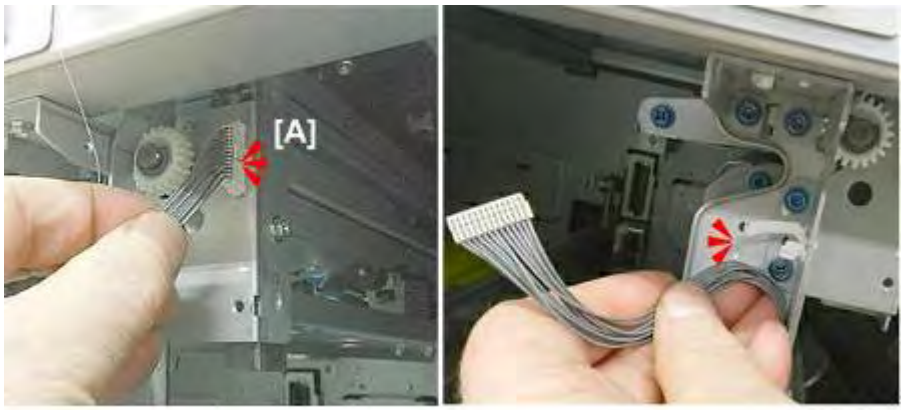
Important

1. If the VTU is not open, you will not be able to remove the PFU.



d1793304

- Remove bracket [A] (x3).



d1793305

- Disconnect the PFU harness (x1, x1)

d1793306

- Disconnect the PFU at the front (x2).
- Swing the PFU to the right [B].

d1793307

- Pull the PFU to the front. This disengages the back of the PFU from the alignment pins and couplings at the rear.
- Pull the PFU out of the machine.

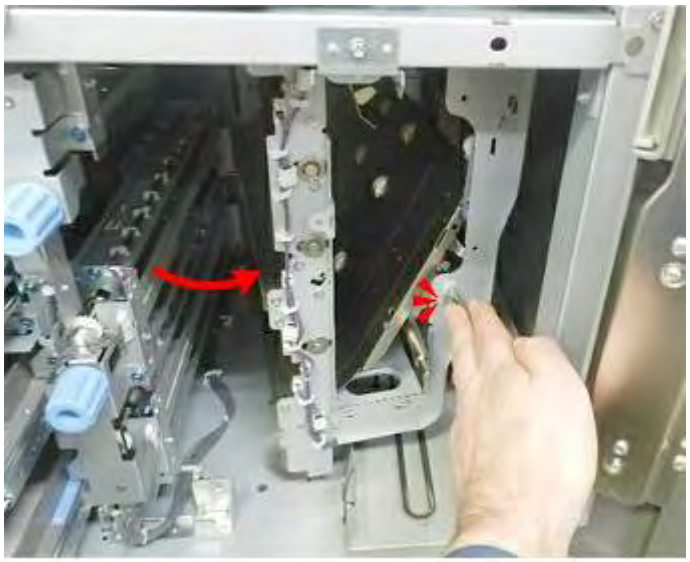
d1793308

- Lay the PFU on a flat clean surface.

Tray 2 PFU

Preparation

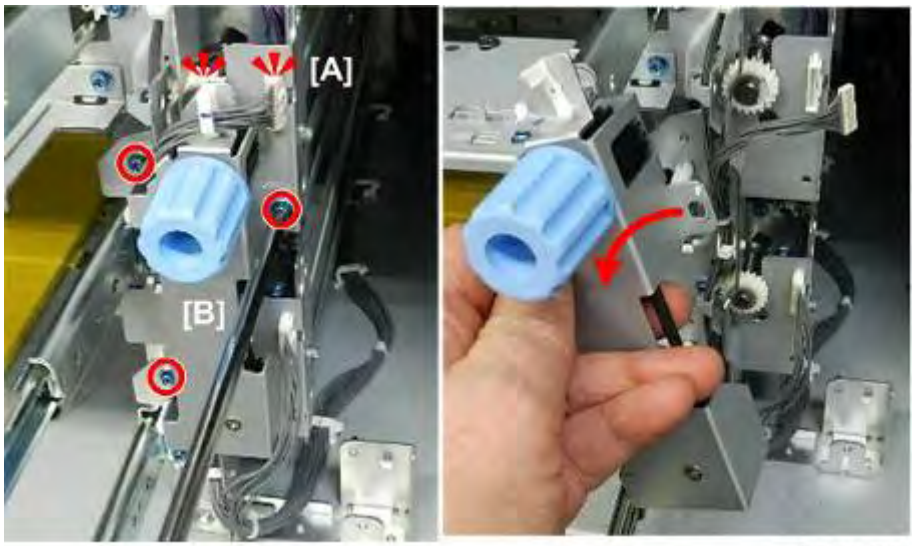
- Open the VTU page 4-257



d1793445

Important

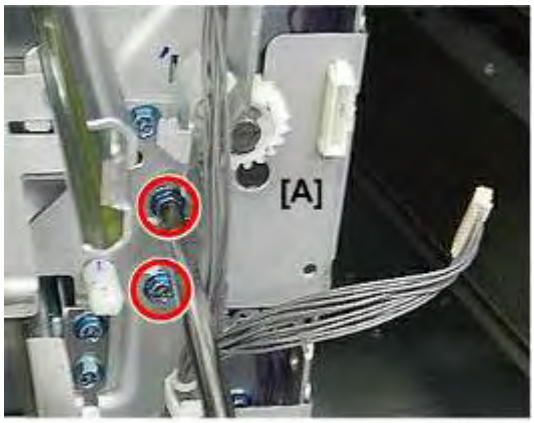
1. If the VTU is not open, you will not be able to remove the PFU.



d1793309

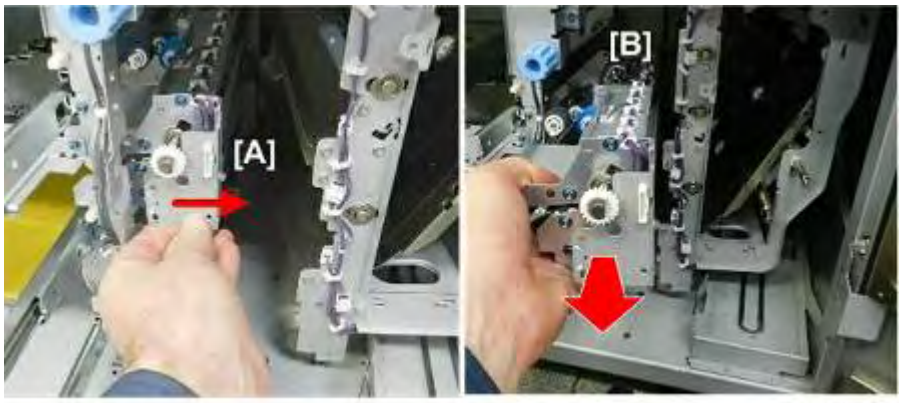
- Disconnect the PFU [A] (x1, x).

1. Remove bracket [B] (x3).



d1793310

2. Disconnect the PFU at the front (x2).



d1793311

3. Swing the PFU to the right [A].
4. Pull the PFU [B] to the front. This disengages the back of the PFU from the alignment pins and couplings at the rear.
5. Pull the PFU out of the machine.

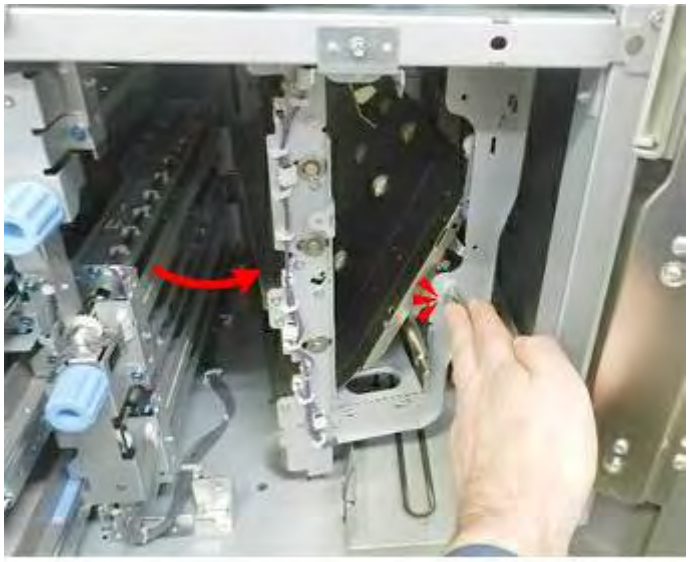
d1793312

6. Lay the PFU on a flat clean surface.

Tray 3 PFU

Preparation

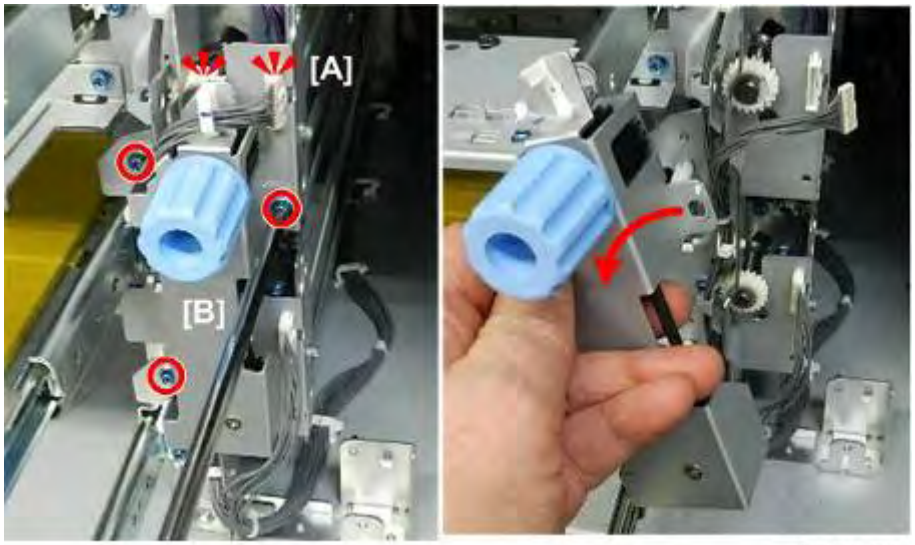
- Open the VTU page 4-257



d1793445

Important

1. If the VTU is not open, you will not be able to remove the PFU.

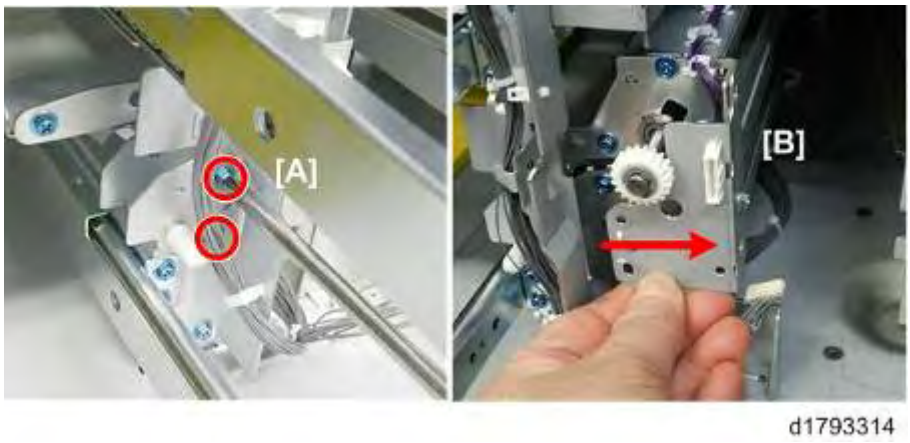


d1793309

- Disconnect the PFU [A] (x1, x).

1. Remove bracket [B] (x3).

2. Disconnect the PFU at [A] and [B] (x1, x).



3. Disconnect the PFU [A] at the front (x2).
4. Swing the PFU to the right [B].

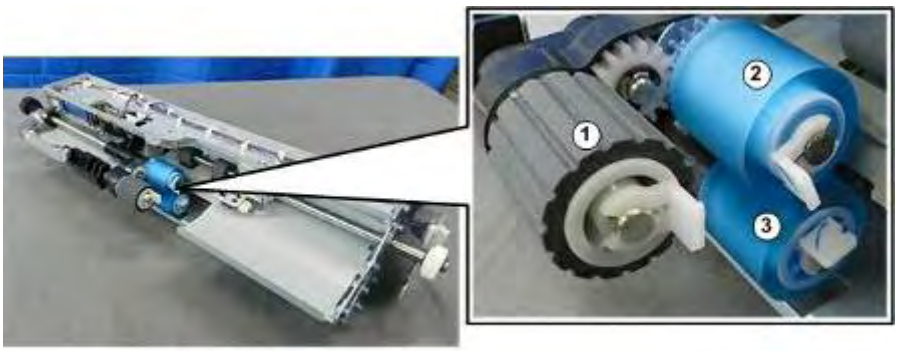
5. Pull the PFU to the front. This disengages the back of the PFU from the alignment pins and couplings at the rear.
6. Pull the PFU out of the machine.

4.13.7 PFU ROLLERS, SENSORS, SOLENOID

Before You Begin

Preparation

1. Remove PFUs (Tray1, Tray 2, Tray 3) page 4-244



d1793366

①	Pickup Roller
②	Feed Roller
③	Separation Roller

Pick-up, Feed, Separation Rollers

d1793367

- Remove snap ring of each roller.

①	Pickup Roller
②	Feed Roller
③	Separation Roller
④	Separation Roller Torque Limiter

- Reset the PM counter to zero for replaced rollers.

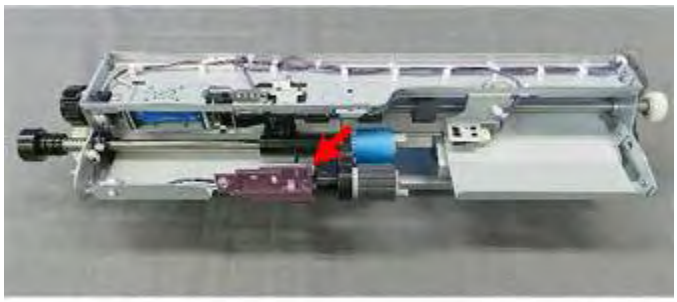
Important

- The feed rollers of the main machine and LCIT are not interchangeable because they turn in different directions.
- After replacing a feed roller in the main machine, make sure that it turns counter-clockwise in the direction of paper feed.
- Avoid touching the surfaces of these rollers with bare hands.

Paper End Sensor

Preparation

1. Remove PFU page 4-244



d1793368

- The paper end sensor is on the left edge of the unit

d1793369

- Disconnect sensor bracket (x1, x1).

d1793370

- Remove sensor from bracket.

Pickup Roller Lift Sensor

Preparation

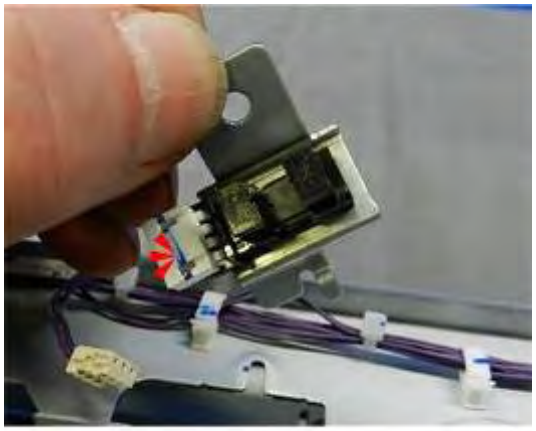
1. Remove PFU page 4-244

d1793371

- The lift sensor is on top of the unit.

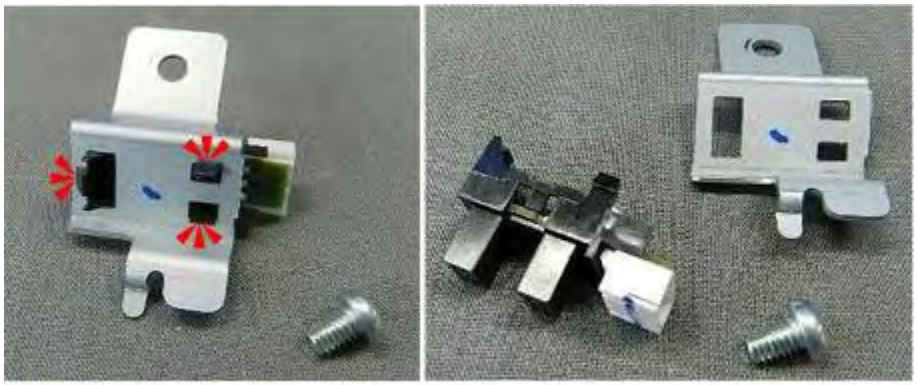
d1793372

- Remove bracket (with sensor attached) (x1).



d1793373

- Disconnect sensor (x1).



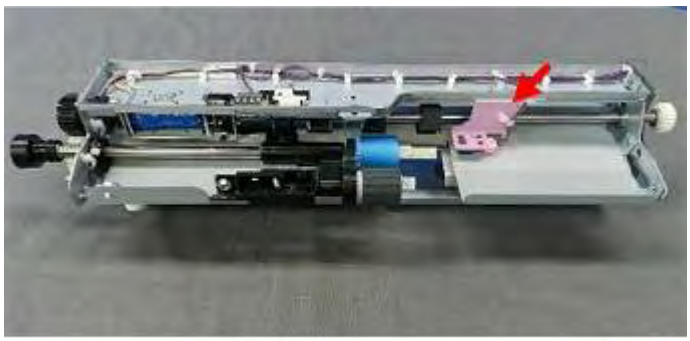
d1793374

- Separate sensor and bracket (x3).

Paper Feed Sensor

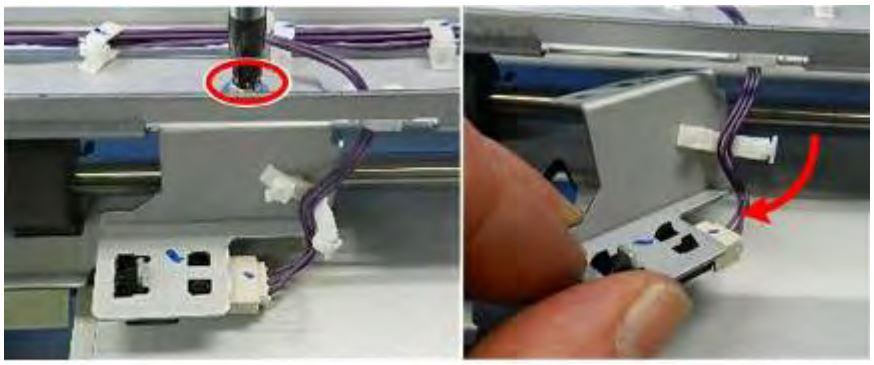
Preparation

1. Remove PFU page 4-244



d1793375

- The paper feed sensor is on the left, toward the front.

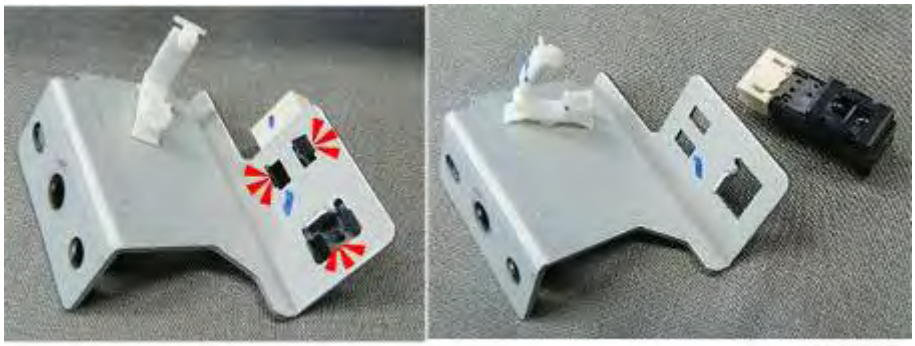


d1793376

- Disconnect sensor bracket (x1, x1).

d1793377

- Disconnect sensor (x1).



d1793378

- Separate sensor and bracket (x3).

Pickup Roller Solenoid

Preparation

1. Remove PFU page 4-244

d1793379

- The pickup roller solenoid is on top of the unit toward the rear.

d1793380

- Remove spring [A] (x1).
- Disconnect bracket [B] (x2, x1, x2).

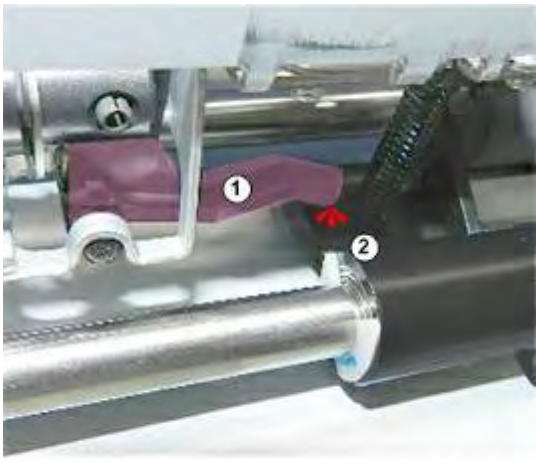
d1793381

- Remove solenoid.

d1793382

- Separate solenoid and bracket (x2).

Re-installation



d1793383

1. When you re-install the pickup roller solenoid, make sure that the arm of the solenoid ① is on the lift arm of the pick-up roller shaft ②.
2. Depress the pickup roller and make sure that it bounces up and down.

Important

- If the actuator of the solenoid is not positioned correctly, the pickup roller will catch on the frame and jam the right tandem tray when the PFU is re-installed.

4.14 VERTICAL TRANSPORT UNIT

4.14.1 OPENING THE VTU

Preparation

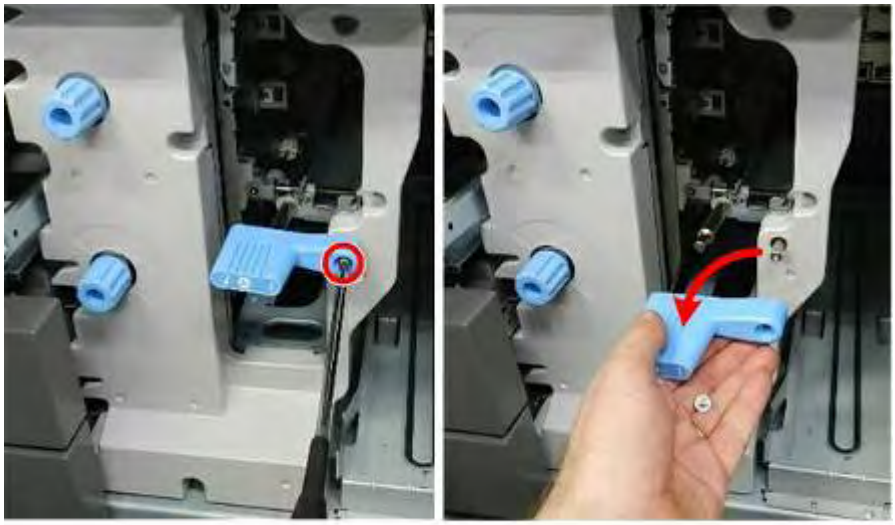
1. Open the front doors.

d1793401

- Remove the toner bottle.

d1793402

- Pull out Tray 1 (top tray).

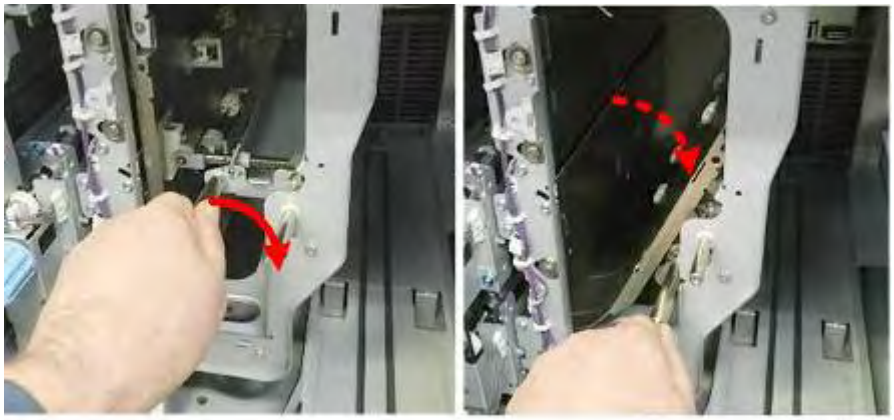


d1793403

- Remove the VTU handle (x1).

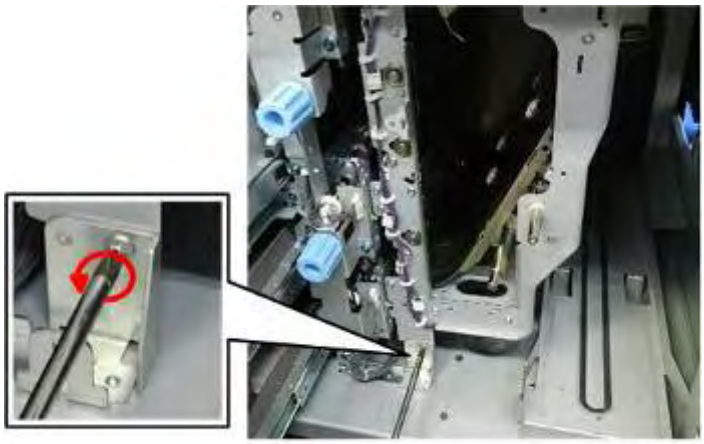
d1793404

- Remove the VTU cover (x5).



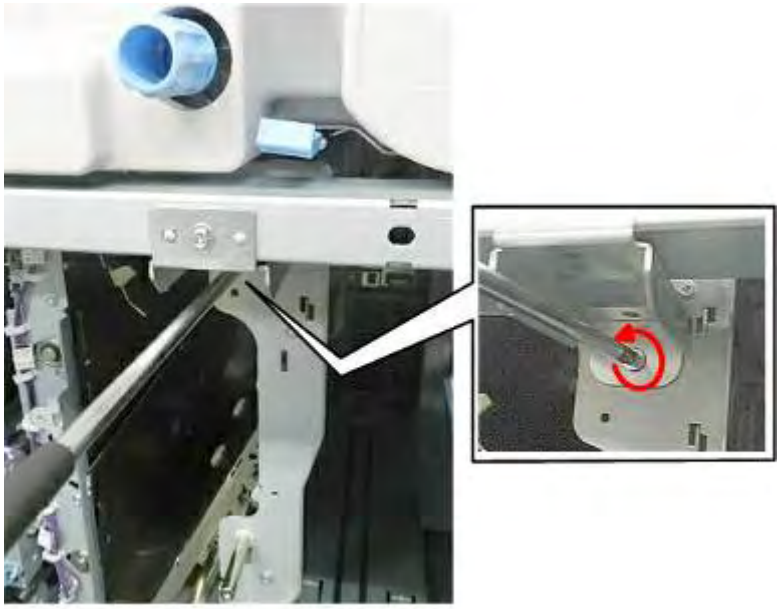
d1793405

- Lower the handle to open the VTU paper path plate.



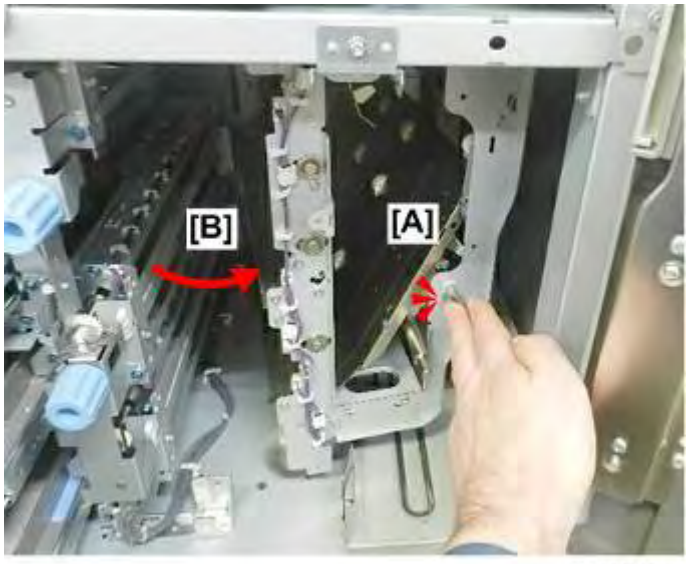
d1793406

- Disconnect the left bottom corner (x1).



d1793407

- Disconnect the upper right corner (x1).



d1793408

- Push the right brace [A] completely to the right to open the gap [B] between the paper feed units on the left and the VTU on the right.

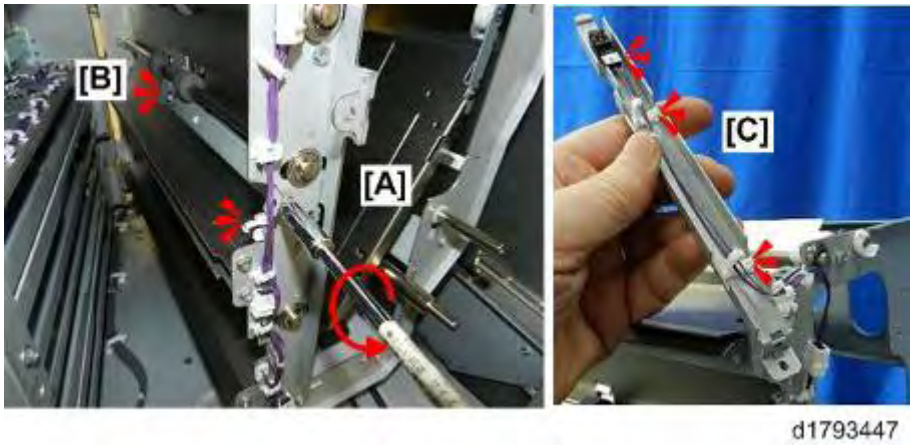
4.14.2 TRANSPORT SENSORS

The transport sensors can be removed without removing the VTU from the machine.

①	1st Transport sensor (F1)
②	2nd Transport sensor (F2)
③	3rd Transport sensor (F3)
④	Vertical transport sensor

Preparation

- Open the VTU page 4-257



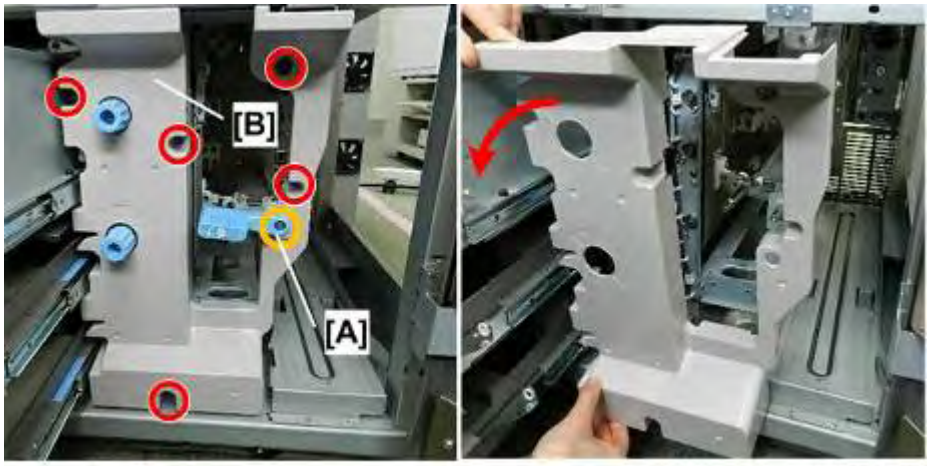
- At the front [A] disconnect the sensor bracket (x1, x1).
- Disconnect the bracket at the rear [B] (x1).
- Separate sensor and bracket (x2, x1).

4.14.3 VTU REMOVAL

Preparation

1. Open front doors
2. Pull out the paper trays
3. Pull out front drawer
4. Open controller box page 4-27
5. Remove right cover page 4-22

- Remove toner bottle.

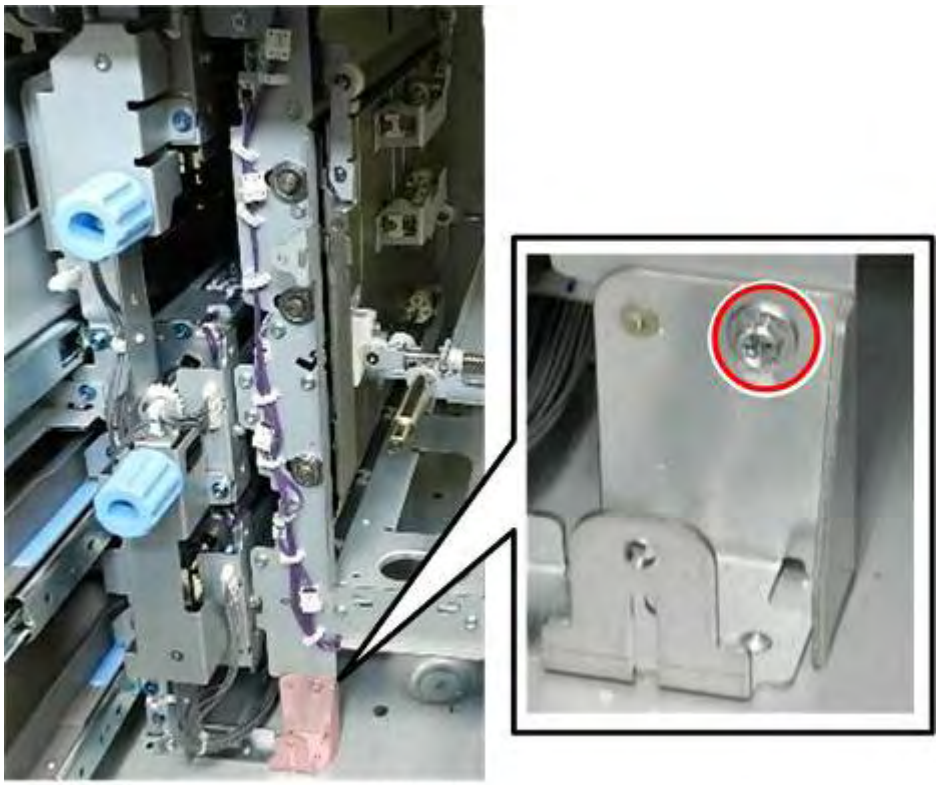


d1793422

- Remove handle [A] and cover [B] (x5).

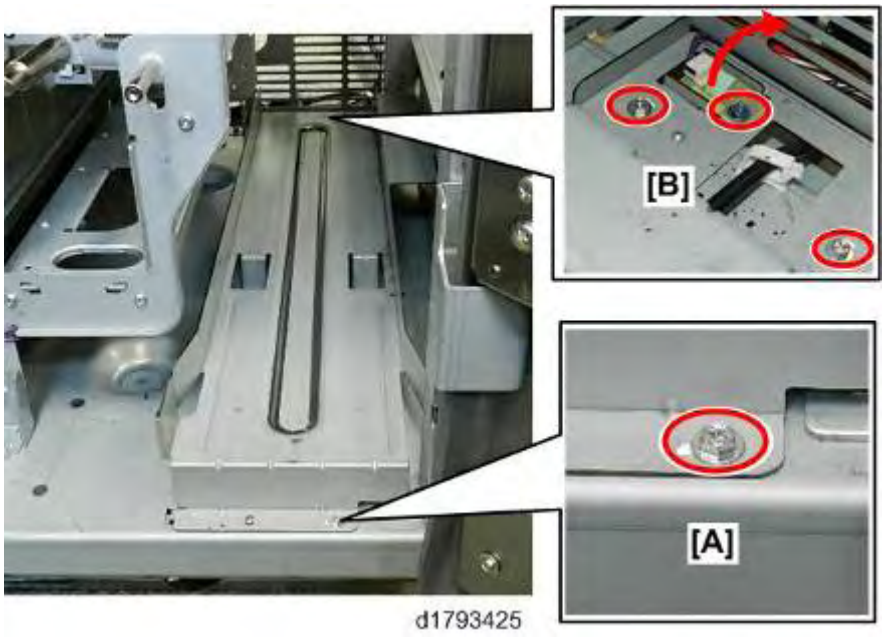
d1793423

- Remove bracket (x2).



d1793424

- Remove screw (x1).

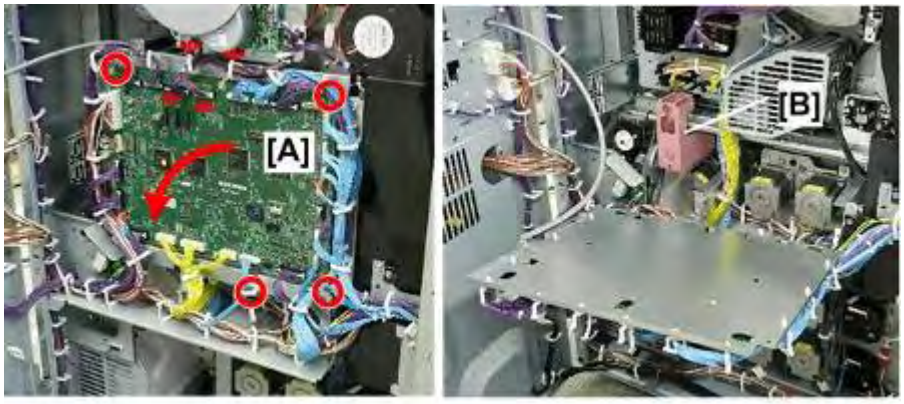


d1793425

- Disconnect toner bottle rail:
  [A] Front (x1)
  [B] Rear (x2, x1). When you remove the blue screw, pull out the temperature sensor. You do not need to disconnect the sensor.

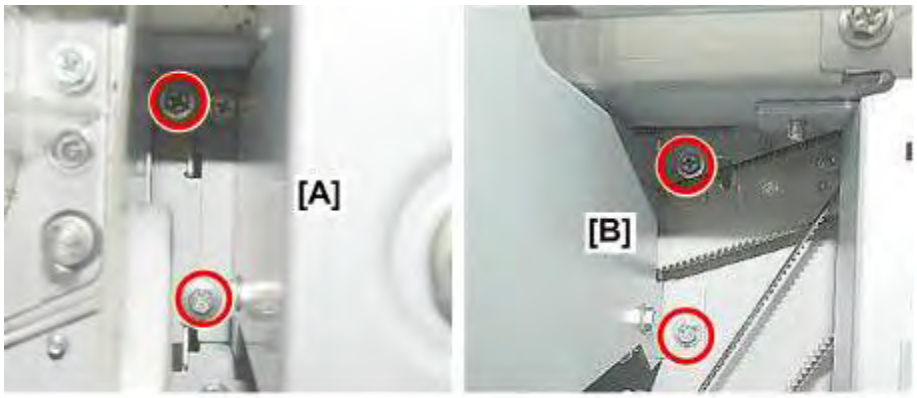
d1793426

- From the front, slide toner bottle rail out of the machine.



d1793427

- Lower IOB [A] (x2, x2, x4).
- With the IOB lowered, you can see bracket [B] that must be removed in the next step.



d1793428

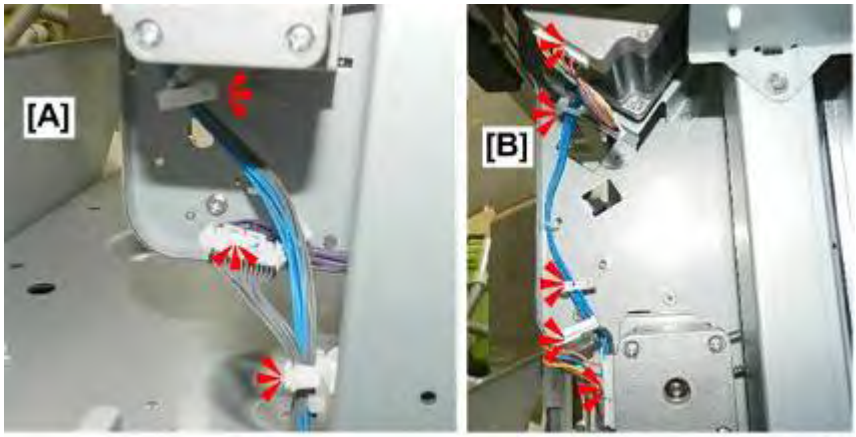
- Disconnect:

  [A] Left side of bracket (x2)

  [B] Right side of bracket (x2)

d1793429

- As you remove bracket [A], disconnect belt [B].

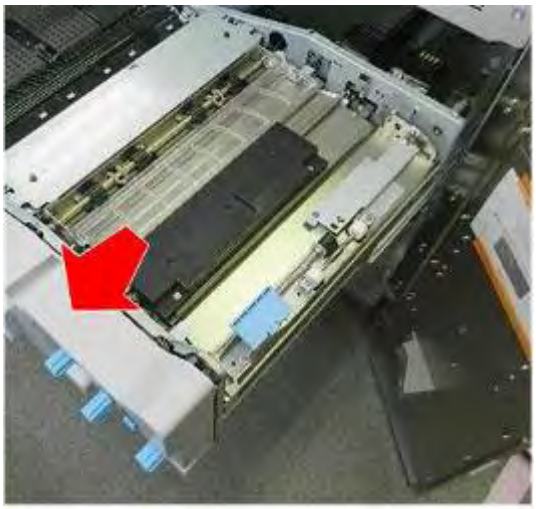


d1793430

- At the corner of the machine, below the lowered IOB, disconnect VTU motor harnesses at [A] and [B] (x5, x2)

d1793431

- The VTU unit is mounted on two pins ① and ② below the lowered IOB.

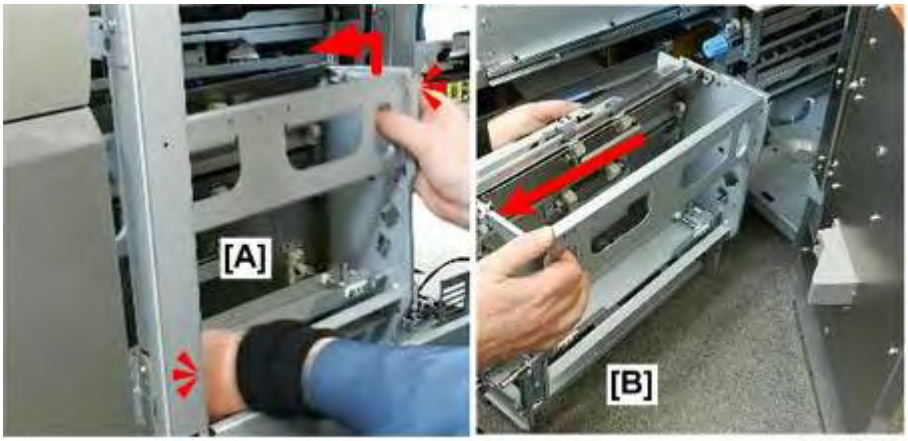


d1793432

- Make sure that the front drawer is pulled out completely.

Important

1. The VTU cannot be removed with the front drawer inside the machine.



d1793433

- On the right side of the machine [A], lift VTU [A] off its hooks.
- At the front [B], pull the VTU out of the machine, and then lay it on a flat surface.

d1793434

4.14.4 BANK EXIT MOTOR, VERTICAL TRANSPORT MOTOR

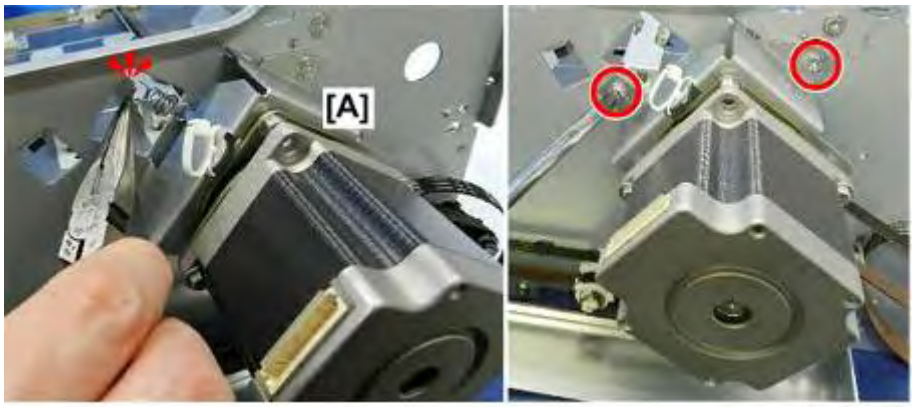
d1793435

①	Vertical transport motor
②	Bank exit motor

Bank Exit Motor

Preparation

- Remove the VTU page 4-257



d1793436

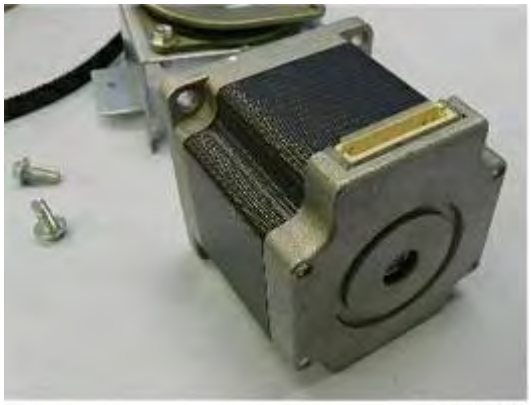
1. Disconnect spring of bank exit motor [A], and then disconnect top of motor bracket (x1, x2).

d1793437

2. Disconnect bottom bracket [A], and then disconnect belt as you remove bracket [B] (with motor attached) (x1, x1).

d1793438

3. Disconnect motor from bracket (x2).

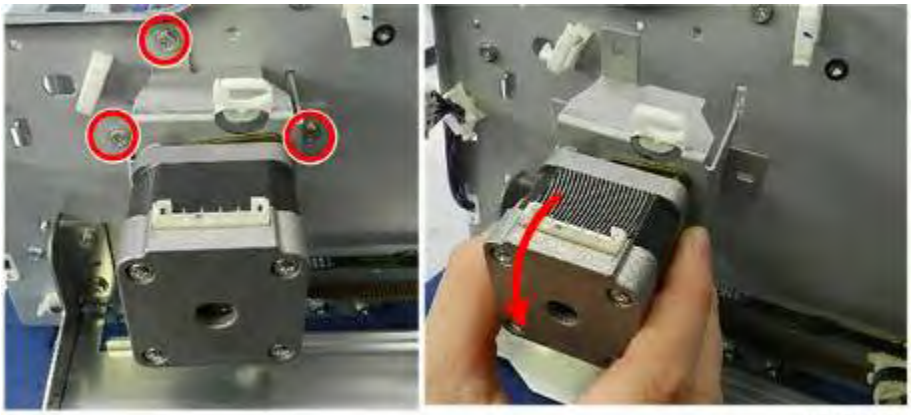


d1793439

Vertical Transport Motor

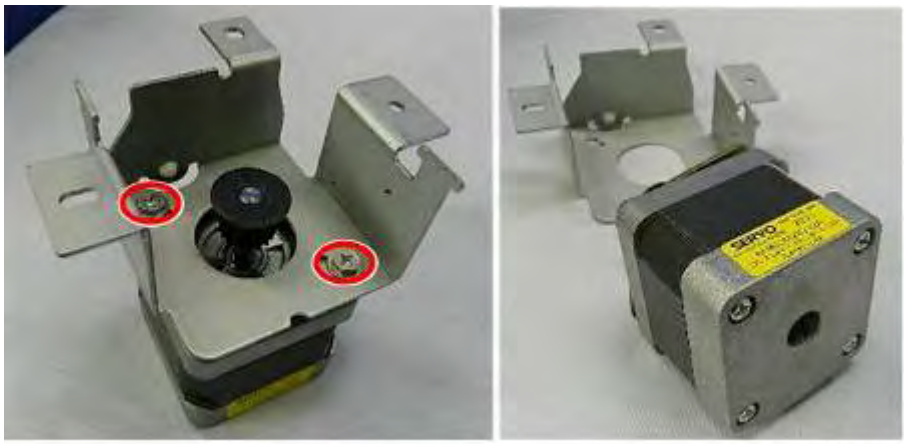
Preparation

- Remove the VTU page 4-261



d1793440

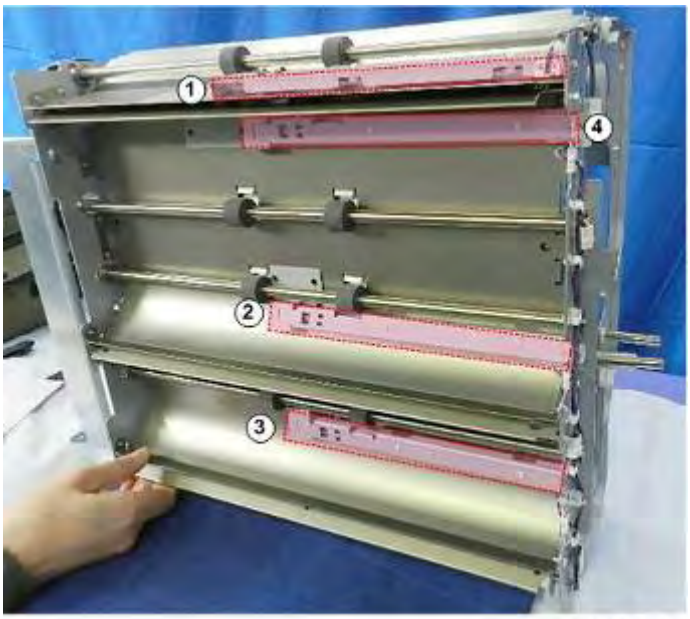
1. Disconnect motor bracket (x3).
2. As you remove the bracket (with motor attached), disconnect belt behind the bracket (x1).



d1793441

3. Remove motor from bracket (x2).

4.14.5 VERTICAL TRANSPORT SENSORS



d1793442

①	1st Transport sensor (F1)
②	2nd Transport sensor (F2)
③	3rd Transport sensor (F3)
④	Vertical transport sensor

1st Transport Sensor (F1)

Preparation

- Open the VTU page 4-257

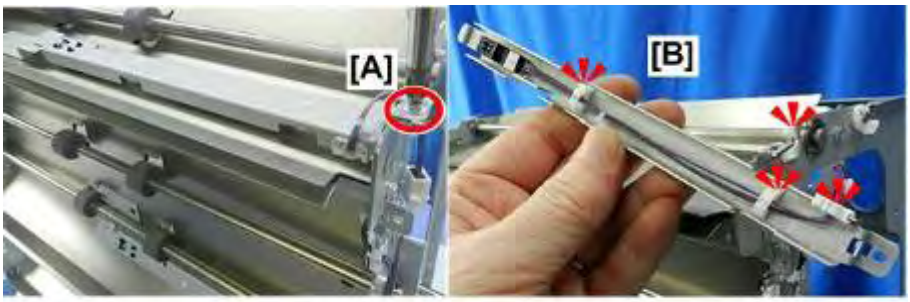
Note

- The sensors can be removed without removing the VTU.

Each sensor is removed in the same way:

1. 1 screw ( )
2. 4 clamps ( )
3. 1 connector ( )
4. 4 pawls ( )

The procedure below describes how to remove 1st transport sensor. Follow the same procedure to remove any of the other VTU sensors.



d1793443

1. Disconnect sensor bracket at the front [A] (x1).
2. Disconnect sensor harness inside bracket [B] (x3).

d1793444

3. Remove sensor (x1, 4).

4.15 REGISTRATION UNIT

4.15.1 PAPER DUST TRAY

The dust collector should be opened and emptied very PM visit.

Preparation

- Open both front doors
- Pull out the drawer.

d1793501

- Remove the cover [A] (x2).

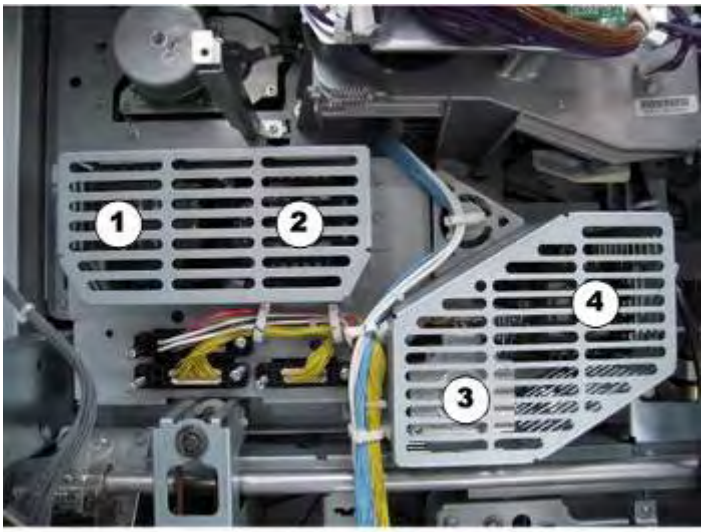
d1793502

- Remove the dust collector [A] (x2).
- Empty the collected paper dust into a trash bin.

4.15.2 MOTORS

Preparation

1. Open controller box page 4-27



d1793503

①	Registration Entrance Motor
②	Registration Timing Motor
③	Registration Gate Roller Motor
④	Transport Timing Motor

These four motors can be accessed and are serviced from the back of the machine.

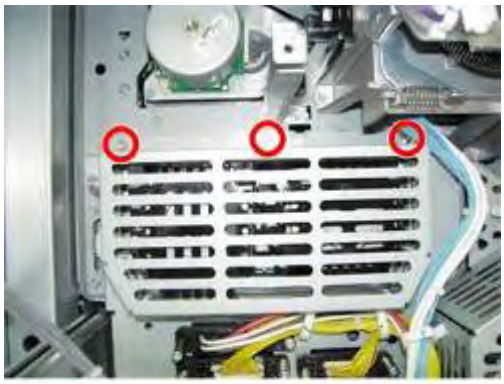
4.15.3 REGISTRATION ENTRANCE MOTOR

Preparation

1. Open controller box page 4-27
2. Lower the IOB bracket page 4-32

d1793505

- Free harnesses from the motor cage [A] (x3).

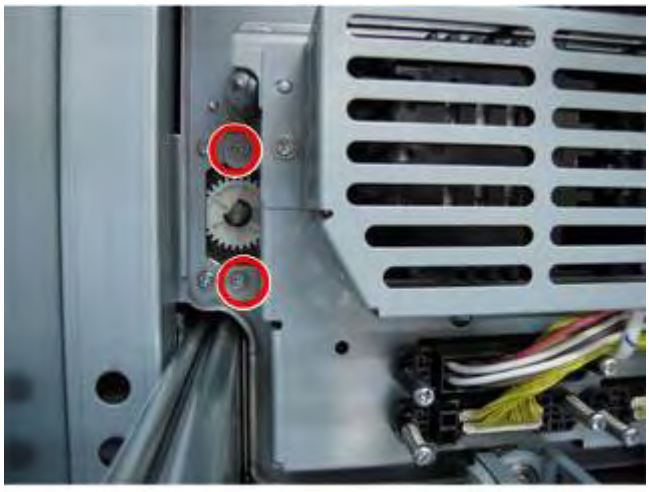


d1793506

- Disconnect top of plate (x3

d1793507

- Disconnect bottom of plate at [A] and [B] (x2).



d1793508

- Disconnect side of plate (x2).

d1793509

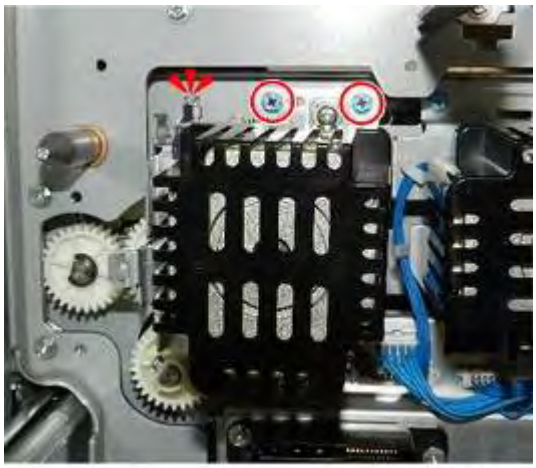
- Pull out front drawer.

d1793510

- Make sure the motors [A] are pulled away toward the front.
- Remove plate [B].

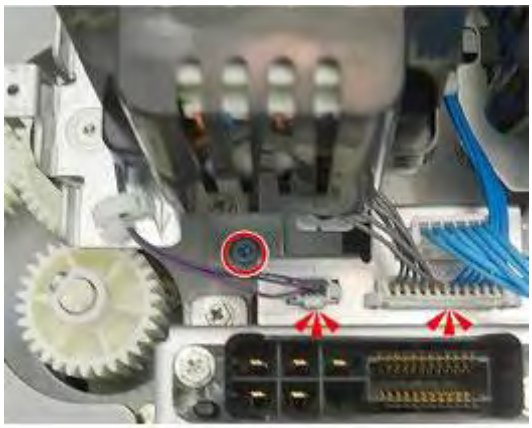
d1793504

- Push the front drawer into the machine so you can access the motors again.
- The registration entrance motor is on the left.



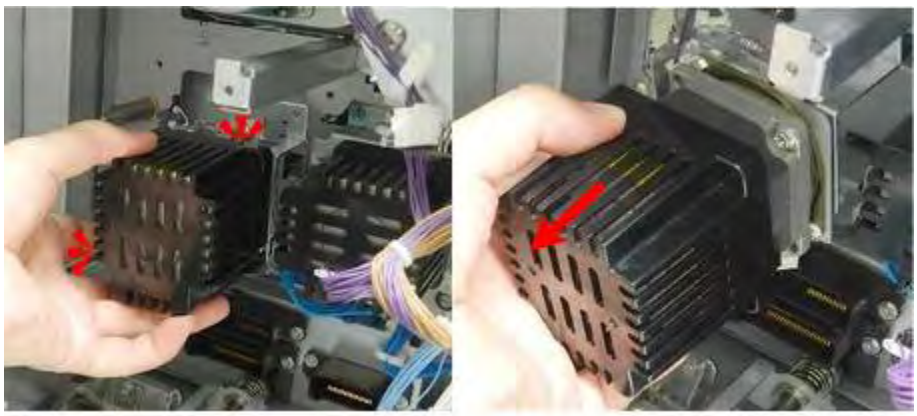
d1803521

- Disconnect the motor bracket at the top (x1, x2).



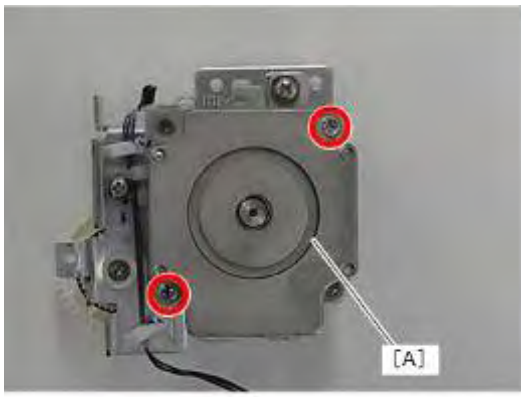
d1803522

- Disconnect the motor bracket at the bottom (x2, x1).



d1803523

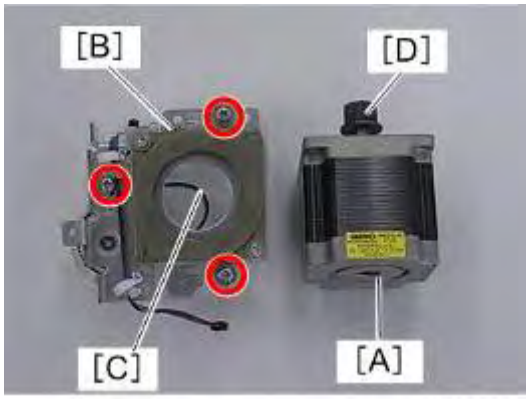
- Disconnect the cage and then remove the motor bracket with motor attached (x2).



d1790118

- Separate motor [A] and bracket (x2).

Re-installation



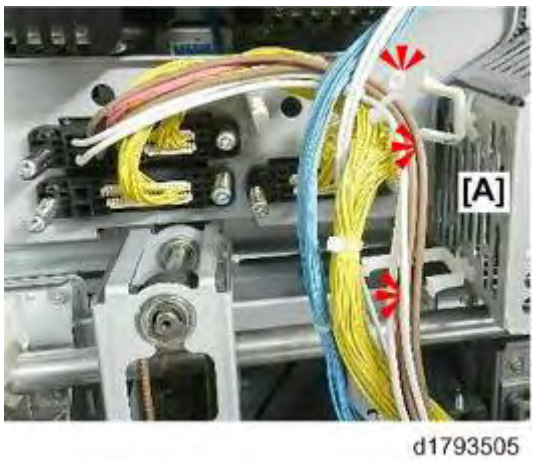
d1790119

- When re-installing motor [A], loosen the three screws to release the tension on spring [B].
- Set the belt [C] and motor gear [D], and then fasten the motor and bracket together (x2).
- Tighten the screws [B] to restore tension on the belt.

4.15.4 REGISTRATION TIMING MOTOR

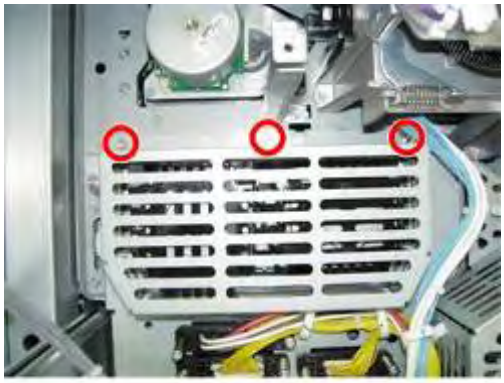
Preparation

1. Open controller box page 4-27
2. Lower the IOB bracket page 4-32



d1793505

- Free harnesses from the motor cage [A] (x3).

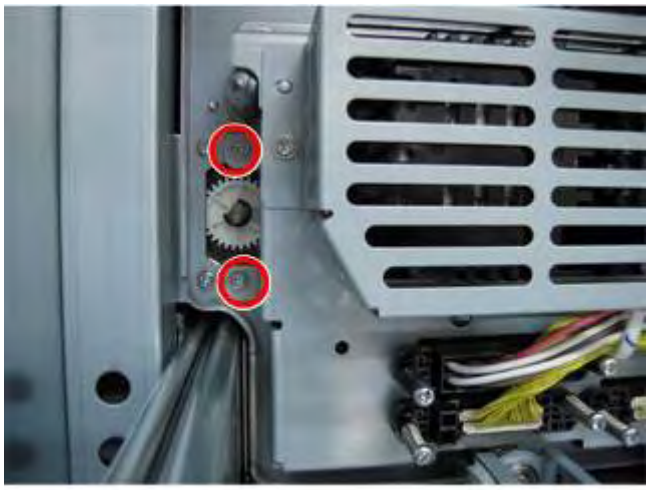


d1793506

- Disconnect top of plate (x3

d1793507

- Disconnect bottom of plate at [A] and [B] (x2).



d1793508

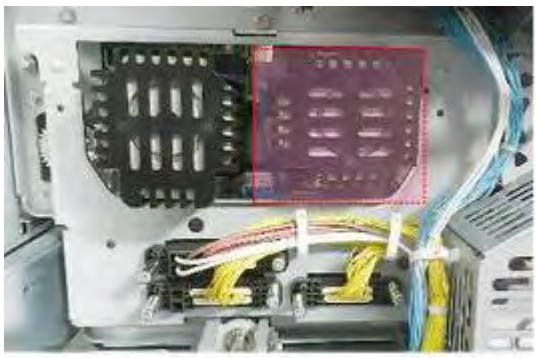
- Disconnect side of plate (x2).

d1793509

- Pull out front drawer.

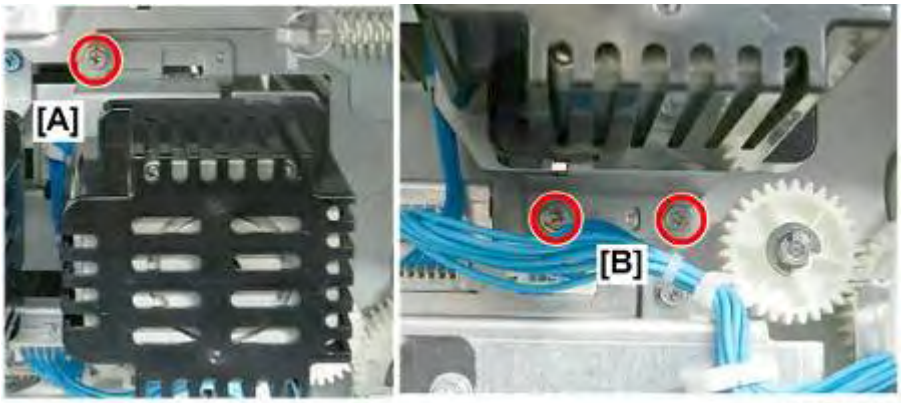
d1793510

- Make sure the motors [A] are pulled away toward the front.
- Remove plate [B].



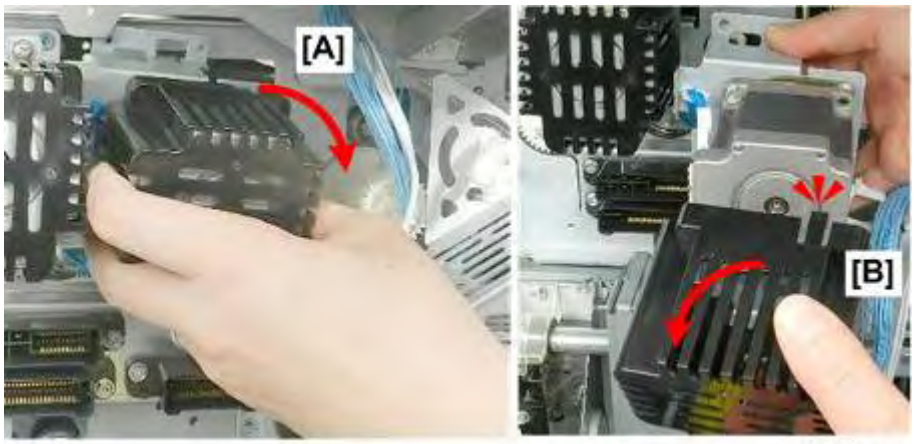
d1793515

- Push the front drawer into the machine so you can access the motors again.
- The registration timing motor is on the right.



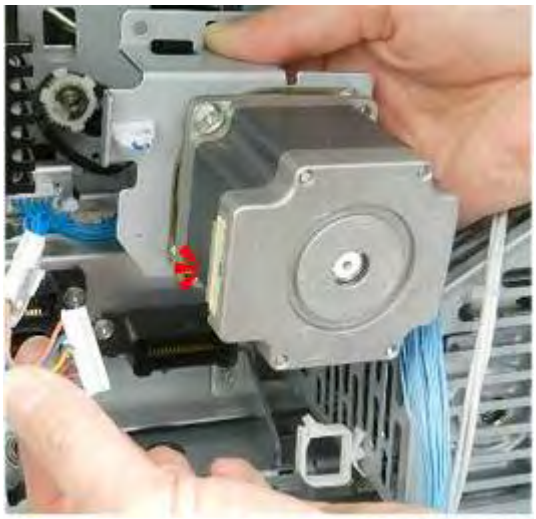
d1793516

- Disconnect motor bracket at top [A] and bottom [B] (x3).



d1793517

- Pull away motor [A] a small distance away from the back of the machine, and then release the tabs to remove plastic motor cage [B] (x2).



d1793518

- Disconnect motor (x1).

d1793519

- Separate motor from bracket (x2).

d1793520

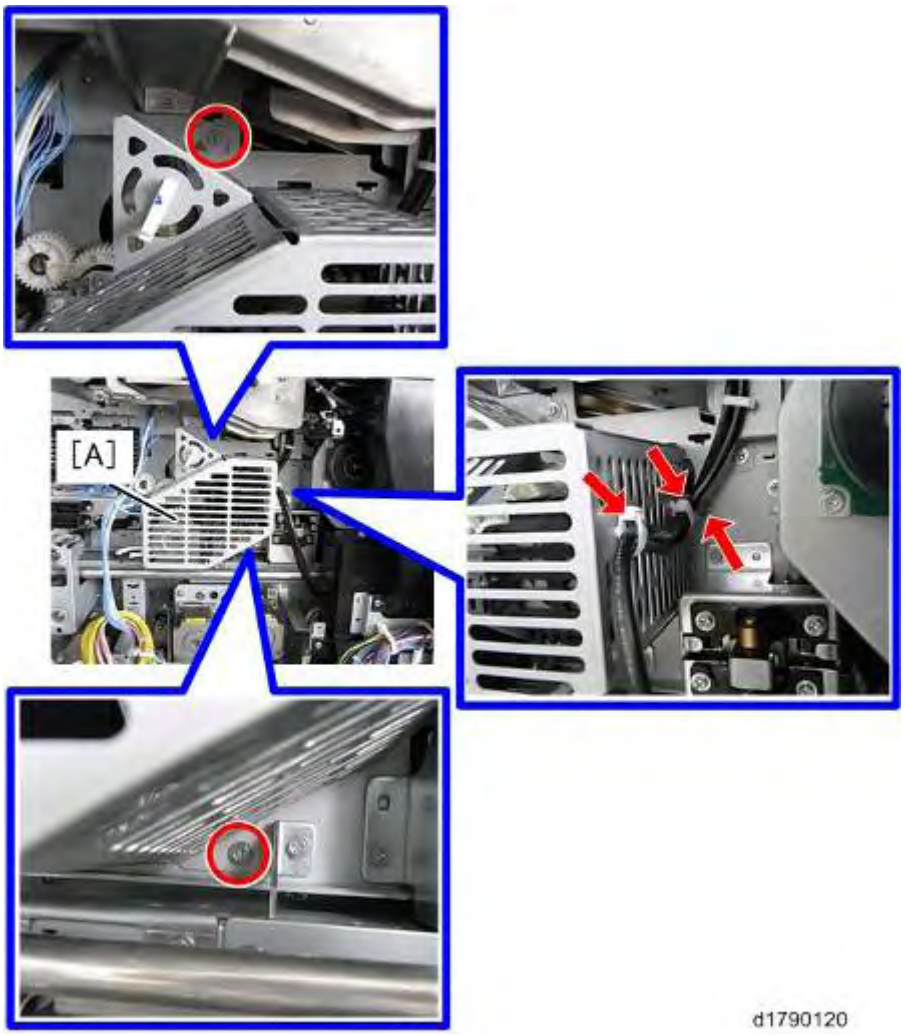
Note

1. After re-installing the motor, pull out the front drawer and confirm that the timing belt is set correctly.

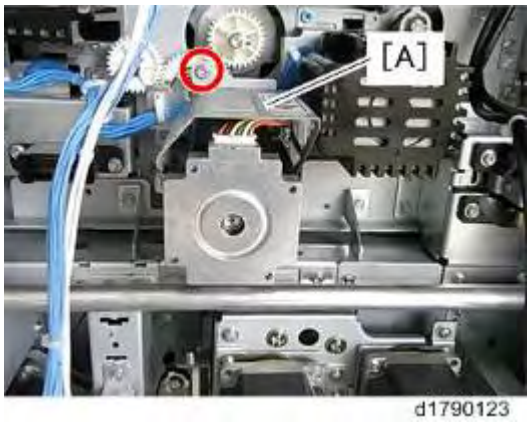
4.15.5 REGISTRATION GATE ROLLER MOTOR

Preparation

- Open controller box page 4-27
- Lower the IOB bracket page 4-32
- Remove registration entrance motor bracket page 4-274



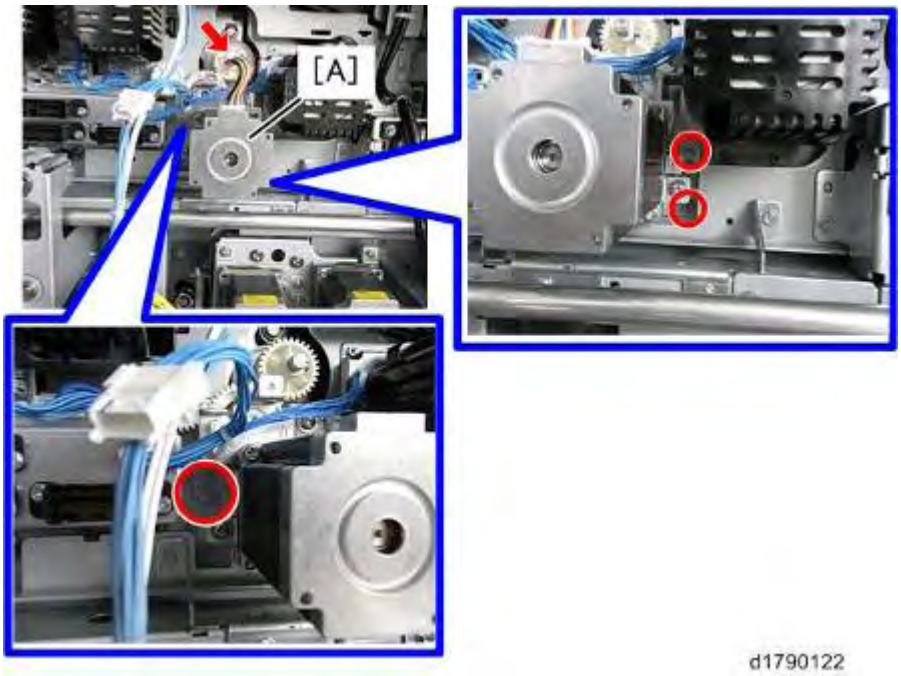
1. Remove harness cage [A] (x3, x2).



2. Remove shield [A] (x1).

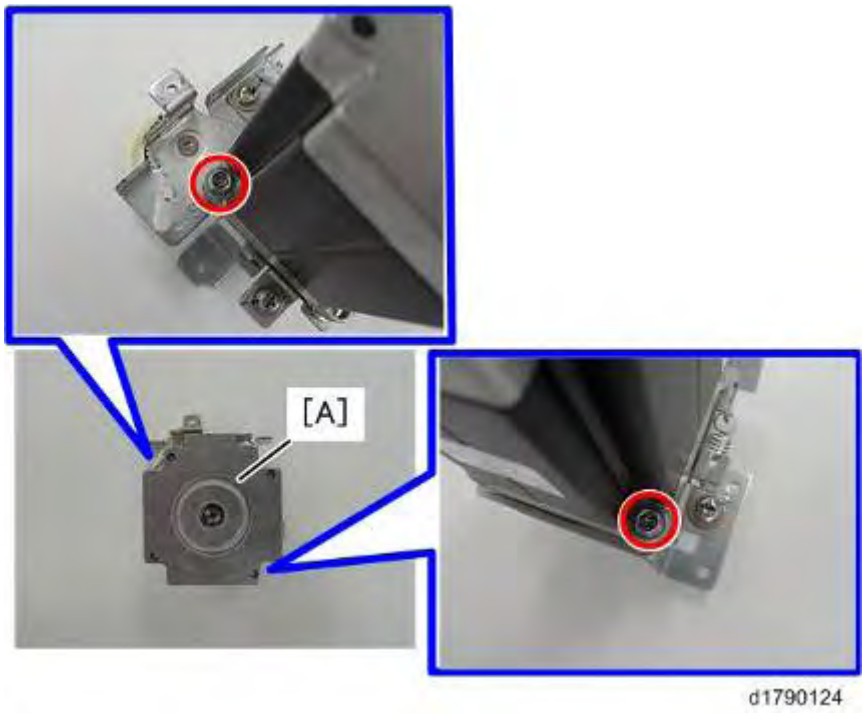
d1790121

3. Disconnect harness (x2).



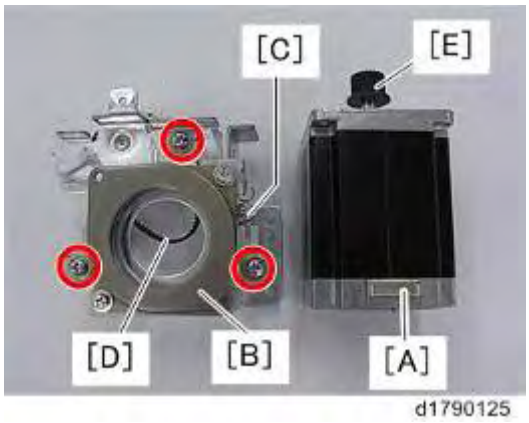
d1790122

4. Disconnect bracket of motor [A] (x3, x1)

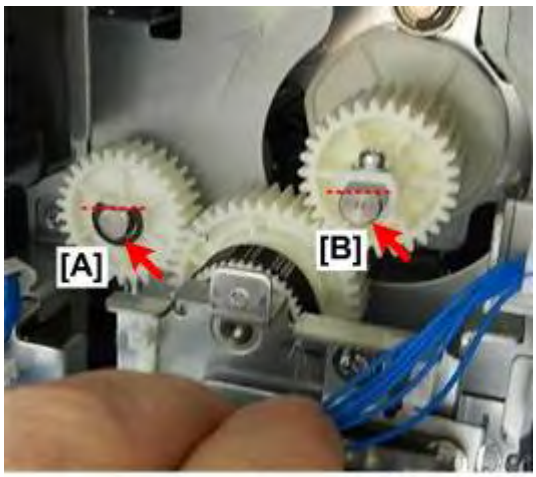


5. Separate motor [A] and bracket (x2).

Re-installation



- When re-assembling motor [A] and bracket [B], first loosen the three screws to release the tension on spring [C].
- Set the belt [D] and motor gear [E], and then fasten the motor and bracket together (x2).
- Tighten the three screws to restore tension on the belt.



- Before you re-attach the motor, make sure that the flat sides of both shafts are up and level with one another.

Important

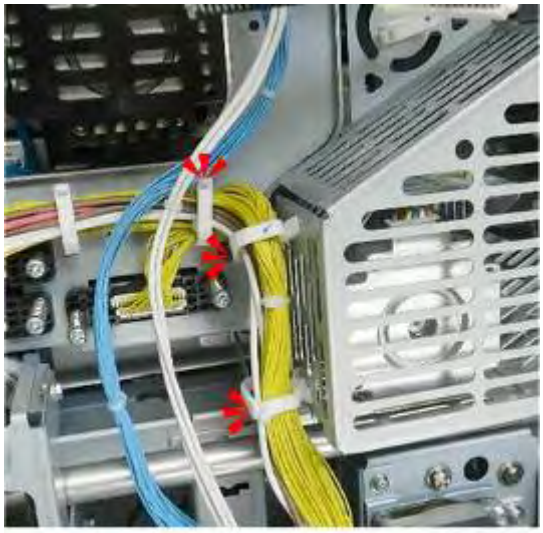
1. You can turn either gear so the flat side is facing up. Make sure both flat sides are facing up after setting the motor.
2. If these flat sides are not facing up and parallel, the gears will be out of alignment. This can cause paper jams in the registration unit.

4.15.6 TRANSFER TIMING MOTOR

Preparation

- Open controller box page 4-27
- Lower the IOB bracket page 4-32

- The transfer timing motor is behind motor cage [A].
- Free harnesses on right side of cage [B] (x3).



d1793522

- Free harnesses on left side of cage (x3).

d1793523

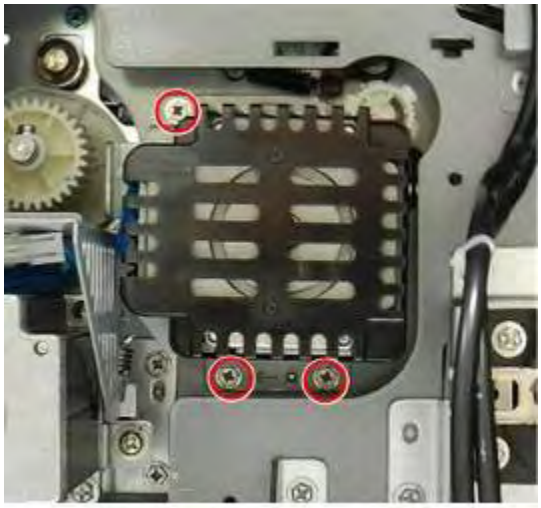
- Disconnect cage at [A], [B], [C] (x3).

d1793524

- Remove motor cage.

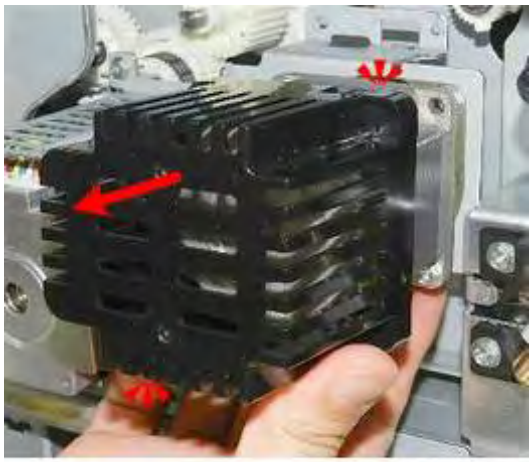
d1793529

- The transfer timing motor is the motor on the right.



d1803525

- Disconnect the motor bracket (x3).



d1803526

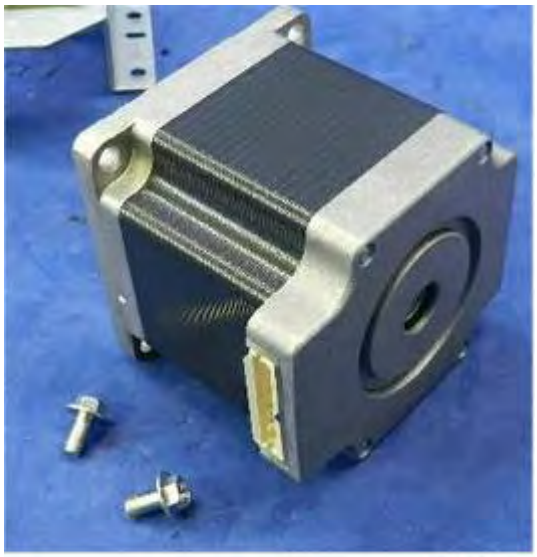
- Separate the cage from the bracket and remove it (x2).

d1803527

- Disconnect the motor (x1,x1).

d1793533

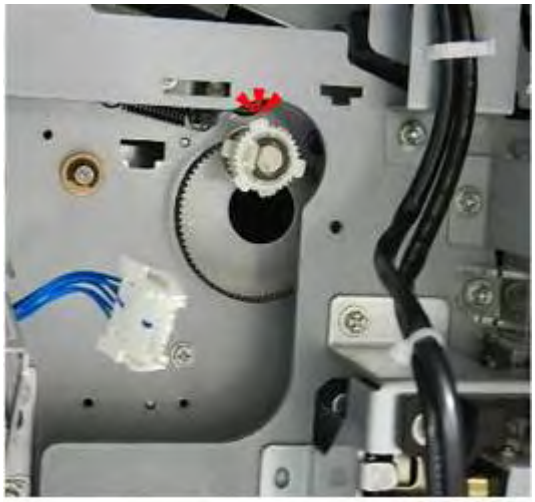
- Separate motor from bracket (x2).



d1793534

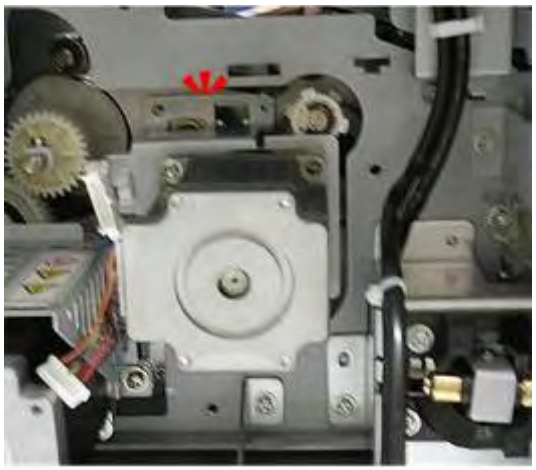
Re-installation

- Assemble the motor and motor bracket.
- Make sure that the front drawer is pushed in.



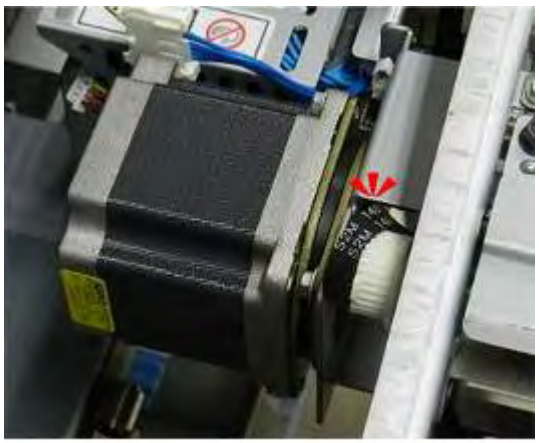
d1803528

- Hang the belt.



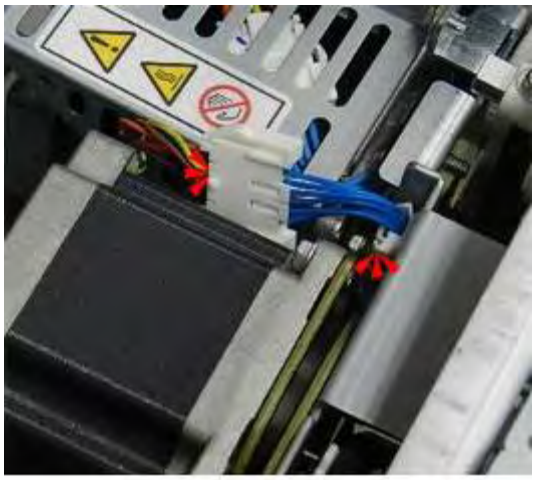
d1803529

- Re-attach the motor bracket (with motor attached) (x3).
- Pull out the front drawer until it stops.



d1803530

- At the back edge of the open front drawer, set the timing belt.



d1803531

- Re-connect the motor (x1, x1).
- Push in the front drawer, and then make sure that the motor bracket screws are tight.

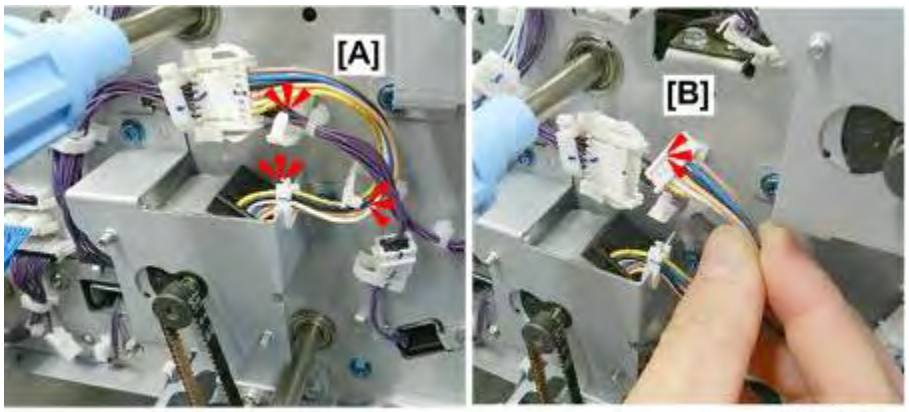
4.15.7 MAIN RELAY MOTOR

Preparation

1. Pull out front drawer
2. Remove drawer right cover

d1793535

- The main relay motor is on the front, right side of the drawer.



d1793536

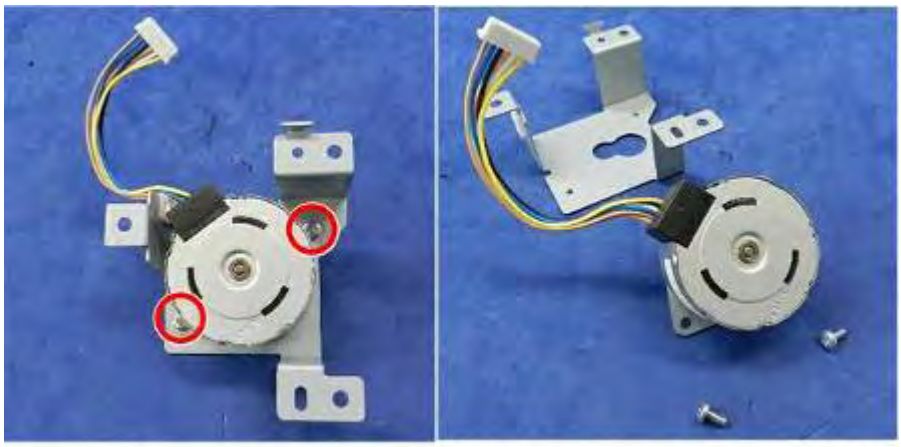
- Free harness [A] (x3).
- Disconnect motor [B] (x1).

d1793537

- Disconnect motor bracket:
  [A] Left (x2)
  [B] Right (x1)

d1793538

- Remove belt [A] (x1).
- Remove motor [B].



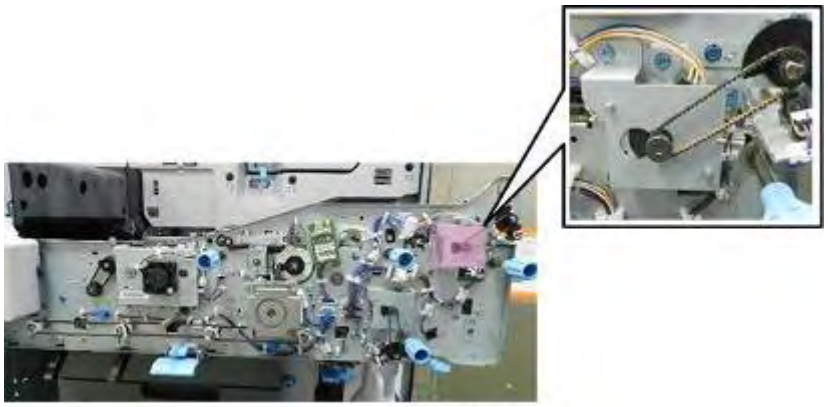
d1793539

- Separate motor from bracket (x2).

4.15.8 LCIT RELAY MOTOR

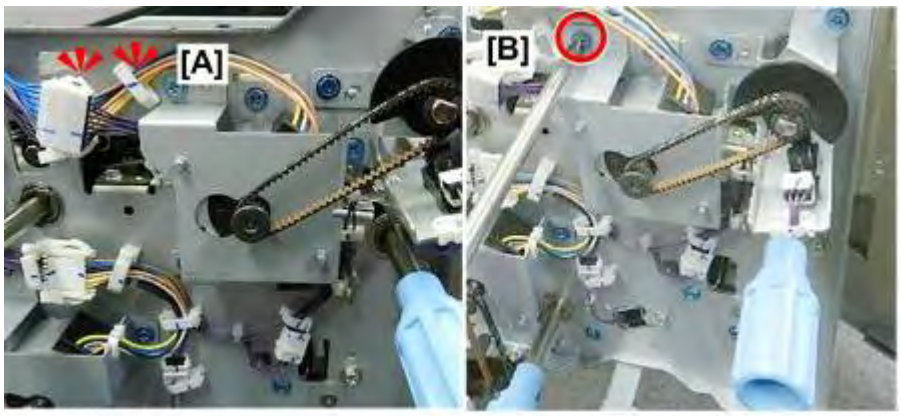
Preparation

1. Pull out front drawer
2. Remove drawer right cover



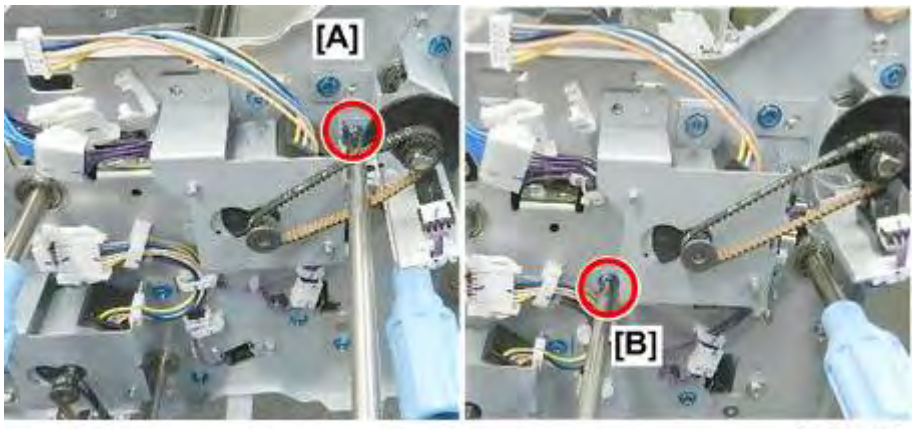
d1793547

- The LCIT relay motor is at the upper right cover of the drawer front.



d1793548

- Disconnect:
  [A] Harness (x1, x1)
  [B] Bracket top (x1)

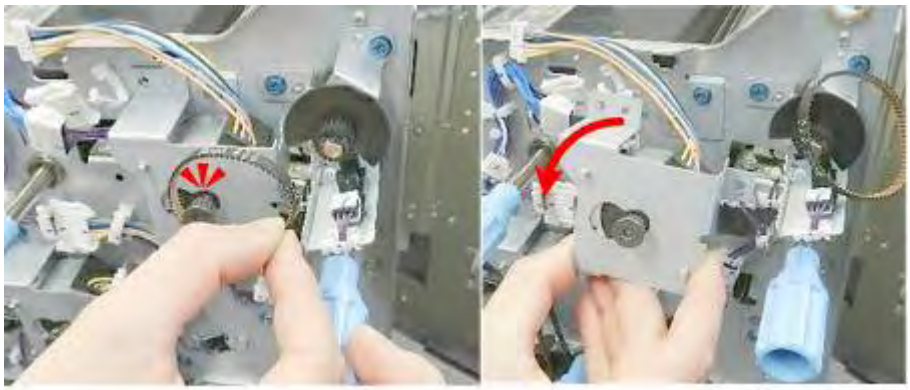


d1793549

- Disconnect:

  [A] Motor bracket right (x1)

  [B] Motor bracket left (x1)



d1793550

- Disconnect belt and remove motor (x1).

d1793551

- Separate motor from bracket (x2).

4.15.9 LE SHIFT UNIT MOTOR, CIS FAN

Preparation

1. Open controller box page 4-27
2. Remove transfer timing motor page 4-285
3. Pull out the front drawer, and then remove the right front cover of the drawer. page 4-26

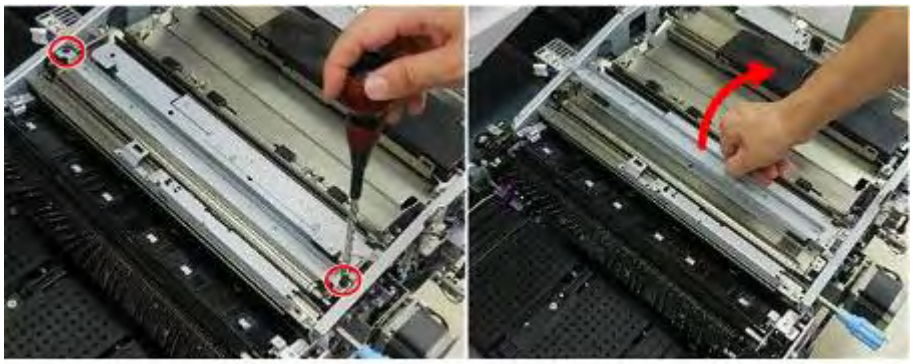
d1793588

①	CIS Fan
②	LE Shift Unit Motor

- The motor and fan are on the left. Several parts must be removed in order to access these components.

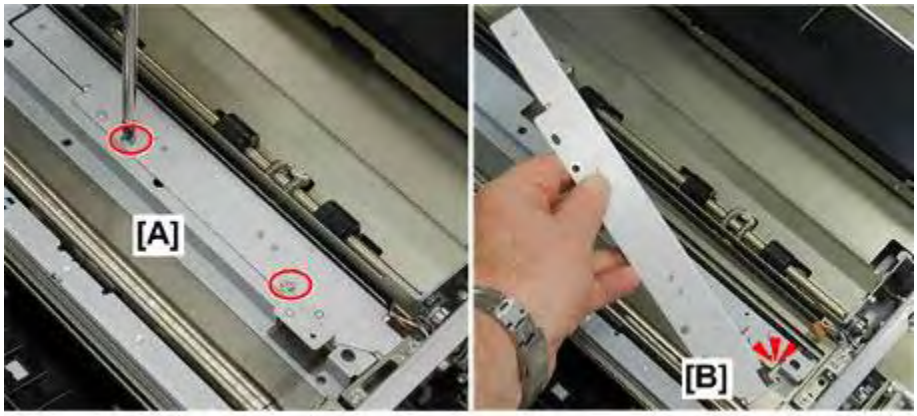
d1793594

- Remove plastic cover.



d1803532

- Remove the paper dust tray (x2).

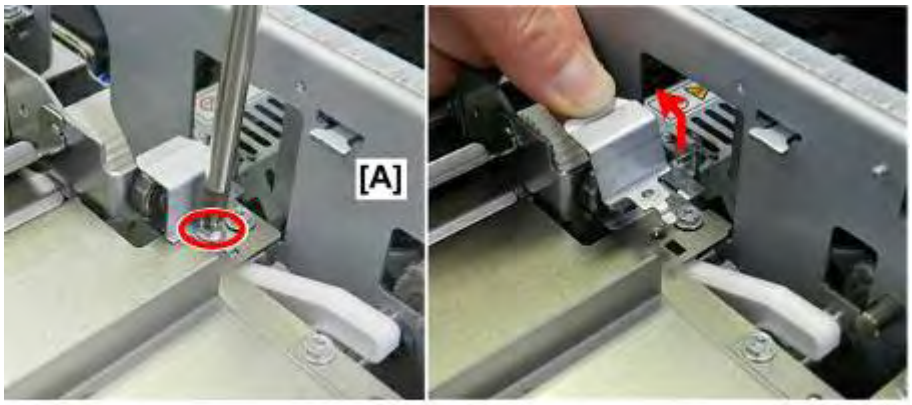


d1803533

- Remove CIS bracket screws [A] (x2).
- Disconnect and remove CIS bracket (x1).

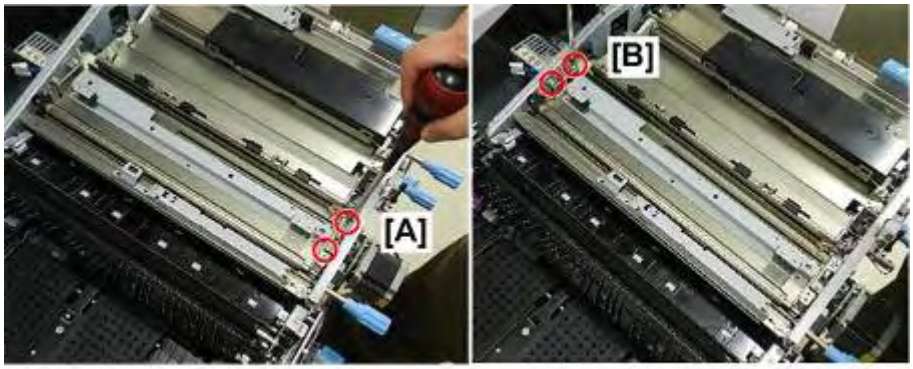
d1793571

- Remove front lock plate [A] (x1).



d1793572

- Remove rear lock plate [A] (x1).

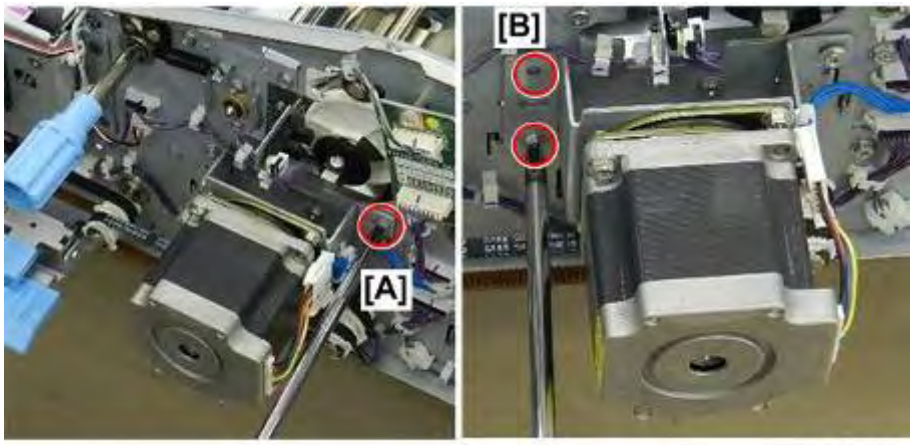


d1803534

- Disconnect shift cover at the front [A] (x2).
- Disconnect at rear [B] (x2).

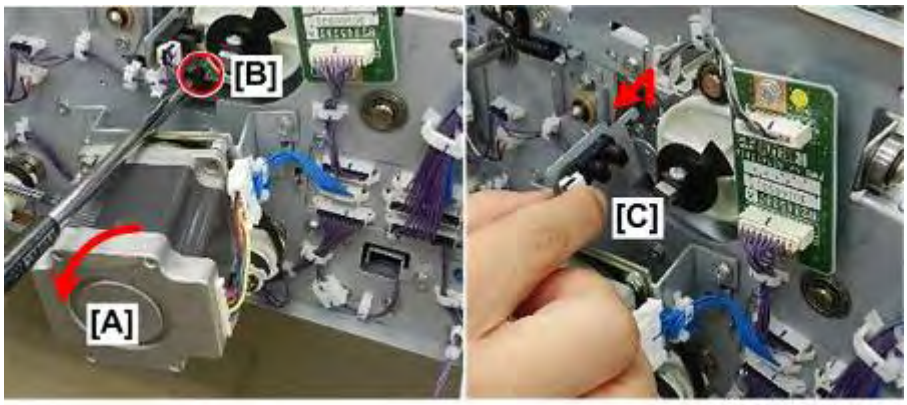
d1803535

- Remove cover.



d1803536

- Loosen screw [A] (do not remove) of duplex transport motor 2.
- On the left side of the same bracket, remove both screws (x2).

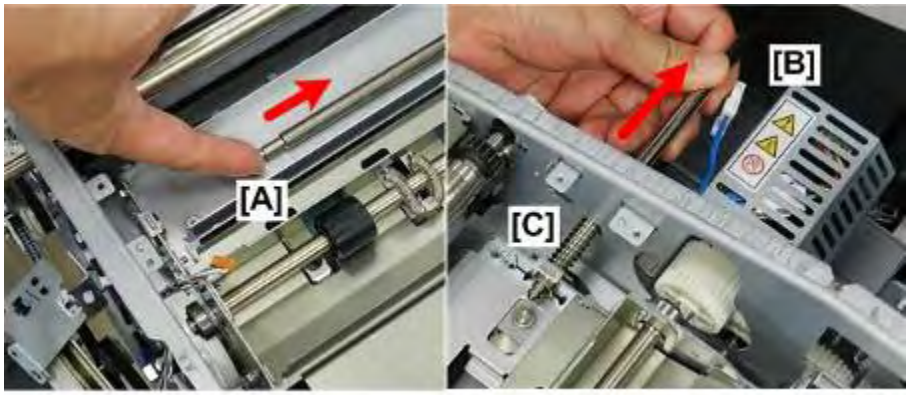


d1803537

- Pull motor [A] down slightly, and then remove sensor bracket screw [B] (x1).
- Pull out the sensor bracket [C]. (This is the registration gate roller HP sensor.)

d1803538

- Disconnect the front end of the shaft (x1, x1).

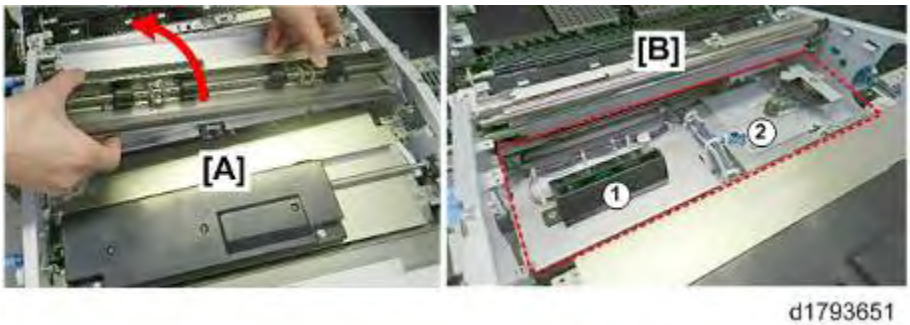


d1803539

- Push front end of shaft [A] to the rear.
- Pull out shaft [B] and remove spring [C].

d1803540

- Remove the shaft.



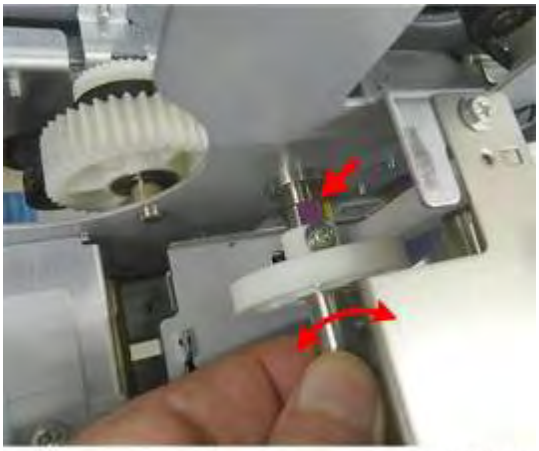
d1793651

- Next, remove the LE shift unit [A].

Note

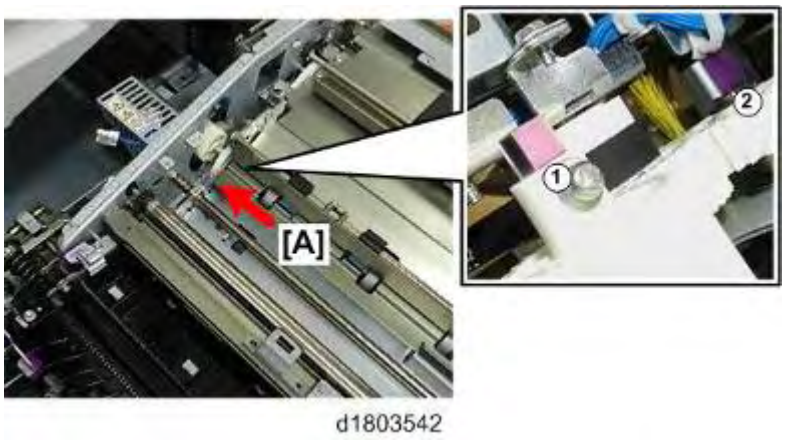
1. The area below [B] is now clear so you can see the CIS fan ① and the LE shift unit motor ②.

Re-installation



d1803541

- Before you re-install the shift unit, turn the cam shaft on the right until its flat edge is facing up and level.



d1803542

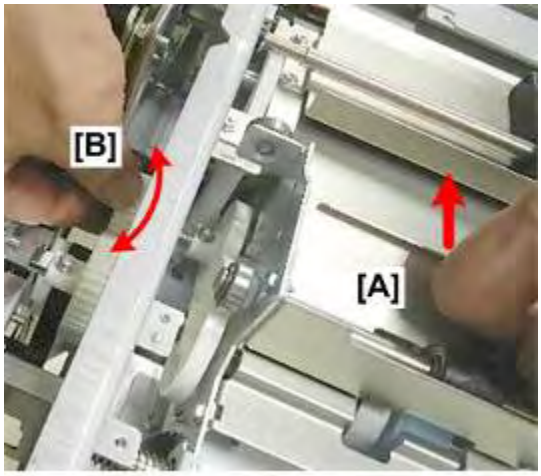
- Turn the shift unit gear so the flat end of its shaft ① is facing up and parallel with the end of the flat end of the cam shaft ②.
- Slowly, set shift unit [A] with the flat side of the shaft facing up.

d1803543

- Slowly, push in the front drawer until it stops.
- At the back of the machine, check the positions of the shaft ends.
  1. If the flat sides of the shaft ends are facing up and parallel [A], they are positioned correctly.
  2. If one or both are not aligned correctly [B] one or both must be adjusted.

Important

- The flat sides of both of these shafts must face up and be parallel [A].
- If either or both are even slightly out of position, this will cause paper jams in the registration unit.



d1803544

- Pull out the front drawer again until it stops.
- If you need to adjust the positions of the shaft ends, lift the shift unit [A] up slightly, and then turn the gears until they are up and level.

d1803545

- Slowly, push in the front drawer until it stops.
- At the back of the machine, check the positions of the shaft ends and make sure the flat sides are facing up and parallel..
- Pull the drawer out again until it stops.
- Re-install the removed shaft.
- After re-installation of the shaft, once again push the drawer into the machine and then check the positions of the shaft ends to make sure that they have not slipped out of alignment.
- Re-install the transfer timing motor, and then finish the re-installation.

CIS Fan

Preparation

1. Remove the LE shift unit (see above).

d1793652

- Remove sensor cover (x1).

d1793653

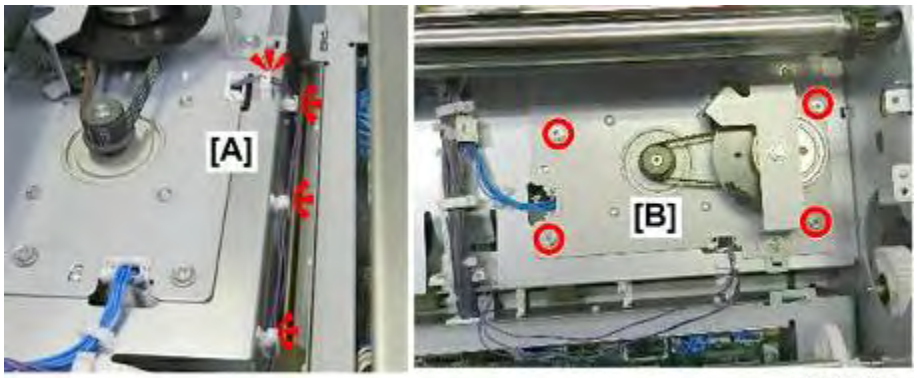
- Remove fan (x5, x1).

d1793654

LE Shift Unit Motor, LE Shift Unit HP Sensor

Preparation

1. Remove the LE shift unit (see above).



d1793655

- Free motor harness [A] (x4).
- Disconnect motor bracket [B] (x4).

d1793656

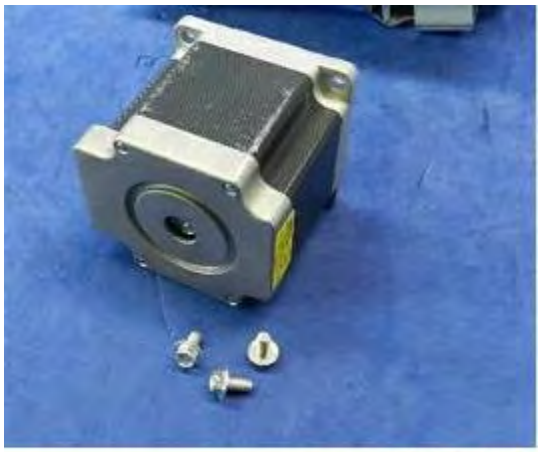
- Pull out the motor bracket (with motor attached) a short distance (the motor and sensor are still connected).

d1793657

- Disconnect the motor [A] (x1).
- Disconnect sensor harness [B] (x3, x1).

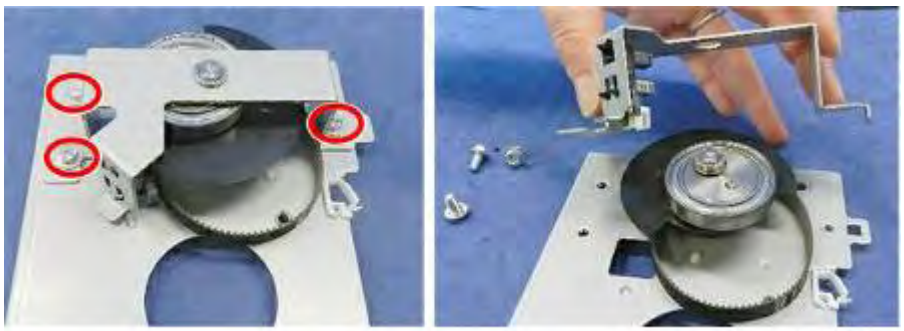
d1793658

- Disconnect motor and bracket (x3).



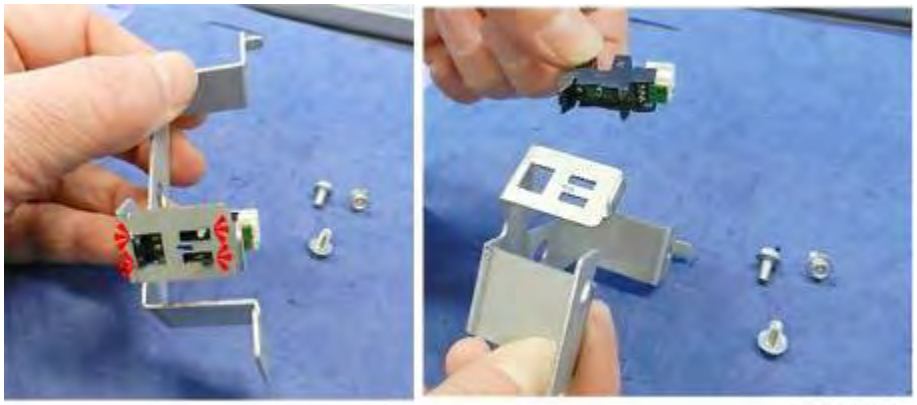
d1793659

- Separate motor and bracket.



d1793660

- Remove sensor bracket (x3).



d1793661

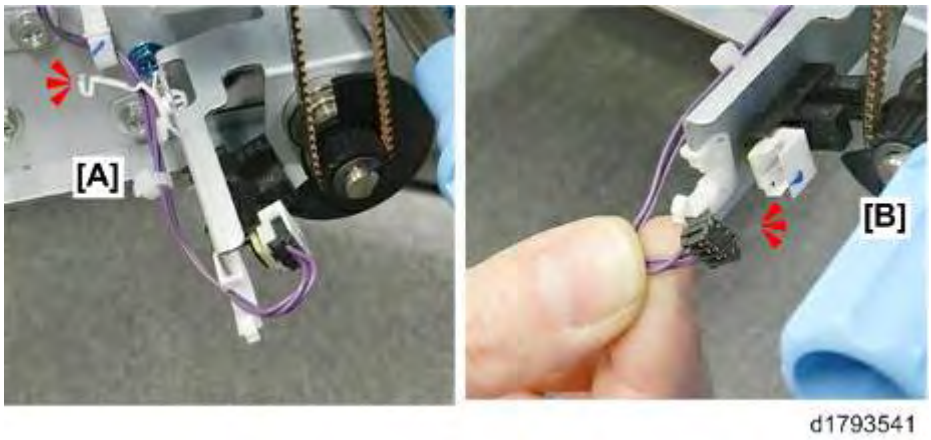
4.15.10 MAIN RELAY HP SENSOR

Preparation

1. Pull out drawer
2. Remove drawer right cover

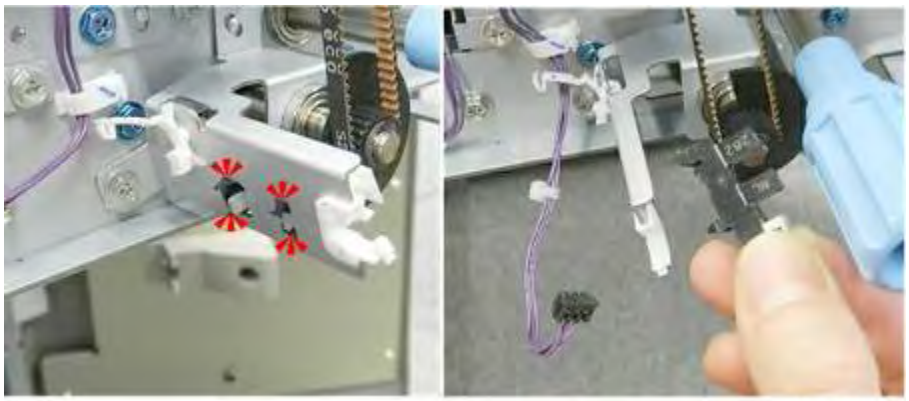
d1793540

- The main relay HP sensor is at the right bottom edge of the drawer.



d1793541

- Free and disconnect harness at [A] and [B] (x1, x1).



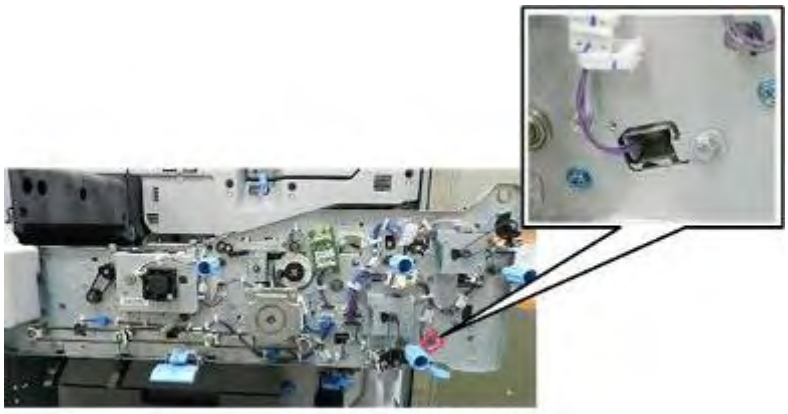
d1793542

- Disconnect sensor (x4).

4.15.11 MAIN RELAY SENSOR

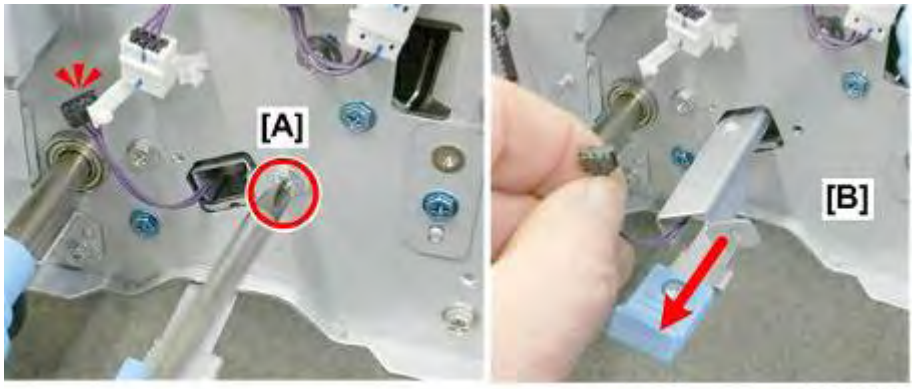
Preparation

1. Pull out drawer
2. Remove drawer right cover



d1793543

- The main relay sensor is at the bottom right corner of the drawer.

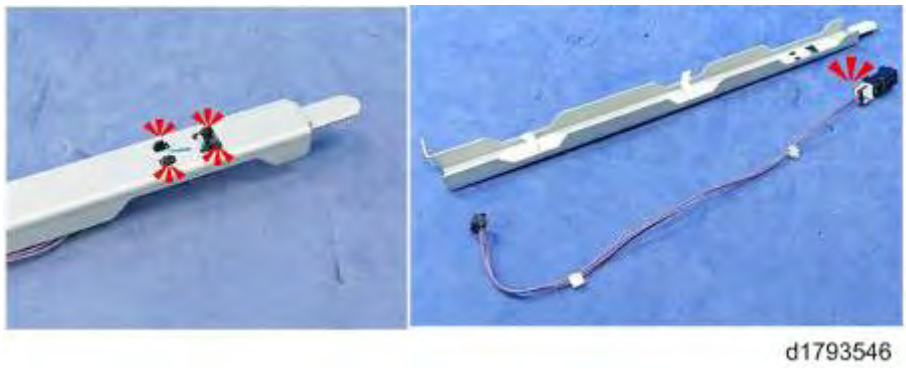


d1793544

- Disconnect sensor bracket [A], then pull out the bracket [B] (x1, x1).

d1793545

- Pull out the bracket [A] completely.
- Free harness [B] (x2).



d1793546

- Remove sensor (x4, x1).

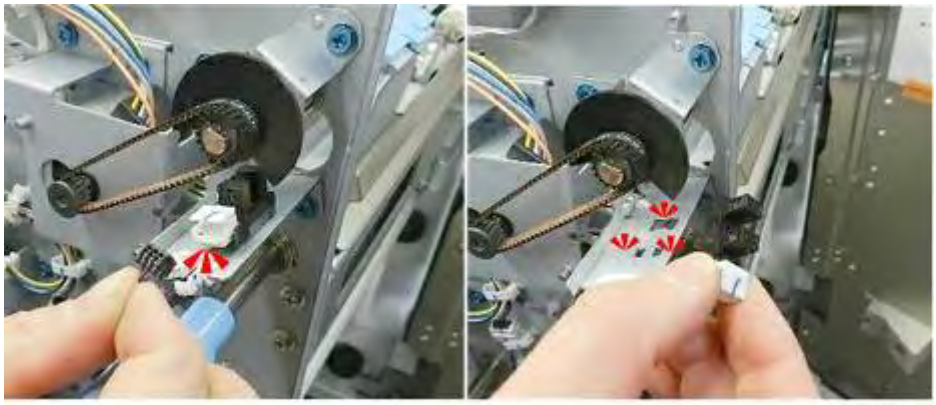
4.15.12 LCIT RELAY HP SENSOR

Preparation

1. Pull out drawer
2. Remove drawer right cover

d1793552

- The LCIT relay HP sensor is in the upper right corner of the drawer.



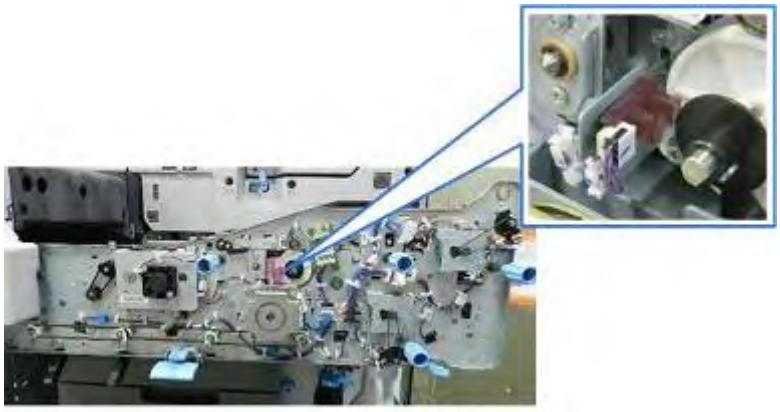
d1793553

- Disconnect sensor (x1).
- Remove sensor (x3).

4.15.13 REGISTRATION GATE ROLLER HP SENSOR

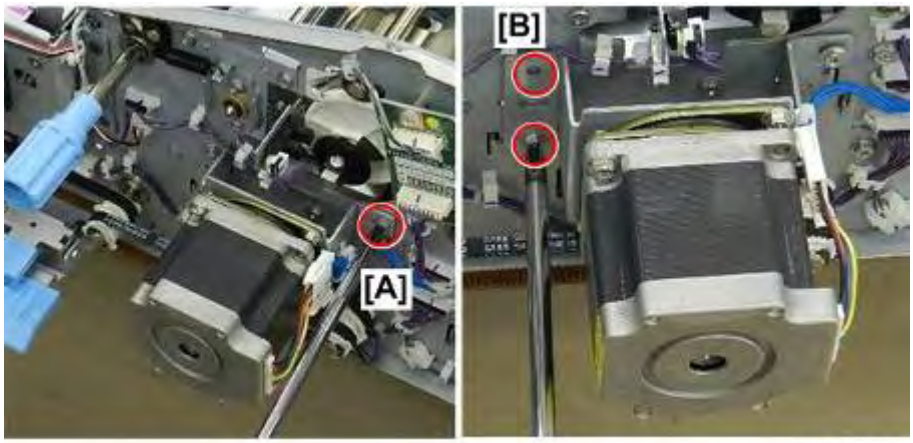
Preparation

1. Pull out drawer
2. Remove drawer right cover



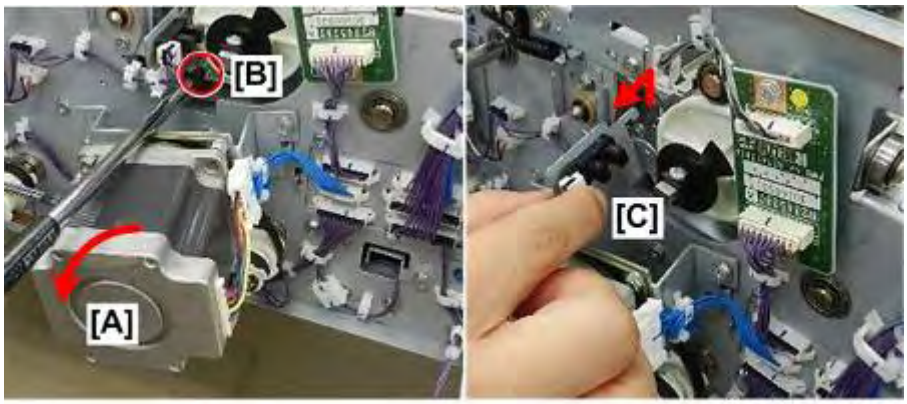
d1793554

- The registration gate roller HP sensor is at the top of the drawer unit, near center.



d1803536

- Loosen screw [A] (do not remove) of duplex transport motor 2.
- On the left side of the same bracket, remove both screws (x2).



d1803537

- Pull motor [A] down slightly, and then disconnect sensor bracket screw [B] (x1).
- Pull out the sensor bracket [C].

d1803546

- Remove sensor (x1, x1, x4)

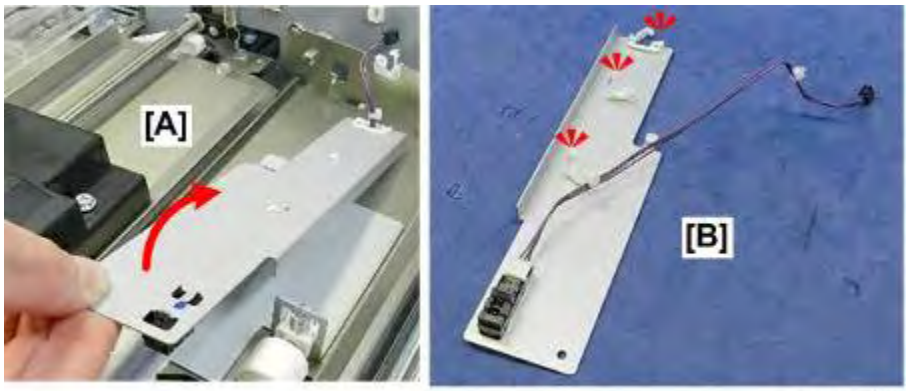
4.15.14 LCIT RELAY SENSOR

Preparation

- Pull out drawer

d1793559

1. At the right edge of the drawer, disconnect sensor at [A] (x1, x1).
2. Disconnect bracket at [B] (x1).



d1793560

3. Remove bracket [A].
4. Free sensor harness [B] (x3).

d1793561

5. Remove sensor (x4).

4.15.15 REGISTRATION TIMING SENSOR

Preparation

- Pull out drawer

d1793562

1. Remove cover [A] (x2).
2. Disconnect sensor bracket [B] (x1).

d1793563

3. Disconnect sensor [A] (x1).
4. Remove sensor [B] (x4).

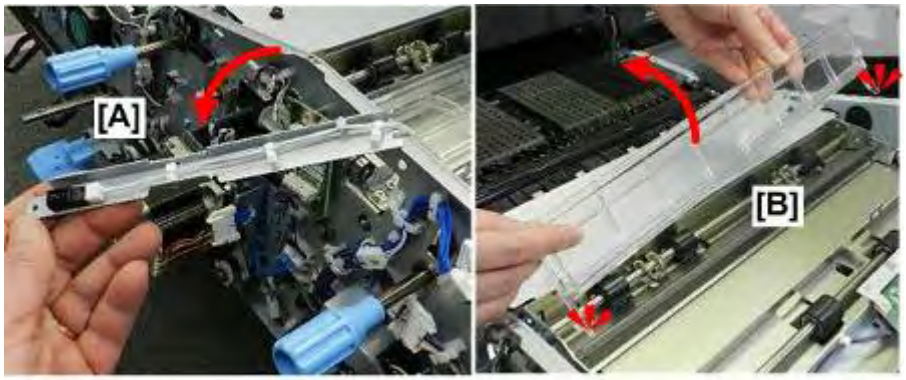
4.15.16 DOUBLE-FEED SENSOR 1, DOUBLE-FEED SENSOR 2

Preparation

- Pull out drawer
- Remove drawer right cover

d1793562

1. Remove cover [A] (x2).
2. Disconnect sensor bracket [B] (x1).



d1793564

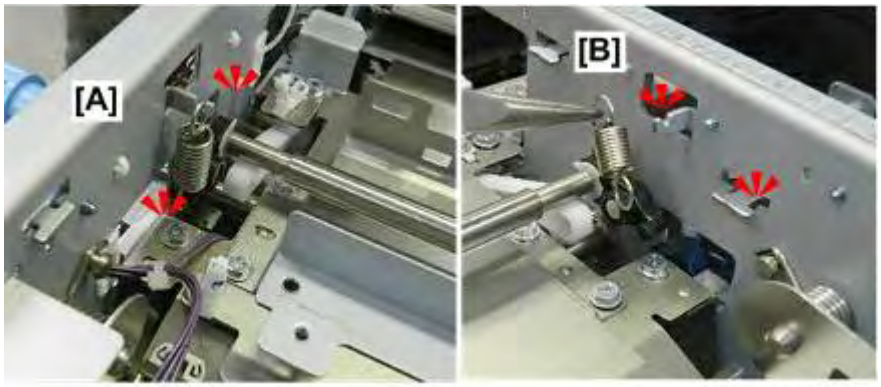
3. Move sensor bracket [A] aside.
4. Remove plastic cover [B] .

d1793565

5. Removed double-feed sensor 2 bracket (with sensor attached) (x1).

d1793566

6. Double-feed sensor 2 (receiver) with bracket attached (x2).

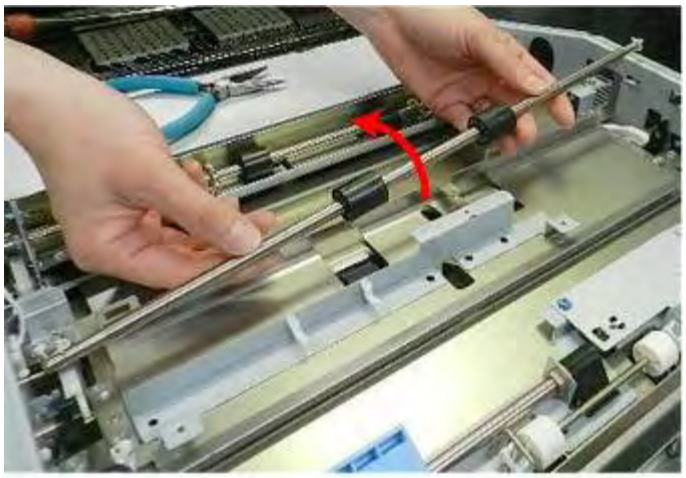


d1793567

7. Remove springs at front [A] and rear [B] (x2).

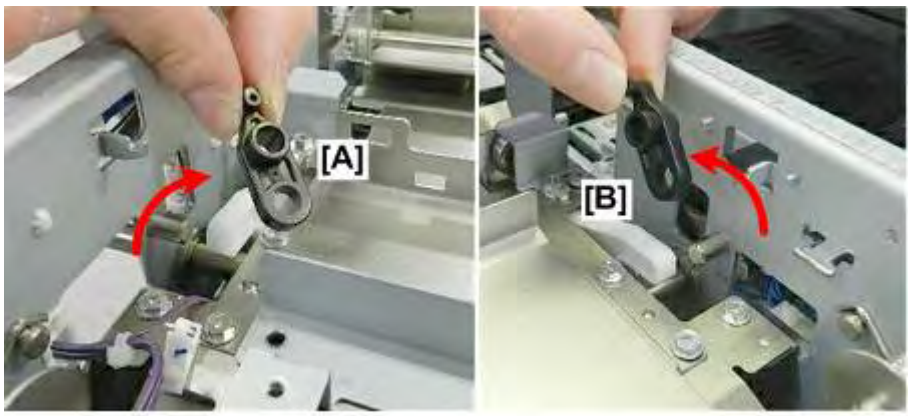
d1793568

8. Disconnect roller at front (x1).



d1793569

9. Remove roller.

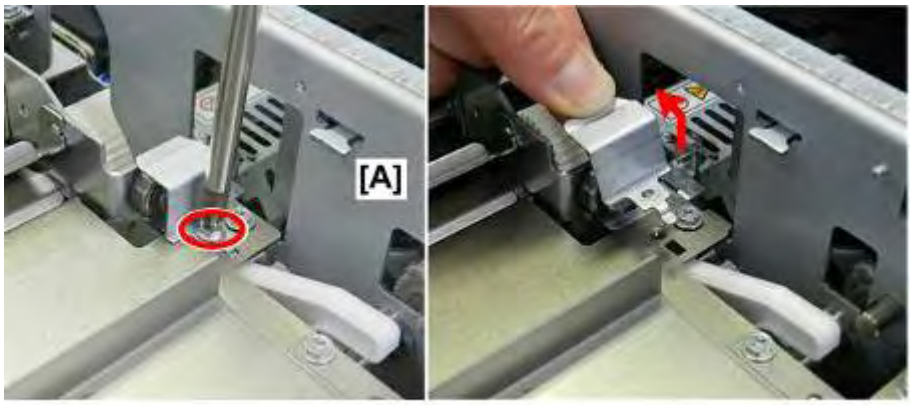


d1793570

10. Remove couplings from front [A] and rear [B] so they do not become lost.

d1793571

11. At front [A], remove lock plate (x1).



d1793572

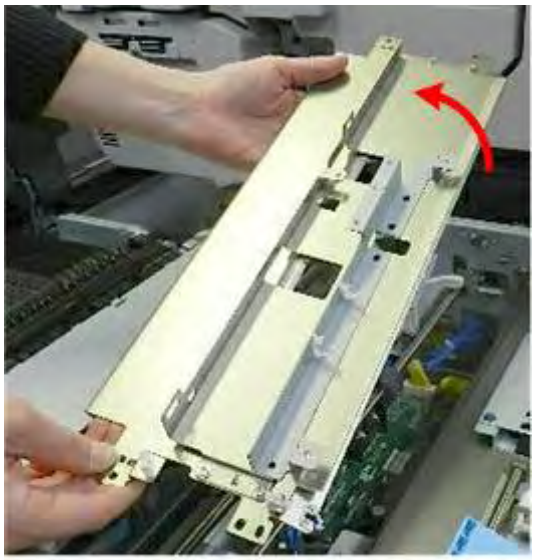
12. At rear, remove lock plate [A] (x1).

d1793573

13. Disconnect harness near handle (x1).

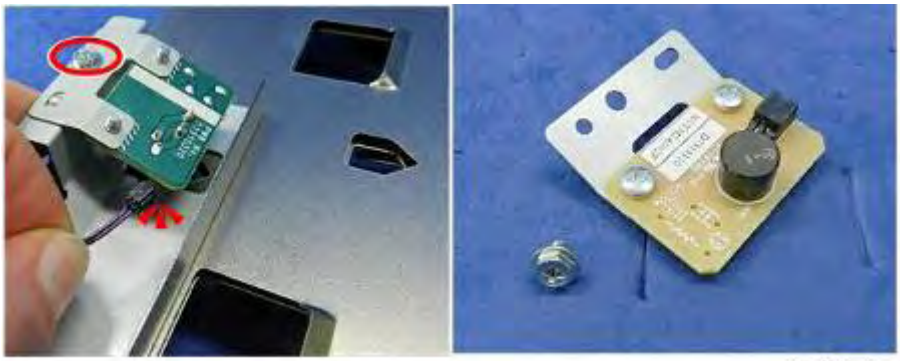
d1793574

14. Disconnect cover plate (x4).



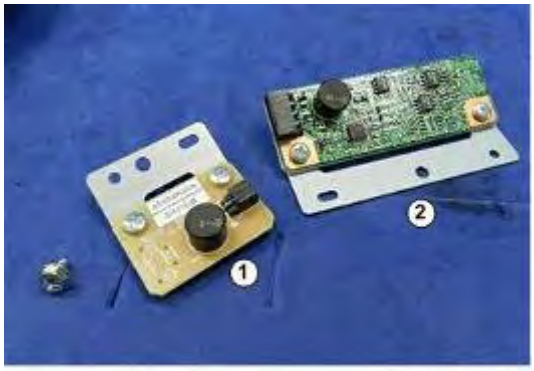
d1793575

15. Remove cover plate.



d1793576

16. Remove sensor (x1, x1).



d1793577

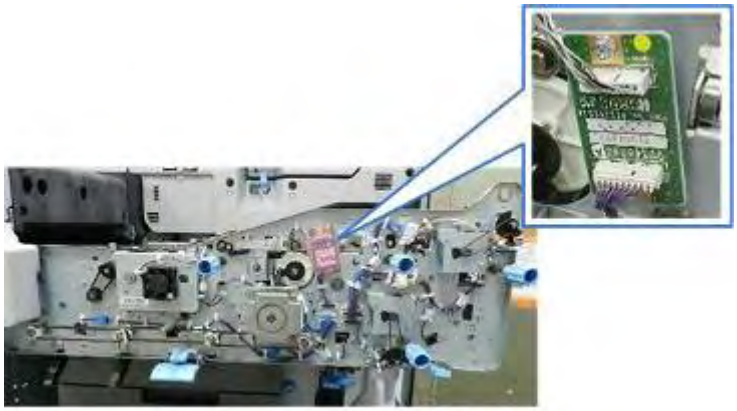
①	Double-feed Sensor 1 (Emitter)
②	Double-feed Sensor 2 (Receiver)

4.15.17 CIS

CRB (CIS Relay Board)

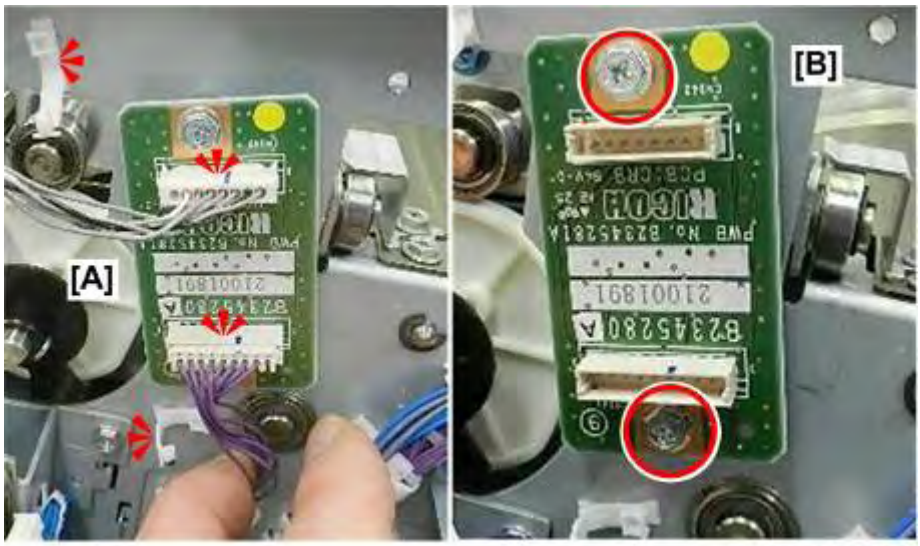
Preparation

- Pull out drawer
- Remove right front cover



d1793556

1. The CIS board is on the front side of the drawer, near center.



d1793557

2. Disconnect the board [A] (x2).
3. Remove board [B] (x2).

CIS Element

Preparation

1. Pull out drawer
2. Remove drawer right cover

d1793578

1. Remove plate (x2).

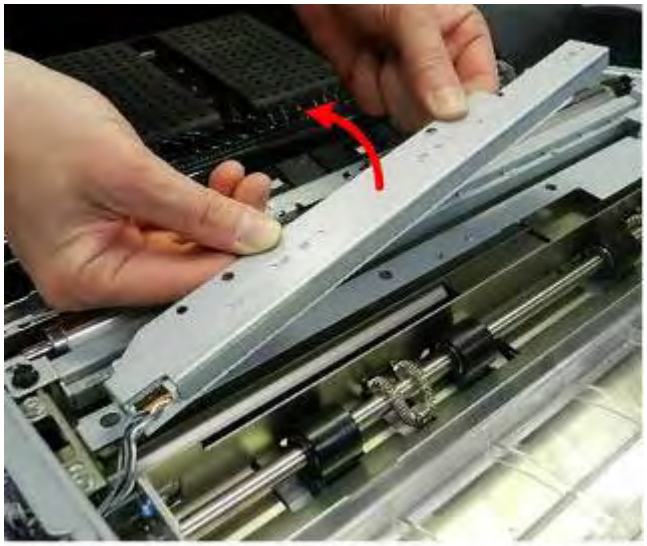
d1793591

2. Disconnect CIS (x2, x1).

d1793579

3. The CIS element is encased by a bracket.

4. Disconnect the bracket (x2).

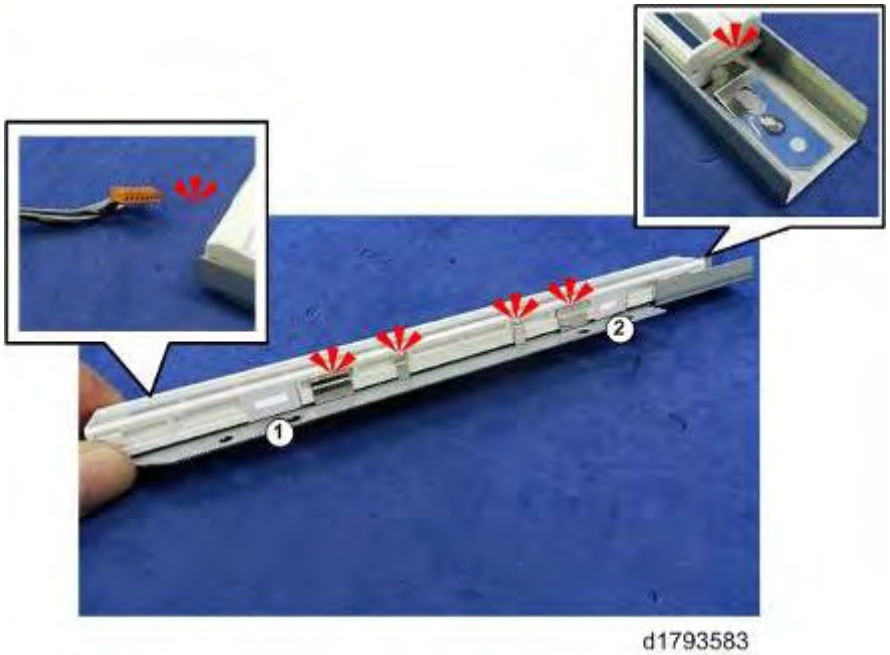


d1793581

5. Remove CIS bracket.

d1793582

6. Lay the CIS bracket on a flat clean surface.
7. Clean the surface of the CIS with a lens cloth.



d1793583

8. Separate the CIS from the bracket (x1, x5).

Important

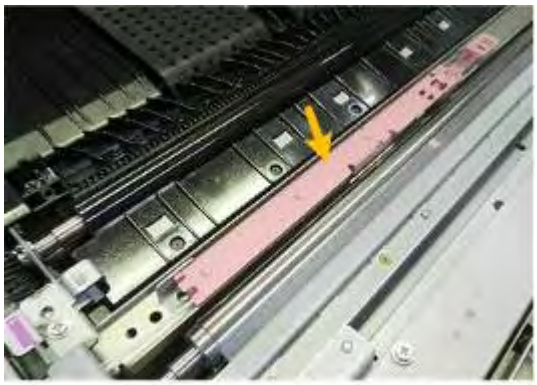
- Do not try to release the tabs ① and ② (the metal tabs with cut-outs and plastic inserts).

d1793584

4.15.18 TRANSFER TIMING SENSOR

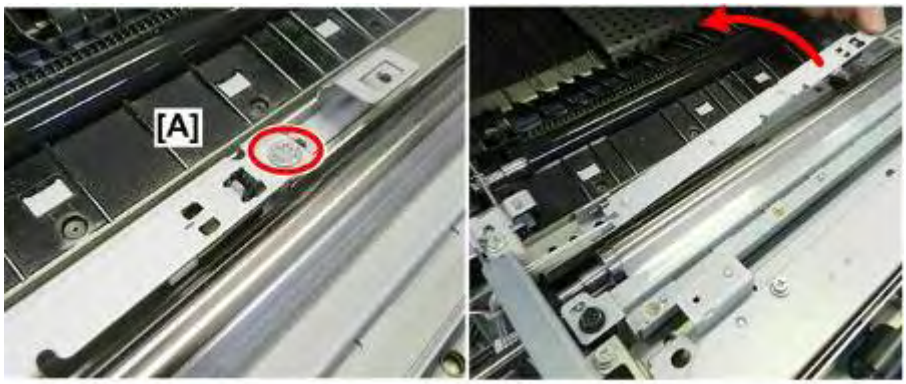
Preparation

1. Pull out drawer
2. Remove drawer right cover



d1793585

- The transfer timing sensor lies to the right of the PTR unit.



d1793586

- Disconnect sensor bracket [A] and then raise it (x1).

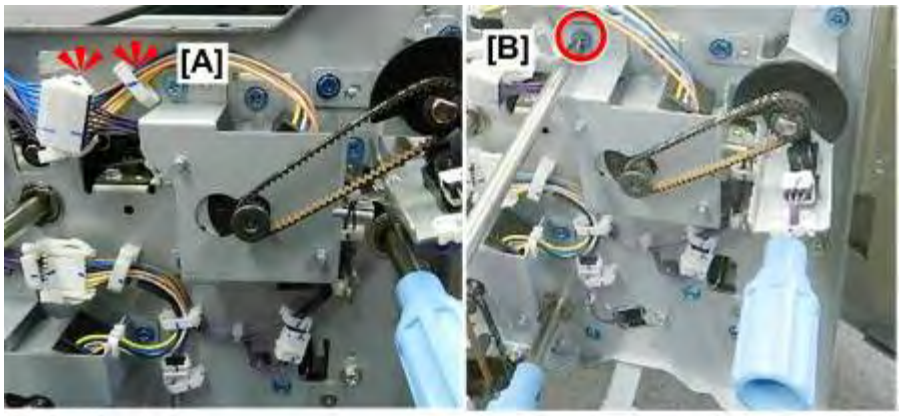
d1793587

- Remove sensor (x1, x4).

4.15.19 REGISTRATION ENTRANCE SENSOR

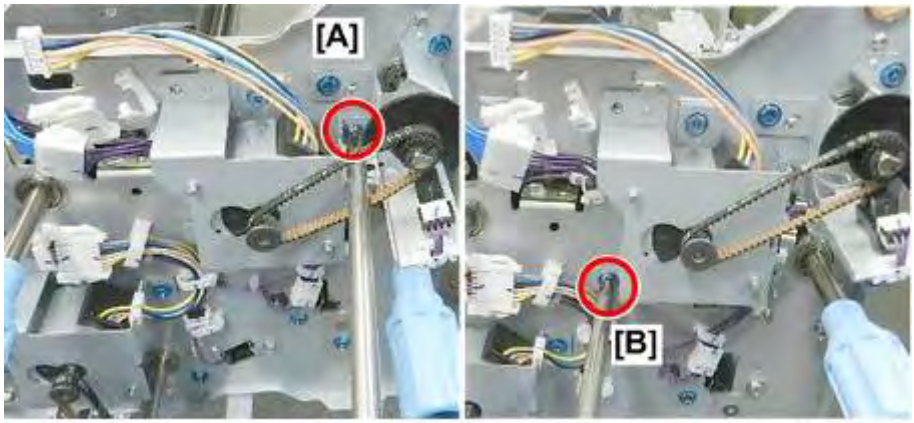
Preparation

- Pull out the front drawer
- Remove drawer right cover



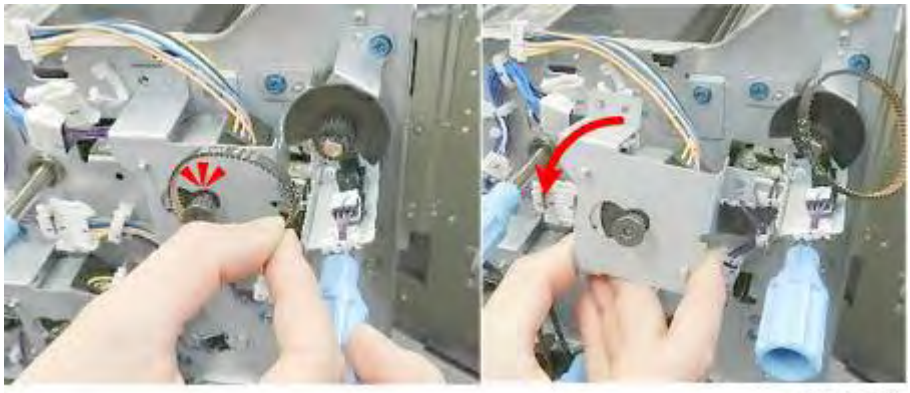
d1793548

1. Disconnect motor [A] (x1, x1).
2. Disconnect motor bracket at top [B] (x1).



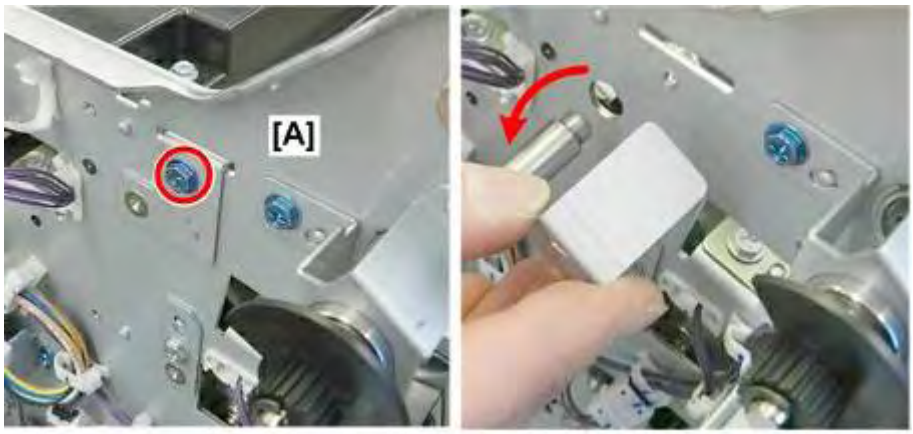
d1793549

3. Disconnect bracket:
   [A] Right (x1)
   [B] Left (x1)



d1793550

4. Remove belt and then remove bracket (with motor attached) (x1).

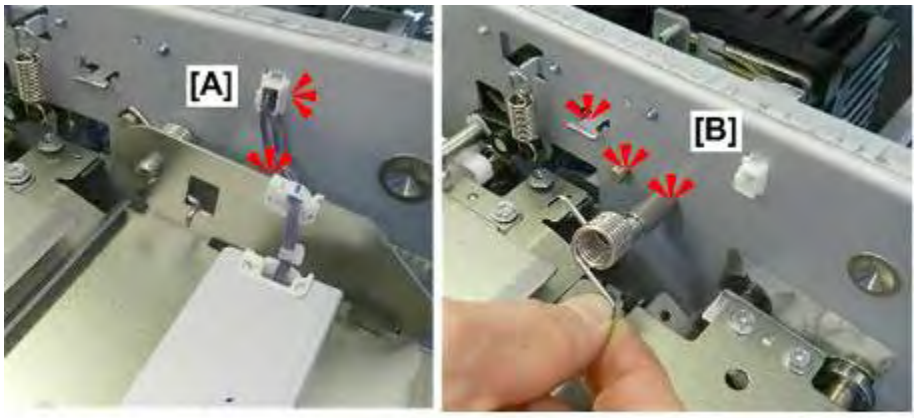


d1793680

5. Remove lock plate [A] (x1).

d1793681

6. On the other side of the frame, remove spring (x1).

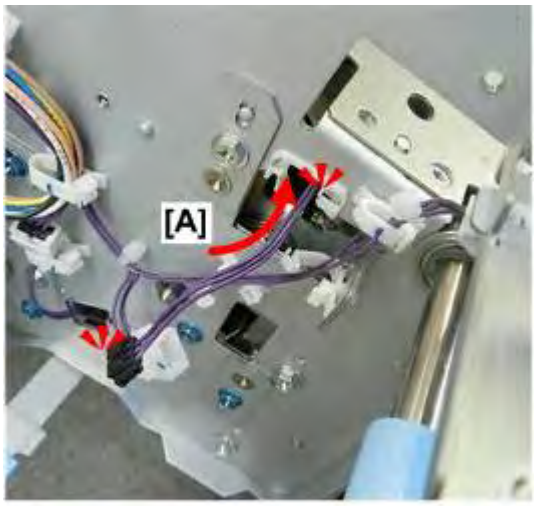


d1793682

7. At the rear [A], disconnect sensor (x1, x1).
8. Remove spring [B] (x1).

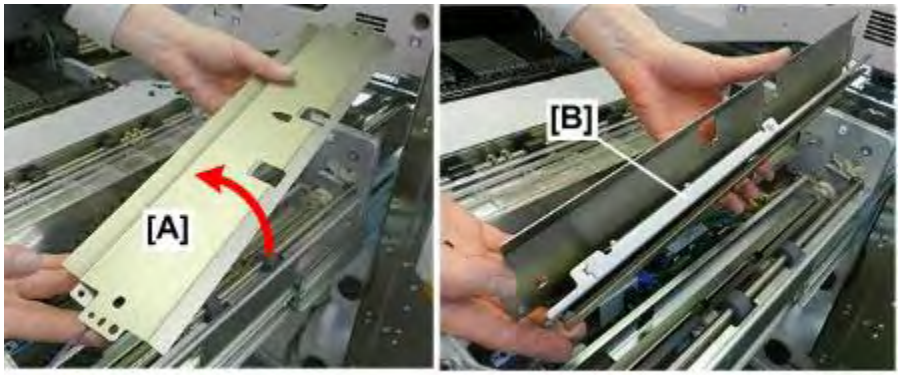
d1793683

9. Disconnect plate:
   [A] Front (x2)
   [B] Rear (x2)



d1793684

10. At the front [A], disconnect harness, and then pass the harness back through the hole (x1)



d1793685

11. Remove plate [A].
12. The bracket [B] of the registration entrance sensor is inside the plate.

d1793686

13. Disconnect sensor bracket (x1).

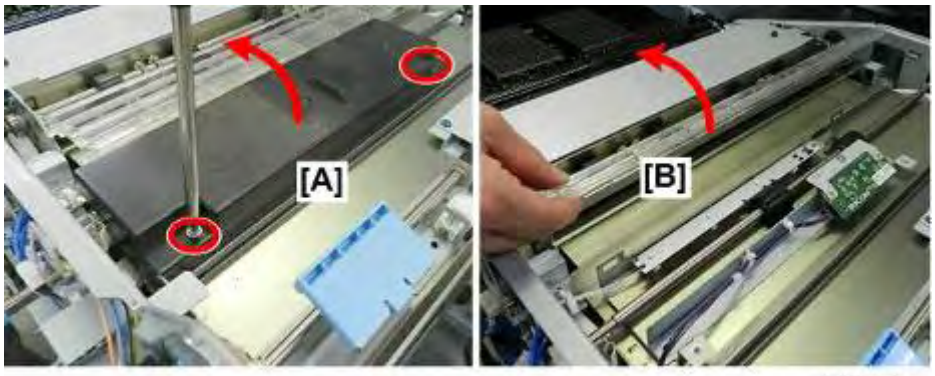
d1793687

14. Remove sensor from bracket (x1, x4).

4.15.20 DRB, TE SHIFT UNIT MOTOR, TE SHIFT UNIT HP SENSOR

Preparation

1. Open the controller box page 4-27
2. Remove registration timing motor page 4-277
3. Pull out drawer
4. Remove drawer right cover

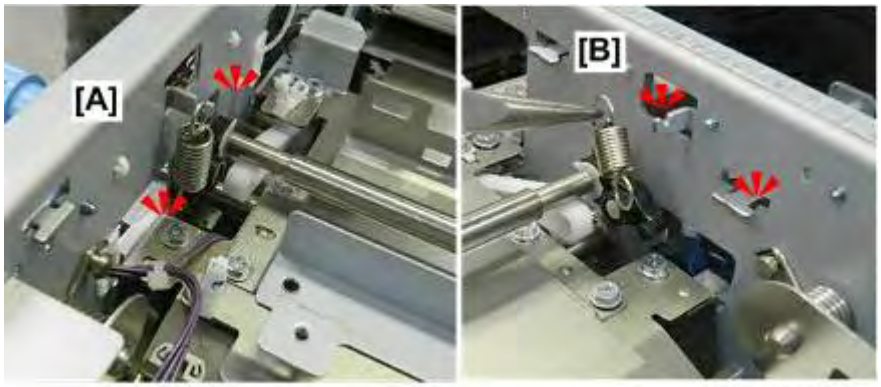


d1793662

1. Remove:

   [A] Cover (x2).

   [B] Plastic cover



d1793567

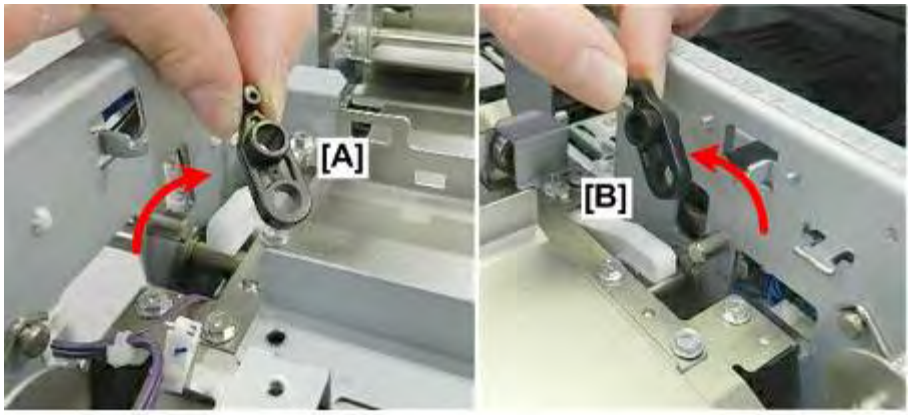
2. Remove springs:
   [A] Front (x1)
   [B] Rear (x1)

d1793568

3. Disconnect roller at front (x1).

d1793569

4. Remove roller.

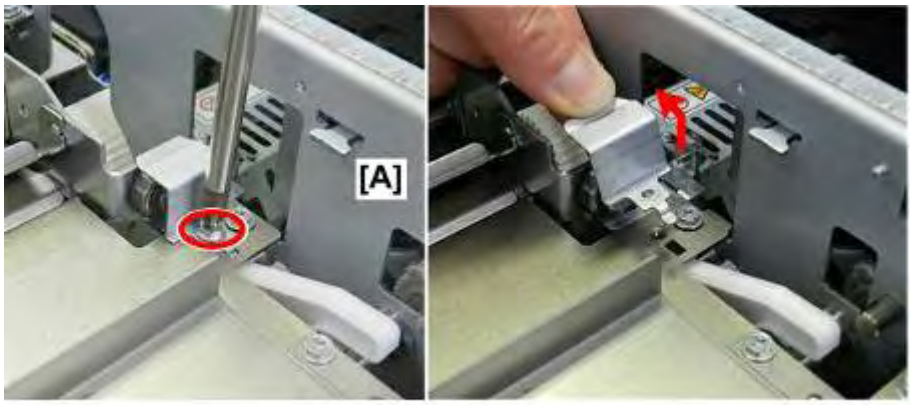


d1793570

5. Remove couplings from front [A] and rear [B] so they do not become lost.

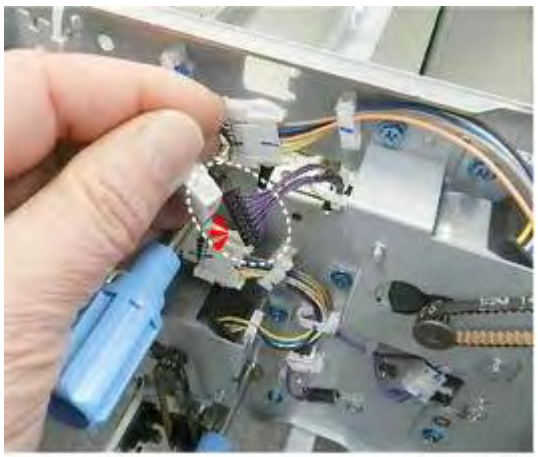
d1793571

6. At front [A], remove lock plate (x1).



d1793572

7. At rear, remove lock plate [A] (x1).

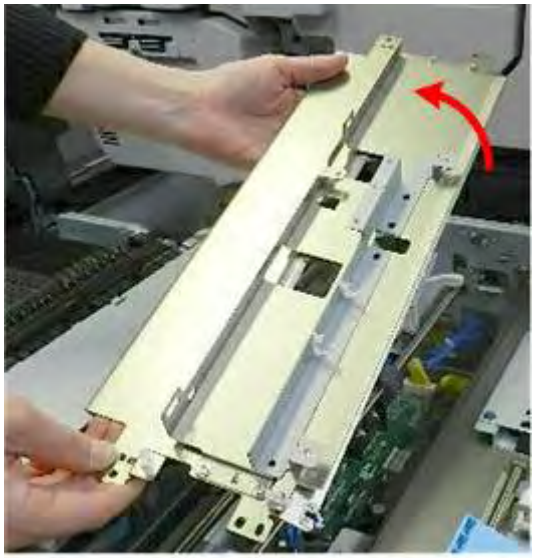


d1793573

8. Disconnect harness near handle (x1).

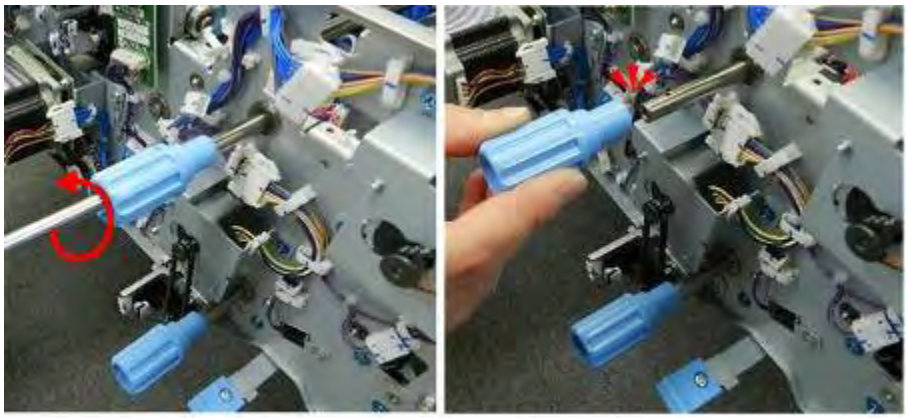
d1793574

9. Disconnect cover plate (x4).



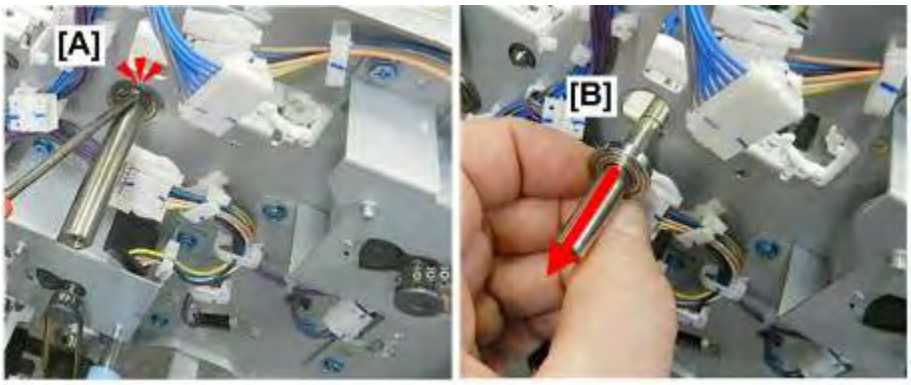
d1793575

10. Remove cover plate.



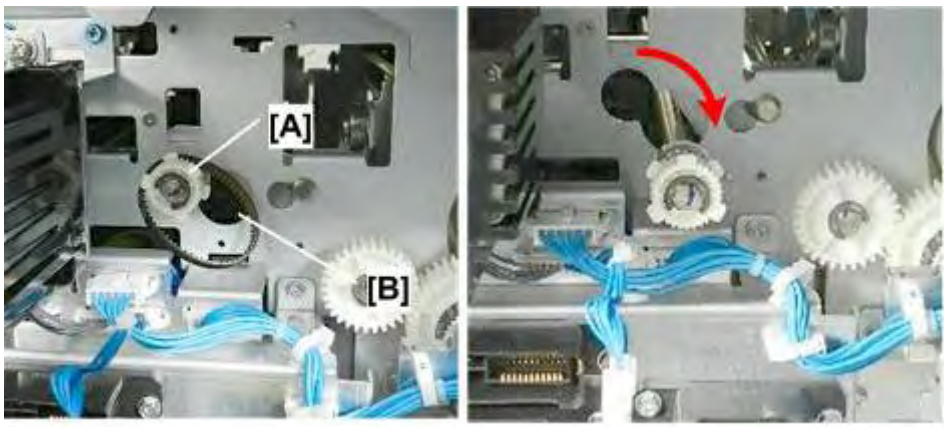
d1793665

11. Remove knob (x1).



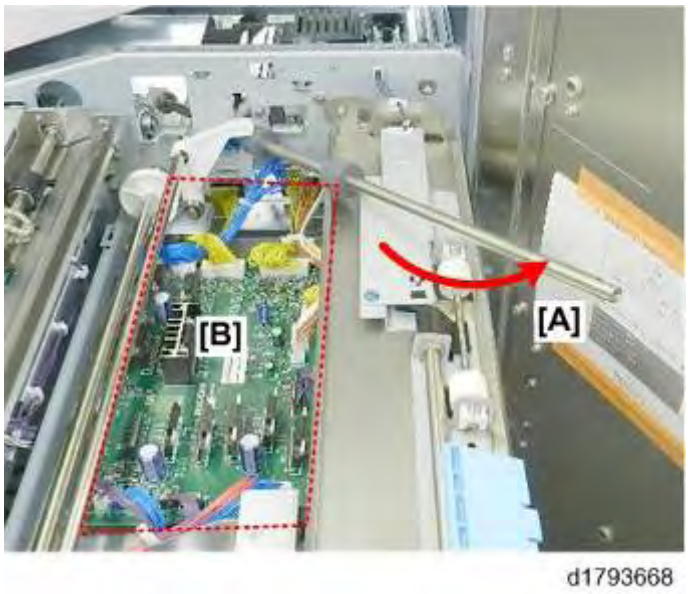
d1793666

12. Disconnect end of roller shaft [A] and then remove bearing [B] (x1, x1).
13. At the rear, remove the registration timing motor. page 4-277



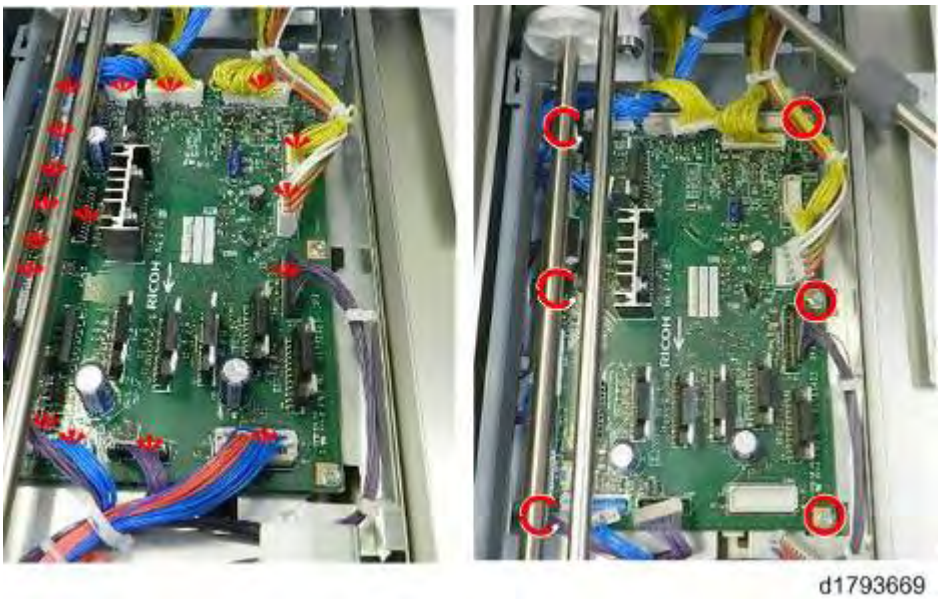
d1793667

14. Where the registration timing motor was removed, you can see the end of the roller shaft [A].
15. Move the end of the shaft down into the larger hole [B].



16. At the front, push the roller [A] aside. This clears the field for access to the following parts:
- DRB
- TE shift unit motor
- TE shift unit HP sensor

DRB

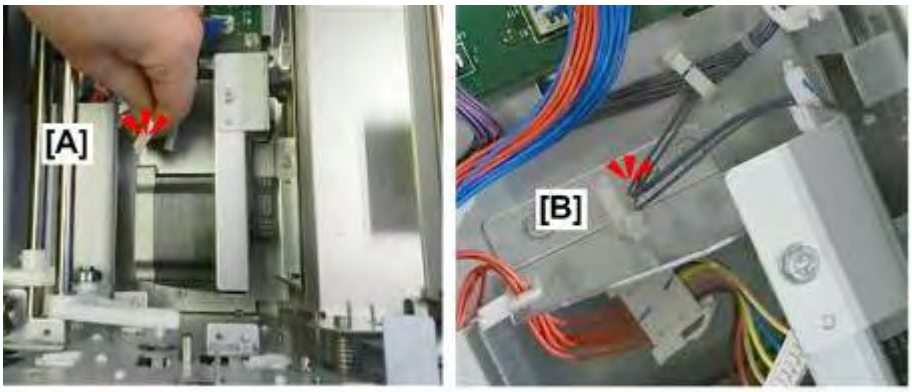


1. Disconnect the DRB (x18, x6)

d1793670

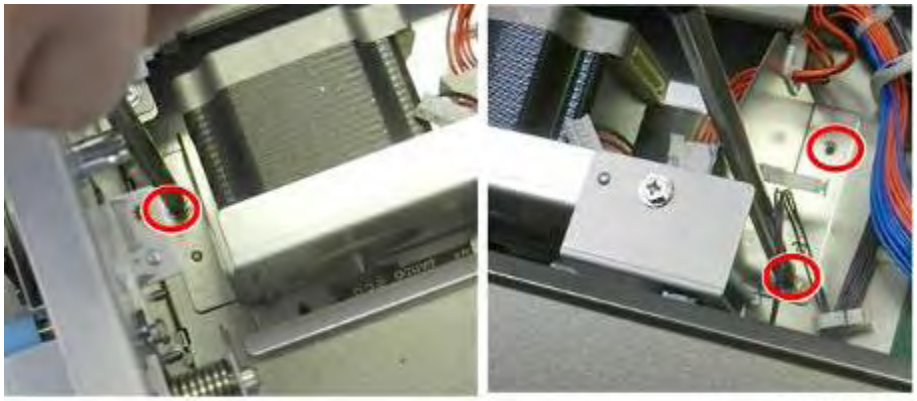
2. Remove DRB.

TE Shift Unit Motor



d1793671

- Disconnect motor [A] (x1).
- Disconnect sensor harness [B] (x).



d1793672

- Disconnect motor bracket (x3).

d1793673

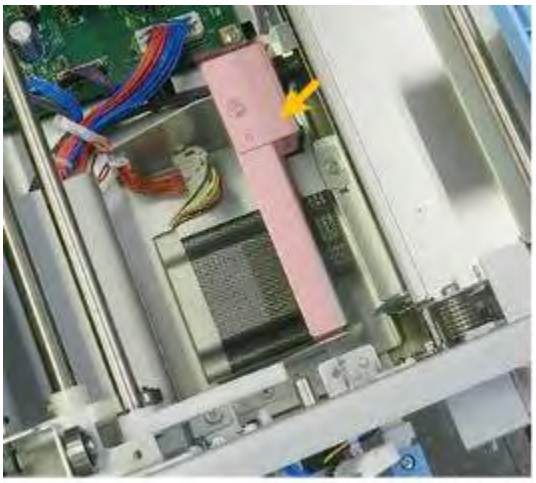
- Remove motor bracket (with motor attached).

d1793674

- Separate the motor from the bracket (x1).

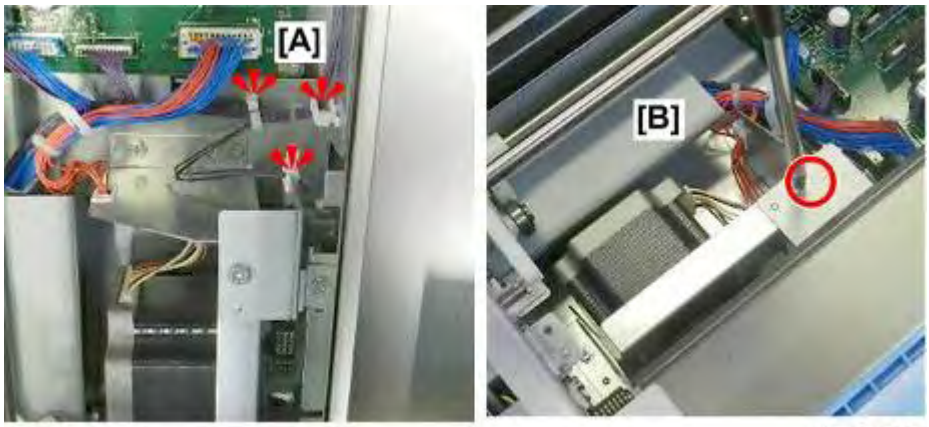
d1793675

TE Shift Unit HP Sensor



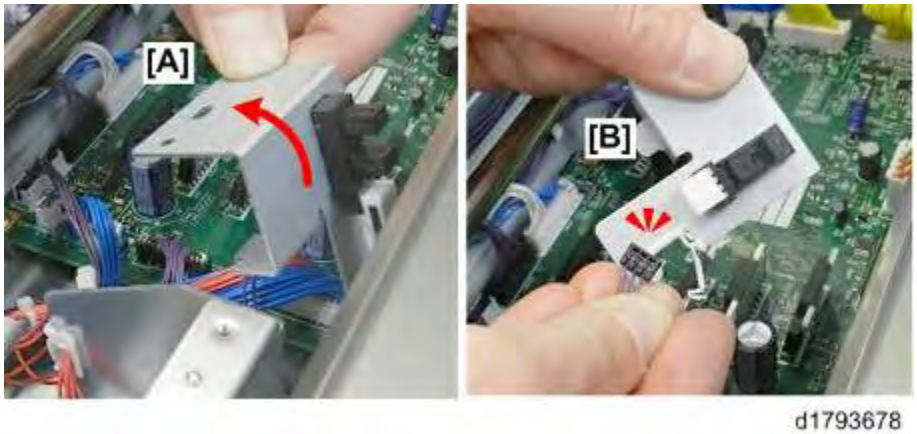
d1793676

1. The TE shift unit HP sensor is above the TE shift unit motor.



d1793677

2. Disconnect sensor harness [A] (x2, x1).
3. Disconnect sensor bracket [B] (x1).



d1793678

4. Pull up sensor bracket [A] (with sensor still connected).
5. Disconnect sensor [B] (x1).

d1793679

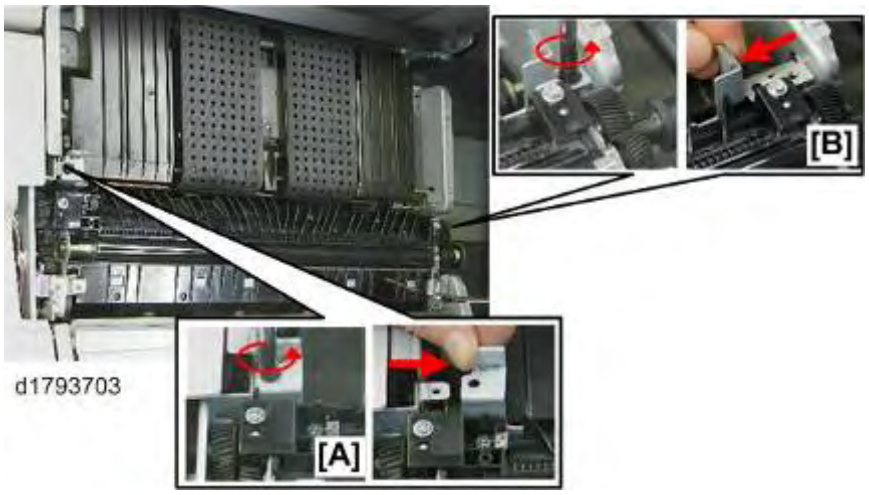
6. Remove sensor (x4).

4.16 PAPER TRANSFER ROLLER (PTR) UNIT

4.16.1 PTR UNIT REMOVAL

Preparation

1. Open both front doors
2. Pull out the drawer



- At the front [A], disconnect the plate and push it to the rear (x1).
- At the rear [B], disconnect the plate and push it to the front (x1).

Important

1. Both plates must be pushed toward the center as far as possible. If they are not, the unit cannot be removed.

- Using the plates has handles, remove the PTR unit.

d1793705

- Lay the PTR unit on a flat clean surface.
- Before servicing the unit, place some paper or a drop cloth under the unit to catch stray toner and lubricant dust.

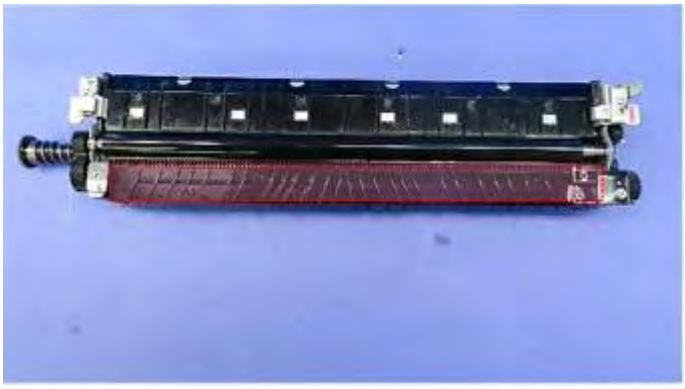
4.16.2 PTR DISASSEMBLY

Preparation

1. Pull out drawer
2. Remove PTR unit

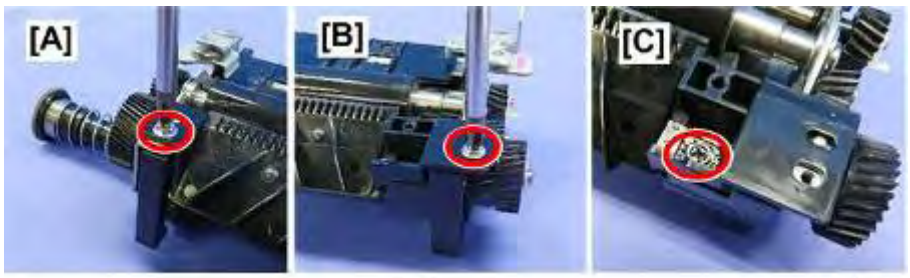
Follow the steps below in order to disassemble the PTR unit.

Separation Plate



d1793710

- The separation plate is on the left side of the PTR unit.



d1793711

- Disconnect the separation plate rear [A], front [B], and again at front [C] (x3).

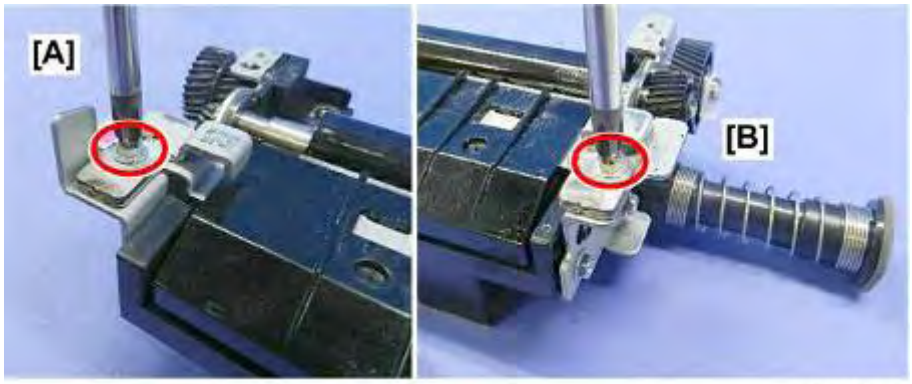
d1793712

- Remove separation plate.

Entrance Guide Plate

d1793713

1. The entrance guide plate is on the right side of the PTR unit.



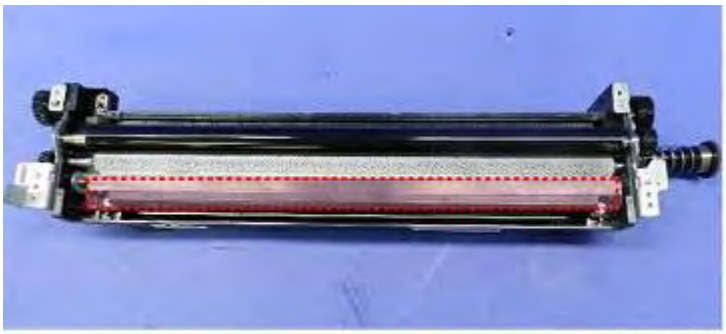
d1793714

2. Disconnect:
   [A] Front (x1)
   [B] Rear (x1)

d1793715

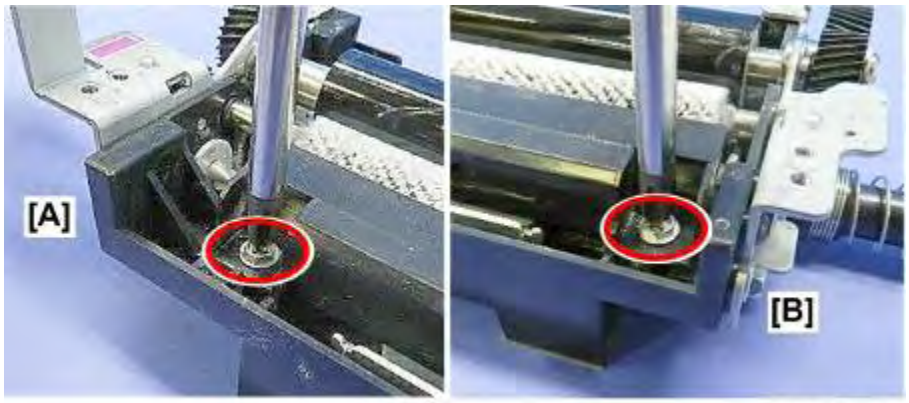
3. Remove entrance guide plate.

Lubricant Bar



d1793716

- The lubricant bar is on the right.



d1793717

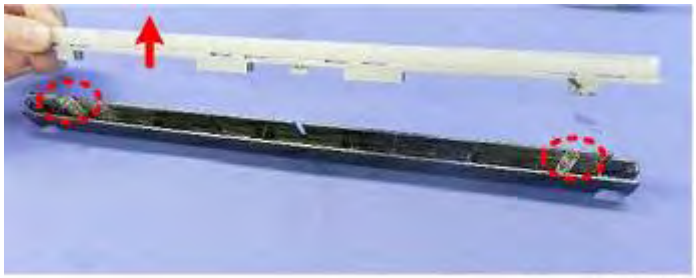
- Disconnect:
  [A] Front (x1)
  [B] Rear (x1)

d1793718

- Remove lubricant bar bracket (with bar attached).

d1793719

- Open the releases on each end of the bracket to release the bar from the bracket (x1).



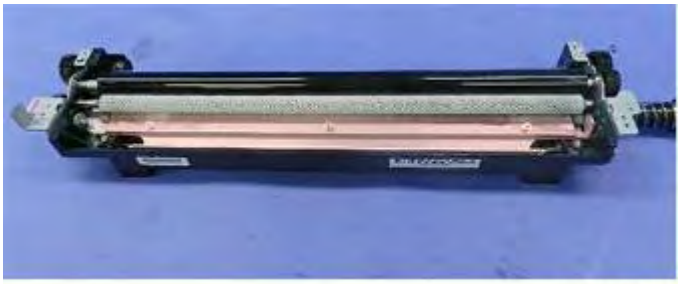
d1793720

- Separate the bar and bracket.

Important

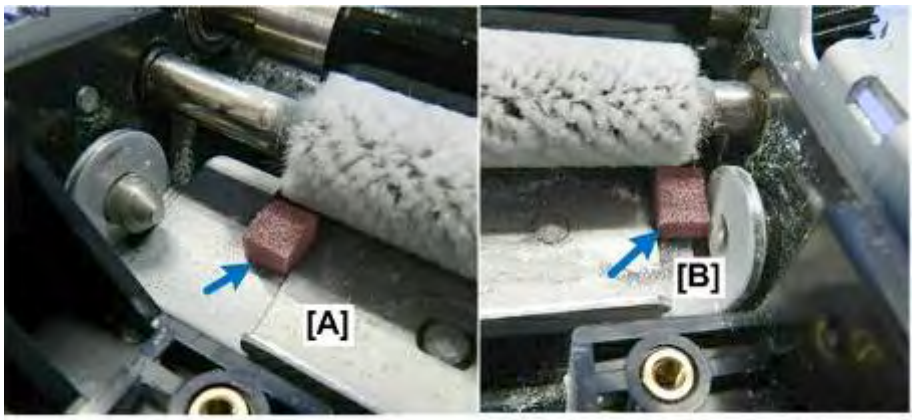
- Do not lose the springs inside the bracket.

Cleaning Blade



d1793721

- The cleaning blade is on the right side of the unit.



d1793722

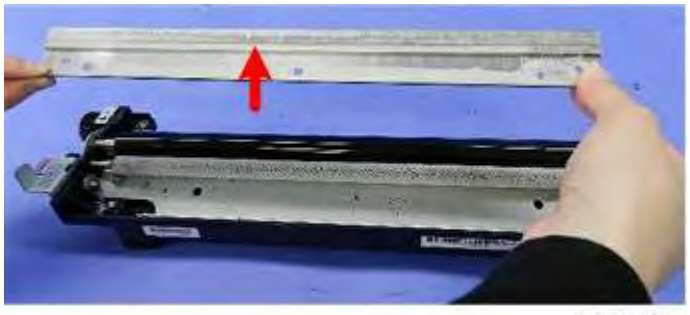
- Before you remove the blade, note the locations of the sponge seals [A] and [B] below each end of the roller.

  Important

  1. These sponges are delicate and tear easily.
  2. Work carefully when during blade removal to avoid damaging these seals. The seals cannot be replaced in the field.

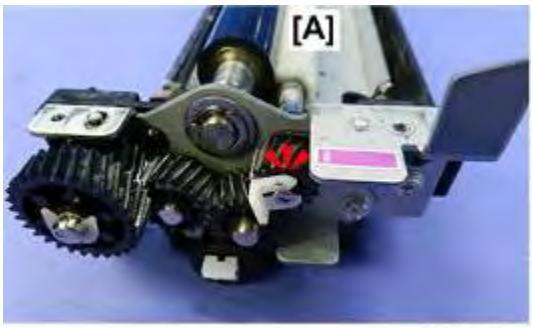
d1793723

- Disconnect cleaning blade (x3).


d1793724

- Remove cleaning blade.

Lubricant Roller

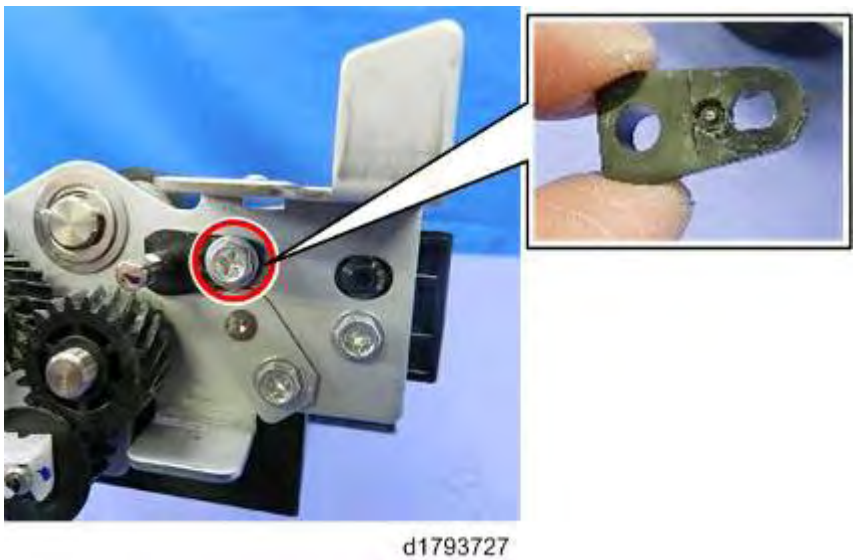


d1793725

- At the front, disconnect the end of the lubricant roller [A] (x1).

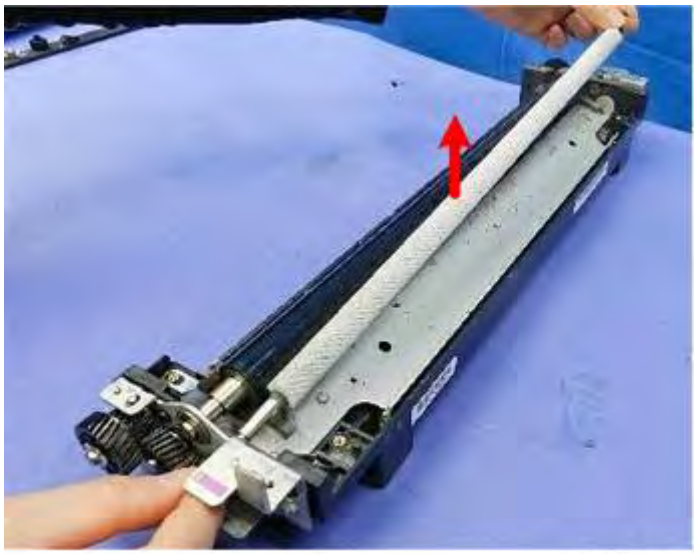
d1793726

- Remove the gear from the tip of the roller.



d1793727

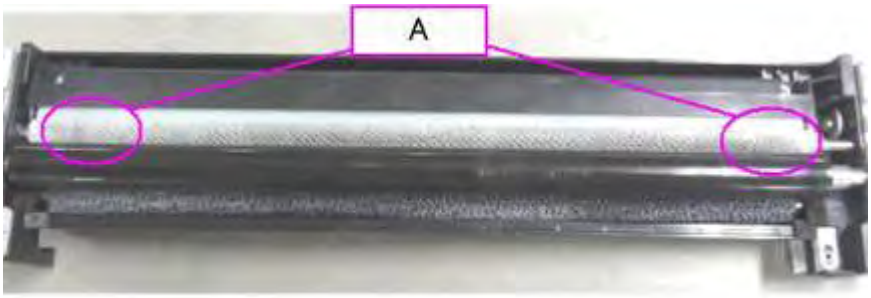
- Remove the lock plate (x1).



d1793728

- Remove lubricant roller.

Re-installation



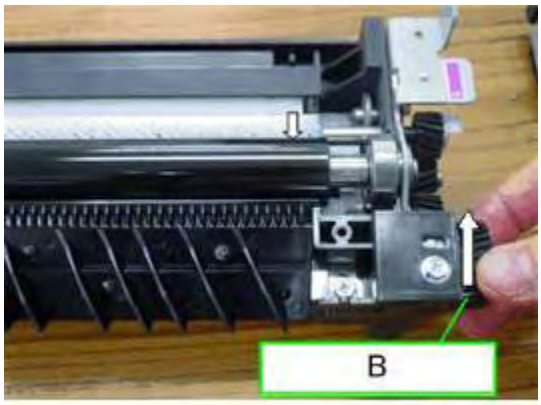
d1793757

- Before replacing the lubricant brush roller, apply setting powder to both ends of the roller [A] (about 30 mm or 1 in. from each end). This prevents the roller from catching on the blade.

d173763

Note

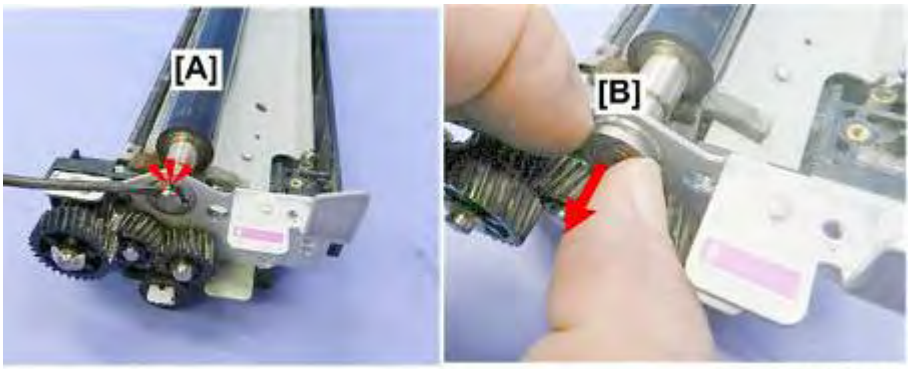
- [A] shows the minimum amount applied and [B] the maximum amount applied.



d1793758

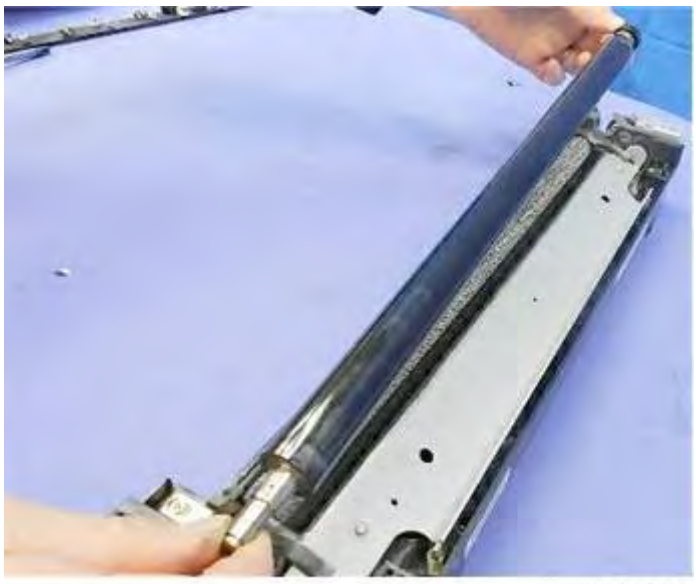
- Turn gear [B] in the direction of the arrow 3 to 5 times to spread the power evenly.

Paper Transfer Roller (PTR)



d1793729

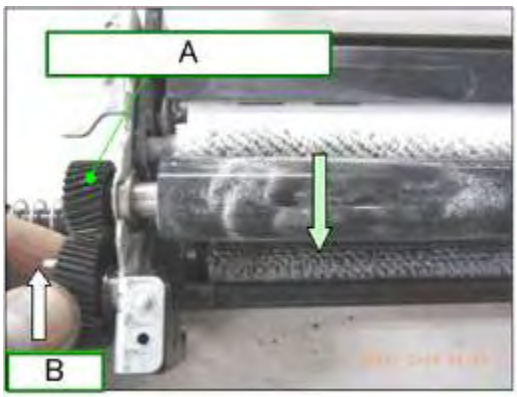
1. At the front [A], disconnect the end of the PTR [B] (℃x1, x1).

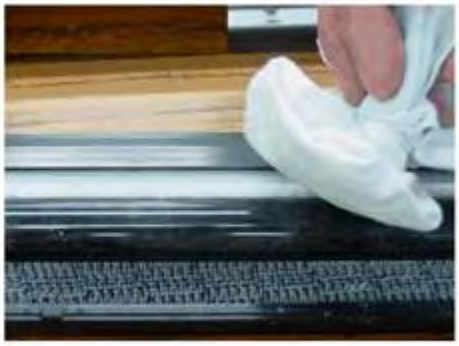


d1793730

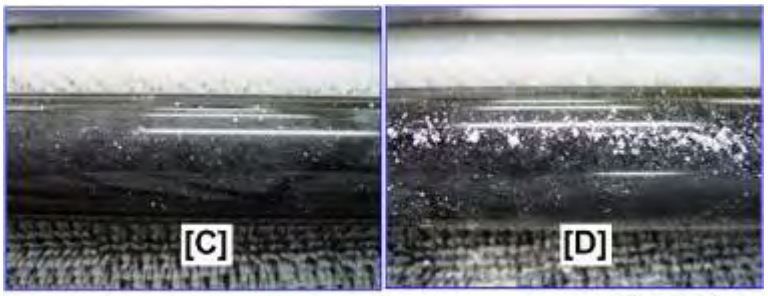
2. Remove the PTR.

Re-installation





d1793760



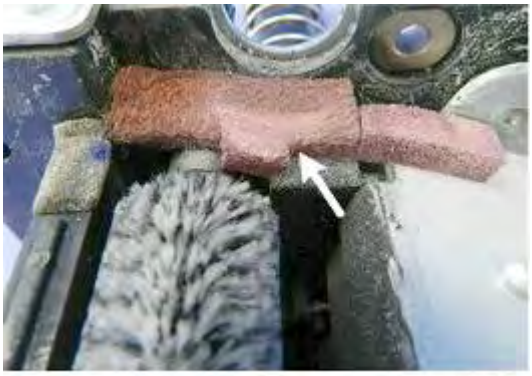
d1793764

- When replacing the PTR, turn gear [A] while applying setting powder to the surface of the roller. This prevents the roller from catching on the blade.
- Cover the entire surface of the roller.

Note

1. [C] shows the minimum amount applied and [D] the maximum amount applied.

Cleaning Roller



d1793731

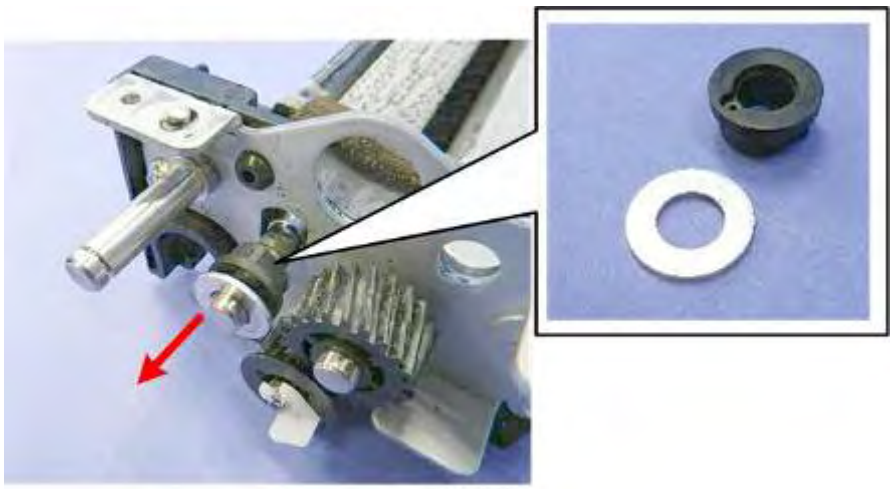
- Once again, note the position of the sponge seals at each end of the cleaning roller.

Important

1. Work carefully to avoid damaging these seals. They cannot be replaced in the field.

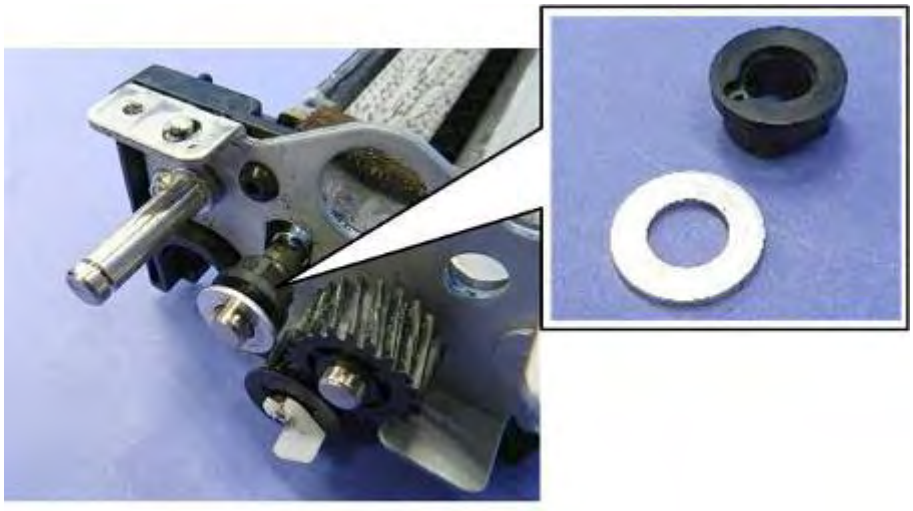
d1793732

- At the front, disconnect tip of gear [A] (x1)
- Remove gears [B] (x2).



d1793733

- Remove bushing and washer.
- Be sure to lubricate the following parts before you re-install the PTR unit in the machine.



d1793752

- This bushing and washer require lubrication with Barrierta S552R.

Note

- In the steps below, the left photo illustrates the minimum amount applied, and the

right photo the maximum amount applied.

d1793753

- First, lubricate the sleeve of the bushing with 0.02 to 0.04 g of grease.

Note

1. The grease in the foreground illustrates the total amount to be applied to the entire bushing, not just the sleeve.

d1793754

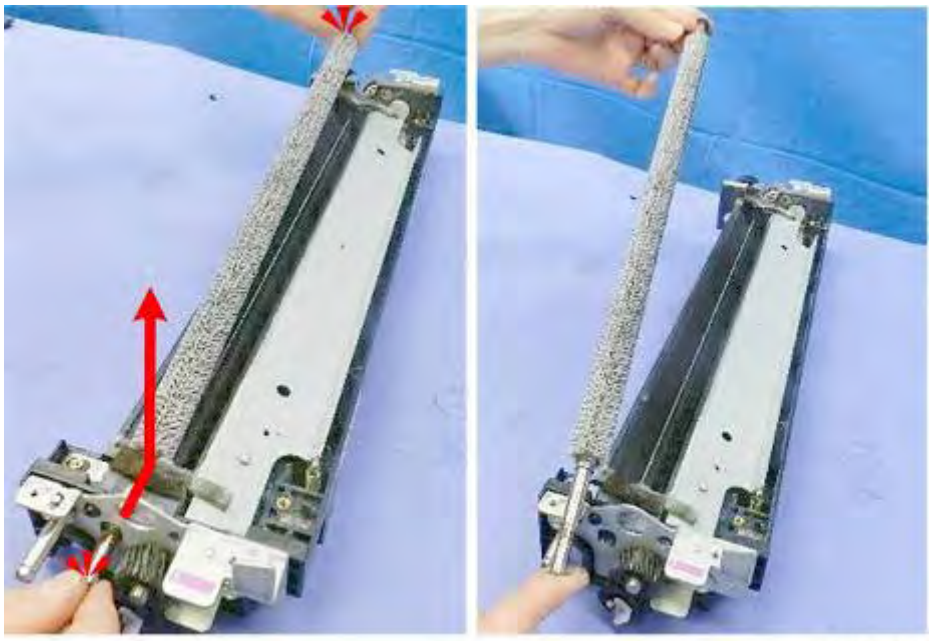
- Next, apply grease to the face of the bushing flange.

d1793755

- Finally, apply grease to the washer.

d1793756

- After setting the washer and bushing on the shaft, apply a small amount of grease to the tip of the shaft.



d1793734

- Remove cleaning roller.

d1793735

- After removing the cleaning roller, you can vacuum inside the PTR unit.

After Parts Replacement

- Re-assemble the machine and make sure that the machine is off.
- Open the left and right front door of the machine.
- Turn the machine on.
- Enter the SP mode.
- Do these SP codes to reset the counters for the following items:

Item	SP Code
PTR Unit	7621-026
PTR Cleaning Blade	7621-027
PTR Lubricant Bar	7621-028
Paper Transfer Discharge Unit	7621-029
Paper Transfer Roller (PTR)	7621-030

- Close the left and right front doors.
- Process control executes automatically.
- After process control executes, the operation panel will display “Ready”.
  1. If process control fails, you will see “Fail” appear on the operation panel, and then the machine will issue an SC code.
  2. Do the procedure recommended to resolve the problem that triggered the SC code.
  3. You must then execute SP3011-002 to execute process control manually because it will not execute again automatically.
- This completes the procedure.
  Do SP3012-001 to confirm that process control executed successfully.

Notes about Lubrication

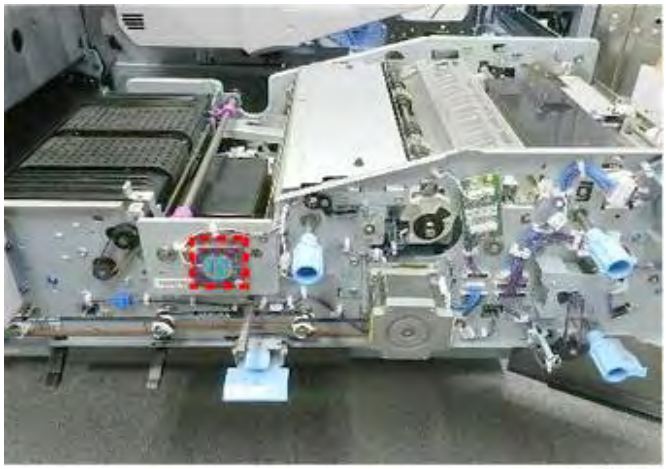
1. The cleaning blade, lubricant roller, and lubricant bar are always replaced together.
2. Setting powder (zinc stearate) is applied to the cleaning blade at the factory.
3. Lubricant roller: When the set of parts is replaced, setting powder must be applied at the PTR roller nip on both ends of the roller while the PTR is rotated.
4. Paper transfer roller (PTR): When the paper transfer roller (PTR) is replaced, the entire surface of the roller must be dusted with setting powder while the PTR is rotated.

4.16.3 FANS

PTR Fan (Front)

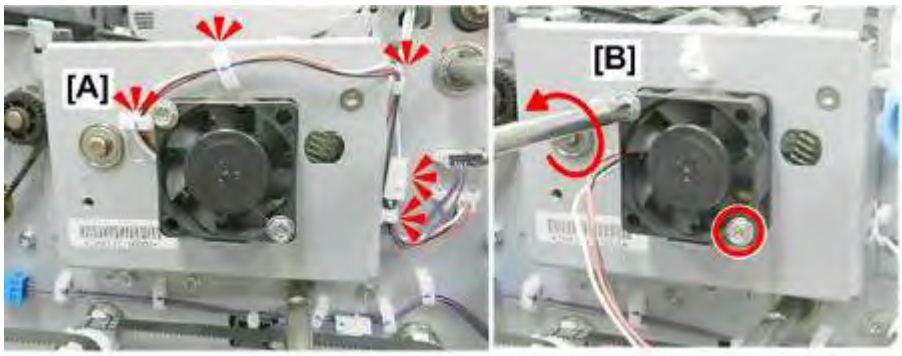
Preparation

- Pull out drawer
- Remove drawer right cover



d1793736

1. The front fan can be accessed without removing the PTR unit.



d1793737

2. Disconnect fan [A] (x4, x1).
3. Disconnect fan bracket [B] (x2).

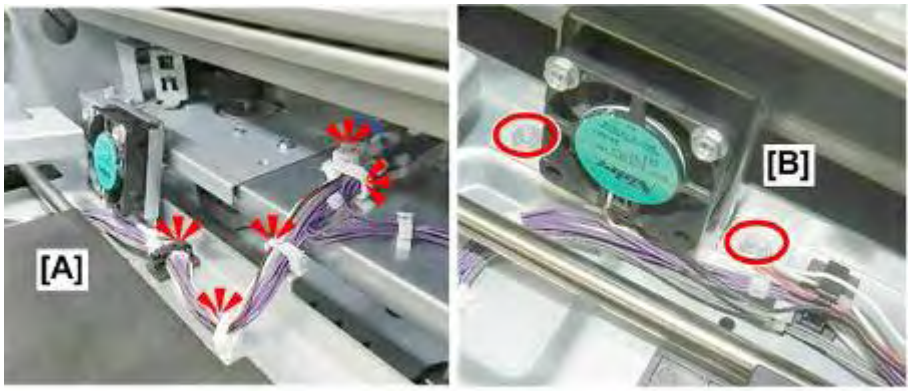
d1793738

4. Remove fan.

PTR Fan (Rear)

Preparation

- Pull out drawer
- Remove drawer right cover
- Remove PTR unit page 4-335

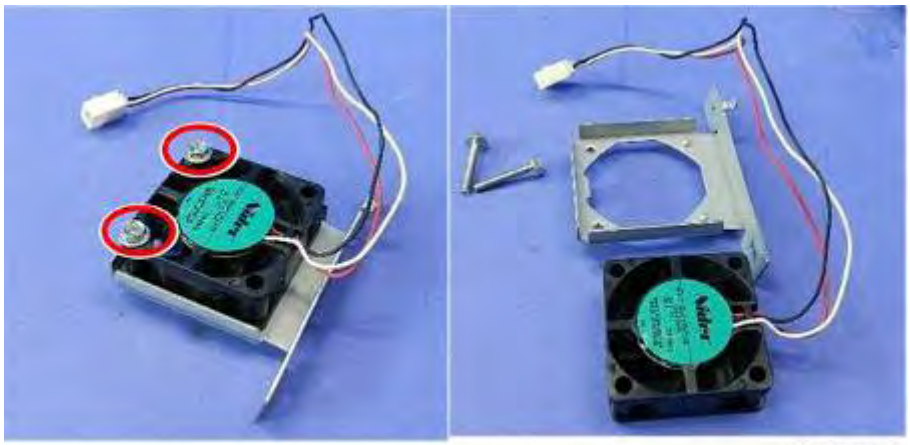


d1793739

1. Disconnect fan harness [A] and motor bracket [B] (x4, x1).

d1793740

2. Remove fan.



d1793741

3. Separate fan from bracket (x2).

4.16.4 PAPER SEPARATION POWER PACK

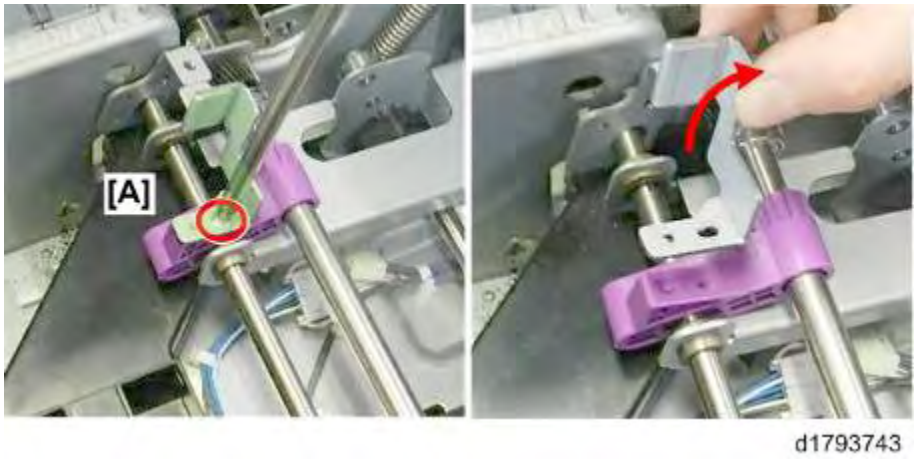
Preparation

Remove:

1. PTR unit page 4-335
2. PTB unit page 4-357

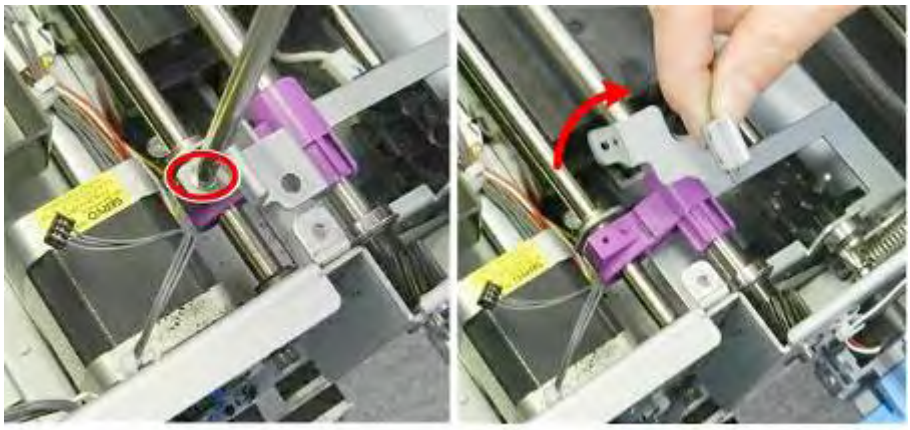
d1793742

- Reach into the machine at the back frame of the drawer, and then remove the screw.



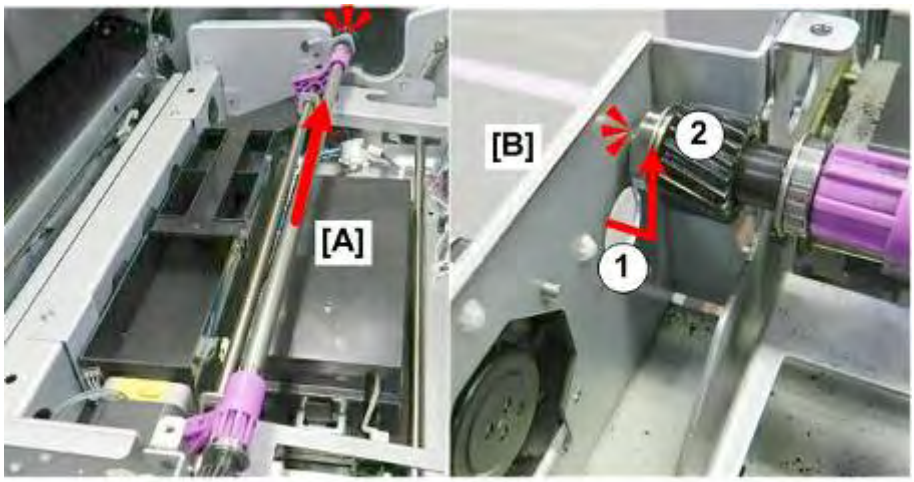
d1793743

- At the rear of the open drawer [A], remove bracket (x1).



d1793744

- At the front of the drawer, remove bracket (x1).

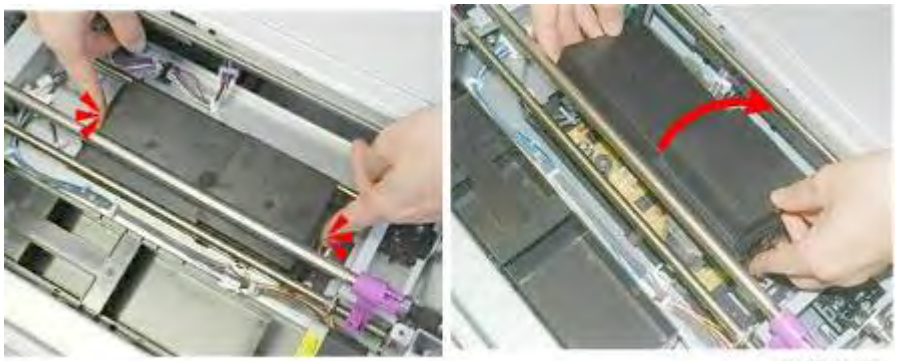


d1793745

- While pushing roller [A] as far to the rear as possible, pull the front end of the shaft ① through the hole and then pull up end of the roller ② against the back of the plate [B].

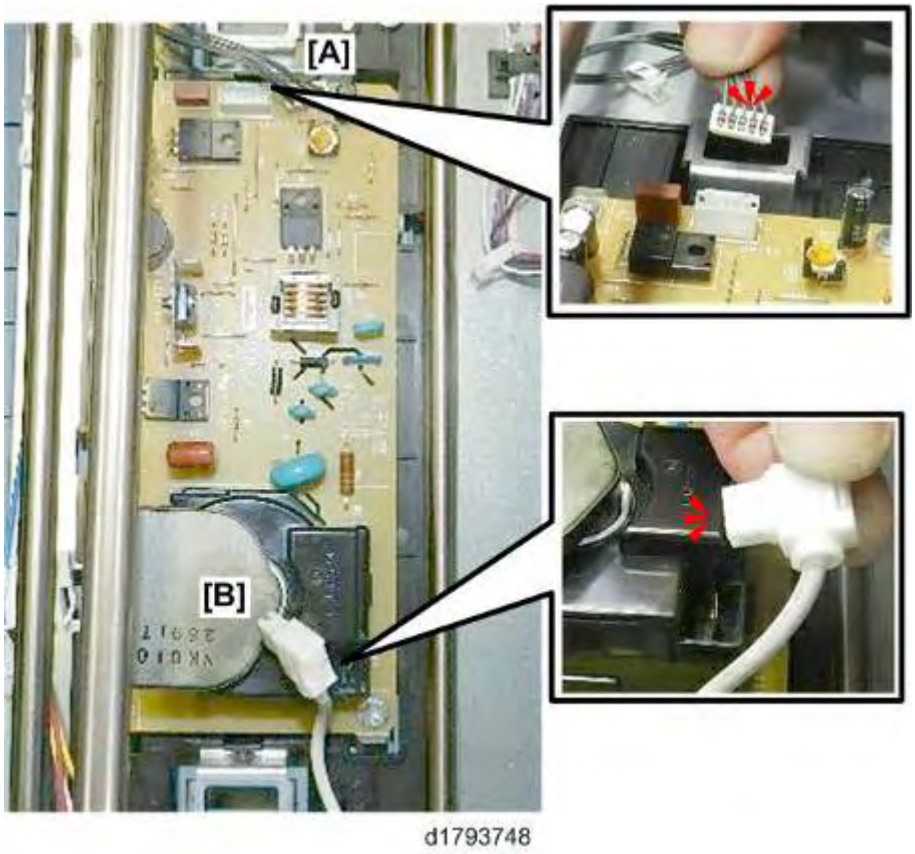
d1793746

- Make sure that the roller is raised high as possible.



d1793747

- Depress tab releases on both sides of the board cover, and then remove the cover.

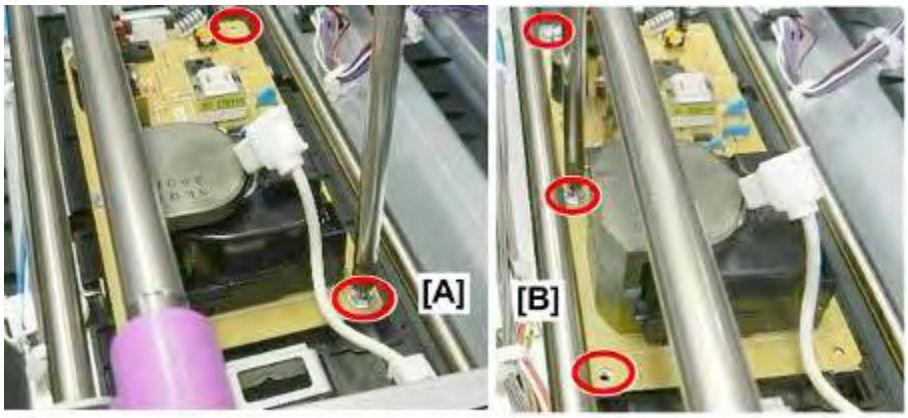


d1793748

- Disconnect board at:

  [A] Rear (x1)

  [B] Front (x1)



d1793749

- Disconnect board:
  [A] Right (x2)
  [B] Left (x3)

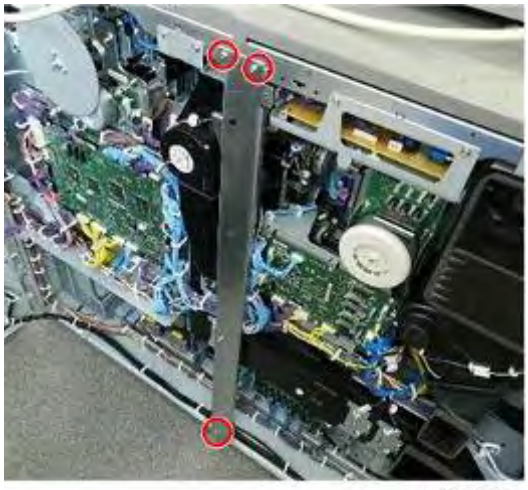
d1793750

- Remove the board.

4.16.5 ITB/PTR CLEANING MOTOR

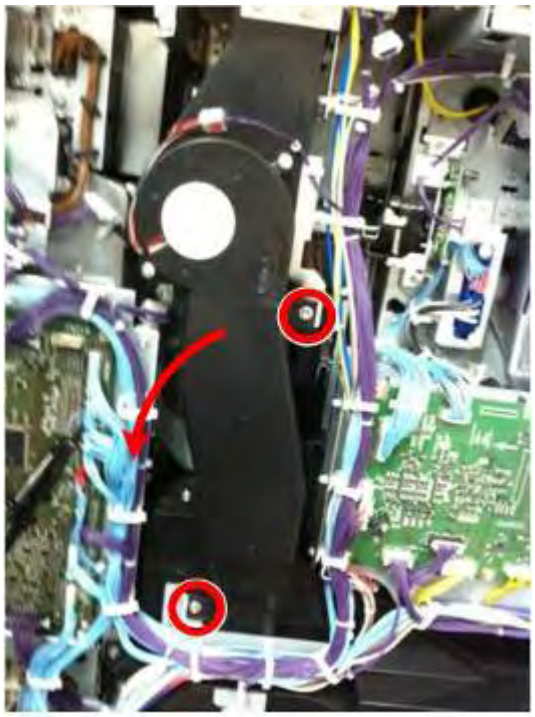
Preparation

1. Pull out drawer
2. Rear cover
3. Open controller box page 4-27



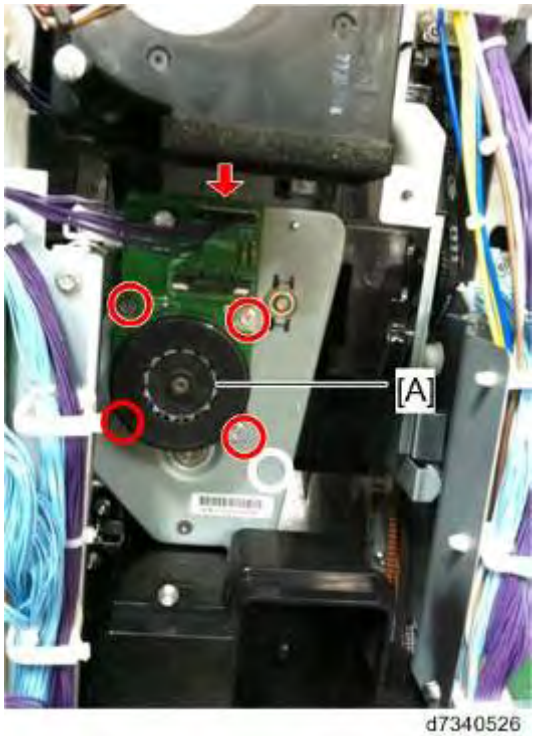
d1793231

1. Remove vertical stay (x3).



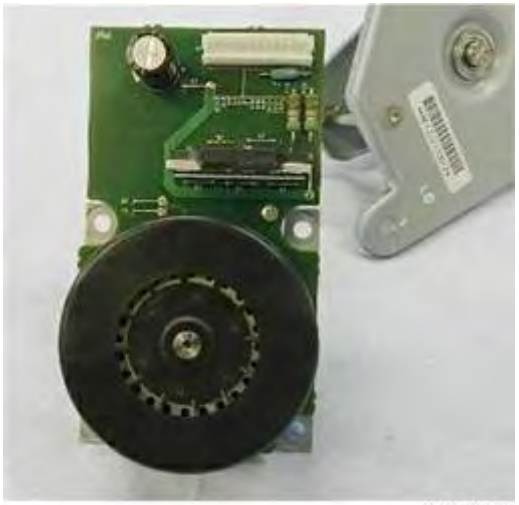
d1793247

2. Remove the vertical duct (x2).



d7340526

3. Separate motor from bracket [A] (x4, x1).



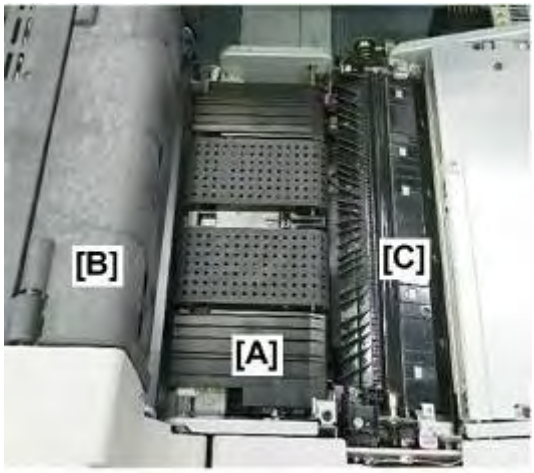
d7340527

4.17 PAPER TRANSPORT BELT (PTB) UNIT

4.17.1 PTB UNIT REMOVAL

Preparation

1. Open both doors
2. Pull out the drawer

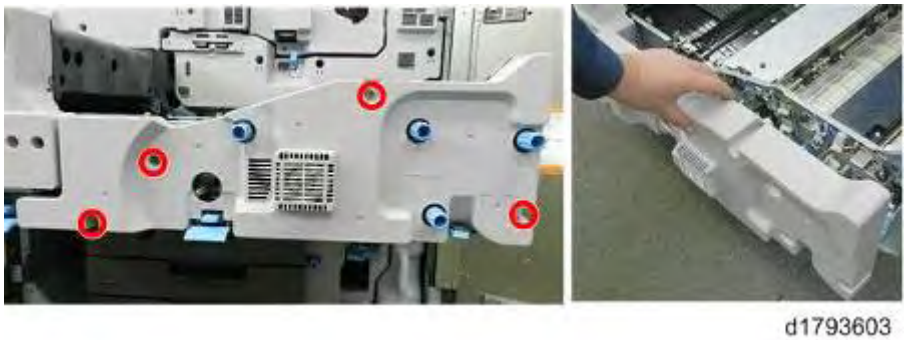


d1793601

- The PTB (Paper Transport Belt) unit [A] resides between the fusing unit [B] and the PTR unit [C].

d1793602

- Remove handle C1 from the front of the drawer (x1).



d1793603

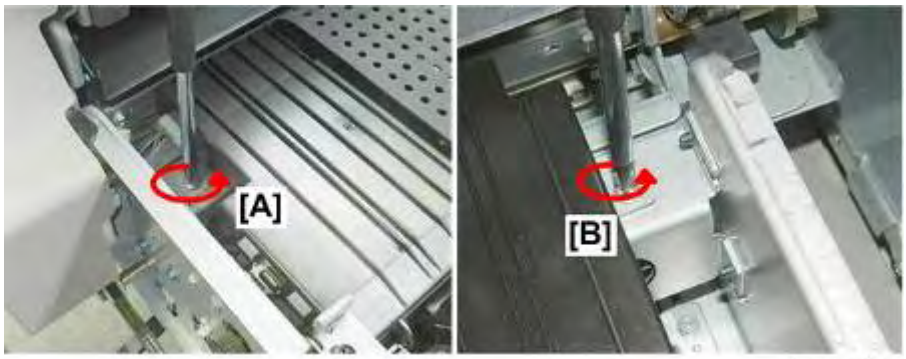
- Remove the right front cover of the drawer (x4).

d1793604

- Remove the timing belt (x1).

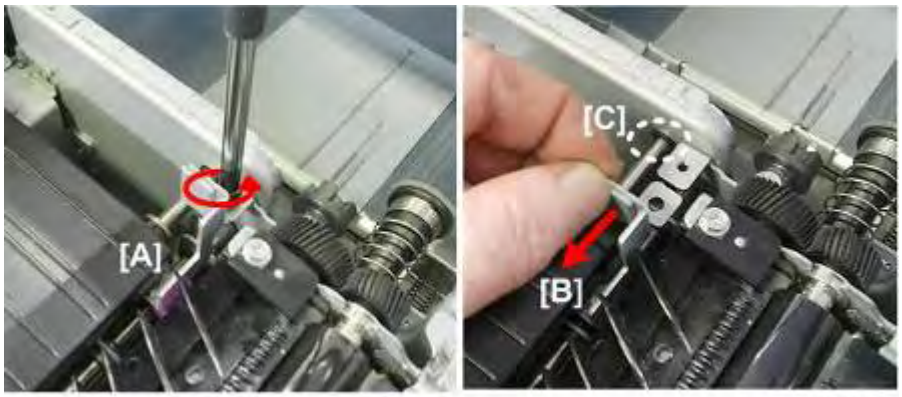
d1793605

- Remove gear (x1).



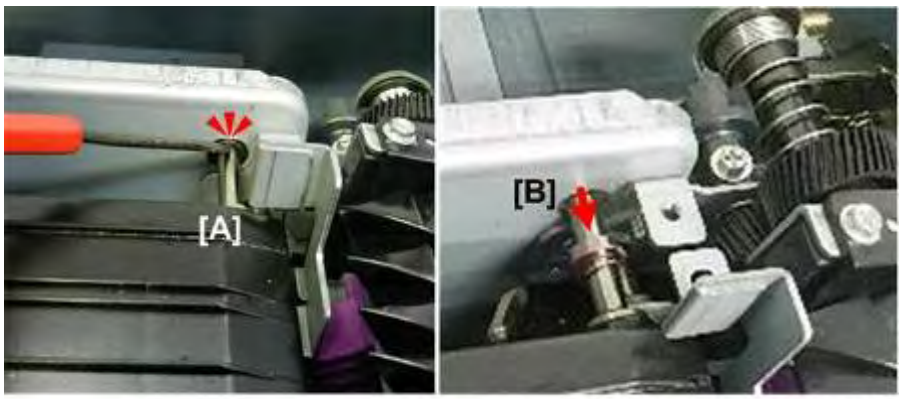
d1793606

- Disconnect the front [A] and back [B] of the PTB unit (x2).



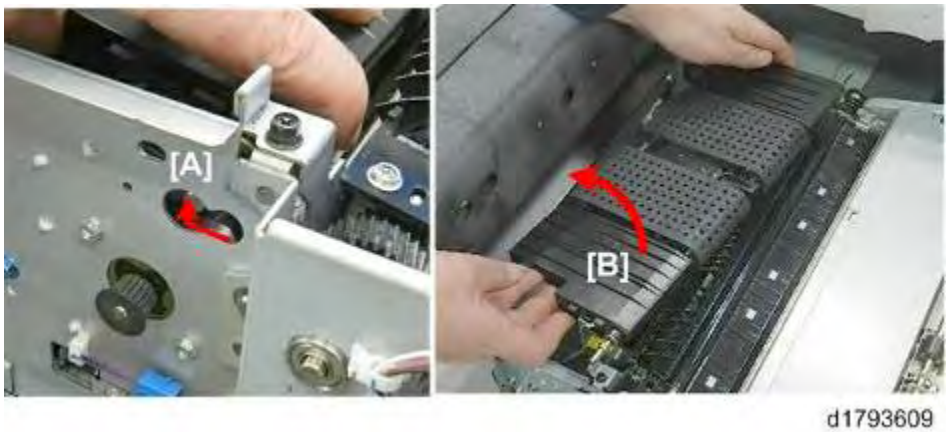
d1793607

- At the rear [A], disconnect the rear lock plate of the adjacent PTR unit (x1).
- Push the plate [B] toward the front. This will free the area around the end of the PTB unit shaft [C], so an e-ring can be removed.



d1793608

- Disconnect the end of the PTB unit shaft [A] (x1).
- Pull the bearing and ring [B] toward the front so they will not be lost when the unit is removed.



d1793609

- At the front, pull the end of the shaft [A] to the left, and then pull it away from the cut-out.
- Lift the front of the unit [B] slightly.

d1793610

- Disconnect the front of the unit [A] and then remove the unit from the machine (x2)

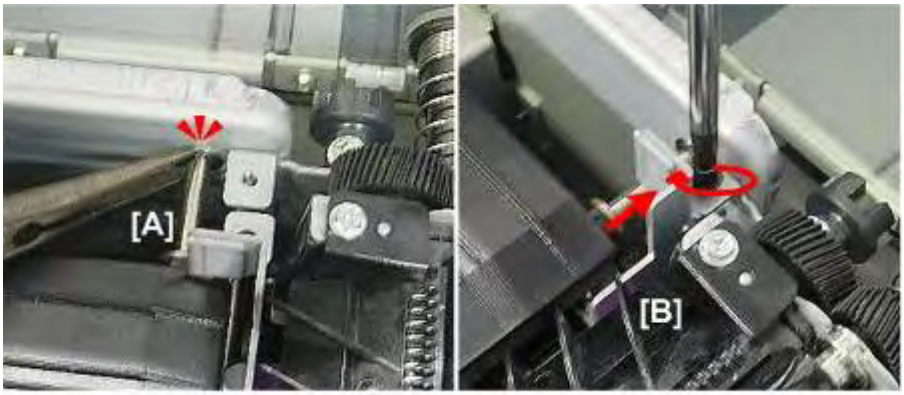
d1793612

- Handle the unit carefully to prevent losing the bearings on the front [A] and end [B] of the PTB unit guide shaft. (These can fall off easily.)

d1793611

- Lay the PTB unit on a flat clean surface.

PTR Unit Re-installation



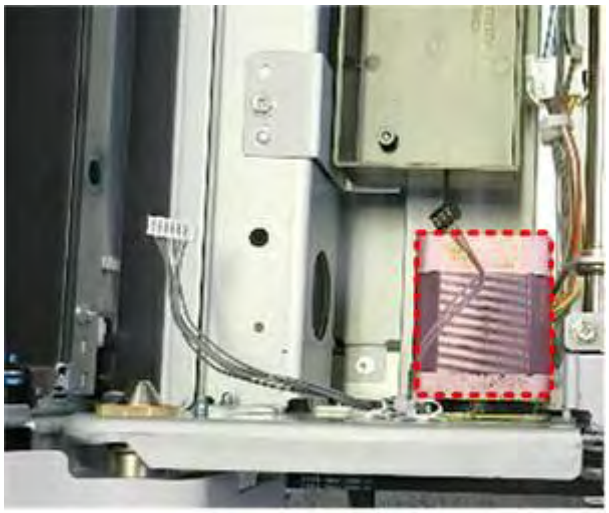
d1793613

1. After re-attaching the e-ring [A] at the rear, be sure to slide the PTR unit plate [B] to the rear and fasten it with the screw.

4.17.2 PTB MOTOR

Preparation

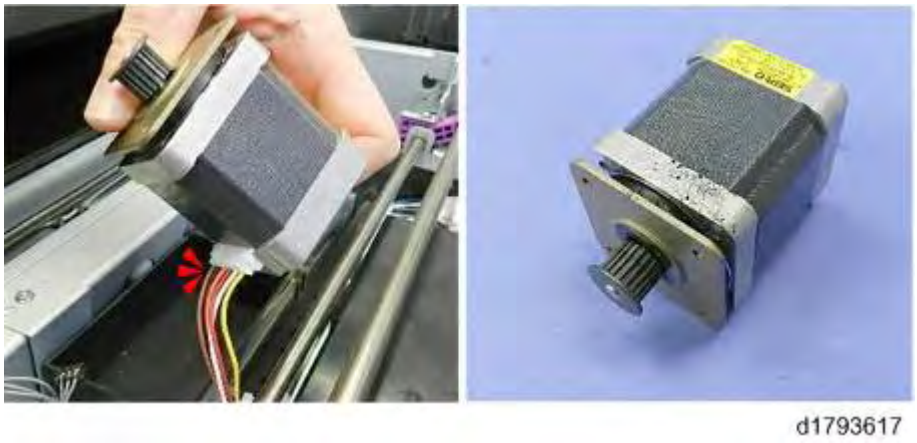
- Pull out drawer
- Remove PTB unit page 4-357



d1793615

1. The PTB motor is behind the front panel.

2. At the front [A], disconnect motor (x2).

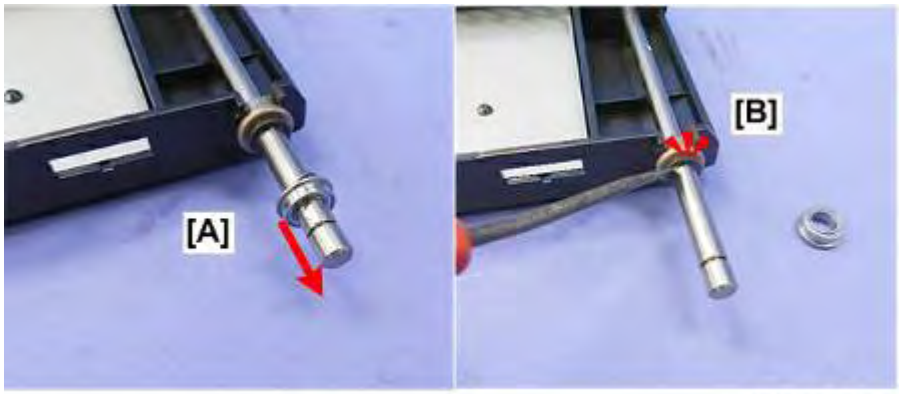


3. Raise motor, and then disconnect it (x1).

4.17.3 PAPER TRANSFER BELTS (PTB)

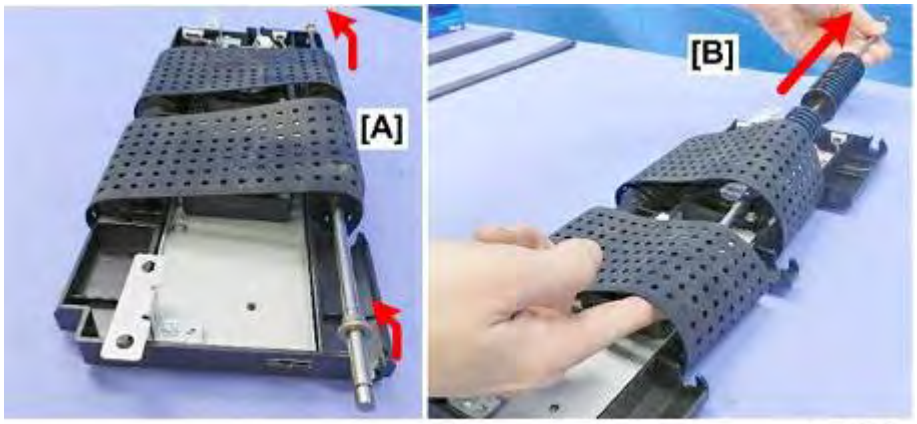
Preparation

- Remove PTB unit page 4-357



d1793618

1. At the right rear corner of the unit [A], slide the bearing and washer off the end of the shaft.
2. Disconnect end of roller shaft [B] (ℂx1).

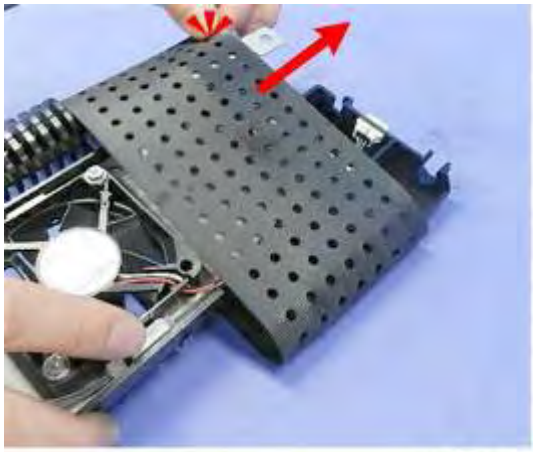


d1793619

3. Lift both ends of the roller [A] out of its guides.
4. Slide roller under the belts toward front [B], and then remove the roller.

d1793620

5. Slide off the rear belt.

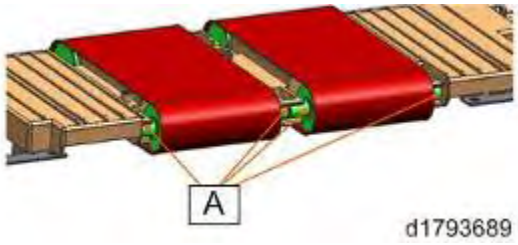


d1793621

6. Slide off the front belt.

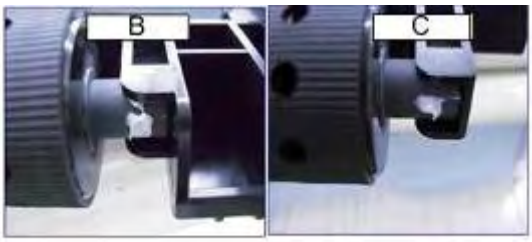
Re-installation

Before re-assembly, the following points should be lubricated with Barrierta S552R grease.



d1793689

1. [A] shows the points where grease should be applied.



d1793690

2. [B] shows the minimum application of grease, and [C] the maximum.

4.17.4 PTB SENSOR, FANS

Preparation

1. Remove PTB unit page 4-357
2. Remove both belts page 4-363

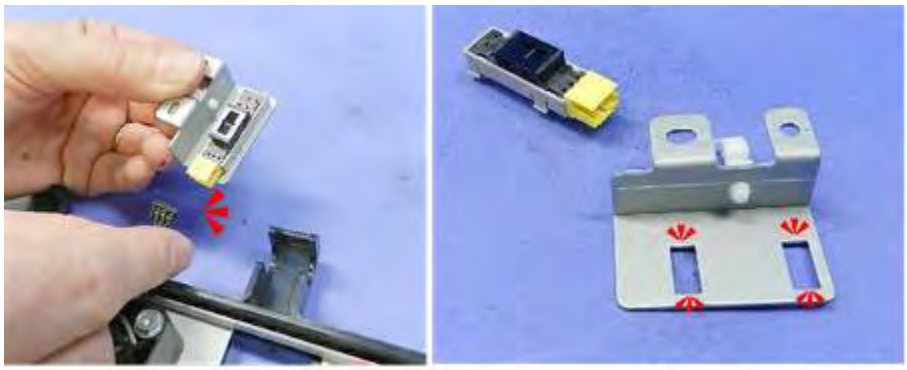
d1793622

①	PTB Fan (Front(
②	PTB Sensor
③	PTB Fan (Rear)

PTB Sensor

d1793623

1. Disconnect, and then remove sensor bracket (x1, x1).



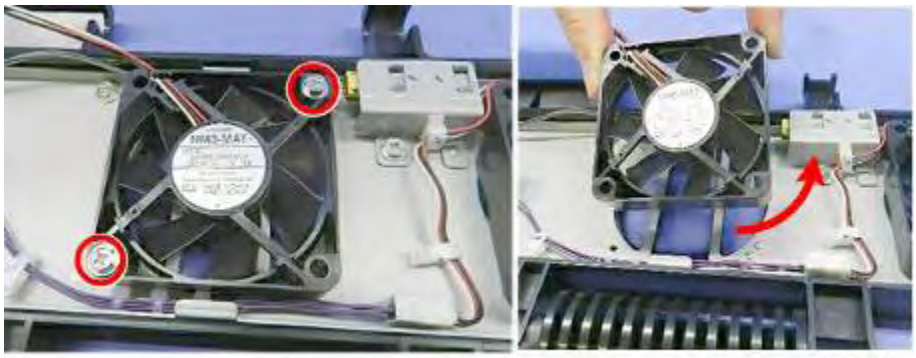
d1793624

2. Separate sensor from bracket (x1, x4).

PTB Fan (Front)

d1793625

- Disconnect harness (x1, x1)



d1793626

- Disconnect fan, and then remove it (x2).

d1793627

PTB Fan (Rear)

d1793628

1. Disconnect fan, and then remove it (x2, x1, x2).

d1793629

4.18 FUSING UNIT

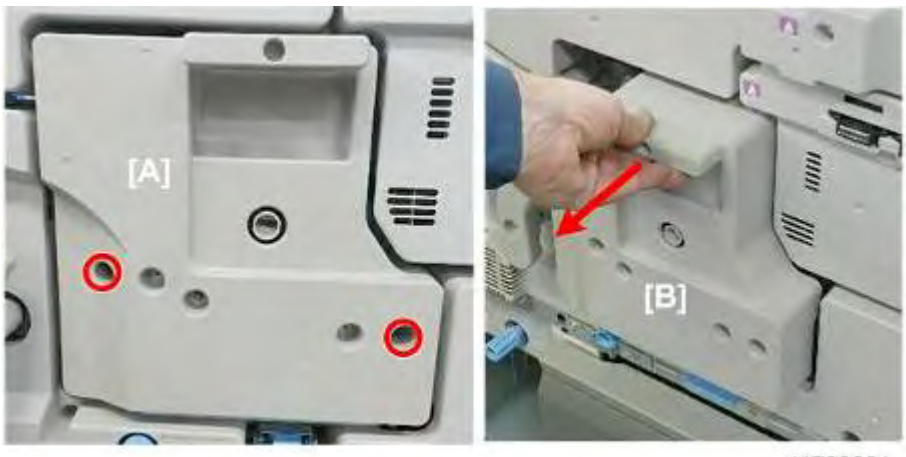
4.18.1 FUSING UNIT, FUSING CLEANING UNIT REMOVAL

d1793800

Preparation

1. Make sure that the system is off and confirm that the machine power cord is disconnected from the power source.
2. Spread a drop cloth or some paper in front of the machine.
3. Prepare a flat clean surface where you can place the fusing unit after it has been removed.
4. Open both front doors.
5. Allow at least 10 min. for the fusing unit to cool before you remove it.

Removing the Fusing Unit



d1793801

1. Remove the lock screws of the cover [A] (x2).

Note

- These are black screws.

2. Grip the unit by its handle [B], and then pull the unit out until it stops.

d1793802

3. Grip the unit on both ends, and then lift it off its tray. The unit weighs about 15 kg (33 lb.).

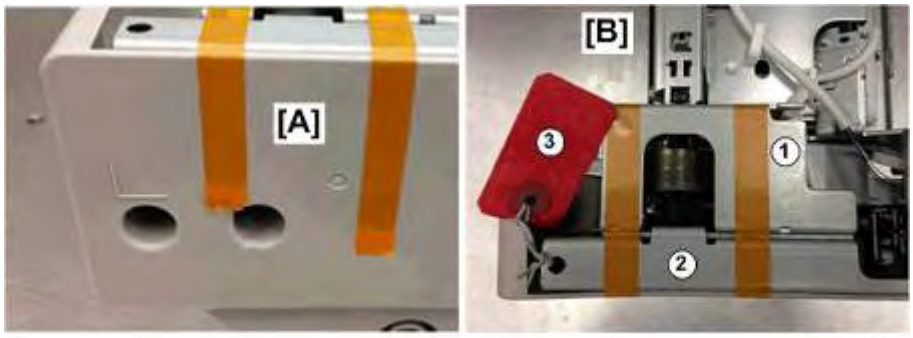
D1793803

4. Lay the unit on a flat clean surface, strong enough to support its weight.

New Fusing Unit

If the fusing unit needs to be replaced, be sure to remove the shipping brackets of the new fusing unit (TCRU Set B).

1. Open the TCRU Set B box, and then remove the new fusing unit.



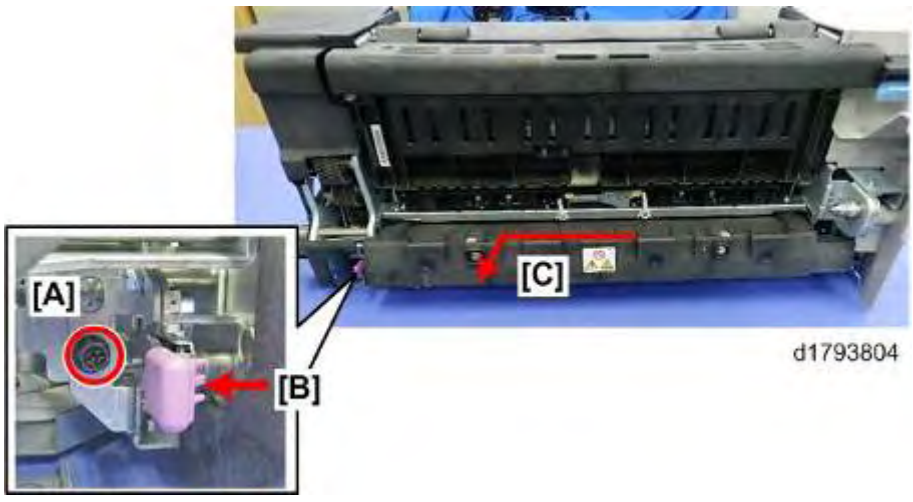
d1802607

2. Two strips of tape are attached to the front of the fusing unit [A].
3. From the top [B], pull off both strips of tape, and then remove shipping bracket ① and bracket ② with the red tag ③ attached.

Removing the Fusing Cleaning Unit

Preparation

- Remove the fusing unit page 4-369

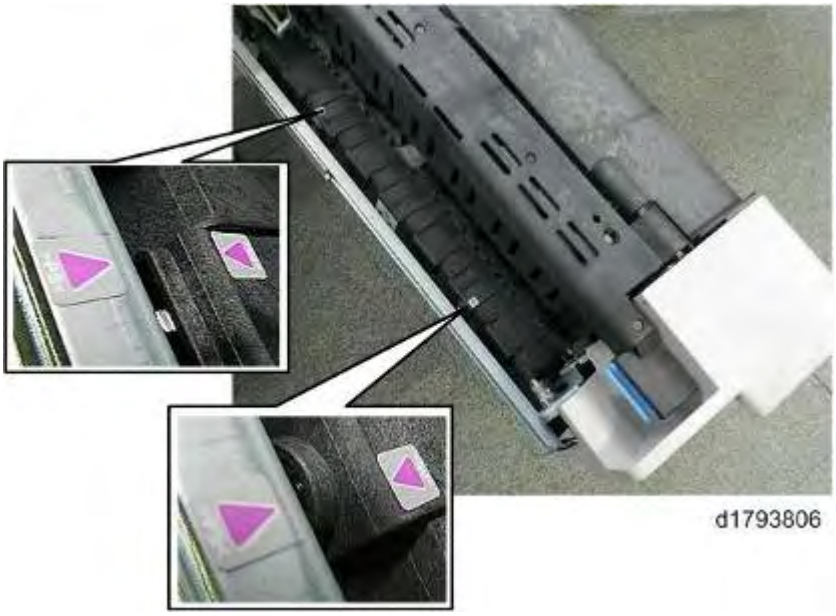


d1793804

- Remove the screw [A] at the left rear corner of the fusing unit (x1).
- Push lever [B] to the rear, and then push the unit [C] slightly to the rear to remove it.

d1793805

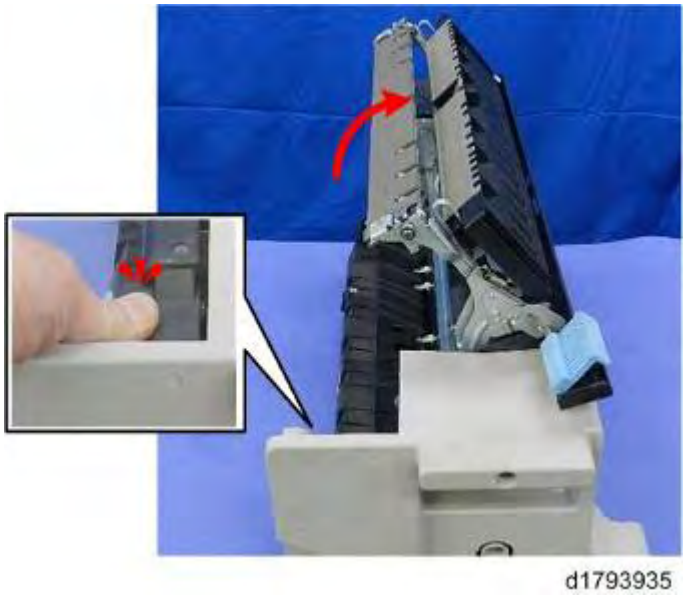
Fusing Unit Re-installation



- Use the alignment marks to align the fusing unit on its tray.
- Push the fusing unit on its tray into the machine, and then re-attach the screws (x2).

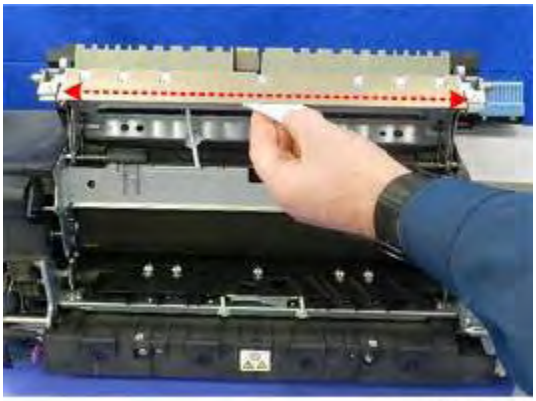
4.18.2 PERIODIC CLEANING

- Remove the fusing unit (x2).
- Lay the fusing unit on a flat clean surface.



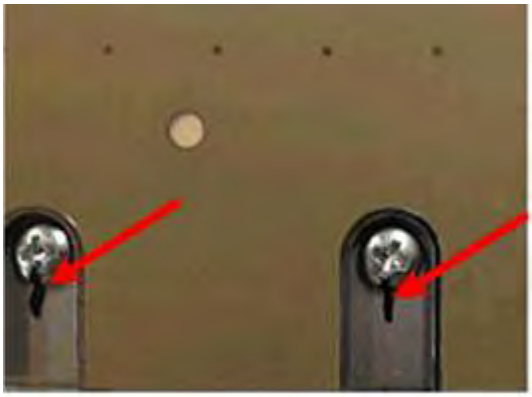
- Open the fusing unit.

Fusing Belt Stripper Plate



d1793936

- Use a dry cloth to clean the fusing belt stripper plate.



d1794066

Important

1. The paint-locked screws on the plate have been adjusted at the factory. Never remove these screws.

Pressure Roller Stripper Plate

d1793937

- Use a dry cloth to clean the cover of pressure roller stripper plate

Entrance Guide Plate

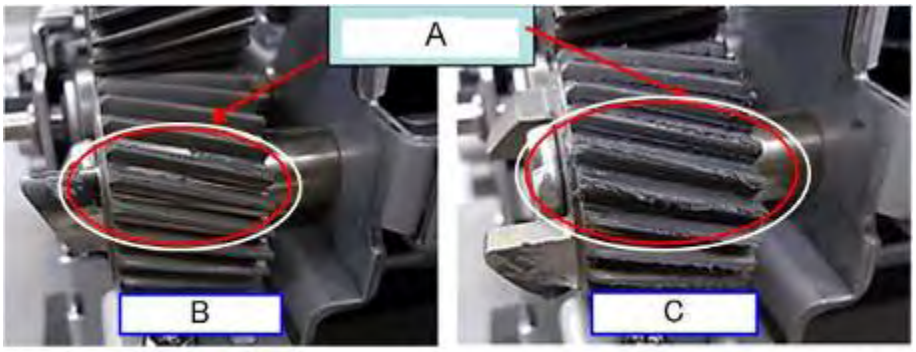
d1793938

1. Use a dry cloth to clean the entrance guide plate

4.18.3 PERIODIC LUBRICATION

d1793811

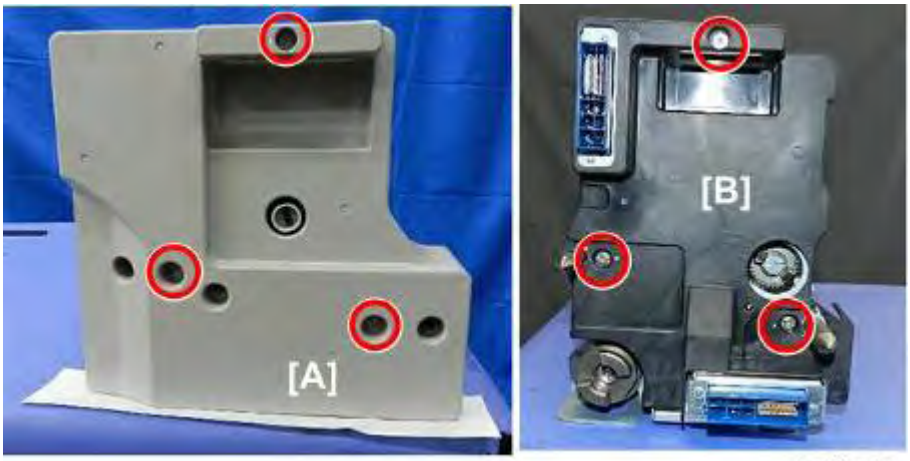
- Remove the fusing unit. page 4-369
- Remove the rear plate [A] (x3).
- Apply Fluotribo MG Grease to drive gears ①,②.
  - Apply 1.5±0.3 g to ①
  - Apply 4±0.8g to ②



d1803832

- The gears [A] are lubricated.
- [B] shows a minimum application of grease and [C] the maximum application of grease.

4.18.4 HEATING ROLLER FUSING LAMPS

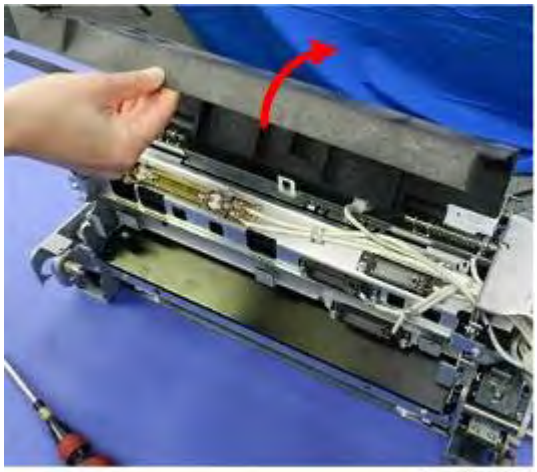


d1793812

1. Remove front cover [A] (x3).
2. Remove rear cover [B] (x3).

d1793815

3. Disconnect top cover (x2).



d1793816

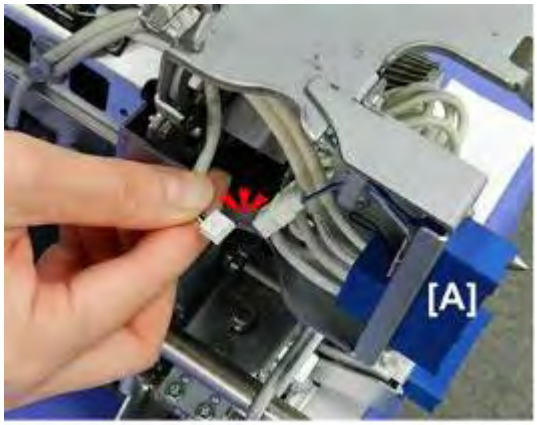
4. Remove top cover.

d1793817

5. Open separation unit.

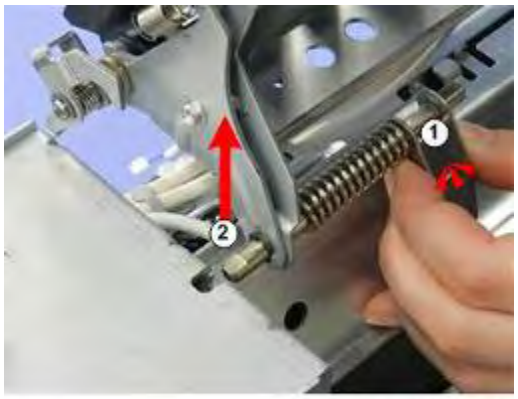
d1793818

6. Disconnect separation unit (x2).



d1793819

7. At the rear [A] disconnect separation unit (x1).

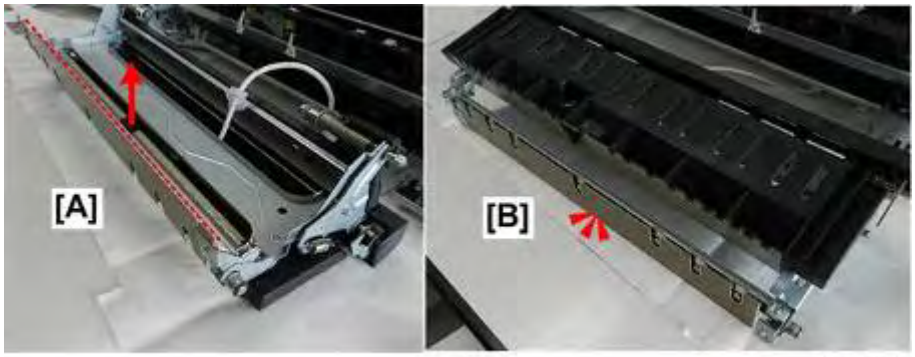


d1793820

8. Release the springs ① on both ends of the separation unit, and then lift it straight up ② to remove it.

Important

- Hold the separation unit on both ends and lift it straight up to prevent bending it.
- When you re-install the separation unit, hold it straight on both ends, and then lower it straight down.



d1803801

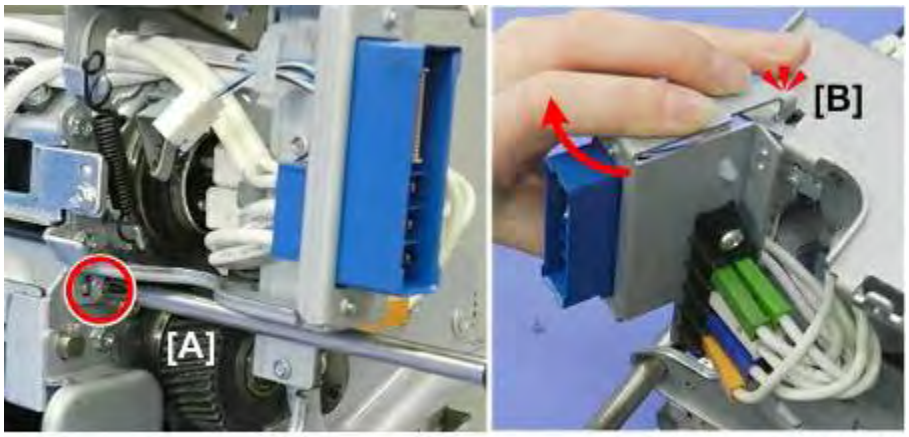
9. Lay the separation unit down with its edge up [A].

Important

1. Never lay the separation unit down with its edge down [B].

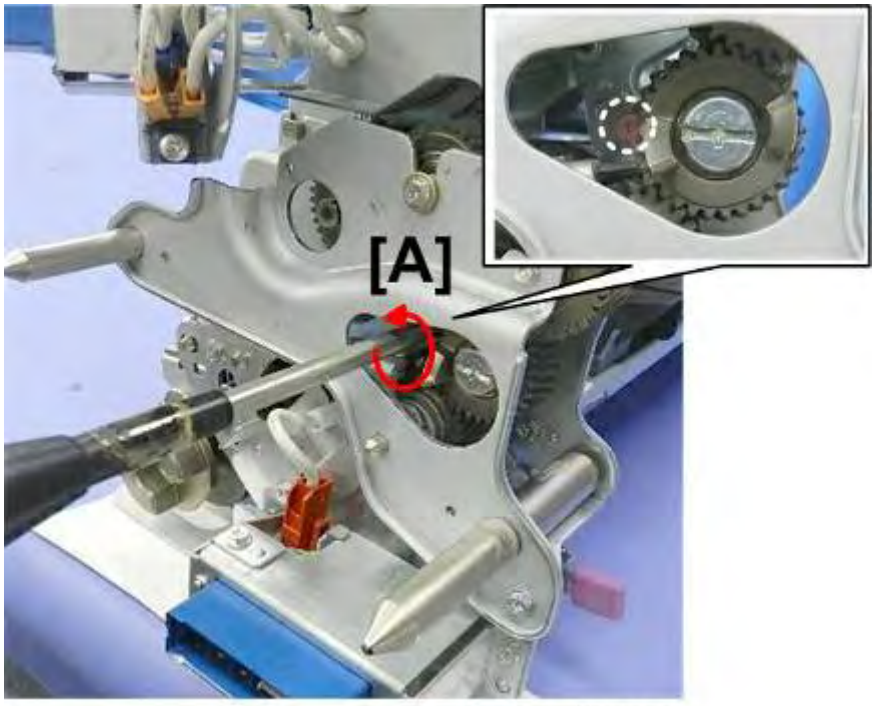
d1793821

10. At the rear, disconnect the lamp connector bracket at the top [A] and bottom [B] (x2).



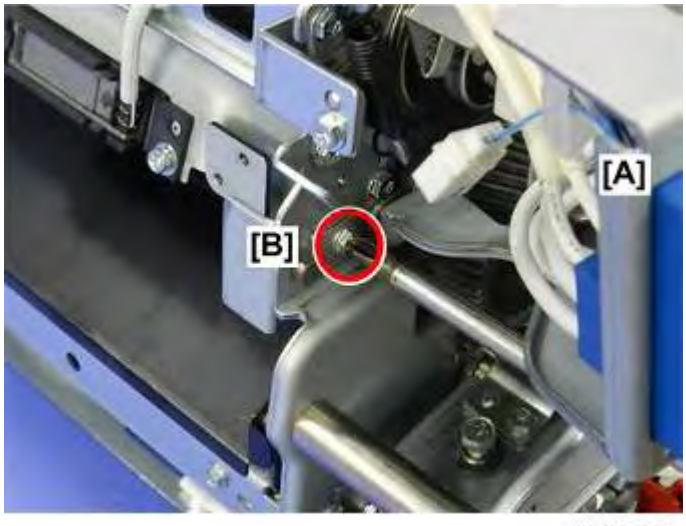
d1793822

11. Disconnect the bracket at the lower left [A], unhook the bracket [B] (x1).



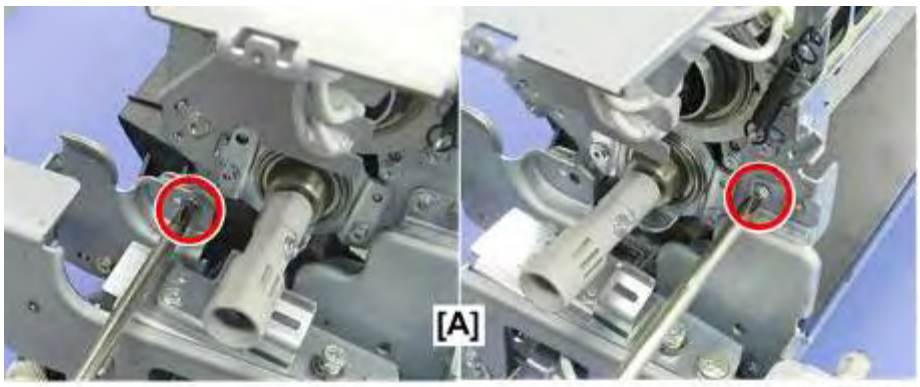
d1793823

12. Insert screwdriver through cut-out [A] and remove the hidden screw (x1).



d1793824

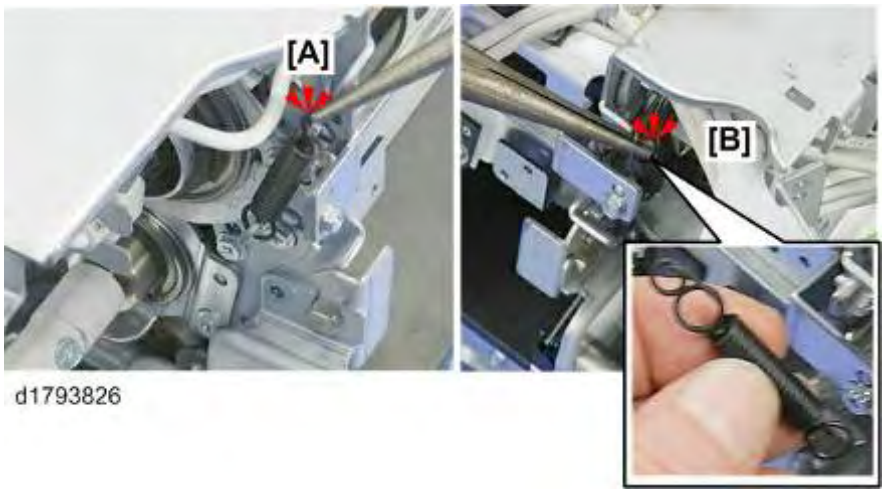
13. At the rear [A] remove screw [B] (x1).



14. At the front [A], remove screws (x1, x1).

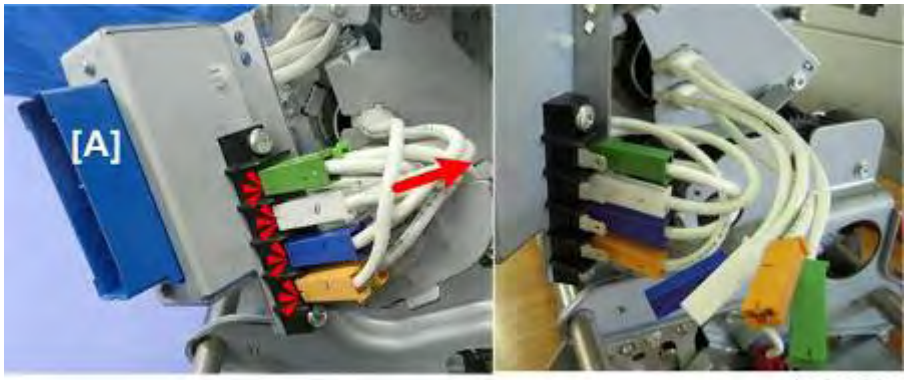
Important

- At re-installation, install the step screws ( ) at the front and rear first. Installation of these screws first will position the gears correctly, so the unit on the fusing belt side and the pressure unit are positioned correctly.



15. Disconnect springs at the front [A] and rear [B] (x2).

16. At the rear [A], remove screw and bushing [B] (x1, x1).



d1793833

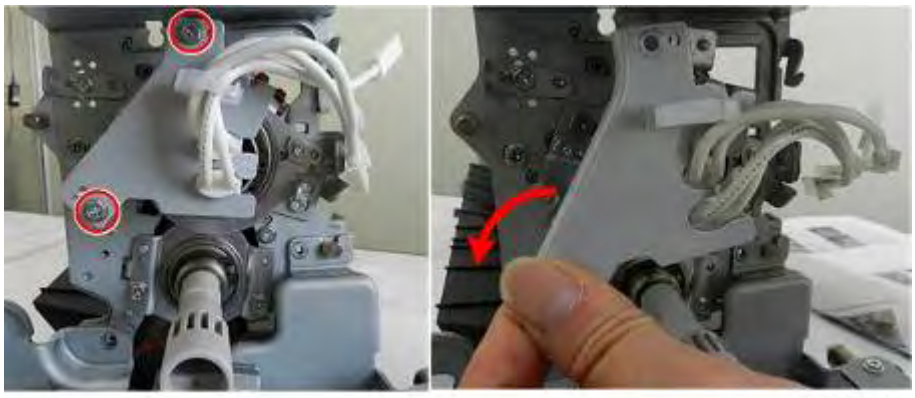
17. At the rear connector [A], disconnect the heating roller lamps (x4).

Important

1. The heating roller lamps are connected at the outside to the right of the drawer connector. They must be re-connected at the outside. However, their order of installation (top to bottom) is not important. They can be re-connected in any order.

d1793834

18. At the front, disconnect the heating roller thermostats [A] (x4).



d1803802

19. At the front, remove the heating roller lamp bracket (x1, x2).

d1803803

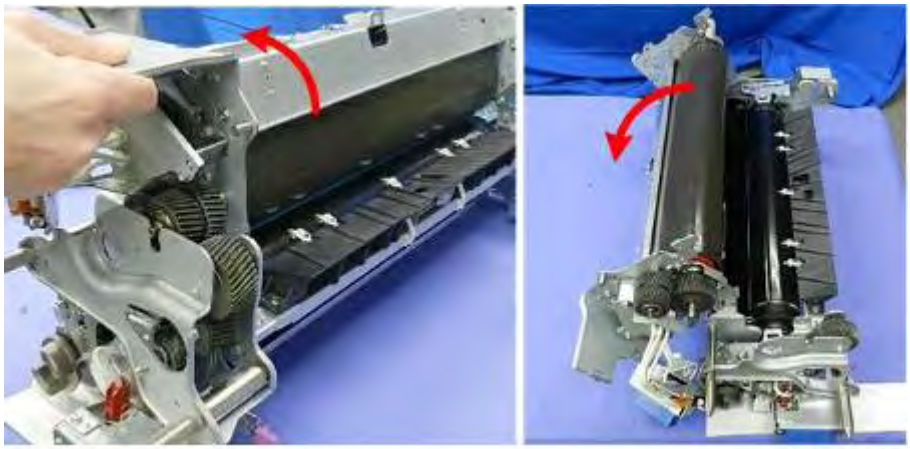
20. At the rear, remove the other heating roller lamp bracket (x2).

d1793837

21. Pull the lamps out of the heating roller.

Important

1. Hold the fusing lamps by the ends and never touch the glass surfaces.



d1793828

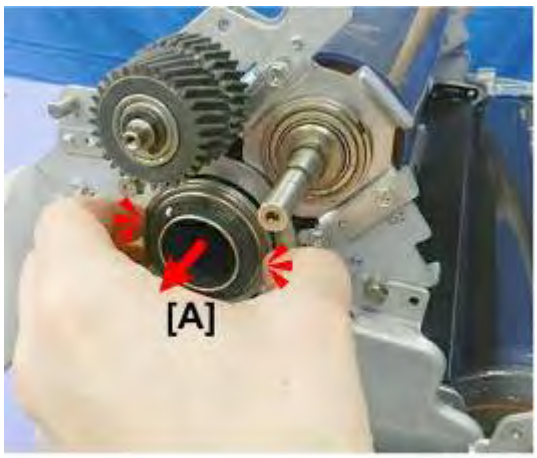
22. Open the upper unit.

d1793829

23. At the rear, remove drive gear [A] (x1).

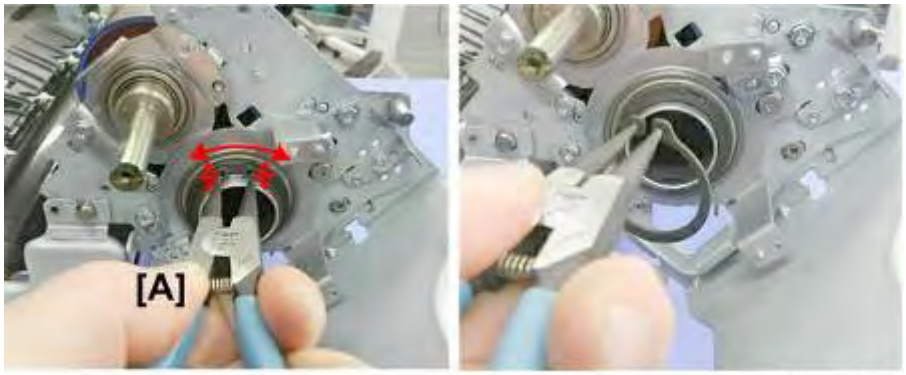
d1793839

24. At the rear, use spreaders to disconnect the heating roller [A] (x1).



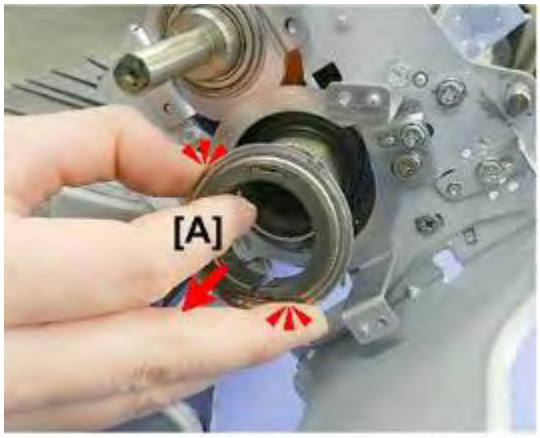
d1793840

25. Remove heating roller bearing [A].



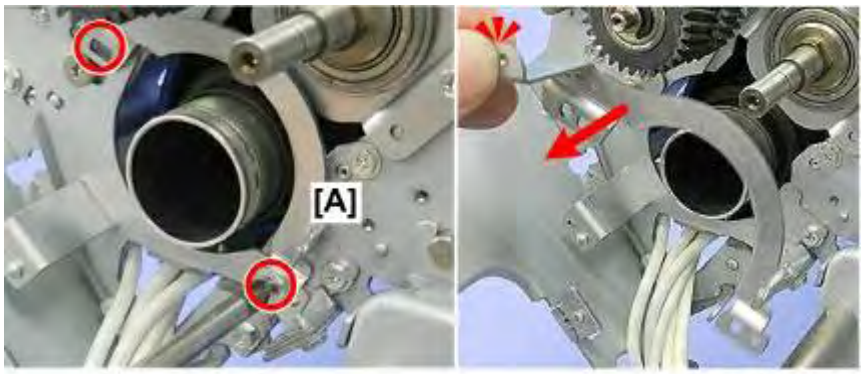
d1793841

26. At the front, use spreaders to disconnect the heating roller [A] (x1).



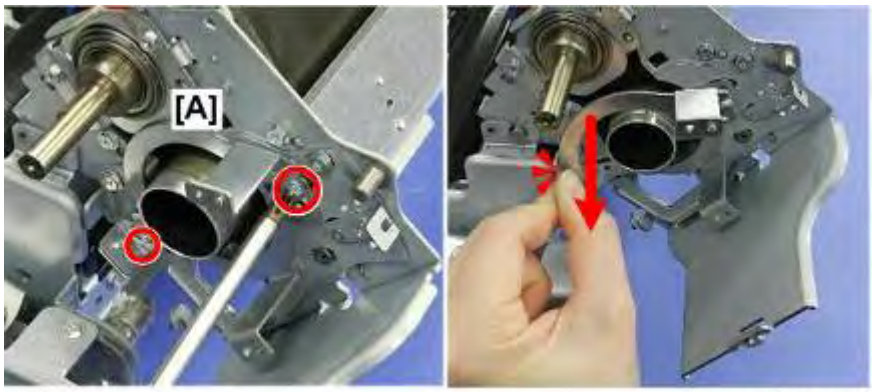
d1793842

27. Remove heating roller bearing [A].



d1793843

28. At the rear, remove crescent bracket [A] (x2).



29. At the front, remove crescent bracket [A] (x2).

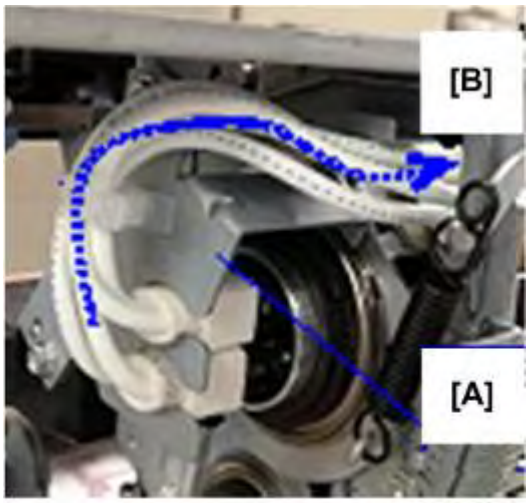
30. At the front, remove hot roller knob [A] (x1).

31. At the rear, use spreaders to disconnect hot roller [A] (x1).

d1793832

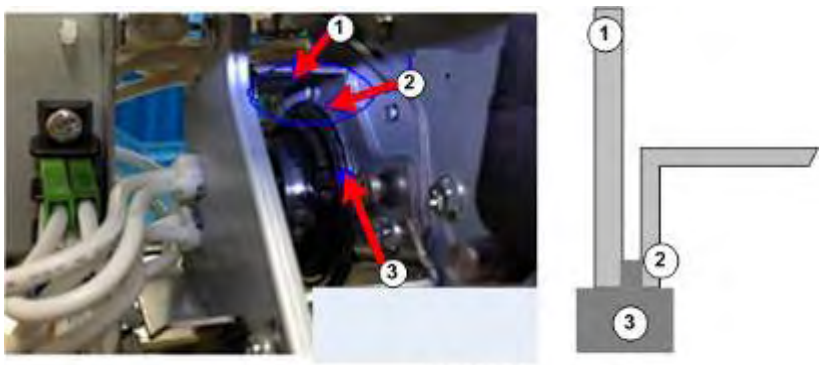
32. At the front, disconnect hot roller shaft [A] (x1).

Heating Roller Lamp Re-installation Points



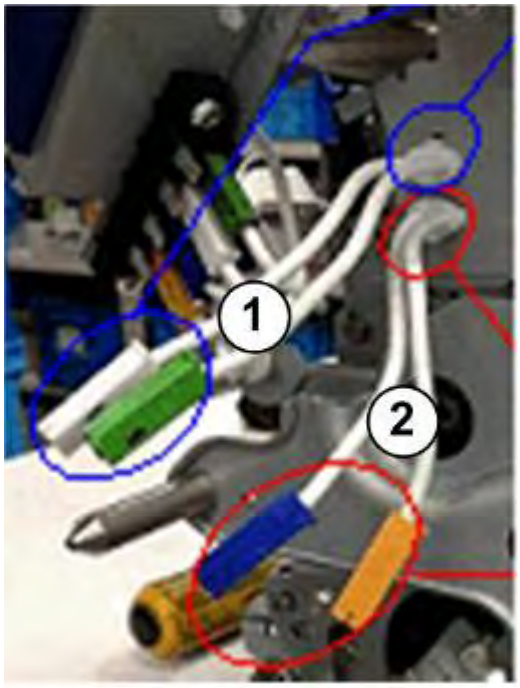
d1793983

1. At the front end of the heating roller [A] route the harnesses through the frame [B].



d1793984

2. Check the alignment at the rear.
   - ① Heating lamp holder – rear above
   - ② Heating lamp holder - rear
   - ③ Bearing sleeve



d1793985

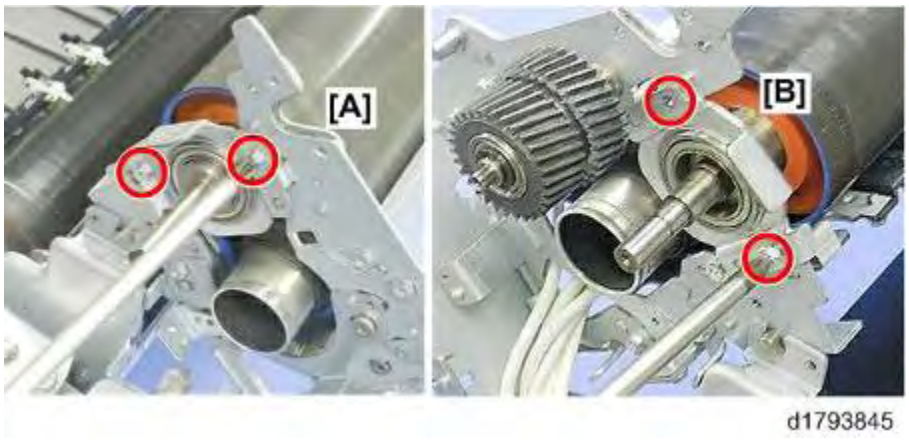
①	White, Green	DOM	200V 1090/1000W
		NA	208V 1090/1000W
		EU	220V 1090/1000W
②	Blue Yellow	DOM	200V 1150/900W
		NA	208V 1150/900W
		EU	220V 1150/900W

3. Install the lamps so that the colors on the connectors are as shown in this photo (white and green on top, blue and yellow below).

4.18.5 HOT ROLLER, HEATING ROLLER, FUSING BELT

Preparation

1. Heating roller fusing lamps page 4-375

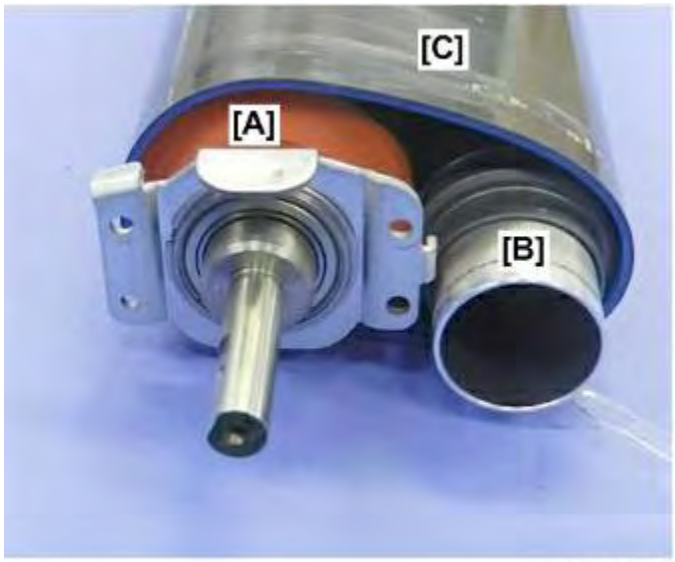


d1793845

- At the front, remove square bracket [A] (x2).
- At the rear, remove square bracket [B] (x2).

d1793846

- Grip the metal brackets at both ends of the hot roller [A], and then lift out the belt with the heating roller and hot roller together inside the belt.



d1793847

- Lay the belt with the rollers on a flat clean surface.
  1. [A] Hot roller
  2. [B] Heating roller
  3. [C] Fusing belt

d1793848

- Remove the bracket (and bearing) from each end of the hot roller.

d1793849

- Pull the roller out of the fusing belt.

d1793850

- Separate the brackets and bearings removed from the ends of the hot roller.
- Spin the races of the bearings and make sure that they rotate easily.

d1793851

- Pull the heating roller out of the fusing belt.

4.18.6 CLEANING, LUBRICATION BEFORE RE-ASSEMBLY

Do these checks and procedures before re-assembling the fusing unit.

Important

- Work carefully and always avoid touching the surfaces of the hot roller, heating roller, and fusing belt with bare hands

Heating Roller

d1793852

- Always inspect and clean a heating roller for contamination by grease before re-installing it.

  Important

  - Grease contamination can cause uneven heating on the surface of the roller and cause problems during fusing.
- Clean the entire surface of the heating roller with a dry cloth.
- Next, clean the entire surface with a cloth dampened with water (not alcohol).
- Finally, clean the entire surface again with a dry cloth.

Hot Roller

d1793853

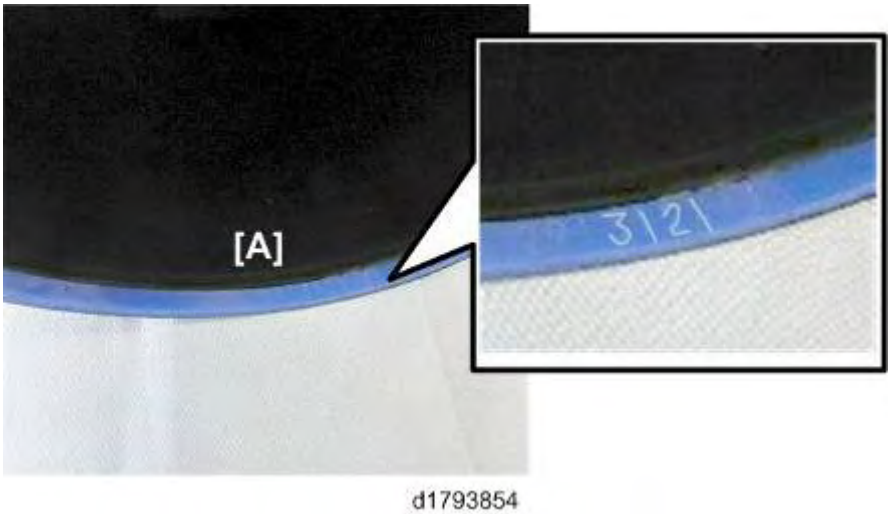
1. Always inspect and clean a hot roller for contamination by grease before re-installing it. This is especially important for a used roller that is to be re-installed.

   Important

   - Grease on the surface of the hot roller can cause the surface of the roller to peel.
   - If peeled particles reach the surface of the fusing belt, this can cause glossy patches or streaks to appear on prints.

2. Clean the entire surface of the hot roller with a dry cloth.
3. Next, clean the entire surface with a cloth dampened with water (not alcohol).
4. Finally, clean the entire surface again with a dry cloth.

Fusing Belt



d1793854

- The front edge of the fusing belt [A] is marked with faint numbers, letters, lines.
- This edge should always be installed at the front end of the unit.

Heating Roller Thermistor

d1793855

1. At the rear, inspect and clean the heating roller thermistor with a clean cloth.

Heating Roller, Hot Roller Bearings

d1803804

1. Separate the bearings and flanges.

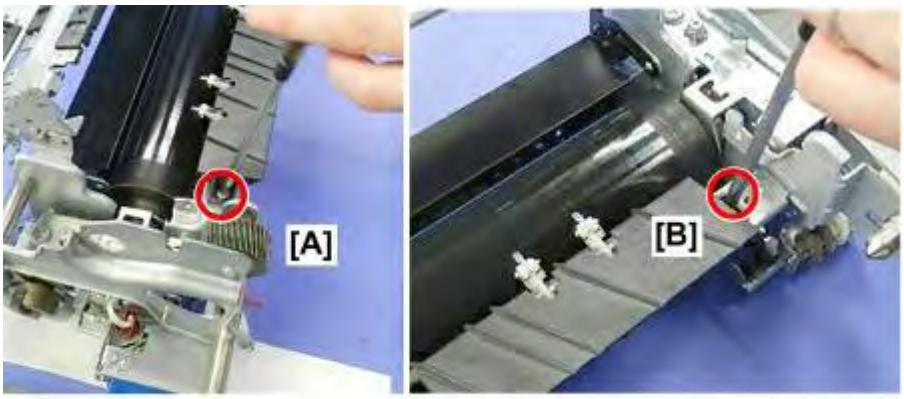
d1803805

2. Apply Fluotribo MG Grease to the inner surfaces of the flanges and bearings.

d1793861

3. Set the lubricated flanges so the ridge on each end of the fusing belt hangs over the rims of the flanges as shown above.

4.18.7 PRESSURE ROLLER STRIPPERS, FUSING PATH SENSORS

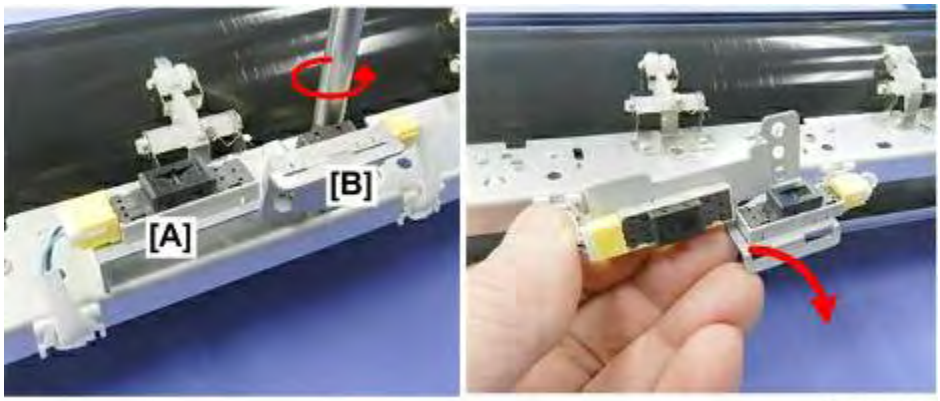


d1793862

- Disconnect both ends [A] and [B] of the pressure roller stripper cover (x2).

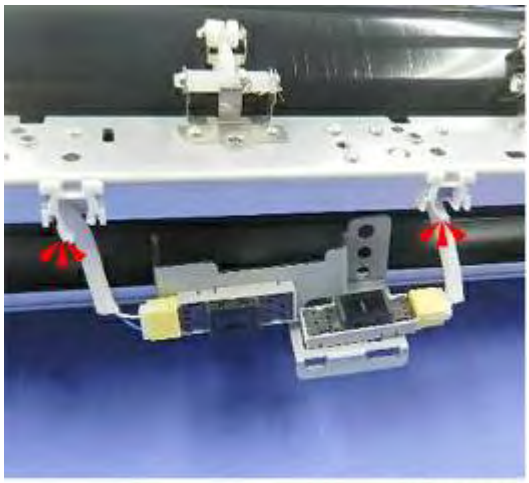
d1793863

- Remove the cover [A].
- Disconnect both ends of the pressure roller stripper bracket [B] (x2).



d1793864

- Disconnect and pull away the sensor bracket (x1).
  [A] Exit sensor (x1, x3)
  [B] Pressure roller paper sensor (x1, x3)



d1793865

- Free the harnesses (x2).

d1793866

- Remove the pressure roller stripper bracket.

d1793867

Pressure Roller Stripper Pawls

d1803824

Important

1. Before re-assembly, check each pawl to see if any one is warped or broken.
2. Check the tip of each pawl (circled above) to see if it is bent or damaged.
3. A damaged tip can cause pawl marks to appear on paper, and cause other problems like allowing paper to wrap around the pressure roller.

d1803825

1. Disconnect coil spring from bracket.

d1803826

Note

- When you re-attach the long hook of the coil spring, wrap it under the rotating arm first, and then set the tension spring.

d1803827

2. Open the holder attached to the outside of the bracket, rotate the pawl, and then remove it from the tip of the arm.

d1803828

3. Open the bracket and then remove the stripper pawl rotation arm.

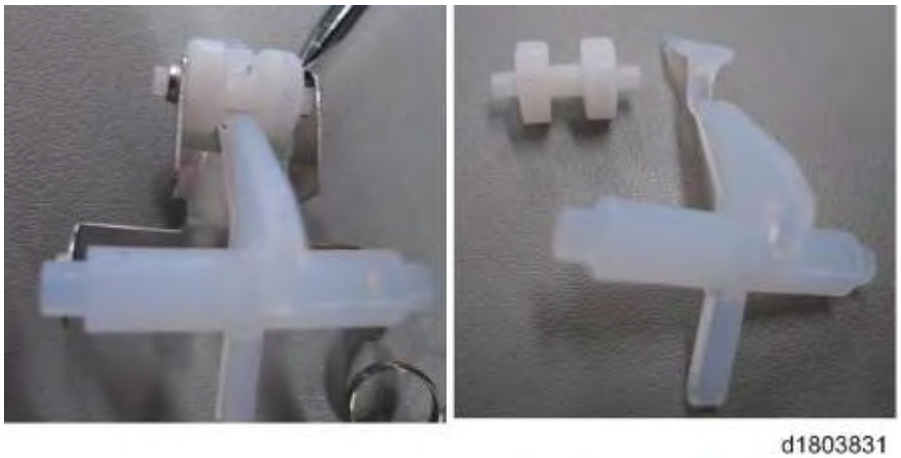
d1803829

4. Remove the coil spring from the pawl rotation arm.

d1803830

Note

- When you re-attach the coil spring, set the short hook (circled red) on the pawl first, and then set the pawl and spring.



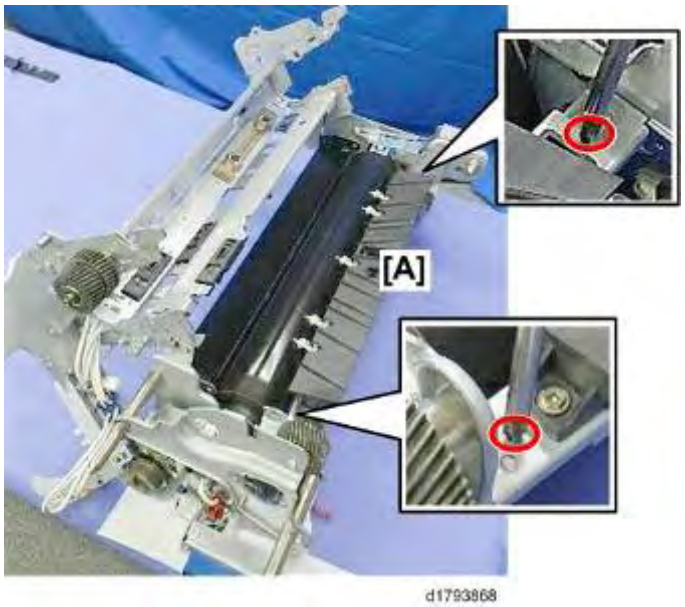
d1803831

5. Open the holder, and then separate the pawl and arm shaft.

4.18.8 PRESSURE ROLLER FUSING LAMP, PRESSURE ROLLER

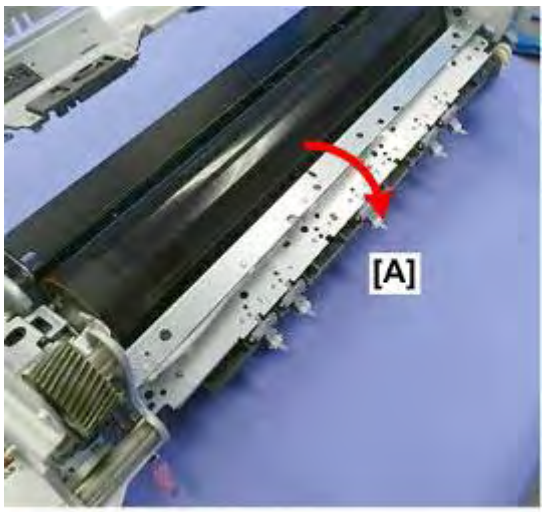
Preparation

1. Heating roller fusing lamps page 4-375
2. Fusing belt with heating roller, hot roller page 4-387



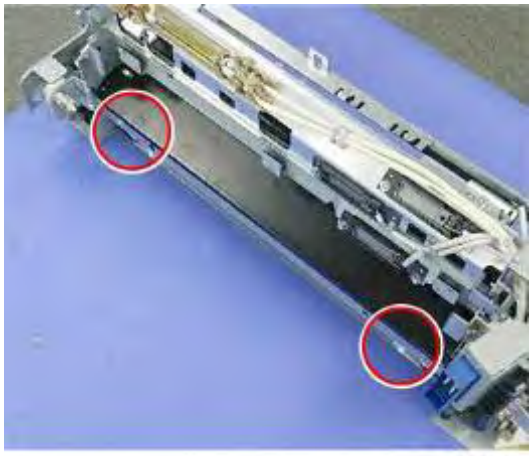
d1793868

- Disconnect both ends of the pressure roller stripper bracket [A] (x2). (Removing the cover is not necessary.)



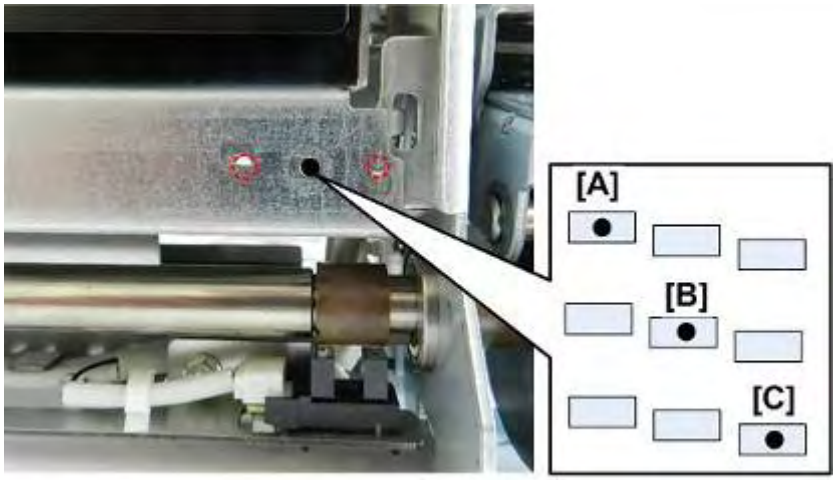
d1793869

- Turn the stripper bracket [A] away from the pressure roller.



d1793870

- Disconnect both ends of the side plate (x2).



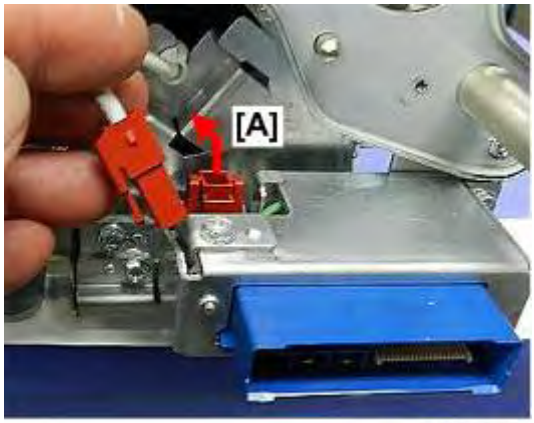
d1803806

Important

1. At re-installation of this plate, the screw must be attached at the center hole [B]. This hole is the default position. The other off-set holes are used to adjust the height of the plate. For more details about this adjustment, see the “Troubleshooting” section.

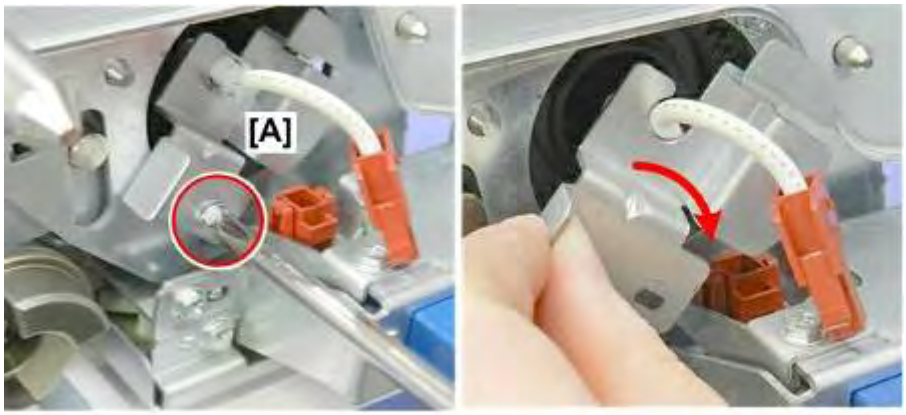
d1793871

- Remove the side plate.



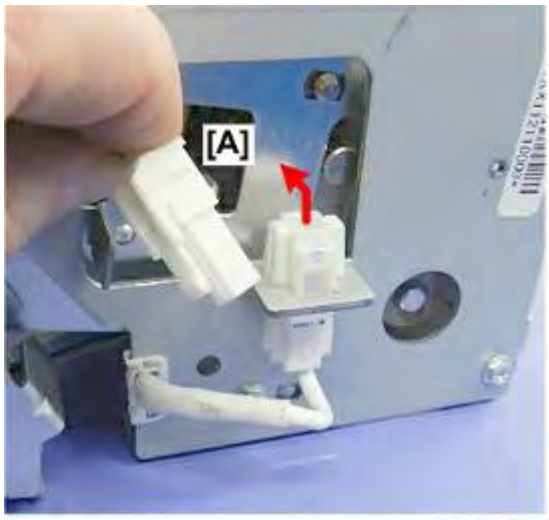
d1793872

- At the rear, disconnect the pressure roller fusing lamp [A] (x1).



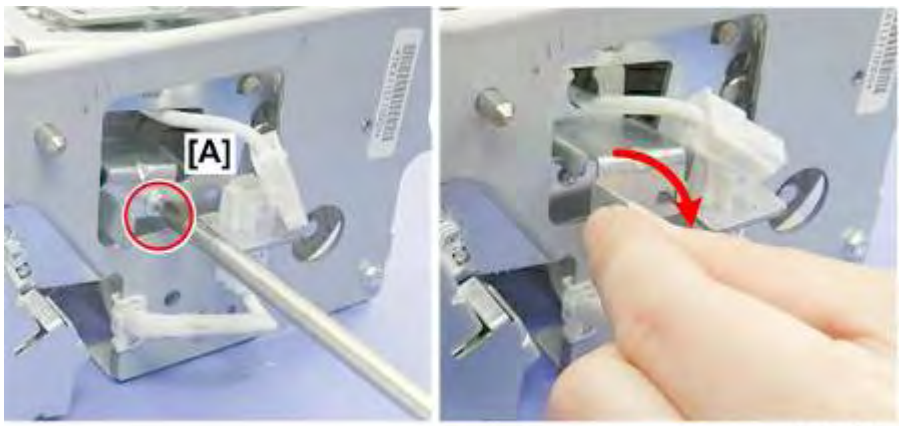
d1793873

- Remove the pressure roller lamp bracket [A] (x1).



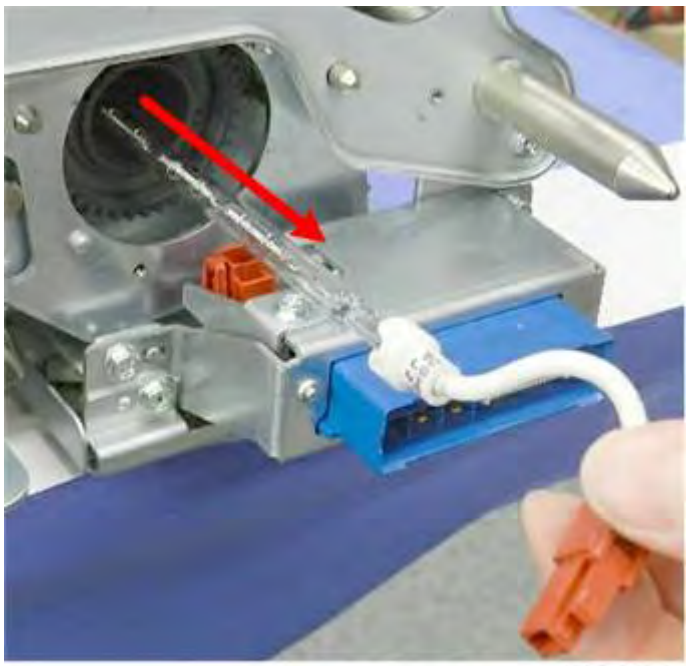
d1793874

- At the front, disconnect the pressure roller lamp [A] (x1).



d1793875

- Remove the pressure roller lamp bracket [A] (x1).



d1793876

- At the rear, pull out the pressure roller lamp.

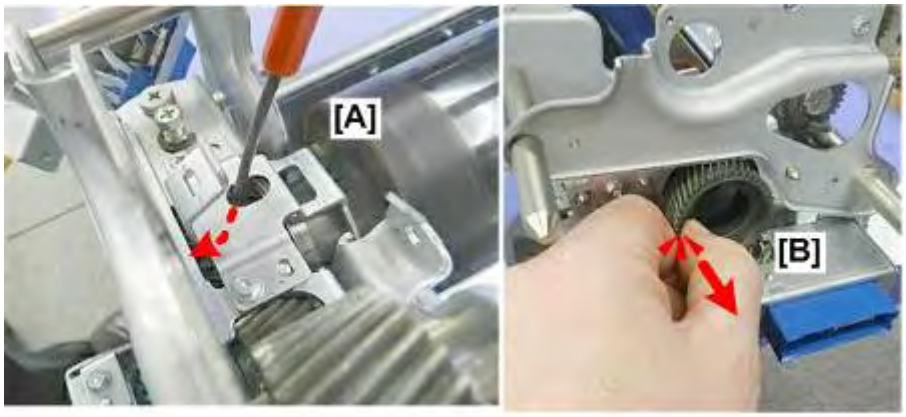
Important

- Always handle the fusing lamps by holding them on the ends. Never touch the surface of a fusing lamp.

- Lay the lamp on a flat clean surface.

d1793877

- Use spreaders to disconnect the rear end of the pressure roller [A] (x1).



d1793878

- Above the rear end of the pressure roller, insert a small driver through the cut-out [A] and push the gear out.
- Remove gear [B].

d1793879

- Disconnect the pressure roller holding bracket at the rear [A] (x2).
- Disconnect the pressure roller holding bracket at the front [B] (x2).

d1793880

- Grip the holding brackets on each end of the pressure roller, lift straight up, and then remove the roller.
- Lay the roller on a flat clean surface.

Pressure Roller Cleaning, Lubrication

d1793881

1. Use spreaders to disconnect the bearing from the front end of the pressure roller [A] (x1).
2. Pull the other bearing from the other end of the pressure roller (there is no fastener on the other bearing).

d1793882

3. Spin the races of the bearings and make sure that the rotate easily.
4. If they do not turn easily, they must be replaced.

d1793883

5. At the bottom of the frame (near the front) inspect and clean the pressure roller thermistor [A] with a clean cloth.

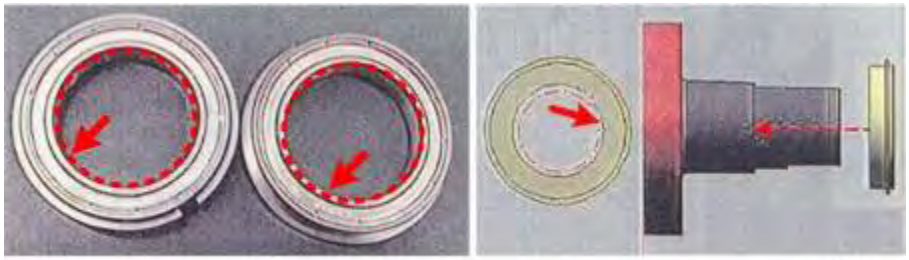
d1793884

- Always inspect and clean the pressure roller for contamination by grease before re-installing it.

Important

1. Grease contamination can cause uneven heating on the surface of the roller and cause problems during fusing.

- Clean the entire surface of the roller with a dry cloth.
- Next, clean the entire surface with a cloth dampened with water (not alcohol).
- Finally, clean the entire surface again with a dry cloth.



d1793885

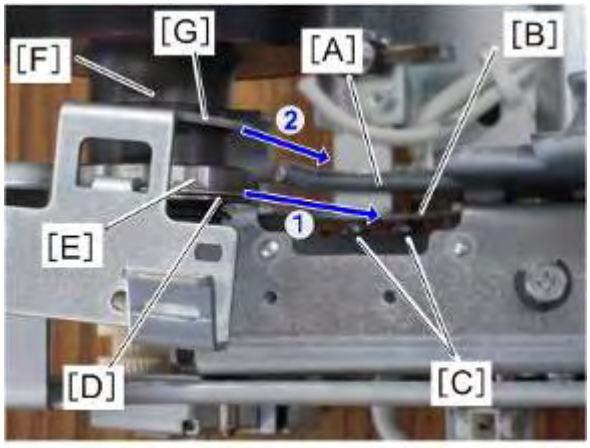
- Use a small brush, or the tip of a small flat-tip screwdriver, etc. to apply Fluotribo MG grease to the inside surfaces of the pressure roller races.

Pressure Roller Re-installation

d1793986

- When installing the pressure roller, check the lamp harnesses at the front [A] and rear [B].

Front (Pressure Roller – Top View)



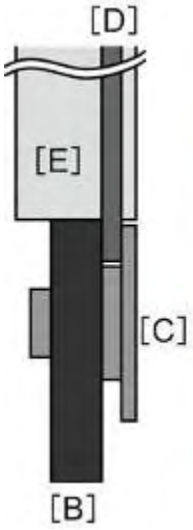
d1791307

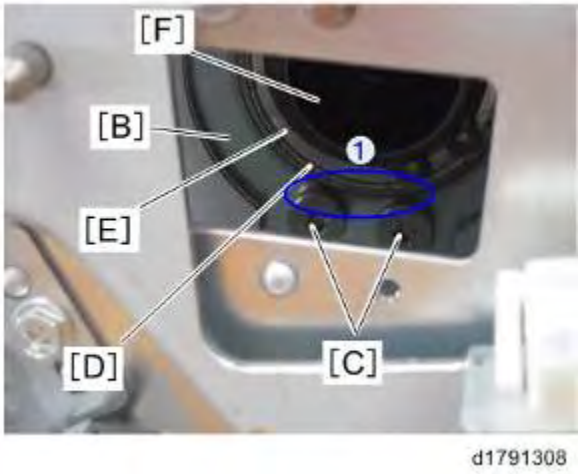
A	Front frame bend
B	Front moving frame
C	Step screws (x2)
D	Ball bearing flange
E	Ball bearing race

F	Pressure roller front
G	Front bracket

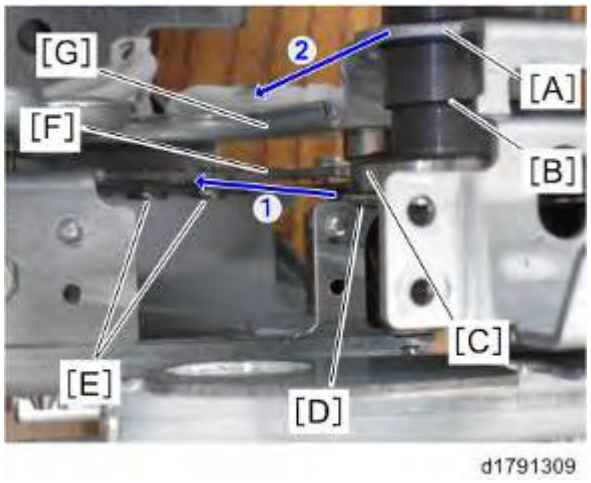
- The ball bearing flange should be between the frame and step screw.
- The front bracket should be behind the bend in the frame.

Pressure Roller





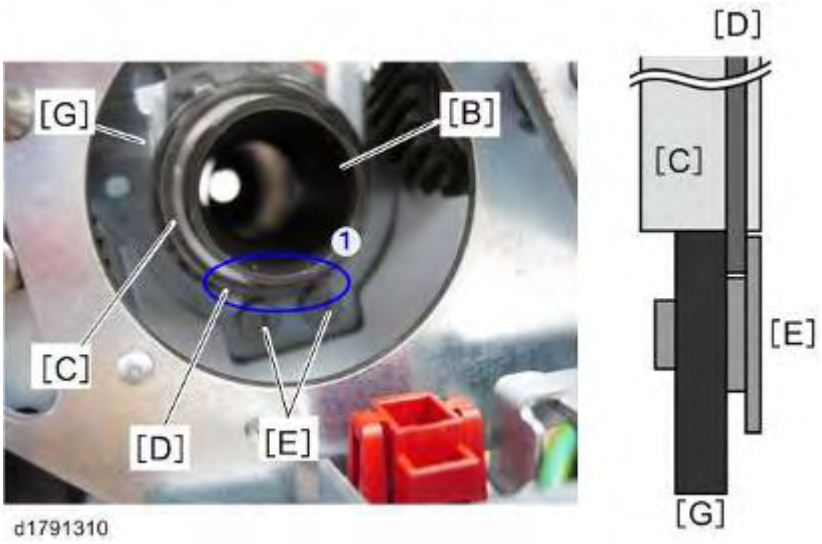
B	Front moving frame
C	Step screw
D	Ball bearing flange
E	Ball bearing race
F	Pressure roller front



A	Rear bracket
B	Pressure roller rear
C	Ball bearing race
D	Ball bearing flange
E	Step screws (x2)
F	Frame bend
G	Moving frame rear

- The ball bearing flange should be between the rear movable frame and the step screws.
- The bracket should be behind the rear movable roller.

Pressure Roller - Rear



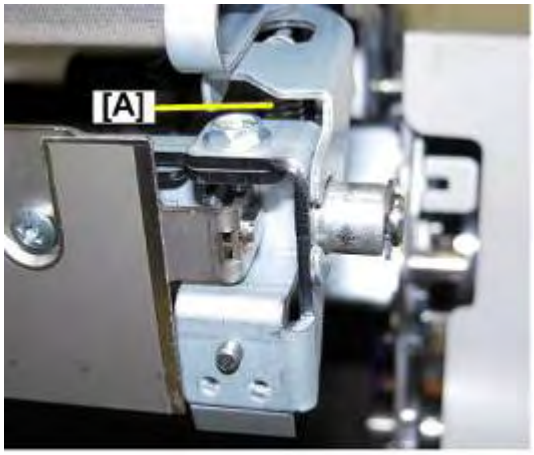
B	Pressure roller rear
E	Step screws (x2)
D	Ball bearing flange
C	Ball bearing race
G	Moving frame rear

Separation Plate

- Remove the fusing unit. page 4-369

d1803820

- Open exit guide [A].



d1803821

- At the front, remove springs from front and rear end of the separation plate. [A] shows the front.

d1803822

- Disconnect both ends of the separation plate, and then remove the collars (x2).

d1803823

- Lift both ends of the guide plate out of the cut-outs, and then remove the guide plate.

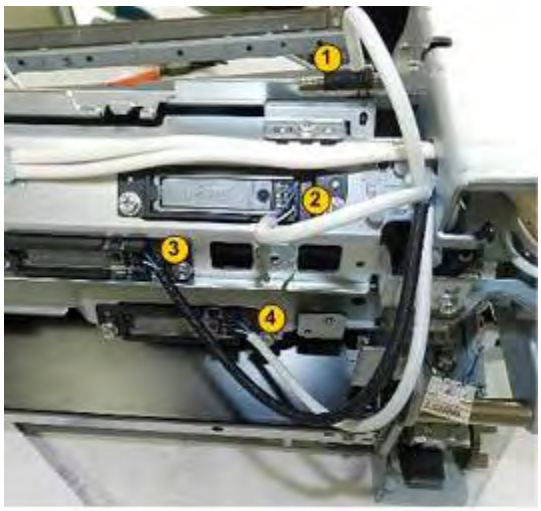
4.18.9 THERMOSTATS, THERMISTORS, NC SENSORS

Hot Roller Heating Roller Sensors, Heating Roller Thermistor

Preparation

Remove:

1. Fusing front cover, rear cover
2. Separation unit cover, top cover



d1803807

These harnessess and must be removed together:

① Heating roller thermistor

② Hot roller NC sensor

③ Heating roller NC sensor (center)

④ Heating roller NC sensor (end)

Important

- At re-installation re-connect the harnesses in the correct order.

①	Thermistor
②	White harness –short
③	Black harness
④	White harness – long

d1793888

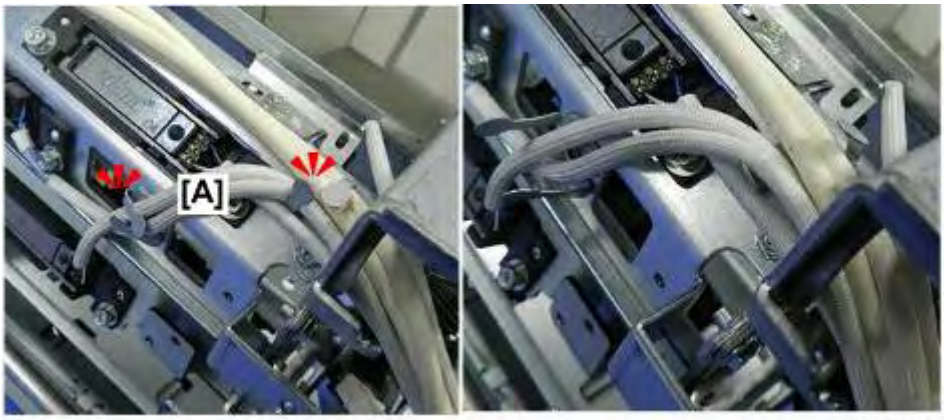
1. At the rear, disconnect the connector bracket (x2).

d1793889

2. Inside the bracket, disconnect the top and bottom of the plastic connector cradle (x2).

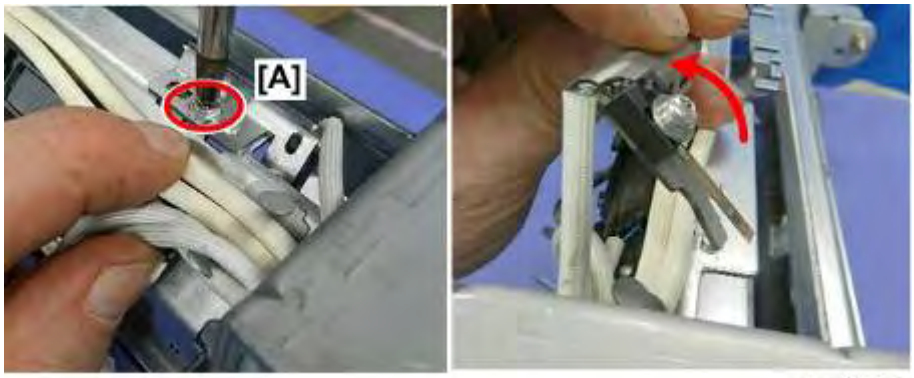
d1793890

3. Pull out the connector cradle [A], and then disconnect the harnesses [B] (x1).



d1793891

4. Open the metal clamps to free the harnesses [A] (x2).



d1793892

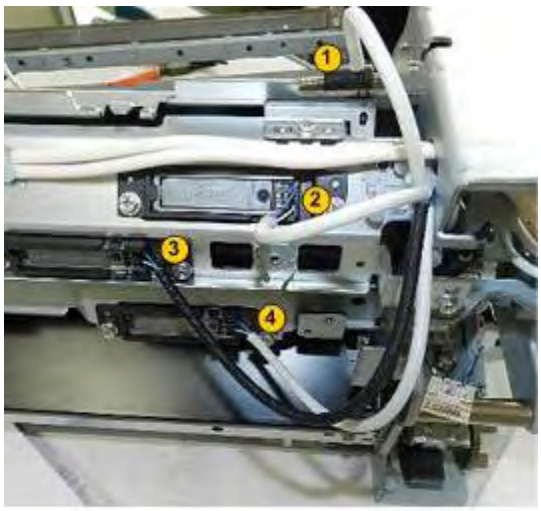
5. Disconnect the heating roller thermistor [A] (x1).

d1793893

6. Disconnect the NC sensors on the right side of the unit [A] (x3).

d1793894

7. Remove the harnesses and connector together.



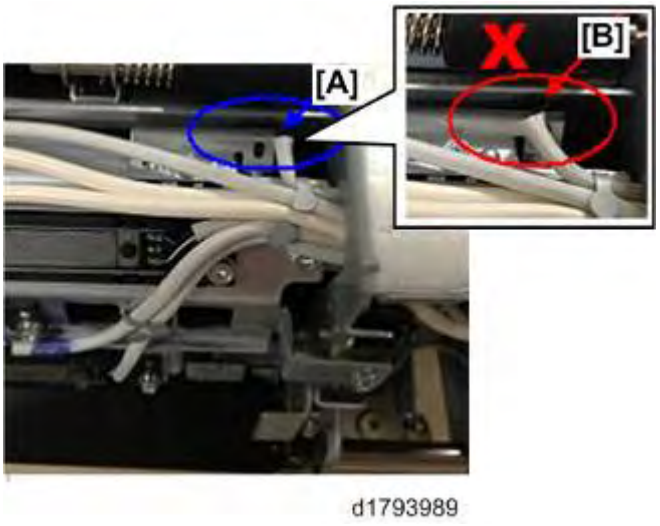
d1803807

Important

- At re-installation re-connect the harnesses in the correct order.

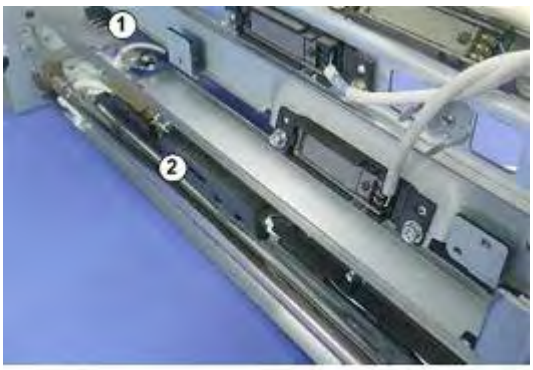
①	Thermistor
②	White harness –short
③	Black harness
④	White harness – long

Re-installation: Heating Roller Thermistor



- Check the position of the heating roller thermistor.
  - Arrange it as shown at [A]. This is correct.
  - If the roller rides up over the holder [B] this is incorrect.

Pressure Roller Thermistor and NC Sensor

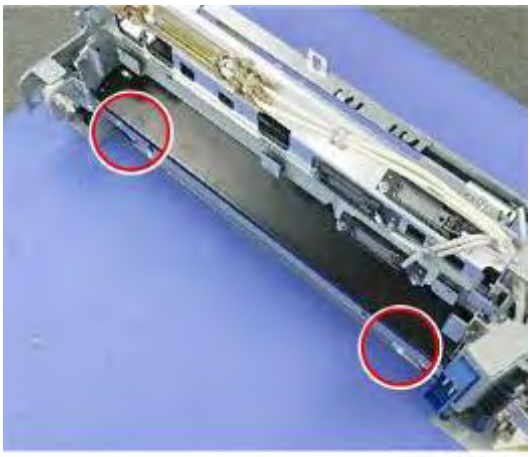


d1793895

These elements are attached to the same harness and must be removed together:

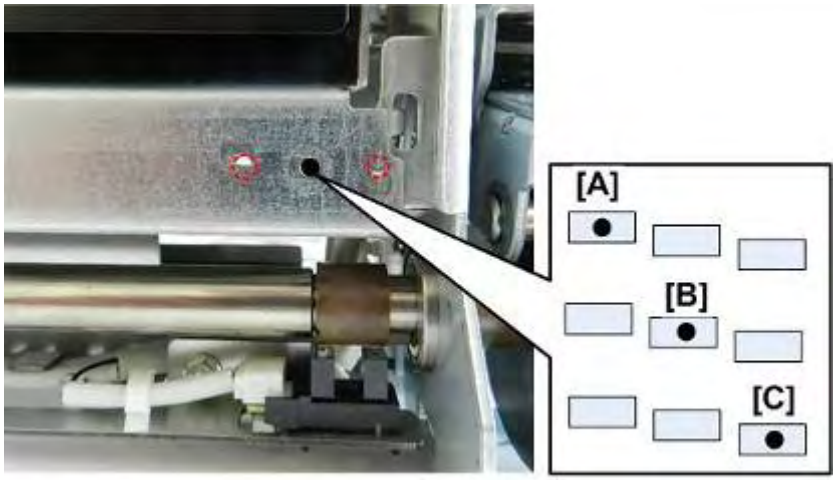
① Pressure roller thermistor

② Pressure roller NC sensor



d1793870

1. Disconnect both ends of the side plate (x2).



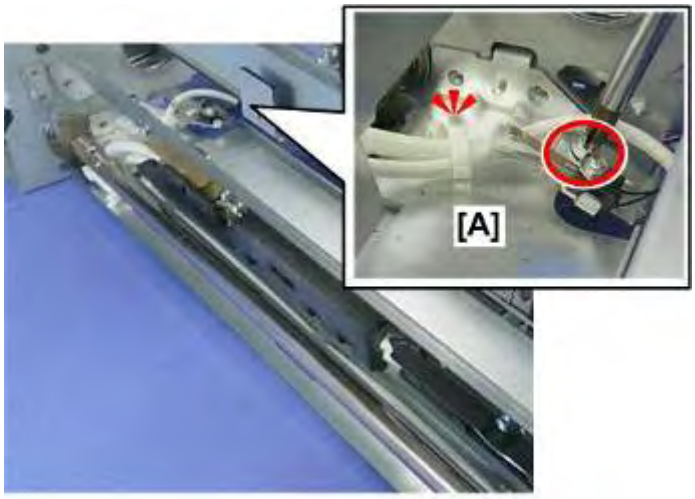
d1803806

Important

- At re-installation of this plate, the screw must be attached at the center hole [B]. This hole is the default position.
- The other off-set holes are used to adjust the height of the plate.

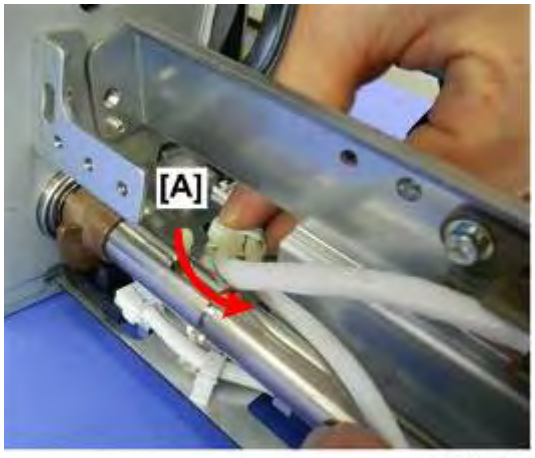
d1793871

2. Remove the side plate.



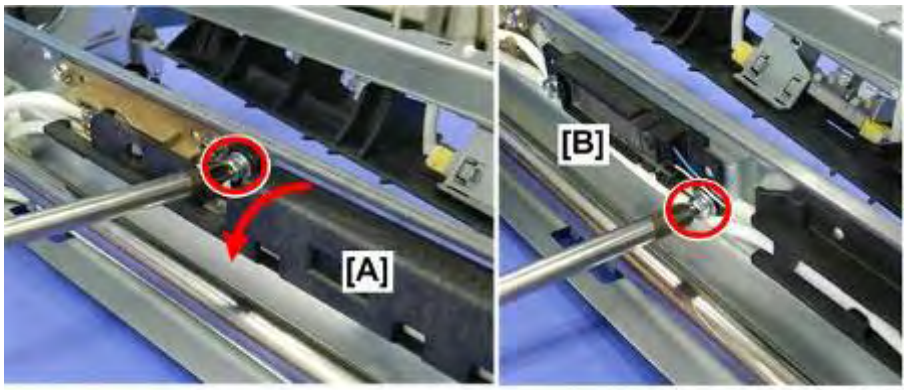
d1793896

3. At the front, disconnect the pressure roller thermistor [A] (x1, x1).

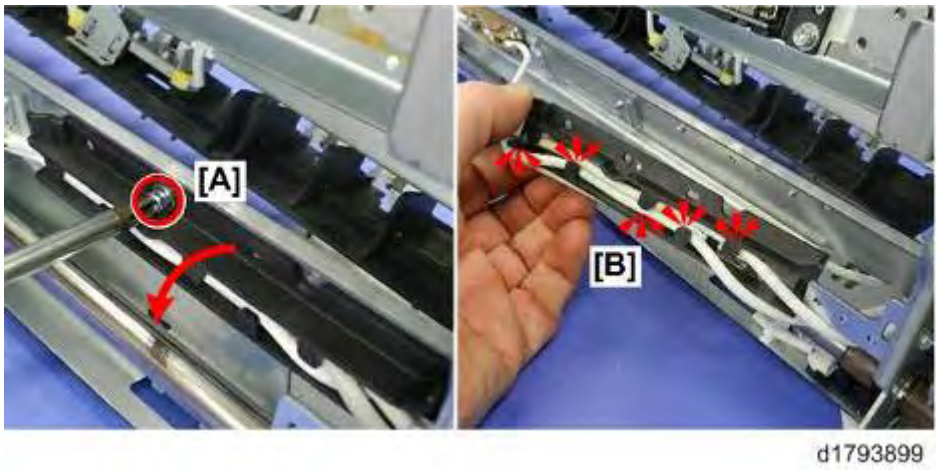


d1793897

4. Pull the thermistor and its harness [A] through the frame.



5. Remove cover [A] (x1).
6. Disconnect pressure roller NC sensor [B] (x1).

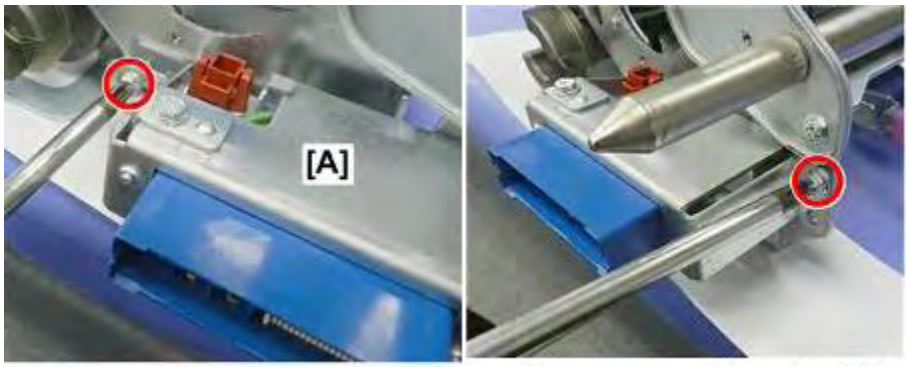


7. Disconnect harness cover [A], and then free the harnesses [B] (x1).

8. Pull the NC sensor and thermistor away from the side of the unit.

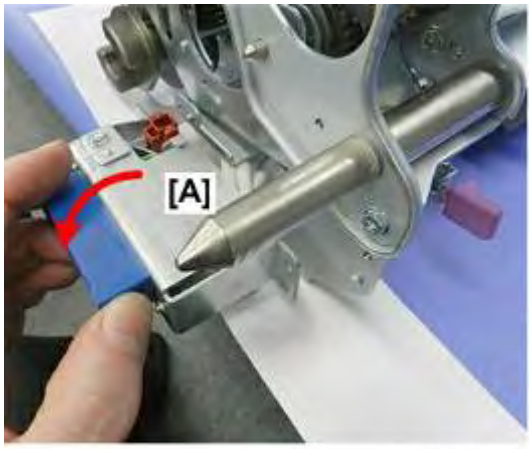
d1793887

9. At the rear, remove bottom plate [A] (x1).



d1793901

10. Disconnect rear connector bracket [A] (x2).



d1793902

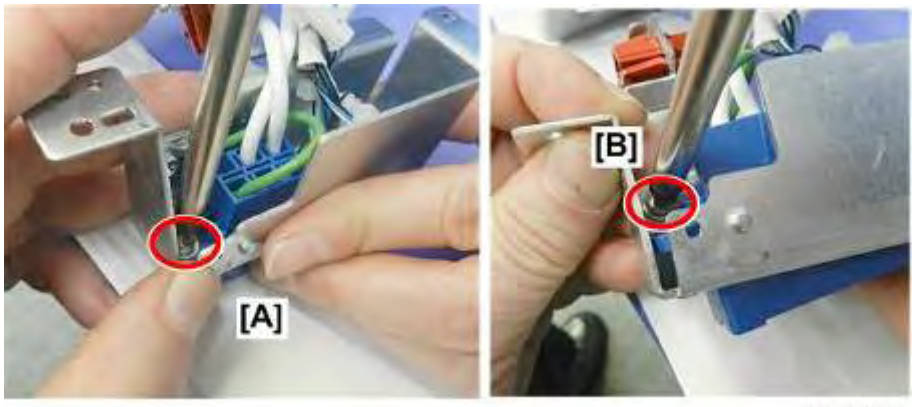
11. Pull the connector bracket [A] partially away of the unit.

d1793903

12. At the rear corner, free the harnesses (x2).

d1793904

13. Disconnect ground wire [A] (x1).
14. Remove screw [B] (x1).



d1793905

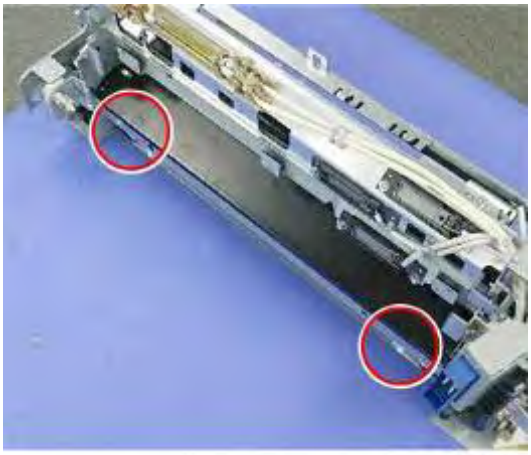
15. Separate the connector and bracket at [A] and [B] (x2).

d1793906

16. Disconnect the harness [A] (x1).
17. Pull the disconnected harness through the frame [B].

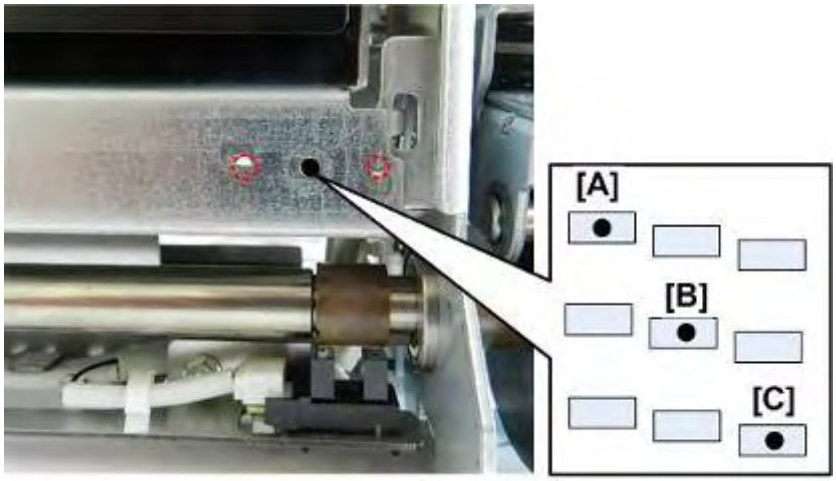
d1793907

Pressure Roller Thermostat



d1793870

- Disconnect both ends of the side plate (x2).



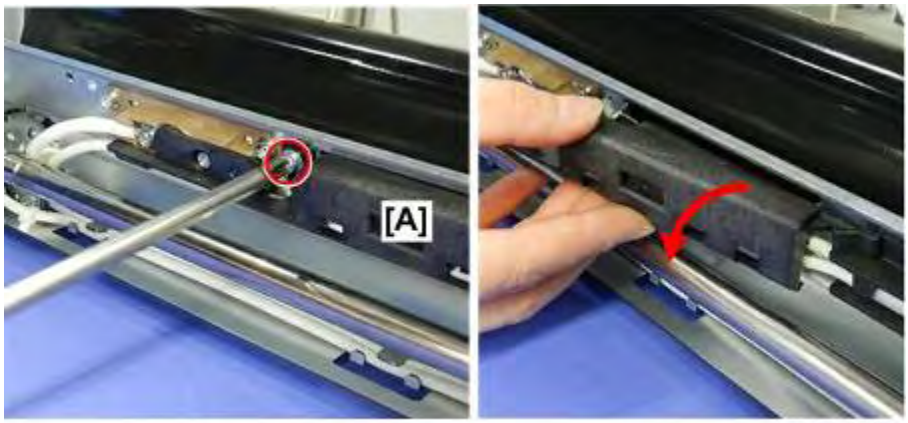
d1803806

Important

1. At re-installation of this plate, the screw must be attached at the center hole [B]. This hole is the default position.
2. The other off-set holes are used to adjust the height of the plate.

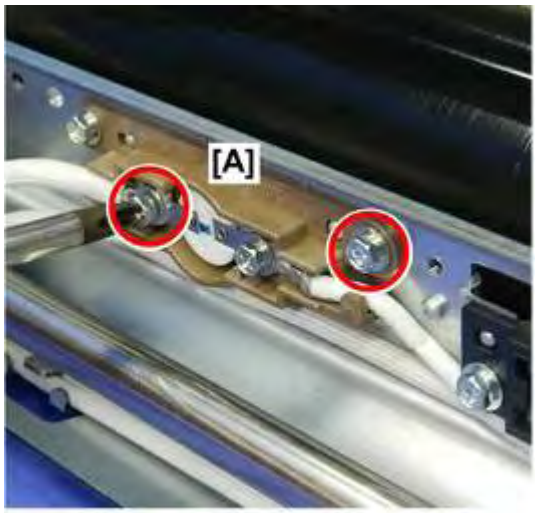
d1793871

- Remove the plate.



d1793908

- Remove harness cover [A] (x1).



d1793909

- Disconnect thermostat [A] (x1).

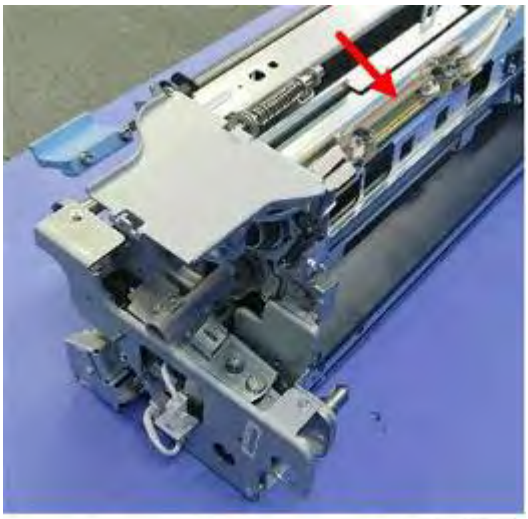
d1793910

- Remove the thermostat.

⚠WARNING

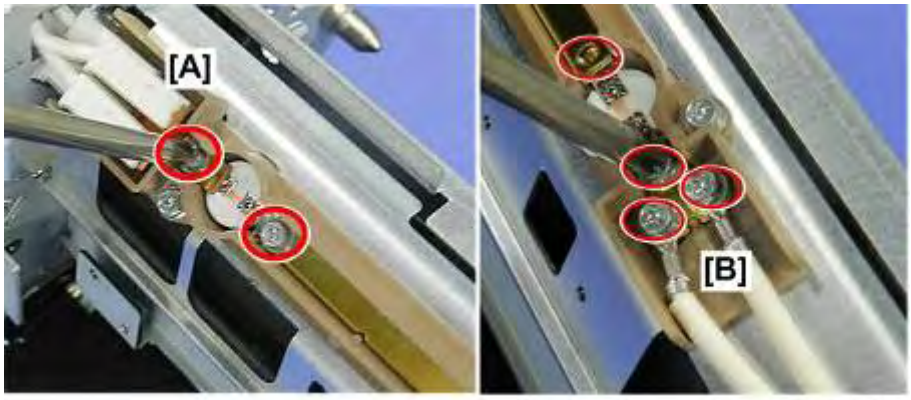
1. To prevent a fire, never attempt to reset a blown thermostat by manipulating the exposed edges of the black cover with a screwdriver, or by hitting it on a table.
2. A thermostat that has been reset manually could fail and cause a fire.
3. Always replace a blown thermostat with a new one

Heating Roller Thermostats



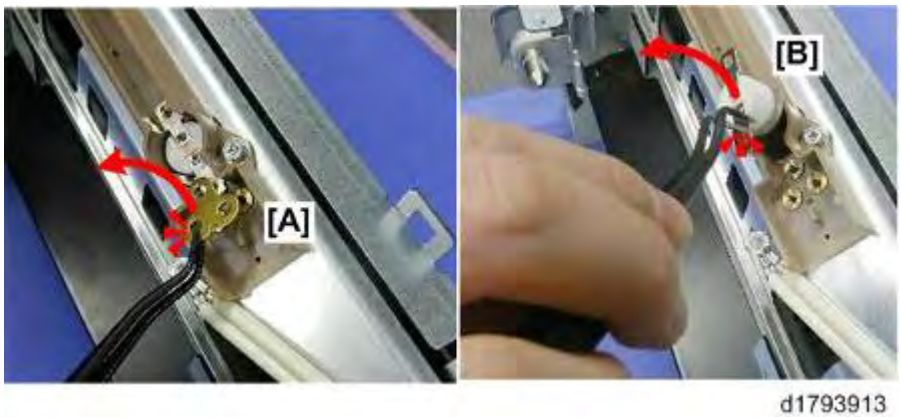
d1793911

- The heating roller thermostats are located on the right front side of the unit.



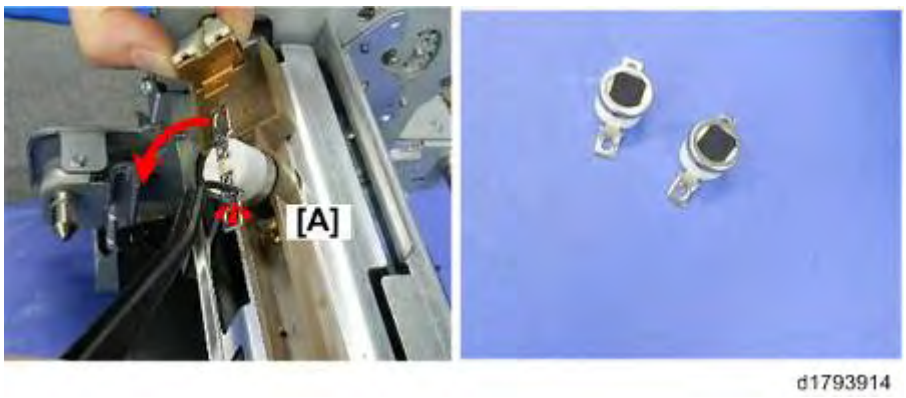
d1793912

- Remove the thermostat and leaf screws [A] and [B] (x6).



d1793913

- Remove the gold leaf [A], and then remove the center thermostat [B].



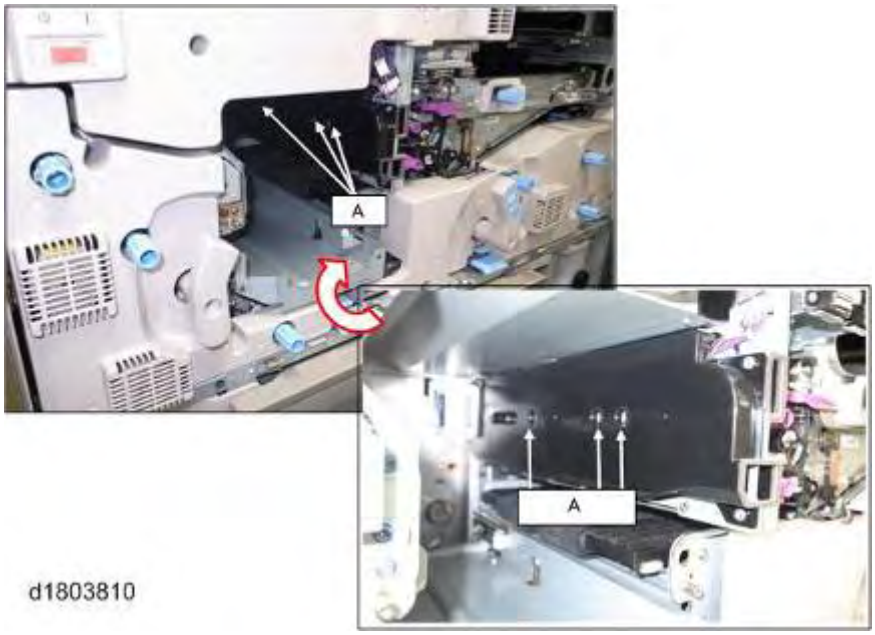
- Remove the front thermostat.

⚠WARNING

1. To prevent a fire, never attempt to reset a blown thermostat by manipulating the exposed edges of the black cover with a screwdriver, or by hitting it on a table.
2. A thermostat that has been reset manually could fail and cause a fire.
3. Always replace a blown thermostat with a new one.

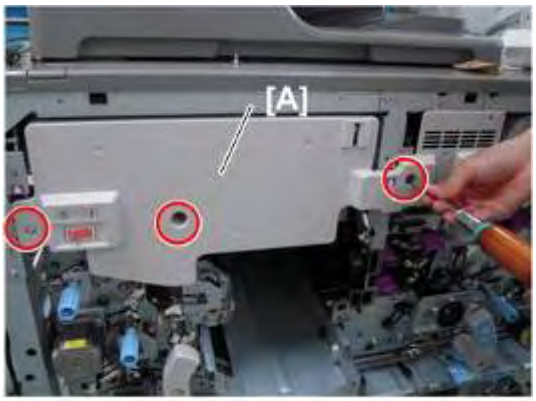
4.18.10 THERMOPILE

Before You Begin



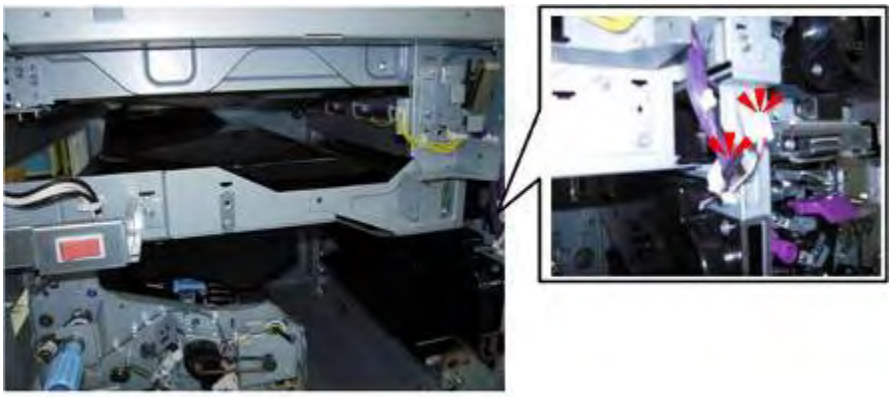
The photo above shows the locations of the thermopiles inside the machine with the fusing unit removed.

- Remove front edge cover. page 4-22
- Remove the fusing unit. page 4-387



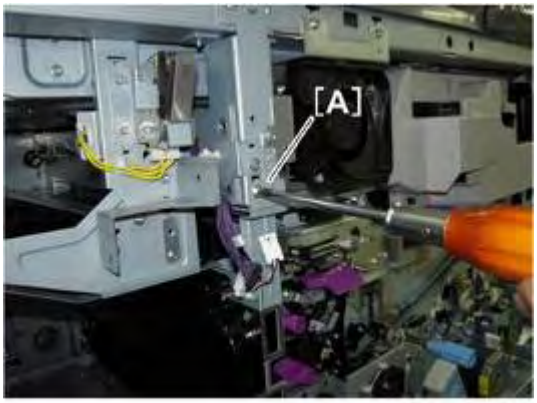
d1803811

- Remove cover [A] (x3).



d1803812

- Disconnect fan and thermopile harnesses (x2).



d1803813

- Remove bracket [A] (x1).

- Remove left rear cover.
- At the back of the machine, remove bracket [A] (x1).

Important

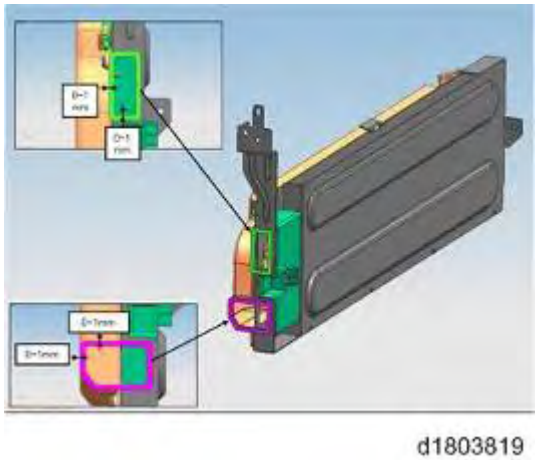
1. Remove and reattach the screw carefully to prevent it falling into the machine.

- Remove the belt cleaning unit. page 4-169
- Remove the PTR unit. page 4-335
- Disconnect and pull the ITB unit about halfway out of the machine or remove it.

- Slowly, pull the thermopile unit out of the machine.

Important

1. At re-installation of the thermopile unit, these two guide pins must be inserted into the holes at the back of the machine.



- Carefully, peel the two sponge seals from the thermopile unit.

Important

- The seals that you just peeled off should not be used again. New seals should be attached at the locations shown above.

d1803816

- Remove the black cover (x5).

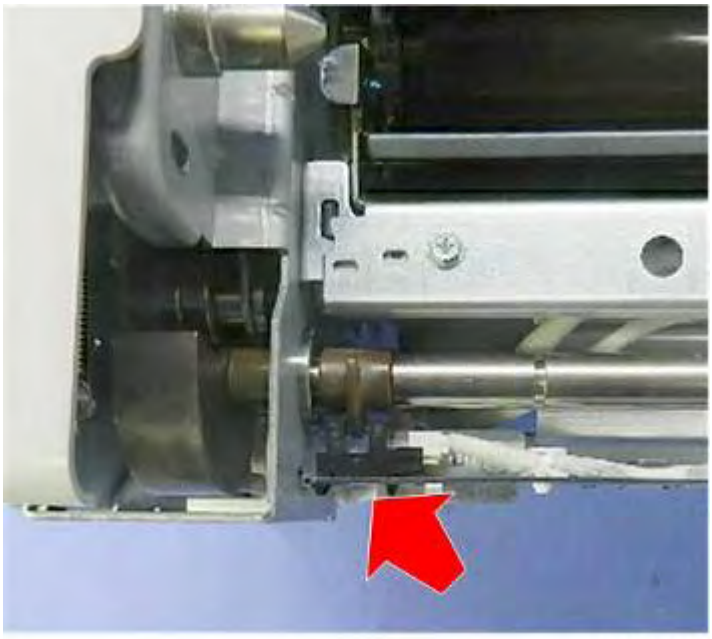
d1803817

- Disconnect the harnesses (x3).

d1803818

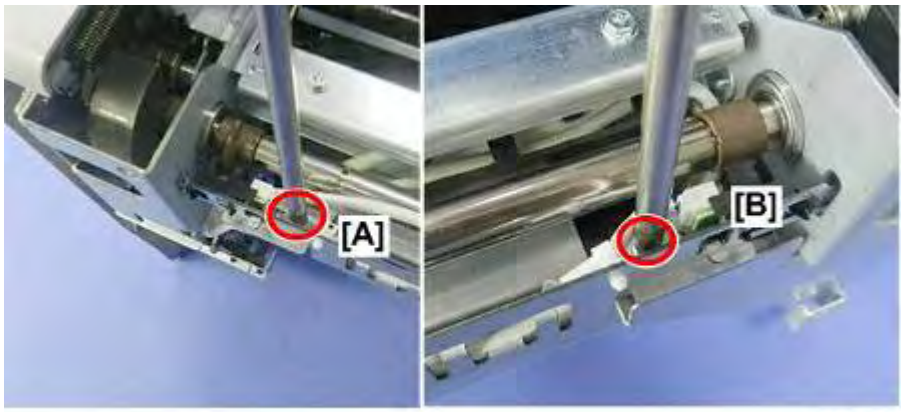
- Remove the thermopile (x1, x1).

4.18.11 PRESSURE ROLLER LIFT SENSORS



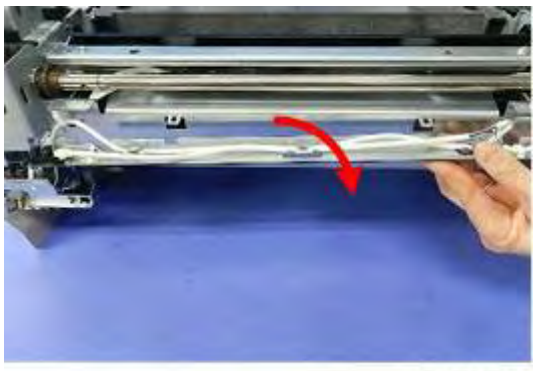
d1793915

1. Both lift sensors are visible at the right, bottom of the fusing unit.



d1793916

2. Disconnect both ends of the sensor bracket at the front [A] and rear [B] (x2).



d1793917

3. Pull the sensor bracket away from the side of the unit.

d1793918

4. Disconnect the front sensor [A] (x1, x1, x3).
5. Disconnect the rear sensor [B] (x1, x1, x3).

4.18.12 FUSING MOTOR, PRESSURE ROLLER LIFT MOTOR

Important

- The fusing motor and pressure roller lift motor are together behind the EDRB bracket at the back of the machine.

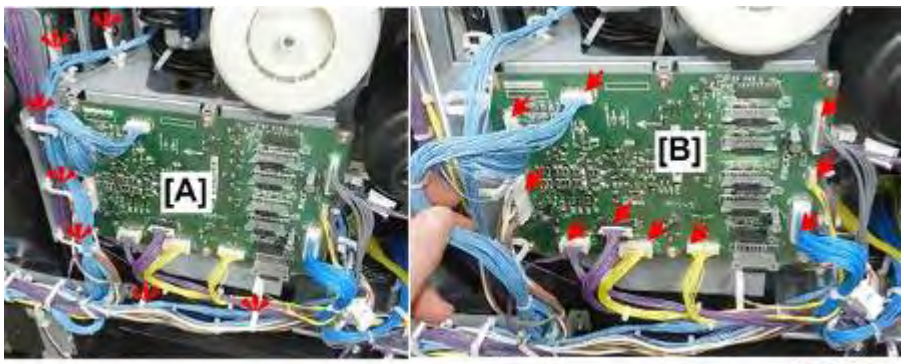
Remove EDRB

Preparation

- Open controller box page 4-27
- Remove left rear cover page 4-23

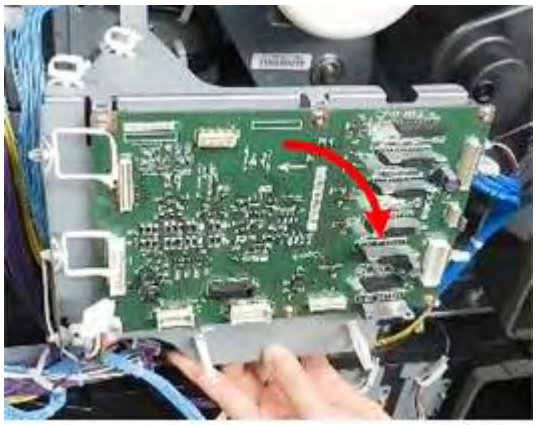
d1793919

- Remove vertical stay [A] (x3).
- Free the harnesses on the right edge of the EDRB [B] (x2).



d1793920

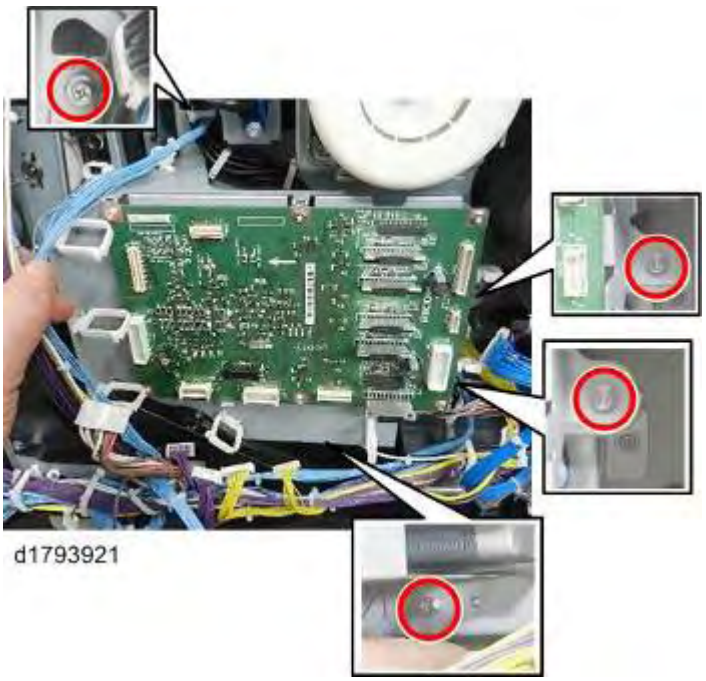
- Free the other harnesses at the bottom, left, and top edges of the EDRB [A] (x7).
- Disconnect the EDRB [B] (x10).



d1793922

- Remove the EDRB bracket (with PCB attached), and then lay it on a flat clean surface.

Fusing Motor

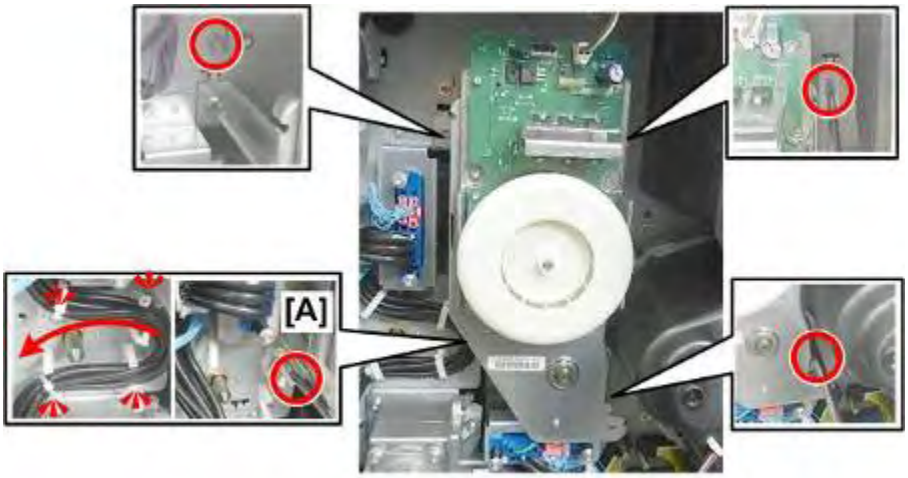


d1793921

1. Disconnect the EDRB bracket (x4).

d1793923

2. Disconnect the fusing motor (x2).



d1793924

3. Disconnect the fusing motor bracket (x4).

Important

1. In order to clear the area around screw [A], you must move the black harnesses to the left (x4).

d1793925

4. Remove the fusing motor bracket (with motor attached).

d1793926

5. Separate the fusing motor from the bracket (x4).

d1793927

Fusing Motor Drive Gear Lubrication

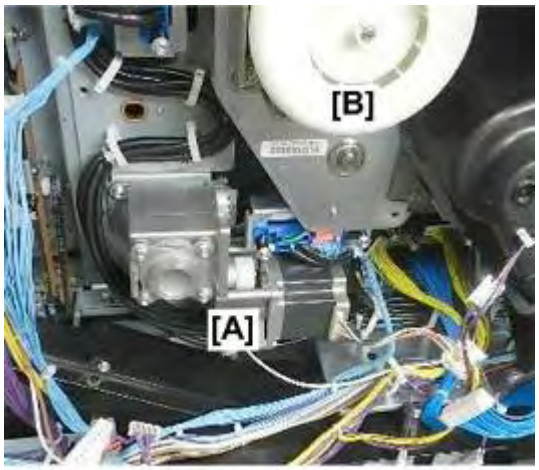
d1793928

1. Lubricate the fusing motor drive gear.

Pressure Roller Lift Motor

Preparation

- Remove EDRB bracket page 4-550

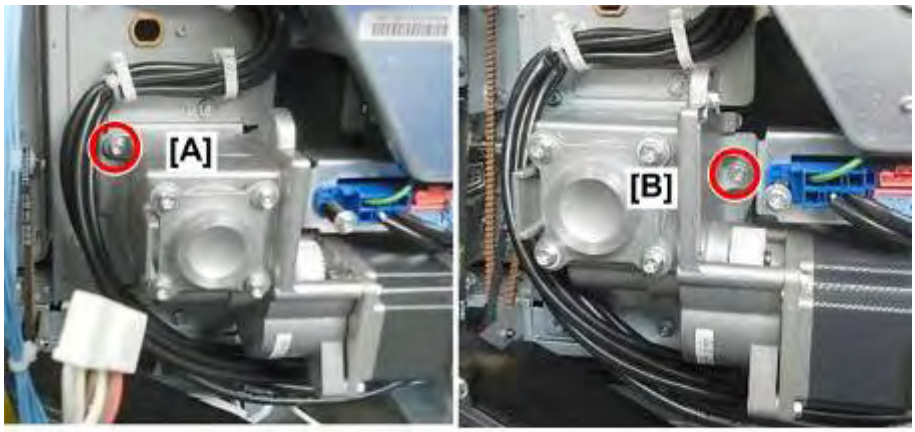


d1793929

1. The pressure roller lift motor [A] is below the fusing motor [B].

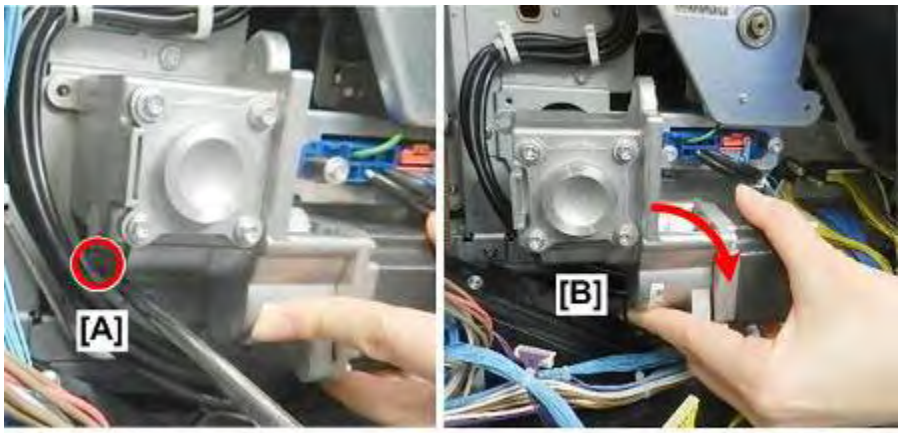
d1793930

2. Disconnect the motor harness (x1).



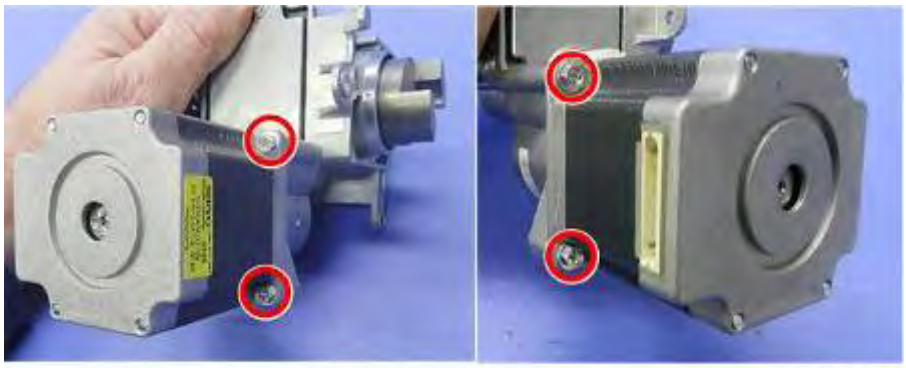
d1793931

3. Disconnect motor bracket at [A] and [B] (x2).



d1793932

4. Disconnect motor bracket at [A], and then remove the bracket [B] (with motor attached) (x1).



d1793933

5. Separate the motor and bracket (x4).

d1793934

Re-installation

d1793990

- After re-assembly, always check the web motor harness and web end harness to make sure that these harnesses are connected and securely clamp.
- A loose harness could interfere with the operation of the gears.

4.18.13 FUSING CLEANING UNIT

Cleaning Unit Disassembly

Preparation

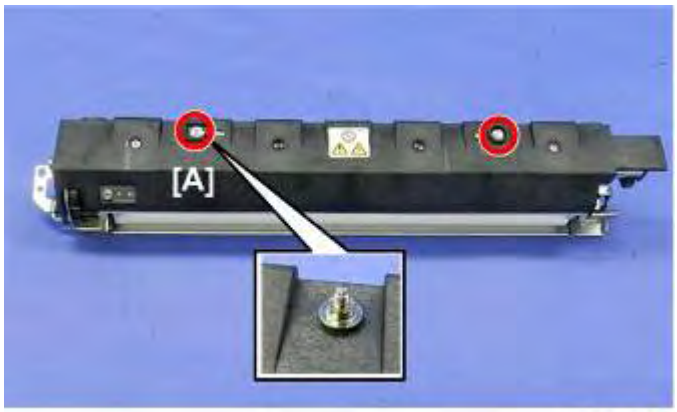
1. Remove the fusing unit page 4-369

d1793950

- Lay the fusing unit on its right side.
- Disconnect the web unit at the rear [A] (x1).
- Push the release lever [B] to the rear to release the web unit.

d1793951

- Lift the web unit out of the fusing unit and lay it on a flat clean surface.



d1793952

- Disconnect web unit cover [A] (x1, x1). (The rear screw is a shoulder screw.)

d1793953

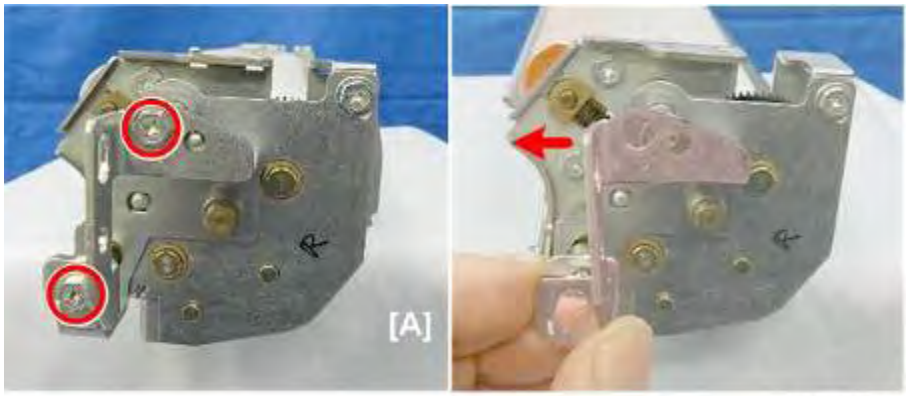
- Remove the cover.

d1793954

- At the front [A] remove the U-bracket (x3).

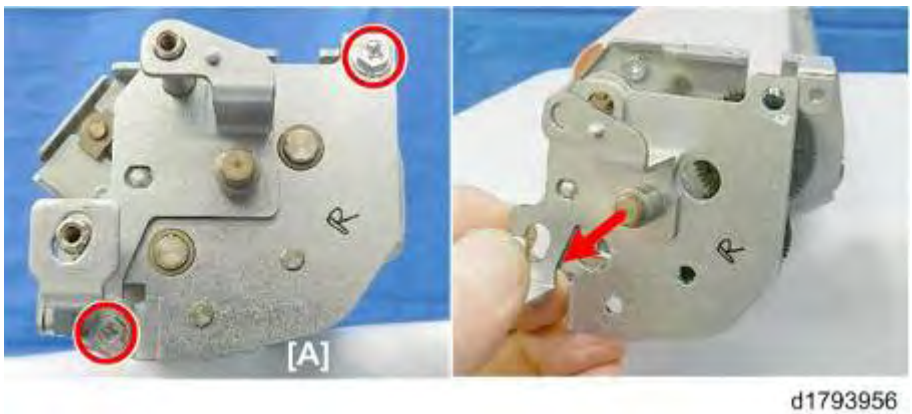
Note

1. The front end of the web unit has the black feeler arm that rotates on a shaft. This is the feeler of the web end sensor.



d1793955

- At the rear [A], remove the S-bracket (x2).

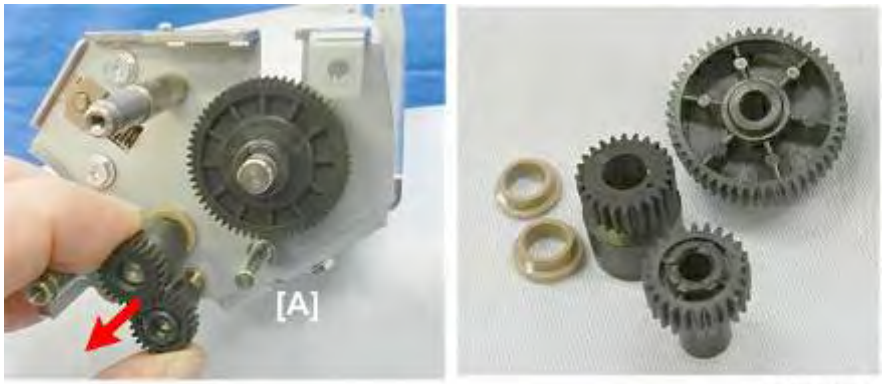


d1793956

- Remove the wide plate [A] (x2).

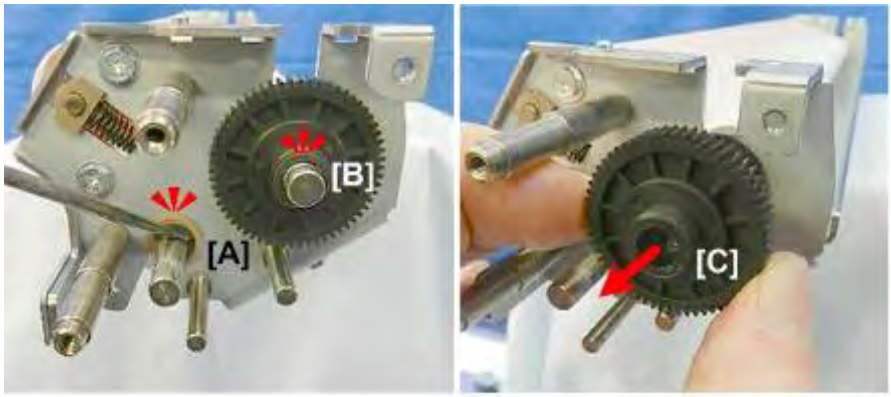
d1793957

- Remove the spacers [A] (x2).
- Remove gear [B].



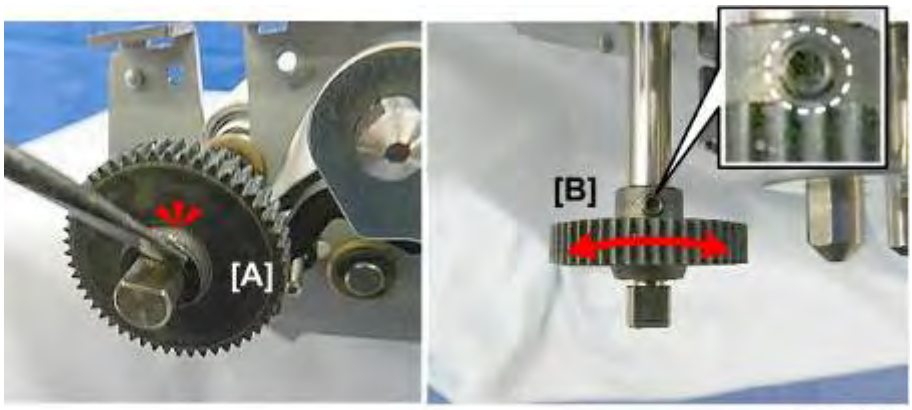
d1793958

- Remove the small gears [A] together.



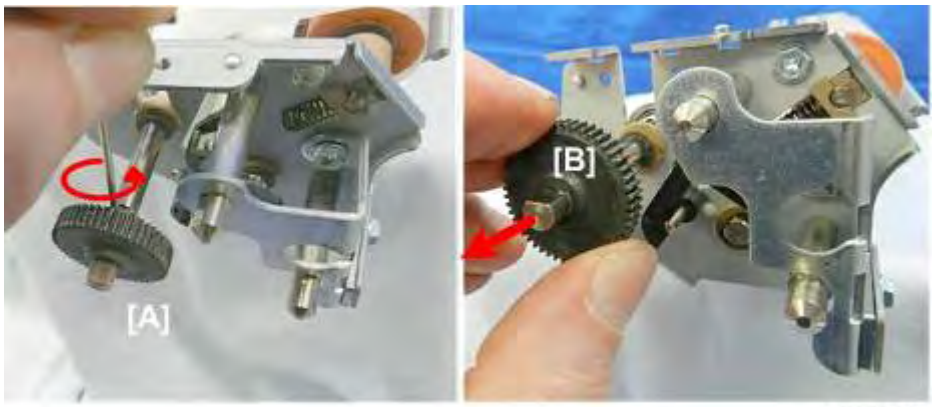
d1793959

- Disconnect shaft [A] gear [B] and then remove [C] (x2).



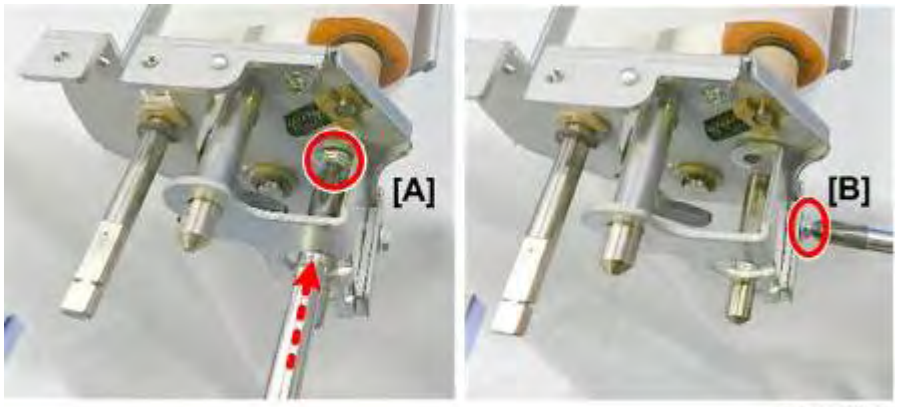
d1793960

- At the front, remove e-ring [A] (ℂx1).
- Turn the gear so the small hole [B] on the flange is facing up.



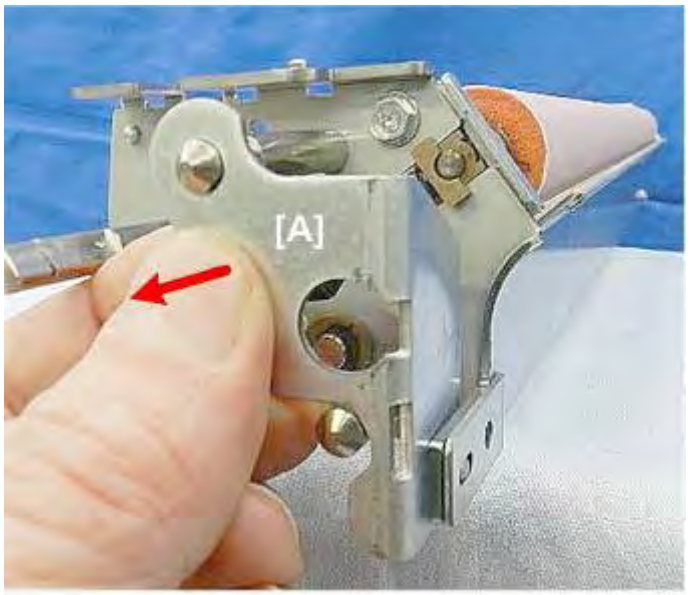
d1793961

- Use a 1.5 mm Allen key [A] to loosen the small hex bolt. **Do not remove it!**
- Remove gear [B].



d1793962

- At the rear, disconnect the main-pin plate at [A] and [B] (x2).

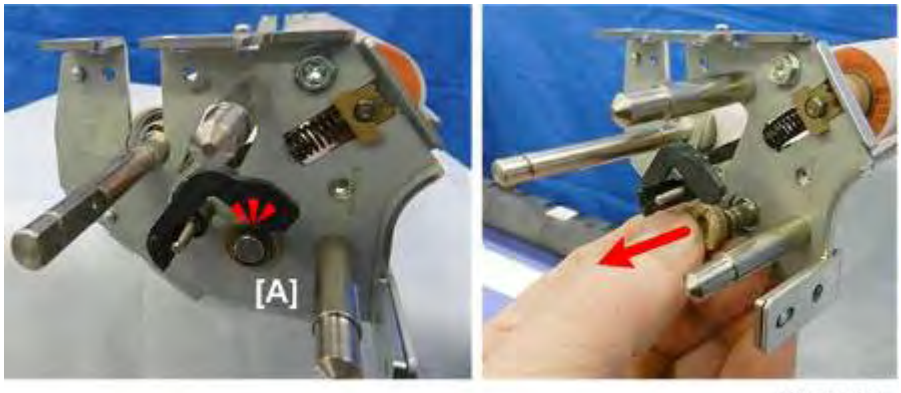


d1793963

- Remove the main-pin plate [A].

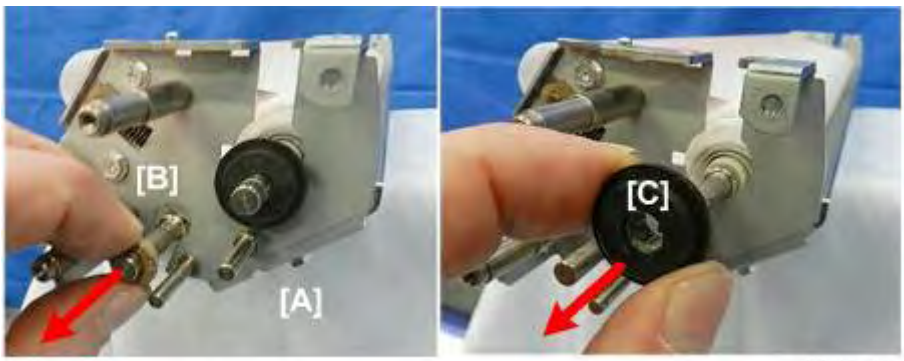
d1793964

- At the front, disconnect the take-up roller shaft [A] (x1, x1).



d1793965

- Disconnect the supply roller shaft [A] (x1, x1).



d1793966

- At the rear [A], free the supply roller shaft [B] (x1).
- Remove notched-bushing [C].

d1793967

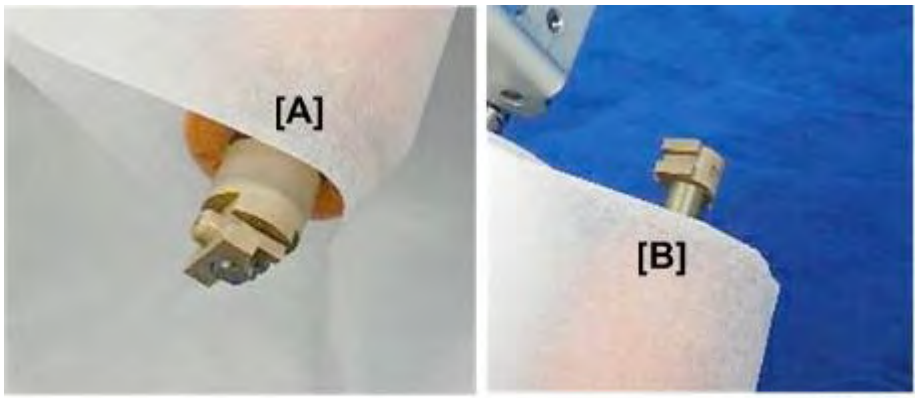
- At the rear, disconnect the end contact roller lock plate [A], and then remove spring [B] (x3, x1).

d1793968

- At the front, disconnect the other end contact roller lock plate [A] (x1, x1).
- Pull lock plate [B] away from the contact roller carefully so you do not lose the bushing on each end of the roller.

Important

- Do not touch the surface of the contact roller with bare hands.

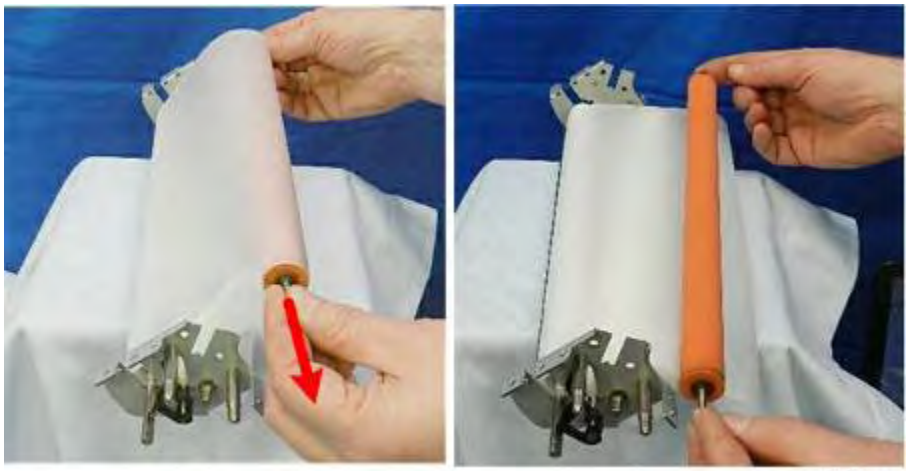


d1793969

- Note the bushings are not same: the front bushing [A] is larger than the rear bushing [B].

d1793970

- Bushing [A] must be re-attached to the front end of the contact roller and bushing [B] to the rear end of the roller.

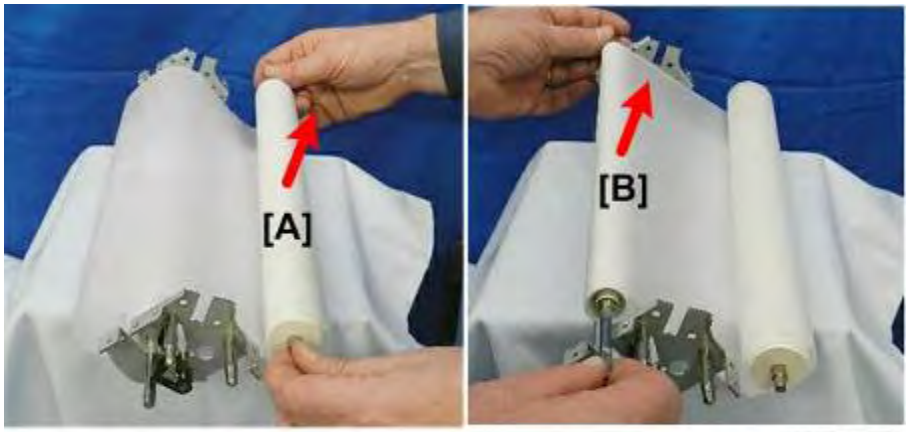


d1793971

- Pull the contact roller out from under the web.

Important

- Never touch the surface of the contact roller with bare hands.

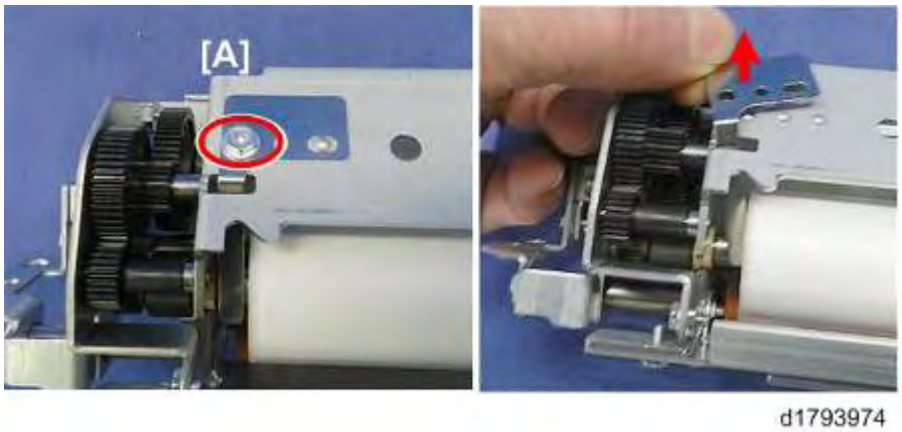


d1793972

- Remove supply roller [A] and take-up roller [B].

d1793973

- From left to right: take-up roller, supply roller, contact roller.

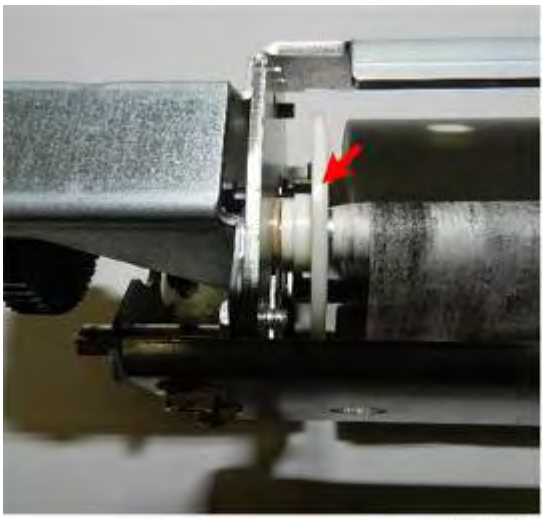


d1793974

- Turn the unit over and remove the brake [A] (x1).

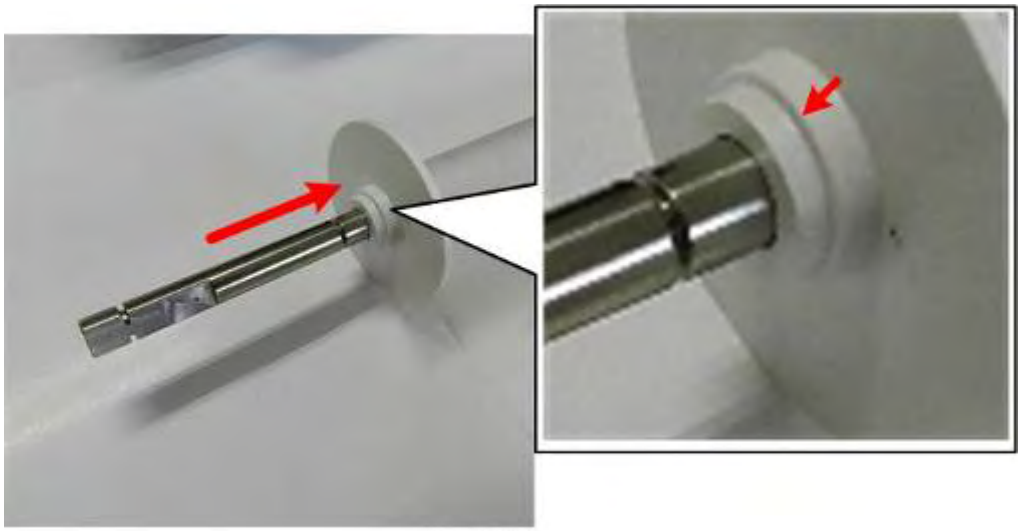
d1793975

Re-installation



d1803808

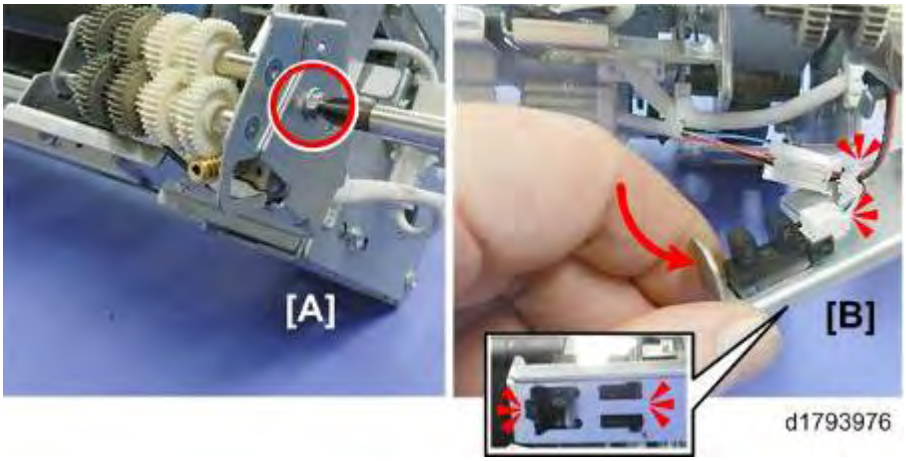
1. A retaining ring has been added to the end of the take-up roller.



d1803809

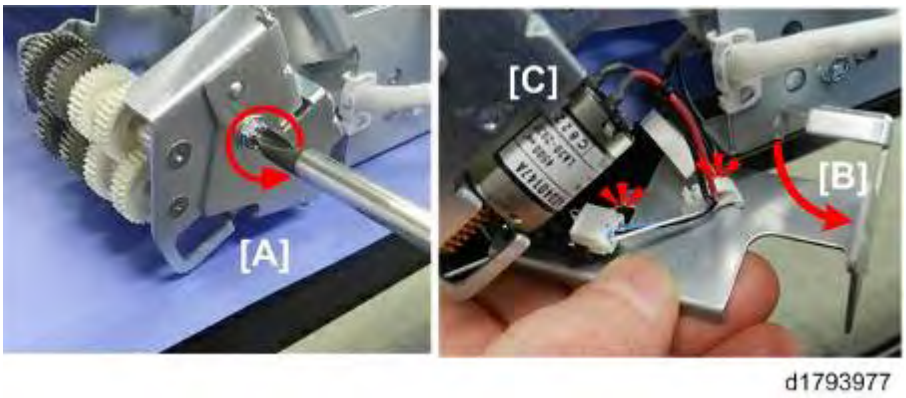
2. At re-installation make sure that the ring is installed on the shaft with its stepped flange pointing toward the end of the shaft away from the web.

Web End Sensor



- The web end sensor is located at the left front corner of the fusing unit [A].
- Disconnect and lower sensor bracket [B] (x1).
- Disconnect the sensor (x1, x1, x3).

Web Motor



- The web is located at the left front corner of the fusing unit [A] with the web end sensor.
- Disconnect and lower sensor bracket [B] (x1).
- Disconnect the motor (x1, x1).

- Pull the motor out of the bracket.

4.19 INVERT, DUPLEX, EXIT UNIT

4.19.1 EXIT SENSOR

Preparation

1. Open front drawer

d1794101

- The exit sensor is on the left edge of the front drawer.

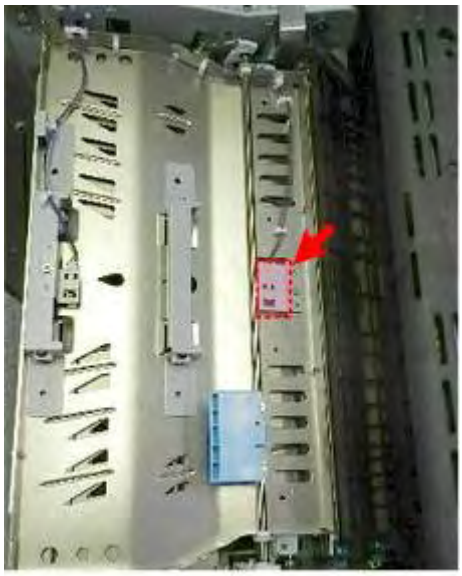
d1794102

- Remove sensor [A] > [B] > [C] (x1, x1, x4)

4.19.2 EXIT JUNCTION GATE SENSOR

Preparation

1. Open front drawer



d1794103

1. The exit junction gate sensor is on the left side of the front drawer.

d1794104

2. Remove sensor [A] > [B] > [C] (x1, x1, x4).

4.19.3 PURGE RELAY SENSOR

Preparation

1. Open front drawer

d1794105

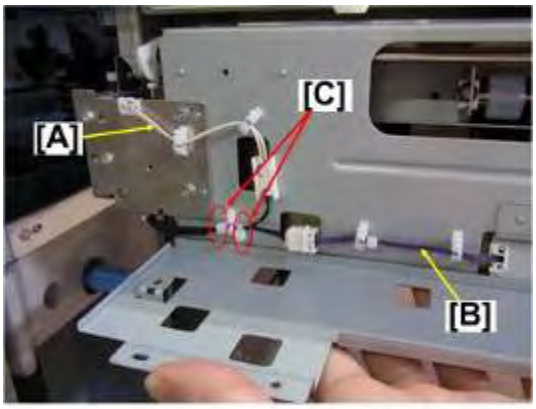
- The purge relay sensor is behind a plate on the left bottom edge of the front drawer.

d1794106

- Remove plate (x3).

d1794107

- Remove sensor [A] > [B] > [C] (x1, x1, x4).



d1794067

Important

1. At re-installation, make sure that the clamp is closed on the invert junction gate solenoid harness [A] and the purge relay sensor harness [B] between the bands [C]. This prevents the connectors disconnecting when the guide plate is opened and closed.

4.19.4 INVERT JUNCTION GATE SOLENOID

Preparation

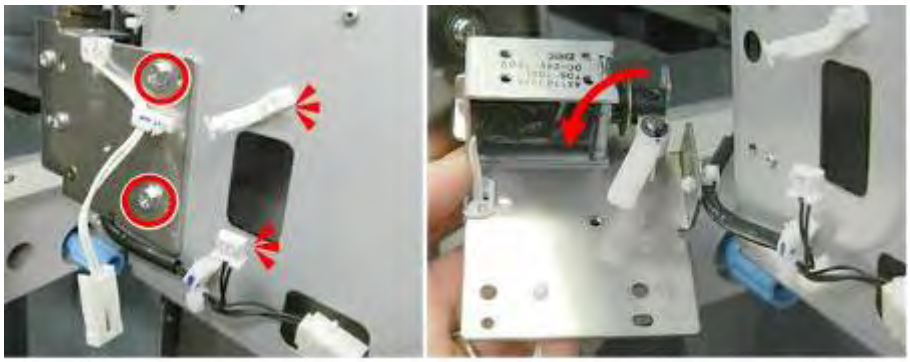
- Open front drawer

d1794108

1. The invert junction gate solenoid is behind a plate on the left bottom edge of the front drawer.

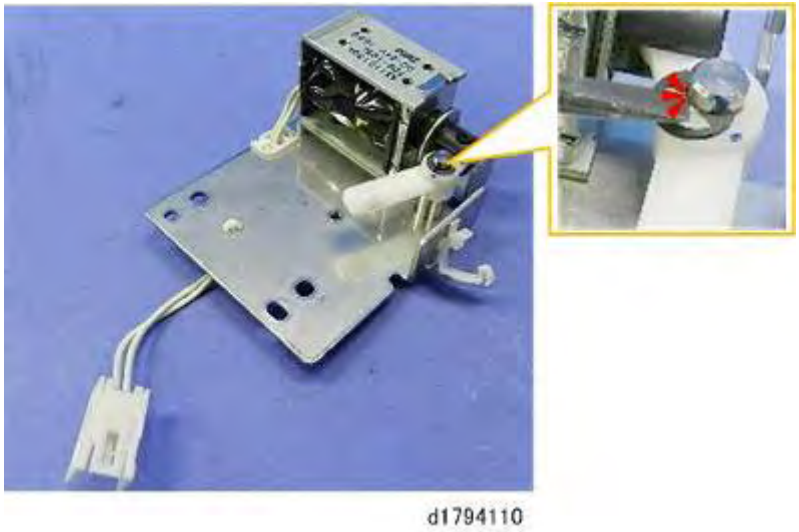
d1794106

2. Remove plate (x3).



d1794109

3. Remove bracket (with solenoid attached) (x1, x1, x2.

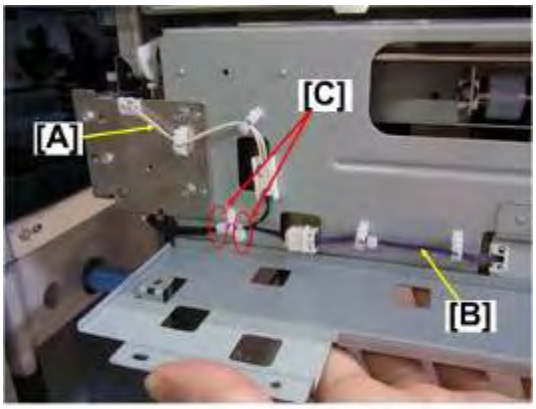


d1794110

4. Disconnect plunger (x1).

d1794111

5. Separate solenoid from bracket (x2, x2).



d1794067

Important

- At re-installation, make sure that the clamp is closed on the invert junction gate solenoid harness [A] and the purge relay sensor harness [B] between the bands [C]. This prevents the connectors disconnecting when the guide plate is opened and closed.

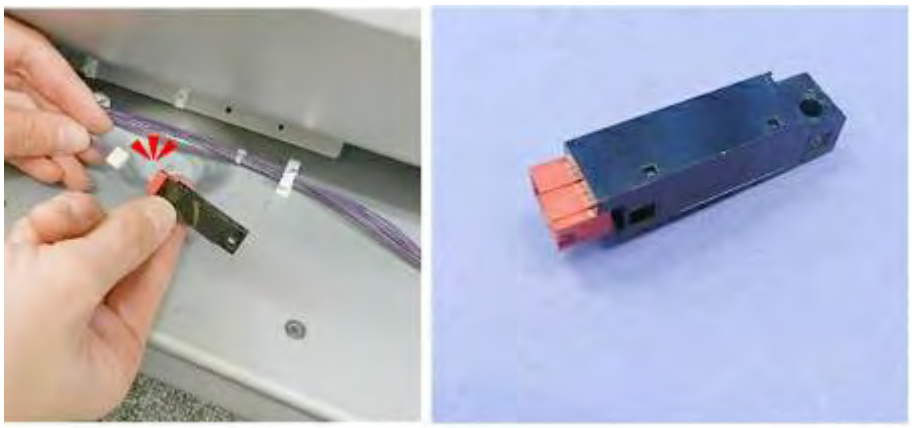
4.19.5 PURGED PAPER SENSOR

Preparation

1. Remove left cover

d1794112

- The purged paper sensor is at the bottom left side of the machine.



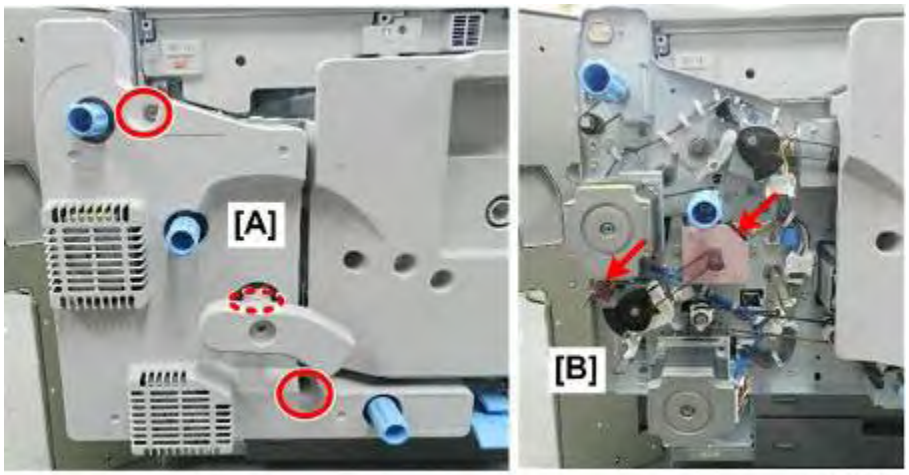
d1794114

- Pull sensor out and disconnect it (x1).

4.19.6 INVERT EXIT MOTOR, INVERT EXIT HP SENSOR

Preparation

1. Pull out drawer



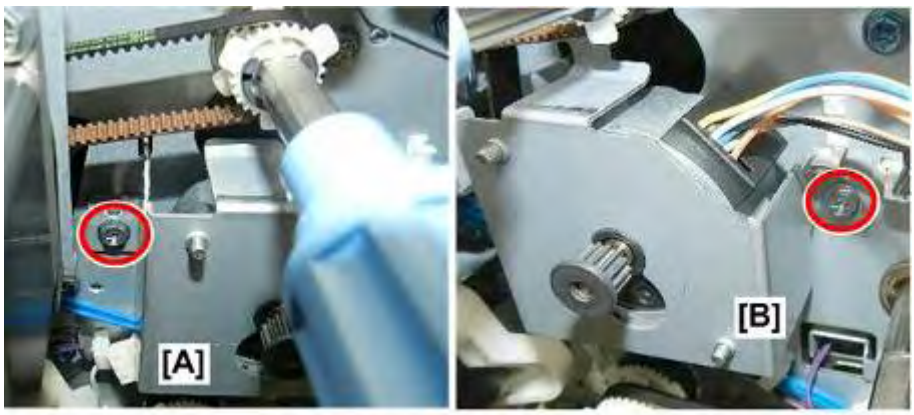
d1794115

- Remove left front cover of drawer [A] (x3).
- The invert exit motor and invert exit HP sensor are at the center [B].

Invert Exit Motor

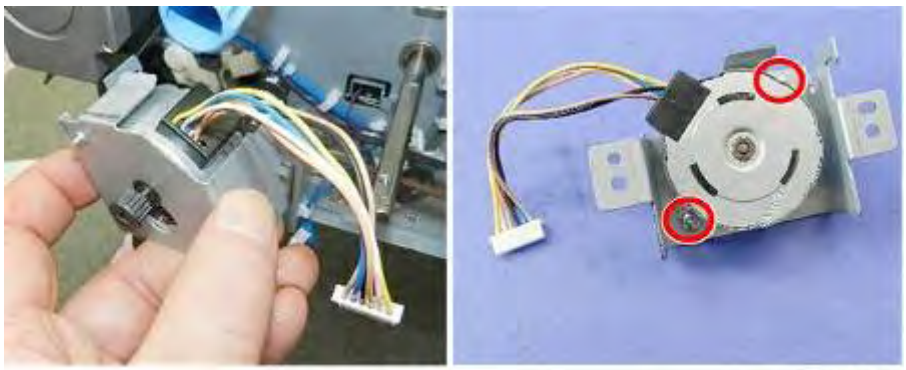
d1794116

1. Disconnect:
   [A] Belt (○x1)
   [B] Harness (x2, x1)



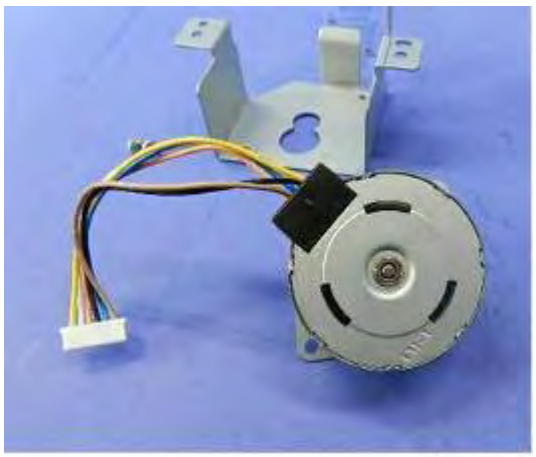
d1794117

2. Disconnect motor bracket:
   [A] Left side (x1)
   [B] Right side (x1)



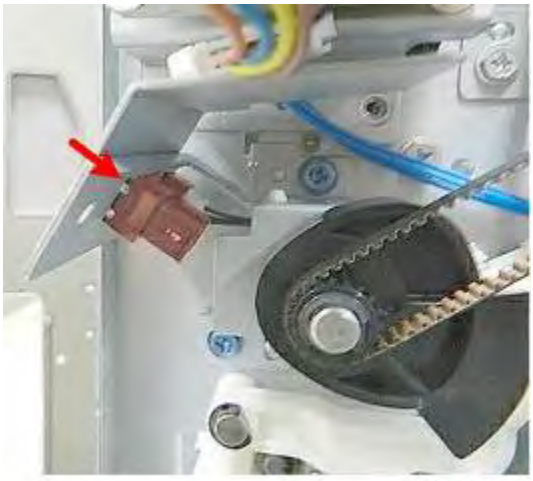
d1794118

3. Remove bracket (with motor attached).
4. Separate motor from bracket (x2).



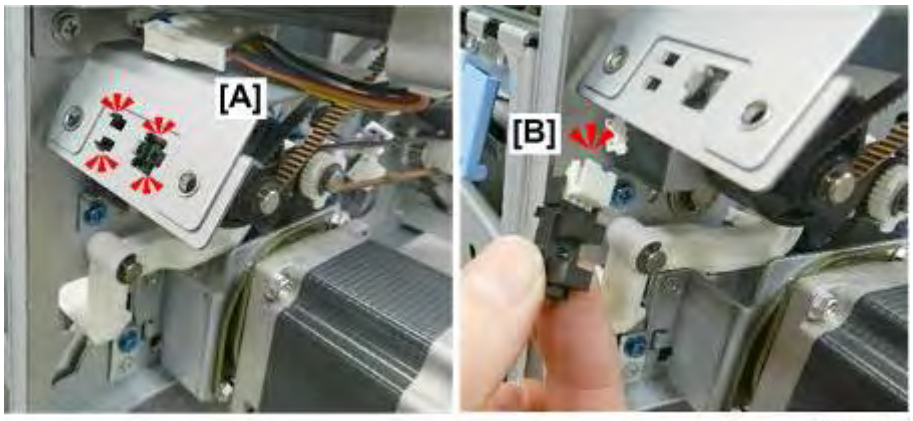
d1794119

Invert Exit HP Sensor



d1794120

- The invert exit HP sensor is mounted on a plate above the belt.



d1794121

- Remove sensor [A] > [B] (x4, x1).

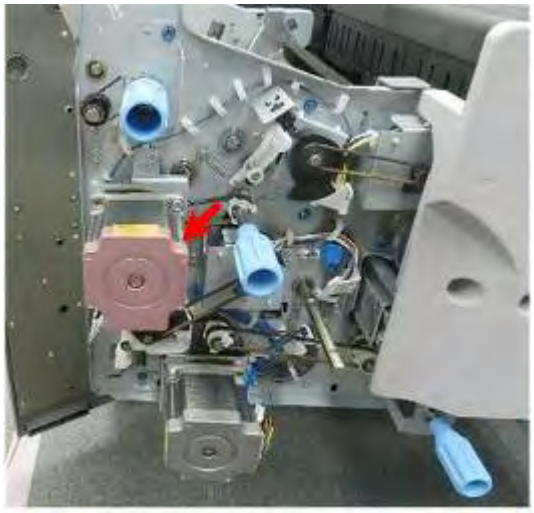
4.19.7 INVERT ENTRANCE MOTOR

Preparation

1. Pull out front drawer.

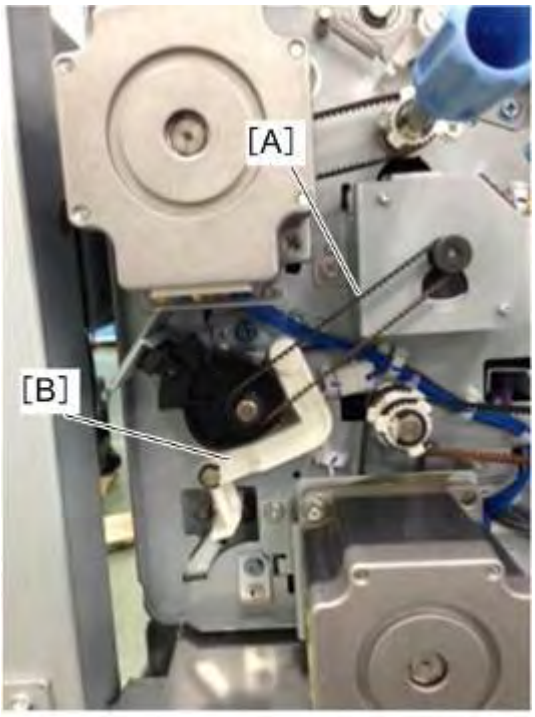
d1794184

- Remove left front cover of drawer (x3).



d1794122

- The invert entrance motor is on the left.



d1794186

- Remove timing belt [A] and link [B] (x1, x1).

d1794187

- Remove the cam bracket (x3).

d1794123

- Disconnect motor bracket:

  [A] Top (x1)

  [B] Lower right (x1)

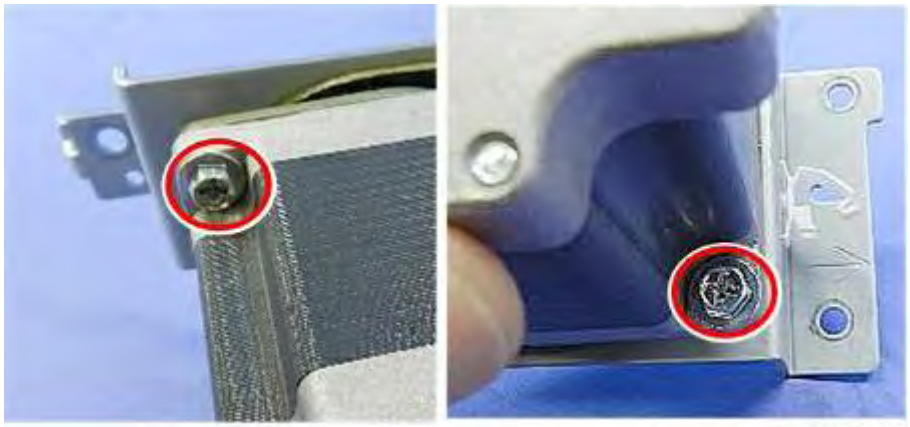
  [C] Lower left (x1)

d1794124

- Unhook motor bracket (motor is still connected).

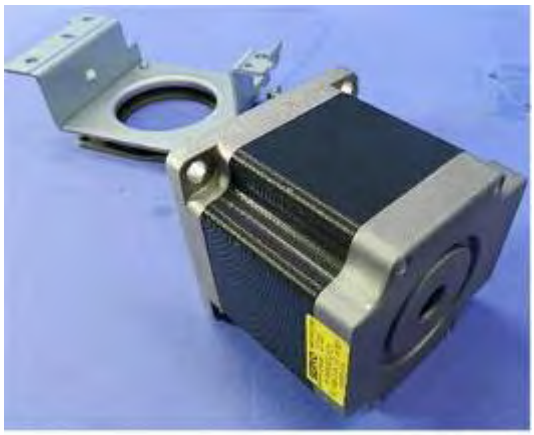
d1794125

- Disconnect motor (x1).



d1794126

- Separate motor from bracket (x2).



d1794127

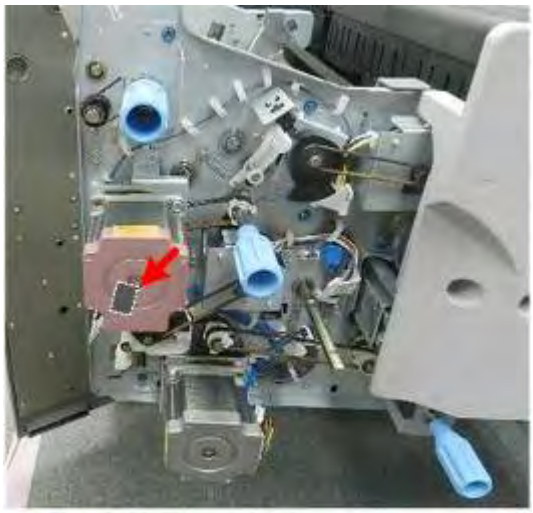
4.19.8 EXIT INVERT SENSOR

Preparation

- Pull out front drawer

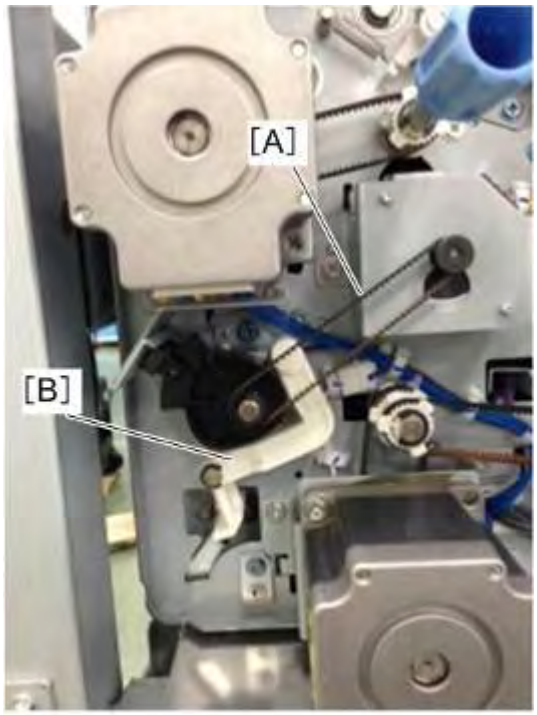
d1794184

1. Remove left front cover of drawer (x3).



d1794128

2. The exit invert sensor is behind the invert entrance motor.



d1794186

3. Remove timing belt [A] and link [B] (x1, x1).

d1794187

4. Remove the cam bracket (x3).

d1794129

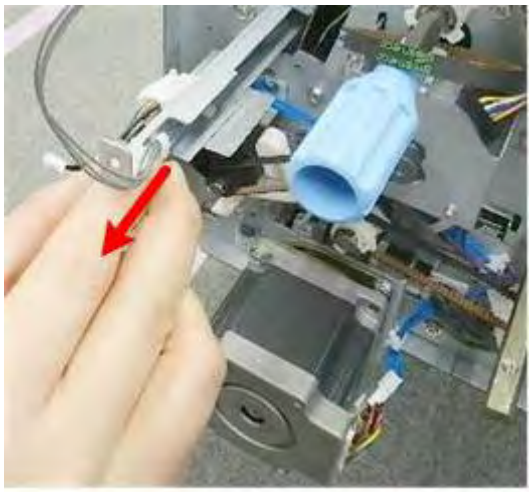
5. First, remove the motor (see previous section).

d1794130

6. Disconnect:

[A] Harness (x7)

[B] Sensor bracket (x1).



d1794131

7. Pull out sensor bracket.

d1794132

8. Disconnect sensor (x1, x4).

4.19.9 DUPLEX TRANSPORT MOTOR 1

Preparation

1. Pull out front drawer

d1794184

1. Remove left front cover of drawer (x3).

d1794133

2. Duplex transport motor 1 is at the bottom.

d1794134

3. Disconnect the motor (x1).

d1794135

4. Disconnect motor bracket:

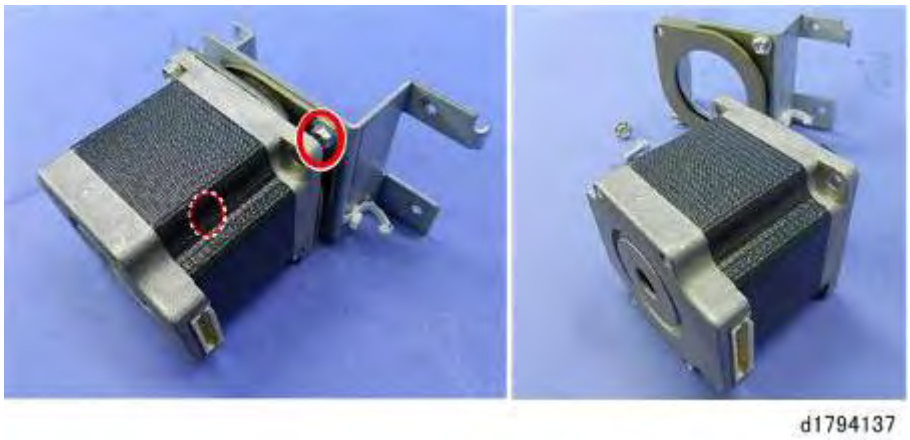
   [A] Top left (x1)

   [B] Upper right (x1)

   [C] Lower right (x1)

d1794136

5. Remove motor bracket (with motor attached).



6. Separate motor from bracket (x2).

4.19.10 DUPLEX INVERT SENSOR

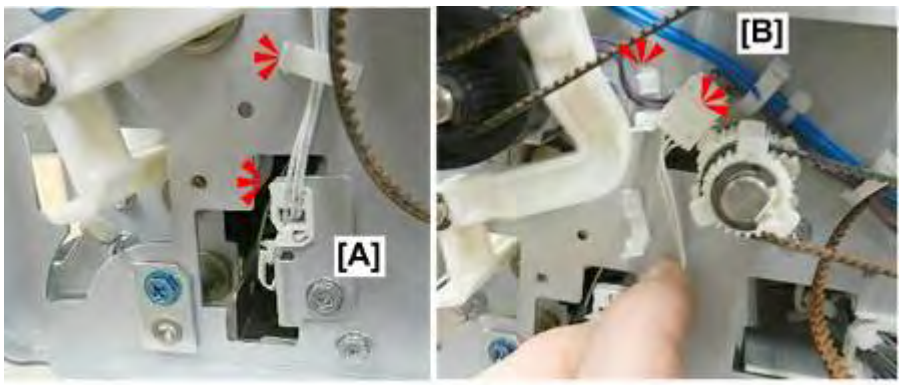
Preparation

- Pull out front drawer

1. Remove left front cover of drawer (x3).

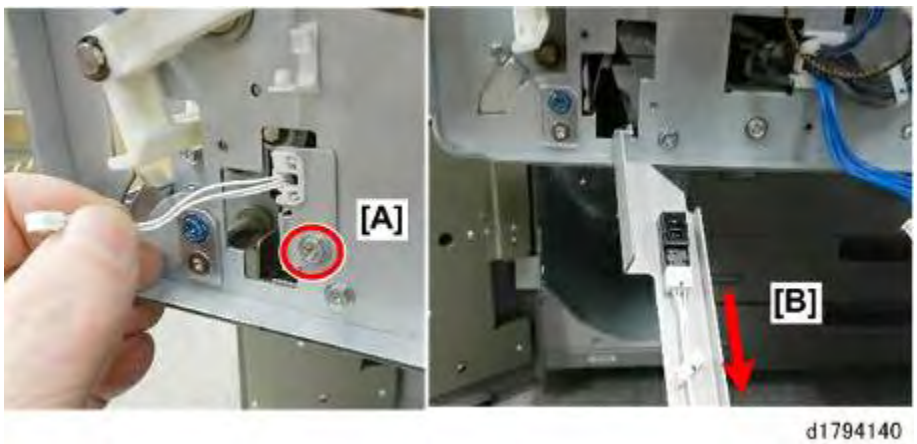
d1794138

2. The duplex invert sensor is behind duplex transport motor 1.
3. First, remove the motor (see previous section).



d1794139

4. Free harness [A] at sensor bracket (x2).
5. Disconnect harness above [B] (x1, x1).



d1794140

6. Disconnect sensor bracket [A] (x1).

7. Pull out bracket [B] (with sensor attached).

8. Remove sensor (x1, x4).

4.19.11 DUPLEX TRANSPORT SENSOR 1

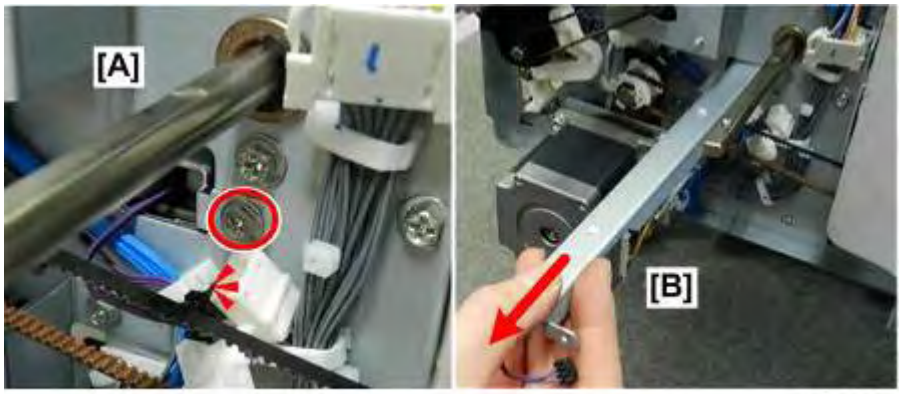
Preparation

- Pull out front drawer

1. Remove left front cover of drawer (x3).

d1794142

2. Duplex transport sensor 1 is at the lower right.



d1794143

3. Disconnect harness and sensor bracket [A] (x1, x1).

d1794144

4. Remove sensor (x1, x4).

4.19.12 DUPLEX TRANSPORT SENSOR 2, 3

Preparation

- Pull out front drawer

d1794145

1. Remove fusing unit (x2).

d1794146

①	Duplex transport sensor 2
②	Duplex transport sensor 3

Note

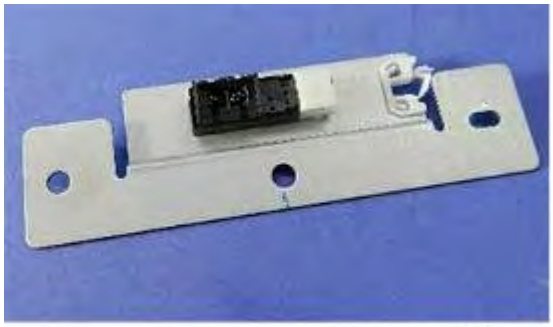
- The removal procedure for both sensors is the same.
- Only the removal procedure for duplex transport sensor 2 is described below.

d1794147

2. Disconnect sensor bracket (x1).

d1794148

3. Pull off sensor bracket (with sensor attached), and then disconnect sensor (x1).



d1794149

4. Separate sensor from bracket (x4).

4.19.13 EXIT JUNCTION GATE MOTOR, EXIT JUNCTION GATE HP SENSOR

Preparation

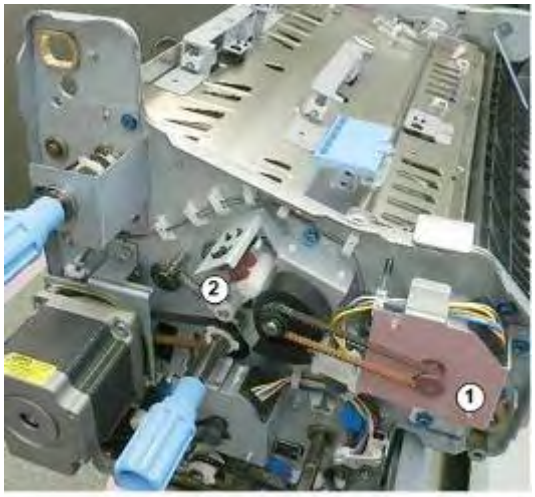
1. Pull out front drawer

d1794184

1. Remove left front cover of drawer (x3).

d1794145

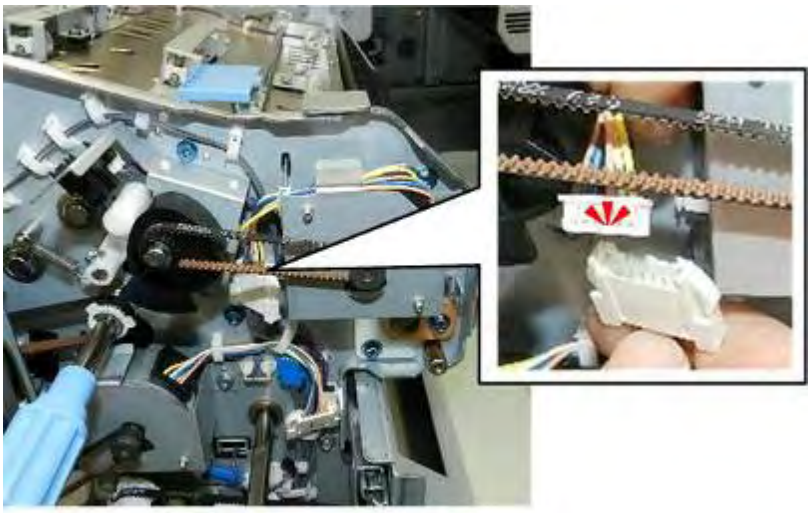
2. Remove fusing unit (x2).



d1794150

3. The exit junction gate motor ① is on the right and the exit junction gate HP sensor ② is on the left.

Exit Junction Gate Motor

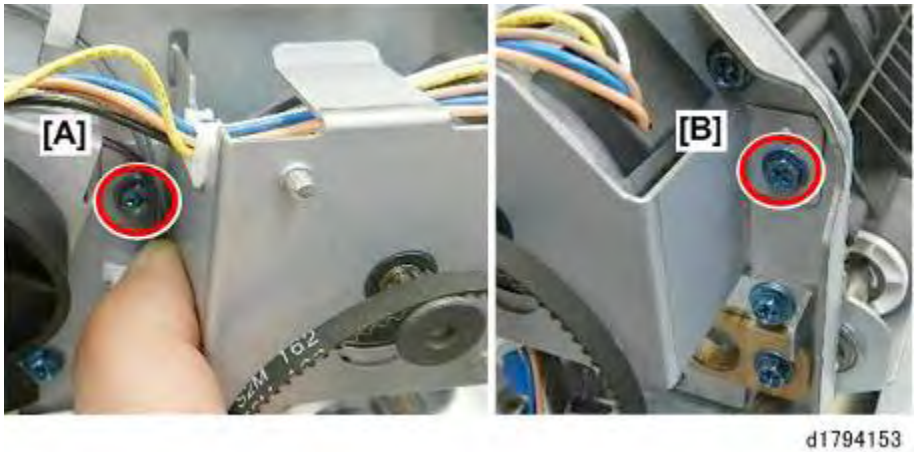


d1794151

- Disconnect motor (x1).

d1794152

- Disconnect belt (x1).

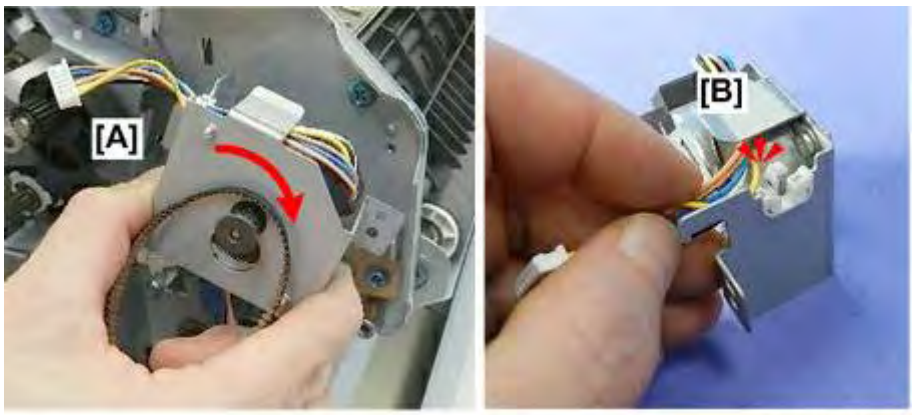


d1794153

- Disconnect motor bracket:

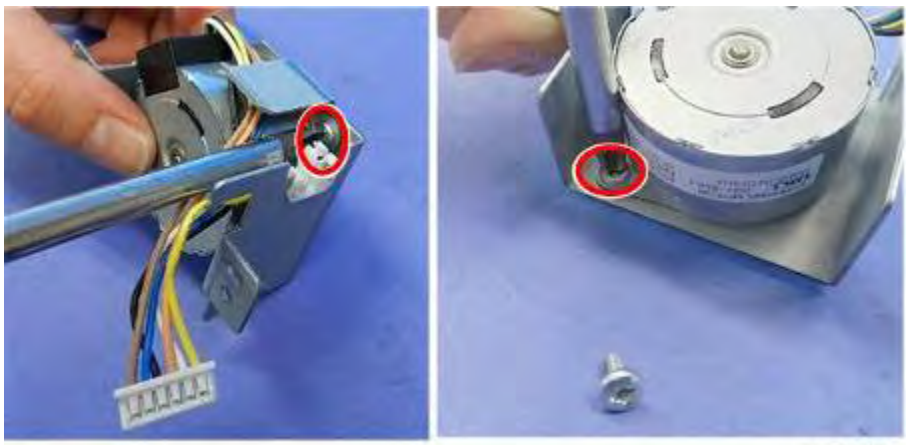
  [A] Left (x1)

  [B] Right (x1)



d1794154

- Remove bracket [A] (with motor attached).
- Disconnect harness [B] (x1).

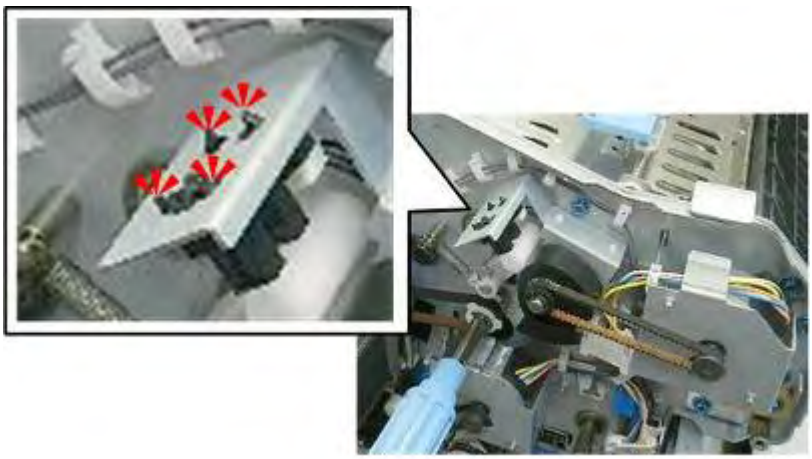


d1794155

- Separate motor from harness (x2).

d1794156

Exit Junction Gate HP Sensor



d1794157

1. Disconnect sensor from bracket (x4)

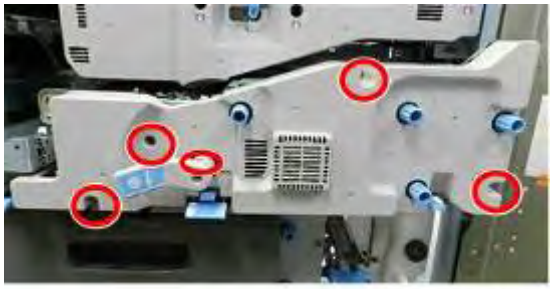
d1794158

2. Disconnect sensor (x1).

4.19.14 DUPLEX TRANSPORT MOTOR 2

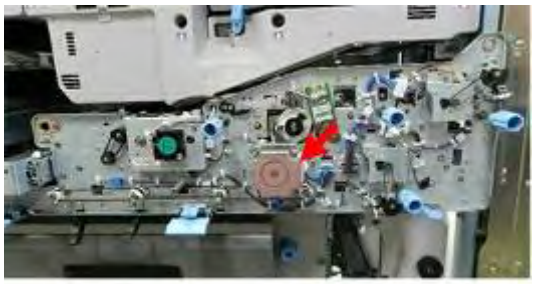
Preparation

- Pull out front drawer



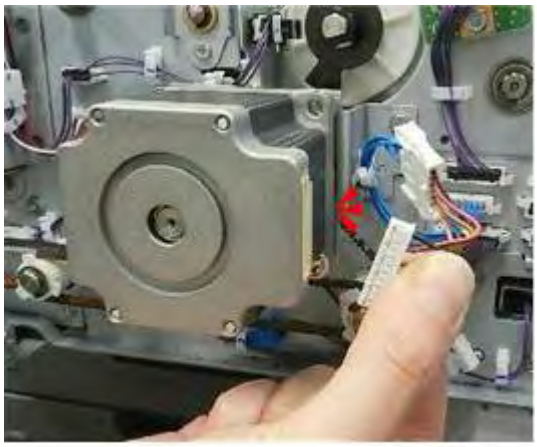
d1794159

1. Remove right front cover (x5).



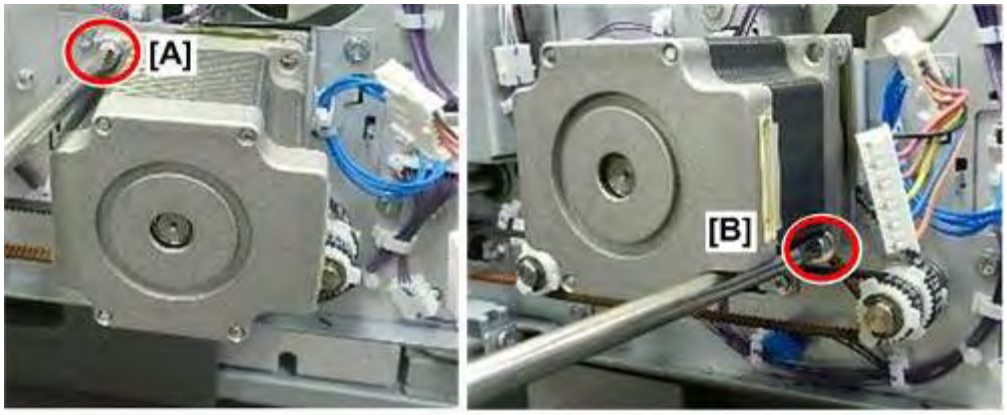
d1794160

2. Duplex transport motor 2 is in the center.



d1794161

3. Disconnect motor (x1).



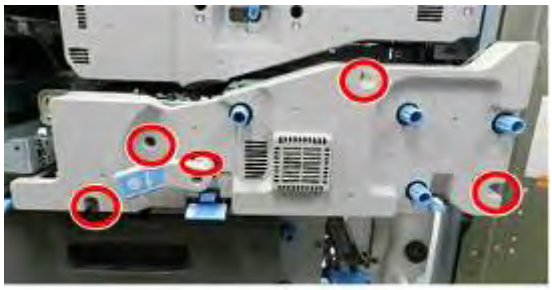
4. Disconnect motor bracket:
   [A] Upper left (x1)
   [B] Lower right (x1)

5. Remove motor.

4.19.15 DUPLEX TRANSPORT SENSOR 4, 5, 6, DUPLEX EXIT SENSOR

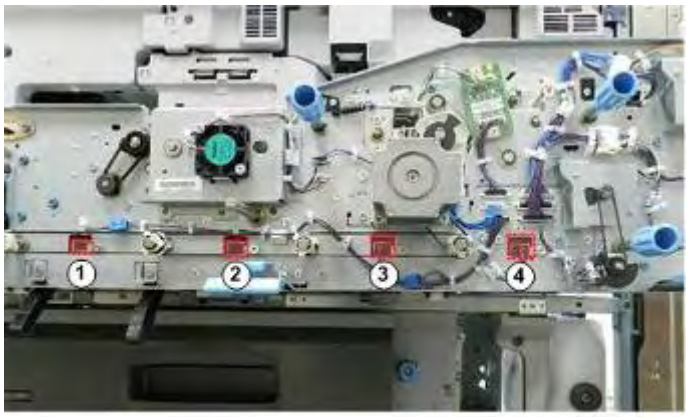
Preparation

1. Pull out front drawer



d1794159

- Remove right front cover (x5).



d1794164

①	Duplex transport sensor 4
②	Duplex transport sensor 5
③	Duplex transport sensor 6
④	Duplex exit sensor

Note

- Only one removal is described below because the procedure is the same for each sensor.

1. Disconnect:

   [A] Harness, sensor bracket (x1, x1, x1)

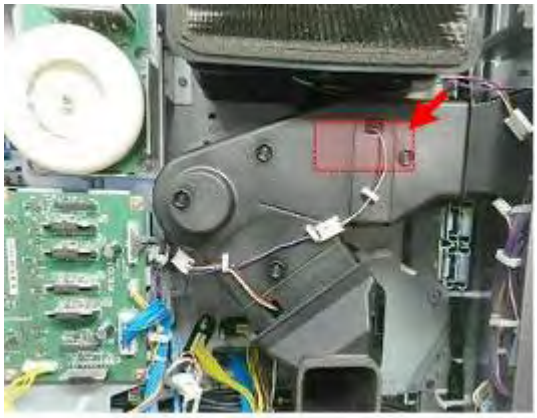
   [B] Pull out sensor bracket

2. Remove sensor (x1, x4).

4.19.16 EXIT MOTOR

Preparation

1. Rear cover
2. Left cover



d1794167

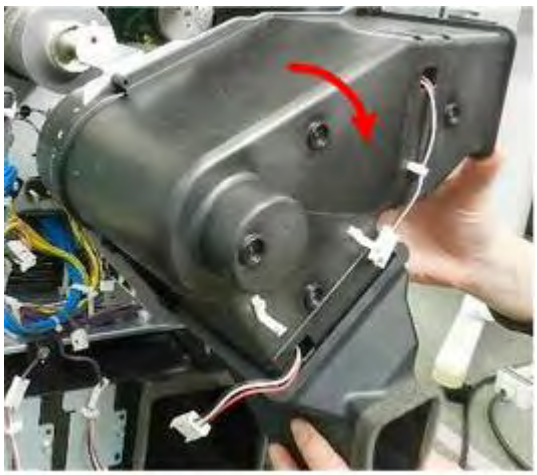
1. The exit motor is at the left rear corner of the machine behind the duct.

d1794168

2. Disconnect harnesses (x3, x2)

d1794169

3. Disconnect duct:
   [A] Upper right (x1)
   [B]: Lower right (x1)
   [C] Lower left (x1)

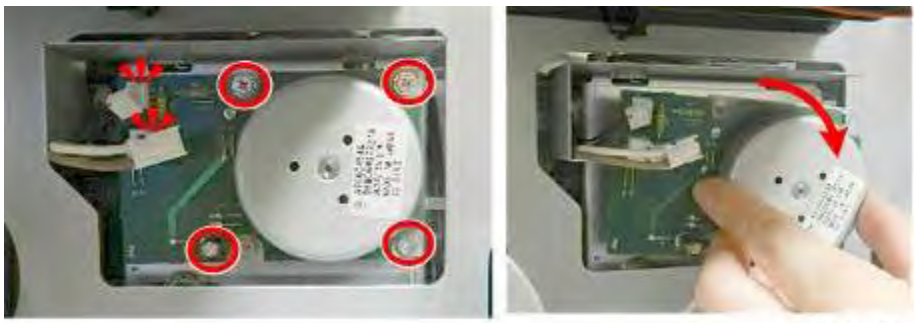


d1794170

4. Remove duct.

d1794171

1. At the left side of the machine, remove duct (x2).



d1794173

2. Remove motor (x2, x4).

d1794174

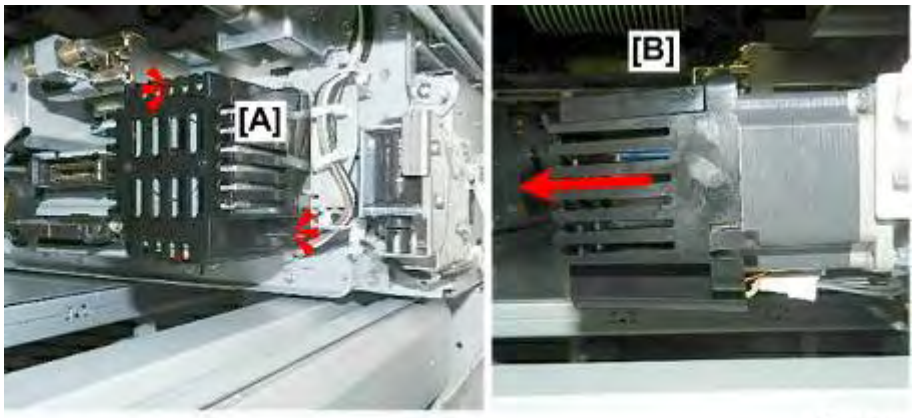
4.19.17 EXIT/INVERT MOTOR

Preparation

1. Rear cover
2. Left cover

d1794175

1. The exit/invert motor is at the back of the machine near the lower left side.



d1794176

2. Open both front doors and pull the front drawer far enough so you can see the plastic cage from the open left side of the machine.

3. Release plastic tabs [A], and then remove the cage.

d1794177

4. Push in the front drawer completely so you can see the motor at the rear.
5. Disconnect motor:

   [A] Upper right (x1)

   [B] Lower left (x1)

d1794178

6. Remove motor [A] partially, and then disconnect motor [B] (x1).

d1794179

4.19.18 DUPLEX/INVERT MOTOR

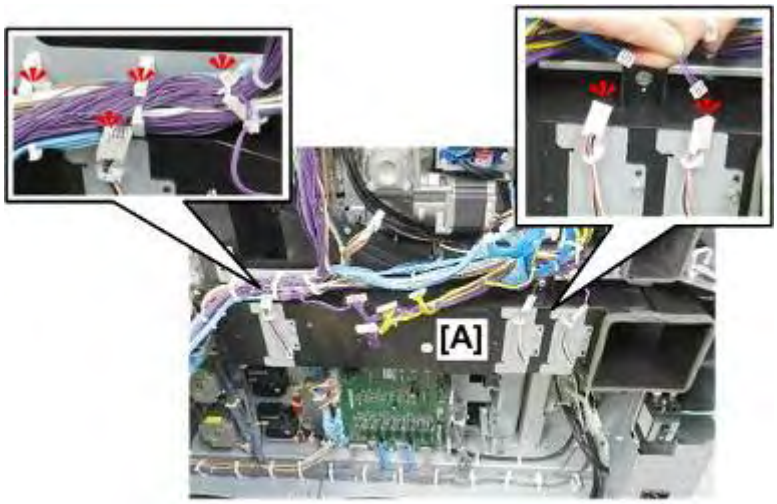
Preparation

1. Rear cover

Large Horizontal Duct

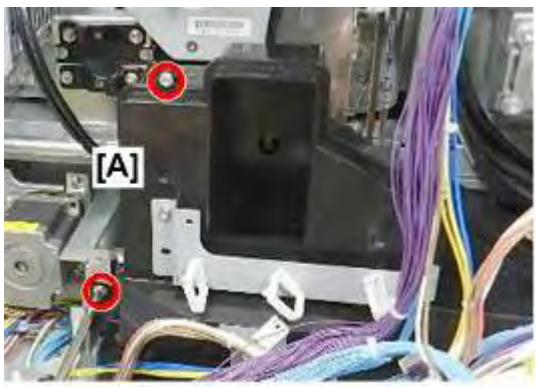
d1794180

1. The duplex invert motor is behind the large horizontal duct.



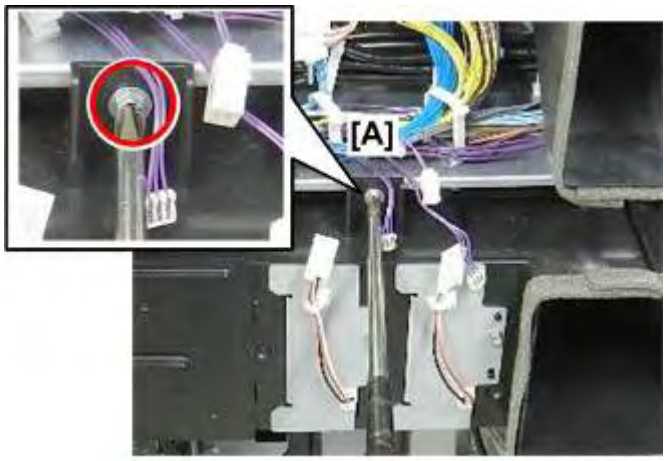
d1794026

2. Free harnesses at top of duct (x5).



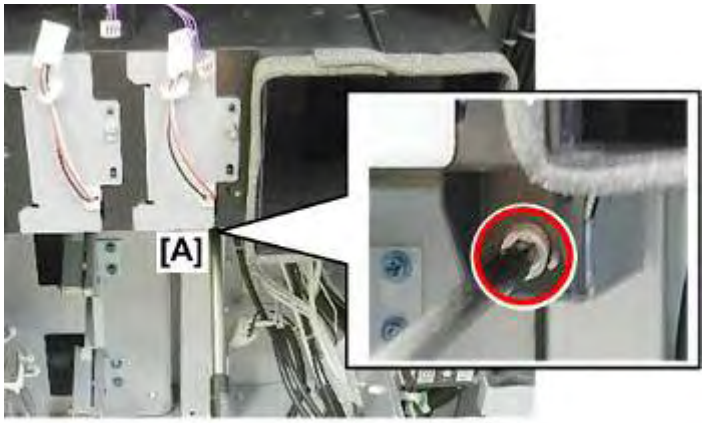
d1794185

3. Disconnect duct at left [A] (x2).



d1794028

4. Disconnect duct at center [A] (x1).



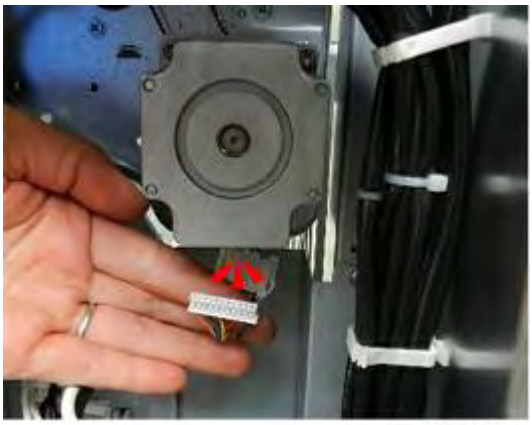
d1794029

5. Disconnect duct at bottom right [A] (x1).

d1794030

6. Remove duct.

Duplex/Invert Motor



d1794181

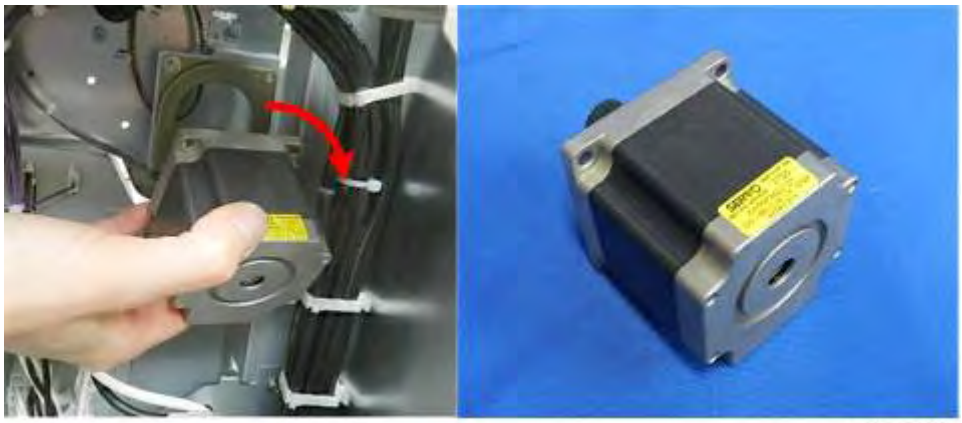
- Disconnect motor (x1).

d1794182

- Disconnect motor:

  [A] Upper right (x1)

  [B] Lower left (x1)



d1794183

- Remove motor.

4.20 USED TONER PATH

4.20.1 USED TONER PATH, USED TONER TRANSPORT MOTOR

⇒If a blockage occurs in either the upper or lower used toner path, the machine will issue SC488.

- In this case, the mechanism must be disassembled to determine if the upper duct or lower pipe is jammed with clumped toner.
- The jammed duct or pipe must be replaced.

Preparation

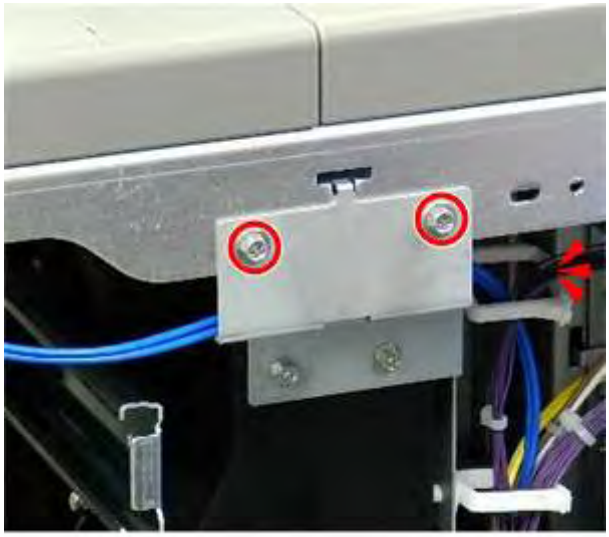
1. Open controller box
2. Rear cover

d1794001

- Pull out the following units to relieve pressure on the couplings of the motors that must be removed and re-installed.
  ① PCDU
  ② ITB cleaning unit
  ③ Drawer
  ④ Paper trays
  Be sure to cover the drum ⑤ to protect it from light.

d1794002

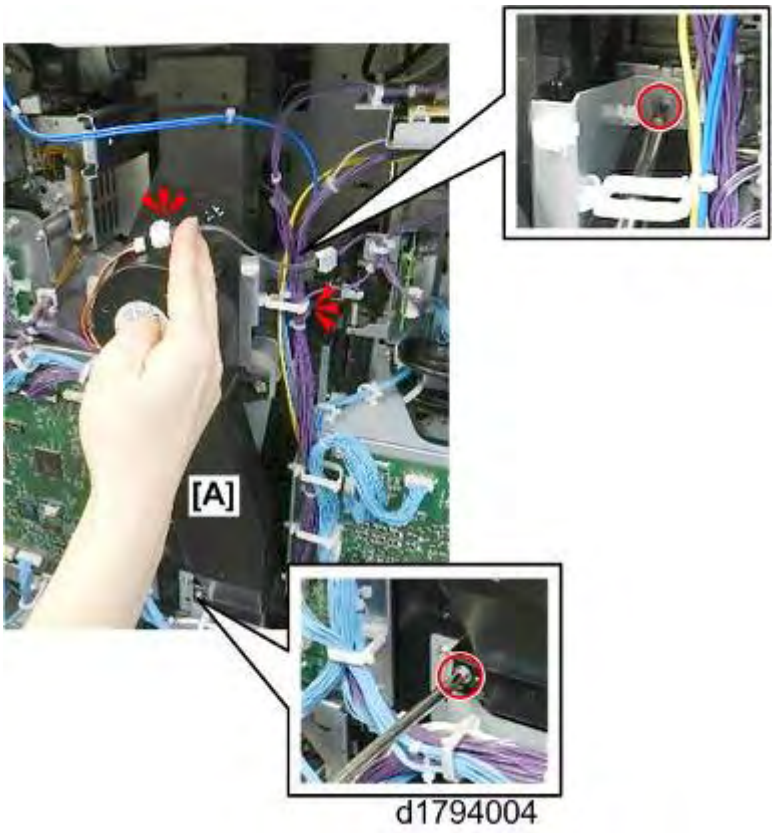
- Remove the vertical stay (x3).



d1794003

- Remove the bracket fan duct bracket at the top (x2, x2).

Fan, Vertical Duct



d1794004

1. Disconnect vertical fan and duct [A] (x1, x3).

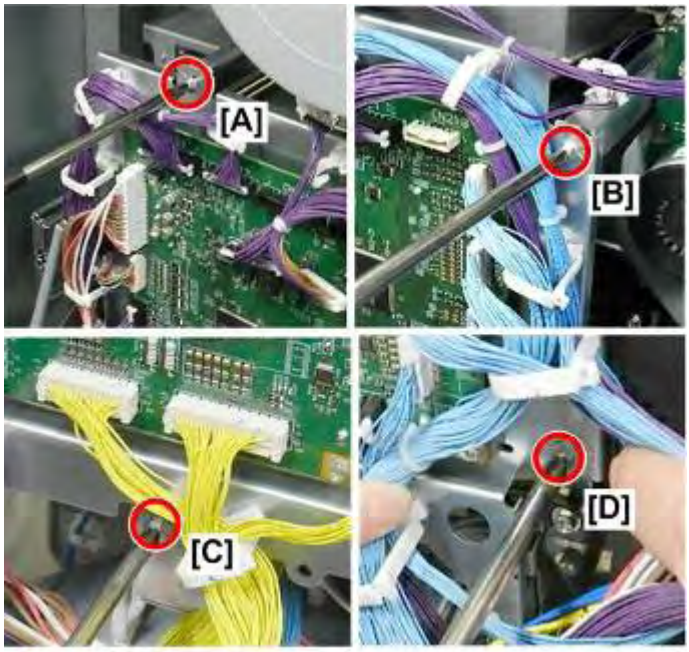
d1794005

2. Remove vertical fan with duct.

Lower IOB Bracket

d1794006

1. Next, start to lower the IOB at the lower left (x2, x2).



d1794008

2. Disconnect IOB:

   [A] Upper left (x1)

[B] Upper right (x1)

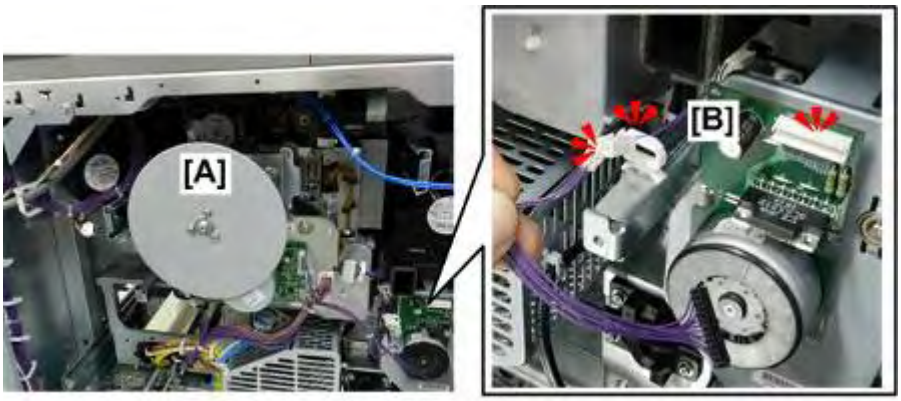
[C] Lower left (x1)

[D] Lower right (x1)

d1794009

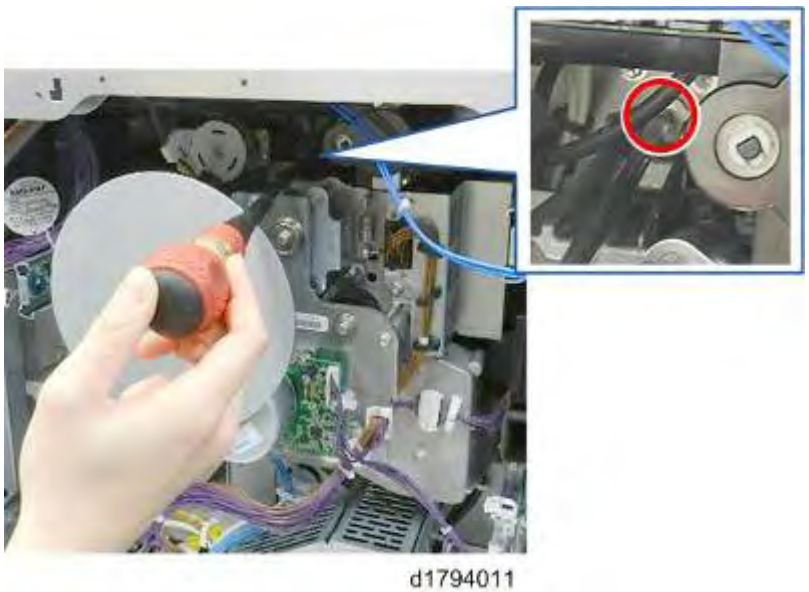
3. Lower the IOB bracket (with PCB attached) until it stops.

Main Motor Unit



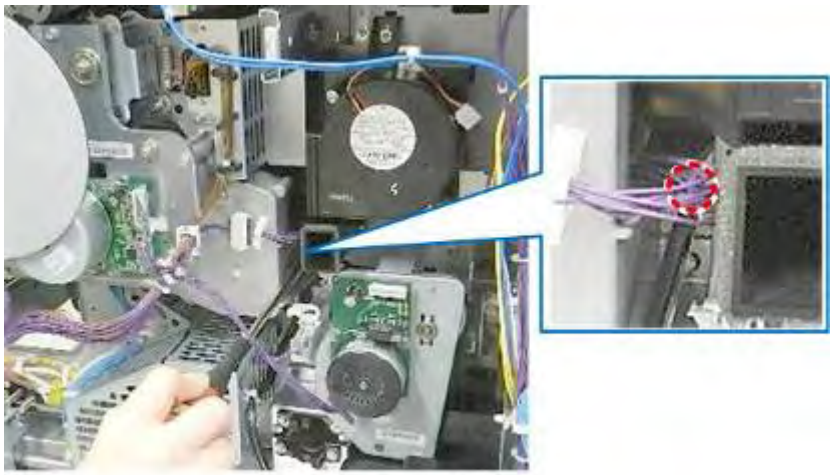
d1794010

- Next, remove the main motor unit [A] with drum, drum cleaning, and development motors attached.
- Disconnect at [B] (x1, x2).



d1794011

- Upper right (x1).



d1794012

- Lower left (x1).

d1794013

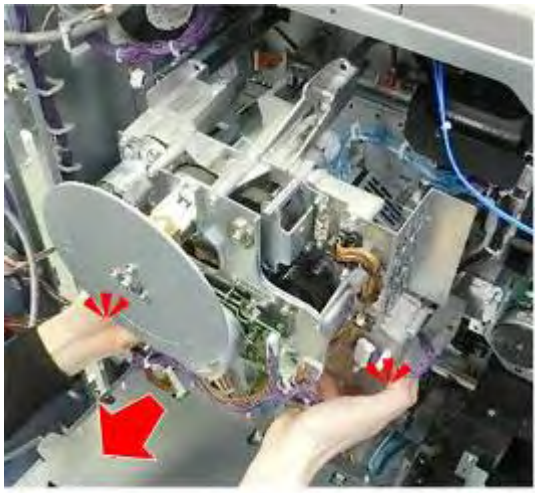
- Bottom (x1).

d1794014

- Bottom, left (x1).

d1794015

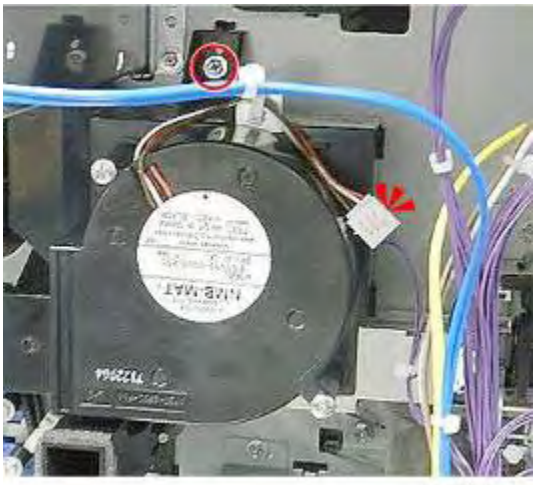
- Left (x1).



d1794016

- Remove the main motor unit.

Fan, Small Horizontal Duct

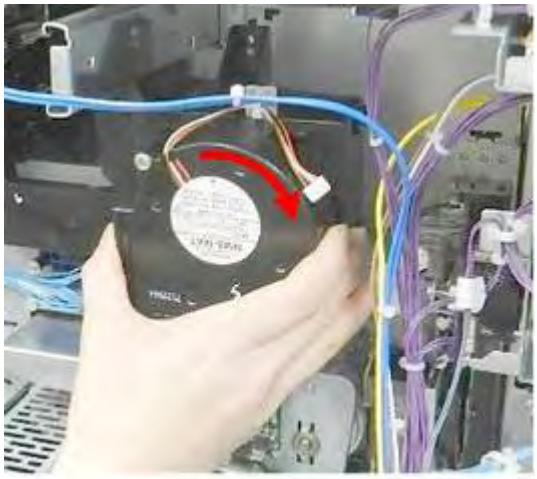


d1794017

1. Remove the fan attached to the end of the small horizontal duct near the center of the machine.
2. Disconnect fan (x1.x1, x1)

d1794018

3. Lower right (x1).


d1794019

4. Remove fan.

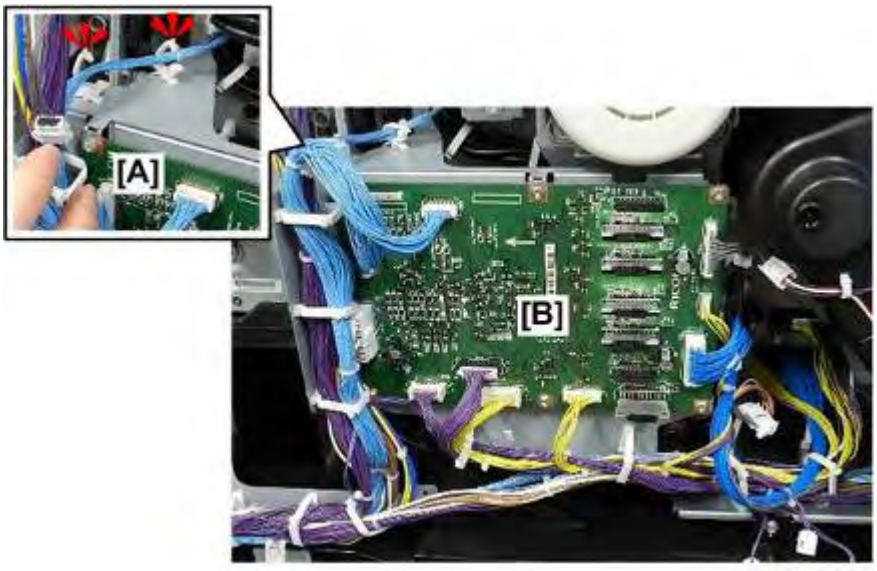
d1794020

5. Next, disconnect the duct where you just removed the fan (x2).

d1794021

6. Remove duct.

Remove EDRB

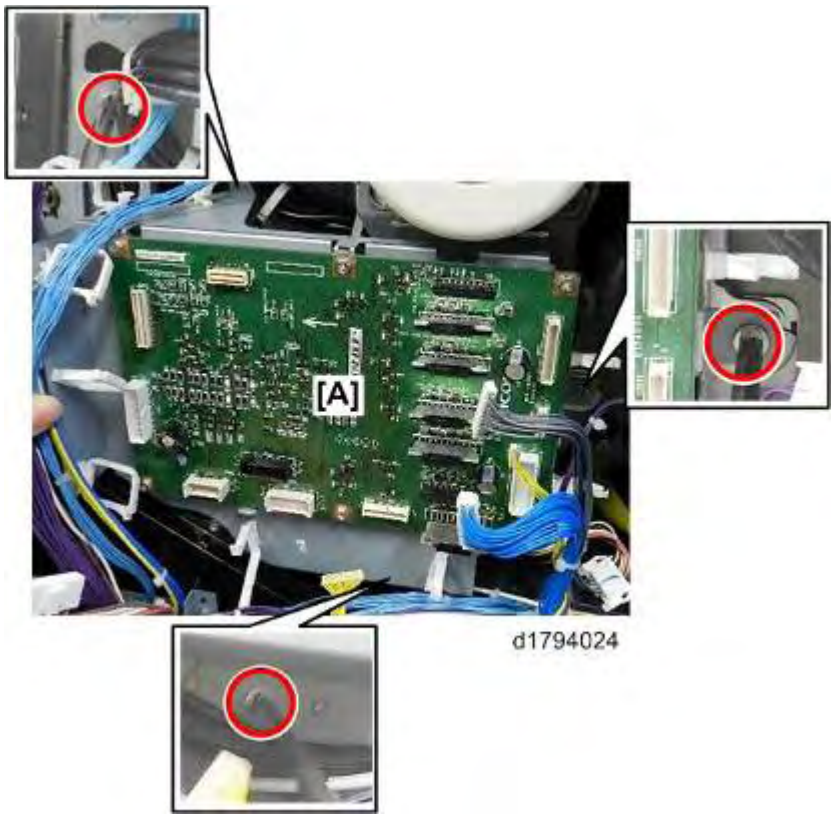


d1794022

- Next, start to remove the EDRB.
- At the upper right corner [A] of the EDRB [B] free the harness [x2].

d1794023

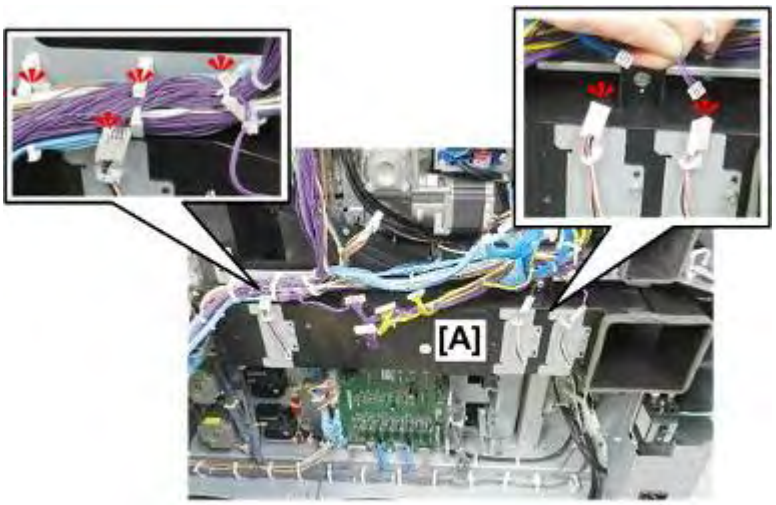
- Disconnect EDRB (x7, x10).



- Disconnect bracket of EDRB [A] (x3).

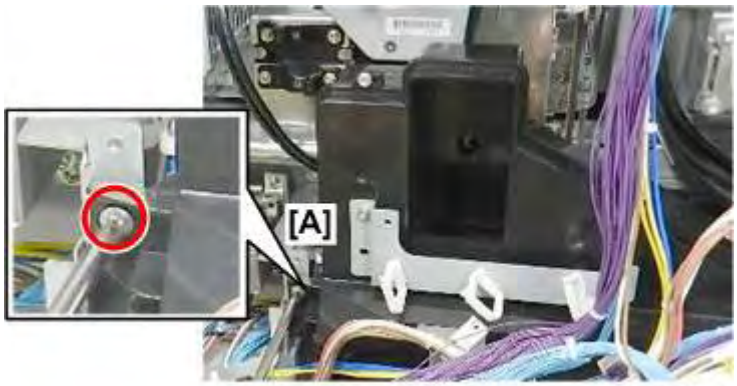
- Remove EDRB bracket (with PCB attached).

Large Horizontal Duct



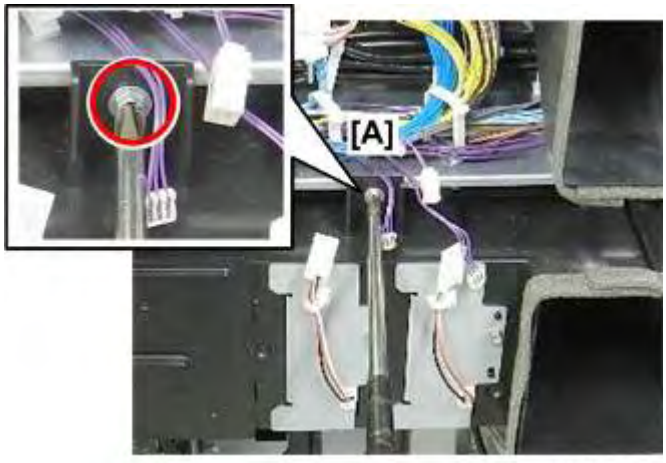
d1794026

1. Next, remove the large horizontal duct [A] at the bottom right side of the machine.
2. Free top of duct (x5, x3).



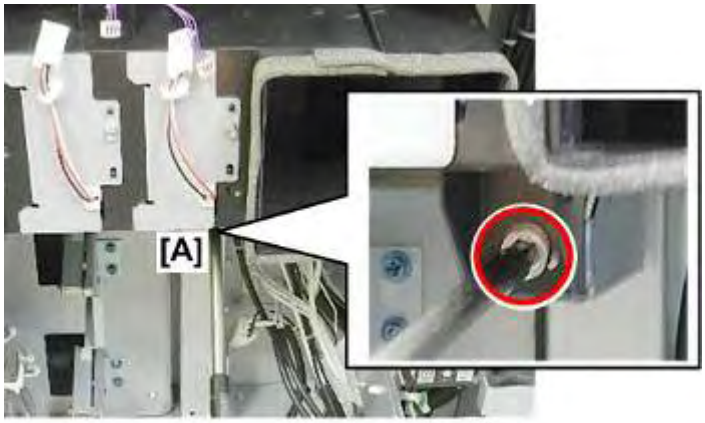
d1794027

3. Disconnect duct at lower left [A] (x1).



d1794028

4. Duct at center [A] (x1).



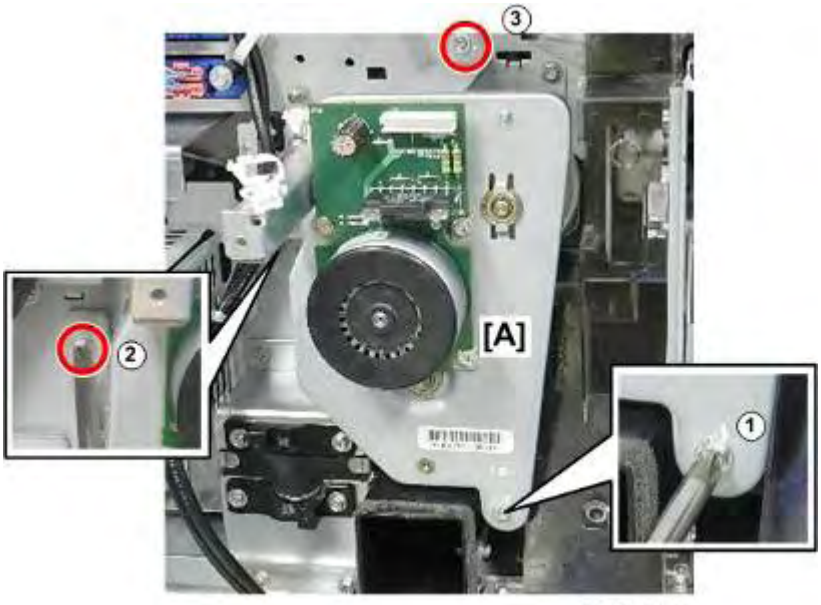
d1794029

5. Duct at bottom right [A] (x1).

d1794030

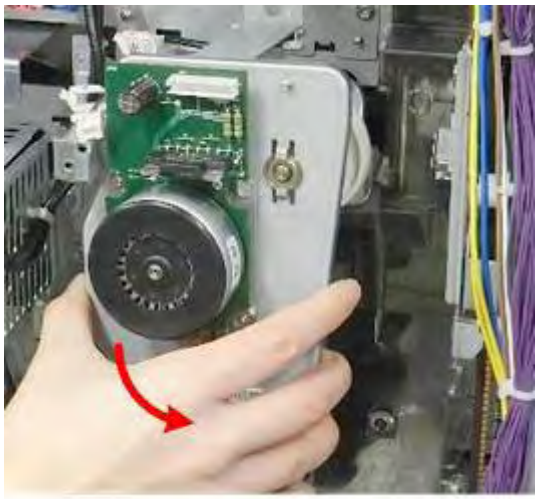
6. Remove the duct.

ITB/PTR Motor



d1794031

- Next, remove the ITB/PTR motor bracket [A] (x3).
  1. ① is a small screw.
  2. ② and ③ are larger and the same size.



d1794032

- Remove the bracket (with motor attached).

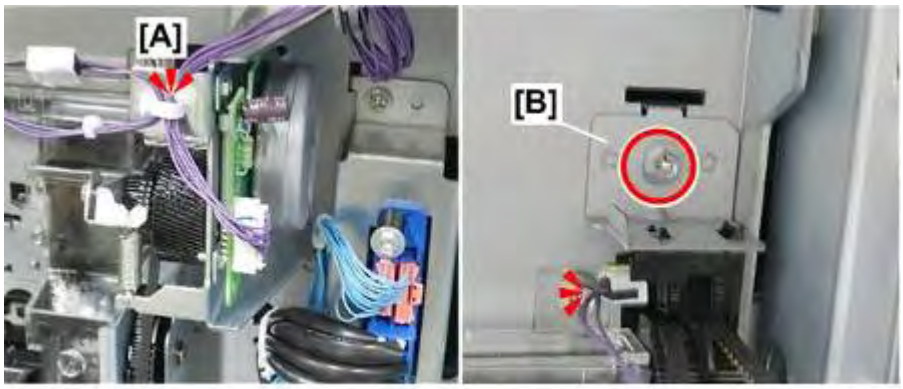
Used Toner Transport Motor

d1794033

Important

- This motor transports used toner. If the motor does not rotate, the motor is defective, or the harness is broken or defective.

1. At the top, rotate the used toner transport motor.
   - If the motor does not turn easily, this means there is a block in the upper used toner path, lower used toner path, or both.
   - The motor drives the belts for both paths, so you will not be able to determine which path is blocked until they are disconnected from the belts.

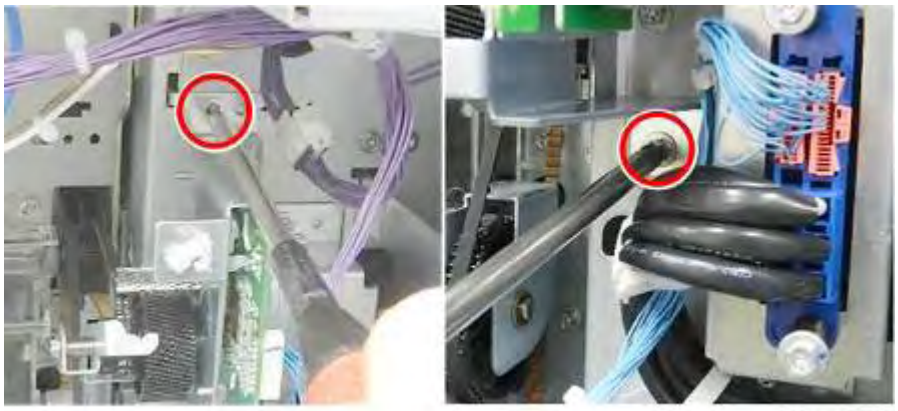


d1794034

2. Free harness [A] (x1).
3. Disconnect used toner transport sensor bracket [B] (x1).

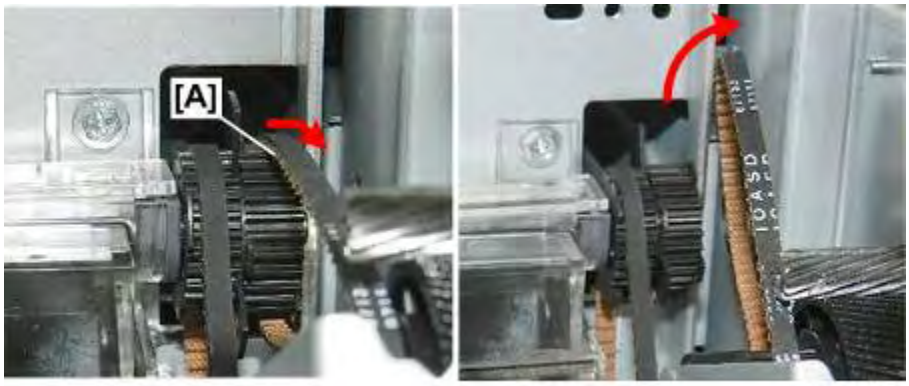
d1794035

4. Remove spring [A] from the used toner transport motor bracket (x1).



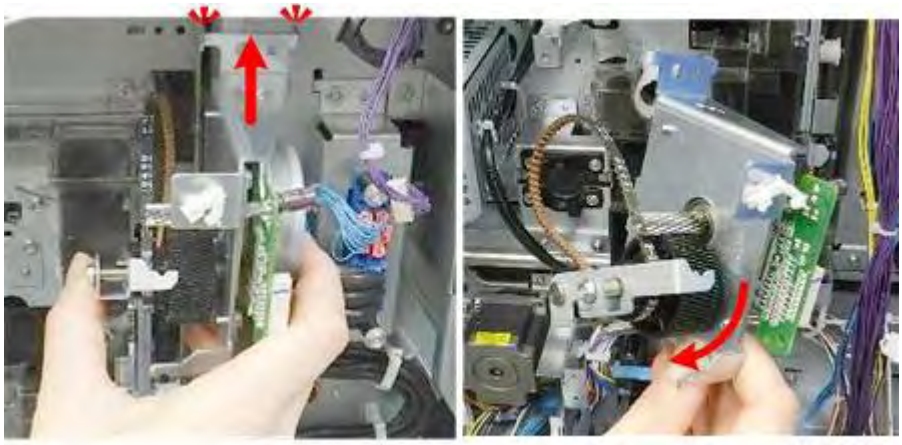
d1794036

5. Unfasten the used toner transport motor bracket (x2).



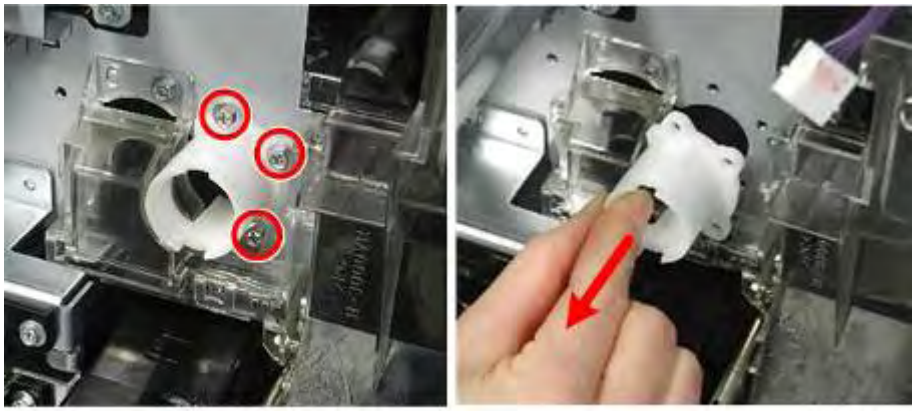
d1794037

6. Disconnect belt [A] (x1).



d1794038

7. Lift the motor bracket of its hooks, then remove it (with motor attached).



d1794039

8. Remove white collar (x3).

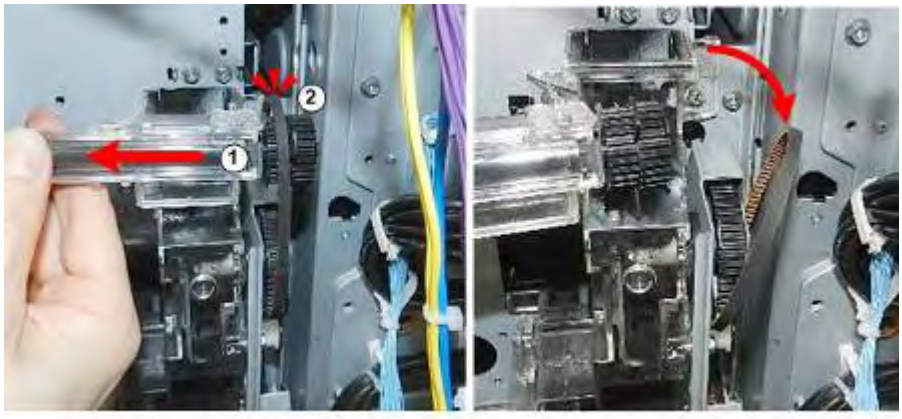
Used Toner Path Upper Duct

d1794040

1. Disconnect upper used toner duct (x7).

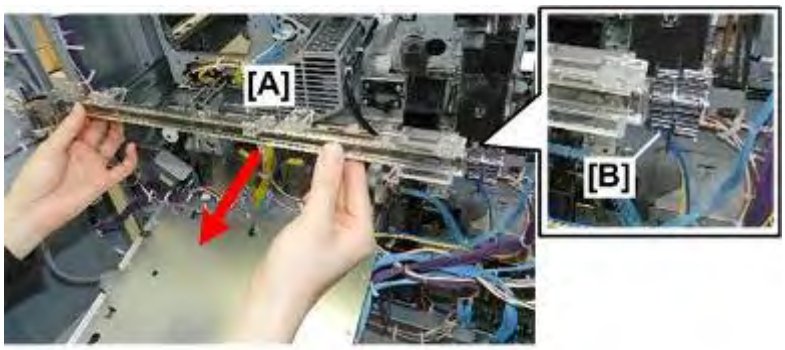
d1794041

2. Pull the duct out slightly.



d1794042

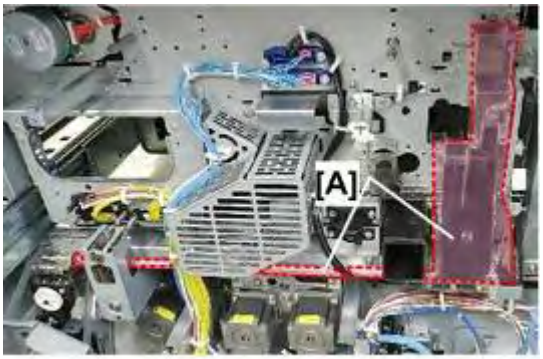
3. Pull the duct slightly to the left ① to disconnect from the belt ②.



d1794043

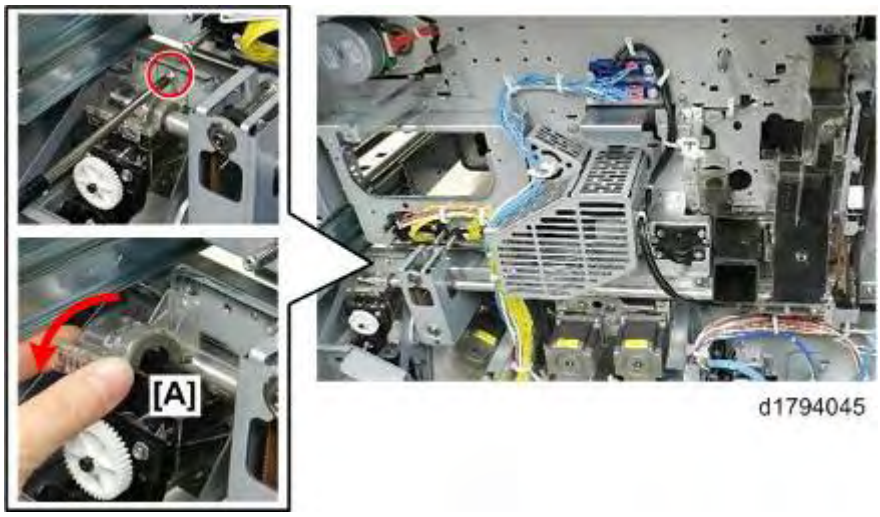
4. Remove the upper duct [A].
5. Turn the gear [B] on the end of the duct. If the gear does not turn easily, the duct is jammed or defective and must be replaced.

Used Toner Path Vertical Duct, Horizontal Pipe



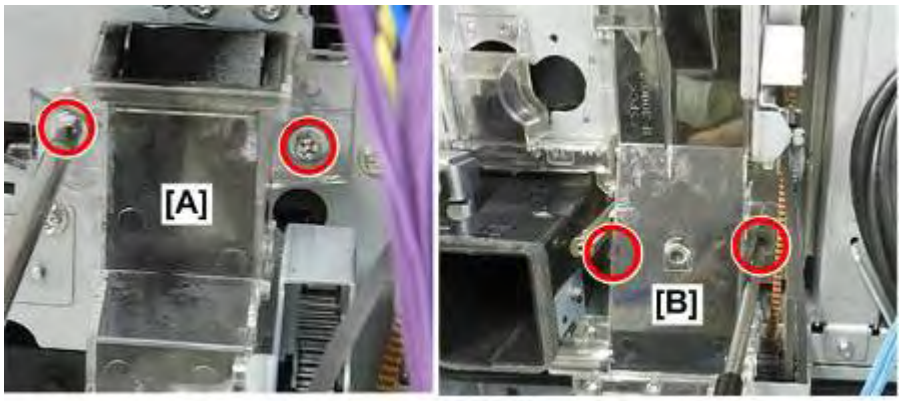
d1794044

- Next, the vertical duct and lower duct [A] of the used toner path must be removed.

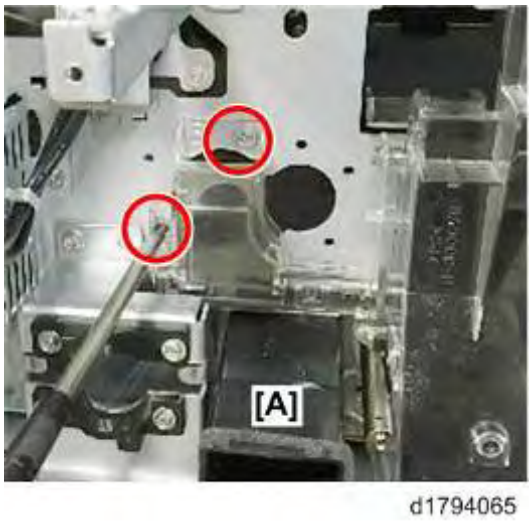


d1794045

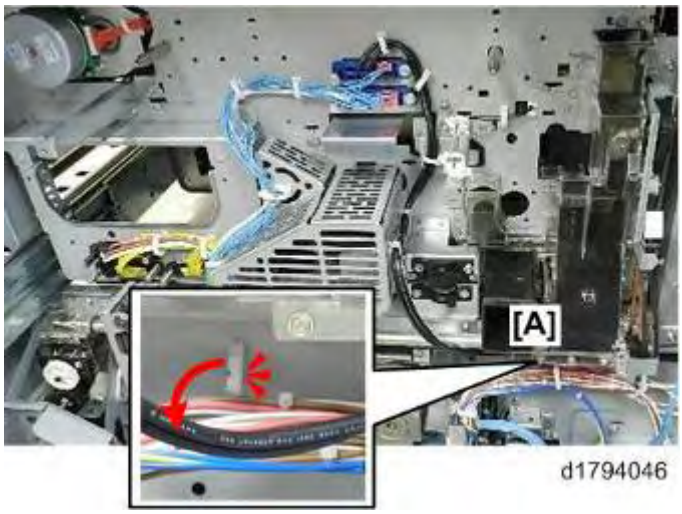
- Remove cap [A] (x1). This disconnects the left end of the pipe.



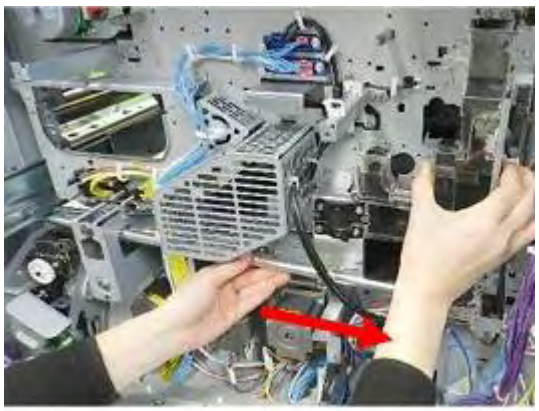
- On the right, disconnect the top of vertical duct [A] (x2).
- Disconnect bottom [B] of vertical duct [A] (x2)



- To the left, unfasten above the open air duct [A] (x2).

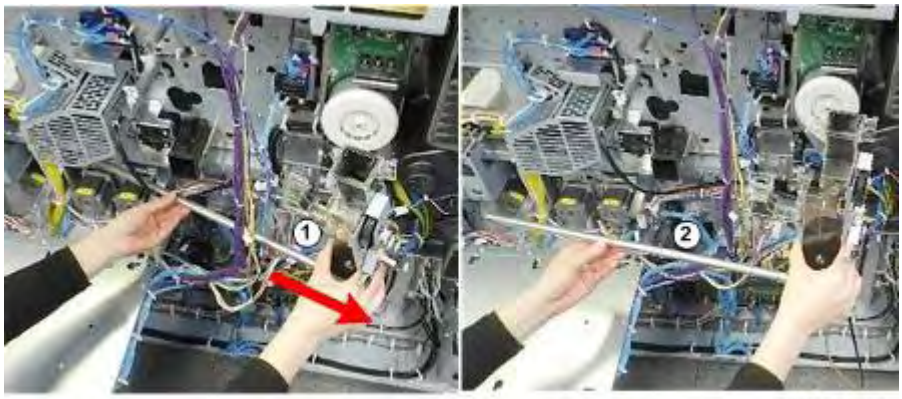


- Free the black harness at [A] (x1). (This will make removal easier.)



d1794047

- Slide the pipe and vertical duct to the right.



d1794048

- Continue to move it to the right ① as you separate it from the harnesses until it is free ②.
- Turn the gear on the right end of the pipe. If the gear does not rotate freely, the pipe is jammed or defective and must be replaced.

4.20.2 USED TONER BOTTLE UNIT

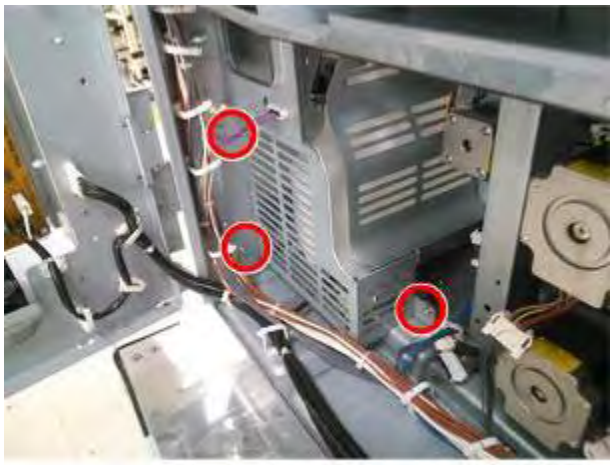
Used Toner Bottle Unit Removal

Preparation

1. Open controller box door
2. Rear cover
3. Right cover
4. Spread some paper to prepare a place to lay the used toner bottle unit (the paper will catch loose toner)

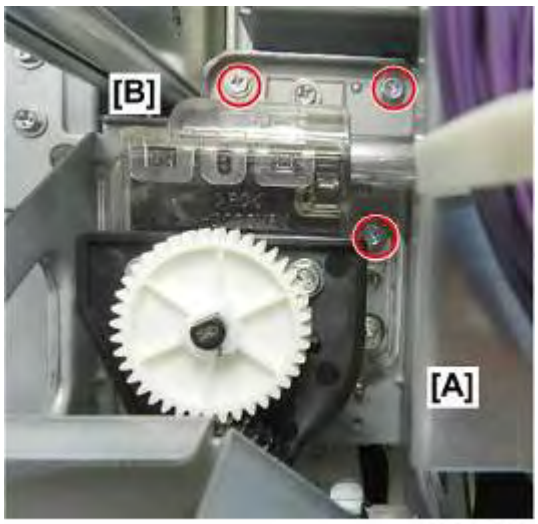
d1794049

- Open the right front door, and then remove the toner bottle.



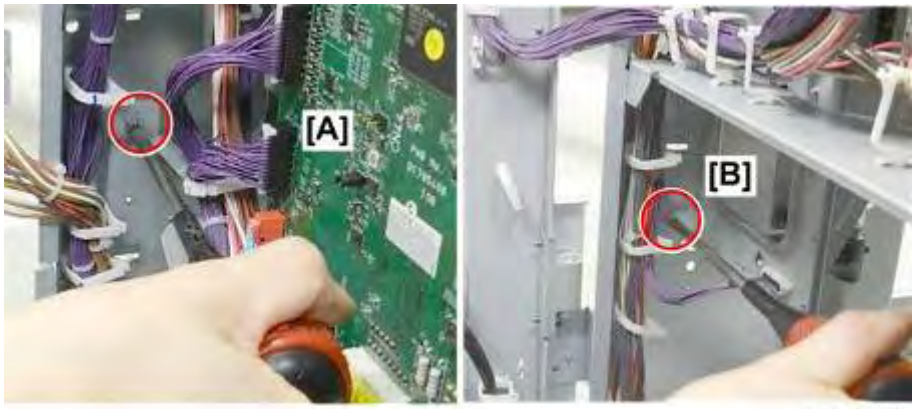
d1794068

- Disconnect the corner of the ventilation grate (x3).



d1794053

- Down, and to the left of the IOB [A] remove screws [B] (x3).

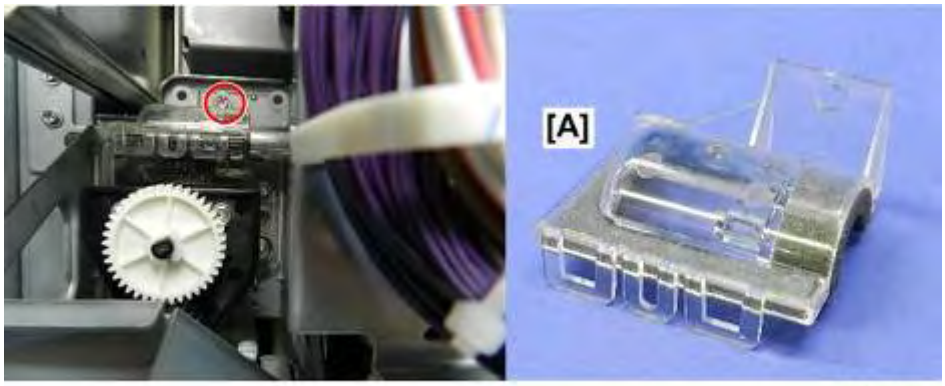


d1794054

- Down, and to the left of IOB [A], disconnect used toner bottle transport unit (x2).

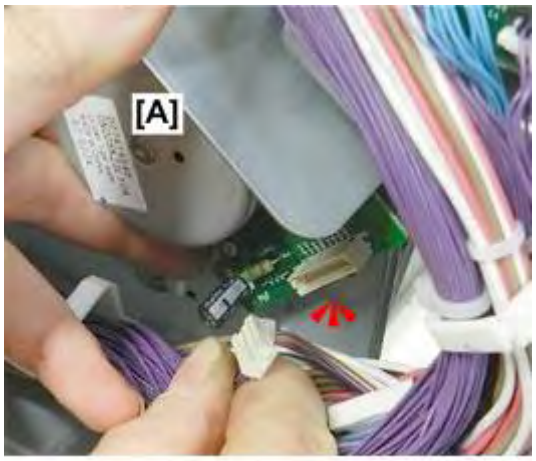
d1794056

- Disconnect unit (x1).



d1794057

- Down, and to the left of the IOB, remove cap [A] (x1).



d1794058

- Disconnect used toner transport motor (x1).

d1794059

- Remove used toner bottle unit [A]
- Lay the unit on a clean flat surface, covered with paper [B].

Used Toner Transport Motor

Preparation

- Remove used toner bottle unit page 4-502

d1794060

1. Remove the motor from the bracket (x4).

Used Toner Bottle Full Sensor

Preparation

- Remove used toner bottle unit page 4-502

d1794061

1. The used toner bottle full sensor [A] is located at the top of the unit above the gear train [B].
2. Sensor (x1, x3)

Used Toner Bottle Near-Full Sensor

Preparation

1. Remove used toner bottle unit page 4-502

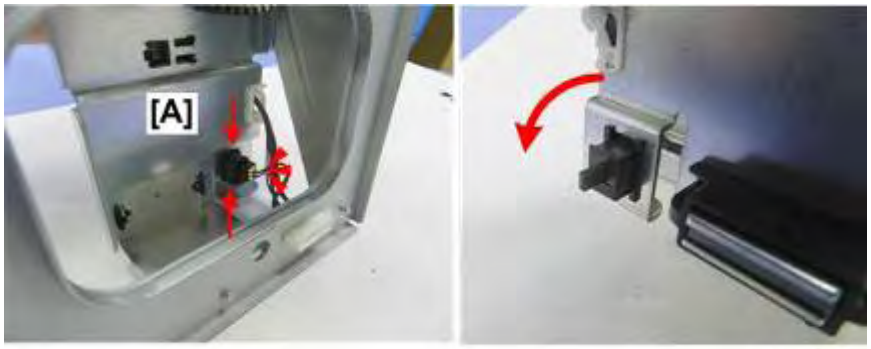
d1794062

1. Used toner bottle near-full sensor [A] is on the outside surface of the unit plate.
2. Sensor (x1, x3).

Used Toner Bottle Set Switch

Preparation

- Remove used toner bottle unit page 4-502



d1794063

- The used toner bottle set switch [A] is located at the base of the used toner bottle unit.
- Switch (x1).
- Depress the top and bottom of the switch together to release it, and then push it out the front.

4.21 FILTERS, FANS

4.21.1 FILTERS

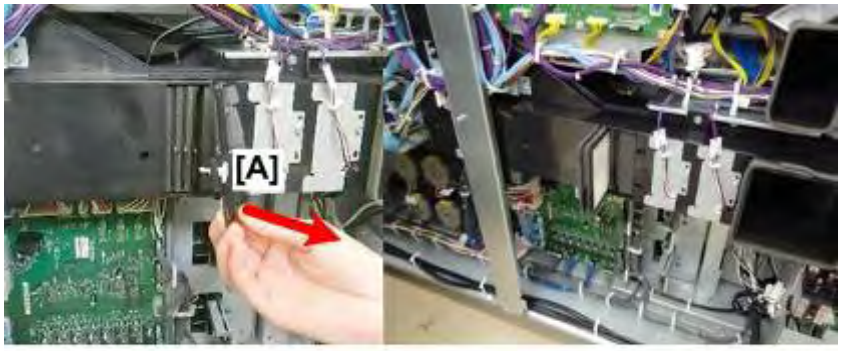
Fusing Exhaust Filters

Preparation

1. Remove rear cover

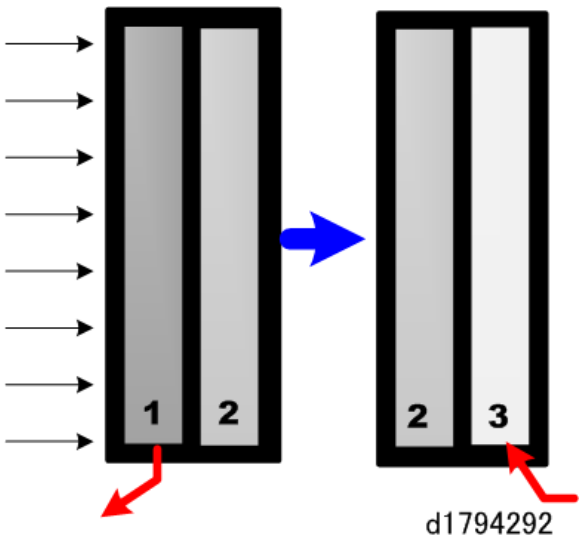
d1794201

1. These filters are in the horizontal duct.



d1794202

2. Remove release plastic screw, and then remove cover [A].



d1794292

3. Remove the first filter (1).
4. Remove second filter (2), and then set it in the empty slot on the left.
5. Insert a new filter (3) in the slot on the right.

Note

1. The first filter on the left is removed and then discarded. The second filter is moved to the slot on the left, and the new filter is inserted in the slot on the right.

Air Filters

Preparation

- Remove rear cover page 4-23

d1794204

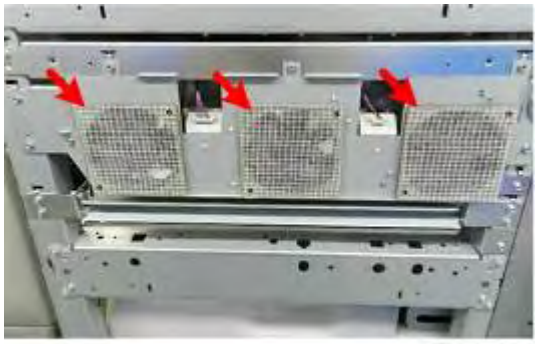
1. At the left rear corner of the machine, remove filter [A].

d1794205

Right Cover Air Intake Filers

Preparation

- Remove right cover



d1794206

- These filters cannot be removed.
- Vacuum clean them.

Right Cover Base Filters

d1794207

- Release and remove both filters.
- Vacuum clean.

Toner Supply Filter

d1794208

- This filter is on the back of the canopy that covers the toner bottle bank.
- Remove filter and vacuum clean.

4.21.2 FANS

Before You Begin

Here is a list of fans contained in this machine.

Name	SC	Comment
Laser Unit Cooling Fan	SC530-01	
Development Unit Cooling Fan: Front	SC531-01	
Development Unit Cooling Fan: Rear	SC531-02	
Belt Cooling Fan	SC530-02	
Ozone Air Intake Fan	SC530-06	
Ozone Air Exhaust Fan	SC530-07	
Fusing Transport Exhaust Fan	SC530-08	
Fusing Exhaust Fan: Upper	SC530-09	
Fusing Exhaust Fan: Lower	SC530-10	
Fusing Air Intake Fan: Lower Right	SC530-13	
Fusing Air Intake Fan: Lower Left	SC530-14	
Paper Exit Exhaust Fan: Lower Right	SC530-15	
Paper Exit Exhaust Fan: Lower Left	SC530-16	
HP Cooling Suction Fan	SC530-17	
HP Cooling Exhaust Fan	SC530-18	
PSU Cooling Fan: T Right	SC530-19	
PSU Cooling Fan: T Left	SC530-20	
PSU Air Intake Fan: M1 Right	SC532-03	
PSU Air Exhaust Fan: M1 Left	SC532-04	
PSU Air Intake Fan: M2 Right	SC532-05	
PSU Air Exhaust Fan: M2 Left	SC532-06	

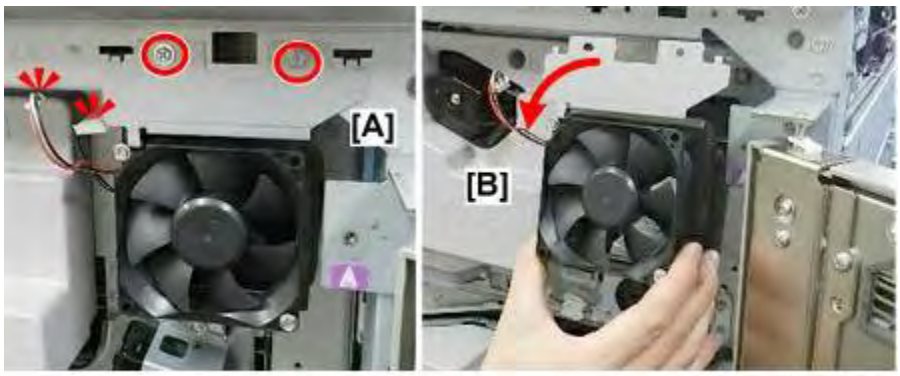
Name	SC	Comment
Control Board Air Intake Fan	---	
Controller Board Cooling Fan	---	
ID Sensor Cooling Fan	SC532-08	page 4-203
PTB Fan: Front	SC532-09	page 4-365
PTB Fan: Rear	SC532-10	page 4-365
CIS Cleaning Fan	SC532-11	page 4-294
Right Air Intake Fan: Front	SC31-05	page 4-349
Right Air Intake Fan: Rear	SC531-06	page 4-349
Right Air Intake Fan: Center	SC531-07	page 4-349

1. The "SC" column lists the corresponding SC code that the machine issues if there is a problem with the fan.
2. Before you remove any fan, always check the direction of the label. The fan must be re-installed with the label facing the same direction as when it was removed. Air flows left to right with the label facing right. Air flows right to left with the label facing left.
    1. In the above table, some components have cross references in the right-hand column to other sections of the manual. The removal procedures for these components are not described in this section. For more about removal of these fans, go to the referenced section.

Laser Unit Cooling Fan

d1794209

- Lower ITB lever, and then remove the cover (x5).



d1794210

- Disconnect fan bracket [A] (x1, x1, x2).
- Remove fan [B].

d1794211

- Separate fan from bracket (x2).

Development Unit Cooling Fan: Front

d1794221

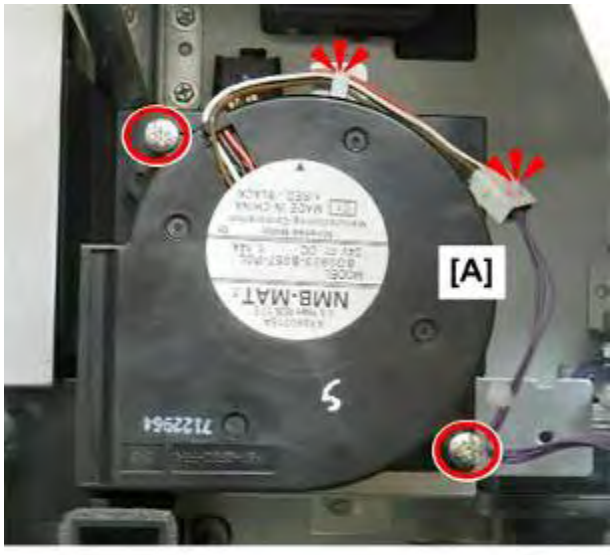
1. Remove cover (x4).

d1804201

2. Disconnect and then remove fan (x1, x2).

Development Unit Cooling Fan: Rear

1. Remove ozone blower fan (See “Ozone Blower Fan” in this section).



d1794227

2. Inside machine, disconnect fan [A] (x1, x1, x2).
3. Remove fan.

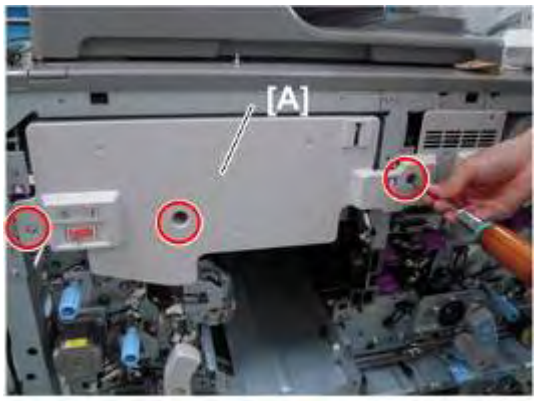
d1794228

Belt Cooling Fan

Preparation

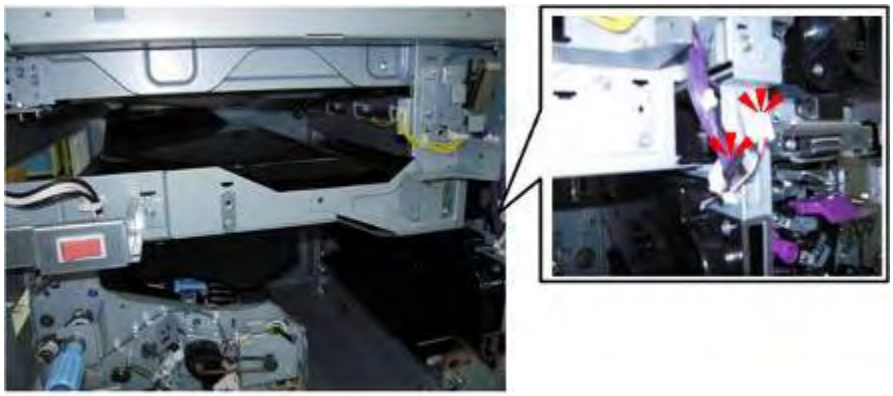
1. Remove left cover

- Remove front edge cover. page 4-22
- Remove the fusing unit. page 4-387



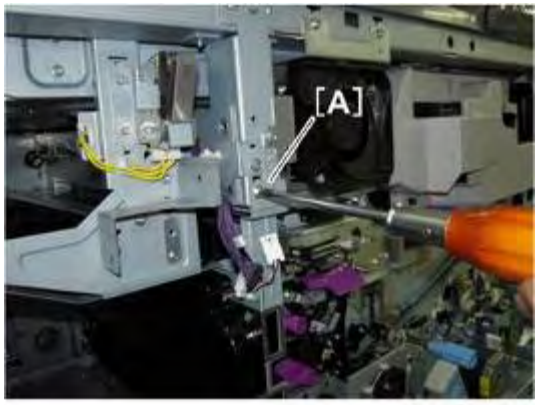
d1803811

- Remove cover [A] (x3).



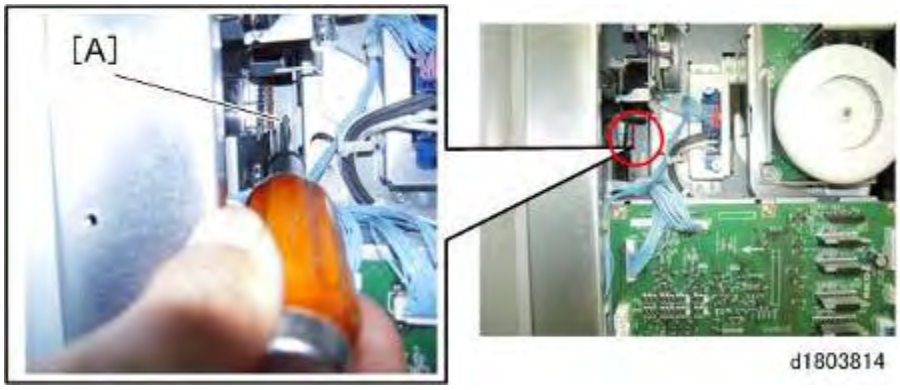
d1803812

- Disconnect fan and thermopile harnesses (x2).



d1803813

- Remove bracket [A] (x1).



d1803814

- Remove left rear cover.
- At the back of the machine, remove bracket [A] (x1).

Important

1. Remove and reattach the screw carefully to prevent it falling into the machine.

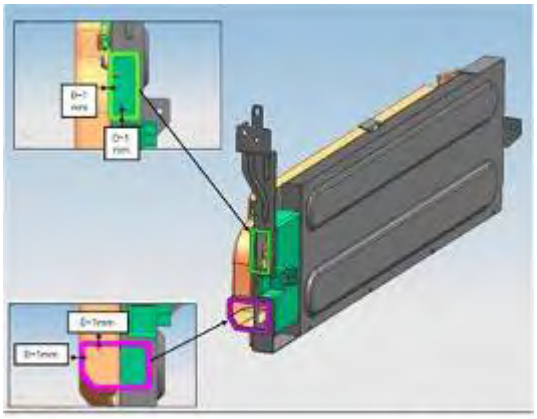
- Remove the belt cleaning unit. page 4-169
- Remove the PTR unit. page 4-335
- Disconnect and pull the ITB unit about halfway out of the machine or remove it.

d1803815

- Slowly, pull the thermopile unit out of the machine.

Important

- At re-installation of the thermopile unit, these two guide pins must be inserted into the holes at the back of the machine.



d1803819

- Carefully, peel the two sponge seals from the thermopile unit.

  Important

  - The seals that you just peeled off should not be used again. New seals should be attached at the locations shown above.

d1803816

- Remove the black cover (x5).

d1803833

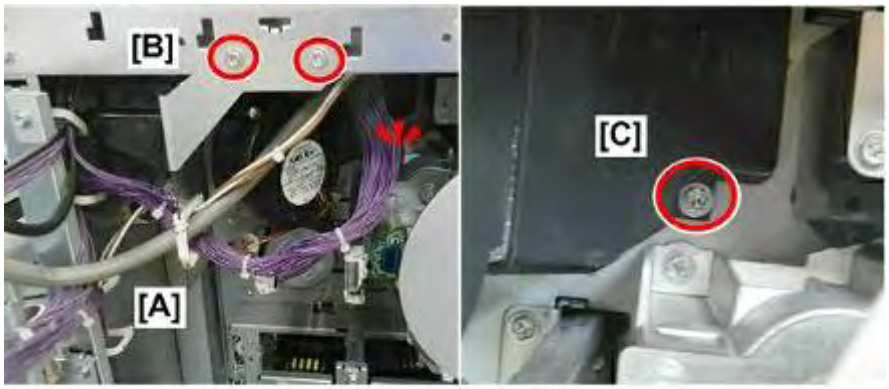
- Disconnect the fan (x1, x1 x2).

d1794217

Ozone Air Intake Fan

Preparation

1. Open controller box door page 4-27



d1794229

- At the right, rear corner of the machine, free harnesses [A] (x1).
- Disconnect bracket [B] (x2).
- Disconnect motor [C] (x1).

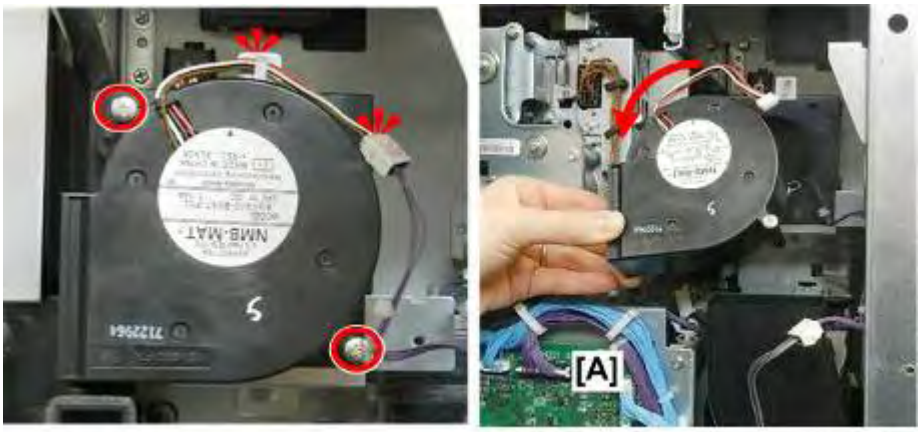
d1794230

- Remove bracket with motor attached.

d1794231

- Separate motor from bracket and duct (x1, x2).

Ozone Air Exhaust Fan



d1794218

1. Near the upper right corner of IOB [A], disconnect and remove the motor (x1, x1, x2)

d1794219

4.21.3 HORIZONTAL DUCT FANS

Fusing Transport Exhaust Fan

Preparation

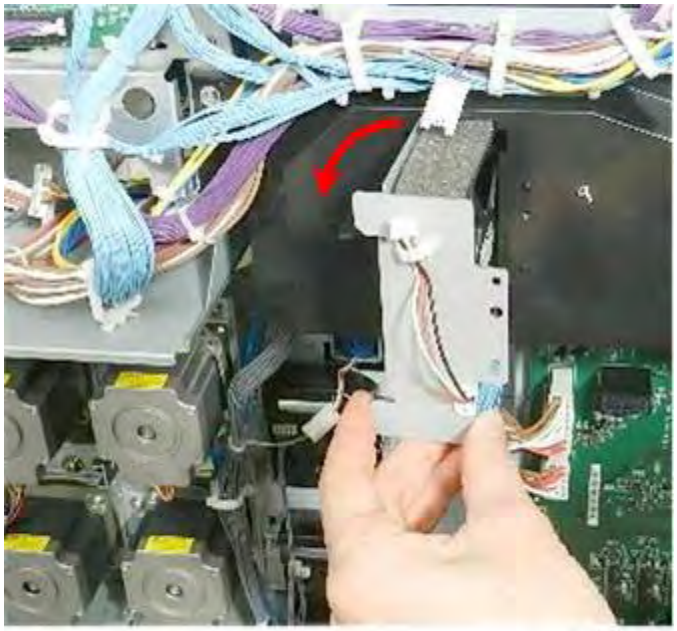
1. Open controller box page 4-27
2. Remove left rear cover page 4-23

d1794232

1. This fan is behind the vertical stay.

d1794233

2. Remove vertical stay [A] (x3).
3. Disconnect motor and bracket (x1, x1).



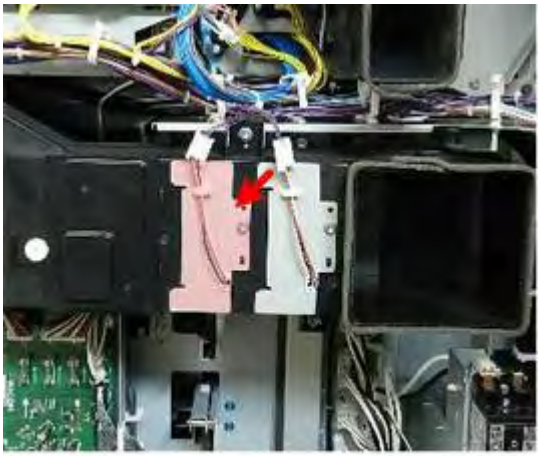
d1794234

4. Remove bracket (with motor attached).

d1794235

5. Separate motor from bracket (x2, x2).

Fusing Exhaust Fan: Upper



d1794236

- This fan is in the horizontal duct.

d1794237

- Disconnect motor and bracket, and then remove bracket (with motor attached) (x1, x1).

d1794238

- Separate motor from bracket (x2,x 2).

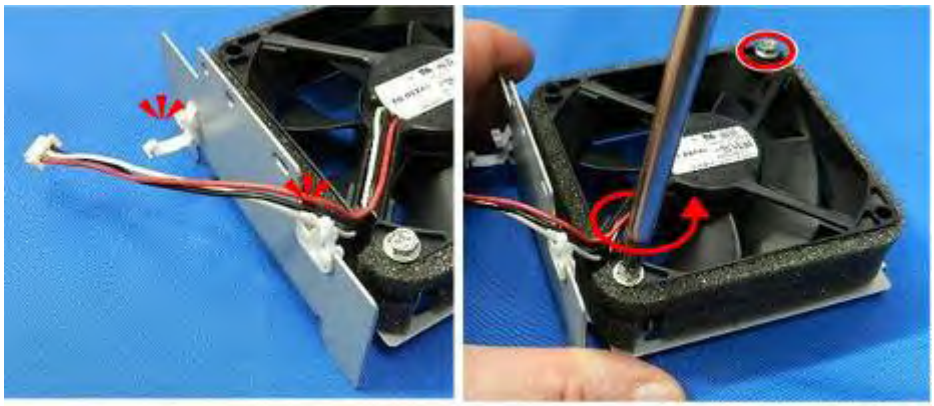
Fusing Exhaust Fan: Lower

d1794239

1. This fan is in the horizontal duct.

d1794240

2. Disconnect motor and bracket, and then remove bracket (with motor attached) (x1, x1).



d1794241

3. Separate motor from bracket (x2, x2).

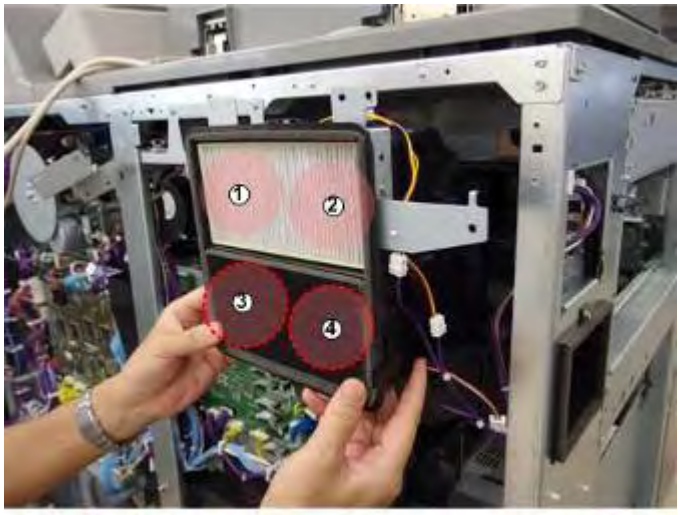
d1794242

4.21.4 REAR EXHAUST FANS

This section describes the removal of these four fans.

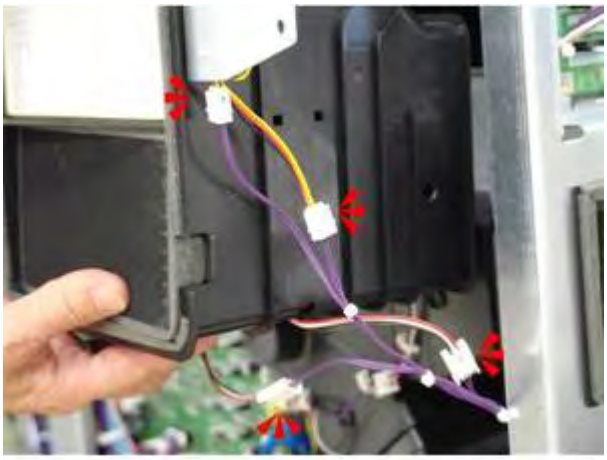
Preparation

- Remove left rear cover page 4-23



d1794243

①	18 Fusing Air Intake Fan: Lower Right
②	19 Fusing Air Intake Fan: Lower Left
③	20 Paper Exit Exhaust Fan: Lower Right
④	21 Paper Exit Exhaust Fan: Lower Left



d1794244

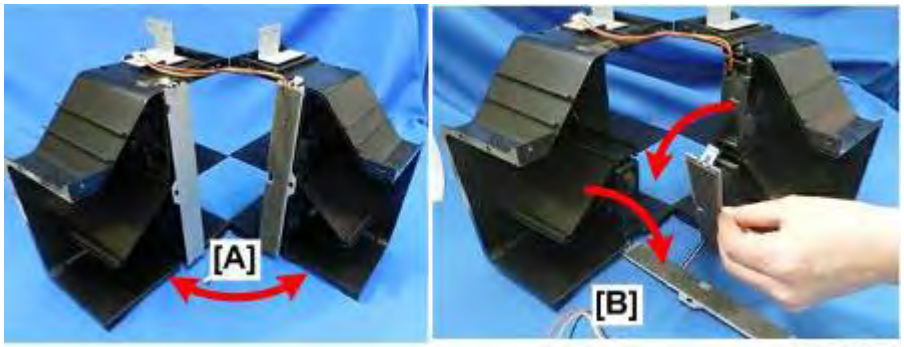
1. Disconnect fan (x4).

d1794247

2. Remove the ozone filter and air filter from the housing.

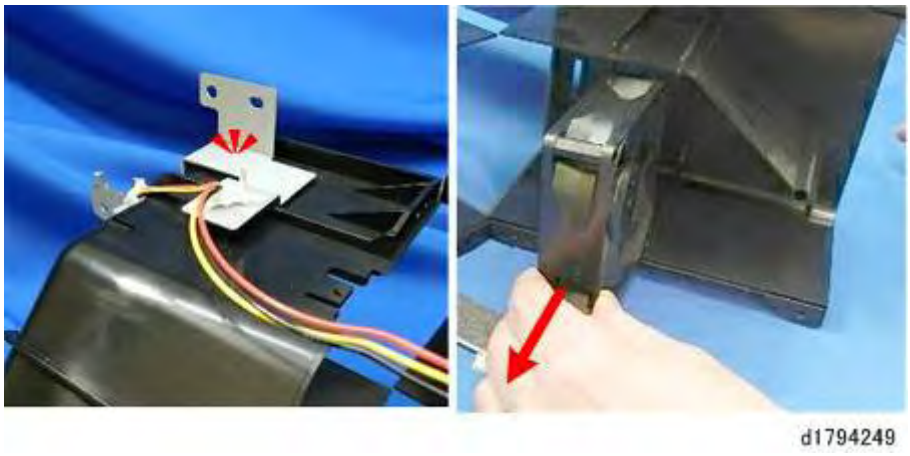
d1794246

3. Free harness and unfasten housing (x1, x4).



d1794248

4. Open housing [A].
5. Remove brackets [B].



6. Free the harness and remove the four fans.

Important

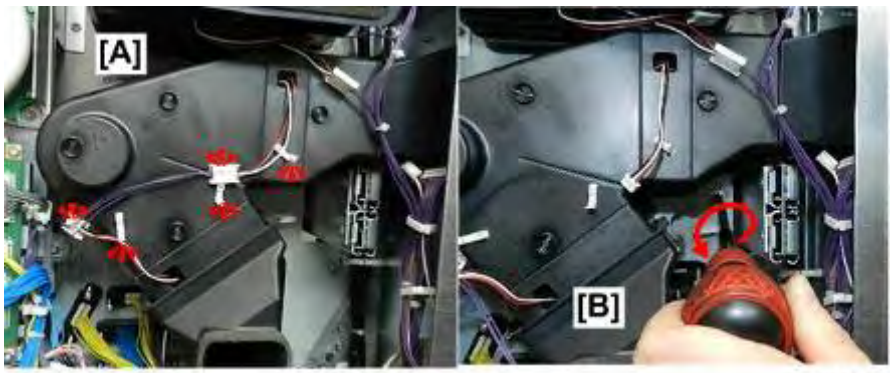
- Pay attention to the direction of the labels as you remove each fan. They must be re-installed with the labels facing the same direction.

4.21.5 HP (HEAT PIPE) COOLING FANS

①	HP Cooling Suction Fan
②	HP Cooling Exhaust Fan

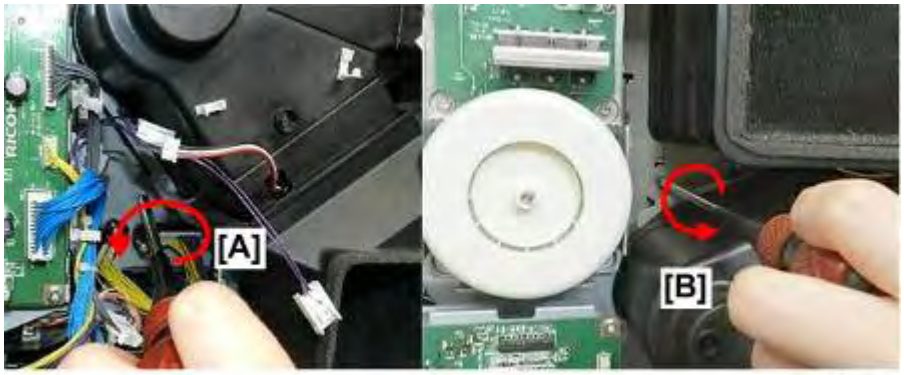
Preparation

1. Rear cover



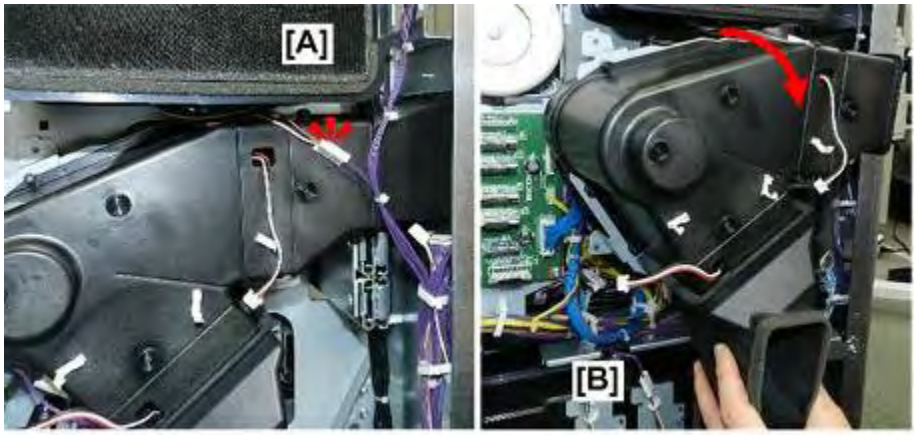
d1794251

- Free harnesses [A] (x3, x2).
- Disconnect duct at [B] (x1).



d1794252

- Disconnect duct at [A] and [B] (x2).



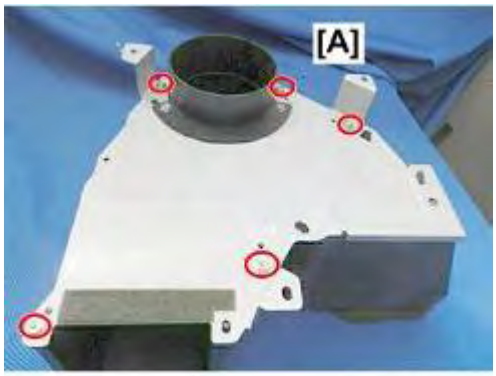
d1794253

- Disconnect harness [A] (x1).
- Remove duct [B] with fans inside.

d1794254

①	HP Cooling Suction Fan
②	HP Cooling Exhaust Fan

- Lay the duct on a flat clean surface.



d1794255

- Remove screws (x5).
- Remove collar duct [B].

d1794256

- Remove fans.

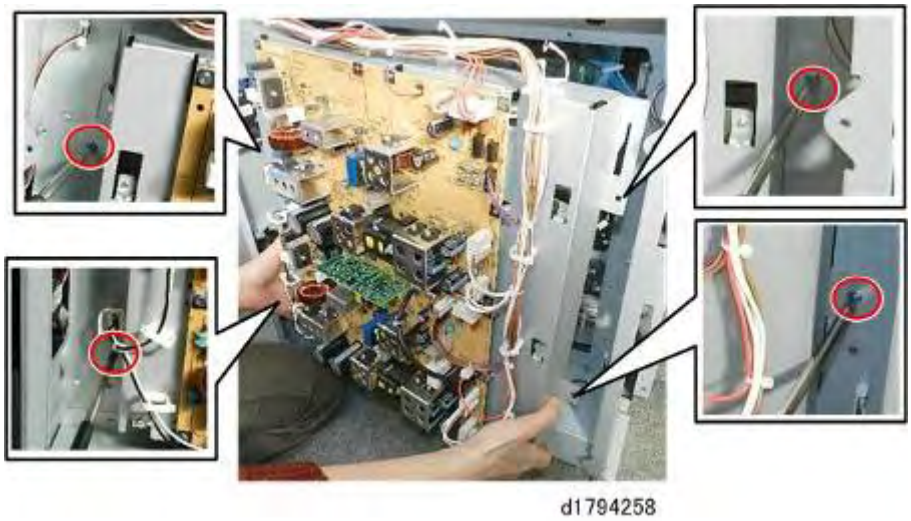
d1794257

4.21.6 CONTROLLER BOX FANS

PSU Cooling Fan: T Right, T Left

Preparation

1. Open controller box door page 4-27
2. Remove controller box cover page 4-30



d1794258

- Disconnect the PSU bracket (x4).

d1794259

①	PSU Cooling Fan: T Right

②	PSU Cooling Fan: T Left

- You do not need to remove any connectors.
- Place a block under the bracket so there is no strain on the connectors and harnesses.

PSU Cooling Fan: T Right

d1794260

1. Disconnect and remove fan (x1, x2).

d1794261

PSU Cooling Fan: T Left

d1794262

1. Disconnect and remove fan (x1, x2).

Control Board Air Intake Fan

Preparation

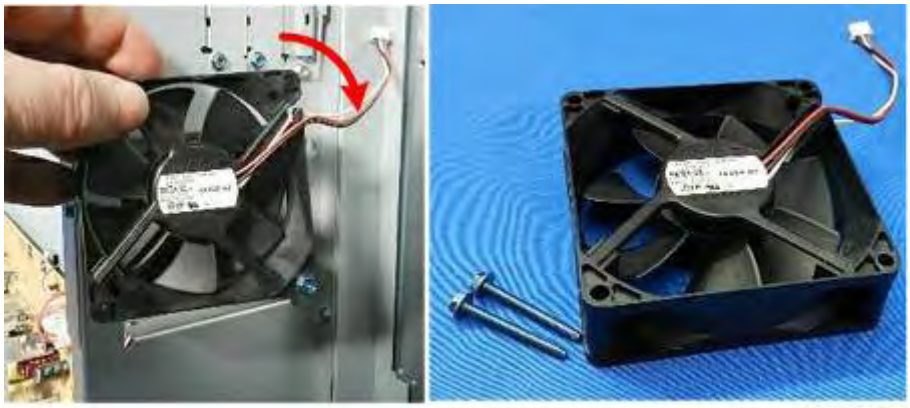
- Open controller box door page 4-27
- Remove controller box cover page 4-30

d1794266

1. Locate the fan.

d1794267

2. Disconnect fan at [A] and [B] (x1, x1, x2).



d1794268

3. Remove the fan.

PSU Air Exhaust Fan: M1 Left

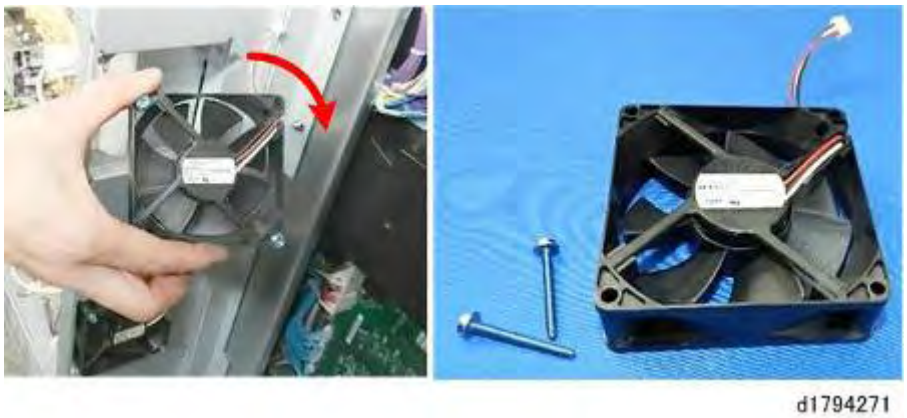
Preparation

1. Open controller box door page 4-27
2. Remove controller box cover page 4-30

d1794269

1. Locate the fan.

2. Disconnect fan at [A] and [B] (x1, x2).



3. Remove fan.

PSU Air Exhaust Fan: M2 Left

Preparation

1. Open controller box door page 4-27
2. Remove controller box cover page 4-30

d1794272

- Locate the fan.

d1794273

- Disconnect fan at [A] and [B] (x1, x2).

d1794274

- Remove fan.

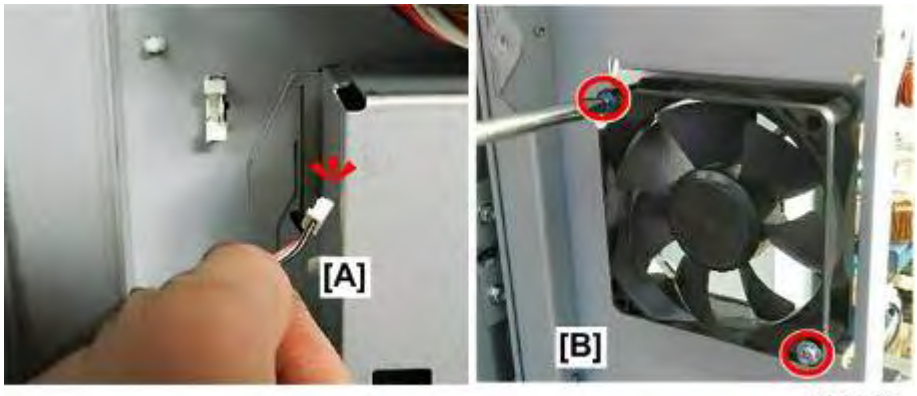
PSU Air Intake Fan: M1 Right

Preparation

- Open controller box door page 4-27
- Remove controller box cover page 4-30

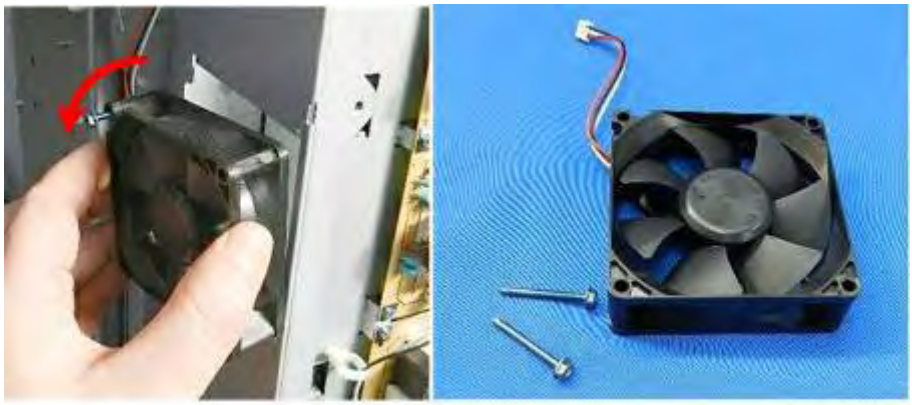
d1794263

1. Locate the fan.



d1794264

2. Disconnect the fan at [A] and [B] (x1, x2).



d1794265

3. Remove fan.

PSU Air Intake Fan: M2 Right

Preparation

- Open controller box door page 4-27
- Remove controller box cover page 4-30

d1794275

1. Locate the fan.

d1794276

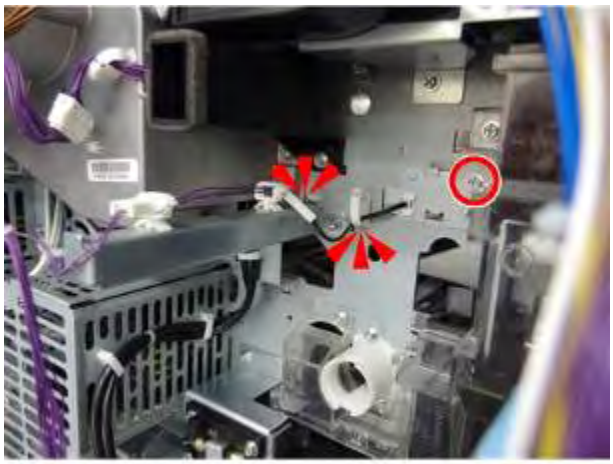
2. Disconnect fan at [A] and [B] (x1, x2).

d1794277

3. Remove fan.

Thermistor Mechatron

- Remove development unit cooling fan: rear. (See “Development Unit Cooling Fan: Rear” in this section.)
- Remove ITB cleaning unit. page 4-173
- Remove ITB/PTR motor. page 4-219



d1804206

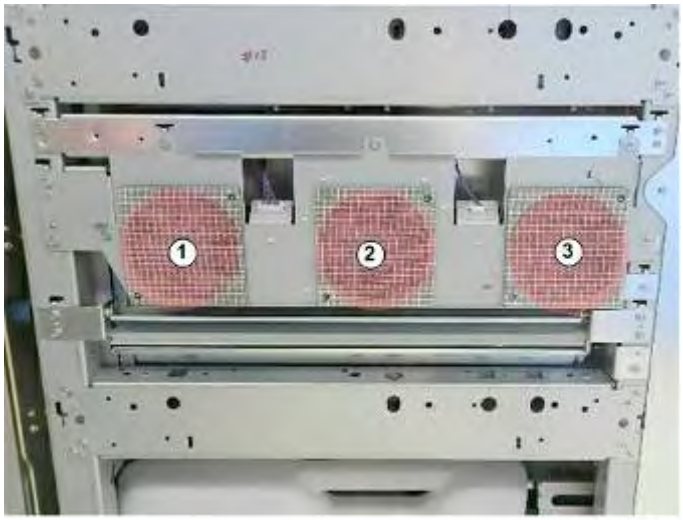
- Remove mechatron bracket (x1, x1, x1).

d1804207

4.21.7 RIGHT COVER FANS

Preparation

1. Remove right cover



d1794280

①	Right Air Intake Fan: Front
②	Right Air Intake Fan: Center
③	Right Air Intake Fan: Rear

d1794281

- Disconnect fans (x2).

d1794282

- Disconnect fan bracket (x5).

d1794283

- Remove bracket (with fans attached).

d1794284

①	Right Air Intake Fan: Front
②	Right Air Intake Fan: Center
③	Right Air Intake Fan: Rear

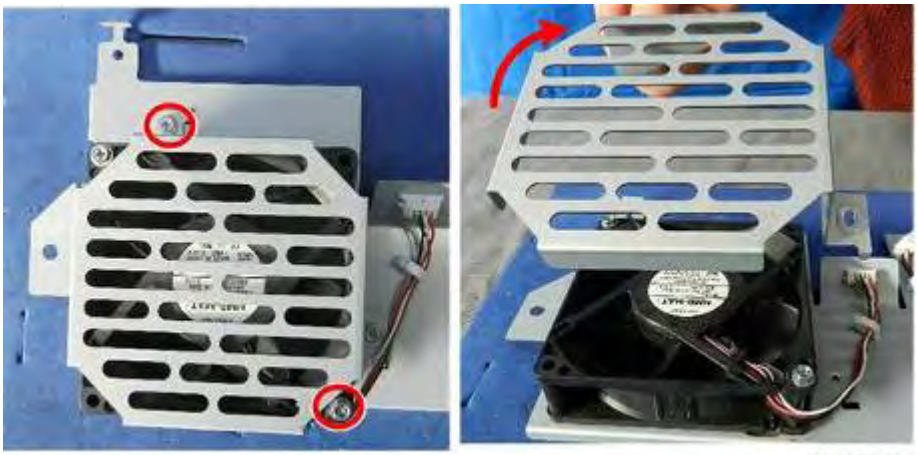
Right Air Intake Fan: Front

1. Disconnect and remove motor (x1, x2).

Right Air Intake Fan: Center

- Disconnect and remove fan (x1,x1, x2).

Right Air Intake Fan: Rear



d1794288

1. Remove cage (x2).

d1794289

2. Disconnect and remove fan (x1, x1, x2).

d1794290

4.22 BOARDS, HDD, BREAKER SWITCH

Here is a list of the boards that can be replaced. Numbers 14 to 18 are difficult to access. Refer to the appropriate sections listed under "Comments".

No.	Board	Location	Comments
1	AC Drive Board	Main Left Side	
2	CGB Power Pack	Main Rear	
3	EDRB	Main Rear	
4	IOB	Main Rear	
5	RYB	Main Rear	
6	BCU	Controller Box	
7	CNB	Controller Box	
8	HDD	Controller Box	
9	IPU Sub Board	Controller Box	
10	IPU-Controller Board	Controller Box	
11	PSU-A	Controller Box	
12	PSU-B	Controller Box	
13	PSU-C	Controller Box	
14	CRB (CIS)	Registration Unit	page 4-41
15	DRB	Registration Unit	page 4-325
16	Paper Separation PP	PTR Unit	page 4-351
17	TDRB	ITB Unit	page 4-188
18	Transfer PP	ITB Unit	page 4-189

4.22.1 MAIN UNIT

AC Drive

Preparation

Remove:

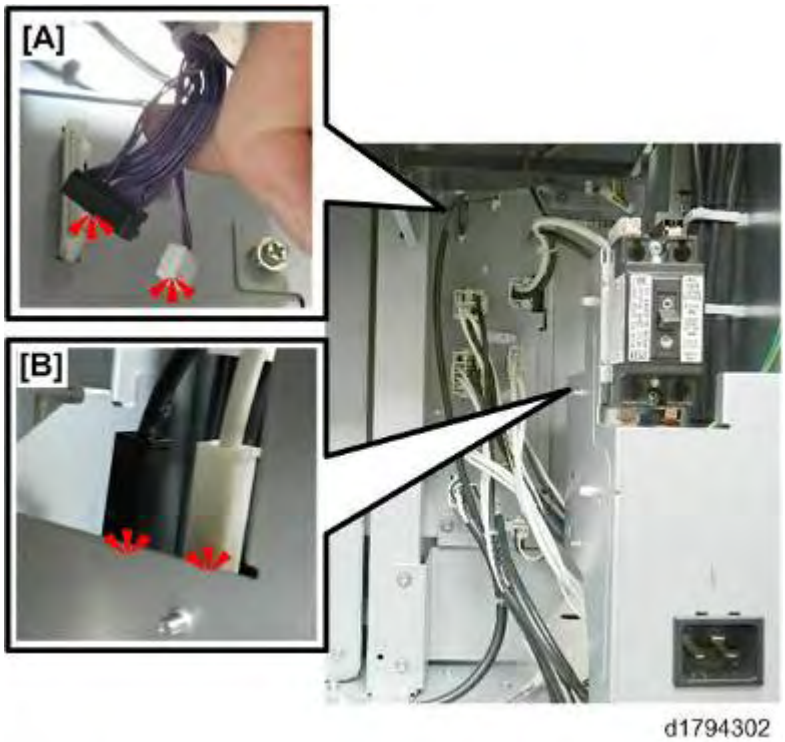
- Rear cover

Important

- Turn the machine off and allow it to cool for at least 10 min. before you remove the AC drive board.
- Avoid touching the heat shield of the board.
- The tube fuses on the board are the ceramic type. You cannot visually inspect a fuse to determine if it has blown.

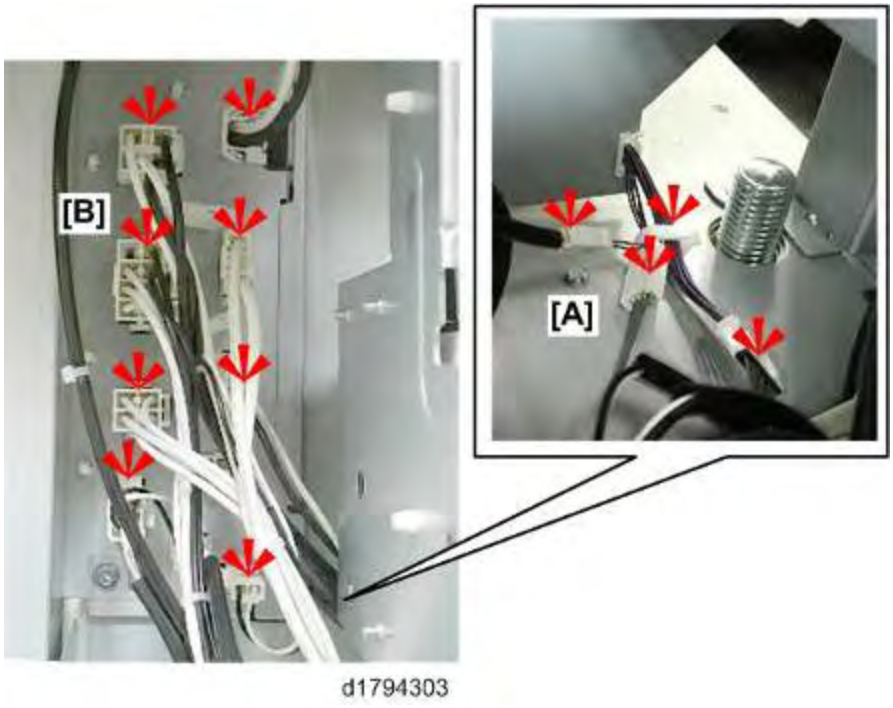
d1794301

- The AC drive board extends from rear to front along bottom left side of the machine.



d1794302

- At the lower left corner, disconnect:
  [A] Harnesses (x2)
  [B] Noise filter (x2(.



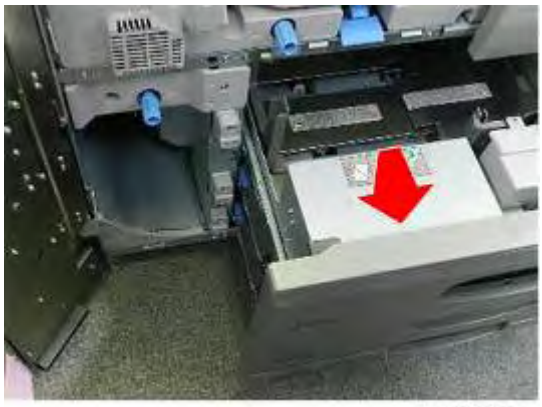
- At the bottom, disconnect harnesses [A] (x1,x3).
- Disconnect back of drive board (x8).

Important

1. Be sure to note which connectors are connected and which are not. The anti-condensation heaters may or may not be connected, depending on ambient temperature and humidity at the work site.

d1794304

- Disconnect back of drive board (x2).

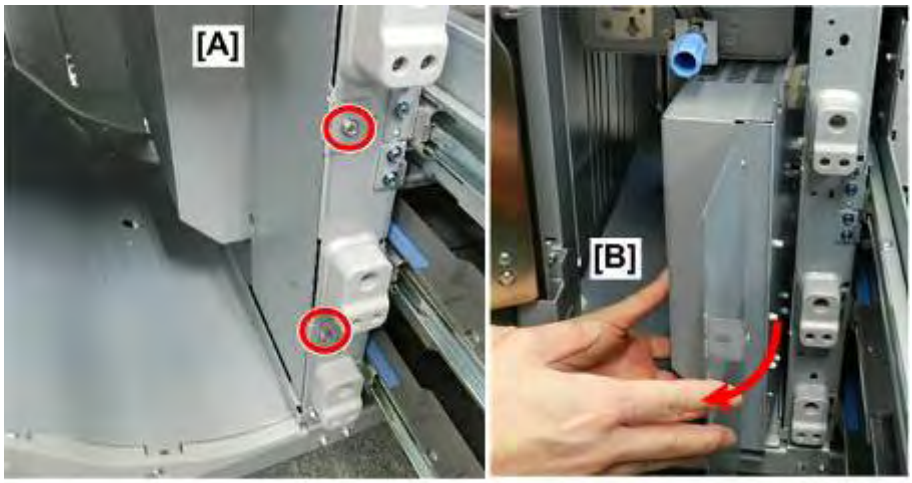


d1794305

- At the front, pull out the paper trays.

d1794306

- Remove cover (x2).



d1794307

- Disconnect front end of drive board [A] (x2).
- Remove AC drive board [B].

d1794308

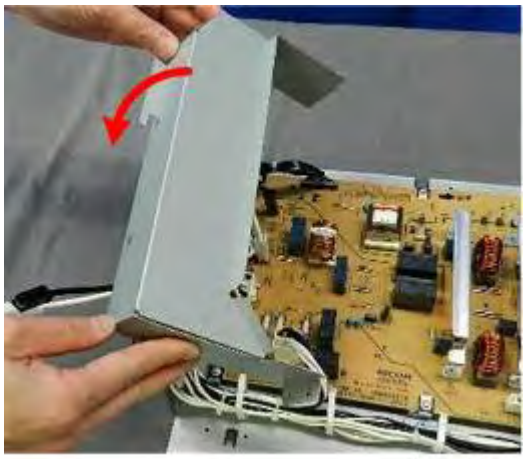
- Disconnect drive board shield cover (x8).

d1794309

- Remove cover [A].
- Disconnect top of cover [B] (x2).

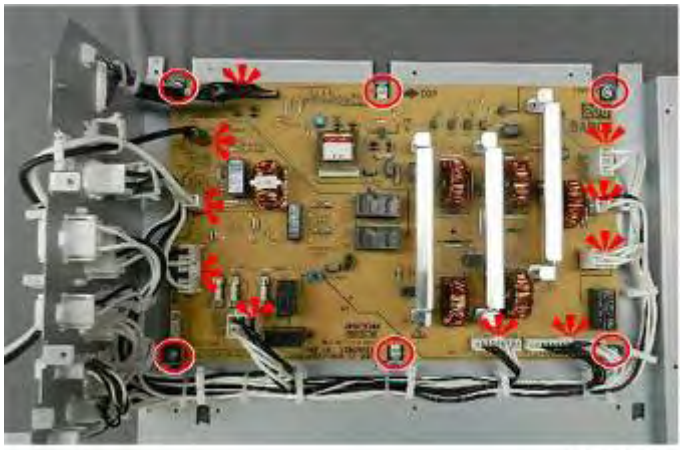
d1794310

- Disconnect top and bottom of cover [A] and [B] (x2).



d1794311

- Remove cover.



d1794312

- Disconnect board (x10, x6).

d1794313

- Remove board. The rated voltage of the board is marked in the upper right corner.

CGB Power Pack

Preparation

- Remove rear cover.

d1794317

- The CGB (Charge Grid Bias) power pack is located at the rear edge of the machine.

d1794318

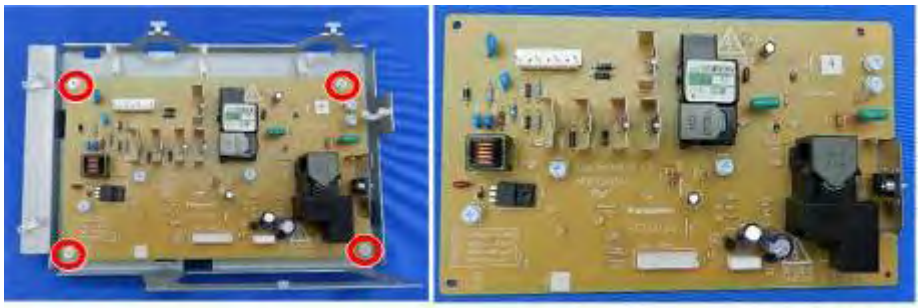
- Disconnect':

  [A] Top of bracket (x2)

  [B] Bottom of bracket (x3, x3).

d1794319

- Pull bracket (with board attached) partially out of the machine.
- Disconnect board (x6, x4).



d1794320

- Separate board from bracket (x4).

EDRB

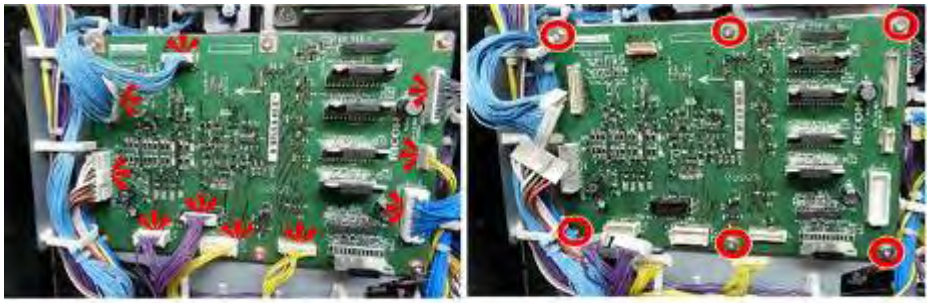
Preparation

Remove:

1. Rear cover
2. Vertical stay

d1794321

- The EDRB is near the center of the back of the machine.



d1794322

- Disconnect board (x10, x6).

d1794323

- Remove board.

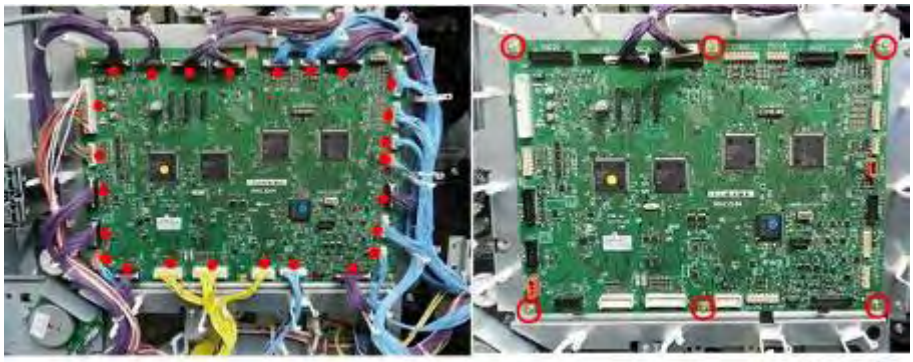
IOB

Preparation

- Open controller box page 4-27
- Rear cover
- Vertical stay

d1794324

1. The IOB is on the back of the machine below the flywheel.



d1794325

2. Disconnect the board (x15, x26).
3. Disconnect the board from its bracket (x6)

d1794293

4. If you are replacing the IOB:
   - Note the positions of the DIP switches on the old board.
   - Set the DIP switches on the new board in the same way. (The switches may be different according to your geographical area.)

RYB (Relay Board)

Preparation

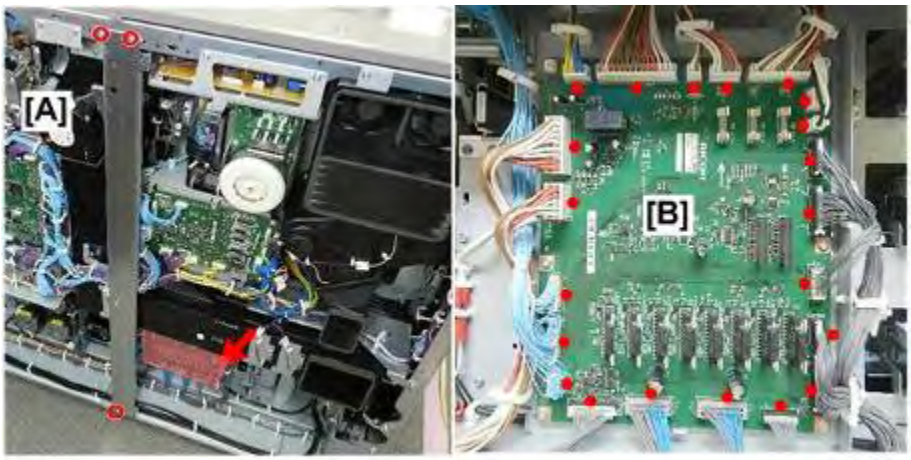
- Open controller box cover

Remove:

1. Rear cover

d1794328

- The RYB is at the bottom of the back of the machine, below the horizontal duct.



d1794329

- Remove vertical stay [A] (x3).
- Disconnect board (x9, x21).

d1794330

- Disconnect bracket (x4).
- Remove bracket (with board attached).

d1794331

- Separate board from bracket (x6).

4.22.2 PSU-A, B, C

Before You Begin

Observe these points when working around the PSU boards in the controller box:

1. Make sure that the machine is switched off and that the machine power cord has been disconnected from its power source.
2. A PSU board generates heat. Switch the machine off and allow it to cool for at least 10 min. before you open the controller box.
3. When moving or working around the board, avoid touching the heat shield.
4. Condensers on the board may retain charge, even after the machine is turned off.
5. Avoid touching soldered connections with bare hands or metal tools.
6. While the board is out of the machine, do not lay it near conductive materials.
7. When a PSU appears damaged, always check the AC drive board for one or more blown fuses.
8. If you determine that the PSU board is defective, check for blown fuses.

PSU-A

Preparation

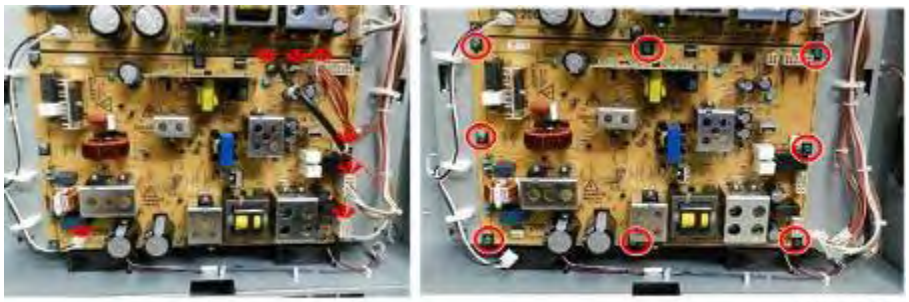
- Remove controller box cover page 4-30

Note

1. A bracket is not attached to a replacement for PSU-A. The board is removed directly from the machine.

d1794332

1. PSU-A is the lower board.



d1794333

2. Disconnect board (x7, x8)

d1794334

3. Remove board.

PSU-B

Preparation

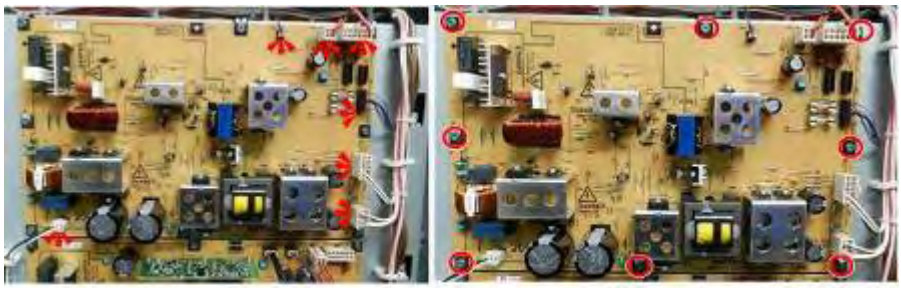
- Remove controller box cover page 4-30

Note

- A bracket is not attached to a replacement for PSU-B. The board is removed directly from the machine.

d1794335

- PSU-B is the upper board.



d1794336

- Disconnect boards (x7, x8)

d1794337

- Remove board.

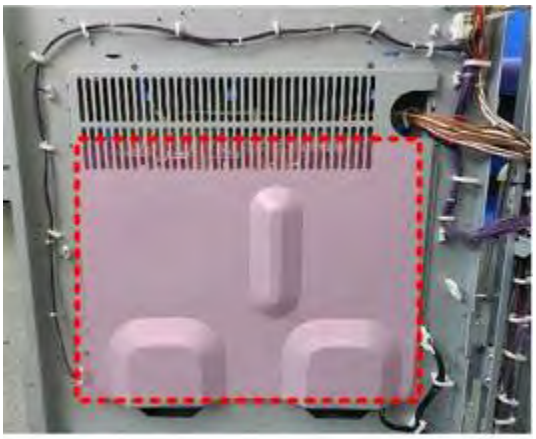
PSU-C

Preparation

1. Open controller box
2. Remove controller box cover.

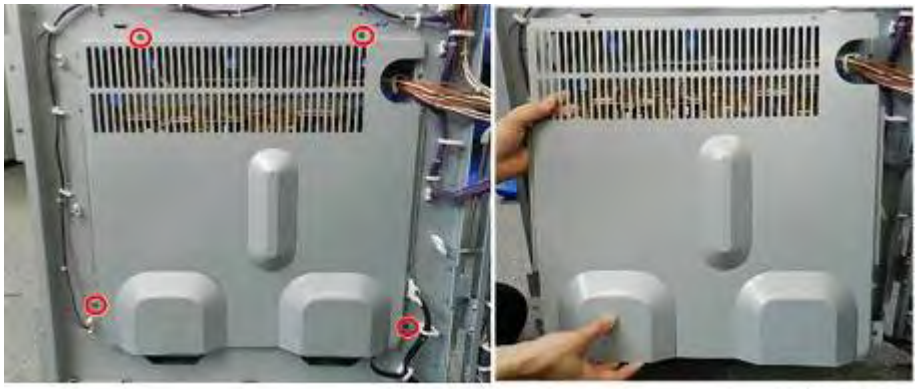
Note

- A replacement for PSU-C is mounted on a large bracket.
- Be sure to remove the harnesses and clamps from the old PSU-C and attach them to the new PSU-C bracket.



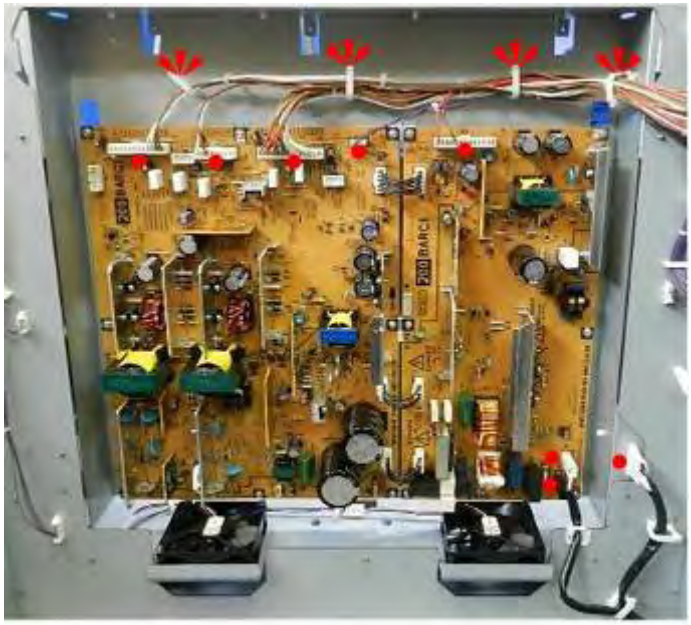
d1794338

- PSU-C is inside the controller box, behind PSU-A and PSU-B and covered by a shield plate
- Remove PSU-A. page 4-555
- Remove PSU-B. page 4-556
- Open the controller box and remove its rear cover.



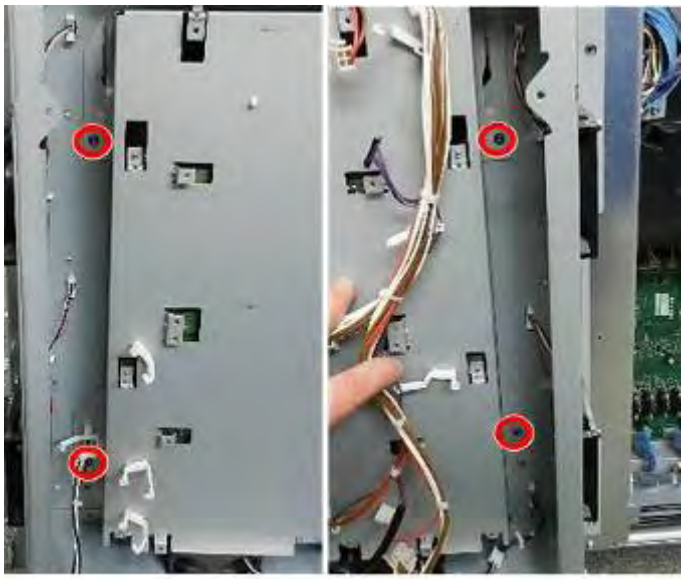
d1794339

- Remove shield plate (x4).



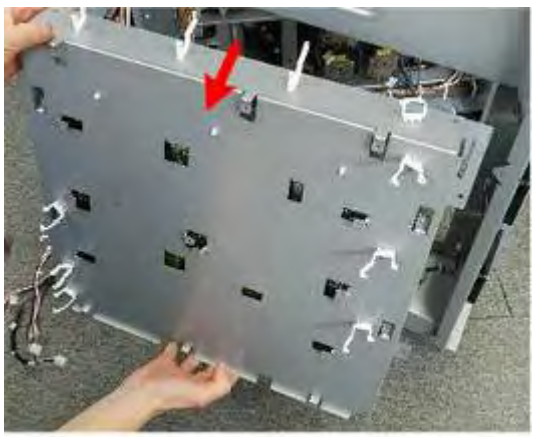
d1794340

- Inside the controller box, disconnect board (x4, x8).



d1794342

- Disconnect bracket on both sides (x4).



d1794343

- Remove bracket (with board attached).

d1794344

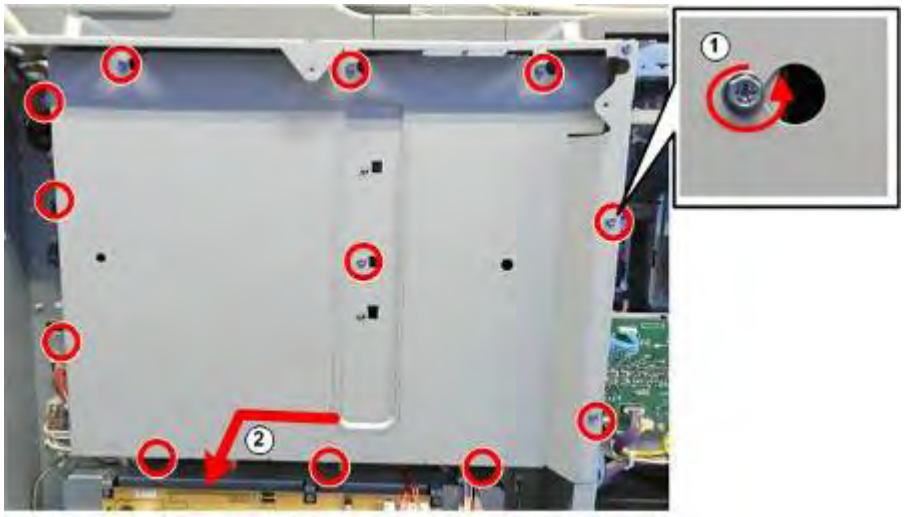
- If you are replacing the board, remove the 15 clamps and lower right harness. You must attach these to the new board bracket.

4.22.3 AROUND THE CONTROL BOARD

Before You Begin

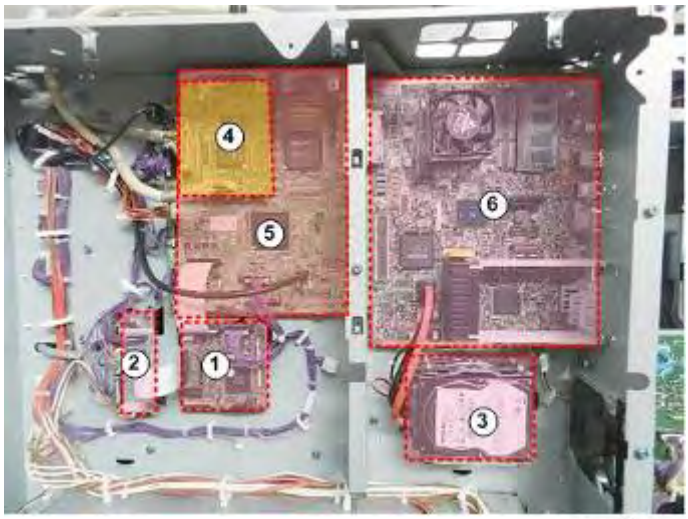
Preparation

1. Remove controller box cover page 4-30



d1792501

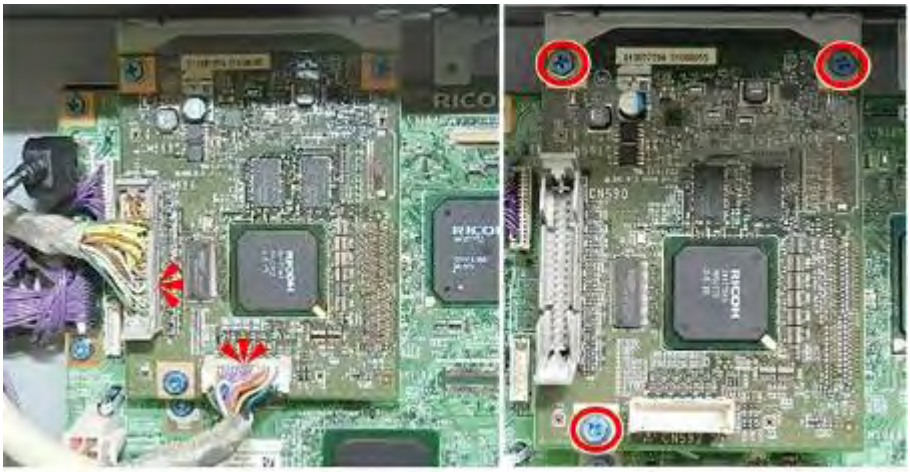
1. Loosen screws of the metal cover (x12).
   - Do not remove the screws.
   - Each screw slides into a larger hole ① when the cover is pushed to the left ②.
2. Slide the cover to the left and then remove it.



d1794345

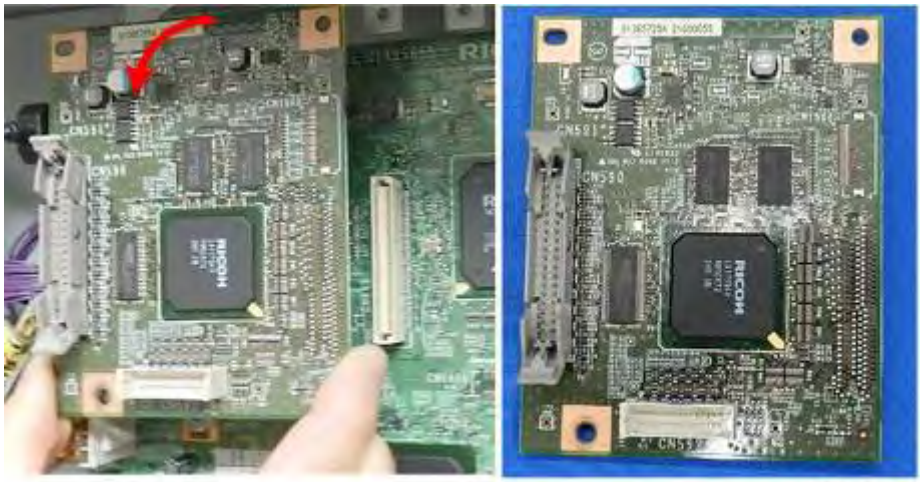
①	BCU
②	CNB
③	HDD
④	IPU Sub Board
⑤	IPU
⑥	Controller Board

IPU Sub Board



d1794356

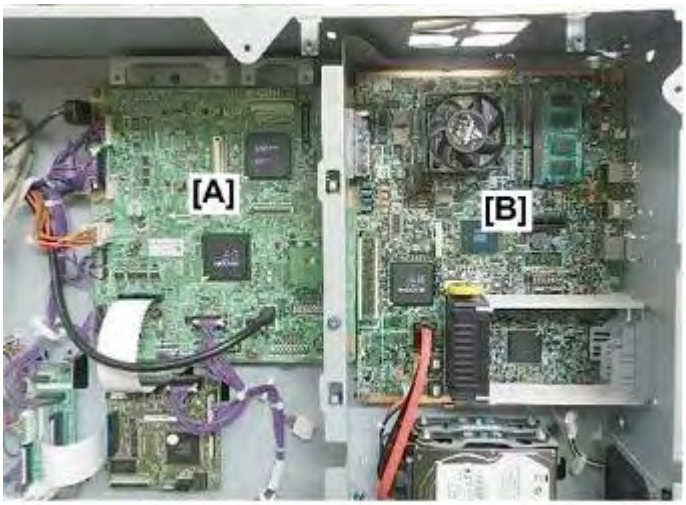
- The IPU sub board resides on the IPU.
- Disconnect the sub board (x2, x3)



d1794357

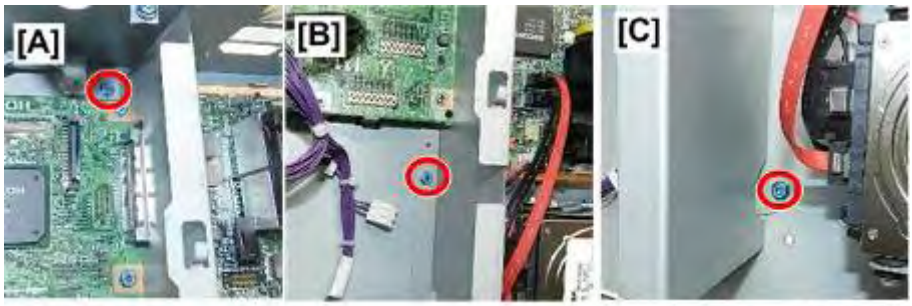
- Remove board.

IPU-Controller Board



d1794359

1. The IPU main board [A] and controller board [B] are separate, connected boards. They are always removed together.



d1794360

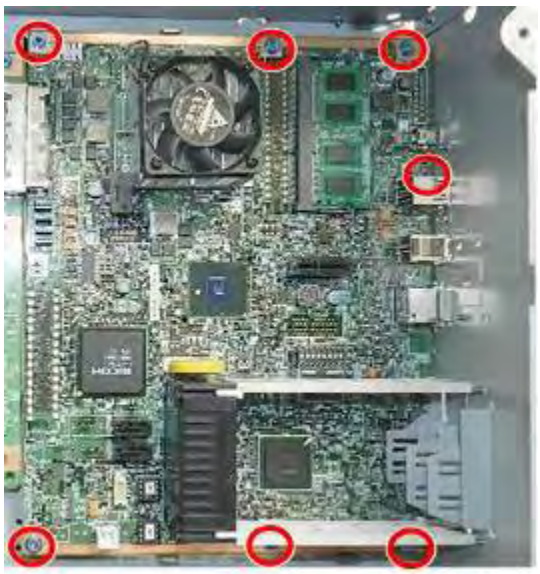
2. First, disconnect partition between the boards:
   [A] IPU upper right corner (x1)
   [B] IPU lower right corner (x1)
   [C] HDD lower left (x1)

d1794361

3. Remove partition [A].
4. Disconnect HDD (x1).

d1794362

5. First, disconnect IPU (x1, x13, x8)



d1794363

6. Disconnect controller board (x7).

d1794364

7. Slowly, remove the connected IPU-Controller board. Do not allow the edge connectors (marked by arrow) to bend.

8. Lay the boards on a flat clean surface.

Note

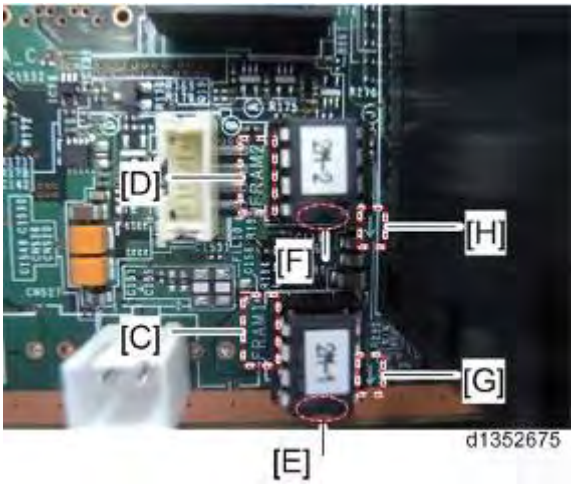
- The controller NVRAMs are located at [A].

9. Separate the boards.

Precautions When Replacing the Controller Board

Two NVRAMs [A] and [B] are on the controller board.

- NVRAM [A] is labeled 2M-1, and NVRAM [B] is labeled 2M-2.
- These NVRAMs are a set.
- When replacing the controller board, remove both NVRAMs, 2M-1 and 2M-2, and then attach them to the new board at the same locations. Failure to do this will cause the machine to issue SC195-00.



- NVRAM 2M-1 is inserted at connector socket [C] labeled FRAM-1. Make sure that the circular notch [E] on the NVRAM is pointing in the direction of arrow [G] embossed on the board.

- NVRAM 2M-1 is inserted at connector socket [D]. Make sure that the circular notch [F] on the NVRAM is pointing in the direction of the arrow [H] embossed on the board.
- If the NVRAMs are installed incorrectly, this could cause both the board and the NVRAMs to short out and cause permanent damage.
- After the board is replaced, check which ESA applications have been installed, and then follow the installation procedures to re-install each application.

BCU

d1794346

- Disconnect and remove the BCU (x2, x2, x2)

d1794347

- If you are replacing the BCU, remove the NVRAM [A], and then install it on the new BCU.

Important

- Pay attention to the direction the circular notch is pointing when you install it. If the NVRAM is installed incorrectly, the machine will display “Please Wait” and then freeze and not boot.

- Turn the machine on.
- Enter the SP mode.
- Do SP5811-004 and enter the manufacturer number of the BCU. If you fail to enter the correct number, the machine will issue SC995-01.
- Do SP5131-001 and select paper size type (0: Japan, 1: NA, 3: EU).
- Do SP5807-001, and then select your area. Failure to do this will cause the machine to return SC995-04.

4.22.4 NVRAM REPLACEMENT

There are three NVRAMs. Two are on the controller board, and one is on the BCU.

Important

- Always touch a metal surface before handling an NVRAM. Static electricity from your hands can damage an NVRAM.

Controller Board NVRAM Replacement

After Replacement of a Defective NVRAM

- You will need the factory settings sheet provided with the machine.
- Turn the power on, enter the SP mode, and then do the factory settings.
- Re-install security settings as required.

NVRAM Upload and Download

1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
2. Output the SMC data (“ALL”) using SP5-990-001.
3. Turn off the main switch.
4. Insert a blank SD card into Slot 2, and then turn on the machine.
5. Upload the NVRAM data to the blank SD card using SP5-824-001 (NVRAM Data Upload).
6. The settings of the following SP codes cannot be copied. Enter the SP mode, make a note of their settings, and then re-enter them manually after the NVRAM has been replaced:
    1. SP5985-001. Enable onboard NIC.
    2. SP5985-002. Enable onboard USB.
7. Turn off the main power switch, and then unplug the AC power cord.
8. Remove the SD card from slot #2.
9. Replace the NVRAM on the controller board with a new one, plug in the AC power cord, and then turn on the main power switch.
10. Do SP5846-051 to copy all address data to the SD card.

11. Turn the machine off, and then unplug it.
12. Remove the SD card with the address book data from Slot 2.
13. Swap the old NVRAMs on the controller board with new ones.

Two NVRAMs [A] and [B] are on the controller board.

- NVRAM [A] is labeled 2M-1, and NVRAM [B] is labeled 2M-2.
- These NVRAMs are a set. When replacing the controller board, remove both NVRAMs, 2M-1 and 2M-2, and then attach them to the new board at the same locations. Failure to do this will cause the machine to issue SC195-00.
- NVRAM 2M-1 is inserted at connector socket labeled FRAM-1. Make sure that the circular notch on the NVRAM is pointing in the direction of arrow embossed on the board.
- NVRAM 2M-1 is inserted at connector socket. Make sure that the circular notch on the NVRAM is pointing in the direction of the arrow embossed on the board.
- If the NVRAMs are installed incorrectly, this could cause both the board and the NVRAMs to short out and cause permanent damage.
- After the board is determine whether the ESA application should be installed, and then follow the procedure to install each application.

1. Make sure that there is no SD card in Slot 2, and then plug in the power cord and turn the machine on.

   Important

   - If the machine returns SC995-02, cycle the machine off and try again.
2. Insert the SD card with the copied NVRAM data in Slot 2.
3. Do SP5825-001 to download the data from the SD card. This requires two or three minutes to complete.
   1. When you see the “Finished!” message, cycle the machine off/on, and then touch [Exit]. Do not turn the machine off.
   2. If SC870-11 (Address Book Data Error) appears, ignore it.
4. Enter the SP mode and manually enter the settings for the SP codes that you recorded in Step 5:
   - SP5985-001. Enable onboard NIC.
   - SP5985-002. Enable onboard USB.

Note

1. After doing a setting if the machine prompts you to cycle the machine off/on, ignore this message and continue until all the settings are done.

5. Turn the machine off and remove the SD card from Slot 2.
6. Turn the machine on.
7. Insert the SD card with the address book data into Slot 2.
8. Do SP5846-052 to restore the address book data.
   - The execution will fail if the settings at Step 16 for SP5985-001 or SP985-002 were not done correctly.
   - If this execution succeeds, the machine will prompt you to cycle the machine off/on.
9. Switch the machine off, and then remove the SD card from Slot 2.
10. Turn the machine on.
11. Enter the SP mode and print another SMC report with SP5990-001, and then compare it with the original SMC report in Step 1 and correct any settings.

Note

- Reset the NVRAM counter (Total counter: 1000, other counters to zero.

12. Execute process control.

Note

- If you see the message “SD Card for Restoration is Required”, the data encryption key must be re-installed.

BCU NVRAM Replacement

After Replacement of a Defective NVRAM

- You will need the factory settings sheet provided with the machine.
- Turn the machine on, enter the SP mode, and then enter the factory settings.

NVRAM Upload and Download

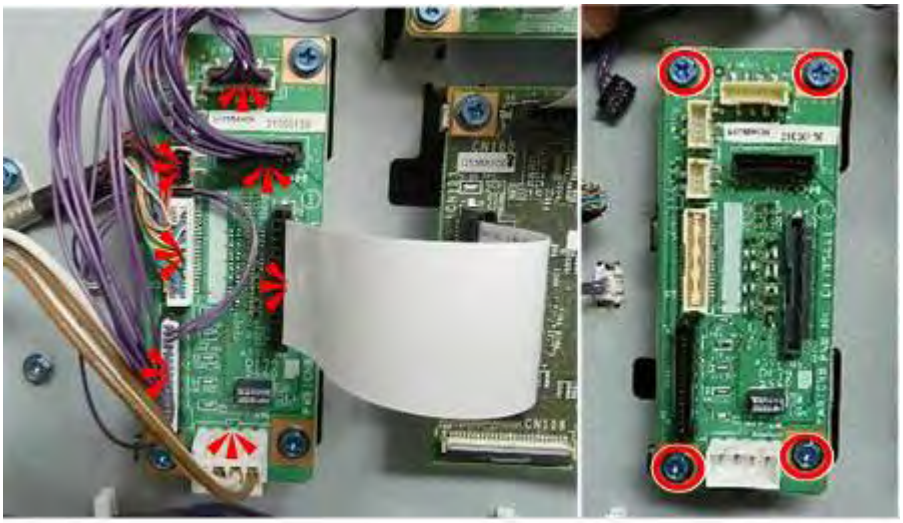
1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
2. Output the SMC data (SP5-990-001) if possible.
3. Turn the main switch off.
4. Install an SD card into SD card in Slot 2, and then turn the machine on.
5. Copy the NVRAM data to an SD card (SP5-824-001) if possible.
6. Turn off the machine, and then unplug the power cord.
7. Replace the NVRAM on the BCU and reassemble the machine.
8. Plug in the power cord, and then turn the main switch on.
9. Select a paper-size type (SP5-131-001), and then select your area with SP5807-001. The machine will return SC995-04 if the area is not set correctly.
10. Enter the serial number of the NVRAM (EEPROM).

Note

- The NVRAM (EEPROM) manufacturer number is different from that set with SP5811-004. For more details, contact your supervisor or support center. If the number is not entered, the machine will return SC195-00.

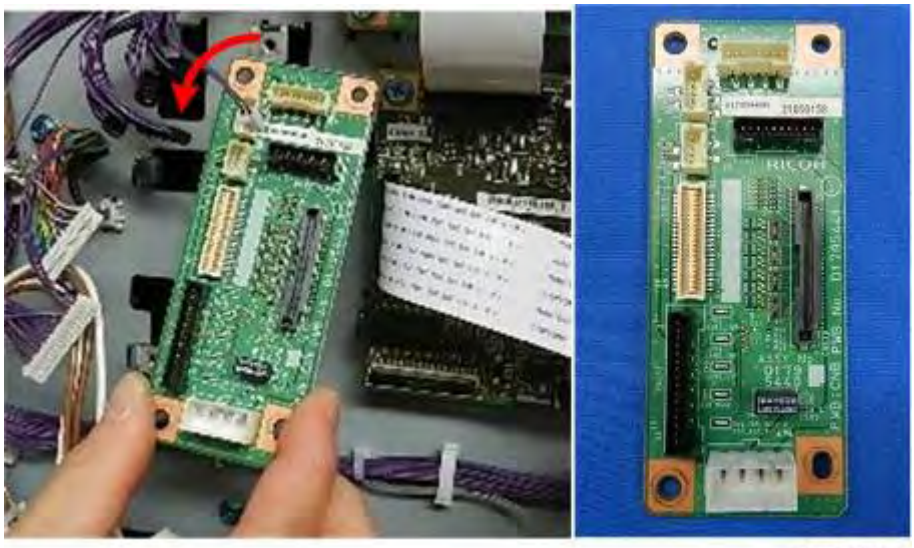
11. Cycle the machine off/on.
12. Copy the data from the SD card to the NVRAM (SP5-825-001) that you copied them to the SD card in Step 5.
13. Turn the main switch off, and then remove the SD card from Slot 2.
14. Turn the main switch on.
15. Specify the SP and UP mode settings.
16. Do the process control self-check.

4.22.5 CNB



d1794348

- Disconnect CNB (x1, x7, x4).



d1794349

- Remove CNB.

4.22.6 HDD

The HDD unit contains two separate disks.

1. Never remove an HDD unit from a machine, or remove an old HDD from the work site without permission of the customer.
2. Before replacing the HDD unit, copy the address book data to an SD card with SP5846-051.
3. The following data will be lost after HDD replacement: Document server documents, Document server addresses, and Stamps.
4. Document server documents and address book data must be re-entered manually after the HDD has been replaced.
5. The HDD unit contains two disks that must always be replaced as a set.

d1794350

- Disconnect HDD [A] (x2).
- Disconnect right side of bracket [B] (x2).

d1794351

- Disconnect bottom and left side [A] (x2).
- Remove bracket (with HDDs attached).

d1794352

- Disconnect upper HDD (x2).

d1794353

- Disconnect top and bottom sides [A] and [B] of the upper HDD (x4).

d1794354

- Remove upper HDD.

d1794355

- Remove lower HDD (x4).

Re-installation

d1794358

- There is a notation on the metal panel to remind you to re-connect the HDD cables correctly: Red over Black.
- Reconnecting these cables incorrectly will cause an error. If this occurs, just switch the machine off and connect them correctly. (The HDD will not be damaged.)

After Installing a New HDD Unit

- Do SP5-832-001 to format the hard disk.
- Do SP5-853-001 to copy the preset stamp data from the firmware to the hard disk
- Do SP5-846-052 to copy back the address book to the hard disk from the SD card to which you have already copied the address book data if possible.
- Turn the main power switch off/on.

Important

1. Make sure the cables are correctly connected on the controller board: Red cable: Upper socket, Black cable: Lower socket.
2. If the connections are reversed, the machine will issue an error at startup. If it occurs just reconnect the HDD correctly and start again. The HDD will not be damaged by such an incorrect startup.

Disposal of HDD Unit

If the customer has any concerns about the security of any information on the HDD, the HDD must remain with the customer for disposal or safe keeping.

1. The HDD may contain proprietary or classified (Confidential, Secret) information.
2. Specifically, the HDD contains document server documents and data stored in temporary files created automatically during copy job sorting and jam recovery. Such data is stored on the HDD in a special format so it cannot normally be read but can be recovered with illegal methods.

Reinstallation

Explain to the customer that the following information stored on the HDD is lost when the HDD is replaced:

- Document server documents
- Fixed stamps
- Document server address book

The address book and document server documents (if needed) must be input again. If the customer is using the Data Overwrite Security, the Data Encryption feature or OCR Scanned PDF, these applications must be installed again.

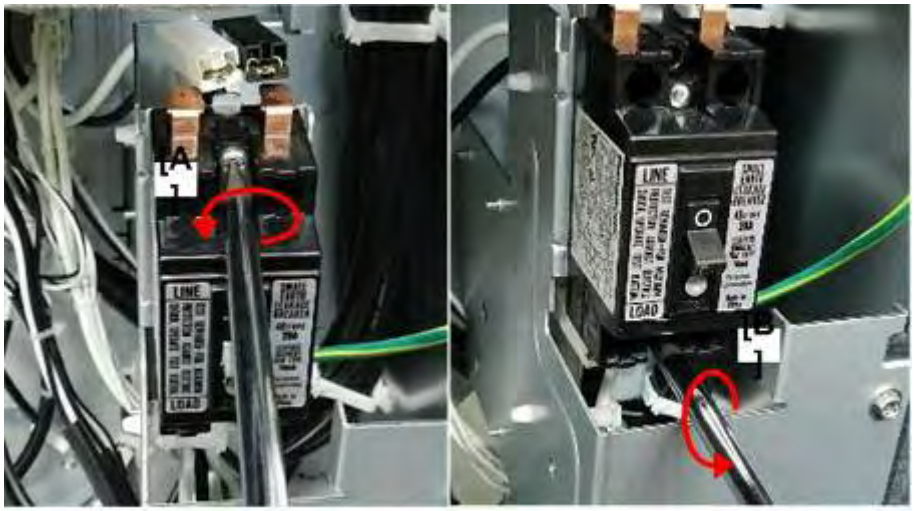
4.22.7 BREAKER SWITCH

Important

1. The ratings for the breaker switch depend on the model: BR-C1a, (15A),
2. BR-C1b (15A), BR-C1c (20A).

d1794314

- Breaker switch [A] is located at the lower left corner of the machine.
- Disconnect at top [B] (x2).



d1794315

- Disconnect switch (x2).

d1794316

- Pull the switch out partially, and then disconnect bottom (x2).

SYSTEM MAINTENANCE REFERENCE

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
8 ~ 9	08/22/2014	Revised the description for Error Code 32

5. SYSTEM MAINTENANCE REFERENCE

5.1 TYPES OF SP MODES

There are nine broad categories of SP codes, identified by group numbers.

Group	Comment
SP1000	**Feed**. Paper feed SP codes: Image position adjustment, roller operation speeds, target fusing temperatures, etc.
SP2000	**Drum**. Drum operation related SP codes: Magnification adjustments, test pattern printing, etc.
SP3000	**Process**. Process control related SP codes, TD sensor initialization, toner draining and fill, process control setting adjustments, process control interval settings, etc.
SP4000	**Scanner**. Scanning operation related SP codes: Main and sub scan magnification adjustments, scanner free run, test pattern printing, LDAP certification, machine security, PM alarm, time setting, memory clear,
SP5000	**Mode**. Machine operation related SP codes: Display settings, counter settings, input and output checks for main machine, service telephone number setting, NVRAM data upload and download, network settings, HDD formatting, IEE802.11 setup, USB setup, UCS setting,
SP6000	**Peripherals**. Peripheral (options) related SP codes for peripheral units (including ADF): Finisher performance settings (folding, stapling, etc.), input and output checks for peripheral units, etc.
SP7000	**Data Logs**. Data log related SP codes: Counters, machine and peripheral PM parts displays, clear PM counters after part replacement, jam detection by location display (original and paper), consumable usage displays (toner),
SP8000	**@Remote**. A standard set of counters used to log more detailed information about machine operation that can be monitored from a remote location (service center).

Group	Comment
SP9000	**DFU**. These SP codes are for “Design and Factory Use” only. These are used by designers for troubleshooting and machine testing and should never be used in the field by service technicians without specific instructions from design centers.

The following notations are used in the SP mode tables.

Notation	What it means
[range/step]	Example: [–9 to +9/0.1 mm] The default setting can be adjusted in 0.1 mm steps in the range ±9. **Note**: The default setting for each SP mode is shown on the screen in the "Initial" box immediately below the entry box.
DFU	Denotes "Design or Factory Use". Do not change this value.
Japan Only	The feature or item is for Japan only. Do not change this value.
LEF	Long Edge Feed
SEF	Short Edge Feed

5.2 SERVICE PROGRAM MODE

See "Appendices" for Service Program Mode.

5.3 UPDATING THE FIRMWARE

5.3.1 SOFTWARE UPDATE

Software Update Procedure

SD cards are used to update the software and to back up important data. Here is a list of the firmware modules that can be updated or restored from an SD card:

1. GW controller software
2. BCU software
3. LCDC (operation panel) software
4. Network Sys (network) software
5. Web Sys (Web Image Monitor)
6. Document Server software
7. NFA (Net File) software
8. Printer application software
9. Scanner application software
10. DESS (encryption module) software

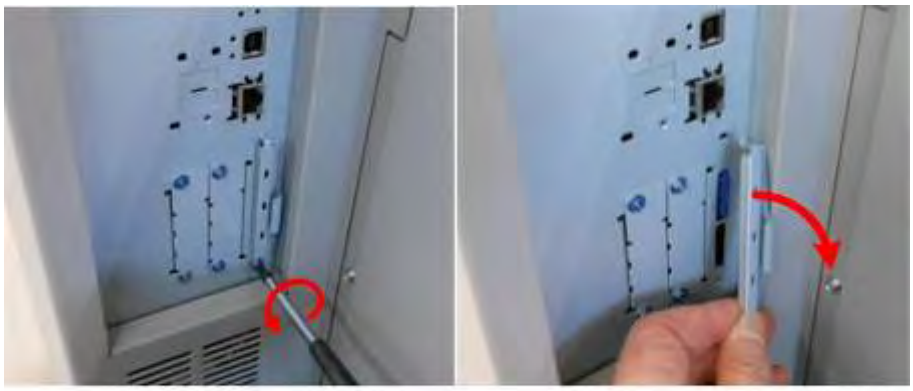
Important

- Never connect or remove an IC card or SD card with the machine power turned on.
- Never turn the power off while the machine is downloading data from an IC card or SD card.
- The IC cards and SD card are precision items. Use them carefully.
- Never store IC cards or SD cards in a location where they are exposed to high temperature, high humidity, or direct sunlight.
- Never bend an IC card or SD card, scratch it, or expose it to strong vibration.
- Before uploading data to an SD card, always confirm that its write-protect switch is off.

Doing the Software Update Procedure

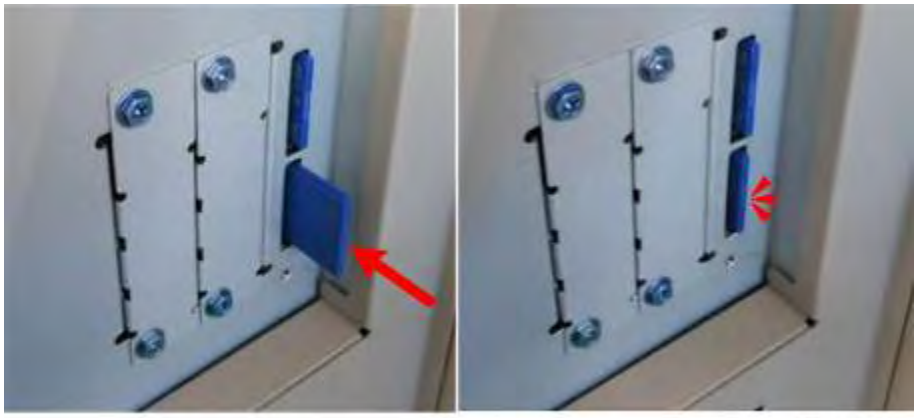
An SD card with the software downloaded to it is necessary for this procedure.

- Turn the main switch off.



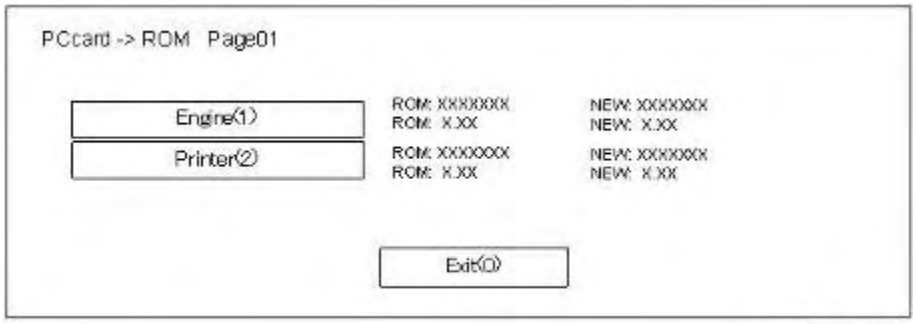
d1791200

- Remove the SD card slot cover [A] (x 1).



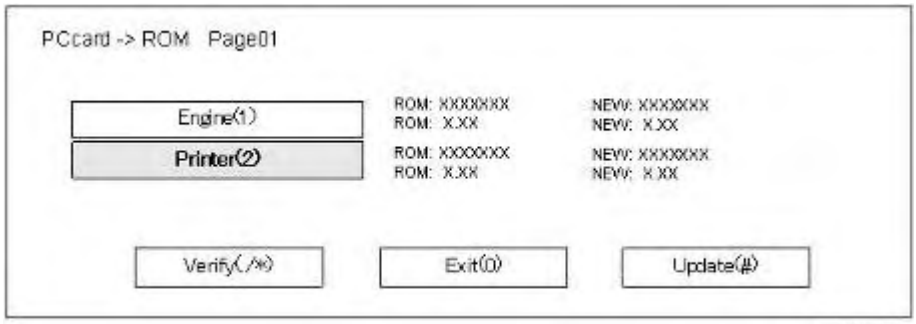
d1791213

- Hold the SD card (the surface with printing must be away from the front of the machine), and insert it into Slot 2.
- Turn the main power switch on.



d1791301

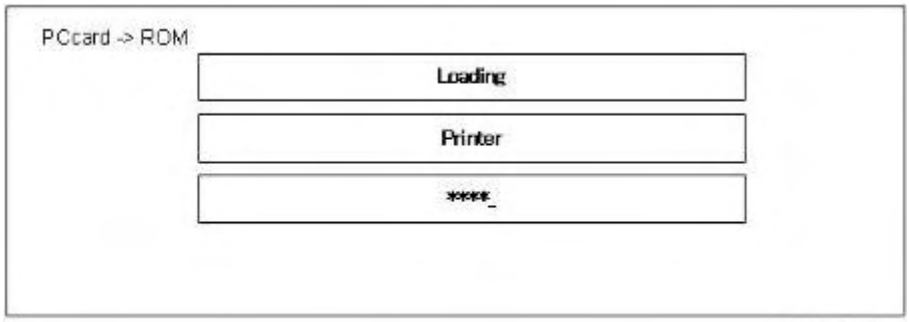
- If the SD card contains more than one software application, the screen will be almost the same. The screen above shows that the SC card contains two applications: "Engine" and "Printer".



d1791302

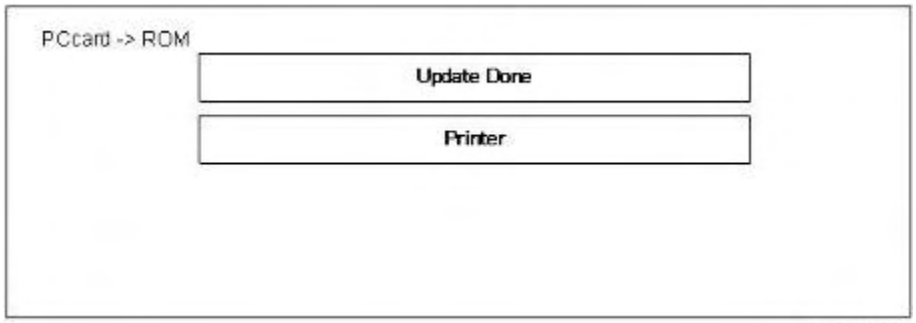
- To select the item for upgrade, touch the selection on the touch panel, or push the corresponding key on the 10-key pad (1 to 5) of the operation panel. The number in parentheses tells you which key to push. When you make a selection, the [Verify(./*)] and [Update(#)] buttons come on the screen.
  1. If you push [Exit] (or the [0] key), you go back to the usual operation screen.
  2. Push the [Start] key on the operation panel to select and download all the options shown on the screen.
  3. Push the [Clear] key on the operation panel if you want to cancel your selections and make new ones.
  4. "ROM": This is the number and other version information of the ROM firmware installed in the machine at this time.
  5. "NEW": This is the number and other version information of the firmware on the SD card.
- With the selected items shown in reverse color, push the [Update] button or the [#] key on the operation panel to start the update.

  After you push [Update]:



d1791303

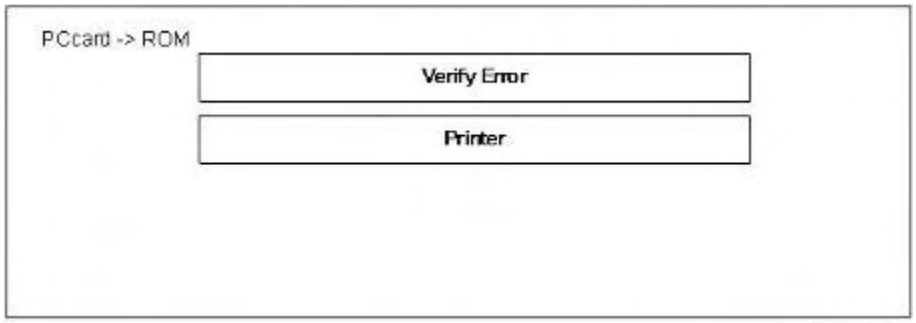
  1. The middle bar shows the name of the module that the machine updates at this time. (The example above shows that the machine updates the "Printer" module at this time.)
  2. The bottom bar is a progress bar. The "_" marks in the progress bar are replaced by "*" marks. This progress bar cannot be displayed during the firmware update for the operation panel. But, the LED of the [Start] key on the operation panel changes from red to green to show that the update of the operation panel firmware continues.
  3. When the update is completed, you will see this screen.



d1791304

After the firmware update, you will see "Update Done" in the first bar. The name of the module in the bottom bar is the name of the last module that was updated (only the name of the last module is shown, if several modules were been updated).

- Turn the power off and on. Then, select the items that you updated, and then push the [Verify] button. This is to check that the modules were updated correctly.



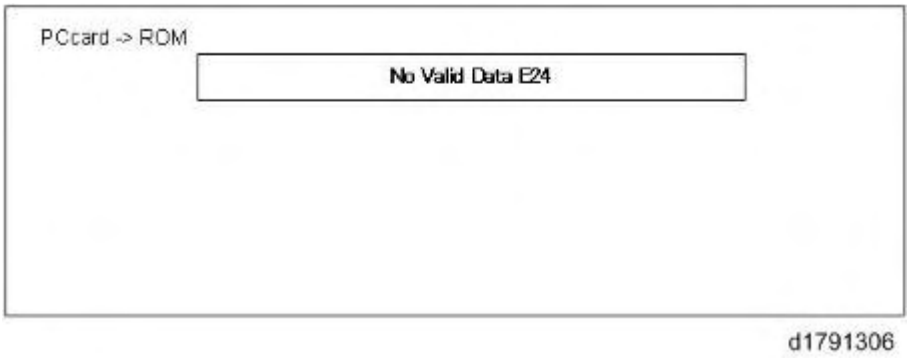
d1791305

- If you see "Verify Error" in the first bar on the screen, then you must do the procedure again for the module shown in the bottom bar.

Note

  - The "Verify" procedure is not necessary but it is strongly recommended.
- After the firmware is correctly updated, turn the main power switch off.
- Push the SD card in a small distance to release it, then pull it out of the slot.
- Turn the main power switch on, and check that the machine operates correctly.

Errors During Firmware Update



If an error occurs during a download, an error message will appear. The error code consists of the letter "E" and a number ("E20", for example).

Error Message Table

No.	meaning	Solution
20	Cannot map logical address	Make sure the SD card is installed correctly, or use a different SD card.
21	Cannot access memory	HDD connection not correct, or replace hard disk.
22	Cannot decompress compressed data	The ROM data on the SD card is not correct, or data is damaged.
23	Error occurred when ROM update program started	Controller program defective. If the second attempt fails, replace the controller board.
24	SD card access error	Make sure the SD card is installed correctly, or use a different SD card.
30	No HDD available for stamp data download	HDD connection not correct or replace hard disks.
31	Data incorrect for continuous download	Install the SD card with the remaining data necessary for the download, then re-start the procedure.

⇒

⇒ 32	Machine power was turned off and the update was interrupted. When the machine power was turned on to resume the update the SD card slot was empty or was inserted with an SD card containing different firmware.	Repeat the update procedure by inserting the SD card containing the firmware requiring the update.
33	Incorrect SD card version	The ROM data on the SD card is not correct, or data is damaged.
34	Module mismatch - Correct module is not on the SD card	The data on the SD is not correct. Get the correct data (Japan, Overseas, OEM, etc.) then install again.
35	Module mismatch – Module on SD card is not for this machine	SD update data is not correct. The data on the SD card is for a different machine. Get the correct data then install again.
36	Cannot write module – Cause other than E34, E35	SD update data is not correct. The data on the SD card is for a different machine. Get the correct data then install again.
40	Engine module download failed	Replace the data for the module on the SD card and try again, or replace the BCU board.
42	Operation panel module download failed	Replace the data for the module on the SD card and try again, or replace the LCDC.
43	Stamp data module download failed	Replace the data for the module on the SD card and try again, or replace the hard disk.
44	Controller module download failed	Replace the data for the module on the SD card and tray again, or replace the controller board.
50	Electronic confirmation check failed	SD update data is not correct. The data on the SD card is for a different machine. Get the correct data then install again.

Updating the LCDC for the Operation Panel

- Use this procedure to update the LCDC (LCD Control Board).
- Turn the copier main switch off.
- Put the SD card into slot 2.
- Turn the copier main switch on.
- Stop until the card utility screen is displayed.
  After approximately 10 seconds, the initial screen opens in English.
- Touch [Opepanel.DOM].
- Touch [UpDate(#)] to start the update.
  While the data downloads, the operation panel goes off.
  The LED on the [Start] key flashes red at 1/2 second intervals for approximately 6 minutes.
  When the update is completed, the [Start] key starts to flash at 1-second intervals.
- Turn the copier main power switch off, remove the SD card, then turn the copier on again.

Downloading Stamp Data

After you replace or format the HDD, download the stamp data from the controller firmware to the hard disk.

1. Go into the SP mode.
2. Select SP5853 then press "Execute".
3. Obey the instructions on the screen to complete the procedure.

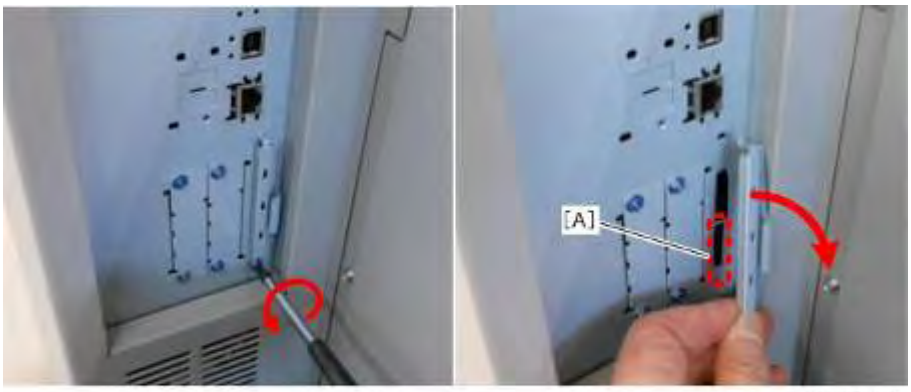
5.4 UPLOADING/DOWNLOADING NVRAM DATA

5.4.1 UPLOADING NVRAM DATA TO AN SD CARD

Before you begin, please note:

- Uploading NVRAM contents to an SD card will fail if the machine serial number of the machine is not registered with **SP5811**.
- The machine serial number is set at the factory before shipping.
- NVRAM data can be uploaded from several machines and stored on the same SD card because a unique filename is created automatically for each machine.

1. Enter the SP mode and do **SP5990-2** to print an SMC report.
   - Always print an SMC report before uploading NVRAM data, just in case the download of the NVRAM data fails.
   - If the download fails, you can use the report to re-enter the SP and UP settings manually.
2. Turn the machine off.



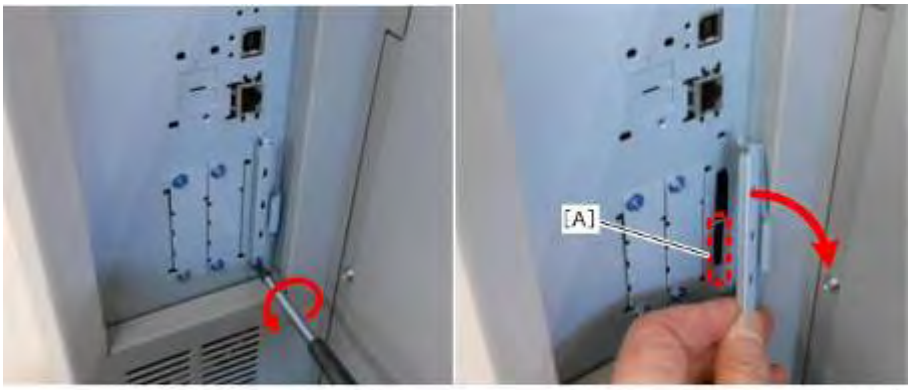
d1790128

- Remove the SD slot cover.
- Insert the SD card in Slot 2 [A].
- Turn the machine on.
- Enter the SP mode and do **SP5824** (NVRAM Data Upload).
- Touch [EXECUTE] on the operation panel to start the upload.
  - Data uploaded from NVRAM is stored in a file in the NVRAM folder created on the on the card: NVRAM folder> D179*.nv
    where D179*.nv is the number of the machine entered at the factory before shipping. The number will be unique for each machine.
  - If this upload is done with the NVRAM folder and file from a previous upload is stored on the SD card, the folder and file will be overwritten. (A new directory and file are not created.)

5.4.2 DOWNLOADING NVRAM DATA FROM AN SD CARD

Before you begin, please note:

- Downloading NVRAM data from an SD card may fail if the SD card is defective.
- If downloading NVRAM data from an SD card fails, just repeat the procedure.
- If the second attempt to download from the SD card fails, then you must enter the SP and UP settings manually from the SMC report you printed before uploading the NVRAM data to the SD card.
- Turn the machine off.



d1790128

- Remove the SD slot cover.
- Insert the SD card that holds the NVRAM data in Slot 2 [A].

  Important

  - The machine number included in the filename of the file on the SD card must match the number of the machine.
- Turn the machine on.
- Enter the SP mode and open **SP5825**.
- Touch [EXECUTE]. The download executes.
- When the prompt that tells you that the operation has completed and that the machine must be re-booted, touch [Exit].
- Exit the SP mode and remove the SD card.
- Cycle the machine off/on.

5.5 ADDRESS BOOK UPLOAD/DOWNLOAD

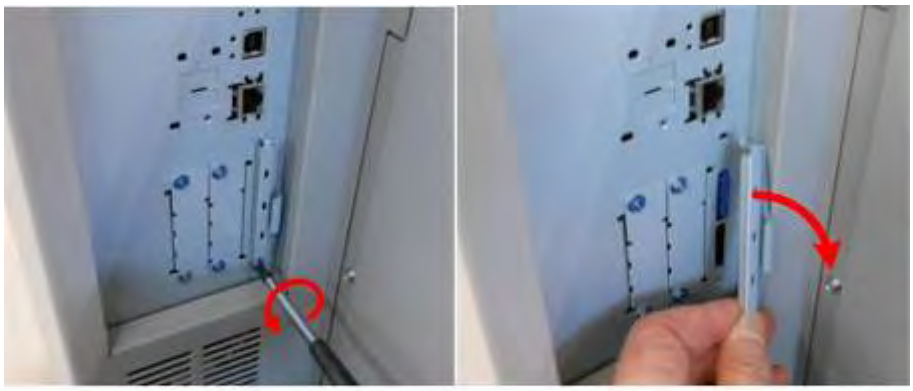
5.5.1 INFORMATION LIST

The following information is possible to be uploaded and downloaded.

- Registration No.
- User Code
- E-mail
- Protection Code
- Group Name
- Key Display
- Select Title
- Folder
- Local Authentication
- Folder Authentication
- Account ACL
- New Document Initial ACL
- LDAP Authentication

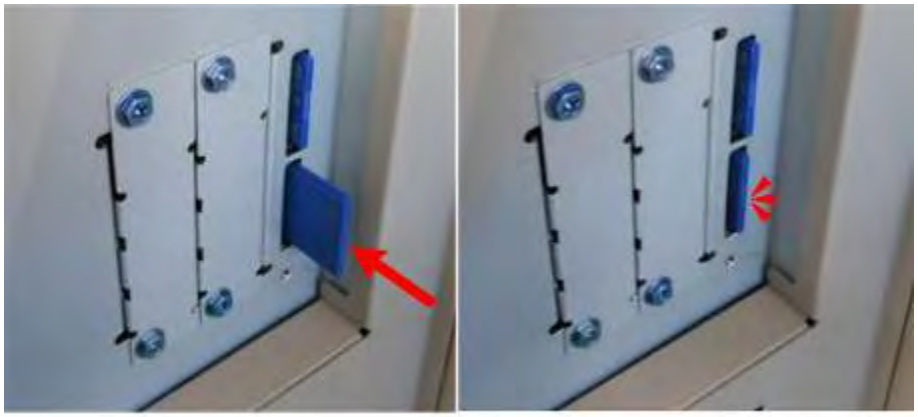
5.5.2 DOWNLOAD ADDRESS BOOK

- Prepare a formatted SD card.
- Make sure that the write-protection on the SD card is off.
- Turn off the main power switch of the main machine.



d1791200

- Remove the SD slot cover (x 1).



d1791213

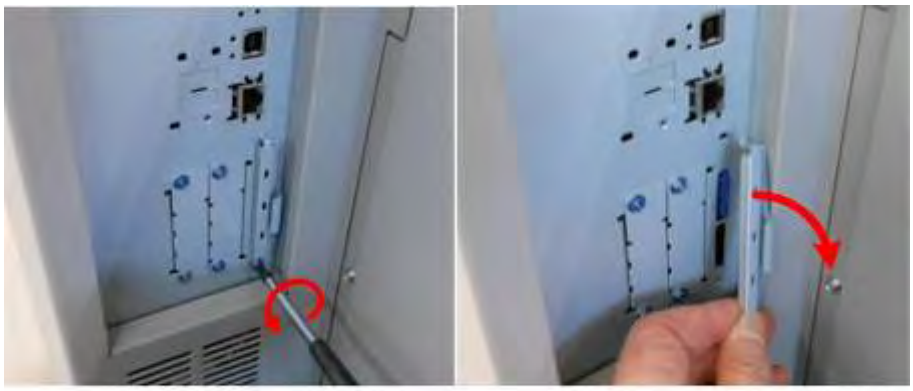
- Insert an SD card into Slot 2.
- Turn the machine on.
- Enter the SP mode.
- Do **SP5846-051** (Backup All Addr Book).
- Exit the SP mode, and then turn the machine off.
- Remove the SD card form Slot 2.
- Re-attach the SD card slot cover.

Note

1. If the capacity of SD card is not enough to store the address book data, an error message is displayed.
2. Handle the SD with card.
3. Never remove an SD card with address book information from the work site.

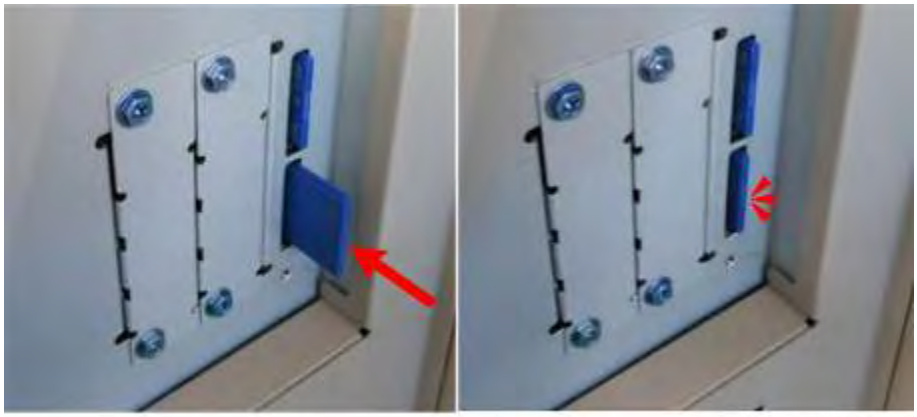
5.5.3 UPLOAD ADDRESS BOOK

- Turn the machine off.



d1791200

- Remove the SD slot cover [A] (x 1).



d1791213

- Insert the SD card that holds the address book data into Slot 2.
- Turn the machine on.
- Enter the SP mode.
- Do **SP5846-052** (Restore All Addr Book).
- Exit the SP mode, and then turn the machine off.
- Remove the SD card from Slot 2.
- Re-attach the SD slot cover.

Note

  - The counter in the user code information is initialized after uploading.
  - Administrator and supervisor related information can be neither downloaded nor uploaded.
  - If there is no address book data on the SD card, the machine will return an error message.

5.6 CAPTURING THE DEBUG LOGS

5.6.1 OVERVIEW

With this feature, you can save debug logs that are stored in the machine (HDD or operation panel) on an SD card. This function allows the Customer Engineer to save and retrieve error information for analysis. The Capturing Log feature saves debug logs for:

- Controller
- Engine
- Operation panel

Important

- In older models, a technician enabled the logging tool after a problem occurred. After that, when the problem had been reproduced, the technician was able to retrieve the debug log.
- However, this new feature saves the debug logs whenever a problem occurs, and then this log can be saved to an SD card.
- You can retrieve the debug logs with an SD card without a network.
- Analysis of the debug log is effective for problems caused by the software. Analysis of the debug log is not valid for the selection of defective parts or problems caused by hardware.

Types of debug logs that can be saved

Type	Storage Timing	Destination (maximum storage capacity)
Controller debug log (GW debug log)	1. Saved at all times	HDD (4 GB). Compressed when written to an SD card from the HDD (from 4 GB to about 300 MB)
Engine debug log	1. When an engine SC occurs 2. When paper feeding/output stop by jams 3. When the machine doors are opened during normal operation	HDD (up to 300 times)

Type	Storage Timing	Destination (maximum storage capacity)
Operation panel debug log	▪ When a controller SC occurs ▪ When saving by manual operation with the Number keys and the Reset key (Press “Reset”, “0”, "1” and “C”(hold for 3 seconds)) ▪ When the operation unit detects an error ▪ When the operation panel detects an error	Operation panel (400 MB /Up to 30 times) When updating the firmware for the operation panel, the debug logs are erased.

Debug logs are not saved when:

- Memory is being erased
- Data encryption equipment is being installed
- Firmware configuration is being changed
- There is a power outage (power cord disconnected accidentally)
- The machine is shutdown normally with the power switch and data write to the HDD cannot be completed. For example, when shutdown starts immediately after a paper jam occurs or the front door is opened or closed, the machine needs about 5 sec. to save the debug log after the machine stops completely.
- Power supply to the HDD is off because of energy saving (engine OFF mode /STR mode)

Operation Log Security

The following operation logs related to security are never saved.

- User ID
- Password
- IP address
- Telephone number
- Encryption key
- Transition to SP mode

  The following operation logs are never saved.
- Number keys (0 to 9) on the operation panel
- Soft keyboard on the touch panel display
- External keyboard

5.6.2 RETRIEVING DEBUG LOGS

Retrieve debug logs to identify the date of occurrence and details about problems.

- Analysis of the debug log is effective for problems caused by the software.
- Analysis of the debug log cannot identify defects in parts or problems caused by hardware.

Procedure for Retrieving the Debug Log

d1791225

- Insert the SD card into the slot on the right edge of the operation panel.
- Enter SP mode.
- Set the start date of the log with **SP5857-101**.
  - Enter the date in the format yyyymmdd where yyyy is the year, mm the month, and dd the day.
  - For example, for March 28, 2013 you would enter "20130328"
  - Enter a date 72 hours before the problem occurred.
- Set the end date of the log with **SP5857-102**.
  - Use the same format (yyyymmdd) that you used to enter the start date.
  - For example, for March 31, 2013 you would enter "20130331".
- Next, do **SP5-857-103** to retrieve the debug log data and store it onto the SD card.
- When the transfer is finished, the machine will display "Completed" on the operation panel.

Important

- The length of time needed to transfer the debug log data can be affected by the type and format of the SD card. Formatting the SD card with Panasonic SD Formatter (freeware) is recommended.

The approximate time required for the transfer of the following debug logs are:

- Controller (GW): 2 to 20 min.
- Engine debug log: 2 min.
- Operation: 2 to 20 min.
- Make sure that the SD card access LED is off, then remove the SD card.

- Make sure that the SD card access LED is off, then remove the SD card.
  If you see the "Failed" message, remove the SD card, cycle the machine off/on, and then repeat this procedure from Step 2.

Debug logs are saved with the following file names.

Debug Log	Filename Format
Controller(GW)	/LogTrace/machine no./watching/yyyymmdd_hhmmss_unique ID.gz
Engine	/LogTrace/machine number/engine/yyyymmdd_hhmmss.gz
Operation Panel	/LogTrace/machine no./opepanel/yyyymmdd_hhmmss.tar.gz

TROUBLESHOOTING

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

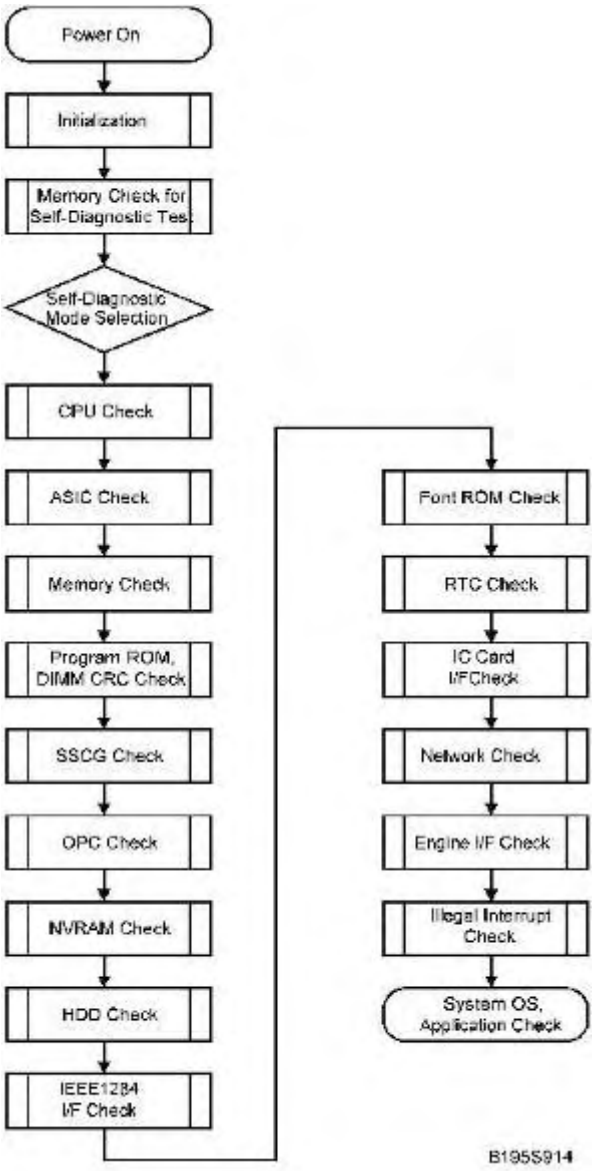
6. TROUBLESHOOTING

6.1 SELF-DIAGNOSTIC MODE

6.1.1 SELF-DIAGNOSTIC MODE AT POWER ON

As soon as the main machine is powered on, the controller waits for the initial settings of the copy engine to take effect and then starts an independent self-diagnostic test program. The self-diagnostic test follows the path of the flow chart shown below and checks the CPU, memory, HDD, and so on. An SC code is displayed in the touch panel if the self-diagnostic program detects any malfunction or abnormal condition.

6.1.2 SELF-DIAGNOSTIC TEST FLOW



6.1.3 DETAILED SELF-DIAGNOSTIC MODE

In addition to the self-diagnostic test initiated every time the main machine is powered on, you can set the machine in a more detailed diagnostic mode manually in order to test other components or conditions that are not tested during self-diagnosis after power on.

6.1.4 EXECUTING DETAILED SELF-DIAGNOSIS

Follow this procedure to execute detailed self-diagnosis.

- Switch off the machine.
- Hold down [#], press and hold down [./*], and then while pressing both keys at the same time, switch on the machine.
  You will see "Now Loading" on the touch-panel, and then you will see the results of the test.
  A report is printed every time a detailed self-diagnostic test is executed, whether errors were detected or not.

6.2 SC CODE DESCRIPTIONS

6.2.1 SUMMARY

There are 4 levels of service call conditions.

Level	Definition	Reset Procedure
A	To prevent damage to the machine, the main machine cannot be operated until the SC has been reset by a service representative (see the note below).	Enter SP mode, use SP 5810, touch [Execute], and then turn the main power switch off and on.
B	SCs that disable only the features that use the defective item. Although these SCs are not shown to the user under normal conditions, they are displayed on the operation panel only when the defective feature is selected.	Turn the operation switch or main switch off and on.
C	The SC history is updated. The machine can be operated as usual.	The SC will not be displayed. Only the SC history is updated.
D	Turning the main switch off then on resets SCs displayed on the operation panel. These are re-displayed if the error occurs again.	Turn the operation switch off and on. Also see below.

When a Level "D" SC code occurs

When a Level D SC occurs, a screen opens on the operation panel to tell the operator:

- An error occurred
- The job in progress will be erased
- The machine will reboot automatically after approximately 30 seconds.

The operator can wait until the machine reboots automatically or touch "Reset" on the screen to reset the machine immediately and go back to the copy screen.

If the operator does not touch "Reset"

The next message tells the operator that the machine will reset automatically and that the previous job was lost and must be started again. After reading the message, the operator touches "Confirm" on the screen. The next screen shows the number and title of the SC code, and stops until the operator turns the machine off and on.

If the operator touches "Reset"

If the operator touches "Reset" to bypass the 30-second interval for the machine to reboot, the machine reboots immediately and the operation panel displays the copy screen.

Important

- Do not try to use the operation panel during an automatic reboot.
- If the Remote Service System is in use, the SC code is sent immediately to the Service Center.

6.2.2 SC CODE DESCRIPTIONS

Here are some important points to keep in mind when working with the SC codes:

- If a problem concerns a circuit board, disconnect and reconnect the connectors and then test the machine. Often a loose or disconnected harness is the cause of the problem. Always do this before you decide to replace the PCB.
- If a motor lock error occurs, check the mechanical load before you decide to replace the motor or sensors.
- When a Level "A" or "B" SC occurs while in an SP mode, the machine cannot display the SC number. If this occurs, check the SC number after leaving the SP mode.
- The machine reboots automatically when the machine issues a Level "D" SC code. This is done for Level "D" SC codes only.
- Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the hard disk or memory, press the operation switch to switch the power off, wait for the power LED to go off, and then switch the main power switch off.
- The main power LED lights or flashes while the platen cover or ARDF is open, while the main machine is communicating with a facsimile or the network server, or while the machine is accessing the hard disk or memory for reading or writing data.

Here is summary of the SC code groups.

SC100	Image Scanning	
SC200	Image Writing	
SC300	Image Creation: Charge, Development, Around Drum	
SC400	Image Transfer, Cleaning, Other	
SC500	Paper Feed and Transport, Duplexing, Fusing	
SC600	Communications, Other	
SC700	Peripherals	
	SC700 – SC703	ADF
	SC720	Finisher, Booklet Finisher
	SC725	Multi Fold Unit
	SC735	Trimmer Unit
	SC740	Cover Interposer Tray
	SC750-SC754	Perfect Binder
	SC756	Ring Binder
SC800	Firmware, Controller	
SC900	Hardware, Controller	

6.3 SC100

SC101-01	D	Exposure lamp error
		The write level peak did not reach the prescribed level when the white plate was scanned. White plate scanning is attempted three times to compensate for the possibility of noise on the serial path to the SBU.
		▪ LED defective ▪ LED driver defective ▪ SBU defective ▪ IPU defective ▪ Power line, signal harness defective ▪ Condensation in scanner unit ▪ Mirror, lens defective. ▪ White plate missing or not installed correctly, plate defective, plate dirty

SC101-2	D	Exposure lamp error
		LED error flag occurred.
		▪ LED defective ▪ LED driver defective ▪ Power line, signal harness defective

SC102-00	D	Exposure lamp adjustment error
		After the prescribed number of adjustments, the write level peak exceeded the prescribed value when the white plate was scanned.
		▪ LED defective ▪ LED driver defective ▪ SBU defective ▪ IPU defective ▪ Power line, signal harness defective

SC120-00	D	Scanner home position error 1
		The scanner HP sensor did not go OFF : ▪ During homing operation (power ON, leaving low power mode) ▪ During auto adjustment (power ON, leaving low power mode) ▪ During document, book scanning
		▪ Motor drive board defective ▪ Motor defective ▪ HP sensor defective ▪ Harness defective ▪ Timing belt, pulley, wire, or carriage loose, defective

SC121-00	D	Scanner home position error 2
		The scanner HP sensor did not go ON : ▪ During homing operation ▪ During auto adjustment ▪ During document, book scanning
		▪ Motor drive board defective ▪ Motor defective ▪ HP sensor defective ▪ Harness defective ▪ Timing belt, pulley, wire, or carriage loose, defective

SC141-00	D	Black level adjustment error
		The black level did not reach the prescribed level after AGC (Automatic Gain Control) adjustment done immediately after power on, or when leaving lower power mode.
		▪ SBU defective ▪ IPU defective ▪ Power line, signal harness defective

SC142-00	D	White level detection error
		The white level did not reach the prescribed level after AGC (Automatic Gain Control) adjustment done immediately after power on, or when leaving lower power mode.
		▪ LED defective ▪ LED driver defective ▪ SBU defective ▪ IPU defective ▪ Power line, signal harness defective ▪ Condensation in scanner unit ▪ Mirror, lens defective. ▪ White plate missing or not installed correctly, plate defective, plate dirty

SC144-00	D	SBU Communication Error
		When the machine was switched on, or when the machine returned to full operation from the low power mode, the machine could not access the SBU register, or the SBU register values were abnormal.
		▪ SBU-BCU harness loose, disconnected, defective ▪ SBU defective ▪ Harness defective

SC161-01	D	IPU Error (LSYNC defective)
		At power on, or when the machine recovered from low power mode, the IPU executed self-diagnostics and detected an error (LSYNC).
		▪ Harness between SBU and IPU loose, broken, defective ▪ IPU defective

SC161-02	D	IPU Error (Ri response error)
		An IPU error occurred when Ri was accessed.
		▪ IPU (BCU, Controller) defective

SC165-00	D	Copy data security card error
		The optional copy data security card (also called “ICIB”) was not installed, even though the illegal copy function setting was done at initialization, or the ICIB was judged defective, the ICIB was judged defective when the machine was powered on or returned from low power mode. **Note**: This is the SD card that holds the firmware for the prohibit copy function that stops copying of currency, bank bonds, etc.
		▪ ICIB not installed ▪ ICIB not installed correctly

SC185-00	D	CIS communication error
		The values read from the ASIC in the CIS register were different from the expected values, possibly due to a problem on the serial communication line between the CIS and ADF, or there was a problem with the initial value on the ASIC when the system was booted. Two attempts are made to obtain the correct values, and then this SC issues upon failure of the third attempt.
		▪ Connector loose, broken, defection on the harness between ADF and CIS ▪ CIS ASIC defective, or not booting

SC186-00	D	CIS error light source error
		There was a problem with the light source mounted in the CIS device at initialization. The average value in the area at the leading edge in the main scan direction was lower than the value prescribed for shading peak data at initialization and original feed. ▪ **At Initialization**. Dual array CIS LED is defective, so there is a large difference between the averaged value in the area of the leading edge in the main scan direction and the average value in the area of the trailing edge. ▪ **Original Feed**. The shading peak values are to low due to damage to the dual array of the CIS LED (this is confirmed by the gray balance check for CIS scan control). The first, second detections trigger initial/feed jam alerts, the third detection issues this SC code.
		▪ **At Initialization**. One LED defective ▪ **Original Feed**. Both LEDs defective ▪ White roller behind the CIS damaged, dirty, or not installed correctly. ▪ Power or signal harness loose, broken, defective. ▪ ADF main control board defective

SC187-00	D	CIS black level check error
		Black level data not within range at black level creation. The first, second detections trigger initial jam alerts, the third detection issues this SC code.
		▪ CIS device defective

SC188-00	D	CIS white level check error
		The results of the reading of peak data values from the CIS device were abnormal and not within range for white level target, and confirmation of the shading data peak values failed. (The target values for white level adjustment are set with SP4785-001, SP4784-001, SP47846-001.) The first, second detections trigger initial jam alerts, the third detection issues this SC code.
		▪ CIS device defective ▪ White roller behind the CIS damaged, dirty, or not installed correctly. ▪ Power or signal harness loose, broken, defective. ▪ ADF main control board defective

SC189-00	D	CIS gray balance check error
		The results of the gray balance check with SP4705-002 was not on target and varied from Chart GS20. This SC is issued if there is an error on the first check.
		▪ CIS device defective

SC195-00	D	Machine number code error
		An 11-digit code is required.
		▪ The entered 11-digit code does not match

6.4 SC200

SC202-00	D	Polygon motor ON timeout error
		After the polygon motor turned on, or within 15 sec. after the rpm's changed, the motor did not enter READY status. **Note**: There are no replaceable parts in the laser unit. If any part is defective, the laser unit must be replaced.
		▪ Polygon motor drive board I/F connector loose, broken, defective ▪ Polygon motor or polygon motor driver motor defective. ▪ Polygon motor pulse not output correctly, or no XSCRDY signal detected due to defective motor control board.

SC203	D	Polygon Motor OFF Timeout Error
		The polygon motor lock signal (XSCRDY signal) failed to unlock (go HIGH) within 3 sec. after the polygon motor went OFF.
		▪ Polygon motor drive board I/F connector loose, broken, defective ▪ Polygon motor or polygon motor driver motor defective. ▪ Polygon motor pulse not output correctly, or no XSCRDY signal detected due to defective motor control board.

SC204-00	D	Polygon motor XSCRDY signal error
		While the motor was rotating the XSCRDY signal when inactive (H) for more than one motor revolution.
		▪ Polygon motor drive board I/F connector loose, broken, defective ▪ Polygon motor or polygon motor driver motor defective.

SC210-00	C	Trailing edge beam error
		The calculated magnification rate between two points was not within specification.
		▪ Beam detection unit I/F harness loose, broken, defective ▪ Beam detection defective ▪ Beam photo-detector not functioning ▪ IPU defective ▪ LD driver defective ▪ LDB defective ▪ BCU defective

SC220	D	Laser synchronization detection error
		A signal was not output from the LSDB after more than 100 ms (100 ms x2) after the LD fired.
		▪ Synchronization detection unit I/F harness loose, broken, defective ▪ Synchronization detection unit defective ▪ Beam photo-detector out of alignment ▪ IPU defective ▪ LD driver defective ▪ LDB defective ▪ BCU defective

SC230-00	D	FGATE failed to go ON
		The FGATE signal did not go ON within the 250 ms after printing started.
		▪ IPU write error ▪ Poor connection between BCU, controller board ▪ BCU, IPU or controller board defective ▪ Harness from BCU to LDB loose, broken, defective

SC231-00	D	FGATE failed to go OFF
		After the FGATE signal went on, it failed to go OFF within the prescribed time.
		▪ IPU defective

SC240-00	D	LD Error
		When the LD initialized, the LD error status was asserted twice for the LD driver.
		▪ LD deteriorated, defective ▪ LDB harness loose, broken, defective ▪ LD drive board defective

SC270-00	D	Image writing ASIC communication error
		At start up the write/read values to the same registers were not the same values.
		▪ IPU, BCU defective ▪ Harness defective ▪ LSU defective

SC270-10	D	Image writing ASIC communication error: Other
		At startup, the machine did not go over to the door closed status after door open status clear.
		▪ IPU, BCU defective ▪ Harness defective ▪ Interlock switch defective ▪ LSU defective

SC274-00	D	Image transfer error
		The image transfer data generated a fatal error.
		▪ Harness defective ▪ LDB defective ▪ IPU defective

SC276-00	D	APC Communication Error (C)
		The LDB is not functioning normally.
		▪ LDB defective

6.5 SC300

SC300-00	D	Charge corona wire voltage (C1) error 1
		The charge wire voltage error signal went HIGH because the charge corona wire voltage fell below -4V for more than 50 ms,
		▪ Voltage leak ▪ Signal harness loose, broken, defective

SC301-00	D	Charge corona wire voltage (C2) error 2
		The charge wire voltage error signal went HIGH because the charge corona wire voltage fell below -4V for more than 50 ms.
		▪ Voltage leak ▪ Signal harness loose, broken, defective

SC304-00	D	Charge grid voltage error
		Error detected 500 ms after output started. During this time, the detected voltage remained below –400V for more than 50 ms.
		▪ Leak or charge unit not set correctly ▪ Charge corona unit open ▪ Charge corona unit harness loose, broken, defective ▪ High voltage harness loose, broken, defective

SC308-00	D	Charge wire cleaner position error
		The cleaning pads of the charge wire are not operating correctly.
		▪ Motor, gear, cleaning pad defective ▪ Charge unit not set correctly ▪ Pad movement blocked

SC316-00	C	Quenching lamp error
		The quenching lamp below the drum of the PCDU is not operating correctly.
		▪ Connector loose, broken, defective ▪ Harness damaged ▪ QL LED defective

SC320-00	D	Development Bias Error
		100 ms after output started, an abnormal detection signal (H) was detected continuously for 60 ms. During this time the voltage exceeded –90µA for more than 50 ms.
		▪ Leak, or signal harness loose, broken, defective

SC325-00	D	Development motor error
		Within 1 sec. after the motor started, a LOCK signal was not detected for for more than 1 sec., or motor was not rotating correctly.
		▪ Motor connector loose, broken, defective ▪ Overload on development unit drive mechanism due to obstruction ▪ Motor drive board defective

SC332-01	D	Toner supply motor 1 error (left toner supply bottle)
		The left toner supply bottle has locked and is not rotating correctly. The rotation of the bottle is checked every 100 ms. When these errors start, a count begins. For every 10 errors detected in succession, this counts as 1. When the total reaches 23 (230), this SC code is issued.
		▪ Toner bottle set incorrectly ▪ Overload due to obstruction preventing bottle from rotating ▪ Toner bottle motor broken, defective ▪ Motor broken

SC332-05	D	Toner supply motor 2 error (right toner supply bottle)
		The right toner supply bottle has locked and is not rotating correctly. The rotation of the bottle is checked every 100 ms. When these errors start, a count begins. For every 10 errors detected in succession, this counts as 1. When the total reaches 23 (230), this SC code is issued.
		▪ Toner bottle set incorrectly ▪ Overload due to obstruction preventing bottle from rotating ▪ Toner bottle motor broken, defective ▪ Motor broken

SC336-01	D	Developer set error
		Before the TD sensor control voltage (Vcnt = 4.3V) is adjusted when the TD sensor is initialized (SP3-030), the development unit is always checked for the presence of developer. The check revealed that the development unit did not have a sufficient amount of toner. Vt (the TD sensor output) was less than 0.7V.
		▪ Developer level extremely low

SC348-001	D	Toner supply error
		Before the TD sensor control voltage (Vcnt = 4.3V) is adjusted when the TD sensor is initialized (SP3-030), the development unit is always checked for the presence of developer. The check revealed that the development unit did not have a sufficient amount of toner. Vt (the TD sensor output) was less than 0.7V. The amount of toner on the ID sensor pattern (SP3300-001) was less than the low limit (SP3301-023). Also, toner supply drive time (SP3301-041) was over the upper limit (SP3301-031).
		▪ Toner encoder cleaning PET sheet broken ▪ Toner encoder sensor cleaning PET sheet defective ▪ Toner encoder sensor defective ▪ Toner feed motor defective ▪ Toner agitator motor defective

SC360-01	D	TD sensor calibration error
		When the TD sensor was initialized, the TD sensor output could not be adjusted within ±0.1V of target Vt.
		▪ TD sensor harness broken ▪ TD sensor dirty, or installed incorrectly ▪ TD sensor defective ▪ Not initialized developer

SC361-01	D	TD sensor output error 1: Vt above upper limit
		The TD sensor output (Vt) was greater than 4.7V (SP3210-1) 20 consecutive times.
		▪ Toner density extremely low

SC362-01	D	TD sensor output error 1: Vt below lower limit
		The TD sensor output (Vt) was less than 0.5V (SP3210-001) 10 consecutive times.
		▪ TD sensor connector loose, broken, defective ▪ TD sensor defective

SC370-00	D	ID sensor calibration error
		The ID sensor Vsg_reg could not be initialized to 4±0.5V.
		▪ Image transfer belt wrinkled, off center, or damaged

SC371-00	D	ID sensor outpout error: Background reflected output
		The output reflected from the surface of the drum was Vsg_reg < 0.5V.
		▪ ID sensor connector loose, broken, defective ▪ ID sensor defective

SC372-00	C	ID sensor LED current upper limit error
		ID sensor (PWM) value is greater than the threshold value set by SP3320-15 (Default: 0).
		▪ ID sensor dirty ▪ ID sensor defective, worn out ▪ ITB dirty, damaged, worn out

SC373-01	D	ID sensor pattern density high error
		The density of the black reading in the ID sensor patterns created between pages (SP3300-1) is greater than the threshold value set by SP3301-21.
		▪ Too much developer supplied

SC374-01	D	ID sensor pattern density low error
		The density of the black reading in the ID sensor patterns created between pages (SP3300-1) was less than the threshold value set by SP3301-23, three times in succession.
		▪ Development bias defective (poor conductivity) ▪ Image transfer to belt abnormal

SC381-01	D	Potential sensor output high error
		The potential sensor reading of the unexposed surface of the drum was Vd (700) > -800V
		▪ Window on the probe of the potential sensor is dirty

SC382-01	D	Potential sensor output low error
		Potential sensor reading of the unexposed surface of the drum was Vd (700) < -500V
		▪ Potential sensor defective

SC395-00	D	Drum motor error
		A lock signal could not be detected within one sec. after the motor start signal was sent, or the LOCK signal was lost during normal operation of the motor.
		▪ Motor harness loose, broken, defective ▪ Excessive torque on the drum, possibly due to a snagging cleaning blade ▪ Motor drive board defective

6.6 SC400

SC400-01	D	Development gamma high error
		Development gamma was greater than 3.0, probably due to excessive condensation. Toner density is too high.
		▪ Toner density excessive ▪ Condensation

SC401-01	D	Development gamma low error
		Development gamma was less than 3.0, probably due to excessive condensation. Toner density is too low.
		▪ Toner density excessive ▪ Dust shield glass dirty ▪ Image transfer power pack defective

SC402-51	D	Development gamma calculation error 1: Insufficient data
		Two points not available for gamma calculation. Toner density abnormal, probably due to condensation.
		▪ Toner density excessive ▪ Condensation

SC402-61	D	Development gamma calculation error 2: LD misfire
		No gradation pattern was created on the drum for process control.
		▪ LD misfire

SC403-01	C	Development start voltage error 1: Vk High
		The development start voltage (Vk) was higher than -300V due to abnormal toner density.
		▪ Toner density abnormal

SC404-01	C	Development start voltage error 2: Vk Lolw
		The development start voltage (Vk) was lower than -300V due to abnormal toner density caused by condensation.
		▪ Toner density excessive ▪ Condensation

SC410-01	C	Residual voltage error
		Residual voltage, the trace amount of voltage remaining on the drum after charge quenching with the QL, was above -200V.
		▪ Drum worn, replace drum

SC411-01	C	Charge potential error: Vd adjustment error
		Charge DC bias cannot be adjusted to target Vd ±8V.
		▪ Charge corona unit dirty

SC412-01	C	Potential sensor Vl adjustment error
		The LD power could not be adjusted to the target for Vpl±5V. Vl is the OPC drum potential after maximum laser exposure. The potential sensor measures Vl by reading the white patches of the potential sensor pattern. To change Vl, the machine adjusts the input current (Vpl) of the laser diode.
		▪ OPC drum worn, filming ▪ Charge corona unit dirty

SC440-01	D	Image transfer power pack error 1: Voltage leak
		The machine detected a problem with the image transfer power pack. An interrupt checks the status of the power pack every 250 ms. This SC is issued if a problem exists with 10 consecutive samplings (10 ms).

		▪ Power leak at the paper transfer power pack of PTR unit ▪ Image transfer PP harness loose, broken, defective ▪ IOB defective ▪ PTR defective ▪ ITB defective

SC440-11	D	Image transfer power pack error 2: Low voltage
		A sampling of the image transfer power pack voltage detected it was less than 0.1kV.
		▪ Image transfer PP harness loose, broken, defective ▪ Image transfer PP defective

SC443-00	D	Image transfer roller error
		The machine detected that the electrical resistance of the roller exceeded the allowed limit, indicating that the service life of the roller has expired or there could be a problem with the transfer power pack.
		▪ High-voltage harness to image transfer roller loose, broken, defective ▪ Connection point at roller broken ▪ Image transfer roller worn out ▪ Image transfer power pack defective ▪ Poor contact between the image transfer roller and ITB because roller not set correctly

SC446-00	D	Transport belt motor error
		Ten consecutive LOCK signals were detected 1000 ms after the motor started, and an error was detected at the TDCU.
		▪ Motor connector loose, broken, defective ▪ Excessive load on the ITB unit drive mechanism due to obstruction ▪ Motor drive board defective ▪ Motor defective

SC450-01	D	PTR leak error
		Samplings of PTR voltage (done every 10 ms) detected 50 consecutive voltage errors within 500 ms.
		▪ Voltage leak at the paper transfer roller (PTR) power pack ▪ Power pack harness loose, broken, defective ▪ IOB defective ▪ PTR defective ▪ ITB defective

SC450-11	D	Transfer separation power pack error: Low voltage
		During the execution of bias feedback control, the machine detected that the output of the paper transfer power pack was less than 0.1 kV.
		▪ Transfer separation power pack harness loose, broken, defective ▪ Transfer separation power pack defective

SC453-00	D	Paper transfer roller error
		The machine detected that the electrical resistance of the roller exceeded the allowed limit, indicating that the service life of the roller has expired or there could be a problem with the transfer power pack.
		▪ PTR harness loose, broken, defective ▪ PTR terminal contact damaged ▪ Poor contact between PTR and idle roller, PTR not set correctly ▪ PTR worn ▪ Transfer separation power pack defective

SC460-01	D	Transfer separation power pack leak error
		The machine detected a voltage leak at the transfer separation power pack. The voltage is sampled every 250 ms, and 10 consecutive errors were detected within 10 ms.

		▪ Voltage leak at the paper transfer roller (PTR) power pack. ▪ Power pack harness loose, broken, defective ▪ IOB defective ▪ PTR defective ▪ ITB defective

SC465-00	D	PTR motor error
		After motor start and 1000 ms had elapsed, 10 attempts failed to detect LOCK signal LOW until motor stop.
		▪ PTR motor harness disconnected or broken ▪ Excessive torque on the PTR drive mechanism, due to obstruction ▪ Motor driver defective ▪ Motor defective

SC466-00	D	PTR separation error
		The PTR separation motor was operating but the PTR separation sensor failed to detect the feeler that triggers detection of the PTR separation sensor. After the motor switched on, the feeler remained at the OFF position and the feeler was not detected at the ON position within 1000 ms.
		▪ PTR unit installed incorrectly ▪ Sensor dirty ▪ Motor harness disconnected or broken ▪ Sensor defective ▪ Motor defective

SC471-01	D	Belt position ready timeout
		The machine could not center the ITB correctly at power on. ITB could not be centered correctly within the time specified for SP2920-013 (which initializes the steering control of the belt) to execute.

		▪ Belt position sensor defective ▪ Sensor harness loose, broken, defective ▪ Sensor defective ▪ Centering control pulleys loose, disconnected, installed incorrectly

SC471-02	D	Belt centering roller HP error
		The belt centering roller sensor did not detect the belt centering roller at HP during initialization, or the belt centering roller sensor still detected the belt centering roller at HP after the belt centering roller motor switched on
		▪ Belt centering motor harness loose, broken, defective ▪ Belt centering HP sensor harness loose, broken, defective ▪ Belt centering motor defective ▪ Belt centering HP sensor defective

SC471-03	C	ITB position error 1
		The belt centering sensor detected the ITB out of position by more than 2 mm.
		▪ Belt centering sensor defective ▪ Belt centering mechanism (wire) jammed, not operating

SC471-04	D	ITB position error 2
		The front edge of the belt is out of position. This is an overrun error, and the position of the belt cannot be initialized. ▪ The output of the belt position sensor (Va) is less than the threshold value set for SP2920-007. ▪ The output value of the overrun threshold (Vb) is less than the threshold value set for SP2920-011. ▪ After the length of time set with SP2020-12 (overrun timeout) expired, the readings of Vb and Va above had not changed.
		▪ Belt initial position error ▪ Belt centering sensor defective ▪ Steering mechanism defective

SC471-05	D	ITB position error 3
		The front edge of the belt is out of position. This is an overrun error, and the position of the belt cannot be initialized. ▪ The output of the belt position sensor (Va) is less than the threshold value set for SP2920-007. ▪ The output value of the overrun threshold (Vb) is less than the threshold value set for SP2920-011. ▪ After the length of time set with SP2020-12 (overrun timeout) expired, the readings of Vb and Va above had not changed.
		▪ Belt initial position error ▪ Belt centering sensor defective ▪ Steering mechanism defective
SC471-06	D	Belt centering sensor error
		The readings of the belt centering sensor dropped below one volt after the prescribed number of samplings.
		▪ Belt centering sensor defective ▪ Steering mechanism defective

SC480-00	D	Drum cleaning motor error
		The drum cleaning motor failed to start within the prescribed time or failed during normal operation.
		▪ Motor harness loose, broken, defective ▪ Excessive torque on the drum cleaning unit, locked ▪ Motor driver defective

SC485-00	D	Used toner transport motor error
		The used toner transport motor failed to start within the prescribed time or failed during normal operation.
		▪ Used toner transport motor harness loose, broken, defective ▪ Excessive torque on the used toner transport unit, due to toner blockage, auger locked ▪ Motor driver defective

SC486-00	D	Used toner bottle motor error
		The used toner bottle motor failed to start within the prescribed time or failed during normal operation.
		▪ Motor harness loose, broken, defective ▪ Motor defective

SC488-00	D	Used toner transport blockage
		Used toner was not moving to the used toner bottle.
		▪ Used toner transport path blocked, not operating

SC497-00	C	Temperature/humidity sensor error (PCDU)
		The machine detected a problem with the temperature/humidity sensor located near the front edge of the PCDU. ▪ The temperature sensor output was less than 0.76V or more than 2.9V three times in one second, indicating a problem with the temperature detection. ▪ The humidity sensor output was more than 2.4V three times in one second, indicating a problem with humidity detection.
		▪ Sensor harness disconnected or broken ▪ Sensor defective

SC498-00	C	Temperature/Humidity Sensor Error (Main)
		The machine detected a problem at the temperature/humidity sensor located under the used toner bottle at the rear of the machine: ▪ The temperature sensor output was less than 0.76V or more than 2.9V three times in one second, indicating a problem with the temperature detection. ▪ The humidity sensor output was more than 2.4V three times in one second, indicating a problem with humidity detection.
		▪ Sensor harness disconnected or broken ▪ Sensor defective

6.7 SC500

SC501-01	B	Tray 1 bottom plate lift error 1
		One of the following occurred at the start of the job: ▪ The tray 1 lift sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate. ▪ The tray lift sensor was on before the pick-up solenoid switched on.
		▪ Tray lift motor harness disconnected or broken ▪ Paper or other obstacle trapped between tray and motor ▪ Pick-up solenoid disconnected or broken ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC501-02	B	Tray 1 bottom plate lift error 2
		The upper limit sensor did not go LOW within 1.7 sec. after the tray lowered at paper end.
		▪ Lift motor harness loose, broken, defective ▪ Paper or other obstacle trapped between tray and motor ▪ Pick-up solenoid harness loose, broken, defective ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC501-03	B	Tray 1 bottom plate lift error 3
		Low limit position of the tray not detected with 10 sec. after paper end and tray lowering.
		▪ Paper or other obstacle trapped between tray and motor ▪ Lift motor harness loose, broken, defective ▪ Low limit sensor harness loose, broken, defective ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC501-04	C	Tray 1 rear fence motor error
		One of the following occurred: ▪ The return sensor does not switch on within 10 sec. after the rear fence motor switches on. ▪ The HP sensor does not switch on 10 sec. after the rear fence motor switches on. ▪ The HP sensor and return sensor switch on at the same time.
		▪ Rear fence motor harness disconnected or broken ▪ Paper or other obstacle interfering with operation of the sensors ▪ Paper or other obstacle trapped between tray and motor ▪ Motor mechanical overload due to obstruction ▪ Return sensor or HP sensor harness disconnected or broken ▪ Return sensor or HP sensor dirty ▪ Rear fence motor defective ▪ Return sensor or HP sensor defective

SC502-01	B	Tray 2 bottom plate lift error 1
		One of the following occurred at the start of the job: ▪ The tray 2 lift sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate. ▪ The tray lift sensor was on before the pick-up solenoid switched on.
		▪ Tray lift motor harness disconnected or broken ▪ Paper or other obstacle trapped between tray and motor ▪ Pick-up solenoid disconnected or broken ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC502-02	B	Tray 2 bottom plate lift error 2
		The upper limit sensor did not go LOW within 1.7 sec. after the tray lowered at paper end.
		▪ Lift motor harness loose, broken, defective ▪ Paper or other obstacle trapped between tray and motor ▪ Pick-up solenoid harness loose, broken, defective ▪ Pick-up solenoid defective

SC503-01	B	Tray 3 bottom plate lift error 1
		One of the following occurred at the start of the job: ▪ The tray 3 lift sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate. ▪ The tray lift sensor was on before the pick-up solenoid switched on.
		▪ Tray lift motor harness disconnected or broken ▪ Paper or other obstacle trapped between tray and motor ▪ Pick-up solenoid disconnected or broken ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC503-02	B	Tray 3 bottom plate lift error 2
		Low limit position of the tray not detected with 10 sec. after paper end and tray lowering.
		▪ Paper or other obstacle trapped between tray and motor ▪ Lift motor harness loose, broken, defective ▪ Pick-up solenoid harness loose, broken defective ▪ Paper or other obstacle blocking operation of pick-up solenoid

SC504-01	B	LCT top tray (Tray 4) lift error 1
		When the tray was initialized, the upper limit sensor failed to detect 3 times before the pick-up solenoid went ON.
		▪ Pick-up solenoid harness, loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defecive ▪ Main control board defective

SC504-02	B	LCT top tray (Tray 4) lift error 2 (timeout error)
		The bottom plate upper limit sensor did not go ON within 10 sec. after the LCT initialized and the bottom plate was lifted.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC504-11	B	LCT top tray (Tray 4) lift error 3
		The upper limit sensor failed to go ON (3 failures) before the pick-up solenoid went ON after LCT initialization.
		▪ Pick-up solenoid harness loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC504-12	B	LCT top tray (Tray4) lift error 4 (timeout error)
		The upper limit sensor did not go ON within 8 sec. after the LCT was initialized and the bottom plate of the tray started to rise.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC504-16	B	LCT top tray (Tray 4) error 5
		The LCT front blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Front blower fan harness loose, broken, defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC504-17	B	LCT top tray (Tray 4) error 6
		The LCT rear blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Rear blower fan harness loose, broken, defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC505-01	B	LCT middle tray (Tray 5) lift error 1
		When the tray was initialized, the upper limit sensor failed to detect 3 times before the pick-up solenoid went ON.
		▪ Pick-up solenoid harness, loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defecive ▪ Main control board defective

SC505-02	B	LCT middle tray (Tray 5) lift error 2 (timeout error)
		The bottom plate upper limit sensor did not go ON within 10 sec. after the LCT initialized and the bottom plate was lifted.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC505-11	B	LCT middle tray (Tray 5) lift error 3
		The upper limit sensor failed to go ON (3 failures) before the pick-up solenoid went ON after LCT initialization.
		▪ Pick-up solenoid harness loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC505-12	B	LCT middle tray (Tray4) lift error 4 (timeout error)
		The upper limit sensor did not go ON within 8 sec. after the LCT was initialized and the bottom plate of the tray started to rise.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC505-16	B	LCT middle tray (Tray 5) error 5
		The LCT front blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Front blower fan harness loose, broken, defective ▪ Fan defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC505-17	B	LCT middle tray (Tray 5) error 6
		The LCT rear blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Rear blower fan harness loose, broken, defective ▪ Fan defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC506-01	B	LCT bottom tray (Tray 6) lift error 1
		When the tray was initialized, the upper limit sensor failed to detect 3 times before the pick-up solenoid went ON.
		▪ Pick-up solenoid harness, loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defecive ▪ Main control board defective

SC506-02	B	LCT bottom tray (Tray 6) lift error 2 (timeout error)
		The bottom plate upper limit sensor did not go ON within 10 sec. after the LCT initialized and the bottom plate was lifted.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC506-11	B	LCT bottom tray (Tray 6) lift error 3
		The upper limit sensor failed to go ON (3 failures) before the pick-up solenoid went ON after LCT initialization.
		▪ Pick-up solenoid harness loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC506-12	B	LCT bottom tray (Tray4) lift error 4 (timeout error)
		The upper limit sensor did not go ON within 8 sec. after the LCT was initialized and the bottom plate of the tray started to rise.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ LCT main motor harness loose, broken, defective ▪ Main control board defective

SC506-16	B	LCT bottom tray (Tray 6) error 5
		The LCT front blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Front blower fan harness loose, broken, defective ▪ Fan defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC506-17	B	LCT bottom tray (Tray 6) error 6
		The LCT rear blower fan was not detected at HIGH for 700 ms after the fan switched ON and the LD signal check started.
		▪ Rear blower fan harness loose, broken, defective ▪ Fan defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC509-01	B	Multi bypass tray lift error 1
		When the tray was initialized, the upper limit sensor failed to detect 3 times before the pick-up solenoid went ON.
		▪ Pick-up solenoid harness, loose, broken, defective ▪ Pick-up solenoid defective ▪ Upper limit sensor harness loose, broken, defective ▪ Upper limit sensor defective ▪ LCT main board harness loose, broken, defecive ▪ Main control board defective

SC509-02	B	Multi bypass tray lift error 2 (timeout error)
		The bottom plate upper limit sensor did not go ON within 10 sec. after the LCT initialized and the bottom plate was lifted.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ Bypass main motor harness loose, broken, defective ▪ Main control board defective

SC509-03	B	Multi bypass tray lift error 3 (timeout error)
		The bottom plate upper limit sensor did not go ON within 10 sec. after the LCT initialized and the bottom plate was lifted.
		▪ Lift motor harness loose, broken, defective ▪ Lift motor defective ▪ Upper limit sensor harness loose, broken, defecive ▪ Upper limit sensor defective ▪ Bypass main motor harness loose, broken, defective ▪ Main control board defective

SC510-01	D	Double-feed sensor error 1
		One or both of the double-feed sensors in the registration unit not operating.
		▪ IOB, DRB harness loose, broken, defective ▪ IOB and DRB defective ▪ Double-Feed sensor defective

SC510-02	D	Double-feed sensor error 2
		One or both of the double-feed sensors in the registration unit not operating.
		▪ IOB, DRB harness loose, broken, defective ▪ IOB and DRB defective ▪ Double-Feed sensor defective

SC512-00	D	Rotary gate home position error
		The rotary gate HP sensor did not go ON within two cycles (877 sec.) of the rotary gate motor starting, or, the the HP sensor did not go OFF within two cycles of the rotary gate motor starting aftter the sensor went ON.
		▪ Rotary gate motor harness loose, broken, defective ▪ HP sensor connector loose, broken, defective ▪ Motor overload (blocked) ▪ Motor driver defective ▪ Sensor defective

SC513-01	D	Leading edge shift unit error 1: Initialization
		The shift unit HP sensor was not detected on or off at the prescribed time. Normally, the sensor should to ON to initialize at power on, and when the front doors are closed. The HP sensor goes ON just before the shift unit motor starts to rotate cw; however, ▪ The HP sensor did not go ON within 40 ms after the motor started. ▪ The HP sensor did not switch off/on within 1068 ms after the shift motor started to rotate ccw.
		▪ Leading edge shift motor harness loose, broken, defective ▪ HP sensor connector loose, broken, defective ▪ Motor overload due to blockage ▪ Motor driver defective ▪ Sensor defective

SC513-02	D	Leading edge shift unit error 2: During operation
		The shift unit HP sensor did not go ON/OFF at the prescribed time. Normally, the HP sensor goes ON just before the shift motor starts to rotate cw, but the sensor did not go ON within 40 ms after the motor started to rotate cw.
		▪ Leading edge shift motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Motor overload due to blockage ▪ Motor driver defective ▪ Sensor defective

SC513-11	B	Trailing edge shift unit HP sensor error 1: Initialization
		Normally, the shift unit HP sensor goes ON within 20 pulses after the trailing edge shift motor starts to rotate cw; however, ▪ The HP sensor did not go ON within 20 pulses after the motor started to rotate cw. ▪ The HP sensor did not switch from ON to OFF within 67 ms after the trailing edge shift motor started to rotate either cw or ccw.
		▪ Trailing edge shift motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Motor overload due to blockage ▪ Motor driver defective ▪ Sensor defective

SC513-12	C	Trailing edge shift HP sensor error 2: During operation
		The shift unit HP sensor did not go ON/OFF at the prescribed time. Normally, the HP sensor goes ON just before the shift motor starts to rotate cw, but the sensor did not go ON within 20 pulses after the motor started to rotate cw.
		▪ Trailing edge shift motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Motor overload due to blockage ▪ Motor driver defective ▪ Sensor defective

SC514-00	C	Exit junction gate HP sensor error
		The HP junction gate HP sensor did not detect at the prescribed time, or the HP sensor did not go from ON to OFF at the prescribed time after the junction gate was supposed to change position.
		▪ Exit junction gate motor harness loose, broken, defective ▪ Exit junction gate motor defective ▪ HP sensor defective ▪ HP sensor harness loose, broken, defective

SC515-01	B	Separation motor home position error 1: Main machine
		The motor that separates the relay rollers in the main machine to free the paper for image shift adjustment, or its HP sensor, is not operating correctly
		▪ Separation motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Separation motor defective ▪ HP sensor defective

SC515-02	B	Separation motor home position error 2: LCT
		The motor that separates the relay rollers in the LCT path to free the paper for image shift adjustment, or its HP sensor, is not operating correctly.
		▪ Separation motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Separation motor defective ▪ HP sensor defective

SC515-03	B	Separation motor home position error 3: Invert/exit
		The motor or its HP sensor is not operating correctly.
		▪ Separation motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Separation motor defective ▪ HP sensor defective

SC515-04	B	Separation motor home position error 4: LCT exit
		The motor that separates the relay rollers in the LCT path to free the paper for image shift adjustment at the LCT exit, or its HP sensor, is not operating correctly.
		▪ Separation motor harness loose, broken, defective ▪ HP sensor harness loose, broken, defective ▪ Separation motor defective ▪ HP sensor defective ▪ LCT main board harness loose, broken, defective ▪ Main control board defective

SC520-00	D	Fusing motor error
		A LOCK signal could not be detected within 1 sec. after the fusing motor started, or the LOCK signal was lost for more than 1 sec. while the motor was running and could not be detected.
		▪ Motor connector loose, broken, defective ▪ Excessive torque on fusing roller due to jam, blockage ▪ Fusing motor driver defective ▪ Fusing motor defective ▪ Fusing motor harness loose, broken, defective

SC521-00	D	Exit motor error
		A lock signal was not detected within 1 sec. after the motor switched on. -or- A lock signal was not detected withing 1 sec. after the START signal was issued.
		▪ Motor connector loose, broken, defective ▪ Excessive torque on the exit drive mechanism ▪ Motor driver broken ▪ Motor broken

SC530-**	D	Main machine fan errors
		A fan motor failed to start within the prescribed time or stopped and remained off for one sec.
		▪ Fan motor harness disconnected or broken ▪ Fan defective ▪ Fan overload, stopped due to physical obstruction blocking its rotation
-01	D	Laser unit cooling fan
-02		Belt cleaning unit fan
-08		Fusing transport exit fan
-09		Fusing unit exit fan – Upper
-10		Fusing unit exit fan – Lower
-13		Heat pipe fan – Rear, right
-14		Heat pip fan – Rear, left
-15		Exit fan – Rear, right
-16		Paper exit fan – Rear, left
-17		Heat pipe cooling fan
-18		Heat pipe cooling fan
-19		PSU cooling fan - Right
-20		PSU cooling fan - Left
-21		PTR cooling fan - Front
-22		PTR cooling fan – Rear

SC531-**	D	Main machine PWM fan errors
		A fan motor failed to start within the prescribed time or stopped and remained off for one sec.
		▪ Fan motor harness disconnected or broken ▪ Fan defective ▪ Fan overload, stopped due to physical obstruction blocking its rotation
-01		Development cooling fan - Front
-02		Development cooling fan - Rear
-03		Ozone suction fan
-04		Ozone exhaust fan
-05		Right suction fan - Front
-06		Right suction fan - Rear
-07		Right suction fan - Center

SC532-**	C	Main machine fans: Logged errors
		A fan motor failed to start within the prescribed time or stopped and remained off for one sec.
		▪ Fan motor harness disconnected or broken ▪ Fan defective ▪ Fan overload, stopped due to physical obstruction blocking its rotation
-01		Duplex fan – Lower, front
-02		Duplex fan – Lower rear
-03		PSU intake fan M1 right
-04		PSU exhaust fan M1 left
-05		PSU intake fan M2 right
-06		PSU exhaust fan M2 left

-08		ID sensor cooling fan
-09		Paper intake fan – Front
-10		Paper intake fan – Rear
-11		CIS cleaning fan

SC541-00	A	Fusing temperature sensor (center) error
		Temperature detected below -40°C for 3 sec. (temperature sampled every 100 ms).
		▪ Thermistor connection loose ▪ Thermistor connected incorrectly

SC542-01	A	Reload temperature error 1: Fusing temperature sensor: center
		Fusing temperature failed to reach 80°C within 50 sec. after the start of fusing temperature control.
		▪ Thermistor damaged ▪ Thermistor out of position, installed incorrectly ▪ Incorrect input voltage

SC542-02	A	Reload temperature error 2: Fusing temperature sensor: center
		Fusing temperature failed to reach reload temperature within 180 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC543-00	A	Software high temperature error: Fusing temperature sensor: center
		Temperature over 250°C detected 10 times (temperature is sampled every 100 ms).
		▪ TRIAC short ▪ IOB defective ▪ Fusing temperature control malfunctioned

SC544-01	A	Heating roller NC sensor: center error
		High temperature detected above 290°C.
		▪ TRIAC short ▪ IOB defective ▪ Fusing temperature control malfunctioned

SC544-02	A	Fusing temperature sensor: center error
		High temperataure above 270°C detected.
		▪ TRIAC short ▪ IOB defective ▪ Fusing temperature control malfunctioned

SC545-01	A	Fusing lamp on error (Fusing lamp 1)
		Fusing lamp remained at full power for more than 50 sec. SC545-01 not detected within 50 sec. after reaching reload temperature and fusing idling, and within 50 sec. after start of paper feed.
		▪ Thermistor out of position, installed incorrectly ▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC545-02	A	Fusing lamp on error (Fusing lamp 3)
		Fusing lamp remained at full power for more than 50 sec. SC545-02 not detected within 50 sec. after reaching reload temperature and fusing idling, and within 50 sec. after start of paper feed.
		▪ Thermistor out of position because installed incorrectly ▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC547-01	D	Zero cross error 1: Fusing Relay
		Zero cross specification triggered an error.
		▪ Fusing relay damaged ▪ Fusing relay circuit error

SC547-02	D	Zero cross error 1: Fusing Relay
		Zero cross specification triggered an error.
		▪ Fusing relay damaged ▪ Fusing relay circuit error

SC547-03	D	Zero cross over error
		At power-on the machine detected that the main power supply was unstable, probably due to electrical noise on the line. The zero cross signal, generated from an ac power supply, is used to generate a trigger pulse to control the applied power accurately
		▪ Frequency of zero cross signal was unstable

SC549-01	D	Temperature low error 1: Fusing temperature sensor: center
		After reaching CPM down level 3, temperature was judged too low (-10°C) for longer than 10 sec.
		▪ Paper bank heater disconnected, not operating

SC549-02	D	Temperature low error 2: Fusing temperature sensor: end
		After reaching CPM down level 3, temperature was judged too low (-10°C) for longer than 10 sec.
		▪ Paper bank heater disconnected, not operating

SC549-03	D	Temperature low error 3: Fusing temperature sensor: far end
		After reaching CPM down level 3, temperature was judged too low (-10°C) for longer than 10 sec.
		▪ Paper bank heater disconnected, not operating

SC550-00	A	Thermistor disconnect error 1: Heating roller NC sensor:Center
		Temperature detected below 0°C for 20 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC551-00	A	Thermistor disconnect error 2: Fusing temperature sensor:End
		Temperature detected below -40°C for 3 sec (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC552-01	A	Fusing reload temperature error 1: Fusing temperature sensor: end
		Fusing temperature did not reach 80°C within 60 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC552-02	A	Fusing reload temperature error 2: Fusing temperature sensor: end
		Temperature did not reach reload temperature within 515 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC553-00	A	Software high temperature error: Fusing temperature sensor: end
		Temperature detected above 250°C for 10 sec. (temperature sampled every 100 ms).
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC554-01	A	Hardware temperature error 1: Heating roller NC sensor: end
		High temperature detected above 290°C.
		▪ TRIAC short ▪ IOB defective ▪ Fusing temperature control malfunction

SC554-02	A	Hardware temperature error 2: Fusing temperature sensor: end
		High temperature detected above 270°C.
		▪ TRIAC short ▪ IOB defective ▪ Fusing temperature control malfunction

SC555-00	A	Fusing lamp continuous on error (fusing lamp 4)
		Fusing lamp remained at full power for more than 50 sec. SC555-00 not detected within 50 sec. after reaching reload temperature and fusing idling, and within 50 sec. after start of paper feed.
		▪ Thermopile detection error, defective thermopile ▪ Fusing lamp defective ▪ Fusing unit defective

SC557-03	D	Zero cross cycle over error
		At power-on the machine detected that the main power supply was unstable, probably due to electrical noise on the line.
		▪ Zero cross signal frequency unstable, due to noise on the power supply line

SC558-00	A	Thermistor disconnect error: Pressure roller thermistor
		Temperature detected below O°C for 80 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC559-00	A	Three consecutive fusing jams
		This SC only occurs if SP1142 is on (Default: OFF), and paper jams occurred in the fusing unit for three consecutive feeds. With SP1142 set to "1" the machine operation can be restored only by the service technician after three consecutive jams occur.
		▪ Fusing unit defecive

SC560-00	A	Thermistor disconnect error: Heating roller NC sensor: end
		Temperature detected below O°C for 30 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC561-00	A	Thermistor disconnect error: Pressure roller NC sensor
		Temperature detected below O°C for 75 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC562-01	A	Fusing reload temperature error: Pressure roller NC sensor
		Temperature failed to reach 45°C within 110 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC562-02	A	Fusing reload temperature error: Pressure roller NC sensor
		Temperature failed to reach reload temperature within 270 sec. after start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC563-00	A	Software high temperature error: Pressure roller NC sensor
		Temperature detected above 220°C for 10 sec. (temperature sampled every 100 ms).
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC564-00	A	Hardware high temperature error: Pressure roller thermistor
		Temperature detected higher than 270°C.
		▪ IOB defective ▪ Fusing temperature control malfunction ▪ Heating roller thermistor defective

SC565-00	A	Fusing lamp on error (Fusing lamp 5)
		Fusing lamp remained at full power for more than 50 sec. SC565-00 not detected within 50 sec. after reaching reload temperature and fusing idling, and within 50 sec. after start of paper feed.

		▪ Thermistor out of position because installed incorrectly ▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC566-00	A	Thermistor disconnect error: Fusing heat thermistor
		Temperature detected below 0°C for 55 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC567-00	A	Software high temperature error: Fusing heat thermistor
		Temperature detected above 250°C for 10 sec. (temperature sampled every 100 ms).
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC568-00	A	Hardware temperature error: Fusing heat thermistor
		Temperature detected higher than 270°C.
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC569-01	D	Pressure roller lift error 1: HP Control
		Attempts to detect pressure roller at home position failed 3 times.
		▪ Pressure roller lift motor defective ▪ Pressure roller lift sensor defective ▪ Lift mechanism blocked, defective

SC569-02	D	Pressure roller lift error 2: Control failure
		This SC ode is issued immediately after just one failure.
		▪ Pressure roller lift motor failure ▪ Pressure roller lift sensor failure ▪ Pressure roller mechanism failure, blockage

SC569-03	D	Pressure roller lift error 3: B High
		Pressure roller sensor B (rear) is HIGH.
		▪ Pressure roller lift motor failure ▪ Pressure roller lift sensor failure ▪ Pressure roller mechanism failure, blockage

SC569-04	D	Pressure roller lift error 4: Control fail
		Pressure roller lift mechanism failure.
		▪ Pressure roller lift motor failure ▪ Pressure roller lift sensor failure ▪ Pressure roller mechanism failure, blockage

SC571-00	A	Thermistor disconnect error: Fusing temperature sensor: far end
		Temperature detected below 0°C for 3 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC572-01	A	Fusing reload temperature error: Fusing temperature sensor: far end
		Temperature failed to reach 80°C with 60 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC572-02	A	Fusing reload temperature error: Fusing temperature sensor: far end
		Failed to achieve reload temperature within 405 sec. after the start of fusing temperature control.
		▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC573-00	A	Software high temperature error: Fusing temperature sensor: far end
		Temperature detected above 250°C for 10 sec. (temperature sampled every 10 ms).
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC574-00	A	Hardware temperature error: Fusing heat thermistor
		Temperature detected higher than 270°C.
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC575-00	A	Fusing lamp on error (Fusing lamp 2)
		Fusing lamp remained at full power for more than 50 sec. SC575-00 not detected within 50 sec. after reaching reload temperature and fusing idling, and within 50 sec. after start of paper feed.
		▪ Thermistor out of position because installed incorrectly ▪ Fusing lamp disconnected ▪ Overheat prevention disconnect

SC576-00	A	Thermistor disconnect error: Hot roller NC sensor
		Temperature detected below 0°C for 15 sec. (temperature sampled every 100 ms).
		▪ Thermistor disconnected ▪ Thermistor connector damaged

SC577-00	A	Software high temperature error: Hot roller NC sensor
		Temperature detected above 250°C for 10 sec. (temperature sampled every 100 ms).
		▪ TRIAC short ▪ IOB defect ▪ Fusing temperature control malfunction

SC581-00	D	Decurl Unit: Decurl HP sensor error
		Home position not detected within 6 sec., or HP sensor not detected OFF.
		▪ Lift motor connector loose, broken, defective ▪ HP sensor connector loose, broken, defective ▪ Motor defective ▪ HP sensor defective

SC582-00	D	Decurl Unit: Decurl limit error
		Over limit sensor ON detected.
		▪ Lift motor defective ▪ HP sensor connector loose, broken, defective ▪ Limit sensor connector loose, broken, defective ▪ HP sensor defective ▪ Limit sensor defective

SC587-01	C	Thermistor error
		Calculated temperature for thermistor lower than -10C, indicating thermistor disconnection, or calculated temperature less than 80°C, indicating thermistor disconnection.
		▪ Connectors loose, broken, defective ▪ Thermistors defective

SC590-1	D	RYB stepper motor error ▪ Tray 1(F1) Feed Motor ▪ Tray 1 (F1) transport Motor ▪ Tray 2 (F2) Feed Motor ▪ Tray 2 (F2) transport Motor ▪ Tray 3(F3) Feed Motor ▪ Tray 3 (F3) transport Motor ▪ Vertical Transport Motor ▪ Bank Exit Motor
		A stepper motor controlled by the Relay Board (RYB) has failed.
SC590-2	D	DRB stepper motor error ▪ Registration Entrance Motor ▪ Trailing Edge Shift Motor ▪ Registration Timing Motor ▪ Registration Shift Motor ▪ Transfer Timing Motor ▪ Duplex Transfer Motor ▪ Registration Gate Motor ▪ Main Relay Separation Motor ▪ LCT Relay Separation Motor ▪ PTB Motor
		A stepper motor controlled by the DRB in the right drawer has failed.

SC590-3	D	TDRB stepper motor error ▪ PTR Lift Motor ▪ Belt Centering Motor
		A stepper motor controlled by the TDRB on the back of the machine has failed.
SC590-4	D	EDRB stepper motor error ▪ Exit Junction Gate Motor ▪ Exit Invert Motor ▪ Invert Exit Motor ▪ Inverter Entrance Motor ▪ Duplex Transport Motor ▪ Invert Duplex Motor ▪ Pressure Roller Lift Motor
		A stepper motor controlled by the EDRB has failed.
SC590-5	D	DDRB stepper motor error ▪ Decurl Unit Motor ▪ Decurl Feed Motor
		A stepper motor controlled by the DDRB has failed.
		▪ Motor connector loose, broken, defective ▪ Motor drive board overheated ▪ Motor shorted out ▪ Motor or drive board defective **Note**: ▪ Look at the Point-to-Point diagram to determine which motors the referenced board controls. ▪ Go into the SP mode and use SP5804 to test the operation of the motors to determine which motor is not operating.

SC590-06	D	Decurl unit motor error
		A problem was detected with the stepper motor in the decurl unit.
		▪ Motor harness loose, broken, defective ▪ Motor defective

SC590-07	D	Charge unit motor error
		A problem was detected with the charge unit cleaning motor in the CGB unit. This motor is controlled by the IOB.
		▪ Motor harness loose, broken, defective ▪ Motor defective

SC590-08	D	Toner agitator motor error
		A problem was detected with the toner agitator motor on the end of the toner supply unit. This motor is controlled by the IOB.
		▪ Motor harness loose, broken, defective ▪ Motor defective

SC590-09	D	Toner supply motor error
		A problem was detected with the toner feeds motor on the end of the toner supply unit. This motor is controlled by the IOB.
		▪ Motor harness loose, broken, defective ▪ Motor defective

6.8 SC600

SC620-**	D	ADF communication error
		No response from the ADF after connection to the main machine or an error occurred after connection.
		▪ ADF I/F cable disconnected or loose ▪ Electrical noise on the line ▪ ADF defective ▪ Incompatible ADF connected ▪ IPU board defective

SC621-00	D	Peripheral Communication Error
		The UART generated an error when the finisher was connected.
		▪ Peripheral I/F cable disconnected or broken ▪ Peripheral main board disconnected or defective ▪ BCU defective ▪ IOB defective

SC622-00	D	Paper Bank Communication Error
		The UART generated an error.
		▪ Poor bank drawer connection ▪ BCU harness disconnected or broken ▪ IOB harness disconnected or broken ▪ BCU defective ▪ IOB defective

SC632-00	B	MF accounting device error 1	GW
		The controller sends data to the accounting device, but the device does not respond. This occurs three times.	
		▪ Loose connection between the controller and the accounting device	

SC 633-00	B	MF accounting device error 2	GW
		After communication is established, the controller receives the brake signal from the accounting device.	
		▪ Loose connection between the controller and the accounting device	

SC 634-00	B	MF accounting device error 3	GW
		The accounting device sends the controller the report that indicates a backup RAM error has occurred.	
		▪ Defective controller of the MF accounting device ▪ Battery error	

SC 635-00	B	MF accounting device error 4	GW
		The accounting device sends the controller the report that indicates the battery voltage error has occurred.	
		▪ Defective controller of the MF accounting device ▪ Battery error	

SC636	D	IC Card Error	GW
-01		External authentication module error	
		This SC is generated if the external authentication is enabled and following condition occurs: ▪ No external authentication module ▪ SD card error or external authentication module broken ▪ No DESS module	
-02		Version error	
		The version of the external authentication module is not correct.	
		▪ Incorrect module version	
-11		OSM User Code File Error	
		The correct "usercode" file could not be found in the root folder of the SD card because the file is not present, or the existing file is corrupted or the wrong type file.	
		Make sure the eccm.mod file is in the root folder of the SD card. **Note**: Check the eccm.mod file is in the root folder of the SD card.	

SC637	D	Tracking Information Notice Error	GW
-01		Tracking Application Error	
		When the tracking information is lost, this SC is issued.	
		▪ The machine failed to give notice the tracking information to the tracking SDK application. ▪ Tracking information is lost, and the machine cannot count correctly.	
-02		Tracking Information Notice Error	
		When the tracking information is lost, this SC is issued.	
		▪ The machine failed to give notice the tracking information to the management server. ▪ Tracking information is lost, and the machine cannot count correctly.	

SC650	B	Communication error of the remote service modem (Embedded RCG-M)
-001		Authentication error
		The authentication for the Embedded RCG-M fails at a dial up connection.
		▪ Incorrect SP settings ▪ Disconnected telephone line ▪ Disconnected modem board ▪ LAN board disconnected
-004		Incorrect modem setting
		Dial up fails due to the incorrect modem setting.
		▪ Same as -001
-005	B	Communication line error
		The supplied voltage is not sufficient due to a defective communication line or defective connection.
		▪ Same as -001
-013		Modem board error 1
		The modem board does not work properly even though the setting of the modem board is installed with a dial up connection.
		▪ Same as -001
-014		Modem board error 2
		The modem board is installed even though the RCG-N is installed.
		▪ Same as -001 above

SC651	C	Incorrect dial up connection
		-001: Program parameter error
		-002: Program execution error
		An unexpected error occurs when the modem (Embedded RCG-M) tries to call the center with a dial up connection.
		▪ Caused by a software bug

SC652-00	D	ID2 mismatching
		ID2 for @Remote certification is mismatching between the controller board and NVRAM.
		▪ Used controller board installed ▪ Used NVRAM installed

SC653-00	D	@Remote Service ID2 Mismatch Error 2	GW
		One of the following problems exist with the ID2 stored in NVRAM: ▪ ID2 has less than 17 digits ▪ A non-printable character exists in ID2 ▪ ID2 is all spaces ▪ ID2 is NULL	
		▪ Replace NVRAM.	

SC665-01	D	FFC connect check: IPU-to-BCU
		The machine checks the FFC (Flat Flexible Cable) connections at the HORUS module on the BCU to see whether the connections are "H" or "L" to determine whether the connections are correct and secure. ▪ The check returns an "H" is the connection is secure, and returns an "L" if the connection is not secure. ▪ This SC is issued if the check returns an "L".
		▪ FFC between BCU and IPU loose, broken, defective ▪ BCU defective ▪ IPU defective

SC665-02	D	FFC connection check: BCU-to-CNB
		The machine checks the FFC (Flat Flexible Cable) AD terminal connections at the HORUS module on the BCU to see whether the connections are correct and secure by checking the voltage levels.
		▪ FFC between BCU and IPU loose, broken, defective ▪ BCU defective ▪ IPU defective

SC665-03	D	FFC connection check: IOB-to-CNB
		The machine checks the FFC (Flat Flexible Cable) AD terminal connections at the IOB and CNB to see whether the connections are correct and secure by checking the voltage levels.
		▪ FCC between IOB and CNB loose, broken, defective ▪ BCU defective ▪ IOB defective ▪ CNB defective

SC665-04	D	IOB fail to to start
		There was a critical failure on IOB.
		▪ BCU-to-CNB harnesses loose, broken, defective ▪ IOB-to-CNB harnesses loose, broken, defective ▪ No output from PSU B ▪ IOB defective ▪ RYB defective ▪ CNB defective ▪ BCU defective

SC669-*	D	BCU EEPROM communication error
		Three tries were attempted but three EEPROM communication errors were returned.
		▪ Noise ▪ EEPROM defective ▪ BCU defective
-01		EEPROM OPEN ID error
-02		EEPROM OPEN channel error
-03		EEPROM OPEN device error
-04		EEPROM OPEN communication interrupt error
-05		EEPROM OPEN timeout error
-06		EEPROM OPEN operation interrupt error
-07		EEPROM OPEN buffer full
-08		EEPROM OPEN no error code
-09		EEPROM CLOSE ID error
-10		EEPROM CLOSE no error code
-11		EEPROM DATA WRITE ID error
-12		EEPROM DATA WRITE channel error
-13		EEPROM DATA WRITE device error
-14		EEPROM DATA WRITE communication cancel error
-15		EEPROM DATA WRITE communication timeout error
-16		EEPROM DATA WRITE operation interrupt error
-17		EEPROM DATA WRITE buffer full
-18		EEPROM DATA WRITE no error code
-19		EEPROM DATA READ ID error
-20		EEPROM DATA READ channel error

-21		EEPROM DATA READ device error
-22		EEPROM DATA READ communication cancel error
-23		EEPROM DATA READ timeout error
-24		EEPROM DATA READ operation interrupt error
-25		EEPROM DATA READ buffer full
-26		EEPROM DATA READ no error code
-27		EEPROM DEVICE DETECT ID error
-28		EEPROM DEVICE DETECT channel error
-29		EEPROM DEVICE DETECT device error
-30		EEPROM DEVICE DETECT communication cancel error
-31		EEPROM DEVICE DETECT communication timeout error
-32		EEPROM DEVICE DETECT operation interrupt error
-33		EEPROM DEVICE DETECT buffer full
-34		EEPROM DEVICE DETECTt no error code

SC670-00	D	Engine start failure	GW
		Case 1 ▪ No /ENGRDY signal asserted at power on, or when machine left low power mode. ▪ No response from EC from engine within the specified time at power on. ▪ No response from PC from engine within the specified time at power on. ▪ No response from SC from engine within the specified time at power on (MFP module only). ▪ Write to Rapi driver failed (no destination found at PCI). **Case 2** ▪ Unexpected error occurred after /ENGRDY signal asserted.	
		▪ Case 1: Engine board did not boot. ▪ Case2: Engine board unexpectedly reset	

SC672		Controller-to-operation panel communication error at startup
-10		Communication problem between controller and operation panel occurred at power on.
-11		Communication problem between controller and operation panel occurred, or a data error occurred, at power on.
-12		Communication with the controller board suddenly ceased after normal start up.
-13		A problem shut down the controller.
-99		Operation panel OCS (firmware) error
	D	▪ After the machine is powered on, the communication between the controller and the operation panel is not established, or communication with controller is interrupted after a normal startup. ▪ After startup reset of the operation panel, the attention code or the attention acknowledge code is not sent from the controller within 30 seconds. After the controller issues a command to check the communication line with the controller at 30-second intervals, the controller fails to respond twice.
		▪ Controller stalled ▪ Controller board installed incorrectly ▪ Controller board defective ▪ Operation panel connector loose or defective ▪ Controller delay

SC682	D	PCDU ID chip communication error
		Communication with the PCDU ID chip failed 3 times.
-01		Device ID illegal
		▪ ID corrupted, wrong unit
-06		Channel error
		▪ Poor connection

-11		Device error
		▪ No ID chip
-16		Communication interrupted
		▪ Line noise
-21		Communication timeout
		▪ Line noise
-26		Operation interrupted
		▪ Line noise
-31		Request buffer full
		▪ Software defective.
-36		No error code
		▪ Software defective.

SC687-00	D	PER Error
		No PER command from the controller.
		▪ Communication error

6.9 SC700

SC700-01	D	ADF: bottom plate motor error
		The bottom plate HP sensor could not be detect the plate leaving the home position after the bottom plate motor turned on and started to raise the plate, or it did not detect the plate after the motor lowered it.
		▪ Bottom plate HP sensor harness loose, broken, defective ▪ Bottom plate motor harness loose, broken, defective ▪ Sensor defective ▪ Motor defective ▪ ADF main board defective

SC700-02	D	ADF: original pickup operation error
		Even though the pickup motor is rotating clock-wise, the pickup roller home position sensor cannot detect the position of the pickup roller.
		▪ Pickup roller HP sensor harness loose, disconnected, defective ▪ Pickup roller HP sensor defective ▪ Pickup motor harness loose, disconnected, defective ▪ Pickup motor defective ▪ ADF control board defective

SC700-04	D	ADF: feed motor error
		An error was detected during motor operation.
		▪ Make sure bracket installed correctly, not bent ▪ Motor harness loose, broken, defective ▪ Motor defective

SC700-05	D	ADF: Pull-out roller motor error
		An error was detected during motor operation.
		▪ Make sure bracket installed correctly, not bent ▪ Motor harness loose, broken, defective ▪ Motor defective

SC700-06	D	ADF: transport motor error
		An error was detected during motor operation.
		▪ Make sure bracket installed correctly, not bent ▪ Motor harness loose, broken, defective ▪ Motor defective

SC700-07	D	ADF: scan motor error
		An error was detected during motor operation.
		▪ Make sure bracket installed correctly, not bent ▪ Motor harness loose, broken, defective ▪ Motor defective

SC700-09	D	ADF: exit motor error
		An error was detected during motor operation.
		▪ Make sure bracket installed correctly, not bent ▪ Motor harness loose, broken, defective ▪ Motor defective

SC701-02	D	ADF: pick-up roller motor drive board error
		This SC code may be appear with an original jam alert. There was a problem with the board that controls the pick-up roller motor.
		▪ Motor harness loose, broken, defective ▪ ADF control board harness loose, broken, defective ▪ Motor defective ▪ ADF control board defective

SC702-04	D	ADF: interlock switch error 1
		There is a problem (short, etc.) with either the cover interlock switch or lift interlock switch (24V).
		▪ Switch defective

SC702-05	B	ADF: interlock switch error 2
		There is a problem (short, etc.) with either the cover interlock switch or lift interlock switch (24V).
		▪ Switch defective

SC703-01	B	ADF: double-feed detection error
		An error signal was detected for the double-feed detection function.
		▪ Double-feed sensor board harness loose, broken, defective ▪ Double-feed sensor(s) harness loose, broken, defective ▪ Double-feed sensor board defective ▪ Double-feed sensor defective

SC720-01	D	Finisher: Communication error with downstream peripheral
		▪ Three attempts to communicate with the downstream unit failed because there was no response to the recognition command sent to the unit. ▪ After the recognition command was sent to the upstream unit, the TX port level did not go HIGH within the prescribed time.
		▪ I/F cable of the downstream unit loose, broken, defective ▪ Downstream main board defective, disconnected

SC720-03	D	Finisher: Interlock switch error 1
		There was an error in the voltage level of the 24V_INT_1 power supply (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Harness shorted out

SC720-04	D	Finisher: Interlock switch error 2
		There was an error in the voltage level of the 24V_INT_2 power supply (this SC issues immediately at 1st occurrence).z
		▪ Motor defective ▪ Harness shorted out

SC720-05	D	Finisher: PSU cooling fan error
		There was no LOCK detection signal issued from the fan motor (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor drive board defective

SC720-10	D	Finisher: Transport motor 1 (entrance, straight-through)
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-11	D	Finisher: Transport motor 2 (junction gate feed) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-12	D	Finisher: Transport motor 3 (downstream from punch unit) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-13	D	Finisher: Transport motor 4 (registration) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-15	B	Finisher: Transport motor 6 (pre-stack) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-16	B	Finisher: Exit motor 1 (proof tray exit) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-17	B	Finisher: Exit motor 2 (exit to shift tray) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-18	B	Finisher: Exit motor 3 (staple unit exit) error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-20	B	Finisher: Junction gate motor 1 (proof tray) error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-21	D	Finisher: Junction gate motor 2 (staple JG) error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-23	B	Finisher: Pre-stack release motor (pressure/JG release) error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).

		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-24	B	Finisher: Exit guide motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-25	D	Finisher: Punch drive motor error
		▪ After the punch motor started to operate, the punch was not detected at its home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ After the punch motor started to operate, the punch did not leave its home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-26	B	Finisher: Punch switch motor error
		▪ When the component moved to the home position, the sensor could not detect the component at the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor did not detect that the component had left the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload

SC720-27	D	Finisher: Punch movement motor error
		▪ After the punch motor started to operate, the punch did not return to its home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the punch motor started to operate, the punch unit did not leave the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload

SC720-28	B	Finisher: Punch side-to-side registration (motor, CIS) error
		There was an error at the CIS used for side-to-side registration of the punch unit.
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload

SC720-31	B	Finisher: Jogger motor 2 (front) error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-32	B	Finisher: Jogger motor 3 (rear) error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-33	B	Finisher: Positioning roller motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-34	B	Finisher: Positioning roller drive motor
		A discharge or short circuit was detected on the motor drive board (this SC issues immediately at first error).
		▪ Motor defective ▪ Connector loose, broken, defective

SC720-35	B	Finisher: Stack plate motor 1 error
		▪ The stack plate drive unit in the staple unit did not return to the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect that the component had left the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-39	B	Finisher: Booklet stapler top fence motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-40	B	Finisher: Bottom fence lift motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-41	B	Finisher: Finisher: Stack feed-out belt motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-42	B	Finisher: Finisher: Corner stapler movement motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-43	B	Finisher: Finisher: Stapler rotation motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-44	B	Finisher: Corner stapler motor error
		▪ The corner stapler did not operate within the prescribed time (1st error triggers a jam, 2nd error issues this SC code) ▪ When the component moved to the home position, the sensor could not detect the component at the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Staple jam ▪ Overload (too many sheets for stapling) ▪ Motor defective ▪ Connector loose, broken, defective ▪ HP sensor dirty, disconnected, defective

SC720-50	B	Finisher: Booklet stapler side fence motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).

		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-51	B	Finisher: Booklet stapler bottom fence motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-52	B	Finisher: Fold plate motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-53	B	Finisher: Booklet stapler bottom fence motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-54	B	Finisher: Stack unit transport motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-55	B	Finisher: Booklet stapler clamp roller motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).

		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-56	B	Finisher: Stack JG motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-60	B	Finisher: Booklet stapler motor error
		▪ The booklet stapler did not operate within the prescribed time (1st error triggers a jam, 2nd error issues this SC code) ▪ When the component moved to the home position, the sensor could not detect the component at the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Staple jam ▪ Overload (too many sheets for stapling) ▪ Motor defective ▪ Connector loose, broken, defective ▪ HP sensor dirty, disconnected, defective

SC720-70	B	Finisher: Tray 1 lift motor error
		▪ When the tray started to lower, the paper sensor continued to detect paper even though enough time had elapsed for the sensor to no longer detect paper (1st error triggers a jam, 2nd error issues this SC code) ▪ When the tray started to rise, the paper sensor did not detect paper even though enough time had elapsed for the sensor to detect paper (1st error triggers a jam, 2nd error issues this SC code)
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Paper sensor dirty, disconnected, defective

SC720-71	B	Finisher: Shift motor 1 (tray, shift roller) motor error
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-72	B	Finisher: Exit jogger motor 1 error
		▪ When the jogger motor started to operate, the component was not detected at the home position within the prescribe time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the jogger fence moved from the home position, the sensor could not detect that the component had left the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-74	B	Finisher: Output jogger retraction motor error
		▪ When output jogger retraction started, the component was not detected at the home position within the prescribe time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the output jogger retraction moved from the home position, the sensor could not detect that the component had left the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-75	B	Finisher: Drag drive motor error
		▪ When drag roller operation started, the component was not detected at the home position within the prescribe time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the drag roller moved from the home position, the sensor could not detect that the component had left the home position within the prescribed time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-76	B	Finisher: Drag roller motor error
		▪ At cw rotation (roller return), the motor drive board discharged or had a short circuit (this SC issues immediately at first error). ▪ At ccw rotation (press operation), the component was not detected at the home position within the prescribe time (1st error triggers a jam, 2nd error issues this SC code). ▪ At ccw rotation (press operation), the component had not moved from the home position within the prescribe time (1st error triggers a jam, 2nd error issues this SC code).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ HP sensor dirty, disconnected

SC720-80	D	Finisher: Interlock power supply error
		There was an error in the voltage level of the 24V_INT power supply (this SC issues immediately at 1st occurrence).
		Control board power supply circuit damaged

SC720-81	D	Finisher: Interlock switch error 3
		There was an error in the voltage level of the 24V_PO}W power supply (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Harness shorted out

SC720-82	B	Finisher: Fence horizontal move motor
		▪ When the component moved to the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ When the component moved from the home position, the sensor could not detect the component within the prescribed time (1st error triggers a jam, 2nd error issues this SC code). ▪ DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Overload ▪ Encoder error ▪ HP sensor dirty, disconnected, defective

SC720-83	B	Finisher: Stack transport motor error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC720-84	B	Finisher: Fold roller motor error
		A discharge or short circuit was detected on the motor drive board (this SC issues immediately at first error).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload

SC720-85	B	Finisher: Booklet stapler tray motor error
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		▪ Motor defective ▪ Connector loose, broken, defective ▪ Motor overload ▪ Encoder error

SC725-01	D	Multi Fold Unit: downstream communication error
		Downstream MFU failed to respond to communication from the main machine.
		▪ MFU I/F cable disconnected, loose, or broken ▪ MFU main board harness disconnected or broken ▪ Main machine controller harness disconnected or broken ▪ MFU main board defective ▪ Main machine controller board defective

SC725-03	D	Multi Fold Unit: interlock switch error 1
04		Multi Fold Unit interlock switch error 2
		▪ A fuse has blown on the 24V line.

SC725-12	B	Multi Fold Unit: registration roller transport motor error
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-13	B	Multi Fold Unit: dynamic roller transport roller error
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-14	B	Multi Fold Unit: top tray exit motor error.
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-30	B	Multi Feed Unit 1st stopper motor error
		The 1st stopper HP sensor did not detect the 1st stopper in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ 1st stopper HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ 1st stopper motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-31	B	Multi Fold Unit: 2nd stopper motor
		The 2nd stopper HP sensor did not detect the 2nd stopper in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ 2nd stopper HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ 2nd stopper motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-32	B	Multi Fold Unit: 3rd stopper motor error
		The 3rd stopper HP sensor did not detect the 3rd stopper in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ 3rd stopper HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ 3rd stopper motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-33	B	Multi Fold Unit: jogger fence motor error
		The jogger fence HP sensor did not detect the jogger fence in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Jogger fence HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Jogger fence motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-34	B	Multi Fold Unit: dynamic roller lift motor error
		The dynamic roller HP sensor did not detect the dynamic roller in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Dynamic roller HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Dynamic roller lift motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-35	B	Multi Fold Unit: registration roller release motor error
		The registration roller HP sensor did not detect the registration roller in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Registration roller HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Registration roller release motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-36	B	Multi Fold Unit: FM2 direct-send JG motor error
		The direct-send JG HP sensor did not detect the direct-send JG in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ FM2 direct-send JG HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ FM2 direct-send JG motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-37	B	Multi Fold Unit: FM6 pawl motor error
		The FM6 pawl HP sensor did not detect the FM6 pawl in (or out of) its home position. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ FM6 pawl HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ FM6 pawl motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-38	B	Multi Fold Unit: fold plate motor error
		The fold plate HP sensor did not detect the fold plate in (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Fold plate HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Fold plate motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC725-39	B	Multi Fold Unit: 1st fold motor error
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-40	B	Multi Fold Unit: 2nd fold motor
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-41	B	Multi Fold Unit: crease motor error
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-71	D	Multi Fold Unit: horizontal transport motor
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-72	D	Multi Fold Unit: horizontal exit motor
		The motor drive PCB detected an error at the motor.
		▪ Motor harness or connector disconnected or defective ▪ Motor or motor drive board defective

SC725-73	D	Multi Fold Unit: top tray transport motor error
		▪ The motor drive PCB detected an error at the motor.
		▪ The motor drive PCB detected an error at the motor.

SC725-74	D	Multi Fold Unit: entrance JG motor error
		The entrance junction gate HP sensor did not detect the entrance junction gate at (or out of) its home position. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Entrance JG HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Entrance JG motor harness or connector disconnected or defective ▪ Sensor defective ▪ Motor or motor drive board defective

SC735-10	B	Trimmer Unit: trimming blade motor error
		The trimming blade HP sensor did not detect the blade at (or out of) its home position within the prescribed time during trimming. The 1st detection causes a jam signal if the error occurred during cutting. The 2nd detection causes this SC code if the error occurred at the start or end of cutting.
		▪ Trimming blade HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Trimming blade motor harness or connector disconnected or defective ▪ Motor defective ▪ Trimming unit main board defective

SC735-11	B	Trimmer Unit: press roller motor error
		The press roller HP sensor did not detect the press roller at (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Press roller motor HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Press roller motor harness or connector disconnected or defective ▪ Motor defective ▪ Trimming unit main board defective

SC735-12	B	Trimmer Unit: cut position motor error
		The cut position HP sensor did not detect the cut position stopper at (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Cut position HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Cut position motor harness or connector disconnected or defective ▪ Motor defective ▪ Trimming unit main board defective

SC735-13	B	Trimmer Unit: press stopper motor error
		The press stopper HP sensor did not detect the press stopper at (or out of) its home position within the prescribed time. The 1st occurrence causes a jam, and the 2nd occurrence causes this SC code.
		▪ Press stopper HP sensor dirty ▪ Sensor harness or connector disconnected or defective ▪ Press stopper motor harness or connector disconnected or defective ▪ Motor defective ▪ Trimming unit main board defective

SC740-01	D	Cover Interposer Tray: downstream communication error
		The downstream Cover Interposer Tray (CIT) failed to respond to three attempts by the main machine to communicate.
		▪ CIT I/F cable disconnected, loose, or broken ▪ CIT main board harness disconnected or broken ▪ Main machine controller harness disconnected or broken ▪ CIT main board defective ▪ Main machine controller board defective

SC740-10	B	Cover Interposer Tray: lift motor 1 error
		In the first tray: ▪ The upper limit sensor did not detect the bottom plate within the specified time after the lift motor switched on to lift the bottom plate. ▪ The lower limit sensor did not direct the bottom plate within the specified time after the lift motor switched on to lower the bottom plate. **Note**: In both cases, 1 error count indicates a jam, 2 error counts issue this SC code.
		▪ Lift motor, upper limit sensor, lower limit sensor harnesses, connectors disconnected or defective ▪ Lift motor defective ▪ Upper limit sensor defective ▪ Lower limit sensor defective

SC740-11	B	Cover Interposer Tray: pick-up motor 1 error
		In the first tray: ▪ While the pick-up roller motor was on, the pick-up roller HP sensor did not detect the pick-up roller at the home position within the specified number of pulses. ▪ While the pick-up roller motor was on, the pick-up roller HP sensor did not detect the pick-up roller at the home position above the specified number of pulses. **Note**: In both cases, 1 error count indicates a jam, 2 error counts issue this SC code.
		▪ The pick-up motor, pick-up roller HP sensor harnesses, connectors were disconnected or defective ▪ Pick-up motor overload due to an obstruction ▪ Pick-up motor defective ▪ Pick-up roller HP sensor defective

SC740-20	B	Cover Interposer Tray: lift motor 2 error
		In the second tray: ▪ The upper limit sensor did not detect the bottom plate within the specified time after the lift motor switched on to lift the bottom plate. ▪ The lower limit sensor did not direct the bottom plate within the specified time after the lift motor switched on to lower the bottom plate. **Note:** In both cases, 1 error count indicates a jam, 2 error counts issue this SC code.
		▪ Lift motor, upper limit sensor, lower limit sensor harnesses, connectors disconnected or defective ▪ Lift motor defective ▪ Upper limit sensor defective ▪ Lower limit sensor defective

SC740-21	B	Cover Interposer Tray: pickup motor 2 error
		In the second tray: ▪ While the pick-up roller motor was on, the pick-up roller HP sensor did not detect the pick-up roller at the home position within the specified number of pulses. ▪ While the pick-up roller motor was on, the pick-up roller HP sensor did not detect the pick-up roller at the home position above the specified number of pulses. **Note:** In both cases, 1 error count indicates a jam, 2 error counts issue this SC code.
		▪ The pick-up motor, pick-up roller HP sensor harnesses, connectors were disconnected or defective ▪ Pick-up motor overload due to an obstruction ▪ Pick-up motor defective ▪ Pick-up roller HP sensor defective

SC750-01	D	Perfect Binder: Communication error with downstream peripheral
		RPPI Base Specification Standard
		▪ Relay board defective, connector loose, broke, defective

SC750-10	D	Perfect Binder: Master-to-slave communication error 1
		Master control board could not communicate with the slave control board for over 5 sec. and issued the communication alarm.
		▪ Connector loose, broken, defective; slave board defective, master board defective

SC750-11	D	Perfect Binder: Master-to-slave communication error 2
		Slave control board could not communicate with the master control board for over 5 sec. and issued the communication alarm.
		▪ Connector loose, broken, defective; slave board defective, master board defective

SC750-12	D	Perfect Binder: Master-to-relay board communication error
		IPU not "READY" IPU occupancy not obtained IPU detected an error
		▪ Master control board, relay control board connectors loose, broken, defective ▪ Master control board defective ▪ Relay control board defective

SC750-13	D	Perfect Binder: Slave-to-cutter control board communication error 1
		Slave control board could not communicate with the cutter control board (it detected the communication alarm for over 5 sec.).
		▪ Slave board connector loose, broken, defective ▪ Cutter board defective ▪ Connector loose, broken, defective

SC750-14	D	Perfect Binder: Slave-to-cutter control board communication error 2
		Cutter control board could not communicate with the slave control board and detected the communication alarm for over 5 sec.
		▪ Slave board connector loose, broken, defective ▪ Cutter board defective ▪ Connector loose, broken, defective

SC750-15	D	Perfect Binder: Master EEPROM Read Error
		Data written to the EEPROM does not match data read from the EEPROM
		▪ EEPROM defective

SC750-16	D	Perfect Binder: Master EEPROM write error
		When data was written to the EEPROM, the EEPROM signaled that it was busy for longer than 25 ms and did not recover.
		▪ EEPROM defective ▪ EEPROM not installed

SC750-17	D	Perfect Binder: Master-to-inserter initial communication error
		After the ConfigSet (parallel signal) went ON while the inserter connection status was being checked, the initialization did not end successfully within 5 sec.
		▪ Inserter board connector loose, broken, defective ▪ Inserter board defective

SC750-18	D	Perfect Binder: Master-to-Inserter Board Communication Error
		No response to the specified command during the timeout. There was an overflow in memory where information required for paper feed is stored. (Master control board detection.)
		▪ Communication error at inserter ▪ Connector loose, broken, defective

SC750-19	D	Perfect Binder: Software matching error
		The IDs for the relay software of the master, slave, cutter, inserter devices do not match.
		▪ Software write failure, software of another company

SC750-20	D	Perfect Binder: 24V Check Signal Error 1
		The 24V1 monitor signal of the master control board did not go off even though the front door switch was closed. (Relay circuit failed to go ON.)
		▪ Front door L/R SW defective, master board defective

SC750-21	D	24V Check Signal Error 2
		Top cover switch open or the 24V2 monitoring signal of master controller lost power for more than 5 sec, regardless of the status of the front door L/RWS and top cover sensor (Top cover sensor, or top cover switch is faulty.)
		▪ Front door L/RSW defective ▪ Top cover switch defective ▪ Top cover sensor defective ▪ Master board defective

SC750-22	D	Perfect Binder: 24V Check Signal Error 3
		The the 24V2 check signal of the slave control board failed to go OFF within 5 sec. even though the front door and top cover are closed.
		▪ Front door L/RSW defective ▪ Top cover switch defective ▪ Top cover sensor defective ▪ Master board defective

SC750-23	D	Perfect Binder: 24V Check Signal Error 4
		The the 24V3 check signal of the slave control board failed to go OFF within 5 sec., regardless of the status of the front door (monitored by the master control board).
		▪ Front door L/RSW defective, slave board defective

SC750-24	D	Perfect Binder: Power supply fan (right) lock error
		Right power supply fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Right power supply fan overloaded, defective ▪ Slave board defective

SC750-25	D	Perfect Binder: Power supply fan (center) lock error
		Center power supply fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Center power supply fan overloaded, defective ▪ Slave board defective

SC750-26	D	Perfect Binder: Left power supply fan lock error detected
		A lock signal was detected within 300 ms after the left power supply fan started up.
		▪ Left power supply fan overloaded, defective ▪ Slave board defective

SC750-27	D	Perfect Binder: Spine plate fan (front) lock error
		Front spine plate fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Front spine plate fan overloaded, defective ▪ Slave board defective

SC750-28	D	Perfect Binder: Spine plate lower fan (right) lock error
		Right lower spine plate fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Right lower spine plate fan overloaded, defective ▪ Slave board defective

SC750-29	D	Perfect Binder: Spine plate upper fan (front) lock error
		Front upper spine plate fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Front upper spine plate fan overloaded, defective ▪ Slave board defective

SC750-30	D	Perfect Binder: Spine plate upper fan (right) lock error
		Upper right spine plate fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Upper right spine plate fan overloaded, defective ▪ Slave board defective

SC750-31	D	Perfect Binder: Signature fan 2 (front) lock error
		Front signature fan 2 failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Front signature fan 2 overloaded, defective ▪ Slave board defective

SC750-32	D	Perfect Binder: Signature fan 2 (rear) lock error
		Rear signature fan 2 failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		Rear signature fan 2 overloaded, defective ▪ Slave board defective

SC750-33	D	Perfect Binder: Signature fan 1 (front) lock error
		Front signature fan 1 failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Front signature fan 1 overloaded, defective ▪ Slave board defective

SC750-34	D	Perfect Binder: Signature fan 1 (rear) lock error
		Rear signature fan 1 failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Rear signature fan 1 overloaded, defective ▪ Slave board defective

SC750-35	D	Perfect Binder: Glue supply fan (high) lock error
		Glue supply (high) fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Glue supply fan (high) overloaded, defective ▪ Slave board defective

SC750-36	D	Perfect Binder: Glue supply fan L lock error
		Glue supply L fan failed to generate a lock signal within 12 sec., and signal could be detected even after a re-try.
		▪ Glue supply fan L overloaded, defective ▪ Slave board defective

SC750-37	D	Perfect Binder: Grip HP sensor lag error
		During operation of the grip unit the HP sensor did not OFF after grip unit moved 20 mm.
		▪ Grip motor overloaded, defective ▪ Grip HP sensor defective ▪ Sensor flag defective ▪ Connector loose, broken defective

SC750-38	D	Perfect Binder: Grip HP sensor late error
		The HP sensor did not go ON after the grip unit released the signature and moved 76 mm.
		▪ Grip motor overloaded, defective ▪ Grip HP sensor defective ▪ Sensor flag defective ▪ Connector loose, broken defective

SC750-39	D	Perfect Binder: Grip end sensor lag error
		▪ The grip end sensor did not go off after the grip unit released the signature and moved the prescribed distance. ▪ The grip end sensor did not go off, even after the booklet had been released after moving 86 mm.
		▪ Grip motor overloaded, defective ▪ Grip end sensor defective ▪ Sensor flag defective ▪ Connector loose, broken defective

SC750-40	D	Perfect Binder: Grip end sensor late error
		▪ The grip end sensor did not go on, even after the booklet had been moved 86 mm. ▪ The grip end sensor did not go on within 3.7 sec. after the book was gripped.
		▪ Grip motor overloaded, defective ▪ Grip end sensor defective ▪ Sensor flag defective ▪ Connector loose, broken defective ▪ No data incoming from signature thickness sensor

SC750-41	D	Perfect Binder: Left trimming buffer HP sensor lag error
		The left trimmings buffer HP sensor did not go OFF within 3 sec. after the trimmings buffer moved away from the sensor.
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Left trimmings buffer HP sensor defective ▪ Buffer full of trimmings

SC750-42	D	Perfect Binder: Trimming buffer HP sensor late error
		The left trimmings buffer HP sensor did not go ON within 5 sec. after the trimmings buffer moved toward the sensor.
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Left trimmings buffer HP sensor defective ▪ Buffer full of trimmings

SC750-43	D	Perfect Binder: Right trimming buffer HP sensor lag error
		The right trimmings buffer HP sensor did not go OFF within 3 sec. after the trimmings buffer moved away from the sensor.
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Right trimmings buffer HP sensor defective ▪ Buffer full of trimmings

SC750-44	D	Perfect Binder: Right trimming buffer HP sensor late error
		The right trimmings buffer HP sensor did not go ON within 5 sec. after the trimmings buffer moved toward the sensor.
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Right trimmings buffer HP sensor defective ▪ Buffer full of trimmings

SC750-45	D	Perfect Binder: Trimmings buffer motor rotation error
		No encoder lock input received within 50 ms during operation.
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Left trimmings buffer end sensor defective ▪ Buffer full of trimmings

SC750-46	D	Perfect Binder: Thrust plate operation error
		The thrust press plate sensor did not go OFF after the trimmings buffer moved to the left for 3 sec. (blocked by jammed trimming scraps).
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Thrust plate sensor defective ▪ Buffer full of trimmings

SC750-47	D	Perfect Binder: Thrust plate retraction error
		The paper press plate sensor did not go ON after the trimmings buffer moved to the right for 3 sec. (blocked by jammed trimming scraps).
		▪ Trimmings buffer motor defective ▪ Motor connector loose, broken, defective ▪ Thrust plate sensor defective ▪ Buffer full of trimmings

SC750-48	D	Perfect Binder: Book collection buffer HP sensor error
		The book collection buffer HP sensor did not go OFF within the time prescribed for release of the book in the book buffer.
		▪ Book buffer tray motor connector loose, broken, defective ▪ Motor overload, defective ▪ Book collection buffer tray HP sensor loose, broken, defective, blocked by paper scraps

SC750-49	D	Perfect Binder: Book collection buffer tray HP sensor late error
		The book collection buffer HP sensor did not go off even after the book buffer tray moved for 3 sec.
		▪ Book buffer tray motor connector loose, broken, defective ▪ Motor overload, defective ▪ Book collection buffer tray HP sensor loose, broken, defective, blocked by paper scraps

SC750-50	D	Perfect Binder: Press HP sensor lag error
		During press plate operation during trimming, the edge press plate HP sensor did not OFF after it had time to move the prescribed distance.
		▪ Edge press plate motor connection loose, broken, defective ▪ Motor overloaded, defective ▪ Edge press plate HP sensor connection loose, broken, defective ▪ Sensor defective

SC750-51	D	Perfect Binder: Edge press plate late error
		Edge press plate sensor did not go ON within 15 sec. of edge press release. The edge press plage motor stopped when the edge press plate HP sensor switched ON, but after it stopped the HP sensor went OFF.
		▪ Edge press plate motor connection loose, broken, defective ▪ Motor overloaded, defective ▪ Edge press plate HP sensor connection loose, broken, defective ▪ Sensor defective

SC750-52	D	Perfect Binder: Press end sensor lag jam
		After the press plate released the signature and moved the prescribed distance, the press end sensor did not go OFF.
		▪ Edge press plate motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Press end sensor connector loose, broken, defective ▪ Sensor defective

SC750-53	D	Perfect Binder: Press end sensor late jam
		The press end sensor did not go ON within 8 sec. after the press operation started Operation stopped when the press end sensor went ON, but sensor went off after the operation stopped.
		▪ Edge press plate motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Press end sensor connector loose, broken, defective ▪ Sensor defective ▪ No data about book thickness received

SC750-54	D	Perfect Binder: Press limit sensor error
		Press limit sensor signaled ON.
		▪ Press limit sensor connector loose, broken, defective ▪ Sensor defective ▪ Edge press plate HP sensor connector loose, broken, defective ▪ Sensor defective

SC750-55	D	Perfect Binder: Slide HP sensor lag error
		When the slide was raised, the slide HP sensor did not go OFF after it moved 180 mm.
		▪ Slide motor connection loose, broken, defective ▪ Motor overloaded, defective ▪ Slide HP sensor connection loose, broken, defective ▪ Sensor defective

SC750-56	D	Perfect Binder: Slide HP sensor late error
		The slide HP sensor did not go ON after the slide was lowered and had enough time to move 180 mm.
		▪ Slide motor connection loose, broken, defective ▪ Motor overloaded, defective ▪ Slide HP sensor connection loose, broken, defective ▪ Sensor defective

SC750-57	D	Perfect Binder: Book rotation HP sensor (right) lag error
		The book rotation HP sensor did not go OFF after the book was rotated 60 degrees. The book rotation HP sensor did not go OFF after the book was rotated 30 degrees.
		▪ Book rotation motor 1 (right) connector, loose, broken, defective ▪ Motor overloaded, obstructed, defective ▪ Book rotation HP sensor (right) connector loose, broken, defective

SC750-58	D	Perfect Binder: Book rotation HP sensor (right) late error
		The book rotation HP 1 (right) sensor did not go ON after the book was rotated 440 degrees. The book rotation HP 1 (right) sensor did not go ON after the book was rotated 400 degrees. The book rotation HP 1 (right) sensor did not go ON after the book was rotated 360 degrees.
		▪ Book rotation motor 1 (right) connector, loose, broken, defective ▪ Motor overloaded, obstructed, defective ▪ Book rotation HP sensor (right) connector loose, broken, defective

SC750-59	D	Perfect Binder: Book rotation HP sensor (left) lag error
		The book rotation HP sensor 2 (right) did not go OFF after the book was rotated 50 degrees. The book rotation HP sensor 2 (left) did not go OFF after the book was rotated 50 degrees toward the cutting position.
		▪ Book rotation motor 2 (left) connector, loose, broken, defective ▪ Motor overloaded, obstructed, defective ▪ Book rotation HP sensor 1 (left) connector loose, broken, defective

SC750-60	D	Perfect Binder: Book rotation HP sensor (left) late error
		The book rotation HP 2 (left) sensor did not go ON after the book was rotated 400 degrees. The book rotation HP 2 (left) sensor did not go ON after the book was rotated 400 degrees. Before the book is rotated before cutting, the book rotation HP sensor 2 (left) did not go on, even after the book had been rotated twice the prescribed distance.
		▪ Book rotation motor 2 (left) connector, loose, broken, defective ▪ Motor overloaded, obstructed, defective ▪ Book rotation HP sensor 1 (left) connector loose, broken, defective

SC750-61	D	Perfect Binder: Cutter front HP sensor lag error
		At initialization, the blade did not leave the home position even after 20 mm of movement. When the blade moved to the rear, the blade did not leave the home position after the length of time elapsed tof 10 mm of movement.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensors 1, 2 connectors loose, broken, defective

SC750-62	D	Perfect Binder: Cutter rear HP sensor late error
		When the blade was moved to the rear, it did not arrive at the home position after 122 mm of movement.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensors 1, 2 connectors loose, broken, defective

SC750-63	D	Perfect Binder: Cutter rear HP sensor lag error
		When the blade moved from the rear HP sensor, it did not leave the rear HP position after 20 mm of movement toward the front. When the blade moved to the front, the blade did not leave the home position after the length of time elapsed for 10 mm of movement.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensors 1, 2 connectors loose, broken, defective

SC750-64	D	Perfect Binder: Cutter front HP sensor lag error
		When the blade is moved to the front, the blade did not return to blade sensor 1 after enough time had elapsed for the blade to move 122 mm.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensors 1, 2 connectors loose, broken, defective

SC750-65	D	Perfect Binder: Cut end late error
		During movement from front to rear during cutting, blade sensor 1 did not go ON after enough time had elapsed for the blade to move 61 mm. During movement from front to rear during cutting, blade sensor 1 did not go ON after 10 sec. had elapsed.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensor 1 connector loose, broken defective ▪ Sensor defective ▪ Blade is dull, not cutting efficiently

SC750-66	D	Perfect Binder: Cut end lag error
		During movement from rear to front during cutting, blade sensor 1 did not go OFF after enough time had elapsed for the blade to move 61 mm. During movement from rear to front during cutting, blade sensor 1 did not go OFF after 10 sec. had elapsed.
		▪ Cutter motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade sensor 1 connector loose, broken defective ▪ Sensor defective ▪ Blade is dull, not cutting efficiently

SC750-67	D	Perfect Binder: Trimmer limit sensor error
		Trimmer limit sensor signaled ON.
		▪ Trimmer limit sensor 1 connector loose, broken, defective ▪ Sensor defective ▪ Blade sensor 1 connector loose, broken, defective ▪ Sensor defective

SC750-68	D	Perfect Binder: Book lift tray HP sensor lag error
		During tray lifting, the book tray lift sensor did not go off after 10 sec. had elapsed. The book lift sensor did not go off after enough time had elapsed to move the tray more than 10 mm.
		▪ Book lift tray motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Book lift tray HP sensor connector loose, broken, defective ▪ Sensor defective

SC750-69	D	Perfect Binder: Book lift tray HP sensor late error
		While the book lift tray was being lowered, the book lift tray HP sensor did not go on after 1.5 sec. had elapsed.
		▪ Book lift tray motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Book lift tray HP sensor connector loose, broken, defective ▪ Sensor defective ▪ Book jam

SC750-70	D	Perfect Binder: Book lift tray motor rotation error
		No encoder lock input received within 50 ms during operation.
		▪ Book lift motor connector loose, broken, defective ▪ Motor defective ▪ Book lift tray lock sensor connector loose, broken, defective ▪ Sensor defective ▪ Edge press plate, or mechanism jammed by a book

SC750-71	D	Perfect Binder: Book output tray HP sensor lag error
		▪ The book output tray HP sensor did not go OFF within 1 sec. after it went ON. ▪ The book output tray HP sensor did not go OFF after enough time had elapsed for the tray to move more than 10 mm.
		▪ Book output belt motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Book output tray HP sensor connector loose, broken, defective ▪ Sensor defective

SC750-72	D	Perfect Binder: Book out put tray HP sensor late error
		The book output tray HP sensor did not go ON within 3.5 sec. after it went OFF.
		▪ Book output belt motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Book output tray HP sensor connector loose, broken, defective ▪ Sensor defective

SC750-73	D	Perfect Binder: Blade cradle HP sensor lag error
		While the blade was retracting to the home position, the blade cradle sensor did not go OFF after enough time had elapsed for the blade to move 12 mm.
		▪ Blade cradle motor connector loose, broken, defective ▪ Motor overloaded, defective ▪ Blade cradle sensor connector loose, broken, defective ▪ Sensor defective

SC750-74	D	Perfect Binder: Blade cradle HP sensor late error
		While the bladed was being lowered, the blade cradle HP sensor did not go ON after enough time had elapsed for 21 mm of movement.
		▪ Blade cradle motor connector loose, broken, defective ▪ Motor defective ▪ Blade cradle sensor connector loose, broken, defective ▪ Sensor defective ▪ Blade cradle or cutter physically jammed by obstacle

SC750-75	D	Perfect Binder: Book door lock error
		The book door sensor was detected OFF with the book door locked.
		▪ Book door lock solenoid connector loose, broken, defective ▪ Solenoid defective

SC750-76	D	Perfect Binder: Glue heater error
		The glue heater thermistor registered more that 200 degrees for more than 1 sec.
		▪ Glue temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-77	D	Perfect Binder: Electrical short in the gluing unit
		A temperature of less than 5 degrees was detected for 1 sec. or more than 10 sec. after power on.) However, if the thermistor detected less than 100 degrees after measuring temperature at start up, temperature is checked again after 50 sec.
		▪ Glue temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-78	D	Perfect Binder: Glue heater startup error 1
		Glue temperature thermistor did not detect a temperature of 140 degrees within 200 sec. after it detected a temperature over 50 degrees.
		▪ Glue temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-79	D	Perfect Binder: Low temperature detection error
		After adjustment of the glue temperature, the glue temperature thermistor detected a temperature lower than 135 degrees for more than 10 sec.
		▪ Glue temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-80	D	Perfect Binder: High temperature error
		Thermistor detected abnormal high temperature.
		▪ Glue abnormal temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-81	D	Perfect Binder: Thermostat error
		Abnormal thermostat detection
		▪ Thermostat defective ▪ Glue heater defective ▪ Slave board defective

SC750-82	D	Perfect Binder: Glue level thermistor error 1
		After glue warm-up completed, the glue level thermistor detected a temperature of over 170 degrees for more than10 sec.
		▪ Glue level thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-83	D	Perfect Binder: Glue level thermistor error 2
		After glue warm-up completed, the glue level thermistor detected a temperature less than 100 degrees for more than10 sec.
		▪ Glue level thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-84	D	Perfect Binder: Thermistor disconnect error
		The glue abnormal temperature thermistor detected a temperature of less than 5 degrees for 1 sec., or more than 10 sec. after power on. However, if the thermistor detected less than 100 degrees after measuring temperature at start up, temperature is checked again after 50 sec.
		▪ Glue abnormal temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-85	D	Perfect Binder: Glue level thermistor disconnect error
		The AD value of the glue level thermistor was above 991 LSB for 10 sec. Temperature adjustment mode stops if glue level sensor detects the temperature remaining below 99 degrees for more than 10 sec.
		▪ Glue level thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC750-86	D	Perfect Binder: Internal temperature thermostat error
		The A/D value of the internal temperature thermostat was detected above 80 degrees for 1 sec.
		▪ Internal temperature thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board defective

SC750-87	D	Perfect Binder: Internal temperature thermostat disconnect error
		The A/D value of the internal temperature thermostat was detected below -20 degrees for 1 sec.
		▪ Internal temperature thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board defective

SC750-88	D	Perfect Binder: Internal temperature thermostat error
		Temperature was detected above 10C three consecutive times (sampled every sec. for 1 min.).
		▪ Internal temperature thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board defective

SC750-89	D	Perfect Binder: Glue heater startup error 2
		The warm-up temperature was abov e the +-5C target for the glue vat temperature. (Not detected within 100 sec. after machine warm-up.)
		▪ Internal temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC751-10	D	Glue heater startup error 3
		The warm-up temperature was below the +-5C target for the glue vat temperature. (Not detected within 100 sec. after machine warm-up.)
		▪ Internal temperature thermistor defective ▪ Glue heater defective ▪ Slave board defective

SC751-11	D	Perfect Binder: Glue heater startup error 4
		At the end of temperature adjustment at power on, warm-up did not complete within 500 sec. The glue vat temperature did not reach the warm-up temperature within 500 sec.
		▪ Glue heater connector loose, broken, defective ▪ Heater defective ▪ Slave board defective

SC751-12	D	Perfect Binder: Ambient temperature error
		Ambient temperature is not within the operational range: It was between 0°C and -20°C.
		▪ Internal temperature thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board defective

SC751-13	D	Perfect Binder: Glue low limit late error
		The level of the glue in the vat was detected below the low limit 4 times.
		▪ Glue clogged, glue supply defective ▪ Glue level thermistor connector loose, broken, defective ▪ Slave board defective

SC751-14	D	Perfect Binder: Glue high limit late error
		Without glue application, and with the glue level above the low limit, the glue level thermistor did not detect the the level of the glue at the high limit, even after 12 glue pellets were supplied.
		▪ Glue clogged, glue supply defective ▪ Glue level thermistor connector loose, broken, defective ▪ Slave board defective

SC751-15	D	Perfect Binder: Glue lowering level error
		Without glue supply, the level of the glue detected by the glue lever thermistor did not lower away from the high limit level, even after application of 25.42 g.
		▪ Glue clogged, glue supply defective ▪ Glue level thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board defective ▪ Glue application defective

SC751-16		Perfect Binder: Glue level thermistor adjustment value error
		▪ Temperature detected by glue level thermistor out of range, 128°C+-14°C for low limit. ▪ Temperature detected by glue level thermistor out of range, 142°C+-10°C for high limit. ▪ The glue level thermistor adjustment value for low limit is larger than the high level. ▪ Glue level thermistor target value is 5°C off the values of the low and high limit.
		▪ Master control board EEPROM defective ▪ Glue level thermistor connector loose, broken, defective ▪ Thermistor defective ▪ Slave board disconnected, defective

SC751-17	D	Perfect Binder: Timing sensor adjustment high value error
		The timing sensor A/D input value was lower than 3.0 to 3.5V, the A/D input value did not go higher than 3.0 to 3.5V, even after timing sensor D/A output value was higher than 3.5V.
		▪ Timing sensor connector loose, broken, defective ▪ Sensor defective ▪ Master control board disconnected, defective

SC751-18	D	Perfect Binder: Cover registration sensor adjustment high value error
		The cover registration sensor A/D input value was lower than 3.0 to 3.5V, the A/D input value did not go higher than 3.0 to 3.5V, even after cover registration sensor output value output was higher than 3.5V.
		▪ Cover registration sensor connector loose, broken, defective ▪ Sensor defective ▪ Master control board disconnected, defective

SC751-19	D	Perfect Binder: Cover horizontal registration sensor (S) adjustment high value error
		The cover horizontal registration sensor (S) A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor (S) D/A output value output was higher than 3.7V.
		▪ Cover horizontal registration sensor (S) connector loose, broken, defective ▪ Sensor defective ▪ Slave control board defective

SC751-20	D	Perfect Binder: Cover horizontal registration sensor (L) adjustment high value error
		The cover horizontal registration sensor (L) A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover horizontal registration sensor (L) D/A output value output was higher than 3.7V.
		▪ Cover horizontal registration sensor (L) connector loose, broken, defective ▪ Sensor defective ▪ Slave control board defective

SC751-21	D	Perfect Binder: Signature exit sensor adjustment high value error
		The signature exit sensor A/D input value was lower than 3.2 to 3.54V, the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor output value output was higher than 3.7V.
		▪ Signature exit sensor connector loose, broken, defective ▪ Sensor defective ▪ Slave control board disconnected, defective

SC751-22	D	Perfect Binder: LE detect sensor adjustment high value error
		The leading edge detect sensor A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor A/D output value output was higher than 3.7V.
		▪ LE detect sensor connector loose, broken, defective ▪ Sensor defective ▪ Slave control board disconnected, defective

SC751-23	D	Perfect Binder: Entrance path sensor adjustment high value error
		When the entrance path sensor was adjusted, the sensor A/D input was less than 2.58 V, even after the sensor D/A output was more than 3.3V.
		▪ Entrance path sensor connector loose, broken, defective ▪ Sensor defective ▪ Cutter control board disconnected, defective

SC751-24	D	Perfect Binder: Book registration sensor adjustment high value error
		When the book registration sensor was adjusted, the sensor A/D input was less than 2.58 V, even after the sensor D/A output was more than 3.3V.
		▪ Book registration sensor connector loose, broken, defective ▪ Cutter control board disconnected, defective

SC751-25	D	Perfect Binder: Timing sensor adjustment low value error
		The timing sensor A/D input value was higher than 3.0 to 3.5V, the A/D input value did not enter the range 3.0 to 3.5V, even after timing sensor D/A output value was lower than 0.1V.
		▪ Timing sensor connector loose, broken, defective ▪ Sensor defective ▪ Master control board disconnected, defective

SC751-26	D	Perfect Binder: Cover registration sensor adjustment low value error
		The cover registration sensor A/D input value was higher than 3.0 to 3.5V, the A/D input value did not enter the range 3.0 to 3.5V, even after cover registration sensor D/A output value output was lowered 0.1V.
		▪ Cover registration sensor connector loose, broken, defective ▪ Sensor defective ▪ Master control board disconnected, defective

SC751-27	D	Perfect Binder: Cover horizontal registration sensor (S) adjustment low value error
		The cover horizontal registration sensor (S) A/D input value was higher than 3.2 to 3.54V, and the A/D input value did enter the range 3.2 to 3.54V, even sensor D/A output value output was lowered 0.04V.
		▪ Cover horizontal registration sensor (S) connector loose, broken, defective ▪ Sensor defective ▪ Slave control board defective

SC751-28	D	Perfect Binder: Cover horizontal registration sensor (L) adjustment low value error
		The cover horizontal registration sensor (L) A/D input value was higher than 3.2 to 3.54V, and the A/D input value did enter the range 3.2 to 3.54V, even sensor D/A output value output was lowered 0.04V.
		▪ Cover horizontal registration sensor (L) connector loose, broken, defective ▪ Sensor defective ▪ Slave control board defective

SC751-29	D	Perfect Binder: Signature exit sensor adjustment low value error
		The signature exit sensor A/D input value was higher than 3.2 to 3.54V, the A/D input value did not enter the range 3.2 to 3.54V, even after cover registration sensor output value output was lowered 0.04V.
		▪ Signature exit sensor connector loose, broken, defective ▪ Sensor defective ▪ Slave control board disconnected, defective

SC751-30	D	Perfect Binder: LE detect sensor adjustment low value error
		The LE detect sensor A/D input value was higher than 3.2 to 3.54V, and the sensor A/D input value did not enter the range 3.2 to 3.54V, even after the sensor output value was raised 0.04V.
		▪ LE detect sensor connector loose, broken, defective ▪ Sensor defective ▪ Slave control board disconnected, defective

SC751-31	D	Perfect Binder: Entrance path sensor adjustment low value error
		When the entrance path sensor was adjusted, the sensor A/D input was higher than 2.58 V, even after the sensor D/A output was lowered to 0V.
		▪ Entrance path sensor connector loose, broken, defective ▪ Sensor defective ▪ Cutter control board disconnected, defective

SC751-32	D	Perfect Binder: Book registration sensor adjustment low value error
		When the book registration sensor was adjusted, the sensor A/D input was more than 2.58 V, even after the sensor D/A output was less than 0V.
		▪ Book registration sensor connector loose, broken, defective ▪ Cutter control board disconnected, defective

SC751-33	D	Perfect Binder: LE detect sensor late error
		The stack was late for gluing to the cover because there was no stack transport end sensor from the slave control board and there was no signal that the LE detect sensor had signaled to arrival of the stack.
		LE detect sensor connector loose, broken, defective ▪ Sensor defective

SC751-34	D	Perfect Binder: Trim unit entrance sensor late error
		The stack was late arriving because the trim unit entrance sensor did not go ON even after a transport end signal was received.
		▪ Trim unit entrance sensor connector loose, broken, defective ▪ Sensor defective

SC751-35	D	Perfect Binder: Book registration sensor late error
		At the start of cutter registration, the book registration did not go ON. The stack could not be detected for fore edge cutting.
		▪ Book registration sensor connector loose, broken, defective ▪ Sensor defective

SC751-36	D	Perfect Binder: Signature exit sensor lag error
		When the power was turned on, the cover path was closed and the signature exit sensor detected paper present, but the LE detect sensor had detected no paper present.
		▪ Signature exit sensor connector loose, broken, defective ▪ Sensor defective

SC751-37	D	Perfect Binder: Entrance path sensor late error
		During the automatic exit operation, the entrance path sensor could not detect any paper within 6860 ms after gluing and stack transport started.
		▪ Entrance path sensor connector loose, broken, defective ▪ Sensor defective ▪ Stack transport roller defective

SC751-38	D	Perfect Binder: Main grip late error
		There was no stack received from the sub grip unit; the main grip signature sensor detected no stack.
		▪ Main grip signature sensor connector loose, broken, defective ▪ Sensor defective

SC751-39	D	Perfect Binder: Trim unit entrance sensor lag error
		▪ At the end of initialization at power on, the entrance path sensor went ON. ▪ At the end of automatic exit, the entrance path sensor went ON.
		▪ Trim unit entrance sensor connector, loose, broken, defective

SC751-40	D	Perfect Binder: Book registration sensor lag error
		Book registration sensor: ▪ Detected ON at the end of initialization after power on. ▪ Detected ON at the end of automatic exit operation. ▪ Detected ON at the end of book binding and automatic exit. ▪ Could detect no stack at fore edge cutting. ▪ Detected ON at end of grip operation during book binding.
		▪ Book registration sensor connector loose, broken, defective ▪ Sensor defective at the lift tray

SC751-41	D	Perfect Binder: Book arrival sensor lag error
		Book not detected at sensor position.
		▪ Book arrival sensor connector loose, broken, defective ▪ Sensor defective ▪ Book failed to reach output tray ▪ Fore edge trim scraps fell into output area

SC751-42	D	Perfect Binder: Trimming jam error
		▪ The edge press plate HP sensor remained OFF after disposing of the trimmed paper and the trimmings buffer was moved 19 mm to the right. ▪ After the trimmings buffer door was opened and closed tto check for paper scraps, the machine detected paper scrap jam 3 times (and issued the alarm after the 2nd detection). ▪ There are scraps in the trimmings buffer and at the edge press plate
		▪ Edge press plate HP sensor connector loose, broken, defective ▪ Sensor defective

SC751-43	D	Perfect Binder: Sub grip unit lag error
		When the sub grip unit was checked for the presence of paper, no paper could be detected even after opening the sub grip unit.
		▪ Paper remains in the sub grip unit. ▪ Sub grip paper sensor connector loose, broken, defective

SC751-44	D	Perfect Binder: Main grip unit lag error
		▪ Although cutter retracted, the absence of paper could not be detected. ▪ Paper remains in the main grip unit
		▪ Main grip signature sensor loose, broken, defective ▪ Sensor defective

SC751-45	D	Perfect Binder: Signature thickness sensor minimum value error
		When the result of the signature thickness detection (A/D value) was adjusted, the minimum value (0 mm) was smaller than the A/D value of -30.
		▪ Signature thickness sensor connector loose, broken, defective ▪ Sensor defective

SC751-46	D	Perfect Binder: Signature thickness sensor maximum value error
		When the result of the signature thickness detection (A/D value) was adjusted, the maximum value (25mm) was smaller than the A/D value.
		▪ Sensor defective

SC751-47	D	Perfect Binder: Signature thickness sensor value unstable error
		The signature thickness reading did not change, even after the main grip unit opened and closed.
		▪ Signature thickness sensor connector loose, broken, defective ▪ Sensor defective

SC751-48	D	Perfect Binder: Glue vat HP sensor late error
		▪ The glue vat HP sensor (rear) did not go ON when the glue vat roller motor initialized at power on and remained on for 4240 ms. ▪ When the glue vat HP sensor (rear) moved from the HP to the front, the glue vat HP sensor was already OFF.
		▪ Glue vat roller motor connector loose, broken, defective ▪ Motor defective ▪ Glue vat HP sensor connector loose, broken, defective ▪ Sensor defective

SC751-49	D	Perfect Binder: Glue vat HP sensor lag error
		The glue vat HP sensor did not go off when the glue vat moved to the front, even though the glue vat roller motor operated for 285 ms. The glue vat HP sensor was already ON when the glue vat moved from the front to the rear.
		▪ Glue vat roller motor connector loose, broken, defective ▪ Motor defective ▪ Glue vat HP sensor connector loose, broken, defective ▪ Sensor defective

SC751-50	D	Perfect Binder: Glue vat roller motor error
		The glue vat roller rotation sensor could not detect rotation of the glue vat roller motor within 1200 ms of motor operation.
		▪ Glue vat roller motor connector loose, broken, defective ▪ Motor defective ▪ Glue vat roller rotation sensor connector loose, broken, defective ▪ Sensor defective

SC751-51	D	Perfect Binder: Glue roller HP sensor late error
		During glue supply, the glue roller HP sensor did not go ON, even though the glue roller motor was operating for 1000 ms.
		▪ Glue supply motor connector loose, broken, defective ▪ Motor defective ▪ Glue pellets jammed ▪ Glue roller HP sensor connector loose, broken, defective ▪ Sensor defective

SC751-52	D	Perfect Binder: Glue roller HP sensor lag error
		During glue supply, the glue roller HP sensor did not go OFF, even though the glue roller motor was operating for 2400 ms.
		▪ Glue supply motor connector loose, broken, defective ▪ Motor defective ▪ Glue pellets jammed ▪ Glue roller HP sensor connector loose, broken, defective ▪ Sensor defective

SC751-53	D	Perfect Binder: Spine fold HP sensor (L) late error
		▪ The spine fold HP sensor (left) did not go ON during spine folding, even after the spine fold motor (left) was operating for 5805 ms (or enough time elapsed for the plate to travel 101.24 mm). ▪ When the spine fold plate moved from the open to closed position, the spine fold HP sensor (left) was already OFF.
		▪ Spine fold motor (L) connector loose, broken, defective ▪ Motor defective ▪ Spine fold HP sensor (L) connector loose, broken, defective ▪ Sensor defective

SC751-54	D	Perfect Binder: Spine fold HP sensor (L) lag error
		▪ The spine fold (left) HP sensor did not go OFF when the spine fold plate closed, even while the spine fold motor (left) was operating for 500 ms. ▪ When the spine fold plate moved from the close to open position, the spine fold HP sensor (left) was already ON.
		▪ Spine fold motor (L) connector loose, broken, defective ▪ Motor defective ▪ Spine fold HP sensor (L) connector loose, broken, defective ▪ Sensor defective

SC751-55	D	Perfect Binder: Left spine fold plate close error
		In the operation of the left spine fold plate, the left spine close sensor did not go ON, even after the left spine fold plate motor was on for 5805 ms, equivalent to the plate moving 101.25 mm. When the spine fold plate moved from the closed to open position, the left spine close sensor was already OFF.
		▪ Spine fold motor (L) connector loose, broken, defective ▪ Motor defective ▪ Spine close sensor (L) connector loose, broken, defective ▪ Sensor defective

SC751-56	D	Perfect Binder: Left spine fold plate open error
		In the operation of the left spine fold plate, the left spine close sensor did not go OFFN, even after the left spine fold plate motor was on for 500 ms. When the spine fold plate moved from the open to closed position, the left spine close sensor was already ON.
		▪ Spine fold motor (L) connector loose, broken, defective ▪ Motor defective ▪ Spine close sensor (L) connector loose, broken, defective

SC751-57	D	Perfect Binder: Spine fold HP sensor (L) error
		The spine fold HP sensor (L) and spine fold close sensor (L) went ON at the same time.
		▪ Spine fold HP sensor (L) connector loose, broken, defective ▪ Sensor defective ▪ Spine close sensor (L) connector loose, broken, defective ▪ Sensor defective

SC751-58	D	Perfect Binder: Spine fold HP sensor (R) error
		▪ The spine fold HP sensor (right) did not go ON during operation of the right fold plate, even after the spine fold motor (right) was operating for 3225 ms (or enough time elapsed for the plate to travel 56.25mm). ▪ When the spine fold plate moved from the open to closed position, the spine fold HP sensor (right) was already OFF.
		▪ Spine fold motor (R) connector loose, broken, defective ▪ Motor defective ▪ Spine fold HP sensor (R) connector loose, broken, defective ▪ Sensor defective

SC751-59	D	Perfect Binder: Spine fold HP sensor (R) lag error
		▪ The spine fold (right) HP sensor did not go OFF when the spine fold plate closed, even while the spine fold motor (right) was operating for 500 ms. ▪ When the spine fold plate moved from the closed to open position, the spine fold HP sensor (right) was already ON.
		▪ Spine fold motor (R) connector loose, broken, defective ▪ Motor defective ▪ Spine fold HP sensor (R) connector loose, broken, defective.

SC751-60	D	Perfect Binder: Right spine fold plate close error
		The spine fold press sensor (right) did not go ON when the right fold plate was closing, even after the spine fold motor (right) was operating for 3225 ms (or enough time elapsed for the plate to travel 56.25mm). When the spine fold plate moved from the closed to open position, the spine fold press sensor (right) was already OFF.
		▪ Spine fold motor (R) connector loose, broken, defective ▪ Motor defective ▪ Spine fold press sensor (R) connector loose, broken, defective ▪ Sensor defective

SC751-61	D	Perfect Binder: Right spine fold plate open error
		▪ The spine fold press sensor (right) did not go OFF when the spine fold plate closed, even while the spine fold motor (right) was operating for 500 ms. ▪ When the spine fold plate moved from the open to open position, the spine fold press sensor (right) was already ON.
		▪ Spine fold motor (R) connector loose, broken, defective ▪ Motor defective ▪ Spine fold press sensor (R) connector loose, broken, defective ▪ Sensor defective

SC751-62	D	Perfect Binder: Spine fold HP sensor (R) error
		The spine fold HP sensor (R) and spine fold press sensor (R) went ON at the same time.
		▪ Spine fold HP sensor (R) connector loose, broken, defective ▪ Sensor defective ▪ Spine fold press sensor (R) connector loose, broken, defective ▪ Sensor defective

SC751-63	D	Perfect Binder: Spine fold plate open position late error
		At the start of the spine fold operation, the spine plate open sensor did not go ON, even after the spine plate motor operated for 900 ms (93.75 mm of feed).
		▪ Spine plate motor connector loose, broken, defective ▪ Motor defective ▪ Spine open sensor connector loose, broken, defective ▪ Sensor defective

SC751-64	D	Perfect Binder: Spine fold plate open position lag error
		At the start of the spine fold operation, the spine plate open sensor did not go OFF, even after the spine plate motor operated for 1350 ms (93.75 mm of feed).
		▪ Spine plate motor connector loose, broken, defective ▪ Motor defective ▪ Spine open sensor connector loose, broken, defective ▪ Sensor defective

SC751-65	D	Perfect Binder: Spine fold plate close position late error
		At the start of the spine fold operation, the spine plate close sensor did not go ON, even after the spine plate motor operated for 2250 ms (93.75 mm of feed).
		▪ Spine plate motor connector loose, broken, defective ▪ Motor defective ▪ Spine close sensor connector loose, broken, defective ▪ Sensor defective

SC751-66	D	Perfect Binder: Spine fold plate close position lag error
		At the start of the spine fold operation, the spine plate close sensor did not go OFF, even after the spine plate motor operated for 505 ms.
		▪ Spine plate motor connector loose, broken, defective ▪ Motor defective ▪ Spine close sensor connector loose, broken, defective ▪ Sensor defective

SC751-67	D	Perfect Binder: Front door lock error
		The front door lock release sensor did not go off, even though the door was locked.
		▪ Front door lock solenoid defective ▪ Front door lock release sensor defective

SC751-68	D	Perfect Binder: Front door lock release error
		The front door lock release sensor did not go ON, even though the door was unlocked.
		▪ Front door lock solenoid defective ▪ Front door lock release sensor defective ▪ Connector loose, broken, defective

SC751-69	D	Perfect Binder: Front door force open error
		The front door was detected open, even though it was locked.
		▪ Front door switch defective ▪ Front door solenoid defective ▪ Connector loose, broken, defective

SC751-70	D	Perfect Binder: Switchback flapper HP sensor late error
		During the switchback flapper lift operation, the switchback flapper HP sensor did not go ON, even though the switchback flapper motor operated long enough for lifting through an arc of 50 degrees.
		▪ Switchback flapper HP sensor defective ▪ Switchback flapper motor defective

SC751-71	D	Perfect Binder: Switchback flapper HP sensor lag error
		During the switchback flapper lift operation, the switchback flapper HP sensor did not go OFF, even though the switchback flapper motor operated long enough for lowering through an arc of 150 degrees.
		▪ Switchback flapper HP sensor defective ▪ Switchback flapper motor defective ▪ Connector loose, broken, defective

SC751-72	D	Perfect Binder: TE press lever HP sensor late error
		When the trailing edge press lever was released, the TE press lever HP sensor did not go ON, even though the TE press lever motor operated long enough to move the lever through and arc of 30 degrees.
		▪ TE press lever sensor defective ▪ TE press lever motor defective ▪ Connector loose, broken, defective

SC751-73	D	Perfect Binder: TE press lever HP sensor lag error
		When the trailing edge press lever was released, the TE press lever HP sensor did not go OFF, even though the TE press lever motor operated long enough to move the lever through and arc of 20 degrees.
		▪ TE press lever sensor defective ▪ TE press lever motor defective

SC751-74	D	Perfect Binder: Jog fence front HP sensor late error
		The front jog fence HP sensor did not go ON, even thought the jog fence motor operated long enough for 60 mm of feed.
		▪ Jog fence front HP sensor defective ▪ Jog fence front motor defective

SC751-75	D	Perfect Binder: Jog fence front HP sensor lag jam
		While small-size paper was being jogged, the jog fence front HP sensor did not go OFF after the front jog fence motor operated long enough for 40 mm of feed.
		▪ Jog fence front HP sensor defective ▪ Jog fence front motor defective ▪ Connector loose, broken, defective

SC751-76	D	Perfect Binder: Jog fence large HP sensor late error
		While large-size paper was being jogged, the front jog fence large HP sensor did not go ON, even though the jog fence front motor operated long enough for 70mm of feed.
		▪ Jog fence front large HP sensor defective ▪ Front jog fence motor defective

SC751-77	D	Perfect Binder: Jog fence front large HP sensor lag error
		While large-size paper was being jogged, the jog fence front large HP sensor did not go OFF after the front jog fence motor operated long enough for 20 mm of feed.
		▪ Jog fence front large HP sensor defective ▪ Jog fence front motor defective ▪ Connector loose, broken, defective

SC751-78	D	Perfect Binder: Jog fence front HP sensor late error
		While jogging small-size paper, the right jog fence HP sensor did not go ON, even though the jog fence motor operated long enough for 60 mm of feed.
		▪ Jog fence right HP sensor defective ▪ Jog fence right motor defective

SC751-79	D	Perfect Binder: Jog fence right HP sensor lag jam
		While small-size paper was being jogged, the jog fence right HP sensor did not go OFF after the right jog fence motor operated long enough for 40 mm of feed.
		▪ Jog fence right HP sensor defective ▪ Jog fence right motor defective ▪ Connector loose, broken, defective

SC751-80	D	Perfect Binder: Jog fence right large HP sensor late error
		While large-size paper was being jogged, the right jog fence large HP sensor did not go ON, even though the jog fence front motor operated long enough for 70mm of feed.
		▪ Jog fence right large HP sensor defective ▪ Jog fence right motor defective

SC751-81	D	Perfect Binder: Jog fence right large HP sensor lag error
		While large-size paper was being jogged, the jog fence right large HP sensor did not go OFF after the right jog fence motor operated long enough for 20 mm of feed.
		▪ Jog fence right large HP sensor defective ▪ Jog fence right motor defective ▪ Connector loose, broken, defective

SC751-82	D	Perfect Binder: Switchback roller HP sensor late error
		During the switchback roller lift operation, the switchback roller HP sensor did not go ON, even though the switchback roller lift motor operated long enough for lifting through an arc of 40 degrees.
		▪ Switchback roller HP sensor defective ▪ Switchback lift motor defective

SC751-83	D	Perfect Binder: Switchback roller HP sensor lag error
		During the switchback roller lowering, the switchback roller HP sensor did not go OFF, even though the switchback roller lift motor operated long enough for lowering through an arc of 40 degrees.
		▪ Switchback roller HP sensor defective ▪ Switchback roller lift motor defective ▪ Connector loose, broken, defective

SC751-84	D	Perfect Binder: Stacking tray lower limit late error
		When the stacking tray was lowered, the tray lower limit sensor did not go ON after the stacking tray lift motor had operated long enough for 90 mm of lift.
		▪ Tray lower limit sensor defective ▪ Stacking tray lift motor defective

SC751-85	D	Perfect Binder: Stacking tray low limit lag error
		When the stacking tray was raised, the tray lower limit sensor did not go OFF after the stacking tray lift motor had operated long enough for 30mm of lift.
		▪ Tray lower limit sensor defective ▪ Stacking tray lift motor defective ▪ Harness connector loose, broken, defective

SC751-86	D	Perfect Binder: Paper detect sensor (front) detection error
		When the stacking tray was raised, the paper detect sensor (front) did not go ON, even after the stacking tray overflow sensor went ON and the stacking tray lift motor had operated for 30 mm of lift.
		▪ Paper detect sensor (front) defective ▪ Stacking tray lift motor defective

SC751-87	D	Perfect Binder: Paper detect sensor (front) no paper detection error
		When the stacking tray was lowered, the tray lower limit sensor did not go OFF after the stacking tray lift motor had operated long enough for 10mm of lowering.
		▪ Paper detect sensor (front) defective ▪ Stacking tray lift motor defective ▪ Harness connector loose, broken, defective

SC751-88	D	Perfect Binder: Paper detect sensor (rear) paper detection error
		When the stacking tray was raised, the paper detect sensor (rear) did not go ON, even after the stacking tray overflow sensor went ON and the stacking tray lift motor had operated for 40 mm of lift.
		▪ Paper detect sensor (rear) defective ▪ Stacking tray lift motor defective

SC751-89	D	Perfect Binder: Paper detect sensor (rear) no paper detection error
		When the stacking tray was lowered, the paper detect sensor (rear) did not go OFF after the stacking tray lift motor had operated long enough for 10mm of lowering.
		▪ Paper detect sensor (rear) defective ▪ Stacking tray lift motor defective ▪ Harness connector loose, broken, defective

SC752-10	D	Perfect Binder: Stack overflow sensor detection late error
		When the stacking tray was raised, the stack overflow sensor did not go OFF after the stacking tray lift motor had operated long enough for 70mm lowering.
		▪ Stack overflow sensor defective ▪ Stacking tray lift motor defective

SC752-11	D	Perfect Binder: Stacking tray low limit sensor error 1
		The stacking tray low limit sensor and the stack overflow sensor went ON at the same time.
		▪ Tray lower limit sensor defective ▪ Stack overflow sensor defective ▪ Harness connector loose, broken, defective

SC752-12	D	Perfect Binder: Stack overflow sensor detection position late error
		When the tray was lowered to allow removal of the booklets, the stack overflow sensor did not go OFF, even after the stacking tray lift motor had operated long enough for 40mm of lift.
		▪ Stack overflow sensor defective ▪ Stacking tray lift motor defective ▪ Harness connector loose, broken, defective

SC752-13	D	Perfect Binder: Stacking tray low limit sensor error 2
		When the stacking tray was lifted, the stack overflow sensor did not go OFF, even though the either (or both) the paper detect sensor (front) or the paper detect sensor (rear) were on while the stacking tray empty sensor was OFF.
		▪ Tray empty sensor defective ▪ Paper detect sensors (front, rear, or both) defective ▪ Stack overflow sensor defective ▪ Tray lift motor defective ▪ Harness connector loose, broken, defective

SC752-14	D	Perfect Binder: Stack tray HP sensor late error
		When the tray moved to the home position, the HP sensor did not go ON after enough time for 70mm of movement had elapsed.
		▪ Stack tray HP sensor defective ▪ Stacking tray lift motor defective

SC752-15	D	Perfect Binder: Stack tray HP sensor lag error
		When the tray moved from the home position, the HP sensor did not go OFF after enough time for 10mm of movement had elapsed.
		▪ Stack tray HP sensor defective ▪ Stacking tray motor defective

SC752-16	D	Perfect Binder: Stack weight move HP sensor late error
		When the tray moved to the home position, the stack weight move HP sensor did not go ON after enough time for 70mm of movement had elapsed.
		▪ Stack weight HP sensor defective ▪ Stack weight motor defective

SC752-17	D	Perfect Binder: Stack weight HP sensor lag error
		During movement away from the HP sensor, the HP sensor did not go OFF after enough time for 10mm of movement had elapsed.
		▪ Stack weight HP sensor defective ▪ Stack weight motor defective

SC752-18	D	Perfect Binder: Cover guide HP sensor (left) late error
		During movement toward the HP sensor of the left cover path, the cover guide HP sensor (left) did not go ON after the cover guide motor (left) had operated long enough for 3000 ms of movement.
		▪ Cover guide (left) HP sensor defective ▪ Cover guide motor (left) defective

SC752-19	D	Perfect Binder: Cover guide (left) HP sensor error
		The cover guide HP sensor (left) and cover guide (left) open sensor went ON at the same time.
		▪ Cover guide HP sensor (L) defective ▪ Cover guide open sensor (left) ▪ Harness connector loose, broken, defective

SC752-20	D	Perfect Binder: Left cover guide release position late error
		During movement toward the left cover guide open position, the cover guide open sensor (left) did not go ON after the cover guide motor (left) had operated long enough for 3000 ms of movement.
		▪ Cover guide (left) open sensor defective ▪ Cover guide motor (left) defective

SC752-21	D	Perfect Binder: Cover guide (right) HP sensor late error
		During movement toward the HP sensor of the right cover path, the cover guide HP sensor (right) did not go ON after the cover guide motor (right) had operated long enough for 3000 ms of movement.
		▪ Cover guide (right) HP sensor defective ▪ Cover guide motor (right) defective

SC752-22	D	Perfect Binder: Cover guide (right) sensor error
		The cover guide HP sensor (right) and cover guide (right) open sensor went ON at the same time.
		▪ Cover guide HP sensor (R) defective ▪ Cover guide open sensor (right) ▪ Harness connector loose, broken, defective

SC752-23	D	Perfect Binder: Right cover guide release position late error
		During movement toward the right cover guide open position, the cover guide open sensor (right) did not go ON after the cover guide motor (right) had operated long enough for 3000 ms of movement.
		▪ Cover guide (right) HP sensor defective ▪ Cover guide motor (right) defective

SC752-24	D	Perfect Binder: Registration unit HP late error
		When the cover registration unit moved toward the home position, the cover horizontal registration sensor did not go ON, even after the cover horizontal registration motor had operated for 975 ms.
		▪ Cover horizontal registration motor defective ▪ Cover registration HP sensor defective

SC752-25	D	Perfect Binder: Registration HP sensor lag error
		During operation of the cover registration unit , the cover horizontal registration HP sensor did not go OFF, even after the cover horizontal registration motor had operated for 975 ms.
		▪ Cover horizontal registration motor defective ▪ Registration HP sensor defective ▪ Harness connector loose, broken, defective

SC752-26	D	Perfect Binder: Sub grip HP sensor late error
		During the sub grip lift operation, the sub grip upper HP sensor did not go ON, even though the sub grip lift motor had operated for 4110 ms.
		▪ Sub grip lift motor defective ▪ Sub grip upper HP sensor defective

SC752-27	D	Perfect Binder: Sub grip HP sensor lag error
		During sub grip lowering, the sub grip lower HP sensor did not go OFF, even though the sub grip lift motor had operated for 240 ms.
		▪ Sub grip lift motor defective ▪ Sub grip lower HP sensor defective ▪ Harness connector loose, broken, defective

SC752-28	D	Perfect Binder: Sub grip size HP sensor late error
		▪ When the sub grip unit opened horizontally, the size move HP sensor did not go ON, even after the size move motor had operated for 726 ms, or operated long enough for 108.75 mm of movement. ▪ After the sub grip unit moved to the horizontal release position, the sub grip size HP sensor was already OFF.
		▪ Sub grip size motor defective ▪ Sub grip size HP sensor defective

SC752-29	D	Perfect Binder: Sub grip size HP sensor lag error
		▪ When the sub grip unit closed horizontally, the size move HP sensor did not go OFF, even after the size move motor had operated for 500 ms, or operated long enough for 108.75 mm of movement. ▪ After the sub grip unit moved from the horizontal close position to the open position, the size shift HP sensor was already ON.
		▪ Sub grip size motor defective ▪ Sub grip size HP sensor defective ▪ Harness connector, loose, broken, defective

SC752-30	D	Perfect Binder: Sub grip open position late error
		At the start of the sub grip open operation, the SG open sensor did not go ON, even after the SG motor had operated for 1500 ms.
		▪ SG motor drive board defective ▪ SG open sensor defective

SC752-31	D	Perfect Binder: Sub grip open position lag error
		At the start of the sub grip close operation, the SG open sensor did not go OFFN, even after the SG motor had operated for 500 ms.
		▪ SG motor defective ▪ SG open sensor defective ▪ Harness connector loose, broken, defective

SC752-32	D	Perfect Binder: Sub grip close position late error
		At the start of the sub grip close operation, the SG close sensor did not go ON, even after the SG motor had operated for 1500 ms.
		▪ SG motor defective ▪ SG close sensor defective

SC752-33	D	Perfect Binder: Sub grip close position lag error
		At the start of the sub grip open operation, the SG close sensor did not go OFF, even after the SG motor had operated for 500 ms.
		▪ SG motor defective ▪ SG close sensor defective ▪ Harness connector loose, broken, defective

SC752-34	D	Perfect Binder: Sub grip sensor error
		The SG open sensor and SG close sensor went ON at the same time.
		▪ SG open sensor defective ▪ SG close sensor defective ▪ Harness connector loose, broken, defective

SC752-35	D	Perfect Binder: Sub grip HP late error
		While moving to the sub grip home position, the sub grip HP sensor did not go ON, even though the sub grip motor had operated for 3000 ms.
		▪ Sub grip motor defective ▪ Sub grip HP sensor defective

SC752-36	D	Perfect Binder: Sub grip HP position lag error
		While passing the signature, the sub grip HP sensor did not go OFF, even though the sub grip motor had operated for 500 ms.
		▪ Sub grip motor defective ▪ Sub grip HP sensor defective ▪ Connector harness loose, broken, defective

SC752-37	D	Perfect Binder: Signature move main grip position late error
		While sub grip was passing the signature, the signature move MG position sensor did not go ON, even though the signature move motor had operated for 3000 ms. At the timing of the movement of the signature from sub grip to main grip, the signature was still gripped by the main grip at the rotation HP sensor.
		▪ Signature movement motor defective ▪ Signature MG position sensor defective

SC752-38	D	Perfect Binder: Signature move main grip position lag error
		While moving to the sub grip home position, the signature MG position sensor did not go OFF, even though the signature move motor had operated for 500 ms.
		▪ Signature move motor defective ▪ Signature MG position HP sensor defective ▪ Connector harness loose, broken, defective

SC752-39	D	Perfect Binder: Main grip rotate enable position sensor late error
		While moving to the sub grip home position, the MG rotate enable sensor did not go ON, even though the signature move motor had operated for 2475 ms.
		▪ Signature move motor defective ▪ MG rotate enable sensor defective

SC752-40	D	Perfect Binder: Main grip rotate enable position sensor lag error
		While passing the signature, the MG rotate enable sensor did not go OFF, even though the signature move motor had operated for 1450 ms.
		▪ Signature move motor defective ▪ MG rotate enable sensor defective ▪ Connector harness loose, broken, defective

SC752-41	D	Perfect Binder: Signature move HP sensor defective
		The signature move HP sensor and signature move MG position sensor went on at the same time.
		▪ Signature move HP sensor defective ▪ Signature MG position HP sensor defective ▪ Connector harness loose, broken, defective

SC752-42	D	Perfect Binder: Main grip HP sensor late error
		▪ During main grip lift, the MG HP sensor did not go ON, even though the main grip lift motor had operated for 6185 ms. ▪ MG HP sensor did not go OFF when the main grip moved from up position to down position.
		▪ MG lift motor defective ▪ MG HP sensor defective

SC752-43	D	Perfect Binder: Main grip HP sensor lag error
		▪ During main grip lowering, the MG HP sensor did not go OFF, even though the main grip lift motor had operated for 1455 ms. ▪ MG HP sensor did not go ON when the main grip moved from down position to up position.
		▪ MG lift motor defective ▪ MG HP sensor defective ▪ Connector harness loose, broken, defective

SC752-44	D	Perfect Binder: Main grip press sensors (s) position late error
		When lifting from main grip signature registration position, MG press sensor did not go ON, even though the MG lift motor had operated for 95 ms.
		▪ MG lift motor defective ▪ MG press sensor defective

SC752-45	D	Perfect Binder: Main grip press sensor (S) position lag error
		When lowering to main grip signature registration position, MG press sensor (S) did not go OFF, even though the MG lift motor had operated for 5640 ms.
		▪ MG lift motor defective ▪ MG press sensor (S) defective ▪ Connector harness loose, broken, defective

SC752-46	D	Perfect Binder: Main grip press sensor (L) position late error
		When lowering cover in main grip to press position, MG press sensor (L) did not go ON, even though the MG lift motor had operated for 6185 ms.
		▪ MG lift motor defective ▪ MG press sensor (L) defective

SC752-47	D	Perfect Binder: Main grip press sensor (L) position lag error
		When raising cover in main grip from press position, MG press sensor (L) did not go OFF, even though the MG lift motor had operated for 95 ms.
		▪ MG lift motor defective ▪ MG press sensor (L) defective ▪ Connector harness loose, broken, defective

SC752-48	D	Perfect Binder: Signature exit sensor late error
		When signature was passed from main grip to signature exit roller, signature exit sensor did not go ON after MG lift motor moved to signature turnover position.
		▪ MG lift motor defective ▪ Signature exit sensor defective ▪ Signature out of position, snagged on main grip

SC752-49	D	Perfect Binder: Main grip HP sensor (L) late error
		During main grip lift, the MG HP sensor (L) did not go ON, even though the main grip lift motor had operated for 6185 ms.
		▪ MG lift motor defective ▪ MG HP sensor (L) defective

SC752-50	D	Perfect Binder: Main grip HP sensor (L) lag error
		During main grip lowering, the MG HP sensor (L) did not go OFF, even though the main grip lift motor had operated for 1455 ms.
		▪ MG lift motor defective ▪ MG HP sensor (L) defective ▪ Connector harness loose, broken, defective

SC752-51	D	Perfect Binder: Main grip rotate HP sensor late error
		▪ When rotating signature to main grip turnover position, MG rotate HP sensor did not go ON, even though the MG rotate motor had operated for 2250 ms. ▪ There is paper present at some location other than the sub grip HP sensor, and no paper at the MG rotate HP sensor of the main grip.
		▪ MG rotate motor defective ▪ MG rotate HP sensor defective

SC752-52	D	Perfect Binder: Main grip rotate HP sensor lag error
		When rotating signature to main grip binding position, the MG rotate HP sensor did not go OFF, even though the MG rotate motor had operated for 500 ms.
		▪ MG rotate motor defective ▪ MG rotate HP sensor defective ▪ Connector harness loose, broken, defective

SC752-53	D	Main grip rotate-to-binding position late error
		When rotating signature to main grip binding position, the MG rotate-to-binding position sensor did not go ON, even though the MG rotate motor had operated for 2250 ms.
		▪ MG rotate motor defective ▪ MG rotate-to-binding position sensor defective

SC752-54	D	Main grip rotate-to-binding position lag error
		When rotating signature to main grip turnover position, MG rotate-to-binding position sensor did not go OFF, even though the MG rotate motor had operated for 500 ms.
		▪ MG rotate motor defective ▪ MG rotate-to-binding position sensor defective ▪ Connector harness loose, broken, defective

SC752-55	D	Perfect Binder: Main grip rotate sensor error
		The MG rotate HP sensor and MG rotate-to-binding position sensor went on at the same time.
		1. MG rotate HP sensor defective 2. MG rotate-to-binding position sensor defective 3. Connector harness loose, broken, defective

SC752-56	D	Perfect Binder: Main grip open sensor (R) late error
		At the start of the main grip open operation, the MG open sensor (R) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		1. Main grip motor (R) defective 2. MG open sensor (R) defective

SC752-57	D	Perfect Binder: Main grip open sensor (R) lag error
		At the start of the main grip close operation, the MG open sensor (R) did not go OFF, even after the MG motor (R) had operated for 500 ms.
		1. Main grip motor (R) defective 2. Main grip open sensor (R) defective 3. Connector or harness loose, broken, defective

SC752-58	D	Perfect Binder: Main grip close sensor (R) late error
		At the start of the main grip close operation, the MG clsoe sensor (R) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		1. Main grip motor (R) defective 2. MG close sensor (R) defective

SC752-59	D	Perfect Binder: Main grip close sensor (R) lag error
		At the start of the main grip close operation, the MG close sensor (R) did not go OFF, even after the MG motor (R) had operated for 500 ms.
		1. Main grip motor (R) defective 2. Main grip close sensor (R) defective 3. Connector or harness loose, broken, defective

SC752-60	D	Perfect Binder: Main grip motor (R) rotation error
		At the start of the main grip open operation, the MG encoder sensor (R) was not detected on/off, even after the MG motor (R) had operated for 200 ms.
		1. Main grip motor (R) defective 2. Main grip encoder sensor (R) defective 3. Connector or harness loose, broken, defective

SC752-61	D	Perfect Binder: Main grip (R) sensor error
		The MG open sensor (R) and MG close sensor (R) went ON at the same time.
		1. Main open sensor (R) defective 2. Main grip close sensor (R) defective 3. Connector or harness loose, broken, defective

SC752-62	D	Perfect Binder: Main grip open sensor (F) late error
		At the start of the main grip open operation, the MG open sensor (F) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		1. Main grip motor (F) defective 2. MG open sensor (F) defective

SC752-63	D	Perfect Binder: Main grip open sensor (F) lag error
		At the start of the main grip close operation, the MG open sensor (F) did not go OFF, even after the MG motor (F) had operated for 500 ms.
		1. MG motor (F) defective 2. MG open sensor (F) defective 3. Connector or harness loose, broken, defective

SC752-64	D	Perfect Binder: Main grip close sensor (F) late error
		At the start of the main grip open operation, the MG clsoe sensor (F) did not go ON, even after the MG motor (F) had operated for 3000 ms.
		1. MG motor (F) defective 2. MG close sensor (F) defective

SC752-65	D	Perfect Binder: Main grip close sensor (F) lag error
		At the start of the main grip open operation, the MG close sensor (F) did not go OFF, even after the MG motor (F) had operated for 500 ms.
		1. MG motor (F) defective 2. MG close sensor (F) defective 3. Connector or harness loose, broken, defective

SC752-66	D	Perfect Binder: Main grip motor (F) rotation error
		At the start of the main grip open/close operation, the MG encoder sensor (F) was not detected on/off, even after the MG motor (F) had operated for 200 ms.
		MG motor (F) defective MG encoder sensor (F) defective Connector or harness loose, broken, defective

SC752-67	D	Perfect Binder: Main grip (F) sensor error
		The MG open sensor (F) and MG close sensor (F) went ON at the same time.
		MG open sensor (F) defective MG close sensor (F) defective Connector or harness loose, broken, defective

SC752-68	D	Perfect Binder: Signature exit path HP sensor late error
		During signature output roller separation, the signature exit path sensor did not go ON, even after the signature exit path motor was ON for 750 ms.
		Signature path exit motor defective Signature path exit HP sensor defective

SC752-69	D	Perfect Binder: Signature exit path HP sensor lag error
		During signature exit roller nip operation, the signature exit path sensor did not go OFF, even after the signature exit path motor was OFF for 300 ms.
		Signature path exit motor defective Signature path exit HP sensor defective Connector loose, broken, defective

SC752-70	D	Perfect Binder: Signature path exit press sensor late error
		During signature exit roller nip operation, the signature exit path exit press sensor did not go ON, even after the signature exit path motor operated for 300 ms.
		Signature path exit motor defective Signature path exit press sensor defective

SC752-71	D	Perfect Binder: Signature path exit press sensor lag error
		During signature output roller separation, the signature exit path press sensor did not go OFF, even after the signature exit path motor was ON for 300 ms.
		Signature path exit motor defective Signature path exit press sensor defective Connector loose, broken, defective

SC752-72	D	Perfect Binder: Leading edge sensor late error
		When signature exited at signature path exit roller, the leading edge sensor did not go ON, even after the signature exit roller motor operated long enough to feed the book 45 mm.
		Signature exit roller motor defective Leading edge sensor defection Signature jam

SC752-73	D	Perfect Binder: Cover interposer tray read error
		At power on the data on the EEPROM returned a checksum error when the data were read.
		EEPROM defective

SC752-74	D	Perfect Binder: Cover interposer tray EEPROM write error
		When data were written to EEPROM, the write data and read data did not match.
		EEPROM defective EEPROM not installed, not installed correctly

SC752-75	D	Perfect Binder: Drive switch motor error (down to up)
		The rack where the drive gear is mounted did not retract from the drive switch sensor after the drive switch motor operated for 3 s.
		Drive switch motor defective Drive switch sensor defective Connector loose, broken, defective

SC752-76	D	Perfect Binder: Drive switch motor error (up to down) error
		The rack where the drive gear is mounted was late arriving at the drive switch sensor after the drive switch motor operated for 3 s.
		Drive switch motor defective Drive switch sensor defective Connector loose, broken, defective

SC752-77	D	Perfect Binder: Upper tray low position late error
		The upper tray did not leave the lower limit sensor after the upper tray lift motor had operated for 5 s.
		Upper tray lift motor defective Upper tray low limit sensor defective Connector loose, broken, defective

SC752-78	D	Perfect Binder: Upper tray feed position late error
		The upper tray did not arrive at the PICK sensor after the upper tray lift motor had operated for 5 s.
		Upper tray lift motor defective Upper tray PICK sensor defective Connector loose, broken, defective

SC752-79	D	Perfect Binder: Lower tray low position lag error
		The lower tray did not leave the low limit sensor after the lower tray lift motor had operated for 5 s.
		Lower tray lift motor defective Upper tray low limit sensor defective Connector loose, broken, defective

SC752-80	D	Perfect Binder: Lower tray paper feed position late error
		The lower tray did not leave the lower tray paper feed sensor after the lower tray lift motor had operated for 5 s.
		Lower tray lift motor defective Lower tray PICK sensor defective Connector loose, broken, defective

SC752-81	D	Perfect Binder: Low performance error (or service mode)
		When error occurred, wrinkling possible where there was no affect from straight-through feed. If jam occurred at straight-through feed, the paper may not have fed. The error may have occurred at straight-through feed. One or more of these conditions exit.
		Check for paper jams and then remove

SC752-82	B	Perfect Binder: Grip HP sensor lag error
		During operation of the grip unit the HP sensor did not OFF after grip unit moved 20 mm.
		Grip motor overloaded, defective Grip HP sensor defective Sensor flag defective Connector loose, broken defective

SC752-83	B	Perfect Binder: Grip HP sensor late error
		The HP sensor did not go ON after the grip unit released the signature and moved 76 mm.
		Grip motor overloaded, defective Grip HP sensor defective Sensor flag defective Connector loose, broken defective

SC752-84	B	Perfect Binder: Grip end sensor lag error
		The grip end sensor did not go off after the grip unit released the signature and moved the prescribed distance. The grip end sensor did not go off, even after the booklet had been released after moving 86 mm.
		Grip motor overloaded, defective Grip end sensor defective Sensor flag defective Connector loose, broken defective

SC752-85	B	Perfect Binder: Grip end sensor late error
		The grip end sensor did not go on, even after the booklet had been had been moved 86 mm. The grip end sensor did not go on within 3.7 sec. after the book was gripped.
		Grip motor overloaded, defective Grip end sensor defective Sensor flag defective Connector loose, broken defective No data incoming from signature thickness sensor

SC752-86	B	Perfect Binder: Left trimming buffer HP sensor lag error
		The left trimmings buffer HP sensor did not go OFF within 3 sec. after the trimmings buffer moved away from the sensor.
		Trimmings buffer motor defective Motor connector loose, broken, defective Left trimmings buffer HP sensor defective Buffer full of trimmings

SC752-87	B	Perfect Binder: Trimming buffer HP sensor late error
		The left trimmings buffer HP sensor did not go ON within 5 sec. after the trimmings buffer moved toward the sensor.
		Buffer full of trimmings Trimmings buffer motor defective Motor connector loose, broken, defective Left trimmings buffer HP sensor defective

SC752-88	B	Perfect Binder: Right trimming buffer HP sensor lag error
		The right trimmings buffer HP sensor did not go OFF within 3 sec. after the trimmings buffer moved away from the sensor.
		Buffer full of trimmings Trimmings buffer motor defective Motor connector loose, broken, defective Right trimmings buffer HP sensor defective

SC752-89	B	Perfect Binder: Right trimming buffer HP sensor late error
		The right trimmings buffer HP sensor did not go ON within 5 sec. after the trimmings buffer moved toward the sensor.
		Buffer full of trimmings Trimmings buffer motor defective Motor connector loose, broken, defective Right trimmings buffer HP sensor defective

SC753-10	B	Perfect Binder: Trimmings buffer motor rotation error
		No encoder lock input received within 50 ms during operation.
		Trimmings buffer motor defective Motor connector loose, broken, defective Left trimmings buffer end sensor defective Buffer full of trimmings

SC753-11	B	Perfect Binder: Thrust plate operation error
		The thrust press plate sensor did not go OFF after the trimmings buffer moved to the left for 3 sec. (blocked by jammed trimming scraps).
		Trimmings buffer motor defective Motor connector loose, broken, defective Thrust plate sensor defective Buffer full of trimmings

SC753-12	B	Perfect Binder: Thrust plate retraction error
		The paper press plate sensor did not go ON after the trimmings buffer moved to the right for 3 sec. (blocked by jammed trimming scraps).
		Trimmings buffer motor defective Motor connector loose, broken, defective Thrust plate sensor defective Buffer full of trimmings

SC753-13	B	Perfect Binder: Book collection buffer HP sensor error
		The book collection buffer HP sensor did not go OFF within the time prescribed for release of the book in the book buffer.
		Book buffer tray motor connector loose, broken, defective Motor overload, defective Book collection buffer tray HP sensor loose, broken, defective Mechanism blocked by paper scraps

SC753-14	B	Perfect Binder: Book collection buffer tray HP sensor late error
		The book collection buffer HP sensor did not go off even after the book buffer tray moved for 3 sec.
		Book buffer tray motor connector loose, broken, defective Motor overload Motor defective Book collection buffer tray HP sensor loose, broken, defective, Blocked by paper scraps

SC753-15	B	Perfect Binder: Press HP sensor lag error
		During press plate operation during trimming, the edge press plate HP sensor did not OFF after it had time to move the prescribed distance.
		Edge press plate motor connection loose, broken, defective Motor overloaded, defective Edge press plate HP sensor connection loose, broken, defective Sensor defective

SC753-16	B	Perfect Binder: Press plate late error
		Edge press plate sensor did not go ON within 15 sec. of edge press release. The edge press plate motor stopped when the edge press plate HP sensor switched ON, but after it stopped the HP sensor went OFF.
		Edge press plate motor connection loose, broken, defective Motor overloaded Motor defective Edge press plate HP sensor connection loose, broken, defective Sensor defective

SC753-17	B	Perfect Binder: Press end sensor lag jam
		After the press plate released the signature and moved the prescribed distance, the press end sensor did not go OFF.
		Edge press plate motor connector loose, broken, defective Motor overloaded, defective Press end sensor connector loose, broken, defective Sensor defective

SC753-18	B	Perfect Binder: Press end sensor late jam
		The press end sensor did not go ON within 8 sec. after the press operation started Operation stopped when the press end sensor went ON, but sensor went off after the operation stopped.
		Edge press plate motor connector loose, broken, defective Motor overloaded, defective Press end sensor connector loose, broken, defective Sensor defective No data about book thickness received

SC753-19	B	Perfect Binder: Slide HP sensor lag error
		When the slide was raised, the slide HP sensor did not go OFF after it moved 180 mm.
		Slide motor connection loose, broken, defective Motor overloaded, defective Slide HP sensor connection loose, broken, defective Sensor defective

SC753-20	B	Perfect Binder: Slide HP sensor late error
		The slide HP sensor did not go ON after the slide was lowered and had enough time to move 180 mm.
		Slide motor connection loose, broken, defective Motor overloaded, defective Slide HP sensor connection loose, broken, defective Sensor defective

SC753-21	B	Perfect Binder: Book rotation HP sensor (right) lag error
		The book rotation HP sensor did not go OFF after the book was rotated 60 degrees. The book rotation HP sensor did not go OFF after the book was rotated 30 degrees.
		Book rotation motor 1 (right) connector, loose, broken, defective Motor overloaded, obstructed, defective Book rotation HP sensor (right) connector loose, broken, defective

SC753-22	B	Perfect Binder: Book rotation HP sensor (right) late error
		The book rotation HP 1 (right) sensor did not go ON after the book was rotated 440 degrees. The book rotation HP 1 (right) sensor did not go ON after the book was rotated 400 degrees. The book rotation HP 1 (right) sensor did not go ON after the book was rotated 360 degrees.
		Book rotation motor 1 (right) connector, loose, broken, defective Motor overloaded, obstructed, defective Book rotation HP sensor (right) connector loose, broken, defective

SC753-23	B	Perfect Binder: Book rotation HP sensor (left) lag error
		The book rotation HP sensor 2 (right) did not go OFF after the book was rotated 50 degrees. The book rotation HP sensor 2 (left) did not go OFF after the book was rotated 50 degrees toward the cutting position.
		Book rotation motor 2 (left) connector, loose, broken, defective Motor overloaded, obstructed, defective Book rotation HP sensor 1 (left) connector loose, broken, defective

SC753-24	B	Perfect Binder: Book rotation HP sensor (left) late error
		The book rotation HP 2 (left) sensor did not go ON after the book was rotated 400 degrees. The book rotation HP 2 (left) sensor did not go ON after the book was rotated 400 degrees. Before the book is rotated before cutting, the book rotation HP sensor 2 (left) did not go on, even after the book had been rotated twice the prescribed distance.
		Book rotation motor 2 (left) connector, loose, broken, defective Motor overloaded, obstructed, defective Book rotation HP sensor 1 (left) connector loose, broken, defective

SC753-25	B	Perfect Binder: Cutter front HP sensor lag error
		At initialization, the blade did not leave the home position even after 20 mm of movement. When the blade moved to the rear, the blade did not leave the home position after the length of time elapsed for 10 mm of movement.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensors 1, 2 connectors loose, broken, defective

SC753-26	B	Perfect Binder: Cutter rear HP sensor late error
		When the blade was moved to the rear, it did not arrive at the home position after 122 mm of movement.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensors 1, 2 connectors loose, broken, defective

SC753-27	B	Perfect Binder: Cutter rear HP sensor lag error
		When the blade moved from the rear HP sensor, it did not leave the rear HP position after 20 mm of movement toward the front. When the blade moved to the front, the blade did not leave the home position after the length of time elapsed for 10 mm of movement.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensors 1, 2 connectors loose, broken, defective

SC753-28	B	Perfect Binder: Cutter front HP sensor late error
		When the blade is moved to the front, the blade did not return to blade sensor 1 after enough time had elapsed for the blade to move 122 mm.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensors 1, 2 connectors loose, broken, defective

SC753-29	B	Perfect Binder: Cut end late error
		During movement from front to rear during cutting, blade sensor 1 did not go ON after enough time had elapsed for the blade to move 61 mm. During movement from front to rear during cutting, blade sensor 1 did not go ON after 10 sec. had elapsed.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensor 1 connector loose, broken defective Sensor defective Blade is dull, not cutting efficiently

SC753-30	B	Perfect Binder: Cut end lag error
		During movement from rear to front during cutting, blade sensor 1 did not go OFF after enough time had elapsed for the blade to move 61 mm. During movement from rear to front during cutting, blade sensor 1 did not go OFF after 10 sec. had elapsed.
		Cutter motor connector loose, broken, defective Motor overloaded, defective Blade sensor 1 connector loose, broken defective Sensor defective Blade is dull, not cutting efficiently

SC753-31	B	Perfect Binder: Book lift tray HP sensor lag error
		During tray lifting, the book tray lift sensor did not go off after 10 sec. had elapsed. The book lift sensor did not go off after enough time had elapsed to move the tray more than 10 mm.
		Book lift tray motor connector loose, broken, defective Motor overloaded, defective Book lift tray HP sensor connector loose, broken, defective Sensor defective

SC753-32	B	Perfect Binder: Book lift tray HP sensor late error
		While the book lift tray was being lowered, the book lift tray HP sensor did not go on after 1.5 sec. had elapsed.
		Book lift tray motor connector loose, broken, defective Motor overloaded, defective Book lift tray HP sensor connector loose, broken, defective Sensor defective Book jam

SC753-33	B	Perfect Binder: Book lift tray motor rotation error
		No encoder lock input received within 50 ms during operation.
		Book lift motor connector loose, broken, defective Motor defective Book lift tray lock sensor connector loose, broken, defective Sensor defective Edge press plate, or mechanism jammed by a book

SC753-34	B	Perfect Binder: Book output tray HP sensor lag error
		The book output tray HP sensor did not go OFF within 1 sec. after it went ON. The book output tray HP sensor did not go OFF after enough time had elapsed for the tray to move more than 10 mm.
		Book output belt motor connector loose, broken, defective Motor overloaded, defective Book output tray HP sensor connector loose, broken, defective Sensor defective

SC753-35	B	Perfect Binder: Book out put tray HP sensor late error
		The book output tray HP sensor did not go ON within 3.5 sec. after it went OFF.
		Book output belt motor connector loose, broken, defective Motor overloaded, defective Book output tray HP sensor connector loose, broken, defective Sensor defective

SC753-36	B	Perfect Binder: Blade cradle HP sensor lag error
		While the blade was retracting to the home position, the blade cradle sensor did not go OFF after enough time had elapsed for the blade to move 12 mm.
		Blade cradle motor connector loose, broken, defective Motor overloaded, defective Blade cradle sensor connector loose, broken, defective Sensor defective

SC753-37	B	Perfect Binder: Blade cradle HP sensor late error
		While the bladed was being lowered, the blade cradle HP sensor did not go ON after enough time had elapsed for 21 mm of movement.
		Blade cradle motor connector loose, broken, defective Motor defective Blade cradle sensor connector loose, broken, defective Sensor defective Blade cradle or cutter physically jammed

SC753-38	B	Perfect Binder: Book door lock error
		The book door sensor was detected OFF with the book door locked.
		Book door lock solenoid connector loose, broken, defective Solenoid defective

SC753-39	B	Perfect Binder: Glue heater error
		The glue heater thermistor registered more that 200 degrees for more than 1 sec.
		Glue temperature thermistor defective Glue heater defective Slave board defective

SC753-40	B	Electrical short in the gluing unit
		A temperature of less than 5 degrees was detected for 1 sec. or more than 10 sec. after power on.) However, if the thermistor detected less than 100 degrees after measuring temperature at start up, temperature is checked again after 50 sec.
		Glue temperature thermistor defective Glue heater defective Slave board defective

SC753-41	B	Perfect Binder: Glue heater startup error 1
		Glue temperature thermistor did not detect a temperature of 140 degrees within 200 sec. after it detected a temperature over 50 degrees.
		Glue temperature thermistor defective Glue heater defective Slave board defective

SC753-42	B	Perfect Binder: Low temperature detection error
		After adjustment of the glue temperature, the glue temperature thermistor detected a temperature lower than 135 degrees for more than 10 sec.
		Glue temperature thermistor defective Glue heater defective Slave board defective

SC753-43	B	Perfect Binder: High temperature detected in unit
		Thermistor detected abnormal high temperature.
		Glue abnormal temperature thermistor defective Glue heater defective Slave board defective

SC753-44	B	Perfect Binder: Thermostat error
		Abnormal thermostat detection.
		Thermostat defective Glue heater defective Slave board defective

SC753-45	B	Perfect Binder: Glue level thermistor error 1
		After glue warm-up completed, the glue level thermistor detected a temperature of over 170 degrees for more than10 sec.
		Glue level thermistor defective Glue heater defective Slave board defective

SC753-46	B	Perfect Binder: Glue level thermistor error 2
		After glue warm-up completed, the glue level thermistor detected a temperature less than 100 degrees for more than10 sec.
		Glue level thermistor defective Glue heater defective Slave board defective

SC753-47	B	Perfect Binder: Thermistor disconnect error
		The glue abnormal temperature thermistor detected a temperature of less than 5 degrees for for 1 sec., or more than 10 sec. after power on. However, if the thermistor detected less than 100 degrees after measuring temperature at start up, temperature is checked again after 50 sec.
		Glue abnormal temperature thermistor defective Glue heater defective Slave board defective

SC753-48	B	Perfect Binder: Glue level thermistor disconnect error
		The AD value of the glue level thermistor was above 991 LSB for 10 sec. Temperature adjustment mode stops if glue level sensor detects the temperature remaining below 99 degrees for more than 10 sec. Because temperature adjustment began in another mode, the adjustment stopped when the error was detected and error detection stopped. Error detection will not operate at temperature adjustment stop.
		Glue level thermistor defective Glue heater defective Slave board defective

SC753-49	B	Perfect Binder: Internal temperature thermistor error
		The A/D value of the internal temperature thermostat was detected above 80 degrees for 1 sec.
		Internal temperature thermistor connector loose, broken, defective Thermistor defective Slave board defective

SC753-50	B	Perfect Binder: Internal temperature thermostat disconnect error

		The A/D value of the internal temperature thermostat was detected below -20 degrees for 1 sec.
		Internal temperature thermistor connector loose, broken, defective Thermistor defective Slave board defective

SC753-51	B	Perfect Binder: Internal temperature thermistor error
		Temperature was detected above 10°C three consecutive times (sampled every sec. for 1 min.).
		Internal temperature thermistor connector loose, broken, defective Thermistor defective Slave board defective

SC753-52	B	Perfect Binder: Glue heater startup error 2
		The warm-up temperature was above the +-5°C target for the glue vat temperature. (Not detected within 100 sec. after machine warm-up.)
		Internal temperature thermistor defective Glue heater defective Slave board defective

SC753-53	B	Perfect Binder: Glue heater startup error 3
		The warm-up temperature was below the +-5C target for the glue vat temperature. (Not detected within 100 sec. after machine warm-up.)
		Internal temperature thermistor defective Glue heater defective Slave board defective

SC753-54	B	Perfect Binder: Glue heater startup error 4
		At the end of temperature adjustment at power on, warm-up did not complete within 500 sec. The glue vat temperature did not reach the warm-up temperature within 500 sec.
		Glue heater connector loose, broken, defective Heater defective Slave board defective

SC753-55	B	Perfect Binder: Ambient temperature error
		Ambient temperature is not within the operational range: It was between 0°C and -20C.
		Internal temperature thermistor connector loose, broken, defective Thermistor defective Slave board defective

SC753-56	B	Perfect Binder: Glue low limit late error
		The level of the glue in the vat was detected below the low limit 4 times.
		Glue clogged, glue supply defective Glue level thermistor connector loose, broken, defective Slave board defective

SC753-57	B	Perfect Binder: Glue high limit late error
		Without glue application, and with the glue level above the low limit, the glue level thermistor did not detect the level of the glue at the high limit, even after 12 glue pellets were supplied.
		Glue clogged, glue supply defective Glue level thermistor connector loose, broken, defective Slave board defective

SC753-58	B	Perfect Binder: Glue lowering level error
		Without glue supply, the level of the glue detected by the glue lever thermistor did not lower away from the high limit level, even after application of 25.42 g
		Glue clogged, glue supply defective Glue level thermistor connector loose, broken, defective Thermistor defective Slave board defective Glue application defective

SC753-59	B	Perfect Binder: Glue level thermistor adjustment value error
		Temperature detected by glue level thermistor out of range, 128°C+-14°C for low limit. Temperature detected by glue level thermistor out of range, 142°C+-10°C for high limit. The glue level thermistor adjustment value for low limit is larger than the high level. Glue level thermistor target value is 5°C off the values of the low and high limit.
		Master control board EEPROM data error Glue level thermistor connector loose, broken, defective Thermistor defective Slave board disconnected, defective

SC753-60	B	Perfect Binder: Timing sensor adjustment high value error
		The timing sensor A/D input value was lower than 3.0 to 3.5V, the A/D input value did not go higher than 3.0 to 3.5V, even after timing sensor D/A output value was higher than 3.5V.
		Timing sensor connector loose, broken, defective Sensor defective Master control board disconnected, defective

SC753-61	B	Perfect Binder: Cover registration sensor adjustment high value error
		The cover registration sensor A/D input value was lower than 3.0 to 3.5V, the A/D input value did not go higher than 3.0 to 3.5V, even after cover registration sensor output value output was higher than 3.5V.
		Cover registration sensor connector loose, broken, defective Sensor defective Master control board disconnected, defective

SC753-62	B	Perfect Binder: Cover horizontal registration sensor (S) adjustment high value error
		The cover horizontal registration sensor (S) A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor (S) D/A output value output was higher than 3.7V.
		Cover horizontal registration sensor (S) connector loose, broken, defective Sensor defective Slave control board defective

SC753-63	B	Perfect Binder: Cover horizontal registration sensor (L) adjustment high value error
		The cover horizontal registration sensor (L) A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover horizontal registration sensor (L) D/A output value output was higher than 3.7V.
		Cover horizontal registration sensor (L) connector loose, broken, defective Sensor defective Slave control board defective

SC753-64	B	Perfect Binder: Signature exit sensor adjustment high value error
		The signature exit sensor A/D input value was lower than 3.2 to 3.54V, the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor output value output was higher than 3.7V.
		Signature exit sensor connector loose, broken, defective Sensor defective Slave control board disconnected, defective

SC753-65	B	Perfect Binder: LE detect sensor adjustment high value error
		The leading edge detect sensor A/D input value was lower than 3.2 to 3.54V, and the A/D input value did not go higher than 3.2 to 3.54V, even after cover registration sensor A/D output value output was higher than 3.7V.
		LE detect sensor connector loose, broken, defective Sensor defective Slave control board disconnected, defective

SC753-66	B	Perfect Binder: Entrance path sensor adjustment high value error
		When the entrance path sensor was adjusted, the sensor A/D input was less than 2.58 V, even after the sensor D/A output was more than 3.3V.
		Entrance path sensor connector loose, broken, defective Sensor defective Cutter control board disconnected, defective

SC753-67	B	Perfect Binder: Book registration sensor adjustment high value error
		When the book registration sensor was adjusted, the sensor A/D input was less than 2.58 V, even after the sensor D/A output was more than 3.3V.
		Book registration sensor connector loose, broken, defective Cutter control board disconnected, defective

SC753-68	B	Perfect Binder: Timing sensor adjustment low value error
		The timing sensor A/D input value was higher than 3.0 to 3.5V, the A/D input value did not enter the range 3.0 to 3.5V, even after timing sensor D/A output value was lower than 0.1V.
		Timing sensor connector loose, broken, defective Sensor defective Master control board disconnected, defective

SC753-69	B	Perfect Binder: Cover registration sensor adjustment low value error
		The cover registration sensor A/D input value was higher than 3.0 to 3.5V, the A/D input value did not enter the range 3.0 to 3.5V, even after cover registration sensor D/A output value output was lowered 0.1V.
		Cover registration sensor connector loose, broken, defective Sensor defective Master control board disconnected, defective

SC753-70	B	Perfect Binder: Cover horizontal registration sensor (S) adjustment low value error
		The cover horizontal registration sensor (S) A/D input value was higher than 3.2 to 3.54V, and the A/D input value did enter the range 3.2 to 3.54V, even sensor D/A output value output was lowered 0.04V.
		Cover horizontal registration sensor (S) connector loose, broken, defective Sensor defective Slave control board defective

SC753-71	B	Perfect Binder: Cover horizontal registration sensor (L) adjustment low value error
		The cover horizontal registration sensor (L) A/D input value was higher than 3.2 to 3.54V, and the A/D input value did enter the range 3.2 to 3.54V, even sensor D/A output value output was lowered 0.04V.
		Cover horizontal registration sensor (L) connector loose, broken, defective Sensor defective Slave control board defective

SC753-72	B	Perfect Binder: Signature exit sensor adjustment low value error
		The signature exit sensor A/D input value was higher than 3.2 to 3.54V, the A/D input value did not enter the range 3.2 to 3.54V, even after cover registration sensor output value output was raised 0.04V.
		Signature exit sensor connector loose, broken, defective Sensor defective Slave control board disconnected, defective

SC753-73	B	Perfect Binder: LE detect sensor adjustment low value error
		The LE detect sensor A/D input value was higher than 3.2 to 3.54V, and the sensor A/D input value did not enter the range 3.2 to 3.54V, even after the sensor output value was raised 0.04V.
		LE detect sensor connector loose, broken, defective Sensor defective Slave control board disconnected, defective

SC753-74	B	Perfect Binder: Entrance path sensor adjustment low value error
		When the entrance path sensor was adjusted, the sensor A/D input was higher than 2.58 V, even after the sensor D/A output was lowered to 0V.
		Entrance path sensor connector loose, broken, defective Sensor defective Cutter control board disconnected, defective

SC753-75	B	Perfect Binder: Book registration sensor adjustment low value error
		When the book registration sensor was adjusted, the sensor A/D input was more than 2.58 V, even after the sensor D/A output was less than 0V.
		Book registration sensor connector loose, broken, defective Cutter control board disconnected, defective

SC753-76	B	Perfect Binder: LE detect sensor late error
		The stack was late for gluing to the cover because there was no stack transport end sensor from the slave control board and there was no signal that the LE detect sensor had signaled to arrival of the stack.
		LE detect sensor connector loose, broken, defective Sensor defective

SC753-77	B	Perfect Binder: Trim unit entrance sensor late error
		The stack was late arriving because the trim unit entrance sensor did not go ON even after a transport end signal was received.
		Trim unit entrance sensor connector loose, broken, defective Sensor defective

SC753- 78	B	Perfect Binder: Book registration sensor late error
		At the start of cutter registration, the book registration did not go ON.
		The stack could not be detected for fore edge cutting. Book registration sensor connector loose, broken, defective Sensor defective

SC753-79	B	Perfect Binder: Signature exit sensor lag error
		When the power was turned on, the cover path was closed and the signature exit sensor detected paper present, but the LE detect sensor had detected no paper present.
		Signature exit sensor connector loose, broken, defective Sensor defective

SC753-80	B	Perfect Binder: Entrance path sensor late error
		During the automatic exit operation, the entrance path sensor could not detect any paper within 6860 ms after gluing and stack transport started.
		Entrance path sensor connector loose, broken, defective Sensor defective Stack transport roller defective

SC753-81	B	Perfect Binder: Main grip late error
		There was no stack received from the sub grip unit; the main grip signature sensor detected no stack.
		Main grip signature sensor connector loose, broken, defective Sensor defective

SC753-82	B	Perfect Binder: Trim unit entrance sensor lag error
		At the end of initialization at power on, the entrance path sensor went ON.
		At the end of automatic exit, the entrance path sensor went ON. Trim unit entrance sensor connector, loose, broken, defective

SC753-83	B	Perfect Binder: Book registration sensor lag error
		Book registration sensor detected ON at the end of initialization after power on. Book registration sensor detected ON at the end of automatic exit operation. Book registration sensor detected ON at the end of book binding and automatic exit. Book registration sensor could detect no stack at fore edge cutting. Book registration sensor detected ON at end of grip operation during book binding.
		Book registration sensor connector loose, broken, defective Sensor defective at the lift tray

SC753-84	B	Perfect Binder: Book arrival sensor lag error
		Book arrival sensor connector loose, broken, defective
		Sensor defective Book failed to reach output tray Fore edge trim scraps fell into output area

SC753-85	B	Perfect Binder: Trimming jam error
		The edge press plate HP sensor remained OFF after disposing of the trimmed paper and the trimmings buffer was moved 19 mm to the right. After the trimmings buffer door was opened and closed to check for paper scraps, the machine detected paper scrap jam 3 times (and issued the alarm after the 2nd detection).
		There are scraps in the trimmings buffer and at the edge press plate. Edge press plate HP sensor connector loose, broken, defective Sensor defective

SC753-86	B	Perfect Binder: Sub grip unit lag error
		When the sub grip unit was checked for the presence of paper, no paper could be detected even after opening the sub grip unit.
		Paper remains in the sub grip unit. Sub grip paper sensor connector loose, broken, defective

SC753-87	B	Perfect Binder: Main grip unit lag error
		Although cutter retracted, the absence of paper could not be detected.
		Paper remains in the main grip unit Main grip signature sensor loose, broken, defective Sensor defective

SC753-88	B	Perfect Binder: Signature thickness sensor minimum value error
		When the result of the signature thickness detection (A/D value) was adjusted, the minimum value (0 mm) was smaller than the A/D value of -30.
		Signature thickness sensor connector loose, broken, defective Sensor defective

SC753-89	B	Perfect Binder: Signature thickness sensor maximum value error
		When the result of the signature thickness detection (A/D value) was adjusted, the maximum value (25mm) was smaller than the A/D value.
		Signature thickness sensor connector loose, broken, defective Sensor defective

SC754-10	B	Perfect Binder: Signature thickness sensor value unstable error
		The signature thickness reading did not change, even after the main grip unit opened and closed.
		Signature thickness sensor connector loose, broken, defective Sensor defective

SC754-11	B	Perfect Binder: Glue vat roller motor error
		The glue vat roller rotation sensor could not detect rotation of the glue vat roller motor within 1200 ms of motor operation.
		Glue vat roller motor connector loose, broken, defective Motor defective Glue vat roller rotation sensor connector loose, broken, defective Sensor defective

SC754-12	B	Perfect Binder: Glue level HP sensor late error
		During glue supply, the glue level HP sensor did not go ON, even though the glue roller motor was operating for 1000 ms.
		Glue supply motor connector loose, broken, defective Motor defective Glue pellets jammed Glue roller HP sensor connector loose, broken, defective Sensor defective

SC754-13	B	Perfect Binder: Glue level SP sensor lag error
		During glue supply, the glue level HP sensor did not go OFF, even though the glue roller motor was operating for 2400 ms.
		Glue supply motor connector loose, broken, defective Motor defective Glue pellets jammed Glue roller HP sensor connector loose, broken, defective Sensor defective

SC754-14	B	Perfect Binder: Front door lock error
		Front door lock release sensor did not go off, even though the door was locked.
		Front door lock solenoid defective Front door lock release sensor defective

SC754-15	B	Perfect Binder: Front door lock release error
		The front door lock release sensor did not go ON, even though the door was unlocked.
		Front door lock solenoid defective Front door lock release sensor defective Connector loose, broken, defective

SC754-16	B	Perfect Binder: Front door force open error
		The front door was detected open, even though it was locked.
		Front door switch defective Front door solenoid defective Connector loose, broken, defective

SC754-17	B	Perfect Binder: Switchback flapper HP sensor late error
		During the switchback flapper lift operation, the switchback flapper HP sensor did not go ON, even though the switchback flapper motor operated long enough for lifting through an arc of 50 degrees
		Switchback flapper HP sensor defective Switchback flapper motor defective

SC754-18	B	Perfect Binder: Switchback flapper HP sensor lag error
		During the switchback flapper lift operation, the switchback flapper HP sensor did not go OFF, even though the switchback flapper motor operated long enough for lowering through an arc of 150 degrees
		Switchback flapper HP sensor defective Switchback flapper motor defective Connector loose, broken, defective

SC754-19	B	Perfect Binder: TE press lever HP sensor late error
		When the trailing edge press lever was released, the TE press lever HP sensor did not go ON, even though the TE press lever motor operated long enough to move the lever through and arc of 30 degrees.
		TE press lever sensor defective TE press lever motor defective Connector loose, broken, defective

SC754-20	B	Perfect Binder: TE press lever HP sensor lag error
		When the trailing edge press lever was released, the TE press lever HP sensor did not go OFF, even though the TE press lever motor operated long enough to move the lever through and arc of 20 degrees.
		TE press lever sensor defective TE press lever motor defective

SC754-21	B	Perfect Binder: Jog fence front HP sensor late error
		The front jog fence HP sensor did not go ON, even thought the jog fence motor operated long enough for 60 mm of feed.
		Jog fence front HP sensor defective Jog fence front motor defective

SC754-22	B	Perfect Binder: Jog fence front HP sensor lag jam
		While small-size paper was being jogged, the jog fence front HP sensor did not go OFF after the front jog fence motor operated long enough for 40 mm of feed.
		Jog fence front HP sensor defective Jog fence front motor defective Connector loose, broken, defective

SC754-23	B	Perfect Binder: Jog fence large HP sensor late error
		While large-size paper was being jogged, the front jog fence large HP sensor did not go ON, even though the jog fence front motor operated long enough for 70mm of feed.
		Jog fence front large HP sensor defective Front jog fence motor defective

SC754-24	B	Perfect Binder: Jog fence front large HP sensor lag error
		While large-size paper was being jogged, the jog fence front large HP sensor did not go OFF after the front jog fence motor operated long enough for 20 mm of feed.
		Jog fence front large HP sensor defective Jog fence front motor defective Connector loose, broken, defective

SC754-25	B	Perfect Binder: Jog fence rear HP sensor late error
		While jogging small-size paper, the rear jog fence HP sensor did not go ON, even though the jog fence motor operated long enough for 60 mm of feed.
		Jog fence rear HP sensor defective Jog fence rear motor defective

SC754-26	B	Perfect Binder: Jog fence rear HP sensor lag jam
		While small-size paper was being jogged, the jog fence rear HP sensor did not go OFF after the rear jog fence motor operated long enough for 40 mm of feed.
		Jog fence rear HP sensor defective Jog fence rear motor defective Connector loose, broken, defective

SC754-27	B	Perfect Binder: Jog fence rear large HP sensor late error
		While large-size paper was being jogged, the rear jog fence large HP sensor did not go ON, even though the jog fence rear motor operated long enough for 70mm of feed.
		Jog fence rear large HP sensor defective Jog fence rear motor defective

SC754-28	B	Perfect Binder: Jog fence rear large HP sensor lag error
		While large-size paper was being jogged, the jog fence rear large HP sensor did not go OFF after the rear jog fence motor operated long enough for 20 mm of feed.
		Jog fence rear large HP sensor defective Jog fence rear motor defective Connector loose, broken, defective

SC754-29	B	Perfect Binder: Switchback roller HP sensor late error
		During the switchback roller lift operation, the switchback roller HP sensor did not go ON, even though the switchback roller lift motor operated long enough for lifting through an arc of 40 degrees.
		Switchback roller HP sensor defective Switchback lift motor defective

SC754-30	B	Perfect Binder: Switchback roller HP sensor lag error
		During the switchback roller lowering, the switchback roller HP sensor did not go OFF, even though the switchback roller lift motor operated long enough for lowering through an arc of 40 degrees.
		Switchback roller HP sensor defective Switchback roller lift motor defective Connector loose, broken, defective

SC754-31	B	Perfect Binder: Stacking tray lower limit late error
		When the stacking tray was lowered, the tray lower limit sensor did not go ON after the stacking tray lift motor had operated long enough for 90 mm of lift.
		Tray lower limit sensor defective Stacking tray lift motor defective

SC754-32	B	Perfect Binder: Stacking tray low limit lag error
		When the stacking tray was raised, the tray lower limit sensor did not go OFF after the stacking tray lift motor had operated long enough for 30mm of lift.
		Tray lower limit sensor defective Stacking tray lift motor defective Harness connector loose, broken, defective

SC754-33	B	Perfect Binder: Paper detect sensor (front) detection error
		When the stacking tray was raised, the paper detect sensor (front) did not go ON, even after the stacking tray overflow sensor went ON and the stacking tray lift motor had operated for 30 mm of lift.
		Paper detect sensor (front) defective Stacking tray lift motor defective

SC754-34	B	Perfect Binder: Perfect Binder: Paper detect sensor (front) no paper detection error
		When the stacking tray was lowered, the tray lower limit sensor did not go OFF after the stacking tray lift motor had operated long enough for 10mm of lowering.
		Paper detect sensor (front) defective Stacking tray lift motor defective Harness connector loose, broken, defective

SC754-35	B	Perfect Binder: Paper detect sensor (rear) paper detection error
		When the stacking tray was raised, the paper detect sensor (rear) did not go ON, even after the stacking tray overflow sensor went ON and the stacking tray lift motor had operated for 40 mm of lift.
		Paper detect sensor (rear) defective Stacking tray lift motor defective

SC754-36	B	Perfect Binder: Paper detect sensor (rear) no paper detection error
		When the stacking tray was lowered, the paper detect sensor (rear) did not go OFF after the stacking tray lift motor had operated long enough for 10mm of lowering.
		Paper detect sensor (rear) defective Stacking tray lift motor defective Harness connector loose, broken, defective

SC754-37	B	Perfect Binder: Stack overflow sensor detection late error
		When the stacking tray was raised, the stack overflow sensor did not go OFF after the stacking tray lift motor had operated long enough for 70mm lowering.
		Stack overflow sensor defective Stacking tray lift motor defective

SC754-38	B	Perfect Binder: Stacking tray low limit sensor error 1
		The stacking tray low limit sensor and the stack overflow sensor went ON at the same time.
		Tray lower limit sensor defective Stack overflow sensor defective Harness connector loose, broken, defective

SC754-39	B	Perfect Binder: Stack overflow sensor detection position lag error
		When the tray was lowered to allow removal of the booklets, the stack overflow sensor did not go OFF, even after the stacking tray lift motor had operated long enough for 40mm of lift.
		Stack overflow sensor defective Stacking tray lift motor defective Harness connector loose, broken, defective

SC754-40	B	Perfect Binder: Stacking tray low limit sensor error 2
		When the stacking tray was lifted, the stack overflow sensor did not go OFF, even though the either (or both) the paper detect sensor (front) or the paper detect sensor (rear) were on while the stacking tray empty sensor was OFF.
		Tray empty sensor defective Paper detect sensors (front, rear, or both) defective Stack overflow sensor defective Tray lift motor defective Harness connector loose, broken, defective

SC754-41	B	Perfect Binder: Stack tray HP sensor late error
		When the tray moved to the home position, the HP sensor did not go ON after enough time for 70mm of movement had elapsed.
		Stack tray HP sensor defective Stacking tray lift motor defective

SC754-42	B	Perfect Binder: Stack tray HP sensor lag error
		When the tray moved from the home position, the HP sensor did not go OFF after enough time for 10mm of movement had elapsed.
		Stack tray HP sensor defective Stacking tray motor defective

SC754-43	B	Perfect Binder: Stack weight move HP sensor late error
		When the tray moved to the home position, the stack weight move HP sensor did not go ON after enough time for 70mm of movement had elapsed.
		Stack weight HP sensor defective Stack weight motor defective

SC754-44	B	Perfect Binder: Stack weight HP sensor lag error
		During movement away from the HP sensor, the HP sensor did not go OFF after enough time for 10mm of movement had elapsed.
		Stack weight HP sensor defective Stack weight motor defective

SC754-45	B	Perfect Binder: Sub grip HP sensor late error
		During the sub grip lift operation, the sub grip upper HP sensor did not go ON, even though the sub grip lift motor had operated for 4110 ms.
		Sub grip lift motor defective Sub grip upper HP sensor defective

SC754-46	B	Perfect Binder: Sub grip HP sensor lag error
		During sub grip lowering, the sub grip lower HP sensor did not go OFF, even though the sub grip lift motor had operated for 240 ms.
		Sub grip lift motor defective Sub grip lower HP sensor defective Harness connector loose, broken, defective

SC754-47	B	Perfect Binder: Sub grip size HP sensor late error
		When the sub grip unit opened horizontally, the size move HP sensor did not go ON, even after the size move motor had operated for 726 ms, or operated long enough for 108.75 mm of movement. After the sub grip unit moved to the horizontal release position, the sub grip size HP sensor was already OFF.
		Sub grip size motor defective Sub grip size HP sensor defective

SC754-48	B	Perfect Binder: Sub grip size HP sensor lag error
		When the sub grip unit closed horizontally, the size move HP sensor did not go OFF, even after the size move motor had operated for 500 ms, or operated long enough for 108.75 mm of movement. After the sub grip unit moved from the horizontal close position to the open position, the size shift HP sensor was already ON.
		Sub grip size motor defective Sub grip size HP sensor defective Harness connector, loose, broken, defective

SC754-49	B	Perfect Binder: Sub grip open position late error
		At the start of the sub grip open operation, the SG open sensor did not go ON, even after the SG motor had operated for 1500 ms.
		SG motor drive board defective SG open sensor defective

SC754-50	B	Perfect Binder: Sub grip open position lag error
		At the start of the sub grip close operation, the SG open sensor did not go OFFN, even after the SG motor had operated for 500 ms.
		SG motor defective SG open sensor defective Harness connector loose, broken, defective

SC754-51	B	Perfect Binder: Sub grip close position late error
		At the start of the sub grip close operation, the SG close sensor did not go ON, even after the SG motor had operated for 1500 ms.
		SG motor defective SG close sensor defective

SC754-52	B	Perfect Binder: Sub grip close position lag error
		At the start of the sub grip open operation, the SG close sensor did not go OFF, even after the SG motor had operated for 500 ms.
		SG motor defective SG close sensor defective Harness connector loose, broken, defective

SC754-53	B	Perfect Binder: Main grip HP sensor late error
		During main grip lift, the MG HP sensor did not go ON, even though the main grip lift motor had operated for 6185 ms. MG HP sensor did not go OFF when the main grip moved from up position to down position.
		MG lift motor defective MG HP sensor defective

SC754-54	B	Perfect Binder: Main grip HP sensor lag error
		During main grip lowering, the MG HP sensor did not go OFF, even though the main grip lift motor had operated for 1455 ms. MG HP sensor did not go ON when the main grip moved from down position to up position.
		MG lift motor defective MG HP sensor defective Connector harness loose, broken, defective

SC754-55	B	Perfect Binder: Main grip press sensors (s) position late error
		When lifting from main grip signature registration position, MG press sensors did not go ON, even though the MG lift motor had operated for 95 ms.
		MG lift motor defective MG press sensors defective

SC754-56	B	Perfect Binder: Main grip press sensor (S) position lag error
		When lowering to main grip signature registration position, MG press sensor (S) did not go OFF, even though the MG lift motor had operated for 5640 ms.
		MG lift motor defective MG press sensor (S) defective Connector harness loose, broken, defective

SC754-57	B	Perfect Binder: Main grip press sensor (L) position late error
		When lowering cover in main grip to press position, MG press sensor (L) did not go ON, even though the MG lift motor had operated for 6185 ms.
		MG lift motor defective MG press sensor (L) defective

SC754-58	B	Perfect Binder: Main grip press sensor (L) position lag error
		When raising cover in main grip from press position, MG press sensor (L) did not go OFF, even though the MG lift motor had operated for 95 ms.
		MG lift motor defective MG press sensor (L) defective Connector harness loose, broken, defective

SC754-59	B	Perfect Binder: Signature exit sensor late error
		When signature was passed from main grip to signature exit roller, signature exit sensor did not go ON after MG lift motor moved to signature turnover position.
		MG lift motor defective Signature exit sensor defective Signature out of position, snagged on main grip

SC754-60	B	Perfect Binder: Main grip HP sensor (L) late error
		During main grip lift, the MG HP sensor (L) did not go ON, even though the main grip lift motor had operated for 6185 ms.
		MG lift motor defective MG HP sensor (L) defective

SC754-61	B	Perfect Binder: Main grip HP sensor (L) lag error
		During main grip lowering, the MG HP sensor (L) did not go OFF, even though the main grip lift motor had operated for 1455 ms.
		MG lift motor defective MG HP sensor (L) defective Connector harness loose, broken, defective

SC754-62	B	Perfect Binder: Main grip open sensor (R) late error
		At the start of the main grip open operation, the MG open sensor (R) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		Main grip motor (R) defective MG open sensor (R) defective

SC754-63	B	Perfect Binder: Main grip open sensor (R) lag error
		At the start of the main grip close operation, the MG open sensor (R) did not go OFF, even after the MG motor (R) had operated for 500 ms.
		Main grip motor (R) defective Main grip open sensor (R) defective Connector or harness loose, broken, defective

SC754-64	B	Perfect Binder: Main grip close sensor (R) late error
		At the start of the main grip close operation, the MG clsoe sensor (R) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		Main grip motor (R) defective MG close sensor (R) defective

SC754-65	B	Perfect Binder: Main grip close sensor (R) lag error
		At the start of the main grip close operation, the MG close sensor (R) did not go OFF, even after the MG motor (R) had operated for 500 ms.
		Main grip motor (R) defective Main grip close sensor (R) defective Connector or harness loose, broken, defective

SC754-66	B	Perfect Binder: Main grip motor (R) rotation error
		At the start of the main grip open operation, the MG encoder sensor (R) was not detected on/off, even after the MG motor (R) had operated for 200 ms.
		Main grip motor (R) defective Main grip encoder sensor (R) defective Connector or harness loose, broken, defective

SC754-67	B	Perfect Binder: Main grip open sensor (F) late error
		At the start of the main grip open operation, the MG open sensor (F) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		Main grip motor (F) defective MG open sensor (F) defective

SC754-68	B	Perfect Binder: Main grip open sensor (F) lag error
		At the start of the main grip close operation, the MG open sensor (F) did not go OFF, even after the MG motor (F) had operated for 500 ms.
		MG motor (F) defective MG open sensor (F) defective Connector or harness loose, broken, defective

SC754-69	B	Perfect Binder: Main grip close sensor (F) late error
		At the start of the main grip open operation, the MG clsoe sensor (F) did not go ON, even after the MG motor (F) had operated for 3000 ms.
		MG motor (F) defective MG close sensor (F) defective

SC754-70	B	Perfect Binder: Main grip close sensor (F) lag error
		At the start of the main grip open operation, the MG close sensor (F) did not go OFF, even after the MG motor (F) had operated for 500 ms.
		MG motor (F) defective MG close sensor (F) defective Connector or harness loose, broken, defective

SC754-71	B	Perfect Binder: Main grip motor (F) rotation error
		At the start of the main grip open/close operation, the MG encoder sensor (F) was not detected on/off, even after the MG motor (F) had operated for 200 ms.
		MG motor (F) defective MG encoder sensor (F) defective Connector or harness loose, broken, defective

SC754-72	B	Perfect Binder: Signature exit path HP sensor late error
		During signature output roller separation, the signature exit path sensor did not go ON, even after the signature exit path motor was ON for 750 ms.
		Signature path exit motor defective Signature path exit HP sensor defective

SC754-73	B	Perfect Binder: Signature exit path HP sensor lag error
		During signature exit roller nip operation, the signature exit path sensor did not go OFF, even after the signature exit path motor was OFF for 300 ms.
		Signature path exit motor defective Signature path exit HP sensor defective Connector loose, broken, defective

SC754-74	B	Perfect Binder: Signature path exit press sensor late error
		During signature exit roller nip operation, the signature exit path exit press sensor did not go ON, even after the signature exit path motor operated for 300 ms.
		Signature path exit motor defective Signature path exit press sensor defective

SC754-75	B	Perfect Binder: Signature path exit press sensor late error
		During signature output roller separation, the signature exit path press sensor did not go OFF, even after the signature exit path motor was ON for 300 ms.
		Signature path exit motor defective Signature path exit press sensor defective Connector loose, broken, defective

SC754-76	B	Perfect Binder: Leading edge sensor late error
		When signature exited at signature path exit roller, the leading edge sensor did not go ON, even after the signature exit roller motor operated long enough to feed the book 45 mm.
		Signature exit roller motor defective Leading edge sensor defection Signature jam

SC754-77	B	Perfect Binder: Drive switch motor error (down to up)
		The rack where the drive gear is mounted did not retract from the drive switch sensor after the drive switch motor operated for 3 s.
		Drive switch motor defective Drive switch sensor defective Connector loose, broken, defective

SC754-78	B	Perfect Binder: Drive switch motor error (up to down)
		The rack where the drive gear is mounted was late arriving at the drive switch sensor after the drive switch motor operated for 3 s.
		Drive switch motor defective Drive switch sensor defective Connector loose, broken, defective

SC754-79	B	Perfect Binder: Upper tray low position late error
		The upper tray did not leave the lower limit sensor after the upper tray lift motor had operated for 5 s.
		Upper tray lift motor defective Upper tray low limit sensor defective Connector loose, broken, defective

SC754-80	B	Perfect Binder: Upper tray feed position late error
		The upper tray did not arrive at the PICK sensor after the upper tray lift motor had operated for 5 s.
		Upper tray lift motor defective Upper tray PICK sensor defective Connector loose, broken, defective

SC754-81	B	Perfect Binder: Lower tray low position lag error
		The lower tray did not leave the low limit sensor after the lower tray lift motor had operated for 5 s.
		Lower tray lift motor defective Upper tray low limit sensor defective Connector loose, broken, defective

SC754-82	B	Perfect Binder: Lower tray paper feed position late error
		The lower tray did not leave the lower tray paper feed sensor after the lower tray lift motor had operated for 5 s.
		Lower tray lift motor defective Lower tray PICK sensor defective Connector loose, broken, defective

SC756-10	D	Ring Binder: Junction gate abnormal
		Junction gate failed to move out of the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor could not detect the junction gate within the prescribed time (600 pulses). The first occurrence triggers a jam, the second an SC code.
		Path JG motor (M201) disconnected, overloaded JG HP sensor (S203) loose, broken, or defective.

SC756-20	B	Ring Binder: Pre-punch side fence HP error
		Thee sensor failed to detect that t he component had moved out of the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code The sensor could not detect the component within the prescribed time (600 pulses). The first occurrence triggers a jam, the second an SC code.
		Side jogger motor (M302) disconnected, defective Pre-punch jogger HP sensor (S302) loose, broken, defective

SC756-21	B	Ring Binder: Pre-punch jogger roller HP sensor
		The sensor failed to detect that the component had moved out of the home position within the prescribed time (36 pulses). The first occurrence triggers a jam, the second an SC code The sensor could not detect the component within the prescribed time (22 pulses). The first occurrence triggers a jam, the second an SC code.
		Jog roller lift motor (M305) defective Motor overloaded Connector loose, broken, defective Jog roller lift HP sensor defective

SC756-22	B	Ring Binder: Ring binder punch defective
		Punch unit was not detected at unit initialization. The HP sensor was still detected within 30 ms after the DC motor switched ON and made one revolution. An encoder pulse was not detected within 5 ms after the DC motor switched ON and made one revolution at home position. The HP sensor was not detected within 400 ms after the DC motor switched ON.
		Punch motor (M304) defective Connector loose, broken, defective Motor overload Punch HP sensor (S302) defective Punch encoder sensor defective

SC756-30	B	Ring Binder: Paddle roller HP error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Paddle roller lift motor (M603) defective Motor overloaded Connector loose, broken, defective Paddle roller HP sensor defective

SC756-31	B	Ring Binder: Jogger fence 1 error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code
		Jog fence 1 motor (M604) defective Connector loose, broken, defective Motor overload Side fence 1 HP sensor (S601) defective

SC756-32	B	Ring Binder: Jogger fence 2 error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Jog fence 2 motor (M606) defective Connector loose, broken, defective Motor overload Side fence 2 HP sensor (S611) defective

SC756-33	B	Ring Binder: Stack tamper HP error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Stack tamper motor (M607) defective Motor overloaded Connector loose, broken, defective Stack tamper HP sensor (S612) defective

SC756-34	B	Ring Binder: Pre-bind jogger clamp HP error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Spine clamp motor (M605) disconnected, defective, clamp HP sensor (S603) loose, broken, defective.

SC756-40	B	Ring Binder: Binder unit run-out error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Run-out press roller motor (M610) defective Motor overloaded Connector loose, broken, defective Run-out roller HP sensor (S614) defective

SC756-41	B	Ring Binder: Clamp thickness error
		During jogging a 100-sheet stack was detected and the 50-sheet detect sensor (S606) went OFF. (1st detection signals a jam, 2nd detection issues this SC code.) When the clamp moved to the open release position at initialization, the 50-sheet detect sensor went OFF.
		50-sheet detect sensor (S606) defective Connector loose, broken, defective

SC756-42	B	Ring Binder: Alignment pin error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Alignment pin motor (M602) disconnected, defective Alignment pin HP sensor (S604) loose, broken, defective

SC756-43	B	Ring Binder: Pre-bind jogger shutter error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		Shutter motor (M608) disconnected, defective Shutter HP sensor 1 (S605) loose, broken, defective

SC756-44	B	Ring Binder: 50/100 clamp adjustment error
		When moving to the home position, the sensor could not detect the component at the home position within the prescribed time (400 pulses). The first occurrence triggers a jam, the second an SC code. The sensor failed to detect that the component had moved out of the home position within the prescribed time (400 ms). The first occurrence triggers a jam, the second an SC code.
		50/100 clamp adjustment motor (M702) defective Connector loose, broken, defective Motor overload Ring switch HP sensor (S706) defective Ring switch timing sensor (S707) defective

SC756-45	B	Ring Binder: Timing sensor interval error
		At initialization or ring binding, the ON or OFF time of the timing sensor exceeded 1500 ms (1st detection signals a jam, 2nd detection issues this SC code)
		Clamp unit motor (M701) defective Connector loose, broken, defective Motor overload Bind timing sensor (S702) connector loose, broken, defective Sensor defective

SC756-46	B	Ring Binder: Clamp unit HP error
		At initialization or during ring binding, the unit did not arrive at home position within the prescribed time (1500 ms) (1st detection triggers a jam alert, 2nd detection issues this SC code). The sensor failed to detect that the component had moved out of the home position within the prescribed time (1500 ms) (1st detection triggers a jam alert, 2nd detection issues this SC code).
		Clamp unit motor (M701) defective Connector loose, broken, defective Motor overload Clamp unit HP sensor (S701) connector loose, broken, defective Sensor defective

SC756-47	B	Ring Binder: Spine alignment error
		During alignment a home position timeout (400 ms) occurred twice during movement of the tip of the alignment pin (2nd attempt was within an additional 400 ms).
		Alignment pin motor (M602) defective Connector loose, broken, defective Alignment pin HP sensor (S604) defective Alignment pin up sensor (S610) defective Jog mechanism defective Punch defective

SC756-48	B	Ring Binder: Binder unit not detected
		Binder unit was not detected at initialization before operation.
		Connector loose, broken, defective

SC756-50	B	Ring Binder: Output belt rotation error
		The sensor failed to detect that the component had moved out of the home position within the prescribed time (800 pulses). The first occurrence triggers a jam, the second an SC code. The sensor could not detect the component within the prescribed time (2300 pulses). The first occurrence triggers a jam, the second an SC code.
		Output belt rotation motor (M403) defective Connector loose, broken, defective Motor overload Output belt rotation HP sensor (S403) defective

SC756-51	B	Ring Binder: Output belt 1 HP error
		The sensor failed to detect that the component had moved out of the home position within the prescribed time (200 pulses). The first occurrence triggers a jam, the second an SC code The sensor could not detect the component within the prescribed time (2125 pulses). The first occurrence triggers a jam, the second an SC code.
		Output belt 1 motor (M401) defective Connector loose, broken, defective Motor overload Output belt 1 HP sensor (S401) defective

SC756-52	B	Ring Binder: Output belt 2 HP error
		The sensor failed to detect that the component had moved out of the home position within the prescribed time (200 pulses). The first occurrence triggers a jam, the second an SC code The sensor could not detect the component within the prescribed time (3130 pulses). The first occurrence triggers a jam, the second an SC code.
		Output belt 2 motor (M402) defective Connector loose, broken, defective Motor overload Output belt 2 HP sensor (S402) defective

SC756-60	B	Ring Binder: Stack height error
		The height of the stack increases until the stack height sensor goes ON. The sensor did not go ON within 6 sec. after the motor went ON (1st detection triggers a jam alert, 2nd detection issues this SC code). No operation for next page. System triggers FULL if sensor remains ON for 1 sec. after lowering. However, all stops if lower sensor goes ON. If the sensor remains ON for more than 6 sec. 1st detection triggers a jam alert, 2nd detection issues this SC code. However, all stop if lower sensor goes ON. If the sensor remains ON for more than 6 sec., the 1st detection triggers a jam alert, the 2nd detection issues this SC code.
		Stacker motor defective (M501) Connector loose, broken, defective Stack height sensor 1 (S502E) connector loose, broken, defective Sensor defective

SC756-61	B	Ring Binder: Stacker error
		At the start of stacking, or the end of the operation, even though the unit signaled stack full (stack up/down sensors went ON together), no stack was detected. When stacking stopped, no stack was detected within 2 sec., even after the stack full alert. (1st detection triggers a jam, 2nd detection issues this SC code.)
		Stacker HP sensor (S501) defective Stack height sensor 1 (S502) defective Stacker document sensor (S504) defective Connector, loose, broken, defective

6.10 SC800

SC816		Energy save I/O subsystem error	GW
-00		-	
-01		Sub system error	
-02		sysarch(LPUX_GET_PORT_INFO) error	
-03		STR shift reject	
-04		Write error generated by kernel communication driver	
-05		STR pre-shift processing error	
-07		sysarch(LPUX_GET_PORT_INFO) error	
-08		sysarch(LPUX_ENGINE_TIMERCTRL) error	
-09		sysarch(LPUX_RETURN_FACTOR_STR) error	
-10	D	sysarch(LPUX_GET_PORT_INFO) error	
-11		sysarch(LPUX_GET_PORT_INFO) error	
-12		sysarch(LPUX_GET_PORT_INFO) error	
-13		open() Error	
-14		Memory address setting error	
-15		open() Error	
-16		open() Error	
-17		open() Error	
-18		open() Error	
-19		Duplicate open () error	
-20		open() Error	
-22	D	Parameter error	
-23		read() Error	

-24		read() Error
-25		write() Error
-26		write() communication retry error
-27		write() communication retry error
-28		write() communication retry error
-29		read() communication retry error
-30		read() communication retry error
-35		read() Error
-36		Sub System Error
-37		Sub System Error
-38		Sub System Error
-39		Sub System Error
-40		Sub System Error
-41	D	Sub System Error
-42		Sub System Error
-43		Sub System Error
-44		Sub System Error
-45		Sub System Error
-46		Sub System Error
-47		Sub System Error
-48		Sub System Error
-49		Sub System Error
-50		Sub System Error
-51		Sub System Error
-52		Sub System Error
-53		Sub System Error

-54		Sub System Error
-55		Sub System Error
-56		Sub System Error
-57		Sub System Error
-58		Sub System Error
-59		Sub System Error
-60		Sub System Error
-61		Sub System Error
-62		Sub System Error
-63		Sub System Error
-64		Sub System Error
-65		Sub System Error
-66		Sub System Error
-67		Sub System Error
-68		Sub System Error
-69		Sub System Error
-70	D	Sub System Error
-71		Sub System Error
-72		Sub System Error
-73		Sub System Error
-74		Sub System Error
-75		Sub System Error
-76		Sub System Error
-77		Sub System Error
-78		Sub System Error
-79		Sub System Error

-80		Sub System Error
-81	D	Sub System Error
-82		Sub System Error
-83		Sub System Error
-84		Sub System Error
-85		Sub System Error
-86		Sub System Error
-87		Sub System Error
-88		Sub System Error
-89		Sub System Error
-90		Sub System Error
-91		Sub System Error
-92		Sub System Error
-93		Sub System Error
-94		Sub System Error
		Low power I/O sub system detected an error
		Low power I/O sub system error Low power I/O sub system command board error (no response) Error detected before STR shift processing

SC819-00	D	Kernel halt error	GW
0x696e		gwinit processing end	
		If an unexpected error occurs at SCS processing end, gwint processing also halts (this result is judged a kernel stop error, by gwinit specification)	
0x766d		VM full error	
		Occurs when too much RAM is used during system processing	
---		Other error	
		System detected internal mismatch error	
		Memory defective Flash memory defective CPU defective	
	D	Other error (characters on operation panel)	
		System detected internal mismatch error	
		Software defective Insufficient memory Hardware driver defective (RAM, FLASH memory)	

SC840-00	B	EEPROM error 1: EEPROM access
		During the I/O processing, a reading error occurred. The 3rd reading failure causes this SC code. During the I/O processing, a writing error occurred.
		Defective EEPROM

SC841-00	B	EEPROM error 2: EEPROM read/write error
		Mirrored data of the EEPROM is different from the original data in EEPROM.
		Data in the EEPROM is overwritten for some reason.

SC842-00	B	NAND-Flash Update Verify Error Detected.	GW
		SCS write error (verify error) occurred at the Nand-Flash module when remote ROM or main ROM was updated.	
		Nand-Flash defective	

SC842-01	B	Insufficient Nand-Flash blocks (threshold exceeded)	GW
		At startup, or when machine returned from low power mode, the Nand-Flash status was read and judged that the number of unusable blocks had exceeded threshold, and then SCS generated the SC code.	
		Number of unusable blocks exceeded threshold for Nand-Flash	

SC842-02	B	Number of Nand-Flash block deletions exceeded	GW
		At startup, or when the machined returned from low power mode, the Nand-Flash was read and judged that the number of deleted blocks had exceeded threshold, and then SCS generated this SC code.	
		Number of blocks deleted exceeded threshold for Nand-Flash	

SC853-00	B	Bluetooth device connection error	GW
		The Bluetooth device (USB type) was connected after the machine was powered on.	
		Always connect the Bluetooth device (USB type) before the machine is powered on.	

SC854-00	B	Bluetooth device removed	GW
		This error occurred when the Bluetooth device (USB type) was removed.	
		Never remove Bluetooth (USB type) after machine starts	

SC855	B	Wireless LAN card Error	GW
1		Driver attach failed	
2		Driver failed to initialize	
		An error was detected for the wireless LAN card (802.11).	
		Poor wireless device connection Wireless LAN card defective	

SC857-00	B	USB I/F Error	GW
		USB I/F could not be used due to driver malfunction	
		USB driver defective	

SC858	A	Data Encryption Error 1	GW
		When the data encryption key was updated, data was converted but a serious error occurred.	
-01		HDD Key Setting Error	
		USB Flash, other data, corrupted Communication error caused by electrostatic noise Controller board defective	
-02		NVRAM Read Error	
		NVRAM defective	
-30		NVRAM Before Replace Error	
		Software parameters caused error caused by at data conversion	
-31		Other Error	
		Controller board defective	

SC859	B	Data encryption error 2	GW
		When the data encryption key was updated, HDD data was converted, but not correctly. Image displayed at conversion only (this SC is not displayed), but SC is displayed after machine is cycled off/on.	
-01		HDD check error	
		HDD conversion was set with the data encryption key update function, but the HDD was removed. Machine lost power during data encryption key update Electrostatic noise, or an HDD error occurred, during data encryption key update, and data was not encrypted.	
-02		Power loss during data encryption	
		Power loss occurred while the data encryption key was being updated.	
-10		Data read command error	
		Machine lost power during data encryption key update Electrostatic noise, or an HDD error occurred, during data encryption key update, and data was not encrypted.	

SC860-00	B	HDD startup error at power on	GW
		HDD is connected but a driver error is detected, or the driver did not respond with the status of the HDD within 30 s.	
		HDD is not initialized Level data is corrupted HDD is defective (attempt to initialize the HDD with SP5832-001)	

SC863	D	HDD data read failure	GW
-01		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	

-02		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-03		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-04		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-05	D	The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-06		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-07		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-08		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-09		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-10	D	The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	

-11		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-12		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-13		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-14		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-15	D	The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-16		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-17		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-18		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-19		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	

-20	D	The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-21		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-22		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	
-23		The data written to the HDD cannot be read normally, due to bad sectors generated during operation.	
		HDD defective	

SC864	D	HDD data CRC error	GW
-01		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-02		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-03		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-04		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	

-05	D	During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-06		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-07		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-08		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-09		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-10	D	During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-11		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-12		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	

		HDD defective	
-13		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-14		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-15	D	During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-16		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-17		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-18		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-19		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	

-20	D	During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-21		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-22		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	
-23		During HDD operation, the HDD cannot respond to an CRC error query. Data transfer did not execute normally while data was being written to the HDD.	
		HDD defective	

SC865	D	HDD access error	GW
-00		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-01		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-02		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	

-03	D	There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-04		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-05		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-06		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-07	D	There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-08		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-09		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	

-10		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-11	D	There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-12		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-13		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-14		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-15		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-16	D	There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	

-17		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-18		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-19		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-20		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-21	D	There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-22		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	
-23		There was no return in response to an error that occurred during HDD operation.	
		HDD responded to an error during operation for a condition other than those for SC863, 864.	

SC866-00	B	SD card error 1: Confirmation	GW
		The machine detected an electronic license error in the application on the SD card in the controller slot immediately after the machine was turned on. Note: The program on the SD card contains electronic confirmation license data. This SC code is displayed only if the SD card contains license information.	
		There is an illegal program on the SD card.	

SC867 -00 to 02	D	SD card error 2: SD card removed	GW
		The SD card was removed while the machine is on.	
		The SD card required to start an application was not in the SD card slot.	

SC868 -00 to 02	D	SD card error 3: SD card access	GW
		An error occurred while an SD card was in use.	
		SD card defective SD controller defective	

SC870	B	Address book data error	GW
-00		Temporary address book error (another error that does not apply to other errors listed below)	
-01		No media to hold the saved address book data at startup.	
-02		The setting that enables data encryption at startup did not find the required module (DESS).	
-03		At initialization failed to generate file required to save the address book data.	

-04		At initialization failed to generate file required to save destination data.
-05		At initialization the file required to generate destination address data failed.
-06		At initialization failed to generate file required for LDAP search.
-07	B	At initialization failed to initialize entry information required by the system.
-08		At initialization there was a setting on the HDD required by the system for entry, but the initialization of the area to hold the address book failed to initialize.
-09		Mismatch error occurred in NVRAM device setting for the area where the information required to save the address book configuration is stored.
-10		No directory created for storage of the address book data in SD/USB Flash ROM (device setting).
-11		Mismatch error occurred with address book items at startup
-20	B	File I/O: file initialization failed
-21		File I/O: file creation failed
-22		File I/O: file open failed
-23		File I/O: file write failed
-24		File I/O: file read failed
-25		File I/O: file size check failed
-26		File I/O: data erasure failed
-27		File I/O: data add failed
-30		Failed to retrieve data from cache when the address book was searched for a destination or remote receiver
-31		Failed to retrieve data from cache when LDAP was searched
-32		Failed to retrieve WS-Scanner address book data from the cache
-41		Failed to retrieve data from cache

-50		Address book data encryption error at startup
-51	B	Failed to create directory required to convert normal data to encrypted data
-52		Failed to convert normal data to encrypted data
-53		Failed to convert encrypted data to normal data
-54		Data mismatch occurred when data was retrieved from encrypted address book
-55		Failed to delete files when setting was changed
-56		Failed to create special file to hold encryption key when files were deleted
-57		Failed to move files when data encryption setting was changed
-58		Failed to delete directory for data encryption setting change
-59		Insufficient resources detected when data encryption setting was changed
-60		Could not retrieve system administrator permission setting
	B	The address book data cannot be read from the HDD or SD card where it is stored, or the data read from the media is defective.
		Software defective. Address book lookup mismatch error (server setting, LDAP setting) Address book encryption setting or encryption key mismatch error (after NVRAM or HDD replaced separately and address book was not initialized) The media holding the address book data (SD card, HDD) was removed temporarily, or application not compatible with machine Address book data corrupted at access

SC872-00	B	HDD mail receive data error	GW
		HDD error detected at power on.	
		HDD defective Machine lost power while HDD was being accessed	

SC873-00	B	HDD mail send data error	GW
		HDD error detected at power on.	
		HDD defective Machine lost power while HDD was being accessed	

SC874-99	D	Delete data area (other errors)	GW
		An error occurred while data was being erased on HDD or NVRAM.	
		Error detected in HDD data delete program Error detected in NVRAM data delete program The “Delete All” option was not set	

SC875	D	Delete All error:HDD delete	GW
-01		HDD check error (hddchack –i)	
-02		Data delete failure	
		During deletion of data from the HDD, and error was detected before HDD erase.	
		HDD logic delete failed Failed to delete every module holding data	

SC876-00	D	Log data errors		GW
		An error was detected when data was retrieved from the log at startup, or while the machine was operating.		
		876-1	Log data error 1	
			Log data file corrupted	
		876-2	Log data error 2	
			When the log encryption setting was enabled, the encryption module was not installed.	
		876-3	Log data error 3	
			Invalid log encryption key due to defective NVRAM data.	

	D	876-4	Log data error 4
			Even though log data encryption was disabled, log data was encrypted in (NVRAM faulty). Even though log data encryption was enabled, log data was not encrypted (NVRAM faulty).
		876-5	Log data error 5
			NVRAM replaced with one from another machine HDD replaced with one from another machine
		876-99	Log data error 6
			An error other than Log Data Errors 1 to 5 occurred.

SC877-00	B	HDD SD card delete error	GW
		Data overwrite (Zoffy) did not execute even though the machine is set for Zoffy.	
		Zoffy SD card (Data Overwrite Security) was removed SD card defective	

SC878-00	D	TPM authentication error	GW
		TPM electronic recognition failure	
		Update of system module attempted without correct update path USB flash memory not operating correctly	

Trusted Platform Module

In computing, Trusted Platform Module (TPM) is both the name of a published specification detailing a secure crypto processor that can store cryptographic keys that protect information, as well as the general name of implementations of that specification, often called the "TPM chip" or "TPM Security Device" (as designated in certain Dell BIOS settings).

SC878-01	D	USB flash error	GW
		There is a problem in the file system of the USB flash memory.	
		USB Flash system files corrupted	

SC878-02	D	TPM error 1	GW
		An error occurred in either TPM or the TPM driver	
		TPM not operating correctly	

SC878-03	D	TCSD dffof	GW
		An error occurred in the TPM software stack.	
		TPM, TPM software cannot start A file required by TPM is missing	

SC880-00	B	File Format Converter (MLB) error
		A request to get access to the MLB is not answered within the specified time.
		MLB defective

SC881-01	D	Management area error	GW
		A problem was detected in the software This error may even occur is an IC card option is not installed.	
		At login When a print job was received When WEB browser was opened	

SC899-00	D	Software error	GW
		Unknown software error occurred.	
		A software error occurred in the GW controller.	

6.11 SC900

SC900-00	D	Electrical total counter error	GW
		The total counter contains data that is not a number.	
		NVRAM incorrect type NVRAM defective or corrupted Unexpected error from external source When PRT received signals at SRM, the requested count did not complete.	

SC910-00	B	External controller error 1	GW
SC 911-00		External controller error 2	GW
SC 912-00		External controller error 3	GW
SC 913-00		External controller error 4	GW
SC 914-00		External controller error 5	GW
		The external controller alerted the machine about an error.	
		Refer to the instructions for the external controller	

SC 915-01	A	External controller error 6 (Egret Board)	GW
SC 915-02		External controller error 6 (HDD serial communication error)	GW
SC 915-03		External controller error 6 (CPU overheated)	GW
SC 915-04		External controller error 6 (GW cannot send due to receipt of erroneous command)	GW
SC 915-05		External controller error 6 (Error disabled GW communication)	GW
		The external controller alerted the machine about an error.	
		Refer to the instructions for the external controller	

SC 919-00	D	External controller down	GW
		While EAC (External Application Converter), the conversion module, was operating normally, the receipt of a power line interrupt signal from the FLUTE serial driver was detected, or BREAK signal from the other station was detected.	
		Controller power outage Controller rebooted Connection to controller loose	

SC920-01	B	Printer Error 1 (No response at PM start)	GW
SC920-01		Printer Error 1 (Timeout occurred during PM operation)	GW
SC920-02		Printer Error 1 (WORK memory not acquired)	GW
SC920-03		Printer Error 1 (Filter processing did not start)	GW
SC920-04		Printer Error 1 (Filter processing ended abnormally)	GW
		An internal application error was detected and operation cannot continue.	
		Software defective, switch off/on, or change the controller firmware Insufficient memory	

SC921-00	D	Printer Error 2: Font error	GW
		When the printer application started, the specified font could not be found on the SD card.	
		The specified font is not on the SD card SD card data corrupted	

SC925-00	B	Net File function error	GW
SC925-01		Net File function error	GW
		The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue. The HDDs are defective and they cannot be debugged or partitioned, so the Scan Router functions (delivery of received faxes, document capture, etc.), Web services, and other network functions cannot be used. HDD status codes are displayed below the SC code:	
		HDD defective Power loss while data was writing to HDD Software bug	

Here is a list of HDD status codes:

Display	**Meaning**
(-1)	HDD not connected
(-2)	HDD not ready
(-3)	No label
(-4)	Partition type incorrect
(-5)	Error returned during label read or check
(-6)	Error returned during label read or check
(-7)	“filesystem” repair failed
(-8)	“filesystem” mount failed
(-9)	Drive does not answer command
(-10)	Internal kernel error
(-11)	Size of drive is too small
(-12)	Specified partition does not exist
(-13)	Device file does not exist

Recovery from SC 925

Procedure 1

If the machine shows SC codes for HDD errors (SC860 to SC865) with SC 925, do the recovery procedures for SC860 to SC865.

Procedure 2

If the machine does not show one of the five HDD errors (SC860 to SC865), turn the machine power off and on.

If this is not the solution for the problem, then initialize the NetFile partition on the HDD with SP5832-11 (HDD Formatting – Ridoc I/F).

NetFiles: These are jobs printed from the document server using a PC and DeskTopBinder.

Before you initialize the NetFile partition on the HDD, tell the customer:

Received faxes on the delivery server will be erased

All captured documents will be erased

Desk Top Binder/Print Job Manager/Desk Top Editor job history will be erased

Documents on the document server, and scanned documents, will not be erased.

The first time that the network gets access to the machine, the management information must be configured again (this will use a lot of time).

Before you initialize the Netfile partition with SP5832-11, do these steps:

In the User Tools mode, do Document Management> Batch Delete Transfer Documents.

Do SP5832-11, and turn the machine off and on.

Procedure 3

If “Procedure 2” is not the solution for the problem, do SP5832-1 (HDD Formatting – All)

Cycle the machine off/on.

Note

SP5832-001 erases all document and address book data on the hard disks. Consult with the customer before you do this SP code.

Procedure 4

If “Procedure 3” does not solve the problem, replace the HDD.

SC990-00	D	Software error 1	GW
		An unexpected operation was encountered by the software.	
		Software crash, reboot the machine If the HDDs have just been replaced, be sure to download the stamp data (SP 5853). With SP5990 004(SMC Report – Logging Data), print the most recent information for SC990. The SC990 information displays the file name, line number, and value. Report this information to your technical supervisor. For example: **Function.c LINE: 123 VAL: 0**	

SC991-00	C	Software Error 2	GW
		The software peformed an unexpected function and the program cannot continue. Recovery processing allows the program to continue.	
		Abnormal variable Internal parameter error Insufficient work memory Hardware error not detected by SC	

In order to get more details about SC991:
Execute SP7403 or print an SMC Report (SP5990) to read the history of the 10 most recent logged errors.
If you press the zero key on the operation panel with the SP selection menu displayed, you will see detailed information about the recently logged SC991, including the software file name, line number, and so on. Of these two methods, 1) is the recommended method, because another SC could write over the information for the previous SC.

SC992-00	D	Undefined Error (No SC Code)	GW
		An error not controlled by the system occurred (the error does not come under any other SC code).	
		Software defective Incorrect SC code from previous machine	

994-00	C	Application Item Error	GW
		The number of executed application items on the operation panel reach the maximum limit for the operation panel structure.	
		Too many executed application items	

SC995-01	A	CPM setting error
SC995-02		CPM setting error
SC995-03		CPM setting error
SC995-04		CPM setting error
		The 11-digit machine code information and the manufacturer code were compared.
		The machine code and manufacturer codes do not match.

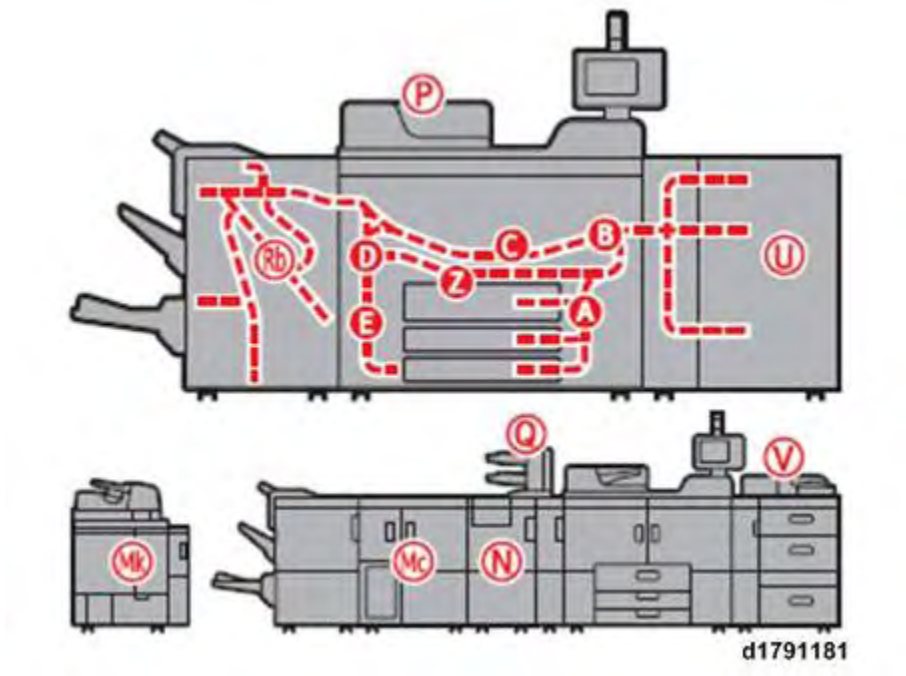
SC997-00	B	Application selection error 1	GW
		An application did not start after pressing the appropriate key on the operation panel.	
		Software bug	

SC998-00	D	Application selection error 2	GW
		Register processing did not execute for an application within 60 sec. after the machine was switched on. No applications start correctly, and all end abnormally.	
		Software bug A RAM or DIMM option required by the application is not installed or not installed correctly.	

6.12 JAM DETECTION

6.12.1 DISPLAY

When a jam occurs, a graphic display appears and shows you on the operation panel where the paper has stopped.



6.12.2 JAM REMOVAL

⚠CAUTION

When removing jammed paper, avoid touching components outside the area where the paper has stopped. Some parts inside the machine become very hot and can cause minor burns if they are touched.

Note

Do not turn the machine off when you remove a paper jam. If you turn the machine off, this will clear all the job settings.

Always remove paper carefully to prevent it from tearing and leaving paper scraps in the machine. Paper scraps left behind can cause other paper jams or damage the machine.

If jam displays keep occurring for the same location, carefully check around the location for obstacles in the paper path.

Always follow the instructions and procedures about paper jam removal described on the decals affixed to the machine, These decals are affixed to back of the the door of the main machine, and also provided on peripheral units.

6.12.3 PAPER JAM CODE LOGS

Checking Logs

You can check the paper jam logs with SP7507.

SP7-507-001 Plotter Jam History - Latest

SP7-507-002 Plotter Jam History - Latest 1

SP7-507-003 Plotter Jam History - Latest 2

SP7-507-004 Plotter Jam History - Latest 3

SP7-507-005 Plotter Jam History - Latest 4

SP7-507-006 Plotter Jam History - Latest 5

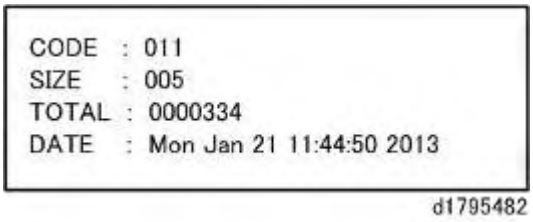
SP7-507-007 Plotter Jam History - Latest 6

SP7-507-008 Plotter Jam History - Latest 7

SP7-507-009 Plotter Jam History - Latest 8

SP7-507-010 Plotter Jam History - Latest 9

Jam Display



CODE: Jam code number

SIZE: Paper size

TOTAL: Total count for jams at this location (SP7-502-001)

DATE: Date of jam occurrence

Note

Information is displayed for the 10 most recent jams.

Initial jams at power on are not displayed here.

6.12.4 JAM CODE DESCRIPTIONS

Note

Code: This is the code number of the jam that is displayed in log data.

Display Code: This is the letter/number code displayed in the on-line grahpic help display that appears on the operation panel after a jam occurs.

ADF

Code	Meaning	Display Code
13	Separation sensor late error	P1
63	Separation sensor lag error	
14	Skew correction sensor late error	
64	Skew correction sensor lag error	
15	Scanner entrance sensor late error	
65	Scanner entrance sensor lag error	
16	Registration sensor: late error	
66	Registration sensor lag error	
17	Exit sensor late error	
67	Exit sensor lag error	
239	Original grip error	
1	At power on	
1	Stack jam error (overflow)	

Main Machine

Code	Meaning	Display Code
0	Jam release	
1	Standby jam (initial)	J001
3	F1 Paper feed sensor	J003
4	F2 Paper feed sensor	J004
5	F3 Paper feed sensor	J005
6	LCT F! Paper Feed Sensor	J006

7	LCT F2 Paper feed sensor	J007
8	LCT F3 Paper feed sensor	J008
9	LCT F4 Paper feed sensor	J009
10	F1 Transport sensor	J010
11	F2 Transport sensor	J011
12	F3 Transport sensor	J012
13	LCT F1 Transport Sensor	J013
14	LCT F2 Transport sensor	J014
15	LCT F3 Transport sensor	J015
16	LCT F4 Transport sensor	J016
17	Vertical transport sensor	J017
18	Main relays sensor (1st feed)	J018
19	Main relay sensor (duplex 2nd feed)	J019
20	Registration entrance sensor	J020
21	LCT F1 Vertical transport sensor: A4 LCT	J021
22	LCT F1 Vertical transport sensor 1	J022
23	LCT F1 Vertical transport sensor 2	J023
24	LCT F2 Vertical transport sensor	J024
25	LCT F3 Vertical transport sensor	J025
26	LCT exit sensor	J026
27	LCT relay sensor	J027
28	Registration timing sensor (Main)	J028
29	Registration timing sensor (LCT)	J029
30	Paper late jam	J030
31	Transfer timing sensor	J031
32	Paper transport sensor	J032

33	-	J033
34	Fusing exit sensor	J034
35	Exit JG sensor	J035
36	Exit sensor	J036
37	-	J037
38	Invert/exit sensor (2nd pass)	J038
39	Invert/exit sensor (duplex)	J039
40	Duplex invert sensor (1st pass)	J040
41	Duplex Invert sensor (2nd pass)	J041
42	Duplex transport sensor 1	J042
43	Duplex transport sensor 2	J043
44	Duplex transport sensor 3	J044
45	Duplex transport sensor 4	J045
46	Duplex transport sensor 5	J046
47	Duplex transport sensor 6	J047
48	Duplex unit exit sensor	J048
49	Over skew	J049
50	Over shift	J050
51	-	-
52	-	-
53	F1 Paper feed sensor	J053
54	F2 Paper feed sensor	J054
55	F3 Paper feed sensor	J055
56	LCT F1 Paper feed sensor	J056
57	LCT F2 Paper feed sensor	J057
58	LCT F3 Paper feed sensor	J058

59	LCT F4 Paper feed sensor	J059
60	F1 Transport sensor	J060
61	F2 Transport sensor	J061
62	F3 Transport sensor	J062
63	LCT F1 Transport sensor	J063
64	LCT F2 Transport sensor	J064
65	LCT F3 Transport sensor	J065
66	LCT F4 Transport sensor	J066
67	Vertical transport sensor	J067
68	Main relay sensor	J068
69	-	J069
70	Registration entrance sensor	J070
71	LCT F1 Vertical transport sensor: A4 LCT	J071
72	LCT F1 Vertical transport sensor 1	J072
73	LCT F1 Vertical transport sensor 2	J073
74	LCT F2 Vertical transport sensor	J074
75	LCT F3 Vertical transport sensor	J075
76	LCT exit sensor	J076
77	LCT relay sensor	J077
78	Registration timing sensor	J078
79	-	J079
80	Sub scan registration correction	J080
81	Transfer timing sensor	J081
82	Paper transport sensor	J082
83	-	J083
84	Fusing exit sensor	J084

85	Exit JG sensor	J085
86	Exit sensor	J086
87	Invert/exit sensor (1st pass)	J087
88	-	J088
89	Invert/exit sensor (duplex)	J089
90	Duplex invert sensor (1st pass)	J090
91	Duplex invert sensor (2nd pass)	J091
92	Duplex transport sensor 1	J092
93	Duplex transport sensor 2	J093
94	Duplex transport sensor 3	J094
95	Duplex transport sensor 4	J095
96	Duplex transport sensor 5	J096
97	Duplex transport sensor 6	J097
98	Duplex unit exit sensor	J098
99	Double-feed	J099

Finisher SR5060/5050

Code	Meaning	Display Code
100	Door open jam	Rb1 to Rb17
101	Display non-performing jam	
102	Disable paper stop jam	
103	Software internal error	
104	Paper tranport late at exit	
105	Paper transport lag at exit	
106	Paper transport late at proof tray exit	

107	Proof tray exit lag error	
108	Shift tray exit late error	
109	Shift tray exit lag error	
110	Staple exit transport late error	
111	Staple exit paper transport lag error	
112	Pre-stacker late error	
113	Pre stacker lag error	
114	Stack output error	
115	Booklet stapler late error	
116	Booklet stapler lag error	
117	Booklet stapler late error	
118	Booklet stapler exit lag error	
119	Transport system error	
120	Shift tray lift drive error	
121	Jogger drive error	
122	Shift drive error	
123	Stapler drive error	
124	Stack output drive error	
125	Punch drive error	
126	Stack jogger error	
127	Pre-stack drive error	
128	Stack transport error	
129	Center staple error	
130	Center fold error	

Multi Fold Unit FD5020

Code	Meaning	Display Code
250	Door open jam	N1 to N22
251	Display non-performing jam	
252	Disable paper stop jam	
253	Software internal error	
254	Entrance late jam	
255	Entrance lag jam	
256	Fold paper tray exit late error	
257	Fold paper tray exit lag error	
258	Straight-through exit late error	
259	Straight-through exit lag error	
260	Stopper 1 late error	
261	Stopper 1 lag error	
262	Stopper 2 late error	
263	Stopper 2 lag error	
264	Stopper 3 late error	
265	Stopper 3 lag error	
266	Registration correction error	
267	Fold paper tray transport error	
268	Entrance JG motor error	
269	Stopper 1 motor error	
270	Stopper 2 motor error	
271	Stopper 3 motor error	
272	Dynamic roller lift motor error	

273	Registration roller release motor error	
274	Fold plate motor error	
275	Jogger fence motor error	
276	Direct-send JG motor error	

Cover Interposer Tray CI5030

Code	Meaning	Display Code
150	Door open jam	Q
151	Display non-performing jam	
152	Disable paper stop jam	
153	Software internal error	
154	1st Feed sensor late jam	
155	1st Feed sensor lag jam	
156	2nd Feed sensor late jam	
157	2nd Feed sensor lag jam	
158	1st Transport sensor late jam	
159	1st Transport sensor lag jam	
160	2nd Transport sensor late jam	
161	2nd Transport sensor lag jam	
162	1st Vertical transport sensor late jam	
163	1st Vertical transport sensor lag jam	
164	2nd Vertical transport sensor late jam	
165	2nd Vertical transport sensor lag jam	
166	Exit sensor late jam	
167	Exit sensor lag jam	

168	Entrance sensor late jam	
169	Entrance sensor lag jam	
170	Exit sensor late jam	
171	Exit sensor lag jam	
172	Insert timing late jam	
173	1st Lift motor jam	
174	2nd Lift motor jam	
175	1st Pickup motor jam	
176	2nd Pickup motor jam	

Perfect Binder GB5010

Code	Meaning	Display Code
300	Door open jam	Mk1 to 14
301	Display non-performing jam	
302	Disable paper stop jam	
303	Software internal error	
304	Straight-through exit sensor late jam	
305	Straight-through exit sensor lag jam	
306	Cover registration sensor late jam	
307	Cover registration sensor lag (switchback) jam	
308	Cover horizontal registration sensor (small) late jam	
309	Cover horizontal registration sensor (small) lag jam	
310	Cover horizontal registration sensor (large) late jam	

311	Cover horizontal registration sensor (large) lag jam	
312	Entrance sensor late jam	
313	Entrance sensor lag jam	
314	Signature path sensor 1 late jam	
315	Signature path sensor 1 lag jam	
316	Signature path sensor 2 late jam	
317	Signature path sensor 2 lag jam	
318	Timing sensor late jam	
319	Timing sensor lag jam	
320	Stacking tray paper late jam	
321	Stacking tray paper lag jam	
322	Sub grip paper late jam	
323	Signature path 1 sensor late jam	
324	Signature path 1 sensor lag jam	
325	Signature path 2 sensor late jam	
326	Signature path 2 sensor lag jam	
327	Cover registration sensor late jam	
328	Cover registration sensor lag jam	
329	Paper size mismatch jam (length in paper feed direction)	
330	Cover size short jam	
331	Trimming width over jam	
332	Finishing height over jam	
333	Insert cover size mismatch jam	
334	Pre-junction sensor late jam	

335	Pre-junction sensor lag jam	
336	Upper tray separation sensor late jam	
337	Upper tray separation sensor lag jam	
338	Lower tray separation sensor late jam	
339	Lower tray separation sensor lag jam	
340	Transport path sensor 1 late jam	
341	Transport path sensor 1 lag jam	
342	Transport path sensor 2 late jam	
343	Transport path sensor 2 lag jam	
344	Transport sensor late jam	
345	Transport sensor lag jam	

Ring Binder RB5020

Code	Meaning	Display Code
350	Door open jam	Mc1 to 8
351	Display non-performing jam	
352	Disable paper stop jam	
353	Software internal error	
354	Transport unit entrance late jam	
355	Transport unit entrance lag jam	
356	Transport unit relay late jam	
357	Transport unit relay lag jam	
358	Transport unit exit late jam	
359	Transport unit exit lag jam	
360	Pre-punch jam	

361	Post-punch jam	
362	Binder paper trailing edge jam	
363	Binder paper leading edge jam	
364	Poor ring separation jam	
365	Binder unit not detected jam	
366	Output belt 1 jam	
367	Output belt 2 jam	
368	Stacker unit jam	
369	Punch motor jam	
370	Shutter motor jam	
371	Alignment pin motor jam	
372	Pre-punch jogger jam	
373	Alignment unit jam	
374	Punch motor jam	
375	50/100 Clamp adjust motor jam	
376	Exit rotation motor jam	

Trimmer TR5040

Code	Meaning	Display Code
200	Door open jam	Rt1 to 2
201	Display non-performing jam	
202	Disable paper stop jam	
203	Software internal error	
204	Entrance late jam	
205	Entrance lag jam	
206	Skew sensor late jam	
207	Skew sensor lag jam	
208	Exit sensor late jam	
209	Exit lag jam	
210	Cutter motor lock	
211	Cut position motor	
212	Pressure roller	
213	Stopper/pressure roller	
214	Tray motor	

6.12.5 PAPER SIZE MISMATCH CODES

The paper size mismatch codes are listed in the tables below.

Paper sizes in the main scan and sub scan directions are units of 0.1 mm.

Size Code	Size Name	SEF/LEF	Main Scan	Sub Scan
132(84H)	A3	SEF	2970	4200
005(05H)	A4	LEF	2970	2100
133(85H)	A4	SEF	2100	2970
141(8DH)	B4	SEF	2570	3640
006(06H)	A5	LEF	2100	1480
134(86H)	A5	SEF	1480	2100
014(0EH)	B5	LEF	2570	1820
142(8EH)	B5	SEF	1820	2570
135(87H)	A6	SEF	1050	1480
143(8FH)	B6	SEF	1280	1820
160(A0H)	11”x17”(DLT)	SEF	2794	4318
164(A4H)	8 1/2”x14”(LG)	SEF	2159	3556
166(A6H)	8 1/2”x11”(LT)	SEF	2159	2794
038(26H)	8 1/2”x11”(LT)	LEF	2794	2159
172(ACH)	5 1/2”x8 1/2”(HLT)	SEF	1397	2159
175(AFH)	12”x18”	SEF	3048	4572
146(92H)	Postcard	SEF	1000	1480
017(11H)	Return postcard	LEF	2000	1480
145(91H)	Return postcard	SEF	1480	2000

Size Code	Size Name	SEF/LEF	Main Scan	Sub Scan
113(71H)	EXP #2	LEF	1620	1140
241(F1H)	EXP #2	SEF	1140	1620
243(F3H)	Length #3	SEF	1200	2350
244(F4H)	Length #4	SEF	900	2050
242(F2H)	EXP #4	SEF	1050	2350
247(F7H)	Square #2	SEF	2400	3320

6.13 FUSES

6.13.1 RYB (RELAY BOARD)

Fuse	Rating	If Fuse Blows at Power On
FU2	10A	SC590-04
FU3	10A	SC520-00
FU4	10A	SC590-02

6.13.2 AC DRIVE

Fuse	Rating	Part No.	Power To	If Fuse Blows
FU401	250V 5A	Ceramic tube 11071344	PSU-A	Machine does not start
FU402	250V 1A	Micro	Heaters	Machine does not start, no power to heater
FU403	250V 5A	Ceramic tube 11071344	PSU-B	Machine freezes at “Please Wait”, does not boot
FU404	250V 8A	Ceramic tube 11071346	PSU-C	Freezes at “Please Wait”, then SC670-00 appears

6.13.3 PSU-A

Fuse	Rating	Part No.	Power To	If Fuse Blows
FU1	250V 5A	Micro	None	---
FU2	250V 5A	Micro	None	---

6.13.4 PSU-B

Fuse	Rating	Part No.	Power To	If Fuse Blows
FU1	250V 5A	Micro	None	
FU2	250V 5A	Micro	RYB,IOB	Freezes at “Please Wait”, machine does not start
FU3	250V 10A	Glass tube 11071216	None	Does not use 24 V, does not blow
FU4	250V 10A	Glass tube 11071216	ADF	Machine starts normally, but ADF inoperable
FU5	250V 10A	Glass tube 11071216	SIO	SC144, SC202-00

6.13.5 PSU-C

Fuse	Rating	Part No.	Power To	If Fuse Blows
FUS001	250V 8A	Glass tube 11071166	AC line	Machine freezes at “Please Wait”, does not boot
FUS002	S250V 2.5A	Micro	AC line	SC621-00, SC670-00, Toner out detects > No recovery if machine cycled off/on
FUS012	250V 2.63A	Micro	RYB,DRB	JAM001 detected, duplex unit not set error
FUS034	250V 2.63A	Micro	None	---
FU111	250V 2.63A	Micro	None	---
FU112	250V 2.63A	Micro	RYB,IOB	SC621-00, SC670-00, Toner out detects > No recovery if machine cycled off/on

6.14 LEDS

6.14.1 IOB

LED	Function	Meaning	
LED1	Monitors 24V	On	Conducting
		Off	No Conducting
LED2	Monitors 5VL	On	Conducting
		Off	No Conducting
LED3	Monitors 5V	On	Conducting
		Off	No Conducting
LED4	Monitors 24VS	On	Conducting
		Off	No Conducting
LED6	Monitors FPGA operation	Flash	Configuration end (FPGA user circuit operating)
		Off	Configuration not complete
		On	Abnormal (LED not operating)

6.14.2 BCU

LED	Function	Meaning	
LED1	Monitors CPU operation	Flash	On/Off at 0.5 sec. intervals. Normal operation or engine program download end.
		On	Abnormal operation, or engine program downloading.
		Off	Abnormal operation
		Flash	On/Off at 1.5 sec. intervals. Abnormal operation (watch dog reset generated)

6.14.3 SIO

LED	Function	Meaning	
LED1	5V line scanner power on/off (SIO generated)	On	Conducting
		Off	Off: No Conducting

6.14.4 ADF

LED	Function	Meaning	
LED1 (Green)	Monitors CPU operation	Flash	On/Off 1 sec. intervals, operating normally
		Flash	On/Off 0.3 sec. intervals, abnormal operation (jam)
		On	With LED2 on (orange), CPU reset
		Off	No conduction
LED2 (Orange)	Monitors CPU operation	On	With LED1 on (green), CPU reset
		Off	Normal operation, or no conduction

6.14.5 IPU

LED	Function	Meaning	
LED3 (Green)	Monitors 3.3 V line	On	Conducting
		Off	No conduction

ENERGY AND PAPER SAVING

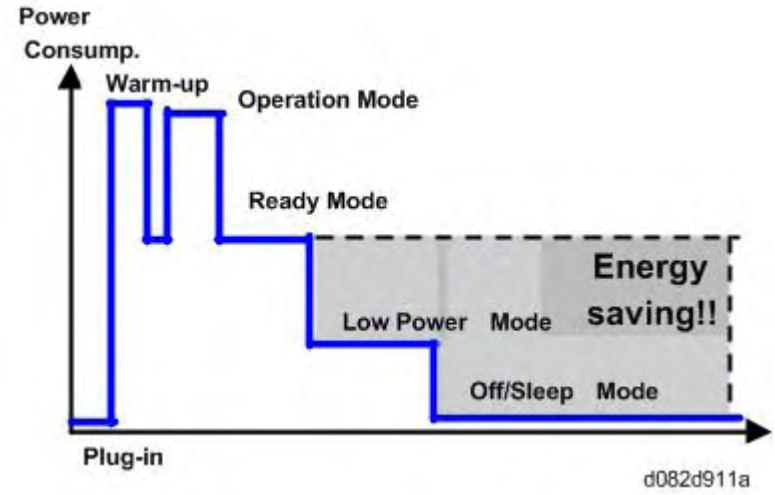
REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

7. ENERGY AND PAPER SAVING

7.1 ENERGY SAVE

7.1.1 ENERGY SAVER MODES

Customers should use energy saver modes properly, to save energy and protect the environment.



The area shaded grey in this diagram represents the amount of energy that is saved when the timers are at the default settings. If the timers are changed, then the energy saved will be different. For example, if the timers are all set to 240 min., the grey area will disappear, and no energy is saved before 240 min. expires.

Timer Settings

The user can set these timers with User Tools (System settings > Timer setting)

Energy saver timer 1-240 min.: Low Power Mode. Default setting: 15 min.

Auto off timer 1-240 min.: Off/Sleep Mode. Default setting: 60 min.

Normally, Energy Saver timer < Auto Off timer. But, for example, if Auto Off timer < or = Energy Saver timer, the machine goes immediately to Off mode when the Auto Off timer expires. It skips the Energy Saver mode.

Example

Low power: 15 min.

Auto Off: 1 min.

The machine goes to Off mode after 1 minute. Low Power mode is not used.

Return to Stand-by Mode

Low Power Mode

The recovery time depends on the model.

Machine	NA/EU
D179	35 sec.
D180	35 sec.
D181	75 sec.

Off/Sleep Mode

Recovery time: 360 sec. or less

Recommendation

We recommend that the default settings should be kept.

If the customer requests that these settings should be changed, please explain that their energy costs could increase, and that they should consider the effects on the environment of extra energy use.

If it is necessary to change the settings, please try to make sure that the Auto Off timer is not too long. Try with a shorter setting first, such as 30 min., then go to a longer one (such as 60 min.) if the customer is not satisfied.

If the timers are all set to the maximum value, the machine will not begin saving energy until 240 minutes has expired after the last job. This means that after the customer has finished using the machine for the day, energy will be consumed that could otherwise be saved.

If you change the settings, the energy consumed can be measured using SP8941, as explained below.

7.1.2 ENERGY SAVE EFFECTIVENESS

SP 8941 (Machine Status) keeps a record of the amount of time that the machine spends in each mode.

8941-001: Operating mode

8941-002: Standby mode

8941-004: Low power mode

8941-005: Off/sleep mode

With this data, and the power consumption values from the specifications, we can estimate the amount of energy that is used by the machine.

This should only be used as a reference value, because the power consumption specifications are measured in a controlled environment with a constant power supply.

To get an exact measurement at the customers site, a watt meter must be used to measure the actual energy consumed.

To use SP8941 to calculate the energy consumed:

At the start of the measurement period, read the values of SP8941 001 to 005.

At the end of the measurement period, read the values of SP8941 001 to 005 again.

Find the amount of time spent in each mode (subtract the earlier measurement from the later measurement).

Multiply this by the power consumption spec for each mode.

Convert the result to kWh (kilowatt hours)

Here is an example calculation.

Machine Date	Power Consumption (W): Data: a	SP8941: Machine Status	Start Time: (min.) Data: b	End Time: (min.) Data: c	Time Differences (Data: c - Data: b) (min.) Data: d	Power Consumption (Data:a x Data:d) (Wmin.) Data: e
Operating	1.80 KW	001: Op. Time	21089	21386	297	534600
Ready	51W	002: Standby Time	306163	308046	1883	96033

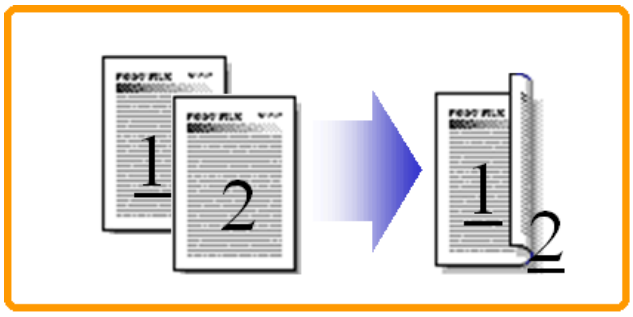
Energy mode (Panel off)		003: Energy Save Time	0	0	0	0
Low power mode	3.8 W or less	004: Low power Time	72836	75111	3725	14155
Sleep mode	1W or less	005: Off mode Time	508776	520377	11601	11601
Total Time of Data: d (min.)					17506	
Total Time of Data: d/60min. (Hour)					291.7667	
Total Power Consumption of Data: e (Wmin.)						656389

7.2 PAPER SAVE

7.2.1 EFFECTIVENESS OF DUPLEX/COMBINE FUNCTION

Duplexing and the combine functions reduce the amount of paper used. This means that less energy overall is used for paper production, which improves the environment.

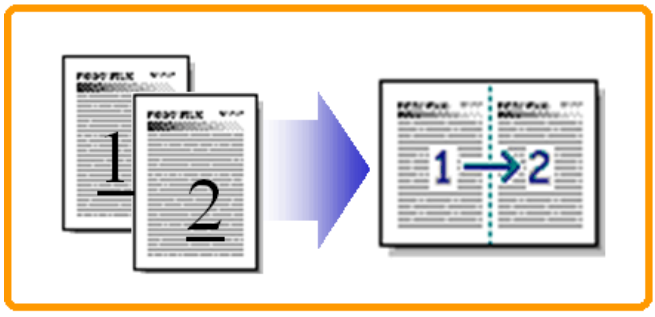
1. Duplex:



d1351966

Reduce paper volume in half!

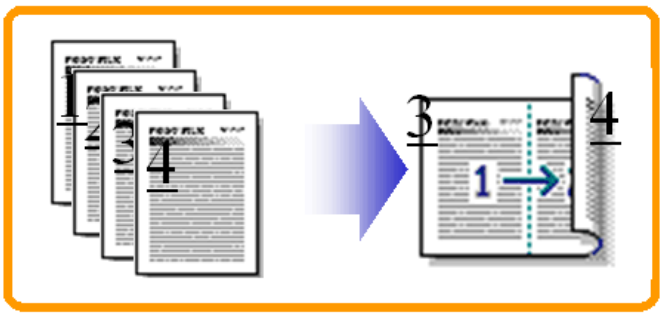
2. Combine mode:



d1351967

Reduce paper volume in half!

3. Duplex + Combine:



d1351968

Using both features together can further reduce paper volume by 3/4!

To check the paper consumption, look at the total counter and the duplex counter.

The total counter counts all pages printed.

For one duplex page, the total counter goes up by 2.

For a duplex job of a three-page original, the total counter goes up by 3.
The duplex counter counts pages that have images on both sides.
For one duplex page, the duplex counter goes up by 1.
For a duplex job of a three-page original, the duplex counter will only increase by 1, even though two sheets are used.

Paper Savings and Counter

Total counter: SP 8581-001
Duplex counter: SP 8411-001
Single-sided with combine mode: SP 8421-004
Duplex with combine mode: SP 8421-005
The following table shows paper savings and how the counters increase for some simple examples of single-sided and duplex jobs.
Duplex mode:

Originals	Simplex Sheet used	Duplex Sheets used	Paper Saved	Total counter SP8501-001	Duplex counter SP8411-001
1	1	1	**0**	1	0
2	2	1	**1**	2	1
3	3	2	**1**	3	1
4	4	2	**2**	4	2
5	5	3	**2**	5	2
10	10	5	**5**	10	5
20	20	10	**10**	20	10

If combine mode is used, the total and duplex counters work in the same way as explained previously. The following table shows paper savings and how the counters increase for some simple examples of duplex/combine jobs.

2 in 1 mode:

Originals	Simplex Sheet used	Duplex Sheets used	Paper Saved	Total counter SP8501-001	Duplex counter SP8411-001
1	1	1	**0**	1	1
2	2	1	**1**	1	1
3	3	2	**1**	2	2
4	4	2	**2**	2	2
5	5	3	**2**	3	2
10	10	5	**5**	5	5
20	20	10	**10**	10	10

Duplex + 2 in 1 mode:

Originals	Simplex Sheet used	Duplex Sheets used	Paper Saved	Total counter SP8501-001	Duplex counter SP8411-001
1	1	1	**0**	1	1
2	2	1	**1**	1	1
3	3	1	**2**	2	2
4	4	1	**3**	2	2
5	5	2	**3**	3	3
6	6	2	**4**	3	3
7	7	2	**5**	4	4
8	8	2	**6**	4	4
9	9	3	**6**	5	5
10	10	3	**7**	5	5
11	11	3	**8**	6	6
12	12	3	**9**	6	6

D179/D180/D181
SERVICE MANUAL APPENDICES

D179/D180/D181 APPENDICES

TABLE OF CONTENTS

1. APPENDICES: SPECIFICATIONS..... 1-1

1.1 GENERAL SPECIFICATIONS..... 1-1

1.1.1 MAIN FRAME..... 1-1

1.1.2 PRINTER..... 1-5

1.1.3 SCANNER..... 1-8

1.2 SUPPORTED PAPER SIZES..... 1-10

1.2.1 PAPER FEED..... 1-10

Mainframe, Bank (Optional Paper Trays), Bypass Tray..... 1-10

1.2.2 PAPER EXIT..... 1-12

Main: Mainframe / 1-bin: 1-bin tray (D158/D159 only)..... 1-12

1.2.3 ORIGINAL SIZE DETECTION..... 1-14

1.3 SOFTWARE ACCESSORIES..... 1-16

1.3.1 PRINTER DRIVERS..... 1-16

1.3.2 SCANNER AND LAN FAX DRIVERS..... 1-17

1.3.3 UTILITY SOFTWARE..... 1-18

1.4 OPTIONAL EQUIPMENT..... 1-21

1.4.1 DECURL UNIT DU5030..... 1-21

1.4.2 MULTI BYPASS TRAY BY5010..... 1-21

1.4.3 LCIT RT5070..... 1-22

1.4.4 LCIT RT5080..... 1-24

1.4.5 COVER INTERPOSER TRAY CI5030..... 1-26

1.4.6 BOOKLET FINISHER SR5060..... 1-27

Basic Specifications..... 1-27

Staple specifications..... 1-29

Saddle stitch specifications..... 1-30

Punch specifications (Option)..... 1-31

Stack Capacity After Finishing..... 1-32

1.4.7 FINISHER SR5050..... 1-33

Basic Specifications..... 1-33

Staple specifications..... 1-35

Punch Specifications (Option)..... 1-36

Stack Capacity After Finishing..... 1-37

1.4.8 MULTI-FOLDING UNIT FD5020 1-38
1.4.9 PERFECT BINDER (GB5010) 1-40
1.4.10 COVER INTERPOSER TRAY FOR PERFECT BINDER TYPE S11-42
1.4.11 TRANSIT PASS UNIT FOR PERFECT BINDER TYPE S1 1-43
1.4.12 RING BINDER RB5020 1-44
1.4.13 TRIMMER UNIT TR5040 1-46

2. APPENDICES: PREVENTIVE MAINTENANCE TABLES 2-1
2.1 PM TABLES 2-1
2.1.1 PM PARTS LIST KEY 2-1
2.1.2 OPTICS 2-2
2.1.3 DEVELOPMENT UNIT 2-3
2.1.4 AROUND THE DRUM 2-3
2.1.5 IMAGE TRANSFER UNIT AND PAPER SEPARATION 2-4
2.1.6 FUSING UNIT 2-6
2.1.7 OTHER 2-7
2.1.8 MAIN PAPER TRAYS (X3) 2-8
2.1.9 MAIN PAPER FEED PATH 2-9
2.1.10 PAPER EXIT 2-11
2.1.11 DUPLEX 2-12
2.1.12 ADF 2-12
2.1.13 PM TABLES FOR PERIPHERALS 2-13
Decurl Unit DU5030 2-14
Multi Bypass Tray BY5010 2-14
LCIT RT5070/RT5070 2-15
LCIT RT5070/RT5080 2-15
Cover Interposer Tray CI5030 2-16
Booklet Finisher SR5060/Finisher SR5060 2-16
Multi-Folding Unit FD5020 2-18
Perfect Binder GB5010 2-19
Ring Binder RB5020 2-22
Trimmer Unit TR5040 2-23

3. APPENDICES: SP MODE TABLES 3-1
3.1 MAIN SP TABLES-1 3-1
3.1.1 SP1-XXX (FEED) 3-1
3.2 MAIN SP TABLES-2 3-234
3.2.1 SP2-XXX (DRUM) 3-234
3.3 MAIN SP TABLES-3 3-372

3.3.1 SP3-XXX (PROCESS) 3-372
3.4 MAIN SP TABLES-4 3-415
3.4.1 SP4-XXX (SCANNER) 3-415
3.5 MAIN SP TABLES-5 3-459
3.5.1 SP5-XXX (MODE) 3-459
3.6 MAIN SP TABLES-6 3-632
3.6.1 SP6-XXX (PERIPHERALS) 3-632
3.7 MAIN SP TABLES-7 3-665
3.7.1 SP7-XXX (DATA LOG) 3-665
3.8 MAIN SP TABLES-8 3-781
3.8.1 SP8-XXX (DATA LOG 2) 3-781
Keys and abbreviations in Data Log 2 3-782
3.9 INPUT AND OUTPUT CHECK 3-826
3.9.1 INPUT CHECK TABLE 3-826
3.9.2 OUTPUT CHECK TABLE 3-864
3.10 PRINTER SP TABLE 3-887
3.10.1 SP1-XXX (SERVICE MODE) 3-887
3.11 SCANNER SP TABLE 3-900
3.11.1 SP1-XXX (SYSTEM AND OTHERS) 3-900

APPENDIX:

SPECIFICATIONS

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

1. APPENDICES: SPECIFICATIONS

1.1 GENERAL SPECIFICATIONS

1.1.1 MAIN FRAME

Items		Specification	Remarks
Configuration		Console	
Print/Copy Process		1-drum dry electrostatic transfer system with internal transfer belt	
Fusing		Oil-less Belt-fusing Method	
Technology	Reading element	Lower side*: 4 channel CCD array image-sensing element Upper side: 3-line CMOS CIS(Contact Image Sensor)	*Contact glass side
	Printing processing	40-beam VCSEL (Vertical Cavity Surface Emitting LASER) Technology	-> 1200x4800 dpi
Engine Speed	Plain Paper	D179: 95ppm Baron-C1b: 110ppm Baron-C1c: 135ppm	A4/LT(LEF)
	Coated Paper	D179: 95ppm D180: 110ppm (256.1-300gsm: 95ppm) D181: 135ppm (256.1-300gsm: 110ppm)	
Warm up time		360 sec or less	
Limitless Paper Supply		Supported	
Dimensions (W x D x H)		1,320 x 1,110 x 1,460 mm	
Net Weight		415kg	
ARDF		Standard	

Items			Specification	Remarks
Input Capacity	Standard		Tray1: 1,100 sheets x 2 (Tandem Tray) Tray2: 550 sheets Tray3: 550 sheets Total: 3,300sheets	Capacity is calculated using paper that is 0.1 mm thick
	Option LCT	A4/LT LCT	Tray4: 1,100 sheets Tray5: 1,100 sheets Tray6: 2,800 sheets Total: 5,000sheets	
		A3/DLT LCT	Tray4: 1,100 sheets Tray5: 2,200 sheets Tray6: 1,100 sheets Total: 4,400sheets	
	Multi Bypass Tray (Option)		Tray7: 550 sheets	
	Max (System)		w/ A4/LT LCT: 8,850 sheets w/ A3/DLT LCT: 8,250 sheets	
Input Paper Size	Tray 2nd and 3rd		A3 SEF to A5 LEF, B4 SEF to B5 LEF, 11x17 SEF to 5.5x8.5 LEF < Custom Paper Size > Width: 139.7 to 330.2mm (5.50 to 13.00 inch) Length: 139.7 to 457.7mm (5.50 to 18 inch)	
	A4/LTLCT	Tray 4th-6th	A4 LEF to A5 LEF/SEF, B5 LEF, 8.5x11 LEF to 5.5x8.5 LEF/SEF < Custom Paper Size > Width: 139.7 to 305.0mm (5.50 to 12.00 inch) Length: 139.7 to 230.0mm (5.50 to 9.05 inch)	

Items			Specification	Remarks
Input Paper Size	A3/DLTLCT	Tray 4th-6th	A3 SEF to A6 SEF, B4 SEF to B6 SEF, 11x17 SEF to 5.5x8.5 LEF < Custom Paper Size > Width: 100.0 to 330.2mm (3.94 to 13.00 inch) Length: 139.7 to 487.7mm (5.50 to 19.20 inch)	
	Tray 7th		A3 SEF to A6 SEF, B4 SEF to B6 SEF, 11x17 SEF to 5.5x8.5 LEF < Custom Paper Size > Width: 100.0 to 330.2mm (3.94 to 13.00 inch) Length: 139.7 to 487.7mm (5.50 to 19.20 inch)	
Input Paper Weight	Tray 1st		52.3 - 256gsm, 14lb Bond - 95lb Cover	
	Tray 2nd and 3rd		52.3 - 256gsm, 14lb Bond - 95lb Cover	
	A4/LT LCT	Tray 4th	52.3 - 216gsm, 14lb Bond - 80lb Cover	
		Tray 5th	52.3 - 216gsm, 14lb Bond - 80lb Cover	
		Tray 6th	52.3 - 163gsm, 14lb Bond - 90lb Index	
Input Paper Weight	A3/DLTLCT	Tray 4th	52 - 256gsm, 14lb Bond - 95lb Cover	
		Tray 5th	40.0 - 300gsm, 11lb Bond -110lb Cover	
		Tray 6th	52.3 - 256gsm, 14lb Bond - 95lb Cover	
	Tray 7th		52 - 256gsm, 14lb Bond - 95lb Cover	
Input	Print Mode	Simplex	40 - 300gsm, 11lb Bond - 110lb Cover	

Items			Specification		Remarks
Paper Weight		Duplex	52 - 300gsm, 14lb Bond - 110lb Cover Note: Over 256gsm thick paper is limited support. Need prior test of each paper brand.		
Output Capacity	Finisher		3,000 + 250 sheets		
	Booklet Finisher		2,500 + 250 sheets		
	Stacker		Not supported		
Max Print Area			320 x 480mm		
Power Source			NA:208-240V, 50/60Hz, 20A EU:220-240V, 50/60Hz, 16A		
Max. Power Consumption			TBA		
Toner Bottle			Two Bottles		
Auto Duplex Printing / Inverter Output			13 x 19.2 inch - HLT <Custom Paper Size> 105.0 - 330.2 mm SEF 139.7 - 487.7 mm LEF		
			Paper Thickness	52.3 - 300gsm	Over 257gsm thick paper is limited support.
			Inverter Exit Paper	40 - 300gsm	

1.1.2 PRINTER

Items		Specification	Remarks
CPU		Intel(R) Celeron(R) Processor P4505 1.86GHz	
RAM	Standard	BASIC MODEL Standard: 2GB (2GB x1) SP MODEL Standard: 2GB (2GB x1)	
Hard Disk Drive		Standard: 500GB (250GB x 2)	
PDL	Standard	Standard: PCL6, PCL5e, PDF	
	Option	Adobe PostScript 3, Genuine IPDS, XPS	
Continuous Print Speed	Max.	135ppm/110ppm/95ppm (BR-C1c/BR-C1b/BR-C1a)	
Print Resolution	Max.	1200x4800 (dpi)	
Rendering Resolution	PCL5e	-300 x 300 dpi -600 x 600 dpi <Gradation *> Fast (1bit)	* With the combination of 'Resolution' and 'Gradation' or 'Printing Mode' settings in printer drivers, the variation of print resolution as listed below.
Rendering Resolution	PCL6	-600 x 600 dpi -1200 x 1200 dpi <Gradation *> Fast (1bit)	* With the combination of 'Resolution' and 'Gradation' or 'Printing Mode' settings in printer drivers, the variation of print resolution as listed below.

Items		Specification	Remarks
Rendering Resolution	PS3	-600 x 600 dpi -300 x 300 dpi -1200 x 1200 dpi <Gradation *> Fast (1bit)	* With the combination of 'Resolution' and 'Gradation' or 'Printing Mode' settings in printer drivers, the variation of print resolution as listed below.
Rendering Resolution	XPS *	-600 x 600 dpi -1200 x 1200 dpi <Printing Mode *> Standard (1bit)	*With the combination of 'Resolution' and 'Gradation' or 'Printing Mode' settings in printer drivers, the variation of print resolution as listed below. *We highly recommend applying ServicePack1 to Windows Vista before using XPS driver.
Rendering Resolution	IPDS	-300dpi (1bit) -600dpi (1bit)	
Fonts	Standard	PCL: 45 fonts, 13 International fonts	
	Option	PS3: 136 fonts IPDS: 108 fonts	
Host Interface	Standard	Ethernet (1000BASE-T*/100BASE-TX/10BASE-T), USB2.0 TypeA(2 port on back of the machine, 1 port on operational panel), TypeB, SD Slot on operational panel	* Ethernet 1000Base-T on board but needs to be selected by user

Items		Specification	Remarks
	Option	IEEE1284/ECP Wireless LAN (IEEE802.11a/b/g/n) Bluetooth	Bluetooth can not be used on USB port on operation panel. Wireless LAN and Bluetooth option can not be used at the same time.
Network Protocol		Standard: TCP/IP Option: IPX/SPX(Netware Option)	
MIB support	Standard MIB	MIB-II(RFC1213), HostResource(RFC1514), PrinterMib(RFC1759), Printer Port Monitor MIB	
	Private MIB	Ricoh Original	
Network/Operating Systems		Windows XP/Vista/7/Server 2003/Server 2008 /Server2008R2 Netware: 6.5* Unix: Sun Solaris, HP-UX, SCO OpenServer, Red Hat Linux, IBM AIX Mac OS X v.10.2 or later SAP R/3, NDPS Gateway, IBM iSeries, AS/400-using OS/400 Host Print Transform	* Netware option required

1.1.3 SCANNER

Items		Specifications	Remarks
Color Scan		Standard	
Scanning Speed (single pass duplex DF)	B&W	120(simplex)/220(duplex) (A4/LET LEF / 200dpi/300dpi-1bit)	
	Color	120(simplex)/220(duplex) (A4/LET LEF / 200dpi-4bit / 300dpi-4bit)	
Scanning Resolution	Std	100 / 150 / 200 / 300 / 400 / 600dpi	200dpi as a default
Auto Size Detection (US model)	Contact Glass	11"x17"(DLT) SEF, 8 1/2"x14"(LG) SEF, 8 1/2"x11"(LT) LEF/SEF, 8 1/2"x5 1/2"(HLT) LEF, *SP mode adjustment is required : 8 1/2"x5 1/2"(HLT)SEF	
Auto Size Detection (US model)	ARDF	11"x17" (DLT)SEF, 8 1/2"x14" (LG)SEF, 8 1/2"x11"(LT) LEF/SEF, 5 1/2"x8 1/2"(HLT) LEF/SEF, 8 1/2"x13"(Foolscap) SEF 10"x14"SEF, 11"x15"SEF (detected the same as DLT SEF, Default = DLT SEF), 8"x10"SEF (detected the same as LT SEF, Default = LT SEF), 7 1/4"x10 1/2"(EXE) LEF/SEF	
Auto Size Detection (EU/AP/CHN Model)	Contact Glass	A3 SEF, B4 SEF, A4 LEF/SEF, B5 LEF/SEF, A5 LEF, 8 1/2"x13"(F) SEF, *SP mode adjustment is required : A5 SEF, 8"x13"(F) SEF, 8 1/4"x13"(Folio) SEF, 8K SEF, 16K LEF/SEF	

Items		Specifications	Remarks
Auto Size Detection (EU/AP/CHN Model)	ARDF	11"x17" (DLT)SEF, 8 1/2"x14" (LG)SEF, 8 1/2"x11"(LT) LEF/SEF, 5 1/2"x8 1/2"(HLT) LEF/SEF, 8 1/2"x13"(Foolscap) SEF, 10"x14"SEF, 11"x15"SEF (detected the same as DLT SEF, Default = DLT SEF), 8"x10"SEF (detected the same as LT SEF, Default = LT SEF) 7 1/4"x10 1/2"(EXE) LEF/SEF	
Scan Area	Main Scan	297mm	
	Sub Scan	432mm	
sRGB Support		RGB (equivalent to sRGB)	
Network Interface		Ethernet	Ethernet 1000Base-T in on boarded but needs to be selected by user.
		(1000Base-T*/100Base-TX/10Base-T)	
		USB2.0 Type A	
		SD card slot	Scan to USB/SD Card is available.
		Wireless LAN (IEEE802.11a/b/g/n)	Option

1.2 SUPPORTED PAPER SIZES

1.2.1 PAPER FEED

Mainframe, Bank (Optional Paper Trays), Bypass Tray

Size (W x L) [mm]	Mainframe tray		Bank		Bypass-Tray	
	NA	EU/ Asia/ TW	NA	EU/ Asia/ TW	NA	EU/ Asia/ TW
A3 SEF (297 x 420)	S	A	S	A	M	M
A4 SEF (210 x 297)	A	A	A	A	M	M
A4 LEF (297 x 210)	S	A	S	A	M	M
A5 SEF (148 x 210)	-	-	M	B	M	M
A5 LEF (210 x 148)	S	A	A	A	M	M
A6 SEF (105 x 148)	-	-	-	-	M	M
B4 SEF (257 x 364)	S	A	S	A	M	M
B5 SEF (182 x 257)	A	A	A	A	M	M
B5 LEF (257 x 182)	S	A	S	A	M	M
B6 SEF (128 x 182)	-	-	M	M	M	M
DLT SEF (11" x 17")	A	S	A	S	M	M
Legal SEF ($8^1/_2$" x 14")	A	S	A	S	S	M
Foolscap SEF ($8^1/_2$" x 13")	M	M	M	M	M	M
LT SEF ($8^1/_2$" x 11")	A	A	A	A	M	M
LT LEF (11" x $8^1/_2$")	A	S	A	S	M	M
Gov. LG SEF ($8^1/_4$" x 14")	M	M	M	M	M	M
Folio SEF ($8^1/_4$" x 13")	M	M	M	M	M	M
F/GL SEF (8" x 13")	M	M	M	M	M	M

G LT SEF (8" x 10 1/2")	M	M	M	M	M	M
G LT LEF (10 1/2" x 8")	M	M	M	M	M	M
Eng Quatro SEF (8" x 10")	M	M	M	M	M	M
Eng Quatro LEF (10" x 8")	M	M	M	M	M	M
Executive SEF (7 1/4" x 10 1/2")	M	M	M	M	M	M
Executive LEF (10 1/2" x 7 1/4")	A	S	A	S	M	M
HLT SEF (5 1/2" x 8 1/2")	-	-	M	M	M	M
HLT LEF (8 1/2" x 5 1/2")	A	S	-	-	M	M
Com10 SEF (4 1/8" x 9 1/2")	-	-	-	-	M	M
Monarch SEF (3 7/8" x 7 1/2")	-	-	-	-	M	M
C5 SEF (162 x 229)	-	-	-	-	M	M
C5 LEF (229 x 162)	-	-	-	-	M	M
C6 Env SEF (114 x 162)	-	-	-	-	M	M
DL Env SEF (110 x 220)	-	-	-	-	M	M
8K SEF (267 x 390)	M	M	M	M	M	
16K SEF (195 x 267)	M	M	M	M	M	M
16K LEF (267 x 195)	M	M	M	M	M	M
12" x 18" SEF	-	-	-	-	M	M
Folio SEF (11" x 15")	M	M	M	M	M	M
Folio SEF (11” x 14”)	M	M	M	M	M	M
Folio SEF (10" x 15")	M	M	M	M	M	M
Folio SEF (10" x 14")	M	M	M	M	M	M

Remarks:

A:	Supported: the sensor detects the paper size.
M:	Supported: the user specifies the paper size.

S:	Supported: depends on a technician adjustment
-:	Not supported

1.2.2 PAPER EXIT

Main: Mainframe / 1-bin: 1-bin tray (D158/D159 only)

Size (W x L) [mm]	Main	1-bin
A3 SEF (297 x 420)	A	A
A4 SEF (210 x 297)	A	A
A4 LEF (297 x 210)	A	A
A5 SEF (148 x 210)	A	A
A5 LEF (210 x 148)	A	A
A6 SEF (105 x 148)	A	A
B4 SEF (257 x 364)	A	A
B5 SEF (182 x 257)	A	A
B5 LEF (257 x 182)	A	A
B6 SEF (128 x 182)	A	A
Ledger (11" x 17")	A	A
Legal SEF (8.5" x 14")	A	A
Foolscap SEF (8.5" x 13")	A	A
Letter SEF (8.5" x 11")	A	A
Letter LEF (11" x 8.5")	A	A
Government LG SEF (8.25" x 14")	A	A
Folio SEF (8.25" x 13")	A	A
F/GL SEF (8" x 13")	A	A
G LT SEF (8" x 10.5")	A	A

Size (W x L) [mm]	Main	1-bin
G LT LEF (10.5" x 8")	A	A
Eng Quatro SEF (8" x 10")	A	A
Eng Quatro LEF (10" x 8")	A	A
Executive SEF (7.25" x 10.5")	A	A
Executive LEF (10.5" x 7.25")	A	A
Half Letter SEF (5.5" x 8.5")	A	A
Half Letter LEF (8.5" x 5.5")	A	A
Com10 SEF (4.125" x 9.5")	A	-
Monarch SEF (3.875" x 7.5")	A	-
C5 SEF (162 x 229)	A	-
C5 LEF (229 x 162)	A	-
C6 SEF (114 x 162)	A	-
DL SEF (110 x 220)	A	-
8K SEF (267 x 390)	A	A
16K SEF (195 x 267)	A	A
16K LEF (267 x 195)	A	A
12" x 18" SEF	A	A
11" x 15" SEF	A	A
11" x 14" SEF	A	A
10" x 15" SEF	A	A
10" x 14" SEF	A	A

Remarks:

A	Supported
-	Not supported

1.2.3 ORIGINAL SIZE DETECTION

Size (W x L) [mm]	NA		EU/Asia/Oceania/China	
	Platen	ADF	Platen	ADF
A3 SEF (297 x 420)	-	Y	Y*1	Y
B4 SEF (257 x 364)	-	-	Y*1	Y
A4 SEF (210 x 297)	Y*1	Y	Y*1	Y
A4 LEF (297 x 210)	Y*1	Y	Y*1	Y
B5 SEF (182 x 257)	-	-	Y*1	Y
B5 LEF (257 x 182)	-	-	Y*1	Y
A5 SEF (148 x 210)	-	-	Y*3/Y*1	Y
A5 LEF (210 x 148)	-	-	Y*1	Y
B6 SEF (128 x 182)	-	Y*5	-	Y
B6 LEF (182 x 128)	-	Y*5	-	Y
DLT SEF (11" x 17")	Y	Y*2	-	Y*2
LG SEF ($8^1/_2$" x 14")	Y	Y*2	-	-
LT SEF ($8^1/_2$" x 11")	Y*1	Y*2	Y*1	Y*2
LT LEF (11" x $8^1/_2$")	Y*1	Y*2	Y*1	Y*2
HLT SEF ($5^1/_2$" x $8^1/_2$")	Y*3	Y	-	-
HLT LEF ($8^1/_2$" x $5^1/_2$")	Y	Y	-	-
US EXE SEF (7 $1/_4$" x 10 $1/_2$")	-	Y	-	-
US EXE LEF (10 $1/_2$" x 7 $1/_4$")	-	Y	-	-
F SEF (8" x 13")	-	-	Y*4	Y*4
Foolscap SEF ($8^1/_2$" x 13")	-	Y*2	Y*4	Y*4
Folio SEF ($8^1/_4$" x 13")	-	-	Y*4	Y*4

Folio SEF (11" x 15")	-	Y*2	-	-
Folio SEF (10" x 14")	-	Y	-	-
Folio SEF (8" x 10")	-	Y*2	-	-
US EXE SEF ($7^1/_4$" x $10^1/_2$")	-	Y	-	-
US EXE LEF ($10^1/_2$ x $7^1/_4$")	-	Y*2	-	-
8K SEF (267 x 390)	-	-	Y*1	Y*2
16K SEF (195 x 267)	-	-	Y*1	Y*2
16K LEF (267 x 195)	-	-	Y*1	Y*2

*1: The machine can detect the paper size depending on the setting of SP4-305-001

*2: The machine can detect the paper size depending on the setting of SP6-016-001.

*3: The machine can detect the paper size depending on the setting of SP4-303-001.

*4: The machine can detect the paper size depending on the setting of SP5-126-001.

*5: The machine can detect the paper size when the optional ARDF is installed.

Remarks:

Y	Supported
-	Not supported.

1.3 SOFTWARE ACCESSORIES

The printer drivers and utility software are provided on one CD-ROM. An auto-run installer allows you to select which components to install.

1.3.1 PRINTER DRIVERS

Printer Language	Windows XP*1*6	Windows Vista*2*6	Windows 7*3*6	Windows 8
RPCS	No	No	No	No
PCL 5e	Yes	Yes	Yes	Yes
PCL 6(XL)	Yes	Yes	Yes	Yes
PostScript	Yes	Yes	Yes	Yes
XPS	-	Yes	Yes	Yes
RPGL/GL2	No	No	No	No
PCL 6(XL) Universal Driver	Yes	Yes	Yes	Yes
PostScript Universal Driver	Yes	Yes	Yes	Yes

Printer Language	Windows Server 2003*4*6	Windows Server 20085*6	Windows Server 2012 or later	Macintosh*7
RPCS	No	No	No	No
PCL 5e	Yes	Yes	Yes	No
PCL 6(XL)	Yes	Yes	Yes	No
PostScript	Yes	Yes	Yes	Yes
XPS	-	Yes	Yes	No
RPGL/GL2	No	No	No	No

Printer Language	Windows Server 2003*4*6	Windows Server 20085*6	Windows Server 2012 or later	Macintosh*7
PCL 6(XL) Universal Driver	Yes	Yes	Yes	No
PostScript Universal Driver	Yes	Yes	Yes	Yes

*1 Microsoft Windows XP Professional Edition / Home Edition
*2 Microsoft Windows Vista Ultimate / Enterprise / Business / Home Premium / Home Basic
*3 Microsoft Windows 7 Home Premium / Professional / Ultimate / Enterprise
*4 Microsoft Windows Server 2003 Standard Edition / Enterprise Edition / Microsoft Windows Server 2003 R2 Standard Edition / Enterprise Edition
*5 Microsoft Windows Server 2008 Standard / Enterprise / Microsoft Windows Server 2008 R2 Standard / Enterprise
*6 Supports both versions (32/64 bit)
*7 Mac OS X 10.5 or later (native mode).

1.3.2 SCANNER AND LAN FAX DRIVERS

Driver	Windows XP*1*6	Windows Vista*2*6	Windows 7*3*6	Windows 8
Network TWAIN	Yes	Yes	Yes	Yes
LAN-FAX	-	-	-	-

Driver	Windows Server 2003*4*6	Windows Server 20085*6	Windows Server 2012 or later	Macintosh*7
Network TWAIN	Yes	Yes	Yes	Yes
LAN-FAX	-	-	-	-

*1 Microsoft Windows XP Professional Edition / Home Edition
*2 Microsoft Windows Vista Ultimate / Enterprise / Business / Home Premium / Home Basic
*3 Microsoft Windows 7 Home Premium / Professional / Ultimate / Enterprise

*4 Microsoft Windows Server 2003 Standard Edition / Enterprise Edition / Microsoft Windows Server 2003 R2 Standard Edition / Enterprise Edition
*5 Microsoft Windows Server 2008 Standard / Enterprise / Microsoft Windows Server 2008 R2 Standard / Enterprise
*6 Supports both versions (32/64 bit)

Note

- The LAN Fax driver lets you fax documents directly from your PC. Address Book Editor and Cover Sheet Editor must be installed as well.
- The Network TWAIN driver operates in 32-bit compatibility mode on 64-bit operating systems
- The Network TWAIN driver is provided on the scanner driver CD-ROM.

1.3.3 UTILITY SOFTWARE

Name	Category	Description
XG-SD	Input Management	Enables to set efficient delivery flows for scan data as an ESA app.
Gloria-P	Output Management	Output management per each user (On-demand).
Gloria-A	Output Management	Management for personal identifier using IC-card.
Gloria-AP	Output Management	IC-card
Gloria-FS	Output Management	Location-free Print server
Maple	Output Management	Troubleshooting wizard for common printing troubles.
Karachi	Other	Cloud printing service
RIS	Management of Document/Output/Machine/Authentication/Input/ES	Integrated solution includes C&D, Output, Authentication, DM, Account/Report.
Forest	Machine Log Management	Log management server focused on the output machines management.

Name	Category	Description
UZ-D1	Machine Log Management	Log management server focused on the output machines management.
Basil	Machine Log Management	Client Software for Machine searching, Status management, address book management.
UZ-A1	Machine Log Management	@Remote appliance box.
Lime	Machine Log Management	Server-typed software focused on @Remote function from UZ-S1.
Birdie-D	Machine Log Management	Client Software for machine searching, Status management, Configuration management.
Birdie-S	Machine Log Management	Basil based, server-typed software.
Ibis	Other	Client PC software which integrated the function of Apricot and Air Designer.
MDS Tool V1.0	Other	A tool for Manage phase on MDS. Collects the machine information of customers with FM Audit (3rd party client software), then upload to the center and offers it with SaaS.
Mebius	Authentication	User authentication management
eDC-i1	Other	Software activation management system

Name	Category	Description
Client Activator	Other	Utility for delivering the software to MFP with activating.
Endpoint	Machine Log Management	Cooperates with IBM Tivoli management software, to offers an integrated asset management solution by monitoring condition of MFP and sending the output counts to Tivoli.
Green Calculator	Other	Sales support tool with measuring the environmental performance value (Power Consumption etc…)
UZ-S1	Machine Log Management	Management tool for MA segment customers.
Ridoc IO DeviceType	-	SAP R/3 form printing solution.
Camelot	-	-
Info print Manager	-	-

1.4 OPTIONAL EQUIPMENT

1.4.1 DECURL UNIT DU5030

Item		Specification	
Dimensions (W x D x H)		71 x 509 x 181mm	
Weight		Less than 5kg	
Type		Internal Module to be installed in mainframe (Option)	
Power Consumption		Less than 30W	
Power Supply		From mainframe	
Paper Size		100 x 139.7mm - 330.2 x 487.7mm	
Paper Weight		40 – 350gsm	
Decurl Function	Pressure Adjustment	3 steps	From operation panel
	Curl Type	Back curl/Face curl	From operation panel

1.4.2 MULTI BYPASS TRAY BY5010

Item	Specification	Notes
Paper Capacity	550 sheets (80g/m2, 20lb Bond)	
Paper Size	A5 (LEF)/5.5”x8.5” (LEF) – 13” x 19.2” <Custom Size Paper> Width: 100.0 to 330.2mm (3.94 to 13.00 inch) Length: 139.7 to 487.7mm (5.50 to 19.20 inch)	

Item	Specification	Notes
Paper Weight	52.3 to 216g/m2, 14lb Bond to 80lb Cover	
Power Source	From LCT (From Mainframe -->LCT)	
Paper Volume Sensors	In 4 steps: Near end, 0%, 50%, 100%	
Dimension (W x D x H)	690 mm x 561 mm x 210mm	
Weight	Less than 20kg	

1.4.3 LCIT RT5070

item	Specification
Dimensions (W x D x H)	540 x 730 x 1,000 mm
Weight	Less than 106 Kg
Configuration	Console Type
Power source	From mainframe
Noise (Power level)	TBA
Paper size	A4_LEF, B5_LEF, A5_SEF 8.5”x11”_LEF, 5.5“x8.5“_SEF <Over Size Paper> 305.0 x 230mm *Need to set by corresponding SP mode
Paper weight	4th tray: 52.3-216.0 g/m2 14lb Bond - 80lb Cover 5th tray: 52.3-216.0 g/m2 14lb Bond - 80lb Cover 6th tray: 52.3 -163.0 g/m2 14lb Bond - 90lb Index

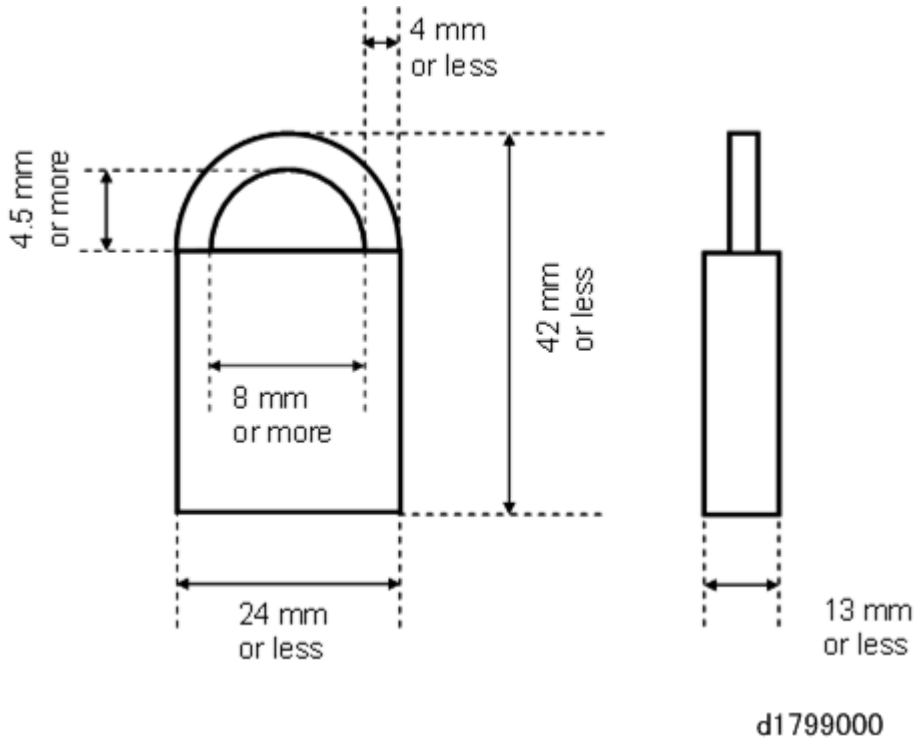
item	Specification
Paper capacity	4th tray: 1,100 sheets 5th tray: 1,100 sheets 6th tray: 2,800 sheets *In case paper less than 0.1mm thick
Air Assist Paper Pickup	No
Tray Security Lock	Yes (all tray) *1

*1: Recommended Lock Type

The following lock is recommended. Please procure it locally.

ABUS Lock: T84MB (20mm)

See the following drawing for alternative.



1.4.4 LCIT RT5080

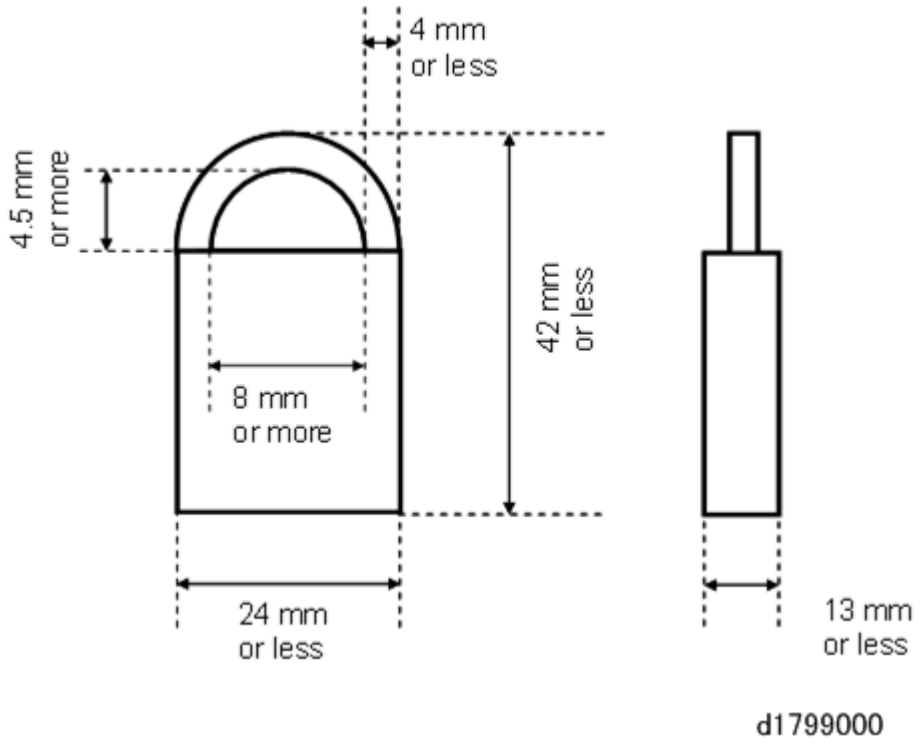
Item	Specification
Dimensions (W x D x H)	865 x 730 x 1,000 mm
Weight	Less than 185 Kg
Configuration	Console Type
Power source	From mainframe
Noise (Power level)	TBA
Paper size	A5 (LEF)/5.5”x8.5” (LEF) – 13” x 19.2”(SEF) <Custom Size Paper> Width: 100.0 to 330.2mm (3.94 to 13.00 inch) Length: 139.7 to 487.7mm (5.50 to 19.20 inch) Note: Paper narrower than 139.2mm needs the attachment
Paper weight	40-300g/m2 11lb Bond -110lb Cover
Paper capacity	4th tray: 1,100 sheets 5th tray: 2,200 sheets 6th tray: 1,100 sheets *In case paper less than 0.1mm thick
Paper weight	4th tray: 52-256 g/m2 14lb Bond - 95lb Cover 5th tray: 40-300 g/m2 11lb Bond - 110lb Cover 6th tray: 52-256 g/m2 14lb Bond - 95lb Cover
Air Assist Paper Pickup	Yes (all tray)
Tray Security Lock	Yes (all tray) *1
Active Tray LED	Yes

*1: Recommended Lock Type

The following lock is recommended. Please procure it locally.

ABUS Lock: T84MB (20mm)

See the following drawing for alternative.



1.4.5 COVER INTERPOSER TRAY CI5030

Item	Specification	Notes
Dimension (W x D x H)	540 x 730 x 1290 (mm)	
Weight	Less than 45kg	
Power Source	From mainframe	
Noise (Power level)	TBA	
Paper Size	A5/HLT – 13” x 19.2” <Custom Size Paper> Width: 139.7 to 330.2mm (5.50 to 13.00 inch) Length: 139.7 to 487.7mm (5.50 to 19.20 inch)	
Paper weight	64 – 216g/m2 17 –58lb Bond /110 lb index	
Paper capacity	200 sheets x 2 trays	20lb, 80g/m2
Original set position	Center position	
Original Set	Face Up, First sheet on top	
Size change	Touch screen	User changeable

1.4.6 BOOKLET FINISHER SR5060

Basic Specifications

Item		Specification	
Dimensions (W x D x H)		996 x 730 x 1126mm *Not includes projections. When all extendable trays are closed.	
Weight		Less than 112kg	
Configuration		Console type	
Power Source		NA: 120-240V EU/AP: 220-240V	
Power Consumption		Less than 150W (Excluding peak consumption)	
Output Jogger		Standard	
Staple Position Adjustment		Yes (Two position staple only)	
Proof Tray	Stack capacity	250 sheets Without folding (A4, 8 1/2” x 11 or smaller) 50 sheets Without folding (B4, 8 1/2” x 14” or larger) 30 sheets Z folding (B4 or larger) 20 sheets Z folding (A4SEF, LTSEF)	80g/m2, 20 lb.Bond
	Paper size	A5-13” x 19.2”	
	Paper weight	<Without Z-folding> 52 g/m2-216g/m2 16-40 lb. Bond, 50-80 lb. Cover, 90-110 lb. Index <Z-folding> 64-105 g/m2, 20lb Bond	

Item		Specification
Shift Tray	Stack capacity	2,500 sheets (A4 LEF, B5 LEF, 8 1/2” x 11 LEF) 1,500 sheets (A3, A4 SEF, B4, B5 SEF, 11” x 17” SEF, 8 1/2 “ x 11” SEF, SRA4, 226 x 310mm) 1,000 sheets (12” x 18”, SRA3, 13”x18”, 12.6”x18.5”, 12.6”x19.2”, 13”x19”, 13” x 19.2”, 310 x 432mm) 500 sheets (A5 LEF, 5 1/2” x 8 1/2” LEF) 100 sheet (A5 SEF, 5 1/2” x 8 1/2” SEF) 30 sheets (Z-folding paper)
	Paper size	<Without Z-folding> Max Up to 330.2 x 487.7 mm (13” x 19.2”) <Z-folding> up to 12”x18”
	Paper weight	<Without Z-folding> 40-400g/m2*BR-C1 doesn’t support over 300gsm thick <Z-folding> 64-105 g/m2, 18-28lb Bond

Note

- The capacity to be calculated with 80g/m2, 20lb Bond paper.

Staple specifications

Item		Specification
Paper size		B5-A3 8 1/2” x 11” – 11” x 17”
Paper weight		<Without Z-folding> 64-80g/m2 (17-22 lb.Bond) <Z-folding> 64-105 g/m2 (17-28 lb Bond)
Staple position		Top, Bottom, 2 Staples, Top-slant
Power Source		2-100 sheets
Staples Capacity*	A4, B5, 8 1/2” x 11”	2-100 sheets
	A3, B4 11”x17”, 8 1/2”x14”	2-50 sheets
	Z-folding	10 sheets
Staple Replenishment		Cartridge exchange / 5,000 pins per cartridge

Note

- The capacity to be calculated with 80g/m2, 20 lb Bond paper.

Saddle stitch specifications

Item		Specification
Paper size		B5-SRA3 8 1/2”x11”-13”x19.2” <Custom Size> Length: 257 to 487.7mm Width: 182 to 330.2mm
Paper weight		64-90g/m2 (18-24 lb.Bond)
Staple position		Center 2 position
Staples Capacity*	64-80g/m2 (18-20lb Bond)	20 sheets
	80-90g/m2 (20-24lb Bond)	15 sheets
	Cover Sheet	One cover sheet (up to 163g/m2) can be included in the above stapling capacity.
Staple Replenishment		Cartridge exchange / 5,000 pins per cartridge

Punch specifications (Option)

	Specification	Remarks
Number of Punch	NA: 2 or 3 holes EU: 2 or 4 holes Scandinavian: 4 holes	Punch option is required.
Punch Registration	Yes (Resist Roller and Side Registration Sensor)	
Max. Thickness	2 or 3 holes: 52 -209g/m2 4 holes: 52 - 163g/m2	
Supported model	Type a (95ppm) Type b (110ppm) Type c (135ppm)	
Performance	Same as engine speed (95/110/135ppm)	

Stack Capacity After Finishing

	Paper size	# of Pages per set	# of Sets
Without Z-folding	A4 LEF, B5 LEF 8 1/2” x 11” LEF	20-100	125-25
		10-19	200-105
		2-9	150
	A4 SEF, B5 SEF 8 1/2” x 11” SEF	10-100	150-15
		2-9	150
	A3, B4 11” x 17”, 8 1/2” x 14”	10-50	150-30
		2-9	150
When mix-sized	A3 & A4, B4 & B5 11” x 17 & 11” x 8 1/2”	2-50	30
With Z-folding (One size or mix-sized)	One size A3 Z-folding & A4 B4 Z-folding & B5 11” x 17” Z-folding + 11” x 8 1/2”	1-10	30-3
When Saddle Stitch	All size	2-5	45
		6-10	23
		11-15	15
		16-20	10
	Limitless stack mode	supported	

1.4.7 FINISHER SR5050

Basic Specifications

Item		Specification	
Dimensions (W x D x H)		996 x 730 x 1126mm *Not includes projections. When all extendable trays are closed.	
Weight		Less than 112kg	
Configuration		Console type	
Power Source		NA: 120-240V EU/AP: 220-240V	
Power Consumption		Less than 150W (Excluding peak consumption)	
Output Jogger		Standard	
Staple Position Adjustment		Yes (Two position staple only)	
Proof Tray	Stack capacity	250 sheets Without folding (A4, 8 1/2” x 11 or smaller) 50 sheets Without folding (B4, 8 1/2” x 14” or larger) 30 sheets Z folding (B4 or larger) 20 sheets Z folding (A4SEF, LTSEF)	80g/m2, 20 lb.Bond
	Paper size	A5-13” x 19.2”	
	Paper weight	<Without Z-folding> 52 g/m2-216g/m2 16-40 lb. Bond, 50-80 lb. Cover, 90-110 lb. Index <Z-folding> 64-105 g/m2, 20lb Bond	

Item		Specification
Shift Tray	Stack capacity	3,000 sheets (A4 LEF, B5 LEF, 8 1/2” x 11 LEF) 1,500 sheets (A3, A4 SEF, B4, B5 SEF, 11” x 17” SEF, 8 1/2 “ x 11” SEF, SRA4, 226 x 310mm) 1,000 sheets (12” x 18”, SRA3, 13”x18”, 12.6”x18.5”, 12.6”x19.2”, 13”x19”, 13” x 19.2”, 310 x 432mm) 500 sheets (A5 LEF, 5 1/2” x 8 1/2” LEF) 100 sheet (A5 SEF, 5 1/2” x 8 1/2” SEF) 30 sheets (Z-folding paper)
	Paper size	<Without Z-folding> Max Up to 330.2 x 487.7 mm (13” x 19.2”) <Z-folding> up to 12”x18”
	Paper weight	<Without Z-folding> 40-400g/m2*BR-C1 doesn’t support over 300gsm thick <Z-folding> 64-105 g/m2, 18-28lb Bond

Note

- The capacity to be calculated with 80g/m2, 20lb Bond paper.

Staple specifications

Item		Specification
Paper size		B5-A3 8 1/2” x 11” – 11” x 17”
Paper weight		<Without Z-folding> 64-80g/m2 (17-22 lb.Bond) <Z-folding> 64-105 g/m2 (17-28 lb Bond)
Staple position		Top, Bottom, 2 Staples, Top-slant
Power Source		NA: 120-240V EU/AP: 220-240V
Staples Capacity*	A4, B5, 8 1/2” x 11”	2-100 sheets
	A3, B4 11”x17”, 8 1/2”x14”	2-50 sheets
	Z-folding	10 sheets
Staple Replenishment		Cartridge exchange / 5,000 pins per cartridge

Note

- The capacity to be calculated with 80g/m2, 20lb Bond paper.

Punch Specifications (Option)

Item	Specification
Number of Punch	NA: 2 or 3 holes EU: 2 or 4 holes Scandinavian: 4 holes
Punch Registration	Yes (Resist Roller and Side Registration Sensor)
Max. Thickness	2 or 3 holes: 52 -209g/m2 4 holes: 52 - 163g/m2
Supported model	Type a (95ppm) Type b (110ppm) Type c (135ppm)
Performance	Same as engine speed (95/110/135ppm)

Stack Capacity After Finishing

	Paper size	# of Pages per set	# of Sets
Without Z-folding	A4 LEF, B5 LEF 8 1/2” x 11” LEF	20-100	150-30
		10-19	200-105
		2-9	150
	A4 SEF, B5 SEF 8 1/2” x 11” SEF	10-100	150-15
		2-9	150
	A3, B4 11” x 17”, 8 1/2” x 14”	10-50	150-30
		2-9	150
When mix-sized	A3 & A4, B4 & B5 11” x 17 & 11” x 8 1/2”	2-50	30
With Z-folding (One size or mix-sized)	One size A3 Z-folding & A4 B4 Z-folding & B5 11” x 17” Z-folding + 11” x 8 1/2”	1-10	30-3

1.4.8 MULTI-FOLDING UNIT FD5020

Item		Specification	Notes
Folding Type	Single Sheet	Z-fold, Half fold/Print inside, Half fold/Print outside, Letter fold-in/Print inside, Letter fold-in/Print outside, Letter fold-out, Double Parallel/Print inside, Double Parallel/Print outside, Gate Fold/Print inside, Gate Fold/Print outside	
	Multiple Sheets	Up to 3 sheets Half fold/Print inside, Half fold/Print outside, Letter fold-in/Print inside, Letter fold-in/Print outside, Letter fold-out,	Coated paper is supported also.
Paper Size	Single Sheet Mode	<Z folding> B4, A4, A3, 8.5"x11", 8.5"x14", 11"×17″,12"x18″	*Multi-folding unit does not support custom paper size.
		<Half folding> B5, B4, A4, A3, 8.5"×11", 8.5"x14", 11"×17″, 12"×18", 12.6"x18.5", 12.6"x19.2", 13"x18", 13"x19", 13"x19.2", 226x310mm, 310x432mm, SRA3, SRA4	
	Single Sheet Mode	<Letter folding in/out> B5, A4, 8.5"x11"	

Item		Specification	Notes
		<Double parallel> B5, B4, A4, A3, 8.5"×11", 8.5"x14",11"x17″, 12"x18″	
		<Gate folding> B5, A4, 8.5"x11", 11"x17" 12"×18″	
	Multiple Sheet Mode	<Half folding> B5, B4, A4, A3, 8.5"x11", 8.5"x14", 11"x17″, 12"x18", 12.6"x18.5", 12.6"x19.2", 13"x18", 13"x19", 13"x19.2", 226x310mm, 310x432mm, SRA3, SRA4	
		<Letter folding in> B5, A4, 8.5"x11"	
		<Letter folding out> B5, A4, 8.5"x11"	
Paper Weight	Single Sheet Mode	64-105g/m2	
	Multiple Sheet Mode	64-80g/m2	
Power Supply		NA: 120V, 50/60Hz EU: 220-240V, 50/60Hz	
Power Consumption		TBA	
Dimension (W x D x H)		470 x 730 x 1,000mm	
Weight		Less than 92kg	

1.4.9 PERFECT BINDER (GB5010)

Item		Specification	
Dimensions (W x D x H)		1,090 x 791 x 1,387 mm	
Weight		Less than 350kg	
Configuration		Console type	
Power consumption		Less than 623W	
Power Supply		200-240V(NA), 220-240V(EU), 50/60Hz	
Cutting directions		3 edges, 1 edges, None	
Booklet size		Width: 201-297 mm Length: 139.7-216 mm	
Booklet thickness		Less than 23 mm	
Body pages	Paper weight	64-163 g/m2 20-40lb.Bond, 90lb.Index, 50-60lb.Cover *106-163 g/m2 paper: Up to 10 sheets as chapter pages	
	Paper size	Width: 257-320 mm Length: 182-228.6 mm	
	Capacity	Max 200 sheets 64-80gsm: 10-200 sheets (20-400 pages in DPX) 81-105gsm:10-150 sheets (20-300 pages in DPX)	
Cover pages	Paper weight	90-300 g/m2 24-40lb.Bond, 90-140lb.Index, 50-100lb.Cover	
	Paper size	Width: 257-330.2 mm Length: 364-487.7 mm	
Interposer tray	Capacity	200 sheets x 2 (90gsm)	*Total load must be under 24 mm
Trimming		Top/Bottom Edge: 6-28mm Fore Edge: 6-50mm	

Item		Specification	
Stack capacity	50 sheets/booklet	13 booklets	*80gsm paper
	100 sheets/booklet	7 booklets	
	200 sheets/booklet	4 booklets	
Warm-up Time		Less than 380 sec	
Glue Capacity		380 g	

1.4.10 COVER INTERPOSER TRAY FOR PERFECT BINDER TYPE S1

TBD

1.4.11 TRANSIT PASS UNIT FOR PERFECT BINDER TYPE S1

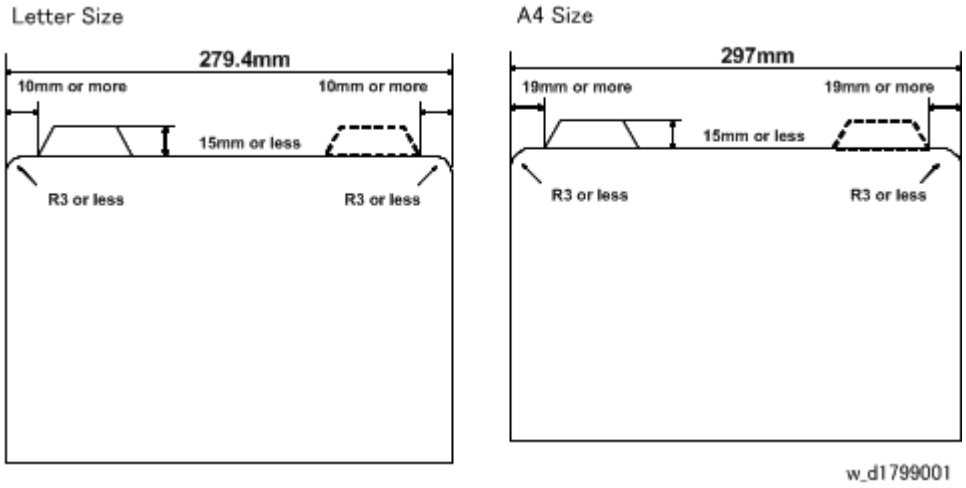
TBD

1.4.12 RING BINDER RB5020

Item			Specification	
Dimensions (W x D x H)			870 x 730 x 1,010 mm	
Weight			Less than 140kg	
Configuration			Console type	
Power consumption			Less than 400W	
Power Supply			100-240V, 50/60Hz	
Paper size	Binding mode		A4_LEF, 8 1/2” x 11”_LEF	
	Punching mode		A4_LEF, 8 1/2” x 11”_LEF	
Paper weight	Binding mode		64-216 g/m2 20-40lb.Bond, 90-110 lb. Index, 50-80 lb. Cover	
	Punching mode		64-216 g/m2 20-40lb.Bond, 90-110 lb. Index, 50-80 lb. Cover	
Capacity of ring bind			2-100 sheets	
Number of holes	8 1/2” x 11”		21 holes	
	A4		23 holes	
Ring Supply	Type	NA	1) 8 1/2” x 11”, Black, 50 sheets 2) 8 1/2” x 11”, Black, 100 sheets 3) 8 1/2” x 11”, White, 50 sheets 4) 8 1/2” x 11”, White, 100 sheets	
		EU	1) A4, Black, 50 sheets 2) A4, Black, 100 sheets 3) A4, White, 50 sheets 4) A4, White, 100 sheets	
	Replenishment		Cartridge exchange	*80 sets/cartridge
TAB Stock			Supported*1	*See the below drawings
Stack capacity	Binding mode		11 sets	*100 sheets /set

Item		Specification
	Punching mode	100 sheets (200 pages in DPX)

*1: Please refer the following regarding supported TAB stock dimension.



1.4.13 TRIMMER UNIT TR5040

Item	Specification	Notes
Dimension (W x D x H)	1,115 x 591 x 555mm	
Weight	75kg	
Configuration	Console type / Optional unit for Finisher	Finisher SR5060 is necessary
Power consumption	Universal Power Supply 100V – 240V NA: 60Hz EU: 50Hz Ave. 75W, Max. 250W	Plug
Trimming Type	One side edge	
Trimming Capacity	1-20 sheets (2-40 pages after folding)	20lb, 80g/m2
Paper Size	13 x 19.2”, 13 x 19”, 12.6 x 19.2”, 12.6 x 18.5” 13 x 18”, SRA3(320 x 450mm), 12 x 18”, A3, B4 SRA4(320 x 225mm), 226 x 310mm, 310 x 432mm, A4, B5, DLT, LG, LT <Custom Size> Width: 182 to 330mm Length: 257 to 488mm	*sizes before folding
Stack Capacity	1 sheet: 60 sets*1 2 - 5 sheets: 60 sets 6 - 10 sheets: 35 - 40 sets*1 11 - 20 sheets: 20 - 25 sets*1	
Stacker Full Detection	Yes	
Limitless Stack	Yes*2	

*1: The stack capacity varies according to the size of the sheets.

*2: Note: Hardware modification by service engineer is necessary. Not applicable by end-user.

APPENDICES:
PREVENTIVE MAINTENANCE TABLES

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

2. APPENDICES: PREVENTIVE MAINTENANCE TABLES

2.1 PM TABLES

2.1.1 PM PARTS LIST KEY

Column	Meaning	
Part	Name of the component, unit, name of part	
By	Person responsible	
	S	Service technician (CE)
	U	User
	T	TCRU trained user
At	Interval for checking, cleaning, replacement. Example: 860 K (309 Km) ▪ You may see two notations for some parts. ▪ The K notation for the number of sheets (806 K) recorded by **SP7621** ▪ The km (distance) notation (309 Km) is recorded by **SP7940**. ▪ Where these notations are used together, do the procedure for whichever count occurs first.	
Action	What is required'	
	●	Replace after total page count elapses
	◎	Replace according to machine log count (sheet count, distance count, whichever occurs first)
	▲	Must inspect, clean, lubricate (if applicable)
	△	Inspect, clean, lubricate (if applicable) as necessary
	R	Must replace
Comment	Materials required for cleaning, lubrication, etc.	

2.1.2 OPTICS

Part	By	At	Action	Comments
White Plate (under ADF)	S	1200K	▲	Lens cloth*1
1st Mirror	S	1200K	▲	Lens cloth*1
2nd Mirror	S	1200K	▲	Lens cloth*1
3rd Mirror	S	1200K	▲	Lens cloth*1
Original Width Sensors (APS)	S	600K	▲	Wipe clean
Exposure Glass*2	S,U	600K	△	Glass cleaner
Guide Rail (2-level both ends)	S	1200K	▲	Dry cloth*3
Contact Glass	SU	600K	△	Glass cleaner
Toner Shield Glass*1*2	S	600K	△	Lens cloth*1
	S	1200K	▲	Lens cloth*1

*1: Lens cloth A0129111

*2: Inspect, clean every PM visit

*3: Never use alcohol

2.1.3 DEVELOPMENT UNIT

Part	By	At	Action	Comments
Developer	ST	860K (309 Km)	◎	Stored empty developer bottle*1
Gears	S	600K	▲	Dry cloth
Toner Supply unit	S	600K	▲	Dry cloth
Doctor blade	S	600K	▲	Clean before developer replacement

*1 You will need the empty developer bottle stored with the machine after installation to hold the old developer drained from the development unit.

2.1.4 AROUND THE DRUM

Part	By	At	Action	Comments
Drum Cleaning Unit*2		---		
Cleaning Blade*1	S	640 K (235 Km)	◎	
Lubrication Brush Roller*1	S	640 K (235 Km)	◎	
Lubrication Bar*1	S	640 K (235 Km)	◎	
Lubrication Blade*1	S	640 K (235Km)	◎	
Brush Roller Coupling*1	S	1800 K (704 Km)	◎	
Gears*1	S	640 K	◎	
Charge Corona Unit*2		---		
Corona Wire	S	1000 K (391 Km)	◎	
Grid	S	1000 K (391 Km)	◎	
Wire Cleaner, Grid Cleaner		1000 K (391 Km)	◎	
Drum*1	S, T	2500 K (978 Km)	◎	

Part	By	At	Action	Comments
Potential Sensor	S	1200 K	△	Dry cloth
Quenching Lamp	S	1200 K	△	
Used Toner Bottle	S, U	1200 K	**R**	

***1**: These parts must always be replaced together as a set.
***2**: TCRU operator can replace entire unit.

2.1.5 IMAGE TRANSFER UNIT AND PAPER SEPARATION

Part	By	At	Action	Comments
Image Transfer Belt (ITB)	S	2400 K (939 Km)	◎	
ID Sensor	S	600K	▲	Dry cloth
Belt Centering Sensor	S	1200K	▲	Blower brush
ITB Unit Internal Rollers	S	1200K	△	Dry cloth
Image Transfer Roller	S	1350K	◎	
ITB Cleaning Unit*1	---	---		
ITB Cleaning Blade*2	S	600K (235 Km)	◎	
ITB Lubricant Brush Roller*2	S	600K (235 Km)	◎	
ITB Lubricant Bar*2	S	600K (235 Km)	◎	
ITB Lubricant Blade*2	S	600K (235 Km)	◎	
PTR Cleaning Unit*1	---	---		

Part	By	At	Action	Comments
PTR Cleaning Blade*2	S	600K (235 Km)	◎	
PTR Lubricant Bar*2	S	600K (235 Km)	◎	
Lubricant Brush Roller*2	S	600K (235 Km)	◎	
Separation Unit	S	600K (235 Km)	◎	
Paper Transfer Roller	S	800K (313 Km)	◎	
Gears	S	3000K (1173 Km)	◎	
PTB Paper Sensors	S	600K	▲	

*1:	TCRU operator can replace entire unit.
*2:	These parts must always be replaced together as a set.

2.1.6 FUSING UNIT

Part	By	At	Action	Comments
Fusing Unit*1				
Fusing Belt	S	1100K (935 Km)	◎	
Hot Roller	S	1800K (1530 Km)	◎	
Pressure Roller	S	1100K (935 Km)	◎	
Pressure Roller Bearings	S	1100K (935 Km)	◎	
Hot Roller Separation Plate	S	600K	▲	Dry cloth
Pressure Roller Pick-off Pawls	S	600KI	▲	
Fusing Unit Entrance Guide	S	600K	▲	
Heating Roller Thermistor	S	1100K	▲	Dry cloth, always clean at PM
Pressure Roller Thermistor	S	1100K	▲	
Main Gears*2	S	1100K	▲	
Hot Roller Bearings	S	1100K	▲	
Heating Roller Bearings	S	1100K	▲	
Heating Roller Bushings	S	1100K		Always inspect at PM
Web Cleaning Unit*1		---		
Cleaning Web	S	750 K (271 Km	◎	
Web Tension Roller	S	3190K (2712 Km)	◎	

Part	By	At	Action	Comments
Fusing Thermopiles	S	600K	▲	Alcohol damp cloth to remove toner, paper dust

*1:	TCRU operator can replace entire unit.
*2	Use Fluotribo MG grease, with about 4±0.8 g on the pressure roller drive gear and 1.5±0.3 g on the idle reduction gear.

2.1.7 OTHER

Part	By	At	Action	Comments
Dust Filters (large)	S	600K	◎	
Dust Filters (small)	S	1200K	◎	
PCDU	S	600K	1050K	Target*1

*1 1050K is the target service life. Unit may require earlier replacement if operation is abnormal.

2.1.8 MAIN PAPER TRAYS (X3)

Part	By	At	1000K	Comments
1st Pick-up Roller	S,T	①	**R**	Wipe clean, dry cloth ③
1st Feed Roller	S,T	①	**R**	
1st Separation Roller	S,T	①	**R**	
2nd Pick-up Roller	S,T	①	**R**	Wipe clean, dry cloth ③
2nd Feed Roller	S,T	①	**R**	
2nd Separation Roller	S,T	①	**R**	
3rd Pick-up Roller	S,T	①	**R**	Wipe clean, dry cloth ③
3rd Feed Roller	S,T	①	**R**	
3rd Separation Roller	S,T	①	**R**	
1st Feed Guide Plate	S	②		Wipe clean, dry cloth
1st Feed Sensor	S,T	①		Blower brush for paper dust
1st Paper End Sensor	S,T	①		Blower brush for paper dust
1st Grip Drive Roller	S	②		Wipe clean, dry cloth
1st Grip Idle Roller	S	②		Wipe clean, dry cloth
2nd Feed Guide Plate	S	②		Wipe clean, dry cloth
2nd Feed Sensor	S,T	①		Blower brush for paper dust
2nd Paper End Sensor	S,T	①		Blower brush for paper dust
2nd Grip Drive Roller	S	②		Wipe clean, dry cloth
2nd Grip Idle Roller	S	②		Wipe clean, dry cloth
3rd Feed Guide Plate	S	②		Wipe clean, dry cloth

Part	By	At	1000K	Comments
3rd Feed Sensor	S,T	①		Blower brush for paper dust
3rd Paper End Sensor	S,T	①		Blower brush for paper dust
3rd Grip Drive Roller	S	②		Wipe clean, dry cloth
3rd Grip Idle Roller	S	②		Wipe clean, dry cloth
Vertical Transport Guide Plate	S	②		Wipe clean, dry cloth
Vertical Transport Sensors	S	②		Blower brush for paper dust
Vertical Transport Drive Rollers	S	②		Wipe clean, dry cloth
Vertical Transport Idle Rollers	S	②		Wipe clean, dry cloth

①: Inspect every **100K** and clean if necessary.

②: Inspect after first **600K** and then every **300K** thereafter and clean if necessary.

③: Replace all three parts together if frequent jams, double feeds occur.

2.1.9 MAIN PAPER FEED PATH

Part	By	At	Comments
Transfer Timing Drive Roller	S	②	Wipe clean, dry cloth
Transfer Timing Idle Roller	S	②	Wipe clean, dry cloth
Registration Gate Driver Roller	S	②	Wipe clean, dry cloth
Registration Gate Idle Roller	S,T	①	Wipe clean, dry cloth
Registration Timing Drive Roller	S	②	Wipe clean, dry cloth
Registration Timing Idle Roller	S,T	①	Wipe clean, dry cloth
Registration Entrance Drive Roller	S	②	Wipe clean, dry cloth
Registration Entrance Idle Roller	S,T	①	Wipe clean, dry cloth
Main Relay Drive Roller	S	②	Wipe clean, dry cloth

Part	By	At	Comments
Main Relay Idle Roller	S,T	①	Wipe clean, dry cloth
LCIT Entrance Drive Roller	S	②	Wipe clean, dry cloth
LCIT Entrance Idle Roller	S,T	①	Wipe clean, dry cloth
Dust Collection Unit	S	②	Wipe clean, dry cloth
Transfer Timing Sensor	S	②	Blower brush for paper dust
Registration Timing Sensor	S,T	①	Blower brush for paper dust
Main Relay Sensor	S	②	Blower brush for paper dust
LCIT Relay Sensor	S	②	Blower brush for paper dust
Double Feed Sensor Pair	S	②	Blower brush for paper dust
CIS	S	②	Blower brush for paper dust

①: Inspect every 100K and clean if necessary.

②: Inspect after first 600K and then every 300K thereafter and clean if necessary.

2.1.10 PAPER EXIT

Part	By	At	Comments
Cooling Roller	S	②	Wipe clean, dry cloth
Cooling Belt	S	②	Wipe clean, dry cloth
Exit Relay Drive Roller	S,T	①	Wipe clean, dry cloth
Exit Relay Idle Roller	S,T	①	Wipe clean, dry cloth
Exit Drive Roller	S,T	①	Wipe clean, dry cloth
Exit Idle Roller	S,T	①	Wipe clean, dry cloth
Inverter Entrance Drive Roller	S	②	Wipe clean, dry cloth
Inverter Entrance Idle Roller	S	②	Wipe clean, dry cloth
Inverter Exit Drive Roller	S	②	Wipe clean, dry cloth
Inverter Exit Idle Roller	S	②	Wipe clean, dry cloth
Exit/Invert Drive Roller	S,T	①	Wipe clean, dry cloth
Exit/Invert Idle Roller	S,T	①	Wipe clean, dry cloth
Exit Junction Gate Sensor	S,T	①	Blower brush for paper dust
Exit Sensor	S,T	①	Blower brush for paper dust
Exit/Invert Sensor	S	②	Blower brush for paper dust
Purge Relay Sensor	S,T	①	Blower brush for paper dust
Exit Anti-Static Brush	S,T	①	Wipe clean, dry cloth
Invert/Exit Anti-static Brush	S	②	Wipe clean, dry cloth

①: Inspect every **100K** and clean if necessary.

②: Inspect after first **600K** and then every **300K** thereafter and clean if necessary.

2.1.11 DUPLEX

Part	By	At	Comments
Duplex Switchback Drive Roller	S	②	Wipe clean, dry cloth
Duplex Switchback Idle Roller	S	②	Wipe clean, dry cloth
Duplex Invert Sensor	S	②	Blower brush for paper dust
Purged Paper Sensor	S,T	①	Blower brush for paper dust
Duplex Transport Drive Rollers	S	②	Wipe clean, dry cloth
Duplex Transport Idle Rollers	S,T	①	Wipe clean, dry cloth
Duplex Transport Sensors	S,T	①	Blower brush for paper dust

①: Inspect every **100K** and clean if necessary.

②: Inspect after first **600K** and then every **300K** thereafter and clean if necessary.

2.1.12 ADF

Key: C: Clean at PM, or as necessary, I: Inspect, L: Lubricate, R: Replace,

Part	By	PM	120K	Action
Feed Operation*[1]	S	I		See Note 1
Covers	S	I/C		Alcohol or water dampened cloth.
Safety*[2]	S	I		See Note 2
Feed Belt	S	C	R	Alcohol or water dampened cloth.
Pick-up Roller	S	C	R	
Separation Roller	S	C	R	
CIS glass	S,U	I/C		Glass cleaner
Sensors*[3]	S	C		Blower brush
Platen	S,U	C		Alcohol or water dampened cloth.
Feed Drive Gears	S	L		EM-50L Grease

Part	By	PM	120K	Action
Feed Rollers*4	S	C		Alcohol or water dampened cloth.
Idle Rollers	S	C		
White Roller	S	C		
White Plate	S	C		

*1	Check basic feed operation for skew, incorrect image registration.
*2	Check for spurious noise during ADF operation.
*3	All sensors in the paper patch: original width sensors, double-feed sensors, exit sensors, etc.
*4	All rollers in the feed unit and original feed path.

2.1.13 PM TABLES FOR PERIPHERALS

Column	Meaning	
Part	Name of the component, unit	
By	Person Responsible	
	S	Service technician (CE)
	U	User
	T	TCRU trained user
***K**	Interval for checking, cleaning, replacement	
	Example: 300K where K = 1000, or 300,000 printed sheets.	
	I	Inspect
	C	Clean at PM or as necessary
	L	Lubricate
	R	Replace after total count exceeded
Note	What to use, etc. Materials required for cleaning, lubrication, etc.	

Decurl Unit DU5030

Part	500K	Note
Transport guide plate	I/C	Clean with damp (alcohol or water) cloth
Decurl rollers (drive, idle roller	I/C	
Transport rollers (drive, idle roller)	I/C	
Purge tray paper sensors (x3)	I/C	

Multi Bypass Tray BY5010

The PM interval is for the number of sheets that have been fed.

Part	By	1000K	Note
Transport guide plate			
Grip rollers (drive, idle rollers)			
Pick-up roller*1		I/R	
Paper feed roller*1		I/R	
Separation roller*1		I/R	

- At 1000K, display the PM Counts for the pick-up, feed, and separation rollers.
- Replace if "Target" has been exceeded.

*1	These rollers can be replaced by a TCRU trained user for each tray.

LCIT RT5070/RT5070

Part	By	100K	1000K	Note
Transport guide plate	S	I/C		Damp cloth
Grip rollers (drive, idle rollers)	S	I/C		
Transport rollers	S	I/C		
Pick-up rollers (4th, 5th, 6th tray)*1	S,T	I/C	R	
Paper feed roller (4th, 5th, 6th tray) *1	S,T	I/C	R	
Separation rollers (4th, 5th, 6th tray) *1	S,T	I/C	R	
Sensors (Feed, Transport, Exit)	S	I/C		Blower brush

*1 Replace these rollers as soon as target service life has been exceeded. May require replacement earlier if double-feeds and jams are occurring frequently.

LCIT RT5070/RT5080

Part	By	100K	1000K	Note
Transport guide plate	S	I/C		Damp cloth
Grip rollers (drive, idle rollers)	S	I/C		
Transport rollers	S	I/C		
Pick-up rollers (4th, 5th, 6th tray)*1	S,T	I/C	R	
Paper feed roller (4th, 5th, 6th tray) *1	S,T	I/C	R	
Separation rollers (4th, 5th, 6th tray) *1	S,T	I/C	R	
Sensors (Feed, Transport, Exit)	S	I/C		Blower brush

*1 Replace these rollers as soon as target service life has been exceeded. May require replacement earlier if double-feeds and jams are occurring frequently.

Cover Interposer Tray CI5030

The PM interval is for the number of sheets that have been fed.

Part	By	PM	60K	Note
Drive, Idle rollers	S	I/C		Damp cloth
Feed belt	S	I/C	R	
Separation roller	S	I/C	R	
Pick-up roller	S	I/C	R	
Sensors	S	I/C		Blower brush.
Transport Guide Plate	S	I/C		Damp cloth

Booklet Finisher SR5060/Finisher SR5060

Part	By	At	Action	Note
Paper Transport	S	500K	I/C	Paper wrinkled, creased, torn?
Operation	S	500K	I/C	Operation correct?
Display Check	S	500K	I/C	Correct messages displayed when door opened, etc.?
Covers	S	500K	I/C	Damp cloth, check for damage
Safety	S	500K	I/C	Spurious noise during operation?
Other	S	500K	I/C	Used within specifications?
Drive Rollers	S	500K	I/C	Alcohol damp cloth
Idle Rollers	S	500K	I/C	
Anti-static Brushes	S	500K	I/C	

Brush Roller*1	S	2500K	R*1	
Bearings	S	500K	I/C/L	Silicone oil if noisy
Sensors	S	500K	I/C	Blower brush
Jog Fences	S	500K	I/C	Make sure screws are tight
Corner Stapler	S	5000K	R*1	Empty hopper
Punch Unit*3	S	2000K	R*1	
Trimmings Hopper	S	500K	I/C	Empty hopper
Positioning Roller*4	S	2500K	R*1	
Shift Sponge Roller	S	3000K	R*1	
Booklet Stapler	S	20000K	R*1	
Shift Tray Worm Gear	S	500K	I/C	
Booklet Output Tray Belt	S	500K	I/C	Alcohol damp cloth

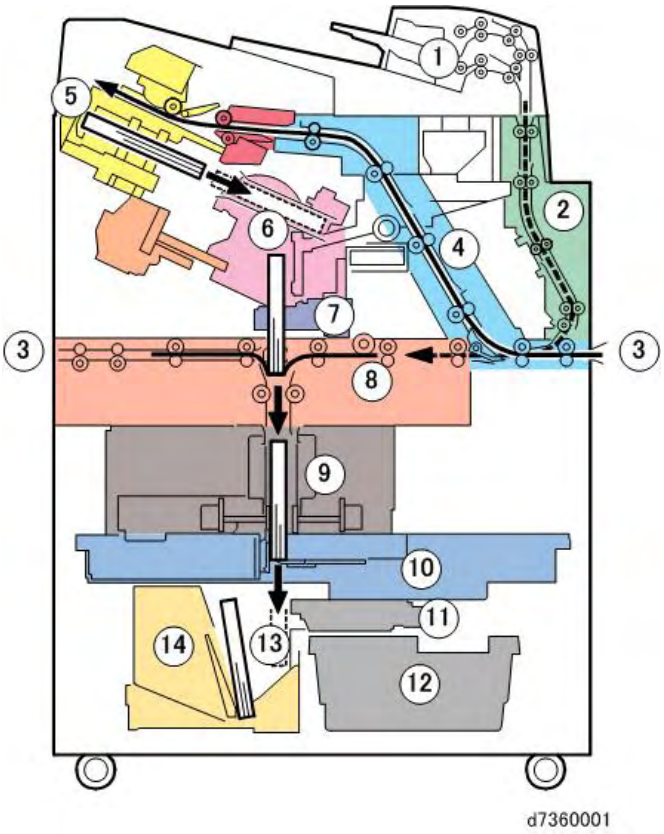
*1	Separate counts are logged for the operation of these rollers because they will not be the same as the sheet counts for the main machine (the finisher will not be used for every job so the counts will be different). Be sure to replace these items after their individual counts have been exceeded.
*2	Estimated service life: 1250K
*3	Estimated service life: 1000K
*4	Estimated service life: 1250K

Multi-Folding Unit FD5020

Part	By	At	Action	Note
Paper Transport	S	PM	I	Paper wrinkled, creased, torn?
Operation	S	PM	I	Operation correct?
Display Check	S	PM	I	Correct messages displayed for mode, door opened, etc.?
Covers	S	PM	I/C	Damp cloth, check for damage
Safety	S	PM	I	Spurious noise during operation?
Other	S	PM	I	Used within specifications?
Drive Rollers	S	PM	I/C	Alcohol dampened cloth
Idle Rollers	S	PM	I/C	
Anti-static Brush	S	PM	I/C	
Bearings	S	PM	I/C/L	Silicone oil if noisy
Sensors	S	PM	I/C	Blower brush
Fold Rollers (1st, 2nd, 3rd)	S	PM	I/C	Alcohol dampened cloth
Crease Rollers (drive, idle roller)	S	PM	I/C	
Fold Roller Drive Gears	S	PM	I/C/L	If lubrication insufficient, apply G501
Horizontal Transport Motor	S	60000K	R*[1]	See notes below
Horizontal Exit Motor	S	60000K	R*[1]	
Solenoid	S	20000K	R*[2]	

Part	By	At	Action	Note
*1 Replace after 51000K				
*2 Replace after 20000K				

Perfect Binder GB5010



No.	Area
1	Cover Interposer Tray for Perfect Binder Type S1
2	Vertical Path (Covers from Inserter)
3	Horizontal Paper Path
4	Signature Path
5	Stacking Tray
6	Main Grip Unit
7	Gluing Unit

8	Cover Registration Unit
9	Signature Rotation Unit
10	Trimming Unit
11	Trimming Buffer Unit
12	Trimmings Box
13	Book Buffer
14	Book Output

Part	By	At	Action	Note
Paper Transport	S	500K	I	Paper wrinkled, creased, torn?
Operation	S	500K	I	Operation correct?
Display Check	S	500K	I	Correct messages displayed for mode, door opened, etc.?
Covers	S	500K	I/C	Damp cloth, check for damage
Safety	S	500K	I	Spurious noise during operation?
Other	S	500K	I	Used within specifications?
Drive Rollers	S	500K	I/C	Alcohol damp cloth
Idle Rollers	S	500K	I/C	
Anti-static Brush	S	500K	I/C	
Bearings	S	500K	I/C/L	Silicone oil
Sensors	S	500K	I/C	Blower Brush
Blade	S	4000K	R*[1]	See Note 1
Trimming Buffer Unit	S	4000K	R*[2]	See Note 2

Part	By	At	Action	Note
Blade Cradle	S	1000K	R*1	See Note 1
Cover Unit Switchback Roller Torque Limiter	S	3000K	R	See Note 3
Signature Thickness Sensor	S	14300K	R	See Note 3
Gluing Unit	S	2000 hr.	R	2000 hours
Book Rotation Unit Diode	S	14300K	R	See Note 3
Trimmings Buffer Motor	S	14300K	R	See Note 3
Main Grip Unit Gears	S	14300K	R	See Note 3
Torque Limiter (Signature Rotation Unit for Trimming)	S	14300K	R	See Note 3
Spine Fold Unit Harness (Left)	S	14300K	R	See Note 3
Spine Fold Unit Harness (Right)	S	14300K	R	See Note 3
Pickup Roller	S	286000K	R	See Note 3
Separation Roller	S	286000K	R	See Note 3
Feed Roller	S	286000K	R	See Note 3
Magnetic Clutch	S	286000K	R	See Note 3
Separation Roller Torque Limiter	S	286000K	R	See Note 3

*1 A message on the operation panel alerts the operator when it is time to replace this item.

*2 This item should always be replaced with the blade.

*3 Separate counts are logged for the operation of these items because they will not be the same as the sheet counts for the main machine (the finisher will not be used for every job so the counts will be different). Be sure to replace these items after their individual counts have been exceeded.

Ring Binder RB5020

Part	By	At	Action	Note
Paper Transport	S	PM	I	Paper wrinkled, creased, torn?
Operation	S	PM	I	Operation correct?
Display Check	S	PM	I	Correct messages displayed for mode, door opened, etc.?
Covers	S	PM	I/C	Damp cloth, check for damage
Safety	S	PM	I	Spurious noise during operation?
Other	S	PM	I	Used within specifications?
Drive Rollers	S	PM	I/C	Dry cloth
Idle Rollers	S	PM	I/C	
Anti-static Brush	S	PM	I/C	
Paddle Roller	S	PM	I/C	
Bearings	S	PM	I/C/L	Launa oil
Sensors	S	PM	I/C	Blower brush
Punch	S	PM	I/C/R	Replace at 1000K
Punch-outs	U	PM	C	Empty hopper

Trimmer Unit TR5040

Part	PM Visit	
Rollers (drive, idle rollers)	IC	Water, clean cloth
Belts	IC	
Discharge brush	IC	Cloth, blower brush
Roller shafts		Lubricate with silicone oil if noisy
Sensors	IC	Blower brush
Paper trimmings hopper	IC	Empty, make sure the user knows how to empty the hopper
Trimming Blade	R	Replace the blade after 400K. SP7989 (Trim Count) displays the total count.

APPENDICES:
SP MODE TABLES

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
338	1/7/2015	SP2-920-001 deleted
569	12/24/2013	SP5811
826 ~ 843	5/13/2014	Input check table SP5803-001 ~ SP5803-173

3. APPENDICES: SP MODE TABLES

3.1 MAIN SP TABLES-1

3.1.1 SP1-XXX (FEED)

1001	**[Lead Edge Reg]** Adjusts the leading edge registration by changing the registration motor operation timing for each mode. Increasing a value: an image is moved to the trailing edge of paper.(It makes registration start timing earlier) Decreasing a value: an image is moved to the leading edge of paper.(It makes registration start timing later)		
1-001-001	Thick 0	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-002	Thick 1	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-003	Thick 2	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-004	Thick 3	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-005	Thick 4	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-006	Thick 5	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-007	Thick 6	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-008	Thick 7	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-001-009	Thick 8	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1002	**[Main Scan Regist (Shift: Off)]** Adjusts writing start position when disable setting of main scan registration is set to 1:On. Increasing a value: an image shifts to the right direction of paper. (Left trim area gets larger) Decreasing a value: an image shifts to the left direction of paper. (Left trim area gets smaller)		
1-002-001	Tray1	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]

1-002-002	Tray2	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-003	Tray3	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-004	Dupx Tray	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-005	Tray4	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-006	Tray5	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-007	Tray6	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
1-002-008	Tray7	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]

1003	**[Side-to-Side Reg]** Adjusts the side-to-side registration by changing the laser main scan start position for each mode and tray. Increasing a value: an image is moved to the rear edge of paper. Decreasing a value: an image is moved to the front edge of paper.		
1-003-001	Tray1	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-002	Tray2	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-003	Tray3	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-004	Dupx Tray	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-005	Tray4	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-006	Tray5	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-007	Tray6	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-003-008	Tray7	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1004	**[Reg Buckle Adj]** Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing. (A "+" setting causes more buckling.)		
1-004-001	Tray1 for Tray3	E	[-5 to 5 / **2** / 1mm/step]
1-004-002	Dupx Tray	E	[-5 to 5 / **2** / 1mm/step]
1-004-003	LCT & Bypass Tray	E	[-5 to 5 / **2** / 1mm/step]

1005	**[Reg Buckle Adj(Thick)]** Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing for thick paper. (A "+" setting causes more buckling.)		
1-005-001	Thick 5	E	[-5 to 5 / **0**/ 1mm/step]
1-005-002	Thick 6	E	[-5 to 5 / **0** / 1mm/step]
1-005-003	Thick 7	E	[-5 to 5 / **0** / 1mm/step]
1-005-004	Thick 8	E	[-5 to 5 / **0** / 1mm/step]

1006	**[Fine Adj Trans Tmg Roll Spd]** Fine-tunes the line speed of transfer timing motor. Adjusts sub-scan magnification and magnification error deviation to improve image position accuracy and to prevent the shock jitter.		
1-006-001	Plain:Weight 0	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-002	Plain:Weight 1	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-003	Plain:Weight 2	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-004	Plain:Weight 3	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-005	Plain:Weight 4	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-006	Plain:Weight 5	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-007	Plain:Weight 6	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-008	Plain:Weight 7	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-009	Plain:Weight 8	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-010	Matte:Weight 0	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-011	Matte:Weight 1	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-012	Matte:Weight 2	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-013	Matte:Weight 3	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-014	Matte:Weight 4	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]

1-006-015	Matte:Weight 5	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-016	Matte:Weight 6	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-017	Matte:Weight 7	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-018	Matte:Weight 8	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-019	Glossy:Weight 0	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-020	Glossy:Weight 1	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-021	Glossy:Weight 2	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-022	Glossy:Weight 3	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step]
1-006-023	Glossy:Weight 4	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-024	Glossy:Weight 5	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-025	Glossy:Weight 6	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-026	Glossy:Weight 7	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-027	Glossy:Weight 8	E*	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-028	Envelope:Weight 5	E	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-029	Envelope:Weight 6	E	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-030	Envelope:Weight 7	E	[-3.0 to 3.0 / **-0.3** / 0.1%/step]
1-006-031	OHP	E	[-3.0 to 3.0 / **-0.3** / 0.1%/step]

1007	**[Fine Adj Invert Ent Roll Spd]** Fine-tunes the line speed of invert entrance roller to prevent luster lines, distortion of the images, and rubbing images.		
1-007-001	Plain:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-002	Plain:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-003	Plain:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-004	Plain:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-005	Plain:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-006	Plain:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]

1-007-007	Plain:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-008	Plain:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-009	Plain:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-010	Matte:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-011	Matte:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-012	Matte:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-013	Matte:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-014	Matte:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-015	Matte:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-007-016	Matte:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-017	Matte:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-018	Matte:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-019	Glossy:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-020	Glossy:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-021	Glossy:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-022	Glossy:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-023	Glossy:Weight 4	E	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-007-024	Glossy:Weight 5	E	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-007-025	Glossy:Weight 6	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-026	Glossy:Weight 7	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-007-027	Glossy:Weight 8	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]

1008	**[Fine Adj Exit/Invert Roll Spd]** Fine-tunes the line speed of exit / invert roller to prevent luster lines, distortion of the images, and rubbing images.		
1-008-001	Plain:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-002	Plain:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-003	Plain:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-004	Plain:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-005	Plain:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-006	Plain:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-008-007	Plain:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-008	Plain:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-009	Plain:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-010	Matte:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-011	Matte:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-012	Matte:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-013	Matte:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-014	Matte:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-015	Matte:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-008-016	Matte:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-017	Matte:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-018	Matte:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-019	Glossy:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-020	Glossy:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-021	Glossy:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-022	Glossy:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-008-023	Glossy:Weight 4	E	[-3.0 to 3.0 / **1.2** / 0.1%/step]

1-008-024	Glossy:Weight 5	E	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-008-025	Glossy:Weight 6	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-026	Glossy:Weight 7	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-008-027	Glossy:Weight 8	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]

1009	**[Fine Adj Duplx/Invert Roll Spd]** Fine-tunes the line speed of the duplex / invert roller to prevent luster lines, distortion of the images, and rubbing images.		
1-009-001	Plain:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-002	Plain:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-003	Plain:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-004	Plain:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-005	Plain:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-006	Plain:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-009-007	Plain:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-008	Plain:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-009	Plain:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-010	Matte:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-011	Matte:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-012	Matte:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-013	Matte:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-014	Matte:Weight 4	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-015	Matte:Weight 5	E*	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-009-016	Matte:Weight 6	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-017	Matte:Weight 7	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-018	Matte:Weight 8	E*	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-019	Glossy:Weight 0	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]

1-009-020	Glossy:Weight 1	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-021	Glossy:Weight 2	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-022	Glossy:Weight 3	E*	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-023	Glossy:Weight 4	E	[-3.0 to 3.0 / **1.2** / 0.1%/step]
1-009-024	Glossy:Weight 5	E	[-3.0 to 3.0 / **0.9** / 0.1%/step]
1-009-025	Glossy:Weight 6	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-026	Glossy:Weight 7	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]
1-009-027	Glossy:Weight 8	E	[-3.0 to 3.0 / **0.6** / 0.1%/step]

1010	**[Adj Exit Mtr Speed]** Adjusts the line speed of the exit motor for each model to prevent luster lines, distortion of the images, and rubbing images.		
1-010-001	Type-a	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-010-002	Type-b	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-010-003	Type-c	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-010-004	Type-x	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1011	**[Fine Adj Exit Motor Speed]** Fine tunes the line speed of the exit motor to prevent luster lines, distortion of the images, and rubbing images.		
1-011-001	Plain:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-002	Plain:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-003	Plain:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-004	Plain:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-005	Plain:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-006	Plain:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-007	Plain:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-008	Plain:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1-011-009	Plain:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-010	Matte:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-011	Matte:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-012	Matte:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-013	Matte:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-014	Matte:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-015	Matte:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-016	Matte:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-017	Matte:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-018	Matte:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-019	Glossy:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-020	Glossy:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-021	Glossy:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-022	Glossy:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-023	Glossy:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-024	Glossy:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-025	Glossy:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-026	Glossy:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-027	Glossy:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-028	Envelope:Weight 5	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-029	Envelope:Weight 6	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-030	Envelope:Weight 7	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-011-031	OHP	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1012	**[Motor Adj:95ppm]** -		
1-012-001	Drum Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of drum motor for type a.
1-012-002	Dev Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of development motor for type a.
1-012-003	Drum CL Mtr	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of drum cleaning motor for type a.
1-012-004	ITB Motor	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of image transfer motor for type a.
1-012-005	PTR Motor	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of paper transfer motor for type a.
1-012-006	Fusing Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of fusing motor for type a.
1-012-007	TH Paper Feed Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of TH paper feed motor for type a.

1013	**[Motor Adj:110ppm]** -		
1-013-001	Drum Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of drum motor for type b.
1-013-002	Dev Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of development motor for type b.

1-013-003	Drum CL Mtr	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of drum cleaning motor for type b.
1-013-004	ITB Motor	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of image transfer motor for type b.
1-013-005	PTR Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of paper transfer motor for type b.
1-013-006	Fusing Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of fusing motor for type b.
1-013-007	TH Paper Feed Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of TH paper feed motor for type b.

1014	**[Motor Adj:135ppm]** -		
1-014-001	Drum Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of drum motor for type c.
1-014-002	Dev Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of development motor for type c.
1-014-003	Drum CL Mtr	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of drum cleaning motor for type c.
1-014-004	ITB Motor	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of image transfer motor for type c.
1-014-005	PTR Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of paper transfer motor for type c.

1-014-006	Fusing Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of fusing motor for type c.
1-014-007	TH Paper Feed Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of TH paper feed motor for type c.

1015	**[Motor Adj:150ppm]** -		
1-015-001	Drum Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of drum motor for type x.
1-015-002	Dev Motor	E*	[-3.0 to 3.0 / **-0.2** / 0.1%/step] Adjusts the line speed of development motor for type x.
1-015-003	Drum CL Mtr	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of drum cleaning motor for type x.
1-015-004	ITB Motor	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step] Adjusts the line speed of image transfer motor for type x.
1-015-005	PTR Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of paper transfer motor for type x.
1-015-006	Fusing Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of fusing motor for type x.
1-015-007	TH Paper Feed Motor	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step] Adjusts the line speed of TH paper feed motor for type x.

1021	**[Skew Detect]** Switches skew detection on / off for each tray.		
1-021-001	Tray 1	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-002	Tray 2	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-003	Tray 3	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-004	Dupx Tray	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-005	Tray 5	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-006	Tray 6	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-007	Tray 7	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On
1-021-008	Tray 8	E	[0 or 1 / **1** / 1/step] 0: Off, 1:On

1022	**[Skew Correction Level Setting]** Adjusts threshold of skew detection.		
1-022-001	Tray1	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-002	Tray2	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-003	Tray3	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-004	Dupx Tray	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-005	Tray4	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-006	Tray5	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-007	Tray6	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]
1-022-008	Tray7	E	[1.60 to 7.50 / **3.0** / 0.1mm/step]

1031	**[Rotary Gate Adjustment]** For adjusting home position gap of rotary gate.		
1-031-001	Home Position	E*	[-10 to 10 / **0** / 1pulse/step]

1032	**[Rotary Gate HP Adjustment]** Adjusts the distance between gate and roller nip of rotary. Increasing a value: distance gets farther and for thick paper. Decreasing a value: distance gets closer and for thin paper.		
1-032-001	Thick 0	E	[-8 to 8 / **0** / 1pulse/step]
1-032-002	Thick 1	E	[-8 to 8 / **0** / 1pulse/step]
1-032-003	Thick 2	E	[-8 to 8 / **0** / 1pulse/step]
1-032-004	Thick 3	E	[-8 to 8 / **0** / 1pulse/step]
1-032-005	Thick 4	E	[-8 to 8 / **0** / 1pulse/step]
1-032-006	Thick 5	E	[-8 to 8 / **0** / 1pulse/step]
1-032-007	Thick 6	E	[-8 to 8 / **0** / 1pulse/step]
1-032-008	Thick 7	E	[-8 to 8 / **0** / 1pulse/step]
1-032-009	Thick 8	E	[-8 to 8 / **0** / 1pulse/step]

1101	**[Reload Permit Setting]** Specifies the settings of the reload permit.		
1-101-001	Pre-rotation Start Temp.	E*	[0 to 200 / **0** / 1deg/step] Pre-rotation start temperature for fusing out motor.
1-101-002	Reload Target Temp.:Center	E*	[0 to 200 / **175** / 1deg/step] Reload permit target temperature: Center
1-101-003	Reload Target Temp.:Press	E*	[0 to 200 / **90** / 1deg/step] Reload permit target temperature: Pressure

1-101-004	Temp.:Delta:Cold:Center	E*	[0 to 200 / **5** / 1deg/step] Reload Permit Temp Delta: Cold: Center
1-101-005	Temp.:Delta:Cold:End	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Cold:End
1-101-006	Temp.:Delta:Cold:Press:Center	E*	[0 to 200 / **20** / 1deg/step] Difference from reload permit target temperature:Cold:Press:Center
1-101-007	Rotation Time:Cold	E*	[0 to 500 / **280** / 1sec/step] Reload Rotation Time for cold
1-101-008	Temp.:Delta:Warm:Center	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Warm:Center
1-101-009	Temp.:Delta:Warm:End	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Warm:End
1-101-010	Temp.:Delta:Warm:Press:Center	E*	[0 to 200 / **20** / 1deg/step] Difference from reload permit target temperature:Warm:Press:Center
1-101-011	Rotation Time:Warm	E*	[0 to 100 / **15** / 1sec/step] Reload rotation time for warm.
1-101-012	Temp.:Delta:Hot:Center	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Warm:Center
1-101-013	Temp.:Delta:Hot:End	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Warm:End
1-101-014	Temp.:Delta:Hot:Press:Center	E*	[0 to 200 / **20** / 1deg/step] Difference from reload permit target temperature:Warm:Press:Center
1-101-015	Rotation Time:Hot	E*	[0 to 100 / **0** / 1sec/step] Reload rotation time for warm.

1-101-020	Roll Core Temp Judgment	E*	[0 or 1 / **1** / 1/step] Sets whether to include roll core temperature detection in reload permission.
1-101-021	Roll Core Temp	E*	[0 to 120 / **30** / 1deg/step] Judgment temperature of roll core temperature detection.
1-101-022	Temp.:Delta:Cold:Full-Bd End	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature: Cold:End
1-101-023	Temp.:Delta:Warm:Full-Bd End	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Cold:End
1-101-024	Temp.:Delta:Hot:Full-BdEnd	E*	[0 to 200 / **5** / 1deg/step] Difference from reload permit target temperature:Cold:End

1102	**[Feed Permit Setting]** Specified the settings of the paper feeding timing.		
1-102-019	Feed Permit Time	E*	[0 to 500 / **90** / 1sec/step] Set time for starting operation before feeding through to feeding permission.
1-102-101	Temp.:Lower Delta:Heat:1	E*	[0 to 100 / **5** / 1deg/step] Pattern 1 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-102	Temp Diff Heating Roller: Upper 1	E*	[0 to 100 / **60** / 1deg/step] Pattern 1 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller.

1-102-103	Temp Diff Press Roller: Lower 1	E*	[0 to 100 / **15** / 1deg/step] Pattern 1 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-104	Temp Diff Press Roller: Upper 1	E*	[0 to 100 / **100** / 1deg/step] Pattern 1 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-105	Rotation Time Before Judgment:1	E*	[0 to 100 / **0** / 1sec/step] Waiting time for the result of feeding permission pattern 1
1-102-106	Temp Diff Heating Roller: Lower 2	E*	[0 to 100 / **10** / 1deg/step] Pattern 2 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-107	Temp Diff Heating Roller: Upper 2	E*	[0 to 100 / **60** / 1deg/step] Pattern 2 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller
1-102-108	Temp Diff Press Roller: Lower 2	E*	[0 to 100 / **10** / 1deg/step] Pattern 2 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-109	Temp Diff Press Roller: Upper 2	E*	[0 to 100 / **30** / 1deg/step] Pattern 2 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.

1-102-110	Rotation Time Before Judgment:2	E*	[0 to 100 / **3** / 1sec/step] Waiting time for the result of feeding permission pattern 2
1-102-111	Temp Diff Heating Roller: Lower 3	E*	[0 to 100 / **5** / 1deg/step] Pattern 3 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-112	Temp Diff Heating Roller: Upper 3	E*	[0 to 100 / **60** / 1deg/step] Pattern 3 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-113	Temp Diff Press Roller: Lower 3	E*	[0 to 100 / **5** / 1deg/step] Pattern 3 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-114	Temp Diff Press Roller: Upper 3	E*	[0 to 100 / **30** / 1deg/step] Pattern 3 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-115	Rotation Time Before Judgment:3	E*	[0 to 100 / **4** / 1sec/step] Waiting time for the result of feeding permission pattern 3.
1-102-116	Temp Diff Heating Roller: Lower 4	E*	[0 to 100 / **5** / 1deg/step] Pattern 4 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.

1-102-117	Temp Diff Heating Roller: Upper 4	E*	[0 to 100 / **60** / 1deg/step] Pattern 4 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-118	Temp Diff Press Roller: Lower 4	E*	[0 to 100 / **20** / 1deg/step] Pattern 4 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-119	Temp Diff Press Roller: Upper 4	E*	[0 to 100 / **100** / 1deg/step] Pattern 4 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-120	Rotation Time Before Judgment:4	E*	[0 to 100 / **0** / 1sec/step] Waiting time for the result of feeding permission pattern 4
1-102-121	Temp Diff Heating Roller: Lower 5	E*	[0 to 100 / **15** / 1deg/step] Pattern 5 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-122	Temp Diff Heating Roller: Upper 5	E*	[0 to 100 / **60** / 1deg/step] Pattern 5 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-123	Temp Diff Press Roller: Lower 5	E*	[0 to 100 / **20** / 1deg/step] Pattern 5 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.

1-102-124	Temp Diff Press Roller: Upper 5	E*	[0 to 100 / **100** / 1deg/step] Pattern 5 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-125	Rotation Time Before Judgment:5	E*	[0 to 100 / **1** / 1sec/step] Waiting time for the result of feeding permission pattern 5
1-102-126	Temp Diff Heating Roller: Lower 6	E*	[0 to 100 / **10** / 1deg/step] Pattern 6 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-127	Temp Diff Heating Roller: Upper 6	E*	[0 to 100 / **10** / 1deg/step] Pattern 6 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the heating roller.
1-102-128	Temp Diff Press Roller: Lower 6	E*	[0 to 100 / **10** / 1deg/step] Pattern 6 settings for feeding permission of lower limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-129	Temp Diff Press Roller: Upper 6	E*	[0 to 100 / **100** / 1deg/step] Pattern 6 settings for feeding permission of upper limit difference value from target temperature of Feed Permit Temp on the pressure roller.
1-102-130	Rotation Time Before Judgment:6	E*	[0 to 100 / **3** / 1sec/step] Waiting time for the result of feeding permission pattern 6.

1-102-150	Normal:FullSize:Category1	E*	[0 to 200 / **100** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 262mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-151	Normal:FullSize:Category2	E*	[0 to 200 / **100** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 262mm to 92mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-152	Normal:FullSize:Category3	E*	[0 to 200 / **100** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 292mm to 311mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-153	Normal:FullSize:Category4	E*	[0 to 200 / **100** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 211mm to324mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-154	Normal:FullSize:Category5	E*	[0 to 200 / **100** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 324mm or more: lower limit difference value from feed permit temperature and target temperature.
1-102-155	Normal:FullSize:Category1	E*	[0 to 200 / **30** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 262mm or less: upper limit difference value from feed permit temperature and target temperature.

1-102-156	Normal:FullSize:Category2	E*	[0 to 200 / **30** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 262mm to 292mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-157	Normal:FullSize:Category3	E*	[0 to 200 / **30** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 292mm to 311mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-158	Normal:FullSize:Category4	E*	[0 to 200 / **30** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 211mm to 324mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-159	Normal:FullSize:Category5	E*	[0 to 200 / **30** / 1deg/step] Fusing priority mode: Edge of Fusing with paper width of 324mm or more: upper limit difference value from feed permit temperature and target temperature.
1-102-160	Output Priority:FullSize:Category1	E*	[0 to 200 / **100** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 262mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-161	Output Priority:FullSize:Category2	E*	[0 to 200 / **100** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 262mm to 292mm or less: lower limit difference value from feed permit temperature and target temperature.

1-102-162	Output Priority:FullSize:Category3	E*	[0 to 200 / **100** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 262mm to 311mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-163	Output Priority:FullSize:Category4	E*	[0 to 200 / **100** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 211mm to 324mm or less: lower limit difference value from feed permit temperature and target temperature.
1-102-164	Output Priority:FullSize:Category5	E*	[0 to 200 / **100** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 324mm or more: lower limit difference value from feed permit temperature and target temperature.
1-102-165	Output Priority:FullSize:Category1	E*	[0 to 200 / **30** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 262mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-166	Output Priority:FullSize:Category2	E*	[0 to 200 / **30** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 262mm to 292mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-167	Output Priority:FullSize:Category3	E*	[0 to 200 / **30** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 292mm to 311mm or less: upper limit difference value from feed permit temperature and target temperature.

1-102-168	Output Priority:FullSize:Category4	E*	[0 to 200 / **30** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 211mm to 324mm or less: upper limit difference value from feed permit temperature and target temperature.
1-102-169	Output Priority:FullSize:Category5	E*	[0 to 200 / **30** / 1deg/step] Output priority mode: Edge of Fusing with paper width of 324mm or more: upper limit difference value from feed permit temperature and target temperature.
1-102-201	Normal: Uncoated Thick 0	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 0.
1-102-202	Normal: Uncoated Thick 1	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Norm: Uncoated: Thick 1.
1-102-203	Normal: Uncoated Thick 2	E*	[1 to 6 / **1** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 2.
1-102-204	Normal: Uncoated Thick 3	E*	[1 to 6 / **1** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 3.
1-102-205	Normal: Uncoated Thick 4	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 4.
1-102-206	Normal: Uncoated Thick 5	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 5.
1-102-207	Normal: Uncoated Thick 6	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 6.

1-102-208	Normal: Uncoated Thick 7	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 7.
1-102-209	Normal: Uncoated Thick 8	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Uncoated: Thick 8.
1-102-210	Normal: Matte Thick 0	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 0
1-102-211	Normal: Matte Thick 1	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 1
1-102-212	Normal: Matte Thick 2	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 2
1-102-213	Normal: Matte Thick 3	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 3
1-102-214	Normal: Matte Thick 4	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 4
1-102-215	Normal: Matte Thick 5	E*	[1 to 6 / **3**/ 1/step] Selects Feed Permit Setting for Normal: Matte Thick 5
1-102-216	Normal: Matte Thick 6	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 6
1-102-217	Normal: Matte Thick 7	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 7
1-102-218	Normal: Matte Thick 8	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Matte Thick 8

1-102-219	Normal: Glossy Thick 0	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 0
1-102-220	Normal: Glossy Thick 1	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 1
1-102-221	Normal: Glossy Thick 2	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 2
1-102-222	Normal: Glossy Thick 3	E*	[1 to 6 / **2** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 3
1-102-223	Normal: Glossy Thick 4	E*	[1 to 6 **/ 2** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 4
1-102-224	Normal: Glossy Thick 5	E*	[1 to 6 / **3**/ 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 5
1-102-225	Normal: Glossy Thick 6	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 6
1-102-226	Normal: Glossy Thick 7	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 7
1-102-227	Normal: Glossy Thick 8	E*	[1 to 6 / **3** / 1/step] Selects Feed Permit Setting for Normal: Glossy Thick 8
1-102-228	Output Priority: Uncoated Thick 0	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 0
1-102-229	Output Priority: Uncoated Thick 1	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 1

1-102-230	Output Priority: Uncoated Thick 2	E*	[1 to 6 / **4** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 2
1-102-231	Output Priority: Uncoated Thick 3	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 3
1-102-232	Output Priority: Uncoated Thick 4	E*	[1 to 6 / **5**/ 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 4
1-102-233	Output Priority: Uncoated Thick 5	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 5
1-102-234	Output Priority: Uncoated Thick 6	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 6
1-102-235	Output Priority: Uncoated Thick 7	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 7
1-102-236	Output Priority: Uncoated Thick 8	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Uncoated Thick 8
1-102-237	Output Priority: Matte Thick 0	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 0
1-102-238	Output Priority: Matte Thick 1	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 1
1-102-239	Output Priority: Matte Thick 2	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 2
1-102-240	Output Priority: Matte Thick 3	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 3

1-102-241	Output Priority: Matte Thick 4	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 4
1-102-242	Output Priority: Matte Thick 5	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 5
1-102-243	Output Priority: Matte Thick 6	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 6
1-102-244	Output Priority: Matte Thick 7	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 7
1-102-245	Output Priority: Matte Thick 8	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Matte Thick 8
1-102-246	Output Priority: Glossy Thick 0	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 0
1-102-247	Output Priority: Glossy Thick 1	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 1
1-102-248	Output Priority: Glossy Thick 2	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 2
1-102-249	Output Priority: Glossy Thick 3	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 3
1-102-250	Output Priority: Glossy Thick 4	E*	[1 to 6 / **5** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 4
1-102-251	Output Priority: Glossy Thick 5	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 5

1-102-252	Output Priority: Glossy Thick 6	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 6
1-102-253	Output Priority: Glossy Thick 7	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 7
1-102-254	Output Priority: Glossy Thick 8	E*	[1 to 6 / **6** / 1/step] Selects Feed Permit Setting for Output Priority: Glossy Thick 8

1106	**[Fusing Temp. Display]** -		
1-106-001	Heating Roller Center	E	[-50 to 300 / **0** / 1deg/step] Shows the temperature of the heating roller detected by the thermistor at the center of the heating roller.
1-106-002	Heating Roller Ends	E	[-50 to 300 / **0** / 1deg/step] Shows the temperature of the heating roller detected by the thermistors at the ends of the heating roller.
1-106-003	Heating Roller Full-Bd Ends	E	[-50 to 300 / **0** / 1deg/step] Displays full-Bd ends temperature of the heating roller.
1-106-004	Heating Roller Rear	E	[-50 to 300 / **0** / 1deg/step] Displays rear temperature of the heating roller.
1-106-005	Pressure Roller Center	E	[-50 to 300 / **0** / 1deg/step] Shows the temperature of the hot roller detected by the thermistors at the center of the pressure roller.
1-106-006	Pressure Roller Ends	E	[-50 to 300 / **0** / 1deg/step] Shows the temperature of the hot roller detected by the thermistors at the ends of the pressure roller.

1-106-007	Hot Roller	E	[-50 to 300 / **0** / 1deg/step] Displays the hot roller temperature.
1-106-008	Hot Roller Core	E	[-50 to 300 / **0** / 1deg/step] Displays core temperature of the hot roller.

1107	**[Standby Target Temp. Setting]** -		
1-107-001	Stanby:Center	E*	[0 to 200 / **160** / 1deg/step] Specifies the target temperature of the heating roller during standby condition.
1-107-002	Stanby:Press	E*	[0 to 200 / **90** / 1deg/step] Specifies the target temperature of the pressure roller during standby condition.
1-107-005	Low Power:Center	E*	[0 to 200 / **75** / 1deg/step] Specifies the target temperature of the heating roller for low power condition.
1-107-006	Low Power:Press	E*	[0 to 200 / **65** / 1deg/step] Specifies the target temperature of the pressure roller for low power: condition.
1-107-007	Print Ready:Center	E*	[0 to 200 / **175** / 1deg/step] Specifies the temperature of the heating roller for the print ready condition.
1-107-008	Print Ready:Press	E*	[0 to 200 / **90** / 1deg/step] Specifies the temperature of the pressure roller for the print ready condition.

1108	**[After Reload/Job Target Temp.]** -		
1-108-001	Center	E*	[0 to 200 / **175** / 1deg/step] Specifies the target temperature of heating roller after re-load or job.
1-108-002	Press	E*	[0 to 200 / **90** / 1deg/step] Specifies the target temperature of the pressure roller after re-load or job.

1111	**[Environment Correction:Fusing]** -		
1-111-001	Temp.: Threshold: Low	E*	[0 to 100 / **17** / 1deg/step] Specifies the threshold temperature for low temperature. If the fusing temperature is 17 degree or less, the machine executes the fusing mode for low temperature.
1-111-002	Temp.: Threshold: High	E*	[0 to 100 / **30** / 1deg/step] Specifies the threshold temperature for high temperature. If the fusing temperature is 30 degree or more, the machine executes the fusing mode for high temperature.
1-111-003	Low Temp. Correction	E*	[0 to 100 / **10** / 1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in low temperature condition, this temperature is added to the target temperature.

1-111-004	High Temp. Correction	E*	[0 to 100 / **5** / 1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in high temperature condition, this temperature is added to the target temperature.
1-111-005	Job Low Temp. Correction	E*	[0.0 to 100.0 / **10.0** / 0.1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in low temperature condition, this temperature is added to the target temperature.
1-111-006	Job High Temp. Correction	E*	[0.0 to 100.0 / **0.0** / 0.1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in high temperature condition, this temperature is added to the target temperature.
1-111-007	Job Low Temp. Correction:Sp.	E*	[0.0 to 100.0 / **10.0** / 0.1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in low temperature condition, this temperature is added to the target temperature.
1-111-008	Job High Temp. Correction:Sp.	E*	[0.0 to 100.0 / **0.0** / 0.1deg/step] Specifies the additional temperature for the target temperature. If the fusing temperature is in high temperature condition, this temperature is added to the target temperature.

1114	**[Heat Storage Status]** -		
1-114-001	Temp.:Threshold:Press	E*	[0 to 200 / **60** / 1deg/step] Specifies the threshold temperature of the pressure roller for the heat storage status.
1-114-002	Temp.:Threshold:Atmosphere	E*	[0 to 200 / **100** / 1deg/step] Specifies the threshold of fusing atmosphere temperature for judging Heat Storage Status.

1115	**[Target Temp. Correction]** -		
1-115-001	Temp.:Delta:Heat:End	E*	[-100 to 100 / **0**/ 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-002	Temp.:Delta:Heat:End:Stand-by	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-003	Temp.:Delta:Feed:CenterB	E*	[0 to 100 / **3** / 1deg/step] Target temperature difference value between heat center A and heat center B.
1-115-005	Temp.:Delta:Heat:End:Reload	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-006	Temp.:Delta:Heat:End:Prefeed	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the hot roller.

1-115-007	Temp.:Delta:Heat:FullSize:Reload	E*	[-100 to 100 / **-10** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the heating roller.
1-115-008	Temp.:Delta:Heat:FullSize:Prefeed	E*	[-100 to 100 / **-15** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the heating roller.
1-115-009	Temp.:Delta:Warm Up:CenterB	E*	[0 to 100 / **3** / 1deg/step] Target temperature difference value between heat center A and heat center B.
1-115-010	Temp.:Delta:Stanby:CenterB	E*	[0 to 100 / **3** / 1deg/step] Target temperature difference value between heat center A and heat center B.
1-115-011	Temp.:Delta:Heat:Full-Bd	E*	[-100 to 100 / **0**/ 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-012	Temp.:Delta:Heat:Full-Bd:Reload	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-013	Temp.:Delta:Heat:Full-Bd:Stand-by	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.
1-115-014	Temp.:Delta:Heat:Full-Bd:Prefeed	E*	[-100 to 100 / **5** / 1deg/step] Corrects the temperature based on the difference in the target temperatures of the end of the heating roller.

1-115-021	Temp.:Delta:Line Feed Corr:95ppm	E*	[-100 to 100 / **-10** / 1deg/step] Correction value of the target temperature by 95ppm.
1-115-022	Temp.:Delta:Line Feed Corr:110ppm	E*	[-100 to 100 / **-5** / 1deg/step] Correction value of the target temperature by 110ppm.
1-115-023	Temp.:Delta:Line Feed Corr:135ppm	E*	[-100 to 100 / **0** / 1deg/step] Correction value of the target temperature by 135ppm.
1-115-024	Temp.:Delta:Line Feed Corr:150ppm	E*	[-100 to 100 / **5** / 1deg/step] Correction value of the target temperature by 150ppm.

1117	**[Time Control]** - 		
1-117-003	Control TimeA1	E*	[0 to 1000 / **90** / 1sec/step] Modifies time to execute 1st stage of fusing temperature correction. (paper width more than 257mm)
1-117-004	Control TimeA2	E*	[0 to 1000 / **250** / 1sec/step] Modifies time to execute 2nd stage of fusing temperature correction. (paper width more than 257mm)
1-117-005	Temp:A:Center1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for center of the heating roller. (paper width more than 257mm)
1-117-006	Temp:A:End1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for end of the heating roller. (paper width more than 257mm)

1-117-007	Temp:A:Full-Bleed:1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for the heating roller. (paper width more than 257mm)
1-117-008	Temp:A:Center2	E*	[-20 to 20 / **0** / 1deg/step] 2nd stage of temperature correction for center of the heating roller. (paper width more than 257mm)
1-117-009	Temp:A:End2	E*	[-20 to 20 / **0** / 1deg/step] 2nd stage of temperature correction for end of the heating roller. (paper width more than 257mm)
1-117-010	Temp:A:Full-Bleed:2	E*	[-20 to 20 / **0** / 1deg/step] 2nd stage of temperature correction for the heating roller. (paper width more than 257mm)
1-117-011	Control TimeB1	E*	[0 to 1000 / **90** / 1sec/step] Modifies time to execute 1st stage of fusing temperature correction. (paper width more than 257mm and also eco print mode)
1-117-012	Control TimeB2	E*	[0 to 1000 / **250** / 1sec/step] Modifies time to execute 2nd stage of fusing temperature correction. (paper width more than 257mm and also eco print mode)
1-117-013	Temp:B:Center1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for center of the heating roller. (paper width more than 257mm and also eco print mode)

1-117-014	Temp:B:End1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for end of the heating roller. (paper width more than 257mm and also eco print mode)
1-117-015	Temp:B:Full-Bleed:1	E*	[-20 to 20 / **0** / 1deg/step] 1st stage of temperature correction for the heating roller. (paper width more than 257mm and also eco print mode)
1-117-016	Temp:B:Center2	E*	[-20 to 20 / **0** / 1deg/step] 2nd stage of temperature correction for center of the heating roller. (paper width more than 257mm and also eco print mode)
1-117-017	Temp:B:End2	E*	[-20 to 20 / **-5** / 1deg/step] 2nd stage of temperature correction for end of the heating roller. (paper width more than 257mm and also eco print mode)
1-117-018	Temp:B:Full-Bleed:2	E*	[-20 to 20 / **-5** / 1deg/step] 2nd stage of temperature correction for the heating roller. (paper width more than 257mm and also eco print mode)
1-117-019	Control TimeC1	E*	[0 to 1000 / **90** / 1sec/step] Modifies time to execute 1st stage of fusing temperature correction. (paper width less than 210mm and also print on envelope / postcard)
1-117-020	Control TimeC2	E*	[0 to 1000 / **250** / 1sec/step] Modifies time to execute 2nd stage of fusing temperature correction. (paper width less than 210mm and also print on envelope / postcard)

1-117-021	Temp:C:Center1	E*	[-20 to 20 / **-5** / 1deg/step] 1st stage of temperature correction for center of the heating roller. (paper width less than 210mm and also print on envelope / postcard)
1-117-022	Temp:C:End1	E*	[-20 to 20 / **-5** / 1deg/step] Pattern C: Timeout 1. 1st stage of temperature correction for end of the heating roller. (paper width less than 210mm and also print on envelope / postcard)
1-117-023	Temp:C:Full-Bleed:1	E*	[-20 to 20 / **-5** / 1deg/step] Pattern C: Timeout 1. 1st stage of temperature correction for the heating roller. (paper width less than 210mm and also print on envelope / postcard)
1-117-024	Temp:C:Center2	E*	[-20 to 20 / **-5** / 1deg/step] Pattern C: Timeout 2. 2nd stage of temperature correction for center of the heating roller. (paper width less than 210mm and also print on envelope / postcard)
1-117-025	Temp:C:End2	E*	[-20 to 20 / **-5** / 1deg/step] 2nd stage of temperature correction for end of the heating roller. (paper width less than 210mm and also print on envelope / postcard)
1-117-026	Temp:C:Full-Bleed:2	E*	[-20 to 20 / **-5** / 1deg/step] 2nd stage of temperature correction for the heating roller. (paper width less than 210mm and also print on envelope / postcard)

1-117-027	Control TimeD1	E*	[0 to 1000 / **30** / 1sec/step] Modifies time to execute 1st stage of fusing temperature correction. (paper width less than 215.9mm)
1-117-028	Control TimeD2	E*	[0 to 1000 / **250** / 1sec/step] Modifies time to execute 2nd stage of fusing temperature correction. (paper width less than 215.9mm)
1-117-029	Temp:D:Center1	E*	[-20 to 20 / **-5** / 1deg/step] 1st stage of temperature correction for center of the heating roller. (paper width less than 215.9mm)
1-117-030	Temp:D:End1	E*	[-20 to 20 / **-5** / 1deg/step] Pattern D: Timeout 1. 1st stage of temperature correction for end of the heating roller. (paper width less than 215.9mm)
1-117-031	Temp:D:Full-Bleed:1	E*	[-20 to 20 / **-5** / 1deg/step] Pattern D: Timeout 1. 1st stage of temperature correction for the heating roller. (paper width less than 215.9mm)
1-117-032	Temp:D:Center2	E*	[-20 to 20 / **-5** / 1deg/step] Pattern D: Timeout 2. 2nd stage of temperature correction for center of the heating roller. (paper width less than 215.9mm)
1-117-033	Temp:D:End2	E*	[-20 to 20 / **-5** / 1deg/step] 2nd stage of temperature correction for end of the heating roller. (paper width less than 215.9mm)

1-117-034	Temp:D:Full-Bleed:2	E*	[-20 to 20 / **-5** / 1deg/step] Pattern D: Timeout 2. 2nd stage of temperature correction for the heating roller. (paper width less than 215.9mm)
1-117-101	Category1:Weight0	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight0.
1-117-102	Category1:Weight1	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight1.
1-117-103	Category1:Weight2	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight2.
1-117-104	Category1:Weight3	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight3.
1-117-105	Category1:Weight4	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight4.
1-117-106	Category1:Weight5	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight5.
1-117-107	Category1:Weight6	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight6.
1-117-108	Category1:Weight7	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight7.
1-117-109	Category1:Weight8	E	[1 to 4 / **3** / 1/step] Time Control pattern for Category1: Weight8.

1-117-111	Category2:Weight0	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight0.
1-117-112	Category2:Weight1	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight1.
1-117-113	Category2:Weight2	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight2.
1-117-114	Category2:Weight3	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight3.
1-117-115	Category2:Weight4	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight4.
1-117-116	Category2:Weight5	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight5.
1-117-117	Category2:Weight6	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight6.
1-117-118	Category2:Weight7	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight7.
1-117-119	Category2:Weight8	E	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight8.
1-117-121	Category3:Weight0	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category2: Weight9.
1-117-122	Category3:Weight1	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category3: Weight1.

1-117-123	Category3:Weight2	E*	[1 to 4 / **3** / 1/step] Time Control pattern for Category3: Weight2.
1-117-124	Category3:Weight3	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight3.
1-117-125	Category3:Weight4	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight4.
1-117-126	Category3:Weight5	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight5.
1-117-127	Category3:Weight6	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight6.
1-117-128	Category3:Weight7	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight7.
1-117-129	Category3:Weight8	E	[1 to 4 / **1** / 1/step] Time Control pattern for Category3: Weight8.
1-117-131	Category4:Weight0	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight0.
1-117-132	Category4:Weight1	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight1.
1-117-133	Category4:Weight2	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight2.
1-117-134	Category4:Weight3	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight3.

1-117-135	Category4:Weight4	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight4.
1-117-136	Category4:Weight5	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight5.
1-117-137	Category4:Weight6	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight6.
1-117-138	Category4:Weight7	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight7.
1-117-139	Category4:Weight8	E	[1 to 4 / **1** / 1/step] Time Control pattern for Category4: Weight8.
1-117-141	Category5:Weight0	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight0.
1-117-142	Category5:Weight1	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight1.
1-117-143	Category5:Weight2	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight2.
1-117-144	Category5:Weight3	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight3.
1-117-145	Category5:Weight4	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight4.
1-117-146	Category5:Weight5	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight5.

1-117-147	Category5:Weight6	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight6.
1-117-148	Category5:Weight7	E*	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight7.
1-117-149	Category5:Weight8	E	[1 to 4 / **1** / 1/step] Time Control pattern for Category5: Weight8.

1118	**[Norm Paper:Init Temp Calc]** -		
1-118-001	Start Time:95ppm	E*	[0.0 to 5.0 / **3.5** / 0.1sec/step] Time of initial adding start from ST trigger.
1-118-002	Start Time:110ppm	E*	[0.0 to 5.0 / **1.0** / 0.1sec/step] Time of initial adding start from ST trigger.
1-118-003	Start Time:135ppm	E*	[0.0 to 5.0 / **0.0** / 0.1sec/step] Time of initial adding start from ST trigger.
1-118-004	Start Time:150ppm	E*	[0.0 to 5.0 / **0.0** / 0.1sec/step] Time of initial adding start from ST trigger.
1-118-005	Continuous Time:95ppm	E*	[0.0 to 50.0 / **10.0** / 0.1sec/step] Initial adding duration time.
1-118-006	Continuous Time:110ppm	E*	[0.0 to 50.0 / **10.0** / 0.1sec/step] Initial adding duration time.
1-118-007	Continuous Time:135ppm	E*	[0.0 to 50.0 / **10.0** / 0.1sec/step] Initial adding duration time.
1-118-008	Continuous Time:150ppm	E*	[0.0 to 50.0 / **10.0** / 0.1sec/step] Initial adding duration time.
1-118-010	Added Temp: Thickness 0	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature: Thick 0
1-118-011	Added Temp: Thickness 1	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature: Thick 1

1-118-012	Added Temp: Thickness 2	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature: Thick 2
1-118-013	Added Temp: Thickness 3	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 3
1-118-014	Added Temp: Thickness 4	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 4
1-118-015	Added Temp: Thickness 5	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 5
1-118-016	Added Temp: Thickness 6	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 6
1-118-017	Added Temp: Thickness 7	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 7
1-118-018	Added Temp: Thickness 8	E*	[0 to 30 / **10** / 1deg/step] Initial adding temperature: Thick 8

1119	**[Norm Paper:Init Temp Calc2]** -		
1-119-001	Continuous Time:95ppm	E*	[0.0 to 50.0 / **16.5** / 0.1sec/step] Initial adding duration 2.
1-119-002	Continuous Time:110ppm	E*	[0.0 to 50.0 / **14.0** / 0.1sec/step] Initial adding duration 2.
1-119-003	Continuous Time:135ppm	E*	[0.0 to 50.0 / **13.0** / 0.1sec/step] Initial adding duration 2.
1-119-004	Continuous Time:150ppm	E*	[0.0 to 50.0 / **10.0** / 0.1sec/step] Initial adding duration 2.
1-119-010	Added Temp: Thickness 0	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature 2: Thick 0
1-119-011	Added Temp: Thickness 1	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature 2: Thick 1
1-119-012	Added Temp: Thickness 2	E*	[0.0 to 30.0 / **5.0** / 0.1sec/step] Initial adding temperature 2: Thick 2

1-119-013	Added Temp: Thickness 3	E*	[0 to 30 / **20** / 1deg/step] Initial adding temperature 2: Thick 3
1-119-014	Added Temp: Thickness 4	E*	[0 to 30 / **20** / 1deg/step] Initial adding temperature 2: Thick 4
1-119-015	Added Temp: Thickness 5	E*	[0 to 30 / **20** / 1deg/step] Initial adding temperature 2: Thick 5
1-119-016	Added Temp: Thickness 6	E*	[0 to 30 / **25 /** 1deg/step] Initial adding temperature 2: Thick 6
1-119-017	Added Temp: Thickness 7	E*	[0 to 30 / **25** / 1deg/step] Initial adding temperature 2: Thick 7
1-119-018	Added Temp: Thickness 8	E*	[0 to 30 / **25** / 1deg/step] Initial adding temperature 2: Thick 8

1121	**[Switch:Rotation Start/Stop]** -		
1-121-001	Time:After Reload	E*	[0 to 999 / **125** / 1sec/step] Sets the time interval for the shift from “reload” to “standby”.
1-121-002	Time:After Recovery	E*	[0 to 100 / **10** / 1sec/step] Sets the time interval for the shift from “recovery” to “standby”.
1-121-003	Time:After Job	E*	[0 to 100 / **30** / 1sec/step] Sets the time interval for the shift from “after job” to “standby”.
1-121-004	Press Temp.:After Reload	E*	[0 to 160 / **160** / 1deg/step] Sets threshold of pressure temperature to apply time of the shift from “reload” to “standby”.
1-121-005	End Uniform Start Temp.:B4	E*	[0 to 250 / **210** / 1deg/step] Sets start temperature to uniform the end temperature after job.(LTT < printing paper width ≤ B4)

1-121-006	End Uniform Start Temp.:LT	E*	[0 to 250 / **210** / 1deg/step] Sets start temperature to uniform the end temperature after job.(A5 < printing paper width ≤ LTT)
1-121-007	End Uniform Start Temp.:A5	E*	[0 to 250 / **210** / 1deg/step] Sets start temperature to uniform the end temperature after job.(printing paper width ≤ A5)
1-121-008	Overshoot Prevent Temp.	E*	[0 to 250 / **215** / 1deg/step] Sets temperature to start rotation to prevent overshooting.
1-121-009	Overshoot Prevent Time	E*	[0 to 100 / **20** / 1sec/step] Sets rotation time to prevent overshooting.
1-121-010	Rotation Time Ctrl(Stop)	E*	[0.0 to 30.0 / **3.0** / 0.1sec/step] Sets duration time to control rotation when stopping.
1-121-011	Rotation Time Ctrl(Stop):Error	E*	[0.0 to 30.0 / **3.0** / 0.1sec/step] Sets duration time to control rotation when stopping.

1122	**[Standby Rotation Setting]** Sets the interval between fusing roller idle rotations during standby.		
1-122-001	Rotation Interval	E*	[0 to 240 / **0** / 1min/step]
1-122-002	Rotation Time	E*	[0.0 to 60.0 / **0.0** / 0.1sec/step]

1123	**[Rotation Speed Setting]** Sets rotation speed before job.		
1-123-001	Rotation Speed	E*	[0 or 1 / **1** / 1/step]

1124	**[CPM Down Setting]** When this machine gets a sequence of coping/printing jobs, the machine uses CPM down mode to prevent the fusing temperature from becoming too low.		
1-124-001	Low: Down Temp.	E*	[-50 to 0 / **-11** / 1deg/step] Specifies the CPM down threshold temperature for the low temperature condition. If the fusing temperature decreases -20°C (adjustable) below the target temperature, the machine enters the CPM down mode.
1-124-002	Low: Up Temp.	E*	[-50 to 0 / **-6** / 1deg/step] Specifies the CPM up threshold temperature for the low temperature condition. If the fusing temperature increases -15°C (adjustable) below the target temperature, the machine enters the CPM up mode.
1-124-003	Low :1st CPM	E*	[10 to 100 / **80** / 5%/step] Specifies the 1st CPM down ration against the normal CPM in the low temperature condition.
1-124-004	Low :2nd CPM	E*	[10 to 100 / **65** / 5%/step] Specifies the 2nd CPM down ration against the normal CPM in the low temperature condition.
1-124-005	Low :3rd CPM	E*	[10 to 100 / **50** / 5%/step] Specifies the 3rd CPM down ration against the normal CPM in the low temperature condition.
1-124-006	High:1st CPM	E*	[10 to 100 / **80** / 5%/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition.

1-124-007	High:2nd CPM	E*	[10 to 100 / **60** / 5%/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition.
1-124-008	High:3rd CPM	E*	[10 to 100 / **25** / 5%/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition.
1-124-012	High:1st CPM Down Temp.:A5	E*	[100 to 250 / **231** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition when Feed Width ≤ A5LEF.
1-124-013	High:2nd CPM Down Temp.:A5	E*	[100 to 250 / **236** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition when Feed Width ≤ A5LEF.
1-124-014	High:3rd CPM Down Temp.:A5	E*	[100 to 250 / **241** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition when Feed Width ≤ A5LEF.
1-124-015	High:1st CPM Down Temp.:A4	E*	[100 to 250 / **246** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition when A5 < Feed Width ≤ A4LEF.
1-124-016	High:2nd CPM Down Temp.:A4	E*	[100 to 250 / **248** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition when A5 < Feed Width ≤ A4LEF.

1-124-017	High:3rd CPM Down Temp.:A4	E*	[100 to 250 / **250** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition when A5 < Feed Width ≤ A4LEF.
1-124-018	Judging Interval	E*	[1 to 250 / **1** / 1sec/step] Sets interval to judge CPM down.
1-124-020	Initial CPM Down 95ppm	E*	[0 to 200 / **19** / 1sec/step] Duration time of Initial CPM down.
1-124-021	Initial CPM Down 110ppm	E*	[0 to 200 / **16** / 1sec/step] Duration time of Initial CPM down.
1-124-022	Initial CPM Down 135ppm	E*	[0 to 200 / **15** / 1sec/step] Duration time of Initial CPM down.
1-124-023	Initial CPM Down 150ppm	E*	[0 to 200 / **15** / 1sec/step] Duration time of Initial CPM down.
1-124-101	High: 1st CPM Down Temp.: Div1	E*	[100 to 250 / **246** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition for division 1.
1-124-102	High: 2nd Down Temp.: Div1	E*	[100 to 250 / **248** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition for division 1.
1-124-103	High: 3rd Down Temp.: Div1	E*	[100 to 250 / **250** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition for division 1.
1-124-111	High: 1st CPM Down Temp.: Div2	E*	[100 to 250 / **231** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition for division 2.

1-124-112	High: 2nd Down Temp.: Div2	E*	[100 to 250 / **236** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition for division 2.
1-124-113	High: 3rd Down Temp.: Div2	E*	[100 to 250 / **241** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition for division 2.
1-124-121	High: 1st CPM Down Temp.: Div3	E*	[100 to 250 / **235** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition for division 3.
1-124-122	High: 2nd Down Temp.: Div3	E*	[100 to 250 / **238** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition for division 3.
1-124-123	High: 3rd Down Temp.: Div3	E*	[100 to 250 / **241** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition for division 3.
1-124-131	High: 1st CPM Down Temp.: Div4	E*	[100 to 250 / **235** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition for division 4.
1-124-132	High: 2nd Down Temp.: Div4	E*	[100 to 250 / **238** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition for division 4.
1-124-133	High: 3rd Down Temp.: Div4	E*	[100 to 250 / **241** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition for division 4.

1-124-141	High: 1st CPM Down Temp.: Div5	E*	[100 to 250 / **235** / 1deg/step] Specifies the 1st CPM down ration against the normal CPM in the high temperature condition for division 5.
1-124-142	High: 2nd Down Temp. :Div5	E*	[100 to 250 / **238** / 1deg/step] Specifies the 2nd CPM down ration against the normal CPM in the high temperature condition for division 5.
1-124-143	High: 3rd Down Temp.: Div5	E*	[100 to 250 / **241** / 1deg/step] Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition for division 5.

1125	**[Image Processing Temp. Correct]** -		
1-125-001	Temp.:Plain:Center:Level1	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 1 of the job image control.
1-125-002	Temp.:Plain:Center:Level2	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 2 of the job image control.
1-125-003	Temp.:Plain:End:Level1	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 1 of the job image control.
1-125-004	Temp.:Plain:End:Level2	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 2 of the job image control.
1-125-005	Temp.:Plain:Full-Bd End:Level1	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 1 of the job image control.
1-125-006	Temp.:Plain:Full-Bd End:Level2	E	[-20 to 20 / **0** / 1deg/step] Specifies the correction temperature for the level 2 of the job image control.

1131	**[Continues Print Mode Switch]** Sets the permission for paper to feed. 0 (Default): Focused on productivity. Image quality is no problem for general use and meets the machine spec. 1: Waits until the fusing roller gets to be stable when paper size is changed.		
1-131-001	Feed Permit Condition	E*	[0 or 1 / **1** / 1/step] 0: Productivity Mode 1: Fusing Quality

1132	**[Maximum Duty Switch]** Switches maximum fixed duty level and power control.		
1-132-001	Control Method Switch	E*	[0 or 1 / **1** / 1/step] 0: Fixed Duty 1: Power Control
1-132-003	Manual Offset	E*	[0 to 8 / **4** / 1/step] Maximum Duty Offset value

1132	**[Power Control]** -		
1-132-011	AC Voltage Value	E	[0 to 300 / **0** / 1/step] Voltage Detection: Determine voltage.
1-132-012	Judgment Voltage	E*	[0 to 300 / **0** / 1/step] Voltage detection: Judged voltage.

1141	**[Fusing SC Error Info]** -		
1-141-001	SC Number	E*	[0 to 99999 / **0** / 1/step] Displays the issued SC number.
1-141-101	Htg Rlr:Ctr Differe Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Displays the difference temperature at the center of the heating roller when an SC was issued.

1-141-103	Htg Rlr:Ctr Compensa Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Displays the compensation temperature at the center of the heating roller when an SC was issued.
1-141-104	Htg Rlr:End Different Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Displays the difference temperature at the end of the heating roller when an SC was issued.
1-141-106	Htg Rlr:End Compensate Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Displays the compensation temperature at the end of the heating roller when an SC was issued.
1-141-108	Htg Rlr:Full-Bd End Different Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-110	Htg Rlr:Full-Bd End Compensate Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-111	Htg Rlr:Rear Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-112	Press Roller:Ctr Differe Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-114	Press Roller:Ctr Compensa Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-115	Press Roller:End Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-116	Fusing Roller:Surface Varied Op Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.

1-141-118	Fusing Roller:Surface Compensate Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-119	Fusing Roller:Roll Core Temp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-120	Htg Rlr:High Tmp Detec:Ctr Differe Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-122	Htg Rlr:High Tmp Detec:Ctr Compensa Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-123	Htg Rlr:High Tmp Detec:End Different Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-125	Htg Rlr:High Tmp Detec:End Compensate Tmp1	E*	[-100 to 300 / **0** / 1deg/step] Temperature information when SC occurred.
1-141-151	Htg Rlr:Ctr Differe Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-153	Htg Rlr:Ctr Compensa Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-154	Htg Rlr:End Different Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-156	Htg Rlr:End Compensate Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-158	Htg Rlr:Full-Bd End Different Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.

1-141-160	Htg Rlr:Full-Bd End Compensate Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-161	Htg Rlr:Rear Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-162	Press Roller:Ctr Differe Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-164	Press Roller:Ctr Compensa Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-165	Press Roller:End Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycles before SC occurred.
1-141-166	Fusing Roller:Surface Varied Op Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-168	Fusing Roller:Surface Compensate Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-169	Fusing Roller:Roll Core Temp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-170	Htg Rlr:High Tmp Detec:Ctr Differe Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-172	Htg Rlr:High Tmp Detec:Ctr Compensa Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-173	Htg Rlr:High Tmp Detec:End Different Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.

1-141-175	Htg Rlr:High Tmp Detec:End Compensate Tmp2	E*	[-100 to 300 / **0** / 1deg/step] Temperature information one cycle before SC occurred.
1-141-201	Htg Rlr:Ctr Differe Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-203	Htg Rlr:Ctr Compensa Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-204	Htg Rlr:End Different Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-206	Htg Rlr:End Compensate Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-208	Htg Rlr:Full-Bd End Different Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-210	Htg Rlr:Full-Bd End Compensate Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-211	Htg Rlr:Rear Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-212	Press Roller:Ctr Differe Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-214	Press Roller:Ctr Compensa Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-215	Press Roller:End Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.

1-141-216	Fusing Roller:Surface Varied Op Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-218	Fusing Roller:Surface Compensate Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-219	Fusing Roller:Roll Core Temp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-220	Htg Rlr:High Tmp Detec:Ctr Differe Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-222	Htg Rlr:High Tmp Detec:Ctr Compensa Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-223	Htg Rlr:High Tmp Detec:End Different Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.
1-141-225	Htg Rlr:High Tmp Detec:End Compensate Tmp3	E*	[-100 to 300 / **0** / 1deg/step] Temperature information two cycles before SC occurred.

1142	**[Fusing Jam Detection]** Displays SC when fusing jam is continuously detected 3 times.		
1-142-001	SC Display	E*	[0 or 1 / **0** / 1/step] 0: Off, 1:On

1151	**[Pressure Setting]** -		
1-151-001	Pressure Change ON/OFF	E*	[0 or 1 / **1** / 1/step] Pressure switching on / off.
1-151-011	Pressure Position1	E*	[0 to 10000 / **630** / 10msec/step] Rotation time from “pressure filler edge” to “pressure position 1”.
1-151-012	Pressure Position2	E*	[0 to 10000 / **1410** / 10msec/step] Rotation time from “pressure filler edge” to “pressure position 2”.
1-151-013	Pressure Position3	E*	[0 to 10000 / **1410** / 10msec/step] Rotation time from “pressure filler edge” to “pressure position 3”
1-151-014	Pressure Position4	E*	[0 to 10000 / **600** / 10msec/step] Rotation time from “pressure filler edge” to “pressure position 4”
1-151-015	Press Pos:Restart	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: Restart
1-151-016	Press Pos:RotationAfterReload	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: rotation after reload.
1-151-017	Press Pos:Before Job	E*	[0 to 4 / **0** / 1/step] S Sets pressurization power: before paper feed.
1-151-018	Press Pos:After Job	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: after paper feed.
1-151-019	Press Pos:Ready Standby	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: Ready standby.
1-151-021	Press Pos:Low Power	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: low power.

1-151-022	Press Pos:Off Sleep	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: off sleep.
1-151-023	Press Pos:Print Ready	E*	[0 to 4 / **0** / 1/step] Sets pressurization power: print ready.
1-151-024	Reverse Operation Time	E*	[0 to 10000 / **140** / 10msec/step] Sets operation limit time to reverse when jam is occurred.
1-151-025	Press Pos:Reverse	E*	[0 to 4 / **1** / 1/step] Sets target pressure position right before reversing operation when jam is occurred.

1152	**[Fusing Nip Band Check]** -		
1-152-001	Execute	E	[0 or 1 / **0** / 1/step] Executes the nip band measurement between heating roller and pressure roller. If the nip band width is not 8 mm, and fusing is not good, replace the pressure roller or install a new fusing unit.
1-152-002	Pre-idling Time	E*	[0 to 999 / **30** / 1sec/step] Specifies pre-idling time.
1-152-003	Stop Time	E*	[0 to 255 / **120** / 1sec/step] Specifies the time for measuring the nip.
1-152-004	Pressure Position	E*	[0 to 4 / **2** / 1/step] Specifies the pressure position for measuring the nip.
1-152-010	Target Temp: Center	E*	[0 to 200 / **160** / 1deg/step] Specifies the target heating roller temperature during fusing nip band check.

1-152-011	Target Temp: Press Roller	E*	[0 to 200 / **100** / 1deg/step] Specifies the target pressure roller temperature during fusing nip band check.

1153	**[Press Roller Cooling Fan]** -		
1-153-001	Startup Difference	E*	[-50 to 50 / **5** / 1deg/step] Sets operation temperature for Press Roller Cooling Fan when restarting.
1-153-002	Paper Difference	E*	[-50 to 50 / **5** / 1deg/step] Sets operation temperature for Press Roller Cooling Fan when operating Job.
1-153-003	After Paper Difference	E*	[-50 to 50 / **5** / 1deg/step] Sets operation temperature for Press Roller Cooling Fan after Job.

1154	**[Standby Rotation]** -		
1-154-001	Rotation Start Temp	E*	[0 to 150 / **120** / 1deg/step] Sets the temperature to start rotation of the fusing roller.
1-154-002	Idling Time at Every Job	E*	[0 to 255 / **30** / 1sec/step]

1155	**[Job Cancel]** -		
1-155-001	Pressure Roller Temperature	E*	[100 to 250 / **210** / 1deg/step] Job-cancel judgment temperature.
1-155-002	Continuous Time	E*	[0 to 200 / **0** / 1deg/step] Job duration time.

1161	**[Fusing Cleaning Web]** Duplex correction for winding cycle of fusing cleaning web.		
1-161-004	Duplex Corr	E*	[0.01 to 1.00 / **1.00** / 0.01/step]

1206	**[Paper Shift Setting]** Selects paper shift mode.		
1-206-001	Shift Mode Selection	E*	[0 to 4 / **1** / 1/step]

1210	**[Fusing Unit Switch Setting]** -		
1-210-001	Fusing Unit No.	E*	[1 to 4 / **1** / 1/step] Selects fusing unit to use.
1-210-002	Fusing Unit No. Current Value	E*	[1 to 4 / **1** / 1/step] Current value of the fusing unit number.
1-210-003	Unit1:Fusing Unit:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-004	Unit1:Fusing Belt:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-005	Unit1:Hot Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-006	Unit1:Pressure Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-007	Unit1:Bearings:Pressure Rlr:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-008	Unit1:Fusing Cleaning UNI:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-009	Unit1:Cleaning Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.
1-210-010	Unit1:Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 1.

1-210-011	Unit1:Fusing Unit:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-012	Unit1:Fusing Belt:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-013	Unit1:Hot Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-014	Unit1:Pressure Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-015	Unit1:Bearings:Pressure Rlr:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-016	Unit1:Fusing Cleaning UNI:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-017	Unit1:Cleaning Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-018	Unit1:Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 1.
1-210-019	Unit1:Web Total Page Counter	E	[0 to 999999999 / **0** / 1sec/step] Web paper feed addition time of Fusing unit 1.
1-210-020	Unit2:Fusing Unit:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-021	Unit2:Fusing Belt:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-022	Unit2:Hot Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-023	Unit2:Pressure Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-024	Unit2:Bearings:Pressure Rlr:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-025	Unit2:Fusing Cleaning UNI:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.

1-210-026	Unit2:Cleaning Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-027	Unit2:Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 2.
1-210-028	Unit2:Fusing Unit:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-029	Unit2:Fusing Belt:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-030	Unit2:Hot Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-031	Unit2:Pressure Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-032	Unit2:Bearings:Pressure Rlr:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-033	Unit2:Fusing Cleaning UNI:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-034	Unit2:Cleaning Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-035	Unit2:Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 2.
1-210-036	Unit2:Web Total Page Counter	E	[0 to 999999999 / **0** / 1sec/step] Web paper feed addition time of Fusing unit 2.
1-210-037	Unit3:Fusing Unit:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-038	Unit3:Fusing Belt:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-039	Unit3:Hot Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-040	Unit3:Pressure Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.

1-210-041	Unit3:Bearings:Pressure Rlr:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-042	Unit3:Fusing Cleaning UNI:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-043	Unit3:Cleaning Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-044	Unit3:Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 3.
1-210-045	Unit3:Fusing Unit:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-046	Unit3:Fusing Belt:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-047	Unit3:Hot Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-048	Unit3:Pressure Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-049	Unit3:Bearings:Pressure Rlr:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-050	Unit3:Fusing Cleaning UNI:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-051	Unit3:Cleaning Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-052	Unit3:Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 3.
1-210-053	Unit3:Web Total Page Counter	E	[0 to 999999999 / **0** / 1sec/step] Web paper feed addition time of Fusing unit 3.
1-210-054	Unit4:Fusing Unit:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-055	Unit4:Fusing Belt:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.

1-210-056	Unit4:Hot Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-057	Unit4:Pressure Roller:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-058	Unit4:Bearings:Pressure Rlr:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-059	Unit4:Fusing Cleaning UNI:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-060	Unit4:Cleaning Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-061	Unit4:Web:Distance Counter	E	[0 to 99999999 / **0** / 1m/step] Distance counter for Fusing unit 4.
1-210-062	Unit4:Fusing Unit:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-063	Unit4:Fusing Belt:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-064	Unit4:Hot Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-065	Unit4:Pressure Roller:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-066	Unit4:Bearings:Pressure Rlr:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-067	Unit4:Fusing Cleaning UNI:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-068	Unit4:Cleaning Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-069	Unit4:Web:Page Counter	E	[0 to 99999999 / **0** / 1page/step] Page counter for Fusing unit 4.
1-210-070	Unit4:Web Total Page Counter	E	[0 to 999999999 / **0** / 1sec/step] Web paper feed addition time of Fusing unit 4.

1302	**[Dbl-Feed Detect]** Switches double-feed detection On/Off for when feeding each tray. 0:Off, 1: On		
1-302-001	Tray1	E	[0 or 1 / **1** / 1/step]
1-302-002	Tray2	E	[0 or 1 / **1** / 1/step]
1-302-003	Tray3	E	[0 or 1 / **1** / 1/step]
1-302-004	Tray4	E	[0 or 1 / **1** / 1/step]
1-302-005	Tray5	E	[0 or 1 / **1** / 1/step]
1-302-006	Tray6	E	[0 or 1 / **1** / 1/step]
1-302-007	Tray7	E	[0 or 1 / **1** / 1/step]

1303	**[Dbl-Feed Detect]** Sets the operation after double-feed detected. 0: Jam 1: purge 2: proof out		
1-303-001	After Dbl-Feed Detect	E	[0 to 2 / **1** / 1/step]

1304	**[Double Feed Detect Setup]** -		
1-304-001	Detection Group	E*	[1 to 10 / **1** / 1times/step] Sets the times to integrate output voltage of double feed detection.
1-304-002	Burst Drive Cycle	E*	[0.5 to 5.0 / **2.0** / 0.1times/step] Sets the interval of burst drive cycle.
1-304-003	Detect distance	E*	[10 to 200 / **100** / 1mm/step] Sets the detection area (distance) per paper.

1-304-004	Burst number	E*	[1 to 20 / **5** / 1times/step] Sets the times of pulses of ultrasonic waves to transmit.
1-304-005	Detect number	E*	[1 to 8 / **5** / 1times/step]
1-304-006	Detect Adjustment	E	[- / **-** / -] [Execute]
1-304-007	Detect Mode	E*	[0 or 1 / **0** / 1/step] Switch of Gain 1: use, 0: disuse

1501	**[Lead Edge Reg]** **DFU**		
1-501-001	Standard Value	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-501-002	Back SideOffset Value	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1502	**[Side-to-Side Reg]** **DFU**		
1-502-001	Standard Value	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-502-002	Back SideOffset Value	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1802	**[CPM Information]** -		
1-802-001	-	E	[0 to 255 / **-** / 1CPM/step]

1902	**[Cleaning Web Setting]** -		
1-902-001	Web Consumption	E*	[0 to 107 / **0** / 1/step] Used amount of web consumption
1-902-002	Fusing Web Motor Operation Time	E*	[3.6 to 130 / **12.2** / 0.1sec/step] Standard web roll up operation interval.
1-902-003	Web Motor Rotation Time	E*	[0.3 to 3.5 / **2.8** / 0.1sec/step] Web roll up operation time.

1-902-004	Web Near End Setting	E*	[50 to 100 / **81** / 1%/step] Threshold to judge web near end.
1-902-005	Web End Memory	E*	[0 or 1 / **0** / 1/step] Web end memory on/off.
1-902-007	Correction Coeff	E*	[0.00 to 2.00 / **0.79** / 0.01/step] Correction Coeff
1-902-008	Takeup Rotations After Jam	E*	[0 to 30 / **10** / 1/step] Roll up times after jam.
1-902-010	Sequence for Each Reload	E*	[0.0 to 30.0 / **3.5** / 0.1sec/step] Cleaning pressure time before reloading.
1-902-011	Rotations After Cold Start	E*	[0 to 30 / **10** / 1/step] Sets the rotation times when starting up in cold condition.
1-902-012	Fixed Operation Time 1	E*	[40 to 60 / **50** / 1%/step] Threshold to fix roll up operation time.
1-902-013	Fixed Operation Time 2	E*	[61 to 120 / **81** / 1%/step] Threshold to fix roll up operation time.
1-902-019	Web Counter Clear Recording	E*	[0 or 1 / **0** / 1/step] Sets web counter clear on/off.
1-902-020	Decision Temp:Press/Low Temp.	E*	[0 to 200 / **20** / 1deg/step] Sets judgment temperature to roll up the web forcibly when pressure temperature is low.

1903	**[Web Drive Time]** -		
1-903-001	Web: Total Page Counter	E*	[0 to 999999999 / **0** / 1sec/step] Displays total page counts of web.
1-903-003	Operation Interval Count	E*	[0.0 to 130.0 / **0.0** / 0.1sec/step] Displays time interval after last web operation.
1-903-004	Total Operation Rotations	E*	[0 to 999999999 / **0** / 1Cycle/step] Displays total rotation times of web

1906	**[De-curler Setting]** Sets curl correction power and curl direction.		
1-906-001	Tray1 :Paper Path selection	E	[0 to 5 / **3** / 1/step] 0: lower pass def 1: lower pass 1 2: lower pass 2 3: upper pass def 4: upper pass 1 5: upper pass 2
1-906-002	Tray2 : Paper Path selection	E	
1-906-003	Tray3 : Paper Path selection	E	
1-906-004	Tray4 : Paper Path selection	E	
1-906-005	Tray5 : Paper Path selection	E	
1-906-006	Tray6 : Paper Path selection	E	
1-906-007	Tray7 : Paper Path selection	E	

1909	**[Force Send to Purge Tray]** Sets purge process on/off when jam is occurred. When jam is occurred, papers stay in the machine when “0: Off” is set.		
1-909-001	Purge 1 (0: Off, 1: On)	E	[0 or 1 / **1** / 1/step]

1912	**[CIS LED Power Adjustment]** Executes LED power adjustment for CIS.		
1-912-001	Execute	E	[- / **-** / -] [Execute]

1913	**[CIS LED Adj. Result Displ]** Displays LED power adjustment result executed by SP1-912-001.		
1-913-001	PWM Duty	E*	[0x00 to 0xAA / **0x3A** / 1/step]

1914	**[CIS P Pass Pixel Display]** Displays CIS paper pass pixels. LE (Leading Edge): 1st reading value LSHIFT (Leading Edge Shift): 2nd reading value TSHIFT, TE_SHIFT (Trailing Edge Shift): 3rd reading value		
1-914-001	Tray1:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-002	Tray1:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-003	Tray1:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-004	Tray1:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.

1-914-005	Tray1:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-006	Tray1:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-007	Tray1:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-008	Tray1:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-009	Tray1:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-010	Tray2:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-011	Tray2:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-012	Tray2:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-013	Tray2:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-014	Tray2:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-015	Tray2:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.

1-914-016	Tray2:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-017	Tray2:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-018	Tray2:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-019	Tray3:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-020	Tray3:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-021	Tray3:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-022	Tray3:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-023	Tray3:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-024	Tray3:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-025	Tray3:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-026	Tray3:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.

1-914-027	Tray3:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-028	Back:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-029	Back:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-030	Back:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-031	Back:LE_Shift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-032	Back:LE_Shift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-033	Back:LE_Shift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-034	Back:TE_Shift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-035	Back:TE_Shift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-036	Back:TE_Shift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-037	Tray4:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.

1-914-038	Tray4:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-039	Tray4:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-040	Tray4:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-041	Tray4:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-042	Tray4:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-043	Tray4:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-044	Tray4:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-045	Tray4:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-046	Tray5:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-047	Tray5:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-048	Tray5:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.

1-914-049	Tray5:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-050	Tray5:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-051	Tray5:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-052	Tray5:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-053	Tray5:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-054	Tray5:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-055	Tray6:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-056	Tray6:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-057	Tray6:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-058	Tray6:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-059	Tray6:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.

1-914-060	Tray6:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-061	Tray6:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-062	Tray6:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-063	Tray6:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-064	Tray7:LEdge1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-065	Tray7:LEdge2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-066	Tray7:LEdge3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-067	Tray7:LShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.
1-914-068	Tray7:LShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-069	Tray7:LShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.
1-914-070	Tray7:TShift1	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of 2 pages before the last page.

1-914-071	Tray7:TShift2	E	[0 to 2854 / **0** / 1dot/step] Displays CIS paper pass pixels of a page before the last page.
1-914-072	Tray7:TShift3	E	[0 to 2854 / **0** / 1dot/step]. Displays CIS paper pass pixels of the last page.

1916	**[CIS LED Power Magnification]** Sets threshold of CIS LED power.		
1-916-001	Variable Magnification mode1	E*	[1.00 to 5.00 / **1.52** / 0.01/step]
1-916-002	Variable Magnification mode2	E*	[1.00 to 5.00 / **2.01** / 0.01/step]
1-916-003	Variable Magnification mode3	E*	[1.00 to 5.00 / **3.53** / 0.01/step]

1917	**[Side-to-Side Reg Disable]** Sets Side-to-Side Registration correction on/off. Set “1: On” when using paper which CIS cannot read such as OHP.		
1-917-001	Tray1	E	[0 or 1 / **0** / 1/step]
1-917-002	Tray2	E	[0 or 1 / **0** / 1/step]
1-917-003	Tray3	E	[0 or 1 / **0** / 1/step]
1-917-004	Dupx Tray	E	[0 or 1 / **0** / 1/step]
1-917-005	Tray4	E	[0 or 1 / **0** / 1/step]
1-917-006	Tray5	E	[0 or 1 / **0** / 1/step]
1-917-007	Tray6	E	[0 or 1 / **0** / 1/step]
1-917-008	Tray7	E	[0 or 1 / **0** / 1/step]

1920	**[LCT Tray Fan Duty Adjustment]** Adjusts power of the air assist fan. Increasing air assist duty prevents double feed and non-paper feed.		
1-920-001	A3LCT Tray4	E	[10 to 100 / **70** / 10%/step]
1-920-002	A3LCT Tray5	E	[10 to 100 / **70** / 10%/step]
1-920-003	A3LCT Tray6	E	[10 to 100 / **70** / 10%/step]

1921	**[LCT Fan Start Time Setting]** Adjust the air assist time before feeding paper. Increasing air assist time prevents double feed and non-paper feed.		
1-921-001	A3LCT Tray4	E	[1 to 10 / **3** / 1sec/step]
1-921-002	A3LCT Tray5	E	[1 to 10 / **3** / 1sec/step]
1-921-003	A3LCT Tray6	E	[1 to 10 / **3** / 1sec/step]

1922	**[LCT Tray Fan ON/OFF]** Sets air assist on/off to prevent double feed and non-paper feed.		
1-922-001	A3LCT Tray4	E	[0 to 2 / **0** / 1/step] 0: Auto Select 1: Force On 2: Force Off Switches LCT tray fan On/Off.
1-922-002	A3LCT Tray5	E	[0 to 2 / **0** / 1/step] 0: Auto Select 1: Force On 2: Force Off Switches LCT tray fan On/Off.
1-922-003	A3LCT Tray6	E	[0 to 2 / **0** / 1/step] 0: Auto Select 1: Force On 2: Force Off Switches LCT tray fan On/Off.

1923	**[LCT Pickup Assist ON/OFF]** Sets pick-up roller assistance. Set “1: Force On” to solve non-feed problems for plain paper, and set “2: Force Off” to solve double feed problems for gloss paper. 0: Auto Select 1: Force On 2: Force Off		
1-923-001	A3LCT Tray4	E	[0 to 2 / **0** / 1/step]
1-923-002	A3LCT Tray5	E	[0 to 2 / **0** / 1/step]
1-923-003	A3LCT Tray6	E	[0 to 2 / **0** / 1/step]
1-923-004	A4LCT Tray4	E	[0 to 2 / **0** / 1/step]
1-923-005	A4LCT Tray5	E	[0 to 2 / **0** / 1/step]
1-923-006	A4LCT Tray6	E	[0 to 2 / **0** / 1/step]
1-923-007	Bypass	E	[0 to 2 / **0** / 1/step]

1924	**[Pre Feed Stop Time Adjust]** Adjusts pre-feed stop time. Increasing value prevents double feed but productivity goes down.		
1-924-001	A3LCT Tray4	E	[0 to 1000 / **0** / 5msec/step]
1-924-002	A3LCT Tray5	E	[0 to 1000 / **0** / 5msec/step]
1-924-003	A3LCT Tray6	E	[0 to 1000 / **0** / 5msec/step]
1-924-004	A4LCT Tray4	E	[0 to 1000 / **0** / 5msec/step]
1-924-005	A4LCT Tray5	E	[0 to 1000 / **0** / 5msec/step]
1-924-006	A4LCT Tray6	E	[0 to 1000 / **0** / 5msec/step]
1-924-007	Bypass	E	[0 to 1000 / **0** / 5msec/step]

1927	**[Decurl Default: Lower Path]** Adjusts lower path curl correction power. Increasing value: curl correction power gets stronger. Decreasing value: curl correction power gets weaker.		
1-927-001	-	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1928	**[Decurl Default: Upper Path]** Adjusts upper path curl correction power. Increasing value: curl correction power gets stronger. Decreasing value: curl correction power gets weaker.		
1-928-001	-	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1929	**[Decurl Line Speed Adj:Default]** Adjusts decurl line speed.		
1-929-001	-	E*	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1930	**[Decurl Line Speed Adj:Pos.1]** Adjusts decurl line speed to prevent luster lines, distortion of the images, and rubbing images.		
1-930-001	-	E*	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1931	**[Decurl Line Speed Adj:Pos.2]** Adjusts decurl line speed to prevent luster lines, distortion of the images, and rubbing images.		
1-931-001	-	E*	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1945	**[Set Cooling Operation]** -		
1-945-001	Low Noise Op Temp	E*	[0 to 50 / **16** / 1deg/step] Changes cooling operation shift temperature in low noise operation.
1-945-002	Noise Op Temp	E*	[0 to 50 / **31** / 1deg/step] Changes cooling operation shift temperature in normal operation.
1-945-003	Noise Op High Temp	E*	[0 to 50 / **33** / 1deg/step] Changes cooling operation shift temperature in high temperature.
1-945-008	Dev. Fan: Front: HS	E*	[20 to 100 / **40** / 1%/step] Changes low speed operation duty of front development fan.
1-945-009	Dev. Fan: Front: NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of front development fan.
1-945-010	Dev. Fan: Rear: HS	E*	[20 to 100 / **40** / 1%/step] Changes low speed operation duty of rear development fan.
1-945-011	Dev. Fan: Rear: NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of rear development fan.

1945	**[Suction Operation]** -		
1-945-012	Ozone Brower Suction: HS	E*	[20 to 100 / **20** / 1%/step] Changes low speed operation duty of ozone brower suction.
1-945-013	Ozone Brower Suction: NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of ozone brower suction.

1945	**[Exhaust Operation]** -		
1-945-014	Ozone Brower Exhaust: HS	E*	[20 to 100 / **60** / 1%/step] Changes low speed operation duty of ozone brower exhaust.
1-945-015	Ozone Brower Exhaust: NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of ozone brower exhaust.

1945	**[Set Cooling Operation]** -		
1-945-016	Right Side Cooling Fan Front HS	E*	[20 to 100 / **50** / 1%/step] Changes low speed operation duty of right front side cooling fan.
1-945-017	Right Side Cooling Fan Rear NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of right front side cooling fan.
1-945-018	Right Side Cooling Fan Front HS	E*	[20 to 100 / **50** / 1%/step] Changes low speed operation duty of right rear side cooling fan.
1-945-019	Right Side Cooling Fan Rear NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of right rear side cooling fan.
1-945-020	Right Side Cooling Fan Center HS	E*	[20 to 100 / **50** / 1%/step] Changes low speed operation duty of right center side cooling fan.
1-945-021	Right Side Cooling Fan Center NS	E*	[20 to 100 / **100** / 1%/step] Changes high speed operation duty of right center side cooling fan.

1950	**[Image Pos:Sub:Side1]** Adjusts registration motor operation start timing to change image position on the front side of each paper type. Increasing a value: makes registration start timing earlier. Decreasing a value: makes registration start timing later.		
1-950-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-950-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-950-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-950-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-950-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1951	**[Image Pos:Sub:Side2]** Adjusts registration motor operation start timing to change image position on the back side of each paper type. Increasing a value: makes registration start timing earlier. Decreasing a value: makes registration start timing later.		
1-951-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-951-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-951-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-951-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-951-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-951-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1952	**[Image Pos:Main:Side1]** Adjusts writing start position to change image position on the front side of each paper type. Increasing a value: left trim area gets larger. Decreasing a value: left trim area gets smaller.		
1-952-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-952-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-952-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-952-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-952-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-952-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1953	**[Image Pos:Main:Side2]** Adjusts writing start position to change image position on the back side of each paper type. Increasing a value: left trim area gets larger. Decreasing a value: left trim area gets smaller.		
1-953-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-953-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-953-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-953-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1-953-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
1-953-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

1955	**[Skew Detect]** Switches skew detection on/off for each paper listed below.		
1-955-001	Custom Paper 001 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-002	Custom Paper 002 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-003	Custom Paper 003 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-004	Custom Paper 004 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-005	Custom Paper 005 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-006	Custom Paper 006 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-007	Custom Paper 007 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-008	Custom Paper 008 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-009	Custom Paper 009 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-010	Custom Paper 010 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-011	Custom Paper 011 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-012	Custom Paper 012 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-013	Custom Paper 013 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-014	Custom Paper 014 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-015	Custom Paper 015 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-016	Custom Paper 016 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-017	Custom Paper 017 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-018	Custom Paper 018 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-019	Custom Paper 019 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-020	Custom Paper 020 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-021	Custom Paper 021 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-022	Custom Paper 022 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-023	Custom Paper 023 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-024	Custom Paper 024 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-025	Custom Paper 025 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-026	Custom Paper 026 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-027	Custom Paper 027 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-028	Custom Paper 028 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-029	Custom Paper 029 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-030	Custom Paper 030 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-031	Custom Paper 031 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-032	Custom Paper 032 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-033	Custom Paper 033 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-034	Custom Paper 034 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-035	Custom Paper 035 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-036	Custom Paper 036 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-037	Custom Paper 037 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-038	Custom Paper 038 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-039	Custom Paper 039 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-040	Custom Paper 040 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-041	Custom Paper 041 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-042	Custom Paper 042 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-043	Custom Paper 043 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-044	Custom Paper 044 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-045	Custom Paper 045 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-046	Custom Paper 046 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-047	Custom Paper 047 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-048	Custom Paper 048 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-049	Custom Paper 049 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-050	Custom Paper 050 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-051	Custom Paper 051 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-052	Custom Paper 052 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-053	Custom Paper 053 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-054	Custom Paper 054 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-055	Custom Paper 055 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-056	Custom Paper 056 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-057	Custom Paper 057 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-058	Custom Paper 058 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-059	Custom Paper 059 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-060	Custom Paper 060 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-061	Custom Paper 061 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-062	Custom Paper 062 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-063	Custom Paper 063 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-064	Custom Paper 064 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-065	Custom Paper 065 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-066	Custom Paper 066 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-067	Custom Paper 067 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-068	Custom Paper 068 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-069	Custom Paper 069 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-070	Custom Paper 070 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-071	Custom Paper 071 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-072	Custom Paper 072 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-073	Custom Paper 073 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-074	Custom Paper 074 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-075	Custom Paper 075 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-076	Custom Paper 076 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-077	Custom Paper 077 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-078	Custom Paper 078 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-079	Custom Paper 079 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-080	Custom Paper 080 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-081	Custom Paper 081 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-082	Custom Paper 082 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-083	Custom Paper 083 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-084	Custom Paper 084 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-085	Custom Paper 085 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-086	Custom Paper 086 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-087	Custom Paper 087 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-955-088	Custom Paper 088 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-089	Custom Paper 089 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-090	Custom Paper 090 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-091	Custom Paper 091 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-092	Custom Paper 092 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-093	Custom Paper 093 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-094	Custom Paper 094 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-095	Custom Paper 095 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-096	Custom Paper 096 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-097	Custom Paper 097 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-098	Custom Paper 098 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-099	Custom Paper 099 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-955-100	Custom Paper 100 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1956	**[Dbl-Feed Detect]** Switches double feed detection on/off for each paper listed below.		
1-956-001	Custom Paper 001 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-002	Custom Paper 002 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-003	Custom Paper 003 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-004	Custom Paper 004 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-005	Custom Paper 005 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-006	Custom Paper 006 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-007	Custom Paper 007 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-008	Custom Paper 008 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-009	Custom Paper 009 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-010	Custom Paper 010 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-011	Custom Paper 011 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-012	Custom Paper 012 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-013	Custom Paper 013 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-014	Custom Paper 014 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-015	Custom Paper 015 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-016	Custom Paper 016 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-017	Custom Paper 017 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-018	Custom Paper 018 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-019	Custom Paper 019 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-020	Custom Paper 020 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-021	Custom Paper 021 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-022	Custom Paper 022 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-023	Custom Paper 023 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-024	Custom Paper 024 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-025	Custom Paper 025 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-026	Custom Paper 026 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-027	Custom Paper 027 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-028	Custom Paper 028 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-029	Custom Paper 029 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-030	Custom Paper 030 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-031	Custom Paper 031 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-032	Custom Paper 032 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-033	Custom Paper 033 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-034	Custom Paper 034 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-035	Custom Paper 035 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-036	Custom Paper 036 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-037	Custom Paper 037 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-038	Custom Paper 038 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-039	Custom Paper 039 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-040	Custom Paper 040 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-041	Custom Paper 041 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-042	Custom Paper 042 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-043	Custom Paper 043 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-044	Custom Paper 044 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-045	Custom Paper 045 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-046	Custom Paper 046 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-047	Custom Paper 047 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-048	Custom Paper 048 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-049	Custom Paper 049 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-050	Custom Paper 050 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-051	Custom Paper 051 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-052	Custom Paper 052 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-053	Custom Paper 053 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-054	Custom Paper 054 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-055	Custom Paper 055 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-056	Custom Paper 056 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-057	Custom Paper 057 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-058	Custom Paper 058 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-059	Custom Paper 059 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-060	Custom Paper 060 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-061	Custom Paper 061 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-062	Custom Paper 062 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-063	Custom Paper 063 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-064	Custom Paper 064 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-065	Custom Paper 065 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-066	Custom Paper 066 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-067	Custom Paper 067 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-068	Custom Paper 068 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-069	Custom Paper 069 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-070	Custom Paper 070 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-071	Custom Paper 071 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-072	Custom Paper 072 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-073	Custom Paper 073 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-074	Custom Paper 074 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-075	Custom Paper 075 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-076	Custom Paper 076 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-077	Custom Paper 077 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-078	Custom Paper 078 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-079	Custom Paper 079 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-080	Custom Paper 080 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-081	Custom Paper 081 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-082	Custom Paper 082 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-083	Custom Paper 083 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-084	Custom Paper 084 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-085	Custom Paper 085 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-086	Custom Paper 086 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-087	Custom Paper 087 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-088	Custom Paper 088 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-089	Custom Paper 089 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-090	Custom Paper 090 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-091	Custom Paper 091 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-956-092	Custom Paper 092 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-093	Custom Paper 093 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-094	Custom Paper 094 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-095	Custom Paper 095 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-096	Custom Paper 096 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-097	Custom Paper 097 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-098	Custom Paper 098 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-099	Custom Paper 099 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-956-100	Custom Paper 100 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1957	**[Side-to-Side Reg Disable]** Sets Side-to-Side Registration correction on/off. Set “1: On” when using paper which CIS cannot read such as OHP.		
1-957-001	Custom Paper 001 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-002	Custom Paper 002 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-003	Custom Paper 003 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-004	Custom Paper 004 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-005	Custom Paper 005 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-006	Custom Paper 006 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-007	Custom Paper 007 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-008	Custom Paper 008 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-009	Custom Paper 009 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-010	Custom Paper 010 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-011	Custom Paper 011 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-012	Custom Paper 012 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-013	Custom Paper 013 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-014	Custom Paper 014 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-015	Custom Paper 015 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-016	Custom Paper 016 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-017	Custom Paper 017 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-018	Custom Paper 018 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-019	Custom Paper 019 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-020	Custom Paper 020 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-021	Custom Paper 021 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-022	Custom Paper 022 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-023	Custom Paper 023 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-024	Custom Paper 024 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-025	Custom Paper 025 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-026	Custom Paper 026 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-027	Custom Paper 027 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-028	Custom Paper 028 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-029	Custom Paper 029 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-030	Custom Paper 030 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-031	Custom Paper 031 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-032	Custom Paper 032 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-033	Custom Paper 033 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-034	Custom Paper 034 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-035	Custom Paper 035 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-036	Custom Paper 036 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-037	Custom Paper 037 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-038	Custom Paper 038 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-039	Custom Paper 039 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-040	Custom Paper 040 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-041	Custom Paper 041 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-042	Custom Paper 042 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-043	Custom Paper 043 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-044	Custom Paper 044 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-045	Custom Paper 045 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-046	Custom Paper 046 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-047	Custom Paper 047 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-048	Custom Paper 048 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-049	Custom Paper 049 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-050	Custom Paper 050 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-051	Custom Paper 051 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-052	Custom Paper 052 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-053	Custom Paper 053 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-054	Custom Paper 054 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-055	Custom Paper 055 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-056	Custom Paper 056 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-057	Custom Paper 057 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-058	Custom Paper 058 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-059	Custom Paper 059 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-060	Custom Paper 060 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-061	Custom Paper 061 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-062	Custom Paper 062 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-063	Custom Paper 063 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-064	Custom Paper 064 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-065	Custom Paper 065 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-066	Custom Paper 066 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-067	Custom Paper 067 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-068	Custom Paper 068 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-069	Custom Paper 069 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-070	Custom Paper 070 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-071	Custom Paper 071 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-072	Custom Paper 072 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-073	Custom Paper 073 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-074	Custom Paper 074 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-075	Custom Paper 075 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-076	Custom Paper 076 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-077	Custom Paper 077 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-078	Custom Paper 078 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-079	Custom Paper 079 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-080	Custom Paper 080 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-081	Custom Paper 081 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-082	Custom Paper 082 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-083	Custom Paper 083 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-084	Custom Paper 084 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-085	Custom Paper 085 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-086	Custom Paper 086 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-087	Custom Paper 087 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-088	Custom Paper 088 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-089	Custom Paper 089 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-090	Custom Paper 090 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-091	Custom Paper 091 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-092	Custom Paper 092 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-093	Custom Paper 093 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-094	Custom Paper 094 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1-957-095	Custom Paper 095 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-096	Custom Paper 096 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-097	Custom Paper 097 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-098	Custom Paper 098 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-099	Custom Paper 099 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]
1-957-100	Custom Paper 100 (0: OFF 1: ON)	E	[0 or 1 / **0** / 1/step]

1958	**[Subscan Reg Jam Detect]** Sets sub-scan registration jam detect on/off. Setting “0:Off” might cause image shifting.		
1-958-001	Custom Paper 001 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-002	Custom Paper 002 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-003	Custom Paper 003 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-004	Custom Paper 004 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-005	Custom Paper 005 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-006	Custom Paper 006 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-007	Custom Paper 007 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-008	Custom Paper 008 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-009	Custom Paper 009 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-010	Custom Paper 010 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-011	Custom Paper 011 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-012	Custom Paper 012 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-013	Custom Paper 013 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-014	Custom Paper 014 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-015	Custom Paper 015 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-016	Custom Paper 016 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-017	Custom Paper 017 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-018	Custom Paper 018 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-019	Custom Paper 019 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-020	Custom Paper 020 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-021	Custom Paper 021 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-022	Custom Paper 022 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-023	Custom Paper 023 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-024	Custom Paper 024 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-025	Custom Paper 025 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-026	Custom Paper 026 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-027	Custom Paper 027 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-028	Custom Paper 028 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-029	Custom Paper 029 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-030	Custom Paper 030 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-031	Custom Paper 031 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-032	Custom Paper 032 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-033	Custom Paper 033 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-034	Custom Paper 034 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-035	Custom Paper 035 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-036	Custom Paper 036 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-037	Custom Paper 037 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-038	Custom Paper 038 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-039	Custom Paper 039 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-040	Custom Paper 040 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-041	Custom Paper 041 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-042	Custom Paper 042 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-043	Custom Paper 043 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-044	Custom Paper 044 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-045	Custom Paper 045 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-046	Custom Paper 046 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-047	Custom Paper 047 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-048	Custom Paper 048 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-049	Custom Paper 049 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-050	Custom Paper 050 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-051	Custom Paper 051 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-052	Custom Paper 052 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-053	Custom Paper 053 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-054	Custom Paper 054 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-055	Custom Paper 055 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-056	Custom Paper 056 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-057	Custom Paper 057 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-058	Custom Paper 058 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-059	Custom Paper 059 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-060	Custom Paper 060 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-061	Custom Paper 061 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-062	Custom Paper 062 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-063	Custom Paper 063 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-064	Custom Paper 064 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-065	Custom Paper 065 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-066	Custom Paper 066 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-067	Custom Paper 067 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-068	Custom Paper 068 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-069	Custom Paper 069 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-070	Custom Paper 070 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-071	Custom Paper 071 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-072	Custom Paper 072 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-073	Custom Paper 073 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-074	Custom Paper 074 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-075	Custom Paper 075 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-076	Custom Paper 076 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-077	Custom Paper 077 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-078	Custom Paper 078 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-079	Custom Paper 079 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-080	Custom Paper 080 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-081	Custom Paper 081 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-082	Custom Paper 082 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-083	Custom Paper 083 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-084	Custom Paper 084 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-085	Custom Paper 085 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-086	Custom Paper 086 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-087	Custom Paper 087 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-088	Custom Paper 088 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-089	Custom Paper 089 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-090	Custom Paper 090 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-091	Custom Paper 091 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-092	Custom Paper 092 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-093	Custom Paper 093 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-094	Custom Paper 094 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-095	Custom Paper 095 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-096	Custom Paper 096 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-097	Custom Paper 097 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1-958-098	Custom Paper 098 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-099	Custom Paper 099 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]
1-958-100	Custom Paper 100 (0: OFF 1: ON)	E	[0 or 1 / **1** / 1/step]

1959	**[Line Speed Adjust:Default Pos]** Adjusts line speed of decurler motor to prevent luster lines, distortion of the images, and rubbing images.		
1-959-001	Custom Paper 001	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-002	Custom Paper 002	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-003	Custom Paper 003	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-004	Custom Paper 004	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-005	Custom Paper 005	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-006	Custom Paper 006	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-007	Custom Paper 007	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-008	Custom Paper 008	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-009	Custom Paper 009	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-010	Custom Paper 010	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-011	Custom Paper 011	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-012	Custom Paper 012	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-013	Custom Paper 013	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-014	Custom Paper 014	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-015	Custom Paper 015	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-016	Custom Paper 016	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-017	Custom Paper 017	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-018	Custom Paper 018	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1-959-019	Custom Paper 019	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-020	Custom Paper 020	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-021	Custom Paper 021	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-022	Custom Paper 022	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-023	Custom Paper 023	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-024	Custom Paper 024	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-025	Custom Paper 025	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-026	Custom Paper 026	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-027	Custom Paper 027	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-028	Custom Paper 028	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-029	Custom Paper 029	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-030	Custom Paper 030	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-031	Custom Paper 031	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-032	Custom Paper 032	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-033	Custom Paper 033	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-034	Custom Paper 034	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-035	Custom Paper 035	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-036	Custom Paper 036	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-037	Custom Paper 037	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-038	Custom Paper 038	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-039	Custom Paper 039	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-040	Custom Paper 040	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-041	Custom Paper 041	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-042	Custom Paper 042	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-043	Custom Paper 043	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-044	Custom Paper 044	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1-959-045	Custom Paper 045	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-046	Custom Paper 046	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-047	Custom Paper 047	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-048	Custom Paper 048	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-049	Custom Paper 049	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-050	Custom Paper 050	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-051	Custom Paper 051	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-052	Custom Paper 052	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-053	Custom Paper 053	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-054	Custom Paper 054	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-055	Custom Paper 055	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-056	Custom Paper 056	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-057	Custom Paper 057	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-058	Custom Paper 058	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-059	Custom Paper 059	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-060	Custom Paper 060	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-061	Custom Paper 061	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-062	Custom Paper 062	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-063	Custom Paper 063	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-064	Custom Paper 064	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-065	Custom Paper 065	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-066	Custom Paper 066	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-067	Custom Paper 067	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-068	Custom Paper 068	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-069	Custom Paper 069	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-070	Custom Paper 070	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1-959-071	Custom Paper 071	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-072	Custom Paper 072	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-073	Custom Paper 073	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-074	Custom Paper 074	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-075	Custom Paper 075	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-076	Custom Paper 076	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-077	Custom Paper 077	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-078	Custom Paper 078	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-079	Custom Paper 079	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-080	Custom Paper 080	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-081	Custom Paper 081	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-082	Custom Paper 082	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-083	Custom Paper 083	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-084	Custom Paper 084	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-085	Custom Paper 085	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-086	Custom Paper 086	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-087	Custom Paper 087	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-088	Custom Paper 088	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-089	Custom Paper 089	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-090	Custom Paper 090	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-091	Custom Paper 091	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-092	Custom Paper 092	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-093	Custom Paper 093	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-094	Custom Paper 094	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-095	Custom Paper 095	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-096	Custom Paper 096	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1-959-097	Custom Paper 097	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-098	Custom Paper 098	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-099	Custom Paper 099	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]
1-959-100	Custom Paper 100	E	[-2.5 to 12.5 / **2.0** / 0.5%/step]

1960	**[Line Speed Adjust:Pos.1]** Adjusts line speed of decurler motor to prevent luster lines, distortion of the images, and rubbing images.		
1-960-001	Custom Paper 001	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-002	Custom Paper 002	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-003	Custom Paper 003	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-004	Custom Paper 004	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-005	Custom Paper 005	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-006	Custom Paper 006	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-007	Custom Paper 007	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-008	Custom Paper 008	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-009	Custom Paper 009	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-010	Custom Paper 010	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-011	Custom Paper 011	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-012	Custom Paper 012	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-013	Custom Paper 013	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-014	Custom Paper 014	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-015	Custom Paper 015	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-016	Custom Paper 016	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-017	Custom Paper 017	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-018	Custom Paper 018	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-019	Custom Paper 019	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1-960-020	Custom Paper 020	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-021	Custom Paper 021	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-022	Custom Paper 022	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-023	Custom Paper 023	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-024	Custom Paper 024	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-025	Custom Paper 025	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-026	Custom Paper 026	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-027	Custom Paper 027	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-028	Custom Paper 028	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-029	Custom Paper 029	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-030	Custom Paper 030	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-031	Custom Paper 031	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-032	Custom Paper 032	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-033	Custom Paper 033	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-034	Custom Paper 034	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-035	Custom Paper 035	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-036	Custom Paper 036	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-037	Custom Paper 037	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-038	Custom Paper 038	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-039	Custom Paper 039	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-040	Custom Paper 040	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-041	Custom Paper 041	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-042	Custom Paper 042	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-043	Custom Paper 043	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-044	Custom Paper 044	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-045	Custom Paper 045	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1-960-046	Custom Paper 046	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-047	Custom Paper 047	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-048	Custom Paper 048	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-049	Custom Paper 049	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-050	Custom Paper 050	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-051	Custom Paper 051	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-052	Custom Paper 052	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-053	Custom Paper 053	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-054	Custom Paper 054	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-055	Custom Paper 055	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-056	Custom Paper 056	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-057	Custom Paper 057	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-058	Custom Paper 058	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-059	Custom Paper 059	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-060	Custom Paper 060	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-061	Custom Paper 061	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-062	Custom Paper 062	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-063	Custom Paper 063	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-064	Custom Paper 064	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-065	Custom Paper 065	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-066	Custom Paper 066	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-067	Custom Paper 067	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-068	Custom Paper 068	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-069	Custom Paper 069	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-070	Custom Paper 070	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-071	Custom Paper 071	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1-960-072	Custom Paper 072	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-073	Custom Paper 073	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-074	Custom Paper 074	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-075	Custom Paper 075	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-076	Custom Paper 076	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-077	Custom Paper 077	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-078	Custom Paper 078	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-079	Custom Paper 079	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-080	Custom Paper 080	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-081	Custom Paper 081	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-082	Custom Paper 082	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-083	Custom Paper 083	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-084	Custom Paper 084	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-085	Custom Paper 085	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-086	Custom Paper 086	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-087	Custom Paper 087	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-088	Custom Paper 088	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-089	Custom Paper 089	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-090	Custom Paper 090	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-091	Custom Paper 091	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-092	Custom Paper 092	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-093	Custom Paper 093	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-094	Custom Paper 094	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-095	Custom Paper 095	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-096	Custom Paper 096	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-097	Custom Paper 097	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1-960-098	Custom Paper 098	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-099	Custom Paper 099	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]
1-960-100	Custom Paper 100	E	[-2.5 to 12.5 / **5.0** / 0.5%/step]

1961	**[Line Speed Adjust:Pos.2]** Adjusts line speed of decurler motor to prevent luster lines, distortion of the images, and rubbing images.		
1-961-001	Custom Paper 001	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-002	Custom Paper 002	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-003	Custom Paper 003	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-004	Custom Paper 004	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-005	Custom Paper 005	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-006	Custom Paper 006	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-007	Custom Paper 007	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-008	Custom Paper 008	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-009	Custom Paper 009	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-010	Custom Paper 010	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-011	Custom Paper 011	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-012	Custom Paper 012	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-013	Custom Paper 013	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-014	Custom Paper 014	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-015	Custom Paper 015	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-016	Custom Paper 016	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-017	Custom Paper 017	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-018	Custom Paper 018	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-019	Custom Paper 019	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-020	Custom Paper 020	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1-961-021	Custom Paper 021	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-022	Custom Paper 022	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-023	Custom Paper 023	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-024	Custom Paper 024	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-025	Custom Paper 025	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-026	Custom Paper 026	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-027	Custom Paper 027	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-028	Custom Paper 028	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-029	Custom Paper 029	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-030	Custom Paper 030	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-031	Custom Paper 031	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-032	Custom Paper 032	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-033	Custom Paper 033	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-034	Custom Paper 034	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-035	Custom Paper 035	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-036	Custom Paper 036	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-037	Custom Paper 037	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-038	Custom Paper 038	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-039	Custom Paper 039	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-040	Custom Paper 040	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-041	Custom Paper 041	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-042	Custom Paper 042	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-043	Custom Paper 043	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-044	Custom Paper 044	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-045	Custom Paper 045	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-046	Custom Paper 046	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1-961-047	Custom Paper 047	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-048	Custom Paper 048	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-049	Custom Paper 049	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-050	Custom Paper 050	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-051	Custom Paper 051	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-052	Custom Paper 052	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-053	Custom Paper 053	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-054	Custom Paper 054	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-055	Custom Paper 055	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-056	Custom Paper 056	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-057	Custom Paper 057	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-058	Custom Paper 058	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-059	Custom Paper 059	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-060	Custom Paper 060	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-061	Custom Paper 061	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-062	Custom Paper 062	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-063	Custom Paper 063	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-064	Custom Paper 064	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-065	Custom Paper 065	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-066	Custom Paper 066	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-067	Custom Paper 067	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-068	Custom Paper 068	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-069	Custom Paper 069	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-070	Custom Paper 070	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-071	Custom Paper 071	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-072	Custom Paper 072	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1-961-073	Custom Paper 073	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-074	Custom Paper 074	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-075	Custom Paper 075	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-076	Custom Paper 076	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-077	Custom Paper 077	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-078	Custom Paper 078	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-079	Custom Paper 079	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-080	Custom Paper 080	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-081	Custom Paper 081	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-082	Custom Paper 082	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-083	Custom Paper 083	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-084	Custom Paper 084	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-085	Custom Paper 085	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-086	Custom Paper 086	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-087	Custom Paper 087	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-088	Custom Paper 088	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-089	Custom Paper 089	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-090	Custom Paper 090	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-091	Custom Paper 091	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-092	Custom Paper 092	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-093	Custom Paper 093	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-094	Custom Paper 094	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-095	Custom Paper 095	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-096	Custom Paper 096	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-097	Custom Paper 097	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-098	Custom Paper 098	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1-961-099	Custom Paper 099	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]
1-961-100	Custom Paper 100	E	[-2.5 to 12.5 / **5.5** / 0.5%/step]

1962	**[Color Paper Adjustment]** Adjusts threshold of LED power for CIS.		
1-962-001	Custom Paper 001	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-002	Custom Paper 002	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-003	Custom Paper 003	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-004	Custom Paper 004	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-005	Custom Paper 005	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-006	Custom Paper 006	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-007	Custom Paper 007	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-008	Custom Paper 008	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-009	Custom Paper 009	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-010	Custom Paper 010	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-011	Custom Paper 011	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-012	Custom Paper 012	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-013	Custom Paper 013	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-014	Custom Paper 014	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-015	Custom Paper 015	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-016	Custom Paper 016	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-017	Custom Paper 017	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-018	Custom Paper 018	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-019	Custom Paper 019	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-020	Custom Paper 020	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-021	Custom Paper 021	E	[1.00 to 5.00 / **1.52** / 0.01/step]

1-962-022	Custom Paper 022	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-023	Custom Paper 023	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-024	Custom Paper 024	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-025	Custom Paper 025	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-026	Custom Paper 026	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-027	Custom Paper 027	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-028	Custom Paper 028	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-029	Custom Paper 029	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-030	Custom Paper 030	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-031	Custom Paper 031	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-032	Custom Paper 032	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-033	Custom Paper 033	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-034	Custom Paper 034	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-035	Custom Paper 035	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-036	Custom Paper 036	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-037	Custom Paper 037	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-038	Custom Paper 038	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-039	Custom Paper 039	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-040	Custom Paper 040	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-041	Custom Paper 041	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-042	Custom Paper 042	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-043	Custom Paper 043	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-044	Custom Paper 044	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-045	Custom Paper 045	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-046	Custom Paper 046	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-047	Custom Paper 047	E	[1.00 to 5.00 / **1.52** / 0.01/step]

1-962-048	Custom Paper 048	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-049	Custom Paper 049	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-050	Custom Paper 050	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-051	Custom Paper 051	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-052	Custom Paper 052	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-053	Custom Paper 053	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-054	Custom Paper 054	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-055	Custom Paper 055	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-056	Custom Paper 056	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-057	Custom Paper 057	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-058	Custom Paper 058	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-059	Custom Paper 059	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-060	Custom Paper 060	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-061	Custom Paper 061	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-062	Custom Paper 062	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-063	Custom Paper 063	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-064	Custom Paper 064	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-065	Custom Paper 065	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-066	Custom Paper 066	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-067	Custom Paper 067	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-068	Custom Paper 068	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-069	Custom Paper 069	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-070	Custom Paper 070	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-071	Custom Paper 071	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-072	Custom Paper 072	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-073	Custom Paper 073	E	[1.00 to 5.00 / **1.52** / 0.01/step]

1-962-074	Custom Paper 074	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-075	Custom Paper 075	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-076	Custom Paper 076	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-077	Custom Paper 077	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-078	Custom Paper 078	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-079	Custom Paper 079	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-080	Custom Paper 080	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-081	Custom Paper 081	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-082	Custom Paper 082	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-083	Custom Paper 083	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-084	Custom Paper 084	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-085	Custom Paper 085	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-086	Custom Paper 086	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-087	Custom Paper 087	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-088	Custom Paper 088	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-089	Custom Paper 089	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-090	Custom Paper 090	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-091	Custom Paper 091	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-092	Custom Paper 092	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-093	Custom Paper 093	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-094	Custom Paper 094	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-095	Custom Paper 095	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-096	Custom Paper 096	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-097	Custom Paper 097	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-098	Custom Paper 098	E	[1.00 to 5.00 / **1.52** / 0.01/step]
1-962-099	Custom Paper 099	E	[1.00 to 5.00 / **1.52** / 0.01/step]

1-962-100	Custom Paper 100	E	[1.00 to 5.00 / **1.52** / 0.01/step]

1963	**[Trans Timing Roll Spd:Fine Adj]** Fine-tunes the line speed of transfer timing motor. Adjusts sub-scan magnification and magnification error deviation to improve image position accuracy and to prevent the shock jitter.		
1-963-001	Custom Paper 001	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-002	Custom Paper 002	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-003	Custom Paper 003	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-004	Custom Paper 004	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-005	Custom Paper 005	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-006	Custom Paper 006	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-007	Custom Paper 007	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-008	Custom Paper 008	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-009	Custom Paper 009	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-010	Custom Paper 010	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-011	Custom Paper 011	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-012	Custom Paper 012	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-013	Custom Paper 013	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-014	Custom Paper 014	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-015	Custom Paper 015	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-016	Custom Paper 016	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-017	Custom Paper 017	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-018	Custom Paper 018	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-019	Custom Paper 019	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-020	Custom Paper 020	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-021	Custom Paper 021	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

1-963-022	Custom Paper 022	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-023	Custom Paper 023	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-024	Custom Paper 024	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-025	Custom Paper 025	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-026	Custom Paper 026	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-027	Custom Paper 027	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-028	Custom Paper 028	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-029	Custom Paper 029	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-030	Custom Paper 030	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-031	Custom Paper 031	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-032	Custom Paper 032	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-033	Custom Paper 033	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-034	Custom Paper 034	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-035	Custom Paper 035	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-036	Custom Paper 036	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-037	Custom Paper 037	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-038	Custom Paper 038	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-039	Custom Paper 039	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-040	Custom Paper 040	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-041	Custom Paper 041	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-042	Custom Paper 042	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-043	Custom Paper 043	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-044	Custom Paper 044	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-045	Custom Paper 045	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-046	Custom Paper 046	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-047	Custom Paper 047	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

1-963-048	Custom Paper 048	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-049	Custom Paper 049	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-050	Custom Paper 050	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-051	Custom Paper 051	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-052	Custom Paper 052	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-053	Custom Paper 053	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-054	Custom Paper 054	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-055	Custom Paper 055	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-056	Custom Paper 056	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-057	Custom Paper 057	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-058	Custom Paper 058	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-059	Custom Paper 059	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-060	Custom Paper 060	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-061	Custom Paper 061	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-062	Custom Paper 062	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-063	Custom Paper 063	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-064	Custom Paper 064	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-065	Custom Paper 065	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-066	Custom Paper 066	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-067	Custom Paper 067	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-068	Custom Paper 068	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-069	Custom Paper 069	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-070	Custom Paper 070	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-071	Custom Paper 071	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-072	Custom Paper 072	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-073	Custom Paper 073	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

1-963-074	Custom Paper 074	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-075	Custom Paper 075	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-076	Custom Paper 076	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-077	Custom Paper 077	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-078	Custom Paper 078	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-079	Custom Paper 079	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-080	Custom Paper 080	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-081	Custom Paper 081	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-082	Custom Paper 082	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-083	Custom Paper 083	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-084	Custom Paper 084	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-085	Custom Paper 085	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-086	Custom Paper 086	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-087	Custom Paper 087	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-088	Custom Paper 088	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-089	Custom Paper 089	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-090	Custom Paper 090	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-091	Custom Paper 091	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-092	Custom Paper 092	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-093	Custom Paper 093	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-094	Custom Paper 094	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-095	Custom Paper 095	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-096	Custom Paper 096	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-097	Custom Paper 097	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-098	Custom Paper 098	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
1-963-099	Custom Paper 099	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

1-963-100	Custom Paper 100	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

1964	**[Exit Motor Spd: Fine Adj]** Fine-tunes the line speed of exit motor to prevent luster lines, distortion of the images, and rubbing images.		
1-964-001	Custom Paper 001	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-002	Custom Paper 002	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-003	Custom Paper 003	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-004	Custom Paper 004	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-005	Custom Paper 005	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-006	Custom Paper 006	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-007	Custom Paper 007	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-008	Custom Paper 008	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-009	Custom Paper 009	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-010	Custom Paper 010	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-011	Custom Paper 011	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-012	Custom Paper 012	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-013	Custom Paper 013	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-014	Custom Paper 014	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-015	Custom Paper 015	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-016	Custom Paper 016	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-017	Custom Paper 017	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-018	Custom Paper 018	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-019	Custom Paper 019	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-020	Custom Paper 020	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-021	Custom Paper 021	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-022	Custom Paper 022	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1-964-023	Custom Paper 023	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-024	Custom Paper 024	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-025	Custom Paper 025	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-026	Custom Paper 026	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-027	Custom Paper 027	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-028	Custom Paper 028	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-029	Custom Paper 029	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-030	Custom Paper 030	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-031	Custom Paper 031	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-032	Custom Paper 032	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-033	Custom Paper 033	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-034	Custom Paper 034	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-035	Custom Paper 035	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-036	Custom Paper 036	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-037	Custom Paper 037	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-038	Custom Paper 038	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-039	Custom Paper 039	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-040	Custom Paper 040	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-041	Custom Paper 041	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-042	Custom Paper 042	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-043	Custom Paper 043	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-044	Custom Paper 044	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-045	Custom Paper 045	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-046	Custom Paper 046	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-047	Custom Paper 047	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-048	Custom Paper 048	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1-964-049	Custom Paper 049	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-050	Custom Paper 050	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-051	Custom Paper 051	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-052	Custom Paper 052	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-053	Custom Paper 053	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-054	Custom Paper 054	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-055	Custom Paper 055	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-056	Custom Paper 056	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-057	Custom Paper 057	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-058	Custom Paper 058	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-059	Custom Paper 059	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-060	Custom Paper 060	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-061	Custom Paper 061	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-062	Custom Paper 062	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-063	Custom Paper 063	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-064	Custom Paper 064	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-065	Custom Paper 065	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-066	Custom Paper 066	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-067	Custom Paper 067	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-068	Custom Paper 068	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-069	Custom Paper 069	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-070	Custom Paper 070	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-071	Custom Paper 071	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-072	Custom Paper 072	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-073	Custom Paper 073	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-074	Custom Paper 074	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1-964-075	Custom Paper 075	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-076	Custom Paper 076	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-077	Custom Paper 077	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-078	Custom Paper 078	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-079	Custom Paper 079	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-080	Custom Paper 080	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-081	Custom Paper 081	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-082	Custom Paper 082	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-083	Custom Paper 083	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-084	Custom Paper 084	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-085	Custom Paper 085	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-086	Custom Paper 086	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-087	Custom Paper 087	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-088	Custom Paper 088	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-089	Custom Paper 089	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-090	Custom Paper 090	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-091	Custom Paper 091	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-092	Custom Paper 092	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-093	Custom Paper 093	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-094	Custom Paper 094	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-095	Custom Paper 095	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-096	Custom Paper 096	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-097	Custom Paper 097	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-098	Custom Paper 098	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-099	Custom Paper 099	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]
1-964-100	Custom Paper 100	E	[-5.0 to 5.0 / **0.0** / 0.1%/step]

1965	**[Invert Entrance Spd: Fine Adj]** Fine-tunes the line speed of invert entrance motor to prevent luster lines, distortion of the images, and rubbing images.		
1-965-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-965-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-965-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-965-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-965-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1966	**[Invert Exit Spd: Fine Adj]** Fine-tunes the line speed of invert exit motor to prevent luster lines, distortion of the images, and rubbing images.		
1-966-001	Custom Paper 001	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-002	Custom Paper 002	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-003	Custom Paper 003	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-004	Custom Paper 004	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-005	Custom Paper 005	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-006	Custom Paper 006	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-007	Custom Paper 007	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-008	Custom Paper 008	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-009	Custom Paper 009	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-010	Custom Paper 010	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-011	Custom Paper 011	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-012	Custom Paper 012	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-013	Custom Paper 013	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-014	Custom Paper 014	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-015	Custom Paper 015	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-016	Custom Paper 016	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-017	Custom Paper 017	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-018	Custom Paper 018	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-019	Custom Paper 019	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-020	Custom Paper 020	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-021	Custom Paper 021	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-022	Custom Paper 022	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-023	Custom Paper 023	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-966-024	Custom Paper 024	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-025	Custom Paper 025	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-026	Custom Paper 026	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-027	Custom Paper 027	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-028	Custom Paper 028	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-029	Custom Paper 029	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-030	Custom Paper 030	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-031	Custom Paper 031	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-032	Custom Paper 032	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-033	Custom Paper 033	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-034	Custom Paper 034	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-035	Custom Paper 035	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-036	Custom Paper 036	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-037	Custom Paper 037	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-038	Custom Paper 038	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-039	Custom Paper 039	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-040	Custom Paper 040	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-041	Custom Paper 041	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-042	Custom Paper 042	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-043	Custom Paper 043	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-044	Custom Paper 044	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-045	Custom Paper 045	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-046	Custom Paper 046	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-047	Custom Paper 047	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-048	Custom Paper 048	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-049	Custom Paper 049	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-966-050	Custom Paper 050	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-051	Custom Paper 051	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-052	Custom Paper 052	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-053	Custom Paper 053	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-054	Custom Paper 054	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-055	Custom Paper 055	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-056	Custom Paper 056	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-057	Custom Paper 057	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-058	Custom Paper 058	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-059	Custom Paper 059	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-060	Custom Paper 060	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-061	Custom Paper 061	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-062	Custom Paper 062	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-063	Custom Paper 063	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-064	Custom Paper 064	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-065	Custom Paper 065	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-066	Custom Paper 066	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-067	Custom Paper 067	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-068	Custom Paper 068	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-069	Custom Paper 069	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-070	Custom Paper 070	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-071	Custom Paper 071	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-072	Custom Paper 072	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-073	Custom Paper 073	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-074	Custom Paper 074	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-075	Custom Paper 075	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1-966-076	Custom Paper 076	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-077	Custom Paper 077	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-078	Custom Paper 078	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-079	Custom Paper 079	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-080	Custom Paper 080	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-081	Custom Paper 081	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-082	Custom Paper 082	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-083	Custom Paper 083	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-084	Custom Paper 084	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-085	Custom Paper 085	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-086	Custom Paper 086	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-087	Custom Paper 087	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-088	Custom Paper 088	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-089	Custom Paper 089	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-090	Custom Paper 090	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-091	Custom Paper 091	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-092	Custom Paper 092	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-093	Custom Paper 093	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-094	Custom Paper 094	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-095	Custom Paper 095	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-096	Custom Paper 096	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-097	Custom Paper 097	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-098	Custom Paper 098	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-099	Custom Paper 099	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]
1-966-100	Custom Paper 100	E	[-3.0 to 3.0 / **0.0** / 0.1%/step]

1975	**[LCT Tray Fan Duty Adjustment]** Adjusts power of the air assist fan. Increasing air assist duty prevents double feed and non-paper feed.		
1-975-001	Custom Paper 001	E	[10 to 100 / **70** / 10%/step]
1-975-002	Custom Paper 002	E	[10 to 100 / **70** / 10%/step]
1-975-003	Custom Paper 003	E	[10 to 100 / **70** / 10%/step]
1-975-004	Custom Paper 004	E	[10 to 100 / **70** / 10%/step]
1-975-005	Custom Paper 005	E	[10 to 100 / **70** / 10%/step]
1-975-006	Custom Paper 006	E	[10 to 100 / **70** / 10%/step]
1-975-007	Custom Paper 007	E	[10 to 100 / **70** / 10%/step]
1-975-008	Custom Paper 008	E	[10 to 100 / **70** / 10%/step]
1-975-009	Custom Paper 009	E	[10 to 100 / **70** / 10%/step]
1-975-010	Custom Paper 010	E	[10 to 100 / **70** / 10%/step]
1-975-011	Custom Paper 011	E	[10 to 100 / **70** / 10%/step]
1-975-012	Custom Paper 012	E	[10 to 100 / **70** / 10%/step]
1-975-013	Custom Paper 013	E	[10 to 100 / **70** / 10%/step]
1-975-014	Custom Paper 014	E	[10 to 100 / **70** / 10%/step]
1-975-015	Custom Paper 015	E	[10 to 100 / **70** / 10%/step]
1-975-016	Custom Paper 016	E	[10 to 100 / **70** / 10%/step]
1-975-017	Custom Paper 017	E	[10 to 100 / **70** / 10%/step]
1-975-018	Custom Paper 018	E	[10 to 100 / **70** / 10%/step]
1-975-019	Custom Paper 019	E	[10 to 100 / **70** / 10%/step]
1-975-020	Custom Paper 020	E	[10 to 100 / **70** / 10%/step]
1-975-021	Custom Paper 021	E	[10 to 100 / **70** / 10%/step]
1-975-022	Custom Paper 022	E	[10 to 100 / **70** / 10%/step]
1-975-023	Custom Paper 023	E	[10 to 100 / **70** / 10%/step]

1-975-024	Custom Paper 024	E	[10 to 100 / **70** / 10%/step]
1-975-025	Custom Paper 025	E	[10 to 100 / **70** / 10%/step]
1-975-026	Custom Paper 026	E	[10 to 100 / **70** / 10%/step]
1-975-027	Custom Paper 027	E	[10 to 100 / **70** / 10%/step]
1-975-028	Custom Paper 028	E	[10 to 100 / **70** / 10%/step]
1-975-029	Custom Paper 029	E	[10 to 100 / **70** / 10%/step]
1-975-030	Custom Paper 030	E	[10 to 100 / **70** / 10%/step]
1-975-031	Custom Paper 031	E	[10 to 100 / **70** / 10%/step]
1-975-032	Custom Paper 032	E	[10 to 100 / **70** / 10%/step]
1-975-033	Custom Paper 033	E	[10 to 100 / **70** / 10%/step]
1-975-034	Custom Paper 034	E	[10 to 100 / **70** / 10%/step]
1-975-035	Custom Paper 035	E	[10 to 100 / **70** / 10%/step]
1-975-036	Custom Paper 036	E	[10 to 100 / **70** / 10%/step]
1-975-037	Custom Paper 037	E	[10 to 100 / **70** / 10%/step]
1-975-038	Custom Paper 038	E	[10 to 100 / **70** / 10%/step]
1-975-039	Custom Paper 039	E	[10 to 100 / **70** / 10%/step]
1-975-040	Custom Paper 040	E	[10 to 100 / **70** / 10%/step]
1-975-041	Custom Paper 041	E	[10 to 100 / **70** / 10%/step]
1-975-042	Custom Paper 042	E	[10 to 100 / **70** / 10%/step]
1-975-043	Custom Paper 043	E	[10 to 100 / **70** / 10%/step]
1-975-044	Custom Paper 044	E	[10 to 100 / **70** / 10%/step]
1-975-045	Custom Paper 045	E	[10 to 100 / **70** / 10%/step]
1-975-046	Custom Paper 046	E	[10 to 100 / **70** / 10%/step]
1-975-047	Custom Paper 047	E	[10 to 100 / **70** / 10%/step]
1-975-048	Custom Paper 048	E	[10 to 100 / **70** / 10%/step]
1-975-049	Custom Paper 049	E	[10 to 100 / **70** / 10%/step]

1-975-050	Custom Paper 050	E	[10 to 100 / **70** / 10%/step]
1-975-051	Custom Paper 051	E	[10 to 100 / **70** / 10%/step]
1-975-052	Custom Paper 052	E	[10 to 100 / **70** / 10%/step]
1-975-053	Custom Paper 053	E	[10 to 100 / **70** / 10%/step]
1-975-054	Custom Paper 054	E	[10 to 100 / **70** / 10%/step]
1-975-055	Custom Paper 055	E	[10 to 100 / **70** / 10%/step]
1-975-056	Custom Paper 056	E	[10 to 100 / **70** / 10%/step]
1-975-057	Custom Paper 057	E	[10 to 100 / **70** / 10%/step]
1-975-058	Custom Paper 058	E	[10 to 100 / **70** / 10%/step]
1-975-059	Custom Paper 059	E	[10 to 100 / **70** / 10%/step]
1-975-060	Custom Paper 060	E	[10 to 100 / **70** / 10%/step]
1-975-061	Custom Paper 061	E	[10 to 100 / **70** / 10%/step]
1-975-062	Custom Paper 062	E	[10 to 100 / **70** / 10%/step]
1-975-063	Custom Paper 063	E	[10 to 100 / **70** / 10%/step]
1-975-064	Custom Paper 064	E	[10 to 100 / **70** / 10%/step]
1-975-065	Custom Paper 065	E	[10 to 100 / **70** / 10%/step]
1-975-066	Custom Paper 066	E	[10 to 100 / **70** / 10%/step]
1-975-067	Custom Paper 067	E	[10 to 100 / **70** / 10%/step]
1-975-068	Custom Paper 068	E	[10 to 100 / **70** / 10%/step]
1-975-069	Custom Paper 069	E	[10 to 100 / **70** / 10%/step]
1-975-070	Custom Paper 070	E	[10 to 100 / **70** / 10%/step]
1-975-071	Custom Paper 071	E	[10 to 100 / **70** / 10%/step]
1-975-072	Custom Paper 072	E	[10 to 100 / **70** / 10%/step]
1-975-073	Custom Paper 073	E	[10 to 100 / **70** / 10%/step]
1-975-074	Custom Paper 074	E	[10 to 100 / **70** / 10%/step]
1-975-075	Custom Paper 075	E	[10 to 100 / **70** / 10%/step]

1-975-076	Custom Paper 076	E	[10 to 100 / **70** / 10%/step]
1-975-077	Custom Paper 077	E	[10 to 100 / **70** / 10%/step]
1-975-078	Custom Paper 078	E	[10 to 100 / **70** / 10%/step]
1-975-079	Custom Paper 079	E	[10 to 100 / **70** / 10%/step]
1-975-080	Custom Paper 080	E	[10 to 100 / **70** / 10%/step]
1-975-081	Custom Paper 081	E	[10 to 100 / **70** / 10%/step]
1-975-082	Custom Paper 082	E	[10 to 100 / **70** / 10%/step]
1-975-083	Custom Paper 083	E	[10 to 100 / **70** / 10%/step]
1-975-084	Custom Paper 084	E	[10 to 100 / **70** / 10%/step]
1-975-085	Custom Paper 085	E	[10 to 100 / **70** / 10%/step]
1-975-086	Custom Paper 086	E	[10 to 100 / **70** / 10%/step]
1-975-087	Custom Paper 087	E	[10 to 100 / **70** / 10%/step]
1-975-088	Custom Paper 088	E	[10 to 100 / **70** / 10%/step]
1-975-089	Custom Paper 089	E	[10 to 100 / **70** / 10%/step]
1-975-090	Custom Paper 090	E	[10 to 100 / **70** / 10%/step]
1-975-091	Custom Paper 091	E	[10 to 100 / **70** / 10%/step]
1-975-092	Custom Paper 092	E	[10 to 100 / **70** / 10%/step]
1-975-093	Custom Paper 093	E	[10 to 100 / **70** / 10%/step]
1-975-094	Custom Paper 094	E	[10 to 100 / **70** / 10%/step]
1-975-095	Custom Paper 095	E	[10 to 100 / **70** / 10%/step]
1-975-096	Custom Paper 096	E	[10 to 100 / **70** / 10%/step]
1-975-097	Custom Paper 097	E	[10 to 100 / **70** / 10%/step]
1-975-098	Custom Paper 098	E	[10 to 100 / **70** / 10%/step]
1-975-099	Custom Paper 099	E	[10 to 100 / **70** / 10%/step]
1-975-100	Custom Paper 100	E	[10 to 100 / **70** / 10%/step]

1976	**[LCT Tray Fan ON/OFF]** Sets air assist on/off. Set “1: On” to solve double feed and non-paper feed problems. 0:Off, 1:On		
1-976-001	Custom Paper 001	E	[0 or 1 / **0** / 1/step]
1-976-002	Custom Paper 002	E	[0 or 1 / **0** / 1/step]
1-976-003	Custom Paper 003	E	[0 or 1 / **0** / 1/step]
1-976-004	Custom Paper 004	E	[0 or 1 / **0** / 1/step]
1-976-005	Custom Paper 005	E	[0 or 1 / **0** / 1/step]
1-976-006	Custom Paper 006	E	[0 or 1 / **0** / 1/step]
1-976-007	Custom Paper 007	E	[0 or 1 / **0** / 1/step]
1-976-008	Custom Paper 008	E	[0 or 1 / **0** / 1/step]
1-976-009	Custom Paper 009	E	[0 or 1 / **0** / 1/step]
1-976-010	Custom Paper 010	E	[0 or 1 / **0** / 1/step]
1-976-011	Custom Paper 011	E	[0 or 1 / **0** / 1/step]
1-976-012	Custom Paper 012	E	[0 or 1 / **0** / 1/step]
1-976-013	Custom Paper 013	E	[0 or 1 / **0** / 1/step]
1-976-014	Custom Paper 014	E	[0 or 1 / **0** / 1/step]
1-976-015	Custom Paper 015	E	[0 or 1 / **0** / 1/step]
1-976-016	Custom Paper 016	E	[0 or 1 / **0** / 1/step]
1-976-017	Custom Paper 017	E	[0 or 1 / **0** / 1/step]
1-976-018	Custom Paper 018	E	[0 or 1 / **0** / 1/step]
1-976-019	Custom Paper 019	E	[0 or 1 / **0** / 1/step]
1-976-020	Custom Paper 020	E	[0 or 1 / **0** / 1/step]
1-976-021	Custom Paper 021	E	[0 or 1 / **0** / 1/step]
1-976-022	Custom Paper 022	E	[0 or 1 / **0** / 1/step]
1-976-023	Custom Paper 023	E	[0 or 1 / **0** / 1/step]

1-976-024	Custom Paper 024	E	[0 or 1 / **0** / 1/step]
1-976-025	Custom Paper 025	E	[0 or 1 / **0** / 1/step]
1-976-026	Custom Paper 026	E	[0 or 1 / **0** / 1/step]
1-976-027	Custom Paper 027	E	[0 or 1 / **0** / 1/step]
1-976-028	Custom Paper 028	E	[0 or 1 / **0** / 1/step]
1-976-029	Custom Paper 029	E	[0 or 1 / **0** / 1/step]
1-976-030	Custom Paper 030	E	[0 or 1 / **0** / 1/step]
1-976-031	Custom Paper 031	E	[0 or 1 / **0** / 1/step]
1-976-032	Custom Paper 032	E	[0 or 1 / **0** / 1/step]
1-976-033	Custom Paper 033	E	[0 or 1 / **0** / 1/step]
1-976-034	Custom Paper 034	E	[0 or 1 / **0** / 1/step]
1-976-035	Custom Paper 035	E	[0 or 1 / **0** / 1/step]
1-976-036	Custom Paper 036	E	[0 or 1 / **0** / 1/step]
1-976-037	Custom Paper 037	E	[0 or 1 / **0** / 1/step]
1-976-038	Custom Paper 038	E	[0 or 1 / **0** / 1/step]
1-976-039	Custom Paper 039	E	[0 or 1 / **0** / 1/step]
1-976-040	Custom Paper 040	E	[0 or 1 / **0** / 1/step]
1-976-041	Custom Paper 041	E	[0 or 1 / **0** / 1/step]
1-976-042	Custom Paper 042	E	[0 or 1 / **0** / 1/step]
1-976-043	Custom Paper 043	E	[0 or 1 / **0** / 1/step]
1-976-044	Custom Paper 044	E	[0 or 1 / **0** / 1/step]
1-976-045	Custom Paper 045	E	[0 or 1 / **0** / 1/step]
1-976-046	Custom Paper 046	E	[0 or 1 / **0** / 1/step]
1-976-047	Custom Paper 047	E	[0 or 1 / **0** / 1/step]
1-976-048	Custom Paper 048	E	[0 or 1 / **0** / 1/step]
1-976-049	Custom Paper 049	E	[0 or 1 / **0** / 1/step]

1-976-050	Custom Paper 050	E	[0 or 1 / **0** / 1/step]
1-976-051	Custom Paper 051	E	[0 or 1 / **0** / 1/step]
1-976-052	Custom Paper 052	E	[0 or 1 / **0** / 1/step]
1-976-053	Custom Paper 053	E	[0 or 1 / **0** / 1/step]
1-976-054	Custom Paper 054	E	[0 or 1 / **0** / 1/step]
1-976-055	Custom Paper 055	E	[0 or 1 / **0** / 1/step]
1-976-056	Custom Paper 056	E	[0 or 1 / **0** / 1/step]
1-976-057	Custom Paper 057	E	[0 or 1 / **0** / 1/step]
1-976-058	Custom Paper 058	E	[0 or 1 / **0** / 1/step]
1-976-059	Custom Paper 059	E	[0 or 1 / **0** / 1/step]
1-976-060	Custom Paper 060	E	[0 or 1 / **0** / 1/step]
1-976-061	Custom Paper 061	E	[0 or 1 / **0** / 1/step]
1-976-062	Custom Paper 062	E	[0 or 1 / **0** / 1/step]
1-976-063	Custom Paper 063	E	[0 or 1 / **0** / 1/step]
1-976-064	Custom Paper 064	E	[0 or 1 / **0** / 1/step]
1-976-065	Custom Paper 065	E	[0 or 1 / **0** / 1/step]
1-976-066	Custom Paper 066	E	[0 or 1 / **0** / 1/step]
1-976-067	Custom Paper 067	E	[0 or 1 / **0** / 1/step]
1-976-068	Custom Paper 068	E	[0 or 1 / **0** / 1/step]
1-976-069	Custom Paper 069	E	[0 or 1 / **0** / 1/step]
1-976-070	Custom Paper 070	E	[0 or 1 / **0** / 1/step]
1-976-071	Custom Paper 071	E	[0 or 1 / **0** / 1/step]
1-976-072	Custom Paper 072	E	[0 or 1 / **0** / 1/step]
1-976-073	Custom Paper 073	E	[0 or 1 / **0** / 1/step]
1-976-074	Custom Paper 074	E	[0 or 1 / **0** / 1/step]
1-976-075	Custom Paper 075	E	[0 or 1 / **0** / 1/step]

1-976-076	Custom Paper 076	E	[0 or 1 / **0** / 1/step]
1-976-077	Custom Paper 077	E	[0 or 1 / **0** / 1/step]
1-976-078	Custom Paper 078	E	[0 or 1 / **0** / 1/step]
1-976-079	Custom Paper 079	E	[0 or 1 / **0** / 1/step]
1-976-080	Custom Paper 080	E	[0 or 1 / **0** / 1/step]
1-976-081	Custom Paper 081	E	[0 or 1 / **0** / 1/step]
1-976-082	Custom Paper 082	E	[0 or 1 / **0** / 1/step]
1-976-083	Custom Paper 083	E	[0 or 1 / **0** / 1/step]
1-976-084	Custom Paper 084	E	[0 or 1 / **0** / 1/step]
1-976-085	Custom Paper 085	E	[0 or 1 / **0** / 1/step]
1-976-086	Custom Paper 086	E	[0 or 1 / **0** / 1/step]
1-976-087	Custom Paper 087	E	[0 or 1 / **0** / 1/step]
1-976-088	Custom Paper 088	E	[0 or 1 / **0** / 1/step]
1-976-089	Custom Paper 089	E	[0 or 1 / **0** / 1/step]
1-976-090	Custom Paper 090	E	[0 or 1 / **0** / 1/step]
1-976-091	Custom Paper 091	E	[0 or 1 / **0** / 1/step]
1-976-092	Custom Paper 092	E	[0 or 1 / **0** / 1/step]
1-976-093	Custom Paper 093	E	[0 or 1 / **0** / 1/step]
1-976-094	Custom Paper 094	E	[0 or 1 / **0** / 1/step]
1-976-095	Custom Paper 095	E	[0 or 1 / **0** / 1/step]
1-976-096	Custom Paper 096	E	[0 or 1 / **0** / 1/step]
1-976-097	Custom Paper 097	E	[0 or 1 / **0** / 1/step]
1-976-098	Custom Paper 098	E	[0 or 1 / **0** / 1/step]
1-976-099	Custom Paper 099	E	[0 or 1 / **0** / 1/step]
1-976-100	Custom Paper 100	E	[0 or 1 / **0** / 1/step]

1977	**[LCT Pickup Assist ON/OFF]** Sets pick-up roller assistance. Set “1: Force On” to solve non-feed problems for plain paper, and set “2: Force Off” to solve double feed problems for gloss paper. 0: Auto Select 1: Force On 2: Force Off		
1-977-001	Custom Paper 001	E	[0 or 1 / **0** / 1/step]
1-977-002	Custom Paper 002	E	[0 or 1 / **0** / 1/step]
1-977-003	Custom Paper 003	E	[0 or 1 / **0** / 1/step]
1-977-004	Custom Paper 004	E	[0 or 1 / **0** / 1/step]
1-977-005	Custom Paper 005	E	[0 or 1 / **0** / 1/step]
1-977-006	Custom Paper 006	E	[0 or 1 / **0** / 1/step]
1-977-007	Custom Paper 007	E	[0 or 1 / **0** / 1/step]
1-977-008	Custom Paper 008	E	[0 or 1 / **0** / 1/step]
1-977-009	Custom Paper 009	E	[0 or 1 / **0** / 1/step]
1-977-010	Custom Paper 010	E	[0 or 1 / **0** / 1/step]
1-977-011	Custom Paper 011	E	[0 or 1 / **0** / 1/step]
1-977-012	Custom Paper 012	E	[0 or 1 / **0** / 1/step]
1-977-013	Custom Paper 013	E	[0 or 1 / **0** / 1/step]
1-977-014	Custom Paper 014	E	[0 or 1 / **0** / 1/step]
1-977-015	Custom Paper 015	E	[0 or 1 / **0** / 1/step]
1-977-016	Custom Paper 016	E	[0 or 1 / **0** / 1/step]
1-977-017	Custom Paper 017	E	[0 or 1 / **0** / 1/step]
1-977-018	Custom Paper 018	E	[0 or 1 / **0** / 1/step]
1-977-019	Custom Paper 019	E	[0 or 1 / **0** / 1/step]
1-977-020	Custom Paper 020	E	[0 or 1 / **0** / 1/step]
1-977-021	Custom Paper 021	E	[0 or 1 / **0** / 1/step]

1-977-022	Custom Paper 022	E	[0 or 1 / **0** / 1/step]
1-977-023	Custom Paper 023	E	[0 or 1 / **0** / 1/step]
1-977-024	Custom Paper 024	E	[0 or 1 / **0** / 1/step]
1-977-025	Custom Paper 025	E	[0 or 1 / **0** / 1/step]
1-977-026	Custom Paper 026	E	[0 or 1 / **0** / 1/step]
1-977-027	Custom Paper 027	E	[0 or 1 / **0** / 1/step]
1-977-028	Custom Paper 028	E	[0 or 1 / **0** / 1/step]
1-977-029	Custom Paper 029	E	[0 or 1 / **0** / 1/step]
1-977-030	Custom Paper 030	E	[0 or 1 / **0** / 1/step]
1-977-031	Custom Paper 031	E	[0 or 1 / **0** / 1/step]
1-977-032	Custom Paper 032	E	[0 or 1 / **0** / 1/step]
1-977-033	Custom Paper 033	E	[0 or 1 / **0** / 1/step]
1-977-034	Custom Paper 034	E	[0 or 1 / **0** / 1/step]
1-977-035	Custom Paper 035	E	[0 or 1 / **0** / 1/step]
1-977-036	Custom Paper 036	E	[0 or 1 / **0** / 1/step]
1-977-037	Custom Paper 037	E	[0 or 1 / **0** / 1/step]
1-977-038	Custom Paper 038	E	[0 or 1 / **0** / 1/step]
1-977-039	Custom Paper 039	E	[0 or 1 / **0** / 1/step]
1-977-040	Custom Paper 040	E	[0 or 1 / **0** / 1/step]
1-977-041	Custom Paper 041	E	[0 or 1 / **0** / 1/step]
1-977-042	Custom Paper 042	E	[0 or 1 / **0** / 1/step]
1-977-043	Custom Paper 043	E	[0 or 1 / **0** / 1/step]
1-977-044	Custom Paper 044	E	[0 or 1 / **0** / 1/step]
1-977-045	Custom Paper 045	E	[0 or 1 / **0** / 1/step]
1-977-046	Custom Paper 046	E	[0 or 1 / **0** / 1/step]
1-977-047	Custom Paper 047	E	[0 or 1 / **0** / 1/step]

1-977-048	Custom Paper 048	E	[0 or 1 / **0** / 1/step]
1-977-049	Custom Paper 049	E	[0 or 1 / **0** / 1/step]
1-977-050	Custom Paper 050	E	[0 or 1 / **0** / 1/step]
1-977-051	Custom Paper 051	E	[0 or 1 / **0** / 1/step]
1-977-052	Custom Paper 052	E	[0 or 1 / **0** / 1/step]
1-977-053	Custom Paper 053	E	[0 or 1 / **0** / 1/step]
1-977-054	Custom Paper 054	E	[0 or 1 / **0** / 1/step]
1-977-055	Custom Paper 055	E	[0 or 1 / **0** / 1/step]
1-977-056	Custom Paper 056	E	[0 or 1 / **0** / 1/step]
1-977-057	Custom Paper 057	E	[0 or 1 / **0** / 1/step]
1-977-058	Custom Paper 058	E	[0 or 1 / **0** / 1/step]
1-977-059	Custom Paper 059	E	[0 or 1 / **0** / 1/step]
1-977-060	Custom Paper 060	E	[0 or 1 / **0** / 1/step]
1-977-061	Custom Paper 061	E	[0 or 1 / **0** / 1/step]
1-977-062	Custom Paper 062	E	[0 or 1 / **0** / 1/step]
1-977-063	Custom Paper 063	E	[0 or 1 / **0** / 1/step]
1-977-064	Custom Paper 064	E	[0 or 1 / **0** / 1/step]
1-977-065	Custom Paper 065	E	[0 or 1 / **0** / 1/step]
1-977-066	Custom Paper 066	E	[0 or 1 / **0** / 1/step]
1-977-067	Custom Paper 067	E	[0 or 1 / **0** / 1/step]
1-977-068	Custom Paper 068	E	[0 or 1 / **0** / 1/step]
1-977-069	Custom Paper 069	E	[0 or 1 / **0** / 1/step]
1-977-070	Custom Paper 070	E	[0 or 1 / **0** / 1/step]
1-977-071	Custom Paper 071	E	[0 or 1 / **0** / 1/step]
1-977-072	Custom Paper 072	E	[0 or 1 / **0** / 1/step]
1-977-073	Custom Paper 073	E	[0 or 1 / **0** / 1/step]

1-977-074	Custom Paper 074	E	[0 or 1 / **0** / 1/step]
1-977-075	Custom Paper 075	E	[0 or 1 / **0** / 1/step]
1-977-076	Custom Paper 076	E	[0 or 1 / **0** / 1/step]
1-977-077	Custom Paper 077	E	[0 or 1 / **0** / 1/step]
1-977-078	Custom Paper 078	E	[0 or 1 / **0** / 1/step]
1-977-079	Custom Paper 079	E	[0 or 1 / **0** / 1/step]
1-977-080	Custom Paper 080	E	[0 or 1 / **0** / 1/step]
1-977-081	Custom Paper 081	E	[0 or 1 / **0** / 1/step]
1-977-082	Custom Paper 082	E	[0 or 1 / **0** / 1/step]
1-977-083	Custom Paper 083	E	[0 or 1 / **0** / 1/step]
1-977-084	Custom Paper 084	E	[0 or 1 / **0** / 1/step]
1-977-085	Custom Paper 085	E	[0 or 1 / **0** / 1/step]
1-977-086	Custom Paper 086	E	[0 or 1 / **0** / 1/step]
1-977-087	Custom Paper 087	E	[0 or 1 / **0** / 1/step]
1-977-088	Custom Paper 088	E	[0 or 1 / **0** / 1/step]
1-977-089	Custom Paper 089	E	[0 or 1 / **0** / 1/step]
1-977-090	Custom Paper 090	E	[0 or 1 / **0** / 1/step]
1-977-091	Custom Paper 091	E	[0 or 1 / **0** / 1/step]
1-977-092	Custom Paper 092	E	[0 or 1 / **0** / 1/step]
1-977-093	Custom Paper 093	E	[0 or 1 / **0** / 1/step]
1-977-094	Custom Paper 094	E	[0 or 1 / **0** / 1/step]
1-977-095	Custom Paper 095	E	[0 or 1 / **0** / 1/step]
1-977-096	Custom Paper 096	E	[0 or 1 / **0** / 1/step]
1-977-097	Custom Paper 097	E	[0 or 1 / **0** / 1/step]
1-977-098	Custom Paper 098	E	[0 or 1 / **0** / 1/step]
1-977-099	Custom Paper 099	E	[0 or 1 / **0** / 1/step]

1-977-100	Custom Paper 100	E	[0 or 1 / **0** / 1/step]

1984	**[Htg Roller Temp Setting]** Sets the heating roller temperature. (heat center)		
1-984-001	Custom Paper 001	E*	[100 to 200 / **170** / 1deg/step]
1-984-002	Custom Paper 002	E*	[100 to 200 / **170** / 1deg/step]
1-984-003	Custom Paper 003	E*	[100 to 200 / **170** / 1deg/step]
1-984-004	Custom Paper 004	E*	[100 to 200 / **170** / 1deg/step]
1-984-005	Custom Paper 005	E*	[100 to 200 / **170** / 1deg/step]
1-984-006	Custom Paper 006	E*	[100 to 200 / **170** / 1deg/step]
1-984-007	Custom Paper 007	E*	[100 to 200 / **170** / 1deg/step]
1-984-008	Custom Paper 008	E*	[100 to 200 / **170** / 1deg/step]
1-984-009	Custom Paper 009	E*	[100 to 200 / **170** / 1deg/step]
1-984-010	Custom Paper 010	E*	[100 to 200 / **170** / 1deg/step]
1-984-011	Custom Paper 011	E*	[100 to 200 / **170** / 1deg/step]
1-984-012	Custom Paper 012	E*	[100 to 200 / **170** / 1deg/step]
1-984-013	Custom Paper 013	E*	[100 to 200 / **170** / 1deg/step]
1-984-014	Custom Paper 014	E*	[100 to 200 / **170** / 1deg/step]
1-984-015	Custom Paper 015	E*	[100 to 200 / **170** / 1deg/step]
1-984-016	Custom Paper 016	E*	[100 to 200 / **170** / 1deg/step]
1-984-017	Custom Paper 017	E*	[100 to 200 / **170** / 1deg/step]
1-984-018	Custom Paper 018	E*	[100 to 200 / **170** / 1deg/step]
1-984-019	Custom Paper 019	E*	[100 to 200 / **170** / 1deg/step]
1-984-020	Custom Paper 020	E*	[100 to 200 / **170** / 1deg/step]
1-984-021	Custom Paper 021	E*	[100 to 200 / **170** / 1deg/step]
1-984-022	Custom Paper 022	E*	[100 to 200 / **170** / 1deg/step]

1-984-023	Custom Paper 023	E*	[100 to 200 / **170** / 1deg/step]
1-984-024	Custom Paper 024	E*	[100 to 200 / **170** / 1deg/step]
1-984-025	Custom Paper 025	E*	[100 to 200 / **170** / 1deg/step]
1-984-026	Custom Paper 026	E*	[100 to 200 / **170** / 1deg/step]
1-984-027	Custom Paper 027	E*	[100 to 200 / **170** / 1deg/step]
1-984-028	Custom Paper 028	E*	[100 to 200 / **170** / 1deg/step]
1-984-029	Custom Paper 029	E*	[100 to 200 / **170** / 1deg/step]
1-984-030	Custom Paper 030	E*	[100 to 200 / **170** / 1deg/step]
1-984-031	Custom Paper 031	E*	[100 to 200 / **170** / 1deg/step]
1-984-032	Custom Paper 032	E*	[100 to 200 / **170** / 1deg/step]
1-984-033	Custom Paper 033	E*	[100 to 200 / **170** / 1deg/step]
1-984-034	Custom Paper 034	E*	[100 to 200 / **170** / 1deg/step]
1-984-035	Custom Paper 035	E*	[100 to 200 / **170** / 1deg/step]
1-984-036	Custom Paper 036	E*	[100 to 200 / **170** / 1deg/step]
1-984-037	Custom Paper 037	E*	[100 to 200 / **170** / 1deg/step]
1-984-038	Custom Paper 038	E*	[100 to 200 / **170** / 1deg/step]
1-984-039	Custom Paper 039	E*	[100 to 200 / **170** / 1deg/step]
1-984-040	Custom Paper 040	E*	[100 to 200 / **170** / 1deg/step]
1-984-041	Custom Paper 041	E*	[100 to 200 / **170** / 1deg/step]
1-984-042	Custom Paper 042	E*	[100 to 200 / **170** / 1deg/step]
1-984-043	Custom Paper 043	E*	[100 to 200 / **170** / 1deg/step]
1-984-044	Custom Paper 044	E*	[100 to 200 / **170** / 1deg/step]
1-984-045	Custom Paper 045	E*	[100 to 200 / **170** / 1deg/step]
1-984-046	Custom Paper 046	E*	[100 to 200 / **170** / 1deg/step]
1-984-047	Custom Paper 047	E*	[100 to 200 / **170** / 1deg/step]
1-984-048	Custom Paper 048	E*	[100 to 200 / **170** / 1deg/step]

1-984-049	Custom Paper 049	E*	[100 to 200 / **170** / 1deg/step]
1-984-050	Custom Paper 050	E*	[100 to 200 / **170** / 1deg/step]
1-984-051	Custom Paper 051	E*	[100 to 200 / **170** / 1deg/step]
1-984-052	Custom Paper 052	E*	[100 to 200 / **170** / 1deg/step]
1-984-053	Custom Paper 053	E*	[100 to 200 / **170** / 1deg/step]
1-984-054	Custom Paper 054	E*	[100 to 200 / **170** / 1deg/step]
1-984-055	Custom Paper 055	E*	[100 to 200 / **170** / 1deg/step]
1-984-056	Custom Paper 056	E*	[100 to 200 / **170** / 1deg/step]
1-984-057	Custom Paper 057	E*	[100 to 200 / **170** / 1deg/step]
1-984-058	Custom Paper 058	E*	[100 to 200 / **170** / 1deg/step]
1-984-059	Custom Paper 059	E*	[100 to 200 / **170** / 1deg/step]
1-984-060	Custom Paper 060	E*	[100 to 200 / **170** / 1deg/step]
1-984-061	Custom Paper 061	E*	[100 to 200 / **170** / 1deg/step]
1-984-062	Custom Paper 062	E*	[100 to 200 / **170** / 1deg/step]
1-984-063	Custom Paper 063	E*	[100 to 200 / **170** / 1deg/step]
1-984-064	Custom Paper 064	E*	[100 to 200 / **170** / 1deg/step]
1-984-065	Custom Paper 065	E*	[100 to 200 / **170** / 1deg/step]
1-984-066	Custom Paper 066	E*	[100 to 200 / **170** / 1deg/step]
1-984-067	Custom Paper 067	E*	[100 to 200 / **170** / 1deg/step]
1-984-068	Custom Paper 068	E*	[100 to 200 / **170** / 1deg/step]
1-984-069	Custom Paper 069	E*	[100 to 200 / **170** / 1deg/step]
1-984-070	Custom Paper 070	E*	[100 to 200 / **170** / 1deg/step]
1-984-071	Custom Paper 071	E*	[100 to 200 / **170** / 1deg/step]
1-984-072	Custom Paper 072	E*	[100 to 200 / **170** / 1deg/step]
1-984-073	Custom Paper 073	E*	[100 to 200 / **170** / 1deg/step]
1-984-074	Custom Paper 074	E*	[100 to 200 / **170** / 1deg/step]

1-984-075	Custom Paper 075	E*	[100 to 200 / **170** / 1deg/step]
1-984-076	Custom Paper 076	E*	[100 to 200 / **170** / 1deg/step]
1-984-077	Custom Paper 077	E*	[100 to 200 / **170** / 1deg/step]
1-984-078	Custom Paper 078	E*	[100 to 200 / **170** / 1deg/step]
1-984-079	Custom Paper 079	E*	[100 to 200 / **170** / 1deg/step]
1-984-080	Custom Paper 080	E*	[100 to 200 / **170** / 1deg/step]
1-984-081	Custom Paper 081	E*	[100 to 200 / **170** / 1deg/step]
1-984-082	Custom Paper 082	E*	[100 to 200 / **170** / 1deg/step]
1-984-083	Custom Paper 083	E*	[100 to 200 / **170** / 1deg/step]
1-984-084	Custom Paper 084	E*	[100 to 200 / **170** / 1deg/step]
1-984-085	Custom Paper 085	E*	[100 to 200 / **170** / 1deg/step]
1-984-086	Custom Paper 086	E*	[100 to 200 / **170** / 1deg/step]
1-984-087	Custom Paper 087	E*	[100 to 200 / **170** / 1deg/step]
1-984-088	Custom Paper 088	E*	[100 to 200 / **170** / 1deg/step]
1-984-089	Custom Paper 089	E*	[100 to 200 / **170** / 1deg/step]
1-984-090	Custom Paper 090	E*	[100 to 200 / **170** / 1deg/step]
1-984-091	Custom Paper 091	E*	[100 to 200 / **170** / 1deg/step]
1-984-092	Custom Paper 092	E*	[100 to 200 / **170** / 1deg/step]
1-984-093	Custom Paper 093	E*	[100 to 200 / **170** / 1deg/step]
1-984-094	Custom Paper 094	E*	[100 to 200 / **170** / 1deg/step]
1-984-095	Custom Paper 095	E*	[100 to 200 / **170** / 1deg/step]
1-984-096	Custom Paper 096	E*	[100 to 200 / **170** / 1deg/step]
1-984-097	Custom Paper 097	E*	[100 to 200 / **170** / 1deg/step]
1-984-098	Custom Paper 098	E*	[100 to 200 / **170** / 1deg/step]
1-984-099	Custom Paper 099	E*	[100 to 200 / **170** / 1deg/step]
1-984-100	Custom Paper 100	E*	[100 to 200 / **170** / 1deg/step]

1-984-101	Plain:Weight 0	E*	[100 to 200 / **150** / 1deg/step]
1-984-102	Plain:Weight 1	E*	[100 to 200 / **165** / 1deg/step]
1-984-103	Plain:Weight 2	E*	[100 to 200 / **170** / 1deg/step]
1-984-104	Plain:Weight 3	E*	[100 to 200 / **185** / 1deg/step]
1-984-105	Plain:Weight 4	E*	[100 to 200 / **185** / 1deg/step]
1-984-106	Plain:Weight 5	E*	[100 to 200 / **185** / 1deg/step]
1-984-107	Plain:Weight 6	E*	[100 to 200 / **185** / 1deg/step]
1-984-108	Plain:Weight 7	E*	[100 to 200 / **180** / 1deg/step]
1-984-109	Plain:Weight 8	E*	[100 to 200 / **180** / 1deg/step]
1-984-110	Matte:Weight 0	E*	[100 to 200 / **140** / 1deg/step]
1-984-111	Matte:Weight 1	E*	[100 to 200 / **145** / 1deg/step]
1-984-112	Matte:Weight 2	E*	[100 to 200 / **165** / 1deg/step]
1-984-113	Matte:Weight 3	E*	[100 to 200 / **165** / 1deg/step]
1-984-114	Matte:Weight 4	E*	[100 to 200 / **180** / 1deg/step]
1-984-115	Matte:Weight 5	E*	[100 to 200 / **185** / 1deg/step]
1-984-116	Matte:Weight 6	E*	[100 to 200 / **185** / 1deg/step]
1-984-117	Matte:Weight 7	E*	[100 to 200 / **175** / 1deg/step]
1-984-118	Matte:Weight 8	E*	[100 to 200 / **180** / 1deg/step]
1-984-119	Glossy:Weight 0	E*	[100 to 200 / **140** / 1deg/step]
1-984-120	Glossy:Weight 1	E*	[100 to 200 / **145** / 1deg/step]
1-984-121	Glossy:Weight 2	E*	[100 to 200 / **165** / 1deg/step]
1-984-122	Glossy:Weight 3	E*	[100 to 200 / **165** / 1deg/step]
1-984-123	Glossy:Weight 4	E*	[100 to 200 / **180** / 1deg/step]
1-984-124	Glossy:Weight 5	E*	[100 to 200 / **185** / 1deg/step]
1-984-125	Glossy:Weight 6	E*	[100 to 200 / **185** / 1deg/step]
1-984-126	Glossy:Weight 7	E*	[100 to 200 / **175** / 1deg/step]

1-984-127	Glossy:Weight 8	E*	[100 to 200 / **180** / 1deg/step]
1-984-128	Envelope:Weight 5	E*	[100 to 200 / **185** / 1deg/step]
1-984-129	Envelope:Weight 6	E*	[100 to 200 / **185** / 1deg/step]
1-984-130	Envelope:Weight 7	E*	[100 to 200 / **180** / 1deg/step]
1-984-131	OHP	E*	[100 to 200 / **185** / 1deg/step]

1985	**[Htg Roller Temp Setting]** Sets heating roller temperature. (pressure center)		
1-985-001	Custom Paper 001	E*	[100 to 200 / **90** / 1deg/step]
1-985-002	Custom Paper 002	E*	[100 to 200 / **90** / 1deg/step]
1-985-003	Custom Paper 003	E*	[100 to 200 / **90** / 1deg/step]
1-985-004	Custom Paper 004	E*	[100 to 200 / **90** / 1deg/step]
1-985-005	Custom Paper 005	E*	[100 to 200 / **90** / 1deg/step]
1-985-006	Custom Paper 006	E*	[100 to 200 / **90** / 1deg/step]
1-985-007	Custom Paper 007	E*	[100 to 200 / **90** / 1deg/step]
1-985-008	Custom Paper 008	E*	[100 to 200 / **90** / 1deg/step]
1-985-009	Custom Paper 009	E*	[100 to 200 / **90** / 1deg/step]
1-985-010	Custom Paper 010	E*	[100 to 200 / **90** / 1deg/step]
1-985-011	Custom Paper 011	E*	[100 to 200 / **90** / 1deg/step]
1-985-012	Custom Paper 012	E*	[100 to 200 / **90** / 1deg/step]
1-985-013	Custom Paper 013	E*	[100 to 200 / **90** / 1deg/step]
1-985-014	Custom Paper 014	E*	[100 to 200 / **90** / 1deg/step]
1-985-015	Custom Paper 015	E*	[100 to 200 / **90** / 1deg/step]
1-985-016	Custom Paper 016	E*	[100 to 200 / **90** / 1deg/step]
1-985-017	Custom Paper 017	E*	[100 to 200 / **90** / 1deg/step]
1-985-018	Custom Paper 018	E*	[100 to 200 / **90** / 1deg/step]

1-985-019	Custom Paper 019	E*	[100 to 200 / **90** / 1deg/step]
1-985-020	Custom Paper 020	E*	[100 to 200 / **90** / 1deg/step]
1-985-021	Custom Paper 021	E*	[100 to 200 / **90** / 1deg/step]
1-985-022	Custom Paper 022	E*	[100 to 200 / **90** / 1deg/step]
1-985-023	Custom Paper 023	E*	[100 to 200 / **90** / 1deg/step]
1-985-024	Custom Paper 024	E*	[100 to 200 / **90** / 1deg/step]
1-985-025	Custom Paper 025	E*	[100 to 200 / **90** / 1deg/step]
1-985-026	Custom Paper 026	E*	[100 to 200 / **90** / 1deg/step]
1-985-027	Custom Paper 027	E*	[100 to 200 / **90** / 1deg/step]
1-985-028	Custom Paper 028	E*	[100 to 200 / **90** / 1deg/step]
1-985-029	Custom Paper 029	E*	[100 to 200 / **90** / 1deg/step]
1-985-030	Custom Paper 030	E*	[100 to 200 / **90** / 1deg/step]
1-985-031	Custom Paper 031	E*	[100 to 200 / **90** / 1deg/step]
1-985-032	Custom Paper 032	E*	[100 to 200 / **90** / 1deg/step]
1-985-033	Custom Paper 033	E*	[100 to 200 / **90** / 1deg/step]
1-985-034	Custom Paper 034	E*	[100 to 200 / **90** / 1deg/step]
1-985-035	Custom Paper 035	E*	[100 to 200 / **90** / 1deg/step]
1-985-036	Custom Paper 036	E*	[100 to 200 / **90** / 1deg/step]
1-985-037	Custom Paper 037	E*	[100 to 200 / **90** / 1deg/step]
1-985-038	Custom Paper 038	E*	[100 to 200 / **90** / 1deg/step]
1-985-039	Custom Paper 039	E*	[100 to 200 / **90** / 1deg/step]
1-985-040	Custom Paper 040	E*	[100 to 200 / **90** / 1deg/step]
1-985-041	Custom Paper 041	E*	[100 to 200 / **90** / 1deg/step]
1-985-042	Custom Paper 042	E*	[100 to 200 / **90** / 1deg/step]
1-985-043	Custom Paper 043	E*	[100 to 200 / **90** / 1deg/step]
1-985-044	Custom Paper 044	E*	[100 to 200 / **90** / 1deg/step]

1-985-045	Custom Paper 045	E*	[100 to 200 / **90** / 1deg/step]
1-985-046	Custom Paper 046	E*	[100 to 200 / **90** / 1deg/step]
1-985-047	Custom Paper 047	E*	[100 to 200 / **90** / 1deg/step]
1-985-048	Custom Paper 048	E*	[100 to 200 / **90** / 1deg/step]
1-985-049	Custom Paper 049	E*	[100 to 200 / **90** / 1deg/step]
1-985-050	Custom Paper 050	E*	[100 to 200 / **90** / 1deg/step]
1-985-051	Custom Paper 051	E*	[100 to 200 / **90** / 1deg/step]
1-985-052	Custom Paper 052	E*	[100 to 200 / **90** / 1deg/step]
1-985-053	Custom Paper 053	E*	[100 to 200 / **90** / 1deg/step]
1-985-054	Custom Paper 054	E*	[100 to 200 / **90** / 1deg/step]
1-985-055	Custom Paper 055	E*	[100 to 200 / **90** / 1deg/step]
1-985-056	Custom Paper 056	E*	[100 to 200 / **90** / 1deg/step]
1-985-057	Custom Paper 057	E*	[100 to 200 / **90** / 1deg/step]
1-985-058	Custom Paper 058	E*	[100 to 200 / **90** / 1deg/step]
1-985-059	Custom Paper 059	E*	[100 to 200 / **90** / 1deg/step]
1-985-060	Custom Paper 060	E*	[100 to 200 / **90** / 1deg/step]
1-985-061	Custom Paper 061	E*	[100 to 200 / **90** / 1deg/step]
1-985-062	Custom Paper 062	E*	[100 to 200 / **90** / 1deg/step]
1-985-063	Custom Paper 063	E*	[100 to 200 / **90** / 1deg/step]
1-985-064	Custom Paper 064	E*	[100 to 200 / **90** / 1deg/step]
1-985-065	Custom Paper 065	E*	[100 to 200 / **90** / 1deg/step]
1-985-066	Custom Paper 066	E*	[100 to 200 / **90** / 1deg/step]
1-985-067	Custom Paper 067	E*	[100 to 200 / **90** / 1deg/step]
1-985-068	Custom Paper 068	E*	[100 to 200 / **90** / 1deg/step]
1-985-069	Custom Paper 069	E*	[100 to 200 / **90** / 1deg/step]
1-985-070	Custom Paper 070	E*	[100 to 200 / **90** / 1deg/step]

1-985-071	Custom Paper 071	E*	[100 to 200 / **90** / 1deg/step]
1-985-072	Custom Paper 072	E*	[100 to 200 / **90** / 1deg/step]
1-985-073	Custom Paper 073	E*	[100 to 200 / **90** / 1deg/step]
1-985-074	Custom Paper 074	E*	[100 to 200 / **90** / 1deg/step]
1-985-075	Custom Paper 075	E*	[100 to 200 / **90** / 1deg/step]
1-985-076	Custom Paper 076	E*	[100 to 200 / **90** / 1deg/step]
1-985-077	Custom Paper 077	E*	[100 to 200 / **90** / 1deg/step]
1-985-078	Custom Paper 078	E*	[100 to 200 / **90** / 1deg/step]
1-985-079	Custom Paper 079	E*	[100 to 200 / **90** / 1deg/step]
1-985-080	Custom Paper 080	E*	[100 to 200 / **90** / 1deg/step]
1-985-081	Custom Paper 081	E*	[100 to 200 / **90** / 1deg/step]
1-985-082	Custom Paper 082	E*	[100 to 200 / **90** / 1deg/step]
1-985-083	Custom Paper 083	E*	[100 to 200 / **90** / 1deg/step]
1-985-084	Custom Paper 084	E*	[100 to 200 / **90** / 1deg/step]
1-985-085	Custom Paper 085	E*	[100 to 200 / **90** / 1deg/step]
1-985-086	Custom Paper 086	E*	[100 to 200 / **90** / 1deg/step]
1-985-087	Custom Paper 087	E*	[100 to 200 / **90** / 1deg/step]
1-985-088	Custom Paper 088	E*	[100 to 200 / **90** / 1deg/step]
1-985-089	Custom Paper 089	E*	[100 to 200 / **90** / 1deg/step]
1-985-090	Custom Paper 090	E*	[100 to 200 / **90** / 1deg/step]
1-985-091	Custom Paper 091	E*	[100 to 200 / **90** / 1deg/step]
1-985-092	Custom Paper 092	E*	[100 to 200 / **90** / 1deg/step]
1-985-093	Custom Paper 093	E*	[100 to 200 / **90** / 1deg/step]
1-985-094	Custom Paper 094	E*	[100 to 200 / **90** / 1deg/step]
1-985-095	Custom Paper 095	E*	[100 to 200 / **90** / 1deg/step]
1-985-096	Custom Paper 096	E*	[100 to 200 / **90** / 1deg/step]

1-985-097	Custom Paper 097	E*	[100 to 200 / **90** / 1deg/step]
1-985-098	Custom Paper 098	E*	[100 to 200 / **90** / 1deg/step]
1-985-099	Custom Paper 099	E*	[100 to 200 / **90** / 1deg/step]
1-985-100	Custom Paper 100	E*	[100 to 200 / **90** / 1deg/step]
1-985-101	Plain:Weight 0	E*	[100 to 200 / **90** / 1deg/step]
1-985-102	Plain:Weight 1	E*	[100 to 200 / **90** / 1deg/step]
1-985-103	Plain:Weight 2	E*	[100 to 200 / **90** / 1deg/step]
1-985-104	Plain:Weight 3	E*	[100 to 200 / **90** / 1deg/step]
1-985-105	Plain:Weight 4	E*	[100 to 200 / **90** / 1deg/step]
1-985-106	Plain:Weight 5	E*	[100 to 200 / **90** / 1deg/step]
1-985-107	Plain:Weight 6	E*	[100 to 200 / **90** / 1deg/step]
1-985-108	Plain:Weight 7	E*	[100 to 200 / **90** / 1deg/step]
1-985-109	Plain:Weight 8	E*	[100 to 200 / **90** / 1deg/step]
1-985-110	Matte:Weight 0	E*	[100 to 200 / **90** / 1deg/step]
1-985-111	Matte:Weight 1	E*	[100 to 200 / **90** / 1deg/step]
1-985-112	Matte:Weight 2	E*	[100 to 200 / **90** / 1deg/step]
1-985-113	Matte:Weight 3	E*	[100 to 200 / **90** / 1deg/step]
1-985-114	Matte:Weight 4	E*	[100 to 200 / **90** / 1deg/step]
1-985-115	Matte:Weight 5	E*	[100 to 200 / **90** / 1deg/step]
1-985-116	Matte:Weight 6	E*	[100 to 200 / **90** / 1deg/step]
1-985-117	Matte:Weight 7	E*	[100 to 200 / **90** / 1deg/step]
1-985-118	Matte:Weight 8	E*	[100 to 200 / **90** / 1deg/step]
1-985-119	Glossy:Weight 0	E*	[100 to 200 / **90** / 1deg/step]
1-985-120	Glossy:Weight 1	E*	[100 to 200 / **90** / 1deg/step]
1-985-121	Glossy:Weight 2	E*	[100 to 200 / **90** / 1deg/step]
1-985-122	Glossy:Weight 3	E*	[100 to 200 / **90** / 1deg/step]

1-985-123	Glossy:Weight 4	E*	[100 to 200 / **90** / 1deg/step]
1-985-124	Glossy:Weight 5	E*	[100 to 200 / **90** / 1deg/step]
1-985-125	Glossy:Weight 6	E*	[100 to 200 / **90** / 1deg/step]
1-985-126	Glossy:Weight 7	E*	[100 to 200 / **90** / 1deg/step]
1-985-127	Glossy:Weight 8	E*	[100 to 200 / **90** / 1deg/step]
1-985-128	Envelope:Weight 5	E*	[100 to 200 / **90** / 1deg/step]
1-985-129	Envelope:Weight 6	E*	[100 to 200 / **90** / 1deg/step]
1-985-130	Envelope:Weight 7	E*	[100 to 200 / **90** / 1deg/step]
1-985-131	OHP	E*	[100 to 200 / **90** / 1deg/step]

1986	**[Process Speed]** Sets process line speed.		
1-986-001	Custom Paper 001	E*	[0 to 2 / **2** / 1/step]
1-986-002	Custom Paper 002	E*	[0 to 2 / **2** / 1/step]
1-986-003	Custom Paper 003	E*	[0 to 2 / **2** / 1/step]
1-986-004	Custom Paper 004	E*	[0 to 2 / **2** / 1/step]
1-986-005	Custom Paper 005	E*	[0 to 2 / **2** / 1/step]
1-986-006	Custom Paper 006	E*	[0 to 2 / **2** / 1/step]
1-986-007	Custom Paper 007	E*	[0 to 2 / **2** / 1/step]
1-986-008	Custom Paper 008	E*	[0 to 2 / **2** / 1/step]
1-986-009	Custom Paper 009	E*	[0 to 2 / **2** / 1/step]
1-986-010	Custom Paper 010	E*	[0 to 2 / **2** / 1/step]
1-986-011	Custom Paper 011	E*	[0 to 2 / **2** / 1/step]
1-986-012	Custom Paper 012	E*	[0 to 2 / **2** / 1/step]
1-986-013	Custom Paper 013	E*	[0 to 2 / **2** / 1/step]
1-986-014	Custom Paper 014	E*	[0 to 2 / **2** / 1/step]

1-986-015	Custom Paper 015	E*	[0 to 2 / **2** / 1/step]
1-986-016	Custom Paper 016	E*	[0 to 2 / **2** / 1/step]
1-986-017	Custom Paper 017	E*	[0 to 2 / **2** / 1/step]
1-986-018	Custom Paper 018	E*	[0 to 2 / **2** / 1/step]
1-986-019	Custom Paper 019	E*	[0 to 2 / **2** / 1/step]
1-986-020	Custom Paper 020	E*	[0 to 2 / **2** / 1/step]
1-986-021	Custom Paper 021	E*	[0 to 2 / **2** / 1/step]
1-986-022	Custom Paper 022	E*	[0 to 2 / **2** / 1/step]
1-986-023	Custom Paper 023	E*	[0 to 2 / **2** / 1/step]
1-986-024	Custom Paper 024	E*	[0 to 2 / **2** / 1/step]
1-986-025	Custom Paper 025	E*	[0 to 2 / **2** / 1/step]
1-986-026	Custom Paper 026	E*	[0 to 2 / **2** / 1/step]
1-986-027	Custom Paper 027	E*	[0 to 2 / **2** / 1/step]
1-986-028	Custom Paper 028	E*	[0 to 2 / **2** / 1/step]
1-986-029	Custom Paper 029	E*	[0 to 2 / **2** / 1/step]
1-986-030	Custom Paper 030	E*	[0 to 2 / **2** / 1/step]
1-986-031	Custom Paper 031	E*	[0 to 2 / **2** / 1/step]
1-986-032	Custom Paper 032	E*	[0 to 2 / **2** / 1/step]
1-986-033	Custom Paper 033	E*	[0 to 2 / **2** / 1/step]
1-986-034	Custom Paper 034	E*	[0 to 2 / **2** / 1/step]
1-986-035	Custom Paper 035	E*	[0 to 2 / **2** / 1/step]
1-986-036	Custom Paper 036	E*	[0 to 2 / **2** / 1/step]
1-986-037	Custom Paper 037	E*	[0 to 2 / **2** / 1/step]
1-986-038	Custom Paper 038	E*	[0 to 2 / **2** / 1/step]
1-986-039	Custom Paper 039	E*	[0 to 2 / **2** / 1/step]
1-986-040	Custom Paper 040	E*	[0 to 2 / **2** / 1/step]

1-986-041	Custom Paper 041	E*	[0 to 2 / **2** / 1/step]
1-986-042	Custom Paper 042	E*	[0 to 2 / **2** / 1/step]
1-986-043	Custom Paper 043	E*	[0 to 2 / **2** / 1/step]
1-986-044	Custom Paper 044	E*	[0 to 2 / **2** / 1/step]
1-986-045	Custom Paper 045	E*	[0 to 2 / **2** / 1/step]
1-986-046	Custom Paper 046	E*	[0 to 2 / **2** / 1/step]
1-986-047	Custom Paper 047	E*	[0 to 2 / **2** / 1/step]
1-986-048	Custom Paper 048	E*	[0 to 2 / **2** / 1/step]
1-986-049	Custom Paper 049	E*	[0 to 2 / **2** / 1/step]
1-986-050	Custom Paper 050	E*	[0 to 2 / **2** / 1/step]
1-986-051	Custom Paper 051	E*	[0 to 2 / **2** / 1/step]
1-986-052	Custom Paper 052	E*	[0 to 2 / **2** / 1/step]
1-986-053	Custom Paper 053	E*	[0 to 2 / **2** / 1/step]
1-986-054	Custom Paper 054	E*	[0 to 2 / **2** / 1/step]
1-986-055	Custom Paper 055	E*	[0 to 2 / **2** / 1/step]
1-986-056	Custom Paper 056	E*	[0 to 2 / **2** / 1/step]
1-986-057	Custom Paper 057	E*	[0 to 2 / **2** / 1/step]
1-986-058	Custom Paper 058	E*	[0 to 2 / **2** / 1/step]
1-986-059	Custom Paper 059	E*	[0 to 2 / **2** / 1/step]
1-986-060	Custom Paper 060	E*	[0 to 2 / **2** / 1/step]
1-986-061	Custom Paper 061	E*	[0 to 2 / **2** / 1/step]
1-986-062	Custom Paper 062	E*	[0 to 2 / **2** / 1/step]
1-986-063	Custom Paper 063	E*	[0 to 2 / **2** / 1/step]
1-986-064	Custom Paper 064	E*	[0 to 2 / **2** / 1/step]
1-986-065	Custom Paper 065	E*	[0 to 2 / **2** / 1/step]
1-986-066	Custom Paper 066	E*	[0 to 2 / **2** / 1/step]

1-986-067	Custom Paper 067	E*	[0 to 2 / **2** / 1/step]
1-986-068	Custom Paper 068	E*	[0 to 2 / **2** / 1/step]
1-986-069	Custom Paper 069	E*	[0 to 2 / **2** / 1/step]
1-986-070	Custom Paper 070	E*	[0 to 2 / **2** / 1/step]
1-986-071	Custom Paper 071	E*	[0 to 2 / **2** / 1/step]
1-986-072	Custom Paper 072	E*	[0 to 2 / **2** / 1/step]
1-986-073	Custom Paper 073	E*	[0 to 2 / **2** / 1/step]
1-986-074	Custom Paper 074	E*	[0 to 2 / **2** / 1/step]
1-986-075	Custom Paper 075	E*	[0 to 2 / **2** / 1/step]
1-986-076	Custom Paper 076	E*	[0 to 2 / **2** / 1/step]
1-986-077	Custom Paper 077	E*	[0 to 2 / **2** / 1/step]
1-986-078	Custom Paper 078	E*	[0 to 2 / **2** / 1/step]
1-986-079	Custom Paper 079	E*	[0 to 2 / **2** / 1/step]
1-986-080	Custom Paper 080	E*	[0 to 2 / **2** / 1/step]
1-986-081	Custom Paper 081	E*	[0 to 2 / **2** / 1/step]
1-986-082	Custom Paper 082	E*	[0 to 2 / **2** / 1/step]
1-986-083	Custom Paper 083	E*	[0 to 2 / **2** / 1/step]
1-986-084	Custom Paper 084	E*	[0 to 2 / **2** / 1/step]
1-986-085	Custom Paper 085	E*	[0 to 2 / **2** / 1/step]
1-986-086	Custom Paper 086	E*	[0 to 2 / **2** / 1/step]
1-986-087	Custom Paper 087	E*	[0 to 2 / **2** / 1/step]
1-986-088	Custom Paper 088	E*	[0 to 2 / **2** / 1/step]
1-986-089	Custom Paper 089	E*	[0 to 2 / **2** / 1/step]
1-986-090	Custom Paper 090	E*	[0 to 2 / **2** / 1/step]
1-986-091	Custom Paper 091	E*	[0 to 2 / **2** / 1/step]
1-986-092	Custom Paper 092	E*	[0 to 2 / **2** / 1/step]

1-986-093	Custom Paper 093	E*	[0 to 2 / **2** / 1/step]
1-986-094	Custom Paper 094	E*	[0 to 2 / **2** / 1/step]
1-986-095	Custom Paper 095	E*	[0 to 2 / **2** / 1/step]
1-986-096	Custom Paper 096	E*	[0 to 2 / **2** / 1/step]
1-986-097	Custom Paper 097	E*	[0 to 2 / **2** / 1/step]
1-986-098	Custom Paper 098	E*	[0 to 2 / **2** / 1/step]
1-986-099	Custom Paper 099	E*	[0 to 2 / **2** / 1/step]
1-986-100	Custom Paper 100	E*	[0 to 2 / **2** / 1/step]
1-986-101	Plain:Weight 0	E*	[0 to 2 / **2** / 1/step]
1-986-102	Plain:Weight 1	E*	[0 to 2 / **2** / 1/step]
1-986-103	Plain:Weight 2	E*	[0 to 2 / **2** / 1/step]
1-986-104	Plain:Weight 3	E*	[0 to 2 / **2** / 1/step]
1-986-105	Plain:Weight 4	E*	[0 to 2 / **2** / 1/step]
1-986-106	Plain:Weight 5	E*	[0 to 2 / **2** / 1/step]
1-986-107	Plain:Weight 6	E*	[0 to 2 / **2** / 1/step]
1-986-108	Plain:Weight 7	E*	[0 to 2 / **2** / 1/step]
1-986-109	Plain:Weight 8	E*	[0 to 2 / **2** / 1/step]
1-986-110	Matte:Weight 0	E*	[0 to 2 / **2** / 1/step]
1-986-111	Matte:Weight 1	E*	[0 to 2 / **2** / 1/step]
1-986-112	Matte:Weight 2	E*	[0 to 2 / **2** / 1/step]
1-986-113	Matte:Weight 3	E*	[0 to 2 / **2** / 1/step]
1-986-114	Matte:Weight 4	E*	[0 to 2 / **2** / 1/step]
1-986-115	Matte:Weight 5	E*	[0 to 2 / **2** / 1/step]
1-986-116	Matte:Weight 6	E*	[0 to 2 / **2** / 1/step]
1-986-117	Matte:Weight 7	E*	[0 to 2 / **1** / 1/step]
1-986-118	Matte:Weight 8	E*	[0 to 2 / **1** / 1/step]

1-986-119	Glossy:Weight 0	E*	[0 to 2 / **2** / 1/step]
1-986-120	Glossy:Weight 1	E*	[0 to 2 / **2** / 1/step]
1-986-121	Glossy:Weight 2	E*	[0 to 2 / **2** / 1/step]
1-986-122	Glossy:Weight 3	E*	[0 to 2 / **2** / 1/step]
1-986-123	Glossy:Weight 4	E*	[0 to 2 / **2** / 1/step]
1-986-124	Glossy:Weight 5	E*	[0 to 2 / **2** / 1/step]
1-986-125	Glossy:Weight 6	E*	[0 to 2 / **2** / 1/step]
1-986-126	Glossy:Weight 7	E*	[0 to 2 / **1** / 1/step]
1-986-127	Glossy:Weight 8	E*	[0 to 2 / **1** / 1/step]
1-986-128	Envelope:Weight 5	E*	[0 to 2 / **2** / 1/step]
1-986-129	Envelope:Weight 6	E*	[0 to 2 / **2** / 1/step]
1-986-130	Envelope:Weight 7	E*	[0 to 2 / **2** / 1/step]
1-986-131	OHP	E*	[0 to 2 / **2** / 1/step]

1987	**[Fusing Mtr Rotation Correct]** Paper type correction of fusing motor rotation.		
1-987-001	Custom Paper 001	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-002	Custom Paper 002	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-003	Custom Paper 003	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-004	Custom Paper 004	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-005	Custom Paper 005	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-006	Custom Paper 006	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-007	Custom Paper 007	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-008	Custom Paper 008	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-009	Custom Paper 009	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-010	Custom Paper 010	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1-987-011	Custom Paper 011	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-012	Custom Paper 012	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-013	Custom Paper 013	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-014	Custom Paper 014	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-015	Custom Paper 015	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-016	Custom Paper 016	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-017	Custom Paper 017	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-018	Custom Paper 018	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-019	Custom Paper 019	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-020	Custom Paper 020	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-021	Custom Paper 021	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-022	Custom Paper 022	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-023	Custom Paper 023	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-024	Custom Paper 024	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-025	Custom Paper 025	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-026	Custom Paper 026	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-027	Custom Paper 027	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-028	Custom Paper 028	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-029	Custom Paper 029	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-030	Custom Paper 030	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-031	Custom Paper 031	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-032	Custom Paper 032	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-033	Custom Paper 033	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-034	Custom Paper 034	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-035	Custom Paper 035	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-036	Custom Paper 036	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1-987-037	Custom Paper 037	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-038	Custom Paper 038	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-039	Custom Paper 039	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-040	Custom Paper 040	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-041	Custom Paper 041	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-042	Custom Paper 042	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-043	Custom Paper 043	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-044	Custom Paper 044	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-045	Custom Paper 045	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-046	Custom Paper 046	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-047	Custom Paper 047	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-048	Custom Paper 048	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-049	Custom Paper 049	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-050	Custom Paper 050	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-051	Custom Paper 051	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-052	Custom Paper 052	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-053	Custom Paper 053	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-054	Custom Paper 054	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-055	Custom Paper 055	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-056	Custom Paper 056	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-057	Custom Paper 057	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-058	Custom Paper 058	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-059	Custom Paper 059	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-060	Custom Paper 060	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-061	Custom Paper 061	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-062	Custom Paper 062	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1-987-063	Custom Paper 063	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-064	Custom Paper 064	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-065	Custom Paper 065	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-066	Custom Paper 066	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-067	Custom Paper 067	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-068	Custom Paper 068	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-069	Custom Paper 069	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-070	Custom Paper 070	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-071	Custom Paper 071	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-072	Custom Paper 072	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-073	Custom Paper 073	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-074	Custom Paper 074	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-075	Custom Paper 075	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-076	Custom Paper 076	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-077	Custom Paper 077	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-078	Custom Paper 078	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-079	Custom Paper 079	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-080	Custom Paper 080	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-081	Custom Paper 081	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-082	Custom Paper 082	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-083	Custom Paper 083	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-084	Custom Paper 084	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-085	Custom Paper 085	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-086	Custom Paper 086	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-087	Custom Paper 087	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-088	Custom Paper 088	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1-987-089	Custom Paper 089	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-090	Custom Paper 090	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-091	Custom Paper 091	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-092	Custom Paper 092	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-093	Custom Paper 093	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-094	Custom Paper 094	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-095	Custom Paper 095	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-096	Custom Paper 096	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-097	Custom Paper 097	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-098	Custom Paper 098	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-099	Custom Paper 099	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-100	Custom Paper 100	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-101	Plain:Weight 0	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-102	Plain:Weight 1	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-103	Plain:Weight 2	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-104	Plain:Weight 3	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-105	Plain:Weight 4	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-106	Plain:Weight 5	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-107	Plain:Weight 6	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-108	Plain:Weight 7	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-109	Plain:Weight 8	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-110	Matte:Weight 0	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-111	Matte:Weight 1	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-112	Matte:Weight 2	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-113	Matte:Weight 3	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-114	Matte:Weight 4	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1-987-115	Matte:Weight 5	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-116	Matte:Weight 6	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-117	Matte:Weight 7	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-118	Matte:Weight 8	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-119	Glossy:Weight 0	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-120	Glossy:Weight 1	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-121	Glossy:Weight 2	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-122	Glossy:Weight 3	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-123	Glossy:Weight 4	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-124	Glossy:Weight 5	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-125	Glossy:Weight 6	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-126	Glossy:Weight 7	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-127	Glossy:Weight 8	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-128	Envelope:Weight 5	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-129	Envelope:Weight 6	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-130	Envelope:Weight 7	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]
1-987-131	OHP	E*	[-10.0 to 10.0 / **0.0** / 0.1%/step]

1988	**[CPM Adjustment]** Adjusts Def-CPM in the range of 1 to 100%.		
1-988-001	Custom Paper 001	E*	[1 to 100 / **100** / 1%/step]
1-988-002	Custom Paper 002	E*	[1 to 100 / **100** / 1%/step]
1-988-003	Custom Paper 003	E*	[1 to 100 / **100** / 1%/step]
1-988-004	Custom Paper 004	E*	[1 to 100 / **100** / 1%/step]
1-988-005	Custom Paper 005	E*	[1 to 100 / **100** / 1%/step]
1-988-006	Custom Paper 006	E*	[1 to 100 / **100** / 1%/step]

1-988-007	Custom Paper 007	E*	[1 to 100 / **100** / 1%/step]
1-988-008	Custom Paper 008	E*	[1 to 100 / **100** / 1%/step]
1-988-009	Custom Paper 009	E*	[1 to 100 / **100** / 1%/step]
1-988-010	Custom Paper 010	E*	[1 to 100 / **100** / 1%/step]
1-988-011	Custom Paper 011	E*	[1 to 100 / **100** / 1%/step]
1-988-012	Custom Paper 012	E*	[1 to 100 / **100** / 1%/step]
1-988-013	Custom Paper 013	E*	[1 to 100 / **100** / 1%/step]
1-988-014	Custom Paper 014	E*	[1 to 100 / **100** / 1%/step]
1-988-015	Custom Paper 015	E*	[1 to 100 / **100** / 1%/step]
1-988-016	Custom Paper 016	E*	[1 to 100 / **100** / 1%/step]
1-988-017	Custom Paper 017	E*	[1 to 100 / **100** / 1%/step]
1-988-018	Custom Paper 018	E*	[1 to 100 / **100** / 1%/step]
1-988-019	Custom Paper 019	E*	[1 to 100 / **100** / 1%/step]
1-988-020	Custom Paper 020	E*	[1 to 100 / **100** / 1%/step]
1-988-021	Custom Paper 021	E*	[1 to 100 / **100** / 1%/step]
1-988-022	Custom Paper 022	E*	[1 to 100 / **100** / 1%/step]
1-988-023	Custom Paper 023	E*	[1 to 100 / **100** / 1%/step]
1-988-024	Custom Paper 024	E*	[1 to 100 / **100** / 1%/step]
1-988-025	Custom Paper 025	E*	[1 to 100 / **100** / 1%/step]
1-988-026	Custom Paper 026	E*	[1 to 100 / **100** / 1%/step]
1-988-027	Custom Paper 027	E*	[1 to 100 / **100** / 1%/step]
1-988-028	Custom Paper 028	E*	[1 to 100 / **100** / 1%/step]
1-988-029	Custom Paper 029	E*	[1 to 100 / **100** / 1%/step]
1-988-030	Custom Paper 030	E*	[1 to 100 / **100** / 1%/step]
1-988-031	Custom Paper 031	E*	[1 to 100 / **100** / 1%/step]
1-988-032	Custom Paper 032	E*	[1 to 100 / **100** / 1%/step]

1-988-033	Custom Paper 033	E*	[1 to 100 / **100** / 1%/step]
1-988-034	Custom Paper 034	E*	[1 to 100 / **100** / 1%/step]
1-988-035	Custom Paper 035	E*	[1 to 100 / **100** / 1%/step]
1-988-036	Custom Paper 036	E*	[1 to 100 / **100** / 1%/step]
1-988-037	Custom Paper 037	E*	[1 to 100 / **100** / 1%/step]
1-988-038	Custom Paper 038	E*	[1 to 100 / **100** / 1%/step]
1-988-039	Custom Paper 039	E*	[1 to 100 / **100** / 1%/step]
1-988-040	Custom Paper 040	E*	[1 to 100 / **100** / 1%/step]
1-988-041	Custom Paper 041	E*	[1 to 100 / **100** / 1%/step]
1-988-042	Custom Paper 042	E*	[1 to 100 / **100** / 1%/step]
1-988-043	Custom Paper 043	E*	[1 to 100 / **100** / 1%/step]
1-988-044	Custom Paper 044	E*	[1 to 100 / **100** / 1%/step]
1-988-045	Custom Paper 045	E*	[1 to 100 / **100** / 1%/step]
1-988-046	Custom Paper 046	E*	[1 to 100 / **100** / 1%/step]
1-988-047	Custom Paper 047	E*	[1 to 100 / **100** / 1%/step]
1-988-048	Custom Paper 048	E*	[1 to 100 / **100** / 1%/step]
1-988-049	Custom Paper 049	E*	[1 to 100 / **100** / 1%/step]
1-988-050	Custom Paper 050	E*	[1 to 100 / **100** / 1%/step]
1-988-051	Custom Paper 051	E*	[1 to 100 / **100** / 1%/step]
1-988-052	Custom Paper 052	E*	[1 to 100 / **100** / 1%/step]
1-988-053	Custom Paper 053	E*	[1 to 100 / **100** / 1%/step]
1-988-054	Custom Paper 054	E*	[1 to 100 / **100** / 1%/step]
1-988-055	Custom Paper 055	E*	[1 to 100 / **100** / 1%/step]
1-988-056	Custom Paper 056	E*	[1 to 100 / **100** / 1%/step]
1-988-057	Custom Paper 057	E*	[1 to 100 / **100** / 1%/step]
1-988-058	Custom Paper 058	E*	[1 to 100 / **100** / 1%/step]

1-988-059	Custom Paper 059	E*	[1 to 100 / **100** / 1%/step]
1-988-060	Custom Paper 060	E*	[1 to 100 / **100** / 1%/step]
1-988-061	Custom Paper 061	E*	[1 to 100 / **100** / 1%/step]
1-988-062	Custom Paper 062	E*	[1 to 100 / **100** / 1%/step]
1-988-063	Custom Paper 063	E*	[1 to 100 / **100** / 1%/step]
1-988-064	Custom Paper 064	E*	[1 to 100 / **100** / 1%/step]
1-988-065	Custom Paper 065	E*	[1 to 100 / **100** / 1%/step]
1-988-066	Custom Paper 066	E*	[1 to 100 / **100** / 1%/step]
1-988-067	Custom Paper 067	E*	[1 to 100 / **100** / 1%/step]
1-988-068	Custom Paper 068	E*	[1 to 100 / **100** / 1%/step]
1-988-069	Custom Paper 069	E*	[1 to 100 / **100** / 1%/step]
1-988-070	Custom Paper 070	E*	[1 to 100 / **100** / 1%/step]
1-988-071	Custom Paper 071	E*	[1 to 100 / **100** / 1%/step]
1-988-072	Custom Paper 072	E*	[1 to 100 / **100** / 1%/step]
1-988-073	Custom Paper 073	E*	[1 to 100 / **100** / 1%/step]
1-988-074	Custom Paper 074	E*	[1 to 100 / **100** / 1%/step]
1-988-075	Custom Paper 075	E*	[1 to 100 / **100** / 1%/step]
1-988-076	Custom Paper 076	E*	[1 to 100 / **100** / 1%/step]
1-988-077	Custom Paper 077	E*	[1 to 100 / **100** / 1%/step]
1-988-078	Custom Paper 078	E*	[1 to 100 / **100** / 1%/step]
1-988-079	Custom Paper 079	E*	[1 to 100 / **100** / 1%/step]
1-988-080	Custom Paper 080	E*	[1 to 100 / **100** / 1%/step]
1-988-081	Custom Paper 081	E*	[1 to 100 / **100** / 1%/step]
1-988-082	Custom Paper 082	E*	[1 to 100 / **100** / 1%/step]
1-988-083	Custom Paper 083	E*	[1 to 100 / **100** / 1%/step]
1-988-084	Custom Paper 084	E*	[1 to 100 / **100** / 1%/step]

1-988-085	Custom Paper 085	E*	[1 to 100 / **100** / 1%/step]
1-988-086	Custom Paper 086	E*	[1 to 100 / **100** / 1%/step]
1-988-087	Custom Paper 087	E*	[1 to 100 / **100** / 1%/step]
1-988-088	Custom Paper 088	E*	[1 to 100 / **100** / 1%/step]
1-988-089	Custom Paper 089	E*	[1 to 100 / **100** / 1%/step]
1-988-090	Custom Paper 090	E*	[1 to 100 / **100** / 1%/step]
1-988-091	Custom Paper 091	E*	[1 to 100 / **100** / 1%/step]
1-988-092	Custom Paper 092	E*	[1 to 100 / **100** / 1%/step]
1-988-093	Custom Paper 093	E*	[1 to 100 / **100** / 1%/step]
1-988-094	Custom Paper 094	E*	[1 to 100 / **100** / 1%/step]
1-988-095	Custom Paper 095	E*	[1 to 100 / **100** / 1%/step]
1-988-096	Custom Paper 096	E*	[1 to 100 / **100** / 1%/step]
1-988-097	Custom Paper 097	E*	[1 to 100 / **100** / 1%/step]
1-988-098	Custom Paper 098	E*	[1 to 100 / **100** / 1%/step]
1-988-099	Custom Paper 099	E*	[1 to 100 / **100** / 1%/step]
1-988-100	Custom Paper 100	E*	[1 to 100 / **100** / 1%/step]
1-988-101	Plain:Weight 0	E*	[1 to 100 / **100** / 1%/step]
1-988-102	Plain::Weight 1	E*	[1 to 100 / **100** / 1%/step]
1-988-103	Plain::Weight 2	E*	[1 to 100 / **100** / 1%/step]
1-988-104	Plain::Weight 3	E*	[1 to 100 / **100** / 1%/step]
1-988-105	Plain::Weight 4	E*	[1 to 100 / **100** / 1%/step]
1-988-106	Plain::Weight 5	E*	[1 to 100 / **100** / 1%/step]
1-988-107	Plain::Weight 6	E*	[1 to 100 / **100** / 1%/step]
1-988-108	Plain::Weight 7	E*	[1 to 100 / **100** / 1%/step]
1-988-109	Plain::Weight 8	E*	[1 to 100 / **100** / 1%/step]
1-988-110	Matte:Weight 0	E*	[1 to 100 / **100** / 1%/step]

1-988-111	Matte:Weight 1	E*	[1 to 100 / **100** / 1%/step]
1-988-112	Matte:Weight 2	E*	[1 to 100 / **100** / 1%/step]
1-988-113	Matte:Weight 3	E*	[1 to 100 / **100** / 1%/step]
1-988-114	Matte:Weight 4	E*	[1 to 100 / **100** / 1%/step]
1-988-115	Matte:Weight 5	E*	[1 to 100 / **100** / 1%/step]
1-988-116	Matte:Weight 6	E*	[1 to 100 / **100** / 1%/step]
1-988-117	Matte:Weight 7	E*	[1 to 100 / **100** / 1%/step]
1-988-118	Matte:Weight 8	E*	[1 to 100 / **100** / 1%/step]
1-988-119	Glossy:Weight 0	E*	[1 to 100 / **100** / 1%/step]
1-988-120	Glossy:Weight 1	E*	[1 to 100 / **100** / 1%/step]
1-988-121	Glossy:Weight 2	E*	[1 to 100 / **100** / 1%/step]
1-988-122	Glossy:Weight 3	E*	[1 to 100 / **100** / 1%/step]
1-988-123	Glossy:Weight 4	E*	[1 to 100 / **100** / 1%/step]
1-988-124	Glossy:Weight 5	E*	[1 to 100 / **100** / 1%/step]
1-988-125	Glossy:Weight 6	E*	[1 to 100 / **100** / 1%/step]
1-988-126	Glossy:Weight 7	E*	[1 to 100 / **100** / 1%/step]
1-988-127	Glossy:Weight 8	E*	[1 to 100 / **100** / 1%/step]
1-988-128	Envelope:Weight 5	E*	[1 to 100 / **100** / 1%/step]
1-988-129	Envelope:Weight 6	E*	[1 to 100 / **100** / 1%/step]
1-988-130	Envelope:Weight 7	E*	[1 to 100 / **100** / 1%/step]
1-988-131	OHP	E*	[1 to 100 / **100** / 1%/step]

1989	**[Nip Width Setting]** Changes the nip position. 1: Press (for reverse rotation when jammed) 2: Press2 (Envelope Feed Nip Width) 3: Press3 (Normal Feed Nip Width)

1-989-001	Custom Paper 001	E*	[1 to 4 / **2** / 1/step]
1-989-002	Custom Paper 002	E*	[1 to 4 / **2** / 1/step]
1-989-003	Custom Paper 003	E*	[1 to 4 / **2** / 1/step]
1-989-004	Custom Paper 004	E*	[1 to 4 / **2** / 1/step]
1-989-005	Custom Paper 005	E*	[1 to 4 / **2** / 1/step]
1-989-006	Custom Paper 006	E*	[1 to 4 / **2** / 1/step]
1-989-007	Custom Paper 007	E*	[1 to 4 / **2** / 1/step]
1-989-008	Custom Paper 008	E*	[1 to 4 / **2** / 1/step]
1-989-009	Custom Paper 009	E*	[1 to 4 / **2** / 1/step]
1-989-010	Custom Paper 010	E*	[1 to 4 / **2** / 1/step]
1-989-011	Custom Paper 011	E*	[1 to 4 / **2** / 1/step]
1-989-012	Custom Paper 012	E*	[1 to 4 / **2** / 1/step]
1-989-013	Custom Paper 013	E*	[1 to 4 / **2** / 1/step]
1-989-014	Custom Paper 014	E*	[1 to 4 / **2** / 1/step]
1-989-015	Custom Paper 015	E*	[1 to 4 / **2** / 1/step]
1-989-016	Custom Paper 016	E*	[1 to 4 / **2** / 1/step]
1-989-017	Custom Paper 017	E*	[1 to 4 / **2** / 1/step]
1-989-018	Custom Paper 018	E*	[1 to 4 / **2** / 1/step]
1-989-019	Custom Paper 019	E*	[1 to 4 / **2** / 1/step]
1-989-020	Custom Paper 020	E*	[1 to 4 / **2** / 1/step]
1-989-021	Custom Paper 021	E*	[1 to 4 / **2** / 1/step]
1-989-022	Custom Paper 022	E*	[1 to 4 / **2** / 1/step]
1-989-023	Custom Paper 023	E*	[1 to 4 / **2** / 1/step]
1-989-024	Custom Paper 024	E*	[1 to 4 / **2** / 1/step]
1-989-025	Custom Paper 025	E*	[1 to 4 / **2** / 1/step]
1-989-026	Custom Paper 026	E*	[1 to 4 / **2** / 1/step]

1-989-027	Custom Paper 027	E*	[1 to 4 / **2** / 1/step]
1-989-028	Custom Paper 028	E*	[1 to 4 / **2** / 1/step]
1-989-029	Custom Paper 029	E*	[1 to 4 / **2** / 1/step]
1-989-030	Custom Paper 030	E*	[1 to 4 / **2** / 1/step]
1-989-031	Custom Paper 031	E*	[1 to 4 / **2** / 1/step]
1-989-032	Custom Paper 032	E*	[1 to 4 / **2** / 1/step]
1-989-033	Custom Paper 033	E*	[1 to 4 / **2** / 1/step]
1-989-034	Custom Paper 034	E*	[1 to 4 / **2** / 1/step]
1-989-035	Custom Paper 035	E*	[1 to 4 / **2** / 1/step]
1-989-036	Custom Paper 036	E*	[1 to 4 / **2** / 1/step]
1-989-037	Custom Paper 037	E*	[1 to 4 / **2** / 1/step]
1-989-038	Custom Paper 038	E*	[1 to 4 / **2** / 1/step]
1-989-039	Custom Paper 039	E*	[1 to 4 / **2** / 1/step]
1-989-040	Custom Paper 040	E*	[1 to 4 / **2** / 1/step]
1-989-041	Custom Paper 041	E*	[1 to 4 / **2** / 1/step]
1-989-042	Custom Paper 042	E*	[1 to 4 / **2** / 1/step]
1-989-043	Custom Paper 043	E*	[1 to 4 / **2** / 1/step]
1-989-044	Custom Paper 044	E*	[1 to 4 / **2** / 1/step]
1-989-045	Custom Paper 045	E*	[1 to 4 / **2** / 1/step]
1-989-046	Custom Paper 046	E*	[1 to 4 / **2** / 1/step]
1-989-047	Custom Paper 047	E*	[1 to 4 / **2** / 1/step]
1-989-048	Custom Paper 048	E*	[1 to 4 / **2** / 1/step]
1-989-049	Custom Paper 049	E*	[1 to 4 / **2** / 1/step]
1-989-050	Custom Paper 050	E*	[1 to 4 / **2** / 1/step]
1-989-051	Custom Paper 051	E*	[1 to 4 / **2** / 1/step]
1-989-052	Custom Paper 052	E*	[1 to 4 / **2** / 1/step]

1-989-053	Custom Paper 053	E*	[1 to 4 / **2** / 1/step]
1-989-054	Custom Paper 054	E*	[1 to 4 / **2** / 1/step]
1-989-055	Custom Paper 055	E*	[1 to 4 / **2** / 1/step]
1-989-056	Custom Paper 056	E*	[1 to 4 / **2** / 1/step]
1-989-057	Custom Paper 057	E*	[1 to 4 / **2** / 1/step]
1-989-058	Custom Paper 058	E*	[1 to 4 / **2** / 1/step]
1-989-059	Custom Paper 059	E*	[1 to 4 / **2** / 1/step]
1-989-060	Custom Paper 060	E*	[1 to 4 / **2** / 1/step]
1-989-061	Custom Paper 061	E*	[1 to 4 / **2** / 1/step]
1-989-062	Custom Paper 062	E*	[1 to 4 / **2** / 1/step]
1-989-063	Custom Paper 063	E*	[1 to 4 / **2** / 1/step]
1-989-064	Custom Paper 064	E*	[1 to 4 / **2** / 1/step]
1-989-065	Custom Paper 065	E*	[1 to 4 / **2** / 1/step]
1-989-066	Custom Paper 066	E*	[1 to 4 / **2** / 1/step]
1-989-067	Custom Paper 067	E*	[1 to 4 / **2** / 1/step]
1-989-068	Custom Paper 068	E*	[1 to 4 / **2** / 1/step]
1-989-069	Custom Paper 069	E*	[1 to 4 / **2** / 1/step]
1-989-070	Custom Paper 070	E*	[1 to 4 / **2** / 1/step]
1-989-071	Custom Paper 071	E*	[1 to 4 / **2** / 1/step]
1-989-072	Custom Paper 072	E*	[1 to 4 / **2** / 1/step]
1-989-073	Custom Paper 073	E*	[1 to 4 / **2** / 1/step]
1-989-074	Custom Paper 074	E*	[1 to 4 / **2** / 1/step]
1-989-075	Custom Paper 075	E*	[1 to 4 / **2** / 1/step]
1-989-076	Custom Paper 076	E*	[1 to 4 / **2** / 1/step]
1-989-077	Custom Paper 077	E*	[1 to 4 / **2** / 1/step]
1-989-078	Custom Paper 078	E*	[1 to 4 / **2** / 1/step]

1-989-079	Custom Paper 079	E*	[1 to 4 / **2** / 1/step]
1-989-080	Custom Paper 080	E*	[1 to 4 / **2** / 1/step]
1-989-081	Custom Paper 081	E*	[1 to 4 / **2** / 1/step]
1-989-082	Custom Paper 082	E*	[1 to 4 / **2** / 1/step]
1-989-083	Custom Paper 083	E*	[1 to 4 / **2** / 1/step]
1-989-084	Custom Paper 084	E*	[1 to 4 / **2** / 1/step]
1-989-085	Custom Paper 085	E*	[1 to 4 / **2** / 1/step]
1-989-086	Custom Paper 086	E*	[1 to 4 / **2** / 1/step]
1-989-087	Custom Paper 087	E*	[1 to 4 / **2** / 1/step]
1-989-088	Custom Paper 088	E*	[1 to 4 / **2** / 1/step]
1-989-089	Custom Paper 089	E*	[1 to 4 / **2** / 1/step]
1-989-090	Custom Paper 090	E*	[1 to 4 / **2** / 1/step]
1-989-091	Custom Paper 091	E*	[1 to 4 / **2** / 1/step]
1-989-092	Custom Paper 092	E*	[1 to 4 / **2** / 1/step]
1-989-093	Custom Paper 093	E*	[1 to 4 / **2** / 1/step]
1-989-094	Custom Paper 094	E*	[1 to 4 / **2** / 1/step]
1-989-095	Custom Paper 095	E*	[1 to 4 / **2** / 1/step]
1-989-096	Custom Paper 096	E*	[1 to 4 / **2** / 1/step]
1-989-097	Custom Paper 097	E*	[1 to 4 / **2** / 1/step]
1-989-098	Custom Paper 098	E*	[1 to 4 / **2** / 1/step]
1-989-099	Custom Paper 099	E*	[1 to 4 / **2** / 1/step]
1-989-100	Custom Paper 100	E*	[1 to 4 / **2** / 1/step]
1-989-101	Plain:Weight 0	E*	[1 to 4 / **2** / 1/step]
1-989-102	Plain::Weight 1	E*	[1 to 4 / **2** / 1/step]
1-989-103	Plain::Weight 2	E*	[1 to 4 / **2** / 1/step]
1-989-104	Plain::Weight 3	E*	[1 to 4 / **2** / 1/step]

1-989-105	Plain::Weight 4	E*	[1 to 4 / **2** / 1/step]
1-989-106	Plain::Weight 5	E*	[1 to 4 / **2** / 1/step]
1-989-107	Plain::Weight 6	E*	[1 to 4 / **2** / 1/step]
1-989-108	Plain::Weight 7	E*	[1 to 4 / **2** / 1/step]
1-989-109	Plain::Weight 8	E*	[1 to 4 / **2** / 1/step]
1-989-110	Matte:Weight 0	E*	[1 to 4 / **2** / 1/step]
1-989-111	Matte:Weight 1	E*	[1 to 4 / **2** / 1/step]
1-989-112	Matte:Weight 2	E*	[1 to 4 / **2** / 1/step]
1-989-113	Matte:Weight 3	E*	[1 to 4 / **2** / 1/step]
1-989-114	Matte:Weight 4	E*	[1 to 4 / **2** / 1/step]
1-989-115	Matte:Weight 5	E*	[1 to 4 / **2** / 1/step]
1-989-116	Matte:Weight 6	E*	[1 to 4 / **2** / 1/step]
1-989-117	Matte:Weight 7	E*	[1 to 4 / **2** / 1/step]
1-989-118	Matte:Weight 8	E*	[1 to 4 / **2** / 1/step]
1-989-119	Glossy:Weight 0	E*	[1 to 4 / **2** / 1/step]
1-989-120	Glossy:Weight 1	E*	[1 to 4 / **2** / 1/step]
1-989-121	Glossy:Weight 2	E*	[1 to 4 / **2** / 1/step]
1-989-122	Glossy:Weight 3	E*	[1 to 4 / **2** / 1/step]
1-989-123	Glossy:Weight 4	E*	[1 to 4 / **2** / 1/step]
1-989-124	Glossy:Weight 5	E*	[1 to 4 / **2** / 1/step]
1-989-125	Glossy:Weight 6	E*	[1 to 4 / **2** / 1/step]
1-989-126	Glossy:Weight 7	E*	[1 to 4 / **2** / 1/step]
1-989-127	Glossy:Weight 8	E*	[1 to 4 / **2** / 1/step]
1-989-128	Envelope:Weight 5	E*	[1 to 4 / **2** / 1/step]
1-989-129	Envelope:Weight 6	E*	[1 to 4 / **2** / 1/step]
1-989-130	Envelope:Weight 7	E*	[1 to 4 / **2** / 1/step]

1-989-131	OHP	E*	[1 to 4 / **2** / 1/step]

1990	**[L Temp:CPM Down]** Sets initial CPM down rate for low temperature condition. 0: No CPM Down 1: CPM Down 1 2: CPM Down 2 3: CPM Down 3		
1-990-001	Custom Paper 001	E*	[0 to 3 / **0** / 1/step]
1-990-002	Custom Paper 002	E*	[0 to 3 / **0** / 1/step]
1-990-003	Custom Paper 003	E*	[0 to 3 / **0** / 1/step]
1-990-004	Custom Paper 004	E*	[0 to 3 / **0** / 1/step]
1-990-005	Custom Paper 005	E*	[0 to 3 / **0** / 1/step]
1-990-006	Custom Paper 006	E*	[0 to 3 / **0** / 1/step]
1-990-007	Custom Paper 007	E*	[0 to 3 / **0** / 1/step]
1-990-008	Custom Paper 008	E*	[0 to 3 / **0** / 1/step]
1-990-009	Custom Paper 009	E*	[0 to 3 / **0** / 1/step]
1-990-010	Custom Paper 010	E*	[0 to 3 / **0** / 1/step]
1-990-011	Custom Paper 011	E*	[0 to 3 / **0** / 1/step]
1-990-012	Custom Paper 012	E*	[0 to 3 / **0** / 1/step]
1-990-013	Custom Paper 013	E*	[0 to 3 / **0** / 1/step]
1-990-014	Custom Paper 014	E*	[0 to 3 / **0** / 1/step]
1-990-015	Custom Paper 015	E*	[0 to 3 / **0** / 1/step]
1-990-016	Custom Paper 016	E*	[0 to 3 / **0** / 1/step]
1-990-017	Custom Paper 017	E*	[0 to 3 / **0** / 1/step]
1-990-018	Custom Paper 018	E*	[0 to 3 / **0** / 1/step]
1-990-019	Custom Paper 019	E*	[0 to 3 / **0** / 1/step]
1-990-020	Custom Paper 020	E*	[0 to 3 / **0** / 1/step]

1-990-021	Custom Paper 021	E*	[0 to 3 / **0** / 1/step]
1-990-022	Custom Paper 022	E*	[0 to 3 / **0** / 1/step]
1-990-023	Custom Paper 023	E*	[0 to 3 / **0** / 1/step]
1-990-024	Custom Paper 024	E*	[0 to 3 / **0** / 1/step]
1-990-025	Custom Paper 025	E*	[0 to 3 / **0** / 1/step]
1-990-026	Custom Paper 026	E*	[0 to 3 / **0** / 1/step]
1-990-027	Custom Paper 027	E*	[0 to 3 / **0** / 1/step]
1-990-028	Custom Paper 028	E*	[0 to 3 / **0** / 1/step]
1-990-029	Custom Paper 029	E*	[0 to 3 / **0** / 1/step]
1-990-030	Custom Paper 030	E*	[0 to 3 / **0** / 1/step]
1-990-031	Custom Paper 031	E*	[0 to 3 / **0** / 1/step]
1-990-032	Custom Paper 032	E*	[0 to 3 / **0** / 1/step]
1-990-033	Custom Paper 033	E*	[0 to 3 / **0** / 1/step]
1-990-034	Custom Paper 034	E*	[0 to 3 / **0** / 1/step]
1-990-035	Custom Paper 035	E*	[0 to 3 / **0** / 1/step]
1-990-036	Custom Paper 036	E*	[0 to 3 / **0** / 1/step]
1-990-037	Custom Paper 037	E*	[0 to 3 / **0** / 1/step]
1-990-038	Custom Paper 038	E*	[0 to 3 / **0** / 1/step]
1-990-039	Custom Paper 039	E*	[0 to 3 / **0** / 1/step]
1-990-040	Custom Paper 040	E*	[0 to 3 / **0** / 1/step]
1-990-041	Custom Paper 041	E*	[0 to 3 / **0** / 1/step]
1-990-042	Custom Paper 042	E*	[0 to 3 / **0** / 1/step]
1-990-043	Custom Paper 043	E*	[0 to 3 / **0** / 1/step]
1-990-044	Custom Paper 044	E*	[0 to 3 / **0** / 1/step]
1-990-045	Custom Paper 045	E*	[0 to 3 / **0** / 1/step]
1-990-046	Custom Paper 046	E*	[0 to 3 / **0** / 1/step]

1-990-047	Custom Paper 047	E*	[0 to 3 / **0** / 1/step]
1-990-048	Custom Paper 048	E*	[0 to 3 / **0** / 1/step]
1-990-049	Custom Paper 049	E*	[0 to 3 / **0** / 1/step]
1-990-050	Custom Paper 050	E*	[0 to 3 / **0** / 1/step]
1-990-051	Custom Paper 051	E*	[0 to 3 / **0** / 1/step]
1-990-052	Custom Paper 052	E*	[0 to 3 / **0** / 1/step]
1-990-053	Custom Paper 053	E*	[0 to 3 / **0** / 1/step]
1-990-054	Custom Paper 054	E*	[0 to 3 / **0** / 1/step]
1-990-055	Custom Paper 055	E*	[0 to 3 / **0** / 1/step]
1-990-056	Custom Paper 056	E*	[0 to 3 / **0** / 1/step]
1-990-057	Custom Paper 057	E*	[0 to 3 / **0** / 1/step]
1-990-058	Custom Paper 058	E*	[0 to 3 / **0** / 1/step]
1-990-059	Custom Paper 059	E*	[0 to 3 / **0** / 1/step]
1-990-060	Custom Paper 060	E*	[0 to 3 / **0** / 1/step]
1-990-061	Custom Paper 061	E*	[0 to 3 / **0** / 1/step]
1-990-062	Custom Paper 062	E*	[0 to 3 / **0** / 1/step]
1-990-063	Custom Paper 063	E*	[0 to 3 / **0** / 1/step]
1-990-064	Custom Paper 064	E*	[0 to 3 / **0** / 1/step]
1-990-065	Custom Paper 065	E*	[0 to 3 / **0** / 1/step]
1-990-066	Custom Paper 066	E*	[0 to 3 / **0** / 1/step]
1-990-067	Custom Paper 067	E*	[0 to 3 / **0** / 1/step]
1-990-068	Custom Paper 068	E*	[0 to 3 / **0** / 1/step]
1-990-069	Custom Paper 069	E*	[0 to 3 / **0** / 1/step]
1-990-070	Custom Paper 070	E*	[0 to 3 / **0** / 1/step]
1-990-071	Custom Paper 071	E*	[0 to 3 / **0** / 1/step]
1-990-072	Custom Paper 072	E*	[0 to 3 / **0** / 1/step]

1-990-073	Custom Paper 073	E*	[0 to 3 / **0** / 1/step]
1-990-074	Custom Paper 074	E*	[0 to 3 / **0** / 1/step]
1-990-075	Custom Paper 075	E*	[0 to 3 / **0** / 1/step]
1-990-076	Custom Paper 076	E*	[0 to 3 / **0** / 1/step]
1-990-077	Custom Paper 077	E*	[0 to 3 / **0** / 1/step]
1-990-078	Custom Paper 078	E*	[0 to 3 / **0** / 1/step]
1-990-079	Custom Paper 079	E*	[0 to 3 / **0** / 1/step]
1-990-080	Custom Paper 080	E*	[0 to 3 / **0** / 1/step]
1-990-081	Custom Paper 081	E*	[0 to 3 / **0** / 1/step]
1-990-082	Custom Paper 082	E*	[0 to 3 / **0** / 1/step]
1-990-083	Custom Paper 083	E*	[0 to 3 / **0** / 1/step]
1-990-084	Custom Paper 084	E*	[0 to 3 / **0** / 1/step]
1-990-085	Custom Paper 085	E*	[0 to 3 / **0** / 1/step]
1-990-086	Custom Paper 086	E*	[0 to 3 / **0** / 1/step]
1-990-087	Custom Paper 087	E*	[0 to 3 / **0** / 1/step]
1-990-088	Custom Paper 088	E*	[0 to 3 / **0** / 1/step]
1-990-089	Custom Paper 089	E*	[0 to 3 / **0** / 1/step]
1-990-090	Custom Paper 090	E*	[0 to 3 / **0** / 1/step]
1-990-091	Custom Paper 091	E*	[0 to 3 / **0** / 1/step]
1-990-092	Custom Paper 092	E*	[0 to 3 / **0** / 1/step]
1-990-093	Custom Paper 093	E*	[0 to 3 / **0** / 1/step]
1-990-094	Custom Paper 094	E*	[0 to 3 / **0** / 1/step]
1-990-095	Custom Paper 095	E*	[0 to 3 / **0** / 1/step]
1-990-096	Custom Paper 096	E*	[0 to 3 / **0** / 1/step]
1-990-097	Custom Paper 097	E*	[0 to 3 / **0** / 1/step]
1-990-098	Custom Paper 098	E*	[0 to 3 / **0** / 1/step]

1-990-099	Custom Paper 099	E*	[0 to 3 / **0** / 1/step]
1-990-100	Custom Paper 100	E*	[0 to 3 / **0** / 1/step]
1-990-101	Plain:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-990-102	Plain:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-990-103	Plain:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-990-104	Plain:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-990-105	Plain:Weight 4	E*	[0 to 3 / **1** / 1/step]
1-990-106	Plain:Weight 5	E*	[0 to 3 / **1** / 1/step]
1-990-107	Plain:Weight 6	E*	[0 to 3 / **1** / 1/step]
1-990-108	Plain:Weight 7	E*	[0 to 3 / **2** / 1/step]
1-990-109	Plain:Weight 8	E*	[0 to 3 / **2** / 1/step]
1-990-110	Matte:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-990-111	Matte:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-990-112	Matte:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-990-113	Matte:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-990-114	Matte:Weight 4	E*	[0 to 3 / **2** / 1/step]
1-990-115	Matte:Weight 5	E*	[0 to 3 / **3** / 1/step]
1-990-116	Matte:Weight 6	E*	[0 to 3 / **3** / 1/step]
1-990-117	Matte:Weight 7	E*	[0 to 3 / **3** / 1/step]
1-990-118	Matte:Weight 8	E*	[0 to 3 / **3** / 1/step]
1-990-119	Glossy:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-990-120	Glossy:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-990-121	Glossy:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-990-122	Glossy:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-990-123	Glossy:Weight 4	E*	[0 to 3 / **2** / 1/step]
1-990-124	Glossy:Weight 5	E*	[0 to 3 / **3** / 1/step]

1-990-125	Glossy:Weight 6	E*	[0 to 3 / **3** / 1/step]
1-990-126	Glossy:Weight 7	E*	[0 to 3 / **3** / 1/step]
1-990-127	Glossy:Weight 8	E*	[0 to 3 / **3** / 1/step]
1-990-128	Envelope:Weight 5	E*	[0 to 3 / **1** / 1/step]
1-990-129	Envelope:Weight 6	E*	[0 to 3 / **1** / 1/step]
1-990-130	Envelope:Weight 7	E*	[0 to 3 / **2** / 1/step]
1-990-131	OHP	E*	[0 to 3 / **1** / 1/step]

1991	**[Over N-Temp:CPM Down]** Sets initial CPM down rate when higher than normal temperature condition. 0: No CPM Down 1: CPM Down 1 2: CPM Down 2 3: CPM Down 3		
1-991-001	Custom Paper 001	E*	[0 to 3 / **0** / 1/step]
1-991-002	Custom Paper 002	E*	[0 to 3 / **0** / 1/step]
1-991-003	Custom Paper 003	E*	[0 to 3 / **0** / 1/step]
1-991-004	Custom Paper 004	E*	[0 to 3 / **0** / 1/step]
1-991-005	Custom Paper 005	E*	[0 to 3 / **0** / 1/step]
1-991-006	Custom Paper 006	E*	[0 to 3 / **0** / 1/step]
1-991-007	Custom Paper 007	E*	[0 to 3 / **0** / 1/step]
1-991-008	Custom Paper 008	E*	[0 to 3 / **0** / 1/step]
1-991-009	Custom Paper 009	E*	[0 to 3 / **0** / 1/step]
1-991-010	Custom Paper 010	E*	[0 to 3 / **0** / 1/step]
1-991-011	Custom Paper 011	E*	[0 to 3 / **0** / 1/step]
1-991-012	Custom Paper 012	E*	[0 to 3 / **0** / 1/step]
1-991-013	Custom Paper 013	E*	[0 to 3 / **0** / 1/step]
1-991-014	Custom Paper 014	E*	[0 to 3 / **0** / 1/step]

1-991-015	Custom Paper 015	E*	[0 to 3 / **0** / 1/step]
1-991-016	Custom Paper 016	E*	[0 to 3 / **0** / 1/step]
1-991-017	Custom Paper 017	E*	[0 to 3 / **0** / 1/step]
1-991-018	Custom Paper 018	E*	[0 to 3 / **0** / 1/step]
1-991-019	Custom Paper 019	E*	[0 to 3 / **0** / 1/step]
1-991-020	Custom Paper 020	E*	[0 to 3 / **0** / 1/step]
1-991-021	Custom Paper 021	E*	[0 to 3 / **0** / 1/step]
1-991-022	Custom Paper 022	E*	[0 to 3 / **0** / 1/step]
1-991-023	Custom Paper 023	E*	[0 to 3 / **0** / 1/step]
1-991-024	Custom Paper 024	E*	[0 to 3 / **0** / 1/step]
1-991-025	Custom Paper 025	E*	[0 to 3 / **0** / 1/step]
1-991-026	Custom Paper 026	E*	[0 to 3 / **0** / 1/step]
1-991-027	Custom Paper 027	E*	[0 to 3 / **0** / 1/step]
1-991-028	Custom Paper 028	E*	[0 to 3 / **0** / 1/step]
1-991-029	Custom Paper 029	E*	[0 to 3 / **0** / 1/step]
1-991-030	Custom Paper 030	E*	[0 to 3 / **0** / 1/step]
1-991-031	Custom Paper 031	E*	[0 to 3 / **0** / 1/step]
1-991-032	Custom Paper 032	E*	[0 to 3 / **0** / 1/step]
1-991-033	Custom Paper 033	E*	[0 to 3 / **0** / 1/step]
1-991-034	Custom Paper 034	E*	[0 to 3 / **0** / 1/step]
1-991-035	Custom Paper 035	E*	[0 to 3 / **0** / 1/step]
1-991-036	Custom Paper 036	E*	[0 to 3 / **0** / 1/step]
1-991-037	Custom Paper 037	E*	[0 to 3 / **0** / 1/step]
1-991-038	Custom Paper 038	E*	[0 to 3 / **0** / 1/step]
1-991-039	Custom Paper 039	E*	[0 to 3 / **0** / 1/step]
1-991-040	Custom Paper 040	E*	[0 to 3 / **0** / 1/step]

1-991-041	Custom Paper 041	E*	[0 to 3 / **0** / 1/step]
1-991-042	Custom Paper 042	E*	[0 to 3 / **0** / 1/step]
1-991-043	Custom Paper 043	E*	[0 to 3 / **0** / 1/step]
1-991-044	Custom Paper 044	E*	[0 to 3 / **0** / 1/step]
1-991-045	Custom Paper 045	E*	[0 to 3 / **0** / 1/step]
1-991-046	Custom Paper 046	E*	[0 to 3 / **0** / 1/step]
1-991-047	Custom Paper 047	E*	[0 to 3 / **0** / 1/step]
1-991-048	Custom Paper 048	E*	[0 to 3 / **0** / 1/step]
1-991-049	Custom Paper 049	E*	[0 to 3 / **0** / 1/step]
1-991-050	Custom Paper 050	E*	[0 to 3 / **0** / 1/step]
1-991-051	Custom Paper 051	E*	[0 to 3 / **0** / 1/step]
1-991-052	Custom Paper 052	E*	[0 to 3 / **0** / 1/step]
1-991-053	Custom Paper 053	E*	[0 to 3 / **0** / 1/step]
1-991-054	Custom Paper 054	E*	[0 to 3 / **0** / 1/step]
1-991-055	Custom Paper 055	E*	[0 to 3 / **0** / 1/step]
1-991-056	Custom Paper 056	E*	[0 to 3 / **0** / 1/step]
1-991-057	Custom Paper 057	E*	[0 to 3 / **0** / 1/step]
1-991-058	Custom Paper 058	E*	[0 to 3 / **0** / 1/step]
1-991-059	Custom Paper 059	E*	[0 to 3 / **0** / 1/step]
1-991-060	Custom Paper 060	E*	[0 to 3 / **0** / 1/step]
1-991-061	Custom Paper 061	E*	[0 to 3 / **0** / 1/step]
1-991-062	Custom Paper 062	E*	[0 to 3 / **0** / 1/step]
1-991-063	Custom Paper 063	E*	[0 to 3 / **0** / 1/step]
1-991-064	Custom Paper 064	E*	[0 to 3 / **0** / 1/step]
1-991-065	Custom Paper 065	E*	[0 to 3 / **0** / 1/step]
1-991-066	Custom Paper 066	E*	[0 to 3 / **0** / 1/step]

1-991-067	Custom Paper 067	E*	[0 to 3 / **0** / 1/step]
1-991-068	Custom Paper 068	E*	[0 to 3 / **0** / 1/step]
1-991-069	Custom Paper 069	E*	[0 to 3 / **0** / 1/step]
1-991-070	Custom Paper 070	E*	[0 to 3 / **0** / 1/step]
1-991-071	Custom Paper 071	E*	[0 to 3 / **0** / 1/step]
1-991-072	Custom Paper 072	E*	[0 to 3 / **0** / 1/step]
1-991-073	Custom Paper 073	E*	[0 to 3 / **0** / 1/step]
1-991-074	Custom Paper 074	E*	[0 to 3 / **0** / 1/step]
1-991-075	Custom Paper 075	E*	[0 to 3 / **0** / 1/step]
1-991-076	Custom Paper 076	E*	[0 to 3 / **0** / 1/step]
1-991-077	Custom Paper 077	E*	[0 to 3 / **0** / 1/step]
1-991-078	Custom Paper 078	E*	[0 to 3 / **0** / 1/step]
1-991-079	Custom Paper 079	E*	[0 to 3 / **0** / 1/step]
1-991-080	Custom Paper 080	E*	[0 to 3 / **0** / 1/step]
1-991-081	Custom Paper 081	E*	[0 to 3 / **0** / 1/step]
1-991-082	Custom Paper 082	E*	[0 to 3 / **0** / 1/step]
1-991-083	Custom Paper 083	E*	[0 to 3 / **0** / 1/step]
1-991-084	Custom Paper 084	E*	[0 to 3 / **0** / 1/step]
1-991-085	Custom Paper 085	E*	[0 to 3 / **0** / 1/step]
1-991-086	Custom Paper 086	E*	[0 to 3 / **0** / 1/step]
1-991-087	Custom Paper 087	E*	[0 to 3 / **0** / 1/step]
1-991-088	Custom Paper 088	E*	[0 to 3 / **0** / 1/step]
1-991-089	Custom Paper 089	E*	[0 to 3 / **0** / 1/step]
1-991-090	Custom Paper 090	E*	[0 to 3 / **0** / 1/step]
1-991-091	Custom Paper 091	E*	[0 to 3 / **0** / 1/step]
1-991-092	Custom Paper 092	E*	[0 to 3 / **0** / 1/step]

1-991-093	Custom Paper 093	E*	[0 to 3 / **0** / 1/step]
1-991-094	Custom Paper 094	E*	[0 to 3 / **0** / 1/step]
1-991-095	Custom Paper 095	E*	[0 to 3 / **0** / 1/step]
1-991-096	Custom Paper 096	E*	[0 to 3 / **0** / 1/step]
1-991-097	Custom Paper 097	E*	[0 to 3 / **0** / 1/step]
1-991-098	Custom Paper 098	E*	[0 to 3 / **0** / 1/step]
1-991-099	Custom Paper 099	E*	[0 to 3 / **0** / 1/step]
1-991-100	Custom Paper 100	E*	[0 to 3 / **0** / 1/step]
1-991-101	Plain:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-991-102	Plain:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-991-103	Plain:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-991-104	Plain:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-991-105	Plain:Weight 4	E*	[0 to 3 / **0** / 1/step]
1-991-106	Plain:Weight 5	E*	[0 to 3 / **0** / 1/step]
1-991-107	Plain:Weight 6	E*	[0 to 3 / **0** / 1/step]
1-991-108	Plain:Weight 7	E*	[0 to 3 / **0** / 1/step]
1-991-109	Plain:Weight 8	E*	[0 to 3 / **0** / 1/step]
1-991-110	Matte:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-991-111	Matte:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-991-112	Matte:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-991-113	Matte:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-991-114	Matte:Weight 4	E*	[0 to 3 / **0** / 1/step]
1-991-115	Matte:Weight 5	E*	[0 to 3 / **1** / 1/step]
1-991-116	Matte:Weight 6	E*	[0 to 3 / **1** / 1/step]
1-991-117	Matte:Weight 7	E*	[0 to 3 / **2** / 1/step]
1-991-118	Matte:Weight 8	E*	[0 to 3 / **2** / 1/step]

1-991-119	Glossy:Weight 0	E*	[0 to 3 / **0** / 1/step]
1-991-120	Glossy:Weight 1	E*	[0 to 3 / **0** / 1/step]
1-991-121	Glossy:Weight 2	E*	[0 to 3 / **0** / 1/step]
1-991-122	Glossy:Weight 3	E*	[0 to 3 / **0** / 1/step]
1-991-123	Glossy:Weight 4	E*	[0 to 3 / **0** / 1/step]
1-991-124	Glossy:Weight 5	E*	[0 to 3 / **1** / 1/step]
1-991-125	Glossy:Weight 6	E*	[0 to 3 / **1** / 1/step]
1-991-126	Glossy:Weight 7	E*	[0 to 3 / **2** / 1/step]
1-991-127	Glossy:Weight 8	E*	[0 to 3 / **2** / 1/step]
1-991-128	Envelope:Weight 5	E*	[0 to 3 / **0** / 1/step]
1-991-129	Envelope:Weight 6	E*	[0 to 3 / **0** / 1/step]
1-991-130	Envelope:Weight 7	E*	[0 to 3 / **0** / 1/step]
1-991-131	OHP	E*	[0 to 3 / **0** / 1/step]

1992	**[Web Feed Interval]** Adjusts Web Feed Interval.		
1-992-001	Custom Paper 001	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-002	Custom Paper 002	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-003	Custom Paper 003	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-004	Custom Paper 004	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-005	Custom Paper 005	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-006	Custom Paper 006	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-007	Custom Paper 007	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-008	Custom Paper 008	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-009	Custom Paper 009	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-010	Custom Paper 010	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1-992-011	Custom Paper 011	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-012	Custom Paper 012	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-013	Custom Paper 013	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-014	Custom Paper 014	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-015	Custom Paper 015	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-016	Custom Paper 016	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-017	Custom Paper 017	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-018	Custom Paper 018	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-019	Custom Paper 019	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-020	Custom Paper 020	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-021	Custom Paper 021	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-022	Custom Paper 022	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-023	Custom Paper 023	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-024	Custom Paper 024	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-025	Custom Paper 025	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-026	Custom Paper 026	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-027	Custom Paper 027	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-028	Custom Paper 028	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-029	Custom Paper 029	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-030	Custom Paper 030	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-031	Custom Paper 031	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-032	Custom Paper 032	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-033	Custom Paper 033	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-034	Custom Paper 034	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-035	Custom Paper 035	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-036	Custom Paper 036	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1-992-037	Custom Paper 037	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-038	Custom Paper 038	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-039	Custom Paper 039	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-040	Custom Paper 040	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-041	Custom Paper 041	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-042	Custom Paper 042	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-043	Custom Paper 043	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-044	Custom Paper 044	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-045	Custom Paper 045	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-046	Custom Paper 046	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-047	Custom Paper 047	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-048	Custom Paper 048	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-049	Custom Paper 049	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-050	Custom Paper 050	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-051	Custom Paper 051	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-052	Custom Paper 052	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-053	Custom Paper 053	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-054	Custom Paper 054	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-055	Custom Paper 055	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-056	Custom Paper 056	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-057	Custom Paper 057	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-058	Custom Paper 058	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-059	Custom Paper 059	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-060	Custom Paper 060	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-061	Custom Paper 061	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-062	Custom Paper 062	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1-992-063	Custom Paper 063	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-064	Custom Paper 064	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-065	Custom Paper 065	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-066	Custom Paper 066	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-067	Custom Paper 067	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-068	Custom Paper 068	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-069	Custom Paper 069	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-070	Custom Paper 070	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-071	Custom Paper 071	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-072	Custom Paper 072	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-073	Custom Paper 073	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-074	Custom Paper 074	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-075	Custom Paper 075	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-076	Custom Paper 076	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-077	Custom Paper 077	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-078	Custom Paper 078	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-079	Custom Paper 079	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-080	Custom Paper 080	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-081	Custom Paper 081	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-082	Custom Paper 082	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-083	Custom Paper 083	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-084	Custom Paper 084	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-085	Custom Paper 085	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-086	Custom Paper 086	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-087	Custom Paper 087	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-088	Custom Paper 088	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1-992-089	Custom Paper 089	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-090	Custom Paper 090	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-091	Custom Paper 091	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-092	Custom Paper 092	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-093	Custom Paper 093	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-094	Custom Paper 094	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-095	Custom Paper 095	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-096	Custom Paper 096	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-097	Custom Paper 097	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-098	Custom Paper 098	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-099	Custom Paper 099	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-100	Custom Paper 100	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-101	Plain:Weight 0	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-102	Plain:Weight 1	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-103	Plain:Weight 2	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-104	Plain:Weight 3	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-105	Plain:Weight 4	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-106	Plain:Weight 5	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-107	Plain:Weight 6	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-108	Plain:Weight 7	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-109	Plain:Weight 8	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-110	Matte:Weight 0	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-111	Matte:Weight 1	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-112	Matte:Weight 2	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-113	Matte:Weight 3	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-114	Matte:Weight 4	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1-992-115	Matte:Weight 5	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-116	Matte:Weight 6	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-117	Matte:Weight 7	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-118	Matte:Weight 8	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-119	Glossy:Weight 0	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-120	Glossy:Weight 1	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-121	Glossy:Weight 2	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-122	Glossy:Weight 3	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-123	Glossy:Weight 4	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-124	Glossy:Weight 5	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-125	Glossy:Weight 6	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-126	Glossy:Weight 7	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-127	Glossy:Weight 8	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-128	Envelope:Weight 5	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-129	Envelope:Weight 6	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-130	Envelope:Weight 7	E*	[0.01 to 3.00 / **1.00** / 0.01/step]
1-992-131	OHP	E*	[0.01 to 3.00 / **1.00** / 0.01/step]

1993	**[Press:Before Job]** Selects pressure operation before job. 0: Pressure Release 1: Pressure		
1-993-001	Custom Paper 001	E*	[0 or 1 / **0** / 1/step]
1-993-002	Custom Paper 002	E*	[0 or 1 / **0** / 1/step]
1-993-003	Custom Paper 003	E*	[0 or 1 / **0** / 1/step]
1-993-004	Custom Paper 004	E*	[0 or 1 / **0** / 1/step]
1-993-005	Custom Paper 005	E*	[0 or 1 / **0** / 1/step]

1-993-006	Custom Paper 006	E*	[0 or 1 / **0** / 1/step]
1-993-007	Custom Paper 007	E*	[0 or 1 / **0** / 1/step]
1-993-008	Custom Paper 008	E*	[0 or 1 / **0** / 1/step]
1-993-009	Custom Paper 009	E*	[0 or 1 / **0** / 1/step]
1-993-010	Custom Paper 010	E*	[0 or 1 / **0** / 1/step]
1-993-011	Custom Paper 011	E*	[0 or 1 / **0** / 1/step]
1-993-012	Custom Paper 012	E*	[0 or 1 / **0** / 1/step]
1-993-013	Custom Paper 013	E*	[0 or 1 / **0** / 1/step]
1-993-014	Custom Paper 014	E*	[0 or 1 / **0** / 1/step]
1-993-015	Custom Paper 015	E*	[0 or 1 / **0** / 1/step]
1-993-016	Custom Paper 016	E*	[0 or 1 / **0** / 1/step]
1-993-017	Custom Paper 017	E*	[0 or 1 / **0** / 1/step]
1-993-018	Custom Paper 018	E*	[0 or 1 / **0** / 1/step]
1-993-019	Custom Paper 019	E*	[0 or 1 / **0** / 1/step]
1-993-020	Custom Paper 020	E*	[0 or 1 / **0** / 1/step]
1-993-021	Custom Paper 021	E*	[0 or 1 / **0** / 1/step]
1-993-022	Custom Paper 022	E*	[0 or 1 / **0** / 1/step]
1-993-023	Custom Paper 023	E*	[0 or 1 / **0** / 1/step]
1-993-024	Custom Paper 024	E*	[0 or 1 / **0** / 1/step]
1-993-025	Custom Paper 025	E*	[0 or 1 / **0** / 1/step]
1-993-026	Custom Paper 026	E*	[0 or 1 / **0** / 1/step]
1-993-027	Custom Paper 027	E*	[0 or 1 / **0** / 1/step]
1-993-028	Custom Paper 028	E*	[0 or 1 / **0** / 1/step]
1-993-029	Custom Paper 029	E*	[0 or 1 / **0** / 1/step]
1-993-030	Custom Paper 030	E*	[0 or 1 / **0** / 1/step]
1-993-031	Custom Paper 031	E*	[0 or 1 / **0** / 1/step]

1-993-032	Custom Paper 032	E*	[0 or 1 / **0** / 1/step]
1-993-033	Custom Paper 033	E*	[0 or 1 / **0** / 1/step]
1-993-034	Custom Paper 034	E*	[0 or 1 / **0** / 1/step]
1-993-035	Custom Paper 035	E*	[0 or 1 / **0** / 1/step]
1-993-036	Custom Paper 036	E*	[0 or 1 / **0** / 1/step]
1-993-037	Custom Paper 037	E*	[0 or 1 / **0** / 1/step]
1-993-038	Custom Paper 038	E*	[0 or 1 / **0** / 1/step]
1-993-039	Custom Paper 039	E*	[0 or 1 / **0** / 1/step]
1-993-040	Custom Paper 040	E*	[0 or 1 / **0** / 1/step]
1-993-041	Custom Paper 041	E*	[0 or 1 / **0** / 1/step]
1-993-042	Custom Paper 042	E*	[0 or 1 / **0** / 1/step]
1-993-043	Custom Paper 043	E*	[0 or 1 / **0** / 1/step]
1-993-044	Custom Paper 044	E*	[0 or 1 / **0** / 1/step]
1-993-045	Custom Paper 045	E*	[0 or 1 / **0** / 1/step]
1-993-046	Custom Paper 046	E*	[0 or 1 / **0** / 1/step]
1-993-047	Custom Paper 047	E*	[0 or 1 / **0** / 1/step]
1-993-048	Custom Paper 048	E*	[0 or 1 / **0** / 1/step]
1-993-049	Custom Paper 049	E*	[0 or 1 / **0** / 1/step]
1-993-050	Custom Paper 050	E*	[0 or 1 / **0** / 1/step]
1-993-051	Custom Paper 051	E*	[0 or 1 / **0** / 1/step]
1-993-052	Custom Paper 052	E*	[0 or 1 / **0** / 1/step]
1-993-053	Custom Paper 053	E*	[0 or 1 / **0** / 1/step]
1-993-054	Custom Paper 054	E*	[0 or 1 / **0** / 1/step]
1-993-055	Custom Paper 055	E*	[0 or 1 / **0** / 1/step]
1-993-056	Custom Paper 056	E*	[0 or 1 / **0** / 1/step]
1-993-057	Custom Paper 057	E*	[0 or 1 / **0** / 1/step]

1-993-058	Custom Paper 058	E*	[0 or 1 / **0** / 1/step]
1-993-059	Custom Paper 059	E*	[0 or 1 / **0** / 1/step]
1-993-060	Custom Paper 060	E*	[0 or 1 / **0** / 1/step]
1-993-061	Custom Paper 061	E*	[0 or 1 / **0** / 1/step]
1-993-062	Custom Paper 062	E*	[0 or 1 / **0** / 1/step]
1-993-063	Custom Paper 063	E*	[0 or 1 / **0** / 1/step]
1-993-064	Custom Paper 064	E*	[0 or 1 / **0** / 1/step]
1-993-065	Custom Paper 065	E*	[0 or 1 / **0** / 1/step]
1-993-066	Custom Paper 066	E*	[0 or 1 / **0** / 1/step]
1-993-067	Custom Paper 067	E*	[0 or 1 / **0** / 1/step]
1-993-068	Custom Paper 068	E*	[0 or 1 / **0** / 1/step]
1-993-069	Custom Paper 069	E*	[0 or 1 / **0** / 1/step]
1-993-070	Custom Paper 070	E*	[0 or 1 / **0** / 1/step]
1-993-071	Custom Paper 071	E*	[0 or 1 / **0** / 1/step]
1-993-072	Custom Paper 072	E*	[0 or 1 / **0** / 1/step]
1-993-073	Custom Paper 073	E*	[0 or 1 / **0** / 1/step]
1-993-074	Custom Paper 074	E*	[0 or 1 / **0** / 1/step]
1-993-075	Custom Paper 075	E*	[0 or 1 / **0** / 1/step]
1-993-076	Custom Paper 076	E*	[0 or 1 / **0** / 1/step]
1-993-077	Custom Paper 077	E*	[0 or 1 / **0** / 1/step]
1-993-078	Custom Paper 078	E*	[0 or 1 / **0** / 1/step]
1-993-079	Custom Paper 079	E*	[0 or 1 / **0** / 1/step]
1-993-080	Custom Paper 080	E*	[0 or 1 / **0** / 1/step]
1-993-081	Custom Paper 081	E*	[0 or 1 / **0** / 1/step]
1-993-082	Custom Paper 082	E*	[0 or 1 / **0** / 1/step]
1-993-083	Custom Paper 083	E*	[0 or 1 / **0** / 1/step]

1-993-084	Custom Paper 084	E*	[0 or 1 / **0** / 1/step]
1-993-085	Custom Paper 085	E*	[0 or 1 / **0** / 1/step]
1-993-086	Custom Paper 086	E*	[0 or 1 / **0** / 1/step]
1-993-087	Custom Paper 087	E*	[0 or 1 / **0** / 1/step]
1-993-088	Custom Paper 088	E*	[0 or 1 / **0** / 1/step]
1-993-089	Custom Paper 089	E*	[0 or 1 / **0** / 1/step]
1-993-090	Custom Paper 090	E*	[0 or 1 / **0** / 1/step]
1-993-091	Custom Paper 091	E*	[0 or 1 / **0** / 1/step]
1-993-092	Custom Paper 092	E*	[0 or 1 / **0** / 1/step]
1-993-093	Custom Paper 093	E*	[0 or 1 / **0** / 1/step]
1-993-094	Custom Paper 094	E*	[0 or 1 / **0** / 1/step]
1-993-095	Custom Paper 095	E*	[0 or 1 / **0** / 1/step]
1-993-096	Custom Paper 096	E*	[0 or 1 / **0** / 1/step]
1-993-097	Custom Paper 097	E*	[0 or 1 / **0** / 1/step]
1-993-098	Custom Paper 098	E*	[0 or 1 / **0** / 1/step]
1-993-099	Custom Paper 099	E*	[0 or 1 / **0** / 1/step]
1-993-100	Custom Paper 100	E*	[0 or 1 / **0** / 1/step]
1-993-101	Plain:Weight 0	E*	[0 or 1 / **0** / 1/step]
1-993-102	Plain:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-993-103	Plain:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-993-104	Plain:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-993-105	Plain:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-993-106	Plain:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-993-107	Plain:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-993-108	Plain:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-993-109	Plain:Weight 8	E*	[0 or 1 / **0** / 1/step]

1-993-110	Matte:Weight 0	E*	[0 or 1 / **0** / 1/step]
1-993-111	Matte:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-993-112	Matte:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-993-113	Matte:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-993-114	Matte:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-993-115	Matte:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-993-116	Matte:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-993-117	Matte:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-993-118	Matte:Weight 8	E*	[0 or 1 / **0** / 1/step]
1-993-119	Glossy:Weight 0	E*	[0 or 1 / **0** / 1/step]
1-993-120	Glossy:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-993-121	Glossy:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-993-122	Glossy:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-993-123	Glossy:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-993-124	Glossy:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-993-125	Glossy:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-993-126	Glossy:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-993-127	Glossy:Weight 8	E*	[0 or 1 / **0** / 1/step]
1-993-128	Envelope:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-993-129	Envelope:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-993-130	Envelope:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-993-131	OHP	E*	[0 or 1 / **0** / 1/step]

1994	**[Press Start Time:Before Job]** Sets pressure start timing before job.		
1-994-001	Custom Paper 001	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1-994-002	Custom Paper 002	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-003	Custom Paper 003	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-004	Custom Paper 004	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-005	Custom Paper 005	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-006	Custom Paper 006	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-007	Custom Paper 007	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-008	Custom Paper 008	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-009	Custom Paper 009	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-010	Custom Paper 010	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-011	Custom Paper 011	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-012	Custom Paper 012	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-013	Custom Paper 013	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-014	Custom Paper 014	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-015	Custom Paper 015	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-016	Custom Paper 016	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-017	Custom Paper 017	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-018	Custom Paper 018	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-019	Custom Paper 019	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-020	Custom Paper 020	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-021	Custom Paper 021	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-022	Custom Paper 022	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-023	Custom Paper 023	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-024	Custom Paper 024	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-025	Custom Paper 025	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-026	Custom Paper 026	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-027	Custom Paper 027	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1-994-028	Custom Paper 028	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-029	Custom Paper 029	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-030	Custom Paper 030	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-031	Custom Paper 031	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-032	Custom Paper 032	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-033	Custom Paper 033	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-034	Custom Paper 034	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-035	Custom Paper 035	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-036	Custom Paper 036	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-037	Custom Paper 037	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-038	Custom Paper 038	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-039	Custom Paper 039	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-040	Custom Paper 040	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-041	Custom Paper 041	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-042	Custom Paper 042	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-043	Custom Paper 043	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-044	Custom Paper 044	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-045	Custom Paper 045	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-046	Custom Paper 046	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-047	Custom Paper 047	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-048	Custom Paper 048	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-049	Custom Paper 049	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-050	Custom Paper 050	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-051	Custom Paper 051	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-052	Custom Paper 052	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-053	Custom Paper 053	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1-994-054	Custom Paper 054	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-055	Custom Paper 055	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-056	Custom Paper 056	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-057	Custom Paper 057	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-058	Custom Paper 058	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-059	Custom Paper 059	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-060	Custom Paper 060	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-061	Custom Paper 061	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-062	Custom Paper 062	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-063	Custom Paper 063	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-064	Custom Paper 064	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-065	Custom Paper 065	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-066	Custom Paper 066	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-067	Custom Paper 067	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-068	Custom Paper 068	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-069	Custom Paper 069	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-070	Custom Paper 070	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-071	Custom Paper 071	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-072	Custom Paper 072	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-073	Custom Paper 073	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-074	Custom Paper 074	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-075	Custom Paper 075	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-076	Custom Paper 076	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-077	Custom Paper 077	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-078	Custom Paper 078	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-079	Custom Paper 079	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1-994-080	Custom Paper 080	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-081	Custom Paper 081	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-082	Custom Paper 082	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-083	Custom Paper 083	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-084	Custom Paper 084	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-085	Custom Paper 085	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-086	Custom Paper 086	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-087	Custom Paper 087	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-088	Custom Paper 088	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-089	Custom Paper 089	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-090	Custom Paper 090	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-091	Custom Paper 091	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-092	Custom Paper 092	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-093	Custom Paper 093	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-094	Custom Paper 094	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-095	Custom Paper 095	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-096	Custom Paper 096	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-097	Custom Paper 097	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-098	Custom Paper 098	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-099	Custom Paper 099	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-100	Custom Paper 100	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-101	Plain:Weight 0	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-102	Plain:Weight 1	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-103	Plain:Weight 2	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-104	Plain:Weight 3	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-105	Plain:Weight 4	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1-994-106	Plain:Weight 5	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-107	Plain:Weight 6	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-108	Plain:Weight 7	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-109	Plain:Weight 8	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-110	Matte:Weight 0	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-111	Matte:Weight 1	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-112	Matte:Weight 2	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-113	Matte:Weight 3	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-114	Matte:Weight 4	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-115	Matte:Weight 5	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-116	Matte:Weight 6	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-117	Matte:Weight 7	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-118	Matte:Weight 8	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-119	Glossy:Weight 0	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-120	Glossy:Weight 1	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-121	Glossy:Weight 2	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-122	Glossy:Weight 3	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-123	Glossy:Weight 4	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-124	Glossy:Weight 5	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-125	Glossy:Weight 6	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-126	Glossy:Weight 7	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-127	Glossy:Weight 8	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-128	Envelope:Weight 5	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-129	Envelope:Weight 6	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-130	Envelope:Weight 7	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]
1-994-131	OHP	E*	[0.0 to 500.0 / **0.0** / 0.1sec/step]

1995	**[Extension of an paper interval]** Sets extension of a paper interval on/off to prevent the shock jitter.		
1-995-001	Custom Paper 001	E	[0 or 1 / **0** / 1/step]
1-995-002	Custom Paper 002	E	[0 or 1 / **0** / 1/step]
1-995-003	Custom Paper 003	E	[0 or 1 / **0** / 1/step]
1-995-004	Custom Paper 004	E	[0 or 1 / **0** / 1/step]
1-995-005	Custom Paper 005	E	[0 or 1 / **0** / 1/step]
1-995-006	Custom Paper 006	E	[0 or 1 / **0** / 1/step]
1-995-007	Custom Paper 007	E	[0 or 1 / **0** / 1/step]
1-995-008	Custom Paper 008	E	[0 or 1 / **0** / 1/step]
1-995-009	Custom Paper 009	E	[0 or 1 / **0** / 1/step]
1-995-010	Custom Paper 010	E	[0 or 1 / **0** / 1/step]
1-995-011	Custom Paper 011	E	[0 or 1 / **0** / 1/step]
1-995-012	Custom Paper 012	E	[0 or 1 / **0** / 1/step]
1-995-013	Custom Paper 013	E	[0 or 1 / **0** / 1/step]
1-995-014	Custom Paper 014	E	[0 or 1 / **0** / 1/step]
1-995-015	Custom Paper 015	E	[0 or 1 / **0** / 1/step]
1-995-016	Custom Paper 016	E	[0 or 1 / **0** / 1/step]
1-995-017	Custom Paper 017	E	[0 or 1 / **0** / 1/step]
1-995-018	Custom Paper 018	E	[0 or 1 / **0** / 1/step]
1-995-019	Custom Paper 019	E	[0 or 1 / **0** / 1/step]
1-995-020	Custom Paper 020	E	[0 or 1 / **0** / 1/step]
1-995-021	Custom Paper 021	E	[0 or 1 / **0** / 1/step]
1-995-022	Custom Paper 022	E	[0 or 1 / **0** / 1/step]
1-995-023	Custom Paper 023	E	[0 or 1 / **0** / 1/step]

1-995-024	Custom Paper 024	E	[0 or 1 / **0** / 1/step]
1-995-025	Custom Paper 025	E	[0 or 1 / **0** / 1/step]
1-995-026	Custom Paper 026	E	[0 or 1 / **0** / 1/step]
1-995-027	Custom Paper 027	E	[0 or 1 / **0** / 1/step]
1-995-028	Custom Paper 028	E	[0 or 1 / **0** / 1/step]
1-995-029	Custom Paper 029	E	[0 or 1 / **0** / 1/step]
1-995-030	Custom Paper 030	E	[0 or 1 / **0** / 1/step]
1-995-031	Custom Paper 031	E	[0 or 1 / **0** / 1/step]
1-995-032	Custom Paper 032	E	[0 or 1 / **0** / 1/step]
1-995-033	Custom Paper 033	E	[0 or 1 / **0** / 1/step]
1-995-034	Custom Paper 034	E	[0 or 1 / **0** / 1/step]
1-995-035	Custom Paper 035	E	[0 or 1 / **0** / 1/step]
1-995-036	Custom Paper 036	E	[0 or 1 / **0** / 1/step]
1-995-037	Custom Paper 037	E	[0 or 1 / **0** / 1/step]
1-995-038	Custom Paper 038	E	[0 or 1 / **0** / 1/step]
1-995-039	Custom Paper 039	E	[0 or 1 / **0** / 1/step]
1-995-040	Custom Paper 040	E	[0 or 1 / **0** / 1/step]
1-995-041	Custom Paper 041	E	[0 or 1 / **0** / 1/step]
1-995-042	Custom Paper 042	E	[0 or 1 / **0** / 1/step]
1-995-043	Custom Paper 043	E	[0 or 1 / **0** / 1/step]
1-995-044	Custom Paper 044	E	[0 or 1 / **0** / 1/step]
1-995-045	Custom Paper 045	E	[0 or 1 / **0** / 1/step]
1-995-046	Custom Paper 046	E	[0 or 1 / **0** / 1/step]
1-995-047	Custom Paper 047	E	[0 or 1 / **0** / 1/step]
1-995-048	Custom Paper 048	E	[0 or 1 / **0** / 1/step]
1-995-049	Custom Paper 049	E	[0 or 1 / **0** / 1/step]

1-995-050	Custom Paper 050	E	[0 or 1 / **0** / 1/step]
1-995-051	Custom Paper 051	E	[0 or 1 / **0** / 1/step]
1-995-052	Custom Paper 052	E	[0 or 1 / **0** / 1/step]
1-995-053	Custom Paper 053	E	[0 or 1 / **0** / 1/step]
1-995-054	Custom Paper 054	E	[0 or 1 / **0** / 1/step]
1-995-055	Custom Paper 055	E	[0 or 1 / **0** / 1/step]
1-995-056	Custom Paper 056	E	[0 or 1 / **0** / 1/step]
1-995-057	Custom Paper 057	E	[0 or 1 / **0** / 1/step]
1-995-058	Custom Paper 058	E	[0 or 1 / **0** / 1/step]
1-995-059	Custom Paper 059	E	[0 or 1 / **0** / 1/step]
1-995-060	Custom Paper 060	E	[0 or 1 / **0** / 1/step]
1-995-061	Custom Paper 061	E	[0 or 1 / **0** / 1/step]
1-995-062	Custom Paper 062	E	[0 or 1 / **0** / 1/step]
1-995-063	Custom Paper 063	E	[0 or 1 / **0** / 1/step]
1-995-064	Custom Paper 064	E	[0 or 1 / **0** / 1/step]
1-995-065	Custom Paper 065	E	[0 or 1 / **0** / 1/step]
1-995-066	Custom Paper 066	E	[0 or 1 / **0** / 1/step]
1-995-067	Custom Paper 067	E	[0 or 1 / **0** / 1/step]
1-995-068	Custom Paper 068	E	[0 or 1 / **0** / 1/step]
1-995-069	Custom Paper 069	E	[0 or 1 / **0** / 1/step]
1-995-070	Custom Paper 070	E	[0 or 1 / **0** / 1/step]
1-995-071	Custom Paper 071	E	[0 or 1 / **0** / 1/step]
1-995-072	Custom Paper 072	E	[0 or 1 / **0** / 1/step]
1-995-073	Custom Paper 073	E	[0 or 1 / **0** / 1/step]
1-995-074	Custom Paper 074	E	[0 or 1 / **0** / 1/step]
1-995-075	Custom Paper 075	E	[0 or 1 / **0** / 1/step]

1-995-076	Custom Paper 076	E	[0 or 1 / **0** / 1/step]
1-995-077	Custom Paper 077	E	[0 or 1 / **0** / 1/step]
1-995-078	Custom Paper 078	E	[0 or 1 / **0** / 1/step]
1-995-079	Custom Paper 079	E	[0 or 1 / **0** / 1/step]
1-995-080	Custom Paper 080	E	[0 or 1 / **0** / 1/step]
1-995-081	Custom Paper 081	E	[0 or 1 / **0** / 1/step]
1-995-082	Custom Paper 082	E	[0 or 1 / **0** / 1/step]
1-995-083	Custom Paper 083	E	[0 or 1 / **0** / 1/step]
1-995-084	Custom Paper 084	E	[0 or 1 / **0** / 1/step]
1-995-085	Custom Paper 085	E	[0 or 1 / **0** / 1/step]
1-995-086	Custom Paper 086	E	[0 or 1 / **0** / 1/step]
1-995-087	Custom Paper 087	E	[0 or 1 / **0** / 1/step]
1-995-088	Custom Paper 088	E	[0 or 1 / **0** / 1/step]
1-995-089	Custom Paper 089	E	[0 or 1 / **0** / 1/step]
1-995-090	Custom Paper 090	E	[0 or 1 / **0** / 1/step]
1-995-091	Custom Paper 091	E	[0 or 1 / **0** / 1/step]
1-995-092	Custom Paper 092	E	[0 or 1 / **0** / 1/step]
1-995-093	Custom Paper 093	E	[0 or 1 / **0** / 1/step]
1-995-094	Custom Paper 094	E	[0 or 1 / **0** / 1/step]
1-995-095	Custom Paper 095	E	[0 or 1 / **0** / 1/step]
1-995-096	Custom Paper 096	E	[0 or 1 / **0** / 1/step]
1-995-097	Custom Paper 097	E	[0 or 1 / **0** / 1/step]
1-995-098	Custom Paper 098	E	[0 or 1 / **0** / 1/step]
1-995-099	Custom Paper 099	E	[0 or 1 / **0** / 1/step]
1-995-100	Custom Paper 100	E	[0 or 1 / **0** / 1/step]
1-995-101	Plain:Weight 0	E*	[0 or 1 / **0** / 1/step]

1-995-102	Plain:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-995-103	Plain:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-995-104	Plain:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-995-105	Plain:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-995-106	Plain:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-995-107	Plain:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-995-108	Plain:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-995-109	Plain:Weight 8	E*	[0 or 1 / **0** / 1/step]
1-995-110	Matte:Weight 0	E*	[0 or 1 / **0** / 1/step]
1-995-111	Matte:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-995-112	Matte:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-995-113	Matte:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-995-114	Matte:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-995-115	Matte:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-995-116	Matte:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-995-117	Matte:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-995-118	Matte:Weight 8	E*	[0 or 1 / **0** / 1/step]
1-995-119	Glossy:Weight 0	E*	[0 or 1 / **0** / 1/step]
1-995-120	Glossy:Weight 1	E*	[0 or 1 / **0** / 1/step]
1-995-121	Glossy:Weight 2	E*	[0 or 1 / **0** / 1/step]
1-995-122	Glossy:Weight 3	E*	[0 or 1 / **0** / 1/step]
1-995-123	Glossy:Weight 4	E*	[0 or 1 / **0** / 1/step]
1-995-124	Glossy:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-995-125	Glossy:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-995-126	Glossy:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-995-127	Glossy:Weight 8	E*	[0 or 1 / **0** / 1/step]

1-995-128	Envelope:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-995-129	Envelope:Weight 6	E*	[0 or 1 / **0** / 1/step]
1-995-130	Envelope:Weight 7	E*	[0 or 1 / **0** / 1/step]
1-995-131	OHP:Weight 5	E*	[0 or 1 / **0** / 1/step]
1-995-150	Common	E	[0 or 1 / **0** / 1/step]

3.2 MAIN SP TABLES-2

3.2.1 SP2-XXX (DRUM)

2101	**[Reg Col Interval]** These values are the parameters for the automatic line position adjustment and are adjusted at the factory. However, you must input a value for SP2101-001 after replacing the laser optics housing unit.		
2-101-001	Main Scan Dot	E*	[-512 to 511 / **0** / 1dot/step] Uses for main scan registration correction (rgate).
2-101-006	Main/Sub Scan	E*	[-47 to 47 / **0** / 1sub-dot/step] Main scan
2-101-021	Main beam pitch adj	E*	[1107 to 1620 / **1438** / 1um/step] For main scan beam pitch adjustment.

2102	**[Print Magnification Adjustment]** These values are the parameters for the automatic line position adjustment and are adjusted at the factory. These SPs must be input only when a new laser unit is installed.		
2-102-001	Main Mag	E*	[0 to 411 / **206** / 1/step] Main scan magnification adjustment value.
2-102-016	Main Mag.: subdot	E*	[-15264 to 15264 / **0** / 1sub-dot/step] Main scan magnification fine adjustment value: standard speed: 1/48dot unit.
2-102-041	Face Main Mag set & Adj	E*	[-0.800 to 0.800 / **0.000** / 0.025%/step] Face: main scan magnification adjustment value.
2-102-042	Face Sub Mag set & Adj	E*	[-0.800 to 0.800 / **0.000** / 0.025%/step] Face: Subs scan magnification adjustment value.

2-102-043	Verso Main Mag set & Adj	E*	[-0.800 to 0.800 / **0.000** / 0.025%/step] Verso: main scan magnification adjustment value.
2-102-044	Verso Sub Mag set & Adj	E*	[-0.800 to 0.800 / **0.000** / 0.0250%/step] Verso: Subs scan magnification adjustment value.

2103	**[Erase Margin Adjustment]** Adjusts the erase margin by deleting image data at the margins.		
2-103-001	Lead Edge Width	E*	[0.0 to 9.0 / **4.0** / 0.1mm/step]
2-103-002	Trail. Edge Width	E*	[0.0 to 9.0 / **4.0** / 0.1mm/step]
2-103-003	Left	E*	[0.0 to 9.0 / **2.0** / 0.1mm/step]
2-103-004	Right	E*	[0.0 to 9.0 / **2.0** / 0.1mm/step]

2106	**[trapezoid Adj]** Trapezoid correction adjustment value.		
2-106-001	Revision 01ch	E*	[-48 to 48 / **-15** / 1subdot/step]
2-106-002	Revision 02ch	E*	[-48 to 48 / **-13** / 1subdot/step]
2-106-003	Revision 03ch	E*	[-48 to 48 / **-12** / 1subdot/step]
2-106-004	Revision 04ch	E*	[-48 to 48 / **-11** / 1subdot/step]
2-106-005	Revision 05ch	E*	[-48 to 48 / **-9** / 1subdot/step]
2-106-006	Revision 06ch	E*	[-48 to 48 / **-8** / 1subdot/step]
2-106-007	Revision 07ch	E*	[-48 to 48 / **-7** / 1subdot/step]
2-106-008	Revision 08ch	E*	[-48 to 48 / **-6** / 1subdot/step]
2-106-009	Revision 09ch	E*	[-48 to 48 / **-5** / 1subdot/step]
2-106-010	Revision 10ch	E*	[-48 to 48 / **-4** / 1subdot/step]
2-106-011	Revision 11ch	E*	[-48 to 48 / **-3** / 1subdot/step]
2-106-012	Revision 12ch	E*	[-48 to 48 / **-1** / 1subdot/step]

2-106-013	Revision 13ch	E*	[-48 to 48 / **0** / 1subdot/step]
2-106-014	Revision 14ch	E*	[-48 to 48 / **1** / 1subdot/step]
2-106-015	Revision 15ch	E*	[-48 to 48 / **3** / 1subdot/step]
2-106-016	Revision 16ch	E*	[-48 to 48 / **4** / 1subdot/step]
2-106-017	Revision 17ch	E*	[-48 to 48 / **4** / 1subdot/step]
2-106-018	Revision 18ch	E*	[-48 to 48 / **5** / 1subdot/step]
2-106-019	Revision 19ch	E*	[-48 to 48 / **7** / 1subdot/step]
2-106-020	Revision 20ch	E*	[-48 to 48 / **8** / 1subdot/step]
2-106-021	Revision 21ch	E*	[-48 to 48 / **9** / 1subdot/step]
2-106-022	Revision 22ch	E*	[-48 to 48 / **10** / 1subdot/step]
2-106-023	Revision 23ch	E*	[-48 to 48 / **11** / 1subdot/step]
2-106-024	Revision 24ch	E*	[-48 to 48 / **12** / 1subdot/step]
2-106-025	Revision 25ch	E*	[-48 to 48 / **13** / 1subdot/step]
2-106-026	Revision 26ch	E*	[-48 to 48 / **14** / 1subdot/step]
2-106-027	Revision 27ch	E*	[-48 to 48 / **15** / 1subdot/step]
2-106-028	Revision 28ch	E*	[-48 to 48 / **16** / 1subdot/step]
2-106-029	Revision 29ch	E*	[-48 to 48 / **18** / 1subdot/step]
2-106-030	Revision 30ch	E*	[-48 to 48 / **19** / 1subdot/step]
2-106-031	Revision 31ch	E*	[-48 to 48 / **20** / 1subdot/step]
2-106-032	Revision 32ch	E*	[-48 to 48 / **21** / 1subdot/step]
2-106-033	Revision 33ch	E*	[-48 to 48 / **21** / 1subdot/step]
2-106-034	Revision 34ch	E*	[-48 to 48 / **23** / 1subdot/step]
2-106-035	Revision 35ch	E*	[-48 to 48 / **24** / 1subdot/step]
2-106-036	Revision 36ch	E*	[-48 to 48 / **25** / 1subdot/step]
2-106-037	Revision 37ch	E*	[-48 to 48 / **26** / 1subdot/step]
2-106-038	Revision 38ch	E*	[-48 to 48 / **27** / 1subdot/step]

2-106-039	Revision 39ch	E*	[-48 to 48 / **29** / 1subdot/step]
2-106-040	Revision 40ch	E*	[-48 to 48 / **30** / 1subdot/step]

2107	**[Image Parameter]** -		
2-107-001	Shading Correction Flag	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Shading correction setting.
2-107-002	Image Gamma Flag	E	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Image gamma setting.
2-107-003	Jaggy Revision	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Edge smoothing process setting.
2-107-004	Fatten slanted line	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Fatten slanted line process setting.
2-107-005	Dot Stabilize Revision	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Dot stabilizing process setting.
2-107-006	Bow Skew Revision	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Bow skew correction setting.
2-107-007	Sub Mag Adj Revision K1	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sub magnification change correction for Bk1.

2-107-008	Sub Mag Adj Revision K2	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sub magnification change correction for Bk2.
2-107-009	Sub Mag Adj Revision W1	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sub magnification change correction for White1.
2-107-010	Sub Mag Adj Revision W2	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sub magnification change correction for White2.
2-107-011	Sub Mag Adj Rev 600dpi W1	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sub magnification change correction. 600dpi, White1 correction setting.
2-107-012	trapezoid Adj ON/OFF	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sets trapezoid correction on/off.
2-107-013	Sub Mag Adj Mirror	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sub magnification change correction. Magnification change mirroring setting.
2-107-018	Sub Mag Adj Revision K3	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sub magnification change correction for Bk3.

2-107-019	Sub Mag Adj Revision Gray	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sub magnification change correction for gray.
2-107-021	Change	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Switches sub magnification parameter change on/off.

2108	**[Image Parameter]** -		
2-108-001	K/C Writing Unit	E	[- / **-** / -] [Execute] Gets parameter of writing unit.

2109	**[Test Pattern]** Generates the test pattern using "COPY Window" tab in the LCD.		
2-109-003	Pattern Selection	E	[0 to 4 / **0** / 1/step] 0: Copy Image Data 1: Vertical Line 1dot 2: Vertical Line 2dot 3: Horizontal Line 1dot 4: Horizontal Line 2dot Selects test pattern.
2-109-006	Density	E	[0 to 15 / **15** / 1/step] Specifies the color density for the test pattern.

2113	**[Adjust LR density difference]** -		

2-113-001	Density	E*	[-10 to 10 / **0** / 1/step] Adjusts development density difference between left and right by light intensity.

2120	**[LD Off Check]** Checks whether the LD turns off or on when the front door is opened.		
2-120-001	Interlock Check	E	[0 or 1 / **0** / 1/step]

2122	**[Erase Margin Adj Leading Edge]** Adjusts leading edge erase margin to improve separation.		
2-122-001	Custom Paper 001	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-002	Custom Paper 002	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-003	Custom Paper 003	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-004	Custom Paper 004	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-005	Custom Paper 005	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-006	Custom Paper 006	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-007	Custom Paper 007	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-008	Custom Paper 008	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-009	Custom Paper 009	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-010	Custom Paper 010	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-011	Custom Paper 011	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-012	Custom Paper 012	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-013	Custom Paper 013	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-014	Custom Paper 014	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-015	Custom Paper 015	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-016	Custom Paper 016	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-017	Custom Paper 017	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-018	Custom Paper 018	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-122-019	Custom Paper 019	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-020	Custom Paper 020	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-021	Custom Paper 021	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-022	Custom Paper 022	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-023	Custom Paper 023	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-024	Custom Paper 024	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-025	Custom Paper 025	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-026	Custom Paper 026	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-027	Custom Paper 027	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-028	Custom Paper 028	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-029	Custom Paper 029	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-030	Custom Paper 030	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-031	Custom Paper 031	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-032	Custom Paper 032	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-033	Custom Paper 033	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-034	Custom Paper 034	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-035	Custom Paper 035	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-036	Custom Paper 036	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-037	Custom Paper 037	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-038	Custom Paper 038	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-039	Custom Paper 039	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-040	Custom Paper 040	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-041	Custom Paper 041	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-042	Custom Paper 042	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-043	Custom Paper 043	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-044	Custom Paper 044	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-122-045	Custom Paper 045	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-046	Custom Paper 046	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-047	Custom Paper 047	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-048	Custom Paper 048	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-049	Custom Paper 049	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-050	Custom Paper 050	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-051	Custom Paper 051	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-052	Custom Paper 052	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-053	Custom Paper 053	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-054	Custom Paper 054	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-055	Custom Paper 055	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-056	Custom Paper 056	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-057	Custom Paper 057	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-058	Custom Paper 058	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-059	Custom Paper 059	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-060	Custom Paper 060	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-061	Custom Paper 061	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-062	Custom Paper 062	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-063	Custom Paper 063	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-064	Custom Paper 064	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-065	Custom Paper 065	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-066	Custom Paper 066	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-067	Custom Paper 067	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-068	Custom Paper 068	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-069	Custom Paper 069	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-070	Custom Paper 070	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-122-071	Custom Paper 071	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-072	Custom Paper 072	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-073	Custom Paper 073	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-074	Custom Paper 074	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-075	Custom Paper 075	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-076	Custom Paper 076	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-077	Custom Paper 077	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-078	Custom Paper 078	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-079	Custom Paper 079	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-080	Custom Paper 080	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-081	Custom Paper 081	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-082	Custom Paper 082	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-083	Custom Paper 083	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-084	Custom Paper 084	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-085	Custom Paper 085	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-086	Custom Paper 086	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-087	Custom Paper 087	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-088	Custom Paper 088	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-089	Custom Paper 089	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-090	Custom Paper 090	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-091	Custom Paper 091	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-092	Custom Paper 092	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-093	Custom Paper 093	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-094	Custom Paper 094	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-095	Custom Paper 095	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-096	Custom Paper 096	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-122-097	Custom Paper 097	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-098	Custom Paper 098	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-099	Custom Paper 099	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-100	Custom Paper 100	E	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-110	Plain:Weight 0	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-111	Plain:Weight 1	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-112	Plain:Weight 2	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-113	Plain:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-114	Plain:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-115	Plain:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-116	Plain:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-117	Plain:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-118	Plain:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-120	Glossy:Weight 0	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-121	Glossy:Weight 1	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-122	Glossy:Weight 2	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-123	Glossy:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-124	Glossy:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-125	Glossy:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-126	Glossy:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-127	Glossy:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-128	Glossy:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-130	Matte:Weight 0	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-131	Matte:Weight 1	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-132	Matte:Weight 2	E*	[-3.0 to 6.0 / **0.5** / 0.1mm/step]
2-122-133	Matte:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-122-134	Matte:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-135	Matte:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-136	Matte:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-137	Matte:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-138	Matte:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-145	Envelope:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-146	Envelope:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-147	Envelope:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-122-150	OHP	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2123	**[Erase Margin Adj Trailing Edge]** Adjusts trailing edge erase margin to improve separation.		
2-123-001	Custom Paper 001	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-002	Custom Paper 002	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-003	Custom Paper 003	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-004	Custom Paper 004	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-005	Custom Paper 005	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-006	Custom Paper 006	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-007	Custom Paper 007	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-008	Custom Paper 008	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-009	Custom Paper 009	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-010	Custom Paper 010	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-011	Custom Paper 011	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-012	Custom Paper 012	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-013	Custom Paper 013	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-014	Custom Paper 014	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-123-015	Custom Paper 015	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-016	Custom Paper 016	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-017	Custom Paper 017	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-018	Custom Paper 018	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-019	Custom Paper 019	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-020	Custom Paper 020	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-021	Custom Paper 021	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-022	Custom Paper 022	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-023	Custom Paper 023	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-024	Custom Paper 024	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-025	Custom Paper 025	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-026	Custom Paper 026	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-027	Custom Paper 027	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-028	Custom Paper 028	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-029	Custom Paper 029	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-030	Custom Paper 030	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-031	Custom Paper 031	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-032	Custom Paper 032	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-033	Custom Paper 033	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-034	Custom Paper 034	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-035	Custom Paper 035	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-036	Custom Paper 036	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-037	Custom Paper 037	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-038	Custom Paper 038	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-039	Custom Paper 039	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-040	Custom Paper 040	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-123-041	Custom Paper 041	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-042	Custom Paper 042	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-043	Custom Paper 043	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-044	Custom Paper 044	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-045	Custom Paper 045	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-046	Custom Paper 046	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-047	Custom Paper 047	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-048	Custom Paper 048	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-049	Custom Paper 049	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-050	Custom Paper 050	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-051	Custom Paper 051	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-052	Custom Paper 052	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-053	Custom Paper 053	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-054	Custom Paper 054	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-055	Custom Paper 055	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-056	Custom Paper 056	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-057	Custom Paper 057	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-058	Custom Paper 058	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-059	Custom Paper 059	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-060	Custom Paper 060	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-061	Custom Paper 061	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-062	Custom Paper 062	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-063	Custom Paper 063	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-064	Custom Paper 064	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-065	Custom Paper 065	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-066	Custom Paper 066	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-123-067	Custom Paper 067	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-068	Custom Paper 068	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-069	Custom Paper 069	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-070	Custom Paper 070	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-071	Custom Paper 071	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-072	Custom Paper 072	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-073	Custom Paper 073	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-074	Custom Paper 074	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-075	Custom Paper 075	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-076	Custom Paper 076	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-077	Custom Paper 077	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-078	Custom Paper 078	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-079	Custom Paper 079	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-080	Custom Paper 080	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-081	Custom Paper 081	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-082	Custom Paper 082	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-083	Custom Paper 083	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-084	Custom Paper 084	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-085	Custom Paper 085	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-086	Custom Paper 086	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-087	Custom Paper 087	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-088	Custom Paper 088	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-089	Custom Paper 089	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-090	Custom Paper 090	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-091	Custom Paper 091	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-092	Custom Paper 092	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-123-093	Custom Paper 093	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-094	Custom Paper 094	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-095	Custom Paper 095	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-096	Custom Paper 096	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-097	Custom Paper 097	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-098	Custom Paper 098	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-099	Custom Paper 099	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-100	Custom Paper 100	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-110	Plain:Weight 0	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-111	Plain:Weight 1	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-112	Plain:Weight 2	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-113	Plain:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-114	Plain:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-115	Plain:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-116	Plain:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-117	Plain:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-118	Plain:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-120	Glossy:Weight 0	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-121	Glossy:Weight 1	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-122	Glossy:Weight 2	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-123	Glossy:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-124	Glossy:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-125	Glossy:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-126	Glossy:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-127	Glossy:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-128	Glossy:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2-123-130	Matte:Weight 0	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-131	Matte:Weight 1	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-132	Matte:Weight 2	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-133	Matte:Weight 3	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-134	Matte:Weight 4	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-135	Matte:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-136	Matte:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-137	Matte:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-138	Matte:Weight 8	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-145	Envelope:Weight 5	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-146	Envelope:Weight 6	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-147	Envelope:Weight 7	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]
2-123-150	OHP	E*	[-3.0 to 6.0 / **0.0** / 0.1mm/step]

2130	**[Sub Mag Adj Parameter]** -		
2-130-001	Interval:0.025 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.025%
2-130-002	Mag Reciprocal:0.025 Percent	E*	[0 to 8191 / **3990** / 1/step] Sub scan magnification change parameter 0.025%
2-130-003	Interval:0.05 Percent	E*	[0 to 255 / **53** / 1/step] Sub scan magnification change parameter 0.05%
2-130-004	Mag Reciprocal:0.05 Percent	E*	[0 to 8191 / **1961** / 1/step] Sub scan magnification change parameter 0.05%

2-130-005	Interval:0.075 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.075%
2-130-006	Mag Reciprocal:0.075 Percent	E*	[0 to 8191 / **1349** / 1/step] Sub scan magnification change parameter 0.075%
2-130-007	Interval:0.1 Percent	E*	[0 to 255 / **53** / 1/step] Sub scan magnification change parameter 0.1%
2-130-008	Mag Reciprocal:0.1 Percent	E*	[0 to 8191 / **1007** / 1/step] Sub scan magnification change parameter 0.1%
2-130-009	Interval:0.125 Percent	E*	[0 to 255 / **47** / 1/step] Sub scan magnification change parameter 0.125%
2-130-010	Mag Reciprocal:0.125 Percent	E*	[0 to 8191 / **799** / 1/step] Sub scan magnification change parameter 0.125%
2-130-011	Interval:0.15 Percent	E*	[0 to 255 / **29** / 1/step] Sub scan magnification change parameter 0.15%
2-130-012	Mag Reciprocal:0.15 Percent	E*	[0 to 8191 / **667** / 1/step] Sub scan magnification change parameter 0.15%
2-130-013	Interval:0.175 Percent	E*	[0 to 255 / **13** / 1/step] Sub scan magnification change parameter 0.175%
2-130-014	Mag Reciprocal:0.175 Percent	E*	[0 to 8191 / **572** / 1/step] Sub scan magnification change parameter 0.175%
2-130-015	Interval:0.2 Percent	E*	[0 to 255 / **29** / 1/step] Sub scan magnification change parameter 0.2%

2-130-016	Mag Reciprocal:0.2 Percent	E*	[0 to 8191 / **493** / 1/step] Sub scan magnification change parameter 0.2%
2-130-017	Interval:0.225 Percent	E*	[0 to 255 / **23** / 1/step] Sub scan magnification change parameter 0.225%
2-130-018	Mag Reciprocal:0.225 Percent	E*	[0 to 8191 / **437** / 1/step] Sub scan magnification change parameter 0.225%
2-130-019	Interval:0.25 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.25%
2-130-020	Mag Reciprocal:0.25 Percent	E*	[0 to 8191 / **399** / 1/step] Sub scan magnification change parameter 0.25%
2-130-021	Interval:0.275 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.275%
2-130-022	Mag Reciprocal:0.275 Percent	E*	[0 to 8191 / **361** / 1/step] Sub scan magnification change parameter 0.275%
2-130-023	Interval:0.3 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.3%
2-130-024	Mag Reciprocal:0.3 Percent	E*	[0 to 8191 / **323** / 1/step] Sub scan magnification change parameter 0.3%
2-130-025	Interval:0.325 Percent	E*	[0 to 255 / **17** / 1/step] Sub scan magnification change parameter 0.325%
2-130-026	Mag Reciprocal:0.325 Percent	E*	[0 to 8191 / **306** / 1/step] Sub scan magnification change parameter 0.325%

2-130-027	Interval:0.35 Percent	E*	[0 to 255 / **17** / 1/step] Sub scan magnification change parameter 0.35%
2-130-028	Mag Reciprocal:0.35 Percent	E*	[0 to 8191 / **289** / 1/step] Sub scan magnification change parameter 0.35%
2-130-029	Interval:0.375 Percent	E*	[0 to 255 / **14** / 1/step] Sub scan magnification change parameter 0.375%
2-130-030	Mag Reciprocal:0.375 Percent	E*	[0 to 8191 / **266** / 1/step] Sub scan magnification change parameter 0.375%
2-130-031	Interval:0.4 Percent	E*	[0 to 255 / **11** / 1/step] Sub scan magnification change parameter 0.4%
2-130-032	Mag Reciprocal:0.4]Percent	E*	[0 to 8191 / **253** / 1/step] Sub scan magnification change parameter 0.4%
2-130-033	Interval:0.425 Percent	E*	[0 to 255 / **21** / 1/step] Sub scan magnification change parameter 0.425%
2-130-034	Mag Reciprocal:0.425 Percent	E*	[0 to 8191 / **231** / 1/step] Sub scan magnification change parameter 0.425%
2-130-035	Interval:0.45 Percent	E*	[0 to 255 / **22** / 1/step] Sub scan magnification change parameter 0.45%
2-130-036	Mag Reciprocal:0.45 Percent	E*	[0 to 8191 / **220** / 1/step] Sub scan magnification change parameter 0.45%
2-130-037	Interval:0.475 Percent	E*	[0 to 255 / **21** / 1/step] Sub scan magnification change parameter 0.475%

2-130-038	Mag Reciprocal:0.475 Percent	E*	[0 to 8191 / **210** / 1/step] Sub scan magnification change parameter 0.475%
2-130-039	Interval:0.5 Percent	E*	[0 to 255 / **18** / 1/step] Sub scan magnification change parameter 0.5%
2-130-040	Mag Reciprocal:0.5 Percent	E*	[0 to 8191 / **198** / 1/step] Sub scan magnification change parameter 0.5%
2-130-041	Interval:0.525 Percent	E*	[0 to 255 / **19** / 1/step] Sub scan magnification change parameter 0.525%
2-130-042	Mag Reciprocal:0.525 Percent	E*	[0 to 8191 / **190** / 1/step] Sub scan magnification change parameter 0.525%
2-130-043	Interval:0.55 Percent	E*	[0 to 255 / **13** / 1/step] Sub scan magnification change parameter 0.55%
2-130-044	Mag Reciprocal:0.55 Percent	E*	[0 to 8191 / **182** / 1/step] Sub scan magnification change parameter 0.55%
2-130-045	Interval:0.575 Percent	E*	[0 to 255 / **11** / 1/step] Sub scan magnification change parameter 0.575%
2-130-046	Mag Reciprocal:0.575 Percent	E*	[0 to 8191 / **176** / 1/step] Sub scan magnification change parameter 0.575%
2-130-047	Interval:0.6 Percent	E*	[0 to 255 / **15** / 1/step] Sub scan magnification change parameter 0.6%
2-130-048	Mag Reciprocal:0.6 Percent	E*	[0 to 8191 / **165** / 1/step] Sub scan magnification change parameter 0.6%

2-130-049	Interval:0.625 Percent	E*	[0 to 255 / **16** / 1/step] Sub scan magnification change parameter 0.625%
2-130-050	Mag Reciprocal:0.625 Percent	E*	[0 to 8191 / **160** / 1/step] Sub scan magnification change parameter 0.625%
2-130-051	Interval:0.65 Percent	E*	[0 to 255 / **14** / 1/step] Sub scan magnification change parameter 0.65%
2-130-052	Mag Reciprocal:0.65 Percent	E*	[0 to 8191 / **154** / 1/step] Sub scan magnification change parameter 0.65%
2-130-053	Interval:0.675 Percent	E*	[0 to 255 / **15** / 1/step] Sub scan magnification change parameter 0.675%
2-130-054	Mag Reciprocal:0.675 Percent	E*	[0 to 8191 / **150** / 1/step] Sub scan magnification change parameter 0.675%
2-130-055	Interval:0.7 Percent	E*	[0 to 255 / **13** / 1/step] Sub scan magnification change parameter 0.7%
2-130-056	Mag Reciprocal:0.7 Percent	E*	[0 to 8191 / **143** / 1/step] Sub scan magnification change parameter 0.7%
2-130-057	Interval:0.725 Percent	E*	[0 to 255 / **14** / 1/step] Sub scan magnification change parameter 0.725%
2-130-058	Mag Reciprocal:0.725 Percent	E*	[0 to 8191 / **140** / 1/step] Sub scan magnification change parameter 0.725%
2-130-059	Interval:0.75 Percent	E*	[0 to 255 / **7** / 1/step] Sub scan magnification change parameter 0.75%

2-130-060	Mag Reciprocal:0.75 Percent	E*	[0 to 8191 / **133** / 1/step] Sub scan magnification change parameter 0.75%
2-130-061	Interval:0.775 Percent	E*	[0 to 255 / **13** / 1/step] Sub scan magnification change parameter 0.775%
2-130-062	Mag Reciprocal:0.775 Percent	E*	[0 to 8191 / **130** / 1/step] Sub scan magnification change parameter 0.775%
2-130-063	Interval:0.8 Percent	E*	[0 to 255 / **14** / 1/step] Sub scan magnification change parameter 0.8%
2-130-064	Mag Reciprocal:0.8 Percent	E*	[0 to 8191 / **126** / 1/step] Sub scan magnification change parameter 0.8%

2150	**[Area Mag. Correction]** Adjusts the magnification for each area. The main scan (297 mm) is divided into 8 areas. Area 1 is at the front side of the machine (left side of the image) and area 8 is at the rear side of the machine (right side of the image). Decreasing a value makes the image shift to the left side on the print. Increasing a value makes the image shift to the right side on the print.		
2-150-001	Area 0	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 0, 1/48 dots each.
2-150-002	Area 1	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 1, 1/48 dots each.
2-150-003	Area 2	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 2, 1/48 dots each.

2-150-004	Area 3	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 3, 1/48 dots each.
2-150-005	Area 4	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 4, 1/48 dots each.
2-150-006	Area 5	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 5, 1/48 dots each.
2-150-007	Area 6	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 6, 1/48 dots each.
2-150-008	Area 7	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 7, 1/48 dots each.
2-150-009	Area 8	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 8, 1/48 dots each.
2-150-010	Area 9	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 9, 1/48 dots each.
2-150-011	Area 10	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 10, 1/48 dots each.
2-150-012	Area 11	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 11, 1/48 dots each.
2-150-013	Area 12	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 12, 1/48 dots each.
2-150-014	Area 13	E*	[-4095 to 4095 / **0** / 1sub-dot/step] Main scan fine adjustment for each area. Area: 13, 1/48 dots each.

2151	**[BowSkew Setting]** -		
2-151-001	Initial setting Area0	E*	[0 to 24 / **0** / 1/step] BowSkew initial setting: Area 0.
2-151-002	Initial setting Area1-8	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 1 to 8
2-151-003	Initial setting Area9-16	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 9 to 16
2-151-004	Initial setting Area17-24	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 17 to 24
2-151-005	Initial setting Area25-32	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 25 to 32
2-151-006	Initial setting Area33-40	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 33 to 40
2-151-007	Initial setting Area41-48	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 41 to 48
2-151-008	Initial setting Area49-56	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 49 to 56
2-151-009	Initial setting Area57-64	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 57 to 64
2-151-010	Initial setting Area65-72	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 65 to 72
2-151-011	Initial setting Area73-80	E*	[0 to 65535 / **0** / 1/step] BowSkew initial setting: Area 73 to 80
2-151-012	Initial setting Area81-85	E*	[0 to 1023 / **0** / 1/step] BowSkew initial setting: Area 81 to 85

2152	**[Shading Coeff]** Adjusts the area correction value for each LD power.

2-152-001	Front. Out of Image	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Leading edge
2-152-002	Area 0	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 0
2-152-003	Area 1	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 1
2-152-004	Area 2	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 2
2-152-005	Area 3	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 3
2-152-006	Area 4	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 4
2-152-007	Area 5	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 5
2-152-008	Area 6	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 6
2-152-009	Area 7	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 7
2-152-010	Area 8	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 8
2-152-011	Area 9	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 9

2-152-012	Area 10	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 10
2-152-013	Area 11	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 11
2-152-014	Area 12	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 12
2-152-015	Area 13	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 13
2-152-016	Area 14	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 14
2-152-017	Area 15	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 15
2-152-018	Area 16	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 16
2-152-019	Area 17	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 17
2-152-020	Area 18	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 18
2-152-021	Area 19	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 19
2-152-022	Area 20	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 20

2-152-023	Area 21	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 21
2-152-024	Area 22	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 22
2-152-025	Area 23	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 23
2-152-026	Area 24	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 24
2-152-027	Area 25	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 25
2-152-028	Area 26	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 26
2-152-029	Area 27	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 27
2-152-030	Area 28	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 28
2-152-031	Area 29	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 29
2-152-032	Area 30	E*	[0.875 to 1.165 / **1.000** / 0.001/step] Correction coefficient of writing shading: Area 30

2183	**[Main Scan Length Detection]** Executes main scan length detection.

2-183-001	Execute	E	[- / **-** / -] [Execute]

2184	**[Main Scan Length Target]** -		
2-184-001	Execute	E	[- / **-** / -] [Execute] Gets main scan length target value.
2-184-006	Count Value	E*	[0 to 300000 / **266835** / 1/step] Displays main scan length target value.

2185	**[Main Scan Length Detection]** Selects main scan length detection mode.		
2-185-001	Mode selection	E*	[0 to 2 / **2** / 1/step] 0: OFF 1: ON 2: ALL ON

2190	**[Line Position Adj. Setting]** Line position adjustment setting: partial magnification.		
2-190-001	Partial Mag	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

2191	**[Porygon Mirror Face Detection]** Selects polygon mirror face detection mode on/off.		
2-191-001	Mode Selection	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

2201	**[Set DC Charge(Fixed) Setting]** Sets charge DC bias when SP3-600-001 (Select ProCon) is set to "0: fixed".

2-201-001	Bk	E*	[350 to 1000 / **650** / 1-V/step]

2202	**[CH:Control Value Setting]** -		
2-202-001	Std Speed:95ppm	E*	[0 to 3066 / **1800** / 1uA/step] Sets CH control value of standard speed 95ppm.
2-202-011	Std Speed:110ppm	E*	[0 to 3066 / **2083** / 1uA/step] Sets CH control value of standard speed 110ppm.
2-202-021	Std Speed:135ppm	E*	[0 to 3066 / **2666** / 1uA/step] Sets CH control value of standard speed 135ppm.
2-202-031	Std Speed:150ppm	E*	[0 to 3066 / **3066** / 1uA/step] Sets CH control value of standard speed 150ppm.

2203	**[CH:Control Value:Display]** -		
2-203-001	Std Speed:95ppm	E*	[0 to 3066 / **1800** / 1uA/step] Displays CH control value of standard speed 95ppm.
2-203-011	Std Speed:110ppm	E*	[0 to 3066 / **2083** / 1uA/step] Displays CH control value of standard speed 110ppm.
2-203-021	Std Speed:135ppm	E*	[0 to 3066 / **2666** / 1uA/step] Displays CH control value of standard speed 135ppm.
2-203-031	Std Speed:150ppm	E*	[0 to 3066 / **3066** / 1uA/step] Displays CH control value of standard speed 150ppm.

2211	**[LD Power(Fixed) Setting]** Adjusts the fixed LD power. This SP is activated only when SP3-600-001 is set to [0: fixed].		
2-211-001	Bk	E*	[60 to 180 / **100** / 1%/step] Increasing this value makes the image density darker.

2212	**[Dev DC(Fixed) Setting]** Adjusts the development bias. Development bias is automatically adjusted during process control; therefore, adjusting these settings has no effect while Process Control is activated. After deactivating Process Control, the value in this SP mode is used for printing.		
2-212-001	Bk	E*	[200 to 800 / **450** / 1-V/step]

2220	**[CH Clean Operation]** Operates CH cleaning.		
2-220-001	Start	E	[- / **-** / -] [Execute]

2221	**[CH Clean Operation Mode]** -		
2-221-001	CH Cleaner Operation Setting	E*	[0 to 2 / **1** / 1/step] 0: NoExe 1: ProconSync 2: Interval
2221	**[Chg Wire Cleaning]** -		
2-221-002	CH Cleaner Operation Interval	E*	[100 to 100000 / **6000** / 100mai/step]
2-221-003	CH Cleaner Counter Disp	E*	[0 to 1000000 / **0** / 1/step]

2-221-004	CH Cleaner Counter Clear	E	[- / **-** / -] [Execute]

2225	**[Cont High Q Img Print Mode]** -		
2-225-001	Mode Selection	E	[0 to 3 / **0** / 1/step] Continuity high quality image print mode selection. 0: standard 1: motor speed up 2: interval 3: motor speed + interval
2-225-002	Thresh:1	E	[0 to 100 / **60** / 1%/step] Continuity high quality image print mode, switching threshold 1.
2-225-003	Thresh:2	E	[0 to 100 / **80** / 1%/step] Continuity high quality image print mode, switching threshold 2.
2-225-004	Drum Cleaning Motor Spd1	E	[0 to 300 / **115** / 1%/step] Drum cleaning motor speed 1.
2-225-005	Drum Cleaning Motor Spd2	E	[0 to 300 / **130** / 1%/step] Drum cleaning motor speed 2.
2-225-006	Interval Page1	E	[1 to 99999 / **200** / 1page/step] Interval page 1.
2-225-007	Interval Time1	E	[1 to 999 / **15** / 1sec/step] Interval time 1.
2-225-008	Interval Page2	E	[1 to 99999 / **100** / 1page/step] Interval page 2.
2-225-009	Interval Time2	E	[1 to 999 / **15** / 1sec/step] Interval time 2.

2226	**[Drum Cleaning Mt Rotation Time]** -

2-226-001	95ppm	E*	[950.0 to 2100.0 / **1320.0** / 0.1rpm/step] Drum cleaning motor rotation time 95ppm.
2-226-002	110ppm	E*	[950.0 to 2100.0 / **1440.0** / 0.1rpm/step] Drum cleaning motor rotation time 110ppm.
2-226-003	135ppm	E*	[950.0 to 2100.0 / **1661.4** / 0.1rpm/step] Drum cleaning motor rotation time 135ppm.
2-226-004	150ppm	E*	[950.0 to 2100.0 / **1910.7** / 0.1rpm/step] Drum cleaning motor rotation time 150ppm.

2310	**[Force Apply Lubricant]** -		
2-310-001	Belt Cleaning	E	[- / **-** / -] [Execute] Executes lubricant forced apply.
2-310-002	Operation Time Setting	E	[0 to 600 / **300** / 10sec/step] Sets the operation time.
2-310-003	Success App Date: History 1	E	[0 to 991231 / **0** / 1/step] Success history 1.(latest)
2-310-004	Success App Date: History 2	E	[0 to 991231 / **0** / 1/step] Success history 2.
2-310-005	Success App Date: History 3	E	[0 to 991231 / **0** / 1/step] Success history 3.
2-310-006	Success App Date: History 4	E	[0 to 991231 / **0** / 1/step] Success history 4.
2-310-007	Success App Date: History 5	E	[0 to 991231 / **0** / 1/step] Success history 5.(Oldest)

2311	**[Vltg Measure Result]** -		
2-311-001	ITB	E*	[0.00 to 10.00 / **0.00** / 0.01kV/step] Voltage value indication measured by voltage detection operation.

2311	**[Control Value:Display]** -		
2-311-100	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Image Transfer Belt bias: Side 1" SP No.
2-311-101	Side1:ITB Bias 1	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 1) control value.
2-311-102	Side1:ITB Bias 2	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 1) control value.
2-311-103	Side1:ITB Bias 3	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 1) control value.
2-311-104	Side1:ITB Bias 4	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 1) control value.
2-311-105	Side1:ITB Bias 5	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 1) control value.

2311	**[Control Value:Current Display]** -		
2-311-110	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Paper Transfer Belt bias: Side 1" SP No.

2-311-111	Side1:PTR Bias 1	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer bias (side 1) control value.
2-311-112	Side1:PTR Bias 2	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer bias (side 1) control value.
2-311-113	Side1:PTR Bias 3	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer bias (side 1) control value.
2-311-114	Side1:PTR Bias 4	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer bias (side 1) control value.
2-311-115	Side1:PTR Bias 5	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer bias (side 1) control value.

2311	**[Control Value:Display]** -		
2-311-120	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Separation Bias" SP No.
2-311-121	Side1:SepDC 1	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-122	Side1:SepDC 2	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-123	Side1:SepDC 3	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-124	Side1:SepDC 4	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-125	Side1:SepDC 5	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.

2-311-130	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Separation Bias"SP No.
2-311-131	Side1:SepAC 1	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-132	Side1:SepAC 2	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-133	Side1:SepAC 3	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-134	Side1:SepAC 4	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-135	Side1:SepAC 5	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-200	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Image Transfer Belt bias: Side 2"SP No.
2-311-201	Side2:ITB Bias 1	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 2) control value.
2-311-202	Side2:ITB Bias 2	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 2) control value.
2-311-203	Side2:ITB Bias 3	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 2) control value.
2-311-204	Side2:ITB Bias 4	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 2) control value.
2-311-205	Side2:ITB Bias 5	E*	[0 to 150 / **0** / 1uA/step] Displays image transfer belt bias (side 2) control value.

2311	**[Control Value:Current Display]** -		
2-311-210	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Paper Transfer Belt bias: Side 2"SP No.
2-311-211	Side2:PTR Bias 1	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer belt bias (side 2) control value.
2-311-212	Side2:PTR Bias 2	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer belt bias (side 2) control value.
2-311-213	Side2:PTR Bias 3	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer belt bias (side 2) control value.
2-311-214	Side2:PTR Bias 4	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer belt bias (side 2) control value.
2-311-215	Side2:PTR Bias 5	E*	[-400 to 0 / **0** / 1uA/step] Displays paper transfer belt bias (side 2) control value.

2311	**[Control Value:Display]** -		
2-311-220	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Separation Bias"SP No.
2-311-221	Side2:SepDC1	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-222	Side2:SepDC2	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-223	Side2:SepDC3	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.

2-311-224	Side2:SepDC4	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-225	Side2:SepDC5	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Displays separation bias control value.
2-311-230	Next Update SP No.	E*	[1 to 5 / **1** / 1/step] Displays last digit of next update "Display Separation Bias"SP No.
2-311-231	Side2:SepDC 1	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-232	Side2:SepDC 2	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-233	Side2:SepDC 3	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-234	Side2:SepDC 4	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.
2-311-235	Side2:SepDC 5	E*	[0.0 to 12.0 / **0.0** / 0.1kV/step] Displays separation bias control value.

2312	**[Current Resist Level Disp]** -		
2-312-001	ITB	E*	[0 to 0 / **0** / 0/step] Displays resistance level when voltage is detected.

2313	**[Vltg Measure:Env]** -		
2-313-001	ITB:Disoly Senser	E*	[0 to 0 / **0** / 0/step] Displays environment when voltage is detected.

2314	**[Vd Meas Result]** -

2-314-001	Resist Correction	E*	[-1.00 to 0.00 / **0.00** / 0.01kV/step] Records Vd measured result.

2315	**[Vltg Cal Result]** -		
2-315-001	Resist Correction	E*	[0.00 to 10.00 / **0.00** / 0.01kV/step] Records voltage calculation result.

2321	**[Vltg Measure Result]** Displays voltage measurement result of paper transfer.		
2-321-001	PTR	E*	[0.00 to 10.00 / **0.00** / 0.01kV/step]

2322	**[Current Resist Level Disp]** Displays current resistance level of paper transfer.		
2-322-001	PTR	E*	[0 to 0 / **0** / 0/step]

2323	**[Current Resist Range Disp]** -		
2-323-001	PTR	E*	[0 to 6 / **3** / 1/step] Records resistance level when monitoring voltage.

2330	**[Environment Level Disp]** -		
2-330-001	Present:PTR	E*	[0 to 0 / **0** / 0/step]

2331	**[Environment Range Disp]** Displays current environment range.		
2-331-001	Present:PTR	E*	[1 to 6 / **4** / 1/step]

2361	**[Voltage Detection:Bias]** Sets the transfer current for voltage detection.		
2-361-001	ITB: Monitor Current	E*	[0 to 150 / **50** / 1uA/step] Transfer current for voltage detection.
2-361-002	PTR: Monitor Current	E*	[-400 to 0 / **-80** / 1uA/step] Transfer current for voltage monitoring.

2370	**[R Corr:LLL]** Threshold to judge resistance level.		
2-370-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-370-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-370-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-370-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-370-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2371	**[R Corr:LL]** Threshold to judge resistance level.		
2-371-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-371-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-371-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-371-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step].
2-371-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2372	**[R Corr:ML]** Threshold to judge resistance level.		
2-372-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-372-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-372-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-372-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]

2-372-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2373	**[R Corr:MM]** Threshold to judge resistance level.		
2-373-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-373-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-373-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-373-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-373-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2374	**[R Corr:MH]** Threshold to judge resistance level.		
2-374-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-374-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-374-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-374-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-374-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2375	**[R Corr:HH]** Threshold to judge resistance level.		
2-375-001	Thresh1:ITB	E*	[0.00 to 10.00 / **1.35** / 0.01kV/step]
2-375-002	Thresh2:ITB	E*	[0.00 to 10.00 / **1.65** / 0.01kV/step]
2-375-003	Thresh3:ITB	E*	[0.00 to 10.00 / **2.15** / 0.01kV/step]
2-375-004	Thresh4:ITB	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-375-005	Thresh5:ITB	E*	[0.00 to 10.00 / **4.50** / 0.01kV/step]

2380	**[R Corr:LLL]** Threshold to judge resistance level.

2-380-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step]
2-380-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-380-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]
2-380-004	Thresh4:PTR	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-380-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2381	**[R Corr Thresh:LL]** Threshold to judge resistance level.		
2-381-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step]
2-381-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-381-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]
2-381-004	Thresh4:PTR	E*	[.0.00 to 10.00 / **4.00** / 0.01kV/step]
2-381-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2382	**[R Corr Thresh:ML]** Threshold to judge resistance level.		
2-382-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step]
2-382-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-382-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]
2-382-004	Thresh4:PTR	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-382-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2383	**[R Corr Thresh:MM]** Threshold to judge resistance level.		
2-383-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step]
2-383-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-383-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]

2-383-004	Thresh4:PTR	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-383-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2384	**[R Corr Thresh:MH]** Threshold to judge resistance level.		
2-384-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step].
2-384-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-384-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]
2-384-004	Thresh4:PTR	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-384-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2385	**[R Corr Thresh:HH]** Threshold to judge resistance level.		
2-385-001	Thresh1:PTR	E*	[0.00 to 10.00 / **1.00** / 0.01kV/step]
2-385-002	Thresh2:PTR	E*	[0.00 to 10.00 / **2.00** / 0.01kV/step]
2-385-003	Thresh3:PTR	E*	[0.00 to 10.00 / **3.00** / 0.01kV/step]
2-385-004	Thresh4:PTR	E*	[0.00 to 10.00 / **4.00** / 0.01kV/step]
2-385-005	Thresh5:PTR	E*	[0.00 to 10.00 / **5.80** / 0.01kV/step]

2400	**[Correction ON/OFF]** Sets each image transfer correction on/off.		
2-400-001	Image Transfer:Corr All	E	[0 to 7 / **0** / 1/step] 0: All Corr: ON 1: All Corr: OFF 2: Line Spd Corr: OFF 3: Env Corr: OFF 4: Resist Corr: OFF

2401	**[Eng Spd Corr T1:Image]** Coefficient for each line speed to determine line speed correction.

2-401-001	95ppm	E*	[50 to 150 / **68** / 1%/step]
2-401-002	110ppm	E*	[50 to 150 / **78** / 1%/step]
2-401-003	135ppm	E*	[50 to 150 / **100** / 1%/step]
2-401-004	150ppm	E*	[50 to 150 / **115** / 1%/step]

2402	**[Eng Spd Corr T1:Image]** Coefficient for each line speed to determine line speed correction.		
2-402-001	95ppm	E*	[50 to 150 / **68** / 1%/step]
2-402-002	110pm	E*	[50 to 150 / **78** / 1%/step]
2-402-003	135pm	E*	[50 to 150 / **100** / 1%/step]
2-402-004	150pm	E*	[50 to 150 / **115** / 1%/step]

2411	**[R Corr:ITB]** Resistance correction coefficient for image transfer roller.		
2-411-001	R-2:Imaging Area1	E*	[10 to 200 / **100** / 1%/step]
2-411-002	R-1:Imaging Area1	E*	[10 to 200 / **100** / 1%/step]
2-411-003	R0:Imaging Area1	E*	[10 to 200 / **100** / 1%/step]
2-411-004	R+1:Imaging Area1	E*	[10 to 200 / **100** / 1%/step]
2-411-005	R+2:Imaging Area1	E*	[10 to 200 / **75** / 1%/step]
2-411-006	R+3:Imaging Area1	E*	[10 to 200 / **75** / 1%/step]

2421	**[Environ Coef:1st]** Coefficient for each environment to determine environment correction.		
2-421-001	LLL:Side1	E*	[0 to 200 / **100** / 1%/step]
2-421-002	LLL:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-003	LLL:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]
2-421-011	LL:Side1	E*	[0 to 200 / **100** / 1%/step]

2-421-012	LL:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-013	LL:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]
2-421-021	ML:Side1	E*	[0 to 200 / **100** / 1%/step]
2-421-022	ML:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-023	ML:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]
2-421-031	MM:Side1	E*	[0 to 200 / **100** / 1%/step]
2-421-032	MM:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-033	MM:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]
2-421-041	MH:Side1	E*	[0 to 200 / **100** / 1%/step]
2-421-042	MH:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-043	MH:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]
2-421-051	HH:Side1	E*	[0 to 200 / **100** / 1%/step]
2-421-052	HH:Side2	E*	[0 to 200 / **100** / 1%/step]
2-421-053	HH:Non Imaging Area	E*	[0 to 200 / **100** / 1%/step]

2431	**[ITB Current]** -		
2-431-001	Imaging Area	E*	[0 to 150 / **80** / 1uA/step] Standard bias value for image area of image transfer.
2-431-002	Procon/Paper Int. P Pattern	E*	[0 to 150 / **80** / 1uA/step] Standard bias value for image transfer when process controlling.
2-431-003	Non Imaging Area	E*	[0 to 150 / **0** / 1uA/step] Standard bias value for non-image area of image transfer.

2441	**[1st:Switch Timing]** -

2-441-001	LEdge ON Timing	E*	[0 to 30 / **10** / 1ms/step] Leading edge ON timing for image transfer bias.
2-441-002	TEdge OFF Timing	E*	[0 to 30 / **10** / 1ms/step] Trailing edge ON timing for image transfer bias.

2500	**[Correction ON/OFF]** -		
2-500-001	Image Transfer:Corr All	E	[0 to 3 / **0** / 1/step] 0: All Corr: ON 1: All Corr: OFF 2: Line Spd Corr: OFF 3: Env Corr: OFF Setting items to switch each correction on/off for separation.

2501	**[Eng Spd Corr DC:Image]** Coefficient for each line speed to determine line speed correction.		
2-501-001	95ppm	E	[50 to 150 / **100** / 1%/step]
2-501-002	110ppm	E	[50 to 150 / **100** / 1%/step]
2-501-003	135ppm	E	[50 to 150 / **100** / 1%/step]
2-501-004	150ppm	E	[50 to 150 / **100** / 1%/step]

2502	**[Eng Spd Corr DC:Image]** Coefficient for each line speed to determine line speed correction.		
2-502-001	95ppm	E	[50 to 150 / **100** / 1%/step]
2-502-002	110ppm	E	[50 to 150 / **100** / 1%/step]
2-502-003	135ppm	E	[50 to 150 / **100** / 1%/step]
2-502-004	150ppm	E	[50 to 150 / **100** / 1%/step]

2511	**[Env Corr:Sep:DC]** Coefficient for each environment to determine environment correction.		
2-511-001	LLL:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-002	LLL:Side2	E	[0 to 200 / **100** / 1%/step]
2-511-011	LL:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-012	LL:Side2	E	[0 to 200 / **100** / 1%/step]
2-511-021	ML:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-022	ML:Side2	E	[0 to 200 / **100** / 1%/step]
2-511-031	MM:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-032	MM:Side2	E	[0 to 200 / **100** / 1%/step]
2-511-041	MH:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-042	MH:Side2	E	[0 to 200 / **100** / 1%/step]
2-511-051	HH:Side1	E	[0 to 200 / **100** / 1%/step]
2-511-052	HH:Side2	E	[0 to 200 / **100** / 1%/step]

2512	**[Env Corr:Sep:DC]** Coefficient for each environment to determine environment correction.		
2-512-001	LLL:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-002	LLL:Side2	E	[0 to 200 / **100** / 1%/step]
2-512-011	LL:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-012	LL:Side2	E	[0 to 200 / **100** / 1%/step]
2-512-021	ML:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-022	ML:Side2	E	[0 to 200 / **100** / 1%/step]
2-512-031	MM:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-032	MM:Side2	E	[0 to 200 / **100** / 1%/step]
2-512-041	MH:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-042	MH:Side2	E	[0 to 200 / **100** / 1%/step]

2-512-051	HH:Side1	E	[0 to 200 / **100** / 1%/step]
2-512-052	HH:Side2	E	[0 to 200 / **100** / 1%/step]

2521	**[SepBias]** -		
2-521-001	OFF Timing:Leading Edge	E*	[0 to 30 / **10** / 1ms/step] Leading edge ON timing for separation bias.
2-521-002	OFF Timing:Trailing Edge	E*	[0 to 30 / **10** / 1ms/step] Trailing edge ON timing for separation bias.

2522	**[SepDC:Leading Edge]** Off timing (DC) of each paper weight's Image leading edge correction.		
2-522-100	Thick 0	E*	[0 to 30 / **5** / 1mm/step]
2-522-101	Thick 1	E*	[0 to 30 / **5** / 1mm/step]
2-522-102	Thick 2	E*	[0 to 30 / **5** / 1mm/step]
2-522-103	Thick 3	E*	[0 to 30 / **5** / 1mm/step]
2-522-104	Thick 4	E*	[0 to 30 / **5** / 1mm/step]
2-522-105	Thick 5	E*	[0 to 30 / **5** / 1mm/step]
2-522-106	Thick 6	E*	[0 to 30 / **5** / 1mm/step]
2-522-107	Thick 7	E*	[0 to 30 / **5** / 1mm/step]
2-522-108	Thick 8	E*	[0 to 30 / **5** / 1mm/step]

2523	**[SepDC:Trailing Edge]** On timing (DC) of each paper weight's Image trailing edge compensation.		
2-523-100	Thick 0	E*	[0 to 30 / **5** / 1mm/step]
2-523-101	Thick 1	E*	[0 to 30 / **5** / 1mm/step]
2-523-102	Thick 2	E*	[0 to 30 / **5** / 1mm/step]

2-523-103	Thick 3	E*	[0 to 30 / **5** / 1mm/step]
2-523-104	Thick 4	E*	[0 to 30 / **5** / 1mm/step]
2-523-105	Thick 5	E*	[0 to 30 / **5** / 1mm/step]
2-523-106	Thick 6	E*	[0 to 30 / **5** / 1mm/step]
2-523-107	Thick 7	E*	[0 to 30 / **5** / 1mm/step]
2-523-108	Thick 8	E*	[0 to 30 / **5** / 1mm/step]

2524	**[SepAC:Leading Edge]** Off timing (AC) of each paper weight's Image leading edge compensation.		
2-524-100	Thick 0	E*	[0 to 30 / **5** / 1mm/step]
2-524-101	Thick 1	E*	[0 to 30 / **5** / 1mm/step]
2-524-102	Thick 2	E*	[0 to 30 / **5** / 1mm/step]
2-524-103	Thick 3	E*	[0 to 30 / **5** / 1mm/step]
2-524-104	Thick 4	E*	[0 to 30 / **5** / 1mm/step]
2-524-105	Thick 5	E*	[0 to 30 / **5** / 1mm/step]
2-524-106	Thick 6	E*	[0 to 30 / **5** / 1mm/step]
2-524-107	Thick 7	E*	[0 to 30 / **5** / 1mm/step]
2-524-108	Thick 8	E*	[0 to 30 / **5** / 1mm/step]

2525	**[SepAC:Trailing Edge]** On timing (AC) of each paper weight's Image trailing edge compensation.		
2-525-100	Thick 0	E*	[0 to 30 / **5** / 1mm/step]
2-525-101	Thick 1	E*	[0 to 30 / **5** / 1mm/step]
2-525-102	Thick 2	E*	[0 to 30 / **5** / 1mm/step]
2-525-103	Thick 3	E*	[0 to 30 / **5** / 1mm/step]
2-525-104	Thick 4	E*	[0 to 30 / **5** / 1mm/step]
2-525-105	Thick 5	E*	[0 to 30 / **5** / 1mm/step]

2-525-106	Thick 6	E*	[0 to 30 / **5** / 1mm/step]
2-525-107	Thick 7	E*	[0 to 30 / **5** / 1mm/step]
2-525-108	Thick 8	E*	[0 to 30 / **5** / 1mm/step]

2530	**[SepDC:1st]** Separate DC bias standard value (side 1) for each paper type/paper weight.		
2-530-100	Plain:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-101	Plain:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-102	Plain:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-103	Plain:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-104	Plain:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-105	Plain:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-106	Plain:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-107	Plain:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-108	Plain:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-110	Glossy:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-111	Glossy:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-112	Glossy:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-113	Glossy:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-114	Glossy:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-115	Glossy:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-116	Glossy:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-117	Glossy:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-118	Glossy:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-120	Matte:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-121	Matte:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]

2-530-122	Matte:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-123	Matte:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-124	Matte:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-125	Matte:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-126	Matte:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-127	Matte:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-128	Matte:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-155	OHP:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-161	Transluc:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-175	Envelope:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-176	Envelope:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-177	Envelope:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-530-178	Envelope:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]

2531	**[SepDC:2nd]** Separate DC bias standard value (side 2) for each paper type/paper weight.		
2-531-100	Plain:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-101	Plain:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-102	Plain:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-103	Plain:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-104	Plain:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-105	Plain:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-106	Plain:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-107	Plain:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-108	Plain:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-110	Glossy:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]

2-531-111	Glossy:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-112	Glossy:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-113	Glossy:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-114	Glossy:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-115	Glossy:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-116	Glossy:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-117	Glossy:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-118	Glossy:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-120	Matte:Weight 0	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-121	Matte:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-122	Matte:Weight 2	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-123	Matte:Weight 3	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-124	Matte:Weight 4	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-125	Matte:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-126	Matte:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-127	Matte:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-128	Matte:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-155	OHP:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-161	Transluc:Weight 1	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-175	Envelope:Weight 5	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-176	Envelope:Weight 6	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-177	Envelope:Weight 7	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]
2-531-178	Envelope:Weight 8	E*	[0.0 to 10.0 / **5.0** / 0.1uA/step]

2532	**[SepAC:1st]** Separate AC bias standard value (side 1) for each paper type/paper weight.

2-532-100	Plain:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-101	Plain:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-102	Plain:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-103	Plain:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-104	Plain:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-105	Plain:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-106	Plain:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-107	Plain:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-108	Plain:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-110	Glossy:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-111	Glossy:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-112	Glossy:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-113	Glossy:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-114	Glossy:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-115	Glossy:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-116	Glossy:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-117	Glossy:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-118	Glossy:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-120	Matte:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-121	Matte:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-122	Matte:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-123	Matte:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-124	Matte:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-125	Matte:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-126	Matte:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-127	Matte:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-532-128	Matte:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-155	OHP:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-161	Transluc:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-175	Envelope:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-176	Envelope:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-177	Envelope:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-532-178	Envelope:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2533	**[SepAC:2nd]** Separate AC bias standard value (side 2) for each paper type/paper weight.		
2-533-100	Plain:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-101	Plain:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-102	Plain:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-103	Plain:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-104	Plain:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-105	Plain:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-106	Plain:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-107	Plain:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-108	Plain:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-110	Glossy:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-111	Glossy:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-112	Glossy:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-113	Glossy:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-114	Glossy:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-115	Glossy:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-116	Glossy:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-533-117	Glossy:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-118	Glossy:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-120	Matte:Weight 0	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-121	Matte:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-122	Matte:Weight 2	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-123	Matte:Weight 3	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-124	Matte:Weight 4	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-125	Matte:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-126	Matte:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-127	Matte:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-128	Matte:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-155	OHP:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-161	Transluc:Weight 1	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-175	Envelope:Weight 5	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-176	Envelope:Weight 6	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-177	Envelope:Weight 7	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-533-178	Envelope:Weight 8	E*	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2534	**[SepBias:Margin]** -		
2-534-001	DC	E*	[0.0 to 10.0 / **0.0** / 0.1uA/step] Separate DC bias standard value of margin.
2-534-001	AC	E*	[8.0 to 12.0 / **8.0** / 0.1kV/step] Separate AC bias standard value of margin.

2541	**[SepDC:LEdge:Coeff]** Coefficients of each paper type/weight for determine Separate DC bias leading edge correction.		
2-541-100	Plain:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-541-101	Plain:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-541-102	Plain:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-541-103	Plain:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-541-104	Plain:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-541-105	Plain:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-541-106	Plain:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-541-107	Plain:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-541-108	Plain:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-541-110	Glossy:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-541-111	Glossy:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-541-112	Glossy:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-541-113	Glossy:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-541-114	Glossy:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-541-115	Glossy:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-541-116	Glossy:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-541-117	Glossy:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-541-118	Glossy:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-541-120	Matte:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-541-121	Matte:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-541-122	Matte:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-541-123	Matte:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-541-124	Matte:Weight 4	E*	[50 to 200 / **100** / 1%/step]

2-541-125	Matte:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-541-126	Matte:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-541-127	Matte:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-541-128	Matte:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-541-155	OHP:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-541-161	Transluc:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-541-175	Envelope:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-541-176	Envelope:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-541-177	Envelope:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-541-178	Envelope:Weight 8	E*	[50 to 200 / **100** / 1%/step]

2542	**[SepDC:TEdge:Coeff]** Coefficients of each paper type/weight for determine Separate DC bias trailing edge correction.		
2-542-100	Plain:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-542-101	Plain:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-542-102	Plain:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-542-103	Plain:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-542-104	Plain:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-542-105	Plain:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-542-106	Plain:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-542-107	Plain:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-542-108	Plain:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-542-110	Glossy:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-542-111	Glossy:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-542-112	Glossy:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-542-113	Glossy:Weight 3	E*	[50 to 200 / **100** / 1%/step]

2-542-114	Glossy:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-542-115	Glossy:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-542-116	Glossy:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-542-117	Glossy:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-542-118	Glossy:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-542-120	Matte:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-542-121	Matte:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-542-122	Matte:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-542-123	Matte:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-542-124	Matte:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-542-125	Matte:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-542-126	Matte:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-542-127	Matte:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-542-128	Matte:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-542-155	OHP:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-542-161	Transluc:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-542-175	Envelope:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-542-176	Envelope:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-542-177	Envelope:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-542-178	Envelope:Weight 8	E*	[50 to 200 / **100** / 1%/step]

2551	**[SepAC:LEdge:Coeff]** Coefficients of each paper type/weight for determine Separate AC bias leading edge correction.		
2-551-100	Plain:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-551-101	Plain:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-551-102	Plain:Weight 2	E*	[50 to 200 / **100** / 1%/step]

2-551-103	Plain:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-551-104	Plain:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-551-105	Plain:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-551-106	Plain:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-551-107	Plain:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-551-108	Plain:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-551-110	Glossy:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-551-111	Glossy:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-551-112	Glossy:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-551-113	Glossy:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-551-114	Glossy:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-551-115	Glossy:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-551-116	Glossy:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-551-117	Glossy:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-551-118	Glossy:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-551-120	Matte:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-551-121	Matte:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-551-122	Matte:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-551-123	Matte:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-551-124	Matte:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-551-125	Matte:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-551-126	Matte:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-551-127	Matte:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-551-128	Matte:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-551-155	OHP:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-551-161	Transluc:Weight 1	E*	[50 to 200 / **100** / 1%/step]

2-551-175	Envelope:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-551-176	Envelope:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-551-177	Envelope:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-551-178	Envelope:Weight 8	E*	[50 to 200 / **100** / 1%/step]

2552	**[SepAC:TEdge:Coeff]** Coefficients of each paper type/weight for determine Separate AC bias trailing edge correction.		
2-552-100	Plain:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-552-101	Plain:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-552-102	Plain:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-552-103	Plain:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-552-104	Plain:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-552-105	Plain:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-552-106	Plain:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-552-107	Plain:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-552-108	Plain:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-552-110	Glossy:Weight 0	E*	[50 to 200 / **100** / 1%/step]
2-552-111	Glossy:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-552-112	Glossy:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-552-113	Glossy:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-552-114	Glossy:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-552-115	Glossy:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-552-116	Glossy:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-552-117	Glossy:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-552-118	Glossy:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-552-120	Matte:Weight 0	E*	[50 to 200 / **100** / 1%/step]

2-552-121	Matte:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-552-122	Matte:Weight 2	E*	[50 to 200 / **100** / 1%/step]
2-552-123	Matte:Weight 3	E*	[50 to 200 / **100** / 1%/step]
2-552-124	Matte:Weight 4	E*	[50 to 200 / **100** / 1%/step]
2-552-125	Matte:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-552-126	Matte:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-552-127	Matte:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-552-128	Matte:Weight 8	E*	[50 to 200 / **100** / 1%/step]
2-552-155	OHP:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-552-161	Transluc:Weight 1	E*	[50 to 200 / **100** / 1%/step]
2-552-175	Envelope:Weight 5	E*	[50 to 200 / **100** / 1%/step]
2-552-176	Envelope:Weight 6	E*	[50 to 200 / **100** / 1%/step]
2-552-177	Envelope:Weight 7	E*	[50 to 200 / **100** / 1%/step]
2-552-178	Envelope:Weight 8	E*	[50 to 200 / **100** / 1%/step]

2600	**[Correction ON/OFF:2nd]** -		
2-600-001	Correction:Select	E	[0 to 7 / **0** / 1/step] 0: All Corr: ON 1: All Corr: OFF 2: Line Spd Corr: OFF 3: Env Corr: OFF 4: Resist Corr: OFF Setting items to switch each correct on/off for paper transfer.

2601	**[Eng Spd Corr:T2]** Coefficient for each line speed to determine line speed correction.		
2-601-001	95ppm	E*	[50 to 150 / **68** / 1%/step]

2-601-002	110ppm	E*	[50 to 150 / **78** / 1%/step]
2-601-003	135ppm	E*	[50 to 150 / **100** / 1%/step]
2-601-004	150ppm	E*	[50 to 150 / **115** / 1%/step]

2611	**[Env Corr:2nd]** Coefficient for each environment to determine environment correction.		
2-611-001	LLL:Side1	E	[0 to 200 / **80** / 1%/step]
2-611-002	LLL:Side2	E	[0 to 200 / **80** / 1%/step]
2-611-003	LLL:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]
2-611-011	LL:Side1	E	[0 to 200 / **80** / 1%/step]
2-611-012	LL:Side2	E	[0 to 200 / **80** / 1%/step]
2-611-013	LL:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]
2-611-021	ML:Side1	E	[0 to 200 / **100** / 1%/step]
2-611-022	ML:Side2	E	[0 to 200 / **100** / 1%/step]
2-611-023	ML:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]
2-611-031	MM:Side1	E	[0 to 200 / **100** / 1%/step]
2-611-032	MM:Side2	E	[0 to 200 / **100** / 1%/step]
2-611-033	MM:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]
2-611-041	MH:Side1	E	[0 to 200 / **100** / 1%/step]
2-611-042	MH:Side2	E	[0 to 200 / **100** / 1%/step]
2-611-043	MH:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]
2-611-051	HH:Side1	E	[0 to 200 / **100** / 1%/step]
2-611-052	HH:Side2	E	[0 to 200 / **100** / 1%/step]
2-611-053	HH:Non Imaging Area	E	[0 to 200 / **100** / 1%/step]

2621	**[R Corr:2nd]** Coefficient for each line speed to determine line speed correction.		

2-621-002	R-2	E*	[50 to 255 / **100** / 1/step]
2-621-003	R-1	E*	[50 to 255 / **100** / 1/step]
2-621-004	R-0	E*	[50 to 255 / **100** / 1/step]
2-621-005	R+1	E*	[50 to 255 / **100** / 1/step]
2-621-006	R+2	E*	[50 to 255 / **100** / 1/step]
2-621-007	R+3	E*	[50 to 255 / **100** / 1/step]

2631	**[PaperThickCoef:Side1]** Coefficient of each paper weight for determines line speed correction.		
2-631-100	Thick 0	E*	[50 to 600 / **100** / 1/step]
2-631-101	Thick 1	E*	[50 to 600 / **100** / 1/step]
2-631-102	Thick 2	E*	[50 to 600 / **100** / 1/step]
2-631-103	Thick 3	E*	[50 to 600 / **100** / 1/step]
2-631-104	Thick 4	E*	[50 to 600 / **100** / 1/step]
2-631-105	Thick 5	E*	[50 to 600 / **100** / 1/step]
2-631-106	Thick 6	E*	[50 to 600 / **100** / 1/step]
2-631-107	Thick 7	E*	[50 to 600 / **100** / 1/step]
2-631-108	Thick 8	E*	[50 to 600 / **100** / 1/step]

2632	**[PaperThickCoef:Side2]** Coefficient of each paper weight for determines line speed correction.		
2-632-100	Thick 0	E*	[50 to 600 / **100** / 1/step]
2-632-101	Thick 1	E*	[50 to 600 / **100** / 1/step]
2-632-102	Thick 2	E*	[50 to 600 / **100** / 1/step]
2-632-103	Thick 3	E*	[50 to 600 / **100** / 1/step]
2-632-104	Thick 4	E*	[50 to 600 / **100** / 1/step]
2-632-105	Thick 5	E*	[50 to 600 / **100** / 1/step]

2-632-106	Thick 6	E*	[50 to 600 / **100** / 1/step]
2-632-107	Thick 7	E*	[50 to 600 / **100** / 1/step]
2-632-108	Thick 8	E*	[50 to 600 / **100** / 1/step]

2640	**[PTR Voltage]** -		
2-640-001	Non Imaging Area	E	[0 to 1000 / **500** / 1V/step] Standard bias value for non-image area of image transfer.

2641	**[PTR Current:Side1]** Standard bias value for paper type/weight of image transfer.		
2-641-100	Plain:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-101	Plain:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-102	Plain:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-103	Plain:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-104	Plain:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-105	Plain:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-106	Plain:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-107	Plain:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-108	Plain:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-110	Glossy:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-111	Glossy:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-112	Glossy:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-113	Glossy:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-114	Glossy:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-115	Glossy:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-116	Glossy:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]

2-641-117	Glossy:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-118	Glossy:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-120	Matte:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-121	Matte:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-122	Matte:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-123	Matte:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-124	Matte:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-125	Matte:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-126	Matte:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-127	Matte:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-128	Matte:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-155	OHP:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-161	Transluc:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-175	Envelope:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-176	Envelope:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-177	Envelope:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-641-178	Envelope:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]

2642	**[PTR Current:Side2]** Standard bias value for paper type/weight of image transfer.		
2-642-100	Plain:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-101	Plain:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-102	Plain:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-103	Plain:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-104	Plain:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-105	Plain:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]

2-642-106	Plain:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-107	Plain:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-108	Plain:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-110	Glossy:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-111	Glossy:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-112	Glossy:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-113	Glossy:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-114	Glossy:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-115	Glossy:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-116	Glossy:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-117	Glossy:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-118	Glossy:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-120	Matte:Weight 0	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-121	Matte:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-122	Matte:Weight 2	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-123	Matte:Weight 3	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-124	Matte:Weight 4	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-125	Matte:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-126	Matte:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-127	Matte:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-128	Matte:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-155	OHP:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-161	Transluc:Weight 1	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-175	Envelope:Weight 5	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-176	Envelope:Weight 6	E*	[-400 to 0 / **-100** / 1uA/step]
2-642-177	Envelope:Weight 7	E*	[-400 to 0 / **-100** / 1uA/step]

2-642-178	Envelope:Weight 8	E*	[-400 to 0 / **-100** / 1uA/step]

2643	**[Leading Edge Corr Coef:2nd]** Leading edge correction coefficient of each paper type/weight.		
2-643-100	Plain:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-643-101	Plain:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-643-102	Plain:Weight 2	E*	[0 to 300 / **140** / 1%/step]
2-643-103	Plain:Weight 3	E*	[0 to 300 / **140** / 1%/step]
2-643-104	Plain:Weight 4	E*	[0 to 300 / **140** / 1%/step]
2-643-105	Plain:Weight 5	E*	[0 to 300 / **140** / 1%/step]
2-643-106	Plain:Weight 6	E*	[0 to 300 / **140** / 1%/step]
2-643-107	Plain:Weight 7	E*	[0 to 300 / **140** / 1%/step]
2-643-108	Plain:Weight 8	E*	[0 to 300 / **140** / 1%/step]
2-643-110	Glossy:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-643-111	Glossy:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-643-112	Glossy:Weight 2	E*	[0 to 300 / **140** / 1%/step]
2-643-113	Glossy:Weight 3	E*	[0 to 300 / **140** / 1%/step]
2-643-114	Glossy:Weight 4	E*	[0 to 300 / **140** / 1%/step]
2-643-115	Glossy:Weight 5	E*	[0 to 300 / **140** / 1%/step]
2-643-116	Glossy:Weight 6	E*	[0 to 300 / **140** / 1%/step]
2-643-117	Glossy:Weight 7	E*	[0 to 300 / **140** / 1%/step]
2-643-118	Glossy:Weight 8	E*	[0 to 300 / **140** / 1%/step]
2-643-120	Matte:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-643-121	Matte:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-643-122	Matte:Weight 2	E*	[0 to 300 / **140** / 1%/step]
2-643-123	Matte:Weight 3	E*	[0 to 300 / **140** / 1%/step]

2-643-124	Matte:Weight 4	E*	[0 to 300 / **140** / 1%/step]
2-643-125	Matte:Weight 5	E*	[0 to 300 / **140** / 1%/step]
2-643-126	Matte:Weight 6	E*	[0 to 300 / **140** / 1%/step]
2-643-127	Matte:Weight 7	E*	[0 to 300 / **140** / 1%/step]
2-643-128	Matte:Weight 8	E*	[0 to 300 / **140** / 1%/step]
2-643-155	OHP:Weight 5	E*	[0 to 300 / **140** / 1%/step]
2-643-161	Transluc:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-643-175	Envelope:Weight 5	E*	[0 to 300 / **100** / 1%/step]
2-643-176	Envelope:Weight 6	E*	[0 to 300 / **140** / 1%/step]
2-643-177	Envelope:Weight 7	E*	[0 to 300 / **140** / 1%/step]
2-643-178	Envelope:Weight 8	E*	[0 to 300 / **140** / 1%/step]

2644	**[Leading Edge Corr Switch:2nd]** Leading edge correction switch timing of each paper type/weight.		
2-644-100	Plain:Weight 0	E*	[0 to 30 / **2** / 1mm/step].
2-644-101	Plain:Weight 1	E*	[0 to 30 / **2** / 1mm/step].
2-644-102	Plain:Weight 2	E*	[0 to 30 / **2** / 1mm/step].
2-644-103	Plain:Weight 3	E*	[0 to 30 / **2** / 1mm/step].
2-644-104	Plain:Weight 4	E*	[0 to 30 / **2** / 1mm/step].
2-644-105	Plain:Weight 5	E*	[0 to 30 / **2** / 1mm/step].
2-644-106	Plain:Weight 6	E*	[0 to 30 / **2** / 1mm/step].
2-644-107	Plain:Weight 7	E*	[0 to 30 / **2** / 1mm/step].
2-644-108	Plain:Weight 8	E*	[0 to 30 / **2** / 1mm/step].
2-644-110	Glossy:Weight 0	E*	[0 to 30 / **2** / 1mm/step].
2-644-111	Glossy:Weight 1	E*	[0 to 30 / **2** / 1mm/step].
2-644-112	Glossy:Weight 2	E*	[0 to 30 / **2** / 1mm/step].

2-644-113	Glossy:Weight 3	E*	[0 to 30 / **2** / 1mm/step].
2-644-114	Glossy:Weight 4	E*	[0 to 30 / **2** / 1mm/step].
2-644-115	Glossy:Weight 5	E*	[0 to 30 / **2** / 1mm/step].
2-644-116	Glossy:Weight 6	E*	[0 to 30 / **2** / 1mm/step].
2-644-117	Glossy:Weight 7	E*	[0 to 30 / **2** / 1mm/step].
2-644-118	Glossy:Weight 8	E*	[0 to 30 / **2** / 1mm/step].
2-644-120	Matte:Weight 0	E*	[0 to 30 / **2** / 1mm/step].
2-644-121	Matte:Weight 1	E*	[0 to 30 / **2** / 1mm/step].
2-644-122	Matte:Weight 2	E*	[0 to 30 / **2** / 1mm/step].
2-644-123	Matte:Weight 3	E*	[0 to 30 / **2** / 1mm/step].
2-644-124	Matte:Weight 4	E*	[0 to 30 / **2** / 1mm/step].
2-644-125	Matte:Weight 5	E*	[0 to 30 / **2** / 1mm/step].
2-644-126	Matte:Weight 6	E*	[0 to 30 / **2** / 1mm/step].
2-644-127	Matte:Weight 7	E*	[0 to 30 / **2** / 1mm/step].
2-644-128	Matte:Weight 8	E*	[0 to 30 / **2** / 1mm/step].
2-644-155	OHP:Weight 5	E*	[0 to 30 / **2** / 1mm/step].
2-644-161	Transluc:Weight 1	E*	[0 to 30 / **2** / 1mm/step].
2-644-175	Envelope:Weight 5	E*	[0 to 30 / **2** / 1mm/step].
2-644-176	Envelope:Weight 6	E*	[0 to 30 / **2** / 1mm/step].
2-644-177	Envelope:Weight 7	E*	[0 to 30 / **2** / 1mm/step].
2-644-178	Envelope:Weight 8	E*	[0 to 30 / **2** / 1mm/step].

2645	**[Trail Edge Corr Coef:2nd]** Trailing edge correct coefficient of each paper type/weight.		
2-645-100	Plain:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-645-101	Plain:Weight 1	E*	[0 to 300 / **100** / 1%/step]

2-645-102	Plain:Weight 2	E*	[0 to 300 / **100** / 1%/step]
2-645-103	Plain:Weight 3	E*	[0 to 300 / **100** / 1%/step]
2-645-104	Plain:Weight 4	E*	[0 to 300 / **100** / 1%/step]
2-645-105	Plain:Weight 5	E*	[0 to 300 / **100** / 1%/step]
2-645-106	Plain:Weight 6	E*	[0 to 300 / **100** / 1%/step]
2-645-107	Plain:Weight 7	E*	[0 to 300 / **100** / 1%/step]
2-645-108	Plain:Weight 8	E*	[0 to 300 / **100** / 1%/step]
2-645-110	Glossy:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-645-111	Glossy:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-645-112	Glossy:Weight 2	E*	[0 to 300 / **100** / 1%/step]
2-645-113	Glossy:Weight 3	E*	[0 to 300 / **100** / 1%/step]
2-645-114	Glossy:Weight 4	E*	[0 to 300 / **100** / 1%/step]
2-645-115	Glossy:Weight 5	E*	[0 to 300 / **100** / 1%/step]
2-645-116	Glossy:Weight 6	E*	[0 to 300 / **100** / 1%/step]
2-645-117	Glossy:Weight 7	E*	[0 to 300 / **100** / 1%/step]
2-645-118	Glossy:Weight 8	E*	[0 to 300 / **100** / 1%/step]
2-645-120	Matte:Weight 0	E*	[0 to 300 / **100** / 1%/step]
2-645-121	Matte:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-645-122	Matte:Weight 2	E*	[0 to 300 / **100** / 1%/step]
2-645-123	Matte:Weight 3	E*	[0 to 300 / **100** / 1%/step]
2-645-124	Matte:Weight 4	E*	[0 to 300 / **100** / 1%/step]
2-645-125	Matte:Weight 5	E*	[0 to 300 / **100** / 1%/step]
2-645-126	Matte:Weight 6	E*	[0 to 300 / **100** / 1%/step]
2-645-127	Matte:Weight 7	E*	[0 to 300 / **100** / 1%/step]
2-645-128	Matte:Weight 8	E*	[0 to 300 / **100** / 1%/step]
2-645-155	OHP:Weight 5	E*	[0 to 300 / **100** / 1%/step]

2-645-161	Transluc:Weight 1	E*	[0 to 300 / **100** / 1%/step]
2-645-175	Envelope:Weight 5	E*	[0 to 300 / **100** / 1%/step]
2-645-176	Envelope:Weight 6	E*	[0 to 300 / **100** / 1%/step]
2-645-177	Envelope:Weight 7	E*	[0 to 300 / **100** / 1%/step]
2-645-178	Envelope:Weight 8	E*	[0 to 300 / **100** / 1%/step]

2646	**[Trail Edge Corr Switch:2nd]** Trailing edge correct switch timing of each paper type/weight.		
2-646-100	Plain:Weight 0	E*	[0 to 30 / **5** / 1mm/step]
2-646-101	Plain:Weight 1	E*	[0 to 30 / **5** / 1mm/step]
2-646-102	Plain:Weight 2	E*	[0 to 30 / **5** / 1mm/step]
2-646-103	Plain:Weight 3	E*	[0 to 30 / **5** / 1mm/step]
2-646-104	Plain:Weight 4	E*	[0 to 30 / **5** / 1mm/step]
2-646-105	Plain:Weight 5	E*	[0 to 30 / **5** / 1mm/step]
2-646-106	Plain:Weight 6	E*	[0 to 30 / **5** / 1mm/step]
2-646-107	Plain:Weight 7	E*	[0 to 30 / **5** / 1mm/step]
2-646-108	Plain:Weight 8	E*	[0 to 30 / **5** / 1mm/step]
2-646-110	Glossy:Weight 0	E*	[0 to 30 / **5** / 1mm/step]
2-646-111	Glossy:Weight 1	E*	[0 to 30 / **5** / 1mm/step]
2-646-112	Glossy:Weight 2	E*	[0 to 30 / **5** / 1mm/step]
2-646-113	Glossy:Weight 3	E*	[0 to 30 / **5** / 1mm/step]
2-646-114	Glossy:Weight 4	E*	[0 to 30 / **5** / 1mm/step]
2-646-115	Glossy:Weight 5	E*	[0 to 30 / **5** / 1mm/step]
2-646-116	Glossy:Weight 6	E*	[0 to 30 / **5** / 1mm/step]
2-646-117	Glossy:Weight 7	E*	[0 to 30 / **5** / 1mm/step]
2-646-118	Glossy:Weight 8	E*	[0 to 30 / **5** / 1mm/step]

2-646-120	Matte:Weight 0	E*	[0 to 30 / **5** / 1mm/step]
2-646-121	Matte:Weight 1	E*	[0 to 30 / **5** / 1mm/step]
2-646-122	Matte:Weight 2	E*	[0 to 30 / **5** / 1mm/step]
2-646-123	Matte:Weight 3	E*	[0 to 30 / **5** / 1mm/step]
2-646-124	Matte:Weight 4	E*	[0 to 30 / **5** / 1mm/step]
2-646-125	Matte:Weight 5	E*	[0 to 30 / **5** / 1mm/step]
2-646-126	Matte:Weight 6	E*	[0 to 30 / **5** / 1mm/step]
2-646-127	Matte:Weight 7	E*	[0 to 30 / **5** / 1mm/step]
2-646-128	Matte:Weight 8	E*	[0 to 30 / **5** / 1mm/step]
2-646-155	OHP:Weight 5	E*	[0 to 30 / **5** / 1mm/step]
2-646-161	Transluc:Weight 1	E*	[0 to 30 / **5** / 1mm/step]
2-646-175	Envelope:Weight 5	E*	[0 to 30 / **5** / 1mm/step]
2-646-176	Envelope:Weight 6	E*	[0 to 30 / **5** / 1mm/step]
2-646-177	Envelope:Weight 7	E*	[0 to 30 / **5** / 1mm/step]
2-646-178	Envelope:Weight 8	E*	[0 to 30 / **5** / 1mm/step]

2651	**[Leading Edge On Timing:2nd]** Leading edge correct switch ON timing for each paper type/weight.		
2-651-100	Plain:Weight 0	E*	[0 to 30 / **10** / 1ms/step]
2-651-101	Plain:Weight 1	E*	[0 to 30 / **10** / 1ms/step]
2-651-102	Plain:Weight 2	E*	[0 to 30 / **10** / 1ms/step]
2-651-103	Plain:Weight 3	E*	[0 to 30 / **10** / 1ms/step]
2-651-104	Plain:Weight 4	E*	[0 to 30 / **10** / 1ms/step]
2-651-105	Plain:Weight 5	E*	[0 to 30 / **10** / 1ms/step]
2-651-106	Plain:Weight 6	E*	[0 to 30 / **10** / 1ms/step]
2-651-107	Plain:Weight 7	E*	[0 to 30 / **10** / 1ms/step]

2-651-108	Plain:Weight 8	E*	[0 to 30 / **10** / 1ms/step]
2-651-110	Glossy:Weight 0	E*	[0 to 30 / **10** / 1ms/step]
2-651-111	Glossy:Weight 1	E*	[0 to 30 / **10** / 1ms/step]
2-651-112	Glossy:Weight 2	E*	[0 to 30 / **10** / 1ms/step]
2-651-113	Glossy:Weight 3	E*	[0 to 30 / **10** / 1ms/step]
2-651-114	Glossy:Weight 4	E*	[0 to 30 / **10** / 1ms/step]
2-651-115	Glossy:Weight 5	E*	[0 to 30 / **10** / 1ms/step]
2-651-116	Glossy:Weight 6	E*	[0 to 30 / **10** / 1ms/step]
2-651-117	Glossy:Weight 7	E*	[0 to 30 / **10** / 1ms/step]
2-651-118	Glossy:Weight 8	E*	[0 to 30 / **10** / 1ms/step]
2-651-120	Matte:Weight 0	E*	[0 to 30 / **10** / 1ms/step]
2-651-121	Matte:Weight 1	E*	[0 to 30 / **10** / 1ms/step]
2-651-122	Matte:Weight 2	E*	[0 to 30 / **10** / 1ms/step]
2-651-123	Matte:Weight 3	E*	[0 to 30 / **10** / 1ms/step]
2-651-124	Matte:Weight 4	E*	[0 to 30 / **10** / 1ms/step]
2-651-125	Matte:Weight 5	E*	[0 to 30 / **10** / 1ms/step]
2-651-126	Matte:Weight 6	E*	[0 to 30 / **10** / 1ms/step]
2-651-127	Matte:Weight 7	E*	[0 to 30 / **10** / 1ms/step]
2-651-128	Matte:Weight 8	E*	[0 to 30 / **10** / 1ms/step]
2-651-155	OHP:Weight 5	E*	[0 to 30 / **10** / 1ms/step]
2-651-161	Transluc:Weight 1	E*	[0 to 30 / **10** / 1ms/step]
2-651-175	Envelope:Weight 5	E*	[0 to 30 / **10** / 1ms/step]
2-651-176	Envelope:Weight 6	E*	[0 to 30 / **10** / 1ms/step]
2-651-177	Envelope:Weight 7	E*	[0 to 30 / **10** / 1ms/step]
2-651-178	Envelope:Weight 8	E*	[0 to 30 / **10** / 1ms/step]

2652	**[Trail Edge Off Timing:2nd]** Trailing edge correct switch Off timing for each paper type/weight.		
2-652-100	Plain:Weight 0	E*	[0 to 30 / **0** / 1ms/step]
2-652-101	Plain:Weight 1	E*	[0 to 30 / **0** / 1ms/step]
2-652-102	Plain:Weight 2	E*	[0 to 30 / **0** / 1ms/step]
2-652-103	Plain:Weight 3	E*	[0 to 30 / **0** / 1ms/step]
2-652-104	Plain:Weight 4	E*	[0 to 30 / **0** / 1ms/step]
2-652-105	Plain:Weight 5	E*	[0 to 30 / **0** / 1ms/step]
2-652-106	Plain:Weight 6	E*	[0 to 30 / **0** / 1ms/step]
2-652-107	Plain:Weight 7	E*	[0 to 30 / **0** / 1ms/step]
2-652-108	Plain:Weight 8	E*	[0 to 30 / **0** / 1ms/step]
2-652-110	Glossy:Weight 0	E*	[0 to 30 / **0** / 1ms/step]
2-652-111	Glossy:Weight 1	E*	[0 to 30 / **0** / 1ms/step]
2-652-112	Glossy:Weight 2	E*	[0 to 30 / **0** / 1ms/step]
2-652-113	Glossy:Weight 3	E*	[0 to 30 / **0** / 1ms/step]
2-652-114	Glossy:Weight 4	E*	[0 to 30 / **0** / 1ms/step]
2-652-115	Glossy:Weight 5	E*	[0 to 30 / **0** / 1ms/step]
2-652-116	Glossy:Weight 6	E*	[0 to 30 / **0** / 1ms/step]
2-652-117	Glossy:Weight 7	E*	[0 to 30 / **0** / 1ms/step]
2-652-118	Glossy:Weight 8	E*	[0 to 30 / **0** / 1ms/step]
2-652-120	Matte:Weight 0	E*	[0 to 30 / **0** / 1ms/step]
2-652-121	Matte:Weight 1	E*	[0 to 30 / **0** / 1ms/step]
2-652-122	Matte:Weight 2	E*	[0 to 30 / **0** / 1ms/step]
2-652-123	Matte:Weight 3	E*	[0 to 30 / **0** / 1ms/step]
2-652-124	Matte:Weight 4	E*	[0 to 30 / **0** / 1ms/step]
2-652-125	Matte:Weight 5	E*	[0 to 30 / **0** / 1ms/step]

2-652-126	Matte:Weight 6	E*	[0 to 30 / **0** / 1ms/step]
2-652-127	Matte:Weight 7	E*	[0 to 30 / **0** / 1ms/step]
2-652-128	Matte:Weight 8	E*	[0 to 30 / **0** / 1ms/step]
2-652-155	OHP:Weight 5	E*	[0 to 30 / **0** / 1ms/step]
2-652-161	Transluc:Weight 1	E*	[0 to 30 / **0** / 1ms/step]
2-652-175	Envelope:Weight 5	E*	[0 to 30 / **0** / 1ms/step]
2-652-176	Envelope:Weight 6	E*	[0 to 30 / **0** / 1ms/step]
2-652-177	Envelope:Weight 7	E*	[0 to 30 / **0** / 1ms/step]
2-652-178	Envelope:Weight 8	E*	[0 to 30 / **0** / 1ms/step]

2671	**[Cleaning BF/AF JOB]** -		
2-671-001	Value	E*	[0 to 1000 / **500** / 1V/step] JOB front and rear cleaning positive output value
2-671-002	Coefficient	E*	[10 to 995 / **100** / 1%/step] JOB front and rear cleaning negative output correct coefficient.
2-671-003	Positive	E*	[0 to 1000 / **1000** / 1V/step] Movement1 rear cleaning positive output
2-671-004	Negative	E*	[10 to 995 / **100** / 1%/step] JOB front and rear negative output correct coefficient.
2-671-005	Posi:prevention	E*	[0 to 1000 / **500** / 1V/step] Paper transfer roller stains prevent positive output value.
2-671-011	CL Recip:Before Trans	E*	[0 to 99 / **2** / 1kai/step] The number of image area electric current front cleaning round trip.

2-671-012	CL Recip:After Trans	E*	[0 to 99 / **1** / 1kai/step] The number of round trip cleaning Image area after electric current.
2-671-013	CL Recip:Power On	E*	[0 to 99 / **9** / 1kai/step] Power supply ON: cleaning round trip Count at recovery (after JAM/SC)

2780	**[Bottle1OPEN/CLOSE]** -		
2780-001	OPEN/CLOSE	E	[ON or OFF / **-** / -] Opens and shuts cap of bottle1.

2780	**[Bottle2OPEN/CLOSE]** -		
2780-002	OPEN/CLOSE	E	[ON or OFF / **-** / -] Opens and shuts cap of bottle2.

2810	**[Clear blurred img]** -		
2-810-001	select clear blurred img mode	E*	[0 to 2 / **1** / 1/step] 0: Clear blurred img always on 1: Clear blurred img on 2: Clear blurred img always off
2-810-002	execute time	E*	[60 to 360 / **120** / 1sec/step]
2-810-003	execute environment	E*	[0 to 100 / **13** / 1g/m3/step]
2-810-004	Execute	E	[- / **-** / -] [Execute]
2-810-005	Non-use Time	E*	[0 to 1440 / **360** / 1min/step]
2-810-006	Abs Humidity Disp	E*	[0 to 63 / **13** / 1g/m3/step]

2811	**[PTR Current:Side1]** -

2-811-001	Custom Paper 001	E	[-400 to 0 / **-100** / 1uA/step]
2-811-002	Custom Paper 002	E	[-400 to 0 / **-100** / 1uA/step]
2-811-003	Custom Paper 003	E	[-400 to 0 / **-100** / 1uA/step]
2-811-004	Custom Paper 004	E	[-400 to 0 / **-100** / 1uA/step]
2-811-005	Custom Paper 005	E	[-400 to 0 / **-100** / 1uA/step]
2-811-006	Custom Paper 006	E	[-400 to 0 / **-100** / 1uA/step]
2-811-007	Custom Paper 007	E	[-400 to 0 / **-100** / 1uA/step]
2-811-008	Custom Paper 008	E	[-400 to 0 / **-100** / 1uA/step]
2-811-009	Custom Paper 009	E	[-400 to 0 / **-100** / 1uA/step]
2-811-010	Custom Paper 010	E	[-400 to 0 / **-100** / 1uA/step]
2-811-011	Custom Paper 011	E	[-400 to 0 / **-100** / 1uA/step]
2-811-012	Custom Paper 012	E	[-400 to 0 / **-100** / 1uA/step]
2-811-013	Custom Paper 013	E	[-400 to 0 / **-100** / 1uA/step]
2-811-014	Custom Paper 014	E	[-400 to 0 / **-100** / 1uA/step]
2-811-015	Custom Paper 015	E	[-400 to 0 / **-100** / 1uA/step]
2-811-016	Custom Paper 016	E	[-400 to 0 / **-100** / 1uA/step]
2-811-017	Custom Paper 017	E	[-400 to 0 / **-100** / 1uA/step]
2-811-018	Custom Paper 018	E	[-400 to 0 / **-100** / 1uA/step]
2-811-019	Custom Paper 019	E	[-400 to 0 / **-100** / 1uA/step]
2-811-020	Custom Paper 020	E	[-400 to 0 / **-100** / 1uA/step]
2-811-021	Custom Paper 021	E	[-400 to 0 / **-100** / 1uA/step]
2-811-022	Custom Paper 022	E	[-400 to 0 / **-100** / 1uA/step]
2-811-023	Custom Paper 023	E	[-400 to 0 / **-100** / 1uA/step]
2-811-024	Custom Paper 024	E	[-400 to 0 / **-100** / 1uA/step]
2-811-025	Custom Paper 025	E	[-400 to 0 / **-100** / 1uA/step]
2-811-026	Custom Paper 026	E	[-400 to 0 / **-100** / 1uA/step]

2-811-027	Custom Paper 027	E	[-400 to 0 / **-100** / 1uA/step]
2-811-028	Custom Paper 028	E	[-400 to 0 / **-100** / 1uA/step]
2-811-029	Custom Paper 029	E	[-400 to 0 / **-100** / 1uA/step]
2-811-030	Custom Paper 030	E	[-400 to 0 / **-100** / 1uA/step]
2-811-031	Custom Paper 031	E	[-400 to 0 / **-100** / 1uA/step]
2-811-032	Custom Paper 032	E	[-400 to 0 / **-100** / 1uA/step]
2-811-033	Custom Paper 033	E	[-400 to 0 / **-100** / 1uA/step]
2-811-034	Custom Paper 034	E	[-400 to 0 / **-100** / 1uA/step]
2-811-035	Custom Paper 035	E	[-400 to 0 / **-100** / 1uA/step]
2-811-036	Custom Paper 036	E	[-400 to 0 / **-100** / 1uA/step]
2-811-037	Custom Paper 037	E	[-400 to 0 / **-100** / 1uA/step]
2-811-038	Custom Paper 038	E	[-400 to 0 / **-100** / 1uA/step]
2-811-039	Custom Paper 039	E	[-400 to 0 / **-100** / 1uA/step]
2-811-040	Custom Paper 040	E	[-400 to 0 / **-100** / 1uA/step]
2-811-041	Custom Paper 041	E	[-400 to 0 / **-100** / 1uA/step]
2-811-042	Custom Paper 042	E	[-400 to 0 / **-100** / 1uA/step]
2-811-043	Custom Paper 043	E	[-400 to 0 / **-100** / 1uA/step]
2-811-044	Custom Paper 044	E	[-400 to 0 / **-100** / 1uA/step]
2-811-045	Custom Paper 045	E	[-400 to 0 / **-100** / 1uA/step]
2-811-046	Custom Paper 046	E	[-400 to 0 / **-100** / 1uA/step]
2-811-047	Custom Paper 047	E	[-400 to 0 / **-100** / 1uA/step]
2-811-048	Custom Paper 048	E	[-400 to 0 / **-100** / 1uA/step]
2-811-049	Custom Paper 049	E	[-400 to 0 / **-100** / 1uA/step]
2-811-050	Custom Paper 050	E	[-400 to 0 / **-100** / 1uA/step]
2-811-051	Custom Paper 051	E	[-400 to 0 / **-100** / 1uA/step]
2-811-052	Custom Paper 052	E	[-400 to 0 / **-100** / 1uA/step]

2-811-053	Custom Paper 053	E	[-400 to 0 / **-100** / 1uA/step]
2-811-054	Custom Paper 054	E	[-400 to 0 / **-100** / 1uA/step]
2-811-055	Custom Paper 055	E	[-400 to 0 / **-100** / 1uA/step]
2-811-056	Custom Paper 056	E	[-400 to 0 / **-100** / 1uA/step]
2-811-057	Custom Paper 057	E	[-400 to 0 / **-100** / 1uA/step]
2-811-058	Custom Paper 058	E	[-400 to 0 / **-100** / 1uA/step]
2-811-059	Custom Paper 059	E	[-400 to 0 / **-100** / 1uA/step]
2-811-060	Custom Paper 060	E	[-400 to 0 / **-100** / 1uA/step]
2-811-061	Custom Paper 061	E	[-400 to 0 / **-100** / 1uA/step]
2-811-062	Custom Paper 062	E	[-400 to 0 / **-100** / 1uA/step]
2-811-063	Custom Paper 063	E	[-400 to 0 / **-100** / 1uA/step]
2-811-064	Custom Paper 064	E	[-400 to 0 / **-100** / 1uA/step]
2-811-065	Custom Paper 065	E	[-400 to 0 / **-100** / 1uA/step]
2-811-066	Custom Paper 066	E	[-400 to 0 / **-100** / 1uA/step]
2-811-067	Custom Paper 067	E	[-400 to 0 / **-100** / 1uA/step]
2-811-068	Custom Paper 068	E	[-400 to 0 / **-100** / 1uA/step]
2-811-069	Custom Paper 069	E	[-400 to 0 / **-100** / 1uA/step]
2-811-070	Custom Paper 070	E	[-400 to 0 / **-100** / 1uA/step]
2-811-071	Custom Paper 071	E	[-400 to 0 / **-100** / 1uA/step]
2-811-072	Custom Paper 072	E	[-400 to 0 / **-100** / 1uA/step]
2-811-073	Custom Paper 073	E	[-400 to 0 / **-100** / 1uA/step]
2-811-074	Custom Paper 074	E	[-400 to 0 / **-100** / 1uA/step]
2-811-075	Custom Paper 075	E	[-400 to 0 / **-100** / 1uA/step]
2-811-076	Custom Paper 076	E	[-400 to 0 / **-100** / 1uA/step]
2-811-077	Custom Paper 077	E	[-400 to 0 / **-100** / 1uA/step]
2-811-078	Custom Paper 078	E	[-400 to 0 / **-100** / 1uA/step]

2-811-079	Custom Paper 079	E	[-400 to 0 / **-100** / 1uA/step]
2-811-080	Custom Paper 080	E	[-400 to 0 / **-100** / 1uA/step]
2-811-081	Custom Paper 081	E	[-400 to 0 / **-100** / 1uA/step]
2-811-082	Custom Paper 082	E	[-400 to 0 / **-100** / 1uA/step]
2-811-083	Custom Paper 083	E	[-400 to 0 / **-100** / 1uA/step]
2-811-084	Custom Paper 084	E	[-400 to 0 / **-100** / 1uA/step]
2-811-085	Custom Paper 085	E	[-400 to 0 / **-100** / 1uA/step]
2-811-086	Custom Paper 086	E	[-400 to 0 / **-100** / 1uA/step]
2-811-087	Custom Paper 087	E	[-400 to 0 / **-100** / 1uA/step]
2-811-088	Custom Paper 088	E	[-400 to 0 / **-100** / 1uA/step]
2-811-089	Custom Paper 089	E	[-400 to 0 / **-100** / 1uA/step]
2-811-090	Custom Paper 090	E	[-400 to 0 / **-100** / 1uA/step]
2-811-091	Custom Paper 091	E	[-400 to 0 / **-100** / 1uA/step]
2-811-092	Custom Paper 092	E	[-400 to 0 / **-100** / 1uA/step]
2-811-093	Custom Paper 093	E	[-400 to 0 / **-100** / 1uA/step]
2-811-094	Custom Paper 094	E	[-400 to 0 / **-100** / 1uA/step]
2-811-095	Custom Paper 095	E	[-400 to 0 / **-100** / 1uA/step]
2-811-096	Custom Paper 096	E	[-400 to 0 / **-100** / 1uA/step]
2-811-097	Custom Paper 097	E	[-400 to 0 / **-100** / 1uA/step]
2-811-098	Custom Paper 098	E	[-400 to 0 / **-100** / 1uA/step]
2-811-099	Custom Paper 099	E	[-400 to 0 / **-100** / 1uA/step]
2-811-100	Custom Paper 100	E	[-400 to 0 / **-100** / 1uA/step]

2812	**[PTR Current:Side2]** -		
2-812-001	Custom Paper 001	E	[-400 to 0 / **-100** / 1uA/step]

2-812-002	Custom Paper 002	E	[-400 to 0 / **-100** / 1uA/step]
2-812-003	Custom Paper 003	E	[-400 to 0 / **-100** / 1uA/step]
2-812-004	Custom Paper 004	E	[-400 to 0 / **-100** / 1uA/step]
2-812-005	Custom Paper 005	E	[-400 to 0 / **-100** / 1uA/step]
2-812-006	Custom Paper 006	E	[-400 to 0 / **-100** / 1uA/step]
2-812-007	Custom Paper 007	E	[-400 to 0 / **-100** / 1uA/step]
2-812-008	Custom Paper 008	E	[-400 to 0 / **-100** / 1uA/step]
2-812-009	Custom Paper 009	E	[-400 to 0 / **-100** / 1uA/step]
2-812-010	Custom Paper 010	E	[-400 to 0 / **-100** / 1uA/step]
2-812-011	Custom Paper 011	E	[-400 to 0 / **-100** / 1uA/step]
2-812-012	Custom Paper 012	E	[-400 to 0 / **-100** / 1uA/step]
2-812-013	Custom Paper 013	E	[-400 to 0 / **-100** / 1uA/step]
2-812-014	Custom Paper 014	E	[-400 to 0 / **-100** / 1uA/step]
2-812-015	Custom Paper 015	E	[-400 to 0 / **-100** / 1uA/step]
2-812-016	Custom Paper 016	E	[-400 to 0 / **-100** / 1uA/step]
2-812-017	Custom Paper 017	E	[-400 to 0 / **-100** / 1uA/step]
2-812-018	Custom Paper 018	E	[-400 to 0 / **-100** / 1uA/step]
2-812-019	Custom Paper 019	E	[-400 to 0 / **-100** / 1uA/step]
2-812-020	Custom Paper 020	E	[-400 to 0 / **-100** / 1uA/step]
2-812-021	Custom Paper 021	E	[-400 to 0 / **-100** / 1uA/step]
2-812-022	Custom Paper 022	E	[-400 to 0 / **-100** / 1uA/step]
2-812-023	Custom Paper 023	E	[-400 to 0 / **-100** / 1uA/step]
2-812-024	Custom Paper 024	E	[-400 to 0 / **-100** / 1uA/step]
2-812-025	Custom Paper 025	E	[-400 to 0 / **-100** / 1uA/step]
2-812-026	Custom Paper 026	E	[-400 to 0 / **-100** / 1uA/step]
2-812-027	Custom Paper 027	E	[-400 to 0 / **-100** / 1uA/step]

2-812-028	Custom Paper 028	E	[-400 to 0 / **-100** / 1uA/step]
2-812-029	Custom Paper 029	E	[-400 to 0 / **-100** / 1uA/step]
2-812-030	Custom Paper 030	E	[-400 to 0 / **-100** / 1uA/step]
2-812-031	Custom Paper 031	E	[-400 to 0 / **-100** / 1uA/step]
2-812-032	Custom Paper 032	E	[-400 to 0 / **-100** / 1uA/step]
2-812-033	Custom Paper 033	E	[-400 to 0 / **-100** / 1uA/step]
2-812-034	Custom Paper 034	E	[-400 to 0 / **-100** / 1uA/step]
2-812-035	Custom Paper 035	E	[-400 to 0 / **-100** / 1uA/step]
2-812-036	Custom Paper 036	E	[-400 to 0 / **-100** / 1uA/step]
2-812-037	Custom Paper 037	E	[-400 to 0 / **-100** / 1uA/step]
2-812-038	Custom Paper 038	E	[-400 to 0 / **-100** / 1uA/step]
2-812-039	Custom Paper 039	E	[-400 to 0 / **-100** / 1uA/step]
2-812-040	Custom Paper 040	E	[-400 to 0 / **-100** / 1uA/step]
2-812-041	Custom Paper 041	E	[-400 to 0 / **-100** / 1uA/step]
2-812-042	Custom Paper 042	E	[-400 to 0 / **-100** / 1uA/step]
2-812-043	Custom Paper 043	E	[-400 to 0 / **-100** / 1uA/step]
2-812-044	Custom Paper 044	E	[-400 to 0 / **-100** / 1uA/step]
2-812-045	Custom Paper 045	E	[-400 to 0 / **-100** / 1uA/step]
2-812-046	Custom Paper 046	E	[-400 to 0 / **-100** / 1uA/step]
2-812-047	Custom Paper 047	E	[-400 to 0 / **-100** / 1uA/step]
2-812-048	Custom Paper 048	E	[-400 to 0 / **-100** / 1uA/step]
2-812-049	Custom Paper 049	E	[-400 to 0 / **-100** / 1uA/step]
2-812-050	Custom Paper 050	E	[-400 to 0 / **-100** / 1uA/step]
2-812-051	Custom Paper 051	E	[-400 to 0 / **-100** / 1uA/step]
2-812-052	Custom Paper 052	E	[-400 to 0 / **-100** / 1uA/step]
2-812-053	Custom Paper 053	E	[-400 to 0 / **-100** / 1uA/step]

2-812-054	Custom Paper 054	E	[-400 to 0 / **-100** / 1uA/step]
2-812-055	Custom Paper 055	E	[-400 to 0 / **-100** / 1uA/step]
2-812-056	Custom Paper 056	E	[-400 to 0 / **-100** / 1uA/step]
2-812-057	Custom Paper 057	E	[-400 to 0 / **-100** / 1uA/step]
2-812-058	Custom Paper 058	E	[-400 to 0 / **-100** / 1uA/step]
2-812-059	Custom Paper 059	E	[-400 to 0 / **-100** / 1uA/step]
2-812-060	Custom Paper 060	E	[-400 to 0 / **-100** / 1uA/step]
2-812-061	Custom Paper 061	E	[-400 to 0 / **-100** / 1uA/step]
2-812-062	Custom Paper 062	E	[-400 to 0 / **-100** / 1uA/step]
2-812-063	Custom Paper 063	E	[-400 to 0 / **-100** / 1uA/step]
2-812-064	Custom Paper 064	E	[-400 to 0 / **-100** / 1uA/step]
2-812-065	Custom Paper 065	E	[-400 to 0 / **-100** / 1uA/step]
2-812-066	Custom Paper 066	E	[-400 to 0 / **-100** / 1uA/step]
2-812-067	Custom Paper 067	E	[-400 to 0 / **-100** / 1uA/step]
2-812-068	Custom Paper 068	E	[-400 to 0 / **-100** / 1uA/step]
2-812-069	Custom Paper 069	E	[-400 to 0 / **-100** / 1uA/step]
2-812-070	Custom Paper 070	E	[-400 to 0 / **-100** / 1uA/step]
2-812-071	Custom Paper 071	E	[-400 to 0 / **-100** / 1uA/step]
2-812-072	Custom Paper 072	E	[-400 to 0 / **-100** / 1uA/step]
2-812-073	Custom Paper 073	E	[-400 to 0 / **-100** / 1uA/step]
2-812-074	Custom Paper 074	E	[-400 to 0 / **-100** / 1uA/step]
2-812-075	Custom Paper 075	E	[-400 to 0 / **-100** / 1uA/step]
2-812-076	Custom Paper 076	E	[-400 to 0 / **-100** / 1uA/step]
2-812-077	Custom Paper 077	E	[-400 to 0 / **-100** / 1uA/step]
2-812-078	Custom Paper 078	E	[-400 to 0 / **-100** / 1uA/step]
2-812-079	Custom Paper 079	E	[-400 to 0 / **-100** / 1uA/step]

2-812-080	Custom Paper 080	E	[-400 to 0 / **-100** / 1uA/step]
2-812-081	Custom Paper 081	E	[-400 to 0 / **-100** / 1uA/step]
2-812-082	Custom Paper 082	E	[-400 to 0 / **-100** / 1uA/step]
2-812-083	Custom Paper 083	E	[-400 to 0 / **-100** / 1uA/step]
2-812-084	Custom Paper 084	E	[-400 to 0 / **-100** / 1uA/step]
2-812-085	Custom Paper 085	E	[-400 to 0 / **-100** / 1uA/step]
2-812-086	Custom Paper 086	E	[-400 to 0 / **-100** / 1uA/step]
2-812-087	Custom Paper 087	E	[-400 to 0 / **-100** / 1uA/step]
2-812-088	Custom Paper 088	E	[-400 to 0 / **-100** / 1uA/step]
2-812-089	Custom Paper 089	E	[-400 to 0 / **-100** / 1uA/step]
2-812-090	Custom Paper 090	E	[-400 to 0 / **-100** / 1uA/step]
2-812-091	Custom Paper 091	E	[-400 to 0 / **-100** / 1uA/step]
2-812-092	Custom Paper 092	E	[-400 to 0 / **-100** / 1uA/step]
2-812-093	Custom Paper 093	E	[-400 to 0 / **-100** / 1uA/step]
2-812-094	Custom Paper 094	E	[-400 to 0 / **-100** / 1uA/step]
2-812-095	Custom Paper 095	E	[-400 to 0 / **-100** / 1uA/step]
2-812-096	Custom Paper 096	E	[-400 to 0 / **-100** / 1uA/step]
2-812-097	Custom Paper 097	E	[-400 to 0 / **-100** / 1uA/step]
2-812-098	Custom Paper 098	E	[-400 to 0 / **-100** / 1uA/step]
2-812-099	Custom Paper 099	E	[-400 to 0 / **-100** / 1uA/step]
2-812-100	Custom Paper 100	E	[-400 to 0 / **-100** / 1uA/step]

2813	**[Leading Edge Corr Coef:2nd]** -		
2-813-001	Custom Paper 001	E	[0 to 300 / **140** / 1%/step]
2-813-002	Custom Paper 002	E	[0 to 300 / **140** / 1%/step]

2-813-003	Custom Paper 003	E	[0 to 300 / **140** / 1%/step]
2-813-004	Custom Paper 004	E	[0 to 300 / **140** / 1%/step]
2-813-005	Custom Paper 005	E	[0 to 300 / **140** / 1%/step]
2-813-006	Custom Paper 006	E	[0 to 300 / **140** / 1%/step]
2-813-007	Custom Paper 007	E	[0 to 300 / **140** / 1%/step]
2-813-008	Custom Paper 008	E	[0 to 300 / **140** / 1%/step]
2-813-009	Custom Paper 009	E	[0 to 300 / **140** / 1%/step]
2-813-010	Custom Paper 010	E	[0 to 300 / **140** / 1%/step]
2-813-011	Custom Paper 011	E	[0 to 300 / **140** / 1%/step]
2-813-012	Custom Paper 012	E	[0 to 300 / **140** / 1%/step]
2-813-013	Custom Paper 013	E	[0 to 300 / **140** / 1%/step]
2-813-014	Custom Paper 014	E	[0 to 300 / **140** / 1%/step]
2-813-015	Custom Paper 015	E	[0 to 300 / **140** / 1%/step]
2-813-016	Custom Paper 016	E	[0 to 300 / **140** / 1%/step]
2-813-017	Custom Paper 017	E	[0 to 300 / **140** / 1%/step]
2-813-018	Custom Paper 018	E	[0 to 300 / **140** / 1%/step]
2-813-019	Custom Paper 019	E	[0 to 300 / **140** / 1%/step]
2-813-020	Custom Paper 020	E	[0 to 300 / **140** / 1%/step]
2-813-021	Custom Paper 021	E	[0 to 300 / **140** / 1%/step]
2-813-022	Custom Paper 022	E	[0 to 300 / **140** / 1%/step]
2-813-023	Custom Paper 023	E	[0 to 300 / **140** / 1%/step]
2-813-024	Custom Paper 024	E	[0 to 300 / **140** / 1%/step]
2-813-025	Custom Paper 025	E	[0 to 300 / **140** / 1%/step]
2-813-026	Custom Paper 026	E	[0 to 300 / **140** / 1%/step]
2-813-027	Custom Paper 027	E	[0 to 300 / **140** / 1%/step]
2-813-028	Custom Paper 028	E	[0 to 300 / **140** / 1%/step]

2-813-029	Custom Paper 029	E	[0 to 300 / **140** / 1%/step]
2-813-030	Custom Paper 030	E	[0 to 300 / **140** / 1%/step]
2-813-031	Custom Paper 031	E	[0 to 300 / **140** / 1%/step]
2-813-032	Custom Paper 032	E	[0 to 300 / **140** / 1%/step]
2-813-033	Custom Paper 033	E	[0 to 300 / **140** / 1%/step]
2-813-034	Custom Paper 034	E	[0 to 300 / **140** / 1%/step]
2-813-035	Custom Paper 035	E	[0 to 300 / **140** / 1%/step]
2-813-036	Custom Paper 036	E	[0 to 300 / **140** / 1%/step]
2-813-037	Custom Paper 037	E	[0 to 300 / **140** / 1%/step]
2-813-038	Custom Paper 038	E	[0 to 300 / **140** / 1%/step]
2-813-039	Custom Paper 039	E	[0 to 300 / **140** / 1%/step]
2-813-040	Custom Paper 040	E	[0 to 300 / **140** / 1%/step]
2-813-041	Custom Paper 041	E	[0 to 300 / **140** / 1%/step]
2-813-042	Custom Paper 042	E	[0 to 300 / **140** / 1%/step]
2-813-043	Custom Paper 043	E	[0 to 300 / **140** / 1%/step]
2-813-044	Custom Paper 044	E	[0 to 300 / **140** / 1%/step]
2-813-045	Custom Paper 045	E	[0 to 300 / **140** / 1%/step]
2-813-046	Custom Paper 046	E	[0 to 300 / **140** / 1%/step]
2-813-047	Custom Paper 047	E	[0 to 300 / **140** / 1%/step]
2-813-048	Custom Paper 048	E	[0 to 300 / **140** / 1%/step]
2-813-049	Custom Paper 049	E	[0 to 300 / **140** / 1%/step]
2-813-050	Custom Paper 050	E	[0 to 300 / **140** / 1%/step]
2-813-051	Custom Paper 051	E	[0 to 300 / **140** / 1%/step]
2-813-052	Custom Paper 052	E	[0 to 300 / **140** / 1%/step]
2-813-053	Custom Paper 053	E	[0 to 300 / **140** / 1%/step]
2-813-054	Custom Paper 054	E	[0 to 300 / **140** / 1%/step]

2-813-055	Custom Paper 055	E	[0 to 300 / **140** / 1%/step]
2-813-056	Custom Paper 056	E	[0 to 300 / **140** / 1%/step]
2-813-057	Custom Paper 057	E	[0 to 300 / **140** / 1%/step]
2-813-058	Custom Paper 058	E	[0 to 300 / **140** / 1%/step]
2-813-059	Custom Paper 059	E	[0 to 300 / **140** / 1%/step]
2-813-060	Custom Paper 060	E	[0 to 300 / **140** / 1%/step]
2-813-061	Custom Paper 061	E	[0 to 300 / **140** / 1%/step]
2-813-062	Custom Paper 062	E	[0 to 300 / **140** / 1%/step]
2-813-063	Custom Paper 063	E	[0 to 300 / **140** / 1%/step]
2-813-064	Custom Paper 064	E	[0 to 300 / **140** / 1%/step]
2-813-065	Custom Paper 065	E	[0 to 300 / **140** / 1%/step]
2-813-066	Custom Paper 066	E	[0 to 300 / **140** / 1%/step]
2-813-067	Custom Paper 067	E	[0 to 300 / **140** / 1%/step]
2-813-068	Custom Paper 068	E	[0 to 300 / **140** / 1%/step]
2-813-069	Custom Paper 069	E	[0 to 300 / **140** / 1%/step]
2-813-070	Custom Paper 070	E	[0 to 300 / **140** / 1%/step]
2-813-071	Custom Paper 071	E	[0 to 300 / **140** / 1%/step]
2-813-072	Custom Paper 072	E	[0 to 300 / **140** / 1%/step]
2-813-073	Custom Paper 073	E	[0 to 300 / **140** / 1%/step]
2-813-074	Custom Paper 074	E	[0 to 300 / **140** / 1%/step]
2-813-075	Custom Paper 075	E	[0 to 300 / **140** / 1%/step]
2-813-076	Custom Paper 076	E	[0 to 300 / **140** / 1%/step]
2-813-077	Custom Paper 077	E	[0 to 300 / **140** / 1%/step]
2-813-078	Custom Paper 078	E	[0 to 300 / **140** / 1%/step]
2-813-079	Custom Paper 079	E	[0 to 300 / **140** / 1%/step]
2-813-080	Custom Paper 080	E	[0 to 300 / **140** / 1%/step]

2-813-081	Custom Paper 081	E	[0 to 300 / **140** / 1%/step]
2-813-082	Custom Paper 082	E	[0 to 300 / **140** / 1%/step]
2-813-083	Custom Paper 083	E	[0 to 300 / **140** / 1%/step]
2-813-084	Custom Paper 084	E	[0 to 300 / **140** / 1%/step]
2-813-085	Custom Paper 085	E	[0 to 300 / **140** / 1%/step]
2-813-086	Custom Paper 086	E	[0 to 300 / **140** / 1%/step]
2-813-087	Custom Paper 087	E	[0 to 300 / **140** / 1%/step]
2-813-088	Custom Paper 088	E	[0 to 300 / **140** / 1%/step]
2-813-089	Custom Paper 089	E	[0 to 300 / **140** / 1%/step]
2-813-090	Custom Paper 090	E	[0 to 300 / **140** / 1%/step]
2-813-091	Custom Paper 091	E	[0 to 300 / **140** / 1%/step]
2-813-092	Custom Paper 092	E	[0 to 300 / **140** / 1%/step]
2-813-093	Custom Paper 093	E	[0 to 300 / **140** / 1%/step]
2-813-094	Custom Paper 094	E	[0 to 300 / **140** / 1%/step]
2-813-095	Custom Paper 095	E	[0 to 300 / **140** / 1%/step]
2-813-096	Custom Paper 096	E	[0 to 300 / **140** / 1%/step]
2-813-097	Custom Paper 097	E	[0 to 300 / **140** / 1%/step]
2-813-098	Custom Paper 098	E	[0 to 300 / **140** / 1%/step]
2-813-099	Custom Paper 099	E	[0 to 300 / **140** / 1%/step]
2-813-100	Custom Paper 100	E	[0 to 300 / **140** / 1%/step]

2814	**[Leading Edge Corr Switch:2nd]** -		
2-814-001	Custom Paper 001	E	[0 to 30 / **2** / 1mm/step]
2-814-002	Custom Paper 002	E	[0 to 30 / **2** / 1mm/step]
2-814-003	Custom Paper 003	E	[0 to 30 / **2** / 1mm/step]

2-814-004	Custom Paper 004	E	[0 to 30 / **2** / 1mm/step]
2-814-005	Custom Paper 005	E	[0 to 30 / **2** / 1mm/step]
2-814-006	Custom Paper 006	E	[0 to 30 / **2** / 1mm/step]
2-814-007	Custom Paper 007	E	[0 to 30 / **2** / 1mm/step]
2-814-008	Custom Paper 008	E	[0 to 30 / **2** / 1mm/step]
2-814-009	Custom Paper 009	E	[0 to 30 / **2** / 1mm/step]
2-814-010	Custom Paper 010	E	[0 to 30 / **2** / 1mm/step]
2-814-011	Custom Paper 011	E	[0 to 30 / **2** / 1mm/step]
2-814-012	Custom Paper 012	E	[0 to 30 / **2** / 1mm/step]
2-814-013	Custom Paper 013	E	[0 to 30 / **2** / 1mm/step]
2-814-014	Custom Paper 014	E	[0 to 30 / **2** / 1mm/step]
2-814-015	Custom Paper 015	E	[0 to 30 / **2** / 1mm/step]
2-814-016	Custom Paper 016	E	[0 to 30 / **2** / 1mm/step]
2-814-017	Custom Paper 017	E	[0 to 30 / **2** / 1mm/step]
2-814-018	Custom Paper 018	E	[0 to 30 / **2** / 1mm/step]
2-814-019	Custom Paper 019	E	[0 to 30 / **2** / 1mm/step]
2-814-020	Custom Paper 020	E	[0 to 30 / **2** / 1mm/step]
2-814-021	Custom Paper 021	E	[0 to 30 / **2** / 1mm/step]
2-814-022	Custom Paper 022	E	[0 to 30 / **2** / 1mm/step]
2-814-023	Custom Paper 023	E	[0 to 30 / **2** / 1mm/step]
2-814-024	Custom Paper 024	E	[0 to 30 / **2** / 1mm/step]
2-814-025	Custom Paper 025	E	[0 to 30 / **2** / 1mm/step]
2-814-026	Custom Paper 026	E	[0 to 30 / **2** / 1mm/step]
2-814-027	Custom Paper 027	E	[0 to 30 / **2** / 1mm/step]
2-814-028	Custom Paper 028	E	[0 to 30 / **2** / 1mm/step]
2-814-029	Custom Paper 029	E	[0 to 30 / **2** / 1mm/step]

2-814-030	Custom Paper 030	E	[0 to 30 / **2** / 1mm/step]
2-814-031	Custom Paper 031	E	[0 to 30 / **2** / 1mm/step]
2-814-032	Custom Paper 032	E	[0 to 30 / **2** / 1mm/step]
2-814-033	Custom Paper 033	E	[0 to 30 / **2** / 1mm/step]
2-814-034	Custom Paper 034	E	[0 to 30 / **2** / 1mm/step]
2-814-035	Custom Paper 035	E	[0 to 30 / **2** / 1mm/step]
2-814-036	Custom Paper 036	E	[0 to 30 / **2** / 1mm/step]
2-814-037	Custom Paper 037	E	[0 to 30 / **2** / 1mm/step]
2-814-038	Custom Paper 038	E	[0 to 30 / **2** / 1mm/step]
2-814-039	Custom Paper 039	E	[0 to 30 / **2** / 1mm/step]
2-814-040	Custom Paper 040	E	[0 to 30 / **2** / 1mm/step]
2-814-041	Custom Paper 041	E	[0 to 30 / **2** / 1mm/step]
2-814-042	Custom Paper 042	E	[0 to 30 / **2** / 1mm/step]
2-814-043	Custom Paper 043	E	[0 to 30 / **2** / 1mm/step]
2-814-044	Custom Paper 044	E	[0 to 30 / **2** / 1mm/step]
2-814-045	Custom Paper 045	E	[0 to 30 / **2** / 1mm/step]
2-814-046	Custom Paper 046	E	[0 to 30 / **2** / 1mm/step]
2-814-047	Custom Paper 047	E	[0 to 30 / **2** / 1mm/step]
2-814-048	Custom Paper 048	E	[0 to 30 / **2** / 1mm/step]
2-814-049	Custom Paper 049	E	[0 to 30 / **2** / 1mm/step]
2-814-050	Custom Paper 050	E	[0 to 30 / **2** / 1mm/step]
2-814-051	Custom Paper 051	E	[0 to 30 / **2** / 1mm/step]
2-814-052	Custom Paper 052	E	[0 to 30 / **2** / 1mm/step]
2-814-053	Custom Paper 053	E	[0 to 30 / **2** / 1mm/step]
2-814-054	Custom Paper 054	E	[0 to 30 / **2** / 1mm/step]
2-814-055	Custom Paper 055	E	[0 to 30 / **2** / 1mm/step]

2-814-056	Custom Paper 056	E	[0 to 30 / **2** / 1mm/step]
2-814-057	Custom Paper 057	E	[0 to 30 / **2** / 1mm/step]
2-814-058	Custom Paper 058	E	[0 to 30 / **2** / 1mm/step]
2-814-059	Custom Paper 059	E	[0 to 30 / **2** / 1mm/step]
2-814-060	Custom Paper 060	E	[0 to 30 / **2** / 1mm/step]
2-814-061	Custom Paper 061	E	[0 to 30 / **2** / 1mm/step]
2-814-062	Custom Paper 062	E	[0 to 30 / **2** / 1mm/step]
2-814-063	Custom Paper 063	E	[0 to 30 / **2** / 1mm/step]
2-814-064	Custom Paper 064	E	[0 to 30 / **2** / 1mm/step]
2-814-065	Custom Paper 065	E	[0 to 30 / **2** / 1mm/step]
2-814-066	Custom Paper 066	E	[0 to 30 / **2** / 1mm/step]
2-814-067	Custom Paper 067	E	[0 to 30 / **2** / 1mm/step]
2-814-068	Custom Paper 068	E	[0 to 30 / **2** / 1mm/step]
2-814-069	Custom Paper 069	E	[0 to 30 / **2** / 1mm/step]
2-814-070	Custom Paper 070	E	[0 to 30 / **2** / 1mm/step]
2-814-071	Custom Paper 071	E	[0 to 30 / **2** / 1mm/step]
2-814-072	Custom Paper 072	E	[0 to 30 / **2** / 1mm/step]
2-814-073	Custom Paper 073	E	[0 to 30 / **2** / 1mm/step]
2-814-074	Custom Paper 074	E	[0 to 30 / **2** / 1mm/step]
2-814-075	Custom Paper 075	E	[0 to 30 / **2** / 1mm/step]
2-814-076	Custom Paper 076	E	[0 to 30 / **2** / 1mm/step]
2-814-077	Custom Paper 077	E	[0 to 30 / **2** / 1mm/step]
2-814-078	Custom Paper 078	E	[0 to 30 / **2** / 1mm/step]
2-814-079	Custom Paper 079	E	[0 to 30 / **2** / 1mm/step]
2-814-080	Custom Paper 080	E	[0 to 30 / **2** / 1mm/step]
2-814-081	Custom Paper 081	E	[0 to 30 / **2** / 1mm/step]

2-814-082	Custom Paper 082	E	[0 to 30 / **2** / 1mm/step]
2-814-083	Custom Paper 083	E	[0 to 30 / **2** / 1mm/step]
2-814-084	Custom Paper 084	E	[0 to 30 / **2** / 1mm/step]
2-814-085	Custom Paper 085	E	[0 to 30 / **2** / 1mm/step]
2-814-086	Custom Paper 086	E	[0 to 30 / **2** / 1mm/step]
2-814-087	Custom Paper 087	E	[0 to 30 / **2** / 1mm/step]
2-814-088	Custom Paper 088	E	[0 to 30 / **2** / 1mm/step]
2-814-089	Custom Paper 089	E	[0 to 30 / **2** / 1mm/step]
2-814-090	Custom Paper 090	E	[0 to 30 / **2** / 1mm/step]
2-814-091	Custom Paper 091	E	[0 to 30 / **2** / 1mm/step]
2-814-092	Custom Paper 092	E	[0 to 30 / **2** / 1mm/step]
2-814-093	Custom Paper 093	E	[0 to 30 / **2** / 1mm/step]
2-814-094	Custom Paper 094	E	[0 to 30 / **2** / 1mm/step]
2-814-095	Custom Paper 095	E	[0 to 30 / **2** / 1mm/step]
2-814-096	Custom Paper 096	E	[0 to 30 / **2** / 1mm/step]
2-814-097	Custom Paper 097	E	[0 to 30 / **2** / 1mm/step]
2-814-098	Custom Paper 098	E	[0 to 30 / **2** / 1mm/step]
2-814-099	Custom Paper 099	E	[0 to 30 / **2** / 1mm/step]
2-814-100	Custom Paper 100	E	[0 to 30 / **2** / 1mm/step]

2815	**[Trail Edge Corr Coef:2nd]** -		
2-815-001	Custom Paper 001	E	[0 to 300 / **100** / 1%/step]
2-815-002	Custom Paper 002	E	[0 to 300 / **100** / 1%/step]
2-815-003	Custom Paper 003	E	[0 to 300 / **100** / 1%/step]
2-815-004	Custom Paper 004	E	[0 to 300 / **100** / 1%/step]

2-815-005	Custom Paper 005	E	[0 to 300 / **100** / 1%/step]
2-815-006	Custom Paper 006	E	[0 to 300 / **100** / 1%/step]
2-815-007	Custom Paper 007	E	[0 to 300 / **100** / 1%/step]
2-815-008	Custom Paper 008	E	[0 to 300 / **100** / 1%/step]
2-815-009	Custom Paper 009	E	[0 to 300 / **100** / 1%/step]
2-815-010	Custom Paper 010	E	[0 to 300 / **100** / 1%/step]
2-815-011	Custom Paper 011	E	[0 to 300 / **100** / 1%/step]
2-815-012	Custom Paper 012	E	[0 to 300 / **100** / 1%/step]
2-815-013	Custom Paper 013	E	[0 to 300 / **100** / 1%/step]
2-815-014	Custom Paper 014	E	[0 to 300 / **100** / 1%/step]
2-815-015	Custom Paper 015	E	[0 to 300 / **100** / 1%/step]
2-815-016	Custom Paper 016	E	[0 to 300 / **100** / 1%/step]
2-815-017	Custom Paper 017	E	[0 to 300 / **100** / 1%/step]
2-815-018	Custom Paper 018	E	[0 to 300 / **100** / 1%/step]
2-815-019	Custom Paper 019	E	[0 to 300 / **100** / 1%/step]
2-815-020	Custom Paper 020	E	[0 to 300 / **100** / 1%/step]
2-815-021	Custom Paper 021	E	[0 to 300 / **100** / 1%/step]
2-815-022	Custom Paper 022	E	[0 to 300 / **100** / 1%/step]
2-815-023	Custom Paper 023	E	[0 to 300 / **100** / 1%/step]
2-815-024	Custom Paper 024	E	[0 to 300 / **100** / 1%/step]
2-815-025	Custom Paper 025	E	[0 to 300 / **100** / 1%/step]
2-815-026	Custom Paper 026	E	[0 to 300 / **100** / 1%/step]
2-815-027	Custom Paper 027	E	[0 to 300 / **100** / 1%/step]
2-815-028	Custom Paper 028	E	[0 to 300 / **100** / 1%/step]
2-815-029	Custom Paper 029	E	[0 to 300 / **100** / 1%/step]
2-815-030	Custom Paper 030	E	[0 to 300 / **100** / 1%/step]

2-815-031	Custom Paper 031	E	[0 to 300 / **100** / 1%/step]
2-815-032	Custom Paper 032	E	[0 to 300 / **100** / 1%/step]
2-815-033	Custom Paper 033	E	[0 to 300 / **100** / 1%/step]
2-815-034	Custom Paper 034	E	[0 to 300 / **100** / 1%/step]
2-815-035	Custom Paper 035	E	[0 to 300 / **100** / 1%/step]
2-815-036	Custom Paper 036	E	[0 to 300 / **100** / 1%/step]
2-815-037	Custom Paper 037	E	[0 to 300 / **100** / 1%/step]
2-815-038	Custom Paper 038	E	[0 to 300 / **100** / 1%/step]
2-815-039	Custom Paper 039	E	[0 to 300 / **100** / 1%/step]
2-815-040	Custom Paper 040	E	[0 to 300 / **100** / 1%/step]
2-815-041	Custom Paper 041	E	[0 to 300 / **100** / 1%/step]
2-815-042	Custom Paper 042	E	[0 to 300 / **100** / 1%/step]
2-815-043	Custom Paper 043	E	[0 to 300 / **100** / 1%/step]
2-815-044	Custom Paper 044	E	[0 to 300 / **100** / 1%/step]
2-815-045	Custom Paper 045	E	[0 to 300 / **100** / 1%/step]
2-815-046	Custom Paper 046	E	[0 to 300 / **100** / 1%/step]
2-815-047	Custom Paper 047	E	[0 to 300 / **100** / 1%/step]
2-815-048	Custom Paper 048	E	[0 to 300 / **100** / 1%/step]
2-815-049	Custom Paper 049	E	[0 to 300 / **100** / 1%/step]
2-815-050	Custom Paper 050	E	[0 to 300 / **100** / 1%/step]
2-815-051	Custom Paper 051	E	[0 to 300 / **100** / 1%/step]
2-815-052	Custom Paper 052	E	[0 to 300 / **100** / 1%/step]
2-815-053	Custom Paper 053	E	[0 to 300 / **100** / 1%/step]
2-815-054	Custom Paper 054	E	[0 to 300 / **100** / 1%/step]
2-815-055	Custom Paper 055	E	[0 to 300 / **100** / 1%/step]
2-815-056	Custom Paper 056	E	[0 to 300 / **100** / 1%/step]

2-815-057	Custom Paper 057	E	[0 to 300 / **100** / 1%/step]
2-815-058	Custom Paper 058	E	[0 to 300 / **100** / 1%/step]
2-815-059	Custom Paper 059	E	[0 to 300 / **100** / 1%/step]
2-815-060	Custom Paper 060	E	[0 to 300 / **100** / 1%/step]
2-815-061	Custom Paper 061	E	[0 to 300 / **100** / 1%/step]
2-815-062	Custom Paper 062	E	[0 to 300 / **100** / 1%/step]
2-815-063	Custom Paper 063	E	[0 to 300 / **100** / 1%/step]
2-815-064	Custom Paper 064	E	[0 to 300 / **100** / 1%/step]
2-815-065	Custom Paper 065	E	[0 to 300 / **100** / 1%/step]
2-815-066	Custom Paper 066	E	[0 to 300 / **100** / 1%/step]
2-815-067	Custom Paper 067	E	[0 to 300 / **100** / 1%/step]
2-815-068	Custom Paper 068	E	[0 to 300 / **100** / 1%/step]
2-815-069	Custom Paper 069	E	[0 to 300 / **100** / 1%/step]
2-815-070	Custom Paper 070	E	[0 to 300 / **100** / 1%/step]
2-815-071	Custom Paper 071	E	[0 to 300 / **100** / 1%/step]
2-815-072	Custom Paper 072	E	[0 to 300 / **100** / 1%/step]
2-815-073	Custom Paper 073	E	[0 to 300 / **100** / 1%/step]
2-815-074	Custom Paper 074	E	[0 to 300 / **100** / 1%/step]
2-815-075	Custom Paper 075	E	[0 to 300 / **100** / 1%/step]
2-815-076	Custom Paper 076	E	[0 to 300 / **100** / 1%/step]
2-815-077	Custom Paper 077	E	[0 to 300 / **100** / 1%/step]
2-815-078	Custom Paper 078	E	[0 to 300 / **100** / 1%/step]
2-815-079	Custom Paper 079	E	[0 to 300 / **100** / 1%/step]
2-815-080	Custom Paper 080	E	[0 to 300 / **100** / 1%/step]
2-815-081	Custom Paper 081	E	[0 to 300 / **100** / 1%/step]
2-815-082	Custom Paper 082	E	[0 to 300 / **100** / 1%/step]

2-815-083	Custom Paper 083	E	[0 to 300 / **100** / 1%/step]
2-815-084	Custom Paper 084	E	[0 to 300 / **100** / 1%/step]
2-815-085	Custom Paper 085	E	[0 to 300 / **100** / 1%/step]
2-815-086	Custom Paper 086	E	[0 to 300 / **100** / 1%/step]
2-815-087	Custom Paper 087	E	[0 to 300 / **100** / 1%/step]
2-815-088	Custom Paper 088	E	[0 to 300 / **100** / 1%/step]
2-815-089	Custom Paper 089	E	[0 to 300 / **100** / 1%/step]
2-815-090	Custom Paper 090	E	[0 to 300 / **100** / 1%/step]
2-815-091	Custom Paper 091	E	[0 to 300 / **100** / 1%/step]
2-815-092	Custom Paper 092	E	[0 to 300 / **100** / 1%/step]
2-815-093	Custom Paper 093	E	[0 to 300 / **100** / 1%/step]
2-815-094	Custom Paper 094	E	[0 to 300 / **100** / 1%/step]
2-815-095	Custom Paper 095	E	[0 to 300 / **100** / 1%/step]
2-815-096	Custom Paper 096	E	[0 to 300 / **100** / 1%/step]
2-815-097	Custom Paper 097	E	[0 to 300 / **100** / 1%/step]
2-815-098	Custom Paper 098	E	[0 to 300 / **100** / 1%/step]
2-815-099	Custom Paper 099	E	[0 to 300 / **100** / 1%/step]
2-815-100	Custom Paper 100	E	[0 to 300 / **100** / 1%/step]

2816	**[Trail Edge Corr Switch:2nd]** -		
2-816-001	Custom Paper 001	E	[0 to 30 / **5** / 1mm/step]
2-816-002	Custom Paper 002	E	[0 to 30 / **5** / 1mm/step]
2-816-003	Custom Paper 003	E	[0 to 30 / **5** / 1mm/step]
2-816-004	Custom Paper 004	E	[0 to 30 / **5** / 1mm/step]
2-816-005	Custom Paper 005	E	[0 to 30 / **5** / 1mm/step]

2-816-006	Custom Paper 006	E	[0 to 30 / **5** / 1mm/step]
2-816-007	Custom Paper 007	E	[0 to 30 / **5** / 1mm/step]
2-816-008	Custom Paper 008	E	[0 to 30 / **5** / 1mm/step]
2-816-009	Custom Paper 009	E	[0 to 30 / **5** / 1mm/step]
2-816-010	Custom Paper 010	E	[0 to 30 / **5** / 1mm/step]
2-816-011	Custom Paper 011	E	[0 to 30 / **5** / 1mm/step]
2-816-012	Custom Paper 012	E	[0 to 30 / **5** / 1mm/step]
2-816-013	Custom Paper 013	E	[0 to 30 / **5** / 1mm/step]
2-816-014	Custom Paper 014	E	[0 to 30 / **5** / 1mm/step]
2-816-015	Custom Paper 015	E	[0 to 30 / **5** / 1mm/step]
2-816-016	Custom Paper 016	E	[0 to 30 / **5** / 1mm/step]
2-816-017	Custom Paper 017	E	[0 to 30 / **5** / 1mm/step]
2-816-018	Custom Paper 018	E	[0 to 30 / **5** / 1mm/step]
2-816-019	Custom Paper 019	E	[0 to 30 / **5** / 1mm/step]
2-816-020	Custom Paper 020	E	[0 to 30 / **5** / 1mm/step]
2-816-021	Custom Paper 021	E	[0 to 30 / **5** / 1mm/step]
2-816-022	Custom Paper 022	E	[0 to 30 / **5** / 1mm/step]
2-816-023	Custom Paper 023	E	[0 to 30 / **5** / 1mm/step]
2-816-024	Custom Paper 024	E	[0 to 30 / **5** / 1mm/step]
2-816-025	Custom Paper 025	E	[0 to 30 / **5** / 1mm/step]
2-816-026	Custom Paper 026	E	[0 to 30 / **5** / 1mm/step]
2-816-027	Custom Paper 027	E	[0 to 30 / **5** / 1mm/step]
2-816-028	Custom Paper 028	E	[0 to 30 / **5** / 1mm/step]
2-816-029	Custom Paper 029	E	[0 to 30 / **5** / 1mm/step]
2-816-030	Custom Paper 030	E	[0 to 30 / **5** / 1mm/step]
2-816-031	Custom Paper 031	E	[0 to 30 / **5** / 1mm/step]

2-816-032	Custom Paper 032	E	[0 to 30 / **5** / 1mm/step]
2-816-033	Custom Paper 033	E	[0 to 30 / **5** / 1mm/step]
2-816-034	Custom Paper 034	E	[0 to 30 / **5** / 1mm/step]
2-816-035	Custom Paper 035	E	[0 to 30 / **5** / 1mm/step]
2-816-036	Custom Paper 036	E	[0 to 30 / **5** / 1mm/step]
2-816-037	Custom Paper 037	E	[0 to 30 / **5** / 1mm/step]
2-816-038	Custom Paper 038	E	[0 to 30 / **5** / 1mm/step]
2-816-039	Custom Paper 039	E	[0 to 30 / **5** / 1mm/step]
2-816-040	Custom Paper 040	E	[0 to 30 / **5** / 1mm/step]
2-816-041	Custom Paper 041	E	[0 to 30 / **5** / 1mm/step]
2-816-042	Custom Paper 042	E	[0 to 30 / **5** / 1mm/step]
2-816-043	Custom Paper 043	E	[0 to 30 / **5** / 1mm/step]
2-816-044	Custom Paper 044	E	[0 to 30 / **5** / 1mm/step]
2-816-045	Custom Paper 045	E	[0 to 30 / **5** / 1mm/step]
2-816-046	Custom Paper 046	E	[0 to 30 / **5** / 1mm/step]
2-816-047	Custom Paper 047	E	[0 to 30 / **5** / 1mm/step]
2-816-048	Custom Paper 048	E	[0 to 30 / **5** / 1mm/step]
2-816-049	Custom Paper 049	E	[0 to 30 / **5** / 1mm/step]
2-816-050	Custom Paper 050	E	[0 to 30 / **5** / 1mm/step]
2-816-051	Custom Paper 051	E	[0 to 30 / **5** / 1mm/step]
2-816-052	Custom Paper 052	E	[0 to 30 / **5** / 1mm/step]
2-816-053	Custom Paper 053	E	[0 to 30 / **5** / 1mm/step]
2-816-054	Custom Paper 054	E	[0 to 30 / **5** / 1mm/step]
2-816-055	Custom Paper 055	E	[0 to 30 / **5** / 1mm/step]
2-816-056	Custom Paper 056	E	[0 to 30 / **5** / 1mm/step]
2-816-057	Custom Paper 057	E	[0 to 30 / **5** / 1mm/step]

2-816-058	Custom Paper 058	E	[0 to 30 / **5** / 1mm/step]
2-816-059	Custom Paper 059	E	[0 to 30 / **5** / 1mm/step]
2-816-060	Custom Paper 060	E	[0 to 30 / **5** / 1mm/step]
2-816-061	Custom Paper 061	E	[0 to 30 / **5** / 1mm/step]
2-816-062	Custom Paper 062	E	[0 to 30 / **5** / 1mm/step]
2-816-063	Custom Paper 063	E	[0 to 30 / **5** / 1mm/step]
2-816-064	Custom Paper 064	E	[0 to 30 / **5** / 1mm/step]
2-816-065	Custom Paper 065	E	[0 to 30 / **5** / 1mm/step]
2-816-066	Custom Paper 066	E	[0 to 30 / **5** / 1mm/step]
2-816-067	Custom Paper 067	E	[0 to 30 / **5** / 1mm/step]
2-816-068	Custom Paper 068	E	[0 to 30 / **5** / 1mm/step]
2-816-069	Custom Paper 069	E	[0 to 30 / **5** / 1mm/step]
2-816-070	Custom Paper 070	E	[0 to 30 / **5** / 1mm/step]
2-816-071	Custom Paper 071	E	[0 to 30 / **5** / 1mm/step]
2-816-072	Custom Paper 072	E	[0 to 30 / **5** / 1mm/step]
2-816-073	Custom Paper 073	E	[0 to 30 / **5** / 1mm/step]
2-816-074	Custom Paper 074	E	[0 to 30 / **5** / 1mm/step]
2-816-075	Custom Paper 075	E	[0 to 30 / **5** / 1mm/step]
2-816-076	Custom Paper 076	E	[0 to 30 / **5** / 1mm/step]
2-816-077	Custom Paper 077	E	[0 to 30 / **5** / 1mm/step]
2-816-078	Custom Paper 078	E	[0 to 30 / **5** / 1mm/step]
2-816-079	Custom Paper 079	E	[0 to 30 / **5** / 1mm/step]
2-816-080	Custom Paper 080	E	[0 to 30 / **5** / 1mm/step]
2-816-081	Custom Paper 081	E	[0 to 30 / **5** / 1mm/step]
2-816-082	Custom Paper 082	E	[0 to 30 / **5** / 1mm/step]
2-816-083	Custom Paper 083	E	[0 to 30 / **5** / 1mm/step]

2-816-084	Custom Paper 084	E	[0 to 30 / **5** / 1mm/step]
2-816-085	Custom Paper 085	E	[0 to 30 / **5** / 1mm/step]
2-816-086	Custom Paper 086	E	[0 to 30 / **5** / 1mm/step]
2-816-087	Custom Paper 087	E	[0 to 30 / **5** / 1mm/step]
2-816-088	Custom Paper 088	E	[0 to 30 / **5** / 1mm/step]
2-816-089	Custom Paper 089	E	[0 to 30 / **5** / 1mm/step]
2-816-090	Custom Paper 090	E	[0 to 30 / **5** / 1mm/step]
2-816-091	Custom Paper 091	E	[0 to 30 / **5** / 1mm/step]
2-816-092	Custom Paper 092	E	[0 to 30 / **5** / 1mm/step]
2-816-093	Custom Paper 093	E	[0 to 30 / **5** / 1mm/step]
2-816-094	Custom Paper 094	E	[0 to 30 / **5** / 1mm/step]
2-816-095	Custom Paper 095	E	[0 to 30 / **5** / 1mm/step]
2-816-096	Custom Paper 096	E	[0 to 30 / **5** / 1mm/step]
2-816-097	Custom Paper 097	E	[0 to 30 / **5** / 1mm/step]
2-816-098	Custom Paper 098	E	[0 to 30 / **5** / 1mm/step]
2-816-099	Custom Paper 099	E	[0 to 30 / **5** / 1mm/step]
2-816-100	Custom Paper 100	E	[0 to 30 / **5** / 1mm/step]

2817	**[ITB Voltage]** -		
2-817-001	Custom Paper 001	E	[0 to 150 / **80** / 1uA/step]
2-817-002	Custom Paper 002	E	[0 to 150 / **80** / 1uA/step]
2-817-003	Custom Paper 003	E	[0 to 150 / **80** / 1uA/step]
2-817-004	Custom Paper 004	E	[0 to 150 / **80** / 1uA/step]
2-817-005	Custom Paper 005	E	[0 to 150 / **80** / 1uA/step]
2-817-006	Custom Paper 006	E	[0 to 150 / **80** / 1uA/step]

2-817-007	Custom Paper 007	E	[0 to 150 / **80** / 1uA/step]
2-817-008	Custom Paper 008	E	[0 to 150 / **80** / 1uA/step]
2-817-009	Custom Paper 009	E	[0 to 150 / **80** / 1uA/step]
2-817-010	Custom Paper 010	E	[0 to 150 / **80** / 1uA/step]
2-817-011	Custom Paper 011	E	[0 to 150 / **80** / 1uA/step]
2-817-012	Custom Paper 012	E	[0 to 150 / **80** / 1uA/step]
2-817-013	Custom Paper 013	E	[0 to 150 / **80** / 1uA/step]
2-817-014	Custom Paper 014	E	[0 to 150 / **80** / 1uA/step]
2-817-015	Custom Paper 015	E	[0 to 150 / **80** / 1uA/step]
2-817-016	Custom Paper 016	E	[0 to 150 / **80** / 1uA/step]
2-817-017	Custom Paper 017	E	[0 to 150 / **80** / 1uA/step]
2-817-018	Custom Paper 018	E	[0 to 150 / **80** / 1uA/step]
2-817-019	Custom Paper 019	E	[0 to 150 / **80** / 1uA/step]
2-817-020	Custom Paper 020	E	[0 to 150 / **80** / 1uA/step]
2-817-021	Custom Paper 021	E	[0 to 150 / **80** / 1uA/step]
2-817-022	Custom Paper 022	E	[0 to 150 / **80** / 1uA/step]
2-817-023	Custom Paper 023	E	[0 to 150 / **80** / 1uA/step]
2-817-024	Custom Paper 024	E	[0 to 150 / **80** / 1uA/step]
2-817-025	Custom Paper 025	E	[0 to 150 / **80** / 1uA/step]
2-817-026	Custom Paper 026	E	[0 to 150 / **80** / 1uA/step]
2-817-027	Custom Paper 027	E	[0 to 150 / **80** / 1uA/step]
2-817-028	Custom Paper 028	E	[0 to 150 / **80** / 1uA/step]
2-817-029	Custom Paper 029	E	[0 to 150 / **80** / 1uA/step]
2-817-030	Custom Paper 030	E	[0 to 150 / **80** / 1uA/step]
2-817-031	Custom Paper 031	E	[0 to 150 / **80** / 1uA/step]
2-817-032	Custom Paper 032	E	[0 to 150 / **80** / 1uA/step]

2-817-033	Custom Paper 033	E	[0 to 150 / **80** / 1uA/step]
2-817-034	Custom Paper 034	E	[0 to 150 / **80** / 1uA/step]
2-817-035	Custom Paper 035	E	[0 to 150 / **80** / 1uA/step]
2-817-036	Custom Paper 036	E	[0 to 150 / **80** / 1uA/step]
2-817-037	Custom Paper 037	E	[0 to 150 / **80** / 1uA/step]
2-817-038	Custom Paper 038	E	[0 to 150 / **80** / 1uA/step]
2-817-039	Custom Paper 039	E	[0 to 150 / **80** / 1uA/step]
2-817-040	Custom Paper 040	E	[0 to 150 / **80** / 1uA/step]
2-817-041	Custom Paper 041	E	[0 to 150 / **80** / 1uA/step]
2-817-042	Custom Paper 042	E	[0 to 150 / **80** / 1uA/step]
2-817-043	Custom Paper 043	E	[0 to 150 / **80** / 1uA/step]
2-817-044	Custom Paper 044	E	[0 to 150 / **80** / 1uA/step]
2-817-045	Custom Paper 045	E	[0 to 150 / **80** / 1uA/step]
2-817-046	Custom Paper 046	E	[0 to 150 / **80** / 1uA/step]
2-817-047	Custom Paper 047	E	[0 to 150 / **80** / 1uA/step]
2-817-048	Custom Paper 048	E	[0 to 150 / **80** / 1uA/step]
2-817-049	Custom Paper 049	E	[0 to 150 / **80** / 1uA/step]
2-817-050	Custom Paper 050	E	[0 to 150 / **80** / 1uA/step]
2-817-051	Custom Paper 051	E	[0 to 150 / **80** / 1uA/step]
2-817-052	Custom Paper 052	E	[0 to 150 / **80** / 1uA/step]
2-817-053	Custom Paper 053	E	[0 to 150 / **80** / 1uA/step]
2-817-054	Custom Paper 054	E	[0 to 150 / **80** / 1uA/step]
2-817-055	Custom Paper 055	E	[0 to 150 / **80** / 1uA/step]
2-817-056	Custom Paper 056	E	[0 to 150 / **80** / 1uA/step]
2-817-057	Custom Paper 057	E	[0 to 150 / **80** / 1uA/step]
2-817-058	Custom Paper 058	E	[0 to 150 / **80** / 1uA/step]

2-817-059	Custom Paper 059	E	[0 to 150 / **80** / 1uA/step]
2-817-060	Custom Paper 060	E	[0 to 150 / **80** / 1uA/step]
2-817-061	Custom Paper 061	E	[0 to 150 / **80** / 1uA/step]
2-817-062	Custom Paper 062	E	[0 to 150 / **80** / 1uA/step]
2-817-063	Custom Paper 063	E	[0 to 150 / **80** / 1uA/step]
2-817-064	Custom Paper 064	E	[0 to 150 / **80** / 1uA/step]
2-817-065	Custom Paper 065	E	[0 to 150 / **80** / 1uA/step]
2-817-066	Custom Paper 066	E	[0 to 150 / **80** / 1uA/step]
2-817-067	Custom Paper 067	E	[0 to 150 / **80** / 1uA/step]
2-817-068	Custom Paper 068	E	[0 to 150 / **80** / 1uA/step]
2-817-069	Custom Paper 069	E	[0 to 150 / **80** / 1uA/step]
2-817-070	Custom Paper 070	E	[0 to 150 / **80** / 1uA/step]
2-817-071	Custom Paper 071	E	[0 to 150 / **80** / 1uA/step]
2-817-072	Custom Paper 072	E	[0 to 150 / **80** / 1uA/step]
2-817-073	Custom Paper 073	E	[0 to 150 / **80** / 1uA/step]
2-817-074	Custom Paper 074	E	[0 to 150 / **80** / 1uA/step]
2-817-075	Custom Paper 075	E	[0 to 150 / **80** / 1uA/step]
2-817-076	Custom Paper 076	E	[0 to 150 / **80** / 1uA/step]
2-817-077	Custom Paper 077	E	[0 to 150 / **80** / 1uA/step]
2-817-078	Custom Paper 078	E	[0 to 150 / **80** / 1uA/step]
2-817-079	Custom Paper 079	E	[0 to 150 / **80** / 1uA/step]
2-817-080	Custom Paper 080	E	[0 to 150 / **80** / 1uA/step]
2-817-081	Custom Paper 081	E	[0 to 150 / **80** / 1uA/step]
2-817-082	Custom Paper 082	E	[0 to 150 / **80** / 1uA/step]
2-817-083	Custom Paper 083	E	[0 to 150 / **80** / 1uA/step]
2-817-084	Custom Paper 084	E	[0 to 150 / **80** / 1uA/step]

2-817-085	Custom Paper 085	E	[0 to 150 / **80** / 1uA/step]
2-817-086	Custom Paper 086	E	[0 to 150 / **80** / 1uA/step]
2-817-087	Custom Paper 087	E	[0 to 150 / **80** / 1uA/step]
2-817-088	Custom Paper 088	E	[0 to 150 / **80** / 1uA/step]
2-817-089	Custom Paper 089	E	[0 to 150 / **80** / 1uA/step]
2-817-090	Custom Paper 090	E	[0 to 150 / **80** / 1uA/step]
2-817-091	Custom Paper 091	E	[0 to 150 / **80** / 1uA/step]
2-817-092	Custom Paper 092	E	[0 to 150 / **80** / 1uA/step]
2-817-093	Custom Paper 093	E	[0 to 150 / **80** / 1uA/step]
2-817-094	Custom Paper 094	E	[0 to 150 / **80** / 1uA/step]
2-817-095	Custom Paper 095	E	[0 to 150 / **80** / 1uA/step]
2-817-096	Custom Paper 096	E	[0 to 150 / **80** / 1uA/step]
2-817-097	Custom Paper 097	E	[0 to 150 / **80** / 1uA/step]
2-817-098	Custom Paper 098	E	[0 to 150 / **80** / 1uA/step]
2-817-099	Custom Paper 099	E	[0 to 150 / **80** / 1uA/step]
2-817-100	Custom Paper 100	E	[0 to 150 / **80** / 1uA/step]

2820	**[SepAC:1st]** -		
2-820-001	Custom Paper 001	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-002	Custom Paper 002	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-003	Custom Paper 003	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-004	Custom Paper 004	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-005	Custom Paper 005	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-006	Custom Paper 006	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-007	Custom Paper 007	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-820-008	Custom Paper 008	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-009	Custom Paper 009	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-010	Custom Paper 010	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-011	Custom Paper 011	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-012	Custom Paper 012	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-013	Custom Paper 013	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-014	Custom Paper 014	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-015	Custom Paper 015	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-016	Custom Paper 016	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-017	Custom Paper 017	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-018	Custom Paper 018	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-019	Custom Paper 019	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-020	Custom Paper 020	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-021	Custom Paper 021	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-022	Custom Paper 022	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-023	Custom Paper 023	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-024	Custom Paper 024	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-025	Custom Paper 025	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-026	Custom Paper 026	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-027	Custom Paper 027	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-028	Custom Paper 028	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-029	Custom Paper 029	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-030	Custom Paper 030	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-031	Custom Paper 031	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-032	Custom Paper 032	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-033	Custom Paper 033	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-820-034	Custom Paper 034	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-035	Custom Paper 035	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-036	Custom Paper 036	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-037	Custom Paper 037	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-038	Custom Paper 038	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-039	Custom Paper 039	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-040	Custom Paper 040	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-041	Custom Paper 041	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-042	Custom Paper 042	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-043	Custom Paper 043	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-044	Custom Paper 044	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-045	Custom Paper 045	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-046	Custom Paper 046	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-047	Custom Paper 047	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-048	Custom Paper 048	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-049	Custom Paper 049	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-050	Custom Paper 050	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-051	Custom Paper 051	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-052	Custom Paper 052	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-053	Custom Paper 053	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-054	Custom Paper 054	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-055	Custom Paper 055	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-056	Custom Paper 056	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-057	Custom Paper 057	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-058	Custom Paper 058	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-059	Custom Paper 059	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-820-060	Custom Paper 060	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-061	Custom Paper 061	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-062	Custom Paper 062	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-063	Custom Paper 063	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-064	Custom Paper 064	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-065	Custom Paper 065	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-066	Custom Paper 066	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-067	Custom Paper 067	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-068	Custom Paper 068	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-069	Custom Paper 069	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-070	Custom Paper 070	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-071	Custom Paper 071	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-072	Custom Paper 072	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-073	Custom Paper 073	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-074	Custom Paper 074	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-075	Custom Paper 075	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-076	Custom Paper 076	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-077	Custom Paper 077	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-078	Custom Paper 078	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-079	Custom Paper 079	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-080	Custom Paper 080	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-081	Custom Paper 081	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-082	Custom Paper 082	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-083	Custom Paper 083	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-084	Custom Paper 084	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-085	Custom Paper 085	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-820-086	Custom Paper 086	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-087	Custom Paper 087	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-088	Custom Paper 088	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-089	Custom Paper 089	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-090	Custom Paper 090	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-091	Custom Paper 091	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-092	Custom Paper 092	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-093	Custom Paper 093	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-094	Custom Paper 094	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-095	Custom Paper 095	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-096	Custom Paper 096	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-097	Custom Paper 097	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-098	Custom Paper 098	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-099	Custom Paper 099	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-820-100	Custom Paper 100	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2821	**[SepAC:2nd]** -		
2-821-001	Custom Paper 001	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-002	Custom Paper 002	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-003	Custom Paper 003	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-004	Custom Paper 004	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-005	Custom Paper 005	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-006	Custom Paper 006	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-007	Custom Paper 007	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-008	Custom Paper 008	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-821-009	Custom Paper 009	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-010	Custom Paper 010	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-011	Custom Paper 011	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-012	Custom Paper 012	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-013	Custom Paper 013	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-014	Custom Paper 014	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-015	Custom Paper 015	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-016	Custom Paper 016	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-017	Custom Paper 017	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-018	Custom Paper 018	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-019	Custom Paper 019	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-020	Custom Paper 020	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-021	Custom Paper 021	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-022	Custom Paper 022	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-023	Custom Paper 023	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-024	Custom Paper 024	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-025	Custom Paper 025	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-026	Custom Paper 026	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-027	Custom Paper 027	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-028	Custom Paper 028	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-029	Custom Paper 029	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-030	Custom Paper 030	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-031	Custom Paper 031	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-032	Custom Paper 032	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-033	Custom Paper 033	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-034	Custom Paper 034	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-821-035	Custom Paper 035	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-036	Custom Paper 036	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-037	Custom Paper 037	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-038	Custom Paper 038	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-039	Custom Paper 039	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-040	Custom Paper 040	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-041	Custom Paper 041	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-042	Custom Paper 042	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-043	Custom Paper 043	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-044	Custom Paper 044	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-045	Custom Paper 045	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-046	Custom Paper 046	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-047	Custom Paper 047	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-048	Custom Paper 048	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-049	Custom Paper 049	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-050	Custom Paper 050	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-051	Custom Paper 051	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-052	Custom Paper 052	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-053	Custom Paper 053	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-054	Custom Paper 054	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-055	Custom Paper 055	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-056	Custom Paper 056	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-057	Custom Paper 057	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-058	Custom Paper 058	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-059	Custom Paper 059	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-060	Custom Paper 060	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-821-061	Custom Paper 061	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-062	Custom Paper 062	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-063	Custom Paper 063	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-064	Custom Paper 064	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-065	Custom Paper 065	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-066	Custom Paper 066	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-067	Custom Paper 067	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-068	Custom Paper 068	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-069	Custom Paper 069	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-070	Custom Paper 070	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-071	Custom Paper 071	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-072	Custom Paper 072	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-073	Custom Paper 073	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-074	Custom Paper 074	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-075	Custom Paper 075	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-076	Custom Paper 076	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-077	Custom Paper 077	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-078	Custom Paper 078	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-079	Custom Paper 079	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-080	Custom Paper 080	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-081	Custom Paper 081	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-082	Custom Paper 082	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-083	Custom Paper 083	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-084	Custom Paper 084	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-085	Custom Paper 085	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-086	Custom Paper 086	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2-821-087	Custom Paper 087	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-088	Custom Paper 088	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-089	Custom Paper 089	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-090	Custom Paper 090	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-091	Custom Paper 091	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-092	Custom Paper 092	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-093	Custom Paper 093	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-094	Custom Paper 094	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-095	Custom Paper 095	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-096	Custom Paper 096	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-097	Custom Paper 097	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-098	Custom Paper 098	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-099	Custom Paper 099	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]
2-821-100	Custom Paper 100	E	[8.0 to 12.0 / **10.0** / 0.1kV/step]

2882	**[PTR Speed Control]** Fine-tunes the speed of paper transfer roller against the intermediate transfer belt speed on a paper type/weight basis.		
2-882-100	Plain:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-101	Plain:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-102	Plain:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-103	Plain:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-104	Plain:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-105	Plain:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-106	Plain:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-107	Plain:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-108	Plain:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

2-882-110	Glossy:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-111	Glossy:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-112	Glossy:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-113	Glossy:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-114	Glossy:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-115	Glossy:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-116	Glossy:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-117	Glossy:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-118	Glossy:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-120	Matte:Weight 0	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-121	Matte:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-122	Matte:Weight 2	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-123	Matte:Weight 3	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-124	Matte:Weight 4	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-125	Matte:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-126	Matte:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-127	Matte:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-128	Matte:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-155	OHP	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-161	Transluc:Weight 1	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-175	Envelope:Weight 5	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-176	Envelope:Weight 6	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-177	Envelope:Weight 7	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-882-178	Envelope:Weight 8	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

2883	**[PTR Speed Control]** Fine-tunes the paper transfer roller speed against the intermediate transfer belt speed according to an environment range.		
2-883-001	Env Coeff:LLL	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-883-002	Env Coeff:LL	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-883-003	Env Coeff:ML	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-883-004	Env Coeff:MM	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-883-005	Env Coeff:MH	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]
2-883-006	Env Coeff:HH	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

2884	**[Fine Adj Trans Tmg Roll Spd]** Fine-tunes the transfer timing roller speed according to an environment range.		
2-884-001	Env Coeff:LLL	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]
2-884-002	Env Coeff:LL	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]
2-884-003	Env Coeff:ML	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]
2-884-004	Env Coeff:MM	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]
2-884-005	Env Coeff:MH	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]
2-884-006	Env Coeff:HH	E*	[-3.0 to 3.0 / **0.0** / 0.1%/step]

2904	**[Prevent Blade Bending]** -		
2-904-001	Pattern Create Interval	E	[0 to 10000 / **2000** / 1page/step]
2-904-002	Op Pg Count Display	E	[0 to 10000 / **0** / 1page/step]

2906	**[Set Time Reverse Ctrl]** -		
2-906-001	Set Rev Execute:ITB	E	[0 or 1 / **0** / 1/step]
2-906-002	Set Rev Execute:PTR	E	[0 or 1 / **0** / 1/step]

2-906-004	Set Rev Execute Interval(D-int1)	E	[1 to 1160 / **580** / 1sec/step]
2-906-005	Assign Execution	E	[0 or 1 / **0** / 1/step]
2-906-006	Set Execute Interval(D-int2)	E	[1 to 1160 / **580** / 1sec/step]
2-906-007	Operation Time Setting:ITB(T-ITB)	E	[10 to 500 / **30** / 10msec/step]
2-906-008	Operation Time Setting:PTR(T-ST)	E	[10 to 500 / **30** / 10msec/step]
2-906-010	Set Rev Execute Interval Counter	E*	[0 to 1160 / **0** / 1sec/step]
2-906-011	Set Execute Interval Counter	E*	[0 to 1160 / **0** / 1sec/step]

2908	**[Print Operation Adjustment]** -		
2-908-001	Additional Time ON/OFF	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Stipulates On/Off for fall additional time.
2-908-002	Additional Time	E*	[0 to 10 / **0** / 1sec/step] Stipulates fall additional time.
2-908-003	Extend Clean Time	E*	[0 to 50 / **0** / 1sec/step] Stipulates additional cleaning time during recovery operation.

2920	**[Steering Control Roller]** -		
⇒ 2-920-001	Deleted		Do not use.

2-920-002	Stable Position of Steering Roller	E*	[-150 to 150 / **0** / 1step/step] Information about steer control's stable position. Receives and preserves position information from TDCU each job end.
2-920-003	Controll ON/OFF	E*	[0 or 1 / **1** / 1/step] 0: Off, 1: On. Steering control function On/Off
2-920-004	Last Time Ai Value	E*	[-150 to 150 / **0** / 1step/step]
2-920-005	LED PWM of Belt Position Senser	E*	[0.0 to 80.0 / **70.0** / 0.1%/step] Belt position sensor LED light intensity adjustment PWM input value.
2-920-006	Threshold for Control Rock	E*	[0 to 1000 / **30** / 1/step] Belt position sensor LED light intensity adjustment operation judge threshold.
2-920-007	Threshold for Senser Error	E*	[0.00 or 1.00 / **0.40** / 0.01V/step] Belt position sensor error judge threshold.
2-920-008	Threshold for PWM Control	E*	[0.00 to 2.00 / **0.30** / 0.01V/step] Belt position sensor status judge threshold.
2-920-009	Sum of Senser Output	E	[0.00 to 10.00 / **0.00** / 0.01V/step] Displays amount of belt position sensor output.
2-920-010	Ratio of Senser Output	E	[-1.00 to 1.00 / **0.00** / 0.001/step] Displays ratio of belt position sensor.
2-920-011	Threshold for Over Run	E*	[0.1 to 3.3 / **3.3** / 0.1V/step]
2-920-012	Timeout of Over Run	E*	[0 to 255 / **1** / 1sec/step]
2-920-013	Timeout of Belt Ready	E*	[0 to 1000 / **400** / 1sec/step]
2-920-014	Gain P(a)	E*	[0.01 to 1.00 / **0.02** / 0.01/step]
2-920-015	Gain P(a) Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-016	Gain I(a)	E*	[0.0001 to 0.01 / **0.0010** / 0.0001/step]

2-920-017	Gain I(a) Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-018	Gain P(a) Belt Initialize	E*	[0.01 to 1 / **0.04** / 0.01/step]
2-920-019	Gain P(a) Belt Initialize Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-020	Gain I(a) Belt Initialize	E*	[0.0001 to 0.0100 / **0.0020** / 0.0001/step]
2-920-021	Gain I(a) Belt Initialize Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-022	Gain P(b)	E*	[0.01 to 1 / **0.02** / 0.01/step]
2-920-023	Gain P(b) Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-024	Gain I(b)	E*	[0.0001 to 0.01000/ **0.0010** / 0.0001/step]
2-920-025	Gain I(b) Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-026	Gain P(b) Belt Initialize	E*	[0.01 to 1 / **0.04** / 0.01/step]
2-920-027	Gain P(b) Belt Initialize Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-028	Gain I(b) Belt Initialize	E*	[0.0001 to 0.01 / **0.0020** / 0.0001/step]
2-920-029	Gain I(b) Belt Initialize Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-030	Gain P(c)	E*	[0.01 to 1.00 / **0.02** / 0.01/step]
2-920-031	Gain P(c) Adjust	E*	[0.01 to 100 / **1.00** / 0.01/step]
2-920-032	Gain I(c)	E*	[0.0001 to 0.0100 / **0.001** / 0.0001/step]
2-920-033	Gain I(c) Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-034	Gain P(c) Belt Initialize	E*	[0.01 to 1.00 / **0.04** / 0.01/step]
2-920-035	Gain P(c) Belt Initialize Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-036	Gain I(c) Belt Initialize	E*	[0.0001 to 0.01000 / **0.0020** / 0.0001/step]
2-920-037	Gain I(c) Belt Initialize Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]

2-920-038	Gain P(x)	E*	[0.01 to 1.00 / **0.02** / 0.01/step]
2-920-039	Gain P(x) Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-040	Gain I(x)	E*	[0.0001 to 0.0100 / **0.0010** / 0.0001/step]
2-920-041	Gain I(x) Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-042	Gain P(x) Belt Initialize	E*	[0.01 to 1.00 / **0.04** / 0.01/step]
2-920-043	Gain P(x) Belt Initialize Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]
2-920-044	Gain I(x) Belt Initialize	E*	[0.0001 to 0.0100 / **0.0020** / 0.0001/step]
2-920-045	Gain I(x) Belt Initialize Adjust	E*	[0.01 to 100.00 / **1.00** / 0.01/step]

2949	**[Process Interval]** -		
2-949-001	Additional Time	E*	[0 to 10 / **0** / 1sec/step] Sets waiting time for to switch to fall action after finish imaging.

2950	**[Face Main Mag set & Adj]** Face: main scan magnification setting and adjustment (Custom Paper)		
2-950-001	Custom Paper 001	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-002	Custom Paper 002	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-003	Custom Paper 003	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-004	Custom Paper 004	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-005	Custom Paper 005	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-006	Custom Paper 006	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-007	Custom Paper 007	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-008	Custom Paper 008	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-009	Custom Paper 009	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-950-010	Custom Paper 010	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-011	Custom Paper 011	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-012	Custom Paper 012	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-013	Custom Paper 013	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-014	Custom Paper 014	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-015	Custom Paper 015	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-016	Custom Paper 016	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-017	Custom Paper 017	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-018	Custom Paper 018	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-019	Custom Paper 019	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-020	Custom Paper 020	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-021	Custom Paper 021	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-022	Custom Paper 022	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-023	Custom Paper 023	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-024	Custom Paper 024	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-025	Custom Paper 025	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-026	Custom Paper 026	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-027	Custom Paper 027	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-028	Custom Paper 028	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-029	Custom Paper 029	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-030	Custom Paper 030	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-031	Custom Paper 031	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-032	Custom Paper 032	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-033	Custom Paper 033	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-034	Custom Paper 034	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-035	Custom Paper 035	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-950-036	Custom Paper 036	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-037	Custom Paper 037	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-038	Custom Paper 038	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-039	Custom Paper 039	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-040	Custom Paper 040	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-041	Custom Paper 041	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-042	Custom Paper 042	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-043	Custom Paper 043	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-044	Custom Paper 044	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-045	Custom Paper 045	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-046	Custom Paper 046	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-047	Custom Paper 047	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-048	Custom Paper 048	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-049	Custom Paper 049	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-050	Custom Paper 050	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-051	Custom Paper 051	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-052	Custom Paper 052	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-053	Custom Paper 053	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-054	Custom Paper 054	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-055	Custom Paper 055	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-056	Custom Paper 056	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-057	Custom Paper 057	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-058	Custom Paper 058	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-059	Custom Paper 059	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-060	Custom Paper 060	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-061	Custom Paper 061	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-950-062	Custom Paper 062	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-063	Custom Paper 063	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-064	Custom Paper 064	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-065	Custom Paper 065	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-066	Custom Paper 066	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-067	Custom Paper 067	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-068	Custom Paper 068	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-069	Custom Paper 069	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-070	Custom Paper 070	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-071	Custom Paper 071	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-072	Custom Paper 072	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-073	Custom Paper 073	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-074	Custom Paper 074	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-075	Custom Paper 075	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-076	Custom Paper 076	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-077	Custom Paper 077	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-078	Custom Paper 078	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-079	Custom Paper 079	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-080	Custom Paper 080	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-081	Custom Paper 081	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-082	Custom Paper 082	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-083	Custom Paper 083	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-084	Custom Paper 084	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-085	Custom Paper 085	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-086	Custom Paper 086	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-087	Custom Paper 087	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-950-088	Custom Paper 088	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-089	Custom Paper 089	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-090	Custom Paper 090	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-091	Custom Paper 091	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-092	Custom Paper 092	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-093	Custom Paper 093	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-094	Custom Paper 094	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-095	Custom Paper 095	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-096	Custom Paper 096	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-097	Custom Paper 097	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-098	Custom Paper 098	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-099	Custom Paper 099	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-950-100	Custom Paper 100	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2951	**[Face Sub Mag set & Adj]** Face: sub scan magnification setting and adjustment (Custom Paper)		
2-951-001	Custom Paper 001	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-002	Custom Paper 002	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-003	Custom Paper 003	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-004	Custom Paper 004	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-005	Custom Paper 005	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-006	Custom Paper 006	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-007	Custom Paper 007	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-008	Custom Paper 008	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-009	Custom Paper 009	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-010	Custom Paper 010	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-951-011	Custom Paper 011	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-012	Custom Paper 012	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-013	Custom Paper 013	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-014	Custom Paper 014	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-015	Custom Paper 015	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-016	Custom Paper 016	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-017	Custom Paper 017	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-018	Custom Paper 018	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-019	Custom Paper 019	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-020	Custom Paper 020	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-021	Custom Paper 021	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-022	Custom Paper 022	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-023	Custom Paper 023	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-024	Custom Paper 024	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-025	Custom Paper 025	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-026	Custom Paper 026	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-027	Custom Paper 027	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-028	Custom Paper 028	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-029	Custom Paper 029	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-030	Custom Paper 030	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-031	Custom Paper 031	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-032	Custom Paper 032	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-033	Custom Paper 033	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-034	Custom Paper 034	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-035	Custom Paper 035	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-036	Custom Paper 036	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-951-037	Custom Paper 037	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-038	Custom Paper 038	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-039	Custom Paper 039	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-040	Custom Paper 040	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-041	Custom Paper 041	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-042	Custom Paper 042	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-043	Custom Paper 043	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-044	Custom Paper 044	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-045	Custom Paper 045	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-046	Custom Paper 046	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-047	Custom Paper 047	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-048	Custom Paper 048	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-049	Custom Paper 049	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-050	Custom Paper 050	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-051	Custom Paper 051	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-052	Custom Paper 052	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-053	Custom Paper 053	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-054	Custom Paper 054	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-055	Custom Paper 055	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-056	Custom Paper 056	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-057	Custom Paper 057	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-058	Custom Paper 058	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-059	Custom Paper 059	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-060	Custom Paper 060	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-061	Custom Paper 061	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-062	Custom Paper 062	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-951-063	Custom Paper 063	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-064	Custom Paper 064	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-065	Custom Paper 065	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-066	Custom Paper 066	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-067	Custom Paper 067	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-068	Custom Paper 068	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-069	Custom Paper 069	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-070	Custom Paper 070	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-071	Custom Paper 071	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-072	Custom Paper 072	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-073	Custom Paper 073	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-074	Custom Paper 074	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-075	Custom Paper 075	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-076	Custom Paper 076	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-077	Custom Paper 077	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-078	Custom Paper 078	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-079	Custom Paper 079	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-080	Custom Paper 080	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-081	Custom Paper 081	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-082	Custom Paper 082	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-083	Custom Paper 083	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-084	Custom Paper 084	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-085	Custom Paper 085	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-086	Custom Paper 086	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-087	Custom Paper 087	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-088	Custom Paper 088	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-951-089	Custom Paper 089	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-090	Custom Paper 090	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-091	Custom Paper 091	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-092	Custom Paper 092	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-093	Custom Paper 093	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-094	Custom Paper 094	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-095	Custom Paper 095	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-096	Custom Paper 096	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-097	Custom Paper 097	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-098	Custom Paper 098	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-099	Custom Paper 099	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-951-100	Custom Paper 100	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2952	**[Verso Main Mag set & Adj]** Verso: main scan magnification setting and adjustment (Custom Paper)		
2-952-001	Custom Paper 001	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-002	Custom Paper 002	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-003	Custom Paper 003	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-004	Custom Paper 004	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-005	Custom Paper 005	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-006	Custom Paper 006	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-007	Custom Paper 007	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-008	Custom Paper 008	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-009	Custom Paper 009	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-010	Custom Paper 010	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-011	Custom Paper 011	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-952-012	Custom Paper 012	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-013	Custom Paper 013	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-014	Custom Paper 014	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-015	Custom Paper 015	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-016	Custom Paper 016	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-017	Custom Paper 017	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-018	Custom Paper 018	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-019	Custom Paper 019	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-020	Custom Paper 020	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-021	Custom Paper 021	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-022	Custom Paper 022	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-023	Custom Paper 023	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-024	Custom Paper 024	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-025	Custom Paper 025	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-026	Custom Paper 026	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-027	Custom Paper 027	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-028	Custom Paper 028	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-029	Custom Paper 029	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-030	Custom Paper 030	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-031	Custom Paper 031	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-032	Custom Paper 032	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-033	Custom Paper 033	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-034	Custom Paper 034	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-035	Custom Paper 035	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-036	Custom Paper 036	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-037	Custom Paper 037	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-952-038	Custom Paper 038	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-039	Custom Paper 039	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-040	Custom Paper 040	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-041	Custom Paper 041	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-042	Custom Paper 042	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-043	Custom Paper 043	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-044	Custom Paper 044	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-045	Custom Paper 045	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-046	Custom Paper 046	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-047	Custom Paper 047	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-048	Custom Paper 048	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-049	Custom Paper 049	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-050	Custom Paper 050	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-051	Custom Paper 051	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-052	Custom Paper 052	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-053	Custom Paper 053	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-054	Custom Paper 054	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-055	Custom Paper 055	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-056	Custom Paper 056	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-057	Custom Paper 057	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-058	Custom Paper 058	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-059	Custom Paper 059	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-060	Custom Paper 060	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-061	Custom Paper 061	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-062	Custom Paper 062	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-063	Custom Paper 063	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-952-064	Custom Paper 064	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-065	Custom Paper 065	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-066	Custom Paper 066	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-067	Custom Paper 067	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-068	Custom Paper 068	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-069	Custom Paper 069	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-070	Custom Paper 070	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-071	Custom Paper 071	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-072	Custom Paper 072	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-073	Custom Paper 073	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-074	Custom Paper 074	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-075	Custom Paper 075	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-076	Custom Paper 076	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-077	Custom Paper 077	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-078	Custom Paper 078	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-079	Custom Paper 079	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-080	Custom Paper 080	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-081	Custom Paper 081	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-082	Custom Paper 082	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-083	Custom Paper 083	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-084	Custom Paper 084	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-085	Custom Paper 085	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-086	Custom Paper 086	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-087	Custom Paper 087	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-088	Custom Paper 088	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-089	Custom Paper 089	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-952-090	Custom Paper 090	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-091	Custom Paper 091	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-092	Custom Paper 092	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-093	Custom Paper 093	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-094	Custom Paper 094	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-095	Custom Paper 095	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-096	Custom Paper 096	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-097	Custom Paper 097	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-098	Custom Paper 098	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-099	Custom Paper 099	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-952-100	Custom Paper 100	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2953	**[Verso Sub Mag set & Adj]** Verso: sub scan magnification adjustment (Custom Paper)		
2-953-001	Custom Paper 001	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-002	Custom Paper 002	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-003	Custom Paper 003	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-004	Custom Paper 004	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-005	Custom Paper 005	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-006	Custom Paper 006	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-007	Custom Paper 007	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-008	Custom Paper 008	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-009	Custom Paper 009	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-010	Custom Paper 010	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-011	Custom Paper 011	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-012	Custom Paper 012	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-953-013	Custom Paper 013	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-014	Custom Paper 014	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-015	Custom Paper 015	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-016	Custom Paper 016	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-017	Custom Paper 017	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-018	Custom Paper 018	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-019	Custom Paper 019	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-020	Custom Paper 020	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-021	Custom Paper 021	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-022	Custom Paper 022	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-023	Custom Paper 023	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-024	Custom Paper 024	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-025	Custom Paper 025	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-026	Custom Paper 026	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-027	Custom Paper 027	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-028	Custom Paper 028	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-029	Custom Paper 029	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-030	Custom Paper 030	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-031	Custom Paper 031	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-032	Custom Paper 032	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-033	Custom Paper 033	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-034	Custom Paper 034	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-035	Custom Paper 035	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-036	Custom Paper 036	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-037	Custom Paper 037	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-038	Custom Paper 038	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-953-039	Custom Paper 039	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-040	Custom Paper 040	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-041	Custom Paper 041	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-042	Custom Paper 042	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-043	Custom Paper 043	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-044	Custom Paper 044	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-045	Custom Paper 045	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-046	Custom Paper 046	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-047	Custom Paper 047	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-048	Custom Paper 048	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-049	Custom Paper 049	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-050	Custom Paper 050	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-051	Custom Paper 051	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-052	Custom Paper 052	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-053	Custom Paper 053	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-054	Custom Paper 054	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-055	Custom Paper 055	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-056	Custom Paper 056	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-057	Custom Paper 057	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-058	Custom Paper 058	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-059	Custom Paper 059	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-060	Custom Paper 060	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-061	Custom Paper 061	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-062	Custom Paper 062	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-063	Custom Paper 063	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-064	Custom Paper 064	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-953-065	Custom Paper 065	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-066	Custom Paper 066	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-067	Custom Paper 067	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-068	Custom Paper 068	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-069	Custom Paper 069	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-070	Custom Paper 070	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-071	Custom Paper 071	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-072	Custom Paper 072	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-073	Custom Paper 073	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-074	Custom Paper 074	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-075	Custom Paper 075	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-076	Custom Paper 076	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-077	Custom Paper 077	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-078	Custom Paper 078	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-079	Custom Paper 079	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-080	Custom Paper 080	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-081	Custom Paper 081	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-082	Custom Paper 082	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-083	Custom Paper 083	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-084	Custom Paper 084	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-085	Custom Paper 085	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-086	Custom Paper 086	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-087	Custom Paper 087	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-088	Custom Paper 088	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-089	Custom Paper 089	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-090	Custom Paper 090	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2-953-091	Custom Paper 091	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-092	Custom Paper 092	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-093	Custom Paper 093	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-094	Custom Paper 094	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-095	Custom Paper 095	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-096	Custom Paper 096	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-097	Custom Paper 097	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-098	Custom Paper 098	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-099	Custom Paper 099	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]
2-953-100	Custom Paper 100	E	[-0.800 to 0.800 / **0.000** / 0.025%/step]

2981	**[PTR Speed Control]** -		
2-981-001	Custom Paper 001	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-002	Custom Paper 002	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-003	Custom Paper 003	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-004	Custom Paper 004	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-005	Custom Paper 005	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-006	Custom Paper 006	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-007	Custom Paper 007	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-008	Custom Paper 008	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-009	Custom Paper 009	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-010	Custom Paper 010	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-011	Custom Paper 011	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-012	Custom Paper 012	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-013	Custom Paper 013	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

2-981-014	Custom Paper 014	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-015	Custom Paper 015	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-016	Custom Paper 016	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-017	Custom Paper 017	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-018	Custom Paper 018	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-019	Custom Paper 019	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-020	Custom Paper 020	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-021	Custom Paper 021	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-022	Custom Paper 022	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-023	Custom Paper 023	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-024	Custom Paper 024	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-025	Custom Paper 025	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-026	Custom Paper 026	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-027	Custom Paper 027	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-028	Custom Paper 028	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-029	Custom Paper 029	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-030	Custom Paper 030	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-031	Custom Paper 031	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-032	Custom Paper 032	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-033	Custom Paper 033	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-034	Custom Paper 034	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-035	Custom Paper 035	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-036	Custom Paper 036	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-037	Custom Paper 037	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-038	Custom Paper 038	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-039	Custom Paper 039	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

2-981-040	Custom Paper 040	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-041	Custom Paper 041	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-042	Custom Paper 042	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-043	Custom Paper 043	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-044	Custom Paper 044	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-045	Custom Paper 045	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-046	Custom Paper 046	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-047	Custom Paper 047	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-048	Custom Paper 048	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-049	Custom Paper 049	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-050	Custom Paper 050	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-051	Custom Paper 051	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-052	Custom Paper 052	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-053	Custom Paper 053	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-054	Custom Paper 054	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-055	Custom Paper 055	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-056	Custom Paper 056	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-057	Custom Paper 057	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-058	Custom Paper 058	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-059	Custom Paper 059	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-060	Custom Paper 060	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-061	Custom Paper 061	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-062	Custom Paper 062	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-063	Custom Paper 063	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-064	Custom Paper 064	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-065	Custom Paper 065	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

2-981-066	Custom Paper 066	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-067	Custom Paper 067	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-068	Custom Paper 068	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-069	Custom Paper 069	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-070	Custom Paper 070	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-071	Custom Paper 071	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-072	Custom Paper 072	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-073	Custom Paper 073	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-074	Custom Paper 074	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-075	Custom Paper 075	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-076	Custom Paper 076	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-077	Custom Paper 077	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-078	Custom Paper 078	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-079	Custom Paper 079	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-080	Custom Paper 080	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-081	Custom Paper 081	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-082	Custom Paper 082	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-083	Custom Paper 083	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-084	Custom Paper 084	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-085	Custom Paper 085	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-086	Custom Paper 086	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-087	Custom Paper 087	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-088	Custom Paper 088	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-089	Custom Paper 089	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-090	Custom Paper 090	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-091	Custom Paper 091	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

2-981-092	Custom Paper 092	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-093	Custom Paper 093	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-094	Custom Paper 094	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-095	Custom Paper 095	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-096	Custom Paper 096	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-097	Custom Paper 097	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-098	Custom Paper 098	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-099	Custom Paper 099	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]
2-981-100	Custom Paper 100	E	[-1.0 to 1.0 / **0.0** / 0.1%/step]

3.3 MAIN SP TABLES-3

3.3.1 SP3-XXX (PROCESS)

3011	**[Manual ProCon :Ex]** -		
3-011-001	Normal ProCon	E	[-/ **-** / -] [Execute] Executes the normal process control manually (potential control).
3-011-002	Density Adjustment	E	[-/ **-** / -] [Execute] Executes the toner density adjustment manually.

3012	**[ProCon OK?]** Process Control Self-check Result Displays the result of the latest process control self-check. e.g., 99 (K): The self-check for Black failed 11 (K): The self-check for Black were successful.		
3-012-001	History:Last	E*	[0 to 99 / **0** / 1/step]
3-012-002	History:Last 2	E*	[0 to 99 / **0** / 1/step]
3-012-003	History:Last 3	E*	[0 to 99 / **0** / 1/step]
3-012-004	History:Last 4	E*	[0 to 99 / **0** / 1/step]
3-012-005	History:Last 5	E*	[0 to 99 / **0** / 1/step]
3-012-006	History:Last 6	E*	[0 to 99 / **0** / 1/step]
3-012-007	History:Last 7	E*	[0 to 99 / **0** / 1/step]
3-012-008	History:Last 8	E*	[0 to 99 / **0** / 1/step]
3-012-009	History:Last 9	E*	[0 to 99 / **0** / 1/step]
3-012-010	History:Last 10	E*	[0 to 99 / **0** / 1/step]

3020	**[Process Setup :Ex]** Executes process initial settings. ▪ Developer mixing ▪ AC charging adjustment ▪ Charging roller cleaning ▪ Transfer current adjustment ▪ Toner density adjustment process control ▪ MUSIC		
3-020-001	Execute: ALL	E	[- / **-** / -] [Execute]

3022	**[Developer Emission:Execute]** -		
3-022-001	Execute	E	[- / **-** / -] [Execute] Executes developer emission.

3023	**[Developer Emission:Execute]** -		
3-023-001	Result	E*	[0 to 9 / **1** / 1/step] Displays the result of developer emission execution. 1: Success 2 to 9: Failure

3024	**[Developer Fill :Exe]** -		
3-024-001	Execute	E	[- / **-** / -] [Execute] Executes the manual developer filling.

3025	**[Developer Fill :Disp]** -

3-025-001	Result	E*	[0 to 9 / **0** / 1/step] Displays the developer filling result. 1: Success 2 to 9: Failure

3028	**[Developer Emission:Set]** -		
3-028-001	Vcont	E	[0 to 500 / **400** / 1V/step] Sets ID Sensor Vcont when emitting the developer.
3-028-002	Vt	E	[0 to 500 / **150** / 0.01V/step] Sets the Vt when emitting the developer.
3-028-003	Line Speed	E	[0 to 500 / **0** / 10.01V/step] Sets the drive times of the development motor when emitting the developer.
3-028-004	Drive Time	E	[1 to 500 / **150** / 1s/step] Sets the drive time of the development motor when emitting the developer.
3-028-005	Additional Drive Time	E	[1 to 500 / **30** / 1s/step] Sets the additional drive time of the development motor when emitting the developer.

3029	**[Developer Fill:Set]** -		
3-029-001	Vcont	E	[0.00 to 500.00 / **400.00** / 0.01V/step] Sets ID Sensor Vcont when filling the developer.
3-029-002	Vt	E	[0.00 to 500.00 / **150.00** / 0.01V/step] Sets the Vt when filling the developer.
3-029-003	Line Speed	E	[0 to 3 / **0** / 1/step] Sets the drive times of the development motor when filling the developer.

3-029-004	Drive Time	E	[1 to 500 / **60** / 1s/step] Sets the drive time of the development motor when filling the developer.
3-029-005	W-Fill Vcont	E	[0.00 to 500.00 / **400.00** / 0.01V/step] Sets ID Sensor Vcont when judging double filling the developer.
3-029-006	W-Fill Vt	E	[0.00 to 500.00 / **150.00** / 0.01V/step] Sets Vt when judging double filling the developer.

3030	**[Init TD Sensor :E]** Executes the TD sensor initialization for all color.		
3-030-001	Execute: ALL	E	[- / **-** / -] [Execute]

3031	**[TD Sens Init OK?]** Displays the developer initialization result. e.g., 2 (Bk): Initialization of Black failed 1 (Bk): Initialization of Black succeeded.		
3-031-001	K	E*	[0 to 9 / **0** / 1/step] 1: Success 2 to 9: Failure

3032	**[Cleaning Setup :E]** -		
3-032-001	Execute: ALL	E	[- / **-** / -] [Execute] Execute this SP when Cleaning unit is replaced.
3032	**[Cleaning Setup OK]** -		

3-032-021	A4 Page Cover	E	[0 to 100 / **6** / 1pages/step] Sets the number of pages to print when cleaning unit initial setting.

3050	**[Force Tnr Supply]** -		
3-050-001	Execute: ALL	E	[- / **-** / -] [Execute] Executes Force toner supply (all colors)
3-050-021	Supply Quantity:K	E	[0.0 to 5.0 / **0.5** / 0.1wt%/step] Sets the amount [wt%] of toner (K) for Force toner supply.

3051	**[Manual Toner Fill :Exe]** -		
3-051-001	Execute:ALL	E	[- / **-** / -] [Execute] Executes the manual toner supply.

3070	**[Pot.Sens Check :E]** -		
3-070-001	All Colors	E	[- / **-** / -] [Execute] Executes potential sensor check.

3071	**[Pot.Sens Chk :Dis]** -		
3-071-001	Vd:K	E	[0 to 999 / **0** / 1-V/step] Displays the result of potential sensor check: Vd(K).
3-071-011	Vr:K	E	[0 to 999 / **0** / 1-V/step] Displays the result of potential sensor check: Vr(K).

3-071-021	Voffset:K	E	[0 to 999 / **0** / 1-V/step] Displays the result of potential sensor check: Voffset(K).

3072	**[TD.Sens Check :Ex]** -		
3-072-001	All Colors	E	[- / **-** / -] [Execute] Executes TD sensor check.

3073	**[TD.Sens Chk :Disp]** -		
3-073-001	Vt:K	E	[0.00 to 5.00 / **0.00** / 0.01V/step] Displays the result of potential sensor check: Vt (k).

3074	**[ID.Sens Check: Ex]** -		
3-074-001	Exe.	E	[- / **-** / -] [Execute] Executes ID sensor check.

3075	**[ID.Sens Chk :Disp]** -		
3-075-001	Vsg_reg	E	[0.00 to 5.00 / **0.00** / 0.01V/step] Displays the result of potential sensor check.:Vsg_reg.
3-075-011	Voffset_reg	E	[0.00 to 5.00 / **0.00** / 0.01V/step] Displays the result of potential sensor check.:Voffset_reg.

3100	**[TE Detect :Set]** Enables/disables the toner alert display on the LCD.

3-100-001	ON/OFF	E*	[0 or 1 / **0** / 1/step] 0:ON 1:OFF

3101	**[Toner Status :Disp]** Displays toner remaining status by 10 indicators. (10: Full, 2: estimate Near end, 0: Toner end)		
3-101-001	K	E*	[0 to 10 / **-** / 1/step]
3-101-002	C	E*	[0 to 10 / **-** / 1/step]
3-101-011	M	E*	[0 to 10 / **-** / 1/step]

3102	**[Toner Remains :Disp]** Displays the remaining amount of each color toner.		
3-102-001	% Remains:K	E*	[0 to 100 / **0** / 1%/step]
3-102-002	% Remains:C	E*	[0 to 100 / **0** / 1%/step]
3-102-011	mg Remains:K	E*	[0 to 99999999 / **0** / 0.1mg/step]
3-102-012	mg Remains:C	E*	[0.0 to 99999999.0 / **0.0** / 0.1mg/step]
3-102-021	Tnr mg(NewBtl):K	E*	[0.0 to 99999999.0 / **1730000.0** / 0.1mg/step]
3-102-022	Tnr mg(NewBtl):C	E*	[0.0 to 99999999.0 / **1730000.0** / 0.1mg/step]
3-102-031	ImgArea:K	E*	[0.0 to 99999999.0 / **1730000.0** / 0.1cm2/step]
3-102-032	ImgArea:C	E*	[0.0 to 99999999.0 / **0.0** / 0.1cm2/step]
3-102-041	TnrRemainCoef:K	E*	[0.00 to 2.55 / **1.50** / 0.01/step]
3-102-042	TnrRemainCoef:C	E*	[0.00 to 2.55 / **1.50** / 0.01/step]
3-102-051	Feed Counter:K	E*	[0 to 99999999 / **0** / 1/step]
3-102-052	Feed Counter:C	E*	[0 to 99999999 / **0** / 1/step]

3110	**[TNE Detect(Lvl1) :Set]** -		
3-110-001	OFF/ON	E*	[0 or 1 / **0** / 1/step] 0:ON 1:OFF Enables/disables the toner alert display on the LCD.
3-110-010	Disp Timing:K	E*	[10 to 100 / **10** / 1/step]

3120	**[TNE Detect(Lvl2) :Set]** -		
3-120-001	Set Cnt	E*	[0 to 999 / **650** / 1counts/step]
3-120-011	Cnt:K	E*	[0 to 5000 / **0** / 1counts/step]

3130	**[TE Detect :Set]** -		
3-130-001	Set Sheets(Min)	E*	[0 to 50 / **10** / 1sheets/step] Sets minimum assured sheets to display toner end after toner near end.
3-130-002	Set Sheets(Max)	E*	[0 to 5000 / **1000** / 1sheets/step] Sets maximum sheets to display toner end after toner near end.
3-130-011	Page Cnt:K	E*	[0 to 5000 / **-** / 1sheets/step] Displays the counter after toner near end.
3-130-021	Set Pxl Cnt	E*	[0 to 1000000 / **40000** / 1cm2/step] Sets the number of sheets with A4 close printing conversion to determine as toner end after toner near end.
3-130-031	Pxl Cnt:K	E*	[0 to 1000000 / **0** / 1cm2/step] Displays the Bk toner consuming amount with close printing conversion after toner near end.

3-130-041	Set Feed Cnt	E*	[0 to 99999999 / **0** / 1msec/step] Sets drive time of feed clutch of sub hopper to determine toner end after toner end.
3-130-051	Feed Cnt:K	E*	[0 to 99999999 / **0** / 1msec/step] Displays drive time of sub hopper of feed clutch (K) after toner near end.

3150	**[TE Sensor :Set]** -		
3-150-001	SamplingCount	E*	[4 to 20 / **10** / 1counts/step] Sets arrangement size of TE sensor.
3-150-002	Judge:p	E*	[0.2 to 0.8 / **0.2** / 0.1/step] Sets threshold to judge toner remains.

3151	**[Bottle Motor :Set]** -		
3-151-001	Bottle:OnTime1	E*	[0 to 5000 / **10** / 1count/step]

3152	**[Toner Pump CL :Set]** -		
3-152-001	On Time	E*	[0 to 5000 / **400** / 1counts/step] Sets toner pump on time.
3-152-002	Off Time	E*	[0 to 5000 / **400** / 1counts/step] Sets toner pump off time.
3-152-003	Recovery Times(Upperlimit)	E*	[0 to 999 / **660** / 1counts/step] Sets upper limit of toner recovery loop times.
3-152-010	Stop Timing :Set	E*	[0 to 2000 / **0** / 1counts/step] Sets upper limit of toner filling operation times by a bottle motor after toner near end.

3-152-011	Cnt:K	E*	[0 to 2000 / **0** / 1counts/step] Displays the counter of toner filling operation times by a bottle motor after toner near end.

3153	**[Feed Motor Drive Cntl:Set]** Changes rotation times of the toner feed motor.		
3-153-001	Rotations	E*	[0 to 7 / **2** / 1/step]

3153	**[Agitator Motor Drive Cntl:Set]** Changes rotation times of the toner agitator motor.		
3-153-002	Rotations	E*	[0 to 7 / **2** / 1/step]

3154	**[TNR Bottle Motor:cnt]** **DFU**		
3-154-001	MTR1 Lock Cnt	E*	[0 to 255 / **0** / 1/step]

3154	**[TNR Bottle Motor:cnt]** **DFU**		
3-154-002	MTR2 Lock Cnt	E*	[0 to 255 / **0** / 1/step]

3155	**[TNR Bottle Motor:cnt]** Last SC history log of toner bottle motor 1. When SC Occurred: 1, When SC not occurred: 0		
3-155-001	MTR1 SC Cnt	E*	[0 to 10 / **0** / 1/step]

3155	**[TNR Bottle Motor:cnt]** Last SC history log of toner bottle motor 2. When SC Occurred: 1, When SC not occurred: 0		
3-155-002	MTR2 SC Cnt	E*	[0 to 10 / **0** / 1/step]

3156	**[TNR Bottle Motor:cnt]** **DFU**		
3-156-001	Set SC Cnt	E*	[0 to 10 / **2** / 1/step]

3157	**[TNR Motor SC cancel]** Executes to cancel SC when SC332-01/SC332-05 occurred.		
3-157-001	Execute	E	[- / **-** / -] [Execute]

3200	**[TnrDensity]** -		
3-200-001	K	E*	[0.0 to 25.5 / **0.0** / 0.1wt%/step] Displays toner density (wt%).

3201	**[TnrDensity]** -		
3-201-001	Upper TC	E*	[1.0 to 15.0 / **8.0** / 0.1wt%/step] Sets upper limit for toner density (wt%) controlling range.
3-201-002	Lower TC	E*	[1.0 to 15.0 / **4.5** / 0.1wt%/step] Sets lower limit for toner density (wt%) controlling range.

3210	**[TD.Sens:Vt :Disp]** -		
3-210-001	Current: K	E*	[0.00 to 5.50 / **0.00** / 0.01V/step] Displays latest TD sensor output (K).

3220	**[Vtcnt :Disp/Set]** -		

3-220-001	Current: K	E*	[2.00 to 5.00 / **3.72** / 0.01V/step] Displays / Sets current TD sensor's control voltage (K).
3-220-011	Initial: K	E*	[2.00 to 5.00 / **3.72** / 0.01V/step] Displays TD sensor's control voltage (K) when executing TD sensor initial setting.

3230	**[Vtref :Disp/Set]** -		
3-230-001	Current: K	E*	[2.00 to 5.00 / **2.89** / 0.01V/step] Displays / Sets current TD sensor's target output voltage:Vtref (Bk).
3-230-011	Initial: K	E*	[2.00 to 5.00 / **3.72** / 0.01V/step] Displays initial value of TD sensor's target output voltage.
3-230-021	Pixel Correction	E*	[-5.00 to 5.50 / **0.00** / 0.01V/step] Displays pixel correction value (Bk) for Vtref correction by image area ratio.

3231	**[Vtref Limits :Set]** -		
3-231-001	Upper:K	E*	[0.00 to 5.00 / **3.22** / 0.01V/step] Sets upper limit of TD sensor's target output voltage: Vtref (Bk).
3-231-011	Lower:K	E*	[0.00 to 5.00 / **2.23** / 0.01V/step] Sets lower limit of TD sensor's target output voltage: Vtref (Bk).

3232	**[Vtref Correct:Pix]** -

3-232-001	ON/OFF	E*	[0 or 1 / **0** / 1/step] 0: NotExecute 1: Execute Switches pixel Vtref correction ON/OFF.

3233	**[PPAT Vtref Corr :Disp/Set]** -		
3-233-041	Vtavg Rate(H)	E*	[0 to 100 / **50** / 1%/step] Sets Vtavg and Vtref used for Vtref standard correction value when threshold is exceeded the upper limit of adhesion amount of ID pattern.
3-233-051	Vtavg Rate(M)	E*	[0 to 100 / **50** / 1%/step] Sets Vtavg and Vtref used for Vtref standard correction value when threshold is in between the upper and lower limit of adhesion amount of ID pattern.
3-233-061	Vtavg Rate(L)	E*	[0 to 100 / **50** / 1%/step] Sets Vtavg and Vtref used for Vtref standard correction value when threshold is exceeded the lower limit of adhesion amount of ID pattern.

3251	**[DotCoverage :Disp]** -		
3-251-011	DC Avg.:S:K	E*	[0.00 to 100.00 / **5.00** / 0.01%/step] Displays cumulative average rate: S (K) of image area.
3-251-021	DC Avg.:M:K	E*	[0.00 to 100.00 / **5.00** / 0.01%/step] Displays cumulative average rate: M (K) of image area.
3-251-031	DC Avg.:L:K	E*	[0.00 to 100.00 / **5.00** / 0.01%/step] Displays cumulative average rate: L (K) of image area.

3260	**[Temp/Humid(PCU)]** -		
3-260-001	Temperature	E	[0 to 100 / **0** / 1deg/step] Displays the temperature based on the detection result of PCU humidity and temperature sensor.
3-260-002	Relative Humidity	E	[0 to 100 / **0** / 1%RH/step] Displays the relative humidity based on the detection result of PCU humidity and temperature sensor.
3-260-003	Absolute Humidity	E	[0.00 to 63.00 / **0.00** / 0.01g/m3/step] Displays the absolute humidity based on the detection result of PCU humidity and temperature sensor.

3261	**[Temp/Humid(Body)]** -		
3-261-001	Temperature	E	[0 to 100 / **0** / 1deg/step] Displays the absolute humidity based on the detection result of mainframe humidity and temperature sensor.
3-261-002	Relative Humidity	E	[0 to 100 / **0** / 1%RH/step] Displays the relative humidity based on the detection result of mainframe humidity and temperature sensor.
3-261-003	Absolute Humidity	E	[0.00 to 63.00 / **0.00** / 0.01g/m3/step] Displays the absolute humidity based on the detection result of mainframe humidity and temperature sensor.

3262	**[Env Set:PCU]** Sets PCU environmental setting forcedly.

3-262-001	Forced Setting	E*	[0 to 5 / **0** / 1/step] 0: Sencer Detect 2: LL 3: ML 4: MM 5: MH

3263	**[Env Set:Body]** Sets mainframe environmental setting forcedly.		
3-263-001	Forced Setting	E*	[0 to 5 / **0** / 1/step] 0: Sencer Detect 1: LLL 2: LL 3: ML 4: MM

3264	**[Env Thresh:PCU]** Sets threshold of absolute humidity to judge the environmental correction level of PCU.		
3-264-002	Abs Humid:2	E*	[0.00 to 100.00 / **5.00** / 0.01g/m3/step]
3-264-003	Abs Humid:3	E*	[.000 to 100.00 / **10.00** / 0.01g/m3/step]
3-264-004	Abs Humid:4	E*	[0.00 to 100.00 / **18.00** / 0.01g/m3/step]
3-264-005	Abs Humid:5	E*	[0.00 to 100.00 / **25.00** / 0.01g/m3/step]

3265	**[Env Thresh:Body]** Sets threshold of absolute humidity to judge the environmental correction level of the mainframe.		
3-265-001	Abs Humid:1	E*	[0.00 to 63.00 / **2.50** / 0.01g/m3/step]
3-265-002	Abs Humid:2	E*	[0.00 to 63.00 / **5.00** / 0.01g/m3/step]
3-265-003	Abs Humid:3	E*	[0.00 to 63.00 / **8.40** / 0.01g/m3/step]
3-265-004	Abs Humid:4	E*	[0.00 to 63.00 / **15.00** / 0.01g/m3/step]
3-265-005	Abs Humid:5	E*	[0.00 to 63.00 / **24.00** / 0.01g/m3/step]

3300	**[ID Pattern :Disp]** -		
3-300-001	M/A(Latest):K	E*	[0.000 or 1.000 / **0.000** / 0.001mg/cm2/step] Displays latest amount of ID pattern adhesion.
3-300-011	M/A(Target):K	E*	[0.000 or 1.000 / **0.180** / 0.001mg/cm2/step] Displays target adhesion quantity (K) of ID pattern.
3-300-021	M/A(Target Corr Coef):K	E*	[0.000 to 0.200 / **0.005** / 0.001mg/cm2/step] Corrects adhesion amount when development gamma is out of target value.
3-300-101	M/A(Latest):K	E*	[0.000 or 1.000 / **0.180** / 0.001mg/cm2/step] Displays latest adhesion amount of ID pattern when process controlling.

3301	**[ID Pattern :Set]** -		
3-301-021	M/A UppErr:K	E	[0.000 or 1.000 / **0.600** / 0.001mg/cm2/step] Sets error decision threshold (K) for SC373-01 ID patter error.
3-301-023	M/A LowErr:K	E	[0.000 or 1.000 / **0.050** / 0.001mg/cm2/step] Sets error decision threshold (K) for SC374-01 ID patter error.
3-301-031	Feed Cnt :Set	E*	[0 to 99999999 / **50000** / 1ms/step] Estimates ON time of sub hopper drive device (Resets when toner end sensor detects the toner).

3-301-041	Feed Cnt :K	E*	[0 to 99999999 / **0** / 1ms/step] Estimates ON time of sub hopper drive device (K).
3-301-081	Create Intrvl:	E	[0.0 to 6553.5 / **8.9** / 0.1s/step] Sets ID pattern creating interval (current value)(K)
3-301-082	Create Intrvl:	E	[0.0 to 6553.5 / **8.9** / 0.1s/step] Sets ID pattern creating interval (default) (K).
3-301-091	Time Cnt :K	E	[0.0 to 6553.5 / **0.0** / 0.1s/step] Displays time count value (K) for ID pattern.
3-301-101	Create Intrvl:95ppm:K	E	[0.0 to 6553.5 / **12.6** / 0.1s/step] Sets ID pattern creating interval (current value)(95ppm)(K)
3-301-111	Create Intrvl:110ppm:K	E	[0.0 to 6553.5 / **10.9** / 0.1s/step] Sets ID pattern creating interval (current value)(110ppm)(K)
3-301-121	Create Intrvl:135ppm:K	E	[0.0 to 6553.5 / **8.9** / 0.1s/step] Sets ID pattern creating interval (current value)(135ppm)(K)
3-301-131	Create Intrvl:150ppm:K	E	[0.0 to 6553.5 / **8.0** / 0.1s/step] Sets ID pattern creating interval (current value)(150ppm)(K)
3-301-151	Create Intrvl:95ppm:K	E	[0.0 to 6553.5 / **12.6** / 0.1s/step] Sets ID pattern creating interval (default)(95ppm)(K)
3-301-161	Create Intrvl:110ppm:K	E	[0.0 to 6553.5 / **10.9** / 0.1s/step] Sets ID pattern creating interval (default)(110ppm)(K)
3-301-171	Create Intrvl:135ppm:K	E	[0.0 to 6553.5 / **8.9** / 0.1s/step] Sets ID pattern creating interval (default)(135ppm)(K)

3-301-181	Create Intrvl:150ppm:K	E	[0.0 to 6553.5 / **8.0** / 0.1s/step] Sets ID pattern creating interval (default)(150ppm)(K)
3-301-201	ID Pattern M/A:K	E	[0.000 to 1.000 / **0.180** / 0.001mg/cm2/step] Sets latest adhesion amount of ID pattern.
3-301-211	Line Width Sensitivi:K	E	[0.0000 to 1.0000 / **0.0080** / 0.0001mg/cm2/um/step] Sets line width sensitivity (K) for ID patter.
3-301-221	Max M/A Sensitivi:K	E	[0.0000 to 1.0000 / **0.2425** / 0.0001/step] Sets maximum adhesion amount sensitivity (K) of ID pattern.

3310	**[ID.Sens :Voffset]** -		
3-310-001	Voffset reg	E*	[0.00 to 5.50 / **0.00** / 0.01V/step] Displays specular reflection light output voltage when ID sensor's LED is OFF.

3311	**[ID.Sens :Vmin]** -		
3-311-001	Vmin_K	E*	[0.00 to 5.00 / **0.00** / 0.01V/step] Displays Black Vmin output of gradation pattern.

3312	**[ID.Sens :Vct]** -		
3-312-001	Vct_reg	E*	[0.000 to 5.000 / **0.000** / 0.001V/step] Displays specular reflection output of cross talk.

3320	**[Vsg Adj: Execute]** -

3-320-001	ALL	E	[- / **-** / -] [Execute] Executes Vsg adjust.

3321	**[Adjusted Vsg]** -		
3-321-001	Vsg reg	E*	[0.00 to 5.50 / **0.00** / 0.01V/step] Displays specular reflection light output of belt background area adjusted by Vsg.

3322	**[Adjusted Ifsg]** -		
3-322-001	Ifsg	E*	[0.0 to 50.0 / **6.0** / 0.1mA/step] Displays LED current of ID sensor adjusted by Vsg.
3-322-011	Ifsg	E*	[0 to 50 / **27** / 0.1mA/step] Displays minimum LED current of ID sensor adjusted by Vsg.

3323	**[Vsg Adj OK?]** Displays Vsg adjustment execution result.		
3-323-001	Latest	E*	[0 to 9 / **0** / 1/step]
3-323-002	Latest 1	E*	[0 to 9 / **0** / 1/step]
3-323-003	Latest 2	E*	[0 to 9 / **0** / 1/step]
3-323-004	Latest 3	E*	[0 to 9 / **0** / 1/step]
3-323-005	Latest 4	E*	[0 to 9 / **0** / 1/step]
3-323-006	Latest 5	E*	[0 to 9 / **0** / 1/step]
3-323-007	Latest 6	E*	[0 to 9 / **0** / 1/step]
3-323-008	Latest 7	E*	[0 to 9 / **0** / 1/step]
3-323-009	Latest 8	E*	[0 to 9 / **0** / 1/step]

3-323-010	Latest 9	E*	[0 to 9 / **0** / 1/step]

3331	**[ID.Sens Coef :Set]** Shipping inspection value of ID/TD sensors that is on the UPC code.		
3-331-041	Vct_reg_Slope Chec	E*	[0.0000 or 1.0000 / **0.0000** / 0.0001V/mA/step]
3-331-046	Vct_reg_Xint_Check	E*	[0.0 to 25.5 / **0.0** / 0.1mA/step]

3339	**[M/A Calculation]** Corrects aging for adhesion amount of ID sensors.		
3-339-010	ON/OFF:Aging	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON
3-339-020	Aging:Coef: 0	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-021	Aging:Coef: 1	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-022	Aging:Coef: 2	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-023	Aging:Coef: 3	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-024	Aging:Coef: 4	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-025	Aging:Coef: 5	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-026	Aging:Coef: 6	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-027	Aging:Coef: 7	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-028	Aging:Coef: 8	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-029	Aging:Coef: 9	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-030	Aging:Coef: 10	E*	[0.50 to 2.00 / **1.00** / 0.01/step]
3-339-040	ON/OFF:Stress	E*	[0 or 1 / **0** / 1/step] 0:OFF 1:ON

3-339-060	ON/OFF: D Distance	E*	[0 or 1 / **0** / 1/step] 0:OFF 1:ON
3-339-070	ON/OFF:Area rate	E*	[0 or 1 / **0** / 1/step] 0:OFF 1:ON
3-339-090	ON/OFF:IT Distance	E*	[0 or 1 / **0** / 1/step] 0:OFF 1:ON

3400	**[Toner Supply Type]** -		
3-400-001	K	E	[0 to 2 / **2** / 1/step] 0: FIXED 2: PID Selects toner supply method (K).

3411	**[Toner Supply Qty]** -		
3-411-001	K	E	[0 to 999 / **0** / 1mg/step] Displays the latest value (K) of toner supplying amount that is calculated by the toner supply amount computation formula.

3440	**[Fixed Supply Mode]** -		
3-440-001	Fixed Rate: K	E	[0 to 100 / **5** / 1%/step] Sets toner supplying rate (K) when 3-400-001 is set to “0: FIXED”

3450	**[Toner Supply PID:]** -

3-450-001	Vt Proportion: K	E*	[0 to 100 / **5** / 1%/step] Sets supplying coefficient (K) to supply in proportion to Vt-Vtref when controlling the toner supplying. Uses PID control to supply toner.
3-450-011	Pixel Proportion:	E*	[0 to 150 / **90** / 1%/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-031	Correction Coeffie	E*	[0.00 to 2.55 / **1.00** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-032	Correction Coeffie	E*	[0.00 to 2.55 / **0.50** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-033	Correction Coeffie	E*	[0.00 to 2.55 / **0.00** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-034	Correction Coeffie	E*	[0.00 to 2.55 / **0.25** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-035	Correction Coeffie	E*	[0.00 to 2.55 / **0.50** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.

3-450-051	Correction Value 1	E*	[-0.10 to 0.00 / **0.00** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-052	Correction Value 2	E*	[0.00 to 0.10 / **0.00** / 0.01/step] Sets supplying coefficient to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-061	P_Pxl_Coef_Err	E*	[0.00 or 1.00 / **0.35** / 0.01/step]
3-450-071	Vt Integral Contro	E*	[0 to 2550 / **500** / 1/step] Sets supplying coefficient (K) to supply in proportion to output image pixels when controlling the toner supplying. Uses PID control to supply toner.
3-450-091	Vt Sum Times: K	E*	[1 to 255 / **20** / 1times/step] Displays accumulate amount (K) of difference to control supplying by the difference of Vtref accumulate amount when controlling the toner supplying. Uses PID control to supply toner.

3500	**[ImgQltyAdj :ON/OFF]** -		
3-500-001	All	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets execution judgment of all image quality adjustments to OFF.
3-500-002	ProCon	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets execution judgment of process control to OFF.

3-500-004	Init TD Sensor	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets execution judgement of TD Sensor Initial Settings to OFF.

3520	**[ImgQltyAdj :Inter]** Sets page interval of image quality adjustment.		
3-520-001	During Job	E*	[0 to 100 / **30** / 1pages/step]

3521	**[Drum Stop Time :D]** Displays time when the drum is stopped. (year/month/day/hour/minute)		
3-521-001	Year	E*	[0 to 99 / **-** / 1year/step]
3-521-002	Month	E*	[1 to 12 / **-** / 1month/step]
3-521-003	Day	E*	[1 to 31 / **-** / 1day/step]
3-521-004	Hour	E*	[0 to 23 / **-** / 1hour/step]
3-521-005	Minute	E*	[0 to 59 / **-** / 1minute/step]

3522	**[Drum Stop Environ]** Displays the environment when the drum is stopped. (temperature/relative humidity/absolute humidity)		
3-522-001	Temperature	E*	[-1280.0 to 1270.0 / **0.0** / 0.1deg/step]
3-522-002	Rel Humidity	E*	[0.0 to 1000.0 / **0.0** / 0.1%RH/step]
3-522-003	Abs Humidity	E*	[0.0 to 1000.0 / **0.0** / 0.1g/m3/step]

3529	**[ProCon Interval C]** -

3-529-001	Gamma Corr	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets development gamma correction for auto process control interval ON/OFF.
3-529-002	Environ Corr	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets environment gamma correction for auto process control interval ON/OFF.
3-529-003	AbsHum Threshold	E*	[0.0 to 99.0 / **4.3** / 0.1g/m3/step] Sets absolute humidity threshold of environment correction for auto process control interval
3-529-004	Max Cnt	E*	[0 to 99 / **2** / 1time/step] Sets maximum times of process control interruption / Job end process control.
3-529-005	Exe Cnt	E*	[0 to 255 / **0** / 1time/step] Sets maximum times counter of process control interruption / Job end process control.
3-529-006	Page Cnt:BW	E*	[0 to 5000 / **0** / 1page/step] Displays BW process control page counter.

3530	**[PowerON ProCon :S]** -		
3-530-001	Non-use Time Setti	E*	[0 to 1440 / **30** / 1minute/step] Sets threshold of process control execution judgment when power is ON.
3-530-002	Temperature Range	E*	[0 to 99 / **10** / 1deg/step] Sets threshold of process control execution judgment when power is ON.

3-530-003	Relative Humidity	E*	[0 to 99 / **50** / 1%RH/step] Sets threshold of process control execution judgment when power is ON.
3-530-004	Absolute Humidity	E*	[0 to 99 / **6** / 1g/m3/step] Sets threshold of process control execution judgment when power is ON.
3-530-005	Interval:BW	E*	[0 to 5000 / **0** / 1pages/step] Sets threshold of process control execution judgment when power is ON.
3-530-007	Page Cnt:BW	E*	[0 to 5000 / **0** / 1pages/step] Sets page counter of BW process control when power is ON.
3-530-009	Non-use long Time Setting	E*	[0 to 1440 / **0** / 1minute/step]

3532	**[JobIn Procon :Set]** Sets threshold of process control execution judgment during standby.		
3-532-001	Non-use Time Setti	E*	[0 to 1440 / **0** / 1minute/step]
3-532-002	Temperature Range	E*	[0 to 99 / **0** / 1deg/step]
3-532-003	Relative Humidity	E*	[0 to 99 / **0** / 1%RH/step]
3-532-004	Absolute Humidity	E*	[0 to 99 / **0** / 1g/m3/step]

3533	**[Interrupt ProCon]** -		
3-533-001	Interval:Set:BW	E*	[0 to 5000 / **4000** / 1pages/step] Sets interval number of sheets for process control interruption (BW).
3-533-002	Interval:Disp:BW	E*	[0 to 5000 / **0** / 1pages/step] Displays interval number of sheets for process control interruption (BW).

3-533-003	Corr(Short):BW	E*	[0.00 to 1.00 / **0.50** / 0.01/step] Sets correcting coefficient (Short) of interval number of sheets for process control interruption (BW).
3-533-004	Corr(Mid):BW	E*	[0.00 or 1.00 / **1.00** / 0.01/step] Sets correcting coefficient (Mid) of interval number of sheets for process control interruption (BW).

3534	**[JobEnd ProCon :Se]** -		
3-534-001	Interval:Set:BW	E*	[0 to 5000 / **2000** / 1pages/step] Sets interval number of sheets for Job end process control (BW).
3-534-002	Interval:Disp:BW	E*	[0 to 5000 / **2000** / 1pages/step] Displays interval number of sheets for Job end process control (BW).
3-534-003	Corr(Short):BW	E*	[0.00 to 1.00 / **0.75** / 0.01/step] Sets correcting coefficient (Short) of interval number of sheets for Job end process control (BW).
3-534-004	Corr(Mid):BW	E*	[0.00 or 1.00 / **1.00** / 0.01/step] Sets correcting coefficient (Mid) of interval number of sheets for Job end process control (BW).

3539	**[Dev Agitating Tim]** -		
3-539-001	Time	E*	[0 to 3000 / **10** / 1sec/step] Sets developer agitation time.

3-539-010	ON/OFF(by AbsHum)	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sets absolute humidity correction of developer agitating time ON/OFF.
3-539-030	ON/OFF(by Non-use	E*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sets non-use time correction of developer agitating time ON/OFF.
3-539-050	ON/OFF(by Non-use	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Sets image area correction of developer agitating time ON/OFF.

3600	**[Select ProCon]** -		
3-600-001	Potential Control	E*	[0 or 1 / **1** / 1/step] 0: FIXED 1: CONTROL Sets electric potential control method.
3-600-003	TC Adj. Mode	E*	[0 to 3 / **2** / 1/step] 0: Do Not Execute 1: 1st Power On 2: 1st Power On & Job End Sets execution timing of toner density adjustment process control.
3-600-004	ACC Before ProCon	E*	[0 to 3 / **2** / 1/step] 0: NotExecute 1: ProcessControl 2: TCControl Executes same action as loop process control executes before AAC by SP mode.

3-600-005	TC Adj. Times	E*	[1 to 10 / **5** / 1/step] Sets upper limit of loop times of toner density adjustment process control.
3-600-070	IMSSe Select	E*	[0 or 1 / **1** / 1/step] 0: ON 1: OFF Sets adhesion amount control method for each paper type.

3611	**[Chrg DC Control]** Displays charging DC bias (K) determined by the process control.		
3-611-001	95ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-011	110ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-021	135ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-031	150ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-101	Procon:95ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-111	Procon:110ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-121	Procon:135ppm: K	E*	[200 to 1350 / **550** / 1-V/step]
3-611-131	Procon:150ppm: K	E*	[200 to 1350 / **550** / 1-V/step]

3612	**[Dev DC Control]** Displays development DC bias (K) determined by the process control.		
3-612-001	95ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-011	110ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-021	135ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-031	150ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-101	Procon:95ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-111	Procon:110ppm: K	E*	[100 to 900 / **350** / 1-V/step]
3-612-121	Procon:135ppm: K	E*	[100 to 900 / **350** / 1-V/step]

3-612-131	Procon:150ppm: K	E*	[100 to 900 / **350** / 1-V/step]

3613	**[LD Power Control]** Displays LD power (K) determined by process control.		
3-613-001	K	E*	[60 to 180 / **100** / 1%/step]
3-613-101	Procon: K	E*	[60 to 180 / **100** / 1%/step]

3620	**[ProCon Target M/A]** -		
3-620-001	Maximum M/A:K	E*	[0.250 to 0.750 / **0.444** / 0.001mg/cm2/step] Sets the maximum mat adhesion quantity (K).
3-620-011	Maximum M/A Adj.:K	E*	[-5 to 5 / **0** / 1/step] Sets max.image density adjustment (K).
3-620-021	Maximum M/A Corr:K	E*	[-0.150 to 0.150 / **0.000** / 0.001mg/cm2/step] Corrects mat adhesion quantity (K) base on P_Rank when development gamma is out of target value.
3-620-101	Procon:Maximum M/A:K	E*	[0.250 to 0.750 / **0.444** / 0.001mg/cm2/step] Sets current value of mat adhesion quantity (K) for each paper type.
3-620-111	Plain:Maximum M/A:K	E*	[0.250 to 0.750 / **0.444** / 0.001mg/cm2/step] Sets mat adhesion quantity (K) for plain paper.
3-620-121	gloss:Maximum M/A:K	E*	[0.250 to 0.750 / **0.444** / 0.001mg/cm2/step] Sets mat adhesion quantity (K) for gloss paper.
3-620-131	rough:Maximum M/A:K	E*	[0.250 to 0.750 / **0.500** / 0.001mg/cm2/step] Sets mat adhesion quantity (K) for rough paper.

3622	**[Dev Pot :Set]** -		
3-622-001	Current: K	E*	[0 to 800 / **300** / 1V/step] Displays development potential current value (K).
3-622-011	Target: K	E*	[0 to 800 / **0** / 1V/step] Displays development potential target value (K).
3-622-051	UpperLimit:K	E*	[400 to 800 / **625** / 1V/step] Sets development potential (upper limit) (K).
3-622-061	LowerLimit:K	E*	[0 to 400 / **200 /** 1V/step] Sets development potential (lower limit) (K).
3-622-101	Procon:Current:K	E*	[0 to 800 / **300** / 1V/step] Displays development potential current value (K) according to paper.

3623	**[LD Power :Set]** -		
3-623-051	Line Width Adj.:K	E*	[20 to 120 / **51** / 1um/step] Sets line width adjustment (K).
3-623-061	Line Width Adj.:K	E*	[-5 to 5 / **0** / 1/step] Sets line width adjustment (K).

3624	**[TC Adj. Mode]** -		
3-624-001	Target(Upp Limit)	E*	[0.00 or 1.00 / **0.15** / 0.01mg/cm2/-kV/step] Sets development gamma adjustment target range (upper limit) for toner density adjustment process control.

3-624-002	Target(Lwr Limit)	E*	[-1.00 to 0.00 / **-0.10** / 0.01mg/cm2/-kV/step] Sets development gamma adjustment target range (lower limit) for toner density adjustment process control.
3-624-005	Force Consume Thre	E*	[1.00 to 6.00 / **1.90** / 0.01mg/cm2/-kV/step] Sets force consuming threshold for toner density adjustment process control.
3-624-007	Consume(Upp Limit)	E*	[0 to 32 / **16** / 1times/step] Sets consuming times (upper limit) of toner density adjustment process control.
3-624-008	Force Supply Thres	E*	[0.00 or 1.00 / **0.65** / 0.01mg/cm2/-kV/step] Sets force supply threshold for toner density adjustment process control.
3-624-009	Supply(Upp Limit)	E*	[1 to 50 / **5** / 1g/step] Sets supply amount (upper limit) of toner density adjustment process control.
3-624-010	Supply(Lwr Limit)	E*	[1 to 50 / **1** / 1g/step] Sets supply amount (lower limit) of toner density adjustment process control.

3627	**[P Pattern Extract]** -		
3-627-001	Edge Detection Threshold :ID.Sens :K	E*	[0.0 to 5.0 / **2.5** / 0.1V/step] Sets edge detection threshold (K) for gradation pattern extracting (ID sensor).
3-627-011	Edge Upper Limit :ID.Sens	E*	[0 to 255 / **42** / 1point/step] Sets upper limit of edge space for gradation pattern extracting (ID sensor).
3-627-021	Edge Lower Limit :ID.Sens	E*	[0 to 255 / **15** / 1point/step] Sets lower limit of edge space for gradation pattern extracting (ID sensor).

3-627-051	Edge Detection Threshold :Pot.Sens :K	E*	[0 to 999 / **250** / 1-V/step] Sets edge detection threshold (K) for gradation pattern extracting (potential sensor).
3-627-061	Edge Upper Limit :Pot.Sens	E*	[0 to 255 / **42** / 1point/step] Sets upper limit of edge space threshold for gradation pattern extract (potential sensor).
3-627-071	Edge Lower Limit :Pot.Sens	E*	[0 to 255 / **15** / 1point/step] Sets lower limit of edge interval threshold for gradation pattern extract (potential sensor).

3629	**[Pot. Control Pattern]** -		
3-629-001	ChargeDC: Pattern1	E*	[0 to 999 / **320** / 1-V/step] Sets 1st patch of charging DC bias (K) for gradation control pattern.
3-629-002	ChargeDC: Pattern2	E*	[0 to 999 / **380** / 1-V/step] Sets 2nd patch of charging DC bias (K) for gradation control pattern.
3-629-003	ChargeDC: Pattern3	E*	[0 to 999 / **450** / 1-V/step] Sets 3rd patch of charging DC bias (K) for gradation control pattern.
3-629-004	ChargeDC: Pattern4	E*	[0 to 999 / **520** / 1-V/step] Sets 4th patch of charging DC bias (K) for gradation control pattern.
3-629-005	ChargeDC: Pattern5	E*	[0 to 999 / **590** / 1-V/step] Sets 5th patch of charging DC bias (K) for gradation control pattern.
3-629-101	DevelopmentDC: Pat	E*	[0 to 999 / **110** / 1-V/step] Sets 1st patch of development bias (K) for gradation control pattern.

3-629-102	DevelopmentDC: Pat	E*	[0 to 999 / **170** / 1-V/step] Sets 2nd patch of development bias (K) for gradation control pattern.
3-629-103	DevelopmentDC: Pat	E*	[0 to 999 / **230** / 1-V/step] Sets 3rd patch of development bias (K) for gradation control pattern.
3-629-104	DevelopmentDC: Pat	E*	[0 to 999 / **290** / 1-V/step] Sets 4th patch of development bias (K) for gradation control pattern.
3-629-105	DevelopmentDC: Pat	E*	[0 to 999 / **360** / 1-V/step] Sets 5th patch of development bias (K) for gradation control pattern.

3630	**[Dev gamma :Disp/S]** -		
3-630-001	Current:K	E*	[0.10 to 6.00 / **1.20** / 0.01mg/cm2/-kV/step] Displays latest development gamma (K).
3-630-011	Target:K	E*	[0.50 to 2.55 / **1.20** / 0.01mg/cm2/-kV/step] Displays target value of development gamma (K).
3-630-021	Initial:K	E*	[0.50 to 2.55 / **1.20** / 0.01mg/cm2/-kV/step] Sets the initial value for development Gamma (K).
3-630-031	Env Cor.(ON/OFF)	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets development gamma (Environmental Correct) ON/OFF.
3-630-032	TC Cor.(ON/OFF)	E*	[0 or 1 / **1** / 1/step] 0:OFF 1:ON Sets development gamma (TC correction) ON/OFF.

3-630-041	Environ Corr:K	E*	[-1.00 to 1.00 / **0.00** / 0.01mg/cm2/-kV/step] Displays environment correction of development gamma.
3-630-051	TnrDensity Corr:K	E*	[-1.00 to 1.00 / **0.00** / 0.01mg/cm2/-kV/step] Displays Toner Density Correction for Dev Gamma (K)
3-630-061	TnrDensity:K	E*	[0.0 to 25.5 / **0.0** / 0.1wt%/step] Displays toner density correction value (K) calculated based on TD sensor output.
3-630-071	Environ Corr1:K	E*	[-1 to 1 / **-0.10** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 1) of development gamma.
3-630-072	Environ Corr2:K	E*	[-1.00 to 1.00 / **-0.05** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 2) of development gamma.
3-630-073	Environ Corr3:K	E*	[-1.00 to 1.00 / **0.00** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 3) of development gamma.
3-630-074	Environ Corr4:K	E*	[-1.00 to 1.00 / **0.05** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 4) of development gamma.
3-630-075	Environ Corr5:K	E*	[-1.00 to 1.00 / **0.10** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 5) of development gamma.
3-630-076	Environ Corr6:K	E*	[-1.00 to 1.00 / **0.15** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 6) of development gamma.

3-630-077	Environ Corr7:K	E*	[-1.00 to 1.00 / **0.10** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 7) of development gamma.
3-630-078	Environ Corr8:K	E*	[-1.00 to 1.00 / **0.10** / 0.01mg/cm2/-kV/step] Sets environmental correction table value (environment correction 8) of development gamma.
3-630-090	TC-Gamma	E*	[0.10 to 0.25 / **0.12** / 0.01/step] Inclination of TC-Development gamma.
3-630-091	TC Corr Threshold:	E*	[4.0 to 8.0 / **6.0** / 0.1wt%/step] Displays toner density converted based on TD Sensor output.

3631	**[Vk :Disp]** -		
3-631-001	K	E*	[-300 to 300 / **0** / 1-V/step] Displays latest developing start voltage (K).

3641	**[Vd(700) :Disp]** -		
3-641-001	Average:K	E*	[0 to 999 / **0** / 1-V/step] Displays the average Vd of one rotation of the drum for the latest OPC charging potential (Offset Exposure ON).
3-641-011	Max:K	E*	[0 to 999 / **0** / 1-V/step] Displays the maximum Vd of one rotation of the drum for the latest OPC charging potential (Offset Exposure ON).
3-641-021	Min:K	E*	[0 to 999 / **0** / 1-V/step] Displays the minimum Vd of one rotation of the drum for the latest OPC charging potential (Offset Exposure ON).

3-641-031	Corr Coef:K	E*	[0.70 to 1.20 / **0.90** / 0.01/step] Sets correction coefficient (Vc-Vd conversion coefficient) can be calculated from Vc-Vd plot.

3642	**[Vr :Disp]** -		
3-642-001	K	E*	[0 to 999 / **0** / 1-V/step] Displays latest residual potential (K) of OPC drum.

3649	**[Pattern Pot:**]** -		
3-649-001	Vl(P5):K	E*	[0 to 999 / **50** / 1-V/step] Displays potential Vl(P5): (K) of 5th patch of the gradation pattern.
3-649-011	Vpl:K	E*	[0 to 999 / **0** / 1-V/step] Displays potential: Vpl(K) of half tone pattern.

3810	**[Lubricant Bar End Detection]** -		
3-810-001	Near End Detection Distance: Thres1:Bk	E	[0 to 99999999 / **10000** / 1m/step] Running distance threshold: to near end detection from mechanical detection.
3-810-003	End Detection Distance: Thres2:Bk	E	[0 to 99999999 / **50000** / 1m/step] Running distance threshold: to end detection from near end detection.
3-810-005	Conduction Detection Times:Thres3	E	[0 to 9 / **1** / 1/step] Conduction detection times threshold.
3-810-006	New Unit Conduction Detection Times:Thres4	E	[0 to 9 / **4** / 1/step] New unit conduction detection times threshold.

3-810-011	Conduction Detection Times Counter:K	E	[0 to 9 / **0** / 1/step] Accumulation counter (K) of conduction detection times.
3-810-015	Near End Drive Distance:K	E	[0 to 99999999 / **0** / 1m/step]
3-810-021	Detection Flag:K	E	[0 to 3 / **0** / 1/step] Detection flag 0: Normal 1: mechanically detected 2: Near end detected 3: End detected
3-810-025	New Part Detection Flag:K	E	[0 or 1 / **0** / 1/step] New part detection flag (K) 0: Normal 1: New part detected

3820	**[Tnr Refresh Mode]** -		
3-820-001	Img Area Thresh:K	E	[0.0 to 25.5 / **2.0** / 0.1%/step] Sets image area ratio threshold value of toner refresh mode.
3-820-011	K Amount	E	[0 to 65535 / **0** / 1mm/step] Displays toner amount to refresh toner.
3-820-021	Max Between Patter	E	[0 to 255 / **40** / 1mm/step] Sets upper limit of consuming ID pattern length.
3-820-031	Max Job End Patter	E	[0 to 1000 / **500** / 1mm/step] Sets upper limit of job end pattern length.

3910	**[Charge Current Contrl:Displ]** -

3-910-001	Charge Env Switch Selection	E*	[0 or 1 / **1** / 1uA/step] 0:OFF 1:ON
3-910-002	LL:95ppm	E*	[0 to 3066 / **1800** / 1uA/step]
3-910-003	MM:95ppm	E*	[0 to 3066 / **1500** / 1uA/step]
3-910-004	HH:95ppm	E*	[0 to 3066 / **1500** / 1uA/step]
3-910-005	Fixed:95ppm	E*	[0 to 3066 / **1800** / 1uA/step]
3-910-012	LL:110ppm	E*	[0 to 3066 / **2083** / 1uA/step]
3-910-013	MM:110ppm	E*	[0 to 3066 / **1736** / 1uA/step]
3-910-014	HH:110ppm	E*	[0 to 3066 / **1736** / 1uA/step]
3-910-015	Fixed:110ppm	E*	[0 to 3066 / **2083** / 1uA/step]
3-910-022	LL:135ppm	E*	[0 to 3066 / **2666** / 1uA/step]
3-910-023	MM:135ppm	E*	[0 to 3066 / **2222** / 1uA/step]
3-910-024	HH:135ppm	E*	[0 to 3066 / **2222** / 1uA/step]
3-910-025	Fixed:135ppm	E*	[0 to 3066 / **2666** / 1uA/step]
3-910-032	LL:150ppm	E*	[0 to 3066 / **3066** / 1uA/step]
3-910-033	MM:150ppm	E*	[0 to 3066 / **2555** / 1uA/step]
3-910-034	HH:150ppm	E*	[0 to 3066 / **2555** / 1uA/step]
3-910-035	Fixed:150ppm	E*	[0 to 3066 / **3066** / 1uA/step]

3921	**[Procon Target M/A]** Sets maximum image density adjustment (K).		
3-921-001	Custom Paper 1	E	[-5 to 5 / **0** / 1/step]
3-921-002	Custom Paper 2	E	[-5 to 5 / **0** / 1/step]
3-921-003	Custom Paper 3	E	[-5 to 5 / **0** / 1/step]
3-921-004	Custom Paper 4	E	[-5 to 5 / **0** / 1/step]
3-921-005	Custom Paper 5	E	[-5 to 5 / **0** / 1/step]

3-921-006	Custom Paper 6	E	[-5 to 5 / **0** / 1/step]
3-921-007	Custom Paper 7	E	[-5 to 5 / **0** / 1/step]
3-921-008	Custom Paper 8	E	[-5 to 5 / **0** / 1/step]
3-921-009	Custom Paper 9	E	[-5 to 5 / **0** / 1/step]
3-921-010	Custom Paper 10	E	[-5 to 5 / **0** / 1/step]
3-921-011	Custom Paper 11	E	[-5 to 5 / **0** / 1/step]
3-921-012	Custom Paper 12	E	[-5 to 5 / **0** / 1/step]
3-921-013	Custom Paper 13	E	[-5 to 5 / **0** / 1/step]
3-921-014	Custom Paper 14	E	[-5 to 5 / **0** / 1/step]
3-921-015	Custom Paper 15	E	[-5 to 5 / **0** / 1/step]
3-921-016	Custom Paper 16	E	[-5 to 5 / **0** / 1/step]
3-921-017	Custom Paper 17	E	[-5 to 5 / **0** / 1/step]
3-921-018	Custom Paper 18	E	[-5 to 5 / **0** / 1/step]
3-921-019	Custom Paper 19	E	[-5 to 5 / **0** / 1/step]
3-921-020	Custom Paper 20	E	[-5 to 5 / **0** / 1/step]
3-921-021	Custom Paper 21	E	[-5 to 5 / **0** / 1/step]
3-921-022	Custom Paper 22	E	[-5 to 5 / **0** / 1/step]
3-921-023	Custom Paper 23	E	[-5 to 5 / **0** / 1/step]
3-921-024	Custom Paper 24	E	[-5 to 5 / **0** / 1/step]
3-921-025	Custom Paper 25	E	[-5 to 5 / **0** / 1/step]
3-921-026	Custom Paper 26	E	[-5 to 5 / **0** / 1/step]
3-921-027	Custom Paper 27	E	[-5 to 5 / **0** / 1/step]
3-921-028	Custom Paper 28	E	[-5 to 5 / **0** / 1/step]
3-921-029	Custom Paper 29	E	[-5 to 5 / **0** / 1/step]
3-921-030	Custom Paper 30	E	[-5 to 5 / **0** / 1/step]
3-921-031	Custom Paper 31	E	[-5 to 5 / **0** / 1/step]

3-921-032	Custom Paper 32	E	[-5 to 5 / **0** / 1/step]
3-921-033	Custom Paper 33	E	[-5 to 5 / **0** / 1/step]
3-921-034	Custom Paper 34	E	[-5 to 5 / **0** / 1/step]
3-921-035	Custom Paper 35	E	[-5 to 5 / **0** / 1/step]
3-921-036	Custom Paper 36	E	[-5 to 5 / **0** / 1/step]
3-921-037	Custom Paper 37	E	[-5 to 5 / **0** / 1/step]
3-921-038	Custom Paper 38	E	[-5 to 5 / **0** / 1/step]
3-921-039	Custom Paper 39	E	[-5 to 5 / **0** / 1/step]
3-921-040	Custom Paper 40	E	[-5 to 5 / **0** / 1/step]
3-921-041	Custom Paper 41	E	[-5 to 5 / **0** / 1/step]
3-921-042	Custom Paper 42	E	[-5 to 5 / **0** / 1/step]
3-921-043	Custom Paper 43	E	[-5 to 5 / **0** / 1/step]
3-921-044	Custom Paper 44	E	[-5 to 5 / **0** / 1/step]
3-921-045	Custom Paper 45	E	[-5 to 5 / **0** / 1/step]
3-921-046	Custom Paper 46	E	[-5 to 5 / **0** / 1/step]
3-921-047	Custom Paper 47	E	[-5 to 5 / **0** / 1/step]
3-921-048	Custom Paper 48	E	[-5 to 5 / **0** / 1/step]
3-921-049	Custom Paper 49	E	[-5 to 5 / **0** / 1/step]
3-921-050	Custom Paper 50	E	[-5 to 5 / **0** / 1/step]
3-921-051	Custom Paper 51	E	[-5 to 5 / **0** / 1/step]
3-921-052	Custom Paper 52	E	[-5 to 5 / **0** / 1/step]
3-921-053	Custom Paper 53	E	[-5 to 5 / **0** / 1/step]
3-921-054	Custom Paper 54	E	[-5 to 5 / **0** / 1/step]
3-921-055	Custom Paper 55	E	[-5 to 5 / **0** / 1/step]
3-921-056	Custom Paper 56	E	[-5 to 5 / **0** / 1/step]
3-921-057	Custom Paper 57	E	[-5 to 5 / **0** / 1/step]

3-921-058	Custom Paper 58	E	[-5 to 5 / **0** / 1/step]
3-921-059	Custom Paper 59	E	[-5 to 5 / **0** / 1/step]
3-921-060	Custom Paper 60	E	[-5 to 5 / **0** / 1/step]
3-921-061	Custom Paper 61	E	[-5 to 5 / **0** / 1/step]
3-921-062	Custom Paper 62	E	[-5 to 5 / **0** / 1/step]
3-921-063	Custom Paper 63	E	[-5 to 5 / **0** / 1/step]
3-921-064	Custom Paper 64	E	[-5 to 5 / **0** / 1/step]
3-921-065	Custom Paper 65	E	[-5 to 5 / **0** / 1/step]
3-921-066	Custom Paper 66	E	[-5 to 5 / **0** / 1/step]
3-921-067	Custom Paper 67	E	[-5 to 5 / **0** / 1/step]
3-921-068	Custom Paper 68	E	[-5 to 5 / **0** / 1/step]
3-921-069	Custom Paper 69	E	[-5 to 5 / **0** / 1/step]
3-921-070	Custom Paper 70	E	[-5 to 5 / **0** / 1/step]
3-921-071	Custom Paper 71	E	[-5 to 5 / **0** / 1/step]
3-921-072	Custom Paper 72	E	[-5 to 5 / **0** / 1/step]
3-921-073	Custom Paper 73	E	[-5 to 5 / **0** / 1/step]
3-921-074	Custom Paper 74	E	[-5 to 5 / **0** / 1/step]
3-921-075	Custom Paper 75	E	[-5 to 5 / **0** / 1/step]
3-921-076	Custom Paper 76	E	[-5 to 5 / **0** / 1/step]
3-921-077	Custom Paper 77	E	[-5 to 5 / **0** / 1/step]
3-921-078	Custom Paper 78	E	[-5 to 5 / **0** / 1/step]
3-921-079	Custom Paper 79	E	[-5 to 5 / **0** / 1/step]
3-921-080	Custom Paper 80	E	[-5 to 5 / **0** / 1/step]
3-921-081	Custom Paper 81	E	[-5 to 5 / **0** / 1/step]
3-921-082	Custom Paper 82	E	[-5 to 5 / **0** / 1/step]
3-921-083	Custom Paper 83	E	[-5 to 5 / **0** / 1/step]

3-921-084	Custom Paper 84	E	[-5 to 5 / **0** / 1/step]
3-921-085	Custom Paper 85	E	[-5 to 5 / **0** / 1/step]
3-921-086	Custom Paper 86	E	[-5 to 5 / **0** / 1/step]
3-921-087	Custom Paper 87	E	[-5 to 5 / **0** / 1/step]
3-921-088	Custom Paper 88	E	[-5 to 5 / **0** / 1/step]
3-921-089	Custom Paper 89	E	[-5 to 5 / **0** / 1/step]
3-921-090	Custom Paper 90	E	[-5 to 5 / **0** / 1/step]
3-921-091	Custom Paper 91	E	[-5 to 5 / **0** / 1/step]
3-921-092	Custom Paper 92	E	[-5 to 5 / **0** / 1/step]
3-921-093	Custom Paper 93	E	[-5 to 5 / **0** / 1/step]
3-921-094	Custom Paper 94	E	[-5 to 5 / **0** / 1/step]
3-921-095	Custom Paper 95	E	[-5 to 5 / **0** / 1/step]
3-921-096	Custom Paper 96	E	[-5 to 5 / **0** / 1/step]
3-921-097	Custom Paper 97	E	[-5 to 5 / **0** / 1/step]
3-921-098	Custom Paper 98	E	[-5 to 5 / **0** / 1/step]
3-921-099	Custom Paper 99	E	[-5 to 5 / **0** / 1/step]
3-921-100	Custom Paper 100	E	[-5 to 5 / **0** / 1/step]

3.4 MAIN SP TABLES-4

3.4.1 SP4-XXX (SCANNER)

4008	**[Sub Scan Magnification Adj]** Adjusts the magnification in the sub scan direction for scanning. If this value is changed, the scanner motor speed is changed. Use the [./*] key to enter the minus (–) before entering the value. Setting a lower value reduces the motor speed and lengthens the image in the sub scan direction (paper direction). Setting a larger value increases the motor speed and shortens the image in the sub scan direction.		
4-008-001	-	E*	[-1.0 to 1.0 / **0.0** / 0.1%/step]

4010	**[Sub Scan Registration Adj]** Adjusts the leading edge registration by changing the scanning start timing in the sub-scan direction. Use the [./*] key to enter the minus (–) before entering the value. A minus setting moves in the direction of the leading edge. A larger value shifts the image away from the leading edge, and a smaller value shifts the image toward the leading edge.		
4-010-001	-	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

4011	**[Main Scan Reg]** Adjusts the side-to-side registration for scanning. (–): The image disappears at the left side. (+): The image appears at the left side. Use the [./*] key to enter the minus (–) before entering the value.		
4-011-001	-	E*	[-2.5 to 2.5 / **0.0** / 0.1mm/step]

4012	**[Set Scale Mask]** Adjusts the erase margin for scanning. The leading, trailing, right and left margins can be set independently. Do not adjust this unless the user wishes to have a scanner margin that is greater than the printer margin.

4-012-001	Book:Sub LEdge	E*	[0.0 to 3.0 / **1.0** / 0.1mm/step]
4-012-002	Book:Sub TEdge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-012-003	Book:Main:LEdge	E*	[0.0 to 3.0 / **1.0** / 0.1mm/step]
4-012-004	Book:Main:TEdge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4012	**[Scanner Erase Margin: Scale]** -		
4-012-005	ADF: Leading Edge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step] Sets mask area to erase scale shadow of sub scan leading edge when scanning with ADF.
4-012-007	ADF: Right	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step] Sets mask area to erase scale shadow of main scan leading edge when scanning with ADF.
4-012-008	ADF: left	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step] Sets mask area to erase scale shadow of sub scan trailing edge when scanning with ADF.

4013	**[Scanner Free run]** Performs the scanner free run with the exposure lamp on or off in the following mode. Full color mode / Full Size / A3 or DLT		
4-013-001	Book mode :Lamp Off	E	[0 or 1 / **0** / 1/step] 0: OFF, 1: ON Allows scanner free running with exposure lamp off.
4-013-002	Book mode :Lamp On	E	[0 or 1 / **0** / 1/step] 0: OFF, 1: ON Allows scanner free running with the exposure lamp on.

4014	**[Scan]** Execute the scanner free fun with each mode.		
4-014-001	HP Detection Enable	E	[- / **-** / -] [Execute] Scanner free run with HP sensor check.
4-014-002	HP Detection Disable	E	[- / **-** / -] [Execute] Scanner free run without HP sensor check.

4020	**[Dust Check]** -		
4-020-001	Dust Detect:On/Off	E*	[0 or 1 / **0** / 1/step] Turns the ADF scan glass dust check on/ off.
4-020-002	Dust Detect:Lvl	E*	[0 to 8 / **4** / 1/step] Selects the detection level. 0: lowest detection level 8: highest detection level
4-020-003	Dust Reject:Lvl	E*	[0 to 4 / **0** / 1/step] Selects the level of the sub scan line correction when using the ADF. 0: Off 1: Weakest 2: Weak 3: Strong 4: Strongest
4-020-011	Dust Detect Level:Rear	E*	[0 or 1 / **0** / 1/step]
4-020-012	Correction Level:Rear	E*	[0 to 8 / **4** / 1/step]

4201	**[LoCPP edge level:K]** -		

4-201-001	600dpi 2bit edge1	E*	[0 to 15 / **15** / 1/step] Upper limit threshold parameter for smaller edge: 600dpi 2bit
4-201-002	600dpi 2bit edge23	E*	[0 to 15 / **15** / 1/step] Upper limit threshold parameter for larger edge: 600dpi 2bit
4-201-003	600dpi 4bit edge1	E*	[0 to 15 / **15** / 1/step] Upper limit threshold parameter for smaller edge: 600dpi 4bit
4-201-004	600dpi 4bit edge23	E*	[0 to 15 / **15** / 1/step] Upper limit threshold parameter for larger edge: 600dpi 4bit

4201	**[LoCPP edge off/on:K]** -		
4-201-011	1200dpi 1bit edge12	E*	[0 or 1 / **0** / 1/step] On/Off for smaller edge: 1200dpi 1bit
4-201-012	1200dpi 1bit edge345	E*	[0 or 1 / **0** / 1/step] On/Off for larger edge: 1200dpi 1bit

4301	**[Operation Check APS Sensor]** Displays a code that represents the original size detected by the original sensors.		
4-301-001	-	E	[0 to 255 / **0** / 1/step]

4303	**[Min Size for APS]** Specifies the result of the detection when the outputs from the original sensors are all OFF.		
4-303-001	-	E*	[0 or 1 / **0** / 1/step] 0: No Original 1: A5-Lengthwise

4305	**[8K/16K Detection]** This program enables the machine to automatically recognize the 8K/16K size.		
4-305-001	-	E*	[0 to 3 / **0** / 1/step] 0: Normal Detection 1: A4-Sideways LT-Lengthwise 2: LT-Sideways A4-Lengthwise 3: 8K 16K

4308	**[Scan Size Detection]** Turns on or off the CCD original size detection. This detection is used only when an original is scanned in book scanning mode.		
4-308-001	Detection ON/OFF	E*	[0 to 2 / **1** / 1/step] 0: OFF 1: ON 2: APS Enables/Disables the original size detecting function.

4309	**[Scan Size Detect:Setting]** -		
4-309-001	Original Density Thresh	E*	[0 to 255 / **18** / 1digit/step] Specifies the threshold between an original area and non-original area for the scan original size detection in book scanning mode.
4-309-002	Detection Time	E*	[20 to 100 / **60** / 20msec/step] Specifies the detection time for the scan original size detection in book scanning mode.
4-309-003	Lamp ON:Delay Time	E*	[40 to 200 / **40** / 10msec/step] Specifies the lamp on timing for the scan original size detection in book scanning mode.

4-309-004	LED PWM Duty	E*	[0 to 100 / **60** / 1/step] Sets the LED lamp intensity.

4310	**[Scan Size Detect Value]** Displays the detected value by CCD. Each detection point for paper size and color is displayed on the LCD.		
4-310-001	S1:R	E	[0 to 255 / **-** / 1digit/step]
4-310-002	S1:G	E	
4-310-003	S1:B	E	
4-310-004	S2:R	E	
4-310-005	S2:G	E	
4-310-006	S2:B	E	
4-310-007	S3:R	E	
4-310-008	S3:G	E	
4-310-009	S3:B	E	

4350	**[Intermittent Shading : BW]** -		
4-350-001	Switch On/Off	E*	[0 or 1 / **1** / 1/step]
4-350-002	Interval 1	E*	[0 to 65535 / **240** / 1sec/step]
4-350-003	Interval 1 Repetitions	E*	[1 to 60 / **1** / 1/step]
4-350-004	Interval 2	E*	[0 to 65535 / **240** / 1sec/step]

4351	**[Intermittent Shading : FC]** -		
4-351-001	Switch On/Off	E*	[0 or 1 / **1** / 1/step]
4-351-002	Interval 1	E*	[0 to 65535 / **240** / 1sec/step]
4-351-003	Interval 1 Repetitions	E*	[1 to 60 / **1** / 1/step]

4-351-004	Interval 2	E*	[0 to 65535 / **240** / 1sec/step]

4400	**[Org Edge Mask]** This SP sets the mask area to remove shadows when scanning originals from the exposure glass in Book mode. **Note:** "LE" denotes "leading edge" and "TE" denotes "trailing edge".		
4-400-001	Book:Sub:LEdge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-400-002	Book:Sub:TEdge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-400-003	Book:Main:LEdge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-400-004	Book:Main:Tedge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]

4400	**[Scanner Erase Margin]** This SP sets the mask area to remove shadows when scanning originals from ADF.		
4-400-005	ADF: Leading Edge	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-400-007	ADF: Right	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]
4-400-008	ADF: left	E*	[0.0 to 3.0 / **0.0** / 0.1mm/step]

4417	**[IPU Test Pattern]** Selects the IPU test pattern.		
4-417-001	Test Pattern	E	[0 to 8 / **0** / 1/step] 0: Scanned image 1: Gradation main scan A 2: Patch 16C 3: Grid pattern A 4: Slant grid pattern B 5: Slant grid pattern C 6: Slant grid pattern D 7: Scanned+Slant Grid C 8: Scanned+Slant Grid D

4429	**[Select Copy Data Security]** -		
4-429-001	Copying	E*	[0 to 3 / **3** / 1/step]
4-429-002	Scanning	E*	[0 to 3 / **3** / 1/step]

4460	**[Digital AE]** This SP sets the lower limit and level for background removal when background removal is selected with a scanner application.		
4-460-001	Low Limit Value	E*	[0 to 1023 / **364** / 1/step]
4-460-002	Background level	E*	[512 to 1535 / **972** / 1/step]

4490	**[FL Correction ON/OFF]** -		
4-490-001	RED	E*	[0 or 1 / **0** / 1/step]
4-490-002	GREEN	E*	[0 or 1 / **0** / 1/step]
4-490-003	BLUE	E*	[0 or 1 / **0** / 1/step]

4550	**[Scan Apli:Txt/Print]** -		
4-550-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-550-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-550-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.

4-550-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-550-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4551	**[Scan Apli:Txt]** -		
4-551-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-551-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-551-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-551-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-551-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4552	**[Scan Apli:Txt Dropout]** -

4-552-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-552-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-552-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-552-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-552-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4553	**[Scan Apli:Txt/Photo]** -		
4-553-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-553-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-553-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-553-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.

4-553-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4554	**[Scan Apli:Photo]** -		
4-554-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-554-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-554-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-554-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-554-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4565	**[Scan Apli:GrayScale]** -		
4-565-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.

4-565-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-565-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-565-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-565-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4570	**[Scan Apli:Col Txt/Photo]** -		
4-570-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-570-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-570-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-570-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-570-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4571	**[Scan Apli:Col Gloss Photo]** -		
4-571-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-571-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-571-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.
4-571-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-571-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4572	**[Scan Apli:AutoCol]** -		
4-572-005	MTF: 0(Off) 1-15 (Weak-Strong)	E*	[0 to 15 / **8** / 1/step] Sets the MTF level (Modulation Transfer Function) designed to improve image contrast. Set higher for stronger effect, lower for weaker effect.
4-572-006	Smoothing: 0(x1) 1-7 (Weak-Strong)	E*	[0 to 7 / **4** / 1/step] Use to remove "jaggies" if they appear. Set higher for smoother images.
4-572-007	Brightness: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for darker, set lower for lighter.

4-572-008	Contrast: 1-255	E*	[1 to 255 / **128** / 1/step] Set higher for more contrast, set lower for less contrast.
4-572-009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	E*	[0 to 7 / **0** / 1/step] Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. 0: Not activated

4600	**[SBU Version Display]** Displays the SBU ID code confirmed by reading the SBU after the SBU adjusts automatically at power on.		
4-600-001	SBU_ID	E	[0x00 to 0xFF / **0** / 1/step]
4-600-002	SCAT_F_ID	E	[0x00 to 0xFF / **0** / 1/step]
4-600-003	SCAT_L_ID	E	[0x00 to 0xFF / **0** / 1/step]

4609	**[Gray Balance Set: R]** -		
4-609-001	Book Scan	E*	[-384 to 255 / **-100** / 1digit/step]
4-609-002	DF Scan	E*	[-384 to 255 / **-100** / 1digit/step]

4610	**[Gray Balance Set: G]** -		
4-610-001	Book Scan	E*	[-384 to 255 / **-100** / 1digit/step]
4-610-002	DF Scan	E*	[-384 to 255 / **-100** / 1digit/step]

4611	**[Gray Balance Set: B]** -		
4-611-001	Book Scan	E*	[-384 to 255 / **-100** / 1digit/step]
4-611-002	DF Scan	E*	[-384 to 255 / **-100** / 1digit/step]

4635	[SSCG Correction Set] -		
4-635-001	Mode Selection	E*	[0 to 3 / **1** / 1/step]

4637	[SSCG Noise Cancel (Analog)] -		
4-637-001	Latest:F:RE	E	[-31 to 31 / **0** / 1digit/step]
4-637-002	Latest:F:RO	E	[-31 to 31 / **0** / 1digit/step]
4-637-003	Latest:F:GE	E	[-31 to 31 / **0** / 1digit/step]
4-637-004	Latest:F:GO	E	[-31 to 31 / **0** / 1digit/step]
4-637-005	Latest:F:BE	E	[-31 to 31 / **0** / 1digit/step]
4-637-006	Latest:F:BO	E	[-31 to 31 / **0** / 1digit/step]
4-637-007	Latest:L:RE	E	[-31 to 31 / **0** / 1digit/step]
4-637-008	Latest:L:RO	E	[-31 to 31 / **0** / 1digit/step]
4-637-009	Latest:L:GE	E	[-31 to 31 / **0** / 1digit/step]
4-637-010	Latest:L:GO	E	[-31 to 31 / **0** / 1digit/step]
4-637-011	Latest:L:BE	E	[-31 to 31 / **0** / 1digit/step]
4-637-012	Latest:L:BO	E	[-31 to 31 / **0** / 1digit/step]

4638	[SSCG Noise Cancel (Digital)] -		
4-638-001	Latest:F:RE	E	[-255 to 255 / **0** / 1digit/step]
4-638-002	Latest:F:RO	E	[-255 to 255 / **0** / 1digit/step]
4-638-003	Latest:F:GE	E	[-255 to 255 / **0** / 1digit/step]
4-638-004	Latest:F:GO	E	[-255 to 255 / **0** / 1digit/step]
4-638-005	Latest:F:BE	E	[-255 to 255 / **0** / 1digit/step]
4-638-006	Latest:F:BO	E	[-255 to 255 / **0** / 1digit/step]

4-638-007	Latest:L:RE	E	[-255 to 255 / **0** / 1digit/step]
4-638-008	Latest:L:RO	E	[-255 to 255 / **0** / 1digit/step]
4-638-009	Latest:L:GE	E	[-255 to 255 / **0** / 1digit/step]
4-638-010	Latest:L:GO	E	[-255 to 255 / **0** / 1digit/step]
4-638-011	Latest:L:BE	E	[-255 to 255 / **0** / 1digit/step]
4-638-012	Latest:L:BO	E	[-255 to 255 / **0** / 1digit/step]

4639	**[SSCG Noise Cancel (Analog)]** -		
4-639-001	Factory :F:RE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-002	Factory :F:RO	E*	[-31 to 31 / **0** / 1digit/step]
4-639-003	Factory :F:GE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-004	Factory :F:GO	E*	[-31 to 31 / **0** / 1digit/step]
4-639-005	Factory :F:BE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-006	Factory :F:BO	E*	[-31 to 31 / **0** / 1digit/step]
4-639-007	Factory :L:RE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-008	Factory :L:RO	E*	[-31 to 31 / **0** / 1digit/step]
4-639-009	Factory :L:GE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-010	Factory :L:GO	E*	[-31 to 31 / **0** / 1digit/step]
4-639-011	Factory :L:BE	E*	[-31 to 31 / **0** / 1digit/step]
4-639-012	Factory :L:BO	E*	[-31 to 31 / **0** / 1digit/step]

4640	**[SSCG Noise Cancel (Digital)]** -		
4-640-001	Factory :F:RE	E*	[-255 to 255 / **0** / 1digit/step]
4-640-002	Factory :F:RO	E*	[-255 to 255 / **0** / 1digit/step]
4-640-003	Factory :F:GE	E*	[-255 to 255 / **0** / 1digit/step]

4-640-004	Factory :F:GO	E*	[-255 to 255 / **0** / 1digit/step]
4-640-005	Factory :F:BE	E*	[-255 to 255 / **0** / 1digit/step]
4-640-006	Factory :F:BO	E*	[-255 to 255 / **0** / 1digit/step]
4-640-007	Factory :L:RE	E*	[-255 to 255 / **0** / 1digit/step]
4-640-008	Factory :L:RO	E*	[-255 to 255 / **0** / 1digit/step]
4-640-009	Factory :L:GE	E*	[-255 to 255 / **0** / 1digit/step]
4-640-010	Factory :L:GO	E*	[-255 to 255 / **0** / 1digit/step]
4-640-011	Factory :L:BE	E*	[-255 to 255 / **0** / 1digit/step]
4-640-012	Factory :L:BO	E*	[-255 to 255 / **0** / 1digit/step]

4641	**[SSCG Noise Amplitude]** -		
4-641-001	F:RE	E	[0 to 1023 / **0** / 1digit/step]
4-641-002	F:RO	E	[0 to 1023 / **0** / 1digit/step]
4-641-003	L:RE	E	[0 to 1023 / **0** / 1digit/step]
4-641-004	L:RO	E	[0 to 1023 / **0** / 1digit/step]
4-641-005	F:GE	E	[0 to 1023 / **0** / 1digit/step]
4-641-006	F:GO	E	[0 to 1023 / **0** / 1digit/step]
4-641-007	L:GE	E	[0 to 1023 / **0** / 1digit/step]
4-641-008	L:GO	E	[0 to 1023 / **0** / 1digit/step]
4-641-009	F:BE	E	[0 to 1023 / **0** / 1digit/step]
4-641-010	F:BO	E	[0 to 1023 / **0** / 1digit/step]
4-641-011	L:BE	E	[0 to 1023 / **0** / 1digit/step]
4-641-012	L:BO	E	[0 to 1023 / **0** / 1digit/step]

4646	**[Scan Adjust Error]** -

4-646-001	White level:F	E	[0 to 65535 / **0** / 1/step]
4-646-002	Black level:F	E	[0 to 65535 / **0** / 1/step]
4-646-003	SSCG Correction:F	E	[0 to 65535 / **0** / 1/step]
4-646-004	White level:L	E	[0 to 65535 / **0** / 1/step]
4-646-005	Black level:L	E	[0 to 65535 / **0** / 1/step]
4-646-006	SSCG Correction:L	E	[0 to 65535 / **0** / 1/step]
4-646-007	FL Correction	E	[0 to 65535 / **0** / 1/step]

4647	**[Scanner Hard Error]** Displays the result of the SBU connection check.		
4-647-001	Power-ON	E	[0 to 65535 / **0** / 1/step] 0: OK Other: SBU connection check failure If the SBU connection check fails, SC144 occurs.

4651	**[Black Level Adj Value(Analog)]** -		
4-651-001	Latest:F:RE	E	[0 to 127 / **0** / 1digit/step]
4-651-002	Latest:F:RO	E	[0 to 127 / **0** / 1digit/step]
4-651-003	Latest:L:RE	E	[0 to 127 / **0** / 1digit/step]
4-651-004	Latest:L:RO	E	[0 to 127 / **0** / 1digit/step]

4652	**[Black Level Adj Value(Analog)]** -		
4-652-001	Latest:F:GE	E	[0 to 127 / **0** / 1digit/step]
4-652-002	Latest:F:GO	E	[0 to 127 / **0** / 1digit/step]
4-652-003	Latest:L:GE	E	[0 to 127 / **0** / 1digit/step]
4-652-004	Latest:L:GO	E	[0 to 127 / **0** / 1digit/step]

4653	**[Black Level Adj Value(Analog)]** -		
4-653-001	Latest:F:BE	E	[0 to 127 / **0** / 1digit/step]
4-653-002	Latest:F:BO	E	[0 to 127 / **0** / 1digit/step]
4-653-003	Latest:L:BE	E	[0 to 127 / **0** / 1digit/step]
4-653-004	Latest:L:BO	E	[0 to 127 / **0** / 1digit/step]

4654	**[Black Level Adj Value(Digital)]** RE: Red Even signal, RO: Red Odd signal Displays the black offset value for the even/odd red signal in the CCD circuit board.		
4-654-001	Latest:F:RE	E	[0 to 16383 / **0** / 1digit/step]
4-654-002	Latest:F:RO	E	[0 to 16383 / **0** / 1digit/step]
4-654-003	Latest:L:RE	E	[0 to 16383 / **0** / 1digit/step]
4-654-004	Latest:L:RO	E	[0 to 16383 / **0** / 1digit/step]

4655	**[Black Level Adj Value(Digital)]** GE: Green Even signal, GO: Green Odd signal Displays the black offset value for the even/odd green signal in the CCD circuit board.		
4-655-001	Latest:F:GE	E	[0 to 16383 / **0** / 1digit/step]
4-655-002	Latest:F:GO	E	[0 to 16383 / **0** / 1digit/step]
4-655-003	Latest:L:GE	E	[0 to 16383 / **0** / 1digit/step]
4-655-004	Latest:L:GO	E	[0 to 16383 / **0** / 1digit/step]

4656	**[Black Level Adj Value(Digital)]** BE: Blue Even signal, BO: Blue Odd signal Displays the black offset value for the even/odd blue signal in the CCD circuit board.

4-656-001	Latest:F:BE	E	[0 to 16383 / **0** / 1digit/step]
4-656-002	Latest:F:BO	E	[0 to 16383 / **0** / 1digit/step]
4-656-003	Latest:L:BE	E	[0 to 16383 / **0** / 1digit/step]
4-656-004	Latest:L:BO	E	[0 to 16383 / **0** / 1digit/step]

4658	**[Analog Gain Adjust]** Displays the previous gain value of the amplifiers on the controller for Red.		
4-658-001	Latest:F:R	E	[0 to 14 / **0** / 1digit/step]
4-658-002	Latest:L:R	E	[0 to 14 / **0** / 1digit/step]

4659	**[Analog Gain Adjust]** Displays the previous gain value of the amplifiers on the controller for Green.		
4-659-001	Latest:F:G	E	[0 to 14 / **0** / 1digit/step]
4-659-002	Latest:L:G	E	[0 to 14 / **0** / 1digit/step]

4660	**[Analog Gain Adjust]** Displays the previous gain value of the amplifiers on the controller for Blue.		
4-660-001	Latest:F:B	E	[0 to 14 / **0** / 1digit/step]
4-660-002	Latest:L:B	E	[0 to 14 / **0** / 1digit/step]

4661	**[Digital Gain Adjust]** RE: Red Even signal, RO: Red Odd signal		
4-661-001	Latest:F:RE	E	[0 to 1023 / **0** / 1digit/step]
4-661-002	Latest:F:RO	E	[0 to 1023 / **0** / 1digit/step]
4-661-003	Latest:L:RE	E	[0 to 1023 / **0** / 1digit/step]
4-661-004	Latest:L:RO	E	[0 to 1023 / **0** / 1digit/step]

4662	**[Digital Gain Adjust]** GE: Green Even signal, GO: Green Odd signal		
4-662-001	Latest:F:GE	E	[0 to 1023 / **0** / 1digit/step]
4-662-002	Latest:F:GO	E	[0 to 1023 / **0** / 1digit/step]
4-662-003	Latest:L:GE	E	[0 to 1023 / **0** / 1digit/step]
4-662-004	Latest:L:GO	E	[0 to 1023 / **0** / 1digit/step]

4663	**[Digital Gain Adjust]** BE: Blue Even signal, BO: Blue Odd signal		
4-663-001	Latest:F:BE	E	[0 to 1023 / **0** / 1digit/step]
4-663-002	Latest:F:BO	E	[0 to 1023 / **0** / 1digit/step]
4-663-003	Latest:L:BE	E	[0 to 1023 / **0** / 1digit/step]
4-663-004	Latest:L:BO	E	[0 to 1023 / **0** / 1digit/step]

4670	**[Black Level Adj Value(Analog)]** -		
4-670-001	Factory Set:F:RE	E*	[0 to 127 / **0** / 1digit/step]
4-670-002	Factory Set:F:RO	E*	[0 to 127 / **0** / 1digit/step]
4-670-003	Factory Set:L:RE	E*	[0 to 127 / **0** / 1digit/step]
4-670-004	Factory Set:L:RO	E*	[0 to 127 / **0** / 1digit/step]

4671	**[Black Level Adj Value(Analog)]** -		
4-671-001	Factory Set:F:GE	E*	[0 to 127 / **0** / 1digit/step]
4-671-002	Factory Set:F:GO	E*	[0 to 127 / **0** / 1digit/step]
4-671-003	Factory Set:L:GE	E*	[0 to 127 / **0** / 1digit/step]
4-671-004	Factory Set:L:GO	E*	[0 to 127 / **0** / 1digit/step]

4672	**[Black Level Adj Value(Analog)]** -		
4-672-001	Factory Set:F:BE	E*	[0 to 127 / **0** / 1digit/step]
4-672-002	Factory Set:F:BO	E*	[0 to 127 / **0** / 1digit/step]
4-672-003	Factory Set:L:BE	E*	[0 to 127 / **0** / 1digit/step]
4-672-004	Factory Set:L:BO	E*	[0 to 127 / **0** / 1digit/step]

4673	**[Black Level Adj Value(Digital)]** RE: Red Even signal, RO: Red Odd signal. Displays the factory setting values of the black level adjustment for the even/odd red signal in the CCD circuit board.		
4-673-001	Factory :F:RE	E*	[0 to 16383 / **0** / 1digit/step]
4-673-002	Factory :F:RO	E*	[0 to 16383 / **0** / 1digit/step]
4-673-003	Factory :L:RE	E*	[0 to 16383 / **0** / 1digit/step]
4-673-004	Factory :L:RO	E*	[0 to 16383 / **0** / 1digit/step]

4674	**[Black Level Adj Value(Digital)]** GE: Green Even signal, GO: Green Odd signal. Displays the factory setting values of the black level adjustment for the even/odd green signal in the CCD circuit board.		
4-674-001	Factory :F:GE	E*	[0 to 16383 / **0** / 1digit/step]
4-674-002	Factory :F:GO	E*	[0 to 16383 / **0** / 1digit/step]
4-674-003	Factory :L:GE	E*	[0 to 16383 / **0** / 1digit/step]
4-674-004	Factory :L:GO	E*	[0 to 16383 / **0** / 1digit/step]

4675	**[Black Level Adj Value(Digital)]** BE: Blue Even signal, BO: Blue Odd signal. Displays the factory setting values of the black level adjustment for the even/odd blue signal in the CCD circuit board.		
4-675-001	Factory :F:BE	E*	[0 to 16383 / **0** / 1digit/step]

4-675-002	Factory :F:BO	E*	[0 to 16383 / **0** / 1digit/step]
4-675-003	Factory :L:BE	E*	[0 to 16383 / **0** / 1digit/step]
4-675-004	Factory :L:BO	E*	[0 to 16383 / **0** / 1digit/step]

4677	**[Analog Gain Adjust]** Displays the factory setting values of the gain adjustment for Red.		
4-677-001	Factory :F:R	E*	[0 to 14 / **0** / 1digit/step]
4-677-002	Factory :L:R	E*	[0 to 14 / **0** / 1digit/step]

4678	**[Analog Gain Adjust]** Displays the factory setting values of the gain adjustment for Green.		
4-678-001	Factory :F:G	E*	[0 to 14 / **0** / 1digit/step]
4-678-002	Factory :L:G	E*	[0 to 14 / **0** / 1digit/step]

4679	**[Analog Gain Adjust]** Displays the factory setting values of the gain adjustment for Blue.		
4-679-001	Factory :F:B	E*	[0 to 14 / **0** / 1digit/step]
4-679-002	Factory :L:B	E*	[0 to 14 / **0** / 1digit/step]

4680	**[Digital Gain Adjust]** Displays the gain value of the amplifiers on the controller for Red.		
4-680-001	Factory :F:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-680-002	Factory :F:RO	E*	[0 to 1023 / **0** / 1digit/step]
4-680-003	Factory :L:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-680-004	Factory :L:RO	E*	[0 to 1023 / **0** / 1digit/step]

4681	**[Digital Gain Adjust]** Displays the gain value of the amplifiers on the controller for Green.		
4-681-001	Factory :F:GE	E*	[0 to 1023 / **0** / 1digit/step]

4-681-002	Factory :F:GO	E*	[0 to 1023 / **0** / 1digit/step]
4-681-003	Factory :L:GE	E*	[0 to 1023 / **0** / 1digit/step]
4-681-004	Factory :L:GO	E*	[0 to 1023 / **0** / 1digit/step]

4682	**[Digital Gain Adjust]** Displays the gain value of the amplifiers on the controller for Blue.		
4-682-001	Factory :F:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-682-002	Factory :F:BO	E*	[0 to 1023 / **0** / 1digit/step]
4-682-003	Factory :L:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-682-004	Factory :L:BO	E*	[0 to 1023 / **0** / 1digit/step]

4688	**[Scan Image Density Adjustment]** Adjusts the white shading parameter when scanning an image with the 1-pass DF. Adjusts the density level if the ID of outputs made in the DF and Platen mode is different.		
4-688-002	1-pass DF	E*	[80 to 120 / **98** / 1%/step]

4690	**[White Level Peak Data]** Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.		
4-690-001	F:RE	E	[0 to 1023 / **0** / 1digit/step]
4-690-002	F:RO	E	[0 to 1023 / **0** / 1digit/step]
4-690-003	L:RE	E	[0 to 1023 / **0** / 1digit/step]
4-690-004	L:RO	E	[0 to 1023 / **0** / 1digit/step]

4691	**[White Level Peak Data]** Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.

4-691-001	F:GE	E	[0 to 1023 / **0** / 1digit/step]
4-691-002	F:GO	E	[0 to 1023 / **0** / 1digit/step]
4-691-003	L:GE	E	[0 to 1023 / **0** / 1digit/step]
4-691-004	L:GO	E	[0 to 1023 / **0** / 1digit/step]

4692	**[White Level Peak Data]** Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.		
4-692-001	F:BE	E	[0 to 1023 / **0** / 1digit/step]
4-692-002	F:BO	E	[0 to 1023 / **0** / 1digit/step]
4-692-003	L:BE	E	[0 to 1023 / **0** / 1digit/step]
4-692-004	L:BO	E	[0 to 1023 / **0** / 1digit/step]

4693	**[Black Level Data]** Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.		
4-693-001	F:RE	E	[0 to 1023 / **0** / 1digit/step]
4-693-002	F:RO	E	[0 to 1023 / **0** / 1digit/step]
4-693-003	L:RE	E	[0 to 1023 / **0** / 1digit/step]
4-693-004	L:RO	E	[0 to 1023 / **0** / 1digit/step]

4694	**[Black Level Data]** Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.		
4-694-001	F:GE	E	[0 to 1023 / **0** / 1digit/step]
4-694-002	F:GO	E	[0 to 1023 / **0** / 1digit/step]
4-694-003	L:GE	E	[0 to 1023 / **0** / 1digit/step]

4-694-004	L:GO	E	[0 to 1023 / **0** / 1digit/step]

4695	**[Black Level Data]** Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.		
4-695-001	F:BE	E	[0 to 1023 / **0** / 1digit/step]
4-695-002	F:BO	E	[0 to 1023 / **0** / 1digit/step]
4-695-003	L:BE	E	[0 to 1023 / **0** / 1digit/step]
4-695-004	L:BO	E	[0 to 1023 / **0** / 1digit/step]

4699	**[SBU Test Pattern Change]** -		
4-699-001	-	E	[0 to 255 / **0** / 1/step]

4700	**[CIS ID Display]** -		
4-700-001	-	E	[0x00 to 0xFF / **0** / 1/step] Displays ID of CIS.

4712	**[CIS GB Adj Value: R]** -		
4-712-001	-	E*	[0 to 8191 / **4095** / 1digit/step] Displays/Saves the gray balance adjustment value (RED) of CIS.

4713	**[CIS GB Adj Value: G]** -		
4-713-001	-	E*	[0 to 8191 / **4095** / 1digit/step] Displays/Saves the gray balance adjustment value (GREEN) of CIS.

4714	[CIS GB Adj Value: B] -		
4-714-001	-	E*	[0 to 8191 / **4095** / 1digit/step] Displays/Saves the gray balance adjustment value (BLUE) of CIS.

4745	[CIS Image Level Error Flag] -		
4-745-001	-	E	[0 to 65535 / **0** / 1/step] Displays image level error flag of CIS. b16:Red SH less plus change error flag, b15: red SH less minus change error flag, b14: Green SH less plus change error flag, b13: Green SH less minus change error flag, b11: Red white level error flag, b10: Green white level error flag, b9: Blue white level error flag, b8 white level adjustment error flag, b7: Blue SH.

4746	[CIS GB Adj Error Flag] -		
4-746-001	-	E	[0 to 7 / **0** / 1/step] Displays the gray balance adjustment error flag of CIS. b2: Red gray balance adjust error flag (GB_ERR_R) b1: Green gray balance adjust error flag (GB_ERR_G) b0: Blue gray balance adjust error flag (GB_ERR_B) Display Format: binary CIS GB adjust error flag = (b2, b1, b0)

4747	[CIS Hard Error Flag] -

4-747-001	-	E	[0 to 7 / **0** / 1/step] Displays the hard error flag of CIS. b2: Boot error flag of Marble (Marble_BOOT_ERR) b1: Marble register read error flag (Marble_READ_ERR) b0: Opal register read error flag (Opal_READ_ERR) Display Format: binary CIS hardware error flag = (b2, b1, b0)

4748	**[CIS M-Scan White Level: Avg. R]** -		
4-748-001	Leading Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (R leading edge) of CIS.
4-748-002	Trailing Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (R trailing edge) of CIS.

4749	**[CIS M-Scan White Level: Avg. G]** -		
4-749-001	Leading Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (G leading edge) of CIS.
4-749-002	Trailing Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (G trailing edge) of CIS.

4750	**[CIS M-Scan White Level: Avg. B]** -		
4-750-001	Leading Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (B leading edge) of CIS.

4-750-002	Trailing Edge	E	[0 to 255 / **0** / 1digit/step] Displays main scan white level average value (B trailing edge) of CIS.

4787	**[CIS White Level Peak Data: R]** -		
4-787-001	Factory Setting	E*	[0 to 255 / **0** / 1digit/step] Displays/preserves white level peak data(R) of CIS at factory shipment.

4788	**[CIS White Level Peak Data: G]** -		
4-788-001	Factory Setting	E*	[0 to 255 / **0** / 1digit/step] Displays/preserves white level peak data (G) of CIS at factory shipment.

4789	**[CIS White Level Peak Data: B]** -		
4-789-001	Factory Setting	E*	[0 to 255 / **0** / 1digit/step] Displays/preserves white level peak data (B) of CIS at factory shipment.

4790	**[CIS White Level Peak Data: R]** -		
4-790-001	-	E	[0 to 255 / **0** / 1digit/step] Displays white level peak data(R) of CIS.

4791	**[CIS White Level Peak Data: G]** -		
4-791-001	-	E	[0 to 255 / **0** / 1digit/step] Displays white level peak data (G) of CIS.

4792	**[CIS White Level Peak Data: B]** -		
4-792-001	-	E	[0 to 255 / **0** / 1digit/step] Displays white level peak data (B) of CIS.

4793	**[CIS Black Level Data: R]** -		
4-793-001	Chip1	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip1)
4-793-002	Chip2	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip2)
4-793-003	Chip3	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip3)
4-793-004	Chip4	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip4)
4-793-005	Chip5	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip5)
4-793-006	Chip6	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip6)
4-793-007	Chip7	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip7)
4-793-008	Chip8	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip8)

4-793-009	Chip9	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip9)
4-793-010	Chip10	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip10)
4-793-011	Chip11	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip11)
4-793-012	Chip12	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip12)
4-793-013	Chip13	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip13)
4-793-014	Chip14	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip14)
4-793-015	Chip15	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip15)
4-793-016	Chip16	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip16)
4-793-017	Chip17	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip17)
4-793-018	Chip18	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip18)
4-793-019	Chip19	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip19)

4-793-020	Chip20	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip20)
4-793-021	Chip21	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip21)
4-793-022	Chip22	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip22)
4-793-023	Chip23	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip23)
4-793-024	Chip24	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (R:Chip24)

4794	**[CIS Black Level Data: G]** -		
4-794-001	Chip1	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip1)
4-794-002	Chip2	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip2)
4-794-003	Chip3	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip3)
4-794-004	Chip4	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip4)
4-794-005	Chip5	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip5)

4-794-006	Chip6	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip6)
4-794-007	Chip7	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip7)
4-794-008	Chip8	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip8)
4-794-009	Chip9	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip9)
4-794-010	Chip10	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip10)
4-794-011	Chip11	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip11)
4-794-012	Chip12	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip12)
4-794-013	Chip13	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip13)
4-794-014	Chip14	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip14)
4-794-015	Chip15	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip15)
4-794-016	Chip16	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip16)

4-794-017	Chip17	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip17)
4-794-018	Chip18	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip18)
4-794-019	Chip19	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip19)
4-794-020	Chip20	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip20)
4-794-021	Chip21	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip21)
4-794-022	Chip22	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip22)
4-794-023	Chip23	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip23)
4-794-024	Chip24	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (G:Chip24)

4795	**[CIS Black Level Data: B]** -		
4-795-001	Chip1	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip1)
4-795-002	Chip2	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip2)

4-795-003	Chip3	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip3)
4-795-004	Chip4	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip4)
4-795-005	Chip5	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip5)
4-795-006	Chip6	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip6)
4-795-007	Chip7	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip7)
4-795-008	Chip8	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip8)
4-795-009	Chip9	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip9)
4-795-010	Chip10	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip10)
4-795-011	Chip11	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip11)
4-795-012	Chip12	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip12)
4-795-013	Chip13	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip13)

4-795-014	Chip14	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip14)
4-795-015	Chip15	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip15)
4-795-016	Chip16	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip16)
4-795-017	Chip17	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip17)
4-795-018	Chip18	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip18)
4-795-019	Chip19	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip19)
4-795-020	Chip20	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip20)
4-795-021	Chip21	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip21)
4-795-022	Chip22	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip22)
4-795-023	Chip23	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip23)
4-795-024	Chip24	E	[0 to 255 / **0** / 1digit/step] Displays black level data of CIS. (B:Chip24)

4796	**[Low Density Color Correction]** -		
4-796-001	Front Side	E*	[0 to 3 / **0** / 1/step] Performs color correction of the low saturation for the front. 0: No color correction for low chroma area (Default)1: Correct low chroma area (weak)2: Correct low chroma area (medium)3: Correct low chroma area (strong)
4-796-002	Rear Side	E*	[0 to 3 / **0** / 1/step] Performs color correction of the low saturation for the rear. 0: No color correction for low chroma area (Default)1: Correct low chroma area (weak)2: Correct low chroma area (medium)3: Correct low chroma area (strong)

4797	**[Rear Side: Digital AE]** -		
4-797-001	Low Limit Setting	E*	[0 to 1023 / **364** / 1/step]
4-797-002	Background Erase Level	E*	[512 to 1535 / **972** / 1/step]

4798	**[CIS LED Duty]** -		
4-798-001	-	E	[0 to 65535 / **0** / 1/step] Displays/Saves LED lighting Duty of CIS.

4799	**[CIS TEST Pattern]** -

4-799-001	select	E	[0 to 5 / **0** / 1/step] 0:Scanned Image 1: Fixed Value Pattern 2: EO Fixed Value Pattern 3: Main Scan Gradation 4: Sub Scan Gradation 5: Grid Pattern Sets CIS test patterns.
4-799-002	Even Output Level Setting	E	[0 to 4095 / **0** / 1digit/step] Sets fixed value output level (even) of CIS test pattern.
4-799-003	Odd Output Level Setting	E	[0 to 4095 / **0** / 1digit/step] Sets fixed value output level (odd) of CIS test pattern.

4802	**[Scanner Free run]** Executes the scanner free run of shading movement with exposure lamp on or off. Press "OFF" to stop this free run. Otherwise, the free run lasts.		
4-802-001	DF mode :Lamp Off	E	[0 or 1 / **-** / 1/step] 0:Off, 1:On
4-802-002	DF mode :Lamp On	E	[0 or 1 / **-** / 1/step] 0:Off, 1:On

4804	**[Home Position Operation]** Executes the scanner HP detection.		
4-804-001	-	E	[- / **-** / -] [Execute]

4806	**[Scan Carriage Retract Op]** Moves the carriage from the scanner home position. Dust may fall through the DF exposure glass. Therefore, do this SP when you transport the machine a long distance.

4-806-001	-	E	[- / **-** / -] [Execute]

4813	**[ALC Selection]** -		
4-813-001	FC	E*	[0 or 1 / **1** / 1/step]
4-813-002	BW	E*	[0 or 1 / **1** / 1/step]

4850	**[PWM]** -		
4-850-001	Latest	E	[0 to 8191 / **0** / 1digit/step]
4-850-002	Factory Setting	E*	[0 to 8191 / **0** / 1digit/step]

4851	**[LED White Level Peak Read]** -		
4-851-001	Latest:F:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-002	Latest:F:RO	E*	[0 to 1023 / **0** / 1digit/step]
4-851-003	Latest:F:GE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-004	Latest:F:GO	E*	[0 to 1023 / **0** / 1digit/step]
4-851-005	Latest:F:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-006	Latest:F:BO	E*	[0 to 1023 / **0** / 1digit/step]
4-851-007	Latest:L:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-008	Latest:L:RO	E*	[0 to 1023 / **0** / 1digit/step]
4-851-009	Latest:L:GE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-010	Latest:L:GO	E*	[0 to 1023 / **0** / 1digit/step]
4-851-011	Latest:L:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-851-012	Latest:L:BO	E*	[0 to 1023 / **0** / 1digit/step]

4852	**[LED White Level Peak Read]** -		
4-852-001	Factory Setting:F:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-002	Factory Setting:F:RO	E*	[0 to 1023 / **0** / 1digit/step]
4-852-003	Factory Setting:F:GE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-004	Factory Setting:F:GO	E*	[0 to 1023 / **0** / 1digit/step]
4-852-005	Factory Setting:F:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-006	Factory Setting:F:BO	E*	[0 to 1023 / **0** / 1digit/step]
4-852-007	Factory Setting:L:RE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-008	Factory Setting:L:RO	E*	[0 to 1023 / **0** / 1digit/step]
4-852-009	Factory Setting:L:GE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-010	Factory Setting:L:GO	E*	[0 to 1023 / **0** / 1digit/step]
4-852-011	Factory Setting:L:BE	E*	[0 to 1023 / **0** / 1digit/step]
4-852-012	Factory Setting:L:BO	E*	[0 to 1023 / **0** / 1digit/step]

4901	**[Background Erase]** -		
4-901-020	Blue Original (Lighter)	E*	[-128 to 127 / **0** / 1/step] Sets the strength of background blue erase when orange original mode is selected. A higher setting erases more background and a lower setting less.
4-901-021	Blue Original (Normal)	E*	[-128 to 127 / **0** / 1/step] Sets the strength of background blue erase when the green original mode is selected. A higher setting erases more background and a lower setting less.

4-901-022	Blue Original (Darker)	E*	[-128 to 127 / **0** / 1/step] Sets the strength of background blue erase when blue original mode is selected. A higher setting erases more background and a lower setting less.

4903	**[Filter Setting]** These SP codes adjust the sharpness and granularity of printed images.		
4-903-001	Ind Dot Erase: Text	E*	[0 to 7 / **0** / 1/step] 0: Softest 1: Soft Mode 4: Normal 6: Sharp Mode 7: Sharpest
4-903-002	Ind Dot Erase: Generation Copy	E*	[0 to 7 / **0** / 1/step] 0: Softest 1: Soft Mode 4: Normal 6: Sharp Mode 7: Sharpest

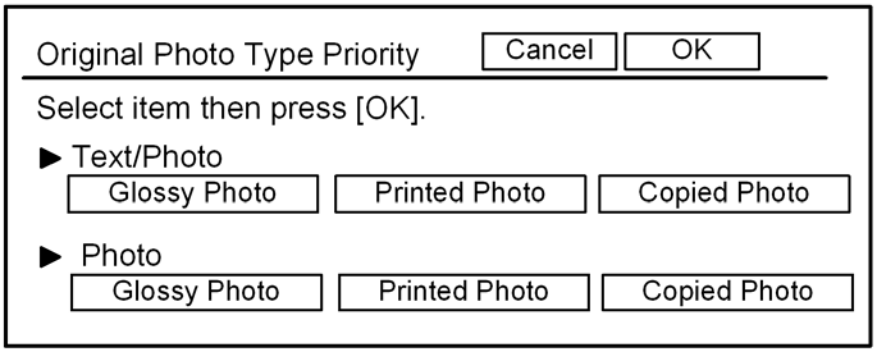
4905	**[Select Gradation Level]** -		
4-905-001	-	E*	[0 to 255 / **0** / 1/step]

4918	**[Man Gamma Adj]** Adjusts the offset data of the printer gamma for yellow in Photo mode.		
4-918-009	-	E	[- / **-** / -] Enter the manual gamma adjustment screen (-001 to 008).

Text/Photo and Photo have different settings (Glossy Photo, Printed Photo, Copied Photo, etc.) as shown in the screen below).

To display this screen: User Tools/Counter button > "Copier/Document Server Settings"> "General

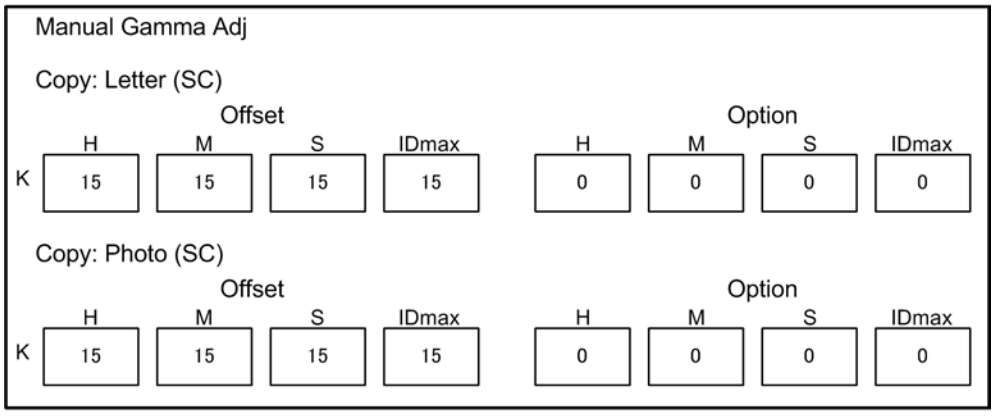
Features"> "Original Photo Type Priority".



d059d005

These features can be adjusted with SP4918.

Enter the SP mode and select SP4918.



d059d006

Eight adjustments can be done independently for "Text" and "Photo" originals. Refer to the table below.

	Area Adjusted on Original	Value	
		Low (1)	High (15)
Offset			
H	Density in light areas (highlights)	Lighter	Darker
M	Density at center	Lighter	Darker
S	Density of dark areas (shadows)	Lighter	Darker
IDmax	Density of entire original	Lighter	Darker
Option			
H	Entire original background erase	Weak	Strong

	Area Adjusted on Original	Value	
		Low (1)	High (15)
M	Entire original contrast	Low	High
S	Not used	---	---
IDmax	Not used	---	---

4954	[Read/Restore Std] Restores the standard chromaticity rank.		
4-954-005	Chromaticity Rank	E*	[0 to 255 / **0** / 1/step]

4958	[Read/Restore Std: Rear] -		
4-958-005	Chromaticity Rank	E*	[0 to 255 / **0** / 1/step]

4993	[High Light Correction] -		
4-993-001	Sensitivity Selection	E*	[0 to 9 / **4** / 1/step] Sets the level of sensitivity for the removal of shadows that can be caused with originals that have been marked up with highlighter pens. Lowering the setting reduces the removal effect, and raising the setting increases the removal effect.
4-993-002	Range Selection	E*	[0 to 9 / **4** / 1/step] Sets the region where highlight removal is applied. A lower setting increases the size of the region, and a higher setting reduces the size of the region.

4994	**[Adj Txt/Photo Recog Level]** Use this SP to adjust the copier capability to distinguish between text and photo areas of images. This adjustment applies only to scanner applications using the high compression PDF mode.		
4-994-001	High Compression PDF	E*	[0 to 2 / **1** / 1/step] 0: Text priority 1: Normal 2: Photo priority

4996	**[White Paper Detection Level]** Selects the threshold level of the original background density. Increasing this threshold level machine easily judge that an original is white.		
4-996-001	-	E*	[0 to 6 / **3** / 1/step] 0: lightest 6: Darkest

3.5 MAIN SP TABLES-5

3.5.1 SP5-XXX (MODE)

5009	**[Add Display Language]** Adds language available in user choice. (Only the languages registered in the machine) Refer to the displayed language list to set in the way showed below. List Number Assigned Bit Switch No.1 to 8 BIT1 to 8 (SP5009-201) No.9 to 16BIT1 to 8 (SP5009-202) No.17 to 24BIT1 to 8 (SP5009-203) No.25 to 32BIT1 to 8 (SP5009-204) Example: To add American(No.3 in the list) or Czech (No.15) Turn Bit 3 of “SP5009-201” 0 to 1 for American. Turn Bit 7 of “SP5009-202” 0 to 1 for Czech. After setting, turn the main power switch off and on to make the setting valid.		
5-009-201	1-8	C*	[1 to 255 / **0** / 1/step]
5-009-202	9-16	C*	[1 to 255 / **0** / 1/step]
5-009-203	17-24	C*	[1 to 255 / **0** / 1/step]
5-009-204	25-32	C*	[1 to 255 / **0** / 1/step]

5019	**[Paper Size]** Sets the transfer paper size for each feed tray.		
5-019-002	Tray 1	C*	[5 or 38 / **38** / 1/step] 5: A4LEF 38: LTLEF

5-019-007	Tray 6	C*	[5 to 172 / **38** / -] 5: A4LEF 6: A5LEF 14: B4LEF 38: LTLEF 44: HLTLEF 134: A5SEF 172: HLTSEF 31: Custom Size When setting the value to “31”, enter the paper size directly into the SP5-040-007 and SP5-041-007.

5024	**[mm/inch Display Selection]** Display units (mm or inch) for custom paper sizes.		
5-024-001	0:mm 1:inch	C*	[0 or 1 / **1** / 1/step] 0: mm (Europe/Asia) 1: inch (USA)

5040	**[Custom Size :Vertical]** Sets the paper size that is used if the SP5-019[Paper Size] set to “0x1F” (CODE_FREEmm) in ASAP code.		
5-040-005	Tray 4	C*	[1000 to 3302 / **2970** / 1mm/step]
5-040-006	Tray 5	C*	[1000 to 3302 / **2970** / 1mm/step]
5-040-007	Tray 6	C*	[1000 to 3302 / **2970** / 1mm/step] Enter the size directly if the SP5-019 -007 is set to “31”

5041	**[Custom Size :Horizontal]** Sets the paper size that is used if the SP5-019[Paper Size] set to “0x1F” (CODE_FREEmm) in ASAP code.		
5-040-005	Tray 4	C*	[1397 to 3302 / **2970** / 1mm/step]
5-040-006	Tray 5	C*	[1397 to 3302 / **2100** / 1mm/step]

5-040-007	Tray 6	C*	[1397 to 3302 / **2100** / 1mm/step] Enter the size directly if the SP5-019-007 is set to “31

5045	**[Accounting counter]** Selects the counting method. Note ▪ The counting method can be changed only once, regardless of whether the counter value is negative or positive.		
5-045-001	Counter Method	C*	[0 or 1 / **0** /1/step] 0: Development 1: Prints

5047	**[Paper Display]** Turns on or off the printed paper display on the LCD.		
5-047-001	Backing Paper	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Sets display or not display "verso paper" on the default paper type setting screen.
5-047-002	Punched Paper	C*	[0 or 1 / **1** / 1 /step] 0: Non-display, 1: Display Sets display or not display "Punched paper" on the default paper type setting screen.

5055	**[Display IP Address]** Display or does not display the IP address on the operation panel.		
5-055-001	-	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5062	**[Parts Replacement Alert Display]** Display or does not display the PM part yield on the LCD.

5-062-003	Development Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-005	#Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-006	Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-007	Brush Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-008	Coating Bar	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-009	Apply Blade	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-010	Joint:Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-011	Gear:Cleaning	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-012	Charger Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-013	Charger Grid	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-014	Corona Wire Charger	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-015	Cushion Corona Wire	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-016	Grid Cleaner Assay	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-017	Corotoron Wire Cleaner Assay	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-018	Photo Conductor	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-019	ITB Image Transfer Belt	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-020	Transfer Roller:ITB	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-021	#ITB Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-022	ITB Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-023	ITB Lubricant Brush Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-024	ITB Lubricant bar	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-025	ITB Lubricant blade	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-026	#PTR Unit Paper Transfer Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-027	PTR Cleaning Brush Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-028	PTR Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-029	PTR Lubricant bar	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-030	Paper Transfer Discharge Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-031	PTR Paper Transfer Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-033	#Fusing Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-034	Fusing Belt	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-035	Hot Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-036	Pressure Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-037	Shaft Bearing:Press Roll	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-038	#Fusing Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-039	Web Roll	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-040	Web Cleaning Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-041	Dust Filter Main	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-042	Dust Filter Heat Exhaust Duct	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-047	Toner Corrector Bottle	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-050	#Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-051	Pick-up Roller Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-052	Feed Roller-Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-053	Separation Roller-Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-054	#Tray2 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-055	Pick-up Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-056	Feed Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-057	Separation Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-058	#Tray3 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-059	Pick-up roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-060	Feed Roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-061	Separation Roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-100	#A3LCT Tray4 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-101	A3LCT Pick-up Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-102	A3LCT Feed Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-103	A3LCT Separation Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-104	#A3LCT Tray5 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-105	A3LCT Pick-up Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-106	A3LCT Feed Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-107	A3LCT Separation Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-108	#A3LCT Tray6 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-109	A3LCT Pick-up Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-110	A3LCT Feed Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-111	A3LCT Separation Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-112	#A4LCT Tray4 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-113	A4LCT Pick-up Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-114	A4LCT Feed Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-115	A4LCT Separation Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-116	#A4LCT Tray5 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-117	A4LCT Pick-up Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-118	A4LCT Feed Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-119	A4LCT Separation Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-120	#A4LCT Tray6 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-121	A4LCT Pick-up Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-122	A4LCT Feed Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-123	A4LCT Separation Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-124	#Bypassd Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-125	Bypass Pick-up Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-126	Bypass Feed Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-127	Bypass Separation Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-128	#Inseter Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-129	Pick-up Roller-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-130	Feed Belt-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-131	Separation Roller-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-132	#Inserter Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-133	Pick-up Roller-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-134	Feed Belt-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-135	Separation Roller-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-136	#ADF	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-137	ADF Feed Belt	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-138	ADF Separation Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-139	ADF pick-up Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-146	Trimming Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-147	Trimmings Catcher	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-148	Rotation Clamp Pad	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-149	Stack Rotation Vibrating Plate	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-151	Switchback Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-152	Ripple Idle Roller Center	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-153	Ripple Idle Rollers	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-154	TE Press Roller large	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-155	TE Press Roller small	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-157	Spine Fold Harness right	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-158	Spine Fold Harness left	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-159	Signature Transport Harness	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-161	Stack Rotation Up-down Harness	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-162	Stack Rotation Grip Harness	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-163	Stack Rotate press LED Harness	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-165	Pick-up Roller Upper	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-166	Separation Roller Upper	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-167	Feed Roller Upper	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-169	Pick-up Roller Lower	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-170	Separation Roller Lower	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-171	Feed Roller Lower	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-173	Blade Cradle	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-174	Switchback Torque Limiter	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-175	Deodorant Filter Upper Lower	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-176	Cover Feed Switchback Roller	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-177	Jogger Motor	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-178	Main Grip Motor	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-179	Signature Thickness Sensor	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-180	Signature Rotate Torque Diode	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-181	Trimmings Buffer Motor	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5-062-182	Signature Press Trq Lmt Clutch	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-183	Gluing Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-184	Ball Screw Unit	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-185	Sign/Stacking Discharge Brush	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-186	Horizontal/Reg Discharge Brush	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-187	Booklet Stack Drawer Connector	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display
5-062-188	Edge Press Plate Sproket Assy	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5066	**[PM Parts Display]**		
5-066-001	-	C*	[0 or 1 / **0** /1/step] 0: No Display 1: Display

5067	**[Parts Replacement Operation Type]** Selects the service maintenance or user maintenance for each PM parts. If the user service is selected, PM alert would display on the LCD.		
5-067-003	Development Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-005	#Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-006	Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-007	Brush Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-008	Coating Bar	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-009	Apply Blade	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-010	Joint:Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-011	Gear:Cleaning	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-012	Charger Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-013	Charger Grid	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-014	Corona Wire Charger	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-015	Cushion Corona Wire	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-016	Grid Cleaner Assay	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-017	Corotoron Wire Cleaner Assay	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-018	Photo Conductor	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-019	ITB Image Transfer Belt	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-020	Transfer Roller:ITB	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-021	#ITB Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-022	ITB Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-023	ITB Lubricant Brush Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-024	ITB Lubricant bar	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-025	ITB Lubricant blade	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-026	#PTR Unit Paper Transfer Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-027	PTR Cleaning Brush Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-028	PTR Cleaning Blade	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-029	PTR Lubricant bar	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-030	Paper Transfer Discharge Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-031	PTR Paper Transfer Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-033	#Fusing Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-034	Fusing Belt	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-035	Hot Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-036	Pressure Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-037	Shaft Bearing:Press Roll	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-038	#Fusing Cleaning Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-039	Web Roll	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-040	Web Cleaning Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-041	Dust Filter Main	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-042	Dust Filter Heat Exhaust Duct	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-047	Toner Corrector Bottle	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-050	#Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-051	Pick-up Roller Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-052	Feed Roller-Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-053	Separation Roller-Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-054	#Tray2 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-055	Pick-up Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-056	Feed Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-057	Separation Roller-Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-058	#Tray3 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-059	Pick-up roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-060	Feed Roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-061	Separation Roller-Tray3	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-100	#A3LCT Tray4 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-101	A3LCT Pick-up Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-102	A3LCT Feed Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-103	A3LCT Separation Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-104	#A3LCT Tray5 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-105	A3LCT Pick-up Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-106	A3LCT Feed Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-107	A3LCT Separation Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-108	#A3LCT Tray6 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-109	A3LCT Pick-up Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-110	A3LCT Feed Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-111	A3LCT Separation Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-112	#A4LCT Tray4 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-113	A4LCT Pick-up Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-114	A4LCT Feed Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-115	A4LCT Separation Roller-Tray4	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-116	#A4LCT Tray5 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-117	A4LCT Pick-up Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-118	A4LCT Feed Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-119	A4LCT Separation Roller-Tray5	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-120	#A4LCT Tray6 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-121	A4LCT Pick-up Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-122	A4LCT Feed Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-123	A4LCT Separation Roller-Tray6	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-124	#Bypassd Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-125	Bypass Pick-up Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-126	Bypass Feed Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-127	Bypass Separation Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-128	#Inseter Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-129	Pick-up Roller-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-130	Feed Belt-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-131	Separation Roller-Inserter Tray1	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-132	#Inserter Tray1 Roller Assembly	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-133	Pick-up Roller-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-134	Feed Belt-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-135	Separation Roller-Inserter Tray2	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-136	#ADF	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-137	ADF Feed Belt	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-138	ADF Separation Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-139	ADF pick-up Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-146	Trimming Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-147	Trimmings Catcher	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-148	Rotation Clamp Pad	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-149	Stack Rotation Vibrating Plate	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-151	Switchback Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-152	Ripple Idle Roller Center	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-153	Ripple Idle Rollers	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-154	TE Press Roller large	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-155	TE Press Roller small	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-157	Spine Fold Harness right	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-158	Spine Fold Harness left	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-159	Signature Transport Harness	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-161	Stack Rotation Up-down Harness	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-162	Stack Rotation Grip Harness	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-163	Stack Rotate press LED Harness	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-165	Pick-up Roller Upper	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-166	Separation Roller Upper	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-167	Feed Roller Upper	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-169	Pick-up Roller Lower	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-170	Separation Roller Lower	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-171	Feed Roller Lower	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-173	Blade Cradle	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-174	Switchback Torque Limiter	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-175	Deodorant Filter Upper Lower	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-176	Cover Feed Switchback Roller	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-177	Jogger Motor	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-178	Main Grip Motor	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-179	Signature Thickness Sensor	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-180	Signature Rotate Torque Diode	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-181	Trimmings Buffer Motor	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-182	Signature Press Trq Lmt Clutch	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5-067-183	Gluing Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-184	Ball Screw Unit	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-185	Sign/Stacking Discharge Brush	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-186	Horizontal/Reg Discharge Brush	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-187	Booklet Stack Drawer Connector	C*	[0 or 1 / **0** /1/step] 0: Service 1: User
5-067-188	Edge Press Plate Sproket Assy	C*	[0 or 1 / **0** /1/step] 0: Service 1: User

5071	**[Set Bypass Paper Size Display]** Turn on or off the paper size confirmation pop-up on the LED. This pop-up prevents miss-matching between a paper size selected by the operation panel and an actual paper size on the by-pass tray.		
5-071-001	-	C	[0 or 1 / **0** / 1/step] 0: Off 1: On

5074	**[Home Key Customization]** Sets applications that appear on the operation panel when “home key” is pressed.		
5-074-002	Login Setting	C*	[0 to 0xFF / **00000000** / 1/step] Sets login operation mode for panel display.

5-074-050	Show Home Edit Menu	C	[0 to 2 / **0** / 1/step] 0: Auto 1: Display 2: Non-Display
5-074-091	Function Setting	C*	[0 to 2 / **0** / 1/step] 0: Function disable 1: SDK application 2: Legacy application (reserved)
5-074-092	Product ID	C*	[0 to 0xFFFF FFFF/ **0** / 1/step] Sets the application product ID.
5-074-093	Application Screen ID	C*	[0 to 255 / **0** / 1/step] Sets the display category of the application that is specified in the SP5075-001 Setting for future function enhancement.

5075	**[USB Keyboard]** Sets the function of the external keyboard.		
5-075-001	Function Setting	C*	[0 or 1 / **0** / 1/step] 0: Disable 1: Enable

5081	**[ServiceSP Entery Code Setting]** DFU		
5-081-001	-	C*	[000000 to 999999 / **-** / -/step]

5083	**[LED Light Switch Setting]** Sets blinking-yellow or not status confirmation LED (4LCD is Alarm LED) at toner near end.		
5-083-001	Toner Near End	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5112	**[Non-Std. Paper Sel.]** Selects On/Off to allow the setting of the custom size.		
5-112-001	(0:OFF 1:ON)	C*	[0 or 1 / **1** / 1/step] 0: Off 1: On

5113	**[Opt Counter Type]** Sets extended device hit number for connecting to extend external device.		
5-113-001	Default Optional Counter Type	C*	[0 to 5 / **0** / 1/step] 0: None, 1: Key card(RK3,4) 2: Key card(down), 3: PrepaidCard 4: Coin Rack 5: MF key card 11: Exp.KeyCard(Add) 12: Exp.KeyCard(Deduct) This program specifies the counter type.
5-113-002	External Optional Counter Type	C*	[0 to 3 / **0** / 1/step] 0: None 1: Expansion Device 1 1: Expansion Device 2 1: Expansion Device 3 This program specifies the external counter type.

5114	**[Optional Counter I/F]** Sets this SP for connecting to extended device that use MF key card/F.		
5-114-001	MF Key Card Extension	C*	[0x00 to 0x01 / **0** / 1/step] 0: Not installed/ 1: Installed(scanning accounting)]

5118	**[Disable Copying]** This program disables copying.		

5-118-001	-	C*	[0 or 1 / **0** / 1/step] 0: Not disabled 1: Disabled

5120	**[Mode Clear Opt. Counter Removal]** This program updates the information on the optional counter. When you install or remove an optional counter, check the setting.		
5-120-001	Yes 1:StandBy 2:No	C*	[0 to 2 / **0** / 1/step] 0: Yes (removed) 1: Standby (installed but not used) 2: No (not removed)]

5121	**[Counter Up Timing]** This program specifies when the counter goes up. The setting refer to “paper feed” and “paper exit” respectively.		
5-121-001	0:Feed 1:Exit	C*	[0 or 1 / **0** / 1/step] 0: Feed, 1: Exit

5126	**[Set F-Size Document]** ADF or platen cover sensor cannot distinct the F-size (8 1/2x13, 8 1/4x13, 8x13). This SP enables to set the F-size with ADF or platen cover sensor. APS and AMS will operate based on this setting, if originals are F-size.		
5-126-001	-	C*	[0 to 2 / **0** / 1/step] 0: 8 1/2 x13 1: 8 1/4 x13 2: 8 x13

5127	**[APS Mode]** This program disables the APS mode.		
5-127-001	-	C*	[0 or 1 / **0** / 1/step] 0: Not disabled 1: Disabled

5131	**[Paper Size Type Selection]** The program selects a paper size system from the following alternatives: the AB system (0), the LT system (1), and the AF system (2).		
5-131-001	-	C*	[0 to 2 / **1** / 1/step] 0: DOM 1: NA 2: EU

5162	**[App. Switch Method]** This program specifies the switch that selects an application program.		
5-162-001	-	C*	[0 or 1 / **0** / 1/step] 0: Soft Key Set 1: Hard Key Set

5165	**[Z-fold Position]** -		
5-165-001	A3T	C*	[(NA:2.5, other:2.0) to (NA:25.4, other:25.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-002	B4T	C*	[(NA:2.5, other:2.0) to (NA:40.6, other:40.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-003	A4T	C*	[(NA:2.5, other:2.0) to (NA:10.2, other:10.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-004	DLTT	C*	[(NA:2.5, other:2.0) to (NA:20.3, other:20.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-005	LGT	C*	[(NA:2.5, other:2.0) to (NA:35.6, other:35.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-006	LTT	C*	[(NA:2.5, other:2.0) to (NA:2.5, other:2.0) / **NA:2.5, Other:2.0** / 1mm/step]

5-165-007	12x18	C*	[(NA:2.5, other:2.0) to (NA:5.1, other:5.0) / **NA:2.5, Other:2.0** / 1mm/step]
5-165-008	Other	C*	[(NA:2.5, other:2.0) to (NA:2.5, other:2.0) / **NA:2.5, Other:2.0** / 1mm/step]

5169	**[CE Login]** Continues login status by service after SP mode end.		
5-169-001	-	C*	[0 or 1 / **0** / 1/step] 0: Disabled 1: Enabled

5185	**[TCRU: Set Machine]**		
5-185-001	-	C	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5186	**[RK4]** Enables or disables the prevention for RK4 (accounting device) disconnection. If the RK4 is disconnected for 10 seconds when this SP is set to "1 (Enable)", the machine automatically jams a sheet of paper and stops.		
5-186-001	-	C	[0 or 1 / **0** / 1/step] 0: Disable 1: Enable

5188	**[Copy Nv Version]** Displays the version number of the NVRAM on the controller board.		
5-188-001	-	C*	[- / **-** / -]

5190	**[Unit Life Target Change]** Switches term of use (display condition) of PM count standard value item by operator adjustment mode or special operator adjustment mode.

5-190-001	-	C*	[0 or 1 / **0** / 1/step] 0: Enable 1: Disable

5191	**[Mode Set]** Shifts to the power save mode or not.		
5-191-001	Power Str Set	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

5193	**[External Controller Info. Settings]** External controller settings.		
5-193-001	-	C	[0 to 10 / **0** / 1/step] 0: External Controller is not installed 1: EFI 2: Ratio 3: Egret 4: GJ 5:Creo 6: QX-100 7: Kurofune 8 to 10: Reserved

5195	**[Limitless SW]** Selects the paper feed mode. **Productivity priority:** This changes the feeding tray as soon as the machine detects the priority tray even the paper still remains in the feeding tray. **Tray priority:** This changes the feeding tray after the paper in the tray where the machine has been feeding paper has been run out of. This SP is activated only when a customer selects the "Auto Paper Select".

5-195-001	-	C*	[0 or 1 / **0** / 1/step] 0: Productivity Precede 1: Use paper up

5199	**[Paper Exit After Staple End]** Enables or disables the paper feeding out from the finisher without stapling. ▪ If this setting is "1: ON", paper is fed out without stapling at the maximum number of the finisher stapling when the machine gets a multiple printing job (over maximum number). ▪ If this setting is "0: OFF", paper is fed out with stapling at the maximum number of the finisher stapling when the machine gets a multiple printing job (over maximum number).		
5-199-001	0: OFF 1: ON	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5212	**[Page Numbering]** This program adjusts the position of the second side page numbers. ▪ "- value" moves the page number positions to the left edge. ▪ "+ value" moves the page number positions to the right edge.		
5-212-003	Duplex Printout Right/Left Position	C*	[-10 to 10 / **0.00** / 1mm/step] Specifies relative positions that face page numbering position against verso page numbering position.
5-212-004	Duplex Printout High/Low Position	C*	[-10 to 10 / **0.00** / 1mm/step] Specifies relative positions that face page numbering position against verso page numbering position.

5227	**[Page Numbering]** -

5-227-221	Allow Page No. Entry	C*	[2 to 9 / **9** / 1/step] 0: Non-display 1: Display Specifies input available figure length of "Job serial numbers page print out starts number" that specified by optional text print out.
5-227-222	Zero SurPlus Setting	C*	[0 or 1 / **0** / 1/step] 0: Zero suppression Off 1: Zero suppression On Specifies zero suppression of "Job serial numbers page print out starts number" that specified by optional text print out.

5302	**[Set Time]** Adjusts the RTC (real time clock) time setting for the local time zone. Examples: For Japan (+9 GMT), enter 540 (9 hours x 60 min.) DOM: +540 (Tokyo) NA: -300 (New York) EU: + 60 (Paris) CH: +480 (Beijing) TW: +480 (Taipei) AS: +480 (Hong Kong) KO :+540 (Korea)		
5-302-002	Time Difference	C*	[-1440 to 1440 / **-300** / 1minute/step]

5307	**[Daylight Saving Time]** -

5-307-001	Setting	C*	[0 to 1 / **1** / 1/step] 0: Disabled 1: Enabled Enables or disables the summer time mode. Note ▪ Make sure that both SP5-307-3 and -4 are correctly set. Otherwise, this SP is not activated even if this SP is set to "1".
5-307-003	Rule Set(Start)	C*	[- / **3200210** / -] Specifies the start setting for the summer time mode. There are 8 digits in this SP. For months 1 to 9, the "0" cannot be input in the first digit, so the eight-digit setting for -2 or -3 becomes a seven-digit setting. 1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [1 to 5] 4th digit: The day of the week. [0 to 6 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] 7th digit: The length of the advanced time. [0 to 9 / 1 hour /step] 8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step] ▪ The digits are counted from the left. ▪ Make sure that SP5-307-1 is set to "1".

5-307-004	Rule Set(End)	C*	[- / **11100200** / -] Specifies the end setting for the summer time mode. There are 8 digits in this SP. 1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [0 to 5] 4th digit: The day of the week. [0 to 7 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] The 7th and 8 digits must be set to "00". ▪ The digits are counted from the left. Make sure that SP5-307-1 is set to "1".

5401	**[Access Control] (SSP)** When installing the SDK application, SAS (VAS) adjusts the following settings.		
5-401-103	Default Document ACL	C*	[0 to 3 / **0** / 1/step] 0: Read Only 1: Edit 2: Edit/Delete 3: Full control Whenever a new login user is added to the address book in external certification mode (for Windows, LDAP, RDH), the default document ACL is updated according to this SP setting. Note ▪ This SP setting is ignored on a machine that is not using document server.
5-401-104	Authentication Time	C*	[0 to 255 / **0** / 1second/step] Specifies the timeout of the authentication.

5-401-162	Extend Certification Detail	C*	[0 to 0xFF / **00000000** / 1/step] Selects the log out type for the extend authentication device. Bit 0: Log-out without an IC card 0: Not allowed (default) 1: Allowed
5-401-200	SDK1 UniqueID	C*	[0 to 0xFFFFFFFF / **0** / 1/step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.
5-401-201	SDK1 Certification Method	C*	[0 to 0xFF / **0** / 1 /step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.
5-401-210	SDK2 UniqueID	C*	[0 to 0xFFFFFFFF / **0** / 1/step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.
5-401-211	SDK2 Certification Method	C*	[0 to 0xFF / **0** / 1/step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.
5-401-220	SDK3 UniqueID	C*	[0 to 0xFFFFFFFF / **0** / 1/step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.
5-401-221	SDK3 Certification Method	C*	[0 to 0xFF / **0** / 1/step] "SDK" is the "Software Development Kit". This data can be converted from SAS (VAS) when installed or uninstalled.

5-401-230	SDK Certification Device	C*	[- / **00000000** / 1 /-] 0-1: SDK authentication available 0-0: Disable all functions 1-1: SKB Display 1-0: Disable 2-1: Administrator login 2-0: Disable 3 to 7-0: Reserved (set “0” only)
5-401-240	Detail Option	C*	[0 to 0xFF / **00000000** / 1/step] 0: Logout confirm option -1: ON, 0: OFF 2 to 1: Auto-logout timer(retry timer) -11: 30sec, 10: 20sec, 01: 10sec, 00: 60sec 3: personal authority / Group authority and operation -1: ON, 0: OFF 4: Skip password entry -1: ON, 0: OFF 5: Set the display of the remaining Frequence -1: ON, 0: OFF 6 to 7: Set the display time -1: ON, 0: OFF Enables or disables the log out confirmation option.

5402	**[Access Control] (SSP)** -		
5-402-101	SDKJ1 Limit Setting	C*	[0 to 0xFF / **00000000** / 1/step] bit0: SDKJ Authentication -0: Panel Type -1: Remote Type bit1: Using user code setup -0: OFF, 1: ON bit2: Using key-counter setup
5-402-102	SDKJ2 Limit Setting	C*	
5-402-103	SDKJ3 Limit Setting	C*	
5-402-104	SDKJ4 Limit Setting	C*	
5-402-105	SDKJ5 Limit Setting	C*	

5-402-106	SDKJ6 Limit Setting	C*	-0: OFF, 1: ON bit3: Using external billing device setup -0: OFF, 1: ON bit4: Using extended external billing device setup -0: OFF, 1: ON bit5~6: Not used bit7: Using extended function J limit users -0: OFF, 1: ON
5-402-107	SDKJ7 Limit Setting	C*	
5-402-108	SDKJ8 Limit Setting	C*	
5-402-109	SDKJ9 Limit Setting	C*	
5-402-110	SDKJ10 Limit Setting	C*	
5-402-111	SDKJ11 Limit Setting	C*	
5-402-112	SDKJ12 Limit Setting	C*	
5-402-113	SDKJ13 Limit Setting	C*	
5-402-114	SDKJ14 Limit Setting	C*	
5-402-115	SDKJ15 Limit Setting	C*	
5-402-116	SDKJ16 Limit Setting	C*	
5-402-117	SDKJ17 Limit Setting	C*	[0 to 0xFF / **00000000** / 1/step] bit0: SDKJ Authentication -0: Panel Type -1: Remote Type bit1: Using user code setup -0: OFF, 1: ON bit2: Using key-counter setup -0: OFF, 1: ON bit3: Using external billing device setup -0: OFF, 1: ON bit4: Using extended external billing device setup -0: OFF, 1: ON bit5~6: Not used bit7: Using extended function J limit users -0: OFF, 1: ON
5-402-118	SDKJ18 Limit Setting	C*	
5-402-119	SDKJ19 Limit Setting	C*	
5-402-120	SDKJ20 Limit Setting	C*	
5-402-121	SDKJ21 Limit Setting	C*	
5-402-122	SDKJ22 Limit Setting	C*	
5-402-123	SDKJ23 Limit Setting	C*	
5-402-124	SDKJ24 Limit Setting	C*	
5-402-125	SDKJ25 Limit Setting	C*	
5-402-126	SDKJ26 Limit Setting	C*	
5-402-127	SDKJ27 Limit Setting	C*	
5-402-128	SDKJ28 Limit Setting	C*	
5-402-129	SDKJ29 Limit Setting	C*	
5-402-130	SDKJ30 Limit Setting	C*	
5-402-141	SDKJ1 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]

5-402-142	SDKJ2 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-143	SDKJ3 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-144	SDKJ4 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-145	SDKJ5 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-146	SDKJ6 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-147	SDKJ7 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-148	SDKJ8 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-149	SDKJ9 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-150	SDKJ10 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-151	SDKJ11 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-152	SDKJ12 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-153	SDKJ13 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-154	SDKJ14 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-155	SDKJ15 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-156	SDKJ16 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-157	SDKJ17 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-158	SDKJ18 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-159	SDKJ19 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-160	SDKJ20 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-161	SDKJ21 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-162	SDKJ22 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-163	SDKJ23 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-164	SDKJ24 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-165	SDKJ25 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-166	SDKJ26 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-167	SDKJ27 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]

5-402-168	SDKJ28 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-169	SDKJ29 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]
5-402-170	SDKJ30 ProductID	C*	[0 to 0xFFFFFFFF / **0** / 1/step]

5404	**[User Code Count Clear]** Clears all counters for users.		
5-404-001	-	C	[- / **-** / -] [Execute]

5411	**[LDAP-Certification]** Sets description of LDAP certification.		
5-411-004	Simplified Authentication	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON Determines whether easy LDAP certification is done.
5-411-005	Password Null Not Permit	C*	[0 or 1 / **1** / 1/step] 0: Password NULL permitted. 1: Password NULL not permitted. This SP is referenced only when SP5411-004 is set to "1" (On).
5-411-006	Detail Option	C*	[0 or 1 / **00000000** / 0x01/step] 0: OFF, 1: ON Determines whether LDAP option (anonymous certification) is turned on or off.

5412	**[Krb-Certification]** -		

5-412-100	Encrypt Mode	C*	[- / **11111111** / 1/step] 0x01:AES256-CTS-HMAC-SHA1-96 0x02:AES128-CTS-HMAC-SHA1-96 0x04:DES3-CBC-SHA1 0x08:RC4-HMAC 0x10:DES-CBC-MD5 0xFF(0x1F):ALL Executes kerberos certification according to certified encryption strength.

5413	**[Lockout Setting]** Switches on/off the lock on the local address book account.		
5-413-001	Lockout On/Off	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON
5-413-002	Lockout Threshold	C*	[1 to 10 / **5** / 1time/step]
5-413-003	Cancellation On/Off	C*	[0 or 1 / **0** / 1/step] 0:OFF, 1:ON
5-413-004	Cancellation Time	C*	[1 to 9999 / **60** / 1minute/step] Sets release time of lockout release function.

5414	**[Access Mitigation]** -		
5-414-001	Mitigation On/Off	C*	[0 or 1 / **0** / 1/step] 0: OFF, 1: ON Switches on/off masking of continuously used IDs and passwords that are identical.
5-414-002	Mitigation Time	C*	[0 to 60 / **15** / 1minute/step] Sets the length of time for excluding continuous access for identical user IDs and passwords.

5415	**[Password Attack]** -		
5-415-001	Permissible Number	C*	[0 to 100 / **30** / 1time/step] Sets the number of attempts to attack the system with random passwords to gain illegal access to the system.
5-415-002	Detect Time	C*	[0 to 10 / **5** / 1second/step] Sets the time limit to stop a password attack once such an attack has been detected.

5416	**[Access Information]** -		
5-416-001	Access User Max Num	C*	[50 to 200 / **200** / 1/step] Limits the number of users used by the access exclusion and password attack detection functions.
5-416-002	Access Password Max Num	C*	[50 to 200 / **200** / 1/step] Limits the number of passwords used by the access exclusion and password attack detection functions.
5-416-003	Monitor Interval	C*	[1 to 10 / **3** / 1second/step] Sets the processing time interval for referencing user ID and password information.

5417	**[Access Attack]** -		
5-417-001	Access Permissible Number	C*	[0 to 500 / **100** / 1time/step] Sets a limit on access attempts when an excessive number of attempts are detected for MFP features.

5-417-002	Attack Detect Time	C*	[10 to 30 / **10** / 1second/step] Sets the length of time for monitoring the frequency of access to MFP features.
5-417-003	Productivity Fall Waite	C*	[0 to 9 / **3** / 1second/step] Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected.
5-417-004	Attack Max Num	C*	[50 to 200 / **200** / 1/step] Sets a limit on the number of requests received for certification in order to slow down the certification speed when an excessive number of access attempts have been detected.

5420	**[User Authentication]** These settings should be done with the System Administrator. Note ▪ These functions are enabled only after the user access feature has been enabled.		
5-420-001	Copy	C*	[0 or 1 / **0** / 1/step] 0: Authentication ON 1: Authentication OFF Determines whether certification is required before a user can use the copy applications.
5-420-011	DocumentServer	C*	[0 or 1 / **0** / 1/step] 0: Authentication ON 1: Authentication OFF Determines whether certification is required before a user can use the document server.

5-420-031	Scanner	C*	[0 or 1 / **0** / 1/step] 0: Authentication ON 1: Authentication OFF Determines whether certification is required before a user can use the scan applications.
5-420-041	Printer	C*	[0 or 1 / **0** / 1/step] 0: Authentication ON 1: Authentication OFF Determines whether certification is required before a user can use the printer applications.
5-420-051	SDK1	C*	[0 or 1 / **0** / 1/step] 0: Authentication ON 1: Authentication OFF Determines whether certification is required before a user can use the SDK application.
5-420-061	SDK2	C*	
5-420-071	SDK3	C*	
5-420-081	Browser	C*	

5430	**[Auth Dialog Message Change]** -		
5-430-001	Message Change On/Off	C*	[0 or 1 / **0** / 1/step] 0: Function OFF 1: Function ON Turns on or off the displayed message change for the authentication.
5-430-002	Message Text Download	C	[- / **-** / -] [Execute] Executes the message download for the authentication.
5-430-003	Message Text ID	C	[Char:Up to 16 bytes / **"¥0"** / -] Inputs message text for the authentication.

5431	**[External Auth User Preset]** -		
5-431-010	Tag	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the tag copy permission for the external authentication.
5-431-011	Entry	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the entry information for the external authentication.
5-431-012	Group	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the group information for the external authentication.
5-431-020	Mail	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the mail information for the external authentication.
5-431-032	Folder	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the folder information for the external authentication.
5-431-033	ProtectCode	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the protection code information for the external authentication.

5-431-034	SmtpAuth	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the SMTP information for the external authentication.
5-431-035	LdapAuth	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the LDAP information for the external authentication.
5-431-036	Smb Ftp Fldr Auth	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the SMB/FTP information for the external authentication.
5-431-037	AcntAcl	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the account ACL information for the external authentication.
5-431-038	DocumentAcl	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the document ACL information for the external authentication.
5-431-040	CertCrypt	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the authentication information for the external authentication.
5-431-050	UserLimitCount	C*	[0 or 1 / **1** / 1/step] 0: Not permit, 1: Permit Turns on or off the copy permission of the maximum number information for the external authentication.

5481	**[Authentication Error Code]** These SP codes determine how the authentication failures are displayed.		
5-481-001	System Log Disp	C*	[0 or 1 / **0** / 1/step] 0: Display OFF 1: Display ON Determines whether an error code appears in the system log after a user authentication failure occurs.
5-481-002	Panel Disp	C*	[0 or 1 / **1** / 1/step] 0: Display OFF 1: Display ON Determines whether an error code appears on the operation panel after a user authentication failure occurs.

5490	**[MF KeyCard]** Sets up operation of the machine with a keycard.		
5-490-001	Job Permit Setting	C*	[0 or 1 / **0** / 1/step] 0: Disabled. Cancels operation without a user code. 1: Enabled. Allows operation without a user code.

5491	**[Optional Counter]** -		
5-491-001	Detail Option	C*	[0 or 1 / **00000000** / 1/step] 0: Forced Job Canceling ON 1: Forced Job Canceling OFF

5501	**[PM Alarm]** Sets PM count level that emits PM alarm call.

5-501-001	PM Alarm Level	C*	[0 to 9999 / **0** / 1/step] 0: Alarm off 1 to 9999: Alarm goes off when Value (1 to 9999) x 1000 > PM counter

5504	**[Jam Alarm]** Sets the alarm to sound for the specified jam level (document miss feeds are not included).		
5-504-001	-	C*	[0 to 3 / **3** / 1/step] Jam occurrence interval sheets of indicated paper that indicated product proposal. 2(M): level H 1/21 1(L): level H 1/4 0(Z): Jam occurrence alarm prohibit.

5505	**[Error Alarm]** Sets the error alarm level. The error alarm counter counts "1" when any SC is detected. However, the error alarm counter decreases by "1" when an SC is not detected during a set number of copied sheets (for example, default 700 sheets). The error alarm occurs when the SC error alarm counter reaches "5".		
5-505-001	**-**	C*	[0 to 255 / **100** / 1/step] 0: Alarm Off

5507	**[Supply/CC Alarm]** Enables or disables the notifying a supply call via the @Remote.		
5-507-001	Paper Supply Alarm	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON
5-507-002	Staple Supply Alarm	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

5-507-003	Toner Supply Alarm	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-507-080	Toner Call Timing	C*	[0 or 1 / **0** / 1/step] 0: At toner exchanging. 1: AtLessThanThresh Changes the timing of the "Toner Supply Call" via the @Remote, when the following conditions occur.
5-507-081	Toner Call Threshold	C*	[10 to 90 / **10** / 10%/step] This program enables only if SP5-507-080 is "1"
5-507-128	Interval :Others	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-132	Interval :A3	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-133	Interval :A4	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-134	Interval :A5	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-141	Interval :B4	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-142	Interval :B5	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-160	Interval :DLT	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.

5-507-164	Interval :LG	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-166	Interval :LT	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.
5-507-172	Interval :HLT	C*	[250 to 10000 / **1000** / 1/step] Sets report level of paper supply administration call.

5508	**[CC Call]** Sets PM count level that emits PM alarm call.		
5-508-001	Jam Remains	C*	[0 or 1 / **1** / 1/step] 0: Disable 1: Enable Enables/disables initiating a call for an unattended paper jam.
5-508-002	Continuous Jams	C*	[0 or 1 / **1** / 1/step] 0: Disable 1: Enable Enables/disables initiating a call for consecutive paper jams.
5-508-003	Continuous Door Open	C*	[0 or 1 / **1** / 1/step] 0: Disable 1: Enable Enables/disables initiating a call when the front door remains open.
5-508-011	Jam Detection: Time Length	C*	[3 to 30 / **10** / 1minite/step] Sets the time a jam must remain before it becomes an "unattended paper jam".
5-508-012	Jam Detection: Continuous Count	C*	[2 to 10 / **5** / 1time/step] Sets the number of consecutive paper jams required to initiate a call.

5-508-013	Door Open: Time Length	C*	[3 to 30 / **10** / 1minute/step] Sets the length of time the door remains open before the machine initiates a call.

5513	**[PartsAlermlevelCount]** Call in at the point that the counter of "PM Parts Counter Display: Normal (SP7-617-001)" reaches this level (K).		
5-513-001	Normal	C*	[0 to 9999 / **300** / 1K/step] 0: OFF 1: ON
5-513-002	Df	C*	[1 to 9999 / **300** / 1K/step]

5514	**[PartsAlermlev]** PM report alarm for each CSS parts: Sets DF paper feed criteria On/Off (report or not).		
5-514-001	Nomal	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-514-002	Df	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5515	**[SC/Alarm Setting]** With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs.		
5-515-001	SC Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-002	Service Parts Near End Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

5-515-003	Service Parts End Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-004	User Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-006	Communication Test Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-007	Machine Information Notice	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-008	Alarm Notice	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-010	Supply Automatic Ordering Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-011	Supply Management Report Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-515-012	Jam/Door Open Call	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

5516	**[Individual PM Part Alarm Call]** With @Remote in use, these SP codes can be set to issue a PM alarm call when one of SP parts reaches its yield.		
5-516-001	Disable/Enable Setting (0:Not Send, 1:Send)	C*	[0 or 1 / **1** / 1/step]
5-516-004	Percent yield for triggering PM alert	C*	[0 to 100 / **75** / 1/step]

5517	[Get Machine Information] -		
5-517-001	Alerm On/Off Setting	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Calls in each time sheets are printed the amount total counter (SP8-581-001) provides. Pages to call in can be set with SP5-517-002: Malfunction predicting alarm: Calling in sheets interval.
5-517-002	Alerm Interval	C*	[10 to 255 / **10** / 1/step] Sets interval of pages to call in for Malfunction predicting alarm. Calls in when total counter reaches multiple sheets of (this SP's value *100)
5-517-021	GetCustomPprInfo:RetryInterval	C*	[0 to 255 / **10** / 1minute/step] When ID info collect is interrupt, retries during the time between receiving Request for obtaining custom paper info, to value set with this setting.
5-517-031	Get SMC Info: Retry Interval	C*	[0 to 255 / **10** / 1minute/step] When SMC info collect is interrupt, retries during the time between receiving Request for obtaining SMC info, to value set with this setting.

5710	[Custom Setting Paper]		
5-710-001	Bypass	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100

5-710-002	Tray 1	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-003	Tray 2	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-004	Tray 3	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-005	Tray 4	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-006	Tray 5	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-007	Tray 6	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100

5-710-008	Tray 7	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-009	Tray 8	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-010	Tray 9	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-011	Tray 10	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-012	Tray 11	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-013	Tray 12	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100

5-710-014	Tray 13	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-015	Tray 14	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100
5-710-016	Tray 15	C*	[0 to 100 / **0** / 1/step] 0: Custom Paper ID1 1: Custom Paper ID2 ... 99: Custom Paper ID99 100: Custom Paper ID100

5711	**[Custom Setting Paper: Data Setting]** File name:”library.mqp”... Standard paper data MQP file ”user.mqp” ... User setting paper data MQP file Upload… Copies it from folder in SD card “¥MQP” to folder “/mnt/usb3/mqp” in flash. Download... Copies it from folder in flash to folder in SD card. (opposite from Upload)		
5-711-001	Standard Paper Data UpLoad	C*	[- / **-** / -] [Execute]
5-711-002	Custom Paper Data UpLoad	C*	[- / **-** / -] [Execute]
5-711-102	Custom Paper Data UpLoad	C*	[- / **-** / -] [Execute]
5-711-201	Standard Paper Data Ver.(Flash)	C*	[- / **-** / -]

5-711-202	Standard Paper Data Ver.(SD Card)	C*	[- / **-** / -]

5715	**[Custom Paper: Thick]** -		
5-715-001	ID1	C	[0 to 7 / **1** / 1/step]
5-715-002	ID2	C	[0 to 7 / **1** / 1/step]
5-715-003	ID3	C	[0 to 7 / **1** / 1/step]
5-715-004	ID4	C	[0 to 7 / **1** / 1/step]
5-715-005	ID5	C	[0 to 7 / **1** / 1/step]
5-715-006	ID6	C	[0 to 7 / **1** / 1/step]
5-715-007	ID7	C	[0 to 7 / **1** / 1/step]
5-715-008	ID8	C	[0 to 7 / **1** / 1/step]
5-715-009	ID9	C	[0 to 7 / **1** / 1/step]
5-715-010	ID10	C	[0 to 7 / **1** / 1/step]
5-715-011	ID11	C	[0 to 7 / **1** / 1/step]
5-715-012	ID12	C	[0 to 7 / **1** / 1/step]
5-715-013	ID13	C	[0 to 7 / **1** / 1/step]
5-715-014	ID14	C	[0 to 7 / **1** / 1/step]
5-715-015	ID15	C	[0 to 7 / **1** / 1/step]
5-715-016	ID16	C	[0 to 7 / **1** / 1/step]
5-715-017	ID17	C	[0 to 7 / **1** / 1/step]
5-715-018	ID18	C	[0 to 7 / **1** / 1/step]
5-715-019	ID19	C	[0 to 7 / **1** / 1/step]
5-715-020	ID20	C	[0 to 7 / **1** / 1/step]
5-715-021	ID21	C	[0 to 7 / **1** / 1/step]
5-715-022	ID22	C	[0 to 7 / **1** / 1/step]

5-715-023	ID23	C	[0 to 7 / **1** / 1/step]
5-715-024	ID24	C	[0 to 7 / **1** / 1/step]
5-715-025	ID25	C	[0 to 7 / **1** / 1/step]
5-715-026	ID26	C	[0 to 7 / **1** / 1/step]
5-715-027	ID27	C	[0 to 7 / **1** / 1/step]
5-715-028	ID28	C	[0 to 7 / **1** / 1/step]
5-715-029	ID29	C	[0 to 7 / **1** / 1/step]
5-715-030	ID30	C	[0 to 7 / **1** / 1/step]
5-715-031	ID31	C	[0 to 7 / **1** / 1/step]
5-715-032	ID32	C	[0 to 7 / **1** / 1/step]
5-715-033	ID33	C	[0 to 7 / **1** / 1/step]
5-715-034	ID34	C	[0 to 7 / **1** / 1/step]
5-715-035	ID35	C	[0 to 7 / **1** / 1/step]
5-715-036	ID36	C	[0 to 7 / **1** / 1/step]
5-715-037	ID37	C	[0 to 7 / **1** / 1/step]
5-715-038	ID38	C	[0 to 7 / **1** / 1/step]
5-715-039	ID39	C	[0 to 7 / **1** / 1/step]
5-715-040	ID40	C	[0 to 7 / **1** / 1/step]
5-715-041	ID41	C	[0 to 7 / **1** / 1/step]
5-715-042	ID42	C	[0 to 7 / **1** / 1/step]
5-715-043	ID43	C	[0 to 7 / **1** / 1/step]
5-715-044	ID44	C	[0 to 7 / **1** / 1/step]
5-715-045	ID45	C	[0 to 7 / **1** / 1/step]
5-715-046	ID46	C	[0 to 7 / **1** / 1/step]
5-715-047	ID47	C	[0 to 7 / **1** / 1/step]
5-715-048	ID48	C	[0 to 7 / **1** / 1/step]

5-715-049	ID49	C	[0 to 7 / **1** / 1/step]
5-715-050	ID50	C	[0 to 7 / **1** / 1/step]
5-715-051	ID51	C	[0 to 7 / **1** / 1/step]
5-715-052	ID52	C	[0 to 7 / **1** / 1/step]
5-715-053	ID53	C	[0 to 7 / **1** / 1/step]
5-715-054	ID54	C	[0 to 7 / **1** / 1/step]
5-715-055	ID55	C	[0 to 7 / **1** / 1/step]
5-715-056	ID56	C	[0 to 7 / **1** / 1/step]
5-715-057	ID57	C	[0 to 7 / **1** / 1/step]
5-715-058	ID58	C	[0 to 7 / **1** / 1/step]
5-715-059	ID59	C	[0 to 7 / **1** / 1/step]
5-715-060	ID60	C	[0 to 7 / **1** / 1/step]
5-715-061	ID61	C	[0 to 7 / **1** / 1/step]
5-715-062	ID62	C	[0 to 7 / **1** / 1/step]
5-715-063	ID63	C	[0 to 7 / **1** / 1/step]
5-715-064	ID64	C	[0 to 7 / **1** / 1/step]
5-715-065	ID65	C	[0 to 7 / **1** / 1/step]
5-715-066	ID66	C	[0 to 7 / **1** / 1/step]
5-715-067	ID67	C	[0 to 7 / **1** / 1/step]
5-715-068	ID68	C	[0 to 7 / **1** / 1/step]
5-715-069	ID69	C	[0 to 7 / **1** / 1/step]
5-715-070	ID70	C	[0 to 7 / **1** / 1/step]
5-715-071	ID71	C	[0 to 7 / **1** / 1/step]
5-715-072	ID72	C	[0 to 7 / **1** / 1/step]
5-715-073	ID73	C	[0 to 7 / **1** / 1/step]
5-715-074	ID74	C	[0 to 7 / **1** / 1/step]

5-715-075	ID75	C	[0 to 7 / **1** / 1/step]
5-715-076	ID76	C	[0 to 7 / **1** / 1/step]
5-715-077	ID77	C	[0 to 7 / **1** / 1/step]
5-715-078	ID78	C	[0 to 7 / **1** / 1/step]
5-715-079	ID79	C	[0 to 7 / **1** / 1/step]
5-715-080	ID80	C	[0 to 7 / **1** / 1/step]
5-715-081	ID81	C	[0 to 7 / **1** / 1/step]
5-715-082	ID82	C	[0 to 7 / **1** / 1/step]
5-715-083	ID83	C	[0 to 7 / **1** / 1/step]
5-715-084	ID84	C	[0 to 7 / **1** / 1/step]
5-715-085	ID85	C	[0 to 7 / **1** / 1/step]
5-715-086	ID86	C	[0 to 7 / **1** / 1/step]
5-715-087	ID87	C	[0 to 7 / **1** / 1/step]
5-715-088	ID88	C	[0 to 7 / **1** / 1/step]
5-715-089	ID89	C	[0 to 7 / **1** / 1/step]
5-715-090	ID90	C	[0 to 7 / **1** / 1/step]
5-715-091	ID91	C	[0 to 7 / **1** / 1/step]
5-715-092	ID92	C	[0 to 7 / **1** / 1/step]
5-715-093	ID93	C	[0 to 7 / **1** / 1/step]
5-715-094	ID94	C	[0 to 7 / **1** / 1/step]
5-715-095	ID95	C	[0 to 7 / **1** / 1/step]
5-715-096	ID96	C	[0 to 7 / **1** / 1/step]
5-715-097	ID97	C	[0 to 7 / **1** / 1/step]
5-715-098	ID98	C	[0 to 7 / **1** / 1/step]
5-715-099	ID99	C	[0 to 7 / **1** / 1/step]
5-715-100	ID100	C	[0 to 7 / **1** / 1/step]

5716	**[Custom Paper: Thin]** -		
5-716-001	ID1	C	[0 to 2 / **1** / 1/step]
5-716-002	ID2	C	[0 to 2 / **1** / 1/step]
5-716-003	ID3	C	[0 to 2 / **1** / 1/step]
5-716-004	ID4	C	[0 to 2 / **1** / 1/step]
5-716-005	ID5	C	[0 to 2 / **1** / 1/step]
5-716-006	ID6	C	[0 to 2 / **1** / 1/step]
5-716-007	ID7	C	[0 to 2 / **1** / 1/step]
5-716-008	ID8	C	[0 to 2 / **1** / 1/step]
5-716-009	ID9	C	[0 to 2 / **1** / 1/step]
5-716-010	ID10	C	[0 to 2 / **1** / 1/step]
5-716-011	ID11	C	[0 to 2 / **1** / 1/step]
5-716-012	ID12	C	[0 to 2 / **1** / 1/step]
5-716-013	ID13	C	[0 to 2 / **1** / 1/step]
5-716-014	ID14	C	[0 to 2 / **1** / 1/step]
5-716-015	ID15	C	[0 to 2 / **1** / 1/step]
5-716-016	ID16	C	[0 to 2 / **1** / 1/step]
5-716-017	ID17	C	[0 to 2 / **1** / 1/step]
5-716-018	ID18	C	[0 to 2 / **1** / 1/step]
5-716-019	ID19	C	[0 to 2 / **1** / 1/step]
5-716-020	ID20	C	[0 to 2 / **1** / 1/step]
5-716-021	ID21	C	[0 to 2 / **1** / 1/step]
5-716-022	ID22	C	[0 to 2 / **1** / 1/step]
5-716-023	ID23	C	[0 to 2 / **1** / 1/step]

5-716-024	ID24	C	[0 to 2 / **1** / 1/step]
5-716-025	ID25	C	[0 to 2 / **1** / 1/step]
5-716-026	ID26	C	[0 to 2 / **1** / 1/step]
5-716-027	ID27	C	[0 to 2 / **1** / 1/step]
5-716-028	ID28	C	[0 to 2 / **1** / 1/step]
5-716-029	ID29	C	[0 to 2 / **1** / 1/step]
5-716-030	ID30	C	[0 to 2 / **1** / 1/step]
5-716-031	ID31	C	[0 to 2 / **1** / 1/step]
5-716-032	ID32	C	[0 to 2 / **1** / 1/step]
5-716-033	ID33	C	[0 to 2 / **1** / 1/step]
5-716-034	ID34	C	[0 to 2 / **1** / 1/step]
5-716-035	ID35	C	[0 to 2 / **1** / 1/step]
5-716-036	ID36	C	[0 to 2 / **1** / 1/step]
5-716-037	ID37	C	[0 to 2 / **1** / 1/step]
5-716-038	ID38	C	[0 to 2 / **1** / 1/step]
5-716-039	ID39	C	[0 to 2 / **1** / 1/step]
5-716-040	ID40	C	[0 to 2 / **1** / 1/step]
5-716-041	ID41	C	[0 to 2 / **1** / 1/step]
5-716-042	ID42	C	[0 to 2 / **1** / 1/step]
5-716-043	ID43	C	[0 to 2 / **1** / 1/step]
5-716-044	ID44	C	[0 to 2 / **1** / 1/step]
5-716-045	ID45	C	[0 to 2 / **1** / 1/step]
5-716-046	ID46	C	[0 to 2 / **1** / 1/step]
5-716-047	ID47	C	[0 to 2 / **1** / 1/step]
5-716-048	ID48	C	[0 to 2 / **1** / 1/step]
5-716-049	ID49	C	[0 to 2 / **1** / 1/step]

5-716-050	ID50	C	[0 to 2 / **1** / 1/step]
5-716-051	ID51	C	[0 to 2 / **1** / 1/step]
5-716-052	ID52	C	[0 to 2 / **1** / 1/step]
5-716-053	ID53	C	[0 to 2 / **1** / 1/step]
5-716-054	ID54	C	[0 to 2 / **1** / 1/step]
5-716-055	ID55	C	[0 to 2 / **1** / 1/step]
5-716-056	ID56	C	[0 to 2 / **1** / 1/step]
5-716-057	ID57	C	[0 to 2 / **1** / 1/step]
5-716-058	ID58	C	[0 to 2 / **1** / 1/step]
5-716-059	ID59	C	[0 to 2 / **1** / 1/step]
5-716-060	ID60	C	[0 to 2 / **1** / 1/step]
5-716-061	ID61	C	[0 to 2 / **1** / 1/step]
5-716-062	ID62	C	[0 to 2 / **1** / 1/step]
5-716-063	ID63	C	[0 to 2 / **1** / 1/step]
5-716-064	ID64	C	[0 to 2 / **1** / 1/step]
5-716-065	ID65	C	[0 to 2 / **1** / 1/step]
5-716-066	ID66	C	[0 to 2 / **1** / 1/step]
5-716-067	ID67	C	[0 to 2 / **1** / 1/step]
5-716-068	ID68	C	[0 to 2 / **1** / 1/step]
5-716-069	ID69	C	[0 to 2 / **1** / 1/step]
5-716-070	ID70	C	[0 to 2 / **1** / 1/step]
5-716-071	ID71	C	[0 to 2 / **1** / 1/step]
5-716-072	ID72	C	[0 to 2 / **1** / 1/step]
5-716-073	ID73	C	[0 to 2 / **1** / 1/step]
5-716-074	ID74	C	[0 to 2 / **1** / 1/step]
5-716-075	ID75	C	[0 to 2 / **1** / 1/step]

5-716-076	ID76	C	[0 to 2 / **1** / 1/step]
5-716-077	ID77	C	[0 to 2 / **1** / 1/step]
5-716-078	ID78	C	[0 to 2 / **1** / 1/step]
5-716-079	ID79	C	[0 to 2 / **1** / 1/step]
5-716-080	ID80	C	[0 to 2 / **1** / 1/step]
5-716-081	ID81	C	[0 to 2 / **1** / 1/step]
5-716-082	ID82	C	[0 to 2 / **1** / 1/step]
5-716-083	ID83	C	[0 to 2 / **1** / 1/step]
5-716-084	ID84	C	[0 to 2 / **1** / 1/step]
5-716-085	ID85	C	[0 to 2 / **1** / 1/step]
5-716-086	ID86	C	[0 to 2 / **1** / 1/step]
5-716-087	ID87	C	[0 to 2 / **1** / 1/step]
5-716-088	ID88	C	[0 to 2 / **1** / 1/step]
5-716-089	ID89	C	[0 to 2 / **1** / 1/step]
5-716-090	ID90	C	[0 to 2 / **1** / 1/step]
5-716-091	ID91	C	[0 to 2 / **1** / 1/step]
5-716-092	ID92	C	[0 to 2 / **1** / 1/step]
5-716-093	ID93	C	[0 to 2 / **1** / 1/step]
5-716-094	ID94	C	[0 to 2 / **1** / 1/step]
5-716-095	ID95	C	[0 to 2 / **1** / 1/step]
5-716-096	ID96	C	[0 to 2 / **1** / 1/step]
5-716-097	ID97	C	[0 to 2 / **1** / 1/step]
5-716-098	ID98	C	[0 to 2 / **1** / 1/step]
5-716-099	ID99	C	[0 to 2 / **1** / 1/step]
5-716-100	ID100	C	[0 to 2 / **1** / 1/step]

5717	**[Custom Paper: Up/Web Info. 1: P-Type]** -		
5-717-001	ID1	C	[0 to 0xFFFF / **1** / 1/step]
5-717-002	ID2	C	[0 to 0xFFFF / **1** / 1/step]
5-717-003	ID3	C	[0 to 0xFFFF / **1** / 1/step]
5-717-004	ID4	C	[0 to 0xFFFF / **1** / 1/step]
5-717-005	ID5	C	[0 to 0xFFFF / **1** / 1/step]
5-717-006	ID6	C	[0 to 0xFFFF / **1** / 1/step]
5-717-007	ID7	C	[0 to 0xFFFF / **1** / 1/step]
5-717-008	ID8	C	[0 to 0xFFFF / **1** / 1/step]
5-717-009	ID9	C	[0 to 0xFFFF / **1** / 1/step]
5-717-010	ID10	C	[0 to 0xFFFF / **1** / 1/step]
5-717-011	ID11	C	[0 to 0xFFFF / **1** / 1/step]
5-717-012	ID12	C	[0 to 0xFFFF / **1** / 1/step]
5-717-013	ID13	C	[0 to 0xFFFF / **1** / 1/step]
5-717-014	ID14	C	[0 to 0xFFFF / **1** / 1/step]
5-717-015	ID15	C	[0 to 0xFFFF / **1** / 1/step]
5-717-016	ID16	C	[0 to 0xFFFF / **1** / 1/step]
5-717-017	ID17	C	[0 to 0xFFFF / **1** / 1/step]
5-717-018	ID18	C	[0 to 0xFFFF / **1** / 1/step]
5-717-019	ID19	C	[0 to 0xFFFF / **1** / 1/step]
5-717-020	ID20	C	[0 to 0xFFFF / **1** / 1/step]
5-717-021	ID21	C	[0 to 0xFFFF / **1** / 1/step]
5-717-022	ID22	C	[0 to 0xFFFF / **1** / 1/step]
5-717-023	ID23	C	[0 to 0xFFFF / **1** / 1/step]
5-717-024	ID24	C	[0 to 0xFFFF / **1** / 1/step]

5-717-025	ID25	C	[0 to 0xFFFF / **1** / 1/step]
5-717-026	ID26	C	[0 to 0xFFFF / **1** / 1/step]
5-717-027	ID27	C	[0 to 0xFFFF / **1** / 1/step]
5-717-028	ID28	C	[0 to 0xFFFF / **1** / 1/step]
5-717-029	ID29	C	[0 to 0xFFFF / **1** / 1/step]
5-717-030	ID30	C	[0 to 0xFFFF / **1** / 1/step]
5-717-031	ID31	C	[0 to 0xFFFF / **1** / 1/step]
5-717-032	ID32	C	[0 to 0xFFFF / **1** / 1/step]
5-717-033	ID33	C	[0 to 0xFFFF / **1** / 1/step]
5-717-034	ID34	C	[0 to 0xFFFF / **1** / 1/step]
5-717-035	ID35	C	[0 to 0xFFFF / **1** / 1/step]
5-717-036	ID36	C	[0 to 0xFFFF / **1** / 1/step]
5-717-037	ID37	C	[0 to 0xFFFF / **1** / 1/step]
5-717-038	ID38	C	[0 to 0xFFFF / **1** / 1/step]
5-717-039	ID39	C	[0 to 0xFFFF / **1** / 1/step]
5-717-040	ID40	C	[0 to 0xFFFF / **1** / 1/step]
5-717-041	ID41	C	[0 to 0xFFFF / **1** / 1/step]
5-717-042	ID42	C	[0 to 0xFFFF / **1** / 1/step]
5-717-043	ID43	C	[0 to 0xFFFF / **1** / 1/step]
5-717-044	ID44	C	[0 to 0xFFFF / **1** / 1/step]
5-717-045	ID45	C	[0 to 0xFFFF / **1** / 1/step]
5-717-046	ID46	C	[0 to 0xFFFF / **1** / 1/step]
5-717-047	ID47	C	[0 to 0xFFFF / **1** / 1/step]
5-717-048	ID48	C	[0 to 0xFFFF / **1** / 1/step]
5-717-049	ID49	C	[0 to 0xFFFF / **1** / 1/step]
5-717-050	ID50	C	[0 to 0xFFFF / **1** / 1/step]

5-717-051	ID51	C	[0 to 0xFFFF / **1** / 1/step]
5-717-052	ID52	C	[0 to 0xFFFF / **1** / 1/step]
5-717-053	ID53	C	[0 to 0xFFFF / **1** / 1/step]
5-717-054	ID54	C	[0 to 0xFFFF / **1** / 1/step]
5-717-055	ID55	C	[0 to 0xFFFF / **1** / 1/step]
5-717-056	ID56	C	[0 to 0xFFFF / **1** / 1/step]
5-717-057	ID57	C	[0 to 0xFFFF / **1** / 1/step]
5-717-058	ID58	C	[0 to 0xFFFF / **1** / 1/step]
5-717-059	ID59	C	[0 to 0xFFFF / **1** / 1/step]
5-717-060	ID60	C	[0 to 0xFFFF / **1** / 1/step]
5-717-061	ID61	C	[0 to 0xFFFF / **1** / 1/step]
5-717-062	ID62	C	[0 to 0xFFFF / **1** / 1/step]
5-717-063	ID63	C	[0 to 0xFFFF / **1** / 1/step]
5-717-064	ID64	C	[0 to 0xFFFF / **1** / 1/step]
5-717-065	ID65	C	[0 to 0xFFFF / **1** / 1/step]
5-717-066	ID66	C	[0 to 0xFFFF / **1** / 1/step]
5-717-067	ID67	C	[0 to 0xFFFF / **1** / 1/step]
5-717-068	ID68	C	[0 to 0xFFFF / **1** / 1/step]
5-717-069	ID69	C	[0 to 0xFFFF / **1** / 1/step]
5-717-070	ID70	C	[0 to 0xFFFF / **1** / 1/step]
5-717-071	ID71	C	[0 to 0xFFFF / **1** / 1/step]
5-717-072	ID72	C	[0 to 0xFFFF / **1** / 1/step]
5-717-073	ID73	C	[0 to 0xFFFF / **1** / 1/step]
5-717-074	ID74	C	[0 to 0xFFFF / **1** / 1/step]
5-717-075	ID75	C	[0 to 0xFFFF / **1** / 1/step]
5-717-076	ID76	C	[0 to 0xFFFF / **1** / 1/step]

5-717-077	ID77	C	[0 to 0xFFFF / **1** / 1/step]
5-717-078	ID78	C	[0 to 0xFFFF / **1** / 1/step]
5-717-079	ID79	C	[0 to 0xFFFF / **1** / 1/step]
5-717-080	ID80	C	[0 to 0xFFFF / **1** / 1/step]
5-717-081	ID81	C	[0 to 0xFFFF / **1** / 1/step]
5-717-082	ID82	C	[0 to 0xFFFF / **1** / 1/step]
5-717-083	ID83	C	[0 to 0xFFFF / **1** / 1/step]
5-717-084	ID84	C	[0 to 0xFFFF / **1** / 1/step]
5-717-085	ID85	C	[0 to 0xFFFF / **1** / 1/step]
5-717-086	ID86	C	[0 to 0xFFFF / **1** / 1/step]
5-717-087	ID87	C	[0 to 0xFFFF / **1** / 1/step]
5-717-088	ID88	C	[0 to 0xFFFF / **1** / 1/step]
5-717-089	ID89	C	[0 to 0xFFFF / **1** / 1/step]
5-717-090	ID90	C	[0 to 0xFFFF / **1** / 1/step]
5-717-091	ID91	C	[0 to 0xFFFF / **1** / 1/step]
5-717-092	ID92	C	[0 to 0xFFFF / **1** / 1/step]
5-717-093	ID93	C	[0 to 0xFFFF / **1** / 1/step]
5-717-094	ID94	C	[0 to 0xFFFF / **1** / 1/step]
5-717-095	ID95	C	[0 to 0xFFFF / **1** / 1/step]
5-717-096	ID96	C	[0 to 0xFFFF / **1** / 1/step]
5-717-097	ID97	C	[0 to 0xFFFF / **1** / 1/step]
5-717-098	ID98	C	[0 to 0xFFFF / **1** / 1/step]
5-717-099	ID99	C	[0 to 0xFFFF / **1** / 1/step]
5-717-100	ID100	C	[0 to 0xFFFF / **1** / 1/step]

5718	**[Custom Paper: Up/Web Info. 2: Coated]** -		
5-718-001	ID1	C	[0 to 0xFFFF / **1** / 1/step]
5-718-002	ID2	C	[0 to 0xFFFF / **1** / 1/step]
5-718-003	ID3	C	[0 to 0xFFFF / **1** / 1/step]
5-718-004	ID4	C	[0 to 0xFFFF / **1** / 1/step]
5-718-005	ID5	C	[0 to 0xFFFF / **1** / 1/step]
5-718-006	ID6	C	[0 to 0xFFFF / **1** / 1/step]
5-718-007	ID7	C	[0 to 0xFFFF / **1** / 1/step]
5-718-008	ID8	C	[0 to 0xFFFF / **1** / 1/step]
5-718-009	ID9	C	[0 to 0xFFFF / **1** / 1/step]
5-718-010	ID10	C	[0 to 0xFFFF / **1** / 1/step]
5-718-011	ID11	C	[0 to 0xFFFF / **1** / 1/step]
5-718-012	ID12	C	[0 to 0xFFFF / **1** / 1/step]
5-718-013	ID13	C	[0 to 0xFFFF / **1** / 1/step]
5-718-014	ID14	C	[0 to 0xFFFF / **1** / 1/step]
5-718-015	ID15	C	[0 to 0xFFFF / **1** / 1/step]
5-718-016	ID16	C	[0 to 0xFFFF / **1** / 1/step]
5-718-017	ID17	C	[0 to 0xFFFF / **1** / 1/step]
5-718-018	ID18	C	[0 to 0xFFFF / **1** / 1/step]
5-718-019	ID19	C	[0 to 0xFFFF / **1** / 1/step]
5-718-020	ID20	C	[0 to 0xFFFF / **1** / 1/step]
5-718-021	ID21	C	[0 to 0xFFFF / **1** / 1/step]
5-718-022	ID22	C	[0 to 0xFFFF / **1** / 1/step]
5-718-023	ID23	C	[0 to 0xFFFF / **1** / 1/step]
5-718-024	ID24	C	[0 to 0xFFFF / **1** / 1/step]

5-718-025	ID25	C	[0 to 0xFFFF / **1** / 1/step]
5-718-026	ID26	C	[0 to 0xFFFF / **1** / 1/step]
5-718-027	ID27	C	[0 to 0xFFFF / **1** / 1/step]
5-718-028	ID28	C	[0 to 0xFFFF / **1** / 1/step]
5-718-029	ID29	C	[0 to 0xFFFF / **1** / 1/step]
5-718-030	ID30	C	[0 to 0xFFFF / **1** / 1/step]
5-718-031	ID31	C	[0 to 0xFFFF / **1** / 1/step]
5-718-032	ID32	C	[0 to 0xFFFF / **1** / 1/step]
5-718-033	ID33	C	[0 to 0xFFFF / **1** / 1/step]
5-718-034	ID34	C	[0 to 0xFFFF / **1** / 1/step]
5-718-035	ID35	C	[0 to 0xFFFF / **1** / 1/step]
5-718-036	ID36	C	[0 to 0xFFFF / **1** / 1/step]
5-718-037	ID37	C	[0 to 0xFFFF / **1** / 1/step]
5-718-038	ID38	C	[0 to 0xFFFF / **1** / 1/step]
5-718-039	ID39	C	[0 to 0xFFFF / **1** / 1/step]
5-718-040	ID40	C	[0 to 0xFFFF / **1** / 1/step]
5-718-041	ID41	C	[0 to 0xFFFF / **1** / 1/step]
5-718-042	ID42	C	[0 to 0xFFFF / **1** / 1/step]
5-718-043	ID43	C	[0 to 0xFFFF / **1** / 1/step]
5-718-044	ID44	C	[0 to 0xFFFF / **1** / 1/step]
5-718-045	ID45	C	[0 to 0xFFFF / **1** / 1/step]
5-718-046	ID46	C	[0 to 0xFFFF / **1** / 1/step]
5-718-047	ID47	C	[0 to 0xFFFF / **1** / 1/step]
5-718-048	ID48	C	[0 to 0xFFFF / **1** / 1/step]
5-718-049	ID49	C	[0 to 0xFFFF / **1** / 1/step]
5-718-050	ID50	C	[0 to 0xFFFF / **1** / 1/step]

5-718-051	ID51	C	[0 to 0xFFFF / **1** / 1/step]
5-718-052	ID52	C	[0 to 0xFFFF / **1** / 1/step]
5-718-053	ID53	C	[0 to 0xFFFF / **1** / 1/step]
5-718-054	ID54	C	[0 to 0xFFFF / **1** / 1/step]
5-718-055	ID55	C	[0 to 0xFFFF / **1** / 1/step]
5-718-056	ID56	C	[0 to 0xFFFF / **1** / 1/step]
5-718-057	ID57	C	[0 to 0xFFFF / **1** / 1/step]
5-718-058	ID58	C	[0 to 0xFFFF / **1** / 1/step]
5-718-059	ID59	C	[0 to 0xFFFF / **1** / 1/step]
5-718-060	ID60	C	[0 to 0xFFFF / **1** / 1/step]
5-718-061	ID61	C	[0 to 0xFFFF / **1** / 1/step]
5-718-062	ID62	C	[0 to 0xFFFF / **1** / 1/step]
5-718-063	ID63	C	[0 to 0xFFFF / **1** / 1/step]
5-718-064	ID64	C	[0 to 0xFFFF / **1** / 1/step]
5-718-065	ID65	C	[0 to 0xFFFF / **1** / 1/step]
5-718-066	ID66	C	[0 to 0xFFFF / **1** / 1/step]
5-718-067	ID67	C	[0 to 0xFFFF / **1** / 1/step]
5-718-068	ID68	C	[0 to 0xFFFF / **1** / 1/step]
5-718-069	ID69	C	[0 to 0xFFFF / **1** / 1/step]
5-718-070	ID70	C	[0 to 0xFFFF / **1** / 1/step]
5-718-071	ID71	C	[0 to 0xFFFF / **1** / 1/step]
5-718-072	ID72	C	[0 to 0xFFFF / **1** / 1/step]
5-718-073	ID73	C	[0 to 0xFFFF / **1** / 1/step]
5-718-074	ID74	C	[0 to 0xFFFF / **1** / 1/step]
5-718-075	ID75	C	[0 to 0xFFFF / **1** / 1/step]
5-718-076	ID76	C	[0 to 0xFFFF / **1** / 1/step]

5-718-077	ID77	C	[0 to 0xFFFF / **1** / 1/step]
5-718-078	ID78	C	[0 to 0xFFFF / **1** / 1/step]
5-718-079	ID79	C	[0 to 0xFFFF / **1** / 1/step]
5-718-080	ID80	C	[0 to 0xFFFF / **1** / 1/step]
5-718-081	ID81	C	[0 to 0xFFFF / **1** / 1/step]
5-718-082	ID82	C	[0 to 0xFFFF / **1** / 1/step]
5-718-083	ID83	C	[0 to 0xFFFF / **1** / 1/step]
5-718-084	ID84	C	[0 to 0xFFFF / **1** / 1/step]
5-718-085	ID85	C	[0 to 0xFFFF / **1** / 1/step]
5-718-086	ID86	C	[0 to 0xFFFF / **1** / 1/step]
5-718-087	ID87	C	[0 to 0xFFFF / **1** / 1/step]
5-718-088	ID88	C	[0 to 0xFFFF / **1** / 1/step]
5-718-089	ID89	C	[0 to 0xFFFF / **1** / 1/step]
5-718-090	ID90	C	[0 to 0xFFFF / **1** / 1/step]
5-718-091	ID91	C	[0 to 0xFFFF / **1** / 1/step]
5-718-092	ID92	C	[0 to 0xFFFF / **1** / 1/step]
5-718-093	ID93	C	[0 to 0xFFFF / **1** / 1/step]
5-718-094	ID94	C	[0 to 0xFFFF / **1** / 1/step]
5-718-095	ID95	C	[0 to 0xFFFF / **1** / 1/step]
5-718-096	ID96	C	[0 to 0xFFFF / **1** / 1/step]
5-718-097	ID97	C	[0 to 0xFFFF / **1** / 1/step]
5-718-098	ID98	C	[0 to 0xFFFF / **1** / 1/step]
5-718-099	ID99	C	[0 to 0xFFFF / **1** / 1/step]
5-718-100	ID100	C	[0 to 0xFFFF / **1** / 1/step]

5719	**[Custom Paper: Up/Web Info. 3: Punch]** -		
5-719-001	ID1	C	[0 to 0xFFFF / **1** / 1/step]
5-719-002	ID2	C	[0 to 0xFFFF / **1** / 1/step]
5-719-003	ID3	C	[0 to 0xFFFF / **1** / 1/step]
5-719-004	ID4	C	[0 to 0xFFFF / **1** / 1/step]
5-719-005	ID5	C	[0 to 0xFFFF / **1** / 1/step]
5-719-006	ID6	C	[0 to 0xFFFF / **1** / 1/step]
5-719-007	ID7	C	[0 to 0xFFFF / **1** / 1/step]
5-719-008	ID8	C	[0 to 0xFFFF / **1** / 1/step]
5-719-009	ID9	C	[0 to 0xFFFF / **1** / 1/step]
5-719-010	ID10	C	[0 to 0xFFFF / **1** / 1/step]
5-719-011	ID11	C	[0 to 0xFFFF / **1** / 1/step]
5-719-012	ID12	C	[0 to 0xFFFF / **1** / 1/step]
5-719-013	ID13	C	[0 to 0xFFFF / **1** / 1/step]
5-719-014	ID14	C	[0 to 0xFFFF / **1** / 1/step]
5-719-015	ID15	C	[0 to 0xFFFF / **1** / 1/step]
5-719-016	ID16	C	[0 to 0xFFFF / **1** / 1/step]
5-719-017	ID17	C	[0 to 0xFFFF / **1** / 1/step]
5-719-018	ID18	C	[0 to 0xFFFF / **1** / 1/step]
5-719-019	ID19	C	[0 to 0xFFFF / **1** / 1/step]
5-719-020	ID20	C	[0 to 0xFFFF / **1** / 1/step]
5-719-021	ID21	C	[0 to 0xFFFF / **1** / 1/step]
5-719-022	ID22	C	[0 to 0xFFFF / **1** / 1/step]
5-719-023	ID23	C	[0 to 0xFFFF / **1** / 1/step]
5-719-024	ID24	C	[0 to 0xFFFF / **1** / 1/step]

5-719-025	ID25	C	[0 to 0xFFFF / **1** / 1/step]
5-719-026	ID26	C	[0 to 0xFFFF / **1** / 1/step]
5-719-027	ID27	C	[0 to 0xFFFF / **1** / 1/step]
5-719-028	ID28	C	[0 to 0xFFFF / **1** / 1/step]
5-719-029	ID29	C	[0 to 0xFFFF / **1** / 1/step]
5-719-030	ID30	C	[0 to 0xFFFF / **1** / 1/step]
5-719-031	ID31	C	[0 to 0xFFFF / **1** / 1/step]
5-719-032	ID32	C	[0 to 0xFFFF / **1** / 1/step]
5-719-033	ID33	C	[0 to 0xFFFF / **1** / 1/step]
5-719-034	ID34	C	[0 to 0xFFFF / **1** / 1/step]
5-719-035	ID35	C	[0 to 0xFFFF / **1** / 1/step]
5-719-036	ID36	C	[0 to 0xFFFF / **1** / 1/step]
5-719-037	ID37	C	[0 to 0xFFFF / **1** / 1/step]
5-719-038	ID38	C	[0 to 0xFFFF / **1** / 1/step]
5-719-039	ID39	C	[0 to 0xFFFF / **1** / 1/step]
5-719-040	ID40	C	[0 to 0xFFFF / **1** / 1/step]
5-719-041	ID41	C	[0 to 0xFFFF / **1** / 1/step]
5-719-042	ID42	C	[0 to 0xFFFF / **1** / 1/step]
5-719-043	ID43	C	[0 to 0xFFFF / **1** / 1/step]
5-719-044	ID44	C	[0 to 0xFFFF / **1** / 1/step]
5-719-045	ID45	C	[0 to 0xFFFF / **1** / 1/step]
5-719-046	ID46	C	[0 to 0xFFFF / **1** / 1/step]
5-719-047	ID47	C	[0 to 0xFFFF / **1** / 1/step]
5-719-048	ID48	C	[0 to 0xFFFF / **1** / 1/step]
5-719-049	ID49	C	[0 to 0xFFFF / **1** / 1/step]
5-719-050	ID50	C	[0 to 0xFFFF / **1** / 1/step]

5-719-051	ID51	C	[0 to 0xFFFF / **1** / 1/step]
5-719-052	ID52	C	[0 to 0xFFFF / **1** / 1/step]
5-719-053	ID53	C	[0 to 0xFFFF / **1** / 1/step]
5-719-054	ID54	C	[0 to 0xFFFF / **1** / 1/step]
5-719-055	ID55	C	[0 to 0xFFFF / **1** / 1/step]
5-719-056	ID56	C	[0 to 0xFFFF / **1** / 1/step]
5-719-057	ID57	C	[0 to 0xFFFF / **1** / 1/step]
5-719-058	ID58	C	[0 to 0xFFFF / **1** / 1/step]
5-719-059	ID59	C	[0 to 0xFFFF / **1** / 1/step]
5-719-060	ID60	C	[0 to 0xFFFF / **1** / 1/step]
5-719-061	ID61	C	[0 to 0xFFFF / **1** / 1/step]
5-719-062	ID62	C	[0 to 0xFFFF / **1** / 1/step]
5-719-063	ID63	C	[0 to 0xFFFF / **1** / 1/step]
5-719-064	ID64	C	[0 to 0xFFFF / **1** / 1/step]
5-719-065	ID65	C	[0 to 0xFFFF / **1** / 1/step]
5-719-066	ID66	C	[0 to 0xFFFF / **1** / 1/step]
5-719-067	ID67	C	[0 to 0xFFFF / **1** / 1/step]
5-719-068	ID68	C	[0 to 0xFFFF / **1** / 1/step]
5-719-069	ID69	C	[0 to 0xFFFF / **1** / 1/step]
5-719-070	ID70	C	[0 to 0xFFFF / **1** / 1/step]
5-719-071	ID71	C	[0 to 0xFFFF / **1** / 1/step]
5-719-072	ID72	C	[0 to 0xFFFF / **1** / 1/step]
5-719-073	ID73	C	[0 to 0xFFFF / **1** / 1/step]
5-719-074	ID74	C	[0 to 0xFFFF / **1** / 1/step]
5-719-075	ID75	C	[0 to 0xFFFF / **1** / 1/step]
5-719-076	ID76	C	[0 to 0xFFFF / **1** / 1/step]

5-719-077	ID77	C	[0 to 0xFFFF / **1** / 1/step]
5-719-078	ID78	C	[0 to 0xFFFF / **1** / 1/step]
5-719-079	ID79	C	[0 to 0xFFFF / **1** / 1/step]
5-719-080	ID80	C	[0 to 0xFFFF / **1** / 1/step]
5-719-081	ID81	C	[0 to 0xFFFF / **1** / 1/step]
5-719-082	ID82	C	[0 to 0xFFFF / **1** / 1/step]
5-719-083	ID83	C	[0 to 0xFFFF / **1** / 1/step]
5-719-084	ID84	C	[0 to 0xFFFF / **1** / 1/step]
5-719-085	ID85	C	[0 to 0xFFFF / **1** / 1/step]
5-719-086	ID86	C	[0 to 0xFFFF / **1** / 1/step]
5-719-087	ID87	C	[0 to 0xFFFF / **1** / 1/step]
5-719-088	ID88	C	[0 to 0xFFFF / **1** / 1/step]
5-719-089	ID89	C	[0 to 0xFFFF / **1** / 1/step]
5-719-090	ID90	C	[0 to 0xFFFF / **1** / 1/step]
5-719-091	ID91	C	[0 to 0xFFFF / **1** / 1/step]
5-719-092	ID92	C	[0 to 0xFFFF / **1** / 1/step]
5-719-093	ID93	C	[0 to 0xFFFF / **1** / 1/step]
5-719-094	ID94	C	[0 to 0xFFFF / **1** / 1/step]
5-719-095	ID95	C	[0 to 0xFFFF / **1** / 1/step]
5-719-096	ID96	C	[0 to 0xFFFF / **1** / 1/step]
5-719-097	ID97	C	[0 to 0xFFFF / **1** / 1/step]
5-719-098	ID98	C	[0 to 0xFFFF / **1** / 1/step]
5-719-099	ID99	C	[0 to 0xFFFF / **1** / 1/step]
5-719-100	ID100	C	[0 to 0xFFFF / **1** / 1/step]

5720	**[Custom Paper: Up/Web Info. 4: Color]** -		
5-720-001	ID1	C	[0 to 0xFFFF / **1** / 1/step]
5-720-002	ID2	C	[0 to 0xFFFF / **1** / 1/step]
5-720-003	ID3	C	[0 to 0xFFFF / **1** / 1/step]
5-720-004	ID4	C	[0 to 0xFFFF / **1** / 1/step]
5-720-005	ID5	C	[0 to 0xFFFF / **1** / 1/step]
5-720-006	ID6	C	[0 to 0xFFFF / **1** / 1/step]
5-720-007	ID7	C	[0 to 0xFFFF / **1** / 1/step]
5-720-008	ID8	C	[0 to 0xFFFF / **1** / 1/step]
5-720-009	ID9	C	[0 to 0xFFFF / **1** / 1/step]
5-720-010	ID10	C	[0 to 0xFFFF / **1** / 1/step]
5-720-011	ID11	C	[0 to 0xFFFF / **1** / 1/step]
5-720-012	ID12	C	[0 to 0xFFFF / **1** / 1/step]
5-720-013	ID13	C	[0 to 0xFFFF / **1** / 1/step]
5-720-014	ID14	C	[0 to 0xFFFF / **1** / 1/step]
5-720-015	ID15	C	[0 to 0xFFFF / **1** / 1/step]
5-720-016	ID16	C	[0 to 0xFFFF / **1** / 1/step]
5-720-017	ID17	C	[0 to 0xFFFF / **1** / 1/step]
5-720-018	ID18	C	[0 to 0xFFFF / **1** / 1/step]
5-720-019	ID19	C	[0 to 0xFFFF / **1** / 1/step]
5-720-020	ID20	C	[0 to 0xFFFF / **1** / 1/step]
5-720-021	ID21	C	[0 to 0xFFFF / **1** / 1/step]
5-720-022	ID22	C	[0 to 0xFFFF / **1** / 1/step]
5-720-023	ID23	C	[0 to 0xFFFF / **1** / 1/step]
5-720-024	ID24	C	[0 to 0xFFFF / **1** / 1/step]

5-720-025	ID25	C	[0 to 0xFFFF / **1** / 1/step]
5-720-026	ID26	C	[0 to 0xFFFF / **1** / 1/step]
5-720-027	ID27	C	[0 to 0xFFFF / **1** / 1/step]
5-720-028	ID28	C	[0 to 0xFFFF / **1** / 1/step]
5-720-029	ID29	C	[0 to 0xFFFF / **1** / 1/step]
5-720-030	ID30	C	[0 to 0xFFFF / **1** / 1/step]
5-720-031	ID31	C	[0 to 0xFFFF / **1** / 1/step]
5-720-032	ID32	C	[0 to 0xFFFF / **1** / 1/step]
5-720-033	ID33	C	[0 to 0xFFFF / **1** / 1/step]
5-720-034	ID34	C	[0 to 0xFFFF / **1** / 1/step]
5-720-035	ID35	C	[0 to 0xFFFF / **1** / 1/step]
5-720-036	ID36	C	[0 to 0xFFFF / **1** / 1/step]
5-720-037	ID37	C	[0 to 0xFFFF / **1** / 1/step]
5-720-038	ID38	C	[0 to 0xFFFF / **1** / 1/step]
5-720-039	ID39	C	[0 to 0xFFFF / **1** / 1/step]
5-720-040	ID40	C	[0 to 0xFFFF / **1** / 1/step]
5-720-041	ID41	C	[0 to 0xFFFF / **1** / 1/step]
5-720-042	ID42	C	[0 to 0xFFFF / **1** / 1/step]
5-720-043	ID43	C	[0 to 0xFFFF / **1** / 1/step]
5-720-044	ID44	C	[0 to 0xFFFF / **1** / 1/step]
5-720-045	ID45	C	[0 to 0xFFFF / **1** / 1/step]
5-720-046	ID46	C	[0 to 0xFFFF / **1** / 1/step]
5-720-047	ID47	C	[0 to 0xFFFF / **1** / 1/step]
5-720-048	ID48	C	[0 to 0xFFFF / **1** / 1/step]
5-720-049	ID49	C	[0 to 0xFFFF / **1** / 1/step]
5-720-050	ID50	C	[0 to 0xFFFF / **1** / 1/step]

5-720-051	ID51	C	[0 to 0xFFFF / **1** / 1/step]
5-720-052	ID52	C	[0 to 0xFFFF / **1** / 1/step]
5-720-053	ID53	C	[0 to 0xFFFF / **1** / 1/step]
5-720-054	ID54	C	[0 to 0xFFFF / **1** / 1/step]
5-720-055	ID55	C	[0 to 0xFFFF / **1** / 1/step]
5-720-056	ID56	C	[0 to 0xFFFF / **1** / 1/step]
5-720-057	ID57	C	[0 to 0xFFFF / **1** / 1/step]
5-720-058	ID58	C	[0 to 0xFFFF / **1** / 1/step]
5-720-059	ID59	C	[0 to 0xFFFF / **1** / 1/step]
5-720-060	ID60	C	[0 to 0xFFFF / **1** / 1/step]
5-720-061	ID61	C	[0 to 0xFFFF / **1** / 1/step]
5-720-062	ID62	C	[0 to 0xFFFF / **1** / 1/step]
5-720-063	ID63	C	[0 to 0xFFFF / **1** / 1/step]
5-720-064	ID64	C	[0 to 0xFFFF / **1** / 1/step]
5-720-065	ID65	C	[0 to 0xFFFF / **1** / 1/step]
5-720-066	ID66	C	[0 to 0xFFFF / **1** / 1/step]
5-720-067	ID67	C	[0 to 0xFFFF / **1** / 1/step]
5-720-068	ID68	C	[0 to 0xFFFF / **1** / 1/step]
5-720-069	ID69	C	[0 to 0xFFFF / **1** / 1/step]
5-720-070	ID70	C	[0 to 0xFFFF / **1** / 1/step]
5-720-071	ID71	C	[0 to 0xFFFF / **1** / 1/step]
5-720-072	ID72	C	[0 to 0xFFFF / **1** / 1/step]
5-720-073	ID73	C	[0 to 0xFFFF / **1** / 1/step]
5-720-074	ID74	C	[0 to 0xFFFF / **1** / 1/step]
5-720-075	ID75	C	[0 to 0xFFFF / **1** / 1/step]
5-720-076	ID76	C	[0 to 0xFFFF / **1** / 1/step]

5-720-077	ID77	C	[0 to 0xFFFF / **1** / 1/step]
5-720-078	ID78	C	[0 to 0xFFFF / **1** / 1/step]
5-720-079	ID79	C	[0 to 0xFFFF / **1** / 1/step]
5-720-080	ID80	C	[0 to 0xFFFF / **1** / 1/step]
5-720-081	ID81	C	[0 to 0xFFFF / **1** / 1/step]
5-720-082	ID82	C	[0 to 0xFFFF / **1** / 1/step]
5-720-083	ID83	C	[0 to 0xFFFF / **1** / 1/step]
5-720-084	ID84	C	[0 to 0xFFFF / **1** / 1/step]
5-720-085	ID85	C	[0 to 0xFFFF / **1** / 1/step]
5-720-086	ID86	C	[0 to 0xFFFF / **1** / 1/step]
5-720-087	ID87	C	[0 to 0xFFFF / **1** / 1/step]
5-720-088	ID88	C	[0 to 0xFFFF / **1** / 1/step]
5-720-089	ID89	C	[0 to 0xFFFF / **1** / 1/step]
5-720-090	ID90s	C	[0 to 0xFFFF / **1** / 1/step]
5-720-091	ID91	C	[0 to 0xFFFF / **1** / 1/step]
5-720-092	ID92	C	[0 to 0xFFFF / **1** / 1/step]
5-720-093	ID93	C	[0 to 0xFFFF / **1** / 1/step]
5-720-094	ID94	C	[0 to 0xFFFF / **1** / 1/step]
5-720-095	ID95	C	[0 to 0xFFFF / **1** / 1/step]
5-720-096	ID96	C	[0 to 0xFFFF / **1** / 1/step]
5-720-097	ID97	C	[0 to 0xFFFF / **1** / 1/step]
5-720-098	ID98	C	[0 to 0xFFFF / **1** / 1/step]
5-720-099	ID99	C	[0 to 0xFFFF / **1** / 1/step]
5-720-100	ID100	C	[0 to 0xFFFF / **1** / 1/step]

5721	**[Custom Paper: Size Code]** -		
5-721-001	ID1	C	[0 to 0xFF / **1** / 1/step]
5-721-002	ID2	C	[0 to 0xFF / **1** / 1/step]
5-721-003	ID3	C	[0 to 0xFF / **1** / 1/step]
5-721-004	ID4	C	[0 to 0xFF / **1** / 1/step]
5-721-005	ID5	C	[0 to 0xFF / **1** / 1/step]
5-721-006	ID6	C	[0 to 0xFF / **1** / 1/step]
5-721-007	ID7	C	[0 to 0xFF / **1** / 1/step]
5-721-008	ID8	C	[0 to 0xFF / **1** / 1/step]
5-721-009	ID9	C	[0 to 0xFF / **1** / 1/step]
5-721-010	ID10	C	[0 to 0xFF / **1** / 1/step]
5-721-011	ID11	C	[0 to 0xFF / **1** / 1/step]
5-721-012	ID12	C	[0 to 0xFF / **1** / 1/step]
5-721-013	ID13	C	[0 to 0xFF / **1** / 1/step]
5-721-014	ID14	C	[0 to 0xFF / **1** / 1/step]
5-721-015	ID15	C	[0 to 0xFF / **1** / 1/step]
5-721-016	ID16	C	[0 to 0xFF / **1** / 1/step]
5-721-017	ID17	C	[0 to 0xFF / **1** / 1/step]
5-721-018	ID18	C	[0 to 0xFF / **1** / 1/step]
5-721-019	ID19	C	[0 to 0xFF / **1** / 1/step]
5-721-020	ID20	C	[0 to 0xFF / **1** / 1/step]
5-721-021	ID21	C	[0 to 0xFF / **1** / 1/step]
5-721-022	ID22	C	[0 to 0xFF / **1** / 1/step]
5-721-023	ID23	C	[0 to 0xFF / **1** / 1/step]
5-721-024	ID24	C	[0 to 0xFF / **1** / 1/step]

5-721-025	ID25	C	[0 to 0xFF / **1** / 1/step]
5-721-026	ID26	C	[0 to 0xFF / **1** / 1/step]
5-721-027	ID27	C	[0 to 0xFF / **1** / 1/step]
5-721-028	ID28	C	[0 to 0xFF / **1** / 1/step]
5-721-029	ID29	C	[0 to 0xFF / **1** / 1/step]
5-721-030	ID30	C	[0 to 0xFF / **1** / 1/step]
5-721-031	ID31	C	[0 to 0xFF / **1** / 1/step]
5-721-032	ID32	C	[0 to 0xFF / **1** / 1/step]
5-721-033	ID33	C	[0 to 0xFF / **1** / 1/step]
5-721-034	ID34	C	[0 to 0xFF / **1** / 1/step]
5-721-035	ID35	C	[0 to 0xFF / **1** / 1/step]
5-721-036	ID36	C	[0 to 0xFF / **1** / 1/step]
5-721-037	ID37	C	[0 to 0xFF / **1** / 1/step]
5-721-038	ID38	C	[0 to 0xFF / **1** / 1/step]
5-721-039	ID39	C	[0 to 0xFF / **1** / 1/step]
5-721-040	ID40	C	[0 to 0xFF / **1** / 1/step]
5-721-041	ID41	C	[0 to 0xFF / **1** / 1/step]
5-721-042	ID42	C	[0 to 0xFF / **1** / 1/step]
5-721-043	ID43	C	[0 to 0xFF / **1** / 1/step]
5-721-044	ID44	C	[0 to 0xFF / **1** / 1/step]
5-721-045	ID45	C	[0 to 0xFF / **1** / 1/step]
5-721-046	ID46	C	[0 to 0xFF / **1** / 1/step]
5-721-047	ID47	C	[0 to 0xFF / **1** / 1/step]
5-721-048	ID48	C	[0 to 0xFF / **1** / 1/step]
5-721-049	ID49	C	[0 to 0xFF / **1** / 1/step]
5-721-050	ID50	C	[0 to 0xFF / **1** / 1/step]

5-721-051	ID51	C	[0 to 0xFF / **1** / 1/step]
5-721-052	ID52	C	[0 to 0xFF / **1** / 1/step]
5-721-053	ID53	C	[0 to 0xFF / **1** / 1/step]
5-721-054	ID54	C	[0 to 0xFF / **1** / 1/step]
5-721-055	ID55	C	[0 to 0xFF / **1** / 1/step]
5-721-056	ID56	C	[0 to 0xFF / **1** / 1/step]
5-721-057	ID57	C	[0 to 0xFF / **1** / 1/step]
5-721-058	ID58	C	[0 to 0xFF / **1** / 1/step]
5-721-059	ID59	C	[0 to 0xFF / **1** / 1/step]
5-721-060	ID60	C	[0 to 0xFF / **1** / 1/step]
5-721-061	ID61	C	[0 to 0xFF / **1** / 1/step]
5-721-062	ID62	C	[0 to 0xFF / **1** / 1/step]
5-721-063	ID63	C	[0 to 0xFF / **1** / 1/step]
5-721-064	ID64	C	[0 to 0xFF / **1** / 1/step]
5-721-065	ID65	C	[0 to 0xFF / **1** / 1/step]
5-721-066	ID66	C	[0 to 0xFF / **1** / 1/step]
5-721-067	ID67	C	[0 to 0xFF / **1** / 1/step]
5-721-068	ID68	C	[0 to 0xFF / **1** / 1/step]
5-721-069	ID69	C	[0 to 0xFF / **1** / 1/step]
5-721-070	ID70	C	[0 to 0xFF / **1** / 1/step]
5-721-071	ID71	C	[0 to 0xFF / **1** / 1/step]
5-721-072	ID72	C	[0 to 0xFF / **1** / 1/step]
5-721-073	ID73	C	[0 to 0xFF / **1** / 1/step]
5-721-074	ID74	C	[0 to 0xFF / **1** / 1/step]
5-721-075	ID75	C	[0 to 0xFF / **1** / 1/step]
5-721-076	ID76	C	[0 to 0xFF / **1** / 1/step]

5-721-077	ID77	C	[0 to 0xFF / **1** / 1/step]
5-721-078	ID78	C	[0 to 0xFF / **1** / 1/step]
5-721-079	ID79	C	[0 to 0xFF / **1** / 1/step]
5-721-080	ID80	C	[0 to 0xFF / **1** / 1/step]
5-721-081	ID81	C	[0 to 0xFF / **1** / 1/step]
5-721-082	ID82	C	[0 to 0xFF / **1** / 1/step]
5-721-083	ID83	C	[0 to 0xFF / **1** / 1/step]
5-721-084	ID84	C	[0 to 0xFF / **1** / 1/step]
5-721-085	ID85	C	[0 to 0xFF / **1** / 1/step]
5-721-086	ID86	C	[0 to 0xFF / **1** / 1/step]
5-721-087	ID87	C	[0 to 0xFF / **1** / 1/step]
5-721-088	ID88	C	[0 to 0xFF / **1** / 1/step]
5-721-089	ID89	C	[0 to 0xFF / **1** / 1/step]
5-721-090	ID90	C	[0 to 0xFF / **1** / 1/step]
5-721-091	ID91	C	[0 to 0xFF / **1** / 1/step]
5-721-092	ID92	C	[0 to 0xFF / **1** / 1/step]
5-721-093	ID93	C	[0 to 0xFF / **1** / 1/step]
5-721-094	ID94	C	[0 to 0xFF / **1** / 1/step]
5-721-095	ID95	C	[0 to 0xFF / **1** / 1/step]
5-721-096	ID96	C	[0 to 0xFF / **1** / 1/step]
5-721-097	ID97	C	[0 to 0xFF / **1** / 1/step]
5-721-098	ID98	C	[0 to 0xFF / **1** / 1/step]
5-721-099	ID99	C	[0 to 0xFF / **1** / 1/step]
5-721-100	ID100	C	[0 to 0xFF / **1** / 1/step]

5722	**[Custom Paper: Width (M-scan 0.1mm)]** -		
5-722-001	ID1	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-002	ID2	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-003	ID3	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-004	ID4	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-005	ID5	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-006	ID6	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-007	ID7	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-008	ID8	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-009	ID9	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-010	ID10	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-011	ID11	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-012	ID12	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-013	ID13	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-014	ID14	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-015	ID15	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-016	ID16	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-017	ID17	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-018	ID18	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-019	ID19	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-020	ID20	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-021	ID21	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-022	ID22	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-023	ID23	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-024	ID24	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-722-025	ID25	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-026	ID26	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-027	ID27	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-028	ID28	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-029	ID29	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-030	ID30	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-031	ID31	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-032	ID32	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-033	ID33	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-034	ID34	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-035	ID35	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-036	ID36	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-037	ID37	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-038	ID38	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-039	ID39	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-040	ID40	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-041	ID41	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-042	ID42	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-043	ID43	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-044	ID44	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-045	ID45	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-046	ID46	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-047	ID47	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-048	ID48	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-049	ID49	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-050	ID50	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-722-051	ID51	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-052	ID52	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-053	ID53	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-054	ID54	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-055	ID55	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-056	ID56	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-057	ID57	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-058	ID58	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-059	ID59	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-060	ID60	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-061	ID61	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-062	ID62	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-063	ID63	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-064	ID64	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-065	ID65	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-066	ID66	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-067	ID67	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-068	ID68	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-069	ID69	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-070	ID70	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-071	ID71	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-072	ID72	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-073	ID73	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-074	ID74	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-075	ID75	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-076	ID76	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-722-077	ID77	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-078	ID78	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-079	ID79	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-080	ID80	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-081	ID81	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-082	ID82	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-083	ID83	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-084	ID84	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-085	ID85	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-086	ID86	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-087	ID87	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-088	ID88	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-089	ID89	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-090	ID90	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-091	ID91	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-092	ID92	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-093	ID93	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-094	ID94	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-095	ID95	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-096	ID96	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-097	ID97	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-098	ID98	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-099	ID99	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-722-100	ID100	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5723	[Custom Paper: Length (S-scan 0.1mm)] -		
5-723-001	ID1	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-002	ID2	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-003	ID3	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-004	ID4	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-005	ID5	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-006	ID6	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-007	ID7	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-008	ID8	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-009	ID9	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-010	ID10	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-011	ID11	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-012	ID12	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-013	ID13	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-014	ID14	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-015	ID15	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-016	ID16	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-017	ID17	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-018	ID18	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-019	ID19	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-020	ID20	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-021	ID21	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-022	ID22	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-023	ID23	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-024	ID24	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-723-025	ID25	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-026	ID26	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-027	ID27	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-028	ID28	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-029	ID29	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-030	ID30	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-031	ID31	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-032	ID32	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-033	ID33	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-034	ID34	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-035	ID35	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-036	ID36	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-037	ID37	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-038	ID38	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-039	ID39	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-040	ID40	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-041	ID41	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-042	ID42	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-043	ID43	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-044	ID44	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-045	ID45	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-046	ID46	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-047	ID47	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-048	ID48	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-049	ID49	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-050	ID50	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-723-051	ID51	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-052	ID52	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-053	ID53	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-054	ID54	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-055	ID55	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-056	ID56	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-057	ID57	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-058	ID58	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-059	ID59	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-060	ID60	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-061	ID61	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-062	ID62	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-063	ID63	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-064	ID64	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-065	ID65	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-066	ID66	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-067	ID67	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-068	ID68	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-069	ID69	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-070	ID70	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-071	ID71	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-072	ID72	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-073	ID73	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-074	ID74	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-075	ID75	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-076	ID76	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5-723-077	ID77	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-078	ID78	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-079	ID79	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-080	ID80	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-081	ID81	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-082	ID82	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-083	ID83	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-084	ID84	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-085	ID85	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-086	ID86	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-087	ID87	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-088	ID88	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-089	ID89	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-090	ID90	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-091	ID91	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-092	ID92	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-093	ID93	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-094	ID94	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-095	ID95	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-096	ID96	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-097	ID97	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-098	ID98	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-099	ID99	C	[0 to 0xFFFFFFFF / **1** / 1/step]
5-723-100	ID100	C	[0 to 0xFFFFFFFF / **1** / 1/step]

5724	**[Custom Paper: MQP Version]** -		
5-724-001	ID1	C	[0 to 99 / **1** / 1/step]
5-724-002	ID2	C	[0 to 99 / **1** / 1/step]
5-724-003	ID3	C	[0 to 99 / **1** / 1/step]
5-724-004	ID4	C	[0 to 99 / **1** / 1/step]
5-724-005	ID5	C	[0 to 99 / **1** / 1/step]
5-724-006	ID6	C	[0 to 99 / **1** / 1/step]
5-724-007	ID7	C	[0 to 99 / **1** / 1/step]
5-724-008	ID8	C	[0 to 99 / **1** / 1/step]
5-724-009	ID9	C	[0 to 99 / **1** / 1/step]
5-724-010	ID10	C	[0 to 99 / **1** / 1/step]
5-724-011	ID11	C	[0 to 99 / **1** / 1/step]
5-724-012	ID12	C	[0 to 99 / **1** / 1/step]
5-724-013	ID13	C	[0 to 99 / **1** / 1/step]
5-724-014	ID14	C	[0 to 99 / **1** / 1/step]
5-724-015	ID15	C	[0 to 99 / **1** / 1/step]
5-724-016	ID16	C	[0 to 99 / **1** / 1/step]
5-724-017	ID17	C	[0 to 99 / **1** / 1/step]
5-724-018	ID18	C	[0 to 99 / **1** / 1/step]
5-724-019	ID19	C	[0 to 99 / **1** / 1/step]
5-724-020	ID20	C	[0 to 99 / **1** / 1/step]
5-724-021	ID21	C	[0 to 99 / **1** / 1/step]
5-724-022	ID22	C	[0 to 99 / **1** / 1/step]
5-724-023	ID23	C	[0 to 99 / **1** / 1/step]
5-724-024	ID24	C	[0 to 99 / **1** / 1/step]

5-724-025	ID25	C	[0 to 99 / **1** / 1/step]
5-724-026	ID26	C	[0 to 99 / **1** / 1/step]
5-724-027	ID27	C	[0 to 99 / **1** / 1/step]
5-724-028	ID28	C	[0 to 99 / **1** / 1/step]
5-724-029	ID29	C	[0 to 99 / **1** / 1/step]
5-724-030	ID30	C	[0 to 99 / **1** / 1/step]
5-724-031	ID31	C	[0 to 99 / **1** / 1/step]
5-724-032	ID32	C	[0 to 99 / **1** / 1/step]
5-724-033	ID33	C	[0 to 99 / **1** / 1/step]
5-724-034	ID34	C	[0 to 99 / **1** / 1/step]
5-724-035	ID35	C	[0 to 99 / **1** / 1/step]
5-724-036	ID36	C	[0 to 99 / **1** / 1/step]
5-724-037	ID37	C	[0 to 99 / **1** / 1/step]
5-724-038	ID38	C	[0 to 99 / **1** / 1/step]
5-724-039	ID39	C	[0 to 99 / **1** / 1/step]
5-724-040	ID40	C	[0 to 99 / **1** / 1/step]
5-724-041	ID41	C	[0 to 99 / **1** / 1/step]
5-724-042	ID42	C	[0 to 99 / **1** / 1/step]
5-724-043	ID43	C	[0 to 99 / **1** / 1/step]
5-724-044	ID44	C	[0 to 99 / **1** / 1/step]
5-724-045	ID45	C	[0 to 99 / **1** / 1/step]
5-724-046	ID46	C	[0 to 99 / **1** / 1/step]
5-724-047	ID47	C	[0 to 99 / **1** / 1/step]
5-724-048	ID48	C	[0 to 99 / **1** / 1/step]
5-724-049	ID49	C	[0 to 99 / **1** / 1/step]
5-724-050	ID50	C	[0 to 99 / **1** / 1/step]

5-724-051	ID51	C	[0 to 99 / **1** / 1/step]
5-724-052	ID52	C	[0 to 99 / **1** / 1/step]
5-724-053	ID53	C	[0 to 99 / **1** / 1/step]
5-724-054	ID54	C	[0 to 99 / **1** / 1/step]
5-724-055	ID55	C	[0 to 99 / **1** / 1/step]
5-724-056	ID56	C	[0 to 99 / **1** / 1/step]
5-724-057	ID57	C	[0 to 99 / **1** / 1/step]
5-724-058	ID58	C	[0 to 99 / **1** / 1/step]
5-724-059	ID59	C	[0 to 99 / **1** / 1/step]
5-724-060	ID60	C	[0 to 99 / **1** / 1/step]
5-724-061	ID61	C	[0 to 99 / **1** / 1/step]
5-724-062	ID62	C	[0 to 99 / **1** / 1/step]
5-724-063	ID63	C	[0 to 99 / **1** / 1/step]
5-724-064	ID64	C	[0 to 99 / **1** / 1/step]
5-724-065	ID65	C	[0 to 99 / **1** / 1/step]
5-724-066	ID66	C	[0 to 99 / **1** / 1/step]
5-724-067	ID67	C	[0 to 99 / **1** / 1/step]
5-724-068	ID68	C	[0 to 99 / **1** / 1/step]
5-724-069	ID69	C	[0 to 99 / **1** / 1/step]
5-724-070	ID70	C	[0 to 99 / **1** / 1/step]
5-724-071	ID71	C	[0 to 99 / **1** / 1/step]
5-724-072	ID72	C	[0 to 99 / **1** / 1/step]
5-724-073	ID73	C	[0 to 99 / **1** / 1/step]
5-724-074	ID74	C	[0 to 99 / **1** / 1/step]
5-724-075	ID75	C	[0 to 99 / **1** / 1/step]
5-724-076	ID76	C	[0 to 99 / **1** / 1/step]

5-724-077	ID77	C	[0 to 99 / **1** / 1/step]
5-724-078	ID78	C	[0 to 99 / **1** / 1/step]
5-724-079	ID79	C	[0 to 99 / **1** / 1/step]
5-724-080	ID80	C	[0 to 99 / **1** / 1/step]
5-724-081	ID81	C	[0 to 99 / **1** / 1/step]
5-724-082	ID82	C	[0 to 99 / **1** / 1/step]
5-724-083	ID83	C	[0 to 99 / **1** / 1/step]
5-724-084	ID84	C	[0 to 99 / **1** / 1/step]
5-724-085	ID85	C	[0 to 99 / **1** / 1/step]
5-724-086	ID86	C	[0 to 99 / **1** / 1/step]
5-724-087	ID87	C	[0 to 99 / **1** / 1/step]
5-724-088	ID88	C	[0 to 99 / **1** / 1/step]
5-724-089	ID89	C	[0 to 99 / **1** / 1/step]
5-724-090	ID90	C	[0 to 99 / **1** / 1/step]
5-724-091	ID91	C	[0 to 99 / **1** / 1/step]
5-724-092	ID92	C	[0 to 99 / **1** / 1/step]
5-724-093	ID93	C	[0 to 99 / **1** / 1/step]
5-724-094	ID94	C	[0 to 99 / **1** / 1/step]
5-724-095	ID95	C	[0 to 99 / **1** / 1/step]
5-724-096	ID96	C	[0 to 99 / **1** / 1/step]
5-724-097	ID97	C	[0 to 99 / **1** / 1/step]
5-724-098	ID98	C	[0 to 99 / **1** / 1/step]
5-724-099	ID99	C	[0 to 99 / **1** / 1/step]
5-724-100	ID100	C	[0 to 99 / **1** / 1/step]

5725	**[Custom Paper: Data Type]** -		
5-725-001	ID1	C	[0 to 99 / **1** / 1/step]
5-725-002	ID2	C	[0 to 99 / **1** / 1/step]
5-725-003	ID3	C	[0 to 99 / **1** / 1/step]
5-725-004	ID4	C	[0 to 99 / **1** / 1/step]
5-725-005	ID5	C	[0 to 99 / **1** / 1/step]
5-725-006	ID6	C	[0 to 99 / **1** / 1/step]
5-725-007	ID7	C	[0 to 99 / **1** / 1/step]
5-725-008	ID8	C	[0 to 99 / **1** / 1/step]
5-725-009	ID9	C	[0 to 99 / **1** / 1/step]
5-725-010	ID10	C	[0 to 99 / **1** / 1/step]
5-725-011	ID11	C	[0 to 99 / **1** / 1/step]
5-725-012	ID12	C	[0 to 99 / **1** / 1/step]
5-725-013	ID13	C	[0 to 99 / **1** / 1/step]
5-725-014	ID14	C	[0 to 99 / **1** / 1/step]
5-725-015	ID15	C	[0 to 99 / **1** / 1/step]
5-725-016	ID16	C	[0 to 99 / **1** / 1/step]
5-725-017	ID17	C	[0 to 99 / **1** / 1/step]
5-725-018	ID18	C	[0 to 99 / **1** / 1/step]
5-725-019	ID19	C	[0 to 99 / **1** / 1/step]
5-725-020	ID20	C	[0 to 99 / **1** / 1/step]
5-725-021	ID21	C	[0 to 99 / **1** / 1/step]
5-725-022	ID22	C	[0 to 99 / **1** / 1/step]
5-725-023	ID23	C	[0 to 99 / **1** / 1/step]
5-725-024	ID24	C	[0 to 99 / **1** / 1/step]

5-725-025	ID25	C	[0 to 99 / **1** / 1/step]
5-725-026	ID26	C	[0 to 99 / **1** / 1/step]
5-725-027	ID27	C	[0 to 99 / **1** / 1/step]
5-725-028	ID28	C	[0 to 99 / **1** / 1/step]
5-725-029	ID29	C	[0 to 99 / **1** / 1/step]
5-725-030	ID30	C	[0 to 99 / **1** / 1/step]
5-725-031	ID31	C	[0 to 99 / **1** / 1/step]
5-725-032	ID32	C	[0 to 99 / **1** / 1/step]
5-725-033	ID33	C	[0 to 99 / **1** / 1/step]
5-725-034	ID34	C	[0 to 99 / **1** / 1/step]
5-725-035	ID35	C	[0 to 99 / **1** / 1/step]
5-725-036	ID36	C	[0 to 99 / **1** / 1/step]
5-725-037	ID37	C	[0 to 99 / **1** / 1/step]
5-725-038	ID38	C	[0 to 99 / **1** / 1/step]
5-725-039	ID39	C	[0 to 99 / **1** / 1/step]
5-725-040	ID40	C	[0 to 99 / **1** / 1/step]
5-725-041	ID41	C	[0 to 99 / **1** / 1/step]
5-725-042	ID42	C	[0 to 99 / **1** / 1/step]
5-725-043	ID43	C	[0 to 99 / **1** / 1/step]
5-725-044	ID44	C	[0 to 99 / **1** / 1/step]
5-725-045	ID45	C	[0 to 99 / **1** / 1/step]
5-725-046	ID46	C	[0 to 99 / **1** / 1/step]
5-725-047	ID47	C	[0 to 99 / **1** / 1/step]
5-725-048	ID48	C	[0 to 99 / **1** / 1/step]
5-725-049	ID49	C	[0 to 99 / **1** / 1/step]
5-725-050	ID50	C	[0 to 99 / **1** / 1/step]

5-725-051	ID51	C	[0 to 99 / **1** / 1/step]
5-725-052	ID52	C	[0 to 99 / **1** / 1/step]
5-725-053	ID53	C	[0 to 99 / **1** / 1/step]
5-725-054	ID54	C	[0 to 99 / **1** / 1/step]
5-725-055	ID55	C	[0 to 99 / **1** / 1/step]
5-725-056	ID56	C	[0 to 99 / **1** / 1/step]
5-725-057	ID57	C	[0 to 99 / **1** / 1/step]
5-725-058	ID58	C	[0 to 99 / **1** / 1/step]
5-725-059	ID59	C	[0 to 99 / **1** / 1/step]
5-725-060	ID60	C	[0 to 99 / **1** / 1/step]
5-725-061	ID61	C	[0 to 99 / **1** / 1/step]
5-725-062	ID62	C	[0 to 99 / **1** / 1/step]
5-725-063	ID63	C	[0 to 99 / **1** / 1/step]
5-725-064	ID64	C	[0 to 99 / **1** / 1/step]
5-725-065	ID65	C	[0 to 99 / **1** / 1/step]
5-725-066	ID66	C	[0 to 99 / **1** / 1/step]
5-725-067	ID67	C	[0 to 99 / **1** / 1/step]
5-725-068	ID68	C	[0 to 99 / **1** / 1/step]
5-725-069	ID69	C	[0 to 99 / **1** / 1/step]
5-725-070	ID70	C	[0 to 99 / **1** / 1/step]
5-725-071	ID71	C	[0 to 99 / **1** / 1/step]
5-725-072	ID72	C	[0 to 99 / **1** / 1/step]
5-725-073	ID73	C	[0 to 99 / **1** / 1/step]
5-725-074	ID74	C	[0 to 99 / **1** / 1/step]
5-725-075	ID75	C	[0 to 99 / **1** / 1/step]
5-725-076	ID76	C	[0 to 99 / **1** / 1/step]

5-725-077	ID77	C	[0 to 99 / **1** / 1/step]
5-725-078	ID78	C	[0 to 99 / **1** / 1/step]
5-725-079	ID79	C	[0 to 99 / **1** / 1/step]
5-725-080	ID80	C	[0 to 99 / **1** / 1/step]
5-725-081	ID81	C	[0 to 99 / **1** / 1/step]
5-725-082	ID82	C	[0 to 99 / **1** / 1/step]
5-725-083	ID83	C	[0 to 99 / **1** / 1/step]
5-725-084	ID84	C	[0 to 99 / **1** / 1/step]
5-725-085	ID85	C	[0 to 99 / **1** / 1/step]
5-725-086	ID86	C	[0 to 99 / **1** / 1/step]
5-725-087	ID87	C	[0 to 99 / **1** / 1/step]
5-725-088	ID88	C	[0 to 99 / **1** / 1/step]
5-725-089	ID89	C	[0 to 99 / **1** / 1/step]
5-725-090	ID90	C	[0 to 99 / **1** / 1/step]
5-725-091	ID91	C	[0 to 99 / **1** / 1/step]
5-725-092	ID92	C	[0 to 99 / **1** / 1/step]
5-725-093	ID93	C	[0 to 99 / **1** / 1/step]
5-725-094	ID94	C	[0 to 99 / **1** / 1/step]
5-725-095	ID95	C	[0 to 99 / **1** / 1/step]
5-725-096	ID96	C	[0 to 99 / **1** / 1/step]
5-725-097	ID97	C	[0 to 99 / **1** / 1/step]
5-725-098	ID98	C	[0 to 99 / **1** / 1/step]
5-725-099	ID99	C	[0 to 99 / **1** / 1/step]
5-725-100	ID100	C	[0 to 99 / **1** / 1/step]

5730	**[Extended Function Setting]** -		
5-730-001	JavaTM Platform setting	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON
5-730-010	Expiration Prior Alarm Set	C*	[0 to 999 / **20** / 1day/step]

5731	**[Counter Effect]** -		
5-731-001	Change Mk1 Cnt(Paper-.Combine)	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5734	**[PDF Setting]** Limits PDF file type when operating Scan to, fax send, and web download.		
5-734-001	PDF/A Fixed	C*	[0 or 1 / **0** / 1/step] 0: non-fixed setting 1: fixed setting

5743	**[Network Security Level]** -		
5-743-101	MAIN : reference	C*	[0x01 to 0x10 / **0x01** / 1bit/step] Returns current network security level for reference. 0x01 : custom 0x02 : Level 0 0x04 : Level 1 0x08 : FIPS 0x10 : Level 2

5-743-201	MAIN : setting	C*	[0x01 to 0x10 / **0x01** / 1bit/step] Returns current network security level for setting. 0x01 : custom 0x02 : Level 0 0x04 : Level 1 0x08 : FIPS 0x10 : Level 2

5745	**[EcoCountTime]** Sets and aggregate time of eco counter.		
5-745-005	AutoClearIntervalDays	C*	[0 to 9999 / **0** / 1/step]
5-745-211	Controller Standby	C*	[0 to 9999 / **0** / 1/step]
5-745-212	STR	C*	[0 to 9999 / **0** / 1/step]
5-745-213	Main Power Off	C*	[0 to 9999 / **0** / 1/step]
5-745-214	Scaning and Printing	C*	[0 to 9999 / **0** / 1/step]
5-745-215	Printing	C*	[0 to 9999 / **0** / 1/step]
5-745-216	Scanning	C*	[0 to 9999 / **0** / 1/step]
5-745-217	Engine Standby	C*	[0 to 9999 / **0** / 1/step]
5-745-218	Low Power Consumption	C*	[0 to 9999 / **0** / 1/step]
5-745-219	Silent condition	C*	[0 to 9999 / **0** / 1/step]
5-745-220	Heater off	C*	[0 to 9999 / **0** / 1/step]

5746	**[BMLinkS]**		
5-746-001	available	C*	[0 or 1 / **1** / 1/step] 0: Disables the service 1: Available the service
5-746-002	Interval:mon	C*	[10 to 3600 / **60** / 1/step]
5-746-004	available:log	C*	[0 or 1 / **1** / 1/step]

5748	**[OpePanel Setting]** Sets operation of related operational panel		
5-748-101	Op Type Action Setting	C	[0 to 0xFF / **00000000** / 1/step] Bit0: reconnect operation setting 1: reconnect operation ON 0: reconnect operation Off Bit1: Job stop setting at operational panel communication shut down. 1: Job stop 0: Job duration

5749	**[Import/Export]** -		
5-749-001	Export	C	[- / **-** / -] [Execute]
5-749-101	Import	C	[- / **-** / -] [Execute]

5751	**[Key Event Encryption Setting]** Sets encryption key to encrypt key information.		
5-751-001	Password	C*	[32characters / **-** / 1/step]

5752	**[Copy:FlairAPI Setting]** Sets copy FlairAPI functions ON/OFF.

5-752-001	0x00 - 0xff	C*	[0 to 0xFF / **00000000** / 1/step] Bit0: FlairAPI server start up 0:Off, 1: On Bit1: Access permission from FlairAPI external device 0: Disabled, 1: Enabled Bit2: Switching dedicated IPv6 0: Disabled, 1: Enabled Bit4: Simple UI function 0: Disabled, 1: Enabled Bit5: Access permission from extended device in simple UI function. 0: Disabled, 1: Enabled

5789	**[Custom Paper Value Initialize]** -		
5-789-001	Custom Paper	C	[- / **-** / -] [Execute] Clears paper settings configured by user. 0: All user settings 1: User setting paper 1

5792	**[MCS Debug SW]** -		
5-792-001	-	C	[00000000 to 11111111 / **00000000** / 1/step]
5-792-002	2	C	[00000000 to 11111111 / **00000000** / 1/step]
5-792-003	3	C	[00000000 to 11111111 / **00000000** / 1/step]
5-792-004	4	C	[00000000 to 11111111 / **00000000** / 1/step]

5793	**[ECS Debug SW]** -		
5-793-001	-	C	[- / - / -] [Execute]

5795	**[SRM Debug SW]** -		
5-795-001	-	C	[- / - / -] [Execute]

5796	**[PLN Debug SW]** -		
5-796-001	-	C	[- / - / -] [Execute]

5801	**[Memory Clear]** Resets NVRAM data to the default settings. Before executing any of these SP codes, print an SMC Report.		
5-801-001	All Clear	C	[- / - / -] [Execute] Initializes items 2 to 15 below.
5-801-002	Engine	C	[- / - / -] [Execute] Initializes all registration settings for the engine and copy process settings.
5-801-003	SCS	C	[- / - / -] [Execute] Initializes default system settings, SCS (System Control Service) settings, operation display coordinates, and ROM update information.

5-801-004	IMH	C	[- / - / -] [Execute] Clears Image Memory Handler which manages memory and HDD access.
5-801-005	MCS	C	[- / - / -] [Execute] Initializes the automatic delete time setting for stored documents. (MCS: Memory Control Service)
5-801-006	Copier application	C	[- / - / -] [Execute] Initializes all copier application settings.
5-801-008	Printer Application	C	[- / - / -] [Execute] Initializes the printer defaults, programs registered, the printer SP bit switches, and the printer CSS counter. The following service setting: ▪ Bit switches ▪ Gamma setting (User & Service) ▪ Toner Limit The following user setting: ▪ Tray Priority ▪ Menu protect ▪ System Setting except for setting of Energy Saver ▪ I/F Setup (I/O Buffer and I/O Timeout) ▪ PCL Menu
5-801-009	Scanner Application	C	[- / - / -] [Execute] Initializes the scanner defaults for the scanner and all the scanner SP modes.

5-801-010	Web Service	C	[- / - / -] [Execute] Deletes the Netfile (NFA) management files and thumbnails, and initializes the Job login ID. Netfiles are jobs to be printed from the document server using a PC and the DeskTopBinder software.
5-801-011	NCS	C	[- / - / -] [Execute] Initializes the system defaults and interface settings (IP addresses also), the SmartNetMonitor for Admin settings, WebStatusMonitor settings, and the TELNET settings.
5-801-014	Clear DCS Setting	C	[- / - / -] [Execute] Initializes the DCS (Delivery Control Service) settings.
5-801-015	Clear UCS Setting	C	[- / - / -] [Execute] Initializes the UCS (User Information Control Service) settings.
5-801-016	MIRS Setting	C	[- / - / -] [Execute] Initializes the MIRS (Machine Information Report Service) settings.
5-801-017	CCS	C	[- / - / -] [Execute] Initializes the CCS (Certification and Charge-control Service) settings.
5-801-018	SRM Memory Clr	C	[- / - / -] [Execute] Initializes the SRM (System Resource Manager) settings.

5-801-019	LCS	C	[- / **-** / -] [Execute] Initializes the LCS settings.
5-801-020	Web Uapli	C	[- / **-** / -] [Execute] Initializes the web user application settings.
5-801-021	ECS	C	[- / **-** / -] [Execute] Initializes the ECS settings.
5-801-024	BROWSER	C	[- / **-** / -] [Execute]
5-801-025	Websys	C	[- / **-** / -] [Execute]
5-801-026	PLN	C	[- / **-** / -] [Execute]
5-801-027	SAS	C	[- / **-** / -] [Execute]

5802	**[Free Run]** Make a base engine free run. 0: Release free run mode, 1:Enable free run mode Return this setting to off (0) after testing is completed. Finisher connectors should be disconnected and duplex mode should be off.		
5-802-004	OFF/ON	E	[0 or 1 / **0** / 1/step] 0: OFF 1: ON

5803	**[Input Check]** See Input Check Table

5804	**[Output Check]** See Output Check Table

5805	**[Output Check]** See Output Check Table

5807	**[Area Selection]** Select the area (JPN/ NA/ EU).		
5-807-001	-	E	[1 to 4 / **2** / 1/step] 1: Japan 2: NA 3: EU 4: China

5810	**[SC Reset]** When the machine issues one of the "Level A" SC codes shown below, this indicates a serious problem in the fusing unit. The machine is disabled and the operator cannot reset the SC. The machine requires servicing immediately. Select "1" and then touch [EXECUTE] release the machine for servicing. Note ▪ Turn the main switch off and on after resetting the SC code.		
5-810-001	Fusing SC Reset	E	[- / **-** / -] [Execute]

5811	**[MachineSerial]** Use this SP to the serial number for the machine and BICU.		
5-811-002	Display	E*	[0 to 255 / **0** / 1/step] Displays the machine serial number.
5-811-004	Set:BCU	E	[0 to 255 / **0** / 1/step] Inputs the serial number.
⇒ Not used			

5812	**[Service Tel. No. Setting]** -		
5-812-001	Service	C*	[- / **-** / -] Inputs the telephone number for a service representative. This number would be displayed when a service call condition occurs. This can be up to 16 characters (both numbers and alphabetic characters can be input).
5-812-002	Facsimile	C*	[- / **-** / -] Sets the fax or telephone number for a service representative. This number is printed on the Counter List. This can be up to 16 characters (both numbers and alphabetic characters can be input).
5-812-003	Supply	C*	[- / **-** / -] Use this to input the telephone number of your sales agency. Enter the number and press #. This can be up to 20characters.
5-812-004	Operation	C*	[- / **-** / -] Use this to input the telephone number of your sales agency. Enter the number and press #. This can be up to 20characters.

5816	**[Remote Service]** Use it for Network remote diagnosis.		
5-816-001	I/F Setting	C*	[0 to 2 / **2** / 2/step] 0: Remote service off 1: CSS remote service on 2: NRS remote service on Selects the remote service setting.

5-816-002	CE Call	C*	[0 or 1 / **1** / 1/step] 0: Start of the service 1: End of the service Performs the CE Call at the start or end of the service. Note ▪ This SP is activated only when SP 5816-001 is set to"2".
5-816-003	Function Flag	C*	[0 or 1 / **0** / 1/step] 0: Disabled, 1: Enabled Enables or disables the remote service function. Note ▪ This SP setting is changed to "1" after @Remote register has been completed.
5-816-004	Communication Test Call	C*	[- / **-** / -] [Execute]
5-816-005	Device Information Call	C*	[- / **-** / -] [Execute]
5-816-007	SSL Disable	C*	[0 or 1 / **0** / 1/step] 0: Uses the RCG certification 1: Does no use the RCG certification Uses or does not use the RCG certification by SSL when calling the RCG.
5-816-008	RCG Connect Timeout	C*	[1 to 90 / **30** / 1second/step] Specifies the connect timeout interval when calling the RCG.
5-816-009	RCG Write Timeout	C*	[0 to 100 / **60** / 1second/step] Specifies the write timeout interval when calling the RCG.
5-816-010	RCG Read Timeout	C*	[0 to 100 / **60** / 1second/step] Specifies the read timeout interval when calling the RCG.

5-816-011	Port 80 Enable	C*	[0 or 1 / **0** / 1/step] 0: No. Access denied 1: Yes. Access granted. Enables/disables access via port 80 to the SOAP method.
5-816-012	@Remote Communication Permission Setting	C*	[0 to 2 / **1** / 1/step] This SP code is designed to allow the operator to disable @Remote communication the printer function manually before copying confidential or sensitive documents. This prevents the contents of the copied documents from inadvertently being printed or leaked over the network to an outside destination. 0: Disabled. Machine is not temporarily disconnected from network. 1: Enabled. Machine is temporarily disconnected from network and the machine will not print while confidential or sensitive documents are being copied. 2: Control mode. Only some SP codes can be used to acquire or write data.
5-816-013	RFU Timing	C*	[0 or 1 / **1** / 1/step] 0: RFU is executed whenever update request is received. 1: RFU is executed only when the machine is in the sleep mode. Selects the RFU timing.

5-816-014	RCG Error Timing	C	[0 or 1 / **0** / 1/step] 0:Normal condition 1:Error Displays the cause of an RCG error. When @Remote is used, normally displays "0". If "1" is displayed, this means that the authentication from client to server failed when the network re-booted. To restore normal operation, cycle the machine off/on to return a "0" (normal condition).
5-816-021	RCG-C Registed	C	[0 or 1 / **0** / 1/step] 0: Installation not completed 1: Installation completed This SP displays the Embedded RC Gate installation end flag.
5-816-023	Connect Type (N/M)	C*	[0 or 1 / **0** / 1/step] 0: Internet connection 1: Dial-up connection This SP displays and selects the Embedded RC Gate connection method.
5-816-061	Cert Expire Timing DFU	C*	[0 to 0xFFFFFFFF / **0** / 1second/step] Proximity of the expiration of the certification.
5-816-062	Use Proxy	C*	[0 or 1 / **0** / 1/step] 0: Not use 1: Use This SP setting determines if the proxy server is used when the machine communicates with the service center.

5-816-063	Proxy Host	C*	[- / **-** / -] This SP sets the address of the proxy server used for communication between the RCG Device and the gateway. Use this SP to set up or display the customer proxy server address The address is necessary to set up the embedded RCG-N. Note ▪ The address display is limited to 128 characters. Characters beyond the 128 characters are ignored. ▪ This address is customer information and is not printed in the SMC report.
5-816-064	Proxy PortNumber	C*	[0 to 0xFFFF / **0** / 1/step] This SP sets the port number of the proxy server used for communication between the Embedded RCG-N and the gateway. This setting is necessary to set up the embedded RC Gate-N. Note ▪ This port number is customer information and is not printed in the SMC report.

5-816-065	Proxy User Name	C*	[- / **-** / -] This SP sets the HTTP proxy certification user name. Note ▪ The length of the name is limited to 31 characters. Any character beyond the 31st character is ignored. ▪ This name is customer information and is not printed in the SMC report.
5-816-066	Proxy Password	C*	[- / **-** / -] This SP sets the HTTP proxy certification password. Note ▪ The length of the password is limited to 31 characters. Any character beyond the 31st character is ignored. ▪ This name is customer information and is not printed in the SMC report.
5-816-067	CERT:Up State	C*	[0 to 255 / **0** / 1/step] Displays the status of the certification update.
	0	The certification used by RCG-N is set correctly.	
	1	The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated.	
	2	The certification update is completed and the GW URL is being notified of the successful update.	
	3	The certification update failed, and the GW URL is being notified of the failed update.	
	4	The period of the certification has expired and new request for an update is being sent to the GW URL.	

	11	A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection.		
	12	The rescue certification setting is completed and the GW URL is being notified of the certification update request.		
	13	The notification of the request for certification update has completed successfully, and the system is waiting for the certification update request from the rescue GW URL.		
	14	The notification of the certification request has been received from the rescue GW controller, and the certification is being stored.		
	15	The certification has been stored, and the GW URL is being notified of the successful completion of this event.		
	16	The storing of the certification has failed, and the GW URL is being notified of the failure of this event.		
	17	The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded.		
	18	The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update.		
5-816-068	CERT:Error		C*	[0 to 255 / **0** / 1/step] Displays a number code that describes the reason for the request for update of the certification.
	0	Normal. There is no request for certification update in progress.		
	1	Request for certification update in progress. The current certification has expired.		
	2	An SSL error notification has been issued. Issued after the certification has expired.		
	3	Notification of shift from a common authentication to an individual certification.		
	4	Notification of a common certification without ID2.		

	5	Notification that no certification was issued.	
	6	Notification that GW URL does not exist.	
5-816-069	CERT:Up ID	C*	[- / **-** / -] The ID of the request for certification.
5-816-083	Firm Up Status	C*	[0 to 5 / **0** / 1/step] Displays the status of the firmware update. 0: Farm update reception standby 1: Farm update start schedule standby. 2: User confirmation standby. 3: Device farm update preparation is executing. 4: Device farm update process is executing. 5: Device farm update end process is executing.
5-816-085	Firm Up User Check	C*	This SP setting determines if the operator can confirm the previous version of the firmware before the firmware update execution. If the option to confirm the previous version is selected, a notification is sent to the system manager and the firmware update is done with the firmware files from the URL.
5-816-086	Firmware Size	C*	Allows the service technician to confirm the size of the firmware data files during the firmware update execution.
5-816-087	CERT: Macro Ver.	C	[- / **-** / -] Displays the macro version of the @Remote certification. Max. 8digits.
5-816-088	CERT: PAC Ver.	C	[- / **-** / -] Displays the macro version of the @Remote certification. Max. 16 digits.

5-816-089	CERT: ID2 Code	C	[- / - / -] Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asterisks (*) indicate that no @Remote certification exists. "000000_____" indicates "Common certification". Max. 16 digits.
5-816-090	CERT: Subject	C	[- / - / -] Displays the common name of the @Remote certification subject. CN = the following 17 bytes. Spaces are displayed as underscores (_). Asterisks (*) indicate that no @Remote certification exists. "000000_____" indicates "Common certification". Max. 16 digits.
5-816-091	CERT: Serial No	C	[- / - / -] Displays serial number for the @Remote certification. Asterisks (*) indicate that no @Remote certification exists. Max. 7 digits.
5-816-092	CERT: Issuer	C	[- / - / -] Displays the common name of the issuer of the @Remote certification. CN = the following 30 bytes. Asterisks () indicate that no @Remote certification exists. Max. 7 digits.
5-816-093	CERT: Valid Start	C	[- / - / -] Displays the start time of the period for which the current @Remote certification is enabled. Max. 10 digits.
5-816-094	CERT: Valid End	C	[- / - / -] Displays the end time of the period for which the current @Remote certification is enabled. Max. 10 digits.

5-816-095	Server CN Check	C	[0 or 1 / **0** / 1/step] 0: Precision check 1: Mitigation check Determines how the Server On Check is conducted. Note ▪ "0" is used for GW/NRS connection ands "1" is used for GW/Emulator connection.
5-816-096	GW Host	C	[- / **-** / -] A debug tool.
5-816-097	GW URL Path	C	[- / **-** / -] A debug tool.
5-816-099	Debug RescueG/WURL Set	C	[- / **-** / -] A debug tool.
5-816-100	Specific Gateway Host	C	[0 to 0xffffffff / **0.0.0.0** / 1/step]
5-816-101	Specific Gateway URL Path	C	[- / **-** / -]
5-816-102	CERT: Strength	C*	[1 to 2 / **1** / 1/step] 1:512bit 2:2048bit Displays the strength of encryption used for NRS authentication. The displayed value is not the value acquired from the authentication domain, rather it is the value stored in NVRAM when authentication is written. When NRS starts up, if there is a mismatch between this SP setting and the authentication encryption, then the SP value is updated.

5-816-150	Selection Country	C	[0 to 10 / **NA:1, EU:3, Other:0** / 1/step] 0: Japan 1: USA 2: Canada 3: UK 4: Germany 5: France 6: Italy 7: Netherlands 8: Belgium 9: Luxembourg 10: Spain
5-816-151	Line Type Automatic Judgement	C	[- / **-** / -] [Execute]
5-816-152	Line Type Judgement Result	C	[0 to 255 / **0** / 0]
5-816-153	Selection Dial / Push	C	[0 or 1 / **0** / -] 0: Tone dialing phone 1: Pulse dialing phone
5-816-154	Outside Line Outgoing Number	C	[char (4 digits) / **NULL** / -]
5-816-156	Dial Up User Name	C	[char (32 digits) / **initial user name** / -]
5-816-157	Dial Up Password	C	[char (32 digits) / **initial password** / -]
5-816-161	Local Phone Number	C	[numeric (24 digits) / **NULL** / -]
5-816-162	Connection Timing Adjustment Incoming	C	[0 to 24 / **1** / 1/step]
5-816-163	Access Point	C	[char (16 digits) / **NULL** / -]
5-816-164	Line Connecting	C	[0 or 1 / **0** / 1/step] 0: Sharing FAX 1: No Sharing FAX
5-816-173	Modem Serial NO.	C	[- / **NULL** / -] Displays the modem serial number.

5-816-174	Retransmission Limit	C	[- / **-** / -] [Execute]
5-816-186	RCF-C M DebugBitSW	C	[bit / **0** / 1/step] -
5-816-187	FAX TX Priority	C	[0 or 1 / **0** / 1/step] 0: OFF 1: ON
5-816-200	Manual Polling	C	[- / **-** / -] [Execute] Executes the manual polling.
5-816-201	Regist Status	C	[0 to 4 / **0** / 1/step]
	Displays a number that indicates the status of the @Remote service device. 0: Neither the registered device by the external nor embedded RCG device is set. 1: The embedded RCG device is being set. Only Box registration is completed. In this status, this unit cannot answer a polling request from the external RCG. 2. The embedded RCG device is set. In this status, the external RCG unit cannot answer a polling request. 3. The registered device by the external RCG is being set. In this status the embedded RCG device cannot be set. 4 The registered module by the external RCG has not started.		
5-816-202	Letter Number	C*	[- / **-** / -] Allows entry of the number of the request needed for the RCG-N device.
5-816-203	Confirm Execute	C	[- / **-** / -] [Execute] Executes the inquiry request to the @Remote GW URL. If SP5-816-202 was not entered, an error occurs.

5-816-204	Confirm Result	C	[0 to 255 / **0** / 1/step] Displays a number that indicates the result of the inquiry executed with SP5816 203. 0: Succeeded 1: Inquiry number error 2: Registration in progress 3: Proxy error (proxy enabled) 4: Proxy error (proxy disabled) 5: Proxy error (Illegal user name or password) 6: Communication error 7: Certification update error 8: Other error 9: Inquiry executing
5-816-205	Confirm Place	C	[- / **-** / -] Displays the result of the notification sent to the device from the GW URL in answer to the inquiry request. Displayed only when the result is registered at the GW URL.
5-816-206	Register Execute	C	[- / **-** / -] [Execute] Executes "Embedded RCG Registration".
5-816-207	Register Result	C	[0 to 255 / **0** / 1/step] Displays a number that indicates the registration result.

	Displays a number that indicates the registration result. 0: Succeeded 2: Registration in progress 3: Proxy error (proxy enabled) 4: Proxy error (proxy disabled) 5: Proxy error (Illegal user name or password) 6: Communication error 7: Certification update error 8: Other error 9: Registration executing 10: Request paper number registration error (Hit device is not registered when request area of installation information was device transfer) 11: Request paper number registration error (Hit device have been registered already) 12: Request paper number registration error (parameter error) 20: Dial-up confirmation failure 21: Answer tone detection error 22: Carrier detection failure 23: Modem setting value injustice 24: Supply current shortage 25: Modem circuit failing out 26: Circuit is in use

5-816-208	Error Code	C	[-2147483647 to 2147483647 / **0** / 1/step] Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.

Cause	**Code**	**Meaning**
Illegal Modem Parameter	-11001	Chat parameter error
	-11002	Chat execution error
	-11003	Unexpected error
	-11004	Cutting process occurs during modem connecting.
	-11005	NCS reboot occurs during modem connecting.

Operation Error, Incorrect Setting	-12002	Inquiry, registration attempted without acquiring device status.
	-12003	Attempted registration without execution of an inquiry and no previous registration.
	-12004	Attempted setting with illegal entries for certification and ID2.
	-12005	@Remote communication is prohibited. The device has an Embedded RC gate-related problem.
Operation Error, Incorrect Setting	-12006	A confirmation request was made after the confirmation had been already completed.
	-12007	The request number used at registration was different from the one used at confirmation.
	-12008	Update certification failed because mainframe was in use.
	-12009	D2 mismatch between an individual certification and NVRAM.
	-12010	Certification area is not initialized.
Error Caused by Response from GW URL	-2385	Attempted dial up overseas without the correct international prefix for the telephone number.
	-2387	Not supported at the Service Center
	-2389	Database out of service
	-2390	Program out of service
	-2391	Two registrations for same device

		-2392	Parameter error
		-2393	Basil not managed
		-2394	Device not managed
		-2395	Box ID for Basil is illegal
		-2396	Device ID for Basil is illegal
		-2397	Incorrect ID2 format
		-2398	Incorrect request number format
5-816-209	Instl Clear	C	[- / **-** / -] [Execute]
5-816-240	CommErrorTime	C	[- / **-** / -]
5-816-241	CommErrorCode	C	[- / **-** / -]
5-816-242	CommErrorCode 2	C	[- / **-** / -]
5-816-243	CommErrorCode 3	C	[- / **-** / -]
5-816-244	CommErrorSate 1	C	[- / **-** / -]
5-816-245	CommErrorSate 2	C	[- / **-** / -]
5-816-246	CommErrorSate 3	C	[- / **-** / -]
5-816-247	SSL Err Count	C	[- / **0** / -]
5-816-248	Other Err Count	C	[- / **0** / -]
5-816-250	CommLog Print	C	[- / **-** / -] [Execute] Prints the communication log.

5821	**[Remote Service Address]** -		
5-821-002	RCG IP Address	C*	[00000000h to FFFFFFFFh / **00000000h** / 1/step] Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center.

5-821-003	RCG Port	C*	[0 to 65535 / **443** / 1/step] Sets destination port number of RCG (Remote Communication Gate) at call process against center.
5-821-004	RCG URL Path	C*	[- / **/RCG/services**/ - / -] Sets the URL path of the destination for processing calls to the @Remote service center. 17 Numeric characters allowed (0 to 17)

5824	**[NV-RAM Data Upload]** Uploads the UP and SP mode data (except for counters and the serial number) from NVRAM on the control board to an SD card. Note ▪ While using this SP mode, always keep the front cover open. This prevents a software module accessing the NVRAM during the upload.		
5-824-001	NV-RAM Data Upload	C	[- / - / -] [Execute]

5825	**[NV-RAM Data Download]** Downloads data from an SD card to the NVRAM in the machine. After downloading is completed, remove the SD card and turn the machine power off and on.		
5-825-001	NV-RAM Download	C	[- / - / -] [Execute]

5828	**[Network Setting]** Sets interface of Ethernet and wireless LAN.		
5-828-001	IPv4 Address(Ethernet/IEEE 802.11)	C*	Allows you to confirm and reset the IPv4 address for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd

5-828-002	IPv4 Subnet Mask(Ethernet/IEEE 802.11)	C*	Allows you to confirm and reset the IPv4 subnet mask for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd
5-828-003	IPv4 Default(Ethernet/IEEE 802.11)	C*	Allows you to confirm and reset the IPv4 default gateway used by the network for Ethernet and wireless LAN (802.11): aaa.bbb.ccc.ddd
5-828-006	DHCP(Ethernet/IEEE 802.11)	C*	[0 or 1 / **1** / -] 0: None 1: DHCP Allows you confirm and change the setting that determines whether the IP address is used with DHCP on an Ethernet or wireless (802.11) LAN network.
5-828-021	Active IPv4 Address	C*	Allows you to confirm the IPv4 address that was used when the machine started up with DHCP.
5-828-022	Active IPv4 Subnet Mask	C*	Allows you to confirm the IPv4 subnet mask setting that was used when the machine started up with DHCP.
5-828-023	Active IPv4 Gateway Address	C*	Allows you to confirm the IPv4 default gateway setting that was used when the machine started up with DHCP.
5-828-050	1284 Compatiblity (Centro)	C*	[0 or 1 / **1** / 1/step] Enables or disables 1284 Compatibility. 0: Disabled, 1: Enabled
5-828-052	ECP (Centro)	C*	[0 or 1 / **1** / 1/step] Enables or disables ECP Compatibility. 0: Disabled, 1: Enabled Note ▪ This SP is activated only when SP5-828-50 is set to "1".

5-828-065	Job Spooling	C*	[0 or 1 / **0** / 1/step] Enables/disables Job Spooling. 0: Disabled, 1: Enabled
5-828-066	Job Spooling Clear: Start Time	C*	[0 or 1 / **1** / 1/step] Treatment of the job when a spooled job exists at power on. 0: ON (Data is cleared) 1: OFF (Automatically printed)
5-828-069	Job Spooling (Protocol)	C*	[- / **0111111** / -] Validates or invalidates the job spooling function for each protocol. 0: Validates 1: Invalidates bit0: LPR bit1: FTP bit2: IPP bit3: SMB bit4: BMLinkS bit5: DIPRINT bit6: sftp bit7: (Reserved)
5-828-087	Protocol usage	C*	[each bit value / **0x00000000**/ bit / -] 1: It has been processed by hit protocol. 0: It has Never processed by hit protocol. See [Bit assignment for SP5-828-087] below.
5-828-090	TELNET (0: OFF 1: ON)	C*	[0 or 1 / **1** / 1/step] Enabled or disabled the Telnet protocol. 0: Disable, 1: Enable
5-828-091	Web (0: OFF 1: ON)	C*	[0 or 1 / **1** / 1/step] Enables or disables the Web operation. 0: Disable, 1: Enable
5-828-091	Web(0:OFF 1:ON)	C*	[0 or 1 / **1** / 1/step] 0: Disabled, 1: Enabled Sets Enabled/disabled Rendezvous function.

5-828-145	Active IPv6 Link LocalAddress	C	This is the IPv6 local address link referenced on the Ethernet or wireless LAN in the format: "Link Local Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
5-828-147	Active IPv6 Stateless Address 1	C	SP codes 147 to 155 are the IPv6 status addresses (1 to 5) referenced on the Ethernet or wireless LAN in the format: "Status Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
5-828-149	Active IPv6 Stateless Address 2	C	
5-828-151	Active IPv6 Stateless Address 3	C	
5-828-153	Active IPv6 Stateless Address 4	C	
5-828-155	Active IPv6 Stateless Address 5	C	
5-828-156	IPv6 Manual Address	C*	This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN in the format: "Manual Set Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
5-828-158	IPv6 Gateway Address	C*	This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN. The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
5-828-161	IPv6 Stateless Auto Setting	C	[0 or 1 / **1** / 1/step] 0: Disable, 1: Enable Enables or disables the automatic setting for IPv6 stateless.

5-828-236	Web Item visible	C*	[0x0000 to 0xffff / **FFFFh** / -] Displays or does not display the Web system items. 0: Not displayed, 1:Displayed bit0: Net RICOH bit1: Consumable Supplier bit2-15: Reserved (all)
5-828-237	Web shopping link visible	C*	[0 or 1 / **1** / 1/step] Displays or does not display the link to Net RICOH on the top page and link page of the web system. 0: Not display, 1:Display
5-828-238	Web supplies Link visible	C*	[0 or 1 / **1** / 1/step] Displays or does not display the link to Consumable Supplier on the top page and link page of the web system. 0: Not display, 1:Display
5-828-239	Web Link1 Name	C*	[character strings(maximum 31byte) / **URL1** / -] This SP confirms or changes the URL1 name on the link page of the web system. The maximum characters for the URL name are 31 characters.
5-828-240	Web Link1 URL	C*	[character strings(maximum 127byte) / NULL / -] This SP confirms or changes the link to URL1 on the link page of the web system. The maximum characters for the URL are 127 characters.
5-828-241	Web Link1 visible	C*	[0 or 1 / **1** / 1/step] Displays or does not display the link to URL1 on the top page of the web system. 0: Not display, 1:Display
5-828-242	Web Link2 Name	C*	[character strings(maximum 31byte) / URL1 / -] Same as "-239"

5-828-243	Web Link2 URL	C*	[character strings(maximum 127byte) / NULL / -] Same as "-240"
5-828-244	Web Link2 visible	C*	[0 or 1 / **1** / 1/step] Same as "-241"
5-828-246	DHCPv6 DUID	C*	[0 or 1 / **1** / 1/step] Same as "-241"

Bit assignment for SP5-828-087

bit	Item	bit	Item
0	IPsec	16	SMB printing
1	IPv6	17	WSD-Printer
2	IEEE 802.1X	18	WSD-Scanner
3	Wireless LAN	19	Scan to SMB
4	security mode level setting	20	Scan to NCP
5	Appletalk	21	Reserve
6	DHCP	22	Bluetooth
7	DHCPv6	23	IEEE 1284
8	telnet	24	USB printing
9	SSL	25	Dynamic DNS
10	HTTPS	26	Netware printing
11	BMLinkS printing	27	LLTD
12	diprint printing	28	IPP printing
13	LPRprinting	29	IPP printing (SSL)
14	ftp printing	30	ssh
15	rsh printing	31	sftp

5831	**[Initial Setting Mode Clear]** Press [EXECUTE] to restore the initial settings of all SP codes to their initial (factory) settings. Note ▪ This SP does not reset time settings or user tool settings.		
5-832-001	Copier up application	C	[- / - / -] [Execute]

5832	**[HDD]** Enter the SP number for the partition to initialize, then press #. When the execution ends, cycle the machine power off and on.		
5-832-001	HDD Formatting (ALL)	C	[- / - / -] [Execute]
5-832-002	HDD Formatting (IMH)	C	[- / - / -] [Execute]
5-832-003	HDD Formatting (Thumbnail)	C	[- / - / -] [Execute]
5-832-004	HDD Formatting (Job Log)	C	[- / - / -] [Execute]
5-832-005	HDD Formatting (Printer Fonts)	C	[- / - / -] [Execute]
5-832-006	HDD Formatting (User Info1)	C	[- / - / -] [Execute]
5-832-007	Mail RX Data	C	[- / - / -] [Execute]
5-832-008	Mail TX Data	C	[- / - / -] [Execute]
5-832-009	HDD Formatting (Data for a Design)	C	[- / - / -] [Execute]
5-832-010	HDD Formatting (Log)	C	[- / - / -] [Execute]

5-832-011	HDD Formatting (Ridoc I/F)	C	[- / **-** / -] [Execute]

5836	**[Capture Setting]** -		
5-836-001	Function setting	C*	[0 or 1 / **0** / 1/step] 0: Disable 1: Enable With this function disabled, the settings related to the capture feature cannot be initialized, displayed, or selected.
5-836-002	Panel Setting	C*	[0 or 1 / **0** / 1/step] 0: Displayed 1: Not displayed Determines whether each capture related setting can be selected or updated from the initial system screen.
5-836-003	Print Back Up Function (0:Off 1:On)	C*	[0 or 1 / **0** / 1/step] 0: Off 1: On
	5836-71 to 5836-78, Copier and Printer Document Reduction The following 6 SP modes set the default reduction for stored documents sent to the document management server via the MLB. Enabled only when optional MLB (Media Link Board) is installed.		
5-836-072	Reduction for Copy B&W Text	C*	[0 to 6 / **0** / 1/step] 0: 1, 1: 1/2 2: 1/3 3: 1/4 6: 2/3

5-836-073	Reduction for Copy B&W Other	C*	[0 to 6 / **0** / 1/step] 0: 1, 1: 1/2 2: 1/3 3: 1/4 6: 2/3
5-836-075	Reduction for Printer B&W	C*	[0 to 6 / **0** / 1/step] 0: 1, 1: 1/2 2: 1/3 3: 1/4 6: 2/3
5-836-078	Reduction for Printer B&W 1200dpi	C*	[1, 3 to 5 / **1** / 1/step] 1: 1/2 3: 1/4 4: 1/6 5: 1/8
5-836-082	Format for Copy B&W Text	C*	[0 to 3 / **1** / 1/step] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR
5-836-083	Format Copy B&W Other	C*	[0 to 3 / **1** / 1/step] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR
5-836-085	Format for Printer B&W	C*	[0 to 3 / **1** / 1/step] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR

5-836-091	Default for JPEG	C*	[5 to 95 / **50** / 1/step] Sets the JPEG format default for documents sent to the document management server with the MLB, with JPEG selected as the format. Enabled only when optional File Format Converter (MLB: Media Link Board) is installed.
5-836-092	High Quality for JPEG	C*	[5 to 95 / **60** / 1/step]
5-836-093	Low Quality for JPEG	C*	[5 to 95 / **40** / 1/step]
5-836-094	Default Format for Back Up Files	C*	[0 to 4 / **0** / 1/step] Sets the default format for backup files when setting a printing backup.
5-836-095	Default Resolution for Back Up Files	C*	[0 to 6 / **2** / 1/step] 0: 1 1: 1/2 2: 1/3 3: 1/4 6: 2/3 Sets the default resolution for back up files. This SP availables if the back up files are set to JPEG/TIFF.
5-836-096	Default User Name for Back Up Files	C*	[- / **-** / -] Sets the default user name when setting printing backup on copy.
5-836-097	Default compression for Back Up Files	C*	[0 to 2 / **0** / 1] Sets compression setting for JPEG backup files.
5-836-101	Primary srv IP address	C*	[000.000.000.000 to 255.255.255.255 / **000.000.000.000** / 1/step] Sets the IP address of the PC designated to operate as the primary capture server (CS).
5-836-102	Primary srv scheme	C*	[Char: Max. 6 / **-** / -]

5-836-103	Primary srv port number	C*	[1 to 65535 / **80** / 1/step] Use to set the IO device for the primary CS remotely.
5-836-104	Primary srv URL path	C*	[0 to 16 / **-** / -] Use to set the IO device for the primary CS remotely. Max. characters: 16
5-836-111	Secondary srv IP address	C*	[000.000.000.000 to 255.255.255.255 / **000.000.000.000** / 1/step] Sets the IP address of the PC designated to operate as the secondary capture server (CS).
5-836-112	Secondary srv scheme	C*	[Char: Max. 6 / **-** / -] Sets the IO device of the secondary CS remotely. Max. characters: 6
5-836-113	Secondary srv port number	C*	[1 to 65535 / **80** / 1/step] Sets the IO device of the secondary CS remotely. Max. characters: 6
5-836-114	Primary srv URL path	C*	[0 to 16 / **-** / -] Sets the IO device of the secondary CS remotely. Max. characters: 6
5-836-120	Default Reso Rate Switch	C*	[0 or 1 / **0** / 1/step] Sets the IO device of the CS remotely.
5-836-122	Reso: Copy(Mono)	C*	[0 to 255 / **3** / 1/step] Sets the IO device of the CS remotely: 0: 600dpi, 1: 400dpi, 2: 300dpi, 3: 200dpi, 4: 150dpi, 5: 100dpi, 6: 75dpi
5-836-124	Reso: Print(Mono)	C*	[0 to 255 / **3** / 1/step] Sets the IO device of the CS remotely: 0: 600dpi, 1: 400dpi, 2: 300dpi, 3: 200dpi, 4: 150dpi, 5: 100dpi, 6: 75dpi

5-836-127	Reso: Scan(Color)	C*	[0 to 255 / **4** / 1/step] 0: 600dpi, 1: 400dpi, 2: 300dpi, 3: 200dpi, 4: 150dpi, 5: 100dpi, 6: 75dpi
5-836-128	Reso: Scan(Mono)	C*	[0 to 255 / **3** / 1/step] 0: 600dpi, 1: 400dpi, 2: 300dpi, 3: 200dpi, 4: 150dpi, 5: 100dpi, 6: 75dpi
5-836-141	All addr Info Switch	C*	[0 or 1 / **0** / 1/step] Expands the scope of used resources and performance. Switch this off if this feature is not being used. 1: ON, 0: OFF
5-836-142	Stand-by Doc Max Number	C*	[10 to 10000 / **2000** / 1/step] Expands the scope of used resources and performance. Switch this off if this feature is not being used.

5840	**[IEEE 802.11]** -		
5-840-006	Channel MAX	C*	[- / **14** / -] Sets the maximum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the maximum end of the range for each area. Adjust the upper 4 bits to set the maximum number of channels. **DFU** Note ▪ Do not change the setting. Europe/Asia: 1 to 13 NA/ Asia: 1 to 11

5-840-007	Channel MIN	C*	[1 to 11 / **1** / 1/step] Sets the minimum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the minimum end of the range for each area. Adjust the lower 4 bits to set the minimum number of channels. **DFU** Note ▪ Do not change the setting. Europe: 1 to 13 NA/ Asia: 1 to 11
5-840-011	WEP Key Select	C*	[00 to 11 / **00** / 1 binary/step] Selects the WEP key. 00: Key #1 01: Key #2 (Reserved) 10: Key #3 (Reserved) 11: Key #4 (Reserved)
5-840-045	WPA Debug Lv1	C*	[1 to 3 / **3** / 1/step]
5-840-046	11w	C*	[0 to 2 / **0** / 1/step]
5-840-047	PSK Set Type	C*	[0 or 1 / **0** / 1/step]

5841	**[Supply Name Setting]** Press the [User Tools] key. These names appear when the user presses the Inquiry button on the User Tools screen.		
5-841-001	Toner Name Setting: Black	C*	[- / **-** / -]
5-841-008	Paste Name	C*	[- / **-** / -]
5-841-009	WasteTonerBottle	C*	[- / **-** / -]
5-841-011	StapleStd1	C*	[- / **-** / -]
5-841-012	StapleStd2	C*	[- / **-** / -]
5-841-013	StapleStd3	C*	[- / **-** / -]

5-841-014	StapleStd4	C*	[- / - / -]
5-841-021	StapleBind1	C*	[- / - / -]
5-841-022	StapleBind2	C*	[- / - / -]
5-841-023	StapleBind3	C*	[- / - / -]
5-841-031	Ring Name (50/black)	C*	[- / - / -]
5-841-032	Ring Name (50/white)	C*	[- / - / -]
5-841-033	Ring Name (100/black)	C*	[- / - / -]
5-841-034	Ring Name (100/white)	C*	[- / - / -]

5842	**[GWWS Analysis]** This settings select the output mode for debugging information as each network file is processed.		
5-842-001	Setting 1	C*	Default: **00000000** Do not change Netfiles: Jobs to be printed from the document server using a PC and the DeskTopBinder software
5-842-002	Setting 2	C*	Adjusts the debug program mode setting. Bit7: 5682 mmseg-log setting 0: Date/Hour/Minute/Second 1: Minute/Second/Msec. 0 to 6: Not used

5844	**[USB]** -		
5-844-001	Transfer Rate	C*	Sets the speed for USB data transmission. [Full Speed] [Auto Change]
5-844-002	Vendor ID	C*	Sets the vendor ID: Initial Setting: 0x05A Ricoh Company [0x0000 to 0xFFFF/1] **DFU**

5-844-003	Product ID	C*	Sets the product ID. [0x0000 to 0xFFFF/1] **DFU**
5-844-004	Device Release Number	C*	[0 to 9999 / **100** / 1/step] Sets the device release number of the BCD (binary coded decimal) display. Enter as a decimal number. NCS converts the number to hexadecimal number recognized as the BCD.
5-844-005	Fixed USB Port	C*	[0 to 2 / **0** / 1/step] Selects the PnP name standardization mode. 0: Disable 1: Level 1 2: Level 2
5-844-006	PnP Model Name	C*	Specifies PnP name for USB device.
5-844-007	PnP Serial Number	C*	[12 characters / **NULL** / -] Specifies PnP serial number for USB device.
5-844-008	Mac Supply Level	C*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-844-100	Notify Unsupport	C*	[0x00 to 0x01 / **0x01** / 1/step] Displays or does not display USB unsupported message. 0: Not display 1: Display

5845	**[Delivery Server Setting]** Provides items for delivery server settings.		
5-845-001	FTP Port No.	C*	[1 to 65535 / **3670** / 1 /step] Sets the FTP port number used when image files to the Scan Router Server.

5-845-002	IP Address (Primary)	C*	[000.000.000.000 to 255.255.255.255 / **000.000.000.000** / 1/ -] Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be referenced by the initial system setting.
5-845-006	Delivery Error Display Time	C*	[0 to 999 / **300** / 1 / second] Use this setting to determine the length of time the prompt message is displayed when a test error occurs during document transfer with the NetFile application and an external device.
5-845-008	IP Address (Secondary)	C*	[000.000.000.000 to 255.255.255.255 / **000.000.000.000 /** 1/step] Specifies the IP address assigned to the computer designated to function as the secondary delivery server of Scan Router. This SP allows only the setting of the IP address without reference to the DNS setting.
5-845-009	Delivery Server Model	C*	[0 to 4 / **0** / 1/step] 0: Unknown 1: Accessory version 2: SG1 package version 3: SG2 package version 4: SG2 package version Allows changing the model of the delivery server registered by the I/O device.
5-845-010	Delivery Svr. Capability	C*	[0 to 255 / **00000000** / 1/step]
	Bit7 = 1 Comment information exits		Changes the capability of the registered that the I/O device registered.
	Bit6 = 1 Direct specification of mail address possible		
	Bit5 = 1 Mail RX confirmation setting possible		

	Bit4 = 1 Address book automatic update function exists		
	Bit3 = 1 Fax RX delivery function exists		Changes the capability of the registered that the I/O device registered.
	Bit2 = 1 Sender password function exists		
	Bit1 = 1 Function to link MK-1 user and Sender exists		
	Bit0 = 1 Sender specification required (if set to 1, Bit6 is set to “0”)		
5-845-011	Delivery Svr. Capability(Ext)	C*	[0 to 255 / **0** / 1/step] Changes the capability of servers that is registered as I/O devices. Bit7 = 1 Address book usage limitation (Limitation for each authorized user) Bit6 = 1 RDH authorization link Bit5 to 0: Not used
5-845-013	Server Scheme (Primary) DFU	C*	[- / **-** / -] This is used for the scan router program. 6 Character strings.
5-845-014	Server Port Number (Primary) DFU	C*	[1 to 65535 / **80** / 1/step] This is used for the scan router program.
5-845-015	Server URL Path (Primary) DFU	C*	[- / **-** / -] Character strings 16byte. This is used for the scan router program.

5-845-016	Server Scheme (Secondary) DFU	C*	[- / **-** / -] This is used for the scan router program. 6 character strings.
5-845-017	Server Port Number (Secondary) DFU	C*	[1 to 65535 / **80** / 1/step] This is used for the scan router program.
5-845-018	Server URL Path (Secondary) DFU	C*	[- / **-** / -] Character strings 16byte. This is used for the scan router program.
5-845-022	Rapid Sending Control	C*	[0 or 1 / **1** / 1/step] Enables or disables the prevention function for the continuous data sending error. 0: Disable, 1: Enable Note ▪ If it is set wrong network setting, the machines will continue to sending data over a network. If you switch off this SP, machine stops communication to network when it found wrong setting in its self. ▪ This setting would reduce network traffic by wrong setting.

5846	**[UCS Setting]** -		
5-846-001	Machine ID (For Delivery Server)	C*	[- / **-** / -] Displays the unique device ID in use by the delivery server directory. The value is only Displayed and cannot be changed. This ID is created from the NIC MAC or IEEE 1394 EUI. The ID is displayed as either 6-byle or 8-byte binary.

5-846-002	Machine ID Clear (For Delivery Server)	C*	[- / **-** / -] [Execute] Clears the unique ID of the device used as the name in the file transfer directory. Execute This SP if the connection of the device to the delivery server is unstable. After clearing the ID, the ID will be established again automatically by cycling the machine off and on.
5-846-003	Maximum Entries	C*	[2000 to 20000 / **2000** / 1/step] Changes the maximum number of entries that UCS can handle. If a value smaller than the present value is set, the UCS managed data is cleared, and the data (excluding user code information) is displayed
5-846-006	Delivery Server Retry Timer	C*	[0 to 255 / **0** / 1 / second] Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book. 0: retry OFF Retry time x retry count has to be set in 180second (SC reboot compatible model).
5-846-007	Delivery Server Retry Times	C*	[0 to 255 / **0** / 1time/step] Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book. 0: retry OFF Retry time x retry count has to be set in a 180 seconds (SC reboot compatible model).

5-846-008	Delivery Server Maximum Entries	C*	[2000 to 20000 / **2000** / 1/step] Sets the maximum number account entries of the delivery server user information managed by UCS. This SP would be reflected after rebooting the machine.
5-846-010	LDAP Search Timeout	C*	[1 to 255 / **60** / 1/step] Sets the length of the timeout for the search of the LDAP server.
5-846-020	WSD Maximum Entries	C*	[50 to 250 / **250** / 1/step] Sets the maximum entries for the address book of the WSD (WS-scanner). This SP would be reflected after rebooting the machine.
5-846-021	Folder Auth Change	C*	[0 or 1 / **0** / 1/step] 0: Uses certification information of device login user. 1: Uses certification information of address. This SP would be reflected after rebooting the machine.
5-846-022	Initial Value of Upper Limit Count	C*	[0 to 999999 / **500** / 1degree/step] 0: Disabled printout. 1 to 999,999: 1 Default value of “User upper limit “for User.
5-846-040	Addr Book Migraion(USB->HDD)	C	[- / **-** / -] [Execute] Transfers address book from SD/USB FlashROM to HDD when the model has address book in SD/USB FlashROM. After the transfer, change its Model that has address book in HDD.
5-846-041	Fill Addr Acl Info.	C	[- / **-** / -] [Execute]

	This SP must be executed immediately after installation of an HDD unit in a basic machine that previously had no HDD. The first time the machine is powered on with the new HDD installed; the system automatically takes the address book from the NVRAM and writes it onto the new HDD. However, the new address book on the HDD can be accessed only by the system administrator at this stage. Executing this SP by the service technician immediately after power on grants full address book access to all users. Procedure 1. Turn the machine off. 2. Install the new HDD. 3. Turn the machine on. 4. The address book and its initial data are created on the HDD automatically. 5. However, at this point the address book can be accessed by only the system administrator or key operator. 6. Enter the SP mode and do SP5846-041. After this SP executes successfully, any user can access the address book		
5-846-043	Addr Book Media	C*	[0 to 30 / **0** / 1/step] Displays the slot number where an address book data is in. 0: Unconfirmed 1: SD Slot 1 2: SD Slot 2 4: USB Flash ROM 20: HDD 30: Nothing
5-846-047	Initialize Local Addr Book	C	[- / **-** / -] [Execute] Clears the local address book information, including the user code.
5-846-048	Initialize Delivery Addr Book	C	[- / **-** / -] [Execute] Clears the distribution address book information, except the user code.

5-846-049	Initialize LDAP Addr Book	C	[- / - / -] [Execute] Clears the LDAP address book information, except the user code.
5-846-050	Initialize All Addr Book	C	[- / - / -] [Execute] Clears the LDAP address book information, except the user code. However administrator account (login ID & password) is not deleted. Administrator account is set at initialization of security setting.
5-846-051	Backup All Addr Book	C	[- / - / -] [Execute] Uploads all directory information to the SD card.
5-846-052	Restore All Addr Book	C	[- / - / -] [Execute] Downloads all directory information from the SD card.
5-846-053	Clear Backup Info	C	[- / - / -] [Execute] Deletes the address book data from the SD card in the service slot. Deletes only the files that were uploaded from this machine. This feature does not work if the card is write-protected. Note ▪ After you do this SP, go out of the SP mode, and then turn the power off. ▪ Do not remove the SD card until the Power LED stops flashing.

5-846-060	Search option	C*	[0x00 to 0xff / **00001111** / 1/step] This SP uses bit switches to set up the fuzzy search options for the UCS local address book. [0: OFF,1: ON] Bit: Meaning 0: Checks both upper/lower case characters 1: Japan Only 2: Japan Only 3: Japan Only 4 to 7: Not Used
5-846-062	Complexity option 1	C*	[0 to 32 / **0** / 1/step] Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to upper case and sets the length of the password. Note ▪ This SP does not normally require adjustment. ▪ This SP is enabled only after the system administrator has set up a group password policy to control access to the address book.

5-846-063	Complexity Option 2 DFU	C*	[0 to 32 / **0** / 1/step] Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to lower case and sets the length of the password. Note ▪ This SP does not normally require adjustment. ▪ This SP is enabled only after the system administrator has set up a group password policy to control access to the address book.
5-846-064	Complexity Option 3 DFU	C*	[0 to 32 / **0** / 1/step] Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to numeric character and sets the length of the password. Note ▪ This SP does not normally require adjustment. ▪ This SP is enabled only after the system administrator has set up a group password policy to control access to the address book.

5-846-065	Complexity Option 4 DFU	C*	[0 to 32 / **0** / 1/step] Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to symbolic number and sets the length of the password. Note ▪ This SP does not normally require adjustment. ▪ This SP is enabled only after the system administrator has set up a group password policy to control access to the address book.
5-846-091	FTP Auth Port Setting	C*	[0 to 65535 / **3671** / 1/step] Specifies the FTP port for getting a distribution server address book that is used in the identification mode.

5-846-094	Encryption Stat	C*	[0 to 255 / **-** / 1/step] Shows the status of the encryption function for the address book data. 0: Plain text in-operation. (in-use) 1: Encryption in-operation. (in use) Encryption process finished. 2: Encryption ->plain text in-conversion in-combined treatment. 3: Plain-text->encryption in-conversion in-encryption. 4: Encryption-> Plain-text double sign is completed. 5: Plain-text-> Encryption is completed. 6: Security in-change Encryption key change in-process 7: Security change is completed Encryption key change is completed. 8: Previous security key change file default is completed. 9: C security key change is completed. Encryption key change is completed.

5847	**[Rep Resolution Reduction]** 5847-002 through 5847-006 changes the default settings of image data sent externally by the Net File page reference function. 5847 21 sets the default for JPEG image quality of image files controlled by NetFile. "Repository" refers to jobs to be printed from the document server with a PC and the DeskTopBinder software.		
5-847-002	Rate for Copy B&W Text	C*	[0 to 6 / **0** / 1/step] 0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x 6: 2/3x

5-847-003	Rate for Copy B&W Other	C*	[0 to 6 / **0** / 1/step] 0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x 6: 2/3x
5-847-005	Rate for Printer B&W	C*	[0 to 6 / **0** / 1/step] 0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x 6: 2/3x
5-847-007	Rate for Printer B&W 1200dpi	C*	[0 to 6 / **1** / 1/step] 0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x 6: 2/3x
5-847-021	Network Quality Default for JPEG	C*	[5 to 95 / **50** / 1 /step] Sets the default value for the quality of JPEG images sent as NetFile pages. This function is available only with the MLB (Media Link Board) option installed.

5848	**[Web Service]** 5848-002 sets the 4-bit switch assignment for the access control setting. Setting of 0001 has no effect on access and delivery from Scan Router. 5848-100 sets the maximum size allowed for downloaded images. The default is equal to 1 gigabyte.

5-848-002	Access Ctrl: Repository (only Lower 4bits)	C*	[0000 to 0010 / **00000010** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-003	Access Control: Doc. Svr. Print (Lower 4bits)	C*	[0000 to 0010 / **00000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-004	Access Control: udirectory (Lower 4bits)	C*	[0000 to 0010 / **00000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-009	Access Ctrl: Job Ctrl (Lower 4bits)	C*	[0000 to 0010 / **00000000**/ 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-011	Access Ctrl: Devicemanagement (Lower 4bits)	C*	[0000 to 0010 / **00000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-021	Access Ctrl: Delivery (Lower 4bits)	C*	[0000 to 0010 / **00000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-022	Access Ctrl: uadministration (Lower 4bits)	C*	[0000 to 0010 / **000000000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only
5-848-024	Access Ctrl: Log Service (Lower 4bits)	C*	[0000 to 0010 / **00000000** / 4bit assign] 0000: access enabled 0001: access disabled 0010: read only

5-848-099	Repository: Download Image Setting	C*	[0000 to 0111 / **00000000** / 1/step] 0: setting 0, 1: setting 1 Bit0: Images download setting for MacOS. Bit1: Images download setting for windows. Bit2: For other OS setting (except Mac and windows)
5-848-100	Repository: Download Image Max. Size	C*	[1 to 2048 / **2048** / 1MByte/step] Specifies the max size of the image data that the machine can download.
5-848-217	Setting: Timing	C*	[0 to 2 / **0** / 1/step] 0: Transfer OFF 1: Successively transfer 2: Regular transfer

5849	**[Installation Date]** Displays or prints the installation date of the machine.		
5-849-001	Display	C*	[- / **-** / -] The “Counter Clear Day” has been changed to “Installation Date” or “Inst. Date”.
5-849-002	Switch to Print	C*	[0 or 1 / **1** / 1/step] Determines whether the installation date is printed on the printout for the total counter. 0: OFF (No Print) 1: ON (Print)
5-849-003	Total Counter	C*	[0 to 99999999 / **0** / 1/step] Displays total count value from establishment data (SP5-849-001).

5851	**[Bluetooth]** Sets the operation mode for the Bluetooth unit. Press either key.

5-851-001	Mode	C	[0 or 1 / **0** / 1/step] 0: Public 1: Private

5853	**[Stamp Data Download]** Push [Execute] to download the fixed stamp data from the machine ROM onto the hard disk. Then these stamps can be used by the system. If this is not done, the user will not have access to the fixed stamps ("Confidential", "Secret", etc.). You must always execute this SP after replacing the HDD or after formatting the HDD. Always switch the machine off and on after executing this SP. Note ▪ This SP can be executed only with the hard disks installed.		
5-853-001	-	C	[- / **-** / -] [Execute]

5856	**[Remote ROM Update]** Allows the technician to upgrade the firmware using a local port (IEEE1284) when updating the remote ROM.		
5-856-002	Local Port	C	[0 or 1 / **0** / 1/step] 0: Disable 1: Enable When set to "1" allows reception of firmware data via the local port (IEEE 1284) during a remote ROM update. This setting is reset to zero after the machine is cycled off and on. Allows the technician to upgrade the firmware using a parallel cable.

5857	**[Save Debug Log]** -

5-857-001	On/Off	C*	[0 or 1 / **0** / 1/step] 0: OFF 1: ON Switches the debug log feature on and off. The debug log cannot be captured until this feature is switched on.
5-857-002	Target(2:HDD 3:SD)	C*	[1 to 3 / **2**/ 1/step] 1: IC card 2: HDD 3: SD card Selects the storage device to save debug logs information when the conditions set with SP5-858 are satisfied.
5-857-101	Debug Logging Start Date	C*	[- / **20120101** / 1/step] Sets start date of the debug log output.
5-857-102	Debug Logging End Date	C*	[- / **20371212** / 1/step] Sets end date of the debug log output.
5-857-103	Acquire All Debug Logs	C*	[- / **-** / -] [Execute] Obtains all debug logs.
5-857-104	Acquire Only Controller Debug Logs	C*	[- / **-** / -] [Execute] Obtains controller debug log only.
5-857-105	Acquire Only Engine Debug Logs	C*	[- / **-** / -] [Execute] Obtains engine debug log only.
5-857-107	Acquire Only Opepanel Debug Logs	C*	[- / **-** / -] [Execute] Outputs the controller debug log to the media inserted front I/F

5860	**[SMTP/POP3/IMAP4]** -

5-860-020	Partial Mail Receive Timeout	C*	[1 to 168 / **72** / 1hour/step] Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time.
5-860-021	MDN Response RFC2298 Compliance	C*	[0 or 1 / **1** / 1/step] Determines whether RFC2.5298 compliance is switched on for MDN reply mail. 0: No 1: Yes Sends MAIL FROM SMTP Commands as empty (<>) when conforming to RFC2298.
5-860-022	SMTP Auth. From Field Replacement	C*	[0 or 1 / **0** / 1/step] Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. 0: No. “From” item not switched. 1: Yes. “From item switched.
5-860-025	SMTP Auth. Direct Setting	C*	[0 to 255 / **00000000** / Multiple of 2/step] Selects the authentication method for SMPT. Bit switch: Bit 0: LOGIN Bit 1: PLAIN Bit 2: CRAM MD5 Bit 3: DIGEST MD5 Bit 4 to 7: Not used Note ▪ Set 0 this SP usually.

5-860-026	S/MIME: MIME Header Setting	C*	[0 to 2 / **0** / 1/step] Selects the MIME header type of an E-mail sent by S/MIME. 0: Microsoft Outlook Express standard 1: Internet Draft standard 2: RFC standard
5-860-028	S/MIME: Authentication Check	C*	[0 or 1 / **0** / 1/step] 0: non-check, 1: check Specifies whether to check or non-check address certification at sending S/MIME mail.

5866	**[E-Mail Report]** This SP controls operation of the email notification function.		
5-866-001	Report Validity	C	[0 or 1 / **0** / 1/step] 0: Enabled, 1: Disabled Enables or disables the e-mail notification to @Remote.
5-866-005	Add Date Field	C	[0 or 1 / **0** / 1/step] 0: Enabled, 1: Disabled Disables and re-enables the addition of a date field to the email notification.

5870	**[Common Key Info Writing]** Writes to flash ROM the common proof for validating the device for NRS specifications.		
5-870-001	Writing	C	[- / **-** / -] [Execute]

5-870-003	Initialize	C	[- / **-** / -] [Execute] Initializes the set certification. When the GW controller board is replaced with a new one for repair, you must execute the "Initiralize (-003)" and "Writing (-001)" just after the new board replacement. NOTE: Turn off and on the main power switch after the "Initialize (-003)" and "Writing (-001)" have been done.
5-870-004	Writing: 2048bit	C	[- / - / -] [Execute] Writes the authentication data used for @Remote into the flash ROM.

5873	**[SD Card Appli Move]** Allows you to move applications from one SD card to another.		
5-873-001	Move Exec	C	[- / **-** / -] [Execute] This SP copies the application programs from the original SD card in SD card slot 2 to an SD card in SD card slot 1.
5-873-002	Undo Exec	C	[- / **-** / -] [Execute] This SP copies back the application programs from an SD card in SD Card Slot 2 to the original SD card in SD card slot 1. Use this menu when you have mistakenly copied some programs by using "Move Exec" (SP5873-1).

5875	**[SC Auto Reboot]** This SP determines whether the machine reboots automatically when an SC error occurs. Note ▪ The reboot does not occur for Type A and C SC codes.		
5-875-001	Reboot Setting	C*	[0 or 1 / **0** / 1/step] Enables or disables the automatic reboot function when an SC error occurs. 0: The machine reboots automatically when the machine issues an SC error and logs the SC error code. If the same SC occurs again, the machine does not reboot. 1: The machine does not reboot when an SC error occurs. The reboot is not executed for Type A or C SC codes.
5-875-002	Reboot Type	C*	[0 or 1 / **0** / 1/step] This setting determines how the machine reboots after an SC code is issued. 0: Manual reboot 1: Automatic reboot.

5878	**[Option Setup]** This SP enables the DOS application (Data Overwrite Security). Do this SP after installing Data Overwrite Security Unit.)		
5-878-001	Data Overwrite Security	C	[- / **-** / -] [Execute] Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then reboot the machine.
5-878-002	HDD Encryption	C	[- / **-** / -] [Execute] Enables the Copy Data Security unit. Press "EXECUTE" on the operation panel. Then reboot the machine.

5-878-004	OCR Dictionary	C	[- / **-** / -] [Execute] Installation Process 1: Put the SD card in the SD slot (service slot), then start the device. 2: Execute SP5-878-004. 3: Reboot the machine. 4: Execute SP5-878-004. *This SP executes linking SD card and copying OCR dictionary. Step 2 executes linking SD card, and Step 4 executes copying dictionary. And be sure to turn Off the main power supply between step 2 (linking SD card) and step 4 (copying dictionary). * OCR dictionary is able to overwrite. Overwrite process is same as initial installation process. Use new SD card to execute Installation process 1 to 4.

5881	**[Fixed Phrase Block Erasing]** Touch [EXECUTE] on the operation panel. Then erase all the fixed phase block.		
5-881-001	-	C*	[- / **-** / -] [Execute]

5882	**[CPM Set]** -		
5-882-001	-	C*	[- / **2** / -]

5885	**[CPM Set]** Sets access control for document box on Web Image Monitor.

5-885-020	DocSvr Acc Ctrl	C*	[8bit / **00000000** / -] Sets access control for document box on Web Image Monitor. bit0: Forbid all document sever access (1) bit1: Forbid user mode access (1) bit2: Forbid print function (1) bit3: Forbid fax TX (1) bit4: Forbid scan sending (1) bit5: Forbid downloading (1) bit6: Forbid delete (1) bit7: Reserved
5-885-050	DocSvr Format	C*	[0 to 2 / **0** /1/step] 0: Thumbnail 1: Icon 2: Detail Sets the default display format for document list in document box.
5-885-051	DocSvr Trans	C*	[5 to 20 / **10** / 1/step] Sets the default display number of items per page in the document list in document box.
5-885-100	Set Signature	C*	[0 to 2 / **0** / 1/step] Sets whether to put signature or not when transferring mails that is scanned and stored from WIM.
5-885-101	Set Encrypsion	C*	[0 or 1 / **0** / 1/step] Determines whether the scanned documents with the WIM are encrypted when they are transmitted by an e-mail.
5-885-200	Detect Mem Leak	C*	[8bit / **00000000** / -] Controls memory leak detection of Web Image Monitor. Changed value of this SP will be available when displaying document list in document box on a new HTTP session.

5-885-201	DocSvr Timeout	C*	[1 to 255 / **30** / 1min./step] Sets the time of session time out (min.).

5887	**[SD GetCounter]** This SP determines whether the ROM can be updated. This SP sends a text file to an SD card inserted in SD card Slot 2 (lower slot). The operation stores. The file is stored in a folder created in the root directory of the SD card called SD_COUNTER. The file is saved as a text file (*.txt) prefixed with the number of the machine. 1. Insert the SD card in SD card Slot 2 (lower slot). 2. Select SP5887 then touch [EXECUTE]. 3. Touch [Execute] in the message when you are prompted.		
5-887-001	-	C*	[- / **-** / -] [Execute]

5888	**[Personal Information Protect]** Selects the protection level for logs.		
5-888-001	-	C*	[0 or 1 / **0** / 1/step] 0: No authentication, No protection for logs 1: No authentication, Protected logs (only an administrator can see the logs)

5893	**[SDK Application Counter]** Displays the counter name of each SDK application.		
5-893-001	SDK-1	C	[- / **-** / -] [text display type]
5-893-002	SDK-2	C	[- / **-** / -] [text display type]
5-893-003	SDK-3	C	[- / **-** / -] [text display type]
5-893-004	SDK-4	C	[- / **-** / -] [text display type]
5-893-005	SDK-5	C	[- / **-** / -] [text display type]
5-893-006	SDK-6	C	[- / **-** / -] [text display type]

5894	**[External Mech Count Setting]** -		
5-894-001	Mech Counter Switch Setting	E*	[0 to 2 / **0** / 1/step] Sets switching charge mode of external charging device setting.

5895	**[External Mech Count Setting]** Enable / disable printer/scanner application launching. When connecting external controllers, such as EFI, these applications must be disabled.		
5-895-001	Printer	E*	[0 or 1 / **0** / 1/step]
5-895-002	Scanner	E*	[0 or 1 / **0** / 1/step]

5897	**[Double Sheet Feed Setting]** -		
5-897-001		E*	[0 to 1 / **1** / 1/step] -

5898	**[HDD Pages]** -		
5-898-001	-	E*	[0 to 2 / **0** / 1/step] 0: Standard 1: Extension A 2: Extension B

5900	**[Engine Log Upload]** -		
5-900-001	Pattern	E*	[0 to 4 / **0** / 1/step] Specifies target module group for engine log upload.
5-900-002	Trigger	E*	[0 to 3 / **0** / 1/step] Specifies target trigger group for engine log upload.

5901	**[Engine Log SD-Card Save Set]** -		
5-901-001	File Name Disp:Engine Log	E	[0 or 1 / **0** / 1/step]
5-901-002	File Name Disp:Debug Monitor	E	[0 or 1 / **0** / 1/step]
5-901-003	Engine Log File Size(KB)	E	[0 to 99999999 / **0** / 1/step]
5-901-004	Debug Monitor Log File Size(KB)	E	[0 to 99999999 / **0** / 1/step]
5-901-009	Save Setting:Engine Log	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON
5-901-010	Save Setting:Debug Monitor	E*	[0 or 1 / **1** / 1/step] 0: OFF 1: ON

5907	**[Plug & Play Maker/Model Name]** Selects the brand name and the production name for Windows Plug & Play. This information is stored in the NVRAM. If the NVRAM is defective, these names should be registered again. After selecting, press the "Original Type" key and "#" key at the same time. When the setting is completed, the beeper sounds five times.

5-907-001	-	C*	Brand name (domestic B/W type is less than 7byte, domestic color type and abroad type are less than 15byte). Selects and sets model name (less than16byte) by choosing from displayed on it. Set data on every Ricoh, OEM by CSS at the factory shipment already. And We set this SP that can select it from list for occurrence of error at NV-RAM. The setting can do at market too. The act of showing brand name and model name as character strings during choosing. The act of displaying selected maker name and model name as priority when access This SP item.
5-907-001	-	C*	[Operation on data entry.] Depress enter key (#) after choosing number. The act of displayed maker name and model name is changed this time.

5-907-001	-	C*	[data] Don't entry maker name and model name imperfectly at every word and every phrase. If it has wrong word, it can't plug and play understandably. So we check the characters fully, the text is single byte character or double character? Is it space or under score? Is it capital letter or small letter? You have to check requirements specification fully. notice of entering following select parameter Note ▪ The act of deleting a ruled line so that you will be required 2character at double character entry, or fill its back end with the grey. ▪ :Consider the space that after character stings, enclose specified character strings by heavy ruled line.

5913	**[Switchover Permission Time]** -		
5-913-002	Print Application Timer	C*	[3 to 30 / **3** / 1/step] Sets the amount of time to elapse while the machine is in standby mode (and the operation panel keys have not been used) before another application can gain control of the display.

5967	**[Copy Server : Set Function]** -

5-967-001	(0:ON 1:OFF)	C*	[0 or 1 / **0** / 1/step] Enables and disables the document server. This is a security measure that prevents image data from being left in the temporary area of the HDD. After changing this setting, you must switch the main switch off and on to enable the new setting.

5973	**[User Stamp Registration]** -		
5-973-001	Frame deletion setting	C*	[Stamp image ID, Main scan width, Sub scan width / **0** / 0.1mm/step]

5974	**[Cherry Server]** -		
5-974-001	(0:Light 1:Full)	C*	[0 or 1 / **0** / 1/step] 0: Light version 1: Full version Selects which version of the Scan Router application program, "Light" or "Full (Professional)", is installed.

5985	**[Device Setting]** The NIC and USB support features are built into the GW controller. Use this SP to enable and disable these features. In order to use the NIC and USB functions built into the controller board, these SP codes must be set to "1".		
5-985-001	On Board NIC	E*	[- / **0** / -]
5-985-002	On Board usb	E*	[- / **0** / -]

5987	**[Mech. Counter]** -		

5-987-001	0: OFF / 1: ON	E*	[0 or 1 / **0** / 1/step] Setting for the tamper-proof of mechanical counter.

5988	**[Contract Type]** -		
5-988-001	Maintenance ID Setting	E*	[0 to 255 / **5** / 1/step]

5990	**[SP print mode]** Prints the SMC report. In the SP mode, press Copy Window to move to the copy screen, select the paper size, then press Start. Select A4/LT (Sideways) or larger to ensure that all the information prints. Press SP Window to return to the SP mode, select the desired print, and press Execute.		
5-990-001	All (Data List)	C	[- / **-** / -] [Execute]
5-990-002	SP (Mode Data List)	C	[- / **-** / -] [Execute]
5-990-003	User Program	C	[- / **-** / -] [Execute]
5-990-004	Logging Data	C	[- / **-** / -] [Execute]
5-990-005	Diagnostic Report	C	[- / **-** / -] [Execute]
5-990-006	Non-Default	C	[- / **-** / -] [Execute]
5-990-007	NIB Summary	C	[- / **-** / -] [Execute]
5-990-008	Capture Log	C	[- / **-** / -] [Execute]
5-990-021	Copier User Program	C	[- / **-** / -] [Execute]

5-990-022	Scanner SP	C	[- / - / -] [Execute]
5-990-023	Scanner User Program	C	[- / - / -] [Execute]
5-990-024	SDK/J Summary	C	[- / - / -] [Execute]
5-990-025	SDK/J Application Info	C	[- / - / -] [Execute]
5-990-026	PrinterSP	C	[- / - / -] [Execute]

5992	**[SP Text mode]** Prints the SMC report to a file on an SD card inserted into the SD card slot on the right side of the machine operation panel. 1: front SD slot 2: back SD slot (service slot)		
5-992-001	All (Data List)	C	[- / - / -] [Execute]
5-992-002	SP (Mode Data List)	C	[- / - / -] [Execute]
5-992-003	User Program	C	[- / - / -] [Execute] This SP for only MFP model.
5-992-004	Logging Data	C	[- / - / -] [Execute]
5-992-005	Diagnostic Report	C	[- / - / -] [Execute]
5-992-006	Non-Default	C	[- / - / -] [Execute]
5-992-007	NIB Summary	C	[- / - / -] [Execute]

5-992-008	Capture Log	C	[- / **-** / -] [Execute] This SP for only MFP model.
5-992-021	Copier User Program	C	[- / **-** / -] [Execute] This SP for only MFP model.
5-992-022	Scanner SP	C	[- / **-** / -] [Execute] This SP for only MFP model.
5-992-023	Scanner User Program	C	[- / **-** / -] [Execute] This SP for only MFP model.
5-992-024	SDK/J Summary	C	[- / **-** / -] [Execute]
5-992-025	SDK/J Application Info	C	[- / **-** / -] [Execute]
5-992-026	Printer SP mode	C	[- / **-** / -] [Execute]

5998	**[Fusing Warm UP]** -		
5-998-002	Fusing ON Timing	C	[- / **1** / -]

3.6 MAIN SP TABLES-6

3.6.1 SP6-XXX (PERIPHERALS)

6006	**[ADF Adjustment]** Adjusts the side-to-side and leading edge registration of originals with the ADF.		
6-006-001	Side-to-Side Regist: Front	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-006-002	Side-to-Side Regist: Rear	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-006-010	L-Edge Regist (1-Pass): Front	E*	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6-006-011	L-Edge Regist (1-Pass): Rear	E*	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6006	**[ADF Adjustment]** Adjusts the amount of paper buckle to correct original skew.		
6-006-012	1st Buckle (1-Pass)	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-006-013	2nd Buckle (1-Pass)	E*	[-2.0 to 3.0 / **0.0** / 0.1mm/step]
6006	**[ADF Adjustment]** Adjusts the erase margin at the original trailing edge.		
6-006-014	T-Edge Erase (1-Pass): Front	E*	[-5.0 to 5.0 / **-1.5** / 0.1mm/step]
6-006-015	T-Edge Erase (1-Pass): Rear	E*	[-5.0 to 5.0 / **-1.5** / 0.1mm/step]

6009	**[ADF FreeRun]** Performs a DF free run in simplex, duplex mode or stamp mode.		
6-009-001	Free Run Simplex Motion	E	[0 or 1 / **0** / 1/step]
6-009-002	Free Run Duplex Motion	E	[0 or 1 / **0** / 1/step]

6011	**[1-Pass ADF INPUT Check]** See Input Check Table

6012	**[1-Pass ADF OUTPUT Check]** See Output Check Table

6016	**[Original Size Detect Setting]** Specifies the original size for a size detected by the original sensor, since original sensors cannot recognize all sizes.		
6-016-001	-	E*	[0 to 255 / **0** / 1/step]

6017	**[DF Magnification Adj.]** Adjusts the magnification in the sub-scan direction for the ADF.		
6-017-001	-	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

6020	**[Skew Correction Moving Setting]** Turns the original skew correction in the ARDF for all original sizes on or off.		
6-020-001	-	E*	[0 or 1 / **0** / 1/step] 0: Off (only for small original sizes) 1: On (for all original sizes)

6040	**[Double Feed Detect Setup]** -		
6-040-001	Detect enable	E*	[0 or 1 / **1** / 1/step]
6-040-002	Detect repeat	E*	[1 to 8 / **8** / 1Times/step]
6-040-003	Detect decide	E*	[0 to 99 / **10** / 1Times/step]
6-040-004	Detect distance	E*	[10 to 50 / **21** / 1mm/step]
6-040-005	Burst number	E*	[1 to 20 / **5** / 1Times/step]
6-040-006	Detect number	E*	[1 to 8 / **2** / 1Times/step]
6-040-007	Detect time	E*	[1 to 20 / **10** / 1ms/step]

6-040-008	Detect Test	E	[0 or 1 / **0** / 1/step] Adjusts double feed detection sensitivity.
6-040-009	Detect Adjust Result	E	[0 to 255 / **0** / 1/step] Gets and displays the result of sensitivity adjustment of double feed detection from DF.

6200	**[Adj Booklet Staple Position]** Use this SP to adjust the stapling position of the booklet stapler when paper is stapled and folded in the Booklet Finisher. When viewing the open booklet: + Value: Shifts staple position right. - Value: Shifts staple position left.		
6-200-001	13x19.2	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-002	13x19	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-003	12.6x19.2	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-004	12.6x18.5	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-005	13x18	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-006	SR A3	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-007	12x18	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-008	A3 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-009	B4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-010	SR A4	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-011	226x310	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-012	310x432	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-013	A4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-014	B5 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-015	DLT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-016	LG SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6-200-017	LT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-200-018	Other	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6201	**[Adj Booklet Fold Position]** This SP corrects the folding position when paper is stapled and folded in the Booklet Finisher. When viewing the open booklet: + Value: Shifts staple position right - Value: Shifts staple position left.		
6-201-001	13x19.2	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-002	13x19	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-003	12.6x19.2	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-004	12.6x18.5	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-005	13x18	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-006	SR A3	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-007	12x18	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-008	A3 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-009	B4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-010	SR A4	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-011	226x310	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-012	310x432	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-013	A4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-014	B5 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-015	DLT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-016	LG SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-017	LT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-201-018	Other	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6202	**[Adj Booklet Jog Fence Position]** This SP adjusts the distance between the jogger fences and the sides of the stack on the finisher stapling tray in the Booklet Finisher. The adjustment is done perpendicular to the direction of paper feed. + Value: Increases distance between jogger fences and the sides of the stack. - Value: Decreases the distance between the jogger fences and the sides of the stack.		
6-202-001	13x19.2	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-002	13x19	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-003	12.6x19.2	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-004	12.6x18.5	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-005	13x18	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-006	SR A3	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-007	12x18	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-008	A3 SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-009	B4 SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-010	SR A4	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-011	226x310	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-012	310x432	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-013	A4 SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-014	B5 SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-015	DLT SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-016	LG SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-017	LT SEF	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]
6-202-018	Other	E*	[-0.5 to 0.5 / **0.0** / 0.1mm/step]

6203	**[Set Number of Folds for Book]** -

6-203-001	-	E*	[-3 to 9 / **0** / 1/step]

6204	**[BkFold Plate Adjustment]** -		
6-204-001	-	E*	[-3.0 to 0.0 / **0.0** / 0.5mm/step]

6205	**[Adj Booklet Stapler Jog Pawl]** -		
6-205-001	13x19.2	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-002	13x19	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-003	12.6x19.2	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-004	12.6x18.5	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-005	13x18	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-006	SR A3	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-007	12x18	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-008	A3 SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-009	B4 SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-010	SR A4	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-011	226x310	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-012	310x432	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-013	A4 SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-014	B5 SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-015	DLT SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-016	LG SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-017	LT SEF	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-205-018	Other	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

6206	[Bklet Tray Line Spd Adjust] -		
6-206-001	-	E*	[-5.0 to 5.0 / **0.0** / 0.1%/step]

6207	[Bklet Tray Mt ON Adjust] -		
6-207-001	-	E*	[-20 to 20 / **0** / 1mm/step]

6208	[Bklet Tray Mt Off Adjust] -		
6-208-001	-	E*	[-20 to 20 / **0** / 1mm/step]

6209	[Staple Pos Set:Main Scan:1] -		
6-209-001	A3 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-002	B4 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-003	A4 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-004	A4 LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-005	B5 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-006	B5 LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-007	DLT SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-008	LG SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-009	LT SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-010	LT LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-011	8-Kai SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-012	16-Kai SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-013	16-Kai LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-209-014	Other	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]

6210	[Staple Pos Set:Main Scan:1] -		
6-210-001	A3 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-002	B4 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-003	A4 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-004	A4 LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-005	B5 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-006	B5 LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-007	DLT SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-008	LG SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-009	LT SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-010	LT LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-011	8-Kai SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-012	16-Kai SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-013	16-Kai LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-210-014	Other	E*	[-2 to 2 / **0** / 1mm/step]

6211	[Staple Pos Adj:Main Scan:2] -		
6-211-001	A3 SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-002	B4 SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-003	A4 SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-004	A4 LEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-005	B5 SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-006	B5 LEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-007	DLT SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]

6-211-008	LG SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-009	LT SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-010	LT LEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-011	8-Kai SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-012	16-Kai SEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-013	16-Kai LEF	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]
6-211-014	Other	E*	[-1.5 to1.5 / **0.0** / 0.1mm/step]

6212	**[Staple Pos Set:Main Scan:2]** -		
6-212-001	A3 SEF	E*	[-16 to 115 / **0** / 1mm/step]
6-212-002	B4 SEF	E*	[-16 to 75 / **0** / 1mm/step]
6-212-003	A4 SEF	E*	[-16 to 28 / **0** / 1mm/step]
6-212-004	A4 LEF	E*	[-16 to 115 / **0** / 1mm/step]
6-212-005	B5 SEF	E*	[-16 to 0 / **0** / 1mm/step]
6-212-006	B5 LEF	E*	[-16 to 75 / **0** / 1mm/step]
6-212-007	DLT SEF	E*	[-16 to 98 / **0** / 1mm/step]
6-212-008	LG SEF	E*	[-16 to 34 / **0** / 1mm/step]
6-212-009	LT SEF	E*	[-16 to 34 / **0** / 1mm/step]
6-212-010	LT LEF	E*	[-16 to 98 / **0** / 1mm/step]
6-212-011	8-Kai SEF	E*	[-16 to 85 / **0** / 1mm/step]
6-212-012	16-Kai SEF	E*	[-16 to 12 / **0** / 1mm/step]
6-212-013	16-Kai LEF	E*	[-16 to 85 / **0** / 1mm/step]
6-212-014	Other	E*	[-16 to 115 / **0** / 1mm/step]

6213	**[Staple Pos Adj:Sub Scan]** -

6-213-001	A3 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-002	B4 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-003	A4 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-004	A4 LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-005	B5 SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-006	B5 LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-007	DLT SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-008	LG SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-009	LT SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-010	LT LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-011	8-Kai SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-012	16-Kai SEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-013	16-Kai LEF	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]
6-213-014	Other	E*	[-1.5 to 1.5 / **0.0** / 0.1mm/step]

6214	**[Staple Pos Set:Sub Scan]** -		
6-214-001	A3 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-002	B4 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-003	A4 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-004	A4 LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-005	B5 SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-006	B5 LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-007	DLT SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-008	LG SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-009	LT SEF	E*	[-2 to 2 / **0** / 1mm/step]

6-214-010	LT LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-011	8-Kai SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-012	16-Kai SEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-013	16-Kai LEF	E*	[-2 to 2 / **0** / 1mm/step]
6-214-014	Other	E*	[-2 to 2 / **0** / 1mm/step]

6215	**[Staple Pos Dev Adj:Sub Scan]** -		
6-215-001	-	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]

6216	**[Adj End Bind Jogger]** -		
6-216-001	A3 SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-002	B4 SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-003	A4 SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-004	A4 LEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-005	B5 SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-006	B5 LEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-007	DLT SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-008	LG SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-009	LT SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-010	LT LEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-011	8-Kai SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-012	16-Kai SEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-013	16-Kai LEF	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]
6-216-014	Other	E*	[-1.0 to 1.0 / **0.0** / 0.1mm/step]

6217	**[Staple Jogging Times]** -		
6-217-001	-	E*	[0 or 1 / **0** / 1/step] 0: Default 1: +1 Time

6218	**[Adj Leading Edge Stopper]** -		
6-218-001	A3 SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-002	B4 SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-003	A4 SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-004	A4 LEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-005	B5 SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-006	B5 LEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-007	DLT SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-008	LG SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-009	LT SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-010	LT LEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-011	8-Kai SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-012	16-Kai SEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-013	16-Kai LEF	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]
6-218-014	Other	E*	[-2.5 to 2.5 / **0.0** / 0.5mm/step]

6219	**[ExitGuidePlate CloseTiming Adj]** -		
6-219-001	-	E*	[0 or 1 / **0** / 1/step] 0: Default 1: Late

6220	**[Hitroll Motor Rotation Time]** -		
6-220-001	A3 SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-002	B4 SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-003	A4 SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-004	A4 LEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-005	B5 SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-006	B5 LEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-007	DLT SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-008	LG SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-009	LT SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-010	LT LEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-011	8-Kai SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-012	16-Kai SEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-013	16-Kai LEF	E*	[-50 to 50 / **0** / 5msec/step]
6-220-014	Other	E*	[-50 to 50 / **0** / 5msec/step]

6222	**[Trail Edge Press Adj]** -		
6-222-001	Thick 2	E*	[-3 to 3 / **0** / 1mm/step]
6-222-002	Thick 3	E*	[-3 to 3 / **0** / 1mm/step]
6-222-003	Thick 4	E*	[-3 to 3 / **0** / 1mm/step]
6-222-004	Thick 5	E*	[-3 to 3 / **0** / 1mm/step]

6223	**[Adj Punch Posi Sub Scan]** -		
6-223-001	2-Hole EU/JPN	E*	[-3.5 to 3.5 / **0.0** / 0.5mm/step]

6-223-002	3-Hole NA	E*	[-3.5 to 3.5 / **0.0** / 0.5mm/step]
6-223-003	4-Hole EU	E*	[-3.5 to 3.5 / **0.0** / 0.5mm/step]
6-223-004	4-Hole Scandinavia	E*	[-3.5 to 3.5 / **0.0** / 0.5mm/step]
6-223-005	2-Hole Scandinavia	E*	[-3.5 to 3.5 / **0.0** / 0.5mm/step]

6224	**[Adj Punch Posi Main Scan]** -		
6-224-001	2-Hole EU/JPN	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-224-002	3-Hole NA	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-224-003	4-Hole EU	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-224-004	4-Hole Scandinavia	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-224-005	2-Hole Scandinavia	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]

6225	**[Adj Pre Stack Number]** -		
6-225-001	A3 SEF	E*	[0 to 4 / **4** / 1/step]
6-225-002	B4 SEF	E*	[0 to 4 / **4** / 1/step]
6-225-003	A4 SEF	E*	[0 to 4 / **4** / 1/step]
6-225-004	A4 LEF	E*	[0 to 6 / **6** / 1/step]
6-225-005	B5 SEF	E*	[0 to 4 / **4** / 1/step]
6-225-006	B5 LEF	E*	[0 to 6 / **6** / 1/step]
6-225-007	DLT SEF	E*	[0 to 4 / **4** / 1/step]
6-225-008	LG SEF	E*	[0 to 4 / **4** / 1/step]
6-225-009	LT SEF	E*	[0 to 4 / **4** / 1/step]
6-225-010	LT LEF	E*	[0 to 6 / **6** / 1/step]
6-225-011	8-Kai SEF	E*	[0 to 4 / **4** / 1/step]
6-225-012	16-Kai SEF	E*	[0 to 4 / **4** / 1/step]

6-225-013	16-Kai LEF	E*	[0 to 6 / **6** / 1/step]
6-225-014	Other	E*	[0 to 9 / **0** / 1/step]

6226	**[Adj Registration Control]** -		
6-226-001	-	E*	[0 or 1 / **1** / 1/step]

6227	**[Adj Registration Buckle]** -		
6-227-001	A4 LEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-002	A5 SEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-003	A5 LEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-004	B5 LEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-005	LT LEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-006	HLT SEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-007	HLT LEF	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]
6-227-008	Other	E*	[-3.0 to 3.0 / **0.0** / 0.5mm/step]

6229	**[Skew Corr Adj(Z-Fold)]** -		
6-229-001	-	E*	[0 to 2 / **2** / 1/step] 0: Corr: OFF 1: Corr: ON 2: Rev Corr: ON(Default)

6230	**[Adj Registration Buckle]** -		
6-230-001	-	E*	[-9.0 to 0.0 / **0.0** / 0.5mm/step]

6231	[Skew Corr Reverse Amt Adj(Z-F)] -		
6-231-001	-	E*	[-9.0 to 0.0 / **0.0** / 0.5mm/step]

6232	[Adj Output Jog Position] -		
6-232-001	A3 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-002	B4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-003	A4 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-004	A4 LEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-005	A5 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-006	A5 LEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-007	B5 SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-008	B5 LEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-009	DLT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-010	LG SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-011	LT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-012	LT LEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-013	HLT SEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-014	HLT LEF	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-232-015	Other	E*	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6233	[Output Jog Position Set] -		
6-233-001	-	E*	[0 or 1 / **0** / 1/step] 0: Enable (Default) 1: Disable

6234	**[Output Jog Position Ang Adj:]** -		
6-234-001	-	E*	[-10 to 10 / **0** / 5deg/step]

6235	**[Output Jog Pos Set(Staple)]** -		
6-235-001	-	E*	[0 or 1 / **1** / 1/step] 0: Enable 1: Disable (Default)

6236	**[Exit Paper Tray Lowering Adj]** -		
6-236-001	-	E*	[0 to 2 / **0** / 1/step] 0: Default 1: More 2: Less

6237	**[Tray Full Set(Length?216)]** -		
6-237-001	-	E*	[0 to 2 / **0** / 1/step] 0: Default 1: 1500 Sheets 2: 1000 Sheets

6238	**[Tray Full Set(216<Length?432)]** -		
6-238-001	-	E*	[0 to 2 / **0** / 1/step] 0: Default 1: 1500 Sheets 2: 1000 Sheets

6239	**[Tray Full Set(432<Length)]** -		

6-239-001	-	E*	[0 or 1 / **0** / 1/step] 0: Default 1: 500 Sheets

6240	**[Drag Roller Timing Adj]** -		
6-240-001	-	E*	[-250 to 0 / **0** / 10msec/step]

6241	**[Finisher Input Check]** See Input Check Table

6242	**[Finisher Output Check]** See Output Check Table

6243	**[Shift Tray:Paper Jogger Set]** -		
6-243-001	-	E	[0 or 1 / **0** / 1/step] 0: Speed Priority 1: Accuracy Priority

6244	**[Outputed:Trail Edge Press Set]** -		
6-244-001	-	E	[0 to 2 / **0** / 1/step] 0: Auto 1: Force ON 2: Force OFF

6245	**[Paper Exit Fan Setting]** -		
6-245-001	-	E	[0 to 2 / **0** / 1/step] 0: Auto 1: Force ON 2: Force OFF

6246	**[Paper Exit Fan Vol Adj]** -		
6-246-001	-	E	[0 or 1 / **0** / 1/step] 0: Auto 1: Fax Vol Up

6247	**[Bklet Tray Full Adj]** -		
6-247-001	-	E	[0.0 to 3.0 / **0.9** / 0.1V/step]

6248	**[Staple Job Shift Set]** -		
6-248-001	-	E	[0 or 1 / **0** / 1/step] 0: Shift: OFF(Default) 1: Shift: ON

6309	**[Input Check: Folder]** See Input Check Table

6310	**[Output Check: Folder]** See Output Check Table

6324	**[Jogger Fence Position Adjust]** -		
6-324-001	A3 SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-002	B4 SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-003	A4 SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-004	DLT SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-005	LG SEF	E	[-2.0 to00202.0 / **0.0** / 0.5mm/step]
6-324-006	LT SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]

6-324-007	12x18	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-008	8-Kai	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-009	B5 SEF	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]
6-324-019	Other	E	[-2.0 to 2.0 / **0.0** / 0.5mm/step]

6325	**[Registration Buckle Adjust]** -		
6-325-001	A3 SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-002	B4 SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-003	A4 SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-004	DLT SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-005	LG SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-006	LT SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-007	12x18	E	[-4 to 2 / **0** / 1mm/step]
6-325-008	8-Kai	E	[-4 to 2 / **0** / 1mm/step]
6-325-009	B5 SEF	E	[-4 to 2 / **0** / 1mm/step]
6-325-019	Other	E	[-4 to 2 / **0** / 1mm/step]

6326	**[Reg Buckle Adjust Select]** -		
6-326-001	-	E	[0 or 1 / **0** / 1/step] [0: With Buckle Control] [1: Without Buckle Control]

6400	**[Cvr Inserter Input Check]** See Input Check Table

6401	**[Cvr Inserter Output Check]** See Output Check Table

6500	**[Adj Ring Punch]** -		
6-500-001	A4 LEF	E*	[-2.00 to 2.00 / **0.00** / 0.05mm/step]
6-500-002	LT LEF	E*	[-2.00 to 2.00 / **0.00** / 0.05mm/step]

6501	**[Adj Ring Paddle Pos]** -		
6-501-001	-	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

6502	**[Adj Bind Position 1]** -		
6-502-001	A4 LEF	E*	[-2.0 to 2.0 / **0.0** / 0.2mm/step]
6-502-002	LT LEF	E*	[-2.0 to 2.0 / **0.0** / 0.2mm/step]

6503	**[Adj Bind Position 2]** -		
6-503-001	A4 LEF	E*	[-2.0 to 2.0 / **0.0** / 0.2mm/step]
6-503-002	LT LEF	E*	[-2.0 to 2.0 / **0.0** / 0.2mm/step]

6504	**[Eigen Val Adj Ring Punch]** Shifts the punch hole position horizontally (front-to-rear, rear-to-front) This SP must be adjusted after replacement of one or more of the following items: ▪ Ring binder main board ▪ Binder unit control board ▪ Pre-punch side jogger assembly ▪ Pre-punch jogger HP sensor (S301) **Notes:** The correct value for this setting is written on the label attached to the pre-punch jog unit. The value must be divided by "10". For example, "19" is actually "1.9 mm)

6-504-001	A4 LEF	E	[-2.00 to 2.00 / **0.00** / 0.05mm/step]
6-504-002	LT LEF	E	[-2.00 to 2.00 / **0.00** / 0.05mm/step]

6505	**[Eigen Val Adj Ring Paddle Pos]** Adjusts the height of the paddle roller at initialization. If the correct number is not entered, the stack will not be jogged correctly before binding. [-3 to +3/0/0.1 mm] This SP must be adjusted after replacement of one or more of the following items: ▪ Ring binder main board ▪ Binder unit control board ▪ Pre-bind jogger unit The correct value to be entered for the adjustment is written in the first line of the label. This label is attached to the front cover of the pre-bind jogger unit. **Note:** The value must be divided by "10". For example, "8" is actually "0.8 mm)		
6-505-001	-	E*	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

6506	**[Eigen Val Adj Bind Position 1]** Adjusts the stop position of the front jog fence. If the correct number is not entered, the stack will not be jogged correctly before binding. This SP must be adjusted after replacement of one or more of the following items: ▪ Ring binder main board ▪ Binder unit control board ▪ Pre-bind jogger unit The correct value to be entered for the adjustment is written in the second line of the label. This label is attached to the front cover of the pre-bind jogger unit. **Note:** The value must be divided by "10". For example, "-7" is actually "-0.7 mm)		
6-506-001	A4 LEF	E	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-506-002	LT LEF	E	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6507	**[Eigen Val Adj Bind Position 2]** Shifts the operating position of the rear jog fence. If the correct number is not entered, the stack will not be jogged correctly before binding. [-2 to +2/0/0.1 mm] This SP must be adjusted after replacement of one or more of the following items: ▪ Ring binder main board ▪ Binder unit control board ▪ Pre-bind jogger unit The correct value to be entered for the adjustment is written in the third line of the label. This label is attached to the front cover of the pre-bind jogger unit. **Note:** The value must be divided by "10". For example, "-3" is actually "-0.3 mm")		
6-507-001	A4 LEF	E	[-2.0 to 2.0 / **0.0** / 0.1mm/step]
6-507-002	LT LEF	E	[-2.0 to 2.0 / **0.0** / 0.1mm/step]

6508	**[Input Check: Ring Binder]** See Input Check Table

6509	**[Output Check: Ring Binder]** See Output Check Table

6521	**[Stack Thickness Volume Adjust]** -		
6-521-001	0 mm Adjust	E	[0 to 1023 / **97** / 1/step]
6-521-002	25mm Adjust	E	[0 to 1023 / **865** / 1/step]

6522	**[Glue Remain Thermistor: Wet Sd]** -		
6-522-001	Glue Vat: Wet Side Lower Limit	E	[0 to 255 / **132** / 1/step]

6-522-002	Glue Vat: Wet Side Upper Limit	E	[0 to 255 / **142** / 1/step]

6523	**[Cover Factory Set]** -		
6-523-001	H-Reg Large	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6-523-002	H-Reg Small	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6-523-003	Center	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]

6524	**[Stack SWBK Adj]** -		
6-524-001	-	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]

6525	**[Jogger Motor Mov Amt Adj]** -		
6-525-001	Jogger F Motor:Small	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-525-002	Jogger R Motor:Small	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-525-003	Jogger F Motor:Large	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]
6-525-004	Jogger R Motor:Large	E	[-3.0 to 3.0 / **0.0** / 0.1mm/step]

6526	**[Glue Coating Amt Adj 1]** -		
6-526-001	-	E	[-3.00 to 3.00 / **0.00** / 0.05mm/step]

6527	**[Glue Vat Mov Amt Adj]** -		
6-527-001	-	E	[-8.0 to 8.0 / **0.0** / 0.1mm/step]

6528	**[Finishing Pos Adj]** -		

6-528-001	Finishing Size:Length	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6-528-002	Finishing Size:Width	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]
6-528-003	Cutting Position	E	[-5.0 to 5.0 / **0.0** / 0.1mm/step]

6529	**[Finishing Angle Adjustment]** -		
6-529-001	10Sheets Rear	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
6-529-002	10Sheets Front	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
6-529-003	10Sheets Toward Small Hole	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
6-529-004	200Sheets Rear	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
6-529-005	200Sheets Front	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]
6-529-006	200SheetsToward Small Hole	E	[-10.0 to 10.0 / **0.0** / 0.1mm/step]

6530	**[Corner Processing]** -		
6-530-001	Vertical Cutting:ON-Rear	E	[-5 to 5 / **5** / 1mm/step]
6-530-002	Vertical Cutting:ON-Front	E	[-3 to 3 / **0** / 1mm/step]
6-530-003	Vertical Cutting:OFF-Rear	E	[-5 to 5 / **0** / 1mm/step]
6-530-004	Vertical Cutting:OFF-Front	E	[-5 to 5 / **0** / 1mm/step]

6531	**[Glue Coating Amt Adj 2]** -		
6-531-001	Plain:Stack Thickness1	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-002	Plain:Stack Thickness2	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-003	Plain:Stack Thickness3	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]

6-531-004	Plain:Stack Thickness4	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-005	Plain:Stack Thickness5	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-006	Plain:Stack Thickness6	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-007	Coated:Stack Thickness1	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-008	Coated:Stack Thickness2	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-009	Coated:Stack Thickness3	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-010	Coated:Stack Thickness4	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-011	Coated:Stack Thickness5	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]
6-531-012	Coated:Stack Thickness6	E	[-1.00 to 1.00 / **0.00** / 0.05mm/step]

6532	**[SWBK Roller Lift HP Adj]** -		
6-532-001	-	E	[-9 to 9 / **0** / 1pls/step]

6533	**[Blade/Blade Cradle Set]** -		
6-533-001	Blade Replace Alarm Set	E	[10000 to 100000 / **40000** / 1000/step]
6-533-002	Blade Cradle Mov ThreshSet	E	[100 to 1000 / **550** / 10/step]
6-533-003	Blade Cradle Pos Update	E	[0 or 1 / **0** / 1/step]

6534	**[Glue Temp Set]** -		
6-534-001	-	E	[151 to 155 / **153** / 1deg./step]

6536	**[Degeneracy Mode Clear]** -		
6-536-001	-	E	[0 or 1 / **0** / 1/step]

6537	**[Input Check: Perfect Binder]** See Input Check Table

6538	**[Maintenance Mode]** -		
6-538-001	Grip Release1	E	[0 or 1 / **0** / 0/step]
6-538-002	MG Rotate HP Pos Mov	E	[0 or 1 / **0** / 0/step]
6-538-003	MG Rotate Binding Pos Mov	E	[0 or 1 / **0** / 0/step]
6-538-004	Grip Release2	E	[0 or 1 / **0** / 0/step]
6-538-005	Blade Cradle Replace	E	[0 or 1 / **0** / 0/step]
6-538-006	Blade Replace	E	[0 or 1 / **0** / 0/step]
6-538-007	Cover Path:Open	E	[0 or 1 / **0** / 0/step]
6-538-008	Cover Path:Close	E	[0 or 1 / **0** / 0/step]
6-538-009	Stack Tray:Down	E	[0 or 1 / **0** / 0/step]
6-538-010	Trim Scrap Buffer: Left	E	[0 or 1 / **0** / 0/step]
6-538-011	Trim Scrap Buffer: Right	E	[0 or 1 / **0** / 0/step]
6-538-012	Logistics Pos Mov	E	[0 or 1 / **0** / 0/step]

6539	**[Interposer Tray VR Adj]** -		
6-539-001	Upper Tray A4 Width	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for upper Tray A4 Width
6-539-002	Upper Tray A4 Length	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for upper Tray A4 Length
6-539-003	Upper Tray LT Width	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for upper Tray LT Width

6-539-004	Upper Tray LT Length	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for upper Tray LT Length
6-539-005	Lower TrayA4 Width	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for lower Tray A4 Width
6-539-006	Lower TrayA4 Length	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for lower Tray A4 Length
6-539-007	Lower TrayLT Width	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for lower Tray LT Width
6-539-008	Lower TrayLT Length	E	[0 or 1 / **0** / 0/step] Executes the VR adjustment for lower Tray LT Length

6540	**[Replacement Counter Clear]** -		
6-540-001	Blade	E	[0 or 1 / **0** / 0/step]
6-540-002	Blade Cradle	E	[0 or 1 / **0** / 0/step]
6-540-003	Glue Vat	E	[0 or 1 / **0** / 0/step]

6650	**[Input Check: Trimmer]** See Input Check Table

6651	**[Output Check: Trimmer]** See Output Check Table

6752	**[FM2 Equal 1/2:FineAdjFld(D615)]** -		
6-752-101	A3 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-102	B4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6-752-103	A4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-104	DLT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-105	LG SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-106	LT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-107	12x18 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-108	8-kai (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-109	B5 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-110	13x19 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-111	13x19.2 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-112	13x18 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-113	12.6x18.5 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-114	12.6x19.2 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-115	SRA3 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-116	SRA4 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-117	226x310 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-118	310x432 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-752-119	Custom (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6753	**[FM3 Equal 3rds:Fine Adj 1st]** -		
6-753-101	B4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-753-102	A4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-753-103	LG SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-753-104	LT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-753-107	B5 SEF (Multi Sheet)	E	[-3.0 to 3.0 / **0.0** / 0.2mm/step]
6-753-108	Custom (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6754	[FM3 Equal 3rds:Fine Adj 2nd] -		
6-754-101	B4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-754-102	A4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-754-103	LG SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-754-104	LT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-754-107	B5 SEF (Multi Sheet)	E	[-3.0 to 3.0 / **0.0** / 0.2mm/step]
6-754-108	Custom (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6755	[FM4 3rds 1 Flap:Fine Adj 1st] -		
6-755-101	A3 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-102	B4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-103	A4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-104	DLT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-105	LG SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-106	LT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-107	12"x18" (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-108	8-kai (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-109	B5 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-755-110	Custom (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6756	[FM4 3rds 1 Flap:Fine Adj 2nd] -		
6-756-101	A3 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-102	B4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-103	A4 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6-756-104	DLT SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-105	LG SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-106	LT SEF (Multi Sheet)	E	[0.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-107	12x18 (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-108	8-kai (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-109	B5 SEF (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]
6-756-110	Custom (Multi Sheet)	E	[-4.0 to 4.0 / **0.0** / 0.2mm/step]

6762	**[Top Tray Full Set: Enable]** -		
6-762-001	-	E	[0 or 1 / **0** / 1/step] 0: Full Detection ON 1: Full Detection OFF

6763	**[TopTray Full Set:Limit Output]** -		
6-763-001	-	E	[0 to 250 / **0** / 1/step]

6800	**[Sheet Conversion (Thick Paper)]** Permits Punching on Z-Fold mode. Selects the count type for stapling the thick paper. The machine calculates one sheet of thick paper as three sheets of plain paper by default.		
6-800-001	1 to 3 (Initial:3 Sheets)	E	[1 to 3 / **3** / 1/step] 1: 1 page 2: 2 pages 3: 3 pages

6810	**[Ring Binding Thick Paper]** Selects the count type for binding the thick paper. The machine calculates one sheet of thick paper as three sheets of plain paper by default.

6-810-001	-	E	[1 to 3 / **2** / 1/step] 1: 1 page 2: 2 pages 3: 3 pages

6830	**[Extra]** More than the standard number of sheets can be stapled. This SP sets the additional number of sheets (This Setting + Standard Number = maximum number of sheets). ▪ If the number of the maximum for staples is increased, and the mechanical warranty of the unit can be guaranteed, then the setting can take effect without changing the controller software. ▪ However, assurance that mechanical performance can be guaranteed is required before changing the setting to increase the staple load for more than the maximum in the feed/exit specifications. Raising this setting without quality assurance could damage the machine.		
6-830-001	Staples 0 to 50(Initial:0)	E	[0 to 50 / **0** / 1/step]
6-830-002	Saddles 0 to 50(Initial:0)	E	[0 to 50 / **0** / 1/step]
6-830-003	Half-Fold 0 to 50(Initial:0)	E	[0 to 50 / **0** / 1/step]
6-830-004	Ring Binding 0 to 50(Initial:0)	E	[0 to 50 / **0** / 1/step]

6890	**[Function Enabled]** -		
6-890-001	Z-Fold 0 : No Punch 1: Punching OK	E	[0 or 1 / **1** / 1/step] Permission for punching thick (tab) paper is forbidden and it is up to the service technician to pass this on to the customer. 0: Simultaneous use forbidden 1: Simultaneous use allowed
6-890-002	Staple 0 : No Shift 1: Shift OK	E	[0 or 1 / / **0** / 1/step] -

6900	**[ADF Bottom Plate Setting]** -		
6-900-001	-	E*	[0 or 1 / **0** / 1/step] For 1 path simultaneous duplex models only. Bottom plate mode. 0: Bottom plate rise on original set (default) 1: Bottom plate rise on paper exit signal.

3.7 MAIN SP TABLES-7

3.7.1 SP7-XXX (DATA LOG)

7001	**[Engine Drive Distance Counter]** -		
7-001-001	Photo Conductor	E	[0 to 99999999 / **0** / 1m/step]

7401	**[Total SC]** Displays the number of SC codes detected.		
7-401-001	SC Counter	C*	[00000 to 65535 / **0** / 1/step]
7-401-002	Total SC Counter	C*	[00000 to 65535 / **0** / 1/step]

7403	**[SC History]** Logs the SC codes detected. The 10 most recently detected SC Codes are not displayed on the screen, but can be seen on the SMC (logging) outputs.		
7-403-001	Latest	C*	[00000 to 65535 / **0** / 1/step]
7-403-002	Latest 1	C*	[00000 to 65535 / **0** / 1/step]
7-403-003	Latest 2	C*	[00000 to 65535 / **0** / 1/step]
7-403-004	Latest 3	C*	[00000 to 65535 / **0** / 1/step]
7-403-005	Latest 4	C*	[00000 to 65535 / **0** / 1/step]
7-403-006	Latest 5	C*	[00000 to 65535 / **0** / 1/step]
7-403-007	Latest 6	C*	[00000 to 65535 / **0** / 1/step]
7-403-008	Latest 7	C*	[00000 to 65535 / **0** / 1/step]
7-403-009	Latest 8	C*	[00000 to 65535 / **0** / 1/step]
7-403-010	Latest 9	C*	[00000 to 65535 / **0** / 1/step]

7404	**[SC990 / SC991 History]** Logs the SC991 detected. The 10 most recently detected SC991 are not displayed on the screen, but can be seen on the SMC (logging) outputs. Note ▪ If the same SC codes are detected continuously and total counter is not increasing, it only logs once in case of deleting other SC code logs.		
7-404-001	Latest	C*	[- / **-** / -]
7-404-002	Latest 1	C*	[- / **-** / -]
7-404-003	Latest 2	C*	[- / **-** / -]
7-404-004	Latest 3	C*	[- / **-** / -]
7-404-005	Latest 4	C*	[- / **-** / -]
7-404-006	Latest 5	C*	[- / **-** / -]
7-404-007	Latest 6	C*	[- / **-** / -]
7-404-008	Latest 7	C*	[- / **-** / -]
7-404-009	Latest 8	C*	[- / **-** / -]
7-404-010	Latest 9	C*	[- / **-** / -]

7502	**[Total Paper Jam]** Displays the total number of jams detected.		
7-502-001	Jam Counter	C*	[00000 to 65535 / **0** / 1/step]
7-502-002	Total Jam Counter	C*	[00000 to 65535 / **0** / 1/step]

7503	**[Total Original Jam Counter]** Displays the total number of original jams.		
7-503-001	-	C*	[00000 to 65535 / **0** / 1/step]
7-503-002	Total Original Counter	C*	[00000 to 65535 / **0** / 1/step]

7504	**[Paper Jam Loc]** Displays the number of jams according to the location where jams were detected.		
7-504-001	At Power On	C*	[0000 to 9999 / - / 1/step]
7-504-003	F1 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-004	F2 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-005	F3 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-006	LCTF1 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-007	LCTF2 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-008	LCTF3 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-009	LCTF4 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-010	F1 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-011	F2 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-012	F3 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-013	LCTF1 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-014	LCTF2 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-015	LCTF3 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-016	LCTF4 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-017	Vertical Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-018	Main Unit Relay Sensor<Feed>	C*	[0000 to 9999 / - / 1/step]
7-504-019	Main Unit Relay Sensor<Duplex>	C*	[0000 to 9999 / - / 1/step]
7-504-020	Registration Entrance Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-021	LCTF1 Vertical Transport Sn:A4 LCT	C*	[0000 to 9999 / - / 1/step]
7-504-022	LCTF1 Vertical Transport Sn:1	C*	[0000 to 9999 / - / 1/step]

7-504-023	LCTF1 Vertical Transport Sn:2	C*	[0000 to 9999 / - / 1/step]
7-504-024	LCTF2 Vertical Transport Sn:	C*	[0000 to 9999 / - / 1/step]
7-504-025	LCTF3 Vertical Transport Sn:	C*	[0000 to 9999 / - / 1/step]
7-504-026	LCT Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-027	LCT Relay Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-028	Registration Timing Sensor<Main Unit>	C*	[0000 to 9999 / - / 1/step]
7-504-029	Registration timing Sensor<LCT>	C*	[0000 to 9999 / - / 1/step]
7-504-030	Late Jam	C*	[0000 to 9999 / - / 1/step]
7-504-031	PTR Timing Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-032	TH Transport Sn	C*	[0000 to 9999 / - / 1/step]
7-504-033	Fusing Entrance Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-034	Fusing Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-035	Exit JG Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-036	Paper Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-038	Paper Exit Inverter Sensor<OUT>	C*	[0000 to 9999 / - / 1/step]
7-504-039	Paper Exit Inverter Sensor<Duplex>	C*	[0000 to 9999 / - / 1/step]
7-504-040	Duplex Inverter Sensor<IN>	C*	[0000 to 9999 / - / 1/step]
7-504-041	Duplex Inverter Sensor<OUT>	C*	[0000 to 9999 / - / 1/step]
7-504-042	Duplex Transport Sn 1	C*	[0000 to 9999 / - / 1/step]
7-504-043	Duplex Transport Sn 2	C*	[0000 to 9999 / - / 1/step]
7-504-044	Duplex Transport Sn 3	C*	[0000 to 9999 / - / 1/step]
7-504-045	Duplex Transport Sn 4	C*	[0000 to 9999 / - / 1/step]

7-504-046	Duplex Transport Sn 5	C*	[0000 to 9999 / - / 1/step]
7-504-047	Duplex Transport Sn 6	C*	[0000 to 9999 / - / 1/step]
7-504-048	Duplex Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-049	Skew	C*	[0000 to 9999 / - / 1/step]
7-504-050	Shift	C*	[0000 to 9999 / - / 1/step]
7-504-053	F1 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-054	F2 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-055	F3 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-056	LCTF1 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-057	LCTF2 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-058	LCTF3 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-059	LCTF4 Paper Feed Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-060	F1 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-061	F2 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-062	F3 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-063	LCTF1 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-064	LCTF2 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-065	LCTF3 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-066	LCTF4 Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-067	Vertical Transport Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-068	Main Unit Relay Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-070	Registration Entrance Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-071	LCTF Vertical transport Sn:A4 LCT	C*	[0000 to 9999 / - / 1/step]
7-504-072	LCTF Vertical transport Sn:1	C*	[0000 to 9999 / - / 1/step]
7-504-073	LCTF Vertical transport Sn:2	C*	[0000 to 9999 / - / 1/step]

7-504-074	LCTF Vertical transport Sn	C*	[0000 to 9999 / - / 1/step]
7-504-075	LCTF3 Vertical Transport Sn	C*	[0000 to 9999 / - / 1/step]
7-504-076	LCT Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-077	LCT Relay Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-078	Registration Timing Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-080	Leading Edge Registration Corr	C*	[0000 to 9999 / - / 1/step]
7-504-081	PTR timing Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-082	TH Transport Sn	C*	[0000 to 9999 / - / 1/step]
7-504-083	Fusing Entrance Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-084	Fusing Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-085	Exit JG Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-086	Paper Exit Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-087	Paper Exit Inverter Senser<IN>	C*	[0000 to 9999 / - / 1/step]
7-504-089	Paper Exit Inverter Senser<Duplex>	C*	[0000 to 9999 / - / 1/step]
7-504-090	Duplex Inverter Sensor<IN>	C*	[0000 to 9999 / - / 1/step]
7-504-091	Duplex Inverter Sensor<OUT>	C*	[0000 to 9999 / - / 1/step]
7-504-092	Duplex Transport Sn 1	C*	[0000 to 9999 / - / 1/step]
7-504-093	Duplex Transport Sn 2	C*	[0000 to 9999 / - / 1/step]
7-504-094	Duplex Transport Sn 3	C*	[0000 to 9999 / - / 1/step]
7-504-095	Duplex Transport Sn 4	C*	[0000 to 9999 / - / 1/step]
7-504-096	Duplex Transport Sn 5	C*	[0000 to 9999 / - / 1/step]
7-504-097	Duplex Transport Sn 6	C*	[0000 to 9999 / - / 1/step]
7-504-098	Duplex Exit Sensor	C*	[0000 to 9999 / - / 1/step]

7-504-099	Double-feed Sensor:Detection	C*	[0000 to 9999 / - / 1/step]
7-504-100	FIN:Door Open	C*	[0000 to 9999 / - / 1/step]
7-504-101	FIN:Abnormal Signal	C*	[0000 to 9999 / - / 1/step]
7-504-102	FIN:Unusable paper	C*	[0000 to 9999 / - / 1/step]
7-504-103	FIN:Internal error	C*	[0000 to 9999 / - / 1/step]
7-504-104	FIN:Entrance Sensor(Late)	C*	[0000 to 9999 / - / 1/step]
7-504-105	FIN:Entrance Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-106	FIN:Proof Exit Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-107	FIN:Proof Exit Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-108	FIN: Shift Tray Exit Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-109	FIN:Shift Tray Exit Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-110	FIN: Staple tray Exit Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-111	FIN: Staple tray Exit Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-112	FIN: Staple Tray Paper Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-113	FIN: Staple Tray Paper Sn(Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-114	FIN: Belt Feed Out Sensor	C*	[0000 to 9999 / - / 1/step]
7-504-115	FIN: Booklet Stapler Exit (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-116	FIN: Booklet Stapler Exit (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-117	FIN: Booklet Stapler Exit Sn (Late)	C*	[0000 to 9999 / - / 1/step]

7-504-118	FIN: Booklet Stapler Exit Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-119	FIN:Transport	C*	[0000 to 9999 / - / 1/step]
7-504-120	FIN:Shift Tray Lift Motor	C*	[0000 to 9999 / - / 1/step]
7-504-121	FIN:Jogger Motor	C*	[0000 to 9999 / - / 1/step]
7-504-122	FIN:Shift Motor	C*	[0000 to 9999 / - / 1/step]
7-504-123	FIN:Staple Motor	C*	[0000 to 9999 / - / 1/step]
7-504-124	FIN:Stack Feed-Out Belt Motor	C*	[0000 to 9999 / - / 1/step]
7-504-125	FIN:Punch Motor	C*	[0000 to 9999 / - / 1/step]
7-504-126	FIN:Jogger	C*	[0000 to 9999 / - / 1/step]
7-504-127	FIN:Pre-stack Transport Motor	C*	[0000 to 9999 / - / 1/step]
7-504-128	FIN:Stack Transport	C*	[0000 to 9999 / - / 1/step]
7-504-129	FIN:Booklet	C*	[0000 to 9999 / - / 1/step]
7-504-130	FIN:Folder	C*	[0000 to 9999 / - / 1/step]
7-504-150	Interposer:Door Open	C*	[0000 to 9999 / - / 1/step]
7-504-151	Interposer:Job Data Error	C*	[0000 to 9999 / - / 1/step]
7-504-152	Interposer:Unusable paper	C*	[0000 to 9999 / - / 1/step]
7-504-153	Interposer:Internal error	C*	[0000 to 9999 / - / 1/step]
7-504-154	Interposer:1st Paper Feed Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-155	Interposer: 1st Paper Feed Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-156	Interposer:2nd Paper Feed Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-157	Interposer: 2nd Paper Feed Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]

7-504-158	Interposer:1st pullout Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-159	Interposer:1st pullout Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-160	Interposer:2nd pullout Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-161	Interposer: 2nd pullout Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-162	Interposer:1st Vertical Trans Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-163	Interposer: 1st Vertical Trans Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-164	Interposer: 2nd Vertical Trans Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-165	Interposer: 2nd Vertical Trans Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-166	Interposer:Paper Exit Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-167	Interposer: Paper Exit Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-168	Interposer:Entrance Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-169	Interposer:Entrance Sn (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-170	Interposer:Exit Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-171	Interposer: Exit Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-172	Interposer:Set Timing Sn (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-173	Interposer:1st Lift Motor	C*	[0000 to 9999 / - / 1/step]

7-504-174	Interposer:2nd Lift Motor	C*	[0000 to 9999 / - / 1/step]
7-504-175	Interposer:1st Pick-up Motor	C*	[0000 to 9999 / - / 1/step]
7-504-176	Interposer:2nd Pick-up Motor	C*	[0000 to 9999 / - / 1/step]
7-504-190	Plockmatic:Door Open	C*	[0000 to 9999 / - / 1/step]
7-504-191	Plockmatic:Job Data Error	C*	[0000 to 9999 / - / 1/step]
7-504-192	Plockmatic:Unusable paper	C*	[0000 to 9999 / - / 1/step]
7-504-193	Plockmatic:Internal error	C*	[0000 to 9999 / - / 1/step]
7-504-194	FIN:Booklet Maker Jam	C*	[0000 to 9999 / - / 1/step]
7-504-195	Punch:Door Open	C*	[0000 to 9999 / - / 1/step]
7-504-196	Punch:Job Data Error	C*	[0000 to 9999 / - / 1/step]
7-504-197	Punch:Unusable paper	C*	[0000 to 9999 / - / 1/step]
7-504-198	Punch:Internal error	C*	[0000 to 9999 / - / 1/step]
7-504-199	Punch:GBC Punch Unit	C*	[0000 to 9999 / - / 1/step]
7-504-200	Cutter:Door Open	C*	[0000 to 9999 / - / 1/step]
7-504-201	Cutter:Job Data Error	C*	[0000 to 9999 / - / 1/step]
7-504-202	Cutter:Unusable paper	C*	[0000 to 9999 / - / 1/step]
7-504-203	Cutter:Internal error	C*	[0000 to 9999 / - / 1/step]
7-504-204	Cutter:entrance Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-205	Cutter:Entrance Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-206	Cutter:Skew Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-207	Cutter:entrance Sensor (Late)	C*	[0000 to 9999 / - / 1/step]
7-504-208	Cutter:entrance Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]
7-504-209	Cutter:Exit Sensor (Stay on)	C*	[0000 to 9999 / - / 1/step]

7-504-210	Cutter:Cutter Motro Lock	C*	[0000 to 9999 / **-** / 1/step]
7-504-211	Cutter:Cut Position Motor	C*	[0000 to 9999 / **-** / 1/step]
7-504-212	Cutter:Press Roller	C*	[0000 to 9999 / **-** / 1/step]
7-504-213	Cutter:Press Stopper Motor	C*	[0000 to 9999 / **-** / 1/step]
7-504-214	Cutter :Tray Motor	C*	[0000 to 9999 / **-** / 1/step]
7-504-250	Multi-Fold:Door Open	C*	[0000 to 9999 / **-** / 1/step]
7-504-251	Multi-Fold:Job Data Error	C*	[0000 to 9999 / **-** / 1/step]
7-504-252	Multi-Fold:Unusable paper	C*	[0000 to 9999 / **-** / 1/step]
7-504-253	Multi-Fold:Internal error	C*	[0000 to 9999 / **-** / 1/step]
7-504-254	Multi-Fold:Entrance Sn (Late)	C*	[0000 to 9999 / **-** / 1/step]
7-504-255	Multi-Fold:Entrance Sn (Stay on)	C*	[0000 to 9999 / **-** / 1/step]

7505	**[Original Jam Detection]** Displays the total number of original jams according to the location where jams were detected.		
7-505-001	At Power On	C*	[0000 to 9999 / **0** / 1/step]
7-505-013	Separation Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-505-014	Skew Correction Sensor: On	C*	[0000 to 9999 / **0** / 1/step]
7-505-015	Scanning Entrance Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-505-016	Registration Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-505-017	Original Exit Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-505-063	Separation Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-505-064	Skew Correction Sn:Off	C*	[0000 to 9999 / **0** / 1/step]
7-505-065	Scanning Entrance Sn:Off	C*	[0000 to 9999 / **0** / 1/step]
7-505-066	Registration Sensor:Off	C*	[0000 to 9999 / **0** / 1/step]

7-505-067	Original Exit Sensor:Off	C*	[0000 to 9999 / **0** / 1/step]
7-505-099	Double-feed Detection	C*	[0000 to 9999 / **0** / 1/step]
7-505-239	Original Pull	C*	[0000 to 9999 / **0** / 1/step]

7506	**[Jam Count by Paper Size]** Displays the number of jams according to the paper size.		
7-506-005	A4 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-006	A5 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-014	B5 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-038	LT LEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-044	HLT LEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-132	A3 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-133	A4 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-134	A5 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-141	B4 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-142	B5 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-160	DLT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-164	LG SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-166	LT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-172	HLT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-506-255	Others	C*	[0000 to 9999 / **0** / 1/step]

7507	**[Plotter Jam History]** Displays the copy jam history (the most recent 10 jams) **Sample Display:** CODE:007 SIZE:05h TOTAL:0000334 DATE:Mon Mar 15 11:44:50 2000 where: CODE is the SP7504-* number (see above). SIZE is the ASAP paper size code in hex. TOTAL is the total jam error count DATE is the date the jams occurred.		
7-507-001	Latest	C*	[- / - / -]
7-507-002	Latest 1	C*	[- / - / -]
7-507-003	Latest 2	C*	[- / - / -]
7-507-004	Latest 3	C*	[- / - / -]
7-507-005	Latest 4	C*	[- / - / -]
7-507-006	Latest 5	C*	[- / - / -]
7-507-007	Latest 6	C*	[- / - / -]
7-507-008	Latest 7	C*	[- / - / -]
7-507-009	Latest 8	C*	[- / - / -]
7-507-010	Latest 9	C*	[- / - / -]

7508	**[Original Jam History]** Displays the original jam history of the transfer unit in groups of 10, starting with the most recent 10 jams. Display contents are as follows: CODE is the SP7-505-* number. SIZE is the paper size code in hex. (See "Paper Size Hex Codes" below.) TOTAL is the total jam error count (SP7003) DATE is the date the previous jam occurred **Sample Display:** CODE: 007 SIZE: 05h TOTAL: 0000334 DATE: Mon Mar 15 11:44:50 2000		
7-508-001	Latest	C*	[- / - / -]
7-508-002	Latest 1	C*	[- / - / -]
7-508-003	Latest 2	C*	[- / - / -]
7-508-004	Latest 3	C*	[- / - / -]
7-508-005	Latest 4	C*	[- / - / -]
7-508-006	Latest 5	C*	[- / - / -]
7-508-007	Latest 6	C*	[- / - / -]
7-508-008	Latest 7	C*	[- / - / -]
7-508-009	Latest 8	C*	[- / - / -]
7-508-010	Latest 9	C*	[- / - / -]

Paper Size Hex Codes

These codes are displayed by SP7507 and SP7508.

Size	Code	Size	Code	Size	Code
A4 (S)	05	A3 (L)	84	DLT (L)	A0
A5 (S)	06	A4 (L)	85	LG (L)	A4
B5 (S)	0E	A5 (L)	86	LT (L)	A6
LT (S)	26	B4 (L)	8D	HLT (L)	AC

Size	Code	Size	Code	Size	Code
HLT (S)	2C	B5 (L)	8E	Others	FF

7509	**[Paper Jam Count by Location2]** Displays the total number of jams according to the location where jams were detected.		
7-509-001	Multi-Fold:Top Tray Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-002	Multi-Fold: Top Tray Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-003	Multi-Fold:Horizontal pat Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-004	Multi-Fold: Horizontal pat Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-005	Multi-Fold:1st Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-006	Multi-Fold: 1st Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-007	Multi-Fold:2nd Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-008	Multi-Fold: 2nd Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-009	Multi-Fold:3rd Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-010	Multi-Fold: 3rd Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-011	Multi-Fold:Registration Corr	C*	[0000 to 9999 / **0** / 1/step]
7-509-012	Multi-Fold:Top Tray Transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-509-013	Multi-Fold:Entrance JG Motor Error	C*	[0000 to 9999 / **0** / 1/step]

7-509-014	Multi-Fold:1st Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-015	Multi-Fold: 2nd Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-016	Multi-Fold: 3rd Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-017	Multi-Fold:Dynamic Roller Lift Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-018	Multi-Fold:Regist Roller Release Mtr Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-019	Multi-Fold:Fold Plate Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-020	Multi-Fold:Jogger Fence Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-021	Multi-Fold:Direct-Send JG Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-022	Multi-Fold:FM6 Pawl Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-045	P-Binder:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-509-046	P-Binder:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-047	P-Binder:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-509-048	P-Binder:Internal Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-049	P-Binder:Paper Exit Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-050	P-Binder: Paper Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-051	P-Binder:Cover Regist Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-052	P-Binder:Cover Regist Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]

7-509-053	P-Binder:Cover H-Reg. S Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-054	P-Binder: Cover H-Reg. S Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-055	P-Binder: Cover H-Reg. L Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-509-056	P-Binder: Cover H-Reg. L Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-509-057	P-Binder:Entrance Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-058	P-Binder:Entrance Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-059	P-Binder:Sign. Path:Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-060	P-Binder: Sign. Path:Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-061	P-Binder: Sign. Path:Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-062	P-Binder: Sign. Path:Sn 2:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-063	P-Binder:Timing Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-064	P-Binder:Timing Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-065	P-Binder:Stck Tray Emp. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-066	P-Binder: Stck Tray Emp. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-067	P-Binder:SG Paper Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-068	P-Binder:Cover Path: Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-069	P-Binder: Cover Path: Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]

7-509-070	P-Binder: Cover Path: Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-071	P-Binder: Cover Path: Sn 2:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-072	P-Binder:Cover Reg. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-073	P-Binder: Cover Reg. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-074	P-Binder:Paper Size Mismatch(Portrait)	C*	[0000 to 9999 / **0** / 1/step]
7-509-075	P-Binder:Cover Size Short	C*	[0000 to 9999 / **0** / 1/step]
7-509-076	P-Binder:Cutting Width Over	C*	[0000 to 9999 / **0** / 1/step]
7-509-077	P-Binder:finishin Height Over	C*	[0000 to 9999 / **0** / 1/step]
7-509-078	P-Binder:Interposer Paper Size Mismatch	C*	[0000 to 9999 / **0** / 1/step]
7-509-079	P-Binder:Com. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-080	P-Binder:Com. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-081	P-Binder:U-Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-082	P-Binder:U-Tray P-up Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-083	P-Binder:L-Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-084	P-Binder: L -Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-085	P-Binder:Trans. Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-086	P-Binder:Trans. Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-087	P-Binder:Trans. Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-088	P-Binder:Trans. Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-089	P-Binder:Transport Sn:Late	C*	[0000 to 9999 / **0** / 1/step]

7-509-090	P-Binder:Transport Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-095	P-Binder:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-509-097	P-Binder:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-098	P-Binder:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-509-099	P-Binder:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-509-100	P-Binder:Entrance Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-101	P-Binder: Entrance Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-102	P-Binder:Transport Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-103	P-Binder:Exit Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-509-104	P-Binder:Exit Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-509-105	P-Binder:Pre-punch Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-106	P-Binder:After-Punch Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-107	P-Binder:P TE Detect Sn Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-108	P-Binder:P LE Detect Sn Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-109	P-Binder:Ring Error Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-110	P-Binder:Binder Unit Set Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-112	P-Binder:Output Belt 1 Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-113	P-Binder: Output Belt 2 Jam	C*	[0000 to 9999 / **0** / 1/step]
7-509-114	P-Binder:Punch Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-115	P-Binder:Shutter Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-116	P-Binder: Line-up Pin M Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-117	P-Binder: Paper Jog Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-118	P-Binder: Line-up Pin Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-119	P-Binder: Clamp Motor Error	C*	[0000 to 9999 / **0** / 1/step]

7-509-120	P-Binder:50/100 Adj. M Error	C*	[0000 to 9999 / **0** / 1/step]
7-509-121	P-Binder: Out-Belt Rot. M Error	C*	[0000 to 9999 / **0** / 1/step]

7514	**[Paper Jam Count by Location]** Displays the total number of jams according to the location where jams were detected.		
7-514-001	At Power On	C*	[0000 to 9999 / **0** / 1/step]
7-514-003	F1 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-004	F2 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-005	F3 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-006	LCTF1 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-007	LCTF2 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-008	LCTF3 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-009	LCTF4 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-010	F1 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-011	F2 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-012	F3 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-013	LCTF1 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-014	LCTF2 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-015	LCTF3 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-016	LCTF4 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-017	Vertical transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-018	Main Unit Relay Sensor<Feed>	C*	[0000 to 9999 / **0** / 1/step]
7-514-019	Main Unit Relay Sensor<Duplex>	C*	[0000 to 9999 / **0** / 1/step]
7-514-020	Registration Entrance Sensor	C*	[0000 to 9999 / **0** / 1/step]

7-514-021	LCTF1 Vertical Transport Sn:A4 LCT	C*	[0000 to 9999 / **0** / 1/step]
7-514-022	LCTF1 Vertical Transport Sn:1	C*	[0000 to 9999 / **0** / 1/step]
7-514-023	LCTF1 Vertical Transport Sn:2	C*	[0000 to 9999 / **0** / 1/step]
7-514-024	LCTF2 Vertical Transport Sn:	C*	[0000 to 9999 / **0** / 1/step]
7-514-025	LCTF3 Vertical Transport Sn:	C*	[0000 to 9999 / **0** / 1/step]
7-514-026	LCT Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-027	LCT Relay Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-028	Registration Timing Sensor<Main Unit>	C*	[0000 to 9999 / **0** / 1/step]
7-514-029	Registration timing Sensor<LCT>	C*	[0000 to 9999 / **0** / 1/step]
7-514-030	Late Jam	C*	[0000 to 9999 / **0** / 1/step]
7-514-031	PTR Timing Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-032	TH Transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-514-033	Fusing Entrance Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-034	Fusing Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-035	Exit JG Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-036	Paper Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-038	Paper Exit Inverter Sensor<OUT>	C*	[0000 to 9999 / **0** / 1/step]
7-514-039	Paper Exit Inverter Sensor<Duplex>	C*	[0000 to 9999 / **0** / 1/step]
7-514-040	Duplex Inverter Sensor<IN>	C*	[0000 to 9999 / **0** / 1/step]
7-514-041	Duplex Inverter Sensor<OUT>	C*	[0000 to 9999 / **0** / 1/step]

7-514-042	Duplex transport Sn 1	C*	[0000 to 9999 / **0** / 1/step]
7-514-043	Duplex transport Sn 2	C*	[0000 to 9999 / **0** / 1/step]
7-514-044	Duplex transport Sn 3	C*	[0000 to 9999 / **0** / 1/step]
7-514-045	Duplex transport Sn 4	C*	[0000 to 9999 / **0** / 1/step]
7-514-046	Duplex transport Sn 5	C*	[0000 to 9999 / **0** / 1/step]
7-514-047	Duplex transport Sn 6	C*	[0000 to 9999 / **0** / 1/step]
7-514-048	Duplex Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-049	Skew	C*	[0000 to 9999 / **0** / 1/step]
7-514-050	Shift	C*	[0000 to 9999 / **0** / 1/step]
7-514-053	F1 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-054	F2 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-055	F3 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-056	LCTF1 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-057	LCTF2 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-058	LCTF3 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-059	LCTF4 Paper Feed Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-060	F1 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-061	F2 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-062	F3 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-063	LCTF1 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-064	LCTF2 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-065	LCTF3 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-066	LCTF4 Transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-067	Vertical transport Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-068	Main Unit Relay Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-070	Registration Entrance Sensor	C*	[0000 to 9999 / **0** / 1/step]

7-514-071	LCTF Vertical transport Sn:A4 LCT	C*	[0000 to 9999 / **0** / 1/step]
7-514-072	LCTF Vertical transport Sn:1	C*	[0000 to 9999 / **0** / 1/step]
7-514-073	LCTF Vertical transport Sn:2	C*	[0000 to 9999 / **0** / 1/step]
7-514-074	LCTF Vertical transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-514-075	LCTF3 Vertical Transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-514-076	LCT Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-077	LCT Relay Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-078	Registration Timing Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-080	Leading Edge Registration Corr	C*	[0000 to 9999 / **0** / 1/step]
7-514-081	PTR timing Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-082	TH Transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-514-083	Fusing Entrance Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-084	Fusing Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-085	Exit JG Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-086	Paper Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-087	Paper Exit Inverter Senser<IN>	C*	[0000 to 9999 / **0** / 1/step]
7-514-089	Paper Exit Inverter Senser<Duplex>	C*	[0000 to 9999 / **0** / 1/step]
7-514-090	Duplex Inverter Sensor<IN>	C*	[0000 to 9999 / **0** / 1/step]
7-514-091	Duplex Inverter Sensor<OUT>	C*	[0000 to 9999 / **0** / 1/step]
7-514-092	Duplex Transport Sn 1	C*	[0000 to 9999 / **0** / 1/step]
7-514-093	Duplex Transport Sn 2	C*	[0000 to 9999 / **0** / 1/step]
7-514-094	Duplex Transport Sn 3	C*	[0000 to 9999 / **0** / 1/step]

7-514-095	Duplex Transport Sn 4	C*	[0000 to 9999 / **0** / 1/step]
7-514-096	Duplex Transport Sn 5	C*	[0000 to 9999 / **0** / 1/step]
7-514-097	Duplex Transport Sn 6	C*	[0000 to 9999 / **0** / 1/step]
7-514-098	Duplex Exit Sensor	C*	[0000 to 9999 / **0** / 1/step]
7-514-099	Double-feed Sensor:Detection	C*	[0000 to 9999 / **0** / 1/step]
7-514-100	FIN:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-101	FIN:Abnormal Signal	C*	[0000 to 9999 / **0** / 1/step]
7-514-102	FIN:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-103	FIN:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-104	FIN:Entrance Sensor(Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-105	FIN:Entrance Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-106	FIN:Proof Exit Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-107	FIN:Proof Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-108	FIN: Shift Tray Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-109	FIN:Shift Tray Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-110	FIN: Staple tray Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-111	FIN: Staple tray Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-112	FIN: Staple Tray Paper Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-113	FIN: Staple Tray Paper Sn(Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-114	FIN: Belt Feed Out Sensor	C*	[0000 to 9999 / **0** / 1/step]

7-514-115	FIN: Booklet Stapler Exit (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-116	FIN: Booklet Stapler Exit (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-117	FIN: Booklet Stapler Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-118	FIN: Booklet Stapler Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-119	FIN:Transport	C*	[0000 to 9999 / **0** / 1/step]
7-514-120	FIN:Shift Tray Lift Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-121	FIN:Jogger Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-122	FIN:Shift Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-123	FIN:Staple Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-124	FIN:Stack Feed-Out Belt Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-125	FIN:Punch Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-126	FIN:Jogger	C*	[0000 to 9999 / **0** / 1/step]
7-514-127	FIN:Pre-stack Transport Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-128	FIN:Stack Transport	C*	[0000 to 9999 / **0** / 1/step]
7-514-129	FIN:Booklet	C*	[0000 to 9999 / **0** / 1/step]
7-514-130	FIN:Folder	C*	[0000 to 9999 / **0** / 1/step]
7-514-150	Interposer:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-151	Interposer:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-514-152	Interposer:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-153	Interposer:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-154	Interposer:1st Paper Feed Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]

7-514-155	Interposer: 1st Paper Feed Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-156	Interposer:2nd Paper Feed Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-157	Interposer: 2nd Paper Feed Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-158	Interposer:1st pullout Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-159	Interposer:1st pullout Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-160	Interposer:2nd pullout Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-161	Interposer: 2nd pullout Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-162	Interposer:1st Vertical Trans Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-163	Interposer: 1st Vertical Trans Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-164	Interposer: 2nd Vertical Trans Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-165	Interposer: 2nd Vertical Trans Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-166	Interposer:Paper Exit Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-167	Interposer: Paper Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-168	Interposer:Entrance Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-169	Interposer:Entrance Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-170	Interposer:Exit Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]

7-514-171	Interposer: Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-172	Interposer:Set Timing Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-173	Interposer:1st Lift Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-174	Interposer:2nd Lift Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-175	Interposer:1st Pick-up Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-176	Interposer:2nd Pick-up Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-190	Plockmatic:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-191	Plockmatic:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-514-192	Plockmatic:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-193	Plockmatic:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-194	FIN:Booklet Maker Jam	C*	[0000 to 9999 / **0** / 1/step]
7-514-195	Punch:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-196	Punch:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-514-197	Punch:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-198	Punch:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-199	Punch:GBC Punch Unit	C*	[0000 to 9999 / **0** / 1/step]
7-514-200	Cutter:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-201	Cutter:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-514-202	Cutter:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-203	Cutter:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-204	Cutter:entrance Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-205	Cutter:Entrance Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-206	Cutter:Skew Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]

7-514-207	Cutter:entrance Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-208	Cutter:entrance Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-209	Cutter:Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-514-210	Cutter:Cutter Motro Lock	C*	[0000 to 9999 / **0** / 1/step]
7-514-211	Cutter:Cut Position Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-212	Cutter:Press Roller	C*	[0000 to 9999 / **0** / 1/step]
7-514-213	Cutter:Press Stopper Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-214	Cutter:Tray Motor	C*	[0000 to 9999 / **0** / 1/step]
7-514-250	Multi-Fold:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-514-251	Multi-Fold:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-514-252	Multi-Fold:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-514-253	Multi-Fold:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-514-254	Multi-Fold:Entrance Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-514-255	Multi-Fold:Entrance Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]

7515	**[Total Original Jam Detection]** Displays the number of original jams detected.		
7-515-001	At Power On	C*	[0000 to 9999 / **0** / 1/step]
7-515-013	Separation Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-515-014	Skew Correction Sensor: On	C*	[0000 to 9999 / **0** / 1/step]
7-515-015	Scanning Entrance Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-515-016	Registration Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-515-017	Original Exit Sensor:On	C*	[0000 to 9999 / **0** / 1/step]
7-515-063	Separation Sensor:On	C*	[0000 to 9999 / **0** / 1/step]

7-515-064	Skew Correction Sn:Off	C*	[0000 to 9999 / **0** / 1/step]
7-515-065	Scanning Entrance Sn:Off	C*	[0000 to 9999 / **0** / 1/step]
7-515-066	Registration Sensor:Off	C*	[0000 to 9999 / **0** / 1/step]
7-515-067	Original Exit Sensor:Off	C*	[0000 to 9999 / **0** / 1/step]
7-515-099	Double-feed Detection	C*	[0000 to 9999 / **0** / 1/step]
7-515-239	Original Pull	C*	[0000 to 9999 / **0** / 1/step]

7516	**[Jam Paper Size Cnt]** Displays the number of jams according to the paper size.		
7-516-005	A4 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-006	A5 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-014	B5 LEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-038	LT LEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-044	HLT LEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-132	A3 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-133	A4 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-134	A5 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-141	B4 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-142	B5 SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-160	DLT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-164	LG SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-166	LT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-172	HLT SEF	C*	[0000 to 9999 / **0** / 1/step]
7-516-255	Others	C*	[0000 to 9999 / **0** / 1/step]

7519	**[Paper Jam Count by Location]** Displays the total number of jams according to the location where jams were detected.		
7-519-001	Multi-Fold:Top Tray Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-002	Multi-Fold: Top Tray Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-003	Multi-Fold:Horizontal pat Exit Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-004	Multi-Fold: Horizontal pat Exit Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-005	Multi-Fold:1st Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-006	Multi-Fold: 1st Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-007	Multi-Fold:2nd Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-008	Multi-Fold: 2nd Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-009	Multi-Fold:3rd Stopper Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-010	Multi-Fold: 3rd Stopper Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-011	Multi-Fold:Registration Corr	C*	[0000 to 9999 / **0** / 1/step]
7-519-012	Multi-Fold:Top Tray Transport Sn	C*	[0000 to 9999 / **0** / 1/step]
7-519-013	Multi-Fold:Entrance JG Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-014	Multi-Fold:1st Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]

7-519-015	Multi-Fold: 2nd Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-016	Multi-Fold: 3rd Stopper Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-017	Multi-Fold:Dynamic Roller Lift Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-018	Multi-Fold:Regist Roller Release Mtr Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-019	Multi-Fold:Fold Plate Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-020	Multi-Fold:Jogger Fence Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-021	Multi-Fold:Direct-Send JG Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-022	Multi-Fold:FM6 Pawl Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-045	P-Binder:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-519-046	P-Binder:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-047	P-Binder:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-519-048	P-Binder:Internal Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-049	P-Binder:Paper Exit Sensor (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-050	P-Binder: Paper Exit Sensor (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-051	P-Binder:Cover Regist Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-052	P-Binder:Cover Regist Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-053	P-Binder:Cover H-Reg. S Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]

7-519-054	P-Binder: Cover H-Reg. S Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-055	P-Binder: Cover H-Reg. L Sn (Late)	C*	[0000 to 9999 / **0** / 1/step]
7-519-056	P-Binder: Cover H-Reg. L Sn (Stay on)	C*	[0000 to 9999 / **0** / 1/step]
7-519-057	P-Binder:Entrance Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-058	P-Binder:Entrance Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-059	P-Binder:Sign. Path:Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-060	P-Binder: Sign. Path:Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-061	P-Binder: Sign. Path:Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-062	P-Binder: Sign. Path:Sn 2:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-063	P-Binder:Timing Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-064	P-Binder:Timing Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-065	P-Binder:Stck Tray Emp. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-066	P-Binder: Stck Tray Emp. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-067	P-Binder:SG Paper Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-068	P-Binder:Cover Path: Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-069	P-Binder: Cover Path: Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-070	P-Binder: Cover Path: Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]

7-519-071	P-Binder: Cover Path: Sn 2:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-072	P-Binder:Cover Reg. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-073	P-Binder: Cover Reg. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-074	P-Binder:Paper Size Mismatch(Portrait)	C*	[0000 to 9999 / **0** / 1/step]
7-519-075	P-Binder:Cover Size Short	C*	[0000 to 9999 / **0** / 1/step]
7-519-076	P-Binder:Cutting Width Over	C*	[0000 to 9999 / **0** / 1/step]
7-519-077	P-Binder:finishin Height Over	C*	[0000 to 9999 / **0** / 1/step]
7-519-078	P-Binder:Interposer Paper Size Mismatch	C*	[0000 to 9999 / **0** / 1/step]
7-519-079	P-Binder:Com. Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-080	P-Binder:Com. Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-081	P-Binder:U-Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-082	P-Binder:U-Tray P-up Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-083	P-Binder:L-Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-084	P-Binder: L -Tray P-up Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-085	P-Binder:Trans. Sn 1:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-086	P-Binder:Trans. Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-087	P-Binder:Trans. Sn 2:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-088	P-Binder:Trans. Sn 1:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-089	P-Binder:Transport Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-090	P-Binder:Transport Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]

7-519-095	P-Binder:Door Open	C*	[0000 to 9999 / **0** / 1/step]
7-519-097	P-Binder:Job Data Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-098	P-Binder:Unusable paper	C*	[0000 to 9999 / **0** / 1/step]
7-519-099	P-Binder:Internal error	C*	[0000 to 9999 / **0** / 1/step]
7-519-100	P-Binder:Entrance Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-101	P-Binder: Entrance Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-102	P-Binder:Transport Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-103	P-Binder:Exit Sn:Late	C*	[0000 to 9999 / **0** / 1/step]
7-519-104	P-Binder:Exit Sn:Stay on	C*	[0000 to 9999 / **0** / 1/step]
7-519-105	P-Binder:Pre-punch Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-106	P-Binder:After-Punch Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-107	P-Binder:P TE Detect Sn Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-108	P-Binder:P LE Detect Sn Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-109	P-Binder:Ring Error Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-110	P-Binder:Binder Unit Set Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-112	P-Binder:Output Belt 1 Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-113	P-Binder: Output Belt 2 Jam	C*	[0000 to 9999 / **0** / 1/step]
7-519-114	P-Binder:Punch Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-115	P-Binder:Shutter Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-116	P-Binder: Line-up Pin M Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-117	P-Binder: Paper Jog Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-118	P-Binder: Line-up Pin Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-119	P-Binder: Clamp Motor Error	C*	[0000 to 9999 / **0** / 1/step]
7-519-120	P-Binder:50/100 Adj. M Error	C*	[0000 to 9999 / **0** / 1/step]

7-519-121	P-Binder: Out-Belt Rot. M Error	C*	[0000 to 9999 / **0** / 1/step]

7520	**[Update Log]** Displays error history of firmware update in the past 10 times. [-001] is the latest error history, and [-010] is the most old error history.		
7-520-001	ErrorRecord1	C*	[1 to 255 / **0** / 1/step]
7-520-002	ErrorRecord2	C*	[1 to 255 / **0** / 1/step]
7-520-003	ErrorRecord3	C*	[1 to 255 / **0** / 1/step]
7-520-004	ErrorRecord4	C*	[1 to 255 / **0** / 1/step]
7-520-005	ErrorRecord5	C*	[1 to 255 / **0** / 1/step]
7-520-006	ErrorRecord6	C*	[1 to 255 / **0** / 1/step]
7-520-007	ErrorRecord7	C*	[1 to 255 / **0** / 1/step]
7-520-008	ErrorRecord8	C*	[1 to 255 / **0** / 1/step]
7-520-009	ErrorRecord9	C*	[1 to 255 / **0** / 1/step]
7-520-010	ErrorRecord10	C*	[1 to 255 / **0** / 1/step]

7617	**[PM Parts Counter Display]** -		
7-617-001	Normal	C*	[0000 to 9999999 / **0** / 1/step]
7-617-002	Df	C*	[0000 to 9999999 / **0** / 1/step]

7618	**[PM Parts Counter Reset]** -		
7-618-001	Normal	C*	[- / **-** / -] [Execute] Clears the counter of SP7617-001. Push [Execute] to clear the parts replacement alarm counter for the main machine.

7-618-002	Df	C*	[- / **-** / -] [Execute] Clears the counter of SP7617-002. Push [Execute] to clear the parts replacement alarm counter for the ADF.

7621	**[PM Counter]** Displays the PM counter.		
7-621-003	Development Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-621-007	Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-008	Coating Bar	E	[0 to 99999999 / **0** / 1/step]
7-621-009	Apply Blade	E	[0 to 99999999 / **0** / 1/step]
7-621-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1/step]
7-621-012	Charger Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-013	Charger Grid	E	[0 to 99999999 / **0** / 1/step]
7-621-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1/step]
7-621-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1/step]
7-621-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-621-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-621-018	Photo Conductor	E	[0 to 99999999 / **0** / 1/step]
7-621-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1/step]
7-621-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1/step]
7-621-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]

7-621-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-621-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1/step]
7-621-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1/step]
7-621-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1/step]
7-621-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-028	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-621-029	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1/step]
7-621-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1/step]
7-621-033	#Fusing Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-034	Fusing Belt	E	[0 to 99999999 / **0** / 1/step]
7-621-035	Hot Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-036	Pressure Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1/step]
7-621-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-039	Web Roll	E	[0 to 99999999 / **0** / 1/step]
7-621-040	Web Cleaning Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-041	Dust Filter (Right)	E	[0 to 99999999 / **0** / 1/step]
7-621-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1/step]
7-621-050	#Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-051	Pick-up Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-621-052	Feed Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-621-053	Separation Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]

7-621-054	#Tray2 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-055	Pick-up Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-056	Feed Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-057	Separation Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-058	#Tray3 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-059	Pick-up Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-621-060	Feed Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-621-061	Separation Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-621-100	#A3LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-101	A3LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-102	A3LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-103	A3LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-104	#A3LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-105	A3LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-106	A3LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-107	A3LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-108	#A3LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-109	A3LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-110	A3LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-111	A3LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-112	#A4LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]

7-621-113	A4LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-114	A4LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-115	A4LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-621-116	#A4LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-117	A4LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-118	A4LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-119	A4LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-621-120	#A4LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-121	A4LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-122	A4LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-123	A4LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-621-124	#Bypass Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-125	Bypass Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-126	Bypass Feed Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-127	Bypass Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-128	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-621-129	Pick-up Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-621-130	Feed Belt-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-621-131	Separation Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-621-132	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]

7-621-133	Pick-up Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-134	Feed Belt-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-135	Separation Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-621-136	#ADF	E	[0 to 99999999 / **0** / 1/step]
7-621-137	ADF Feed Belt	E	[0 to 99999999 / **0** / 1/step]
7-621-138	ADF Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-139	ADF Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-146	Trimming Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-147	Trimmings Catcher	E	[0 to 99999999 / **0** / 1/step]
7-621-148	Rotation Clamp Pad	E	[0 to 99999999 / **0** / 1/step]
7-621-149	Stack Rotation Vibrating Plate	E	[0 to 99999999 / **0** / 1/step]
7-621-151	Switchback Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-152	Ripple Idle Roller (Center)	E	[0 to 99999999 / **0** / 1/step]
7-621-153	Ripple Idle Rollers	E	[0 to 99999999 / **0** / 1/step]
7-621-154	TE Press Roller (large)	E	[0 to 99999999 / **0** / 1/step]
7-621-155	TE Press Roller (Small)	E	[0 to 99999999 / **0** / 1/step]
7-621-157	Spine Fold Harness (right)	E	[0 to 99999999 / **0** / 1/step]
7-621-158	Spine Fold Harness (left)	E	[0 to 99999999 / **0** / 1/step]
7-621-159	Signature Transport Harness	E	[0 to 99999999 / **0** / 1/step]
7-621-161	Stack Rotation Up-down Harness	E	[0 to 99999999 / **0** / 1/step]
7-621-162	Stack Rotation Grip Harness	E	[0 to 99999999 / **0** / 1/step]
7-621-163	Stack Rotate Press LED Harness	E	[0 to 99999999 / **0** / 1/step]
7-621-165	Pick-up Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-621-166	Separation Roller Upper	E	[0 to 99999999 / **0** / 1/step]

7-621-167	Feed Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-621-169	Pick-up Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-621-170	Separation Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-621-171	Feed Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-621-173	Blade Cradle	E	[0 to 99999999 / **0** / 1/step]
7-621-174	Switchback Torque Limiter	E	[0 to 99999999 / **0** / 1/step]
7-621-175	Deodorant Filter (Upper&Lower)	E	[0 to 99999999 / **0** / 1/step]
7-621-176	Cover Feed Switchback Roller	E	[0 to 99999999 / **0** / 1/step]
7-621-177	Jogger Motor	E	[0 to 99999999 / **0** / 1/step]
7-621-178	Main Grip Motor	E	[0 to 99999999 / **0** / 1/step]
7-621-179	Signature Thickness Sensor	E	[0 to 99999999 / **0** / 1/step]
7-621-180	Signature Rotate Torque Diode	E	[0 to 99999999 / **0** / 1/step]
7-621-181	Trimmings Buffer Motor	E	[0 to 99999999 / **0** / 1/step]
7-621-182	Signature Press Trq Lmt Clutch	E	[0 to 99999999 / **0** / 1/step]
7-621-184	Ball Screw Unit	E	[0 to 99999999 / **0** / 1/step]
7-621-185	Sign/Stacking Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-621-186	Horizontal/Reg Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-621-187	Booklet Stack Drawer Connector	E	[0 to 99999999 / **0** / 1/step]
7-621-188	Edge Press Plate Sproket Ass'y	E	[0 to 99999999 / **0** / 1/step]

7622	**[Reset]** Use this SP to reset PM counters.		
7-622-003	Development Unit	E	[- / - / -] [Execute]
7-622-005	#Cleaning Unit	E	[- / - / -] [Execute]
7-622-006	Cleaning Blade	E	[- / - / -] [Execute]
7-622-007	Brush Roller	E	[- / - / -] [Execute]
7-622-008	Coating Bar	E	[- / - / -] [Execute]
7-622-009	Apply Blade	E	[- / - / -] [Execute]
7-622-010	Joint:Cleaning Unit	E	[- / - / -] [Execute]
7-622-011	Gear:Cleaning	E	[- / - / -] [Execute]
7-622-012	Charger Unit	E	[- / - / -] [Execute]
7-622-013	Charger Grid	E	[- / - / -] [Execute]
7-622-014	Corona Wire Charger	E	[- / - / -] [Execute]
7-622-015	Cushion Corona Wire	E	[- / - / -] [Execute]
7-622-016	Grid Cleaner Assay	E	[- / - / -] [Execute]
7-622-017	Corotoron Wire Cleaner Assay	E	[- / - / -] [Execute]

7-622-018	Photo Conductor	E	[- / - / -] [Execute]
7-622-019	ITB (Intermediate Transfer Belt)	E	[- / - / -] [Execute]
7-622-020	Transfer Roller:ITB	E	[- / - / -] [Execute]
7-622-021	#ITB Cleaning Unit	E	[- / - / -] [Execute]
7-622-022	ITB Cleaning Blade	E	[- / - / -] [Execute]
7-622-023	ITB Lubricant Brush Roller	E	[- / - / -] [Execute]
7-622-024	ITB Lubricant bar	E	[- / - / -] [Execute]
7-622-025	ITB Lubricant blade	E	[- / - / -] [Execute]
7-622-026	#PTR Unit(Paper Transfer Unit)	E	[- / - / -] [Execute]
7-622-027	PTR Lubricant Brush Roller	E	[- / - / -] [Execute]
7-622-028	PTR Cleaning Blade	E	[- / - / -] [Execute]
7-622-029	PTR Lubricant bar	E	[- / - / -] [Execute]
7-622-030	Paper Transfer Discharge Unit	E	[- / - / -] [Execute]
7-622-031	PTR (Paper Transfer Roller)	E	[- / - / -] [Execute]
7-622-033	#Fusing Unit	E	[- / - / -] [Execute]

7-622-034	Fusing Belt	E	[- / - / -] [Execute]
7-622-035	Hot Roller	E	[- / - / -] [Execute]
7-622-036	Pressure Roller	E	[- / - / -] [Execute]
7-622-037	Shaft Bearing:Press Roll	E	[- / - / -] [Execute]
7-622-038	#Fusing Cleaning Unit	E	[- / - / -] [Execute]
7-622-039	Web Roll	E	[- / - / -] [Execute]
7-622-040	Web Cleaning Roller	E	[- / - / -] [Execute]
7-622-041	Dust Filter (Main)	E	[- / - / -] [Execute]
7-622-042	Dust Filter (Heat Exhaust Duct)	E	[- / - / -] [Execute]
7-622-050	#Tray1 Roller Assembly	E	[- / - / -] [Execute]
7-622-051	Pick-up Roller-Tray1	E	[- / - / -] [Execute]
7-622-052	Feed Roller-Tray1	E	[- / - / -] [Execute]
7-622-053	Separation Roller-Tray1	E	[- / - / -] [Execute]
7-622-054	#Tray2 Roller Assembly	E	[- / - / -] [Execute]
7-622-055	Pick-up Roller-Tray2	E	[- / - / -] [Execute]

7-622-056	Feed Roller-Tray2	E	[- / - / -] [Execute]
7-622-057	Separation Roller-Tray2	E	[- / - / -] [Execute]
7-622-058	#Tray3 Roller Assembly	E	[- / - / -] [Execute]
7-622-059	Pick-up Roller-Tray3	E	[- / - / -] [Execute]
7-622-060	Feed Roller-Tray3	E	[- / - / -] [Execute]
7-622-061	Separation Roller-Tray3	E	[- / - / -] [Execute]
7-622-100	#A3LCT Tray4 Roller Assembly	E	[- / - / -] [Execute]
7-622-101	A3LCT Pick-up Roller-Tray4	E	[- / - / -] [Execute]
7-622-102	A3LCT Feed Roller-Tray4	E	[- / - / -] [Execute]
7-622-103	A3LCT Separation Roller-Tray4	E	[- / - / -] [Execute]
7-622-104	#A3LCT Tray5 Roller Assembly	E	[- / - / -] [Execute]
7-622-105	A3LCT Pick-up Roller-Tray5	E	[- / - / -] [Execute]
7-622-106	A3LCT Feed Roller-Tray5	E	[- / - / -] [Execute]
7-622-107	A3LCT Separation Roller-Tray5	E	[- / - / -] [Execute]
7-622-108	#A3LCT Tray6 Roller Assembly	E	[- / - / -] [Execute]

7-622-109	A3LCT Pick-up Roller-Tray6	E	[- / - / -] [Execute]
7-622-110	A3LCT Feed Roller-Tray6	E	[- / - / -] [Execute]
7-622-111	A3LCT Separation Roller-Tray6	E	[- / - / -] [Execute]
7-622-112	#A4LCT Tray4 Roller Assembly	E	[- / - / -] [Execute]
7-622-113	A4LCT Pick-up Roller-Tray4	E	[- / - / -] [Execute]
7-622-114	A4LCT Feed Roller-Tray4	E	[- / - / -] [Execute]
7-622-115	A4LCT Separation Roller-Tray4	E	[- / - / -] [Execute]
7-622-116	#A4LCT Tray5 Roller Assembly	E	[- / - / -] [Execute]
7-622-117	A4LCT Pick-up Roller-Tray5	E	[- / - / -] [Execute]
7-622-118	A4LCT Feed Roller-Tray5	E	[- / - / -] [Execute]
7-622-119	A4LCT Separation Roller-Tray5	E	[- / - / -] [Execute]
7-622-120	#A4LCT Tray6 Roller Assembly	E	[- / - / -] [Execute]
7-622-121	A4LCT Pick-up Roller-Tray6	E	[- / - / -] [Execute]
7-622-122	A4LCT Feed Roller-Tray6	E	[- / - / -] [Execute]
7-622-123	A4LCT Separation Roller-Tray6	E	[- / - / -] [Execute]

7-622-124	#Bypass Roller Assembly	E	[- / - / -] [Execute]
7-622-125	Bypass Pick-up Roller	E	[- / - / -] [Execute]
7-622-126	Bypass Feed Roller	E	[- / - / -] [Execute]
7-622-127	Bypass Separation Roller	E	[- / - / -] [Execute]
7-622-128	#Inseter Tray1 Roller Assembly	E	[- / - / -] [Execute]
7-622-129	Pick-up Roller-Inserter Tray1	E	[- / - / -] [Execute]
7-622-130	Feed Belt-Inserter Tray1	E	[- / - / -] [Execute]
7-622-131	Separation Roller-Inserter Tray1	E	[- / - / -] [Execute]
7-622-132	#Inseter Tray1 Roller Assembly	E	[- / - / -] [Execute]
7-622-133	Pick-up Roller-Inserter Tray2	E	[- / - / -] [Execute]
7-622-134	Feed Belt-Inserter Tray2	E	[- / - / -] [Execute]
7-622-135	Separation Roller-Inserter Tray2	E	[- / - / -] [Execute]
7-622-136	#ADF	E	[- / - / -] [Execute]
7-622-137	ADF Feed Belt	E	[- / - / -] [Execute]
7-622-138	ADF Separation Roller	E	[- / - / -] [Execute]

7-622-139	ADF Pick-up Roller	E	[- / - / -] [Execute]
7-622-146	Trimming Unit	E	[- / - / -] [Execute]
7-622-147	Trimmings Catcher	E	[- / - / -] [Execute]
7-622-148	Rotation Clamp Pad	E	[- / - / -] [Execute]
7-622-149	Stack Rotation Vibrating Plate	E	[- / - / -] [Execute]
7-622-151	Switchback Roller	E	[- / - / -] [Execute]
7-622-152	Ripple Idle Roller (Center)	E	[- / - / -] [Execute]
7-622-153	Ripple Idle Rollers	E	[- / - / -] [Execute]
7-622-154	TE Press Roller (large)	E	[- / - / -] [Execute]
7-622-155	TE Press Roller (Small)	E	[- / - / -] [Execute]
7-622-157	Spine Fold Harness (right)	E	[- / - / -] [Execute]
7-622-158	Spine Fold Harness (left)	E	[- / - / -] [Execute]
7-622-159	Signature Transport Harness	E	[- / - / -] [Execute]
7-622-161	Stack Rotation Up-down Harness	E	[- / - / -] [Execute]
7-622-162	Stack Rotation Grip Harness	E	[- / - / -] [Execute]

7-622-163	Stack Rotate Press LED Harness	E	[- / - / -] [Execute]
7-622-165	Pick-up Roller Upper	E	[- / - / -] [Execute]
7-622-166	Separation Roller Upper	E	[- / - / -] [Execute]
7-622-167	Feed Roller Upper	E	[- / - / -] [Execute]
7-622-169	Pick-up Roller Lower	E	[- / - / -] [Execute]
7-622-170	Separation Roller Lower	E	[- / - / -] [Execute]
7-622-171	Feed Roller Lower	E	[- / - / -] [Execute]
7-622-173	Blade Cradle	E	[- / - / -] [Execute]
7-622-174	Switchback Torque Limiter	E	[- / - / -] [Execute]
7-622-175	Deodorant Filter (Upper&Lower)	E	[- / - / -] [Execute]
7-622-176	Cover Feed Switchback Roller	E	[- / - / -] [Execute]
7-622-177	Jogger Motor	E	[- / - / -] [Execute]
7-622-178	Main Grip Motor	E	[- / - / -] [Execute]
7-622-179	Signature Thickness Sensor	E	[- / - / -] [Execute]
7-622-180	Signature Rotate Torque Diode	E	[- / - / -] [Execute]

7-622-181	Trimmings Buffer Motor	E	[- / **-** / -] [Execute]
7-622-182	Signature Press Trq Lmt Clutch	E	[- / **-** / -] [Execute]
7-622-184	Ball Screw Unit	E	[- / **-** / -] [Execute]
7-622-185	Sign/Stacking Discharge Brush	E	[- / **-** / -] [Execute]
7-622-186	Horizontal/Reg Discharge Brush	E	[- / **-** / -] [Execute]
7-622-187	Booklet Stack Drawer Connector	E	[- / **-** / -] [Execute]

7623	**[Standard Value]** -		
7-623-003	Development Unit	E	[0 to 99999999 / **860000** / 1/step]
7-623-005	#Cleaning Unit	E	[0 to 99999999 / **640000** / 1/step]
7-623-006	Cleaning Blade	E	[0 to 99999999 / **640000** / 1/step]
7-623-007	Brush Roller	E	[0 to 99999999 / **640000** / 1/step]
7-623-008	Coating Bar	E	[0 to 99999999 / **640000** / 1/step]
7-623-009	Apply Blade	E	[0 to 99999999 / **640000** / 1/step]
7-623-010	Joint:Cleaning Unit	E	[0 to 99999999 / **640000** / 1/step]
7-623-011	Gear:Cleaning	E	[0 to 99999999 / **1280000** / 1/step]
7-623-012	Charger Unit	E	[0 to 99999999 / **1000000** / 1/step]
7-623-013	Charger Grid	E	[0 to 99999999 / **1000000** / 1/step]
7-623-014	Corona Wire Charger	E	[0 to 99999999 / **1000000** / 1/step]
7-623-015	Cushion Corona Wire	E	[0 to 99999999 / **1000000** / 1/step]
7-623-016	Grid Cleaner Assay	E	[0 to 99999999 / **1000000** / 1/step]

7-623-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **1000000** / 1/step]
7-623-018	Photo Conductor	E	[0 to 99999999 / **2500000** / 1/step]
7-623-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **2400000** / 1/step]
7-623-020	Transfer Roller:ITB	E	[0 to 99999999 / **1350000** / 1/step]
7-623-021	#ITB Cleaning Unit	E	[0 to 99999999 / **640000** / 1/step]
7-623-022	ITB Cleaning Blade	E	[0 to 99999999 / **640000** / 1/step]
7-623-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **640000** / 1/step]
7-623-024	ITB Lubricant bar	E	[0 to 99999999 / **640000** / 1/step]
7-623-025	ITB Lubricant blade	E	[0 to 99999999 / **640000** / 1/step]
7-623-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **640000** / 1/step]
7-623-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **640000** / 1/step]
7-623-028	PTR Cleaning Blade	E	[0 to 99999999 / **640000** / 1/step]
7-623-029	PTR Lubricant bar	E	[0 to 99999999 / **640000** / 1/step]
7-623-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **640000** / 1/step]
7-623-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **640000** / 1/step]
7-623-033	#Fusing Unit	E	[0 to 99999999 / **1100000** / 1/step]
7-623-034	Fusing Belt	E	[0 to 99999999 / **1100000** / 1/step]
7-623-035	Hot Roller	E	[0 to 99999999 / **1100000** / 1/step]
7-623-036	Pressure Roller	E	[0 to 99999999 / **1100000** / 1/step]
7-623-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **1100000** / 1/step]
7-623-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **750000** / 1/step]
7-623-039	Web Roll	E	[0 to 99999999 / **750000** / 1/step]
7-623-040	Web Cleaning Roller	E	[0 to 99999999 / **3190000** / 1/step]

7-623-041	Dust Filter (Main)	E	[0 to 99999999 / **640000** / 1/step]
7-623-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **1000000** / 1/step]
7-623-050	#Tray1 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-051	Pick-up Roller-Tray1	E	[0 to 99999999 / **1000000** / 1/step]
7-623-052	Feed Roller-Tray1	E	[0 to 99999999 / **1000000** / 1/step]
7-623-053	Separation Roller-Tray1	E	[0 to 99999999 / **1000000** / 1/step]
7-623-054	#Tray2 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-055	Pick-up Roller-Tray2	E	[0 to 99999999 / **1000000** / 1/step]
7-623-056	Feed Roller-Tray2	E	[0 to 99999999 / **1000000** / 1/step]
7-623-057	Separation Roller-Tray2	E	[0 to 99999999 / **1000000** / 1/step]
7-623-058	#Tray3 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-059	Pick-up Roller-Tray3	E	[0 to 99999999 / **1000000** / 1/step]
7-623-060	Feed Roller-Tray3	E	[0 to 99999999 / **1000000** / 1/step]
7-623-061	Separation Roller-Tray3	E	[0 to 99999999 / **1000000** / 1/step]
7-623-100	#A3LCT Tray4 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-101	A3LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-102	A3LCT Feed Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-103	A3LCT Separation Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-104	#A3LCT Tray5 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-105	A3LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]
7-623-106	A3LCT Feed Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]
7-623-107	A3LCT Separation Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]

7-623-108	#A3LCT Tray6 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-109	A3LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-110	A3LCT Feed Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-111	A3LCT Separation Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-112	#A4LCT Tray4 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-113	A4LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-114	A4LCT Feed Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-115	A4LCT Separation Roller-Tray4	E	[0 to 99999999 / **1000000** / 1/step]
7-623-116	#A4LCT Tray5 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-117	A4LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]
7-623-118	A4LCT Feed Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]
7-623-119	A4LCT Separation Roller-Tray5	E	[0 to 99999999 / **1000000** / 1/step]
7-623-120	#A4LCT Tray6 Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-121	A4LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-122	A4LCT Feed Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-123	A4LCT Separation Roller-Tray6	E	[0 to 99999999 / **1000000** / 1/step]
7-623-124	#Bypass Roller Assembly	E	[0 to 99999999 / **1000000** / 1/step]
7-623-125	Bypass Pick-up Roller	E	[0 to 99999999 / **1000000** / 1/step]
7-623-126	Bypass Feed Roller	E	[0 to 99999999 / **1000000** / 1/step]
7-623-127	Bypass Separation Roller	E	[0 to 99999999 / **1000000** / 1/step]

7-623-128	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-623-129	Pick-up Roller-Inserter Tray1	E	[0 to 99999999 / **60000** / 1/step]
7-623-130	Feed Belt-Inserter Tray1	E	[0 to 99999999 / **60000** / 1/step]
7-623-131	Separation Roller-Inserter Tray1	E	[0 to 99999999 / **60000** / 1/step]
7-623-132	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **60000** / 1/step]
7-623-133	Pick-up Roller-Inserter Tray2	E	[0 to 99999999 / **60000** / 1/step]
7-623-134	Feed Belt-Inserter Tray2	E	[0 to 99999999 / **60000** / 1/step]
7-623-135	Separation Roller-Inserter Tray2	E	[0 to 99999999 / **60000** / 1/step]
7-623-136	#ADF	E	[0 to 99999999 / **120000** / 1/step]
7-623-137	ADF Feed Belt	E	[0 to 99999999 / **120000** / 1/step]
7-623-138	ADF Separation Roller	E	[0 to 99999999 / **120000** / 1/step]
7-623-139	ADF Pick-up Roller	E	[0 to 99999999 / **40000** / 1/step]
7-623-146	Trimming Unit	E	[0 to 99999999 / **40000** / 1/step]
7-623-147	Trimmings Catcher	E	[0 to 99999999 / **40000** / 1/step]
7-623-148	Rotation Clamp Pad	E	[0 to 99999999 / **40000** / 1/step]
7-623-149	Stack Rotation Vibrating Plate	E	[0 to 99999999 / **40000** / 1/step]
7-623-151	Switchback Roller	E	[0 to 99999999 / **1000000** / 1/step]
7-623-152	Ripple Idle Roller (Center)	E	[0 to 99999999 / **1000000** / 1/step]
7-623-153	Ripple Idle Rollers	E	[0 to 99999999 / **1000000** / 1/step]
7-623-154	TE Press Roller (large)	E	[0 to 99999999 / **1000000** / 1/step]
7-623-155	TE Press Roller (Small)	E	[0 to 99999999 / **1000000** / 1/step]
7-623-157	Spine Fold Harness (right)	E	[0 to 99999999 / **120000** / 1/step]
7-623-158	Spine Fold Harness (left)	E	[0 to 99999999 / **120000** / 1/step]

7-623-159	Signature Transport Harness	E	[0 to 99999999 / **120000** / 1/step]
7-623-161	Stack Rotation Up-down Harness	E	[0 to 99999999 / **120000** / 1/step]
7-623-162	Stack Rotation Grip Harness	E	[0 to 99999999 / **120000** / 1/step]
7-623-163	Stack Rotate Press LED Harness	E	[0 to 99999999 / **120000** / 1/step]
7-623-165	Pick-up Roller Upper	E	[0 to 99999999 / **100000** / 1/step]
7-623-166	Separation Roller Upper	E	[0 to 99999999 / **100000** / 1/step]
7-623-167	Feed Roller Upper	E	[0 to 99999999 / **100000** / 1/step]
7-623-169	Pick-up Roller Lower	E	[0 to 99999999 / **100000** / 1/step]
7-623-170	Separation Roller Lower	E	[0 to 99999999 / **100000** / 1/step]
7-623-171	Feed Roller Lower	E	[0 to 99999999 / **100000** / 1/step]
7-623-173	Blade Cradle	E	[0 to 99999999 / **5500** / 1/step]
7-623-174	Switchback Torque Limiter	E	[0 to 99999999 / **1000000** / 1/step]
7-623-175	Deodorant Filter (Upper&Lower)	E	[0 to 99999999 / **1000000** / 1/step]
7-623-176	Cover Feed Switchback Roller	E	[0 to 99999999 / **1000000** / 1/step]
7-623-177	Jogger Motor	E	[0 to 99999999 / **15000000** / 1/step]
7-623-178	Main Grip Motor	E	[0 to 99999999 / **10000** / 1/step]
7-623-179	Signature Thickness Sensor	E	[0 to 99999999 / **50000** / 1/step]
7-623-180	Signature Rotate Torque Diode	E	[0 to 99999999 / **50000** / 1/step]
7-623-181	Trimmings Buffer Motor	E	[0 to 99999999 / **50000** / 1/step]
7-623-182	Signature Press Trq Lmt Clutch	E	[0 to 99999999 / **50000** / 1/step]
7-623-184	Ball Screw Unit	E	[0 to 99999999 / **200000** / 1/step]

7-623-185	Sign/Stacking Discharge Brush	E	[0 to 99999999 / **2000000** / 1/step]
7-623-186	Horizontal/Reg Discharge Brush	E	[0 to 99999999 / **2000000** / 1/step]
7-623-187	Booklet Stack Drawer Connector	E	[0 to 99999999 / **20000** / 1/step]
7-623-188	Edge Press Plate Sproket Ass'y	E	[0 to 99999999 / **150000** / 1/step]

7624	**[Parts Replacement Operation ON/OFF]** Selects the PM maintenance for each part.		
7-624-003	Development Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-005	#Cleaning Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-006	Cleaning Blade	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-007	Brush Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-008	Coating Bar	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-009	Apply Blade	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-010	Joint:Cleaning Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-011	Gear:Cleaning	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-012	Charger Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-013	Charger Grid	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-014	Corona Wire Charger	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-015	Cushion Corona Wire	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-016	Grid Cleaner Assay	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-017	Corotoron Wire Cleaner Assay	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-018	Photo Conductor	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-019	ITB (Intermediate Transfer Belt)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-020	Transfer Roller:ITB	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-021	#ITB Cleaning Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-022	ITB Cleaning Blade	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-023	ITB Lubricant Brush Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-024	ITB Lubricant bar	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-025	ITB Lubricant blade	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-026	#PTR Unit(Paper Transfer Unit)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-027	PTR Lubricant Brush Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-028	PTR Cleaning Blade	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-029	PTR Lubricant bar	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-030	Paper Transfer Discharge Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-031	PTR (Paper Transfer Roller)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-033	#Fusing Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-034	Fusing Belt	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-035	Hot Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-036	Pressure Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-037	Shaft Bearing:Press Roll	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-038	#Fusing Cleaning Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-039	Web Roll	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-040	Web Cleaning Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-041	Dust Filter (Main)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-042	Dust Filter (Heat Exhaust Duct)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-050	#Tray1 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-051	Pick-up Roller-Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-052	Feed Roller-Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-053	Separation Roller-Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-054	#Tray2 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-055	Pick-up Roller-Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-056	Feed Roller-Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-057	Separation Roller-Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-058	#Tray3 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-059	Pick-up Roller-Tray3	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-060	Feed Roller-Tray3	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-061	Separation Roller-Tray3	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-100	#A3LCT Tray4 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-101	A3LCT Pick-up Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-102	A3LCT Feed Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-103	A3LCT Separation Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-104	#A3LCT Tray5 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-105	A3LCT Pick-up Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-106	A3LCT Feed Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-107	A3LCT Separation Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-108	#A3LCT Tray6 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-109	A3LCT Pick-up Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-110	A3LCT Feed Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-111	A3LCT Separation Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-112	#A4LCT Tray4 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-113	A4LCT Pick-up Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-114	A4LCT Feed Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-115	A4LCT Separation Roller-Tray4	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-116	#A4LCT Tray5 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-117	A4LCT Pick-up Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-118	A4LCT Feed Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-119	A4LCT Separation Roller-Tray5	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-120	#A4LCT Tray6 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-121	A4LCT Pick-up Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-122	A4LCT Feed Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-123	A4LCT Separation Roller-Tray6	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-124	#Bypass Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-125	Bypass Pick-up Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-126	Bypass Feed Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-127	Bypass Separation Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-128	#Inseter Tray1 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-129	Pick-up Roller-Inserter Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-130	Feed Belt-Inserter Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-131	Separation Roller-Inserter Tray1	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-132	#Inseter Tray1 Roller Assembly	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-133	Pick-up Roller-Inserter Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-134	Feed Belt-Inserter Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-135	Separation Roller-Inserter Tray2	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-136	#ADF	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-137	ADF Feed Belt	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-138	ADF Separation Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-139	ADF Pick-up Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-146	Trimming Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-147	Trimmings Catcher	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-148	Rotation Clamp Pad	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-149	Stack Rotation Vibrating Plate	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-151	Switchback Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-152	Ripple Idle Roller (Center)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-153	Ripple Idle Rollers	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-154	TE Press Roller (large)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-155	TE Press Roller (Small)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-157	Spine Fold Harness (right)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-158	Spine Fold Harness (left)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-159	Signature Transport Harness	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-161	Stack Rotation Up-down Harness	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-162	Stack Rotation Grip Harness	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-163	Stack Rotate Press LED Harness	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-165	Pick-up Roller Upper	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-166	Separation Roller Upper	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-167	Feed Roller Upper	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-169	Pick-up Roller Lower	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-170	Separation Roller Lower	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-171	Feed Roller Lower	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-173	Blade Cradle	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-174	Switchback Torque Limiter	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-175	Deodorant Filter (Upper&Lower)	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-176	Cover Feed Switchback Roller	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-177	Jogger Motor	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-178	Main Grip Motor	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7-624-179	Signature Thickness Sensor	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-180	Signature Rotate Torque Diode	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-181	Trimmings Buffer Motor	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-182	Signature Press Trq Lmt Clutch	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-184	Ball Screw Unit	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-185	Sign/Stacking Discharge Brush	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-186	Horizontal/Reg Discharge Brush	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-187	Booklet Stack Drawer Connector	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes
7-624-188	Edge Press Plate Sproket Ass'y	E	[0 or 1 / **1** / 1/step] 0:No 1:Yes

7625	**[Pg Count History:Latest 1]** -		
7-625-003	Development Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]

7-625-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-625-007	Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-008	Coating Bar	E	[0 to 99999999 / **0** / 1/step]
7-625-009	Apply Blade	E	[0 to 99999999 / **0** / 1/step]
7-625-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1/step]
7-625-012	Charger Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-013	Charger Grid	E	[0 to 99999999 / **0** / 1/step]
7-625-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1/step]
7-625-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1/step]
7-625-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-625-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-625-018	Photo Conductor	E	[0 to 99999999 / **0** / 1/step]
7-625-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1/step]
7-625-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1/step]
7-625-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-625-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1/step]
7-625-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1/step]
7-625-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1/step]
7-625-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-028	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-625-029	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1/step]

7-625-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1/step]
7-625-033	#Fusing Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-034	Fusing Belt	E	[0 to 99999999 / **0** / 1/step]
7-625-035	Hot Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-036	Pressure Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1/step]
7-625-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-039	Web Roll	E	[0 to 99999999 / **0** / 1/step]
7-625-040	Web Cleaning Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-041	Dust Filter (Main)	E	[0 to 99999999 / **0** / 1/step]
7-625-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1/step]
7-625-050	#Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-051	Pick-up Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-052	Feed Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-053	Separation Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-054	#Tray2 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-055	Pick-up Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-056	Feed Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-057	Separation Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-058	#Tray3 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-059	Pick-up Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-625-060	Feed Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-625-061	Separation Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]

7-625-100	#A3LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-101	A3LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-102	A3LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-103	A3LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-104	#A3LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-105	A3LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-625-106	A3LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-625-107	A3LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-625-108	#A3LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-109	A3LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-110	A3LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-111	A3LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-112	#A4LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-113	A4LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-114	A4LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-115	A4LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-625-116	#A4LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-117	A4LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-625-118	A4LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]

7-625-119	A4LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-625-120	#A4LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-121	A4LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-122	A4LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-123	A4LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-625-124	#Bypass Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-125	Bypass Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-126	Bypass Feed Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-127	Bypass Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-128	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-129	Pick-up Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-130	Feed Belt-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-131	Separation Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-625-132	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-625-133	Pick-up Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-134	Feed Belt-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-135	Separation Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-625-136	#ADF	E	[0 to 99999999 / **0** / 1/step]
7-625-137	ADF Feed Belt	E	[0 to 99999999 / **0** / 1/step]
7-625-138	ADF Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-139	ADF Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]

7-625-146	Trimming Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-147	Trimmings Catcher	E	[0 to 99999999 / **0** / 1/step]
7-625-148	Rotation Clamp Pad	E	[0 to 99999999 / **0** / 1/step]
7-625-149	Stack Rotation Vibrating Plate	E	[0 to 99999999 / **0** / 1/step]
7-625-151	Switchback Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-152	Ripple Idle Roller (Center)	E	[0 to 99999999 / **0** / 1/step]
7-625-153	Ripple Idle Rollers	E	[0 to 99999999 / **0** / 1/step]
7-625-154	TE Press Roller (large)	E	[0 to 99999999 / **0** / 1/step]
7-625-155	TE Press Roller (Small)	E	[0 to 99999999 / **0** / 1/step]
7-625-157	Spine Fold Harness (right)	E	[0 to 99999999 / **0** / 1/step]
7-625-158	Spine Fold Harness (left)	E	[0 to 99999999 / **0** / 1/step]
7-625-159	Signature Transport Harness	E	[0 to 99999999 / **0** / 1/step]
7-625-161	Stack Rotation Up-down Harness	E	[0 to 99999999 / **0** / 1/step]
7-625-162	Stack Rotation Grip Harness	E	[0 to 99999999 / **0** / 1/step]
7-625-163	Stack Rotate Press LED Harness	E	[0 to 99999999 / **0** / 1/step]
7-625-165	Pick-up Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-625-166	Separation Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-625-167	Feed Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-625-169	Pick-up Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-625-170	Separation Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-625-171	Feed Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-625-173	Blade Cradle	E	[0 to 99999999 / **0** / 1/step]
7-625-174	Switchback Torque Limiter	E	[0 to 99999999 / **0** / 1/step]
7-625-175	Deodorant Filter (Upper&Lower)	E	[0 to 99999999 / **0** / 1/step]

7-625-176	Cover Feed Switchback Roller	E	[0 to 99999999 / **0** / 1/step]
7-625-177	Jogger Motor	E	[0 to 99999999 / **0** / 1/step]
7-625-178	Main Grip Motor	E	[0 to 99999999 / **0** / 1/step]
7-625-179	Signature Thickness Sensor	E	[0 to 99999999 / **0** / 1/step]
7-625-180	Signature Rotate Torque Diode	E	[0 to 99999999 / **0** / 1/step]
7-625-181	Trimmings Buffer Motor	E	[0 to 99999999 / **0** / 1/step]
7-625-182	Signature Press Trq Lmt Clutch	E	[0 to 99999999 / **0** / 1/step]
7-625-184	Ball Screw Unit	E	[0 to 99999999 / **0** / 1/step]
7-625-185	Sign/Stacking Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-625-186	Horizontal/Reg Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-625-187	Booklet Stack Drawer Connector	E	[0 to 99999999 / **0** / 1/step]

7626	**[Pg Count History:Latest 2]** -		
7-626-003	Development Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-626-007	Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-008	Coating Bar	E	[0 to 99999999 / **0** / 1/step]
7-626-009	Apply Blade	E	[0 to 99999999 / **0** / 1/step]
7-626-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1/step]

7-626-012	Charger Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-013	Charger Grid	E	[0 to 99999999 / **0** / 1/step]
7-626-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1/step]
7-626-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1/step]
7-626-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-626-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1/step]
7-626-018	Photo Conductor	E	[0 to 99999999 / **0** / 1/step]
7-626-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1/step]
7-626-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1/step]
7-626-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-626-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1/step]
7-626-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1/step]
7-626-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1/step]
7-626-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-028	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1/step]
7-626-029	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1/step]
7-626-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1/step]
7-626-033	#Fusing Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-034	Fusing Belt	E	[0 to 99999999 / **0** / 1/step]
7-626-035	Hot Roller	E	[0 to 99999999 / **0** / 1/step]

7-626-036	Pressure Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1/step]
7-626-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-039	Web Roll	E	[0 to 99999999 / **0** / 1/step]
7-626-040	Web Cleaning Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-041	Dust Filter (Main)	E	[0 to 99999999 / **0** / 1/step]
7-626-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1/step]
7-626-050	#Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-051	Pick-up Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-052	Feed Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-053	Separation Roller-Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-054	#Tray2 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-055	Pick-up Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-056	Feed Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-057	Separation Roller-Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-058	#Tray3 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-059	Pick-up Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-626-060	Feed Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-626-061	Separation Roller-Tray3	E	[0 to 99999999 / **0** / 1/step]
7-626-100	#A3LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-101	A3LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-626-102	A3LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-626-103	A3LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]

7-626-104	#A3LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-105	A3LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-106	A3LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-107	A3LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-108	#A3LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-109	A3LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-626-110	A3LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-626-111	A3LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-626-112	#A4LCT Tray4 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-113	A4LCT Pick-up Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-626-114	A4LCT Feed Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-626-115	A4LCT Separation Roller-Tray4	E	[0 to 99999999 / **0** / 1/step]
7-626-116	#A4LCT Tray5 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-117	A4LCT Pick-up Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-118	A4LCT Feed Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-119	A4LCT Separation Roller-Tray5	E	[0 to 99999999 / **0** / 1/step]
7-626-120	#A4LCT Tray6 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-121	A4LCT Pick-up Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-626-122	A4LCT Feed Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]

7-626-123	A4LCT Separation Roller-Tray6	E	[0 to 99999999 / **0** / 1/step]
7-626-124	#Bypass Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-125	Bypass Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-126	Bypass Feed Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-127	Bypass Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-128	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-129	Pick-up Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-130	Feed Belt-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-131	Separation Roller-Inserter Tray1	E	[0 to 99999999 / **0** / 1/step]
7-626-132	#Inseter Tray1 Roller Assembly	E	[0 to 99999999 / **0** / 1/step]
7-626-133	Pick-up Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-134	Feed Belt-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-135	Separation Roller-Inserter Tray2	E	[0 to 99999999 / **0** / 1/step]
7-626-136	#ADF	E	[0 to 99999999 / **0** / 1/step]
7-626-137	ADF Feed Belt	E	[0 to 99999999 / **0** / 1/step]
7-626-138	ADF Separation Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-139	ADF Pick-up Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-146	Trimming Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-147	Trimmings Catcher	E	[0 to 99999999 / **0** / 1/step]
7-626-148	Rotation Clamp Pad	E	[0 to 99999999 / **0** / 1/step]
7-626-149	Stack Rotation Vibrating Plate	E	[0 to 99999999 / **0** / 1/step]
7-626-151	Switchback Roller	E	[0 to 99999999 / **0** / 1/step]

7-626-152	Ripple Idle Roller (Center)	E	[0 to 99999999 / **0** / 1/step]
7-626-153	Ripple Idle Rollers	E	[0 to 99999999 / **0** / 1/step]
7-626-154	TE Press Roller (large)	E	[0 to 99999999 / **0** / 1/step]
7-626-155	TE Press Roller (Small)	E	[0 to 99999999 / **0** / 1/step]
7-626-157	Spine Fold Harness (right)	E	[0 to 99999999 / **0** / 1/step]
7-626-158	Spine Fold Harness (left)	E	[0 to 99999999 / **0** / 1/step]
7-626-159	Signature Transport Harness	E	[0 to 99999999 / **0** / 1/step]
7-626-161	Stack Rotation Up-down Harness	E	[0 to 99999999 / **0** / 1/step]
7-626-162	Stack Rotation Grip Harness	E	[0 to 99999999 / **0** / 1/step]
7-626-163	Stack Rotate Press LED Harness	E	[0 to 99999999 / **0** / 1/step]
7-626-165	Pick-up Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-626-166	Separation Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-626-167	Feed Roller Upper	E	[0 to 99999999 / **0** / 1/step]
7-626-169	Pick-up Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-626-170	Separation Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-626-171	Feed Roller Lower	E	[0 to 99999999 / **0** / 1/step]
7-626-173	Blade Cradle	E	[0 to 99999999 / **0** / 1/step]
7-626-174	Switchback Torque Limiter	E	[0 to 99999999 / **0** / 1/step]
7-626-175	Deodorant Filter (Upper&Lower)	E	[0 to 99999999 / **0** / 1/step]
7-626-176	Cover Feed Switchback Roller	E	[0 to 99999999 / **0** / 1/step]
7-626-177	Jogger Motor	E	[0 to 99999999 / **0** / 1/step]
7-626-178	Main Grip Motor	E	[0 to 99999999 / **0** / 1/step]
7-626-179	Signature Thickness Sensor	E	[0 to 99999999 / **0** / 1/step]

7-626-180	Signature Rotate Torque Diode	E	[0 to 99999999 / **0** / 1/step]
7-626-181	Trimmings Buffer Motor	E	[0 to 99999999 / **0** / 1/step]
7-626-182	Signature Press Trq Lmt Clutch	E	[0 to 99999999 / **0** / 1/step]
7-626-184	Ball Screw Unit	E	[0 to 99999999 / **0** / 1/step]
7-626-185	Sign/Stacking Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-626-186	Horizontal/Reg Discharge Brush	E	[0 to 99999999 / **0** / 1/step]
7-626-187	Booklet Stack Drawer Connector	E	[0 to 99999999 / **0** / 1/step]

7628	**[Clear PM Counter]** Clear the PM counter of all the PM parts that exceed the timing of exchanging.		
7-628-001	Clear Exceeded Counts	E	[- / **-** / -] [Execute] Do this SP to clear all PM counts that have exceeded their limits.
7-628-002	Reset All Counts	E	[- / **-** / -] [Execute] Do this SP to clear all PM counts, including those that have not exceeded their limits.

7801	**[ROM No./ Firmware Version]** Displays firmware information for main machine and all other connected devices.		
7-801-255	-	C	-

7803	**[PM Counter Display]** Displays the number of sheets printed for each current maintenance unit. PM counters click up based on the number of A4 (LT) LEF size sheets printed. Therefore, the A3 (DLT) Double Count is activated. The Double Count cannot be deactivated. When a unit is replaced, the machine automatically detects that the new unit is installed.		
7-803-001	Paper	C*	[0 to 9999999 / **0** / 1/step]

7804	**[PM Counter Reset]** Clears the PM counter. Press [EXECUTE] to reset the PM count.		
7-804-001	Paper	C	[- / **-** / -] [Execute]

7807	**[SC/Jam Counter Reset]** Clears the counters related to SC codes and paper jams.		
7-807-001	-	C	[- / **-** / -] [Execute]

7826	**[MF Error Counter]** Displays the number of counts requested of the card/key counter.		
7-826-001	Error Total	C*	[0 to 9999999 / **0** / 1/step] A request for the count total failed at power on. This error will occur if the device is installed but disconnected.
7-826-002	Error Staple	C*	[0 to 9999999 / 0 / 1/step] The request for a staple count failed at power on. This error will occur if the device is installed but disconnected.

7827	**[MF Error Counter Clear]** Clears MF Error Counter. Only valid when the MK-1 has been connected.

7-827-001	-	C	[- / **-** / -] [Execute]

7832	**[Self-Diagnose Display]** Displays the result of the diagnostics.		
7-832-001	-	C	[- / **-** / -] [Execute]

7836	**[Total Memory Size]** Displays the memory capacity of the controller system.		
7-836-001	Total Memory Size	C	[- / **-** / -]

7840	**[Service SP Entry Code Chg Hist]** Records dates and times of resetting / changing “Service SP mode switch code setting” for the recent 2 times. (Decides whether the record is for setting changes or resets by branch number.)		
7-840-001	Change Time :Latest	C*	[- / **-** / -]
7-840-002	Change Time : Last1	C*	[- / **-** / -]
7-840-101	Initialize Time : Latest	C*	[- / **-** / -]
7-840-102	Initialize Time : Last1	C*	[- / **-** / -]

7852	**[DF Glass Dust Check]** Displays the count for the number of times the machine has detected dust on the ADF scanning glass at the beginning of copy jobs. This SP operates only after SP4020-001 has been turned on.		
7-852-001	Dust Detection Counter	E*	[0 to 65535 / **0** / 1/step]
7-852-002	Dust Counter Clear Counter	E*	[0 to 65535 / **0** / 1/step]
7-852-003	Dust Detection Counter: Back	E*	[0 to 65535 / **0** / 1/step] For 1 path simultaneous duplex models only.

7901	**[Assert Info.]** Records the location where a problem is detected in the program. Used for debugging.		
7-901-001	File Name	C*	[- / **-** / -]
7-901-002	Number of Lines	C*	[- / **-** / -]
7-901-003	Location	C*	[- / **-** / -]

7940	**[Drive Distance:End Std Value]** Displays Drive Distance Counter End Standard Value.		
7-940-003	Development Unit	E	[0 to 99999999 / **254000** / 1m/step]
7-940-005	#Cleaning Unit	E	[0 to 99999999 / **205000** / 1m/step]
7-940-006	Cleaning Blade	E	[0 to 99999999 / **205000** / 1m/step]
7-940-007	Brush Roller	E	[0 to 99999999 / **205000** / 1m/step]
7-940-008	Coating Bar	E	[0 to 99999999 / **205000** / 1m/step]
7-940-009	Apply Blade	E	[0 to 99999999 / **205000** / 1m/step]
7-940-010	Joint:Cleaning Unit	E	[0 to 99999999 / **205000** / 1m/step]
7-940-011	Gear:Cleaning	E	[0 to 99999999 / **410000** / 1m/step]
7-940-012	Charger Unit	E	[0 to 99999999 / **321000** / 1m/step]
7-940-013	Charger Grid	E	[0 to 99999999 / **321000** / 1m/step]
7-940-014	Corona Wire Charger	E	[0 to 99999999 / **321000** / 1m/step]
7-940-015	Cushion Corona Wire	E	[0 to 99999999 / **321000** / 1m/step]
7-940-016	Grid Cleaner Assay	E	[0 to 99999999 / **321000** / 1m/step]
7-940-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **321000** / 1m/step]
7-940-018	Photo Conductor	E	[0 to 99999999 / **802000** / 1m/step]
7-940-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **770000** / 1m/step]
7-940-020	Transfer Roller:ITB	E	[0 to 99999999 / **433000** / 1m/step]

7-940-021	#ITB Cleaning Unit	E	[0 to 99999999 / **205000** / 1m/step]
7-940-022	ITB Cleaning Blade	E	[0 to 99999999 / **205000** / 1m/step]
7-940-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **205000** / 1m/step]
7-940-024	ITB Lubricant bar	E	[0 to 99999999 / **205000** / 1m/step]
7-940-025	ITB Lubricant blade	E	[0 to 99999999 / **205000** / 1m/step]
7-940-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **205000** / 1m/step]
7-940-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **205000** / 1m/step]
7-940-028	PTR Cleaning Blade	E	[0 to 99999999 / **205000** / 1m/step]
7-940-029	PTR Lubricant bar	E	[0 to 99999999 / **205000** / 1m/step]
7-940-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **205000** / 1m/step]
7-940-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **205000** / 1m/step]
7-940-033	#Fusing Unit	E	[0 to 99999999 / **398000** / 1m/step]
7-940-034	Fusing Belt	E	[0 to 99999999 / **398000** / 1m/step]
7-940-035	Hot Roller	E	[0 to 99999999 / **398000** / 1m/step]
7-940-036	Pressure Roller	E	[0 to 99999999 / **398000** / 1m/step]
7-940-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **398000** / 1m/step]
7-940-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **398000** / 1m/step]
7-940-039	Web Roll	E	[0 to 99999999 / **271000** / 1m/step]
7-940-040	Web Cleaning Roller	E	[0 to 99999999 / **1154000** / 1m/step]

7942	**[Drive Distance % Counter]** Displays the ratio to Drive Distance Counter End Standard Value.		
7-942-003	Development Unit	E	[0 to 255 / **0** / 1%/step]

7-942-005	#Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-942-006	Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-942-007	Brush Roller	E	[0 to 255 / **0** / 1%/step]
7-942-008	Coating Bar	E	[0 to 255 / **0** / 1%/step]
7-942-009	Apply Blade	E	[0 to 255 / **0** / 1%/step]
7-942-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-942-011	Gear:Cleaning	E	[0 to 255 / **0** / 1%/step]
7-942-012	Charger Unit	E	[0 to 255 / **0** / 1%/step]
7-942-013	Charger Grid	E	[0 to 255 / **0** / 1%/step]
7-942-014	Corona Wire Charger	E	[0 to 255 / **0** / 1%/step]
7-942-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1%/step]
7-942-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1%/step]
7-942-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1%/step]
7-942-018	Photo Conductor	E	[0 to 255 / **0** / 1%/step]
7-942-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1%/step]
7-942-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1%/step]
7-942-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-942-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-942-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1%/step]
7-942-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1%/step]
7-942-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1%/step]
7-942-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1%/step]

7-942-027	PTR Lubricant Brush Roller	E	[0 to 255 / **0** / 1%/step]
7-942-028	PTR Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-942-029	PTR Lubricant bar	E	[0 to 255 / **0** / 1%/step]
7-942-030	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1%/step]
7-942-031	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1%/step]
7-942-033	#Fusing Unit	E	[0 to 255 / **0** / 1%/step]
7-942-034	Fusing Belt	E	[0 to 255 / **0** / 1%/step]
7-942-035	Hot Roller	E	[0 to 255 / **0** / 1%/step]
7-942-036	Pressure Roller	E	[0 to 255 / **0** / 1%/step]
7-942-037	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1%/step]
7-942-038	#Fusing Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-942-039	Web Roll	E	[0 to 255 / **0** / 1%/step]
7-942-040	Web Cleaning Roller		

7944	**[Motor Drv Distance Counter]** Displays Motor Drive Distance Counter.		
7-944-003	Development Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1m/step]
7-944-007	Brush Roller	E	[0 to 99999999 / **0** / 1m/step]
7-944-008	Coating Bar	E	[0 to 99999999 / **0** / 1m/step]
7-944-009	Apply Blade	E	[0 to 99999999 / **0** / 1m/step]
7-944-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1m/step]

7-944-012	Charger Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-013	Charger Grid	E	[0 to 99999999 / **0** / 1m/step]
7-944-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1m/step]
7-944-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1m/step]
7-944-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1m/step]
7-944-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1m/step]
7-944-018	Photo Conductor	E	[0 to 99999999 / **0** / 1m/step]
7-944-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1m/step]
7-944-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1m/step]
7-944-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1m/step]
7-944-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1m/step]
7-944-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1m/step]
7-944-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1m/step]
7-944-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1m/step]
7-944-027	PTR Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1m/step]
7-944-028	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1m/step]
7-944-029	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1m/step]
7-944-030	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-031	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1m/step]
7-944-033	#Fusing Unit	E	[0 to 99999999 / **0** / 1m/step]

7-944-034	Fusing Belt	E	[0 to 99999999 / **0** / 1m/step]
7-944-035	Hot Roller	E	[0 to 99999999 / **0** / 1m/step]
7-944-036	Pressure Roller	E	[0 to 99999999 / **0** / 1m/step]
7-944-037	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1m/step]
7-944-038	#Fusing Cleaning Unit	E	[0 to 99999999 / **0** / 1m/step]
7-944-039	Web Roll	E	[0 to 99999999 / **0** / 1m/step]
7-944-040	Web Cleaning Roller		

7950	**[Replacement Date]** Displays the previous replacement date.		
7-950-003	Development Unit	E	[0 or 1 / **0** / 1/step]
7-950-005	#Cleaning Unit	E	[0 or 1 / **0** / 1/step]
7-950-006	Cleaning Blade	E	[0 or 1 / **0** / 1/step]
7-950-007	Brush Roller	E	[0 or 1 / **0** / 1/step]
7-950-008	Coating Bar	E	[0 or 1 / **0** / 1/step]
7-950-009	Apply Blade	E	[0 or 1 / **0** / 1/step]
7-950-010	Joint:Cleaning Unit	E	[0 or 1 / **0** / 1/step]
7-950-011	Gear:Cleaning	E	[0 or 1 / **0** / 1/step]
7-950-012	Charger Unit	E	[0 or 1 / **0** / 1/step]
7-950-013	Charger Grid	E	[0 or 1 / **0** / 1/step]
7-950-014	Corona Wire Charger	E	[0 or 1 / **0** / 1/step]
7-950-015	Cushion Corona Wire	E	[0 or 1 / **0** / 1/step]
7-950-016	Grid Cleaner Assay	E	[0 or 1 / **0** / 1/step]
7-950-017	Corotoron Wire Cleaner Assay	E	[0 or 1 / **0** / 1/step]
7-950-018	Photo Conductor	E	[0 or 1 / **0** / 1/step]

7-950-019	ITB (Intermediate Transfer Belt)	E	[0 or 1 / **0** / 1/step]
7-950-020	Transfer Roller:ITB	E	[0 or 1 / **0** / 1/step]
7-950-021	#ITB Cleaning Unit	E	[0 or 1 / **0** / 1/step]
7-950-022	ITB Cleaning Blade	E	[0 or 1 / **0** / 1/step]
7-950-023	ITB Lubricant Brush Roller	E	[0 or 1 / **0** / 1/step]
7-950-024	ITB Lubricant bar	E	[0 or 1 / **0** / 1/step]
7-950-025	ITB Lubricant blade	E	[0 or 1 / **0** / 1/step]
7-950-026	#PTR Unit(Paper Transfer Unit)	E	[0 or 1 / **0** / 1/step]
7-950-027	PTR Lubricant Brush Roller	E	[0 or 1 / **0** / 1/step]
7-950-028	PTR Cleaning Blade	E	[0 or 1 / **0** / 1/step]
7-950-029	PTR Lubricant bar	E	[0 or 1 / **0** / 1/step]
7-950-030	Paper Transfer Discharge Unit	E	[0 or 1 / **0** / 1/step]
7-950-031	PTR (Paper Transfer Roller)	E	[0 or 1 / **0** / 1/step]
7-950-033	#Fusing Unit	E	[0 or 1 / **0** / 1/step]
7-950-034	Fusing Belt	E	[0 or 1 / **0** / 1/step]
7-950-035	Hot Roller	E	[0 or 1 / **0** / 1/step]
7-950-036	Pressure Roller	E	[0 or 1 / **0** / 1/step]
7-950-037	Shaft Bearing:Press Roll	E	[0 or 1 / **0** / 1/step]
7-950-038	#Fusing Cleaning Unit	E	[0 or 1 / **0** / 1/step]
7-950-039	Web Roll	E	[0 or 1 / **0** / 1/step]
7-950-040	Web Cleaning Roller	E	[0 or 1 / **0** / 1/step]
7-950-041	Dust Filter (Right)	E	[0 or 1 / **0** / 1/step]

7-950-042	Dust Filter (Heat Exhaust Duct)	E	[0 or 1 / **0** / 1/step]
7-950-050	#Tray1 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-051	Pick-up Roller-Tray1	E	[0 or 1 / **0** / 1/step]
7-950-052	Feed Roller-Tray1	E	[0 or 1 / **0** / 1/step]
7-950-053	Separation Roller-Tray1	E	[0 or 1 / **0** / 1/step]
7-950-054	#Tray2 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-055	Pick-up Roller-Tray2	E	[0 or 1 / **0** / 1/step]
7-950-056	Feed Roller-Tray2	E	[0 or 1 / **0** / 1/step]
7-950-057	Separation Roller-Tray2	E	[0 or 1 / **0** / 1/step]
7-950-058	#Tray3 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-059	Pick-up Roller-Tray3	E	[0 or 1 / **0** / 1/step]
7-950-060	Feed Roller-Tray3	E	[0 or 1 / **0** / 1/step]
7-950-061	Separation Roller-Tray3	E	[0 or 1 / **0** / 1/step]
7-950-100	#A3LCT Tray4 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-101	A3LCT Pick-up Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-102	A3LCT Feed Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-103	A3LCT Separation Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-104	#A3LCT Tray5 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-105	A3LCT Pick-up Roller-Tray5	E	[0 or 1 / **0** / 1/step]
7-950-106	A3LCT Feed Roller-Tray5	E	[0 or 1 / **0** / 1/step]
7-950-107	A3LCT Separation Roller-Tray5	E	[0 or 1 / **0** / 1/step]

7-950-108	#A3LCT Tray6 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-109	A3LCT Pick-up Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-110	A3LCT Feed Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-111	A3LCT Separation Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-112	#A4LCT Tray4 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-113	A4LCT Pick-up Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-114	A4LCT Feed Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-115	A4LCT Separation Roller-Tray4	E	[0 or 1 / **0** / 1/step]
7-950-116	#A4LCT Tray5 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-117	A4LCT Pick-up Roller-Tray5	E	[0 or 1 / **0** / 1/step]
7-950-118	A4LCT Feed Roller-Tray5	E	[0 or 1 / **0** / 1/step]
7-950-119	A4LCT Separation Roller-Tray5	E	[0 or 1 / **0** / 1/step]
7-950-120	#A4LCT Tray6 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-121	A4LCT Pick-up Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-122	A4LCT Feed Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-123	A4LCT Separation Roller-Tray6	E	[0 or 1 / **0** / 1/step]
7-950-124	#Bypass Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-125	Bypass Pick-up Roller	E	[0 or 1 / **0** / 1/step]

7-950-126	Bypass Feed Roller	E	[0 or 1 / **0** / 1/step]
7-950-127	Bypass Separation Roller	E	[0 or 1 / **0** / 1/step]
7-950-128	#Inseter Tray1 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-129	Pick-up Roller-Inserter Tray1	E	[0 or 1 / **0** / 1/step]
7-950-130	Feed Belt-Inserter Tray1	E	[0 or 1 / **0** / 1/step]
7-950-131	Separation Roller-Inserter Tray1	E	[0 or 1 / **0** / 1/step]
7-950-132	#Inseter Tray1 Roller Assembly	E	[0 or 1 / **0** / 1/step]
7-950-133	Pick-up Roller-Inserter Tray2	E	[0 or 1 / **0** / 1/step]
7-950-134	Feed Belt-Inserter Tray2	E	[0 or 1 / **0** / 1/step]
7-950-135	Separation Roller-Inserter Tray2	E	[0 or 1 / **0** / 1/step]
7-950-136	#ADF	E	[0 or 1 / **0** / 1/step]
7-950-137	ADF Feed Belt	E	[0 or 1 / **0** / 1/step]
7-950-138	ADF Separation Roller	E	[0 or 1 / **0** / 1/step]
7-950-139	ADF Pick-up Roller	E	[0 or 1 / **0** / 1/step]
7-950-146	Trimming Unit	E	[0 or 1 / **0** / 1/step]
7-950-147	Trimmings Catcher	E	[0 or 1 / **0** / 1/step]
7-950-148	Rotation Clamp Pad	E	[0 or 1 / **0** / 1/step]
7-950-149	Stack Rotation Vibrating Plate	E	[0 or 1 / **0** / 1/step]
7-950-151	Switchback Roller	E	[0 or 1 / **0** / 1/step]
7-950-152	Ripple Idle Roller (Center)	E	[0 or 1 / **0** / 1/step]

7-950-153	Ripple Idle Rollers	E	[0 or 1 / **0** / 1/step]
7-950-154	TE Press Roller (large)	E	[0 or 1 / **0** / 1/step]
7-950-155	TE Press Roller (Small)	E	[0 or 1 / **0** / 1/step]
7-950-157	Spine Fold Harness (right)	E	[0 or 1 / **0** / 1/step]
7-950-158	Spine Fold Harness (left)	E	[0 or 1 / **0** / 1/step]
7-950-159	Signature Transport Harness	E	[0 or 1 / **0** / 1/step]
7-950-161	Stack Rotation Up-down Harness	E	[0 or 1 / **0** / 1/step]
7-950-162	Stack Rotation Grip Harness	E	[0 or 1 / **0** / 1/step]
7-950-163	Stack Rotate Press LED Harness	E	[0 or 1 / **0** / 1/step]
7-950-165	Pick-up Roller Upper	E	[0 or 1 / **0** / 1/step]
7-950-166	Separation Roller Upper	E	[0 or 1 / **0** / 1/step]
7-950-167	Feed Roller Upper	E	[0 or 1 / **0** / 1/step]
7-950-169	Pick-up Roller Lower	E	[0 or 1 / **0** / 1/step]
7-950-170	Separation Roller Lower	E	[0 or 1 / **0** / 1/step]
7-950-171	Feed Roller Lower	E	[0 or 1 / **0** / 1/step]
7-950-173	Blade Cradle	E	[0 or 1 / **0** / 1/step]
7-950-174	Switchback Torque Limiter	E	[0 or 1 / **0** / 1/step]
7-950-175	Deodorant Filter (Upper&Lower)	E	[0 or 1 / **0** / 1/step]
7-950-176	Cover Feed Switchback Roller	E	[0 or 1 / **0** / 1/step]
7-950-177	Jogger Motor	E	[0 or 1 / **0** / 1/step]

7-950-178	Main Grip Motor	E	[0 or 1 / **0** / 1/step]
7-950-179	Signature Thickness Sensor	E	[0 or 1 / **0** / 1/step]
7-950-180	Signature Rotate Torque Diode	E	[0 or 1 / **0** / 1/step]
7-950-181	Trimmings Buffer Motor	E	[0 or 1 / **0** / 1/step]
7-950-182	Signature Press Trq Lmt Clutch	E	[0 or 1 / **0** / 1/step]
7-950-184	Ball Screw Unit	E	[0 or 1 / **0** / 1/step]
7-950-185	Sign/Stacking Discharge Brush	E	[0 or 1 / **0** / 1/step]
7-950-186	Horizontal/Reg Discharge Brush	E	[0 or 1 / **0** / 1/step]
7-950-187	Booklet Stack Drawer Connector	E	[0 or 1 / **0** / 1/step]
7-950-188	Edge Press Plate Sproket Ass'y	E	[0 or 1 / **0** / 1/step]

7951	**[Remain Day Counter: Pages]** Displays the remaining unit life of each PM unit.		
7-951-003	Development Unit	E	[0 to 255 / **0** / 1days/step]
7-951-005	#Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-951-006	Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-951-007	Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-951-008	Coating Bar	E	[0 to 255 / **0** / 1days/step]
7-951-009	Apply Blade	E	[0 to 255 / **0** / 1days/step]
7-951-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-951-011	Gear:Cleaning	E	[0 to 255 / **0** / 1days/step]
7-951-012	Charger Unit	E	[0 to 255 / **0** / 1days/step]

7-951-013	Charger Grid	E	[0 to 255 / **0** / 1days/step]
7-951-014	Corona Wire Charger	E	[0 to 255 / **0** / 1days/step]
7-951-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1days/step]
7-951-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-951-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-951-018	Photo Conductor	E	[0 to 255 / **0** / 1days/step]
7-951-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1days/step]
7-951-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1days/step]
7-951-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-951-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-951-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-951-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-951-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1days/step]
7-951-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1days/step]
7-951-027	PTR Lubricant Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-951-028	PTR Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-951-029	PTR Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-951-030	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1days/step]
7-951-031	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1days/step]
7-951-033	#Fusing Unit	E	[0 to 255 / **0** / 1days/step]
7-951-034	Fusing Belt	E	[0 to 255 / **0** / 1days/step]

7-951-035	Hot Roller	E	[0 to 255 / **0** / 1days/step]
7-951-036	Pressure Roller	E	[0 to 255 / **0** / 1days/step]
7-951-037	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1days/step]
7-951-040	Dust Filler (Main)	E	[0 to 255 / **0** / 1days/step]
7-951-041	Dust Filler (Right)	E	[0 to 255 / **0** / 1days/step]
7-951-042	Dust Filler (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1days/step]

7952	**[Remain Day Counter: Distance]** Adjusts the unit yield of each PM unit.		
7-952-003	Development Unit	E	[0 to 255 / **0** / 1days/step]
7-952-005	#Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-952-006	Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-952-007	Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-952-008	Coating Bar	E	[0 to 255 / **0** / 1days/step]
7-952-009	Apply Blade	E	[0 to 255 / **0** / 1days/step]
7-952-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-952-011	Gear:Cleaning	E	[0 to 255 / **0** / 1days/step]
7-952-012	Charger Unit	E	[0 to 255 / **0** / 1days/step]
7-952-013	Charger Grid	E	[0 to 255 / **0** / 1days/step]
7-952-014	Corona Wire Charger	E	[0 to 255 / **0** / 1days/step]
7-952-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1days/step]
7-952-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-952-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-952-018	Photo Conductor	E	[0 to 255 / **0** / 1days/step]

7-952-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1days/step]
7-952-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1days/step]
7-952-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-952-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-952-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-952-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-952-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1days/step]
7-952-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1days/step]
7-952-027	PTR Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-952-028	PTR Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-952-029	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1days/step]
7-952-030	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1days/step]
7-952-031	#Fusing Unit	E	[0 to 255 / **0** / 1days/step]
7-952-032	Fusing Belt	E	[0 to 255 / **0** / 1days/step]
7-952-033	Hot Roller	E	[0 to 255 / **0** / 1days/step]
7-952-034	Pressure Roller	E	[0 to 255 / **0** / 1days/step]
7-952-035	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1days/step]
7-952-036	#Fusing Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-952-037	Web Roll	E	[0 to 255 / **0** / 1days/step]
7-952-038	Web Cleaning Roller	E	[0 to 255 / **0** / 1days/step]

7954	**[Pg Counter(%)]** Displays the ratio to Drive Pages Counter End Standard Value.

7-954-003	Development Unit	E	[0 to 255 / **0** / 1/step]
7-954-005	#Cleaning Unit	E	[0 to 255 / **0** / 1/step]
7-954-006	Cleaning Blade	E	[0 to 255 / **0** / 1/step]
7-954-007	Brush Roller	E	[0 to 255 / **0** / 1/step]
7-954-008	Coating Bar	E	[0 to 255 / **0** / 1/step]
7-954-009	Apply Blade	E	[0 to 255 / **0** / 1/step]
7-954-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1/step]
7-954-011	Gear:Cleaning	E	[0 to 255 / **0** / 1/step]
7-954-012	Charger Unit	E	[0 to 255 / **0** / 1/step]
7-954-013	Charger Grid	E	[0 to 255 / **0** / 1/step]
7-954-014	Corona Wire Charger	E	[0 to 255 / **0** / 1/step]
7-954-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1/step]
7-954-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1/step]
7-954-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1/step]
7-954-018	Photo Conductor	E	[0 to 255 / **0** / 1/step]
7-954-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1/step]
7-954-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1/step]
7-954-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1/step]
7-954-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1/step]
7-954-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1/step]
7-954-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1/step]
7-954-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1/step]
7-954-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1/step]

7-954-027	PTR Cleaning Blade	E	[0 to 255 / **0** / 1/step]
7-954-028	PTR Lubricant bar	E	[0 to 255 / **0** / 1/step]
7-954-029	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1/step]
7-954-030	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1/step]
7-954-031	#Fusing Unit	E	[0 to 255 / **0** / 1/step]
7-954-032	Fusing Belt	E	[0 to 255 / **0** / 1/step]
7-954-033	Hot Roller	E	[0 to 255 / **0** / 1/step]
7-954-034	Pressure Roller	E	[0 to 255 / **0** / 1/step]
7-954-035	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1/step]
7-954-036	#Fusing Cleaning Unit	E	[0 to 255 / **0** / 1/step]
7-954-037	Web Roll	E	[0 to 255 / **0** / 1/step]
7-954-038	Web Cleaning Roller	E	[0 to 255 / **0** / 1/step]
7-954-040	Dust Filter (Main)	E	[0 to 255 / **0** / 1/step]
7-954-041	Dust Filter (Charger)	E	[0 to 255 / **0** / 1/step]
7-954-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1/step]
7-954-043		E	[0 to 255 / **0** / 1/step]
7-954-044	Ozone Filter (Right of Outlet)	E	[0 to 255 / **0** / 1/step]
7-954-045	Ozone Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1/step]
7-954-050	#Tray1 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-051	Pick-up Roller-Tray1	E	[0 to 255 / **0** / 1/step]
7-954-052	Feed Roller-Tray1	E	[0 to 255 / **0** / 1/step]
7-954-053	Separation Roller-Tray1	E	[0 to 255 / **0** / 1/step]

7-954-054	#Tray2 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-055	Pick-up Roller-Tray2	E	[0 to 255 / **0** / 1/step]
7-954-056	Feed Roller-Tray2	E	[0 to 255 / **0** / 1/step]
7-954-057	Separation Roller-Tray2	E	[0 to 255 / **0** / 1/step]
7-954-058	#Tray3 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-059	Pick-up Roller-Tray3	E	[0 to 255 / **0** / 1/step]
7-954-060	Feed Roller-Tray3	E	[0 to 255 / **0** / 1/step]
7-954-061	Separation Roller-Tray3	E	[0 to 255 / **0** / 1/step]
7-954-100	#A3LCT Tray4 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-101	A3LCT Pick-up Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-102	A3LCT Feed Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-103	A3LCT Separation Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-104	#A3LCT Tray5 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-105	A3LCT Pick-up Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-106	A3LCT Feed Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-107	A3LCT Separation Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-108	#A3LCT Tray6 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-109	A3LCT Pick-up Roller-Tray6	E	[0 to 255 / **0** / 1/step]
7-954-110	A3LCT Feed Roller-Tray6	E	[0 to 255 / **0** / 1/step]
7-954-111	A3LCT Separation Roller-Tray6	E	[0 to 255 / **0** / 1/step]

7-954-112	#A4LCT Tray4 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-113	A4LCT Pick-up Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-114	A4LCT Feed Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-115	A4LCT Separation Roller-Tray4	E	[0 to 255 / **0** / 1/step]
7-954-116	#A4LCT Tray5 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-117	A4LCT Pick-up Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-118	A4LCT Feed Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-119	A4LCT Separation Roller-Tray5	E	[0 to 255 / **0** / 1/step]
7-954-120	#A4LCT Tray6 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-121	A4LCT Pick-up Roller-Tray6	E	[0 to 255 / **0** / 1/step]
7-954-122	A4LCT Feed Roller-Tray6	E	[0 to 255 / **0** / 1/step]
7-954-123	A4LCT Separation Roller-Tray6	E	[0 to 255 / **0** / 1/step]
7-954-124	#Bypass Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-125	Bypass Pick-up Roller	E	[0 to 255 / **0** / 1/step]
7-954-126	Bypass Feed Roller	E	[0 to 255 / **0** / 1/step]
7-954-127	Bypass Separation Roller	E	[0 to 255 / **0** / 1/step]
7-954-128	#Inseter Tray1 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-129	Pick-up Roller-Inserter Tray1	E	[0 to 255 / **0** / 1/step]

7-954-130	Feed Belt-Inserter Tray1	E	[0 to 255 / **0** / 1/step]
7-954-131	Separation Roller-Inserter Tray1	E	[0 to 255 / **0** / 1/step]
7-954-132	#Inseter Tray1 Roller Assembly	E	[0 to 255 / **0** / 1/step]
7-954-133	Pick-up Roller-Inserter Tray2	E	[0 to 255 / **0** / 1/step]
7-954-134	Feed Belt-Inserter Tray2	E	[0 to 255 / **0** / 1/step]
7-954-135	Separation Roller-Inserter Tray2	E	[0 to 255 / **0** / 1/step]
7-954-136	#ADF	E	[0 to 255 / **0** / 1/step]
7-954-137	ADF Feed Belt	E	[0 to 255 / **0** / 1/step]
7-954-138	ADF Separation Roller	E	[0 to 255 / **0** / 1/step]
7-954-139	ADF Pick-up Roller	E	[0 to 255 / **0** / 1/step]
7-954-146	Trimming Unit	E	[0 to 255 / **0** / 1/step]
7-954-147	Trimmings Catcher	E	[0 to 255 / **0** / 1/step]
7-954-148	Rotation Clamp Pad	E	[0 to 255 / **0** / 1/step]
7-954-149	Stack Rotation Vibrating Plate	E	[0 to 255 / **0** / 1/step]
7-954-151	Switchback Roller	E	[0 to 255 / **0** / 1/step]
7-954-152	Ripple Idle Roller (Center)	E	[0 to 255 / **0** / 1/step]
7-954-153	Ripple Idle Rollers	E	[0 to 255 / **0** / 1/step]
7-954-154	TE Press Roller (large)	E	[0 to 255 / **0** / 1/step]
7-954-155	TE Press Roller (Small)	E	[0 to 255 / **0** / 1/step]
7-954-157	Spine Fold Harness (right)	E	[0 to 255 / **0** / 1/step]
7-954-158	Spine Fold Harness (left)	E	[0 to 255 / **0** / 1/step]

7-954-159	Signature Transport Harness	E	[0 to 255 / **0** / 1/step]
7-954-161	Stack Rotation Up-down Harness	E	[0 to 255 / **0** / 1/step]
7-954-162	Stack Rotation Grip Harness	E	[0 to 255 / **0** / 1/step]
7-954-163	Stack Rotate Press LED Harness	E	[0 to 255 / **0** / 1/step]
7-954-165	Pick-up Roller Upper	E	[0 to 255 / **0** / 1/step]
7-954-166	Separation Roller Upper	E	[0 to 255 / **0** / 1/step]
7-954-167	Feed Roller Upper	E	[0 to 255 / **0** / 1/step]
7-954-169	Pick-up Roller Lower	E	[0 to 255 / **0** / 1/step]
7-954-170	Separation Roller Lower	E	[0 to 255 / **0** / 1/step]
7-954-171	Feed Roller Lower	E	[0 to 255 / **0** / 1/step]
7-954-173	Blade Cradle	E	[0 to 255 / **0** / 1/step]
7-954-174	Switchback Torque Limiter	E	[0 to 255 / **0** / 1/step]
7-954-175	Deodorant Filter (Upper&Lower)	E	[0 to 255 / **0** / 1/step]
7-954-176	Cover Feed Switchback Roller	E	[0 to 255 / **0** / 1/step]
7-954-177	Jogger Motor	E	[0 to 255 / **0** / 1/step]
7-954-178	Main Grip Motor	E	[0 to 255 / **0** / 1/step]
7-954-179	Signature Thickness Sensor	E	[0 to 255 / **0** / 1/step]
7-954-180	Signature Rotate Torque Diode	E	[0 to 255 / **0** / 1/step]
7-954-181	Trimmings Buffer Motor	E	[0 to 255 / **0** / 1/step]

7-954-182	Signature Press Trq Lmt Clutch	E	[0 to 255 / **0** / 1/step]
7-954-184	Ball Screw Unit	E	[0 to 255 / **0** / 1/step]
7-954-185	Sign/Stacking Discharge Brush	E	[0 to 255 / **0** / 1/step]
7-954-186	Horizontal/Reg Discharge Brush	E	[0 to 255 / **0** / 1/step]
7-954-187	Booklet Stack Drawer Connector	E	[0 to 255 / **0** / 1/step]
7-954-188	Edge Press Plate Sproket Ass'y	E	[0 to 255 / **0** / 1/step]

7955	**[Estimated Remain Pages]** Displays the estimated remaining operable pages calculated from Pages Remain Day Counter and Distance Remain Day Counter		
7-955-003	Development Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-007	Brush Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-008	Coating Bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-009	Apply Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-012	Charger Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-013	Charger Grid	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1sheet/step]

7-955-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-018	Photo Conductor	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-027	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-028	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-029	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-030	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-031	#Fusing Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-032	Fusing Belt	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-033	Hot Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-034	Pressure Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-035	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-040	Dust Filter (Main)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-041	Dust Filter (Charger)	E	[0 to 99999999 / **0** / 1sheet/step]

7-955-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-043	-	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-044	Ozone Filter (Right of Outlet)	E	[0 to 99999999 / **0** / 1sheet/step]
7-955-045	Ozone Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1sheet/step]

7956	**[Estimated Remain Days]** Displays the estimated remaining operable days calculated from Pages Remain Day Counter and Distance Remain Day Counter.		
7-956-003	Development Unit	E	[0 to 255 / **0** / 1days/step]
7-956-005	#Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-956-006	Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-956-007	Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-956-008	Coating Bar	E	[0 to 255 / **0** / 1days/step]
7-956-009	Apply Blade	E	[0 to 255 / **0** / 1days/step]
7-956-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-956-011	Gear:Cleaning	E	[0 to 255 / **0** / 1days/step]
7-956-012	Charger Unit	E	[0 to 255 / **0** / 1days/step]
7-956-013	Charger Grid	E	[0 to 255 / **0** / 1days/step]
7-956-014	Corona Wire Charger	E	[0 to 255 / **0** / 1days/step]
7-956-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1days/step]
7-956-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-956-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1days/step]
7-956-018	Photo Conductor	E	[0 to 255 / **0** / 1days/step]

7-956-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1days/step]
7-956-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1days/step]
7-956-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1days/step]
7-956-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-956-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1days/step]
7-956-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-956-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1days/step]
7-956-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1days/step]
7-956-027	PTR Cleaning Blade	E	[0 to 255 / **0** / 1days/step]
7-956-028	PTR Lubricant bar	E	[0 to 255 / **0** / 1days/step]
7-956-029	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1days/step]
7-956-030	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1days/step]
7-956-031	#Fusing Unit	E	[0 to 255 / **0** / 1days/step]
7-956-032	Fusing Belt	E	[0 to 255 / **0** / 1days/step]
7-956-033	Hot Roller	E	[0 to 255 / **0** / 1days/step]
7-956-034	Pressure Roller	E	[0 to 255 / **0** / 1days/step]
7-956-035	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1days/step]
7-956-040	Dust Filter (Main)	E	[0 to 255 / **0** / 1days/step]
7-956-041	Dust Filter (Charger)	E	[0 to 255 / **0** / 1days/step]
7-956-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1days/step]
7-956-043	-	E	[0 to 255 / **0** / 1days/step]

7-956-044	Ozone Filter (Right of Outlet)	E	[0 to 255 / **0** / 1days/step]
7-956-045	Ozone Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1days/step]

7957	**[Monthly Average Pages]** Displays Monthly Average Pages.		
7-957-003	Development Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-005	#Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-006	Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-007	Brush Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-008	Coating Bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-009	Apply Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-010	Joint:Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-011	Gear:Cleaning	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-012	Charger Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-013	Charger Grid	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-014	Corona Wire Charger	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-015	Cushion Corona Wire	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-016	Grid Cleaner Assay	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-017	Corotoron Wire Cleaner Assay	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-018	Photo Conductor	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-019	ITB (Intermediate Transfer Belt)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-020	Transfer Roller:ITB	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-021	#ITB Cleaning Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-022	ITB Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]

7-957-023	ITB Lubricant Brush Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-024	ITB Lubricant bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-025	ITB Lubricant blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-027	PTR Cleaning Blade	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-028	PTR Lubricant bar	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-029	Paper Transfer Discharge Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-030	PTR (Paper Transfer Roller)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-031	#Fusing Unit	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-032	Fusing Belt	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-033	Hot Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-034	Pressure Roller	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-035	Shaft Bearing:Press Roll	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-040	Dust Filter (Main)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-041	Dust Filter (Charger)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-043	-	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-044	Ozone Filter (Right of Outlet)	E	[0 to 99999999 / **0** / 1sheet/step]
7-957-045	Ozone Filter (Heat Exhaust Duct)	E	[0 to 99999999 / **0** / 1sheet/step]

7960	**[Estimated Usage Rate]** Displays the rate against the estimated End Standard Value calculated from Pages Remain Day Counter and Distance Remain Day Counter.		
7-960-003	Development Unit	E	[0 to 255 / **0** / 1%/step]
7-960-005	#Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-960-006	Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-960-007	Brush Roller	E	[0 to 255 / **0** / 1%/step]
7-960-008	Coating Bar	E	[0 to 255 / **0** / 1%/step]
7-960-009	Apply Blade	E	[0 to 255 / **0** / 1%/step]
7-960-010	Joint:Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-960-011	Gear:Cleaning	E	[0 to 255 / **0** / 1%/step]
7-960-012	Charger Unit	E	[0 to 255 / **0** / 1%/step]
7-960-013	Charger Grid	E	[0 to 255 / **0** / 1%/step]
7-960-014	Corona Wire Charger	E	[0 to 255 / **0** / 1%/step]
7-960-015	Cushion Corona Wire	E	[0 to 255 / **0** / 1%/step]
7-960-016	Grid Cleaner Assay	E	[0 to 255 / **0** / 1%/step]
7-960-017	Corotoron Wire Cleaner Assay	E	[0 to 255 / **0** / 1%/step]
7-960-018	Photo Conductor	E	[0 to 255 / **0** / 1%/step]
7-960-019	ITB (Intermediate Transfer Belt)	E	[0 to 255 / **0** / 1%/step]
7-960-020	Transfer Roller:ITB	E	[0 to 255 / **0** / 1%/step]
7-960-021	#ITB Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-960-022	ITB Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-960-023	ITB Lubricant Brush Roller	E	[0 to 255 / **0** / 1%/step]
7-960-024	ITB Lubricant bar	E	[0 to 255 / **0** / 1%/step]

7-960-025	ITB Lubricant blade	E	[0 to 255 / **0** / 1%/step]
7-960-026	#PTR Unit(Paper Transfer Unit)	E	[0 to 255 / **0** / 1%/step]
7-960-027	PTR Cleaning Blade	E	[0 to 255 / **0** / 1%/step]
7-960-028	PTR Lubricant bar	E	[0 to 255 / **0** / 1%/step]
7-960-029	Paper Transfer Discharge Unit	E	[0 to 255 / **0** / 1%/step]
7-960-030	PTR (Paper Transfer Roller)	E	[0 to 255 / **0** / 1%/step]
7-960-031	#Fusing Unit	E	[0 to 255 / **0** / 1%/step]
7-960-032	Fusing Belt	E	[0 to 255 / **0** / 1%/step]
7-960-033	Hot Roller	E	[0 to 255 / **0** / 1%/step]
7-960-034	Pressure Roller	E	[0 to 255 / **0** / 1%/step]
7-960-035	Shaft Bearing:Press Roll	E	[0 to 255 / **0** / 1%/step]
7-960-036	#Fusing Cleaning Unit	E	[0 to 255 / **0** / 1%/step]
7-960-037	Web Roll	E	[0 to 255 / **0** / 1%/step]
7-960-038	Web Cleaning Roller	E	[0 to 255 / **0** / 1%/step]
7-960-040	Dust Filter (Main)	E	[0 to 255 / **0** / 1%/step]
7-960-041	Dust Filter (Charger)	E	[0 to 255 / **0** / 1%/step]
7-960-042	Dust Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1%/step]
7-960-043		E	[0 to 255 / **0** / 1%/step]
7-960-044	Ozone Filter (Right of Outlet)	E	[0 to 255 / **0** / 1%/step]
7-960-045	Ozone Filter (Heat Exhaust Duct)	E	[0 to 255 / **0** / 1%/step]
7-960-050	#Tray1 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-051	Pick-up Roller-Tray1	E	[0 to 255 / **0** / 1%/step]

7-960-052	Feed Roller-Tray1	E	[0 to 255 / **0** / 1%/step]
7-960-053	Separation Roller-Tray1	E	[0 to 255 / **0** / 1%/step]
7-960-054	#Tray2 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-055	Pick-up Roller-Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-056	Feed Roller-Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-057	Separation Roller-Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-058	#Tray3 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-059	Pick-up Roller-Tray3	E	[0 to 255 / **0** / 1%/step]
7-960-060	Feed Roller-Tray3	E	[0 to 255 / **0** / 1%/step]
7-960-061	Separation Roller-Tray3	E	[0 to 255 / **0** / 1%/step]
7-960-100	#A3LCT Tray4 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-101	A3LCT Pick-up Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-102	A3LCT Feed Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-103	A3LCT Separation Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-104	#A3LCT Tray5 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-105	A3LCT Pick-up Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-106	A3LCT Feed Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-107	A3LCT Separation Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-108	#A3LCT Tray6 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-109	A3LCT Pick-up Roller-Tray6	E	[0 to 255 / **0** / 1%/step]

7-960-110	A3LCT Feed Roller-Tray6	E	[0 to 255 / **0** / 1%/step]
7-960-111	A3LCT Separation Roller-Tray6	E	[0 to 255 / **0** / 1%/step]
7-960-112	#A4LCT Tray4 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-113	A4LCT Pick-up Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-114	A4LCT Feed Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-115	A4LCT Separation Roller-Tray4	E	[0 to 255 / **0** / 1%/step]
7-960-116	#A4LCT Tray5 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-117	A4LCT Pick-up Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-118	A4LCT Feed Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-119	A4LCT Separation Roller-Tray5	E	[0 to 255 / **0** / 1%/step]
7-960-120	#A4LCT Tray6 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-121	A4LCT Pick-up Roller-Tray6	E	[0 to 255 / **0** / 1%/step]
7-960-122	A4LCT Feed Roller-Tray6	E	[0 to 255 / **0** / 1%/step]
7-960-123	A4LCT Separation Roller-Tray6	E	[0 to 255 / **0** / 1%/step]
7-960-124	#Bypass Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-125	Bypass Pick-up Roller	E	[0 to 255 / **0** / 1%/step]
7-960-126	Bypass Feed Roller	E	[0 to 255 / **0** / 1%/step]
7-960-127	Bypass Separation Roller	E	[0 to 255 / **0** / 1%/step]

7-960-128	#Inseter Tray1 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-129	Pick-up Roller-Inserter Tray1	E	[0 to 255 / **0** / 1%/step]
7-960-130	Feed Belt-Inserter Tray1	E	[0 to 255 / **0** / 1%/step]
7-960-131	Separation Roller-Inserter Tray1	E	[0 to 255 / **0** / 1%/step]
7-960-132	#Inseter Tray1 Roller Assembly	E	[0 to 255 / **0** / 1%/step]
7-960-133	Pick-up Roller-Inserter Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-134	Feed Belt-Inserter Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-135	Separation Roller-Inserter Tray2	E	[0 to 255 / **0** / 1%/step]
7-960-136	#ADF	E	[0 to 255 / **0** / 1%/step]
7-960-137	ADF Feed Belt	E	[0 to 255 / **0** / 1%/step]
7-960-138	ADF Separation Roller	E	[0 to 255 / **0** / 1%/step]
7-960-139	ADF Pick-up Roller	E	[0 to 255 / **0** / 1%/step]
7-960-146	Trimming Unit	E	[0 to 255 / **0** / 1%/step]
7-960-147	Trimmings Catcher	E	[0 to 255 / **0** / 1%/step]
7-960-148	Rotation Clamp Pad	E	[0 to 255 / **0** / 1%/step]
7-960-149	Stack Rotation Vibrating Plate	E	[0 to 255 / **0** / 1%/step]
7-960-151	Switchback Roller	E	[0 to 255 / **0** / 1%/step]
7-960-152	Ripple Idle Roller (Center)	E	[0 to 255 / **0** / 1%/step]
7-960-153	Ripple Idle Rollers	E	[0 to 255 / **0** / 1%/step]
7-960-154	TE Press Roller (large)	E	[0 to 255 / **0** / 1%/step]

7-960-155	TE Press Roller (Small)	E	[0 to 255 / **0** / 1%/step]
7-960-157	Spine Fold Harness (right)	E	[0 to 255 / **0** / 1%/step]
7-960-158	Spine Fold Harness (left)	E	[0 to 255 / **0** / 1%/step]
7-960-159	Signature Transport Harness	E	[0 to 255 / **0** / 1%/step]
7-960-161	Stack Rotation Up-down Harness	E	[0 to 255 / **0** / 1%/step]
7-960-162	Stack Rotation Grip Harness	E	[0 to 255 / **0** / 1%/step]
7-960-163	Stack Rotate Press LED Harness	E	[0 to 255 / **0** / 1%/step]
7-960-165	Pick-up Roller Upper	E	[0 to 255 / **0** / 1%/step]
7-960-166	Separation Roller Upper	E	[0 to 255 / **0** / 1%/step]
7-960-167	Feed Roller Upper	E	[0 to 255 / **0** / 1%/step]
7-960-169	Pick-up Roller Lower	E	[0 to 255 / **0** / 1%/step]
7-960-170	Separation Roller Lower	E	[0 to 255 / **0** / 1%/step]
7-960-171	Feed Roller Lower	E	[0 to 255 / **0** / 1%/step]
7-960-173	Blade Cradle	E	[0 to 255 / **0** / 1%/step]
7-960-174	Switchback Torque Limiter	E	[0 to 255 / **0** / 1%/step]
7-960-175	Deodorant Filter (Upper&Lower)	E	[0 to 255 / **0** / 1%/step]
7-960-176	Cover Feed Switchback Roller	E	[0 to 255 / **0** / 1%/step]
7-960-177	Jogger Motor	E	[0 to 255 / **0** / 1%/step]
7-960-178	Main Grip Motor	E	[0 to 255 / **0** / 1%/step]
7-960-179	Signature Thickness Sensor	E	[0 to 255 / **0** / 1%/step]

7-960-180	Signature Rotate Torque Diode	E	[0 to 255 / **0** / 1%/step]
7-960-181	Trimmings Buffer Motor	E	[0 to 255 / **0** / 1%/step]
7-960-182	Signature Press Trq Lmt Clutch	E	[0 to 255 / **0** / 1%/step]
7-960-184	Ball Screw Unit	E	[0 to 255 / **0** / 1%/step]
7-960-185	Sign/Stacking Discharge Brush	E	[0 to 255 / **0** / 1%/step]
7-960-186	Horizontal/Reg Discharge Brush	E	[0 to 255 / **0** / 1%/step]
7-960-187	Booklet Stack Drawer Connector	E	[0 to 255 / **0** / 1%/step]
7-960-188	Edge Press Plate Sproket Ass'y	E	[0 to 255 / **0** / 1%/step]

7963	**[Operation Env. Log:PCU:Bk]** Displays the PCDU rotation distance in each specified operation environment. T: Temperature (°C), H: Relative Humidity (%)		
7-963-001	T<=5:0<=H<30	E	[0 to 99999999 / **0** / 1m/step]
7-963-002	T<=5:30<=H<55	E	[0 to 99999999 / **0** / 1m/step]
7-963-003	T<=5:55<=H<80	E	[0 to 99999999 / **0** / 1m/step]
7-963-004	T<=5:80<=H<100	E	[0 to 99999999 / **0** / 1m/step]
7-963-005	5<T<15:0<=H<30	E	[0 to 99999999 / **0** / 1m/step]
7-963-006	5<T<15:30<=H<55	E	[0 to 99999999 / **0** / 1m/step]
7-963-007	5<T<15:55<=H<80	E	[0 to 99999999 / **0** / 1m/step]
7-963-008	5<T<15:80<=H<=100	E	[0 to 99999999 / **0** / 1m/step]
7-963-009	15<=T<25:0<=H<30	E	[0 to 99999999 / **0** / 1m/step]
7-963-010	15<=T<25:30<=H<55	E	[0 to 99999999 / **0** / 1m/step]

7-963-011	15<=T<25:55<=H<80	E	[0 to 99999999 / **0** / 1m/step]
7-963-012	15<=T<25:80<=H<=100	E	[0 to 99999999 / **0** / 1m/step]
7-963-013	25<=T<30:0<=H<30	E	[0 to 99999999 / **0** / 1m/step]
7-963-014	25<=T<30:30<=H<55	E	[0 to 99999999 / **0** / 1m/step]
7-963-015	25<=T<30:55<=H<80	E	[0 to 99999999 / **0** / 1m/step]
7-963-016	25<=T<30:80<=H<=100	E	[0 to 99999999 / **0** / 1m/step]
7-963-017	30<=T:0<=H<30	E	[0 to 99999999 / **0** / 1m/step]
7-963-018	30<=T:30<=H<55	E	[0 to 99999999 / **0** / 1m/step]
7-963-019	30<=T:55<=H<80	E	[0 to 99999999 / **0** / 1m/step]
7-963-020	30<=T:80<=H<=100	E	[0 to 99999999 / **0** / 1m/step]

7964	**[Operation Env. Log Clear]** Clears the operation environment log.		
7-964-001	-	E	[0 or 1 / **0** / 1/step] [Execute]

7989	**[Trim Count (TRIMMER)]** Displays the count for the number of cuts performed by the trimmer unit cutting blade.		
7-989-001	Trim Counter	E	[0 to 99999999 / **0** / 1/step]

3.8 MAIN SP TABLES-8

3.8.1 SP8-XXX (DATA LOG 2)

Many of these counters are provided for features that are currently not available, such as sending color faxes, and so on. However, here are some Group 8 codes that when used in combination with others, can provide useful information.

SP Numbers	What They Do
SP8211 to SP8216	The number of pages scanned to the document server.
SP8401 to SP8406	The number of pages printed from the document server
SP8691 to SP8696	The number of pages sent from the document server

Specifically, the following questions can be answered:

- How is the document server actually being used?
- What application is using the document server most frequently?
- What data in the document server is being reused?

Most of the SPs in this group are prefixed with a letter that indicates the mode of operation (the mode of operation is referred to as an "application"). Before reading the Group 8 Service Table, make sure that you understand what these prefixes mean.

Prefixes	What it means	
T:	Total: (Grand Total).	Grand total of the items counted for all applications (C, F, P, etc.).
C:	Copy application.	Totals (pages, jobs, etc.) executed for each application when the job was not stored on the document server.
F:	Fax application.	
P:	Print application.	
S:	Scan application.	

L:	Local storage (document server)	Totals (jobs, pages, etc.) for the document server. The L: counters work differently case by case. Sometimes, they count jobs/pages stored on the document server; this can be in document server mode (from the document server window), or from another mode, such as from a printer driver or by pressing the Store File button in the Copy mode window. Sometimes, they include occasions when the user uses a file that is already on the document server. Each counter will be discussed case by case.
O:	Other applications (external network applications, for example)	Refers to network applications such as Web Image Monitor. Utilities developed with the SDK (Software Development Kit) will also be counted with this group in the future.

The Group 8 SP codes are limited to 17 characters, forced by the necessity of displaying them on the small LCDs of printers and faxes that also use these SPs. Read over the list of abbreviations below and refer to it again if you see the name of an SP that you do not understand.

Keys and abbreviations in Data Log 2

Abbreviation	What it means
/	"By", e.g. "T:Jobs/Apl" = Total Jobs "by" Application
>	More (2> "2 or more", 4> "4 or more"
AddBook	Address Book
Apl	Application
B/W	Black & White
Bk	Black
C	Cyan
ColCr	Color Create
ColMode	Color Mode

Abbreviation	What it means
Comb	Combine
Comp	Compression
Deliv	Delivery
DesApl	Designated Application. The application (Copy, Fax, Scan, Print) used to store the job on the document server, for example.
Dev Counter	Development Count, no. of pages developed.
Dup, Duplex	Duplex, printing on both sides
Emul	Emulation
FC	Full Color
FIN	Post-print processing, i.e. finishing (punching, stapling, etc.)
Full Bleed	No Margins
GenCopy	Generation Copy Mode
GPC	Get Print Counter. For jobs 10 pages or less, this counter does not count up. For jobs larger than 10 pages, this counter counts up by the number that is in excess of 10 (e.g., for an 11-page job, the counter counts up 11-10 =1)
IFax	Internet Fax
ImgEdt	Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc.
K	Black (YMCK)
LS	Local Storage. Refers to the document server.
LSize	Large (paper) Size
Mag	Magnification
MC	One color (monochrome)

Abbreviation	What it means
NRS	New Remote Service, which allows a service center to monitor machines remotely. "NRS" is used overseas, "CSS" is used in Japan.
Org	Original for scanning
OrgJam	Original Jam
Palm 2	Print Job Manager/Desk Top Editor: A pair of utilities that allows print jobs to be distributed evenly among the printers on the network, and allows files to move around, combined, and converted to different formats.
PC	Personal Computer
PGS	Pages. A page is the total scanned surface of the original. Duplex pages count as two pages, and A3 simplex count as two pages if the A3/DLT counter SP is switched ON.
PJob	Print Jobs
Ppr	Paper
PrtJam	Printer (plotter) Jam
PrtPGS	Print Pages
R	Red (Toner Remaining). Applies to the wide format model A2 only. This machine is under development and currently not available.
Rez	Resolution
SC	Service Code (Error SC code displayed)
Scn	Scan
Sim, Simplex	Simplex, printing on 1 side.
S-to-Email	Scan-to-E-mail
SMC	SMC report printed with SP5990. All of the Group 8 counters are recorded in the SMC report.
Svr	Server

Abbreviation	What it means
TonEnd	Toner End
TonSave	Toner Save
TXJob	Send, Transmission
YMC	Yellow, Magenta, Cyan
YMCK	Yellow, Magenta, Cyan, Black

Note

- All of the Group 8 SPs are able to reset by “SP5 801 1 Memory All Clear”.

8001	**[T:Total Jobs]**	C*	These SPs count the number of times each application is used to do a job. [0 to 99999999 / **-** / 1/step] **Note**: The L: counter is the total number of times the other applications are used to send a job to the document server, plus the number of times a file already on the document server is used.
8002	**[C:Total Jobs]**	C*	
8004	**[P:Total Jobs]**	C*	
8005	**[S:Total Jobs]**	C*	
8006	**[L:Total Jobs]**	C*	

- These SPs reveal the number of times an application is used, not the number of pages processed.
- When an application is opened for image input or output, this counts as one job.
- Interrupted jobs (paper jams, etc.) are counted, even though they do not finish.
- Only jobs executed by the customer are counted. Jobs executed by the customer engineer using the SP modes are not counted.
- When using secure printing (when a password is required to start the print job), the job is counted at the time when either "Delete Data" or "Specify Output" is specified.
- A job is counted as a fax job when the job is stored for sending.
- When a fax is received to fax memory, the F: counter increments but the L: counter does not (the document server is not used).
- A fax broadcast counts as one job for the F: counter (the fax destinations in the broadcast are not counted separately).
- A fax broadcast is counted only after all the faxes have been sent to their destinations. If one transmission generates an error, then the broadcast will not be counted until the transmission has been completed.
- A printed fax report counts as one job for the F: counter.

- The F: counter does not distinguish between fax sending or receiving.
- When a copy job on the document server is printed, SP8022 also increments, and when a print job stored on the document server is printed, SP8024 also increments.
- When an original is both copied and stored on the document server, the C: and L: counters both increment.
- When a print job is stored on the document server, only the L: counter increments.
- When the user presses the Document Server button to store the job on the document server, only the L: counter increments.
- When the user enters document server mode and prints data stored on the document server, only the L: counter increments.
- When an image received from Palm 2 is received and stored, the L: counter increments.
- When the customer prints a report (user code list, for example), the O: counter increments. However, for fax reports and reports executed from the fax application, the F: counter increments.

8011	**[T:Jobs/LS]**	C*	These SPs count the number of jobs stored to the document server by each application, to reveal how local storage is being used for input. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel.
8012	**[C:Jobs/LS]**	C*	
8014	**[P:Jobs/LS]**	C*	
8015	**[S:Jobs/LS]**	C*	
8016	**[L:Jobs/LS]**	C*	
8017	**[O:Jobs/LS]**	C*	

- When a scan job is sent to the document server, the S: counter increments. When you enter document server mode and then scan an original, the L: counter increments.
- When a print job is sent to the document server, the P: counter increments.
- When a network application sends data to the document server, the O: counter increments.
- When an image from Palm 2 is stored on the document server, the O: counter increments.
- When a fax is sent to the document server, the F: counter increments.

8021	**[T:Pjob/LS]**	C*	These SPs reveal how files printed from the document server were stored on the document server originally. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of
8022	**[C:Pjob/LS]**	C*	
8024	**[P:Pjob/LS]**	C*	
8025	**[S:Pjob/LS]**	C*	

8026	**[L:Pjob/LS]**	C*	jobs stored from within the document server mode screen at the operation panel.
8027	**[O:Pjob/LS]**	C*	

- When a copy job stored on the document server is printed with another application, the C: counter increments.
- When an application like DeskTopBinder merges a copy job that was stored on the document server with a print job that was stored on the document server, the C: and P: counters both increment.
- When a job already on the document server is printed with another application, the L: counter increments.
- When a scanner job stored on the document server is printed with another application, the S: counter increments. If the original was scanned from within document server mode, then the L: counter increments.
- When images stored on the document server by a network application (including Palm 2), are printed with another application, the O: counter increments.
- When a copy job stored on the document server is printed with a network application (Web Image Monitor, for example), the C: counter increments.
- When a fax on the document server is printed, the F: counter increments.

8031	**[T:Pjob/DesApl]**	C*	These SPs reveal what applications were used to output documents from the document server. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of jobs printed from within the document server mode screen at the operation panel.
8032	**[C:Pjob/DesApl]**	C*	
8034	**[P:Pjob/DesApl]**	C*	
8035	**[S:Pjob/DesApl]**	C*	
8036	**[L:Pjob/DesApl]**	C*	
8037	**[O:Pjob/DesApl]**	C*	

- When documents already stored on the document server are printed, the count for the application that started the print job is incremented.
- When the print job is started from a network application (Desk Top Binder, Web Image Monitor, etc.) the L: counter increments.

8041	**[T:TX Jobs/LS]**	C*	These SPs count the applications that stored files on the document server that
8042	**[C:TX Jobs/LS]**	C*	

8044	**[P:TX Jobs/LS]**	C*	were later accessed for transmission over the telephone line or over a network (attached to an e-mail, or as a fax image by I-Fax). [0 to 9999999 / **0** / 1/step] **Note:** Jobs merged for sending are counted separately. The L: counter counts the number of jobs scanned from within the document server mode screen at the operation panel.
8045	**[S:TX Jobs/LS]**	C*	
8046	**[L:TX Jobs/LS]**	C*	
8047	**[O:TX Jobs/LS]**	C*	

- When a stored copy job is sent from the document server, the C: counter increments.
- When images stored on the document server by a network application or Palm2 are sent as an e-mail, the O: counter increments.

8051	**[T:TX Jobs/DesApl]**	C*	These SPs count the applications used to send files from the document server over the telephone line or over a network (attached to an e-mail, or as a fax image by I-Fax). Jobs merged for sending are counted separately. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of jobs sent from within the document server mode screen at the operation panel.
8052	**[C:TX Jobs/DesApl]**	C*	
8054	**[P:TX Jobs/DesApl]**	C*	
8055	**[S:TX Jobs/DesApl]**	C*	
8056	**[L:TX Jobs/DesApl]**	C*	
8057	**[O:TX Jobs/DesApl]**	C*	

- If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

8061	**[T:FIN Jobs]**
	These SPs total the finishing methods. The finishing method is specified by the application.
8062	**[P:FIN Jobs]**

	These SPs total finishing methods for print jobs only. The finishing method is specified by the application.		
8064	**[P:FIN Jobs]**		
	These SPs total finishing methods for print jobs only. The finishing method is specified by the application.		
8065	**[S:FIN Jobs]**		
	These SPs total finishing methods for scan jobs only. The finishing method is specified by the application. **Note**: Finishing features for scan jobs are not available at this time.		
8066	**[L:FIN Jobs]**		
	These SPs total finishing methods for jobs output from within the document server mode screen at the operation panel. The finishing method is specified from the print window within document server mode.		
8067	**[O:FIN Jobs]**		
	These SPs total finishing methods for jobs executed by an external application, over the network. The finishing method is specified by the application.		
8-067-001	Sort	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started in Sort mode.
8-067-002	Stack	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started out of Sort mode.
8-067-003	Staple	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started in Staple mode.
8-067-004	Booklet	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments.
8-067-005	Z-Fold	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold).

8-067-006	Punch	C*	[0 to 9999999 / **0** / 1/step] Number of jobs started in Punch mode. When Punch is set for a print job, the P: counter increments. (See SP8-064-6.)
8-067-007	Other	C*	[0 to 9999999 / **0** / 1/step] (Reserved)
8-067-008	Inside-Flod	C*	[0 to 9999999 / **0** / 1/step]
8-067-009	Three-In-Fold	C*	[0 to 9999999 / **0** / 1/step]
8-067-010	Three-OUT-Fold	C*	[0 to 9999999 / **0** / 1/step]
8-067-011	Four-Fold	C*	[0 to 9999999 / **0** / 1/step]
8-067-012	KANNON-Fold	C*	[0 to 9999999 / **0** / 1/step]
8-067-013	Perfect-Bind	C*	[0 to 9999999 / **0** / 1/step]
8-067-014	Ring-Bind	C*	[0 to 9999999 / **0** / 1/step]

8071	**[T:Jobs/PGS]**
	These SPs count the number of jobs broken down by the number of pages in the job, regardless of which application was used.
8072	**[C:Jobs/PGS]**
	These SPs count and calculate the number of copy jobs by size based on the number of pages in the job.
8074	**[P:Jobs/PGS]**
	These SPs count and calculate the number of print jobs by size based on the number of pages in the job.
8075	**[S:Jobs/PGS]**
	These SPs count and calculate the number of scan jobs by size based on the number of pages in the job.
8076	**[L:Jobs/PGS]**

	These SPs count and calculate the number of jobs printed from within the document server mode window at the operation panel, by the number of pages in the job.		
8077	**[O:Jobs/PGS]**		
	These SPs count and calculate the number of "Other" application jobs (Web Image Monitor, Palm 2, etc.) by size based on the number of pages in the job.		
8-077-001	1 Page	C*	[0 to 99999999 / **0** / 1/step]
8-077-002	2 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-003	3 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-004	4 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-005	5 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-006	6 to 10 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-007	11 to 20 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-008	21 to 50 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-009	51 to 100 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-010	101 to 300 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-011	301 to 500 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-012	501 to 700 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-013	701 to 1000 Pages	C*	[0 to 99999999 / **0** / 1/step]
8-077-014	1001 to Pages	C*	[0 to 99999999 / **0** / 1/step]

- For example: When a copy job stored on the document server is printed in document server mode, the appropriate L: counter (SP8076 0xx) increments.
- Printing a fax report counts as a job and increments the F: counter (SP 8073).
- Interrupted jobs (paper jam, etc.) are counted, even though they do not finish.
- If a job is paused and re-started, it counts as one job.
- If the finisher runs out of staples during a print and staple job, then the job is counted at the time the error occurs.
- For copy jobs (SP 8072) and scan jobs (SP 8075), the total is calculated by multiplying the

number of sets of copies by the number of pages scanned. (One duplex page counts as 2.)

- The first test print and subsequent test prints to adjust settings are added to the number of pages of the copy job (SP 8072).
- When printing the first page of a job from within the document server screen, the page is counted.

8131	**[T:S-to-Email Jobs]**		
	These SPs count the total number of jobs (color or black-and-white) scanned and attached to an e-mail, regardless of whether the document server was used or not.		
8135	**[S: S-to-Email Jobs]**		
	These SPs count the number of jobs (color or black-and-white) scanned and attached to e-mail, without storing the original on the document server.		
8-135-001	B/W	C*	[0 to 9999999 / **0** / 1/step]
8-135-003	ACS	C*	[0 to 9999999 / **0** / 1/step]

- These counters count jobs, not pages.
- If the job is stored on the document server, after the job is stored it is determined to be color or black-and-white then counted.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- If several jobs are combined for sending to the Scan Router, Scan-to-Email, or Scan-to-PC, or if one job is sent to more than one destination. Each send is counted separately. For example, if the same document is sent by Scan-to-Email as well as Scan-to-PC, then it is counted twice (once for Scan-to-Email and once for Scan-to-PC).

8141	**[T:Deliv Jobs/Svr]**
	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a Scan Router server.
8145	**[S: Deliv Jobs/Svr]**

	These SPs count the number of jobs (color or black-and-white) scanned in scanner mode and sent to a Scan Router server.		
8-145-001	B/W	C*	[0 to 9999999 / **0** / 1/step]
8-145-003	ACS	C*	[0 to 9999999 / **0** / 1/step]

- These counters count jobs, not pages.
- The jobs are counted even though the arrival and reception of the jobs at the Scan Router server cannot be confirmed.
- If even one color image is mixed with black-and-white images, then the job is counted as a "Color" job.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be delivered, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- Even if several files are combined for sending, the transmission counts as one job.

8151	**[T:Deliv Jobs/PC]**		
	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a folder on a PC (Scan-to-PC). **Note:** At the present time, 8 151 and 8 155 perform identical counts.		
8155	**[S:Deliv Jobs/PC]**		
	These SPs count the total number of jobs (color or black-and-white) scanned and sent with Scan-to-PC.		
8-155-001	B/W	C*	[0 to 9999999 / **0** / 1/step]
8-155-003	ACS	C*	[0 to 9999999 / **0** / 1/step]

- These counters count jobs, not pages.
- If the job is cancelled during scanning, it is not counted.
- If the job is cancelled while it is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- Even if several files are combined for sending, the transmission counts as one job.

8171	**[T:Deliv Jobs/WSD]**

	These SPs count the pages scanned by WS.		
8175	**[S:Deliv Jobs/WSD]**		
	These SPs count the pages scanned by WS.		
8-175-001	B/W	C*	[0 to 9999999 / **0** / 1/step]
8-175-003	ACS	C*	[0 to 9999999 / **0** / 1/step]

8181	**[T:Scan to Media Jobs]**		
	These SPs count the scanned pages in a media by the scanner application.		
8185	**[S:Scan to Media Jobs]**		
	These SPs count the scanned pages in a media by the scanner application.		
8-185-001	B/W	C*	[0 to 9999999 / **0** / 1/step]
8-185003	ACS	C*	[0 to 9999999 / **0** / 1/step]

8191	**[T:Total Scan PGS]**	C*	These SPs count the pages scanned by each application that uses the scanner to scan images. [0 to 9999999 / **0** / 1/step]
8192	**[C:Total Scan PGS]**	C*	
8193	**[F:Total Scan PGS]**	C*	
8195	**[S:Total Scan PGS]**	C*	
8196	**[L:Total Scan PGS]**	C*	

- SP 8 191 to 8 196 count the number of scanned sides of pages, not the number of physical pages.
- These counters do not count reading user stamp data, or reading color charts to adjust color.
- Previews done with a scanner driver are not counted.
- A count is done only after all images of a job have been scanned.
- Scans made in SP mode are not counted.

Examples

- If 3 B5 pages and 1 A3 page are scanned with the scanner application but not stored, the S: count is 4.
- If both sides of 3 A4 sheets are copied and stored to the document server using the Store File

button in the Copy mode window, the C: count is 6 and the L: count is 6.

- If both sides of 3 A4 sheets are copied but not stored, the C: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

8201	**[T:LSize Scan PGS]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the total number of large pages input with the scanner for scan and copy jobs. Large size paper (A3/DLT) scanned for fax transmission is not counted. **Note:** These counters are displayed in the SMC Report, and in the User Tools display.		
8205	**[S:LSize Scan PGS]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the total number of large pages input with the scanner for scan jobs only. Large size paper (A3/DLT) scanned for fax transmission is not counted. **Note:** These counters are displayed in the SMC Report, and in the User Tools display.		

8211	**[T:Scan PGS/LS]**	C*	These SPs count the number of pages scanned into the document server. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen
8212	**[C:Scan PGS/LS]**	C*	
8215	**[S:Scan PGS/LS]**	C*	
8216	**[L:Scan PGS/LS]**	C*	

- Reading user stamp data is not counted.
- If a job is cancelled, the pages output as far as the cancellation are counted.
- If the scanner application scans and stores 3 B5 sheets and 1 A4 sheet, the S: count is 4.
- If pages are copied but not stored on the document server, these counters do not change.
- If both sides of 3 A4 sheets are copied and stored to the document server, the C: count is 6 and the L: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

8221	**[ADF Org Feeds]**

	These SPs count the number of pages fed through the ADF for front and back side scanning.		
8-221-001	Front	C*	[0 to 9999999 / **0** / 1/step]
	Number of front sides fed for scanning: With an ADF that can scan both sides simultaneously, the Front side count is the same as the number of pages fed for either simplex or duplex scanning. With an ADF that cannot scan both sides simultaneously, the Front side count is the same as the number of pages fed for duplex front side scanning. (The front side is determined by which side the user loads face-up.)		
8-221-002	Back	C*	[0 to 9999999 / **0** / 1/step]
	Number of rear sides fed for scanning: With an ADF that can scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex scanning. With an ADF that cannot scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex rear-side scanning.		

- When 1 sheet is fed for duplex scanning the Front count is 1 and the Back count is 1.
- If a jam occurs during the job, recovery processing is not counted to avoid double counting. Also, the pages are not counted if the jam occurs before the first sheet is output.

8231	**[Scan PGS/Mode]**		
	These SPs count the number of pages scanned by each ADF mode to determine the work load on the ADF.		
8-231-001	Large Volume	C*	[0 to 9999999 / **0** / 1/step] Selectable. Large copy jobs that cannot be loaded in the ADF at one time.
8-231-002	SADF	C*	[0 to 9999999 / **0** / 1/step] Selectable. Feeding pages one by one through the ADF.
8-231-003	Mixed Size	C*	[0 to 9999999 / **0** / 1/step] Selectable. Select "Mixed Sizes" on the operation panel.

8-231-004	Custom Size	C*	[0 to 9999999 / **0** / 1/step] Selectable. Originals of non-standard size.
8-231-005	Platen	C*	[0 to 9999999 / **0** / 1/step] Book mode. Raising the ADF and placing the original directly on the platen.
006	Mixed 1side/ 2side	C*	[0 to 9999999 / **0** / 1/step] Simplex and Duplex mode.

- If the scan mode is changed during the job, for example, if the user switches from ADF to Platen mode, the count is done for the last selected mode.
- The user cannot select mixed sizes or non-standard sizes with the fax application so if the original's page sizes are mixed or non-standard, these are not counted.
- If the user selects "Mixed Sizes" for copying in the platen mode, the Mixed Size count is enabled.
- In the SADF mode if the user copies 1 page in platen mode and then copies 2 pages with SADF, the Platen count is 1 and the SADF count is 3.

8241	**[T:Scan PGS/Org]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the total number of scanned pages by original type for all jobs, regardless of which application was used.		
8242	**[C:Scan PGS/Org]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the number of pages scanned by original type for Copy jobs.		
8245	**[S:Scan PGS/Org]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the number of pages scanned by original type for Scan jobs.		
8246	**[L:Scan PGS/Org]**	C*	[0 to 9999999 / **0** / 1/step]
	These SPs count the number of pages scanned and stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen		

8241	**8242**	**8243**	**8245**	**8246**	

001	Text	Yes	Yes	Yes	Yes	Yes
002	Text/Photo	Yes	Yes	Yes	Yes	Yes
003	Photo	Yes	Yes	Yes	Yes	Yes
004	GenCopy, Pale	Yes	Yes	No	Yes	Yes
005	Map	Yes	Yes	No	Yes	Yes
006	Normal/Detail	Yes	No	Yes	No	No
007	Fine/Super Fine	Yes	No	Yes	No	No
008	Binary	Yes	No	No	Yes	No
009	Grayscale	Yes	No	No	Yes	No
010	Color	Yes	No	No	Yes	No
011	Other	Yes	Yes	Yes	Yes	Yes

- If the scan mode is changed during the job, for example, if the user switches from ADF to Platen mode, the count is done for the last selected mode.

8251	**[T:Scan PGS/ImgEdt]**	C*	These SPs show how many times Image Edit features have been selected at the operation panel for each application. Some examples of these editing features are: Erase> Border Erase> Center Image Repeat Centering Positive/Negative [0 to 9999999 / **0** / 1/step] Note: The count totals the number of times the edit features have been used. A detailed breakdown of exactly which features have been used is not given.
8252	**[C:Scan PGS/ImgEdt]**	C*	
8255	**[S:Scan PGS/ImgEdr]**	C*	
8256	**[L:Scan PGS/ImgEdt]**	C*	
8257	**[O:Scan PGS/ImgEdt]**	C*	

The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen.

8281	**[T:Scan PGS/TWAIN]**	C*	These SPs count the number of pages scanned using a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. [0 to 9999999 / **0** / 1/step] **Note:** At the present time, these counters perform identical counts.
8285	**[S:Scan PGS/TWAIN]**	C*	

8291	**[T:Scan PGS/Stamp]**	C*	These SPs count the number of pages stamped with the stamp in the ADF unit. [0 to 9999999 / **0** / 1/step] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen
8295	**[S:Scan PGS/Stamp]**	C*	

8301	**[T:Scan PGS/Size]**
	These SPs count by size the total number of pages scanned by all applications. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-441].
8302	**[C:Scan PGS/Size]**
	These SPs count by size the total number of pages scanned by the Copy application. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-442].
8305	**[S:Scan PGS/Size]**
	These SPs count by size the total number of pages scanned by the Scan application. Use these totals to compare original page size (scanning) and output page size [SP 8-445].
8306	**[L:Scan PGS/Size]**

	These SPs count by size the total number of pages scanned and stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen. Use these totals to compare original page size (scanning) and output page size [SP 8-446].		
001	A3	C*	[0 to 9999999 / **0** / 1/step]
002	A4	C*	[0 to 9999999 / **0** / 1/step]
003	A5	C*	[0 to 9999999 / **0** / 1/step]
004	B4	C*	[0 to 9999999 / **0** / 1/step]
005	B5	C*	[0 to 9999999 / **0** / 1/step]
006	DLT	C*	[0 to 9999999 / **0** / 1/step]
007	LG	C*	[0 to 9999999 / **0** / 1/step]
008	LT	C*	[0 to 9999999 / **0** / 1/step]
009	HLT	C*	[0 to 9999999 / **0** / 1/step]
010	Full Bleed	C*	[0 to 9999999 / **0** / 1/step]
254	Other (Standard)	C*	[0 to 9999999 / **0** / 1/step]
255	Other (Custom)	C*	[0 to 9999999 / **0** / 1/step]

8311	T:Scan PGS/Rez	C*	[0 to 9999999/ **0** / 1/step]
	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings.		
8315	S: Scan PGS/Rez	C*	[0 to 9999999/ **0** / 1/step]
	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. Note: At the present time, SP8-311 and SP8-315 perform identical counts.		
001	1200dpi <	C*	[0 to 9999999 / **0** / 1/step]
002	600dpi to 1199dpi	C*	[0 to 9999999 / **0** / 1/step]
003	400dpi to 599dpi	C*	[0 to 9999999 / **0** / 1/step]

004	200dpi to 399dpi	C*	[0 to 9999999 / **0** / 1/step]
005	< 199dpi	C*	[0 to 9999999 / **0** / 1/step]

- Copy resolution settings are fixed so they are not counted.
- The Fax application does not allow finely-adjusted resolution settings so no count is done for the Fax application.

8381	**[T:Total PrtPGS]**	C*	These SPs count the number of pages printed by the customer. The counter for the application used for storing the pages increments. [0 to 99999999 / **0** / 1/step]
8382	**[C:Total PrtPGS]**	C*	
8384	**[P:Total PrtPGS]**	C*	
8385	**[S:Total PrtPGS]**	C*	
8386	**[L:Total PrtPGS]**	C*	
8387	**[O:Total PrtPGS]**	C*	

- When the A3/DLT double count function is switched on with SP5104, 1 A3/DLT page is counted as 2.
- When several documents are merged for a print job, the number of pages stored is counted for the application that stored them.
- These counters are used primarily to calculate charges on use of the machine, so the following pages are not counted as printed pages:
  - Blank pages in a duplex printing job.
  - Blank pages inserted as document covers, chapter title sheets, and slip sheets.
  - Reports printed to confirm counts.
  - All reports done in the service mode (service summaries, engine maintenance reports, etc.)
  - Test prints for machine image adjustment.
  - Error notification reports.
  - Partially printed pages as the result of a copier jam.

8391	**LSize PrtPGS**	C*	[0 to 99999999 / **0** / 1/step]
	These SPs count pages printed on paper sizes A3/DLT and larger. **Note:** In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine.		

8401	**[T:PrtPGS/LS]**	C*	These SPs count the number of pages printed from the document server. The counter for the application used to print the pages is incremented. The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. [0 to 9999999 / **0** / 1/step]
8402	**[C:PrtPGS/LS]**	C*	
8404	**[P:PrtPGS/LS]**	C*	
8405	**[S:PrtPGS/LS]**	C*	
8406	**[L:PrtPGS/LS]**	C*	

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the L: count.
- Fax jobs done with Web Image Monitor and Desk Top Binder are added to the F: count.

8411	**Prints/Duplex**	C*	This SP counts the amount of paper (front/back counted as 1 page) used for duplex printing. Last pages printed only on one side are not counted. [0 to 99999999 / **0** / 1/step]

8421	**[T:PrtPGS/Dup Comb]**
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing. This is the total for all applications.
8422	**[C:PrtPGS/Dup Comb]**
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the copier application.
8424	**[P:PrtPGS/Dup Comb]**
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the printer application.
8425	**[S:PrtPGS/Dup Comb]**
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the scanner application.
8426	**[L:PrtPGS/Dup Comb]**

	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing from within the document server mode window at the operation panel.		
8427	**[O:PrtPGS/Dup Comb]**		
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by Other applications		
001	Simplex> Duplex	C*	[0 to 99999999 / **0** / 1/step]
002	Duplex> Duplex	C*	[0 to 99999999 / **0** / 1/step]
003	Book> Duplex	C*	[0 to 99999999 / **0** / 1/step]
004	Simplex Combine	C*	[0 to 99999999 / **0** / 1/step]
005	Duplex Combine	C*	[0 to 99999999 / **0** / 1/step]
006	2in1	C*	[0 to 99999999 / **0** / 1/step] 2 pages on 1 side (2-Up)
007	4 in1	C*	[0 to 99999999 / **0** / 1/step] 4 pages on 1 side (4-Up)
008	6 in1	C*	[0 to 99999999 / **0** / 1/step] 6 pages on 1 side (6-Up)
009	8 in1	C*	[0 to 99999999 / **0** / 1/step] 8 pages on 1 side (8-Up)
010	9 in1	C*	[0 to 99999999 / **0** / 1/step] 9 pages on 1 side (9-Up)
011	16 in1	C*	[0 to 99999999 / **0** / 1/step] 16 pages on 1 side (16-Up)
012	Booklet	C*	[0 to 99999999 / **0** / 1/step]
013	Magazine	C*	[0 to 99999999 / **0** / 1/step]
014	2-in-1 + Booklet	C*	[0 to 99999999 / **0** / 1/step]
015	4-in-1 + Booklet	C*	[0 to 99999999 / **0** / 1/step]
016	6-in-1 + Booklet	C*	[0 to 99999999 / **0** / 1/step]
017	8-in-1 + Booklet	C*	[0 to 99999999 / **0** / 1/step]

018	9-in-1 + Booklet	C*	[0 to 99999999 / **0** / 1/step]
019	2-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]
020	4-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]
021	6-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]
022	8-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]
023	9-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]
024	16-in-1 + Magazine	C*	[0 to 99999999 / **0** / 1/step]

- These counts (SP8 421 to SP8 427) are especially useful for customers who need to improve their compliance with ISO standards for the reduction of paper consumption.
- Pages that are only partially printed with the n-Up functions are counted as 1 page.
- Here is a summary of how the counters work for Booklet and Magazine modes:

Booklet		Magazine	
Original Pages	Count	Original Pages	Count
1	1	1	1
2	2	2	2
3	2	3	2
4	2	4	2
5	3	5	4
6	4	6	4
7	4	7	4
8	4	8	4

8431	**[T:PrtPGS/ImgEdt]**
	These SPs count the total number of pages output with the three features below, regardless of which application was used.
8432	**[C:PrtPGS/ImgEdt]**

	These SPs count the total number of pages output with the three features below with the copy application.		
8434	**[P:PrtPGS/ImgEdt]**		
	These SPs count the total number of pages output with the three features below with the print application.		
8436	**[L:PrtPGS/ImgEdt]**		
	These SPs count the total number of pages output from within the document server mode window at the operation panel with the three features below.		
8437	**[O:PrtPGS/ImgEdt]**		
	These SPs count the total number of pages output with the three features below with Other applications.		
001	Cover/Slip Sheet	C*	[0 to 99999999 / **0** / 1/step] Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2.
002	Series/Book	C*	[0 to 99999999 / **0** / 1/step] The number of pages printed in series (one side) or printed as a book with booklet right/left pagination.
003	User Stamp	C*	[0 to 99999999 / **0** / 1/step] The number of pages printed where stamps were applied, including page numbering and date stamping.

8441	**[T:PrtPGS/Ppr Size]**
	These SPs count by print paper size the number of pages printed by all applications.
8442	**[C:PrtPGS/Ppr Size]**
	These SPs count by print paper size the number of pages printed by the copy application.

8444	**[P:PrtPGS/Ppr Size]**		
	These SPs count by print paper size the number of pages printed by the printer application.		
8445	**[S:PrtPGS/Ppr Size]**		
	These SPs count by print paper size the number of pages printed by the scanner application.		
8446	**[L:PrtPGS/Ppr Size]**		
	These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel.		
8447	**[O:PrtPGS/Ppr Size]**		
	These SPs count by print paper size the number of pages printed by Other applications.		
001	A3	C*	[0 to 99999999 / **0** / 1/step]
002	A4	C*	[0 to 99999999 / **0** / 1/step]
003	A5	C*	[0 to 99999999 / **0** / 1/step]
004	B4	C*	[0 to 99999999 / **0** / 1/step]
005	B5	C*	[0 to 99999999 / **0** / 1/step]
006	DLT	C*	[0 to 99999999 / **0** / 1/step]
007	LG	C*	[0 to 99999999 / **0** / 1/step]
008	LT	C*	[0 to 99999999 / **0** / 1/step]
009	HLT	C*	[0 to 99999999 / **0** / 1/step]
010	Full Bleed	C*	[0 to 99999999 / **0** / 1/step]
254	Other (Standard)	C*	[0 to 99999999 / **0** / 1/step]
255	Other (Custom)	C*	[0 to 99999999 / **0** / 1/step]

- These counters do not distinguish between LEF and SEF.

8451	**[PrtPGS/Ppr Tray]**

	These SPs count the number of sheets fed from each paper feed station.		
8-451-001	Bypass Tray	C*	Bypass Tray [0 to 99999999 / **0** / 1/step]
8-451-002	Tray 1	C*	Copier [0 to 99999999 / **0** / 1/step]
8-451-003	Tray 2	C*	
8-451-004	Tray 3	C*	Paper Tray Unit (Option) [0 to 99999999 / **0** / 1/step]
8-451-005	Tray 4	C*	
8-451-006	Tray 5	C*	LCT (Option) [0 to 99999999 / **0** / 1/step]
8-451-007	Tray 6	C*	Currently not used.
8-451-008	Tray 7	C*	Currently not used.
8-451-009	Tray 8	C*	Currently not used.
8-451-010	Tray 9	C*	Currently not used.
8-451-011	Tray 10	C*	Currently not used.
8-451-012	Tray 11	C*	Currently not used.
8-451-013	Tray 12	C*	Currently not used.
8-451-014	Tray 13	C*	Currently not used.
8-451-015	Tray 14	C*	Currently not used.
8-451-016	Tray 15	C*	Currently not used.

8461	**[T:PrtPGS/Ppr Type]**
	These SPs count by paper type the number pages printed by all applications. ▪ These counters are not the same as the PM counter. The PM counter is based on feed timing to accurately measure the service life of the feed rollers. However, these counts are based on output timing. ▪ Blank sheets (covers, chapter covers, slip sheets) are also counted. ▪ During duplex printing, pages printed on both sides count as 1, and a page printed on one side counts as 1.

8462	**[C:PrtPGS/Ppr Type]**		
	These SPs count by paper type the number pages printed by the copy application.		
8464	**[P:PrtPGS/Ppr Type]**		
	These SPs count by paper type the number pages printed by the printer application.		
8466	**[L:PrtPGS/Ppr Type]**		
	These SPs count by paper type the number pages printed from within the document server mode window at the operation panel.		
001	Normal	C*	[0 to 99999999 / **0** / 1/step]
002	Recycled	C*	[0 to 99999999 / **0** / 1/step]
003	Special	C*	[0 to 99999999 / **0** / 1/step]
004	Thick	C*	[0 to 99999999 / **0** / 1/step]
005	Normal (Back)	C*	[0 to 99999999 / **0** / 1/step]
006	Thick (Back)	C*	[0 to 99999999 / **0** / 1/step]
007	OHP	C*	[0 to 99999999 / **0** / 1/step]
008	Other	C*	[0 to 99999999 / **0** / 1/step]

8471	**[PrtPGS/Mag]**		
	These SPs count by magnification rate the number of pages printed.		
001	< 49%	C*	[0 to 99999999 / **0** / 1/step]
002	50% to 99%	C*	
003	100%	C*	
004	101% to 200%	C*	
005	201% <	C*	

Counts are done for magnification adjusted for pages, not only on the operation panel but performed remotely with an external network application capable of performing magnification

adjustment as well.
Magnification adjustments done with printer drivers with PC applications such as Excel are also counted.
Magnification adjustments done for adjustments after they have been stored on the document server are not counted.
Magnification adjustments performed automatically during Auto Reduce/Enlarge copying are counted.
The magnification rates of blank cover sheets, slip sheets, etc. are automatically assigned a rate of 100%.

8481	**[T:PrtPGS/TonSave]**	C*	[0 to 99999999 / **0** / 1/step]
8484	**[P:PrtPGS/TonSave]**	C*	
	These SPs count the number of pages printed with the Toner Save feature switched on. **Note:** These SPs return the same results as this SP is limited to the Print application.		

8511	**[T:PrtPGS/Emul]**		
	These SPs count by printer emulation mode the total number of pages printed.		
8514	**[P:PrtPGS/Emul]**		
	These SPs count by printer emulation mode the total number of pages printed.		
001	RPCS	C*	[0 to 99999999 / **0** / 1/step]
002	RPDL	C*	[0 to 99999999 / **0** / 1/step]
003	PS3	C*	[0 to 99999999 / **0** / 1/step]
004	R98	C*	[0 to 99999999 / **0** / 1/step]
005	R16	C*	[0 to 99999999 / **0** / 1/step]
006	GL/GL2	C*	[0 to 99999999 / **0** / 1/step]
007	R55	C*	[0 to 99999999 / **0** / 1/step]
008	RTIFF	C*	[0 to 99999999 / **0** / 1/step]

009	PDF	C*	[0 to 99999999 / **0** / 1/step]
010	PCL5e/5c	C*	[0 to 99999999 / **0** / 1/step]
011	PCL XL	C*	[0 to 99999999 / **0** / 1/step]
012	IPDL-C	C*	[0 to 99999999 / **0** / 1/step]
013	BM-Links	C*	Japan Only
014	Other	C*	[0 to 99999999 / **0** / 1/step]
015	IPDS	C*	[0 to 99999999 / **0** / 1/step]

- SP8 511 and SP8 514 return the same results as they are both limited to the Print application.
- Print jobs output to the document server are not counted.

8521	**[T:PrtPGS/FIN]**		
	These SPs count by finishing mode the total number of pages printed by all applications.		
8522	**[C:PrtPGS/FIN]**		
	These SPs count by finishing mode the total number of pages printed by the Copy application.		
8524	**[P:PrtPGS/FIN]**		
	These SPs count by finishing mode the total number of pages printed by the Print application.		
8525	**[S:PrtPGS/FIN]**		
	These SPs count by finishing mode the total number of pages printed by the Scanner application.		
8526	**[L:PrtPGS/FIN]**		
	These SPs count by finishing mode the total number of pages printed from within the document server mode window at the operation panel.		
001	Sort	C*	[0 to 99999999 / **0** / 1/step]
002	Stack	C*	[0 to 99999999 / **0** / 1/step]
003	Staple	C*	[0 to 99999999 / **0** / 1/step]

004	Booklet	C*	[0 to 99999999 / **0** / 1/step]
005	Z-Fold	C*	[0 to 99999999 / **0** / 1/step]
006	Punch	C*	[0 to 99999999 / **0** / 1/step]
007	Other	C*	[0 to 99999999 / **0** / 1/step]
008	Inside Fold	C*	[0 to 99999999 / **0** / 1/step]
	Half-Fold (FM2) (Multi Fold Unit)		
009	Three-IN-Fold	C*	[0 to 99999999 / **0** / 1/step] Letter Fold-in (FM4) (Multi Fold Unit)
010	Three-OUT-Fold	C*	[0 to 99999999 / **0** / 1/step] Letter Fold-out (FM3) (Multi Fold Unit)
011	Four Fold	C*	[0 to 99999999 / **0** / 1/step] Double Parallel Fold (FM5) (Multi Fold Unit)
012	KANNON-Fold	C*	[0 to 99999999 / **0** / 1/step] Gate Fold (FM6) (Multi Fold Unit)
013	Perfect-Bind	C*	[0 to 99999999 / **0** / 1/step] Perfect Binder
014	Ring-Bind	C*	[0 to 99999999 / **0** / 1/step] Ring Binder

Note

- If stapling is selected for finishing and the stack is too large for stapling, the unstapled pages are still counted.
- The counts for staple finishing are based on output to the staple tray, so jam recoveries are counted.

8531	**[Staples]**	C*	This SP counts the amount of staples used by the machine. [0 to 9999999 / **0** / 1/step]

8551	**[T:FIN Books]**

8-551-001	Perfect-Bind	C*	Booklet finishing Not used
8-551-002	Ring-Bind	C*	

8552	**[C:FIN Books]**		
8-552-001	Perfect-Bind	C*	Booklet finishing Not used
8-552-002	Ring-Bind	C*	

8554	**[P:FIN Books]**		
8-554-001	Perfect-Bind	C*	Booklet finishing Not used
8-554-002	Ring-Bind	C*	

8556	**[L:FIN Books]**		
8-556-001	Perfect-Bind	C*	Booklet finishing Not used
8-556-002	Ring-Bind	C*	

8581	**[T:Counter]**		
	These SPs count the total output broken down by color output, regardless of the application used. In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine.		
8-581-001	Total	C*	[0 to 99999999 / **0** / 1/step]
8-581-031	Total: B/W (A3)	C*	

8591	**[O:Counter]**		
	These SPs count the totals for A3/DLT paper use, number of duplex pages printed, and the number of staples used. These totals are for Other (O:) applications only.		
8-591-001	A3/DLT	C*	[0 to 99999999 / **0** / 1/step]
8-591-002	Duplex	C*	

8601	[T:CvgCounter]		
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		
8-601-001	Cvg: BW %	C*	[0 to 2147483647 / **0** / 1%/step]
8-601-011	Cvg: BW Pages	C*	[0 to 9999999 / **0** / 1/step]

8602	[C:CvgCounter]		
	-		
8-602-001	Cvg: B/W %	C*	[0 to 2147483647 / **0** / 1%/step]

8604	[P:CvgCounter]		
	-		
8-604-001	Cvg: B/W %	C*	[0 to 2147483647 / **0** / 1%/step]

8606	[L:CvgCounter]		
	-		
8-606-001	Cvg: B/W %	C*	[0 to 2147483647 / **0** / 1%/step]

8617	[SDK Apli Counter]		
	These SPs count the total printout pages for each SDK application.		
8-617-001	SDK-1	C*	[0 to 99999999 / **0** / 1/step]
8-617-002	SDK-2	C*	
8-617-003	SDK-3	C*	
8-617-004	SDK-4	C*	
8-617-005	SDK-5	C*	
8-617-006	SDK-6	C*	

8621	[Func Use Counter]		
	-		
8-621-001	Function-001	C*	[0 to 99999999 / **0** / 1/step]
8-621-002	Function-002	C*	
8-621-003	Function-003	C*	
8-621-004	Function-004	C*	
8-621-005	Function-005	C*	
8-621-006	Function-006	C*	[0 to 99999999 / **0** / 1/step]
8-621-007	Function-007	C*	
8-621-008	Function-008	C*	
8-621-009	Function-009	C*	
8-621-010	Function-010	C*	
8-621-011	Function-011	C*	[0 to 99999999 / **0** / 1/step]
8-621-012	Function-012	C*	
8-621-013	Function-013	C*	
8-621-014	Function-014	C*	
8-621-015	Function-015	C*	
8-621-016	Function-016	C*	[0 to 99999999 / **0** / 1/step]
8-621-017	Function-017	C*	
8-621-018	Function-018	C*	
8-621-019	Function-019	C*	
8-621-020	Function-020	C*	
8-621-021	Function-021	C*	[0 to 99999999 / **0** / 1/step]
8-621-022	Function-022	C*	
8-621-023	Function-023	C*	
8-621-024	Function-024	C*	

8-621-025	Function-025	C*	
8-621-026	Function-026	C*	[0 to 99999999 / **0** / 1/step]
8-621-027	Function-027	C*	
8-621-028	Function-028	C*	
8-621-029	Function-029	C*	
8-621-030	Function-030	C*	
8-621-031	Function-031	C*	[0 to 99999999 / **0** / 1/step]
8-621-032	Function-032	C*	
8-621-033	Function-033	C*	
8-621-034	Function-034	C*	
8-621-035	Function-035	C*	
8-621-036	Function-036	C*	
8-621-037	Function-037	C*	
8-621-038	Function-038	C*	
8-621-039	Function-039	C*	
8-621-040	Function-040	C*	
8-621-041	Function-041	C*	[0 to 99999999 / **0** / 1/step]
8-621-042	Function-042	C*	
8-621-043	Function-043	C*	
8-621-044	Function-044	C*	
8-621-045	Function-045	C*	
8-621-046	Function-046	C*	
8-621-047	Function-047	C*	
8-621-048	Function-048	C*	
8-621-049	Function-049	C*	
8-621-050	Function-050	C*	

8-621-051	Function-051	C*	[0 to 99999999 / **0** / 1/step]
8-621-052	Function-052	C*	
8-621-053	Function-053	C*	
8-621-054	Function-054	C*	
8-621-055	Function-055	C*	
8-621-056	Function-056	C*	
8-621-057	Function-057	C*	
8-621-058	Function-058	C*	
8-621-059	Function-059	C*	
8-621-060	Function-060	C*	
8-621-061	Function-061	C*	[0 to 99999999 / **0** / 1/step]
8-621-062	Function-062	C*	
8-621-063	Function-063	C*	
8-621-064	Function-064	C*	

8651	**[T:S-to-Email PGS]**		
	These SPs count by color mode the total number of pages attached to an e-mail for both the Scan and document server applications.		
8-651-001	B/W	C*	[0 to 9999999 / **0** / 1/step]

8655	**[S:S-to-Email PGS]**		
	These SPs count by color mode the total number of pages attached to an e-mail for both the Scan and document server applications.		
8-655-001	B/W	C*	[0 to 9999999 / **0** / 1/step]

Note

- The count for B/W and Color pages is done after the document is stored on the HDD. If the job is cancelled before it is stored, the pages are not counted.
- If Scan-to-Email is used to send a 10-page document to 5 addresses, the count is 10 (the

pages are sent to the same SMTP server together).

- If Scan-to-PC is used to send a 10-page document to 5 folders, the count is 50 (the document is sent to each destination of the SMB/FTP server).
- Due to restrictions on some devices, if Scan-to-Email is used to send a 10-page document to a large number of destinations, the count may be divided and counted separately. For example, if a 10-page document is sent to 200 addresses, the count is 10 for the first 100 destinations and the count is also 10 for the second 100 destinations, for a total of 20.).

8661	**[T:Deliv PGS/Svr]**		
	These SPs count by color mode the total number of pages sent to a Scan Router server by both Scan and LS applications.		
8-661-001	B/W	C*	[0 to 9999999 / **0** / 1/step]

8665	**[S:Deliv PGS/Svr]**		
	These SPs count by color mode the total number of pages sent to a Scan Router server by the Scan application.		
8-665-001	B/W	C*	[0 to 9999999 / **0** / 1/step]

Note

- The B/W and Color counts are done after the document is stored on the HDD of the Scan Router server.
- If the job is canceled before storage on the Scan Router server finishes, the counts are not done.
- The count is executed even if regardless of confirmation of the arrival at the Scan Router server.

8671	**[T:Deliv PGS/PC]**
	These SPs count by color mode the total number of pages sent to a folder on a PC (Scan-to-PC) with the Scan and LS applications.
8675	**[S: Deliv PGS/PC]**
	These SPs count by color mode the total number of pages sent with Scan-to-PC with the Scan application.

001	B/W	C*	[0 to 9999999 / **0** / 1/step]

8691	**[T:TX PGS/LS]**	C*	These SPs count the number of pages sent from the document server. The counter for the application that was used to store the pages is incremented. [0 to 9999999/ **0** / 1/step] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter.
8692	**[C:TX PGS/LS]**	C*	
8694	**[P:TX PGS/LS]**	C*	
8695	**[S:TX PGS/LS]**	C*	
8696	**[L:TX PGS/LS]**	C*	

Note

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.
- If several documents are merged for sending, the number of pages stored are counted for the application that stored them.
- When several documents are sent by a Fax broadcast, the F: count is done for the number of pages sent to each destination.

8701	**[TX PGS/Port]**		
	These SPs count the number of pages sent by the physical port used to send them. For example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for ISDN (G3, G4) is 12.		
8-701-001	PSTN-1	C*	[0 to 9999999/ **0** / 1/step]
8-701-002	PSTN-2	C*	[0 to 9999999/ **0** / 1/step]
8-701-003	PSTN-3	C*	[0 to 9999999/ **0** / 1/step]
8-701-004	ISDN (G3,G4)	C*	[0 to 9999999/ **0** / 1/step]
8-701-005	Network	C*	[0 to 9999999/ **0** / 1/step]

8711	**[T:Scan PGS/Comp]**
8715	**[S:Scan PGS/Comp]**

	These SPs count the number of pages sent by each compression mode.		
001	JPEG/JPEG2000	C*	[0 to 9999999/ **0** / 1/step]
002	TIFF(Multi/Single)	C*	[0 to 9999999/ **0** / 1/step]
003	PDF	C*	[0 to 9999999/ **0** / 1/step]
004	Other	C*	[0 to 9999999/ **0** / 1/step]
005	PDF/Comp	C*	[0 to 9999999/ **0** / 1/step]
006	PDF/A	C*	[0 to 9999999/ **0** / 1/step]
007	PDF(OCR)	C*	[0 to 9999999/ **0** / 1/step]
008	PDF/Comp(OCR)	C*	[0 to 9999999/ **0** / 1/step]

8721	**[T:Deliv PGS/WSD]**		
8725	**[S: Dvliv PGS/WSD]**		
	These SPs count the number of pages scanned by each scanner mode.		
001	B/W	C*	[0 to 9999999/ **0** / 1/step]

8731	**[T:Scan PGS/Media]**		
8735	**[S:Scan PGS/Media]**		
	These SPs count the number of pages scanned and saved in a media by each scanner mode.		
001	B/W	C*	[0 to 9999999/ **0** / 1/step]

8741	**[RX PGS/Port]**		
	These SPs count the number of pages received by the physical port used to receive them.		
001	PSTN-1	C*	[0 to 9999999/ **0** / 1/step]
002	PSTN-2	C*	[0 to 9999999/ **0** / 1/step]
003	PSTN-3	C*	[0 to 9999999/ **0** / 1/step]

004	ISDN (G3,G4)	C*	[0 to 9999999/ **0** / 1/step]
005	Network	C*	[0 to 9999999/ **0** / 1/step]

8771	**[Dev Counter]**		
	These SPs count the frequency of use (number of rotations of the development rollers) for black and other color toners.		
001	Total	C*	[0 to 99999999 / **0** / 1/step]

8781	**[Toner_Bottle_Info.]**	E*	[0 to 9999999 / **0** / 1/step]
	These SPs display the number of already replaced toner bottles. NOTE: Currently, the data in SP7-833-011 through 014 and the data in SP8-781-001 through 004 are the same.		
001	Toner: BK	The number of black-toner bottles	

8791	**[LS Memory Remain]** This SP displays the percent of space available on the document server for storing documents.		
001	-	C*	[0 to 100 / **0** / 1/step]

8801	**[Toner Remain]**		
	These SPs display the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time. Note: This precise method of measuring remaining toner supply (1% steps) is better than other machines in the market that can only measure in increments of 10 (10% steps).		
8-801-001	K	C*	[0 to 100 / **0** / 1% /step]

8811	**[Eco Counter]**		
	-		
8-811-001	Eco Total	C*	[0 to 99999999 / **0** / 1/step]

8-811-004	Duplex	C*	
8-811-005	Combine	C*	
8-811-008	Duplex (%)	C*	[0 to 100 / **0** / 1%/step]
8-811-009	Combine (%)	C*	
8-811-010	Paper Cut (%)	C*	
8-811-101	Eco Totalr:Last	C*	[0 to 99999999 / **0** / 1/step]
8-811-104	Duplex:Last	C*	
8-811-105	Combine:Last	C*	
8-811-108	Duplex (%):Last	C*	[0 to 100 / **0** / 1%/step]
8-811-109	Combine (%):Last	C*	[0 to 100 / **0** / 1%/step]
8-811-110	Paper Cut (%):Last	C*	[0 to 100 / **0** / 1%/step]

8851	**[Cvr Cnt: 0-10%]**		
	These SPs display the number of scanned sheets on which the coverage of each color is from 0% to 10%.		
8-851-011	0 to 2%: BK	E*	[0 to 99999999 / **0** / 1/step]
8-851-021	3 to 4%: BK	E*	[0 to 99999999 / **0** / 1/step]
8-851-031	5 to 7%: BK	E*	[0 to 99999999 / **0** / 1/step]
8-851-041	8 to 10%: BK	E*	[0 to 99999999 / **0** / 1/step]

8861	**[Cvr Cnt: 11-20%]**		
	These SPs display the number of scanned sheets on which the coverage of each color is from 11% to 20%.		
8-861-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8871	**[Cvr Cnt: 21-30%]**

	These SPs display the number of scanned sheets on which the coverage of each color is from 21% to 30%.		
8-871-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8881	**[Cvr Cnt: 31%-]**		
	These SPs display the number of scanned sheets on which the coverage of each color is 31% or higher.		
8-881-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8891	**[Page/Toner Bottle]**		
	These SPs display the amount of the remaining current toner for each color.		
8-891-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8901	**[Page/Ink_prev1]**		
	These SPs display the amount of the remaining previous toner for each color.		
8-901-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8911	**[Page/Ink_prev2]**		
	These SPs display the amount of the remaining 2nd previous toner for each color.		
8-911-001	BK	E*	[0 to 99999999 / **0** / 1/step]

8921	**[Cvr Cnt/Total]**		
	Displays the total coverage and total printout number for each color.		
8-921-001	Coverage (%) Bk	C*	[0 to 2147483647 / **0** / 1%/step]
8-921-011	Coverage /P: Bk	C*	[0 to 99999999 / **0** / 1/step]

8941	**[Machine Status]**		
	These SPs count the amount of time the machine spends in each operation mode. These SPs are useful for customers who need to investigate machine operation for improvement in their compliance with ISO Standards.		
8-941-001	Operation Time	C*	[0 to 99999999 / **0** / 1/step] Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating).
8-941-002	Standby Time	C*	[0 to 99999999 / **0** / 1/step] Engine not operating. Includes time while controller saves data to HDD. Does not include time spent in Energy Save, Low Power, or Off modes.
8-941-003	Energy Save Time	C*	[0 to 99999999 / **0** / 10/step] Includes time while the machine is performing background printing.
8-941-004	Low Power Time	C*	[0 to 99999999 / **0** / 1/step] Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing.
8-941-005	Off Mode Time	C*	[0 to 99999999 / **0** / 1/step] Includes time while machine is performing background printing. Does not include time machine remains powered off with the power switches.
8-941-006	SC	C*	[0 to 99999999 / **0** / 1/step] Total time when SC errors have been staying.
8-941-007	PrtJam	C*	[0 to 99999999 / **0** / 1/step] Total time when paper jams have been staying during printing.

8-941-008	OrgJam	C*	[0 to 99999999 / **0** / 1/step] Total time when original jams have been staying during scanning.
8-941-009	Supply PM Unit End	C*	[0 to 99999999 / **0** / 1/step] Total time when toner end has been staying

8951	**[AddBook Register]**		
	These SPs count the number of events when the machine manages data registration.		
8-951-001	User Code/User ID	C*	[0 to 9999999/ **0** / 1/step] User code registrations.
8-951-002	Mail Address	C*	[0 to 9999999/ **0** / 1/step] Mail addresses registrations.
8-951-003	Fax Destination	C*	[0 to 9999999/ **0** / 1/step] Fax destination registrations.
8-951-004	Group	C*	[0 to 9999999/ **0** / 1/step] Group destination registrations.
8-951-005	Transfer Request	C*	[0 to 9999999/ **0** / 1/step] Fax relay destination registrations for relay TX.
8-951-006	F-Code	C*	[0 to 9999999/ **0** / 1/step] F-Code box registrations
8-951-007	Copy Program	C*	[0 to 255 / **0** / 255/step] Copy application registrations with the Program (job settings) feature.
8-951-008	Fax Program	C*	[0 to 255 / **0** / 255/step] Fax application registrations with the Program (job settings) feature.
8-951-009	Printer Program	C*	[0 to 255 / **0** / 255/step] Printer application registrations with the Program (job settings) feature.

8-951-010	Scanner Program	C*	[0 to 255 / **0** / 255/step] Scanner application registrations with the Program (job settings) feature.

8961	**[Electricity Status]**		
	-		
8-961-001	Ctrl Standby Time	C*	[0 to 99999999 / **0** / 1/step]
8-961-002	STR Time	C*	
8-961-003	Main Power Off Time	C*	
8-961-004	Reading and Printing Time	C*	
8-961-005	Printing Time	C*	[0 to 99999999 / **0** / 1/step]
8-961-006	Reading Time	C*	
8-961-007	Eng Waiting Time	C*	
8-961-008	Low Power State Time	C*	
8-961-009	Silent State Time	C*	
8-961-010	Heater Off State Time	C*	
8-961-011	LCD on Time	C*	

8971	**[Unit Control]**		
	-		
8-971-001	Engine Off Recovery Count	C*	[0 to 99999999 / 0 / 1/step]
8-971-002	Power Off Count	C*	
8-971-003	Force Power Off Count	C*	

3.9 INPUT AND OUTPUT CHECK

⇒ 3.9.1 INPUT CHECK TABLE

<table>
<tr><th>SP No.</th><th>Description</th><th>Function</th></tr>
<tr><td>5-803-001</td><td>Paper Feed 1</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Rear Fence HP Sensor</td><td>Not in HP</td><td>HP detected</td></tr>
<tr><td>1</td><td>Rear Fence Return Sensor</td><td>Not detected</td><td>Detected</td></tr>
<tr><td>2</td><td>Right Tray Paper End Sensor</td><td>Not detected</td><td>Detected</td></tr>
<tr><td>3</td><td>Left Tray Paper End Sensor</td><td>Not detected</td><td>Detected</td></tr>
<tr><td>4</td><td>Tandem Tray End Fence Open Sensor: Rear</td><td>Not Open</td><td>Open</td></tr>
<tr><td>5</td><td>Tandem Tray End Fence Closed Sensor: Rear</td><td>Not Closed</td><td>Closed</td></tr>
<tr><td>6</td><td>Tandem Tray End Fence Open Sensor: Front</td><td>Not open</td><td>Open</td></tr>
<tr><td>7</td><td>Tandem Tray End Fence Close Sensor: Front</td><td>Not closed</td><td>Closed</td></tr>
</table>
</td></tr>
<tr><td>5-803-002</td><td>Paper Feed 2</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Lower Limit Sensor (Right tandem tray)</td><td>Not lowest position</td><td>Lowest position</td></tr>
<tr><td>1</td><td>Paper Height Sensor 1</td><td colspan="2" rowspan="4">See table below</td></tr>
<tr><td>2</td><td>Paper Height Sensor 2</td></tr>
<tr><td>3</td><td>Paper Height Sensor 3</td></tr>
<tr><td>4</td><td>Paper Height Sensor 4</td></tr>
<tr><td></td><td colspan="3">
<table>
<tr><td>Paper Height Sensor 1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Paper Height Sensor 2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Paper Height Sensor 3</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Paper Height Sensor 4</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Amount of Paper (%)</td><td>100</td><td>80</td><td colspan="2">50</td><td colspan="2">25</td><td colspan="2">10</td></tr>
</table>
</td></tr>
<tr><td>5</td><td>1st Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
<tr><td>6</td><td>2nd Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
<tr><td>7</td><td>3rd Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
</table>
</td></tr>
<tr><td>5-803-003</td><td>Paper Feed 3</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Tray 2 Paper Height Detection 1</td><td colspan="2" rowspan="2">See table below</td></tr>
<tr><td>1</td><td>Tray 2 Paper Height Detection 2</td></tr>
<tr><td></td><td colspan="3">
<table>
<tr><td>Tray 2 Height Detection 1</td><td>1</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>Tray 2 Height Detection 2</td><td>1</td><td>1</td><td>0</td><td>0</td></tr>
<tr><td>Amount of Paper (%)</td><td>100</td><td>50</td><td>30</td><td>10</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>Tray 2 Paper Size Sensor</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>3</td><td></td></tr>
</table>
</td></tr>
</table>

4		Paper size		bit 6	bit 5	bit 4	bit 3	bit 2
5				SW1	SW2	SW3	SW4	SW5
6		12x18”	SEF	0	0	0	0	0
		A3	SEF	0	0	1	1	0
		B4	SEF	0	1	1	0	0
		A4	SEF	1	0	1	1	0
			LEF	0	0	1	1	1
		B5	SEF	0	1	0	1	0
			LEF	1	1	1	0	0
		A5	SEF	0	0	0	1	0
			LEF	1	0	0	1	0
		DLT	SEF	0	0	0	1	1
		LG	SEF	0	1	0	0	1
		LT	SEF	0	0	1	0	1
			LEF	1	0	0	1	1
		HLT	SEF	1	0	0	0	1
			LEF	0	0	0	0	1
		F4	SEF	0	0	1	0	0
		Folio	SEF	1	0	1	0	0
		F	SEF	1	0	0	0	0
		Executive	SEF	0	1	0	1	1
			LEF	1	1	0	0	0
		267x388mm	SEF	1	1	0	0	1
		194x267mm	SEF	0	1	1	0	1
			LEF	0	1	0	0	0
7	(Unused)							

5-803-004 Paper Feed 4

Bit No.	Function	0	1
0	Tray 3 Paper Height Detection 1	See table below	
1	Tray 3 Paper Height Detection 2		

Tray 3 Height Detection 1	1	0	0	1
Tray 3 Height Detection 2	1	1	0	0
Amount of Paper (%)	100	50	30	10

2 Tray 3 Paper Size Sensor

3		Paper size		bit 6	bit 5	bit 4	bit 3	bit 2
4				SW1	SW2	SW3	SW4	SW5
5		12x18”	SEF	0	0	0	0	0
6		A3	SEF	0	0	1	1	0
		B4	SEF	0	1	1	0	0
		A4	SEF	1	0	1	1	0
			LEF	0	0	1	1	1
		B5	SEF	0	1	0	1	0
			LEF	1	1	1	0	0
		A5	SEF	0	0	0	1	0
			LEF	1	0	0	1	0
		DLT	SEF	0	0	0	1	1

		LG	SEF	0	1	0	0	1
		LT	SEF	0	0	1	0	1
			LEF	1	0	0	1	1
		HLT	SEF	1	0	0	0	1
			LEF	0	0	0	0	1
		F4	SEF	0	0	1	0	0
		Folio	SEF	1	0	1	0	0
		F	SEF	1	0	0	0	0
		Executive	SEF	0	1	0	1	1
			LEF	1	1	0	0	0
		267x388mm	SEF	1	1	0	0	1
		194x267mm	SEF	0	1	1	0	1
			LEF	0	1	0	0	0
	7	(Unused)						

5-803-005 Paper Feed 5

Bit No.	Function	0	1
0	1st Paper Upper Limit Sensor	Not detected	Detected
1	2nd Paper Upper Limit Sensor	Not detected	Detected
2	3rd Paper Upper Limit Sensor	Not detected	Detected
3-4	(Unused)		
5	1st Paper Feed Sensor	Detected	Not detected
6	2nd Paper Feed Sensor	Detected	Not detected
7	3rd Paper Feed Sensor	Detected	Not detected

5-803-006 Paper Feed 6

Bit No.	Function	0	1
0	1st Transport Sensor	Detected	Not detected
1	2nd Transport Sensor	Detected	Not detected
2	3rd Transport Sensor	Detected	Not detected
3	Vertical Transport Sensor	Detected	Not detected
4	Main Relay Sensor	Detected	Not detected
5	Registration Entrance Sensor	Detected	Not detected
6	LCT Relay Sensor	Detected	Not detected
7	Registration Timing Sensor	Detected	Not detected

5-803-007 Paper Feed 7

Bit No.	Function	0	1
0	Transfer Timing Sensor	Detected	Not detected
1	Transport Roller Separation Sensor	Detected	Not detected
2	Fusing Exit Sensor: Center	Detected	Not detected
3	Pressure Roller Paper Sensor	Not detected	Detected
4	Fusing Belt Sensor	Not detected	Detected
5	Exit Junction Sensor	Detected	Not detected
6	Exit Sensor	Detected	Not detected
7	Exit Invert Sensor	Detected	Not detected

5-803-008 Paper Feed 8

Bit No.	Function	0	1

		0	Duplex Invert Sensor	Detected	Not detected
		1	Duplex Transport Sensor 1	Detected	Not detected
		2	Duplex Transport Sensor 2	Detected	Not detected
		3	Duplex Transport Sensor 3	Detected	Not detected
		4	Duplex Transport Sensor 4	Detected	Not detected
		5	Duplex Transport Sensor 5	Detected	Not detected
		6	Duplex Transport Sensor 6	Detected	Not detected
		7	Duplex Unit Exit Sensor	Detected	Not detected
5-803-009	Paper Feed 9				
		Bit No.	Function	0	1
		0	Purge Relay Sensor	Detected	Not detected
		1	Purged Paper Sensor	Not detected	Detected
		2-4	(Unused)		
		5	Registration Gate Roller HP Sensor	Not in HP	HP detected
		6	LE Shift Unit HP Sensor	Not in HP	HP detected
		7	TE Shift Unit HP Sensor	Not in HP	HP detected
5-803-010	Paper Feed 10				
		Bit No.	Function	0	1
		0	Main Relay HP Sensor	Not in HP (Roller separated)	HP detected (Roller in contact)
		1	LCT Relay HP Sensor	Not in HP (Roller separated)	HP detected (Roller in contact)
		2	Exit Junction Gate HP Sensor	Invert path	Straight path
		3	Invert Exit HP Sensor	HP detected (Roller in contact)	Not in HP (Roller separated)
		4	Decurl Unit HP Sensor	Not in HP	HP detected
		5	Decurl Unit Limit Sensor	Normal	Over limit
		6-7	(Unused)		
5-803-027	LCT-CPU-Port1	[A4 LCT and A3 LCT]			
		Bit No.	Function	0	1
		0-6	(Unused)		
		7	Exit Roller Lift HP Sensor	Not in HP	HP detected
5-803-028	LCT-CPU-Port7	[A4 LCT and A3 LCT]			
		Bit No.	Function	0	1
		0-4	(Unused)		
		5	Door Safety Switch	Door Closed	Door Open-
		6-7	(Unused)		
5-803-029	LCT-CPU-Port9	[A4 LCT and A3 LCT]			
		Bit No.	Function	0	1
		0	SW002 -1	ON	OFF
		1	SW002 -2	ON	OFF
		2	SW002 -3	ON	OFF
		3	SW002 -4	ON	OFF
		4	SW002 -5	ON	OFF
		5	SW002 -6	ON	OFF
		6	SW002 -7	ON	OFF

		7	SW002 -8	ON	OFF
5-803-030	LCT-eIO1-PortB	[A4 LCT]			

Bit No.	Function	0	1
0	4th Paper Height Sensor 1	Not detected	Detected
1	4th Paper Height Sensor 2	Not detected	Detected
2	4th Paper Height Sensor 3	Not detected	Detected
3	4th Paper Height Sensor 4	Not detected	Detected
4	4th Paper Size Switch 1	ON	OFF
5	4th Paper Size Switch 2	ON	OFF
6	4th Paper Size Switch 3	ON	OFF
7	(Unused)		

[A3 LCT]

Bit No.	Function	0	1
0	4th Paper Height Sensor 1	Not detected	Detected
1	4th Paper Height Sensor 2	Not detected	Detected
2	4th Paper Height Sensor 3	Not detected	Detected
3	4th Paper Height Sensor 4	Not detected	Detected
4	4th Paper Width Sensor 1	Detected	Not detected
5	4th Paper Width Sensor 2	Detected	Not detected
6	4th Paper Width Sensor 3	Detected	Not detected
7	4th Paper Length Sensor	Not detected	Detected

5-803-031 LCT-eIO1-PortC

[A4 LCT and A3 LCT]

Bit No.	Function	0	1
0	4th Paper Feed Unit Set	Set	Not set
1	4th Paper End Sensor	Detected (Paper in tray)	Not detected (Paper end)
2	4th Upper Limit Sensor	Detected	Not detected
3	4th Paper Feed Sensor	Detected	Not detected
4	(Unused)		
5	4th Air Assist Fan – Rear Alarm (A3 LCT only)	Normal	Abnormal
6	4th Air Assist Fan – Front Alarm (A3 LCT only)	Normal	Abnormal
7	4th Paper Tray Set (A3 LCT only)	Set	Not set

5-803-032 LCT-eIO1-PortD

[A4 LCT and A3 LCT]

Bit No.	Function	0	1
0	SW100 -4	ON	OFF
1	SW100 -3	ON	OFF
2	SW100 -2	ON	OFF
3	SW100 -1	ON	OFF
4	LCT Exit Sensor	Detected	Not detected
5	4th Relay Sensor (A4 LCT) 4th Relay Sensor 2 (A3 LCT)	Detected	Not detected
6	4th Relay Sensor 1 (A3 LCT)	Detected	Not detected
7	4th Transport Sensor	Detected	Not detected

5-803-033 LCT-eIO2-PortB

[A4 LCT]

Bit No.	Function	0	1
0	5th Paper Height Sensor 1	Not detected	Detected

		1 | 5th Paper Height Sensor 2 | Not detected | Detected 2 | 5th Paper Height Sensor 3 | Not detected | Detected 3 | 5th Paper Height Sensor 4 | Not detected | Detected 4 | 5th Paper Size Switch 1 | ON | OFF 5 | 5th Paper Size Switch 2 | ON | OFF 6 | 5th Paper Size Switch 3 | ON | OFF 7 | (Unused) | | [A3 LCT] Bit No. | Function | 0 | 1 0 | 5th Paper Height Sensor 1 | Not detected | Detected 1 | 5th Paper Height Sensor 2 | Not detected | Detected 2 | 5th Paper Height Sensor 3 | Not detected | Detected 3 | 5th Paper Height Sensor 4 | Not detected | Detected 4 | 5th Paper Width Sensor 1 | Detected | Not detected 5 | 5th Paper Width Sensor 2 | Detected | Not detected 6 | 5th Paper Width Sensor 3 | Detected | Not detected 7 | 5th Paper Length Sensor | Not detected | Detected
5-803-034	LCT-eIO2-PortC	[A4 LCT and A3 LCT] Bit No. | Function | 0 | 1 0 | 5th Paper Feed Unit Set | Set | Not set 1 | 5th Paper End Sensor | Detected (Paper in tray) | Not detected (Paper end) 2 | 5th Upper Limit Sensor | Detected | Not detected 3 | 5th Paper Feed Sensor | Detected | Not detected 4 | (Unused) | | 5 | 5th Air Assist Fan – Rear Alarm (A3 LCT only) | Normal | Abnormal 6 | 5th Air Assist Fan – Front Alarm (A3 LCT only) | Normal | Abnormal 7 | 5th Paper Tray Set (A3 LCT only) | Set | Not set
5-803-035	LCT-eIO2-PortD	[A4 LCT and A3 LCT] Bit No. | Function | 0 | 1 0 | SW200 -4 | ON | OFF 1 | SW200 -3 | ON | OFF 2 | SW200 -2 | ON | OFF 3 | SW200 -1 | ON | OFF 4-5 | (Unused) | | 6 | 5th Relay Sensor (A3 LCT only) | Detected | Not detected 7 | 5th Transport Sensor | Detected | Not detected
5-803-036	LCT-eIO3-PortB	[A4 LCT] Bit No. | Function | 0 | 1 0 | 6th Paper Height Sensor 1 | Not detected | Detected 1 | 6th Paper Height Sensor 2 | Not detected | Detected 2 | 6th Paper Height Sensor 3 | Not detected | Detected 3 | 6th Paper Height Sensor 4 | Not detected | Detected 4 | 6th Paper Size Switch 1 | ON | OFF 5 | 6th Paper Size Switch 2 | ON | OFF

		6 / 6th Paper Size Switch 3 / ON / OFF 7 / (Unused) / /

[A3 LCT]

Bit No.	Function	0	1
0	6th Paper Height Sensor 1	Not detected	Detected
1	6th Paper Height Sensor 2	Not detected	Detected
2	6th Paper Height Sensor 3	Not detected	Detected
3	6th Paper Height Sensor 4	Not detected	Detected
4	6th Paper Width Sensor 1	Detected	Not detected
5	6th Paper Width Sensor 2	Detected	Not detected
6	6th Paper Width Sensor 3	Detected	Not detected
7	6th Paper Length Sensor	Not detected	Detected

5-803-037 / LCT-eIO3-PortC

[A4 LCT and A3 LCT]

Bit No.	Function	0	1
0	6th Paper Feed Unit Set	Set	Not set
1	6th Paper End Sensor	Detected (Paper in tray)	Not detected (Paper end)
2	6th Upper Limit Sensor	Detected	Not detected
3	6th Paper Feed Sensor	Detected	Not detected
4	(Unused)		
5	6th Air Assist Fan – Rear Alarm (A3 LCT only)	Normal	Abnormal
6	6th Air Assist Fan – Front Alarm (A3 LCT only)	Normal	Abnormal
7	6th Paper Tray Set (A3 LCT only)	Set	Not set

5-803-038 / LCT-eIO3-PortD

[A4 LCT and A3 LCT]

Bit No.	Function	0	1
0-5	(Unused)		
6	6th Relay Sensor (A3 LCT only)	Detected	Not detected
7	6th Transport Sensor	Detected	Not detected

5-803-039 / LCT-eIO4-PortB

[Multi Bypass Tray]

Bit No.	Function	0	1
0	Paper Height Sensor 1	Not detected	Detected
1	Paper Height Sensor 2	Not detected	Detected
2	Paper Width Signal 1	Detected	Not detected
3	Paper Width Signal 2	Detected	Not detected
4	Paper Width Signal 3	Detected	Not detected
5	Paper Width Signal 4	Detected	Not detected
6	Paper Width Signal 5	Detected	Not detected
7	Paper Length Sensor	Detected	Not detected

5-803-040 / LCT-eIO4-PortC

[Multi Bypass Tray]

Bit No.	Function	0	1
0	Tray Lower Limit Sensor	Not detected	Detected
1	Paper End Sensor	Detected (Paper in tray)	Not detected (Paper end)
2	Lift Sensor 1	Detected	Not detected
3	Paper Feed Sensor	Detected	Not detected
4	(Unused)		

		5 | Tray Lift Switch | ON | Off 6 | Bypass Tray Unit Slide Signal | Closed | Open 7 | Bypass Tray Set | Set | Not set
5-803-041	LCT-eIO4-PortD	[Multi Bypass Tray] Bit No. | Function | 0 | 1 0-2 | (Unused) | | 3 | Lift Sensor 2 | Detected | Not detected 4-6 | (Unused) | | 7 | Relay Sensor | Detected | Not detected
5-803-050	V1 GPIO0	(Unused)
5-803-051	V1 GPIO1	Bit No. | Function | 0 | 1 0-4 | (Unused) | | 5 | ITB/PTR Drive Motor | Normal | Abnormal 6 | Drum Motor | Normal | Abnormal 7 | Drum Cleaning Unit Motor | Normal | Abnormal
5-803-052	V1 GPIO2	(Unused)
5-803-053	V1 GPIO3	Bit No. | Function | 0 | 1 0-3 | (Unused) | See below 4 | IOB version 1 5 | IOB version 2 6 | IOB version 3 7 | IOB version 4 Mass production: Bit 4: 1, Bit 5: 1, bit 6: 0, bit 7: 0
5-803-054	V1 GPIO4	(Unused)
5-803-055	V1 GPIO5	(Unused)
5-803-056	V1 GPIO6	(Unused)
5-803-057	V1 GPIO7	Bit No. | Function | 0 | 1 0 | Ozone Air Intake Fan | Normal | Abnormal 1 | Right Air Intake Fan: Front | Normal | Abnormal 2 | Right Air Intake Fan: Center | Normal | Abnormal 3 | Lubricant End Sensor | End | Remaining 4 | Laser Unit Cooling Fan | Normal | Abnormal 5 | Cleaning Pad HP Sensor | Not in HP | HP detected 6 | Dev. Unit Cooling Fan :Rear | Normal | Abnormal 7 | Dev. Cleaning Set | Set | Not set
5-803-058	V1 GPIO8	Bit No. | Function | 0 | 1 0 | (Unused) | | 1 | Key Counter Set 1 | See below 2 | Key Counter Set 2 3-7 | (Unused) | | Key counter set: Bit 1: 1, Bit 2: 1

5-803-059	V1 GPIO9	(Unused)
5-803-060	V1 GPIO10	(Unused)
5-803-061	V1 GPIO11	

Bit No.	Function	0	1
0-1	(Unused)		
2	CIS Cleaning Fan	Normal	Abnormal
3	Paper Separation Power Pack	Normal	SC detected
4-7	(Unused)		

5-803-062 V1 GPIO12

Bit No.	Function	0	1
0	Used Toner Bottle Set	Set	Not set
1	Used Toner Bottle Full Sensor	Detected (Full status)	Not detected
2	Used Toner Bottle Near Full Sensor	Not detected	Detected (Near full)
3-7	(Unused)		

5-803-063 V1 GPIO13

Bit No.	Function	0	1
0	PSU Cooling Fan: Right	Abnormal	Normal
1	PSU Cooling Fan: Left	Abnormal	Normal
2	PSU Air Exhaust Fan: M2: Left	Abnormal	Normal
3	PSU Air Exhaust Fan: M1: Left	Abnormal	Normal
4	PSU Air Intake Fan: M2: Right	Abnormal	Normal
5	PSU Air Intake Fan: M1: Right	Abnormal	Normal
6-7	(Unused)		

5-803-064	V1 GPIO14	(Unused)
5-803-065	V1 GPIO15	(Unused)
5-803-066	V1 GPIO16	(Unused)
5-803-067	V1 GPIO17	

Bit No.	Function	0	1
0	Right Air Intake Fan: Center	Normal	Abnormal
1	Charge Wire Cleaner Motor (driver)	Abnormal	Normal
2	Toner Feed Motor (driver)	Abnormal	Normal
3	Toner Agitator Motor (driver)	Abnormal	Normal
4	Toner Supply Bottle End Sensor	Empty	Remaining
5-7	(Unused)		

5-803-068	V1 GPIO18	(Unused)
5-803-069	V1 GPIO19	(Unused)
5-803-070	V1 GPIO20	(Unused)
5-803-071	V1 GPIO21	(Unused)
5-803-072	V1 GPIO22	(Unused)
5-803-073	V1 GPIO23	(Unused)
5-803-074	V1 GPIO24	(Unused)
5-803-075	V1 GPIO25	(Unused)
5-803-076	V1 GPIO26	(Unused)
5-803-077	V1 GPIO27	(Unused)
5-803-078	V1 GPIO28	(Unused)
5-803-079	V1 GPIO29	(Unused)
5-803-080	V1 GPIO30	(Unused)
5-803-081	V2 GPIO0	(Unused)
5-803-082	V2 GPIO1	

Bit No.	Function	0	1
0-1	(Unused)		

Rev. 5/13/2014

		2 Fusing Transport Exhaust Fan: Normal / Abnormal 3 Fusing Exhaust Fan: Lower: Normal / Abnormal 4 Fusing Exhaust Fan: Upper: Normal / Abnormal 5 Paper Exit Exhaust Fan: Lower Right: Normal / Abnormal 6 Paper Exit Exhaust Fan: Lower Left: Normal / Abnormal 7 Exit Motor: Normal / Abnormal
5-803-083	V2 GPIO2	(Unused)
5-803-084	V2 GPIO3	(Unused)
5-803-085	V2 GPIO4	(Unused)
5-803-086	V2 GPIO5	(Unused)
5-803-087	V2 GPIO6	(Unused)
5-803-088	V2 GPIO7	(Unused)
5-803-089	V2 GPIO8	(Unused)
5-803-090	V2 GPIO9	(Unused)
5-803-091	V2 GPIO10	Bit No. / Function / 0 / 1 0 Dev. Roller Rotation Detect Signal: Detected / Not detected 1 Development Motor: Normal / Abnormal 2 Development Unit Set: Set / Not set 3-7 (Unused)
5-803-092	V2 GPIO11	Bit No. / Function / 0 / 1 0-1 (Unused) 2 PTB Fan: Rear: Normal / Abnormal 3 PTB Fan: Front: Normal / Abnormal 4-7 (Unused)
5-803-093	V2 GPIO12	Bit No. / Function / 0 / 1 0 Duplex Transport Sensor 5: Detected / Not detected 1 Duplex Transport Sensor 6: Detected / Not detected 2 Duplex Unit Exit Sensor: Detected / Not detected 3 Transport Roller Separation Sensor: Detected / Not detected 4-7 (Unused)
5-803-094	V2 GPIO13	Bit No. / Function / 0 / 1 0 DRB Set detection: Not set / Set 1 Motor drivers on DRB: Abnormal / Normal 2 (Unused) 3-4 DFU (unused in the field) 5 Drivers for cooling fans: Normal / Abnormal 6-7 (Unused)
5-803-095	V2 GPIO14	(Unused)
5-803-096	V2 GPIO15	(Unused)
5-803-097	V2 GPIO16	(Unused)
5-803-098	V2 GPIO17	Bit No. / Function / 0 / 1 0-4 (Unused) 5 Double Feed Sensor Sensitivity: Low / High 6-7 (Unused)
5-803-099	V2 GPIO18	(Unused)

<table>
<tr><td>5-803-100</td><td>V2 GPIO19</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0-4</td><td>(Unused)</td><td></td><td></td></tr>
<tr><td>5</td><td>NC Sensor High Temp. Detection: Center 2</td><td>Abnormal</td><td>Normal</td></tr>
<tr><td>6</td><td>Thermistor High Temp. Detection 2</td><td>Abnormal</td><td>Normal</td></tr>
<tr><td>7</td><td>DFU (unused in the field)</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>5-803-101</td><td>V2 GPIO20</td><td>(Unused)</td></tr>
<tr><td>5-803-102</td><td>V2 GPIO21</td><td>(Unused)</td></tr>
<tr><td>5-803-103</td><td>V2 GPIO22</td><td>(Unused)</td></tr>
<tr><td>5-803-104</td><td>V2 GPIO23</td><td>(Unused)</td></tr>
<tr><td>5-803-105</td><td>V2 GPIO24</td><td>(Unused)</td></tr>
<tr><td>5-803-106</td><td>V2 GPIO25</td><td>(Unused)</td></tr>
<tr><td>5-803-107</td><td>V2 GPIO26</td><td>(Unused)</td></tr>
<tr><td>5-803-108</td><td>V2 GPIO27</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Duplex Transport Sensor 4</td><td>Detected</td><td>Not detected</td></tr>
<tr><td>1</td><td>PTR Fan: Front</td><td>Normal</td><td>Abnormal</td></tr>
<tr><td>2</td><td>Registration Entrance Sensor</td><td>Detected</td><td>Not detected</td></tr>
<tr><td>3</td><td>LCT Relay Sensor</td><td>Detected</td><td>Not detected</td></tr>
<tr><td>4</td><td>Used Toner Bottle Motor</td><td>Normal</td><td>Abnormal</td></tr>
<tr><td>5-7</td><td>(Unused)</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>5-803-109</td><td>V2 GPIO28</td><td>(Unused)</td></tr>
<tr><td>5-803-110</td><td>V2 GPIO29</td><td>(Unused)</td></tr>
<tr><td>5-803-111</td><td>V2 GPIO30</td><td>(Unused)</td></tr>
<tr><td>5-803-112</td><td>V3 GPIO0</td><td>(Unused)</td></tr>
<tr><td>5-803-113</td><td>V3 GPIO1</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>DIPSW1 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>1</td><td>DIPSW2 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>2</td><td>DIPSW3 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>3</td><td>DIPSW4 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>4</td><td>DIPSW5 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>5</td><td>DIPSW6 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>6</td><td>DIPSW7 (IOB)</td><td>ON</td><td>OFF</td></tr>
<tr><td>7</td><td>DIPSW8 (IOB)</td><td>ON</td><td>OFF</td></tr>
</table>
</td></tr>
<tr><td>5-803-114</td><td>V3 GPIO2</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Tandem Tray End Fence Open Sensor: Rear</td><td>Not Open</td><td>Open</td></tr>
<tr><td>1</td><td>Tandem Tray End Fence Closed Sensor: Rear</td><td>Not Closed</td><td>Closed</td></tr>
<tr><td>2-7</td><td>(Unused)</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>5-803-115</td><td>V3 GPIO3</td><td>(Unused)</td></tr>
<tr><td>5-803-116</td><td>V3 GPIO4</td><td>(Unused)</td></tr>
<tr><td>5-803-117</td><td>V3 GPIO5</td><td>(Unused)</td></tr>
<tr><td>5-803-118</td><td>V3 GPIO6</td><td>(Unused)</td></tr>
<tr><td>5-803-119</td><td>V3 GPIO7</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Fusing Air Intake Fan: Lower Right</td><td>Abnormal</td><td>Normal</td></tr>
<tr><td>1</td><td>(Unused)</td><td></td><td></td></tr>
</table>
</td></tr>
</table>

Rev. 5/13/2014

		2 Fusing Air Intake Fan: Lower Left / Abnormal / Normal 3 Duplex Fan: Lower Rear / Normal / Abnormal 4 Duplex Fan: Lower Front / Normal / Abnormal 5 HP Cooling Exhaust Fan / Normal / Abnormal 6 HP Front Exhaust Fan Lock / Normal / Abnormal 7 (Unused)
5-803-120	V3 GPIO8	Bit No. / Function / 0 / 1 0 (Unused) 1 Key Card Set / Set / Not set 2 Toner Bottle Cap Sensor: Left / Closed / Open 3 Toner Bottle Cap Sensor: Right / Closed / Open 4 Toner Bottle Set Sensor: Left / Set / Not set 5 Toner Bottle Set Sensor: Right / Set / Not set 6-7 (Unused)
5-803-121	V3 GPIO9	(Unused)
5-803-122	V3 GPIO10	Bit No. / Function / 0 / 1 0 HP Cooling Suction Fan / Abnormal / Normal 1 Duplex/Exit drawer set / Set / Not set 2 Motor drivers on EDRB / Abnormal / Normal 3 Fusing Motor / Abnormal / Normal 4-7 (Unused)
5-803-123	V3 GPIO11	Bit No. / Function / 0 / 1 0 Used Toner Collection Motor / Normal / Abnormal 1 Ozone Air Exhaust Fan / Normal / Abnormal 2 PTR Fan: Rear / Normal / Abnormal 3-7 (Unused)
5-803-124	V3 GPIO12	(Unused)
5-803-125	V3 GPIO13	Bit No. / Function / 0 / 1 0 Thermopile: Rear / Abnormal / Normal 1 Thermopile: Near Front / Abnormal / Normal 2 Thermopile: Front / Abnormal / Normal 3 Heating Roller NC Sensor: Center High Temp. Detection / Abnormal / Normal 4 Heating Roller NC Sensor: End High Temp. Detection / Abnormal / Normal 5 Fusing Heat Thermistor: Rear High Temp. Detection / Abnormal / Normal 6 Pressure Roller Thermistor High Temp. Detection / Abnormal / Normal 7 (Unused)
5-803-126	V3 GPIO14	(Unused)
5-803-127	V3 GPIO15	(Unused)
5-803-128	V3 GPIO16	(Unused)
5-803-129	V3 GPIO17	Tray 3 Paper Size Sensor

Rev. 5/13/2014

Paper size		Bit 4	Bit 3	Bit 2		
		SW1	SW2	SW3	SW4	SW5
12x18"	SEF	0	0	0	0	0
A3	SEF	0	0	1	1	0
B4	SEF	0	1	1	0	0
A4	SEF	1	0	1	1	0
	LEF	0	0	1	1	1
B5	SEF	0	1	0	1	0
	LEF	1	1	1	0	0
A5	SEF	0	0	0	1	0
	LEF	1	0	0	1	0
DLT	SEF	0	0	0	1	1
LG	SEF	0	1	0	0	1
LT	SEF	0	0	1	0	1
	LEF	1	0	0	1	1
HLT	SEF	1	0	0	0	1
	LEF	0	0	0	0	1
F4	SEF	0	0	1	0	0
Folio	SEF	1	0	1	0	0
F	SEF	1	0	0	0	0
Executive	SEF	0	1	0	1	1
	LEF	1	1	0	0	0
267x388mm	SEF	1	1	0	0	1
194x267mm	SEF	0	1	1	0	1
	LEF	0	1	0	0	0

Bit No.	Function	0	1
5	Motor drivers on RYB	Abnormal	Normal
6-7	(Unused)		

5-803-130	V3 GPIO18	(Unused)
5-803-131	V3 GPIO19	

Bit No.	Function	0	1
0	CGB Power Pack: Charge 1 error	Normal	SC detected
1	CGB Power Pack: Grid error	Normal	SC detected
2	CGB Power Pack: Bias error	Normal	SC detected
3-7	(Unused)		

5-803-132	V3 GPIO20	

Bit No.	Function	0	1
0	CGB Power Pack: Charge 2 error	Normal	SC detected
1-7	(Unused)		

5-803-133	V3 GPIO21	(Unused)
5-803-134	V3 GPIO22	

Bit No.	Function	0	1
0	Tray 3 Paper Height Detection 1	See table below	
1	Tray 3 Paper Height Detection 2		

		2 Tray 2 Paper Height Detection 1
		3 Tray 2 Paper Height Detection 2

Tray 2/3 Height Detection 1	1	0	0	1
Tray 2/3 Height Detection 2	1	1	0	0
Amount of Paper (%)	100	50	30	10

4	1st Paper Upper Limit Sensor	Not detected	Detected
5	2nd Paper Upper Limit Sensor	Not detected	Detected
6	3rd Paper Upper Limit Sensor	Not detected	Detected
7	Used toner collection lock detection	Detected	Not detected

5-803-135 V3 GPIO23 (Unused)

5-803-136 V3 GPIO24 (Unused)

5-803-137 V3 GPIO25 (Unused)

5-803-138 V3 GPIO26 (Unused)

5-803-139 V3 GPIO27 (Unused)

5-803-140 V3 GPIO28

Bit No.	Function	0	1
0	Transfer Power Pack: T1 error	Normal	SC detected
1	Transfer Power Pack: T2 error	Normal	SC detected
2	ITB/PTR Drive Motor	Normal	Abnormal
3	Motor drivers on TDRB	Abnormal	Normal
4	PTR Separation Sensor	PTR in contact	PTR separated
5	ITB Cleaning Unit set	Set	Not set
6	ITB Unit set	Set	Not Set
7	(Unused)		

5-803-141 V3 GPIO29 (Unused)

5-803-142 V3 GPIO30

Bit No.	Function	0	1
0	3rd Paper Feed Sensor	Detected	Not detected
1	2nd Paper Feed Sensor	Detected	Not detected
2	1st Paper Feed Sensor	Detected	Not detected
3	2nd Transport Sensor	Detected	Not detected
4	3rd Transport Sensor	Detected	Not detected
5	Tandem Tray End Fence Close Sensor: Front	Not closed	Closed
6	Fusing Cooling Fan	Abnormal	Normal
7	(Unused)		

5-803-143 V4 GPIO0 (Unused)

5-803-144 V4 GPIO1

Bit No.	Function	0	1
0	Exit Sensor	Detected	Not detected
1	Purge Relay Sensor	Detected	Not detected
2	Duplex Transport Sensor 1	Detected	Not detected
3	Duplex Transport Sensor 2	Detected	Not detected
4	Duplex Transport Sensor 3	Detected	Not detected
5	Invert Exit HP Sensor	Not in HP (Roller separated)	HP detected (Roller in contact)
6	Exit Junction Gate HP Sensor	Straight path	Invert path
7	Left Tray Paper End Sensor	Detected	Not detected

5-803-145 V4 GPIO2

Rev. 5/13/2014

		Bit No. / Function / 0 / 1 0 / Right Tray Paper End Sensor / Not detected / Detected 1 / Exit Junction Sensor / Detected / Not detected 2-7 / (Unused) / /
5-803-146	V4 GPIO3	Bit No. / Function / 0 / 1 0-3 / (Unused) / / 4 / Fusing Exit Sensor: Center / Detected / Not detected 5 / Fusing Unit Set / Set / Not set 6 / Pressure Roller Lift Sensor B / -- / Excess pressure 7 / Pressure Roller Lift Sensor A / --- / HP detected
5-803-147	V4 GPIO4	(Unused)
5-803-148	V4 GPIO5	(Unused)
5-803-149	V4 GPIO6	(Unused)
5-803-150	V4 GPIO7	Bit No. / Function / 0 / 1 0 / Fusing Belt Sensor / Detected / Not detected 1 / (Unused) / / 2 / Fusing Unit Set (DOM) / Set / Not set 3 / Fusing Unit Set (EU) / Set / Not set 4 / Fusing Unit Set (NA) / Set / Not set 5 / Fusing Exit Sensor: Rear / Detected / Not detected 6 / Development Cooling Fan: Front / Normal / Abnormal 7 / Web End Sensor / End / Remaining
5-803-151	V4 GPIO8	Bit No. / Function / 0 / 1 0 / (Unused) / / 1 / Pressure Roller Paper Sensor / Detected / Not detected 2 / (Unused) / / 3 / Decurl Feed Motor / Normal / Abnormal 4 / Decurl Unit Motor / Normal / Abnormal 5 / Belt Cleaning Fan / Normal / Abnormal 6-7 / (Unused) / /
5-803-152	V4 GPIO9	(Unused)
5-803-153	V4 GPIO10	Bit No. / Function / 0 / 1 0 / Decurl Unit Limit Sensor / Normal / Over limit 1 / Mechanical Counter Set / Not set / Set 2 / ID Sensor Fan / Normal / Abnormal 3 / Decurl Unit Set / Set / Not set 4-7 / (Unused) / /
5-803-154	V4 GPIO11	Bit No. / Function / 0 / 1 0 / Lower Limit Sensor (Right tandem tray) / Not lowest position / Lowest position 1 / Tandem Tray End Fence Open Sensor: Front / Not open / Open

Rev. 5/13/2014

	2-7	(Unused)

5-803-155 V4 GPIO12 (Unused)

5-803-156 V4 GPIO13 (Unused)

5-803-157 V4 GPIO14

Bit No.	Function	0	1
0-1	(Unused)		
2	Toner Bottle Cover Switch	Closed	Open
3	+5V supply detection (PSU-C)	ON	OFF
4	Tray 3 Set Switch	Set	Not set
5-7	(Unused)		

5-803-158 V4 GPIO15

Bit No.	Function	0	1
0-1	(Unused)		
2	Front door	Closed	Open
3	+24VS1 supply detection (PSU-A)	ON	OFF
4	Tray 2 Set Switch	Set	Not set
5-7	(Unused)		

5-803-159 V4 GPIO16 (Unused)

5-803-160 V4 GPIO17 Tray 2 Paper Size Sensor

Paper size		bit 4	bit 3	bit 2	bit 1	bit 0
		SW1	SW2	SW3	SW4	SW5
12x18"	SEF	0	0	0	0	0
A3	SEF	0	0	1	1	0
B4	SEF	0	1	1	0	0
A4	SEF	1	0	1	1	0
	LEF	0	0	1	1	1
B5	SEF	0	1	0	1	0
	LEF	1	1	1	0	0
A5	SEF	0	0	0	1	0
	LEF	1	0	0	1	0
DLT	SEF	0	0	0	1	1
LG	SEF	0	1	0	0	1
LT	SEF	0	0	1	0	1
	LEF	1	0	0	1	1
HLT	SEF	1	0	0	0	1
	LEF	0	0	0	0	1
F4	SEF	0	0	1	0	0
Folio	SEF	1	0	1	0	0
F	SEF	1	0	0	0	0
Executive	SEF	0	1	0	1	1
	LEF	1	1	0	0	0
267x388mm	SEF	1	1	0	0	1
194x267mm	SEF	0	1	1	0	1
	LEF	0	1	0	0	0

bit 5-7: Unused

Rev. 5/13/2014

<table>
<tr><td>5-803-161</td><td>V4 GPIO18</td><td>(Unused)</td></tr>
<tr><td>5-803-162</td><td>V4 GPIO19</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>+24V2 power detection (PSU-C)</td><td>ON</td><td>OFF</td></tr>
<tr><td>1</td><td>(Unused)</td><td></td><td></td></tr>
<tr><td>2</td><td>1st Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
<tr><td>3</td><td>2nd Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
<tr><td>4</td><td>3rd Paper End Sensor</td><td>Detected (Paper in tray)</td><td>Not detected (Paper end)</td></tr>
<tr><td>5</td><td>Purged Paper Sensor</td><td>Not detected</td><td>Detected</td></tr>
<tr><td>6-7</td><td>(Unused)</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>5-803-163</td><td>V4 GPIO20</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>+24S2 power detection (PSU-C)</td><td>ON</td><td>OFF</td></tr>
<tr><td>1-7</td><td>(Unused)</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>5-803-164</td><td>V4 GPIO21</td><td>
<table>
<tr><th>Bit No.</th><th>Function</th><th>0</th><th>1</th></tr>
<tr><td>0</td><td>Rear Fence HP Sensor</td><td>Not in HP</td><td>HP detected</td></tr>
<tr><td>1</td><td>Rear Fence Return Sensor</td><td>Not detected</td><td>Detected</td></tr>
<tr><td>2</td><td>Paper Height Sensor 1</td><td colspan="2" rowspan="4">See table below.</td></tr>
<tr><td>3</td><td>Paper Height Sensor 2</td></tr>
<tr><td>4</td><td>Paper Height Sensor 3</td></tr>
<tr><td>5</td><td>Paper Height Sensor 4</td></tr>
<tr><td></td><td colspan="3">
<table>
<tr><td>Paper Height Sensor 1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Paper Height Sensor 2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Paper Height Sensor 3</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Paper Height Sensor 4</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Amount of Paper (%)</td><td>100</td><td>80</td><td colspan="2">50</td><td colspan="2">25</td><td colspan="2">10</td></tr>
</table>
</td></tr>
<tr><td>6</td><td>Left paper Tray Set</td><td>Set</td><td>Not set</td></tr>
<tr><td>7</td><td>Right paper Tray Set</td><td>Set</td><td>Not set</td></tr>
</table>
</td></tr>
<tr><td>5-803-165</td><td>V4 GPIO22</td><td>(Unused)</td></tr>
<tr><td>5-803-166</td><td>V4 GPIO23</td><td>(Unused)</td></tr>
<tr><td>5-803-167</td><td>V4 GPIO24</td><td>(Unused)</td></tr>
<tr><td>5-803-168</td><td>V4 GPIO25</td><td>(Unused)</td></tr>
<tr><td>5-803-169</td><td>V4 GPIO26</td><td>(Unused)</td></tr>
<tr><td>5-803-170</td><td>V4 GPIO27</td><td>(Unused)</td></tr>
<tr><td>5-803-171</td><td>V4 GPIO28</td><td>(Unused)</td></tr>
<tr><td>5-803-172</td><td>V4 GPIO29</td><td>(Unused)</td></tr>
<tr><td>5-803-173</td><td>V4 GPIO30</td><td>(Unused)</td></tr>
</table>

5-803-175	Dev Unit Non Compatiblity Detect	E	[0 or 1 / **0** / 1/step]
5-803-176	Toner Bottle Sensor1	E	[0 or 1 / **0** / 1/step]
5-803-177	Toner Bottle Sensor2	E	[0 or 1 / **0** / 1/step]

5-803-178	Toner Bottle Chuck Sensor1	E	[0 or 1 / **0** / 1/step]
5-803-179	Toner Bottle Chuck Sensor2	E	[0 or 1 / **0** / 1/step]
5-803-180	Toner EmptySensor	E	[0 or 1 / **0** / 1/step]
5-803-181	Toner Bottle Cover SW(On/Off)	E	[0 or 1 / **0** / 1/step]
5-803-182	Toner Collection Bottle Full Sn	E	[0 or 1 / **0** / 1/step]
5-803-183	Toner Collection Bottle Near Full Sn	E	[0 or 1 / **0** / 1/step]
5-803-184	Toner Collection Set Sn	E	[0 or 1 / **0** / 1/step]
5-803-185	Waste Toner Lock Sn	E	[0 or 1 / **0** / 1/step]
5-803-186	Drum Cleaning Unit Set Detect	E	[0 or 1 / **0** / 1/step]

5-803-187	Drum Cleaning Unit:Lubricant Bar End Detect	E	[0 or 1 / **0** / 1/step]
5-803-188	Belt Cleanig Unit Set Detect Sn	E	[0 or 1 / **0** / 1/step]
5-803-189	Paper Transfer Contact Sn	E	[0 or 1 / **0** / 1/step]
5-803-190	Wire Cleaner Position Sn	E	[0 or 1 / **0** / 1/step]
5-803-200	HP Senser	E	[0 or 1 / **0** / 1/step]
5-803-201	Platen ADF Sensor	E	[0 or 1 / **0** / 1/step]

6011	**[1-Pass ADF INPUT Check]** -		
6-011-001	Original Length 1 (B5 Sensor)	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-002	Original Length 2 (A4 Sensor)	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-003	Original Length 3 (LG Sensor)	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-004	Original Width 1	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-005	Original Width 2	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-006	Original Width 3	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.

6-011-007	Original Width 4	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-008	Original Width 5	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-009	Original Detection	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-010	Separation Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-011	Skew Correction	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-012	Scan Entrance Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-013	Registration Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-014	Exit Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-015	Feed Cover Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-016	Lift Up Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-018	Pick-Up Roller HP Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.

6-011-021	Bottom Plate HP Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-022	Bottom Plate Position Sensor	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-023	Original Length 4 (LT/A4 Tail Sensor)	E	[0 or 1 / **0** / 1/step] ADF starts operation at one side exist free run.
6-011-024	Detect Sensor	E	[0 or 1 / **0** / 1/step]

6241	**[Finisher Input Check]** -		
6-241-001	Finisher Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-241-002	Pre-stack Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-241-003	Pre-stack Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-004	Proof Tray JG HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-005	Stack JG HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-006	Proof Tray Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-241-007	Proof Tray Full Sensor	E	[0 or 1 / **0** / 1/step]
6-241-008	Punch Vertical Registration Sn	E	[0 or 1 / **0** / 1/step]
6-241-009	Punch Side-to-Side Regist Sn	E	[0 to 255 / **0** / 1/step]
6-241-010	Punch Blade HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-011	Punch Unit HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-012	Punch Switch	E	[0 or 1 / **0** / 1/step]
6-241-013	Punch Hopper Full Sensor	E	[0 or 1 / **0** / 1/step]

6-241-014	Punch Set Sensor	E	[0 or 1 / **0** / 1/step]
6-241-015	Stack Plate HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-016	Corner Stapler HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-017	Stapler Rotation HP Sn: Front	E	[0 or 1 / **0** / 1/step]
6-241-018	Stapler Rotation HP Sn: Rear	E	[0 or 1 / **0** / 1/step]
6-241-019	Fence S-to-S Moving HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-020	Fence Up-Down Moving HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-021	Jogger Fence HP Sensor: Front	E	[0 or 1 / **0** / 1/step]
6-241-022	Jogger Fence HP Sensor: Rear	E	[0 or 1 / **0** / 1/step]
6-241-023	Positioning Roller Vibrating HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-024	Top Fence HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-025	Stack Feed-out Belt HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-026	Stapling Tray Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-241-027	Corner Stapler HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-028	Staple End Sensor	E	[0 or 1 / **0** / 1/step]
6-241-029	Self-Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-241-030	Stpl Trimmings Hopper Set Sn	E	[0 or 1 / **0** / 1/step]

6-241-031	Stpl Trimmings Hopper Full Sn	E	[0 or 1 / **0** / 1/step]
6-241-032	Stapling Tray Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-241-033	Stack Transport Unit HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-034	Stack JG Vibrating HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-035	Bklet Top Fence HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-036	Bklet Stplr Clamp Roller HP Sn	E	[0 or 1 / **0** / 1/step]
6-241-037	Fold Plate Cam HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-038	Fold Plate HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-039	Bklet Side Fence HP Sn: Front	E	[0 or 1 / **0** / 1/step]
6-241-040	Bklet Side Fence HP Sn: Rear	E	[0 or 1 / **0** / 1/step]
6-241-041	Bklet Stplr Bottom Fence HP Sn	E	[0 or 1 / **0** / 1/step]
6-241-042	Fold Unit Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-241-043	Bklet Stapler Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-241-044	Bklet Stapler HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-045	Bklet Stplr Stpl End Sn: Front	E	[0 or 1 / **0** / 1/step]
6-241-046	Bklet Stplr Stpl End Sn: Rear	E	[0 or 1 / **0** / 1/step]
6-241-047	Bklet Tray Full Sensor	E	[0 or 1 / **0** / 1/step]

6-241-048	Bklet Tray Paper Set Sensor	E	[0 or 1 / **0** / 1/step]
6-241-049	Bklet Tray Set Sensor	E	[0 or 1 / **0** / 1/step]
6-241-050	Shift Tray Exit Sensor: Long	E	[0 or 1 / **0** / 1/step]
6-241-051	Shift Tray Exit Sensor: Short	E	[0 or 1 / **0** / 1/step]
6-241-052	Exit Guide HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-053	Drag Roller Vibrating HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-054	Press Lever HP Sensor	E	[0 or 1 / **0** / 1/step]
6-241-055	Shift Tray Upper Limit Switch	E	[0 or 1 / **0** / 1/step]
6-241-056	Shift Tray HP Sensor: Front	E	[0 or 1 / **0** / 1/step]
6-241-057	Shift Tray HP Sensor: Rear	E	[0 or 1 / **0** / 1/step]
6-241-058	Paper Height Sensor: Staple	E	[0 or 1 / **0** / 1/step]
6-241-059	Paper Height Sensor: Shift	E	[0 or 1 / **0** / 1/step]
6-241-060	Paper Height Sensor: Z-Fold	E	[0 or 1 / **0** / 1/step]
6-241-061	Paper Height Sensor: TE	E	[0 or 1 / **0** / 1/step]
6-241-062	Shift Tray Full Sensor: 500	E	[0 or 1 / **0** / 1/step]
6-241-063	Shift Tray Full Sensor: 1000	E	[0 or 1 / **0** / 1/step]
6-241-064	Shift Tray Full Sensor: 1500	E	[0 or 1 / **0** / 1/step]

6-241-065	Shift Full Sensor(L-Limit)	E	[0 or 1 / **0** / 1/step]
6-241-066	Shift Full Sensor(Reserve)	E	[0 or 1 / **0** / 1/step]
6-241-067	Shift Tray Emergency Stop Sw	E	[0 or 1 / **0** / 1/step]
6-241-068	Shift Tray Jogger Fence HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-069	Shift Tray Jog Fence Retra HP Senser	E	[0 or 1 / **0** / 1/step]
6-241-070	Front Door Switch	E	[0 or 1 / **0** / 1/step]
6-241-071	Punch Type 1	E	[0 or 1 / **0** / 1/step]
6-241-072	Punch Type 2	E	[0 or 1 / **0** / 1/step]
6-241-073	Staple Tray Set Sensor	E	[0 or 1 / **0** / 1/step]
6-241-074	Reserved	E	[0 or 1 / **0** / 1/step]

6309	**[Input Check: Folder]** -		
6-309-001	Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-309-002	Entrance JG HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-004	Registration Sensor	E	[0 or 1 / **0** / 1/step]
6-309-005	Dynamic Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-006	Registration Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-007	Fold Plate HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-008	Jogger Fence HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-010	1st Stopper Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-011	1st Stopper HP Sensor	E	[0 or 1 / **0** / 1/step]

6-309-012	2nd Stopper Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-013	2nd Stopper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-014	3rd Stopper Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-015	3rd Stopper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-016	Direct-Send JG HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-017	FM6 Pawl HP Sensor	E	[0 or 1 / **0** / 1/step]
6-309-018	Top Tray Paper Path Sensor	E	[0 or 1 / **0** / 1/step]
6-309-019	Top Tray Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-309-020	Horizontal Path Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-309-021	Top Tray Full Sensor (E)	E	[0 or 1 / **0** / 1/step]
6-309-023	Front Door Switch (SW1)	E	[0 or 1 / **0** / 1/step]
6-309-024	Horizontal Path Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-025	Vertical Path Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-026	Bypass Entrance Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-309-027	Bypass Exit Paper Sensor	E	[0 or 1 / **0** / 1/step]

6400	**[Cvr Inserter Input Check]** -		
6-400-001	1st Paper Feed Sensor	E	[0 or 1 / **0** / 1/step]
6-400-002	2nd Paper Feed Sensor	E	[0 or 1 / **0** / 1/step]

6-400-003	1st Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-400-004	2nd Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-400-005	1st Vertical Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-400-006	2nd Vertical Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-400-007	Output Sensor	E	[0 or 1 / **0** / 1/step]
6-400-008	Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-400-009	Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-400-010	1st Pick-up Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-400-011	2nd Pick-up Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-400-012	1st Upper Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-400-013	2nd Upper Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-400-014	1st Lower Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-400-015	2nd Lower Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-400-016	1st Paper Near End Sensor	E	[0 or 1 / **0** / 1/step]
6-400-017	2nd Paper Near End Sensor	E	[0 or 1 / **0** / 1/step]
6-400-018	1st Paper End Sensor	E	[0 or 1 / **0** / 1/step]
6-400-019	2nd Paper End Sensor	E	[0 or 1 / **0** / 1/step]
6-400-020	1st Paper Length Sensor	E	[0 or 1 / **0** / 1/step]
6-400-021	2nd Paper Length Sensor	E	[0 or 1 / **0** / 1/step]
6-400-022	1st Paper Width Sensor 1	E	[0 or 1 / **0** / 1/step]
6-400-023	1st Paper Width Sensor 2	E	[0 or 1 / **0** / 1/step]
6-400-024	1st Paper Width Sensor 3	E	[0 or 1 / **0** / 1/step]

6-400-025	1st Paper Width Sensor 4	E	[0 or 1 / **0** / 1/step]
6-400-026	1st Paper Width Sensor 5	E	[0 or 1 / **0** / 1/step]
6-400-027	2nd Paper Width Sensor 1	E	[0 or 1 / **0** / 1/step]
6-400-028	2nd Paper Width Sensor 2	E	[0 or 1 / **0** / 1/step]
6-400-029	2nd Paper Width Sensor 3	E	[0 or 1 / **0** / 1/step]
6-400-030	2nd Paper Width Sensor 4	E	[0 or 1 / **0** / 1/step]
6-400-031	2nd Paper Width Sensor 5	E	[0 or 1 / **0** / 1/step]
6-400-032	1st Feed Cover Sensor	E	[0 or 1 / **0** / 1/step]
6-400-033	2nd Feed Cover Sensor	E	[0 or 1 / **0** / 1/step]
6-400-034	Cover Vertical Transport Switch	E	[0 or 1 / **0** / 1/step]
6-400-035	Front Door Open Switch	E	[0 or 1 / **0** / 1/step]

6508	**[Input Check: Ring Binder]** -		
6-508-001	Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-508-002	Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-508-003	Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-508-004	Punch Process Reference Sensor	E	[0 or 1 / **0** / 1/step]
6-508-005	Binder Delivery Base Sensor	E	[0 or 1 / **0** / 1/step]
6-508-006	Path JG HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-007	Paper Jog HP Sensor	E	[0 or 1 / **0** / 1/step]

6-508-008	Jog Roller Lift HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-009	Punch HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-010	Punch Encoder Sensor	E	[0 or 1 / **0** / 1/step]
6-508-011	Unit Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-012	Punch Size A4/LT Sensor	E	[0 or 1 / **0** / 1/step]
6-508-013	Punch Type Sensor	E	[0 or 1 / **0** / 1/step]
6-508-014	Full Sensor	E	[0 or 1 / **0** / 1/step]
6-508-015	Punchout Box Sensor	E	[0 or 1 / **0** / 1/step]
6-508-016	Output Belt 1 HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-017	Output Belt 2 HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-018	Output Belt Rotation HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-019	Output Unit Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-508-020	Booklet Pass Sensor	E	[0 or 1 / **0** / 1/step]
6-508-021	Stack HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-022	Stack Height Sensor 1	E	[0 or 1 / **0** / 1/step]
6-508-024	Stacker Paper Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-025	Tray Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-026	Obstacle Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-027	Book Position Sensor	E	[0 or 1 / **0** / 1/step]
6-508-028	Binder Unit Sensor	E	[0 or 1 / **0** / 1/step]
6-508-029	Width Align HP Sensor 1	E	[0 or 1 / **0** / 1/step]
6-508-030	Paddle Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-031	Clamp HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-032	Alignment Pin HP Sensor	E	[0 or 1 / **0** / 1/step]

6-508-033	Shutter HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-034	50-Sheet Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-035	Paper Thickness Sensor	E	[0 or 1 / **0** / 1/step]
6-508-037	Paper LE Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-038	Alignment Pin Top Edge Sensor	E	[0 or 1 / **0** / 1/step]
6-508-039	Width Align HP Sensor 2	E	[0 or 1 / **0** / 1/step]
6-508-040	De-curler Motor HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-041	Shutter Motor HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-042	Roller Lift Motor HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-043	Binder HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-044	Bind Timing Sensor	E	[0 or 1 / **0** / 1/step]
6-508-045	Ring Replace HP Sensor	E	[0 or 1 / **0** / 1/step]
6-508-046	Ring Replace Timing Sensor	E	[0 or 1 / **0** / 1/step]
6-508-047	Ring Supply Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-508-048	Cartridge Reversed Sensor	E	[0 or 1 / **0** / 1/step]
6-508-049	Ring Near-End Sensor	E	[0 or 1 / **0** / 1/step]
6-508-050	Ring 50/100 Sensor	E	[0 or 1 / **0** / 1/step]
6-508-051	Ring A4/LT Sensor	E	[0 or 1 / **0** / 1/step]

6537	**[Input Check: Perfect Binder]** -		
6-537-001	Entrance sensor	E	[0 or 1 / **0** / 1/step]

6-537-002	Timing Sensor	E	[0 or 1 / **0** / 1/step]
6-537-003	Jog Sensor HP: Front	E	[0 or 1 / **0** / 1/step]
6-537-004	Jog Sensor HP: Rear	E	[0 or 1 / **0** / 1/step]
6-537-005	Jog Sensor HP: Front Large	E	[0 or 1 / **0** / 1/step]
6-537-006	Jog Sensor HP: Rear Large	E	[0 or 1 / **0** / 1/step]
6-537-007	Cover Path: Sensor 1	E	[0 or 1 / **0** / 1/step]
6-537-008	Cover Path: Sensor 2	E	[0 or 1 / **0** / 1/step]
6-537-009	Signature Path: Sensor 1	E	[0 or 1 / **0** / 1/step]
6-537-010	Signature Path: Sensor 2	E	[0 or 1 / **0** / 1/step]
6-537-011	Inserter Com Sn:Before Joining	E	[0 or 1 / **0** / 1/step]
6-537-012	Switchback Flapper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-013	Switchback Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-014	Cover Registration Sensor	E	[0 or 1 / **0** / 1/step]
6-537-015	Straight-Through Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-016	TE Press Lever HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-017	Stack Overflow Sensor	E	[0 or 1 / **0** / 1/step]
6-537-018	Tray Lower Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-019	Paper Detect Sensor: Front	E	[0 or 1 / **0** / 1/step]
6-537-020	Paper Detect Sensor: Rear	E	[0 or 1 / **0** / 1/step]

6-537-021	Cover Guide HP Sensor: Right	E	[0 or 1 / **0** / 1/step]
6-537-022	Cover Guide HP Sensor: Left	E	[0 or 1 / **0** / 1/step]
6-537-023	Cover Guide Open Sensor: Right	E	[0 or 1 / **0** / 1/step]
6-537-024	Cover Guide Open Sensor: Left	E	[0 or 1 / **0** / 1/step]
6-537-025	Stack Weight Move HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-026	Stack Tray HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-027	Front Door SW	E	[0 or 1 / **0** / 1/step]
6-537-028	Top Cover Sensor	E	[0 or 1 / **0** / 1/step]
6-537-029	Top Cover Switch	E	[0 or 1 / **0** / 1/step]
6-537-030	Glue Tank Cover Sensor	E	[0 or 1 / **0** / 1/step]
6-537-031	Temperature Start Switch	E	[0 or 1 / **0** / 1/step]
6-537-032	Inserter Connect Signal	E	[0 or 1 / **0** / 1/step]
6-537-033	Glue Tank Empty Sensor	E	[0 or 1 / **0** / 1/step]
6-537-034	Glue Tank Full Sensor	E	[0 or 1 / **0** / 1/step]
6-537-035	24 V Guard 1	E	[0 or 1 / **0** / 1/step]
6-537-036	24 V Guard 2	E	[0 or 1 / **0** / 1/step]
6-537-037	Stack Tray Empty Sensor	E	[0 or 1 / **0** / 1/step]
6-537-038	Front Door Lock Sensor	E	[0 or 1 / **0** / 1/step]
6-537-039	Power Supply Fan Lock: Left	E	[0 or 1 / **0** / 1/step]
6-537-040	Sub Grip Upper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-041	Signature Exit Sensor	E	[0 or 1 / **0** / 1/step]

6-537-042	Size Move HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-043	Registration Unit HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-044	Post Main Grip Encoder Sensor	E	[0 or 1 / **0** / 1/step]
6-537-045	24V 2 Check Signal	E	[0 or 1 / **0** / 1/step]
6-537-046	Spine Fold Press Sensor: Right	E	[0 or 1 / **0** / 1/step]
6-537-047	Main Grip HP Sensor: Left	E	[0 or 1 / **0** / 1/step]
6-537-048	Cover Horizontal Registration Sensor: Small	E	[0 or 1 / **0** / 1/step]
6-537-049	Cover Horizontal Registration Sensor: Large	E	[0 or 1 / **0** / 1/step]
6-537-050	Glue Tank HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-051	Main Grip HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-052	Main Grip Front Encoder Sensor	E	[0 or 1 / **0** / 1/step]
6-537-053	24V 3 Check Signal	E	[0 or 1 / **0** / 1/step]
6-537-054	Main Grip Press Sensor: Left	E	[0 or 1 / **0** / 1/step]
6-537-055	Main Grip Press Sensor: Small	E	[0 or 1 / **0** / 1/step]
6-537-056	Sub Grip Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-537-057	Sub Grip Open Sensor	E	[0 or 1 / **0** / 1/step]
6-537-058	Sub Grip Close Sensor	E	[0 or 1 / **0** / 1/step]
6-537-059	Spine Fold Close Sensor: Left	E	[0 or 1 / **0** / 1/step]

6-537-060	Spine Plate Open Sensor	E	[0 or 1 / **0** / 1/step]
6-537-061	Spine Plate Close Sensor	E	[0 or 1 / **0** / 1/step]
6-537-062	Spine Fold HP Sensor: Left	E	[0 or 1 / **0** / 1/step]
6-537-063	Spine Fold HP Sensor: Right	E	[0 or 1 / **0** / 1/step]
6-537-064	Cutter LE Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-537-065	Main Grip Rotate Enable Sensor	E	[0 or 1 / **0** / 1/step]
6-537-066	Main Grip Rotate Bind Position Sensor	E	[0 or 1 / **0** / 1/step]
6-537-067	Main Grip Rotate HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-068	Rear Main Grip Open Sensor	E	[0 or 1 / **0** / 1/step]
6-537-069	Rear Main Grip Close Sensor	E	[0 or 1 / **0** / 1/step]
6-537-070	Front Main Grip Open Sensor	E	[0 or 1 / **0** / 1/step]
6-537-071	Front Main Grip Close Sensor	E	[0 or 1 / **0** / 1/step]
6-537-072	Main Grip Signature Sensor	E	[0 or 1 / **0** / 1/step]
6-537-073	Thermostat Abnormal	E	[0 or 1 / **0** / 1/step]
6-537-074	Glue Heater Thermistor	E	[0 or 1 / **0** / 1/step]
6-537-075	Glue Unit HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-076	Book Output Path HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-077	Book Output Path Push Sensor	E	[0 or 1 / **0** / 1/step]

6-537-078	Sub Grip HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-079	Signature Main Grip Position Sensor	E	[0 or 1 / **0** / 1/step]
6-537-080	Signature Fan 2 Lock: Rear	E	[0 or 1 / **0** / 1/step]
6-537-081	Signature Fan 2 Lock: Front	E	[0 or 1 / **0** / 1/step]
6-537-082	Signature Fan 1 Lock: Rear	E	[0 or 1 / **0** / 1/step]
6-537-083	Signature Fan 1 Lock: Front	E	[0 or 1 / **0** / 1/step]
6-537-084	Power Supply Fan Lock: Center	E	[0 or 1 / **0** / 1/step]
6-537-085	Power Supply Fan Lock: Rear	E	[0 or 1 / **0** / 1/step]
6-537-086	Spine Plate Fan Lock: Upper Rear	E	[0 or 1 / **0** / 1/step]
6-537-087	Spine Plate Fan Lock: Front	E	[0 or 1 / **0** / 1/step]
6-537-088	Spine Plate Fan Lock: Lower Rear	E	[0 or 1 / **0** / 1/step]
6-537-089	Spine Plate Fan Lock: Lower Front	E	[0 or 1 / **0** / 1/step]
6-537-090	Glue Tank Roller: Rotate Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-537-091	Glue Supply Fan: Lock 1	E	[0 or 1 / **0** / 1/step]
6-537-092	Glue Supply Fan Lock 2	E	[0 or 1 / **0** / 1/step]
6-537-093	Book Catch Fence HP Sensor	E	[0 or 1 / **0** / 1/step]

6-537-094	Output Stack Door Sensor	E	[0 or 1 / **0** / 1/step]
6-537-095	Output Stack Door Switch	E	[0 or 1 / **0** / 1/step]
6-537-096	Book Buffer Tray HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-097	Trim Scrap Buffer HP Sensor: Right	E	[0 or 1 / **0** / 1/step]
6-537-098	Press HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-099	Blade Cradle HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-100	Cutter Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-101	Cutter Area Sensor 1	E	[0 or 1 / **0** / 1/step]
6-537-102	Entrance Path Sensor	E	[0 or 1 / **0** / 1/step]
6-537-103	Book Registration Sensor	E	[0 or 1 / **0** / 1/step]
6-537-104	Cutter Area Sensor 2	E	[0 or 1 / **0** / 1/step]
6-537-105	LE Detect Sensor	E	[0 or 1 / **0** / 1/step]
6-537-106	Grip End Sensor	E	[0 or 1 / **0** / 1/step]
6-537-107	Book Rotate HP Sensor 1: Right	E	[0 or 1 / **0** / 1/step]
6-537-108	Press End Sensor	E	[0 or 1 / **0** / 1/step]
6-537-109	Slide HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-110	Grip HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-111	Book Rotate HP Sensor 2: Left	E	[0 or 1 / **0** / 1/step]
6-537-112	Press Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-113	Trim Scrap Box Sensor	E	[0 or 1 / **0** / 1/step]
6-537-114	Book Arrival Sensor	E	[0 or 1 / **0** / 1/step]
6-537-115	Book Detect Sensor: Output Tray	E	[0 or 1 / **0** / 1/step]

6-537-116	Output Tray HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-117	Trim Scrap Buffer HP Sensor	E	[0 or 1 / **0** / 1/step]
6-537-118	Trim Scrap Box Full Sensor	E	[0 or 1 / **0** / 1/step]
6-537-119	Front Door SW: Center	E	[0 or 1 / **0** / 1/step]
6-537-120	Front Door SW: 36V	E	[0 or 1 / **0** / 1/step]
6-537-121	Thrust Plate Sensor	E	[0 or 1 / **0** / 1/step]
6-537-122	Upper Tray Empty Sensor	E	[0 or 1 / **0** / 1/step]
6-537-123	Lower Tray Empty Sensor	E	[0 or 1 / **0** / 1/step]
6-537-124	Upper Tray Pickup Sensor	E	[0 or 1 / **0** / 1/step]
6-537-125	Lower Tray Pickup Sensor	E	[0 or 1 / **0** / 1/step]
6-537-126	Inserter Cover Sensor	E	[0 or 1 / **0** / 1/step]
6-537-127	Lower Tray Paper Out Sensor	E	[0 or 1 / **0** / 1/step]
6-537-128	Lower Tray Registration Sensor	E	[0 or 1 / **0** / 1/step]
6-537-129	Upper Tray Registration Sensor	E	[0 or 1 / **0** / 1/step]
6-537-130	Upper Tray: Large Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-537-131	Upper Tray: Small Paper Sensor	E	[0 or 1 / **0** / 1/step]
6-537-132	Lower Tray Lower Limit Sensor	E	[0 or 1 / **0** / 1/step]

6-537-133	Transport Sensor: Midway	E	[0 or 1 / **0** / 1/step]
6-537-134	Inserter Unit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-135	Upper Tray Lower Limit Sensor	E	[0 or 1 / **0** / 1/step]
6-537-136	Drive Gear Switching Sensor	E	[0 or 1 / **0** / 1/step]
6-537-137	Transport Sensor 1	E	[0 or 1 / **0** / 1/step]
6-537-138	Transport Sensor 2	E	[0 or 1 / **0** / 1/step]
6-537-139	Relay Unit Transport Sensor	E	[0 or 1 / **0** / 1/step]
6-537-140	Relay Unit Front Door Sensor	E	[0 or 1 / **0** / 1/step]

6650	**[Input Check: Trimmer]** -		
6-650-001	Entrance Sensor	E	[0 or 1 / **0** / 1/step]
6-650-002	Stopper Sensor	E	[0 or 1 / **0** / 1/step]
6-650-003	Exit Sensor	E	[0 or 1 / **0** / 1/step]
6-650-004	Booklet Sensor 1	E	[0 or 1 / **0** / 1/step]
6-650-005	Booklet Sensor 2	E	[0 or 1 / **0** / 1/step]
6-650-006	Booklet Sensor 3	E	[0 or 1 / **0** / 1/step]
6-650-007	Trimming Blade HP Sensor	E	[0 or 1 / **0** / 1/step]
6-650-008	Cut Position HP Sensor	E	[0 or 1 / **0** / 1/step]
6-650-009	Press Roller HP Sensor	E	[0 or 1 / **0** / 1/step]
6-650-010	Press Stopper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-650-011	Scrap Hopper Full HP Sensor	E	[0 or 1 / **0** / 1/step]

6-650-012	Scrap Hopper HP Sensor	E	[0 or 1 / **0** / 1/step]
6-650-013	Door Switch	E	[0 or 1 / **0** / 1/step]

3.9.2 OUTPUT CHECK TABLE

5804	**[Output Check]** -		
5-804-001	Feed Mtr 1 (Speed 1)	E	[OFF or ON / **-** / 1/step]
5-804-002	Feed Mtr 1 (Speed 2)	E	[OFF or ON / **-** / 1/step]
5-804-003	Feed Mtr 1 (Speed 3)	E	[OFF or ON / **-** / 1/step]
5-804-004	Feed Mtr 1 (Speed 4)	E	[OFF or ON / **-** / 1/step]
5-804-005	Feed Mtr 2 (Speed 1)	E	[OFF or ON / **-** / 1/step]
5-804-006	Feed Mtr 2 (Speed 2)	E	[OFF or ON / **-** / 1/step]
5-804-007	Feed Mtr 2 (Speed 3)	E	[OFF or ON / **-** / 1/step]
5-804-008	Feed Mtr 2 (Speed 4)	E	[OFF or ON / **-** / 1/step]
5-804-009	Feed Mtr 3 (Speed 1)	E	[OFF or ON / **-** / 1/step]
5-804-010	Feed Mtr 3 (Speed 2)	E	[OFF or ON / **-** / 1/step]
5-804-011	Feed Mtr 3 (Speed 3)	E	[OFF or ON / **-** / 1/step]
5-804-012	Feed Mtr 3 (Speed 4)	E	[OFF or ON / **-** / 1/step]
5-804-013	Bypass Grip Mtr 1 (Speed 1)	E	[OFF or ON / **-** / 1/step]
5-804-014	Bypass Grip Mtr 1 (Speed 2)	E	[OFF or ON / **-** / 1/step]
5-804-015	Bypass Grip Mtr 1 (Speed 3)	E	[OFF or ON / **-** / 1/step]
5-804-016	Bypass Grip Mtr 1 (Speed 4)	E	[OFF or ON / **-** / 1/step]

5-804-017	Bypass Grip Mtr 1 (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-018	Bypass Grip Mtr 1 (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-019	Bypass Grip Mtr 2 (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-020	Bypass Grip Mtr 2 (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-021	Bypass Grip Mtr 2 (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-022	Bypass Grip Mtr 2 (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-023	Bypass Grip Mtr 2 (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-024	Bypass Grip Mtr 2 (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-025	Bypass Grip Mtr 3 (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-026	Bypass Grip Mtr 3 (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-027	Bypass Grip Mtr 3 (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-028	Bypass Grip Mtr 3 (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-029	Bypass Grip Mtr 3 (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-030	Bypass Grip Mtr 3 (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-031	Bypass V-Transport (Speed 1)	E	[OFF or ON / - / 1/step]

5-804-032	Bypass V-Transport (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-033	Bypass V-Transport (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-034	Bypass V-Transport (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-035	Bank Exit Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-036	Bank Exit Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-037	Bank Exit Mtr (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-038	Bank Exit Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-039	Bank Exit Mtr (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-040	Bank Exit Mtr (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-041	Registration Entrance Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-042	Registration Entrance Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-043	Registration Entrance Mtr (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-044	Registration Entrance Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-045	Registration Entrance Mtr (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-046	Registration Entrance Mtr (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-047	Registration Timing Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-048	Registration Timing Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-049	Registration Timing Mtr (Speed 3)	E	[OFF or ON / - / 1/step]

5-804-050	Registration Timing Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-051	Registration Timing Mtr (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-052	Registration Timing Mtr (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-053	Transfer Timing Motor (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-054	Transfer Timing Motor (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-055	Transfer Timing Motor (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-056	Transfer Timing Motor (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-057	Inverter/Entrance Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-058	Inverter/Entrance Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-059	Inverter/Entrance Mtr (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-060	Inverter/Entrance Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-061	Inverter/Entrance Mtr (Speed 5)	E	[OFF or ON / - / 1/step]
5-804-062	Inverter/Entrance Mtr (Speed 6)	E	[OFF or ON / - / 1/step]
5-804-063	Exit/Inverter Mtr (Fwd:Speed 1)	E	[OFF or ON / - / 1/step]
5-804-064	Exit/Inverter Mtr (Fwd:Speed 2)	E	[OFF or ON / - / 1/step]

5-804-065	Exit/Inverter Mtr (Fwd:Speed 3)	E	[OFF or ON / - / 1/step]
5-804-066	Exit/Inverter Mtr (Fwd:Speed 4)	E	[OFF or ON / - / 1/step]
5-804-067	Exit/Inverter Mtr (Fwd:Speed 5)	E	[OFF or ON / - / 1/step]
5-804-068	Exit/Inverter Mtr (Fwd:Speed 6)	E	[OFF or ON / - / 1/step]
5-804-069	Exit/Inverter Mtr (Rev:Speed 1)	E	[OFF or ON / - / 1/step]
5-804-070	Exit/Inverter Mtr (Rev:Speed 2)	E	[OFF or ON / - / 1/step]
5-804-071	Exit/Inverter Mtr (Rev:Speed 3)	E	[OFF or ON / - / 1/step]
5-804-072	Exit/Inverter Mtr (Rev:Speed 4)	E	[OFF or ON / - / 1/step]
5-804-073	Exit/Inverter Mtr (Rev:Speed 5)	E	[OFF or ON / - / 1/step]
5-804-074	Exit/Inverter Mtr (Rev:Speed 6)	E	[OFF or ON / - / 1/step]
5-804-075	Duplex/Inverter Mtr (Fwd:Speed 1)	E	[OFF or ON / - / 1/step]
5-804-076	Duplex/Inverter Mtr (Fwd:Speed 2)	E	[OFF or ON / - / 1/step]
5-804-077	Duplex/Inverter Mtr (Fwd:Speed 3)	E	[OFF or ON / - / 1/step]
5-804-078	Duplex/Inverter Mtr (Fwd:Speed 4)	E	[OFF or ON / - / 1/step]
5-804-079	Duplex/Inverter Mtr (Fwd:Speed 5)	E	[OFF or ON / - / 1/step]

5-804-080	Duplex/Inverter Mtr (Rev:Speed 1)	E	[OFF or ON / - / 1/step]
5-804-081	Duplex/Inverter Mtr (Rev:Speed 2)	E	[OFF or ON / - / 1/step]
5-804-082	Dup Trans Mtr1 (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-083	Dup Trans Mtr1 (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-084	Dup Trans Mtr2 (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-085	Dup Trans Mtr2 (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-086	Paper Ejection Motor (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-087	Paper Ejection Motor (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-088	Paper Ejection Motor (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-089	Paper Ejection Motor (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-090	Rotary Gate Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-091	Rotary Gate Motor (pos1)	E	[OFF or ON / - / 1/step]
5-804-092	Rotary Gate Motor (pos2)	E	[OFF or ON / - / 1/step]
5-804-093	Rotary Gate Motor (Drive:Speed 1)	E	[OFF or ON / - / 1/step]
5-804-094	Rotary Gate Motor (Drive:Speed 2)	E	[OFF or ON / - / 1/step]
5-804-095	Rotary Gate Motor (Drive:Speed 3)	E	[OFF or ON / - / 1/step]
5-804-096	Unit Shift Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-097	Unit Shift Motor (Drive)	E	[OFF or ON / - / 1/step]
5-804-098	Rear Shift Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-099	Rear Shift Motor (Drive)	E	[OFF or ON / - / 1/step]

5-804-100	Relay Separate Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-101	Relay Separate Motor (Drive)	E	[OFF or ON / - / 1/step]
5-804-102	LCT Relay Separate Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-103	LCT Relay Separate Motor (Drive)	E	[OFF or ON / - / 1/step]
5-804-104	Exit/Inverter Separate Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-105	Exit/Inverter Separate Motor (Drive)	E	[OFF or ON / - / 1/step]
5-804-106	1st Tray: Bottom Plate (Lift: 1 s)	E	[OFF or ON / - / 1/step]
5-804-107	1st Tray: Bottom Plate (Lower: 1 s)	E	[OFF or ON / - / 1/step]
5-804-108	2nd Tray: Bottom Plate (Lift: 1 s)	E	[OFF or ON / - / 1/step]
5-804-109	2nd Tray: Bottom Plate (Lower: 1 s)	E	[OFF or ON / - / 1/step]
5-804-110	3rd Tray: Bottom Plate (Lift: 1 s)	E	[OFF or ON / - / 1/step]
5-804-111	3rd Tray: Bottom Plate (Lower: 1 s)	E	[OFF or ON / - / 1/step]
5-804-112	Rear Fence Motor (Fwd: 1 s)	E	[OFF or ON / - / 1/step]
5-804-113	Rear Fence Motor (Rev: 1 s)	E	[OFF or ON / - / 1/step]
5-804-116	1st Tray: PickUp SOL	E	[OFF or ON / - / 1/step]
5-804-117	2nd Tray: PickUp SOL	E	[OFF or ON / - / 1/step]

5-804-118	3rd Tray: PickUp SOL	E	[OFF or ON / - / 1/step]
5-804-119	Inverter JG SOL	E	[OFF or ON / - / 1/step]
5-804-120	Lock SOL	E	[OFF or ON / - / 1/step]
5-804-121	Connect SOL	E	[OFF or ON / - / 1/step]
5-804-122	Rear Side Fence SOL	E	[OFF or ON / - / 1/step]
5-804-123	Front Side Fence SOL	E	[OFF or ON / - / 1/step]
5-804-124	Bank LED: 1st Tray	E	[OFF or ON / - / 1/step]
5-804-125	Bank LED: 2nd Tray	E	[OFF or ON / - / 1/step]
5-804-126	Bank LED: 3rd Tray	E	[OFF or ON / - / 1/step]
5-804-127	De-curler Unit Move:Lower Default	E	[OFF or ON / - / 1/step]
5-804-128	De-curler Unit Move:Upper Default	E	[OFF or ON / - / 1/step]
5-804-129	De-curl Trans Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-130	De-curl Trans Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-131	De-curl Trans Mtr (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-132	De-curl Trans Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-133	De-curl Trans Mtr (Reverse)	E	[OFF or ON / - / 1/step]
5-804-134	Exit JG Motor (HP)	E	[OFF or ON / - / 1/step]
5-804-135	Exit JG Motor (Drive)	E	[OFF or ON / - / 1/step]
5-804-144	Dev Motor (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-145	Dev Motor (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-146	Dev Motor (Speed 3)	E	[OFF or ON / - / 1/step]

5-804-147	Dev Motor (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-148	Drum CL Mtr (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-149	Drum CL Mtr (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-150	Drum CL Mtr (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-151	Drum CL Mtr (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-160	Fusing Motor (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-161	Fusing Motor (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-162	Fusing Motor (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-163	Fusing Motor (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-164	TH Paper Feed Motor (Speed 1)	E	[OFF or ON / - / 1/step]
5-804-165	TH Paper Feed Motor (Speed 2)	E	[OFF or ON / - / 1/step]
5-804-166	TH Paper Feed Motor (Speed 3)	E	[OFF or ON / - / 1/step]
5-804-167	TH Paper Feed Motor (Speed 4)	E	[OFF or ON / - / 1/step]
5-804-168	Waste Toner Transport Motor	E	[OFF or ON / - / 1/step]
5-804-169	ITB:Steering Control Mtr(HP)	E	[OFF or ON / - / 1/step]
5-804-175	Scananer Lamp	E	[OFF or ON / - / 1/step]
5-804-180	A4LCT Tray4 Paper Feed STM High	E	[OFF or ON / - / 1/step]
5-804-181	A4LCT Tray4 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-182	A4LCT Tray5 Paper Feed STM High	E	[OFF or ON / - / 1/step]

5-804-183	A4LCT Tray5 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-184	A4LCT Tray6 Paper Feed STM High	E	[OFF or ON / - / 1/step]
5-804-185	A4LCT Tray6 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-186	A4LCT Tray4 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-187	A4LCT Tray4 Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-188	A4LCT Tray5 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-189	A4LCT Tray5 Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-190	A4LCT Tray6 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-191	A4LCT Tray6 Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-192	A4LCT V-Transport 1 STM High	E	[OFF or ON / - / 1/step]
5-804-193	A4LCT V-Transport 1 STM Low	E	[OFF or ON / - / 1/step]
5-804-194	A4LCT V-Transport 2 STM High	E	[OFF or ON / - / 1/step]
5-804-195	A4LCT V-Transport 2 STM Low	E	[OFF or ON / - / 1/step]
5-804-196	A4LCT V-Transport 3 STM High	E	[OFF or ON / - / 1/step]
5-804-197	A4LCT V-Transport 3 STM Low	E	[OFF or ON / - / 1/step]
5-804-198	A4LCT Exit STM High	E	[OFF or ON / - / 1/step]

5-804-199	A4LCT Exit STM Low	E	[OFF or ON / - / 1/step]
5-804-200	A4LCT Exit Roller Contact STM	E	[OFF or ON / - / 1/step]
5-804-201	A4LCT Tray4 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-202	A4LCT Tray5 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-203	A4LCT Tray6 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-204	A3LCT Tray4 Paper Feed STM High	E	[OFF or ON / - / 1/step]
5-804-205	A3LCT Tray4 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-206	A3LCT Tray5 Paper Feed STM High	E	[OFF or ON / - / 1/step]
5-804-207	A3LCT Tray5 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-208	A3LCT Tray6 Paper Feed STM High	E	[OFF or ON / - / 1/step]
5-804-209	A3LCT Tray6 Paper Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-210	A3LCT Tray4 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-211	A3LCT Tray4 Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-212	A3LCT Tray5 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-213	A3LCT Tray5 Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-214	A3LCT Tray6 Grip STM High	E	[OFF or ON / - / 1/step]
5-804-215	A3LCT Tray6 Grip STM Low	E	[OFF or ON / - / 1/step]

5-804-216	A3LCT V-Transport 1 STM High	E	[OFF or ON / - / 1/step]
5-804-217	A3LCT V-Transport 1 STM Low	E	[OFF or ON / - / 1/step]
5-804-218	A3LCT V-Transport 2 STM High	E	[OFF or ON / - / 1/step]
5-804-219	A3LCT V-Transport 2 STM Low	E	[OFF or ON / - / 1/step]
5-804-220	A3LCT V-Transport 3 STM High	E	[OFF or ON / - / 1/step]
5-804-221	A3LCT V-Transport 3 STM Low	E	[OFF or ON / - / 1/step]
5-804-222	A3LCT Exit STM High	E	[OFF or ON / - / 1/step]
5-804-223	A3LCT Exit STM Low	E	[OFF or ON / - / 1/step]
5-804-224	A3LCT Exit Roller Contact STM	E	[OFF or ON / - / 1/step]
5-804-225	A3LCT Tray4 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-226	A3LCT Tray5 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-227	A3LCT Tray6 Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-228	A3LCT Tray4 Front Fan	E	[OFF or ON / - / 1/step]
5-804-229	A3LCT Tray4 Rear Fan	E	[OFF or ON / - / 1/step]
5-804-230	A3LCT Tray5 Front Fan	E	[OFF or ON / - / 1/step]
5-804-231	A3LCT Tray5 Rear Fan	E	[OFF or ON / - / 1/step]
5-804-232	A3LCT Tray6 Front Fan	E	[OFF or ON / - / 1/step]
5-804-233	A3LCT Tray6 Rear Fan	E	[OFF or ON / - / 1/step]
5-804-234	Bypass Feed STM High	E	[OFF or ON / - / 1/step]
5-804-235	Bypass Feed STM Low	E	[OFF or ON / - / 1/step]
5-804-236	Bypass Grip STM High	E	[OFF or ON / - / 1/step]

5-804-237	Bypass Grip STM Low	E	[OFF or ON / - / 1/step]
5-804-238	Bypass V-Transport STM High	E	[OFF or ON / - / 1/step]
5-804-239	Bypass V-Transport STM Low	E	[OFF or ON / - / 1/step]
5-804-240	Bypass Pickup SOL	E	[OFF or ON / - / 1/step]
5-804-241	A4LCT Tray4 LED	E	[OFF or ON / - / 1/step]
5-804-242	A4LCT Tray5 LED	E	[OFF or ON / - / 1/step]
5-804-243	A4LCT Tray6 LED	E	[OFF or ON / - / 1/step]
5-804-244	A3LCT Tray4 LED	E	[OFF or ON / - / 1/step]
5-804-245	A3LCT Tray5 LED	E	[OFF or ON / - / 1/step]
5-804-246	A3LCT Tray6 LED	E	[OFF or ON / - / 1/step]

5805	**[Output Check]** -		
5-805-001	Opt. Coolng Fan NS	E	[OFF or ON / - / 1/step]
5-805-002	Opt. Coolng Fan HS	E	[OFF or ON / - / 1/step]
5-805-003	Dev. Coolng Fan Front NS	E	[OFF or ON / - / 1/step]
5-805-004	Dev. Coolng Fan Front HS	E	[OFF or ON / - / 1/step]
5-805-005	Dev. Coolng Fan Rear NS	E	[OFF or ON / - / 1/step]
5-805-006	Dev. Coolng Fan Rear HS	E	[OFF or ON / - / 1/step]
5-805-007	Belt Cleaning Fan NS	E	[OFF or ON / - / 1/step]
5-805-009	Duplex Low Cooling Fan Front NS	E	[OFF or ON / - / 1/step]
5-805-010	Duplex Low Cooling Fan Rear NS	E	[OFF or ON / - / 1/step]

5-805-017	Ozone Brower Suction	E	[OFF or ON / - / 1/step]
5-805-018	Ozone Brower Exhaust	E	[OFF or ON / - / 1/step]
5-805-019	Fuse Trans Exhaust Fan NS	E	[OFF or ON / - / 1/step]
5-805-020	Fuse Exhaust Fan Upper NS	E	[OFF or ON / - / 1/step]
5-805-021	Fuse Exhaust Fan Lower NS	E	[OFF or ON / - / 1/step]
5-805-026	Fuse Insulate Fan Rear Right NS	E	[OFF or ON / - / 1/step]
5-805-027	Fuse Insulate Fan Rear Right HS	E	[OFF or ON / - / 1/step]
5-805-028	Fuse Insulate Fan Rear Left NS	E	[OFF or ON / - / 1/step]
5-805-029	Fuse Insulate Fan Rear Left HS	E	[OFF or ON / - / 1/step]
5-805-030	Paper Exit Exhaust Fan Rear Right NS	E	[OFF or ON / - / 1/step]
5-805-032	Paper Exit Exhaust Fan Rear Left NS	E	[OFF or ON / - / 1/step]
5-805-034	HP Sution Fan NS	E	[OFF or ON / - / 1/step]
5-805-035	HP Exhaust Fan NS	E	[OFF or ON / - / 1/step]
5-805-036	Psu Fan T Right NS	E	[OFF or ON / - / 1/step]
5-805-037	Psu Fan T Right HS	E	[OFF or ON / - / 1/step]
5-805-038	Psu Fan T Left NS	E	[OFF or ON / - / 1/step]
5-805-039	Psu Fan T Left HS	E	[OFF or ON / - / 1/step]
5-805-040	Psu Fan M1 Right NS	E	[OFF or ON / - / 1/step]
5-805-041	Psu Fan M1 Left NS	E	[OFF or ON / - / 1/step]
5-805-042	Psu Fan M2 Right NS	E	[OFF or ON / - / 1/step]

5-805-043	Psu Fan M2 Left NS	E	[OFF or ON / - / 1/step]
5-805-046	P-sensor Fan NS	E	[OFF or ON / - / 1/step]
5-805-047	Paper Transfer Fan Front NS	E	[OFF or ON / - / 1/step]
5-805-048	Paper Transfer Fan Rear NS	E	[OFF or ON / - / 1/step]
5-805-049	CIS Cleaning Fan NS	E	[OFF or ON / - / 1/step]
5-805-051	PRT Cooling Fan Front NS	E	[OFF or ON / - / 1/step]
5-805-052	PRT Cooling Fan Rear NS	E	[OFF or ON / - / 1/step]
5-805-053	Right Side Cooling Fan Front NS	E	[OFF or ON / - / 1/step]
5-805-054	Right Side Cooling Fan Front HS	E	[OFF or ON / - / 1/step]
5-805-055	Right Side Cooling Fan Rear NS	E	[OFF or ON / - / 1/step]
5-805-056	Right Side Cooling Fan Rear HS	E	[OFF or ON / - / 1/step]
5-805-057	Ozone Brower Suction HS	E	[OFF or ON / - / 1/step]
5-805-058	Ozone Brower Exhaust HS	E	[OFF or ON / - / 1/step]
5-805-059	Right Side Cooling Fan Center NS	E	[OFF or ON / - / 1/step]
5-805-060	Right Side Cooling Fan Center HS	E	[OFF or ON / - / 1/step]
5-805-061	Toner Bottle Motor1	E	[OFF or ON / - / 1/step]
5-805-062	Toner Bottle Motor2	E	[OFF or ON / - / 1/step]

5-805-063	Toner Bottle Chuck Motor1	E	[OFF or ON / - / 1/step]
5-805-064	Toner Bottle Chuck Motor2	E	[OFF or ON / - / 1/step]
5-805-065	Toner Agitator Motor	E	[OFF or ON / - / 1/step]
5-805-066	Toner Feed Motor	E	[OFF or ON / - / 1/step]
5-805-067	Toner Collection Bottle Motor	E	[OFF or ON / - / 1/step]
5-805-068	PCL	E	[OFF or ON / - / 1/step]
5-805-069	Fusing Pressue Release Motor(HP)	E	[OFF or ON / - / 1/step] Operates for fusing de-pressure motor home position.
5-805-070	Fusing Pressue Release Motor(Up)	E	[OFF or ON / - / 1/step] Operates for fusing de-pressure motor pressurization2 position.
5-805-071	Web Motor	E	[OFF or ON / - / 1/step] Rewind the web cleaning motor twice.
5-805-072	Trans T1 Output	E	[OFF or ON / - / 1/step]
5-805-073	Trans T2- Output	E	[OFF or ON / - / 1/step]
5-805-074	Trans T2+ Output	E	[OFF or ON / - / 1/step]
5-805-075	Sep AC Output	E	[OFF or ON / - / 1/step]
5-805-076	Sep DC Output	E	[OFF or ON / - / 1/step]
5-805-077	Paper Transfer Contact Motor	E	[OFF or ON / - / 1/step]
5-805-078	Charge C1 Output	E	[OFF or ON / - / 1/step]
5-805-079	Charge C2 Output	E	[OFF or ON / - / 1/step]
5-805-080	Charge G Output	E	[OFF or ON / - / 1/step]

6012	**[1-Pass ADF OUTPUT Check]** -		
6-012-001	Pick-Up Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-003	Feed Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-005	Relay Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-009	Exit Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-010	Bottom Plate Motor For/Rev	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-015	Pull-Out Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.
6-012-016	Middle Motor Forward	E	[OFF or ON / **-** / 1/step] For 1 path simultaneous duplex models only.

6242	**[Finisher Output Check]** -		
6-242-001	Entrance Motor	E	[OFF or ON / **-** / 1/step]
6-242-002	Registration Motor	E	[OFF or ON / **-** / 1/step]
6-242-003	Proof Tray Vertical Trans Mt	E	[OFF or ON / **-** / 1/step]
6-242-004	Pre-stack Release Motor	E	[OFF or ON / **-** / 1/step]
6-242-005	Pre-stack Motor	E	[OFF or ON / **-** / 1/step]

6-242-006	Shift JG Motor	E	[OFF or ON / - / 1/step]
6-242-007	Stapler JG Motor	E	[OFF or ON / - / 1/step]
6-242-008	Proof Tray Exit Motor	E	[OFF or ON / - / 1/step]
6-242-009	Horizontal Transport Motor	E	[OFF or ON / - / 1/step]
6-242-010	Punch Movement Motor	E	[OFF or ON / - / 1/step]
6-242-011	Punch Switch Motor	E	[OFF or ON / - / 1/step]
6-242-012	Punch Drive Motor	E	[OFF or ON / - / 1/step]
6-242-013	Stapling Tray Entrance Motor	E	[OFF or ON / - / 1/step]
6-242-014	Stack Plate Motor	E	[OFF or ON / - / 1/step]
6-242-015	Punch S-to-S Regist: CIS Lamp	E	[OFF or ON / - / 1/step]
6-242-016	Stapler Rotation Motor	E	[OFF or ON / - / 1/step]
6-242-017	Stapler Movement Motor	E	[OFF or ON / - / 1/step]
6-242-018	Fence Up-Down Moving Motor	E	[OFF or ON / - / 1/step]
6-242-019	Fence S-to-S Moving Motor	E	[OFF or ON / - / 1/step]
6-242-020	Front Jogger Fence Motor	E	[OFF or ON / - / 1/step]
6-242-021	Rear Jogger Fence Motor	E	[OFF or ON / - / 1/step]
6-242-022	Positioning Roller Vibrating Motor	E	[OFF or ON / - / 1/step]
6-242-023	Positioning Roller Motor	E	[OFF or ON / - / 1/step]
6-242-024	Feed Out Belt Motor	E	[OFF or ON / - / 1/step]
6-242-025	Top Fence Motor	E	[OFF or ON / - / 1/step]
6-242-026	Shutter Solenoid	E	[OFF or ON / - / 1/step]

6-242-027	Staple Motor	E	[OFF or ON / - / 1/step]
6-242-028	Stack Transport Motor	E	[OFF or ON / - / 1/step]
6-242-029	Stack JG Vibrating Motor	E	[OFF or ON / - / 1/step]
6-242-030	Stack Transport Motor	E	[OFF or ON / - / 1/step]
6-242-031	Reserved	E	[OFF or ON / - / 1/step]
6-242-032	Bklet Stplr Clamp Roller Motor	E	[OFF or ON / - / 1/step]
6-242-033	Bklet Stplr Bottom Fence Motor	E	[OFF or ON / - / 1/step]
6-242-034	Bklet Stplr Side Fence Motor	E	[OFF or ON / - / 1/step]
6-242-035	Bklet Stplr Top Fence Motor	E	[OFF or ON / - / 1/step]
6-242-036	Bklet Stplr Mt	E	[OFF or ON / - / 1/step]
6-242-037	Booklet Tray Motor	E	[OFF or ON / - / 1/step]
6-242-038	Fold Roller Motor	E	[OFF or ON / - / 1/step]
6-242-039	Fold Plate Motor	E	[OFF or ON / - / 1/step]
6-242-040	Shift Tray Exit Motor	E	[OFF or ON / - / 1/step]
6-242-041	Shift Moving Motor	E	[OFF or ON / - / 1/step]
6-242-042	Drag Drive Motor	E	[OFF or ON / - / 1/step]
6-242-043	Drag Roller Motor	E	[OFF or ON / - / 1/step]
6-242-044	Exit Guide Motor	E	[OFF or ON / - / 1/step]
6-242-045	Shift Tray Lift Motor	E	[OFF or ON / - / 1/step]
6-242-046	Shift Tray Jogger Fence Motor	E	[OFF or ON / - / 1/step]
6-242-047	Shift Tray Jog Fence Retra Mt	E	[OFF or ON / - / 1/step]
6-242-048	Exit Fan Motor	E	[OFF or ON / - / 1/step]

6-242-049	Press Lever	E	[OFF or ON / - / 1/step]

6310	**[Output Check: Folder]** -		
6-310-001	Horizontal Transport Motor	E	[OFF or ON / - / 1/step]
6-310-002	Top Tray Transport Motor	E	[OFF or ON / - / 1/step]
6-310-003	Top Tray Exit Motor	E	[OFF or ON / - / 1/step]
6-310-004	Dynamic Roller Transport Motor	E	[OFF or ON / - / 1/step]
6-310-005	Registration Roller Transport Motor	E	[OFF or ON / - / 1/step]
6-310-007	Entrance JG Motor	E	[OFF or ON / - / 1/step]
6-310-008	1st Stopper Motor	E	[OFF or ON / - / 1/step]
6-310-009	2nd Stopper Motor	E	[OFF or ON / - / 1/step]
6-310-010	3rd Stopper Motor	E	[OFF or ON / - / 1/step]
6-310-011	Dynamic Roller Lift Motor	E	[OFF or ON / - / 1/step]
6-310-012	Registration Roller Release Motor	E	[OFF or ON / - / 1/step]
6-310-013	Fold Plate Motor	E	[OFF or ON / - / 1/step]
6-310-014	Jogger Fence Motor	E	[OFF or ON / - / 1/step]
6-310-016	Direct-Send JG Motor	E	[OFF or ON / - / 1/step]
6-310-017	FM6 Pawl Motor	E	[OFF or ON / - / 1/step]
6-310-018	1st Fold Motor	E	[OFF or ON / - / 1/step]
6-310-019	2nd Fold Motor	E	[OFF or ON / - / 1/step]
6-310-020	Crease Motor	E	[OFF or ON / - / 1/step]
6-310-021	Bypass JG Solenoid	E	[OFF or ON / - / 1/step]
6-310-022	Exit JG Solenoid	E	[OFF or ON / - / 1/step]

6-310-023	Top Tray JG Solenoid	E	[OFF or ON / - / 1/step]
6-310-024	LE Stop Pawl Solenoid	E	[OFF or ON / - / 1/step]
6-310-025	Reverse JG Solenoid	E	[OFF or ON / - / 1/step]
6-310-026	Horizontal Exit Motor	E	[OFF or ON / - / 1/step]

6401	**[Cvr Inserter Output Check]** -		
6-401-001	OFF (Stop)	E	[OFF or ON / - / 1/step]
6-401-002	1st Pick-up Motor	E	[OFF or ON / - / 1/step]
6-401-003	2nd Pick-up Motor	E	[OFF or ON / - / 1/step]
6-401-004	1st Paper Feed Motor	E	[OFF or ON / - / 1/step]
6-401-005	2nd Paper Feed Motor	E	[OFF or ON / - / 1/step]
6-401-006	1st Transport Motor	E	[OFF or ON / - / 1/step]
6-401-007	2nd Transport Motor	E	[OFF or ON / - / 1/step]
6-401-008	Vertical Transport Motor	E	[OFF or ON / - / 1/step]
6-401-009	Horizontal Transport Motor	E	[OFF or ON / - / 1/step]

6509	**[Output Check: Ring Binder]** -		
6-509-001	Entrance Motor	E	[OFF or ON / - / 1/step]
6-509-002	Transport Motor	E	[OFF or ON / - / 1/step]
6-509-003	Exit Motor	E	[OFF or ON / - / 1/step]
6-509-004	Path JG Motor	E	[OFF or ON / - / 1/step]
6-509-005	Jog Roller Motor	E	[OFF or ON / - / 1/step]
6-509-006	Side Jogger Motor	E	[OFF or ON / - / 1/step]
6-509-007	After-Punch Output Motor	E	[OFF or ON / - / 1/step]

6-509-008	Jog Roller Lift Motor	E	[OFF or ON / - / 1/step]
6-509-009	Hole Clear Motor	E	[OFF or ON / - / 1/step]
6-509-010	Top Fence SOL	E	[OFF or ON / - / 1/step]
6-509-011	Output Belt 1 Motor	E	[OFF or ON / - / 1/step]
6-509-012	Output Belt 2 Motor	E	[OFF or ON / - / 1/step]
6-509-013	Output Belt Rotation Motor	E	[OFF or ON / - / 1/step]
6-509-014	Output Tray Lift Motor	E	[OFF or ON / - / 1/step]
6-509-015	De-curler Motor	E	[OFF or ON / - / 1/step]
6-509-016	Shutter Motor	E	[OFF or ON / - / 1/step]
6-509-017	Paddle Roller Motor	E	[OFF or ON / - / 1/step]
6-509-018	Alignment Pin Motor	E	[OFF or ON / - / 1/step]
6-509-019	Paddle Roller Lift Motor	E	[OFF or ON / - / 1/step]
6-509-020	Width Align Motor 1	E	[OFF or ON / - / 1/step]
6-509-021	Clamp Motor	E	[OFF or ON / - / 1/step]
6-509-022	Width Align Motor 2	E	[OFF or ON / - / 1/step]
6-509-023	Roller Motor	E	[OFF or ON / - / 1/step]
6-509-024	Roller Lift Motor	E	[OFF or ON / - / 1/step]
6-509-025	Main Lift Motor	E	[OFF or ON / - / 1/step]
6-509-026	50/100 Adjustment Motor	E	[OFF or ON / - / 1/step]

6651	**[Output Check: Trimmer]** -		
6-651-001	Entrance Motor	E	[OFF or ON / - / 1/step]
6-651-002	Exit Motor	E	[OFF or ON / - / 1/step]
6-651-003	Press Roller Motor	E	[OFF or ON / - / 1/step]
6-651-004	Cut Position Motor	E	[OFF or ON / - / 1/step]

6-651-005	Press Stopper Motor	E	[OFF or ON / - / 1/step]
6-651-006	Tray Motor	E	[OFF or ON / - / 1/step]
6-651-007	Trimming Blade Motor	E	[OFF or ON / - / 1/step]

3.10 PRINTER SP TABLE

3.10.1 SP1-XXX (SERVICE MODE)

1001	[Bit Switch]			
001	Bit Switch 1		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	**No I/O Timeout**	**Disabled**	Enabled
		Enables/Disables MFP I/O Timeouts. If enabled, the MFP I/O Timeout setting will have no affect. I/O Timeouts will never occur.		
	bit 4	**SD Card Save Mode**	**Disabled**	Enabled
		If this bit switch is enabled, print jobs will be saved to the GW SD slot and not output to paper.		
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	**[RPCS,PCL]: Printable area frame border**	**Disabled**	Enabled
		Prints all RPCS and PCL jobs with a border around the printable area.		

1001	[Bit Switch]			
002	Bit Switch 2		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	**Applying a Collate Type**	**Shift Collate**	Normal Collate

		A collate type (shift or normal) will be applied to all jobs that do not explicitely define a collate type. **Note**: If #5-0 is enabled, this BitSwitch has no effect.		
	bit 3	**[PCL5e/c,PS]: PDL Auto Switching**	**Enabled**	Disabled
		Enables/Disables the MFPs ability to change the PDL processor mid-job. Some host systems submit jobs that contain both PS and PCL5e/c. If Auto PDL switching is disabled, these jobs will not be printed properly.		
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 5	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
003	Bit Switch 3		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	**[PCL5e/c]: Legacy HP compatibility**	**Disabled**	Enabled
		Uses the same left margin as older HP models such as HP4000/HP8000. In other words, the left margin defined in the job (usually "<ESC>*r0A") will be changed to "<ESC>*r1A".		
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**		
004	Bit Switch 4	0	1

	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 2	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
005	Bit Switch 5		0	1
	bit 0	**Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel.**	**Disabled**	Enabled
		If enabled, users will be able to configure a Collate Type, Staple Type, and Punch Type from the operation panel. The available Types will depend on the device and configured options. After enabling this BitSw, the settings will appear under: "User Tools > Printer Features > System"		
	bit 1	**Multiple copies if a paper size or type mismatch occurs**	**Disabled (single copy)**	Enabled (multiple)
		If a paper size or type mismatch occurs during the printing of multiple copies, only a single copy is output by default. Using this BitSw, the device can be configured to print all copies even if a paper mismatch occurs.		
	bit 2	**Prevent SDK applications from altering the contents of a job.**	**Disabled**	Enabled

		If this BitSw is enabled, SDK applications will not be able to alter print data. This is achieved by preventing SDK applications from accessing a module called the "GPS Filter". Note: The main purpose of this BitSw is for troubleshooting the effects of SDK applications on data.		
	bit 3	**[PS] PS Criteria**	**Pattern3**	Pattern1
		Change the number of PS criterion used by the PS interpreter to determine whether a job is PS data or not.		
	bit 4	**Increase max. number of stored jobs.**	**Disabled (100)**	Enabled (750)
		Changes the maximum number of jobs that can be stored on the HDD. The default (disabled) is 100. If this is enabled, the max. will be raised to 750 or 1000 depending on the model.		
	bit 5	**Face-up output**	Disabled	Enabled (Face-up)
		All print jobs will be output face-up in the destination tray.		
	bit 6	**Method for determining the image rotation for the edge to bind on.**	**Disabled**	Enabled
		If enabled, the image rotation will be performed as they were in the specifications of older models for the binding of pages of mixed orientation jobs. The old models are below: - PCL: Pre-04A models - PS/PDF/RPCS:Pre-05S models		
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
006	Bit Switch 6		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-

	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
007	Bit Switch 7		0	1
	bit 0	**Print path**	**Disable**	Enable
		If enabled, simplex pages (in mixed simplex/duplex PS/PCL5 jobs only) and the last page of an odd paged duplex job (PS, PCL5, PCL6), are always routed through the duplex unit. Not having to switch paper paths increases the print speed slightly.		
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
008	Bit Switch 8		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-

	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	**[PDF]: Orientation Auto Detect Fuction**	**Enabled**	Disabled
		Automatically chooses page orientations of PDF jobs (Landscape or Portrait) based on the content.		

1001	**[Bit Switch]**			
009	Bit Switch 9		0	1
	bit 0	**PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284).**	**Disabled (Immediately)**	Enabled (10 seconds)
		To be used if PDL auto-detection fails. A failure of PDL autodetection doesn't necessarily mean that the job can't be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds.		
	bit 1	DFU	-	-
	bit 2	**Job Cancel**	**Disabled (Not cancelled)**	Enabled (Cancelled)
		If this bit switch, all jobs will be cancelled after a jam occurs. **Note**: If this bitsw is enabled, printing under the following conditions might result in problems: - Job submission via USB or Parallel Port - Spool printing (WIM >Configuration > Device Settings > System)		
	bit 3	DFU	-	-
	bit 4	**Timing of the PJL Status ReadBack (JOB END) when printing multiple collated copies.**	**Disabled**	Enabled

		This bitsw determines the timing of the PJL USTATUS JOB END sent when multiple collated copies are being printed. 0 (default): JOB END is sent by the device to the client after the first copy has completed printing. This causes the page counter to be incremented after the first copy and then again at the end of the job. 1: JOB END is sent by the device to the client after the last copy has finished printing. This causes the page counter to be incremented at the end of each job.		
	bit 5	**Display UTF-8 text in the operation panel**	**Enabled**	Disabled
		Enabled (=0): Text composed of UTF-8 characters can be displayed in the operation panel. Disabled (=1): UTF-8 characters cannot be displayed in the operation panel. For example, job names are sometimes stored in the MIB using UTF-8 encoded characters. When these are displayed on the operation panel, they will be garbled unless this BitSw is enabled (=0).		
	bit 6	**Disable super option**	**Enabled**	Disabled
		Switches super option disable on / off. It this is On, multiple jobs are grouped at LPR port. PJL settings are enabled even jobs that are specified queue names are sent.		
	bit 7	**Enable/Disable Print from USB/SD's Preview function**	Enabled	**Disabled**
		Determines whether Print from USB/SD will have the Preview function. Enabled (=0): Print from USB/SD will have the Preview function. Disabled (=1): Print from USB/SD will not have the Preview function.		

1001	**[Bit Switch]**			
010	Bit Switch A		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-

	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	**Store and Skip Errored Job locks the queue**	**Queue is not locked after SSEJ**	Queue locked after SSEJ
		If this is 1, then after a job is stored using Store and Skip Errored Job (SSEJ), new jobs cannot be added to the queue until the stored job has been completely printed.		
	bit 6	**Allow use of Store and Skip Errored Job if connected to an external charge device.**	**Does not allow SSEJ with ECD**	Allows SSEJ with ECD
		If this is 0, Store and Skip Errored Job (SSEJ) will be automatically disabled if an external charge device is connected. **Note**: We do not officially support enabling this bitsw (1). Use it at your own risk.		
	bit 7	**Job cancels remaining pages when the paid-for pages have been printed on an external charge device**	**Job does not cancel**	Job cancels
		When setting 1 is enabled, after printing the paid-for pages on an external charge device, the job that includes any remaining pages will be canceled. This setting will prevent the next user from printing the unnecessary pages from the previous user's print job.		

1001	**[Bit Switch]**			
011	Bit Switch B		0	1
	bit 0	**Show Menu List**	**Hide Menu List**	Show Menu List
		If this is 0, the Menu List button will be removed from Printer Features.		

	bit 1	**Print job interruption**	**Does not allow interruption**	Allow interruption
		0 (default): Print jobs are not interrupted. If a job is promoted to the top of the print queue, it will wait for the currently printing job to finish. 1: If a job is promoted to the top of the queue, it will interrupt the currently printing job and start printing immediately.		
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	**Add "Apply Auto Paper Select" is the condition that decides if the device's paper size or paper type should be overwritten.**	Disabled	Enabled
		If this BitSwitch is set to "1" (enabled), the "Apply Auto Paper Select" setting will decide if the paper size or paper type that is specified in the device settings should be overwritten by the job's commands when "Tray Setting Priority" is set to "Driver/Command" or "Any Type". - Apply Auto Paper Select = OFF: Overwritten (priority is given to the job's commands) - Apply Auto Paper Select = ON: Not overwritten (priority is given to the device settings)		
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	**[Bit Switch]**			
012	Bit Switch C		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-

	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1003	**[Clear setting]** -		
1-003-003	Delete Program	C*	[- / **-** / -]

1004	**[Print Summary]** Prints the service summary sheet (a summary of all the controller settings).		
1-004-001	Print Printer Summary	C	[- / **-** / -]

1004	**[Print Summary]** Prints the service summary sheet (a summary of all the controller settings).		
1-004-002	Print Printer Summary2	C	[- / **-** / -]

1005	**[Display Version]** Displays the version of the controller firmware.		
1-005-002	-	C	[- / **-** / -]

1006	**[Sample/Locked Print]** -

1-006-001	0:Link with Doc. Srv 1:Enable	C*	[0 or 1 / **0** / 1/step] 0: Linked, 1: On Enables and disables the document server. When you select "0," the document server is enabled or disabled in accordance with Copy Service Mode SP5-967. When you select "1," the document server is enabled regardless of Copy Service Mode SP5-967.

1110	**[Media Print Device Setting]** Selects the setting for the media print device.		
1-110-002	0: Disable 1: Enable	C*	[0 or 1 / **1** / 1/step] Sets Enabled/disabled front I/F(USB/SD) device at media print function. It is required restart after the setting. Initial value is as follows by front I/F(SD/USB). I/F(SD/USB) initial value Option loading machine 0: Disabled Standard loading machine 1: Enabled

1111	**[All Job Delete Mode]** -		
1-111-001	0:excluding New Job 1:including New Job	C*	[0 or 1 / **1** / 1/step] 0: Excluding New Job 1: Including New JobSelects whether to include an image processing job in jobs subject to full cancellation from the SCS job list.

1117	**[-]** -		
1-117-001	-	C*	[0 to 1 / **0** / 1/step] Sets Enabled/Disabled AirPrint function. 0: Air Print function Enabled 1: Air Print function Disabled

7910	**[-]** Returns the part number string.		
7-910-***	-	C	[-/ **NULL** / - / -] RPCS 150 PS 151 RPDL 152 R98 153 R16 154 RPGL 155 R55 156 RTIFF 157 PCL 158 PCLXL 159 MSIS 160 MSIS(OPT) 161 PDF 162 BMLinkS 163 PICTBRIDGE 164 PJL 165 IPDS 166 MediaPrint:JPEG 167 MediaPrint:TIFF 168 XPS 169 FONT 180 FONT1 181 FONT2 182 FONT3 183 FONT4 184 FONT5 185

7911	**[-]** Returns the version string.

7-911-***	-	C	[-/ **NULL** / - / -] RPCS 150 PS 151 RPDL 152 R98 153 R16 154 RPGL 155 R55 156 RTIFF 157 PCL 158 PCLXL 159 MSIS 160 MSIS(OPT) 161 PDF 162 BMLinkS 163 PICTBRIDGE 164 PJL 165 IPDS 166 MediaPrint:JPEG 167 MediaPrint:TIFF 168 XPS 169 FONT 180 FONT1 181 FONT2 182 FONT3 183 FONT4 184 FONT5 185

3.11 SCANNER SP TABLE

3.11.1 SP1-XXX (SYSTEM AND OTHERS)

1001	**[Scan Nv Version]** Displays the scanner firmware version stored in NVRAM in a 9-digit format: Func. Name_Model Name_History No.		
1-001-005	-	C*	[- / **-** / -] Operates following two operation simultaneously for prevent forgot to initialize when initialization of scanner NV is required. : Automatic initialization by individual version control. : Writes the message "initialization is required" at history, and then instructs initialization by release notification. (Only operates this way in current situation.)

1005	**[Erase Margin(Remote scan)]** -		
1-005-001	-	C*	[0 to 5 / **0** / 1/step] Creates an erase margin for all edges of the scanned image. If the machine has scanned the edge of the original, create a margin. This SP is activated only when the machine uses TWAIN scanning.

1009	**[Remote scan disable]** -

1-009-001	-	C*	[0 or 1 / **0** / 1 /step] This SP switches the TWAIN scanner function on/off. This is one of the scanner application functions. 0: ON (enabled) 1: OFF (disabled)

1010	**[Non Display Clear Light PDF]** -		
1-010-001	-	C*	[0 or 1 / **0** / 1 /step] Display or Non display remote scan. 0: Display, 1: No display

1011	**[Org Count Display]** -		
1-011-001	-	C*	[0 or 1 / **0** / 1 /step] 0: OFF (no display) 1: ON (count displays) This SP codes switches the original count display on/off.

1012	**[User Info Release]** -		
1-012-001	-	C*	[0 or 1 / **1** / 1 /step] 1: Release 0: Do not release This SP code sets the machine to release or not release the following items at job end. ▪ Destination (E-mail/Folder/CS) ▪ Sender name ▪ Mail Text ▪ Subject line File name

1013	**[Multi Media Function]** -		
1-013-002	-	C*	0 or 1 / **1** / 1 /step] 0: Disable 1: Enable This SP code enables/disables the multi-media function option (USB 2.0/SD Slot) mounted on the front of the machine. Operators can scan documents to either an SD card or a USB memory device inserted into this unit. This SP must be enabled (set to "1") in order for the device to function.

1013	**[Multi Media Function]** -		
1-013-003	-	C*	[0 to 1 / **1** / 1 /step] Selects use or not use Scan to media. 0: Not use 1: Use (initial value)

1014	**[-]** -		
1-014-001	-	C*	[0 or 1 / **0** / 1 /step] 0: Disable 1: Enable Enables / Disables to input password for Scan To Folder.

1041	**[Scanner FlairAPI Function Setting]**			
001	-	C*	* see BitSwitch below:	
	Sets Scanner FlairAPI Function enable / disable. This SP is set by BitSwitch and needs to reboot the machine after making changes.			
bit	Setting	meanings	Description	

		0	1		
bit 0	Start of FlairAPI Server	**Off (Do not Start)**	On (Start)	Sets whether to start exclusive FlairAPI http server. If it is 0, scanning FlairAPI function and simple UI function will be disabled. The machine installed Android operating panel option, set “1”, others set “0”.	
bit 1	Access permission of FlairAPI from outside of the machine	**Disabled**	Enabled	If it is “0”, accessing is limited from the machine only, such as operating panel, SDK/J, MFP browsers etc… If it is “1”, accessing is allowed from outside of FlairAPI such as PC, Remote UI, and IT-Box etc…	
bit 2	Reserved	-	-	-	
bit 3	Reserved	-	-	-	
bit 4	Simple UI Function	**Disabled**	Enabled	If it is “1”, the machine can be used Scanner Simple UI. If it is “0”, requesting URL of Simple UI returns “404 Not Found”	
bit 5	Accessing permission of Simple UI from outside of the machine	**Disabled**	Enabled	If it is “0”, accessing is limited from the machine only (operating panel and MFP browser). If it is “1”, accessing is allowed from outside of Simple UI such as PC, mobile devices, and so on.	
bit 6	Reserved	-	-	-	

bit 7	Reserved	-	-	-	

2021	**[Compression Level (Gray-scale)]** Selects the compression ratio for grayscale processing mode (JPEG) for the five settings that can be selected at the operation panel.		
2-021-001	Comp1:5-95	C*	[5 to 95 / **20** / 1 /step] Sets compression ratio when "Comp1" was selected when using multi-level compression. Comp1 of 5grades notch. 5”low: low image quality” -> ->95(high: high quality)
2-021-002	Comp2:5-95	C*	[5 to 95 / **40** / 1 /step] Sets compression ratio when "Comp2" was selected when using multi-level compression. Comp2 of 5grades notch.
2-021-003	Comp3:5-95	C*	[5 to 95 / **65** / 1 /step] Sets compression ratio when "Comp3" was selected when using multi-level compression. Comp3 of 5grades notch.
2-021-004	Comp4:5-95	C*	[5 to 95 / **80** / 1 /step] Sets compression ratio when "Comp4" was selected when using multi-level compression. Comp4 of 5grades notch.
2-021-005	Comp5:5-95	C*	[5 to 95 / **95** / 1 /step] Sets compression ratio when "Comp55" was selected when using multi-level compression. Comp55 of 5grades notch.

2024	**[Compression ratio of ClearLight PDF]** Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.

2-024-001	Compression Ratio (Normal image)	C*	[5 to 95 / **25** / 1/step] Sets the compression rate when you select "normal" clear light when using PDF. 5”low: low image quality” ->->95”high: high image”.
2-024-002	Compression Ratio (High)	C*	[5 to 95 / **20** / 1/step] Set the compression rate when you select "High" clear light when using PDF.

2025	**[Compression ratio of ClearLightPDF JPEG2000]** -		
2-025-001	Compression Ratio (Normal) JPEG2000	C*	[5 to 95 / **25** / 1/step] Sets the compression rate when you select "normal" clear light when using clear right PDF JPEG2000. 5”low: low image quality” ->->95”high: high image”.
2-025-002	Compression Ratio (High) JEPG2000	C*	[5 to 95 / **20** / 1/step] Sets the compression rate when you select "high" clear light when using clear right PDF JPEG2000.

2030	**[-]** -		
2-030-001	-	C*	[0 to 255 / **250** / 1/step] Sets brightness that consider a white: Information of detection level 5 at white paper detection enable of PDF setting with OCR "Transparent text". 1 (low: low sensitivity) <-->4(high: high sensitivity) Sensitive 5 can be set fine setting sensitive information by user.

2-030-002	-	C*	[0 to 100 / **80** / 1/step] Sets part 2: Information of detection level 5 at white paper detection enable of PDF setting with OCR "Transparent text".
2-030-003	-	C*	[0 to 100 / **80** / 1/step] Sets part 3: Information of detection level 5 at white paper detection enable of PDF setting with OCR "Transparent text".

3043	**[-]** -		
3-043-001	-	C*	[0 to 1 / **0** / 1/step] Sets the attachment method of the image data read when mail transmission. 0: Attach a document that has been read (initial value). 1: Attaches URL link of a document that has been read.

3044	**[-]** -		
3-044-001	-	C*	[0 to 1 / **1** / 1/step] Sets compression method of image data that has been read when using clear light PDF. 0: high 1: normal (initial value)

3045	**[-]** -

3-045-001	-	C*	[0 to 5 / **5** / 1/step] Selects priority search server when searching mail address. 0: LDAP server 1 1: LDAP server 2 2: LDAP server 3 3: LDAP server 4 4: LDAP server 5 5: BODY address table (initial value)

3053	**[-]** -		
3-053-001	-	C*	[0 to 1 / **0** / 1/step] Sets compression method of image data that has been read when using clear light PDF. 0: JPEG initial value 1: JPEG2000

D179/D180/D181
TROUBLESHOOTING SECTION

TROUBLESHOOTING SECTION REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
141 ~ 142	1/7/2015	ITB Centering: SC Codes

D179/D180/D181 TROUBLESHOOTING SECTION

TABLE OF CONTENTS

1. TROUBLESHOOTING 1

1.1 SERVICING 1

1.1.1 CUSTOMER ENGINEERS 1

1.1.2 REFERENCE MATERIAL FOR MAINTENANCE 1

1.1.3 WARNINGS, CAUTIONS, NOTES 1

1.1.4 BEFORE YOU BEGIN 2

Safety 2

About the Display for Options 2

1.2 IMAGE QUALITY PROBLEMS 3

1.2.1 TONER SPOTTING/STAINING 3

Paper Is Spotted with Toner 3

Black Spots 4

Streaks (1) 5

Streaks (2) 7

Streaks (3) 7

Two 13-mm Long Vertical Streaks 8

Two 14-mm Wide Streaks 10

Stained Paper Edges 11

Stained Background 11

Ghosting 13

Scratched Images and Stained Paper Edges 14

1.2.2 TONER SCATTER 15

Toner Scatter (1) 15

Toner Scatter (2) Trailing Scatter 16

Toner Scatter (3) 19

1.2.3 IMAGE LOSS 20

White Spots 1 20

White Spots 2 21

White Spot Blisters 23

Mottling 23

Rough Images with Paper Smaller Than A4 SEF (210 mm) 26

Rough Images Appear During Low Duty Use....28
Vertical Lines at 60 mm Pitch....29
Black Dots Appear on Coated Paper....30
Static Traces Appear in Low Temperature, Low Humidity Environment 32
Firefly, Comet Patterns....33
White Parallel Stripes....34
Edge Toner Scatter....36
1.2.4 DENSITY PROBLEMS....37
Uneven Image Density....37
Density Change at Low Temperatures....40
Uneven Density from Top to Bottom....43
Fainter Leading Edge....44
Fainter Trailing Edge....46
Uneven Density within 90 mm (3.5 in.) of the Trailing Edge....47
Periodic Density Fluctuation....49
Entire Image Faint....50
Color Is Too Dense....51
Broken Thin Lines....52
Blurred Images....53
Dropouts (Characters Broken)....53
After Images....55
White Streaks....56
Vertical White Lines....58
Shock Jitter at the Fusing Unit....59
1.2.5 GLOSSY PROBLEMS....61
Vertical Glossy Lines....61
Insufficient Gloss....62
1.3 FUSING PROBLEMS, MIXED PAPER....63
1.3.1 INSUFFICIENT TONER FUSING....63
1.3.2 IMPROVING PRINT QUALITY WITH MIXED PAPER....65
Conditions Where Image Quality Can be Improved....65
Control Image....65
1.4 PAPER DELIVERY PROBLEMS....67
1.4.1 FREQUENT PAPER MISFEEDS....67
1.4.2 FUSING UNIT SEPARATION PLATE ACCORDION JAMS....68
1.4.3 MESSAGES REPORTING PAPER MISFEEDS....70
J032 Appears....70
If J049 Appears....72
If J050 Appears....74

If J080 Appears 75
If J082 Appears 76
If J099 Appears 77
1.4.4 PAPER SKEW 77
Leading Edge Shift Unit Manual Adjustment 78
1.4.5 WRONG DETECTION OF SKEW 79
1.4.6 DOUBLE FEEDING 80
1.4.7 WRONG DETECTION OF DOUBLE FEEDING 81
1.4.8 FAILURE TO FEED 82
1.4.9 PAPER FEED PROBLEMS AFFECTING IMAGE QUALITY 83
The Image Is Positioned Incorrectly 83
Image Scaling Error on the Side 1 of Paper 85
Image Scaling Error on the Side 2 of Paper 86
Paper Edges Are Dirty (1) 87
Paper Edges Are Dirty (2) 88
Paper Edges Are Dirty (3) 90
Scratches, Streaks, or Vertical Creases Appear on the Image 91
Decurling Results in Scratches, Streaks, or Creases 92
The Leading/Trailing Edge Margin Is Long 94
Curling 95
1.4.10 CLEANING THE PAPER FEED PATH 95
Cleaning Paper Trays 1-3 97
Cleaning the Paper Feed Path for Paper Trays 1-3 98
Cleaning the Paper Feed Path in the Drawer 100
Cleaning the LCT A3 Paper Feed Path 110
Cleaning the LCT A4 Paper Feed Path 112
Cleaning the Multi Bypass Tray Paper Feed Path 113
Cleaning the Paper Feed Rollers and Paper Feed Belt in the Interposer 114
1.5 PERIPHERAL UNIT TROUBLESHOOTING 115
1.5.1 FINISHER SR5050/SR5060 115
Delivered Sheets Are Not Stacked Properly 115
Large Paper Not Stacked Properly 115
Trailing Edge of Stapled Sheets Close to the Paper Exit 118
Sheets Cannot Be Stapled Properly 120
Streaks Appear 4 mm Apart on the Leading Edge of the Stacked Paper 121
1.5.2 MULTI-FOLDING UNIT 122
Poor Folding 122

Folding Deviation 123
Folds Soiled by Multi-Sheet Folding 128
Edges of Letter Fold Bent 130
Z-Folding Is Not Performed Correctly 131
Folded Sheets Are Not Stacked Properly 132
Matte Paper Scratched During Folding 134
1.5.3 RING BINDER RECOGNITION: SC756-48 136
1.6 IMPROVING THROUGHPUT 137
1.6.1 REDUCING THE WAITING TIME PRIOR TO PRINTING 137
1.6.2 IMPROVING THROUGHPUT WITH COATED PAPER 137
1.6.3 REDUCING WAIT TIME WITH MIXED PAPER 138
1.7 OTHER PROBLEMS 140
1.7.1 ITB CENTERING: SC CODES: SC471-04, -05, -06 140
Preparation for Lubricant Application Mode 140
Make Sure the Machine is Level 141
Steering plate Adjustments 143
Countermeasures for Other SC Codes 148
1.8 PAPER TRANSPORT ROLLER/RIB MAPS 151
1.8.1 HOW TO USE THESE MAPS 151
1.8.2 PAPER TRANSPORT UNITS 152
Overall Layout 152
Paper Feed 1-1: View A (Right Side) 152
Paper Feed 1-2: View B (Top) 153
Paper Feed 2: View A (Right Side) 154
Paper Feed 3: View C (Left Side) 154
1.8.3 REGISTRATION UNIT 155
General Layout 155
Registration Unit Rollers: View B (Top) 155
Registration Unit Guide Plate: View B (Top) 156
1.8.4 PTR UNIT 157
General Layout 157
ITB Cleaning Unit (Bottom) 158
PTR Unit 159
PTB Unit 160
1.8.5 FUSING UNIT 161
General Layout 161
Fusing Exit Guide Plate (Lower) 162
Fusing Exit Guide Plate (Upper) 163
Exit Entrance Guide Plate (Upper) 164

1.8.6 INVERT/EXIT UNIT 165
General Layout.....165
Straight-Through Exit 1: View A (Top).....166
Straight-Through Exit 2: View A (Top).....167
Rollers: View A (Top) 168
Invert/Exit: View B (Left).....168
Duplex 1: View A (Top) 169
Duplex 2: View A (Top) 169
1.8.7 LCT A3.....170
General Layout.....170
Paper Transport: Movable Guide Ribs and Rollers: Left View 171
Paper Transport: Tray 5 Transport Fixed Guide Ribs: Left View.....172
Paper Transport: Fixed Guide Plate Ribs: Right View.....173
1.8.8 FINISHER 174
General Layout: Straight-Through to Shift Tray.....174
Straight Transport 1: Entrance, Paper Registration.....175
Straight Transport 2: Post-Punch 177
Straight Transport 3: Exit to Shift Tray 179
Proof Transport Path Layout 181
Proof Path 1: Entrance, Paper Registration 182
Proof Path 2: Post Punch, Proof Path 184
Proof Path 3: Proof Tray Exit.....186

1. TROUBLESHOOTING

1.1 SERVICING

1.1.1 CUSTOMER ENGINEERS

Maintenance shall be done only by trained customer engineers who have completed service training for the machine and all optional devices designed for use with the machine.

1.1.2 REFERENCE MATERIAL FOR MAINTENANCE

- Maintenance shall be done using the special tools and procedures prescribed for maintenance of the machine described in the reference materials (service manuals, technical bulletins, operating instructions, and safety guidelines for customer engineers).
- In regard to other safety issues not described in this document, all customer engineers shall strictly obey procedures and recommendations described the "CE Safety Guide".
- Use only consumable supplies and replacement parts designed for use with the machine.

1.1.3 WARNINGS, CAUTIONS, NOTES

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

1.1.4 BEFORE YOU BEGIN

Safety

⚠WARNING

- To prevent fire hazard, never use flammable aerosol sprays around the machine.
- Before you replace any unit, to prevent electrical shock, turn off the machine with the operation power switch at the left, front corner of the machine. Wait for the machine to shut down, and then disconnect the machine from the power supply.
- Allow the machine to cool for at least 30 minutes before replacing a part.

⚠CAUTION

- Do not remove any covers or screws other than those explicitly mentioned in a procedure. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness.

About the Display for Options

This machine displays all of the adjustment items in the “Adjustment Settings for Skilled Operators” menu and advanced settings for custom paper regardless of whether or not the items are for options, or if the options have been installed.

- Any modification to the option settings does not take effect unless the applicable options are installed on this machine.
- Settings can be adjusted with the “Advanced Settings for Skilled Operators” (key operators who have received TCRU training), or with SP codes settings by the CE.
- In this guide, the skilled operator adjustment is given first, followed by the corresponding SP code setting which can be done by the CE only.

Important

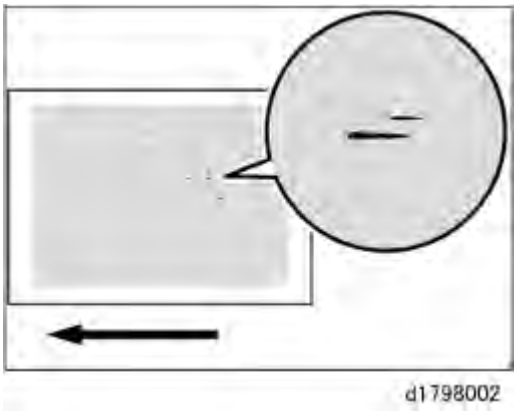
- Always note the current setting before you make any change.
- If a problem persists despite the setting being changed, restore the value you made a note of.
- Operating the machine with the changed setting may cause problems such as reduced print quality.
- If the problem persists even though the setting has been changed, restore the value noted. Operating the machine with the changed setting may cause problems, such as inferior printed images.

1.2 IMAGE QUALITY PROBLEMS

1.2.1 TONER SPOTTING/STAINING

Paper Is Spotted with Toner

Paper is soiled with toner spots of 0.5–1 mm (0.02–0.04 inches) in diameter.



Cause:

Toner fragments have slipped through the cleaning web, which cleans the pressure roller, and re-adhered to paper.

This may occur if:

- Printing on both sides of paper
- Printing on uncoated (especially rough-textured) paper
- Printing a single-dot halftone image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper.

Solution:

Increasing the temperature when using thin paper with a thickness equivalent to Paper Weight 0 or 1 may cause paper curling, resulting in paper jams at the fusing unit.

1. Increase the temperature by 5 °C in Fusing Heat Roller Temperature Adj in Advanced Settings for the custom paper in use. (SP1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Increase the temperature an additional 5 °C in Fusing Heat Roller Temperature Adj.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

5. Have changes to the settings resulted in glossy lines or paper misfeed?

Yes	Decrease the temperature by 10 °C, and then go to the next step.
No	Go to the next step.

6. Set Adjust Cleaning Web Motor Interval to 0.01 in Advanced Settings for the custom paper in use. (SP1-992-001 to 100: Web Feed Interval Custom Paper 001 to 100)
7. Print the image. Is the problem resolved?

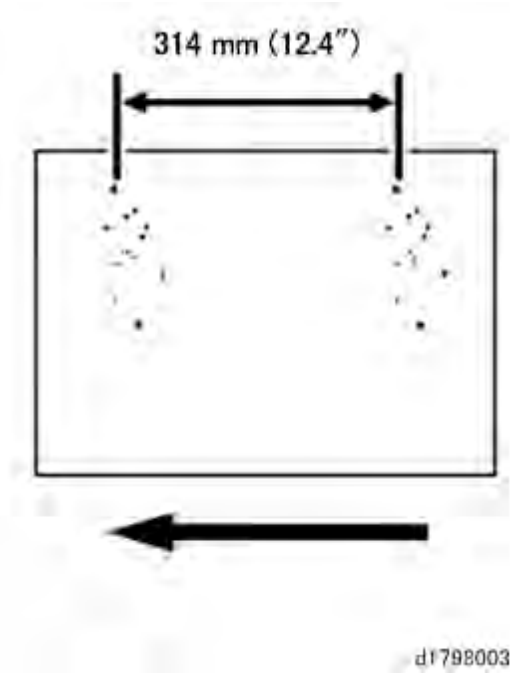
Yes	Finished!
No	Consult key operators.

Note

- Decreasing the value in Adjust Cleaning Web Motor Interval will shorten the replacement cycle of the cleaning web.

Black Spots

Black spots appear at 314 mm (12.4 inches) intervals.



Cause:

The drum is scratched or stained.

Solution:

1. Remove the photoconductor unit and check the drum surface. Is the surface dirty?

Yes	Clean the drum surface.
No	Go to Step 3.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

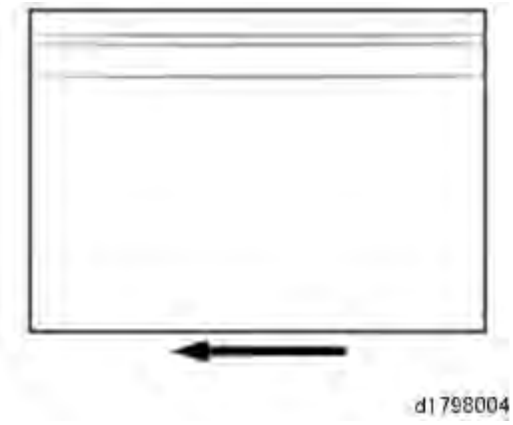
3. Is the surface of the drum scratched?

Yes	Replace the drum.
No	Consult key operators.

4. If the problem cannot be resolved, consult key operators.

Streaks (1)

Streaks parallel to the paper feed direction appear.



Cause:

- The charger is dirty.
- The cleaning unit for PCU has worn out.
- The drum surface is scratched.

Solution:

1. Remove the charge unit and check its surface. Is the surface dirty?

Yes	Clean the charge unit.
No	Go to Step 3.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Replace the charge wire and cleaning pads.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

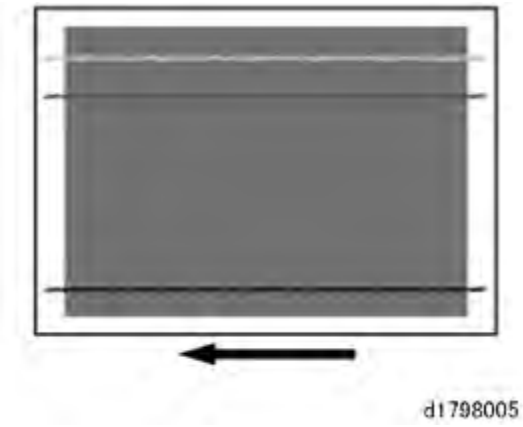
5. Remove the photoconductor unit and check the drum surface. Is the surface dirty or scratched?

Dirty:	Replace the cleaning unit for PCDU.
Scratched:	Replace the drum.
Neither:	Consult key operators.

6. If the problem persists even after you have replaced the cleaning unit for PCU or drum, consult key operators..

Streaks (2)

Extended, blurred streaks parallel to the paper feed direction appear. The streaks also appear randomly in the margins.



d1798005

Cause:

If the temperature or humidity is low, remaining toner might be missed by the cleaning blade of the cleaning unit for intermediate transfer belt or transfer unit, causing streaks to appear sporadically.

Solution:

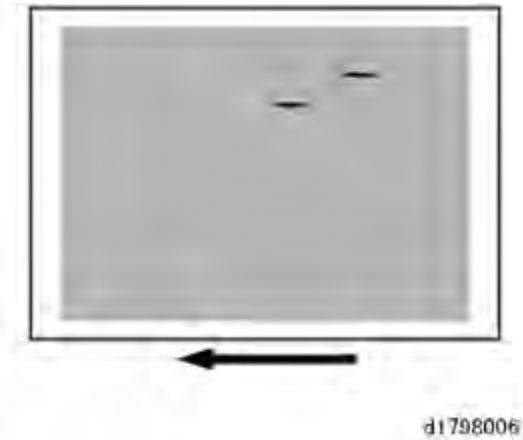
1. Is the printed side affected by the problem?

Yes	Go to the next step.
No	Consult key operators.

2. Replace the cleaning unit for intermediate transfer belt.
3. If the problem persists after you have replaced the cleaning unit for intermediate transfer belt, consult key operators.

Streaks (3)

Streaks appear in solid-filled areas.



d1798006

Cause:

If the toner contains small clumps, they disintegrate in the development unit, producing streaks. This problem may occur if the machine is left unattended for a long period or the toner bottle is kept out of its moisture-proof bag for a long period.

Solution:

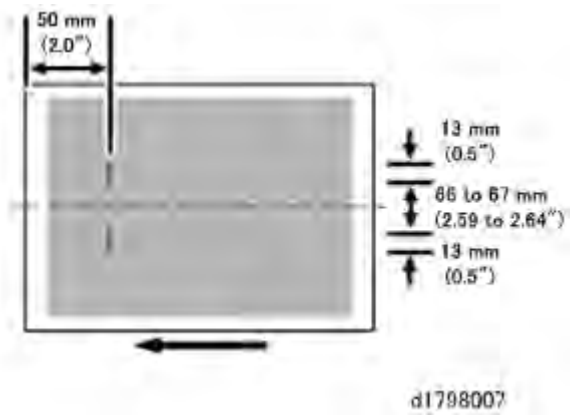
1. Print 350 full-page, solid-fill A3 or DLT sheets.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the toner bottle.

3. Print 350 full-page, solid-fill A3 or DLT sheets.
4. If the problem persists, consult key operators.

Two 13-mm Long Vertical Streaks

Two 13-mm long vertical streaks appear within 50 mm (2.0 inches) from the leading edge.



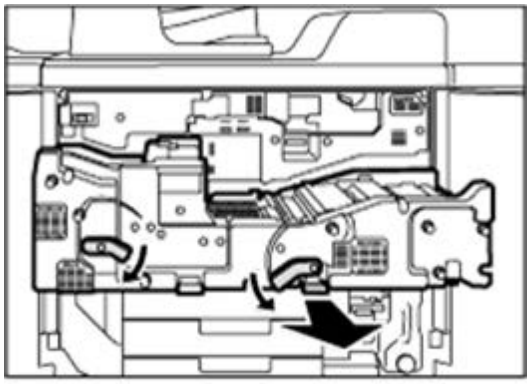
Cause:

The invert exit drive rollers or invert exit idle rollers in the drawer are soiled. This may occur if sheets are delivered face down after one-sided printing.

Solution:

Clean the rollers, sensors, and guide boards in the drawer.

1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
2. Open the front covers.
3. Lower the levers **C1** and **C2**, and then pull the drawer out completely until it stops.

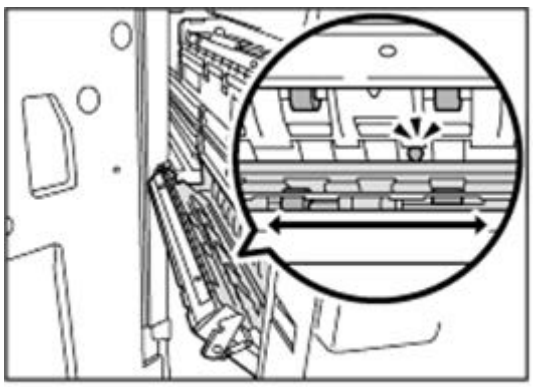


d1798008

4. Pull down and open the cover **D4**.

d1798009

5. Clean the rollers, sensors, and guide boards. For details about cleaning the parts, see page 95 "Cleaning the Paper Feed Path".

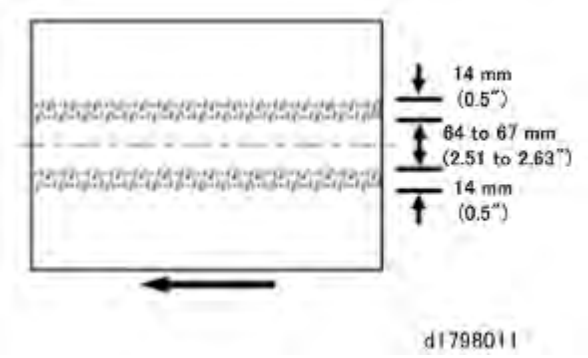


d1798010

6. After cleaning, restore the machine so that it resumes operation.

Two 14-mm Wide Streaks

Two 14-mm wide streaks parallel to the paper feed direction appear.



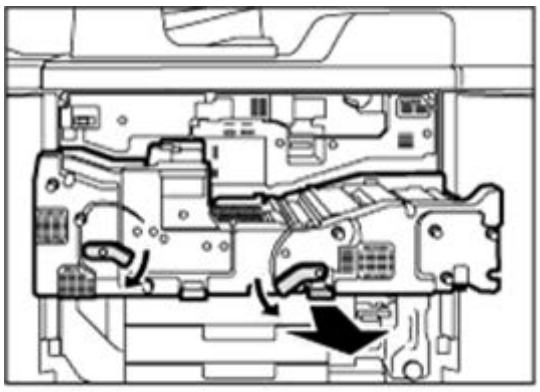
Cause:

The exit drive rollers, exit idle rollers, exit relay drive rollers, or exit relay idle rollers in the drawer are soiled.

Solution:

Clean the rollers, sensors, and guide boards in the drawer.

1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
2. Open the front covers.
3. Lower the levers **C1** and **C2**, and then pull the drawer out completely until it stops.



4. Pull up and open the cover **D3**.

d1798013

5. Clean the rollers while turning the knob **D1**. Clean the sensors and guide boards also. For details about cleaning the parts, see page 95 "Cleaning the Paper Feed Path"

d1798014

6. After cleaning, restore the machine so that it resumes operation.

Stained Paper Edges

Solution:

1. If the paper edges are stained, carry out the procedure in page 63 "Insufficient Toner Fusing"

Stained Background

Random "powdered" dots appear, creating a dirty background. The background may be partially or completely stained.

Completely stained background

d1798015

Partially stained background

Cause:

This may occur because of wearing of the developer, drum unit, or drum charge unit.

Solution:

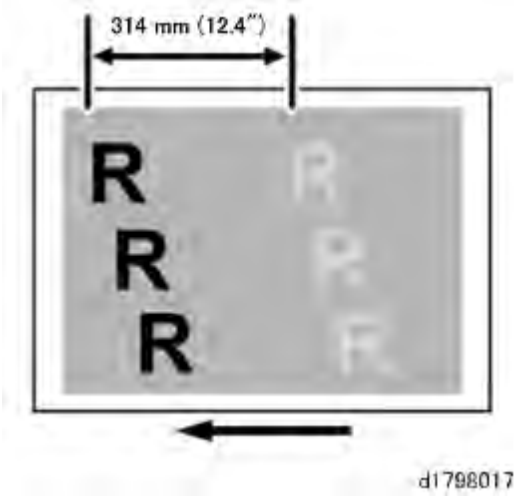
1. If a message prompting replacement of a unit has appeared, replace the unit.
2. In the Machine: Image Quality group on the Adjustment Settings for Skilled Operators menu, select Adjust Image Density and execute Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
3. Print the image. Is the problem resolved?

Yes	Finished!
No	On the machine operation panel: Maintenance > Adjustment Settings for Skilled Operators > Execute Process Initial Setting. (SP3-020-001: Process Setup :Ex Execute: ALL)

4. If the problem persists, consult key operators.

Ghosting

A ghost image of an image to be printed appears at a distance of 314 mm (12.4 in.) to the side of the intended image.



Cause:

The image transfer current is transmitted to the drum, where a potential difference occurs between a developed area and non-developed area and causes the intended image to be reproduced.

This may occur if:

- Solid filled images or bold characters are printed in black on a halftone background
- Printing is done at low temperature or humidity
- Many screening lines are used

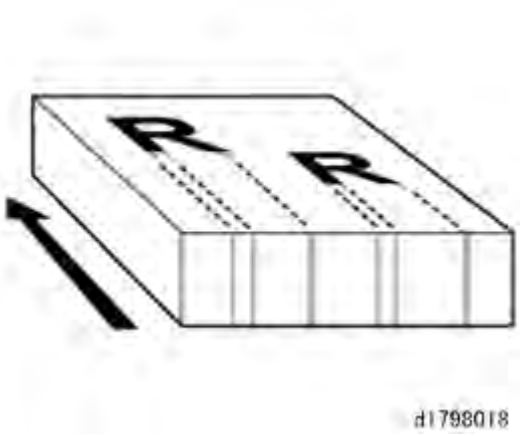
Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators >Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Scratched Images and Stained Paper Edges

Scratched images or soiled paper edges appear.



Cause:

When a relatively stiff, thick paper is delivered, the entrance guide board for the transfer unit is warped toward the intermediate transfer belt due to the stiffness of the paper. The edge of the entrance guide board comes into contact with the toner on the belt to cause images to be scratched and paper edges to be soiled.

This may occur if:

- Paper with a thickness equivalent to Paper Weight 7 is used
- Paper with its grain parallel to the paper feed direction is used. For example, A3/DLT long grain paper is delivered, A4/LT short grain paper is delivered from its long edge, or A4/LT long grain paper is delivered from its short edge.
- Paper is stored at low temperature or humidity

Solution:

Change the direction of paper grain for paper delivery.

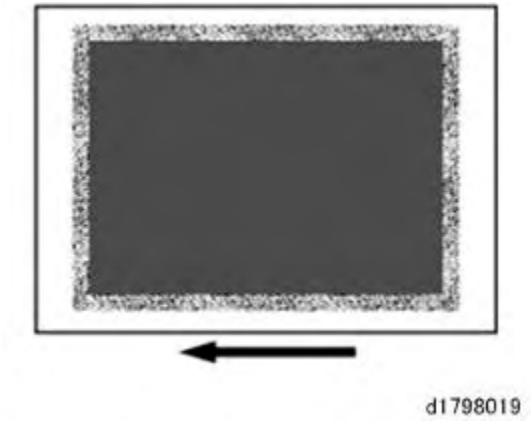
Note

- When storing paper at low humidity, wrap the paper in coated paper or a plastic sheet.

1.2.2 TONER SCATTER

Toner Scatter (1)

Toner is scattered around a solid-fill print.



Cause:

This may occur if printed at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper.

Solution:

Check both sides of the printed sheet to see which side is affected.

- If only Side 1 (front side) is affected, do Procedure (a).
- If only Side 2 (back side) is affected, do Procedure (b).
- If both sides are affected, do Procedure (a), and then do Procedure (b).

(a) Toner scatter on Side 1 only

1. In Advanced Settings for the custom paper in use, increase the absolute value of the negative current by 5% in Paper Transfer Current Setting: Side 1. (SP2-811-001 to 100: PTR Current:Side1 Custom Paper 001 to 100)
   Example: If the present current is −40 uA, change it to −42 uA.
2. Print the image. Is the problem resolved?

Yes	Finished! (Do Procedure (b) if the back side is also affected.)
No	Increase the setting another 5%.

3. If repeating Step 2 does not solve the problem, consult key operators.

(b) Toner scatter on Side 2 (or both sides)

1. In Advanced Settings for the custom paper in use, increase the absolute value of the negative current by 5% in Paper Transfer Current Setting: Side 2. (SP2-812-001 to 100: PTR Current:Side2 Custom Paper 001 to 100)
   Example: If the present current is −40 uA, change it to −42 uA.

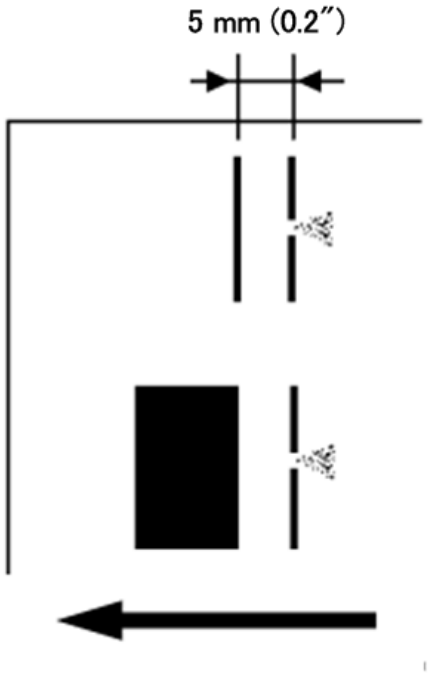
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the setting another 5%.

3. If repeating Step 2 does not solve the problem, consult key operators.

Toner Scatter (2) Trailing Scatter

Parts of a line that is 5 mm (0.2 inches) or less from an image exhibit splatter.



Cause:

Air contained between images is compressed and blows off parts of a line. This may occur if:

- Printing is done at high temperature or humidity
- Using coated or other slippery paper
- Printing line images at less than 5 mm (0.2 inches) intervals

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper.

Solution:

The solution depends on the area in which the line splatter occurs. If the splatter occurs 15 mm (0.6 inches) or less from the leading edge, follow Procedure (a) or follow Procedure (b).

1. **Toner scatter appears within 15 mm (0.6 inches) of the leading edge**

1. Ask the client if the image start position can be shifted more that 15 mm away from the leading edge.

Yes	Go to the next step.
No	Use different paper..

2. Adjusting the image position. In Advanced Settings for the custom paper in use:
   - Specify Adj Image Position of Side1 With Feed for the side 1 of the paper. Adjust in the "**+**" direction. (SP1-950-001 to 100: Image Pos:Sub:Side1 Custom Paper 001 to 100)
   - Adj Image Position of Side2 With Feed for the side 2. Adjust in the "**–**" direction. (SP1-951-001 to 100: Image Pos:Sub:Side2 Custom Paper 001 to 100)
3. Adjusting the mask width at the leading edge. In Advanced Settings for the custom paper in use, specify Adjust Erase Margin of Leading Edge. (SP2-122-001 to 100: Erase Margin Adj Leading Edge Custom Paper 001 to 100).
4. Adjusting the file's leading edge margin.
   - Shift the image more than 15 mm (0.6 inches) away from the trailing edge.
   - For details about adjusting the shift image and adjusting the mask width at the leading edge, see the TCRU manual "Adjustment Item Menu Guide".
   - If you cannot increase the leading edge margin to more than 15 mm (0.6 inches), Consult key operators.

b) Line splatter appears 16 mm (0.6 inches) (or more) from the leading edge

1. In Advanced Settings for the custom paper in use, select Image Transfer Current Setting. (SP2-817-001 to 100: ITB Voltage Custom Paper 001 to 100)
2. Check the present value. Is it the upper limit?

Yes	Go to Step 5.
No	Go to the next step.

3. Increase the absolute value of the current by 5 uA in Image Transfer Current Setting.
4. Print the image. Is the problem resolved?

Yes	Finished!

No	Increase the value by 5 uA. If the problem persists even though you have increased the value to the upper limit (150 uA), go to the next step.

5. Does the client mind if image density is lower?

Yes	Go to the next step.
No	Use different paper..

6. In Advanced Settings for the custom paper in use, select Adjust Toner Adhesion. (SP3-921-001 to 100: Procon Target M/A Custom Paper 1 to 100)
7. Check the present value. Is it the lower limit?

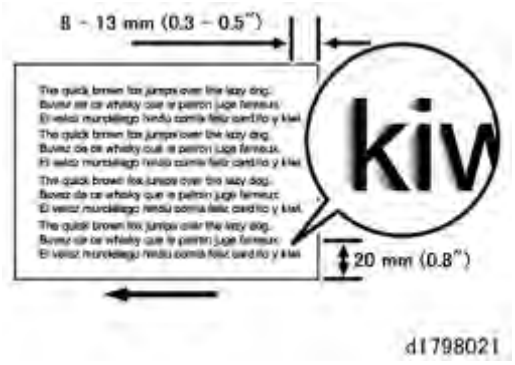
Yes	Consult key operators.
No	Decrease the value by 1 in Adjust Toner Adhesion.

8. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 5 to 7. If the problem persists even though you have decreased the value to the lower limit, consult key operators..

Toner Scatter (3)

Parts of a line or character exhibit splatter. This may occur in a line or character that is 8 to 13 mm (0.3 to 0.5 inches) from the trailing edge and 20 mm (0.8 inches) or less from the left edge facing the paper feed direction.



Cause:

Shock jitter occurs when the trailing edge of the paper leaves the paper guide during paper transfer and causes toner scattering. This may occur if paper with a thickness equivalent to Paper Weight 4 or higher is used.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.
- Changing the transfer current may produce either or both of the following side effects: 1) Reduction in toner yields, 2) Occurrence of banding (streaks)

Solution:

1. In Advanced Settings for the custom paper in use, select Image Transfer Current Setting. (SP2-817-001 to 100: ITB Voltage Custom Paper 001 to 100)
2. Check the present value. Is it lower than 100 uA?

Yes	Carry out all of the following: (1) Increase the value by 5 uA in Image Transfer Current Setting. (2) Set Paper Transfer Current; Trail Edge to "200%". (SP2-815-001 to 100: Trail Edge Corr Coef:2nd Custom Paper 001 to 100) (3) Set Paper Transfer Current; Trail Edge Dist to "30 mm". (SP2-816-001: Trail Edge Corr Switch:2nd Custom Paper 001)
No	Consult key operators.

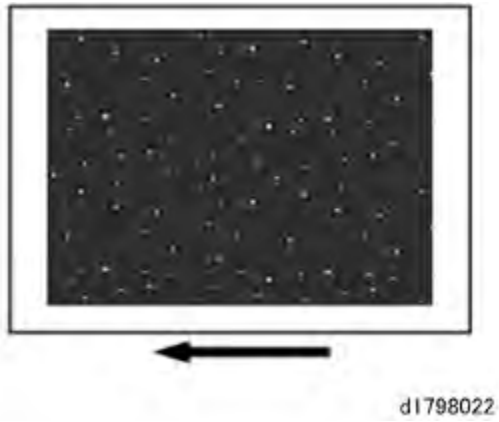
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 1 to 3. If the problem persists even though you have increased the value to 100 uA, consult key operators.

1.2.3 IMAGE LOSS

White Spots 1

White spots of 0.2–0.3 mm (0.008–0.01 inches) in diameter appear.



Cause:

This may occur if printed at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.
- If you reduce the paper transfer current to eliminate white spots, copies may become too faint.

Solution:

Check both sides of the paper for the problem.

- If the problem appears only Side 1 do Procedure (a).
- If the problem appears on Side 2, do Procedure (b).
- If the problem appears on both sides of the paper, do Procedure (a), and then do Procedure (b).

Procedure (a) White Spots on Side 1

1. Adjust the setting for the side 1 of the paper. In Advanced Settings for the custom paper in use, decrease the absolute value of the negative current by 5% in Paper Transfer Current Setting: Side 1. (SP2-811-001 to 100: PTR Current:Side1 Custom Paper 001 to 100)
   Example: If the present current is −40 uA, change it to −38 uA.
2. Print the image. Is the problem resolved?

Yes	Finished! If Side 2 was also affected do Procedure (b).
No	Lower the setting by 5%..

3. Repeat Step 2. If this does not solve the problem, consult key operators.

Procedure (b) White Spots on Side 2

1. Adjust the setting for the side 2 of the paper. In Advanced Settings for the custom paper in use, decrease the absolute value of the negative current by 5% in Paper Transfer Current Setting: Side 2. (SP2-812-001 to 100: PTR Current:Side2 Custom Paper 001 to 100
   Example: If the present current is −40 uA, change it to −38 uA.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Lower the setting another 5%.

3. If repeating Step 2 does not solve the problem, consult key operators.

White Spots 2

Random white specks appear in shaded areas.

d1808008

Cause:

The charge on the image transfer roller is high, and the problem is caused at the pre-nip and nip area of the roller. This can occur if the machine is in an area where ambient temperature and humidity are very low.

Solution:

Check the voltage levels of the image transfer roller and paper transfer roller, and then apply “R+3” to the displayed settings.

Procedure (a) Problem at Image Transfer Roller

1. Check the resistance level of the image transfer roller with SP2-312-001: Current Resist Level Disp ITB.
2. If the value is “R+3”, connect the ITB unit heater and allow the machine to remain idle for one hour.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Replace the image transfer roller.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Check with other units. Consult key operators.

Procedure (b) Problem at Paper Transfer Roller

1. Check the resistance level of the paper transfer roller with SP2-322-001: Current Resist Level Disp PTR.
2. If the value is “R+3”, replace the PTR unit.
3. Print the image. Is the problem resolved?

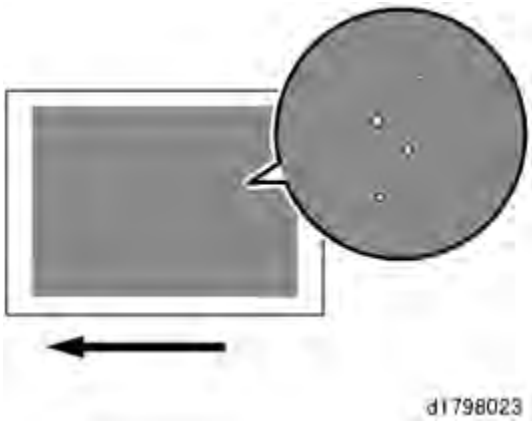
Yes	Finished!
No	Go to the next step.

4. Replace the paper transfer roller.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Check with units. Consult key operators.

White Spot Blisters

White spots 0.3–0.5 mm (0.01–0.02 inches) in diameter surrounded by denser spots (blister-like white spots) appear.



Cause:

This may occur if a solid image is printed on coated paper, if a solid image is printed during duplex printing, or if printing is done at low temperature.

Solution:

If these white spots appear, carry out the procedure in page 63 "Insufficient Toner Fusing".

Mottling

Mottling occurs in solid-filled areas.

Normal

Mottled

Cause:

The transfer electric field on the concave portion of paper is weak, causing a decrease in image transfer. This may occur when:

- Using paper with a rough surface
- Continuously printing an image that consumes little toner
- Printing at high temperature or humidity

Solution:

Before you perform the solution procedure, make sure that the periodic replacement parts have not reached their expiration period. If the replacement parts have reached the end of their service life, replace them.

1. Check to see if any replacement parts have exceeded the expiration date.

Yes	Replace parts that have exceeded service life.
No	Go to the next step.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. In the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

5. Print 100 full-page, solid-fill A4 or LT sheets. Is the problem resolved?

Yes	Finished!
No	Reload with paper that is dry.

6. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the paper with smoother paper.

7. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

8. Is the paper smaller than A4 SEF (210 mm)?

Yes	Go to the next step.
No	Go to Step 10.

9. Use wider paper. Is the problem resolved?

Yes	Do the procedure in the next section: “Rough Images with Paper Smaller Than A4 SEF (210 mm)”
No	Go to the next step.

10. In Advanced Settings for the custom paper in use, select Adjust Toner Adhesion and check the setting. (SP3-921-001 to 100: Procon Target M/A Custom Paper 1 to 100)
11. Is the setting for coverage (M/A) at the upper limit?

Yes	Use different paper..
No	Raise the setting one point.

12. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 11, 12. If this does not solve the problem, do the next step.

13. Open the SC log. Is there a logged SC code?

Yes	If either of the following SC codes were logged, do the procedure to solve the problem: ▪ SC443-00: Image Transfer Roller Error ▪ SC453-00: Paper Transfer Roller Error
No	Go to Step 15

14. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

15. Is it possible to raise the toner density setting?

Yes	In Advanced Settings for the paper in use, select Adjust Toner Adhesion, and raise the setting (+). (SP3-921-001 to 100: Procon Target M/A Custom Paper 1 to 100
No	Consult key operators.

16. Print the image. Is the problem resolved?

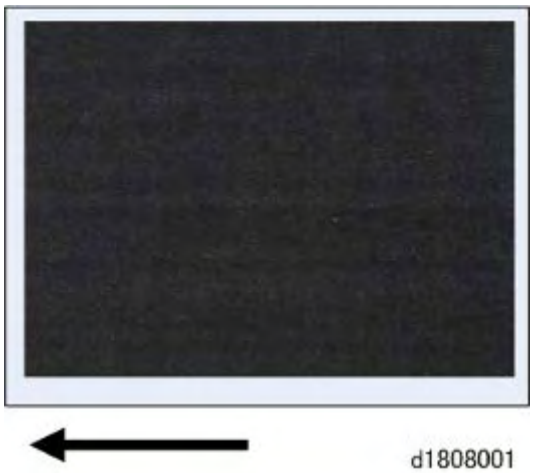
Yes	Finished!
No	Consult key operators.

Note

- Adjust the toner adhesion setting carefully. Raising the toner adhesion setting increases the amount of toner consumption and reduces toner yield.

Rough Images with Paper Smaller Than A4 SEF (210 mm)

Texture of filled image areas appears rough.



Cause:

Paper with a smaller width leaves more of the roller exposed where there is no paper, and this

allows leakage of charge from the transfer electrical field thus reducing the efficiency of image transfer. This effect can also occur when:

- Ambient temperature and humidity are low
- Paper is extremely thick
- Electrical resistance of paper is high
- Duplex printing (occurs on Side 2).

Note

- Please remember that before it can be used, paper requires setting by the operator, especially if adjustments for a different type of paper (custom paper) are used.

Solution:

Check duplex prints and determine on which side the problem occurs. If the problem is occurring on both sides, do the adjust for Side 1 first and then the adjustment for Side 2.

1. In Advanced Settings for the custom paper in use, check the settings for Paper Transfer Current Setting: Side 1 (SP2-811-001 to 100: PTR Current:Side1 Custom Paper 001 to 100), or Paper Transfer Current Setting: Side 2 (2-812-001 to 100: PTR Current:Side2 Custom Paper 001 to 100).
2. Either or both settings at the upper limit?

Yes	Go to Step 6
No	Go to the next step.

3. Are the white spots on labels allowed for use by the client?

Yes	Go to the next step.
No	Go to Step 6.

4. Raise the transfer current setting by 5 points?
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2 to 5.

6. Can you change the orientation of the paper (SEF to LEF, for example), or change the paper size (A4 SEF to A3 SEF)?

Yes	Go to the next step.
No	Use a different paper.

7. Use wider paper.
8. Restore the image transfer voltage to its default setting, and then go back to Step 4.
9. If the problem is not resolved, consult key operators.

Note

- Raising the image transfer voltage can cause white spots to occur in filled areas, so keep this in mind when doing the adjustments. If white spots appear, make some output samples and choose the best from among the test prints and use those settings.

Rough Images Appear During Low Duty Use

During low duty use of the machine, air can become mixed with the developer/toner mixture during agitation and cause rough patches to appear.

Cause:

When the machine is consistently used for low duty printing, air can mix with the developer/toner mixture during agitation which can cause developer deterioration and cause rough patches to appear in images. Low duty is generally defined when:

- Jobs are consistently 5 pages or less
- Pages have less than 4% coverage

Note

- Please remember that before paper can be used, it requires setting by the operator, especially if adjustments for a different type of paper (custom paper) are used.

Solution

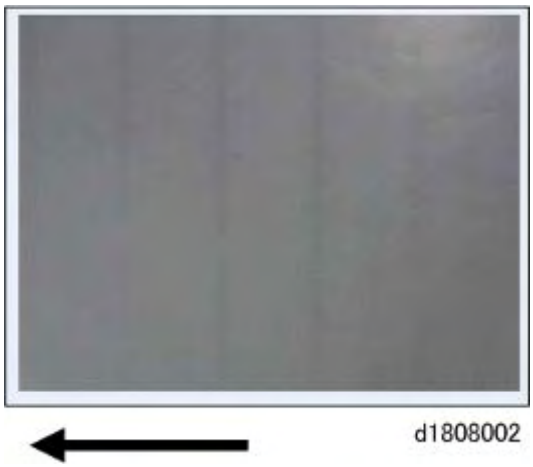
1. Replace the developer.
2. Select Advanced Settings > Main: Image Quality Adjustment > Toner Refresh Mode, and then change the “2” setting to “3”. (SP3-820-001 Tnr Refresh Mode Img Area Thresh:K).
3. If the problem persists, consult key operators.

Note

- If the toner refresh mode is set to "3", the amount of toner consumed will be equivalent to operating the machine under normal conditions at 6% coverage.
- Raising the setting higher than "3" could increase the occurrence of mottled images, increase toner consumption, and lower toner yield.

Vertical Lines at 60 mm Pitch

Faint black bands appear at 60 mm (2.4") intervals vertical to the direction of paper feed.



Cause:

Periodically changing the speed of paper feed can affect the elasticity of images and lead to unevenness in image texture in the shape of black vertical lines. This can also occur when:

- Ambient humidity is high
- Thick paper (above Thickness 3) is used
- There are large areas of halftone coverage

Solution

1. Enter the SP mode.
2. Check the fine adjustment settings of the PTR motor.
   - SP1-012-005: Motor Adj: 95 ppm PTR Motor
   - SP1-013-005: Motor Adj: 110 ppm PTR Motor
   - SP1-014-005: Motor Adj: 135 ppm PTR Motor
3. Check the fine adjustment settings of the transfer timing roller with SP1-006-001 to 31: Fine Adj Trans Tmg Roll Speed (Type): (Weight)
4. Are the settings at their lower limits?

Yes	Go to the next step.
No	Go to Step 8.

5. Is the ambient temperature higher than 23°C (73.4°F)?

Yes	Go to the next step.
No	Use different paper.

6. Is it possible to lower ambient temperature?

Yes	Lower room temperature.
No	Use different paper.

7. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 6 and 7. If the problem persists, go to the next step.

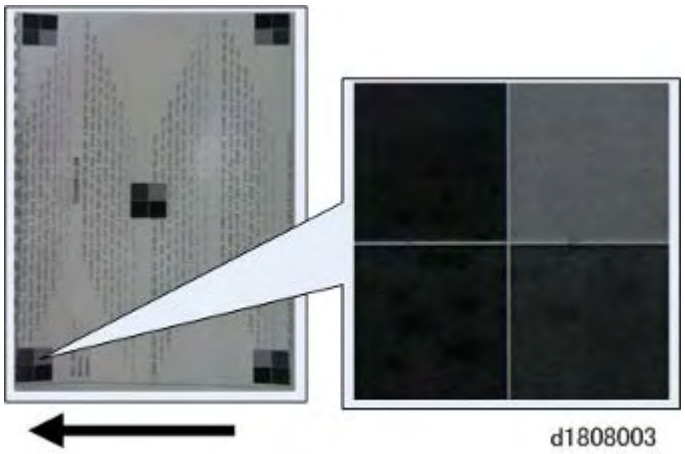
8. Do a fine adjustment of the PTR motor speed (-0.1%)
9. Do a fine adjustment of the image transfer roller speed (-0.1%).
10. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Step 4.

11. If the problem persists, consult key operators.

Black Dots Appear on Coated Paper

The special properties of the paper (slick surface, electrical resistance, etc.) can cause black spots and specks to appear.



Cause:

Ambient conditions and special paper characteristics (slick surface, electrical resistance, etc.) can cause too much charge in the electrical field and cause dots to appear. This effect can occur when:

- High temperature, low humidity
- Coated paper is used
- Paper is thin (lower than 3 the scale)
- Halftones are used in fill areas

Note

- Please remember that before paper can be used, it requires setting by the operator, especially if adjustments for a different type of paper (custom paper) are used.

Solution

1. In Advanced Settings for the custom paper in use, check the present value in Image Transfer Voltage and PTR voltage settings.
   - SP2-817-001 to 100: ITB Voltage Custom Paper 001 to 100
   - SP2-811-001 to 100: PTR Current: Side1 Custom Paper 001 to 100
2. Is paper transfer current setting 140 or less?

Yes	Raise the paper transfer current 5 points.
No	Go to Step 4.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2, 3. If the problem persists, go to the next step.

4. Restore the image transfer current to its default setting.
5. Is the absolute value of the paper transfer current less than 50?

Yes	Use different paper.
No	Go to the next step.

6. Lower the absolute value of the paper transfer current by 5 points.
7. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat from Step 2.

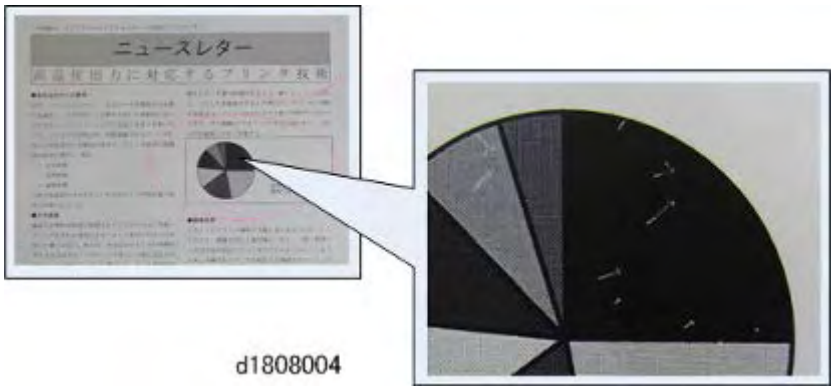
1. If the problem persists, consult key operators.

Note

- Adjustment of the image transfer current can cause white spots in images, so adjust carefully. If white spots appear, choose the best print from among the samples and apply the settings used for this test print.
- Adjustment of the paper transfer current can cause image density to fade, so adjust carefully. If images fade, choose the best print from among the samples and apply the settings used for this test print.

Static Traces Appear in Low Temperature, Low Humidity Environment

Dirt and paper scraps in or around the image area can cause static trace patterns to appear in the images.



Cause

During paper feed scraps of paper may collect around the transfer guide or other areas and cause a disturbance in the application of static charge which can lead to static trace patterns in images. Scattered toner and paper dust in the same areas can also cause discharges and cause the same problem. These problems may occur when:

- Ambient temperature and humidity are low
- Coated paper lower than Thickness 4 is used
- Paper transfer entrance guide is covered with scattered toner or paper dust

Solution

1. Can you raise ambient temperature and humidity?

Yes	Finished!
No	Used different paper.

2. Raise ambient temperature and humidity.
3. Print the image. Is the problem resolved?

Yes	Finished!

No	Go to the next step.

1. If the problem persists, consult key operators.

Firefly, Comet Patterns

White spots in firefly patterns, or black comet streaking patterns appear.

Cause:

Toner clumping can cause white firefly patterns with white spots in the center of kernels. These clumps can also cause degradation in image areas which leads to black, streaked comet patterns. These problems may occur when:

- The machine has remained idle for a long period, especially where ambient temperature was high.
- The machine was moved or shipped and was subjected to severe shock or vibration.
- Toner not used for a long period, especially where ambient temperature was high.

Solution:

1. Print a test sheet at 100% coverage. Do you see firefly or comet patterns?

Yes	Go to the next step.
No	Finished!

2. Print 350 A3 sheets at 100% coverage. Do you see firefly or comet patterns?

Yes	Go to the next step.
No	Finished!

3. Replace toner, and then print 350 A3 sheets at 100% coverage. Do you see firefly or comet patterns?

Yes	Go to the next step.
No	Finished!

4. Replace the toner sub hopper, and then print 350 A3 sheets at 100% coverage. Do you see firefly or comet patterns?

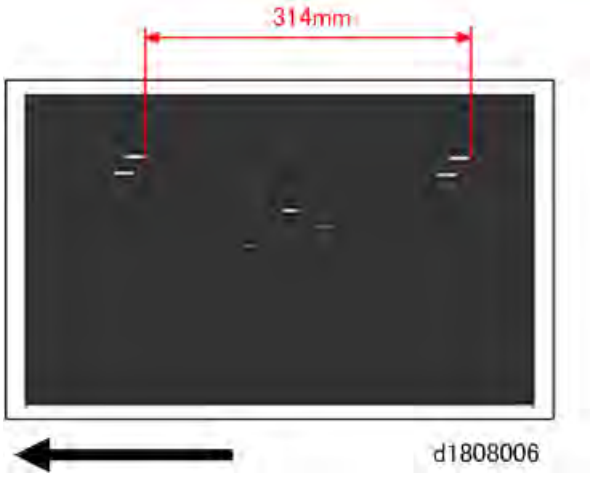
Yes	Go to the next step.
No	Finished!

5. Replace the development unit and the developer, and then print some test prints at 100% coverage. Do you see firefly or comet patterns?

Yes	The problem requires further analysis. Consult key operators.
No	Finished!

White Parallel Stripes

Toner or lubricant powder sticking to and accumulating on the surface of the drum are causing white strips in images.



Cause:

The lubricant powder designed to lubricate the surface of the drum can deteriorate over time, especially with continuous high quality printing. This can allow toner to stick to and collect on the drum surface, leading to parallel white streaks at intervals of about 314 mm (12.5”). Common causes include:

- Continuous high-quality printing

- Worn drum cleaning unit

Solution:

1. Wipe the surface of the drum clean with a dry, clean cloth.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the drum

3. Does the problem re-occur after about 1,000 prints?

Yes	Clean the surface of the drum again, and then go to the next step.
No	Finished!

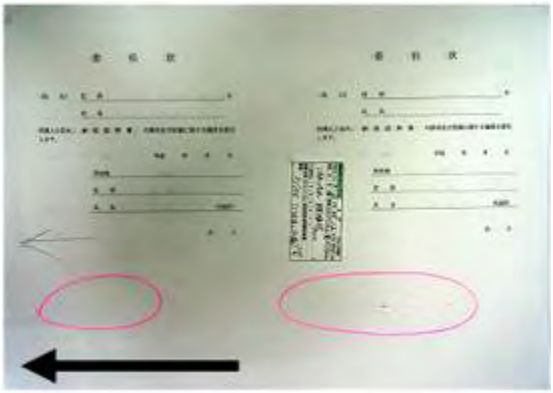
4. Increase the number of drum cleanings.
   - SP2-225-001: Cont High Q Img Print Mode Mode Selection. Change “0” (Default) to “1”.
   - SP2-225-003: Cont High Q Img Print Mode Thresh:2. Change “80” (Default) to “0”.
5. Did the problem re-occur after about 1,000 prints?

Yes	Reset the SP codes to their default settings, and then replace the drum and the drum cleaning unit.
No	If the client is consistently using print long print jobs set for high-quality printing, be sure to set the SP codes as shown in Step 4.

1. If the problem persists, consult key operators.

Edge Toner Scatter

Toner falls onto the edge of the image from the image transfer belt.



d1808007

Cause:

Toner falls from the ITB cleaning unit onto the paper near the edge of the image. Normally, this problem does not appear, but can occur if the cleaning blade or other component in the cleaning unit is defective and allows toner to fall at the image starting point on the paper. Even if the toner does not fall directly onto the paper but into the paper transport path, the toner can be transferred to the paper passing below the ITB.

Solution:

1. Clean the paper transport path.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Did a paper jam occur at the entrance of the ITB cleaning unit?

Yes	Replace the cleaning blade in the ITB cleaning unit.
No	Go to Step 6.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the ITB cleaning unit.

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

6. Clean the ITB unit guide plate, PTR unit, development unit, drum cleaning unit, belt cleaning unit, ribs, and rollers.
7. If the problem persists, consult key operators.

1.2.4 DENSITY PROBLEMS

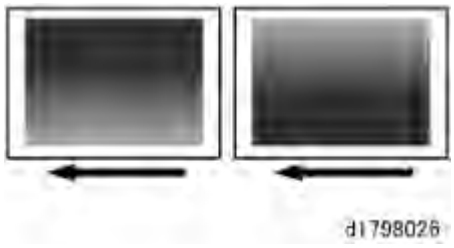
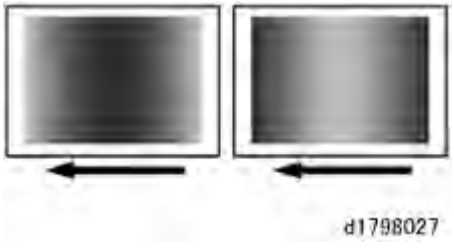
Uneven Image Density

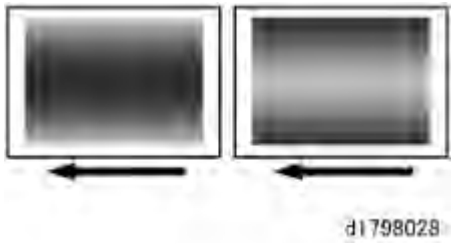
The density is uneven.

Solution:

The solution depends on the type of unevenness. Carry out the appropriate procedure from those in the following table:

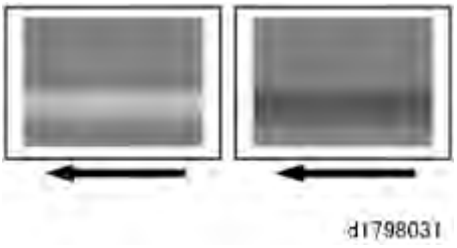
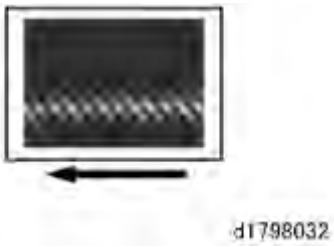
(A) The density is uneven across the entire image.

The density from top to bottom is uneven.	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, see page 43 "Uneven Density from Top to Bottom".
The sides are fainter or denser.	

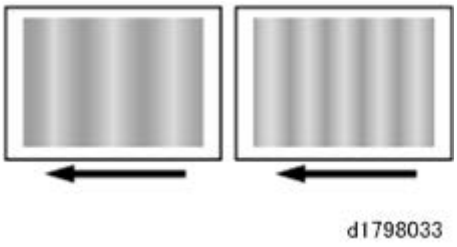
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual . Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, consult key operators.
The top and bottom are fainter or denser.	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, consult key operators.

(B) The density is uneven in a part of the image.

The leading edge is fainter.	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, see page 44 "Fainter Leading Edge".
The trailing edge is fainter.	

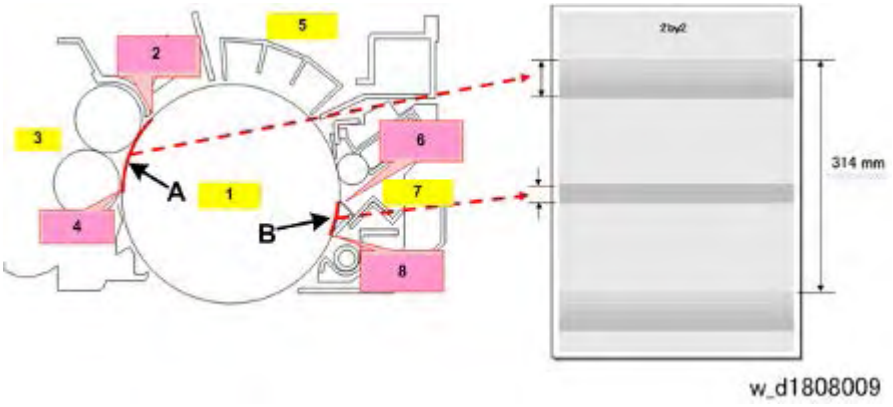
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, see page 46 "Fainter Trailing Edge".
The center is fainter or denser	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, consult key operators.
Wavy unevenness	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, consult key operators.

(C) The density is uneven in the direction perpendicular to the paper feed direction at regular intervals.

Periodic vertical density fluctuation	
	▪ On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment) ▪ If the problem persists, see page 49 "Periodic Density Fluctuation".

Density Change at Low Temperatures

When printing images with halftone fill, uneven density appears at open space positions.



1	Drum
2	Development Entrance Seal
3	Development Unit
4	Development Roller (Lower)
5	Charge Unit
6	Lubrication Mylar
7	Drum Cleaning Unit
8	Drum Cleaning Bladse

Cause:

With 2by2, 4by4 halftone images, the density becomes uneven at the open gaps [A] at the development unit and [B] at the drum cleaning unit.

- Uneven density can appear at the upper and lower position where the image could become partially lighter or darker.
- If differences in temperature and humidity develop between the open and closed gaps around the circumference of the drum (314 mm), this can cause fluctuation in the electrical potential of the drum charge after image exposure and easily create changes in density.
- This problem can easily occur where humidity is low.

Solution

1. Is the absolute humidity above 2.6? (The absolute humidity in the lookup table below is calculated from the temperature and relative humidity.)

Yes	Consult key operators.
No	Go to the next step.

2. Can the ambient temperature and humidity be adjusted?

Yes	Go to the next step.
No	Consult key operators.

3. Raise temperature so absolute humidity is above 2.6.
4. Adjust ambient conditions so the work site is above 15°C (59°F) 30% rH.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Lookup Table for Calculating Absolute Humidity

Absolute humidity is calculated from ambient temperature and relative humidity based on the lookup table below. The areas within the heavy red line in the table below indicate values where quality is assured. To prevent uneven image density, absolute humidity should be above 2.6 within these red shaded areas.

Units: g/m^3

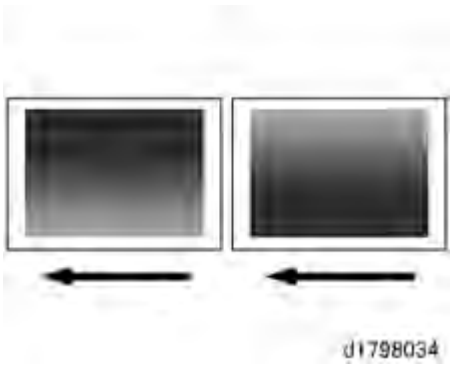
Temp. °C	Relative Humidity [%RH] 5	10	15	20	25	30	35	40	45	50
5	0.34	0.68	1.02	1.36	1.70	2.04	2.38	2.72	3.06	3.40
6	0.36	0.73	1.09	1.45	1.82	2.18	2.55	2.91	3.27	3.64
7	0.39	0.78	1.16	1.55	1.94	2.33	2.72	3.11	3.49	3.88
8	0.41	0.83	1.24	1.66	2.07	2.48	2.90	3.31	3.73	4.14
9	0.44	0.88	1.32	1.77	2.21	2.65	3.09	3.53	3.97	4.42
10	0.47	0.94	1.41	1.88	2.35	2.82	3.29	3.77	4.24	4.71
11	0.50	1.00	1.50	2.01	2.51	3.01	3.51	4.01	4.51	5.01
12	0.53	1.07	1.60	2.14	2.67	3.20	3.74	4.27	4.80	5.34
13	0.57	1.14	1.70	2.27	2.84	3.41	3.98	4.54	5.11	5.68
14	0.60	1.21	1.81	2.42	3.02	3.63	4.23	4.83	5.44	6.04
15	0.64	1.28	1.93	2.57	3.21	3.85	4.50	5.14	5.78	6.42
16	0.68	1.36	2.05	2.73	3.41	4.09	4.78	5.46	6.14	6.82
17	0.72	1.45	2.17	2.90	3.62	4.35	5.07	5.80	6.52	7.25
18	0.77	1.54	2.31	3.08	3.85	4.62	5.39	6.16	6.92	7.69
19	0.82	1.63	2.45	3.27	4.08	4.90	5.71	6.53	7.35	8.16
20	0.87	1.73	2.60	3.46	4.33	5.19	6.06	6.93	7.79	8.66
21	0.92	1.84	2.75	3.67	4.59	5.51	6.42	7.34	8.26	9.18
22	0.97	1.94	2.92	3.89	4.86	5.83	6.81	7.78	8.75	9.72
23	1.03	2.06	3.09	4.12	5.15	6.18	7.21	8.24	9.27	10.30
24	1.09	2.18	3.27	4.36	5.45	6.54	7.63	8.72	9.81	10.90
25	1.15	2.31	3.46	4.61	5.77	6.92	8.07	9.22	10.38	11.53
26	1.22	2.44	3.66	4.88	6.10	7.32	8.54	9.76	10.98	12.20
27	1.29	2.58	3.87	5.16	6.45	7.73	9.02	10.31	11.60	12.89
28	1.36	2.72	4.09	5.45	6.81	8.17	9.54	10.90	12.26	13.62
29	1.44	2.88	4.32	5.76	7.19	8.63	10.07	11.51	12.95	14.39
30	1.52	3.04	4.56	6.08	7.60	9.11	10.63	12.15	13.67	15.19
31	1.60	3.21	4.81	6.41	8.02	9.62	11.22	12.82	14.43	16.03
32	1.69	3.38	5.07	6.76	8.46	10.15	11.84	13.53	15.22	16.91
33	1.78	3.57	5.35	7.13	8.92	10.70	12.48	14.27	16.05	17.83
34	1.88	3.76	5.64	7.52	9.40	11.28	13.16	15.04	16.92	18.79
35	1.98	3.96	5.94	7.92	9.90	11.88	13.86	15.84	17.82	19.80

d1808161

Ab. humidity = 217x(6.11x10(7.5 x temp/ (temp+237.3)))/(temp+273.15) x Relative humidity x 0.01

Uneven Density from Top to Bottom

The density is uneven from top to bottom.



Note

- You can adjust the density of halftone images, but not that of solid fills.

Cause:

This may occur at high temperature or humidity.

Solution:

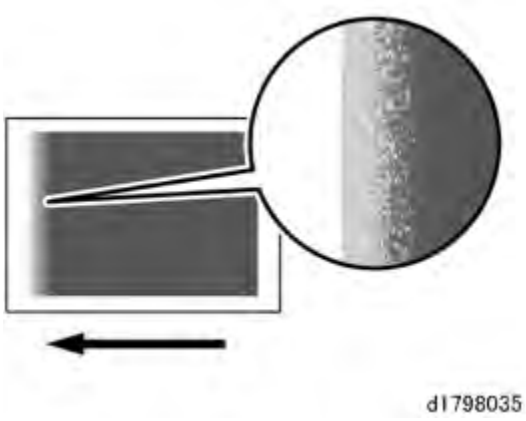
1. On the machine operation panel: Adjustment Settings for Skilled Operators menu > Image Quality > Adjust Density Difference Across Feed Direction. (SP2-113-001: Adjust LR density difference Density)
   - Decreasing the value (-) makes the area above the center denser and that below fainter.
   - Increasing the value (+) makes the area above the center fainter and that below denser.
2. Cycle the machine Off/On. The setting specified in step 1 will be in effect.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the drum charge unit, PCDU.

1. If the problem persists, consult key operators.

Fainter Leading Edge

The leading edge is fainter.



Cause:

At low temperature or when using thin coated paper, this may occur if the paper transfer current is insufficient. At high temperature, this may occur if the paper transfer current is excessive.

Important

- This solution only works when the thickness of the paper is equivalent to Paper Weight 4 or higher. Do not try this as a solution when using paper with a thickness equivalent to Paper Weight 3 or lower, as it may cause paper misfeeding.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Solution:

Do the following adjustments together: Procedure (a) and Procedure (b).

(a) Raising the Switch Point

1. In Advanced Settings for the custom paper in use, make a note of the preset values for Paper Transfer Current: Lead Edge.
   - SP2-814-001 to 100: Leading Edge Corr Switch: 2nd Custom Paper 001 to 100
   - SP2-813-001 to 100: Leading Edge Corr Coef: 2nd Custom Paper 001 to 100
2. Is the paper transfer leading edge switch setting set at its highest value?

Yes	Go to Step 7.
No	Raise the setting by 5 points.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to Step 4.

4. Is the paper transfer leading edge correct less than 200?

Yes	Raise the setting 10 points.
No	Repeat from Step 2.

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat from Step 4.

6. If the problem persists after repeating from Step 4, and then raising the setting to 200, restore the original settings at Step 1, and then do Procedure (b) below to lower the settings.
7. Is the paper transfer leading edge correction setting below 200?

Yes	Raise the setting 10 points.
No	Use different paper.

8. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat from Step 7.

9. If the problem persists after repeating from Step 7, and then raising the paper transfer leading edge correction setting to 200, restore the original settings at Step 1, and then do Procedure (b) below to lower the settings.

(a) Lowering the Current

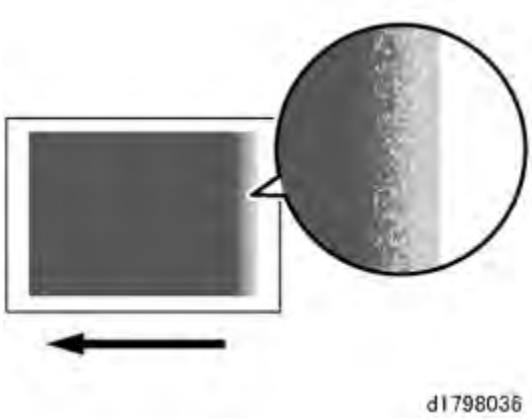
1. In Advanced Settings for the custom paper in use, raise the setting for the paper transfer leading edge correction setting by 10 points. (SP2-813-001 to 100: Leading Edge Corr Coef: 2nd Custom Paper 001 to 100)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the scaling factor by 10 percentage points.

3. Repeat Step 2. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 1 of Procedure (a), and then consult key operators.

Fainter Trailing Edge

The trailing edge is fainter.



Cause:

This may occur because of insufficient or excessive paper transfer current when using paper weighing approximately 160 g/m^2 (60 lb. Cover) or heavier at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Solution:

Do these procedures in the order presented below: Procedure (a), Procedure (b), and then Procedure (c).

Procedure (a) Setting Range

1. Measure in millimeters how far the fainter area extends from the trailing edge.
2. In Paper Transfer Current > Trail Edge Dist, enter the value you measured in Step 1 plus an additional 10 mm. (SP2-816-001: Trail Edge Corr Switch:2nd Custom Paper 001)
3. Go to Procedure (b).

Procedure (b) Raising the Setting

1. In Advanced Settings for the custom paper in use, make a note of the present value in Paper Transfer Current > Trail Edge. (SP2-815-001 to 100: Trail Edge Corr Coef:2nd Custom Paper 001 to 100)

2. Increase the scaling factor in the above setting by 10 percentage points.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the scaling factor by 5 percentage points.

4. Repeat Step 3. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 1 and go to Procedure (c).

Procedure (c) Lowering the Setting

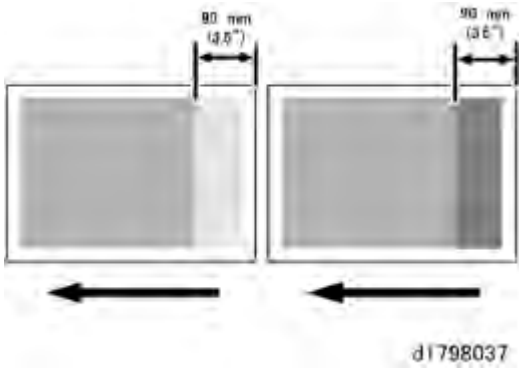
1. Decrease the scaling factor in the above setting by 10 percentage points.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Decrease the scaling factor by 5 percentage points.

3. Repeat Step 2. If the problem persists even though you have decreased the scaling factor by 50 percentage points, restore the value noted in Procedure (b) Step 1 and then consult key operators.

Uneven Density within 90 mm (3.5 in.) of the Trailing Edge

Printing in the area extending approximately 90 mm (3.5 inches) from the trailing edge is fainter or denser.



Cause:

This may occur when:

- Printing is done at low temperature or humidity
- Printing a single-dot halftone image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Solution:

The solution depends on whether the area within 90 mm (3.5 inches) of the trailing edge is denser or fainter. However, if the paper is not registered with the Advanced User Settings, the timing roller speed must be adjusted for the paper type and paper thickness for the paper in use. (SP 1-006-001 Fine Adj Trans Tmg Roll Spd Plain:Weight (number) 001 to 100)

If the area within 90 mm (3.5 inches) of the trailing edge is fainter

1. In Advanced Settings for the custom paper in use, check the present value in Transfer Timing Roller Feed Speed Adj. (SP1-963-001 to 100: Trans Timing Roll Spd:Fine Adj Custom Paper 001 to 100) Is it higher than +1.0%?

Yes	Consult key operators.
No	Go to the next step.

2. Increase the value in Transfer Timing Roller Feed Speed Adj by 0.1 percentage point.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2 and 3. If the problem persists even though you have increased the value to +1.0%, consult key operators.

If the area within 90 mm (3.5 inches) of the trailing edge is denser

1. In Advanced Settings for the custom paper in use, check the present value in Transfer Timing Roller Feed Speed Adj. (SP 1-963-001 to 100: Trans Timing Roll Spd:Fine Adj Custom Paper 001 to 100) Is it lower than -1.0%?

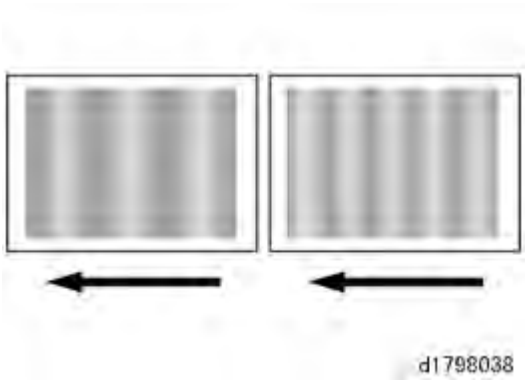
Yes	Consult key operators.
No	Go to the next step.

2. Decrease the value in Transfer Timing Roller Feed Speed Adj by 0.1 percentage point.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2 and 3. If the problem persists even though you have decreased the value to -1.0%, consult key operators.

Periodic Density Fluctuation

The vertical density fluctuates periodically.



Solution:

Before you perform the solution procedure, make sure that the environmental conditions where you are using the machine meet those recommended for use.

The solution depends on the interval.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Interval	Solution
Approximately 12-18 mm (0.5-0.7 inches)	Consult key operators.
Approximately 60 mm (2.4 inches)	▪ In Advanced Settings for the custom paper in use, adjust the value in Transfer Timing Roller Feed Speed Adj according to the type and thickness of paper in use. (SP 1-963-001 to 100: Trans Timing Roll Spd:Fine Adj Custom Paper 001 to 100) ▪ If the problem persists, consult key operators..
Approximately 95 mm (3.7 inches)	Consult key operators.

Interval	Solution
Approximately 314 mm (12.4 inches)	▪ Replace the photoconductor unit. ▪ If the problem persists, consult key operators.

Entire Image Faint

The entire image is fainter than normal.

Cause:

This may occur when:

- Continuously printing an image that consumes little toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Increase the value by 1 in Adjust Maximum Image Density. (SP3-620-001: ProCon Target M/A Maximum M/A:K)
4. Select Adjust Image Density and execute Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, consult key operators.

Color Is Too Dense

The entire image is denser than normal.

Cause:

This may occur when:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
2. Print the image. Is the problem resolved?

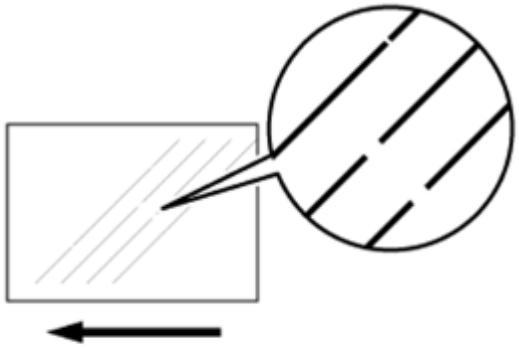
Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in Adjust Maximum Image Density. (SP3-620-001: ProCon Target M/A Maximum M/A:K)
4. Select Adjust Image Density and execute Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, consult key operators.

Broken Thin Lines

Thin lines (1 dot lines in 1200 dpi images) break.



d1798041

Cause:

Oblique (approximately 45°) thin lines or thin lines printed in faint colors are likely to contain breaks.

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
2. Print the image. Is the problem resolved?

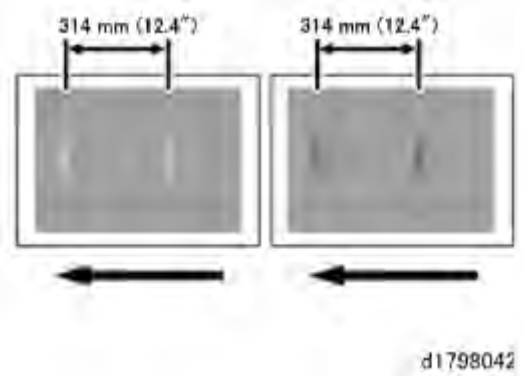
Yes	Finished!
No	Go to the next step.

3. Increase the value by 1 in Adjust Line Width. (SP3-623-061: LD Power :Set Line Width Adj.:K)
4. Select Adjust Image Density and execute Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, consult key operators.

Blurred Images

Lens-shaped blurred images appear at 314 mm (12.4 inches) intervals.



Cause:

If the machine is left unattended for a long period in an environment where temperature and humidity are high, the drum surface can absorb moisture and prevent a application or quenching of electrostatic charge on the drum.

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Maintenance > Photoconductor Refreshing. (SP2-810-004: Clear Blurred Img Execute)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Dropouts (Characters Broken)

Dropouts (character voids) occur when characters or lines are printed.

Cause:

This may occur when:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
2. Print the image. Is the problem resolved?

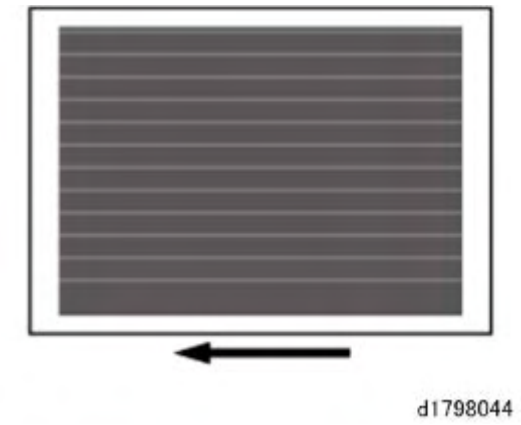
Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in Adjust Maximum Image Density. (SP3-620-001: ProCon Target M/A Maximum M/A:K)
4. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute. (SP3-011-002: Manual ProCon :Ex Density Adjustment)
5. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, consult key operators.

After Images

An afterimage of the image printed just before the intended image appears.



Cause:

This may occur when the image record on the intermediate transfer belt has largely changed. For example, this may occur when a solid-fill image is printed after vertical lines are printed continuously. A potential difference occurs between an image portion and non-image portion on the intermediate transfer belt as a result of continuous printing of vertical lines, causing the vertical lines to become obvious on the next solid-fill image.

This may occur when:

- Printing is done at high temperature or humidity
- Printing on thin coated paper (Paper Weight 3 or lower) or on OHP sheet
- Printing an extremely different type of image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Solution:

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Image Density > Image Density Adjustment: Manual Execute.
2. Can the image density be adjusted manually?

Yes	Adjust the image density manually. (SP3-011-001 Manual ProCon :Ex Normal ProCon)
No	Go to Step 4.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Are the paper transfer current settings at their lowest values?
   - SP2-811-001 to 100: PTR Current:Side1 Custom Paper 001 to 100
   - SP2-812-001 to 100: PTR Current:Side2 Custom Paper 001 to 100

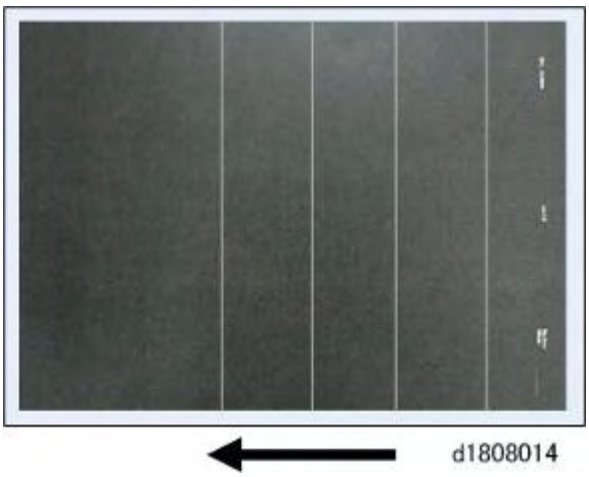
Yes	Use different paper.
No	Go to the next step.

5. In Advanced Settings for the custom paper in use, do the following adjustments:
   - **Side 1**: Decrease the absolute value by 10 points in Paper Transfer Current Setting: Side 1.
   - **Side 2**: Decrease the absolute value by 10 points in Paper Transfer Current Setting: Side 2.
6. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 4 and 5. If the problem persists even though you have decreased the value to its lowest setting, consult key operators.

White Streaks

White streaks perpendicular to the paper feed direction appear.



Cause:

A separating discharge occurs between the intermediate transfer belt and paper edge during paper transfer, which causes a streak-like electric charge on the intermediate transfer belt. This residual electric charge may cause white streaks during image transfer. This may occur at low temperature and humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Solution:

1. In Advanced Settings for the custom paper in use, select Paper Transfer Current; Trail Edge Dist.
   - SP2-816-001: Trail Edge Corr Switch: 2nd Custom Paper 001
   - SP2-815-001 to 100: Trail Edge Corr Coef: 2nd Custom Paper 001 to 100
2. Check the present switch value. Is it at the upper limit?

Yes	Go to Step 6.
No	Raise the switch setting 5 points.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to Step 4.

4. Check the present coefficient value. Is it at its lowest setting?

Yes	Restore the default value, and then repeat from Step 2.
No	Raise the setting 20 points.

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat from Step 4. If the problem persists, consult key operators.

6. Is the paper transfer trailing edge correction setting at its lowest value?

Yes	Use different paper.
No	Raise the setting 20 points.l

7. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat from Step 6. If the problem persists, consult key operators.

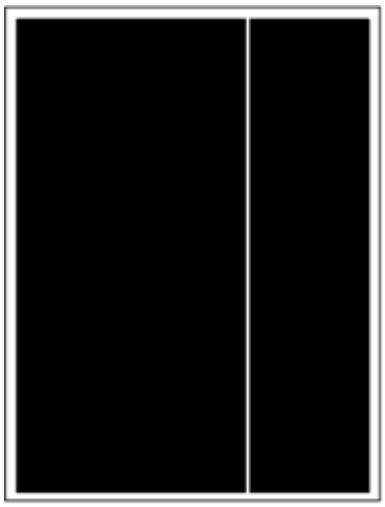
8. Even if the problem persists after setting the paper transfer trailing edge correction to its lowest value, consult key operators.

Note

- Changing these settings can cause fading at the trailing edges of the paper, so keep this in mind when doing the adjustments. If the images fade at the trailing edge, make some output samples and choose the best from among the test prints and use those settings.

Vertical White Lines

These are vertical white lines that appear on the paper in the direction of paper feed.



d1808010

Cause:

This can be caused dirt on the shield glass, or other foreign particles blocking the path of the laser beam from the laser unit. Developer particles draw up into the gap between the doctor blade and the development roller could also be causing the problem.

Solution

1. Remove and clean the toner shield glass.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Clean the development roller and doctor blade cap. (For details, please refer to the Field Service Manual.)
4. Print the image. Is the problem resolved?

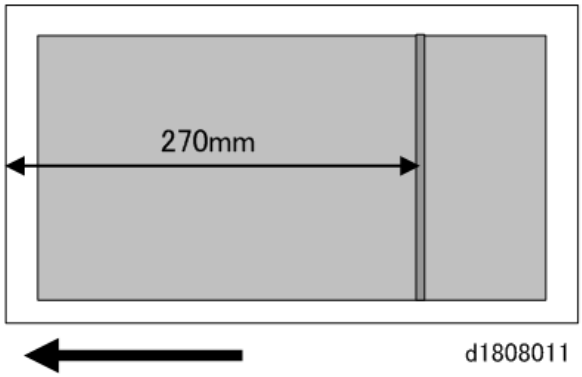
Yes	Finished!
No	Go to the next step.

5. Replace the development unit.
6. Print the image. Is the problem resolved?

Yes	Finished!
No	The cause of the problem requires more investigation. Consult key operators.

Shock Jitter at the Fusing Unit

If shock jitter occurs at the arrival of paper at the fusing unit, this can cause horizontal back lines to appear 270 mm (10.5”) away from the leading edge of the paper.



Cause:

Shock jitter can occur when the paper reaches the fusing unit after passing through the PTR unit, causing black lines to appear about 270 mm (10.5”) from the leading edge of the paper. This can occur when:

- Paper longer than 270 mm is used
- The paper is the first sheet of a print job
- Using thick paper

- Printing halftones

Note

- Please remember that before paper can be used, it requires registration by the operator, especially if adjustments for a different type of paper (custom paper) are used.

Solution:

1. Is the paper in use shorter than 270 mm (10.5")?

Yes	Go to the next step.
No	Go to Step 3.

2. Print the image on paper shorter than 270 mm. Is the problem resolved?

Yes	Finished!
No	Use different paper.

3. In Advanced Settings for the custom paper in use, check the setting for Process Speed Adjustment. (SP1-986-001 to 100: Process Speed Custom Paper 001 to 100)
4. Can the line speed adjustment be reduced?

Yes	Go to the next step.
No	Use different paper.

5. Reduce the line speed setting by 1 point.
6. Print the image. Is the problem resolved?

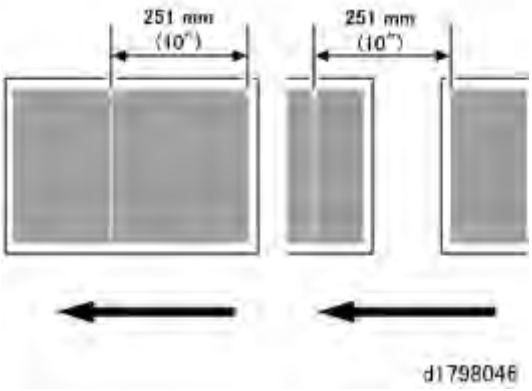
Yes	Finished!
No	Repeat Steps 4 to 6.

7. If the problem persists after adjusting the process line speed, consult key operators.

1.2.5 GLOSSY PROBLEMS

Vertical Glossy Lines

Glossy lines perpendicular to the paper feed direction appear.



Cause:

Glossy lines perpendicular to the paper feed direction may appear 251 mm (10 inches) from the boundary of the margin and the solid image (in the direction opposite to the paper feed direction).

Solution:

1. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?

Yes	Go to the next step.
No	Consult key operators.

2. In Advanced Settings for the custom paper in use, select Fusing Heat Roller Temperature Adj and decrease the value by 5 °C. (SP1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100)
3. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?

Yes	Repeat Step 2 and 3. If the problem persists even though the setting has reached its minimum value, consult key operators. If the problem is resolved, go to the next step.
No	Go to the next step.

4. Check the toner fusion. Is it satisfactory?

Yes	Finished!

No	Restore the previous setting and consult key operators.

Insufficient Gloss

The image is not glossy enough.

Solution:

If the gloss of the image is not glossy enough, do (a) Changing Fusing Temperature, and (b) Changing Processing Speed. See page 63 "Insufficient Toner Fusing".

1.3 FUSING PROBLEMS, MIXED PAPER

1.3.1 INSUFFICIENT TONER FUSING

This section explains how to resolve the problem of insufficient toner fusing on printed copies.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

Changing the fusing temperature or changing the process speed may produce one or more of the following side effects:

- Paper curling
- Paper misfeeding
- Blisters
- Glossy lines
- Change of gloss

If one or more of the above side effects occurs, adjust the fusing temperature and process speed by decreasing the fusing temperature and increasing the process speed.

Solution:

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

Procedure (a): Changing the fusing temperature

1. In Advanced Settings for the custom paper in use, select Fusing Heat Roller Temperature Adj and increase the temperature by 5 °C. (SP1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100)
2. Print the image and check toner fusion. Is the problem resolved?

Yes	Finished!
No	Increase the temperature an additional 5 °C.

3. Repeat Step 2 until the temperature reaches 185 °C. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Check the type of your machine. Is it Pro 8100S?

Yes	Consult key operators.
No	Perform Procedure (b) below.

Procedure (b): Changing the process speed

This procedure is available only for Pro 8120S and Pro 8110S. This will slow down the printing to give the toner more time to fuse. However, because of this, throughput will be reduced.

For example, when printing on A4/LT paper:

Pro 8120S

- If the process speed is changed from High to Middle: 135 cpm to 110 cpm
- If the process speed is changed from Middle to Low: 110 cpm to 95 cpm

Pro 8110S

- If the process speed is changed from High to Low: 110 cpm to 95 cpm
- Pro 8110S does not have the Middle setting.

1. In Advanced Settings for the custom paper in use, select Process Speed Setting. (SP1-986-001 to 100: Process Speed Custom Paper 001 to 100)
2. Decrease the value by one level.
3. If the present value is High, select Middle. If it is Middle, select Low.
4. Print the image and check toner fusion. Is the problem resolved?

Yes	Finished!
No	If the problem persists, the machine may be faulty or the paper unsupported. Contact your service representative. The problem requires further investigation, so consult key operators.

1.3.2 IMPROVING PRINT QUALITY WITH MIXED PAPER

This section describes how to adjust operation to give priority to print quality over production when using different types and thicknesses of paper in the same print jobs.

Note

- In order to ensure optimum toner fusing for different paper types and thicknesses, the operation of the fusing unit can be adjusted for paper conditions. These settings ensure productivity when different paper is used continuously, but problems such as glossy lines can occur when different paper is used in the same job.
- There will be occasions when quality must take precedence over productivity, depending on how the operators are using the machine. In such a case, the Image Quality Priority Mode can be used.

Conditions Where Image Quality Can be Improved

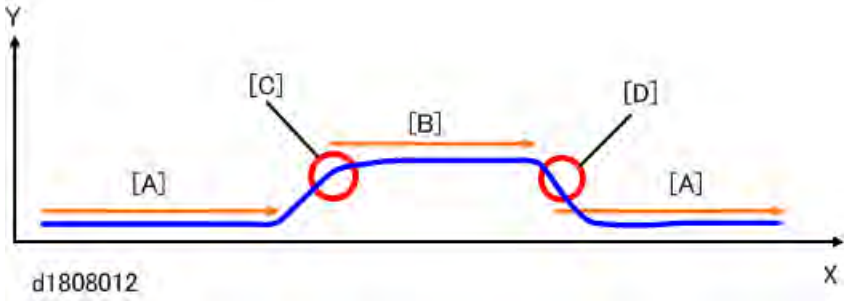
- For brand name paper where there is a large difference in the heating roller temperature setting between the front and rear of the paper area.
- For brand name paper where there is a large difference in the heating roller temperature setting for the width (front-to-back on paper path is the length) of the paper.
- Repeated low volume print jobs.

Solution

1. Advanced Settings > Quality Adjust > Production Priority Mode > Production Priority > change the setting from ON to OFF. (SP1-131-001: Continues Print Mode Switch Feed Permit Condition)

Control Image

(a) Production Monitoring Mode: Production Priority ON

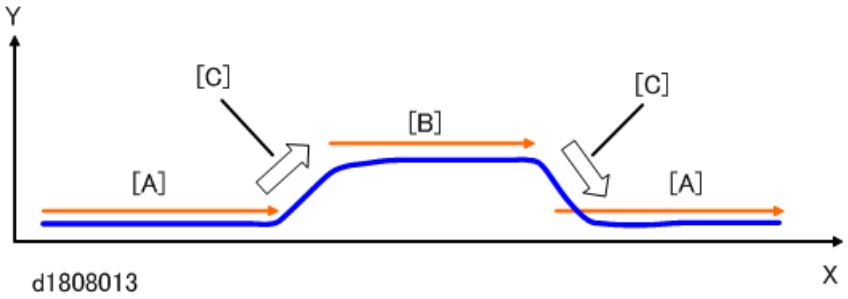


X	Time
Y	Heating Roller Temperature Setting

When changing from thin paper [A] to thick paper [B], insufficient temperature could cause poor

fusing because the fusing temperature [C] was not high enough for thick paper. Also, when changing from thick paper [B] to thin paper [A], high temperature could cause glossy lines to occur because the fusing temperature [D] was too high for thin paper.

(a) Fusing Quality Monitoring Mode: Production Productivity OFF



X	Time
Y	Heating Roller Temperature Setting

When changing from thin paper [A] to thick paper [B], this generates wait time [C]. When changing from thick paper [B] to thin paper [A], this also generates wait time [C]

Note

- With production priority OFF, when the paper brand and area are changed, the wait time is generated in order to adjust the fusing temperature. Also, in some cases, the warm-up time to standby temperature for printing to begin may also be set the with the same wait time lag. Reducing the wait time during troubleshooting execution when using mixed paper sizes, may have no effect.

1.4 PAPER DELIVERY PROBLEMS

1.4.1 FREQUENT PAPER MISFEEDS

Depending on the cause of the problem, do one of the following:

Coated or another type of unsupported paper is loaded On the machine operation panel's tray.

- Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray supporting the paper.
- For details about the size and type of paper that can be loaded in the paper trays, see "Specifications” in the “Appendices”.

The side fences in the paper tray are too close together.

- If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.
- Adjust the side fences to match the paper width.
- When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

The side fences in the paper tray are too far apart.

- If the side fences are too far apart, paper misfeeds may occur due to wrong paper size detection.
- Adjust the side fences to match the paper width.

The paper size/orientation/type is not specified correctly.

- In tray paper settings, specify the size, orientation, and type of the paper in use.

Too many sheets of paper are loaded in the paper tray.

- When loading paper, do not exceed the limit.

The edges of the sheets are rough.

- Turn the sheets the other way up or smooth the edges before loading.

Sheets are curled or wavy.

- Flatten curls and waviness before loading paper.
- Turn the sheets the other way up or smooth the edges before loading.
- Stacking too many sheets may cause the sheets on top to curl greatly. If this happens, reduce the number of stacked sheets.

Sheets absorbed moisture and became limp.

- Sheets that will not be used for a long time should be protected from moisture by, for example, storing them in a sealed bag.
- If the machine is plugged in, the heaters (options) inside the paper bank start operating when the main power is off to prevent sheets from absorbing moisture.

The paper feed sensor is stained with paper dust.

- Clean the part of the paper feed sensor where the paper misfeed is detected.

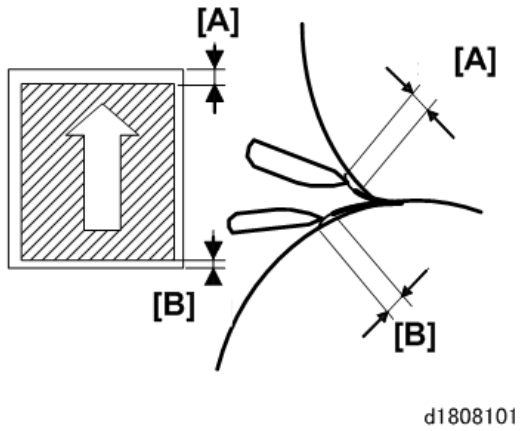
- For details about cleaning the paper feed sensor, see page 95 "Cleaning the Paper Feed Path".

The paper feed performance is less sufficient because the paper transport roller is soiled with toner.

- Clean the part of the paper transport roller where the paper misfeed is detected.
- For details about cleaning the paper transport roller, see page 95 "Cleaning the Paper Feed Path".

1.4.2 FUSING UNIT SEPARATION PLATE ACCORDION JAMS

Accordion jams can occur at the fusing unit separation plate with paper where there is insufficient white space at the leading edge of paper.



[A]	Leading Edge Margin (White Space)
[B]	Trailing Edge Margin (White Space)

Causes:

This problem can occur under with:

- Thin paper (less than 100 gsm)
- Coated paper (low rigidity)
- Image coverage (or toner) near the leading edge of the paper
- Leading edge white space extremely narrow

Solution

The best solution is to have the client staff or key operators increase the size of the margin white space at the leading edge of the paper. If this is not possible, consult with the client staff and key operators to determine if another type of paper can be used.

1. Can the size of the image be adjusted to create more white space in the leading edge?

Yes	Go to Step 2.
No	Go to Step 4.

2. In Advanced Settings for the custom paper in use, change the Leading Edge Mask Width Adjustment to +0.5 mm. (SP2-122-001 to 100: Erase Margin Adj Leading Edge Custom Paper 001 to 100). Did this solve the problem?

Yes	Finished!
No	Go to Step 3.

3. Is the margin at the leading edge less than 10 mm?

Yes	Repeat Steps 2 and 3.
No	Replace the fusing unit. If the problem persists, consult key operators.

4. Ask the client if adjustment of the image on the paper is possible.

Yes	Go to Step 5.
No	Consult key operators.

5. In Advanced Settings for the custom paper in use, set the values for image position adjustment for Side 1 and Side 2 to +0.5 mm.

- SP1-950-001 to 100: Image Pos:Sub:Side1 Custom Paper 001 to 100
- SP1-951-001 to 100: Image Pos:Sub:Side2 Custom Paper 001 to 100

Did this solve the problem?

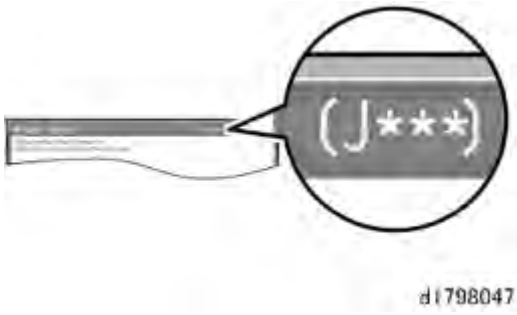
Yes	Finished!
No	Go to Step 6.

1. Is the margin at the leading edge less than 10 mm?

Yes	Repeat Steps 5 and 6.
No	Replace the fusing unit. If the problem persists, consult key operators.

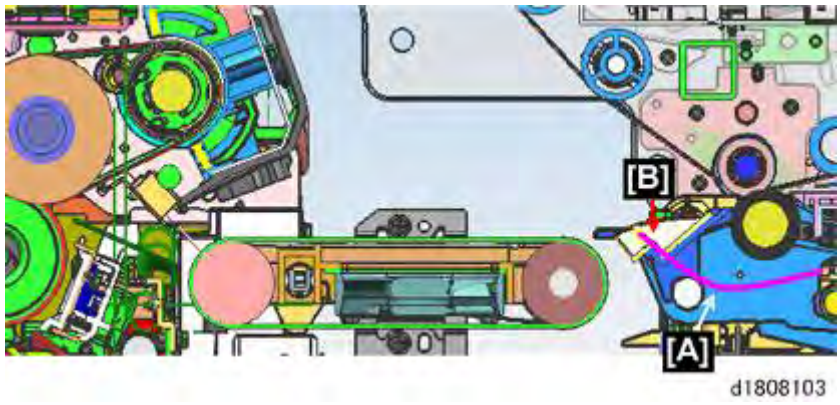
1.4.3 MESSAGES REPORTING PAPER MISFEEDS

Paper misfeeds are reported by messages prefixed with problem codes. Resolve the problem according to the code.



J032 Appears

This problem can occur when using paper thinner than Thickness 1.



When very thin paper (less than Thickness 1) feeds, the paper can sag at the at the transfer exit guide plate [A], fail to separate and wrap in the paper transfer unit [B], causing Jam32.

Cause:

This problem can occur when:

- Paper is extremely thin (less than Thickness 1)
- Ambient temperature is high or low
- Ambient humidity is high or low
- Duplex printing on Side 2

Solution:

This problem can be solved by adjusting the leading edge switching and coefficient settings for the leading edge.

1. Is the paper registered in the User Settings for Custom Paper?

Yes	Go to Step 2.
No	Register the paper in the User Settings.

2. Adjust the User Settings for the paper transfer coefficient and switch.
- (SP 2-813-001 to 100: Leading Edge Corr Coef: 2nd Custom Paper 001 to 100
- (SP 2-814-001 to 100: Leading Edge Corr Switch: 2nd Custom Paper 001 to 100

Is the paper transfer leading edge coefficient setting less than 60?

Yes	Restore the coefficient setting to its default setting.
No	Go to Step 5.

1. Is the paper transfer leading edge correction switch at its upper limit?

Yes	Use different paper. If this is not possible, consult key operators.
No	Add 5 points to the setting.

2. Is the problem resolved?

Yes	Finished!
No	Go to Step 5.

3. Does reducing the paper transfer coefficient setting by 5 points solve the problem?

Yes	Finished!
No	Repeat from Step 2.

If J049 Appears

Cause:

Paper is skewed.

Solution:

Depending on the cause of the problem, do one the following:

The side fences in the paper tray are too far apart.

- If the side fences are too far apart, the paper may be skewed.
- Adjust the side fences to match the paper width.
- When you close the paper tray, the side fences may become misaligned due to the weight of the paper.
- To prevent this, close the paper tray slowly.

The paper size/orientation/type is not specified correctly.

- In tray paper settings, specify the size, orientation, and type of the paper in use.

Colored paper or transparencies are loaded in the paper tray.

Paper edges may not have been detected correctly. Adjust the color paper edge detection.

1. In Advanced Settings for the custom paper in use, select Color Paper Edge Detection Adjustment and make a note of the present value. (SP1-962-001 to 100: Color Paper Adjustment Custom Paper 001 to 100)
2. Increase the value in Color Paper Edge Detection Adjustment.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.

4. Decrease the value in Color Paper Edge Detection Adjustment.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In Advanced Settings for the custom paper in use, set Skew Detection to Off. (SP1-955-001 to 100: Skew Detect Custom Paper 001 to 100)

7. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

An envelope is used.

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable the skew detection function.

If custom paper is used

In Advanced Settings for the custom paper in use, set Skew Detection to Off. (SP1-955-001 to 100: Skew Detect Custom Paper 001 to 100)

If custom paper is not used

On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, set Skew Detection to Off. (SP1-021-001 to 008: Skew Detect Tray <number>)

The skew detection level is too high.

The skew detection level may be too high. Decrease the skew detection level. (SP1-022-001 to 008: Skew Correction Level Setting Tray <number>

1. On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, increase the value in Skew Detection Level. (SP1-022-001 to 008: Skew Correction Level Setting Tray <number>. If you change these settings in plus direction (+), the detection level decreases.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, go to the next step.

3. On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, set Skew Detection to Off. (SP1-021-001 to 008: Skew Detect Tray <number>)

Note

- If the skew detection level is reduced or the skew detection function is disabled, no misfeed report will be displayed. However, this may result in paper skew feeding. If you do not want this result, contact your service representative.
- If the machine wrongly detects skew, see page 79 "Wrong Detection of Skew".

If J050 Appears

Cause:

Sheets cannot be positioned properly by paper position adjustment in the paper registration unit.

Solution:

Depending on the cause of the problem, do one of the following:

The side fences in the paper tray are too far apart.

- If the side fences are too far apart, the paper may shift.
- Adjust the side fences to match the paper width.
- When you close the paper tray, the side fences may become misaligned due to the weight of the paper.
- To prevent this, close the paper tray slowly.

The paper size/orientation/type is not specified correctly.

- In tray paper settings, specify the size, orientation, and type of the paper in use.

Colored paper or transparencies are loaded in the paper tray.

- Paper edges may not have been detected correctly. Adjust the color paper edge detection.

1. In Advanced Settings for the custom paper in use, select Color Paper Edge Detection Adjustment and make a note of the present value. (SP1-962-001: Color Paper Adjustment Custom Paper 001)
2. Increase the value in Color Paper Edge Detection Adjustment.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.

4. Decrease the value in Color Paper Edge Detection Adjustment.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In Advanced Settings for the custom paper in use, set Skew Detection to Off. (SP 1-955-001 to 100: Skew Detect Custom Paper 001 to 100)
7. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Sheets of mixed type, thickness, or color are loaded in the paper tray.

- Load identical sheets in the paper tray.

Shift Tray Full Disable (OFF)

With Custom Paper

In user paper settings for the custom paper in use, disable side-to-side registration. (SP 1-957-001 to 100: Side-to-Side Reg Disable Custom Paper 001 to 100)

With Standard Paper

In Advanced Settings for the custom paper in use, disable side-to-side registration. (SP 1-917-001 to 008: Side-to-Side Reg Disable Tray <number>)

If J080 Appears

Cause:

The paper feed is delayed. This may occur if the paper is slippery.

Solution:

1. In Advanced Settings for the custom paper in use, set Regist Jam Detection with Feed Dir to Off. (SP 1-958-001 to 100: Subscan Reg Jam Detect Custom Paper 001 to 100)
2. Print the image. Is the problem resolved?

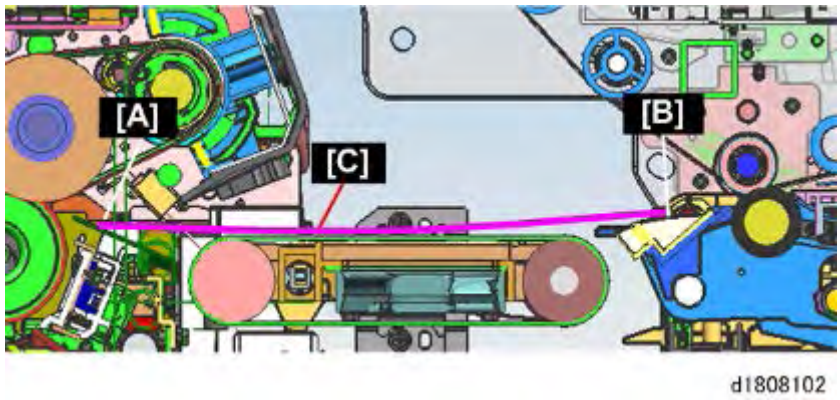
Yes	Finished!
No	Consult key operators.

Note

- When you set Regist Jam Detection with Feed Dir to Off, the printed image may become misaligned at the leading edge.

If J082 Appears

This code signals a jam with paper above Thickness 6.



With paper thicker than Thickness 6, when the leading edge of the paper on the fusing guide plate [A] and the trailing edge is on the transfer exit guide [B] both ends of the paper rest on the guide plates, and due to the rigidity of the paper the surface of the paper loses contact with the paper transport belt below at [C] and the paper cannot feed. Also, coated paper is very slick and can easily slip over the surface of the belt and loses contact with the belt causing a failure to feed (Jam 82).

Cause:

This problem can occur when:

- Using paper sizes B5 LEF, A4 LEF, LT LEF
- Thick paper (above Thickness 6), especially rigid paper or paper with a slick surface like coated paper.

Solution:

This problem can be resolved by switching the paper to short-edge feed (SEF).

1. Is the paper registered with Custom Paper Setting?

Yes	Go to Step 2.
No	Register the paper with User Tools.

2. Can the job be switched from LEF to SEF feed?

Yes	Switch paper orientation to SEF.
No	Go to Step 3.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Use different paper. If this is not possible, consult key operators.

If J099 Appears

Cause:

Double feeding has occurred.

Solution:

Depending on the cause of the problem, do one of the following:

Coated or another type of unsupported paper is loaded On the machine operation panel's tray.

- Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray that supports the paper.

Sheets are stuck to each other.

- Fan the paper before loading it to loosen the sheets.

The edges of the sheets are rough.

- Turn the sheets the other way up or smooth the edges before loading the paper.

1.4.4 PAPER SKEW

Depending on the cause of the problem, do one of the following:

The side fences in the paper tray are too far apart.

If the side fences are too far apart, the paper may be skewed.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

A scrap of paper or some other small fragment is jammed in the paper feed path.

Remove the fragment.

For details about cleaning the paper feed path, see page 95 "Cleaning the Paper Feed Path".

The correct amount of paper buckle has not been specified.

Adjust the degree of paper arching at the registration gate.

If using paper of Paper Weight 1 to 4

1. On the machine operation panel: Image Position group on the Adjustment Settings for Skilled Operators menu, change the value in Adjust Registration Paper Buckle. (SP1-004-1 to 3: Reg. Buckle Adjust: Tray 1 to 3).

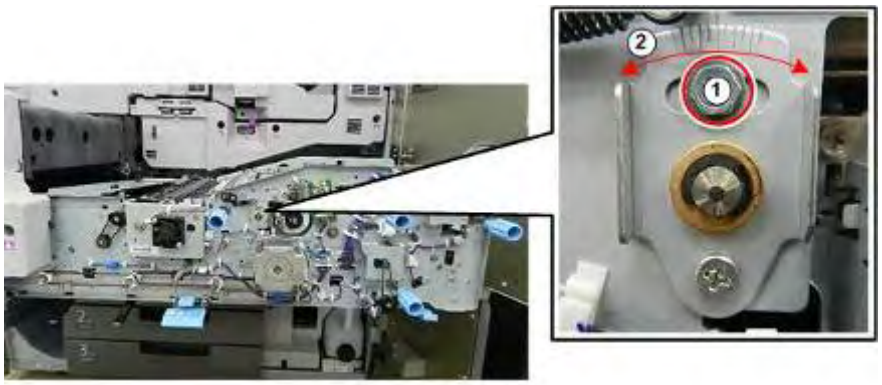
If using paper of Paper Weight 5 to 7

1. On the machine operation panel: group on the Adjustment Settings for Skilled Operators > Image Position > Adjust Registration Paper Buckle (Thick Paper) > Change the value. (SP1-005-001 to 3: Reg. Buckle Adj.: Thick 5 to Thick 7).
2. Increase (+) or decrease (-) the value for the paper tray in use, and then print the image.

- If the problem persists even though the setting has reached its maximum value, try decreasing the setting.
- If the problem persists even though you have tried the complete range of settings from minimum to maximum, do the procedure below.

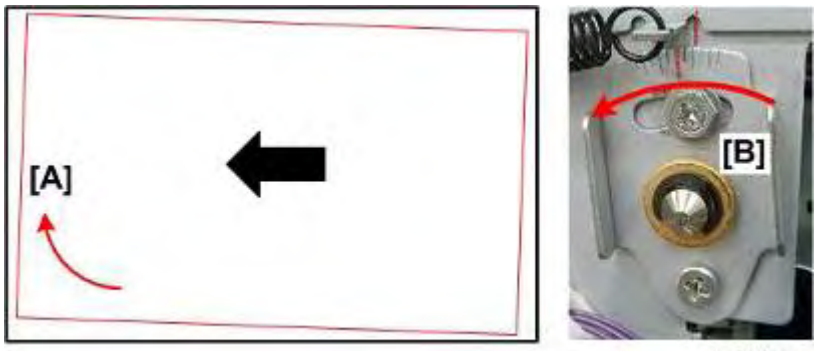
Leading Edge Shift Unit Manual Adjustment

1. Do SP2109-003 Pattern #14, and then print a Trimming Area pattern on both sides of an A3 sheet of paper.
2. Pull out the drawer.
3. Remove the right front cover of the drawer.



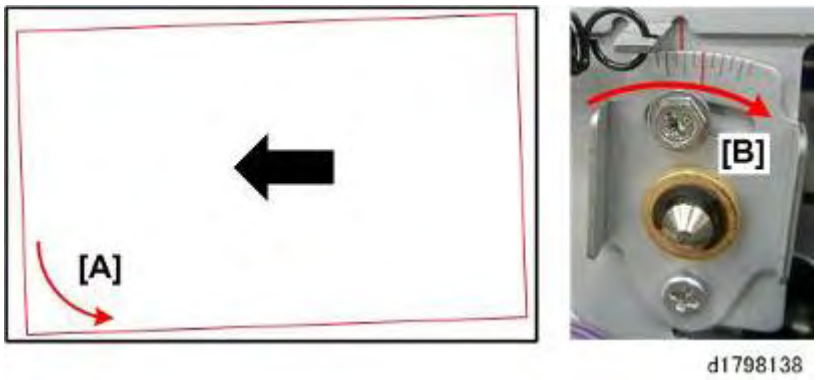
d1798136

4. Note and record the current setting at ①.
5. Loosen screw ① and then move bracket ② to either the left or the right.



d1798137

6. If the trimming area pattern [A] is skewed to the rear, move bracket [B] to the left.



7. If the trimming are pattern [A] is skewed to the front, move bracket [B] to the right.
8. Do more trimming area pattern prints and adjustments until the sides of trimming area pattern are perfectly parallel with the edges of the paper.
9. If the problem persists, consult local staff and key operators.

The skew detection level is too low.

Increase the skew detection level.

1. On the machine operation panel: group on the Adjustment Settings for Skilled Operators > Paper Feed/ Output > Skew Detection Level > Reduce the value. (SP1-022-001 to 008: Skew Correction Level Setting Tray<number>)
2. Reduce the value to increase the detection level.
3. This will allow the machine to report a paper misfeed and stop printing even for a slight skew.

1.4.5 WRONG DETECTION OF SKEW

Depending on the cause of the problem, do one of the following if an envelope is used.

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable skew detection function.

If custom paper is used

In Advanced Settings for the custom paper in use, set Skew Detection to Off. (SP 1-955-001 to 100: Skew Detect Custom Paper 001 to 100)

<If custom paper is not used>

On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, set Skew Detection to Off. (SP 1-021-001 to 008: Skew Detect Tray <number>)

Note

- Disabling the skew detection function will allow skewed printing. If this is not acceptable, contact your service representative.

1.4.6 DOUBLE FEEDING

Depending on the cause of the problem, do one of the following:

Is the paper feed roller covered with paper dust?

- Check the paper feed rollers of the LCT A3/A4, Multi Bypass Unit, and Cover Interposer Tray if they are installed.
- Paper dust may decrease the traction of the paper feed roller and result in double feeding due to paper slippage or insufficient separation.
- Cleaning the paper feed roller will restore traction and so prevent double feeding.
- For details about cleaning the paper feed roller, see page 95 "Cleaning the Paper Feed Path".

Have you fanned the paper sufficiently to remove static cling?

- Check the paper of the LCT A3/A4, Multi Bypass Unit, and Cover Interposer Tray if they are installed.
- Double feeding may result if the paper is not ruffled properly.
- Remove the paper, ruffle it, and reload it.

Is the Pickup Assist setting enabled?

This is for the LCT A3 only. If the Pickup Assist function operates too much, it may cause double feeding with coated paper. By disabling the Pickup Assist setting, you can prevent double feeding.

If custom paper is used

In Advanced Settings for the custom paper in use, set Pickup Assist Setting to Off. (SP 1-977-001 to 100: LCT Pickup Assist ON/OFF Custom Paper 001 to 100)

If custom paper is not used

On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, set Pickup Assist Setting to Off. (SP 1-923-001 to 007: LCT Pickup Assist ON/OFF A3LCT Tray <number>)

Special or coated paper is used (LCT A3 only)

- Is the airflow strong enough?

  The factory-set airflow of the wide LCT may not be strong enough to separate the sheets. Increase the airflow.

  If custom paper is used

  In Advanced Settings for the custom paper in use, increase the value in Adjust Wide LCT Fan Level. (SP 1-975-001 to 100: LCT Tray Fan Duty Adjustment Custom Paper 001 to 100)

  If custom paper is not used

  On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Wide LCT Fan Level > Increase the setting. (SP 1-920-001: LCT Tray Fan Duty Adjustment A3LCT Tray <number>)

- Is the tab sheet holder attached?
  Attach the tab sheet holder to prevent air from leaking at the trailing edge of the paper. This improves paper separation.

1.4.7 WRONG DETECTION OF DOUBLE FEEDING

Depending on the cause of the problem, do one the following:

Paper with high paper-to-paper adhesion is used.

Paper with high paper-to-paper adhesion may be wrongly detected as double feeding.

Disable the double feeding detection function.

If custom paper is used

1. In Advanced Settings for the custom paper in use, set Double Feed Detection to Off. (SP 1-956-001 to 100: Dbl-Feed Detect Custom Paper 001 to 100)

If custom paper is not used

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Double Feed Detection > Set to Off. (SP 1-302-001 to 007: Dbl-Feed Detect Tray <number>)

An envelope is being used.

The seams of envelopes may cause double feeds to be erroneously detected.

Disable the double feed detection.

If custom paper is used

1. In Advanced Settings for the custom paper in use, set Double Feed Detection to Off. (SP 1-956-001 to 100: Dbl-Feed Detect Custom Paper 001 to 100)

If custom paper is not used

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Double Feed Detection > Set to Off. (SP 1-302-001 to 007: Dbl-Feed Detect Tray <number>)

The double feed detection sensor is soiled.

- If the double feed detection sensor is soiled with paper dust or other fragments, it may wrongly detect double feeding.
- Clean the double feed detection sensor.
- For details about cleaning the double feed detection sensor, see page 95 "Cleaning the Paper Feed Path".

Note

- Disabling double feed detection may reduce print image quality or cause blank sheets to be delivered.

1.4.8 FAILURE TO FEED

Depending on the cause of the problem, do one of the following:

Have you fanned the paper to remove static cling?

- Not fanning the paper properly may cause paper misfeeding.
- Remove the paper, fan it, and reload it.

The side fences in the paper tray are too close together.

- If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.
- Adjust the paper guides to match the paper width.
- When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

Special or coated paper is used.

- Is the airflow powerful sufficient?

  The factory-set airflow of the wide LCT may not be strong enough to separate the sheets. Increase the airflow.

  If custom paper is used

  1. In Advanced Settings for the custom paper in use, increase the value in Adjust Wide LCT Fan Level. (SP 1-976-001 to 100: LCT Tray Fan ON/OFF Custom Paper 001 to 100)

  If custom paper is not used

  1. On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu, increase the value in Adjust Wide LCT Fan Level. (SP 1-920-001 to 003: LCT Tray Fan Duty Adjustment A3LCT Tray <number>)

- Is the tab sheet holder attached?

1. Attach the tab sheet holder to prevent air from escaping at the trailing edge of the paper. This improves paper separation.

- Is the paper feed roller covered with paper dust?

  Paper dust on the surface of coated paper may reduce the traction of the paper feed roller and cause paper misfeeding due to paper slippage or insufficient separation. By cleaning the paper feed roller, the frictional force can be restored so that paper misfeeding will not occur. For details about cleaning the paper feed roller of the wide LCT, see page 95 "Cleaning the Paper Feed Path".

An envelope is used.

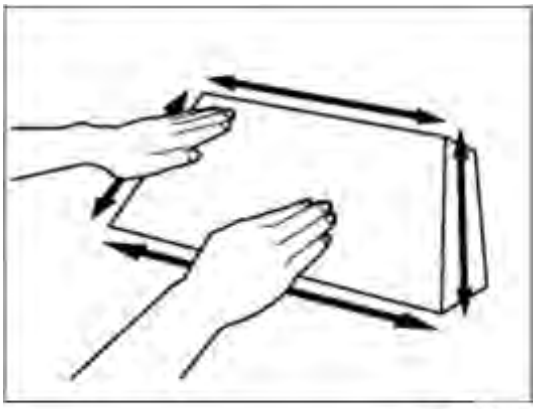
Depending on the type of envelope, air trapped inside may be squeezed out when the paper feed roller picks up the envelope and cause slippage leading to a misfeed.

- Is the wide LCT fan disabled?

1. In Advanced Settings for the custom paper in use, set Wide LCT Fan Setting to Off. (SP 1-976-001 to 100: LCT Tray Fan ON/OFF Custom Paper 001 to 100)

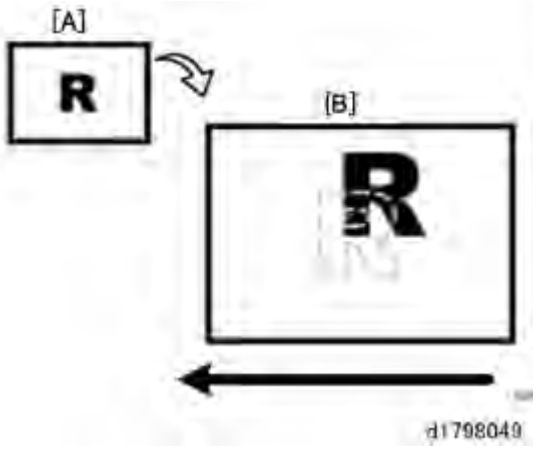
- Have you flattened the envelope?

1. Flatten the envelope and all its edges to eliminate air before loading. If the envelope is curled, decurl it before loading.



1.4.9 PAPER FEED PROBLEMS AFFECTING IMAGE QUALITY

The Image Is Positioned Incorrectly



[A]	Original
[B]	Output

Cause:

Depending on the paper thickness, floppiness, edge roughness, and curl, the image may fall out of alignment.

Solution:

Adjust the image position.

If custom paper is used

1. In Advanced Settings for the custom paper in use, adjust the image position.

Side 1

- To adjust the position vertically, change the value in Adj Image Position of Side1 With Feed. (SP 1-952-001 to 100: Image Pos:Main:Side1 Custom Paper 001 to 100)
- To adjust the position horizontally, change the value in Adj Image Position of Side1 Across Feed. (SP 1-950-001 to 100: Image Pos:Sub:Side1 Custom Paper 001 to 100)

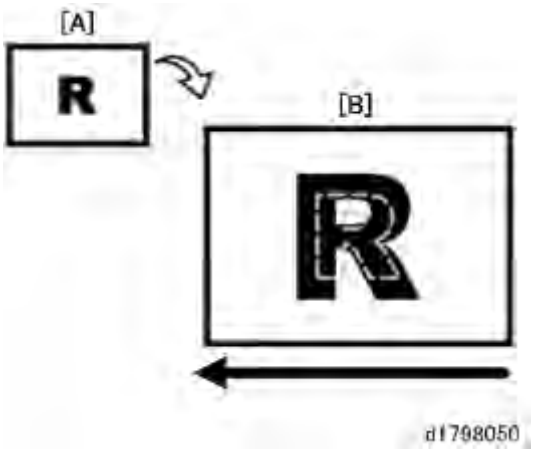
Side 2

- To adjust the position vertically, change the value in Adj Image Position of Side2 With Feed. (SP 1-953-001 to 100: Image Pos:Main:Side2 Custom Paper 001 to 100)
- To adjust the position horizontally, change the value in Adj Image Position of Side2 Across Feed. (SP 1-951-001 to 100: Image Pos:Sub:Side2 Custom Paper 001 to 100)

If custom paper is not used

1. On the machine operation panel: group on the Adjustment Settings for Skilled Operators > Image Position > Adjust the image position.
   - To adjust the position horizontally, change the value in Adjust Image Position With Feed Direction. (SP1-001-001 to 008: Lead Edge Reg Thick <number>)
   - To adjust the position vertically, change the value in Adjust Image Position Across Feed Direction. (SP1-003-001 to 008: Side-to-Side Reg Tray <number>
   - If the problem persists even though you have adjusted the setting to its maximum and minimum values, consult key operators.

Image Scaling Error on the Side 1 of Paper



[A]	Original
[B]	Output

Cause:

An image scaling error may occur because of expansion or contraction of the paper.

Solution:

Adjust the image scaling.

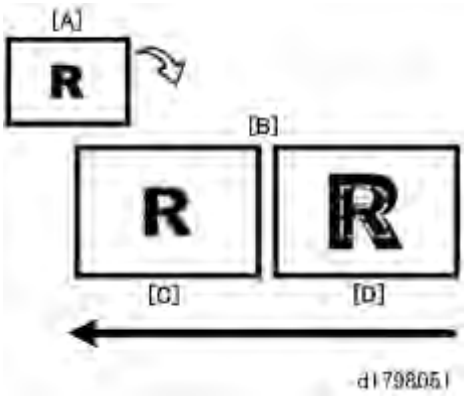
1. In Advanced Settings for the custom paper in use, adjust the image scaling.

- To adjust the horizontal scaling, change the value in Adj Magnification of Side1 Across Feed. (SP 2-950-001 to 100: Face Main Mag set & Adj Custom Paper 001 to 100)
- To adjust the vertical scaling, change the value in Adj Magnification of Side1 With Feed. (SP 2-951-001 to 100: Face Sub Mag set & Adj Custom Paper 001 to 100)

1. Press [+] to increase the scaling and [-] to decrease it.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	If the problem persists even though you have adjusted the setting to its maximum and minimum values, consult key operators.

Image Scaling Error on the Side 2 of Paper



[A]	Original
[B]	Output
[C]	Side 1
[D]	Side 2

Cause:

An image scaling error on the side 2 of the paper may occur because the paper expands or contracts after the image on the side 1 of the paper has been fused.

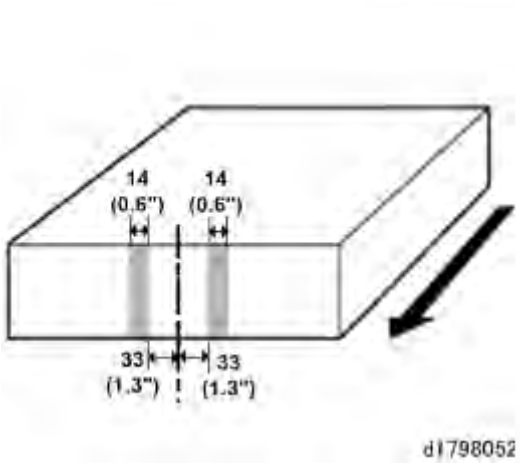
Solution:

Adjust the scaling for the side 2 of the paper and minimize the difference in print size between the side 1 and the side 2.

1. In Advanced Settings for the custom paper in use, adjust the image scaling.
   - To adjust the horizontal scaling, change the value in Adj Magnification of Side2 Across Feed. (SP 2-952-001 to 100: Verso Main Mag set & Adj Custom Paper 001 to 100)
   - To adjust the vertical scaling, change the value in Adj Magnification of Side2 With Feed. (SP 2-953-001 to 100: Verso Sub Mag set & Adj Custom Paper 001 to 100)
2. Press [+] to increase and [-] to decrease the scaling.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Paper Edges Are Dirty (1)



Cause:

The exit rollers in the drawer are soiled.

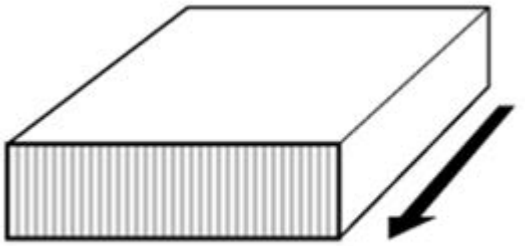
Solution:

Clean the exit rollers in the drawer.

For details about cleaning the exit rollers, see page 10 "

Two 14-mm Wide Streaks".

Paper Edges Are Dirty (2)



d1798053

Cause:

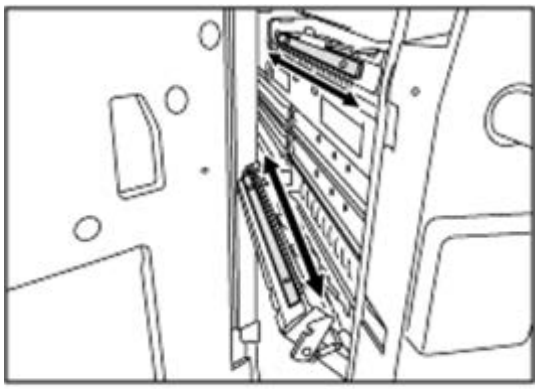
The antistatic brushes in the exit transport and invert transport of the drawer are soiled or the anti-static brushes in Finisher SR5050/SR5060 are soiled.

Solution:

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

Procedure 1

1. Clean the antistatic brushes in the exit transport and inverter transport of the drawer with a blower brush.



d1798054

Procedure 2

Note

- Apply this procedure only when: 1) A back-curl is required to flatten curls with the decurl unit, and 2)
- Sheets are delivered with their printed side facing up in the post-processing machine.

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Check the current decurl setting (Off, Weak, or Strong). (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
2. Is it "Adjust Convex Curl: Weak" or "Adjust Concace Curl: Strong"?

Yes	Go to the next step.
No	Consult key operators.

3. Is this setting essential?

Yes	Go to the next step.
No	Set Adjust Paper Curl to "Adjust Convex Curl: Off" (set it back to the default value).

4. Are the sheets delivered with their printed side facing up.

Yes	Go to the next step.
No	Contact your service representative.

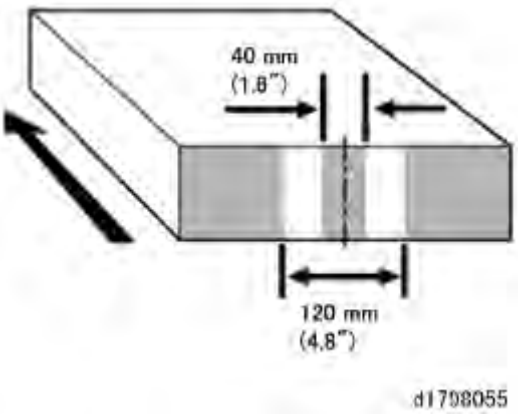
5. Is this setting essential?

Yes	Consult key operators.
No	Change the setting so that the sheets are delivered with their printed side facing down.

6. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Paper Edges Are Dirty (3)



Cause:

The paper feed speed of the decurl unit is too high.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”
- Decreasing the paper feed speed of the decurl unit may result in creases, scratches, or paper jams if thin paper is used.

Solution:

You can lessen the problem by decreasing the paper feed speed of the decurl unit.

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Check the decurl setting (Off, Weak, or Strong) in. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
2. In Advanced Settings for the custom paper in use, adjust the paper feed speed of the decurl unit.
   - If the degree of decurling is set to "Off", reduce the value in Decurler Feed Speed Adj: Curl Adj Off by 0.5%. (SP 1-959-001 to 100: Line Speed Adjust:Default Pos Custom Paper 001 to 100)
   - If the degree of decurling is set to "Weak", reduce the value in Decurler Feed Speed Adj: Curl Adj Weak by 0.5%. (SP 1-960-001 to 100: Line Speed Adjust:Pos.1 Custom Paper 001 to 100)
   - If the degree of decurling is set to "Strong", reduce the value in Decurler Feed Speed Adj: Curl Adj Strg by 0.5%. (SP 1-961-001 to 100: Line Speed Adjust:Pos.2 Custom Paper 001 to 100)
3. Print the image. Is the problem resolved?

Yes	Finished!

No	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, consult key operators.

Scratches, Streaks, or Vertical Creases Appear on the Image

Cause:

The paper feed speed of the exit motor, switchback entrance, or switchback exit is too high or too low.

Solution:

If scratches or streaks appear on the side 2 of the paper

You can lessen the problem by decreasing the paper feed speed.

1. In Advanced Settings for the custom paper in use, adjust the paper feed speed for delivery. Depending on the type of printing, specify one of the following:
   - For one-sided printing, reduce the value in Exit Motor Feed Speed Adjustment by 0.1%. (SP 1-964-001 to 100: Exit Motor Spd: Fine Adj Custom Paper 001 to 100)
   - For duplex printing, reduce the value in Switchback Entrance Feed Speed Adj by 0.1%. (SP 1-965-001 to 100: Invert Entrance Spd: Fine Adj Custom Paper 001 to 100)
   - For one-sided printing (delivery of inverted paper), reduce the value in Switchback Exit Feed Speed Adj by 0.1%. (SP 1-966-001 to 100: Invert Exit Spd: Fine Adj Custom Paper 001 to 100)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value by 0.1% until the problem is resolved. If the problem persists even though you have decreased the value by 1.0%, consult key operators.

If scratches or streaks appear on the side 1 of the paper

You can lessen the problem by increasing the paper feed speed.

1. In Advanced Settings for the custom paper in use, adjust the paper feed speed for delivery. Depending on the type of printing, specify one of the following:
   - For one-sided printing, increase the value in Exit Motor Feed Speed Adjustment by 0.1%. (SP 1-964-001 to 100: Exit Motor Spd: Fine Adj Custom Paper 001 to 100)
   - For duplex printing, increase the value in Switchback Entrance Feed Speed Adj by 0.1%. (SP 1-965-001 to 100: Invert Entrance Spd: Fine Adj Custom Paper 001 to 100)
   - For one-sided printing (delivery of inverted paper), increase the value in Switchback Exit Feed Speed Adj by 0.1%. (SP 1-966-001 to 100: Invert Exit Spd: Fine Adj Custom Paper

001 to 100)

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value by 0.1% until the problem is resolved. If the problem persists even though you have increased the value by 1.0%, consult key operators.

Decurling Results in Scratches, Streaks, or Creases

Cause:

The paper feed speed of the decurl unit is too high or too low.

Solution:

If scratches or streaks appear on the side 2 of the paper or continuous noise results

You can lessen the problem by decreasing the paper feed speed of the decurl unit.

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Check the current decurl setting (Off, Weak, or Strong) in. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
2. In Advanced Settings for the custom paper in use, adjust the paper feed speed of the decurl unit.

- If the degree of decurling is set to "Off", reduce the value in Decurler Feed Speed Adj: Curl Adj Off by 0.5%. (SP 1-959-001 to 100: Line Speed Adjust:Default Pos Custom Paper 001 to 100)
- If the degree of decurling is set to "Weak", reduce the value in Decurler Feed Speed Adj: Curl Adj Weak by 0.5%. (SP 1-960-001 to 100: Line Speed Adjust:Pos.1 Custom Paper 001 to 100)
- If the degree of decurling is set to "Strong", reduce the value in Decurler Feed Speed Adj: Curl Adj Strg by 0.5%. (SP 1-961-001 to 100: Line Speed Adjust:Pos.2 Custom Paper 001 to 100)

1. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, consult key operators.

If scratches, streaks, or creases appear on the side 1 of the paper

You can lessen the problem by increasing the paper feed speed of the decurl unit.

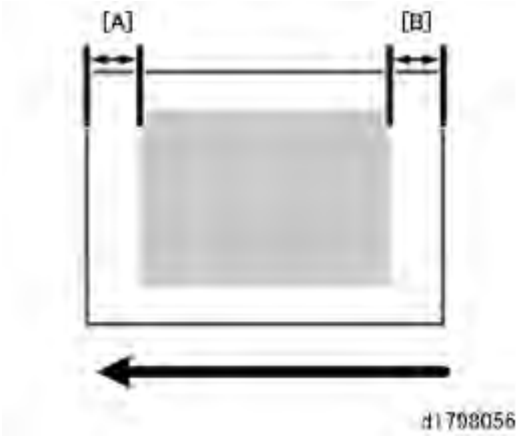
1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Check the current decurl setting (Off, Weak, or Strong) in. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
2. In Advanced Settings for the custom paper in use, adjust the paper feed speed of the decurl unit.
   - If the degree of decurling is set to "Off", increase the value in Decurler Feed Speed Adj: Curl Adj Off by 0.5%. (SP 1-959-001 to 100: Line Speed Adjust:Default Pos Custom Paper 001 to 100)
   - If the degree of decurling is set to "Weak", increase the value in Decurler Feed Speed Adj: Curl Adj Weak by 0.5%. (SP 1-960-001 to 100: Line Speed Adjust:Pos.1 Custom Paper 001 to 100)
   - If the degree of decurling is set to "Strong", increase the value in Decurler Feed Speed Adj: Curl Adj Strg by 0.5%. (SP 1-961-001 to 100: Line Speed Adjust:Pos.2 Custom Paper 001 to 100)
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value by 0.5% until the problem is resolved. If the problem persists even though the value has reached its maximum value, consult key operators.

The Leading/Trailing Edge Margin Is Long

Cause:

In some custom paper presets, the leading/trailing edge margins are wide enough to prevent paper jams.



[A]	Leading Edge Margin
[B]	Trailing Edge Margin

Solution:

Adjust the leading/trailing edge margins.

1. In Advanced Settings for the custom paper in use, reduce the value by 0.5 mm in Adjust Erase Margin of Leading Edge. (SP 2-122-001 to 100: Erase Margin Adj Leading Edge Custom Paper 001 to 100)
2. Reduce the value by 0.5 mm in Adjust Erase Margin of Trailing Edge.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators. If this results in a paper jam during duplex printing, restore the previous setting.

Note

- The adjusted margin cannot be applied to masked images that are solid-filled or contain ruled lines at the leading/trailing edges.
- Reducing the leading/trailing edge margin may result in a paper jam on the fusing belt stripper plate.

Curling

To eliminate curling without using the decurl unit, lower the heat roller temperature.

Lowering the temperature may result in:

- Unsatisfactory fusing
- Reduced glossiness
- Smeared for halftone images on uncoated paper

1. In Advanced Settings for the custom paper in use, select Fusing Heat Roller Temperature Adj and reduce the value by 5 °C. (SP 1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100)
2. Print a full-page solid-fill image. Is the problem resolved?

Yes	Finished!
No	Further reduce the value by 5 °C until the problem is resolved. If the problem persists, consult key operators.

Note

- To use the decurl unit, specify Adjust Paper Curl On the machine operation panel: Paper Feed/ Output group on the Adjustment Settings for Skilled Operators menu. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)

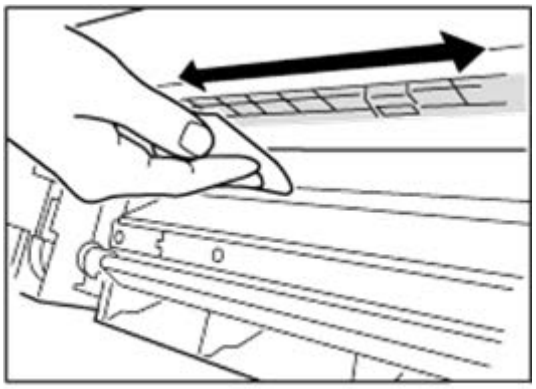
1.4.10 CLEANING THE PAPER FEED PATH

Paper dust sticking to the paper transfer guide board, roller, paper feed roller, or sensor may cause white spots, paper jam, or double feeding. Clean the paper feed path from the paper tray to the paper exit in the drawer.

⚠CAUTION

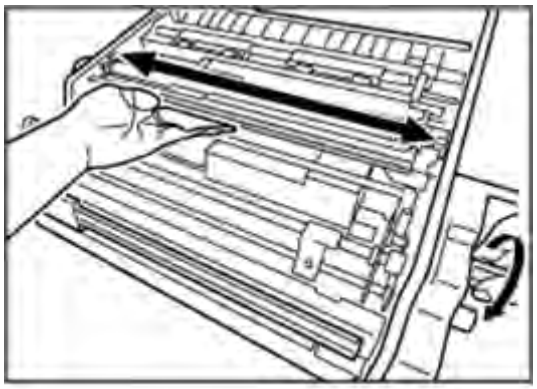
- Before cleaning always turn off the system and disconnect the main machine from its power source.
- Allow the machine to cool for 10 minutes before you start cleaning.

1. **Guide Board**. Wipe the guide board with a well-wrung-out damp cloth. To clean the innermost recesses, use a cloth that is as large as your palm.



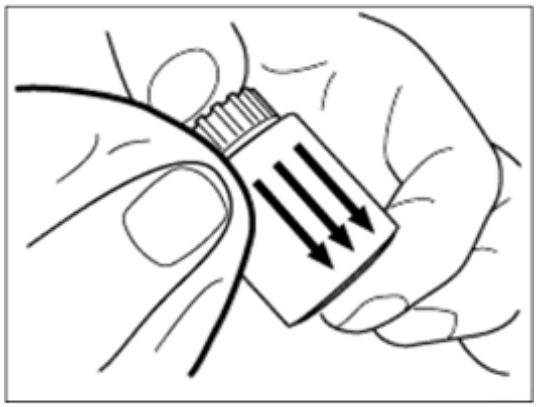
d1798057

2. **Roller**. Wipe the roller with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



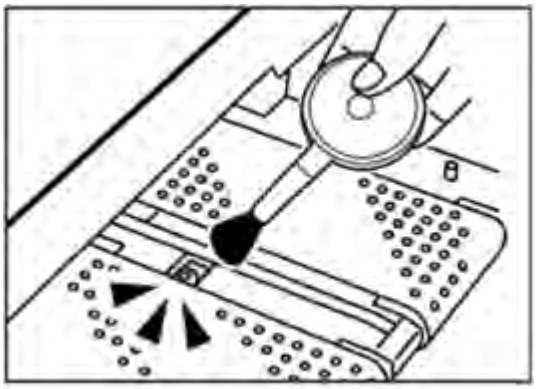
d1798058

3. **Paper Feed Roller**. Wipe the entire surface of the paper feed roller lengthwise with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



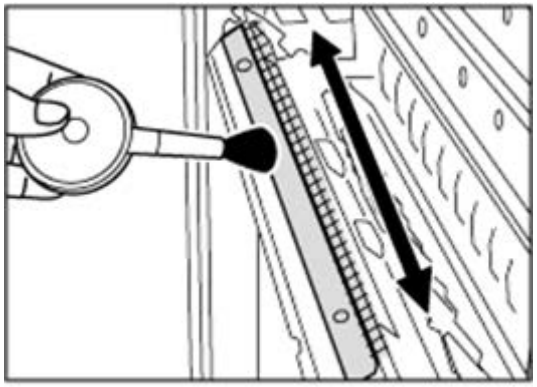
d1798059

4. **Sensor**. Remove dust with a blower brush.



d1798060

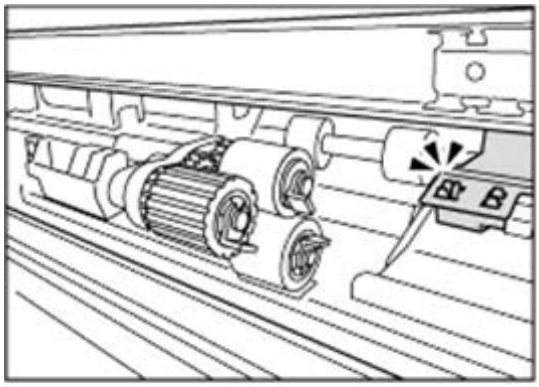
5. **Antistatic Brush**. Remove dust with a blower brush.



d1798061

Cleaning Paper Trays 1-3

1. Remove the paper tray.
2. Clean the sensor.



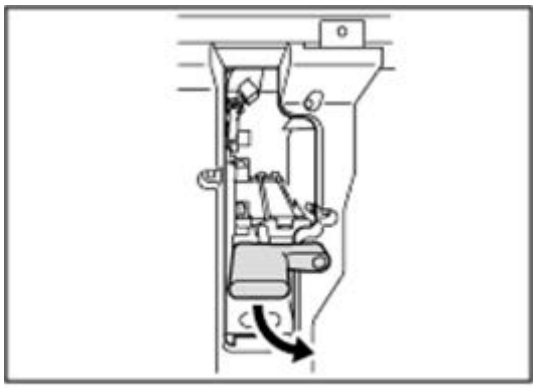
d1798062

Cleaning the Paper Feed Path for Paper Trays 1-3

1. Open the front doors.

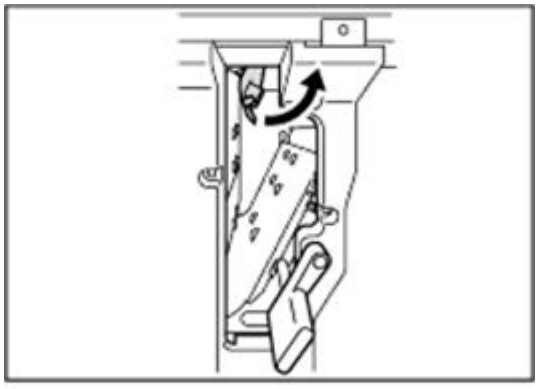
d1798063

2. Pull down the lever **A1**.



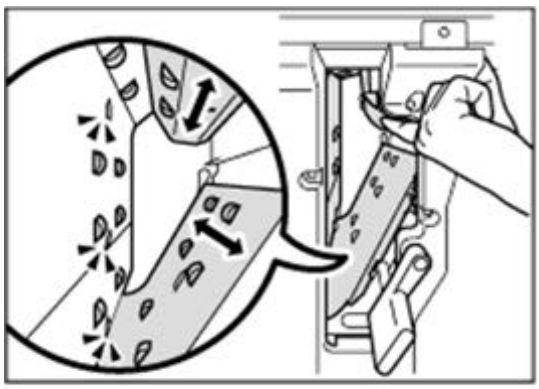
d1798064

3. Pull up the plate.



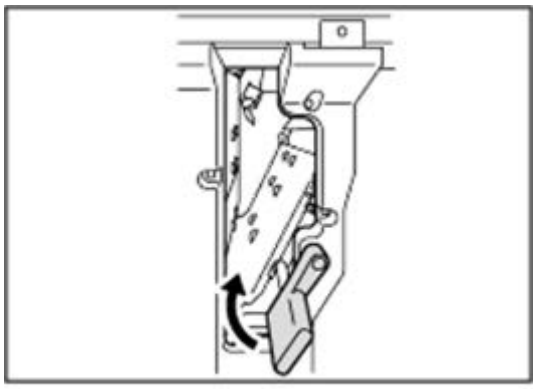
d1798065

4. Clean the rollers, sensors, and guide boards.



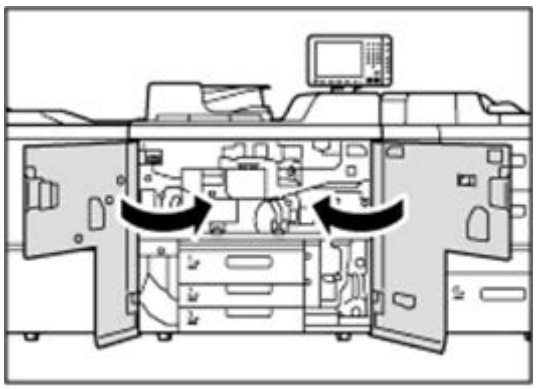
d1798066

5. Pull down the plate.
6. Pull up the lever **A1**.



d1798067

7. Close the front doors.



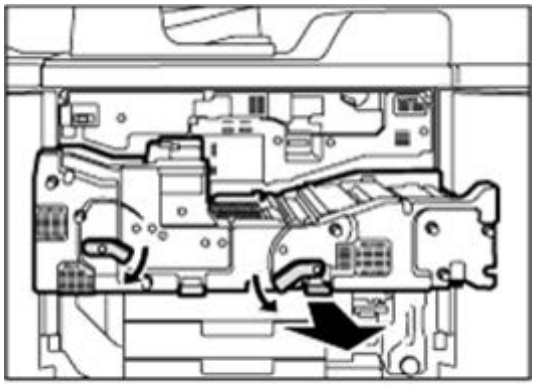
d1798068

Cleaning the Paper Feed Path in the Drawer

1. Open the front doors.

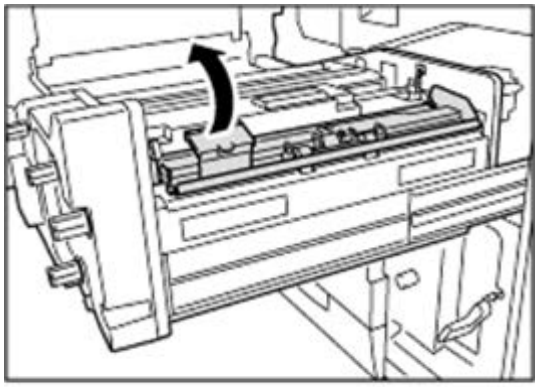
d1798069

2. Pull down the levers **C1** and **C2**, and then pull the drawer out completely until it stops.



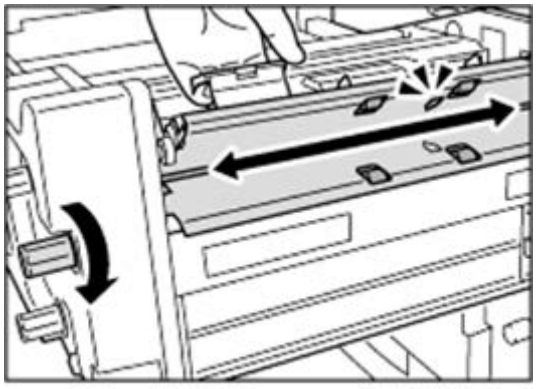
d1798070

3. Pull up and open the cover **B6**.



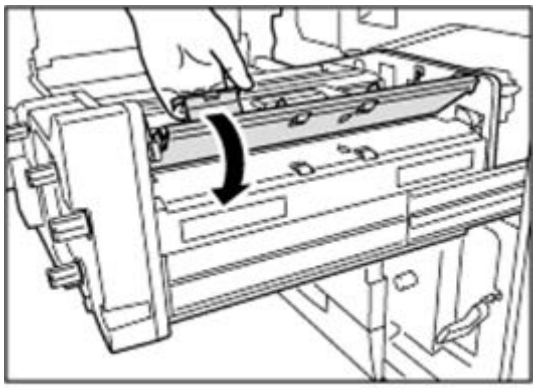
d1798071

4. Clean the rollers while turning the knob **B2**. Clean the sensors and guide boards also.



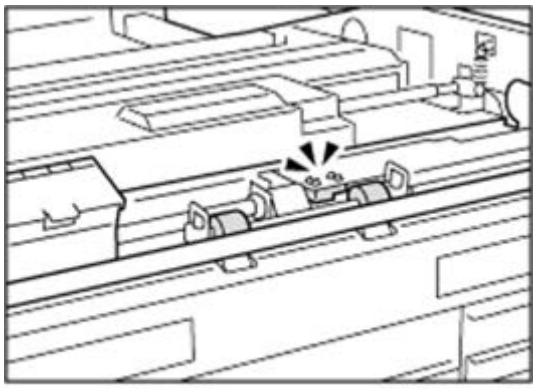
d1798072

5. Close the cover **B6**.



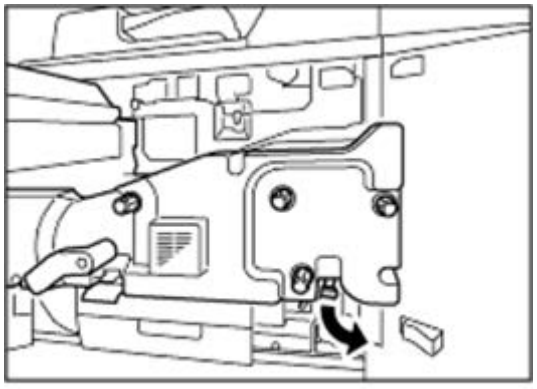
d1798073

6. Clean the rollers and sensors.



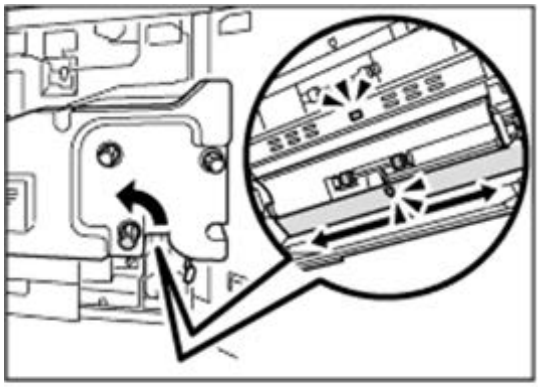
d1798074

7. Pull down and open the cover **B3**.



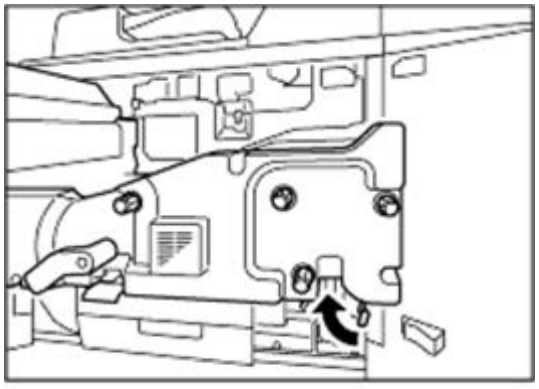
d1798075

8. Clean the rollers while turning the knob **B1**. Clean the sensors and guide boards also.



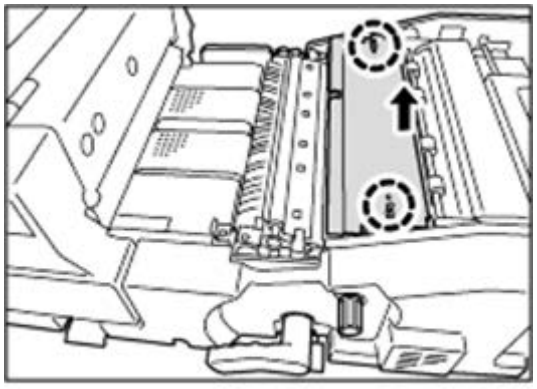
d1798076

9. Close the cover **B3**.



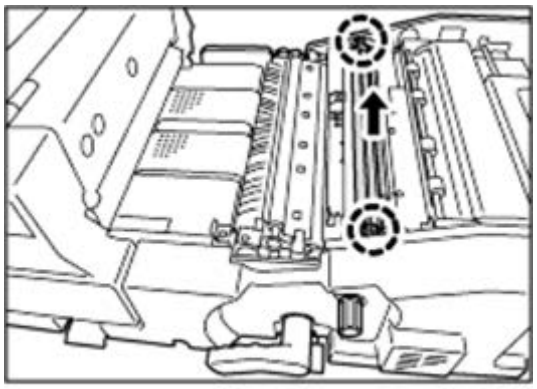
d1798077

10. Remove the 2 screws, and then remove the cover.



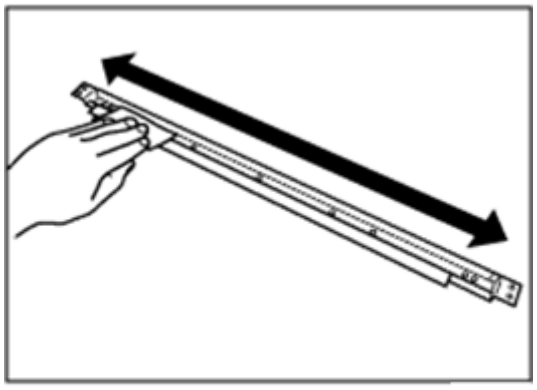
d1798078

11. Remove the 2 screws, and then remove the dust catcher.



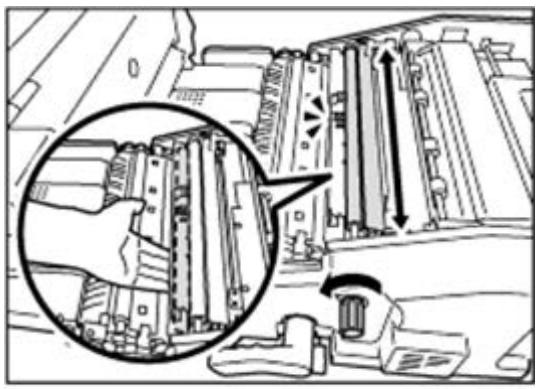
d1798079

12. Clean the dust catcher.



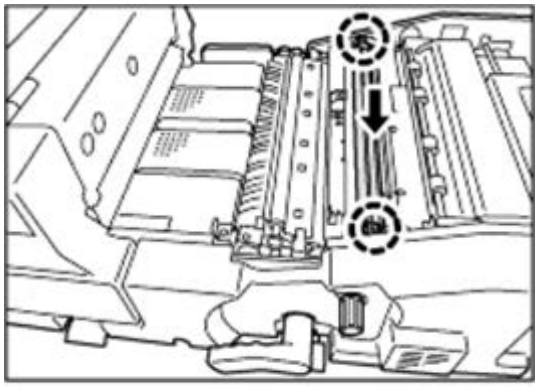
d1798080

13. Clean the roller while turning the knob **B5**. Clean the sensor, guide board, and roller in the paper transfer unit also.



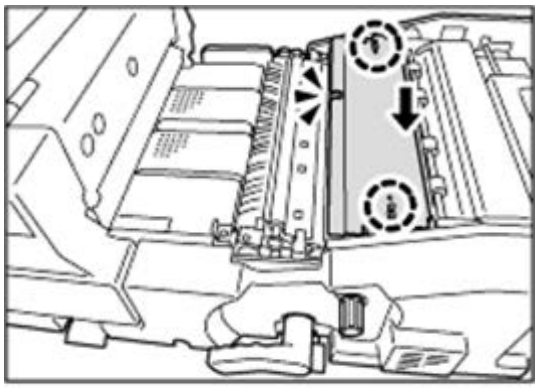
d1798081

14. Attach the dust catcher, and then secure it with the 2 screws.



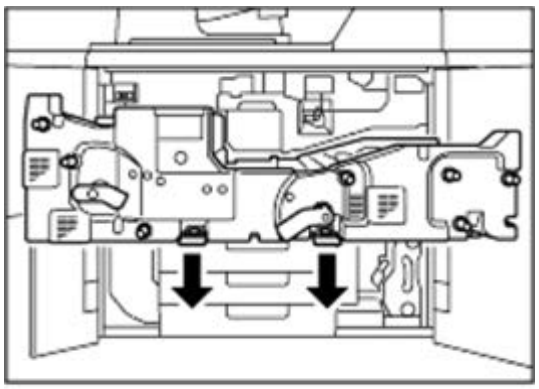
d1798082

15. Attach the cover, aligning the notch on the cover with the claw, and then secure it with the 2 screws.



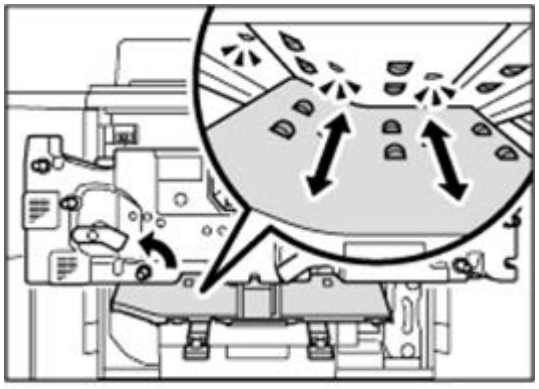
d1798083

16. Pull down the levers **Z2** and **Z3**.



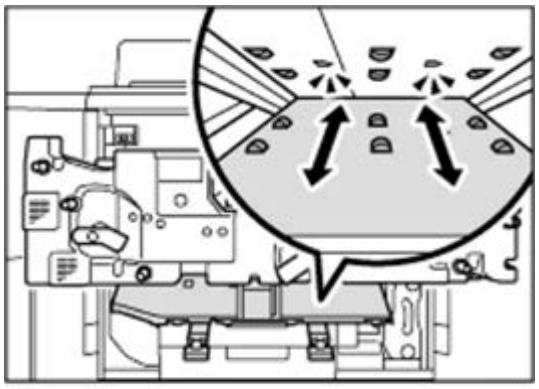
d1798084

17. Clean the left-hand side rollers while turning the knob **Z1**. Clean the left-hand side sensors and guide boards also.



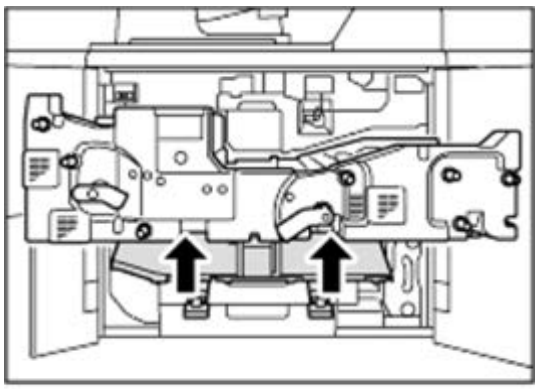
d1798085

18. Clean the right-hand side rollers, sensors, and guide boards.



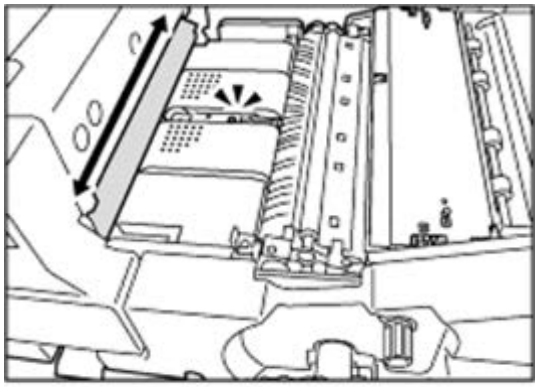
d1798086

19. Pull up the levers **Z2** and **Z3**.



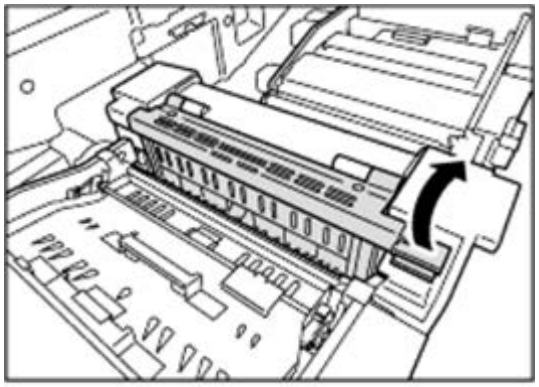
d1798087

20. Clean the sensor and guide board on the entrance of the fusing unit.



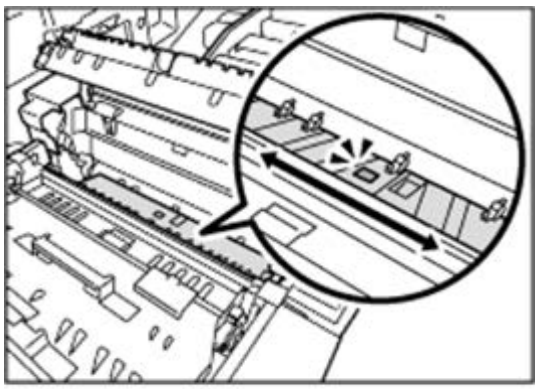
d1798088

21. Pull up and open the cover **D2**.



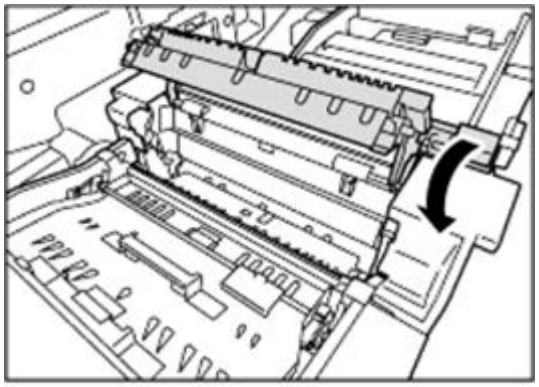
d1798089

22. Clean the sensor and guide board.



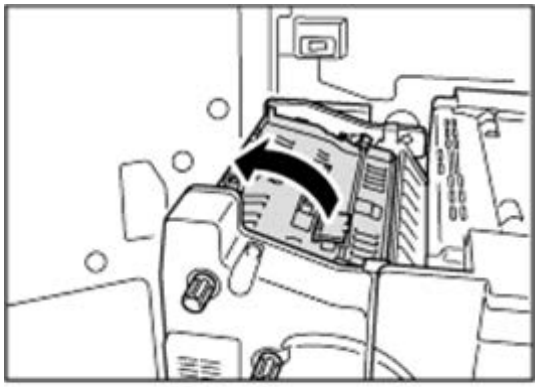
d1798090

23. Close the cover **D2**.



d1798091

24. Pull up and open the cover **D3**.



d1798092

25. Clean the rollers while turning the knob **D1**. Clean the sensors and guide boards also.

d1798093

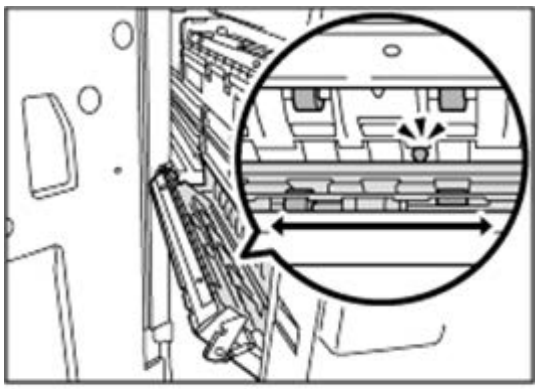
26. Close the cover **D3**.

d1798094

27. Pull down and open the cover **D4**.

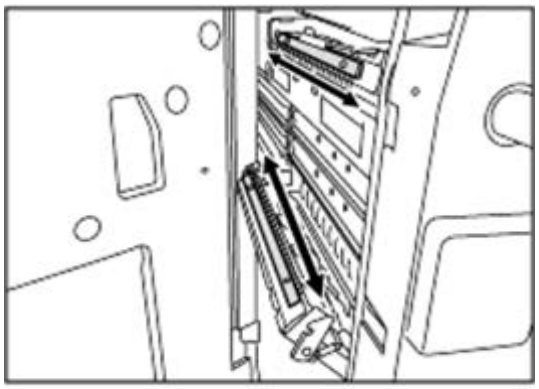
d1798095

28. Clean the rollers, sensor, and guide boards.



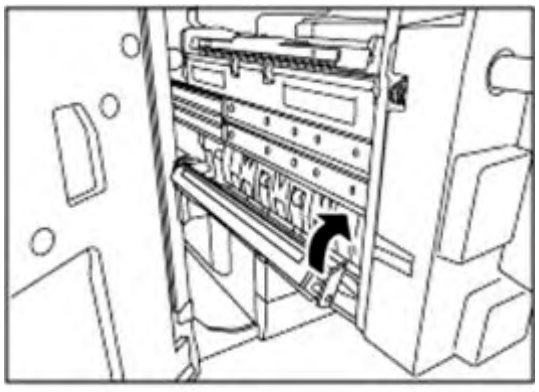
d1798096

29. Clean the antistatic brushes.



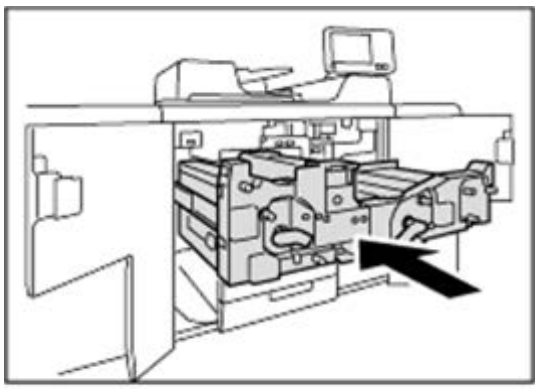
d1798097

30. Close the cover **D4**.



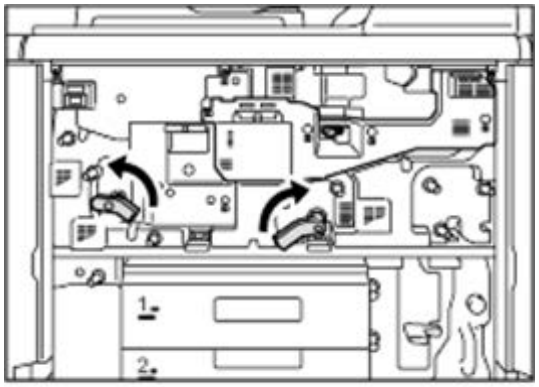
d1798098

31. Push the drawer back into the machine.



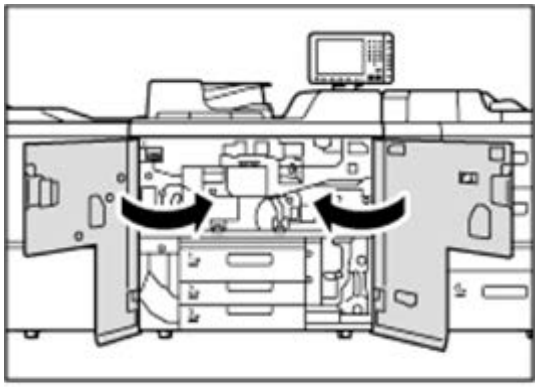
d1798099

32. Pull up the levers **C1** and **C2**.



d1798100

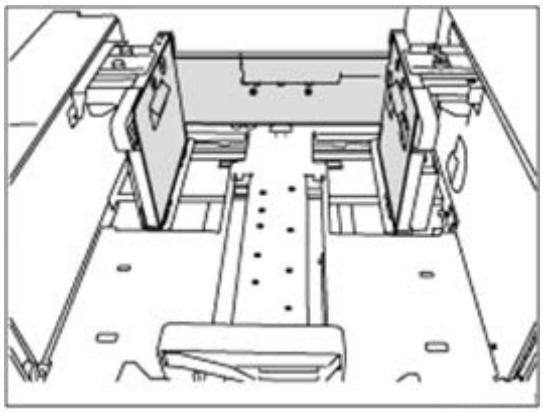
33. Close the front covers.



d1798101

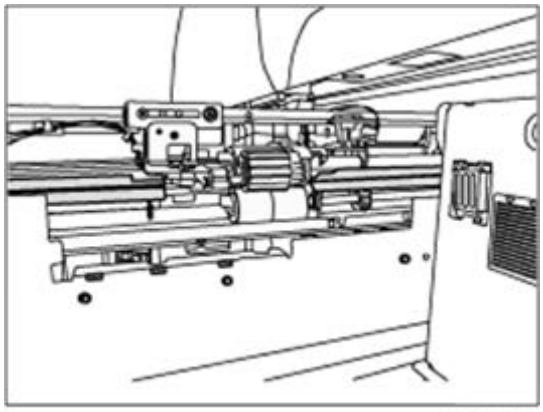
Cleaning the LCT A3 Paper Feed Path

1. Clean the side fences and front guide.



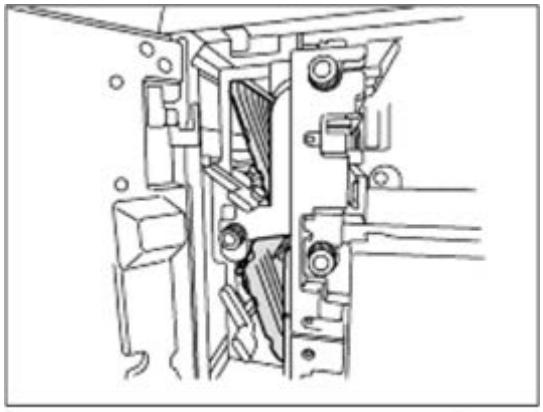
d1798102

2. Clean the paper feed rollers.
3. Clean the guide board of the paper feed unit.



d1798103

4. Clean the guide board interior.

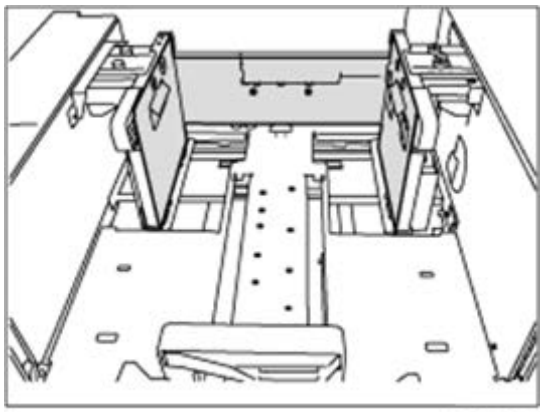


d1798104

5. After cleaning, restore the machine so that it resumes operation.

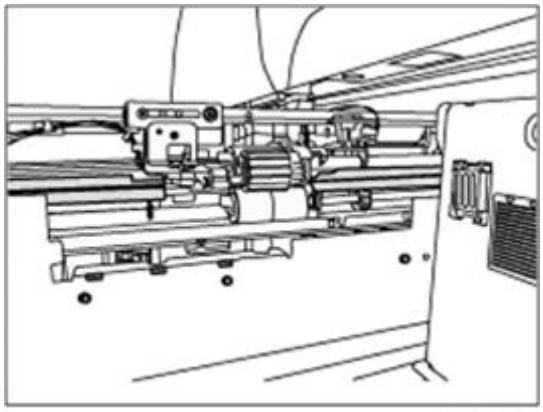
Cleaning the LCT A4 Paper Feed Path

1. Clean the side fences and front guide.



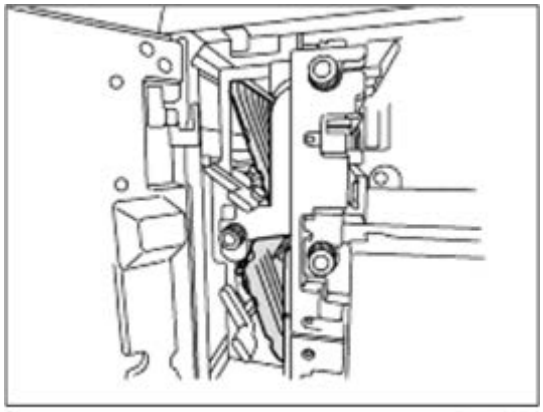
d1798105

2. Clean the paper feed rollers.
3. Clean the guide board of the paper feed unit.



d1798106

4. Clean the guide board interior.



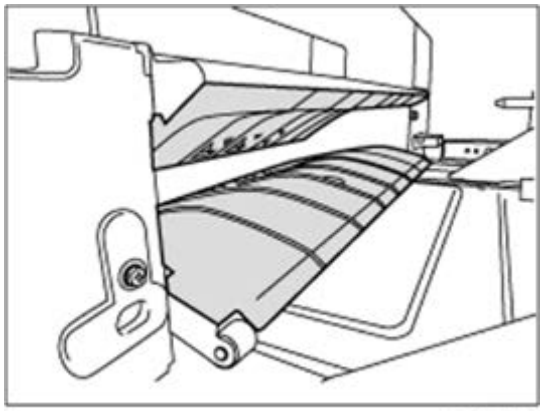
d1798107

5. After cleaning, restore the machine so that it resumes operation.

Cleaning the Multi Bypass Tray Paper Feed Path

1. Clean the side fences and front guide.

2. Clean the paper feed rollers.
3. Clean the guide board.

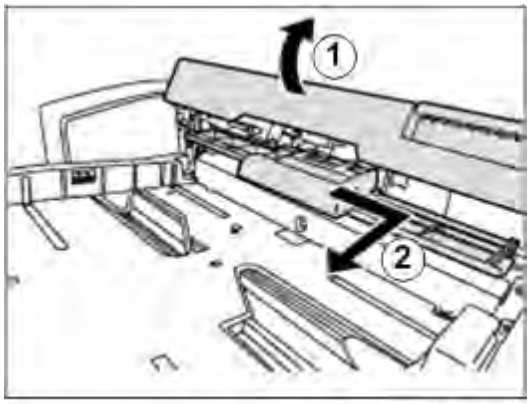


4. After cleaning, restore the machine so that it resumes operation.

Cleaning the Paper Feed Rollers and Paper Feed Belt in the Interposer

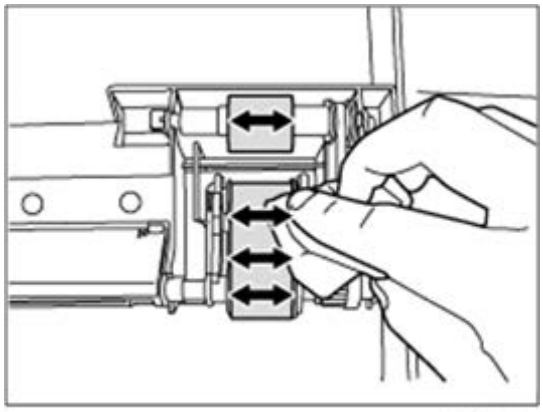
Clean the paper feed belt and paper feed rollers in the interposer. The procedure is explained using the interposer upper tray. The procedure is the same for the lower tray.

1. Remove the loaded paper.
2. Open the upper cover, and then detach the paper feed unit.
3. Pull it out slightly, release the metal shaft, and then detach it.



d1798110

4. Clean the paper feed belt and paper feed rollers in the detached paper feed unit.


d1798111

5. After cleaning, restore the machine so that it resumes operation.

1.5 PERIPHERAL UNIT TROUBLESHOOTING

1.5.1 FINISHER SR5050/SR5060

Delivered Sheets Are Not Stacked Properly

Solution:

Depending on the cause of the problem, do one of the following:

- Coated paper is being used.
  If coated paper is being used, attach the Z-fold support tray for multi-folding unit.
  For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.
- There is airflow in the room.
  Minimize the airflow. For instance, turn the air conditioner off.
- Printed sheets are curled.

If the decurl unit is used

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Select the amount of curl correction. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
   - To correct curls facing up, specify "Adjust Concave Curl".
   - To correct curls facing down, specify "Adjust Convex Curl".
2. Select "Strong" or "Weak" depending on the amount of curl correction required.

If the decurl unit is not used

1. Remove the paper stack and turn it upside down.

There are too many stacked sheets.

1. Reduce the number of the stacked sheets. To do this, suspend printing and remove the stacked sheets, and then resume printing.
   - To suspend printing, press the Suspend key on the finisher.
   - To resume printing, press the Resume key on the finisher.

Large Paper Not Stacked Properly

Cause:

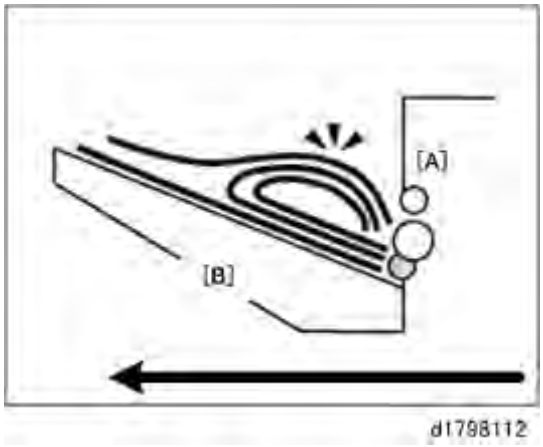
When using large-size or coated and paper-to-paper friction is very high, a sheet may push against another or paper deflection may occur.

This is likely to occur if:

- B4 LEF, 8"x14" LEF, or larger size of paper is used.
- Paper that produces high paper-to-paper friction is used.
- The temperature or humidity is high.

Sheet bending

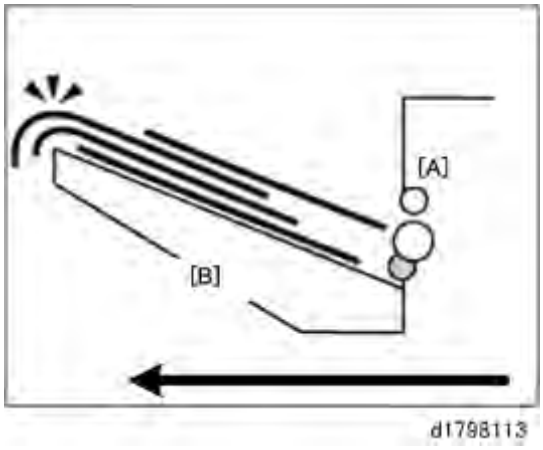
The leading edge of the delivered sheet bends upward and backward.



[A]	Paper Exit
[B]	Output Tray

One sheet pushing out another

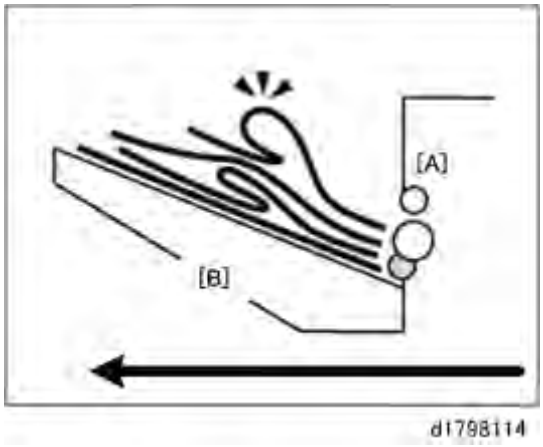
Because of high paper friction, the delivered sheet may get stuck and push out other sheets of paper.



[A]	Paper Exit
[B]	Output Tray

Paper deflection

Because of high paper friction, the delivered sheet may arch up and become crimped.



[A]	Paper Exit
[B]	Output Tray

Solution:

Depending on the cause of the problem, do one of the following:

Sheet bending

There is airflow in the room.

Minimize the airflow. For instance, turn the air conditioner off.

Sheets are curled upward.

- If the decurl unit is used
  1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Set to "Adjust Concave Curl". (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
  2. To control the amount of curl correction, select "Weak" if the present setting is "Off" or "Strong".
- If the decurl unit is not used
  1. Remove the paper stack and turn it upside down.
- Paper of Paper Weight 0 is being used.

  If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit. For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

One sheet pushing out another or sheets becoming crimped

Sheets are curled downward.

- If the decurl unit is used
  1. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Set to "Adjust Convex Curl". (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
  2. To control the amount of curl correction, select "Weak" if the present setting is "Off" or "Strong".
- If the decurl unit is not used
  1. Remove the paper stack and turn it upside down.

Paper of Paper Weight 0 is being used.

If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit. For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

Note

- If the Z-fold support tray for multi-folding unit is attached, the number of sheets that can be stacked is reduced.
- If the Z-fold support tray for multi-folding unit is attached, the range of misalignment of the last print may exceed 2 mm (0.08 inches) if the Shift Collate function is used.

Trailing Edge of Stapled Sheets Close to the Paper Exit

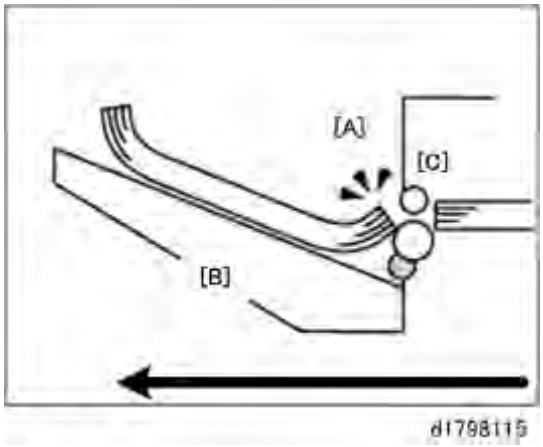
Cause:

If the stapled sheets are curled strongly or become limp after delivery, the trailing edge of the sheets may be too close to the paper exit when the paper is stacked.

If this happens, stapled sheets, when delivered, may push the previously delivered sheet, resulting in paper bending or misfeeding.

This is likely to occur if:

- There is a tight curl on a delivered set of stapled sheets.
- Limp paper such as thin or recycled paper is used.



[A]	Trailing Edges
[B]	Output Tray
[C]	Paper Exit

In the illustration the trailing edges of the stack [A] on the output tray [B] are too close to the paper exit [C]

Solution:

1. Attach the Z-fold support tray for multi-folding unit.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Set to "Adjust Concave Curl". (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
4. Select "Strong" or "Weak" to control the amount of curl correction as required.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Note

- For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.
- If the Z-fold support tray for multi-folding unit is attached, the trailing edge of the ejected sheets will not be too close to the paper exit, so no problem will occur. However, the stapled sheets may not be stacked properly.

Sheets Cannot Be Stapled Properly

Cause:

When the sheets are fed to the staple unit inside the finisher, they may be overlaid, resulting in a misalignment of 5 mm (0.2 inches) relative to each other after stapling.

When coated or other paper producing higher paper-to-paper friction is used, the paper edges are not aligned properly, resulting in misaligned stapling.

This is likely to occur if:

- Coated or other paper producing higher paper-to-paper friction is used.
- Thin or other limp paper is used.

Solution:

Reduce the number of sheets to be stapled.

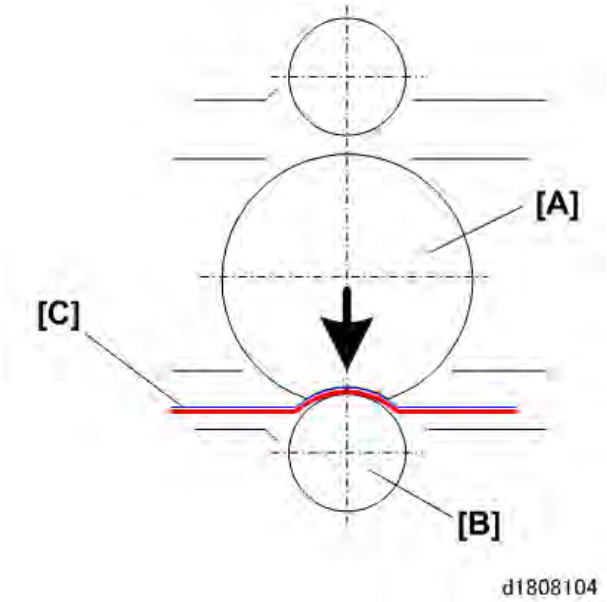
1. In the Finishing: Adjustment Settings for Skilled Operators > Finisher > Number of Sheets Align for Stapling > Reduce the number of sheets to be stapled. (SP 6-225-001 to 014: Adj Pre Stack Number (size) SEF)
2. Print the image. Is the problem resolved?

Yes	Finished!
No	If the problem persists even though the setting has reached its minimum value, consult key operators.

Note

- If the number of sheets to be stapled is reduced, paper alignment will take longer, compromising the machine's throughput.

Streaks Appear 4 mm Apart on the Leading Edge of the Stacked Paper



Cause:

During back-curl correction the paper is compressed in the nip of the sponge roller [A] above and the decurl roller [B], so the sponger roller can press down to correct paper curl. When the image on the paper [C] is facing up when the sponge roller presses down, this can cause toner from the image to detach and foul the anti-static brush which then transfers this loose toner to the leading edge of each sheet.

This can occur when:

- Decurl unit is connected
- Poor stacking, and back-curl correction in effect
- Image on the paper is facing up

Solution:

1. Is it possible to disable back-curl correction?

Yes	Disable back-curl correction. Adjustment Settings for Skilled Operators > Main: Paper Feed/Exit Adjustment > Paper Curl Correction > Off. (SP 1-906-001 to 007: De-curler Setting Tray <number> :Paper Path Selection)
No	Go to Step 2.

2. Determine if the paper can be output with the image side facing down.

Yes	Invert the paper for output. On the operation panel, set the paper to exit the main machine face down
No	Go to Step 3.

3. Remove the anti-static brush. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

Note

- Removal of the anti-static brush before the stapling unit can affect the accuracy of stapling, so the number of sheets shunted to the pre-stacker of the finisher must be reduced. Reducing the number of sheets sent to the pre-stacker before stapling will slow down the line, so be sure to consult key operators before you do this with SP 6-225-001 to 014: Adj Pre Stack Number (size) (<SEF or LEF>.

1.5.2 MULTI-FOLDING UNIT

Poor Folding

Cause:

Depending on paper hardness, inaccurate folds may result. This is referred to as folding deviation.

Solution:

Change the folding position by adjusting the position of the paper edge stopper for folding.

1. For multi-sheet folding, change the folding position using the following settings:
   - Half Fold Position (Multi-sheet Fold) (SP 6-752-101 to 119: FM2 Equal 1/2:FineAdjFld(D615) (size) SEF (Multi Sheet))
   - Letter Fold-out Position 1 (Multi-sheet Fold) (SP 6-753-101 to 108: FM3 Equal 3rds:Fine Adj 1st (size) SEF (Multi Sheet))
   - Letter Fold-out Position 2 (Multi-sheet Fold) (SP 6-754-101 to 108: FM3 Equal 3rds:Fine Adj 2nd (size) SEF (Multi Sheet))
   - Letter Fold-in Position 1 (Multi-sheet Fold) (SP 6-755-101 to 110: FM4 3rds 1 Flap:Fine Adj 1st (size) SEF (Multi Sheet))
   - Letter Fold-in Position 2 (Multi-sheet Fold) (SP 6-756-101 to 110: FM4 3rds 1 Flap:Fine Adj 2nd (size) SEF (Multi Sheet))
2. For single-sheet folding, change the folding position using the following settings:
   - Adjust Z-fold Position 1 (SP 6-750-001 to 100: FM1 Z-Fld: Fine Adj 1st Fld Custom Paper 001 to 100)
   - Adjust Z-fold Position 2 (SP 6-751-001 to 100: FM1 Z-Fld: Fine Adj 2nd Fld Custom Paper 001 to 100)
   - Half Fold Position: Single-sheet Fold (SP 6-752-001 to 100: FM2 Equal 1/2:FineAdjFld(D615) Custom Paper 001 to 100)
   - Letter Fold-out Posn 1: Single-sheet Fld (SP 6-753-001 to 100: FM3 Equal 3rds:Fine Adj

1st Custom Paper 001 to 100)

- Letter Fold-out Posn 2: Single-sheet Fld (SP 6-754-001 to 100: FM3 Equal 3rds:Fine Adj 2nd Custom Paper 001 to 100)
- Letter Fold-in Posn 1: Single-sheet Fold (SP 6-755-001 to 100: FM4 3rds 1 Flap:Fine Adj 1st Custom Paper 001 to 100)
- Letter Fold-in Posn 2: Single-sheet Fold (SP 6-756-001 to 100: FM4 3rds 1 Flap:Fine Adj 2nd Custom Paper 001 to 100)
- Double Parallel Fold Position 1 (SP 6-757-001 to 100: FM5 4ths "V": Fine Adjust 1st Custom Paper 001 to 100)
- Double Parallel Fold Position 2 (SP 6-758-001 to 100: FM5 4ths "V": Fine Adjust 2nd Custom Paper 001 to 100)
- Adjust Gate Fold Position 1 (SP 6-759-001 to 100: FM6 4ths 2 Flap:Fine Adj 1st Custom Paper 001 to 100)
- Adjust Gate Fold Position 2 (SP 6-760-001 to 100: FM6 4ths 2 Flap:Fine Adj 2nd Custom Paper 001 to 100)
- Adjust Gate Fold Position 3 (SP 6-761-001 to 100: FM6 4ths 2 Flap:Fine Adj 3rd Custom Paper 001 to 100)

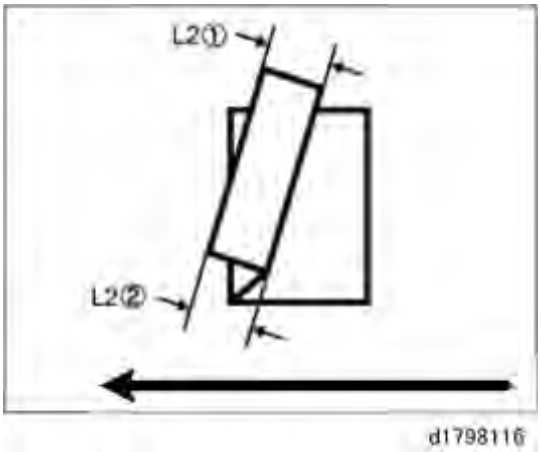
Folding Deviation

Cause:

Depending on paper hardness, folding deviations (skewed folding) may appear.

- A deviation may appear if the edge dimensions of the parts between folds are different.
- For example, in the following illustration, the dimensional difference between the top (L2[2]) and bottom (L2[1]) edges is a deviation.

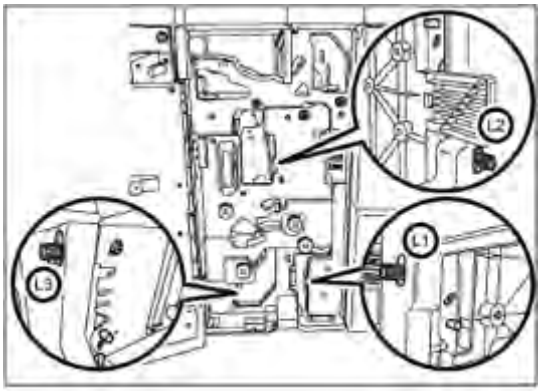
<Folding deviation sample of L2 for Z-fold>



Solution:

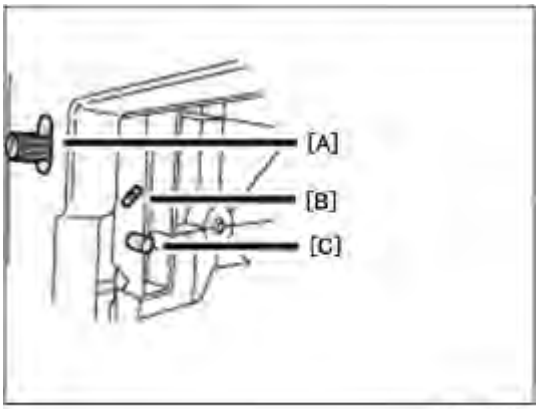
Adjust the deviation.

The multi-folding unit has three adjusting screws (L1, L2, and L3) to adjust deviation.



d1798117

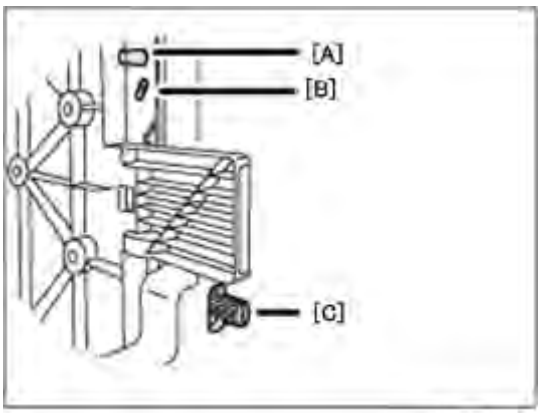
L1



d1798118

[A]	Adjusting Screw
[B]	Adjusting Screw Hole
[C]	Mounting Screw/

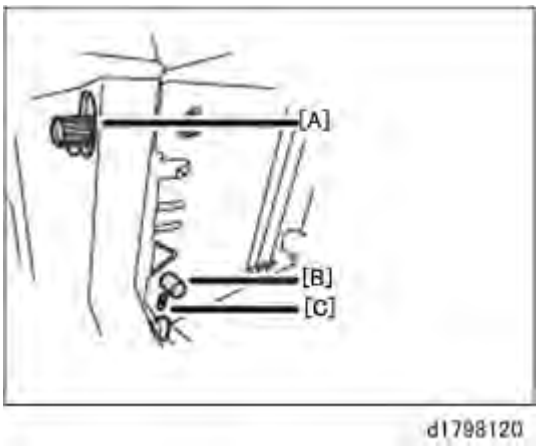
L2



d1798119

[A]	Mounting Screw
[B]	Adjusting Screw Hole
[C]	Adjusting Screw

L3

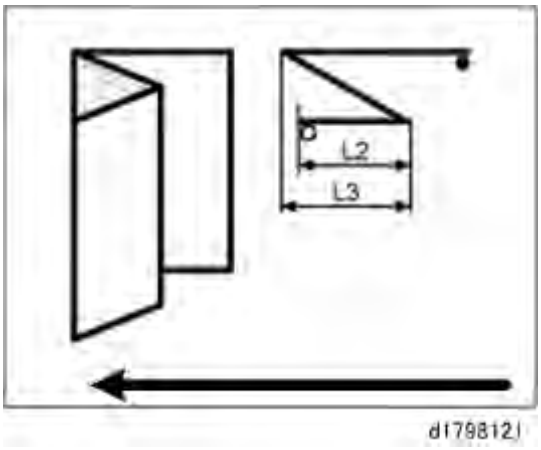


d1798120

[A]	Adjusting Screw
[B]	Mounting Screw
[C]	Adjusting Screw Hole

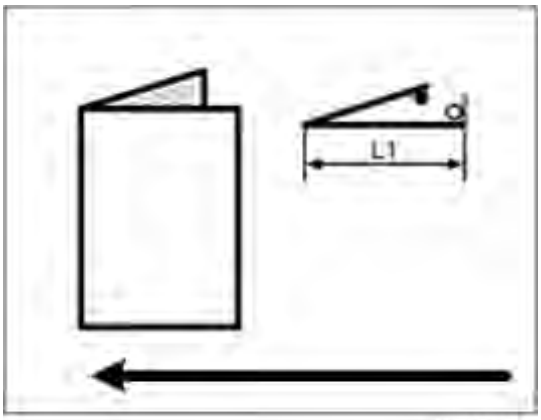
The screws can be used to do adjustments for the following fold methods:

- Z-fold

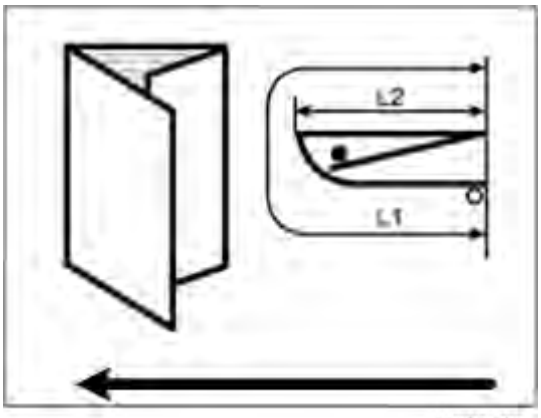


d179812J

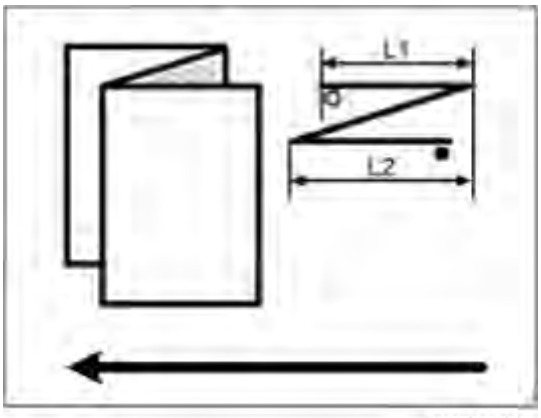
- Half Fold



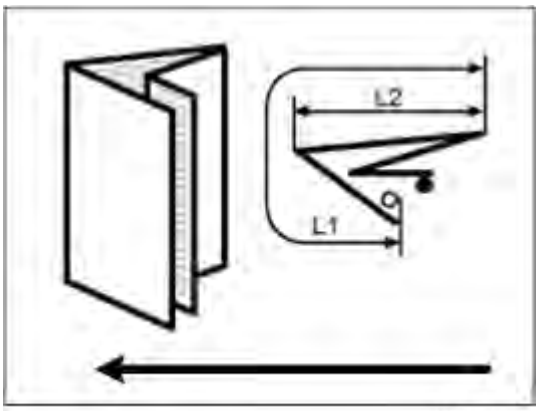
- Letter Fold-in



- Letter Fold-out

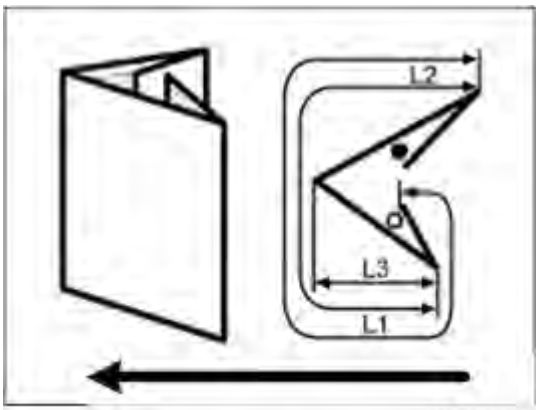


- Double Parallel



d1798125

- Gate Fold



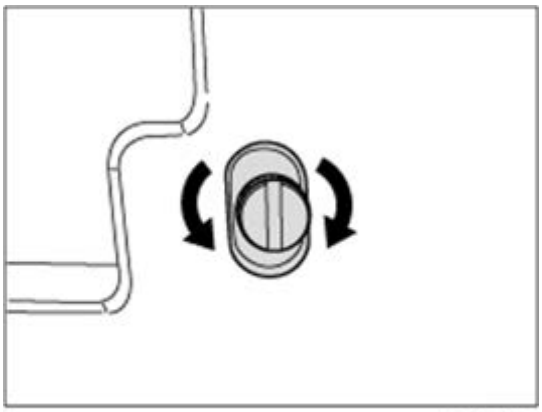
d1798126

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

How to adjust the folding deviation

This procedure is the same for L1, L2, and L3.

1. Open the front cover of the multi-folding unit.
2. Remove the mounting screw.
   If the mounting screw is attached to the adjusting screw hole, unfasten it.
3. Turn the adjusting screw to adjust the deviation.
   - To increase the length at the bottom part of paper, turn the screw clockwise.
   - To decrease the length at the bottom part of paper, turn the screw counterclockwise.



4. Attach the mounting screw to fasten the adjusting screw.
   If the mounting screw is attached to the adjusting screw hole, fasten it.
5. Close the front cover of the multi-folding unit.

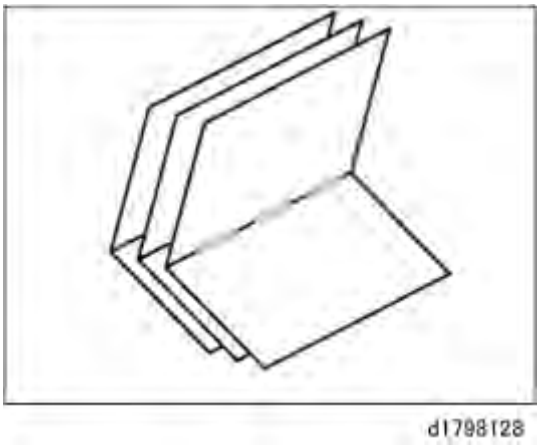
Note

- For multi-sheet folding, the folding deviation that appears in the center of paper will be adjusted.
- If the deviation is large, the paper may be skewed. For further information, see page 77 "Paper Skew".

Folds Soiled by Multi-Sheet Folding

Cause:

If multi-sheet folding is performed after a large number of Z-folds have been performed, the tip of the blade used for the multi-sheet folding may be soiled, resulting in soiled paper.

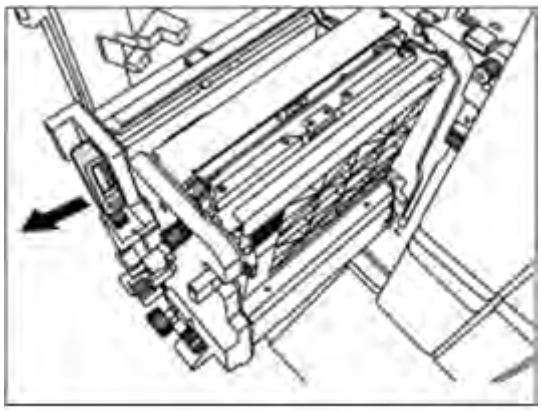


This will produce paper soil of 1-3 cm (0.4-1.2 inches) in width (equal to the width of the blade) in the fold in the center of paper.

Solution:

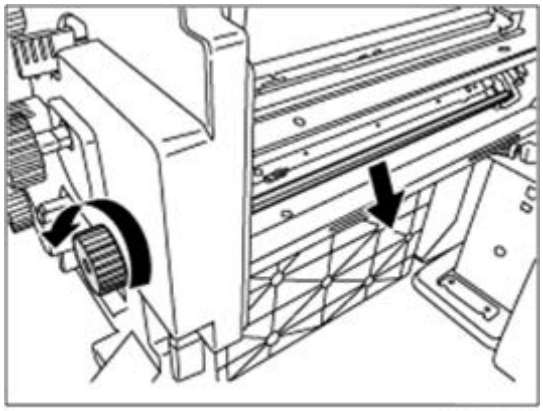
Clean the blade.

1. Open the front cover of the multi-folding unit.
2. Pull the multi-folding unit out.



d1798129

3. Turn the N11 dial counterclockwise until the blade appears.
   The blade is located in the right part of the multi-folding unit.

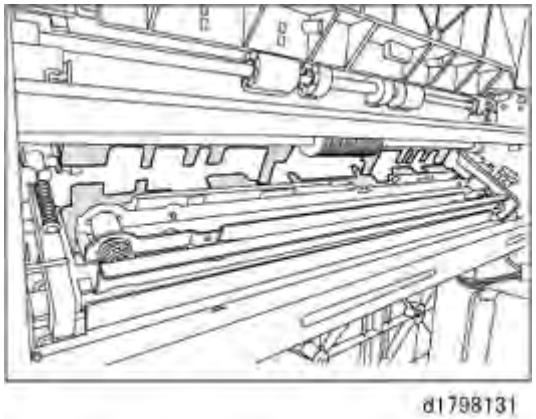


d1798130

4. Wipe the tip and top of the blade with a soft dry cloth.

Important

- Be careful not to damage the blade.

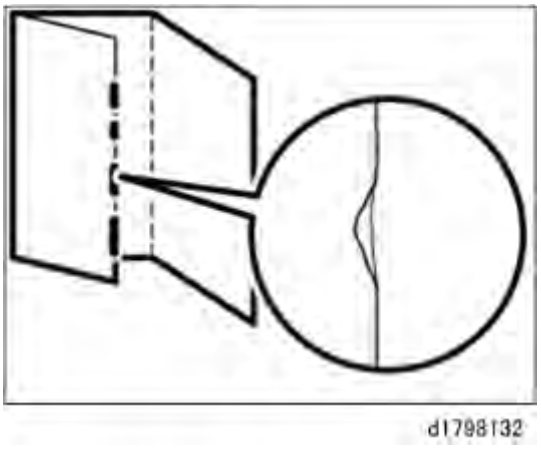


d1798131

5. After cleaning, restore the machine so that it resumes operation.
6. Apply multi-sheet folding and print 3-5 copies. The paper soil will disappear.

Edges of Letter Fold Bent

When letter folding is applied, the edge of the inner flap may become bent.



Solution:

The solution depends on whether letter folding is applied to multiple sheets or a single sheet.

When letter folding is applied to multiple sheets

1. Load the paper the other side up.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. On the machine operation panel: [User Tools] > System Settings > General Features > Set Letter Fold-in Position for multiple sheets to "4.0 mm". (SP 6-755-101 to 110: FM4 3rds 1 Flap:Fine Adj 1st (size) SEF (Multi Sheet))
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

When letter folding is applied to a single sheet

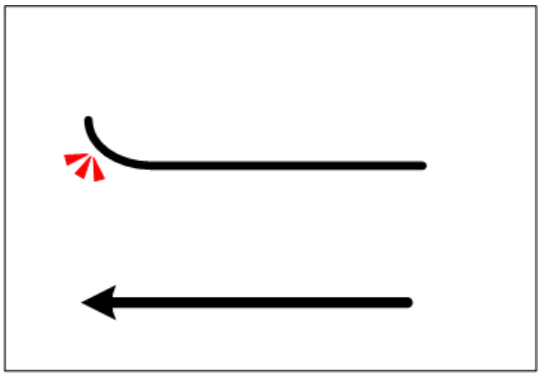
Note

- This procedure is applied especially to coated paper.
- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

1. In General Features in System Settings, set Letter Fold-in Position for a single sheet to "7 mm".
2. In Advanced Settings for the custom paper in use, select Letter Fold-in Posn 1: Single-sheet Fold. (SP 6-755-001 to 100: FM4 3rds 1 Flap:Fine Adj 1st Custom Paper 001 to 100)
3. Increase the value by 0.2 mm.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Step 2 to 4. If the problem persists even though the setting value is 4 mm larger than the maximum value, consult key operators.

Z-Folding Is Not Performed Correctly



d1798133

The delivered paper has an upward curl with a arc of 4 cm (1.6”) or less at leading edge.

Solution:

1. Is the decurl unit installed?

Yes	Go to the next step.
No	Go to Step 4.

2. On the machine operation panel: Adjustment Settings for Skilled Operators > Paper Feed/ Output > Set Adjust Paper Curl to Adjust Concave Curl: Weak. (SP 1-906-001 to 007: De-curler Setting Tray <number>:Paper Path Selection)
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Load the paper the other way up.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult key operators.

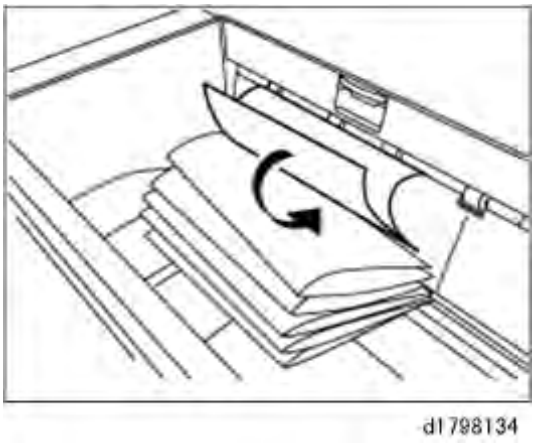
Note

- This folding error will not occur if uncurled paper is used or sheets that curl downward.

Folded Sheets Are Not Stacked Properly

Cause:

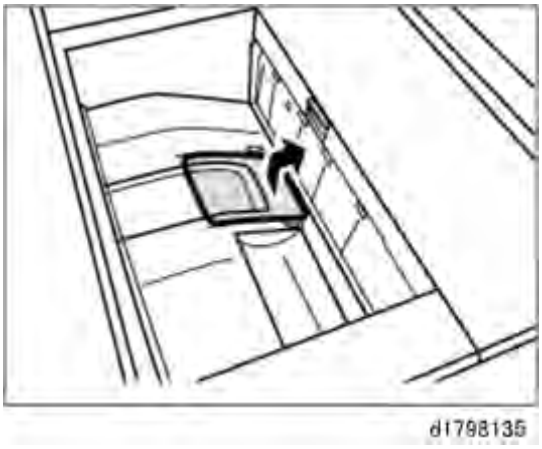
If a large number of half-folded multi-sheet is delivered, the edge of the sheets may bulge and some part of the edge will be swollen. If this happens, other sheets loaded on the bulged paper may turn over in the output tray. This is likely to occur if thick, relatively stiff paper is used.



As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

Solution:

Use the Z-fold support tray for multi-folding unit. This will reduce the angle of stacked bundles and prevent bundles flipping over as they are delivered.



For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

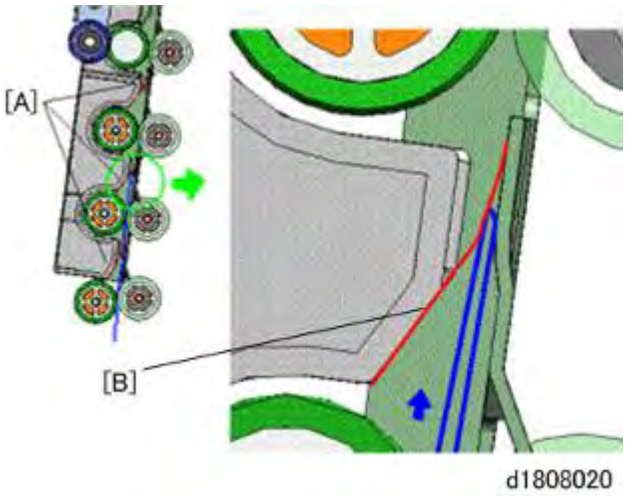
Note

- If the Z-fold support tray for the multi-folding unit is attached, folded paper such as letter-folded paper or gate-folded paper will not turn over in the output tray when delivered.

Matte Paper Scratched During Folding

The surface of matte finish paper shows scratches after folding.

Cause:



When the folded paper is transported to the fold crease unit, the leading edge (creased edge) enters the fold nip prepared level for the press guide, and then is pressed by the on the paper transport guide. The press guide is provided with three press rollers [A]. The friction between the press guide and press guide plate as the paper is fed can scratch or mark the matte finish of the paper.

Note

- The surface of the guide plate is rough and can cause marks on the surface of the paper. The surface of the plate becomes smoother after about 2,000 sheets have feed through the folding unit and these marks disappear.
- The surface of gloss coated paper is much smoother, so these marks do not appear on glossy paper.
- The surface of Normal paper is untreated, so these marks do not appear with Normal paper.

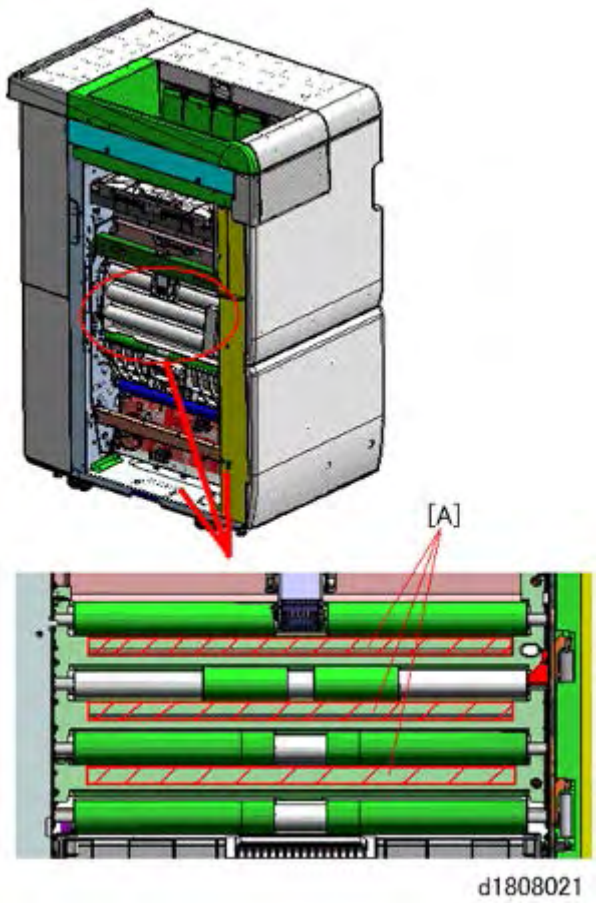
Solution:

1. Open the guide plate and clean the metal plate at [A] with an alcohol dampened cloth.
2. Print and fold a sample. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Take a piece of paper and gently rub the surface of the metal plate to smooth it, and then do another test. Is the problem solved?

Yes	Finished!
No	Repeat Steps 1 and 2. If the problem persists, consult key operators.



Note

- Cleaning the surface of the metal guide plate and buffing it with a piece of paper reduces the occurrence of marks on the paper.
- The present condition of the guide plate at the affected area depends on the amount of usage of the folding unit, but buffing the surface of the plate with paper 20 to 50 times should reduce friction during paper feed.

Important

- After buffing the with paper, always clean the surface of the plate with a clean cloth dampened with alcohol to remove tiny bits of paper that could adhere to the plate after buffing.

1.5.3 RING BINDER RECOGNITION: SC756-48

Cause:

- In a system where the Ring Binder is installed, there may be cases when the main machine issues SC756-48 (Ring Binder: Ring Binder Not Detected) when the Ring Binder door is opened, the ring binder unit is pulled out of the machine, upon recovery from low energy mode, or when the main machine is turned on.
- Occasionally, closing the door will not release SC756-48.

Note

- If the system is powered on with the ring binder unit pulled out, the ring binding system may not start up normally.

Solution:

1. The system recovers from low energy mode, or is powered on, with the ring binder unit pulled out of the machine.
2. The machine issues SC756-48 on the operation panel.
3. The ring binder reset and the door was closed.
4. When the ring binder function is selected for use, SC756-48 pops up on the operation panel.
5. Wait for the current copy or print job to end, and then cycle the main machine off/on.
6. Does SC756-48 display again, even after cycling the machine off/on?

Yes	The Ring Binder is malfunctioning. The problem requires further investigation, so consult key operators.
No	Finished!

1.6 IMPROVING THROUGHPUT

1.6.1 REDUCING THE WAITING TIME PRIOR TO PRINTING

After receiving a print job, the machine usually stops to let the fusing temperature reach an appropriate level for printing. The waiting time for the fusing unit to cool down may be quite long, especially before printing on thin paper. By decreasing the fusing temperature during standby, you can reduce the waiting time.

1. On the machine operation panel: Adjustment Settings for Skilled Operators > Image Quality > Adjust Fusing Temperature on Standby > Decrease the temperature by 10°C.
2. Decrease by 10°C the values for Temperature on Standby Mode, Temperature on Low Power Mode, and Temperature Before Performing a Process.
   - SP 1-107-001: Standby Target Temp. Setting Standby: Center
   - SP 1-107-005: Standby Target Temp. Setting Low Power: Center
   - SP 1-107-007: Standby Target Temp. Setting Print Ready: Center

Note

- When printing on paper other than thin paper, we recommend leaving the above settings unchanged

1.6.2 IMPROVING THROUGHPUT WITH COATED PAPER

This procedure describes measures for printing on coated paper that equivalent to Paper Weight 7 or higher. When printing on coated paper with a thickness equivalent to Paper Weight 7 or higher, the machine's copy/print speed must be reduced to 80% of full speed (for A4 paper) so that the degree of toner fixation can be enhanced. However, depending on the type of paper in use and printed image, you can have the machine print at full copy/print speed.

The following are requirements for improving throughput when using coated paper with a thickness equivalent to Paper Weight 7 or higher are described below.

1. In Advanced Settings for the custom paper in use, increase the value in Process Speed Setting by one step. (SP 1-986-001 to 100: Process Speed Custom Paper 001 to 100)
   - If it is presently set to Low, change it to Middle.
   - If it is presently set to Middle, change it to High.
2. Set “Fusing Heat Roller Temperature Adj” to 185°C. (SP 1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100)
3. Print the image. Does it exhibit any fusing problem?

Yes	You cannot improve throughput under the present condition. Restore the previous setting.
No	You can operate the machine using this setting.

The following table shows the copy/print speed available for each item in “Process Speed Setting”.

Mode	Speed/Machine
High (Full Speed)	135 cpm (Pro 8120S) 110 cpm (Pro 8110S) 95 cpm (Pro 8100S)
Middle	110 cpm (Pro 8120S)
Low	95 cpm (Pro 8120S) 95 cpm (Pro 8110S)

1.6.3 REDUCING WAIT TIME WITH MIXED PAPER

When using mixed paper the fusing unit settings can switch to accommodate the different types and sizes of paper, and this affects the wait time which can lower productivity. However, depending on how the client is using the machine, there are occasions when it is best for the client to operate the machine even when fusing conditions are not exactly ideal. This procedure describes how to confirm whether the wait time during jobs with mixed paper can be reduced. There are three cases when wait time can occur:

- **Case 1**. For brand name paper where there is a large difference in the heating roller temperature between the previous and adjusted paper thickness setting.
- **Case 2**. For brand name paper where there is a large difference in the heating roller temperature in the paper thickness setting for the width (front-to-rear on paper path is the length).
- **Case 3**. Repeated low volume print jobs.

This procedure describes how to reduce the wait time for Case 1 above.

Solution:

1. Are the heating roller temperature settings different for the intervals between different types of paper?

Yes	Go to Step 2.
No	No solution for this machine.

2. Raise the setting for low heating roller temperature paper by +5C. (SP 1-984-001 to 100: Htg Roller Temp Setting Custom Paper 001 to 100) (Upper limit: This is the same as the as the temperature for paper of high temperature.)
3. Do a sample print. Did this reduce the wait time?

Yes	Go to Step 4.
No	Repeat Step 2.

4. Can you get permission from the client to reduce efficiency of paper feed?

Note

- This step could possibly cause paper curl, jams, or wrinkling with low fusing temperature paper.

Yes	Go to Step 5.
No	No solution for this machine.

5. Can you get permission from the client to reduce image quality?

Note

- This step could possibly cause paper curl, jams, or wrinkling with low fusing temperature paper.

Yes	Finished!
No	No solution for this machine.

Important

- Never reduce the heating roller temperature for high fusing temperature paper. Doing so could cause poor fusing and foul the parts inside the machine with toner.

1.7 OTHER PROBLEMS

1.7.1 ITB CENTERING: SC CODES: SC471-04, -05, -06

Cause:

The machine issues the following SC codes when the machine ITB steering control mechanism cannot correct the position of the ITB to compensate for the belt shifting out of position during operation of the system:

- SC471-04: ITB position error 2
- SC471-05: ITB position error 3
- SC471-06: Belt centering sensor error

Solution:

The value of SP 2-920-002 (Steering Control Roller Stable Position of Steering Roller) displays the target setting (-20≦SP Value ≦+20) for the optimum position of the ITB used to reset the ITB to its optimum position with steering control after the lubricant application mode has been executed so the ITB is positioned correctly for stable operation.

Important

- The current setting of SP2-920-002 and the setting of the steering plate during operation and before and after adjustment for any operation where lubricant was applied are recorded.
- If the optimum position of the belt cannot be recovered, then that value of the setting should be passed to the key operator in order to solve future problems.

Note

- SP2-920-002 (Steering Control Roller Stable Position of Steering Roller) displays the number of steps used in operation of the steering control motor that diagonally adjusts the position of the steering control roller to keep the belt at the initial position. The target setting for this SP code is "0". If the displayed setting is within range [-20≦SP≦+20], the position can be controlled within ±2 mm.
- This troubleshooting procedure is not required if the ITB has been replaced after the service life of the ITB has expired and no ITB-related SC code has been issued.

Preparation for Lubricant Application Mode

This procedure is the same as that done for setting the machine in the lubrication application mode after the ITB has been replaced.

1. Remove the drum cleaning unit.
2. Remove the PTR unit.
3. On the front of the ITB unit, turn both blade levers clockwise.
4. Remove the ITB unit.

Make Sure the Machine is Level

If the machine is level within 5 mm, this could cause the belt to cant to the front or rear and negate these adjustment procedures..

1. Re-install the ITB. (Field Service Manual > ITB Unit > Belt Replacement > Belt Re-installation)
2. Open SP2-310-002 (Force Apply Lubricant Operation Time Setting), and then change the setting from 300 to 100 sec.
3. Open SP2-920-013 (Steering Control Roller Timeout of Belt Ready), and then change the setting from 400 to 105 sec.

Note

- The timing settings for these SP codes must be shortened from their normal operation settings in order to allow diligent operation checks.
- Reducing **SP2-310-002** to 100 sec. allows the machine to apply lubricant at 100 sec. intervals, confirm the stable position of the belt, and then adjust the belt to the positions of the left and right scale plates.
- Depending on the conditions of the machine, after application of the lubricant ends the belt may not be adjusted to its correct position within the target range within 100 sec. This can occur if the belt has been re-installed out of position. In this case after the SP executes lubricant application for 10 sec. and stops, if the machine is not able to do the correction quickly enough, so beforehand the belt ready **SP2-920-013** timeout setting is set to 105 sec. If the machine cannot correct the belt position within 105 sec. the machine issues SC471-01 (Belt Position Ready Timeout), and SP2-310-002 (applying the lubricant) stops, and then starts the process again after the belt has been steered to the correct position.

1. Set the following steering control SP codes to “0”.
   - SP 2-920-002 (Steering Control Roller Stable Position of Steering Roller)
   - SP 2-920-004 (Steering Control Roller Last Time Ai Value)
2. SP 2-310-001 (Force Apply Lubricant Belt Cleaning) – 1st Execution
   - SP2-310-001 executes (100 sec.) After the SP executes, check the value of SP2-920-002 (Steering Control Roller Stable Position of Steering Roller).
   - If the value is -20≦SP Value≦+20, do the next 2nd SP execution. At this time the SP value in Step 4 is not set to “0”.
   - If the value is <-20 or +20< the SP value, then the “Steering plate Adjustment” described below is required. After this adjustment, set the value for the Step 4 SP to “0”, and then do the 2nd SP execution.

⟹ 3. Do SP2-310-001 – 2nd Execution
   - Do SP2-310-001 (100 sec.). After this SP executes, check the value of SP2-920-002 (Steering Control Roller Stable Position of Steering Roller)
   - If the value is -20≦SP Value≦+20, do the next 3rd SP execution. At this time the SP value in Step 4 is not set to “0”.

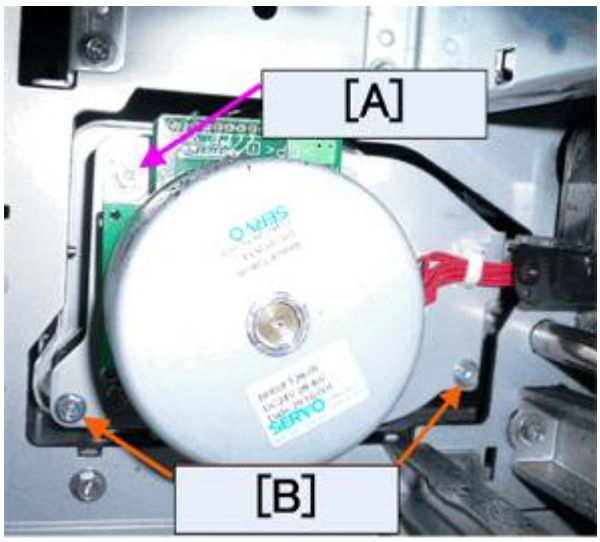
- If the value is <-20 or +20< the SP value, then the “Steering plate Adjustment” described below is required. After this adjustment, set the value for the Step 4 SP to “0”, and then do the 3rd SP execution.

⇒ 4. Do SP2-310-001 – 3rd Execution
- Do SP2-310-001 (100 sec.). After this SP executes, check the value of SP2-920-002 (Steering Control Roller Stable Position of Steering Roller)
- If the value is -20≦SP Value≦+20, do the next 4th SP execution. At this time the SP value in Step 4 is not set to “0”.
- If the value is <-20 or +20< the SP value, then the “Steering plate Adjustment” described below is required. After this adjustment, set the value for the Step 4 SP to “0”, and then do the 4th SP execution.

⇒ 5. Do SP2-310-001 – 4th Execution
- Do SP2-310-001 (100 sec.). After this SP executes, record the value of SP2-920-002 (Steering Control Roller Stable Position of Steering Roller)

6. After doing the 4th execution of SP2-310-001, do one of the following, using the value of the setting for SP2-920-002 (Steering Control Roller Stable Position of Steering Roller).
- If SP value <-20 or +20<SP value: Check the ITB unit, and then reset the ITB belt unit, and then repeat lubricant application in Step 4.
- If -20≦SP Value≦+20: Reset the following SP codes to their default settings:
  For SP2-310-002 change the "100" setting to "300" to restore the default.
  For SP2-920-013 change the "105" setting to "400" to restore the default.
- Next, do Steps 11 and 12. If you did not do the adjustment for the right control plate, skip Steps 11 and 12, and then go to Step 13.

7. Open the controller box. (Field Service Manual > Replacement and Adjustment > Common Procedures > Controller Box, Controller Box Cover > Opening the Controller Box)
8. Loosen the three screws of the ITB/PTR motor bracket, and then tighten them.



d1808023

Note

- This step is required the correct the positions of these screws [A] and [B] because adjustment of the right steering plate can cause these screws slip out of position between the ITB unit and the ITB/PTR motor.

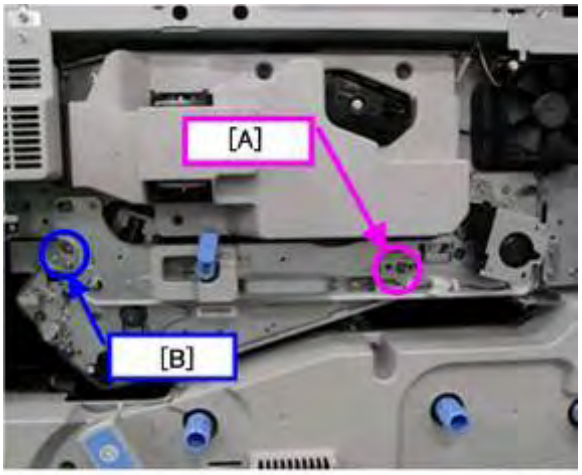
Important

- Recommended torque for screw [A]: 0.9±0.1N m
- Recommended torque for screws[B: 0.7±0.1N m
- Screws [B] are made of resin-based material, so do not apply to much force when loosening and tightening them.

1. Do these procedures, and check the re-installation. This completes the procedure.
   - Close the controller box.
   - Re-install the drum cleaning unit.
   - Raise the ITB lever so the ITB is in contact with the drum.
   - Re-install the PTR unit.
   - Raise the levers on the front of the ITB cleaning unit so the blades are up in the operating position.

Steering plate Adjustments

Do this procedures if the results of the 1st, 2nd, and 3rd executions of SP2-920-002 were SP Value<-20 or +20<SP Value. There are two plates, a left steering plate and a right steering plate. The right steering plate should be adjusted first, and then the left steering plate.



d1808024

Note

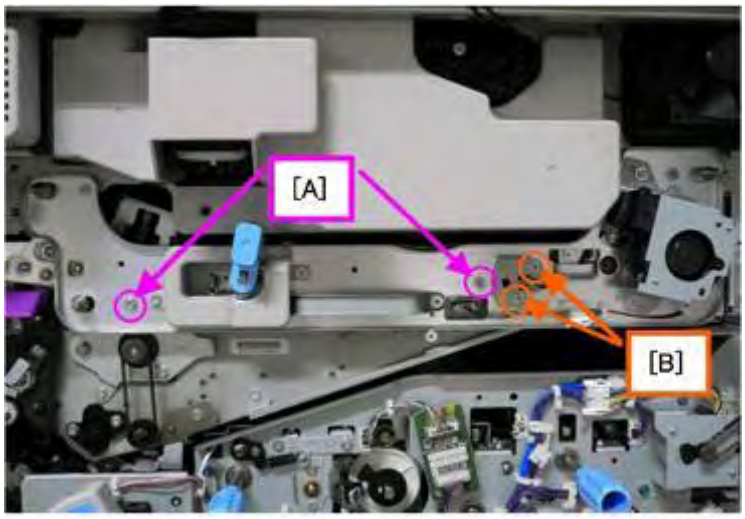
- The range of adjustment for the right steering plate [A] is ±1 on its notched scale.
- The range of adjustment for the left steering plate [B] is ±6 on its notched scale.
- Adjustment of the SP code may have no effect if the right plate has been previously adjusted. For example, if the right steering plate has already been adjusted to +1 on its scale, this corresponds to a +30 setting of the SP code and further adjustment will have no effect.

- However, if the right steering plate has been adjusted to "-1" or "+1" before leaving the factory, the right steering plate should not be adjusted. Leave the right steering plate at its factory setting, and adjust the left steering plate.

Right Steering Plate Adjustment

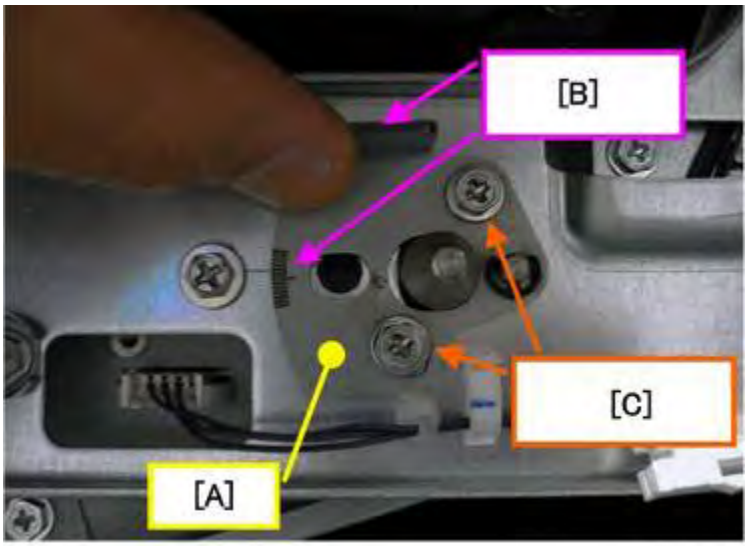
1. Execute application of lubricant with SP2-310-001, and then do SP2-920-002 (Steering Control Roller Stable Position of Steering Roller), and check its setting. Based on this setting, adjust the position of the right steering plate by referring to the table below.

SP2-920-002	From the Current Right Steering Plate Scale Setting	Comments
+21 to +150	+1	Move to upper part of scale
-20 to +20	No adjustment required	Within correct range
-20 to -150	-1	Move to lower part of scale



d1808025

2. Loosen (do not remove) the four screws at [A] and [B].



d1808026

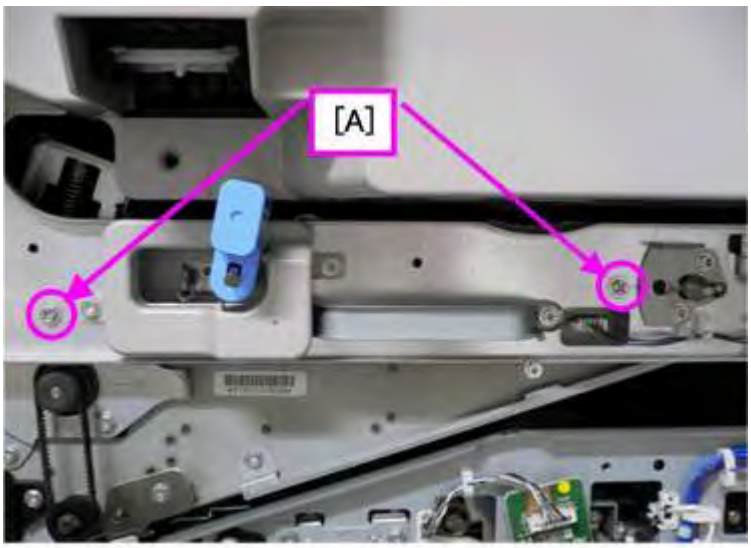
3. Move the adjustment plate [A] to the scale [B], and then tighten both screws [C].

   Example 1

   If the right steering plate was set to "-1" and the SP setting was "+30", move the plate to the up one notch (+1) to "0" on the scale.

   Example 2

   If the right steering plate was set to "+1" and the SP setting was "+30", the position of the plate cannot be adjusted. You will have to adjust the left steering plate up one notch (+1). If the left steering plate is at the "0" notch, move the plate up one notch (+1), or of the plate is at +1, move the plate up two notches (+2).

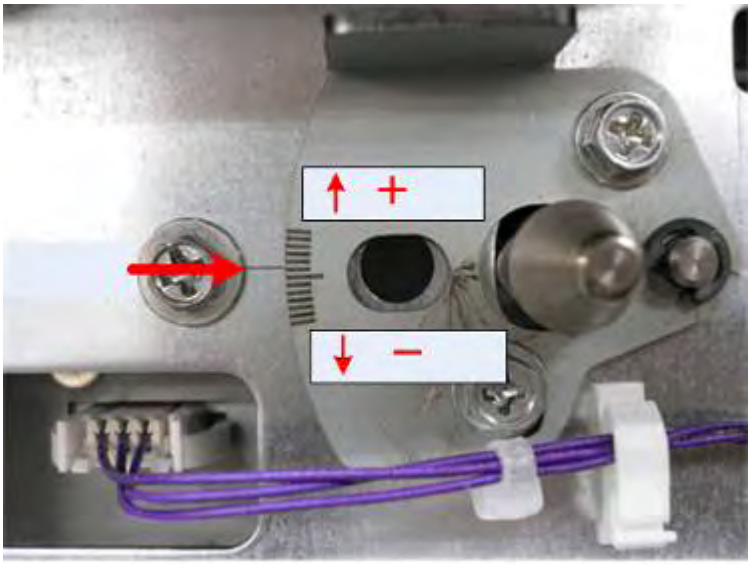


d1808027

4. Tighten both screws [A]. Make sure that the plate is at the correction position on the scale. This completes manual adjustment of the plate.
5. Return to Step 5 in the previous section and restore these SP codes to their default settings.
   - SP 2-920-002 (Steering Control Roller Stable Position of Steering Roller)

- SP 2-920-004 (Steering Control Roller Last Time Ai Value)

Right Steering Plate Scale Adjustment Example



d1808028

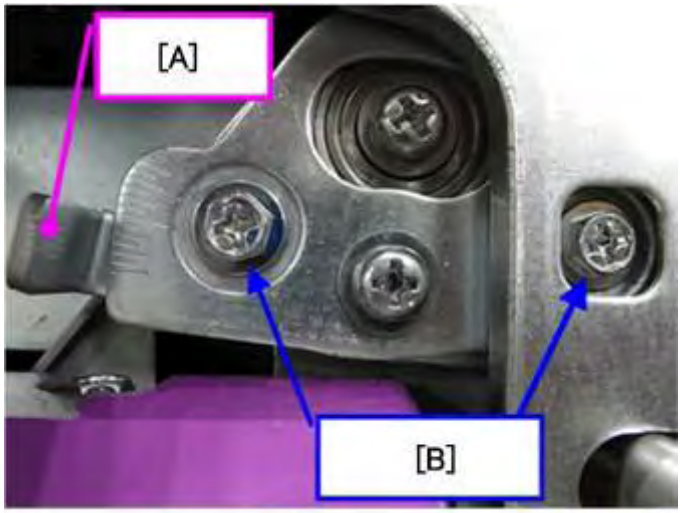
The setting for SP2-920-002 (Steering Control Roller Stable Position of Steering Roller) was "+30", so the right steering plate was adjusted to "+1".

Left Steering Plate Adjustment

1. After executing SP2-310-001 (Force Apply Lubricant Belt Cleaning), do SP2-920-002 (Steering Control Roller Stable Position of Steering Roller) and check its setting. Based on this setting, adjust the position of the left steering plate by referring to the table below.

SP2-920-002	From the Current Left Steering Plate Scale Setting	Comments
+150 to +121	+5	Move to upper part of scale. If you cannot adjust to +5, move to +6.
+120 to +96	+4	
+95 to +71	+3	
+70 to +46	+2	
+45 to +21	+1	
-20 to 0 to +20		
-21 to -45	-1	Move to lower part of scale. If you cannot adjust to -5, move to -6.
-46 to -70	-2	
-71 to -95	-3	

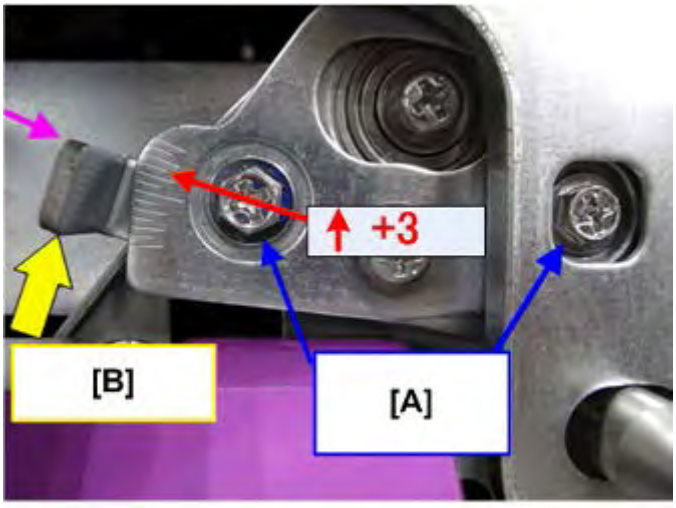
SP2-920-002	From the Current Left Steering Plate Scale Setting	Comments
-96 to -120	-4	
-121 to -150	-5	



d1808029

2. Loosen (do not remove) both screws [B].
3. Move lever [A] to the desired notch, and then tighten both screws [B].
4. Return to Step 5 (under the main **Solution** procedure above), and then execute the force lubricant belt cleaning (SP2-310-001) and the steering control position setting (SP2-920-002).

Left Steering Plate Scale Adjustment Example



d1808030

The setting for SP2-920-002 (Steering Control Roller Stable Position of Steering Roller) was "+80", so the right steering plate was adjusted to "+3".

Countermeasures for Other SC Codes

These are countermeasures for solving other mechanical problems with the recurrence of SC741 series codes that may occur during these troubleshooting procedures.

SC471-01	Belt Position Ready Timeout
	The machine issues this error during normal operation when ITB steering control fails to move the belt within the 400 sec. prescribed by SP2-920-013 (SP 2-920-013: Steering Control Roller Timeout of Belt Ready). If the machine issues this SC during the troubleshooting procedures described above, this means the steering control failed to position the belt within 105 sec. after the SP code was changed from "400" to "105".
	The ITB was not re-installed correctly.
	Remove the ITB, re-install it correctly, and then do the lubricant application SP 2-310-00 (Force Apply Lubricant Belt Cleaning)

SC471-02	Belt Centering Roller HP Error
	There is a problem in the steering control mechanism.
	▪ The wire that controls steering is kinked, has slipped off the pulley, or is not set correctly. ▪ The belt centering HP sensor harness is loose, broken, defective, or the sensor is defective. ▪ The belt centering motor harness is loose, broken, defective, or the motor is defective.
	▪ Cycle the machine off/on. ▪ If the problem persists, remove the ITB unit, remove the belt, and then check the steering control mechanism wire, pulley, sensor and motor harness connections.

SC471-03	ITB Position Error 1
	The belt centering sensor detected that the belt has slipped out of position ±2mm. **Note**: This SC is logged, not displayed.
	The belt has slipped out of position after shipping from the factory, or the main machine has not been leveled correctly.
	No procedure is required. The purpose of this SC code is used for analysis of SC471-04 and SC471-05 described below. It indicates whether the belt is frequently slipping out of position during daily use or if there has been a sudden development of the belt slipping out of position easily.

SC471-04	ITB Position Error 2
	The front edge of the belt is slipping out of position.
SC471-05	ITB Position Error 3
	The rear edge of the belt is slipping out of position.
	▪ These errors may indicated that the belt has slipped out of position after shipping from the factory, or the main machine has not been leveled correctly. ▪ The belt centering sensor harness may be loose, broken, defective, or the sensor may be defective.
	▪ Remove the ITB unit, remove the belt, and then check the belt centering sensor. ▪ Carefully, re-install the ITB ▪ Be sure to do SP2-310-001 (Force Apply Lubricant Belt Cleaning) after re-installing the ITB.

SC471-06	Belt Centering Sensor Error
	There is a problem with the belt centering sensor readings.
	▪ The belt centering sensor harness is loose, broken, defective, the sensor could be defective, or something (a scrap of paper) could be interfering with operation of the sensor. ▪ The ITB is slipping too far to the front or too far to the rear. ▪ The lever of the belt centering sensor is riding up out of position.
	▪ Replace belt centering sensor ▪ Check the belt centering unit sensor and make sure that it is installed correctly. Make sure that the leading edge of the lever is not riding up onto the surface of the ITB as shown in the illustration below. ▪ After re-installing the ITB, be sure to do SP2-310-001 (Force Apply Lubricant Belt Cleaning) after re-installing the ITB.

d1808112

1.8 PAPER TRANSPORT ROLLER/RIB MAPS

1.8.1 HOW TO USE THESE MAPS

After long use the transport rollers and ribs of the guide plates that guide paper in the paper transport path become contaminated with paper dust and loose toner which can cause streaks or roller “footprints” to appear on paper, or on edges of stacked paper. Some simple cleaning procedures can eliminate these problems. This section provides paper transport maps that will help you easily identify the transport rollers and transport guide plate ribs that may require cleaning to eliminate these problems.

- Paper transport maps are provided for the main machine, LCT A3, and the finisher.
- The transport rollers and ribs described in this section are the ones in the paper transport path that can be accessed easily for paper jam removal.

When streaks or roller footprints appear:

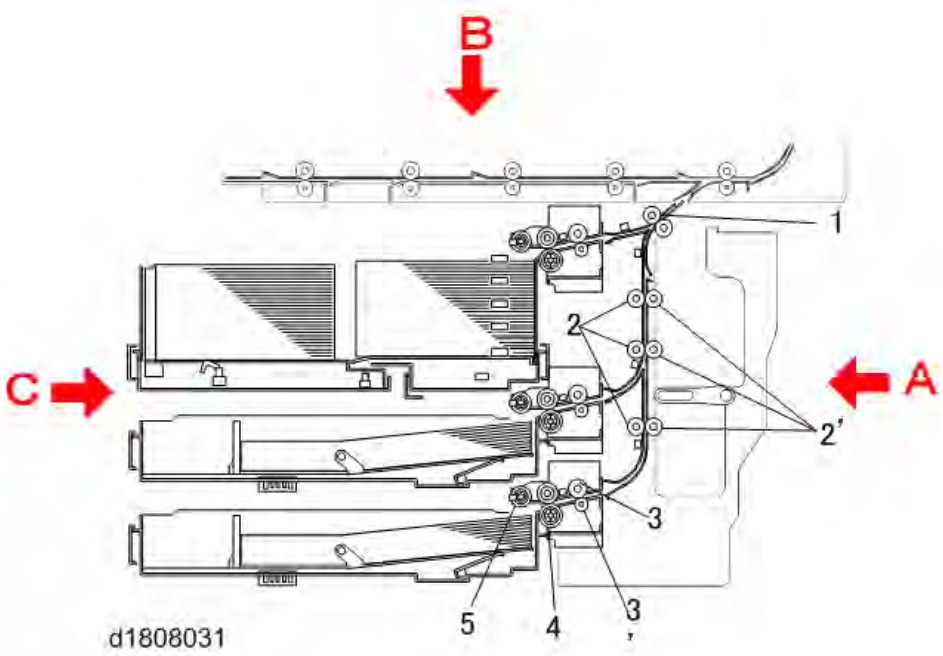
1. Take one sheet that is marked by streaks, and then fold it carefully exactly in half with the crease in the center and parallel to the direction of paper feed.
2. Lay the sheet on a flat surface, and then used a mm scale to measure from the fold line to the marks on the surface or edges of the paper.
3. Compare the measurements with the maps to identify the transport rollers/ribs that are causing the problem, and then clean them. For more details about how to clean the rollers and transport path, see the Field Service Manual > PM Parts List.

Note

- All of the measurements given in the line drawings are given in millimeters.
- The measurements are the “target” measurements of the design drawings. There may be very slight differences between these design measurements and actual measurements due to minute variations in machine manufacture, component manufacture, and component wear. Therefore, the actual measurements taken from the folding paper may not exactly match the location of transport roller or rib.

1.8.2 PAPER TRANSPORT UNITS

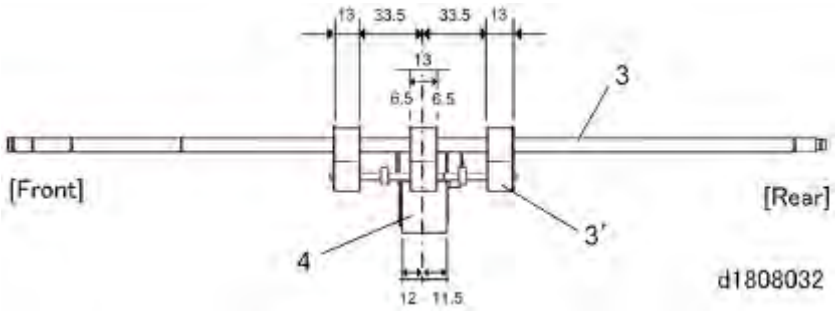
Overall Layout



Note the positions of the red arrows and letters in the diagram above. They are used in the map titles to indicate the direction of view so you can orient the map to the machine and identify the transport rollers and ribs:

- **A**: Right View
- **B**: Top View
- **C**: Left View

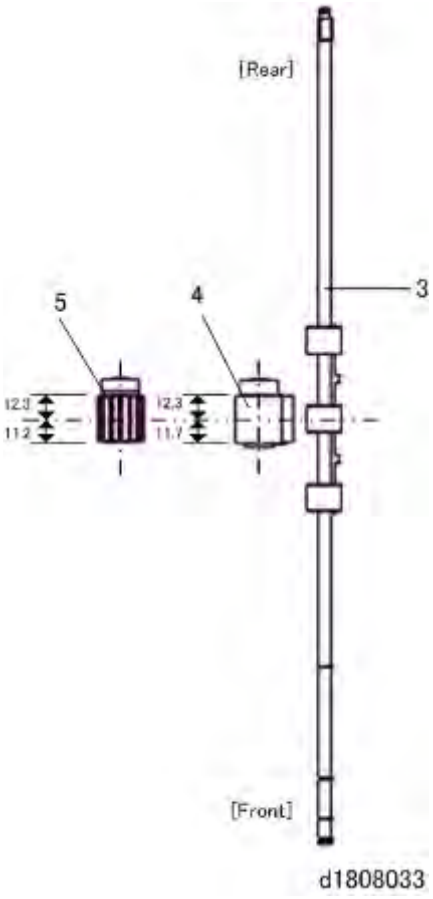
Paper Feed 1-1: View A (Right Side)



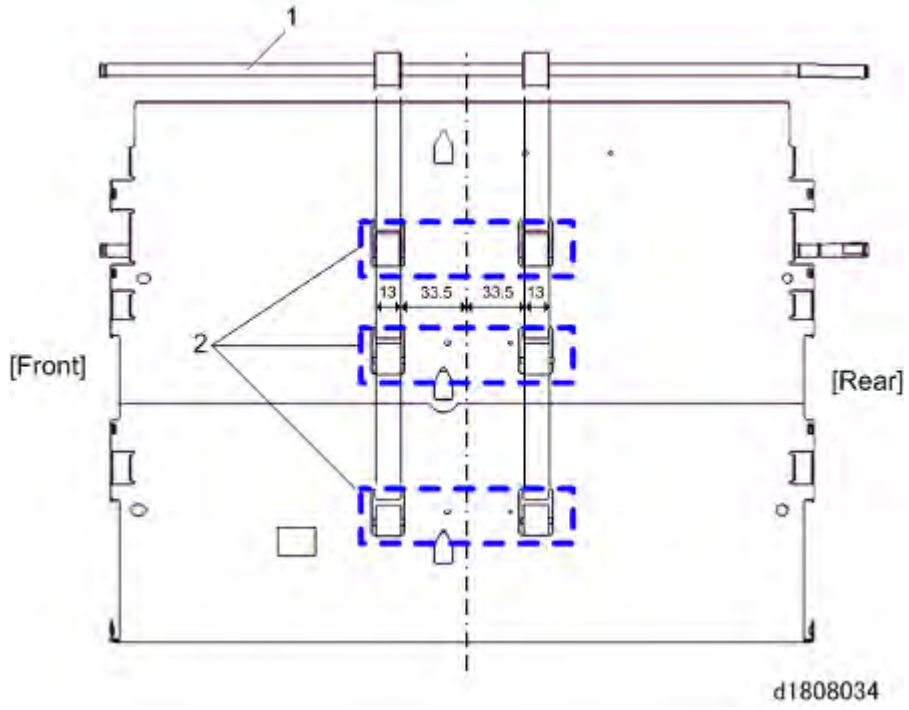
Paper Feed 1-2: View B (Top)

Note

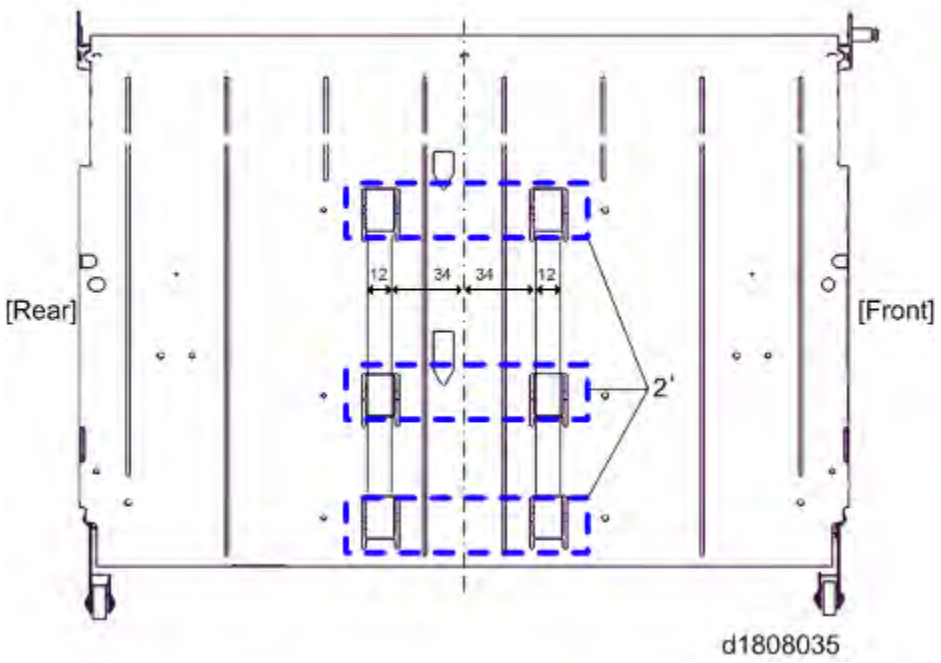
- The layout diagram below applies to Tray 1, Tray 2, and Tray 3 because their mechanisms are the same.



Paper Feed 2: View A (Right Side)



Paper Feed 3: View C (Left Side)

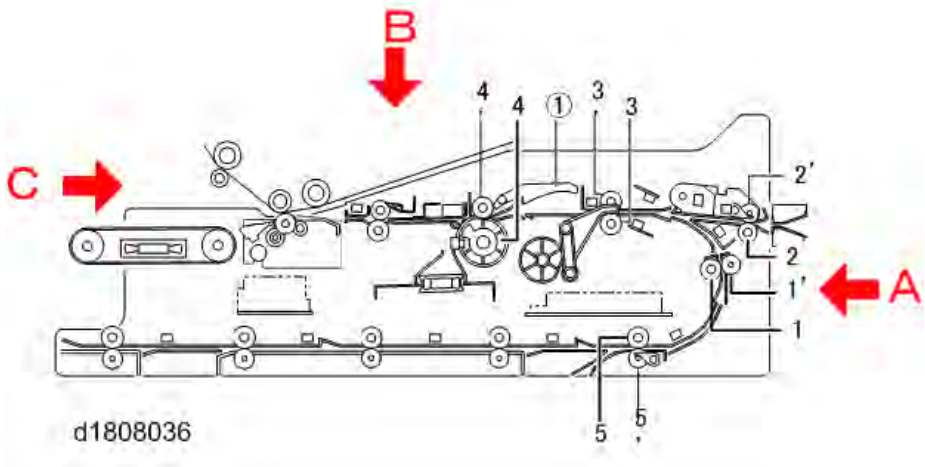


1.8.3 REGISTRATION UNIT

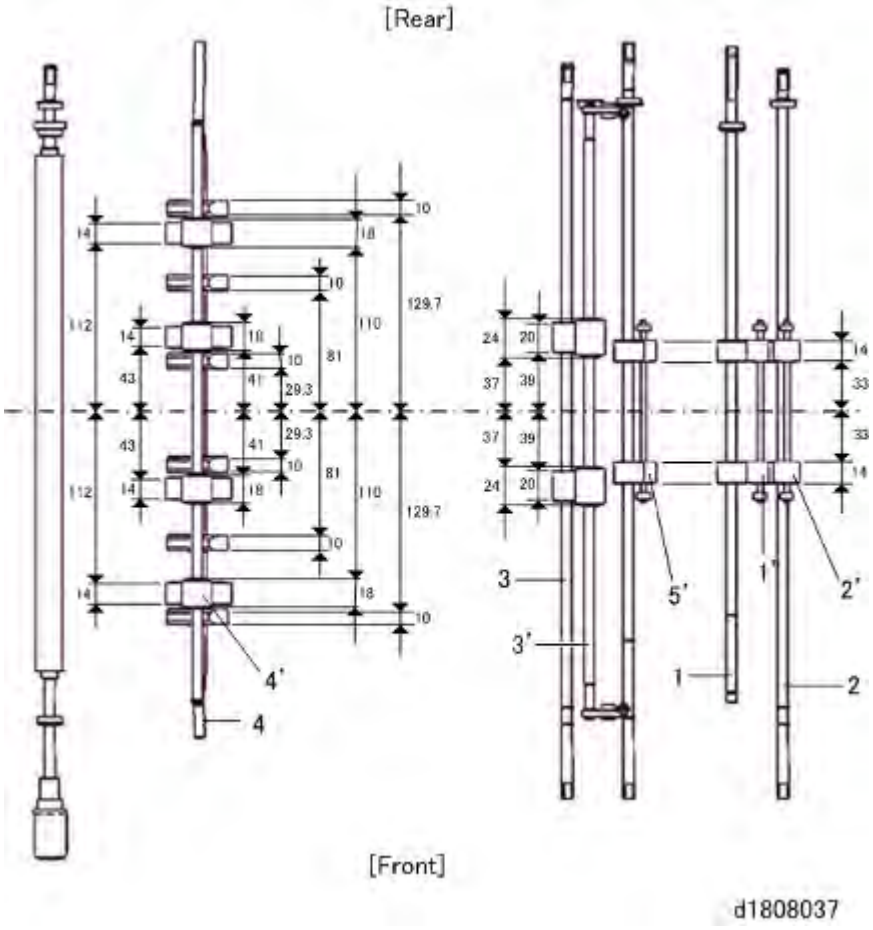
General Layout

Note

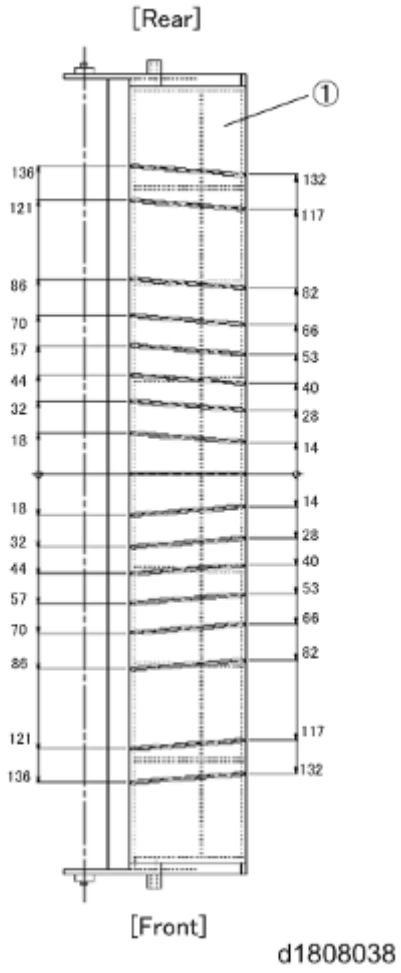
- The red letters and arrows in the diagram below indicate the angle of view so you can orient the map to the machine and identify the transport rollers and ribs



Registration Unit Rollers: View B (Top)

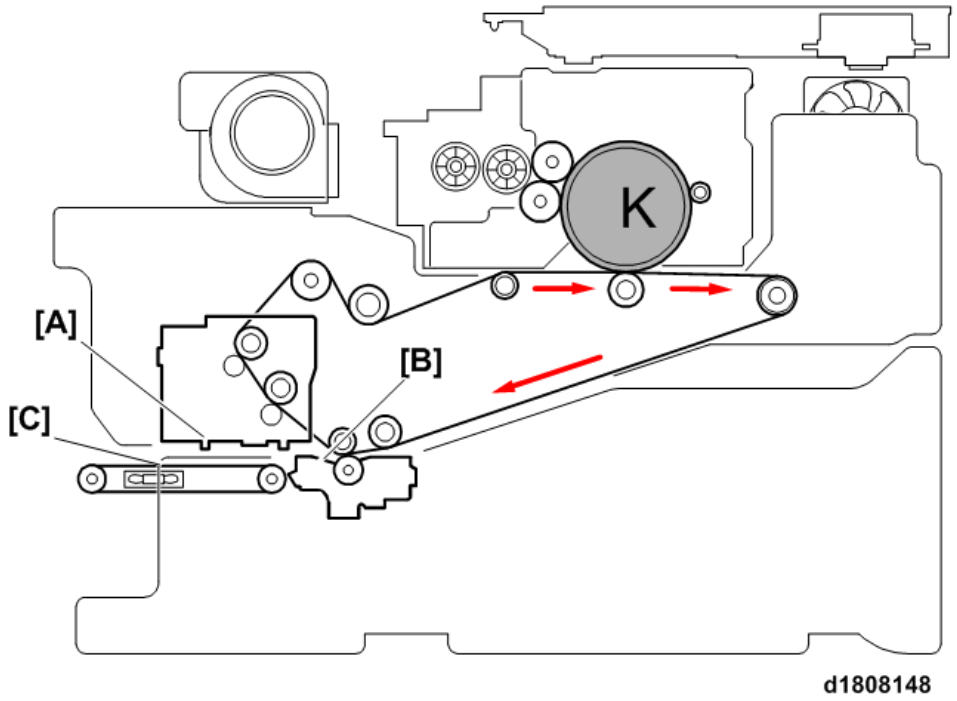


Registration Unit Guide Plate: View B (Top)



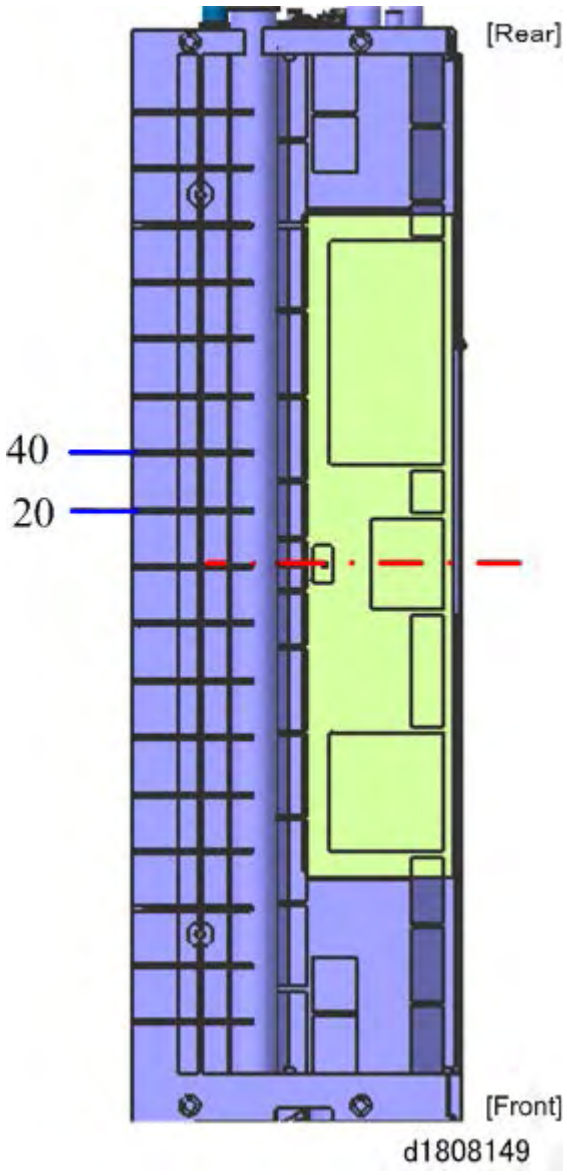
1.8.4 PTR UNIT

General Layout

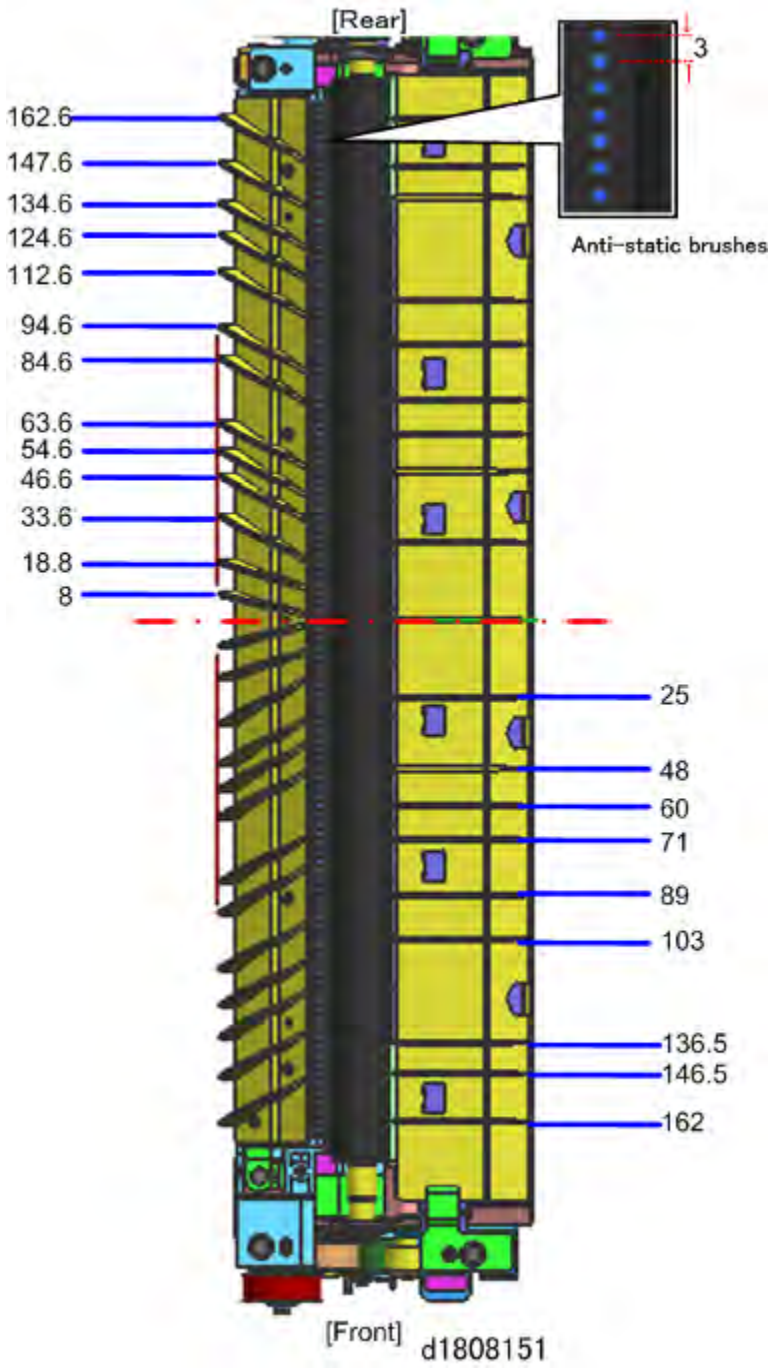


No.	Name
A	Belt Cleaning Unit (Bottom)
B	PTR Unit
C	PTB Unit

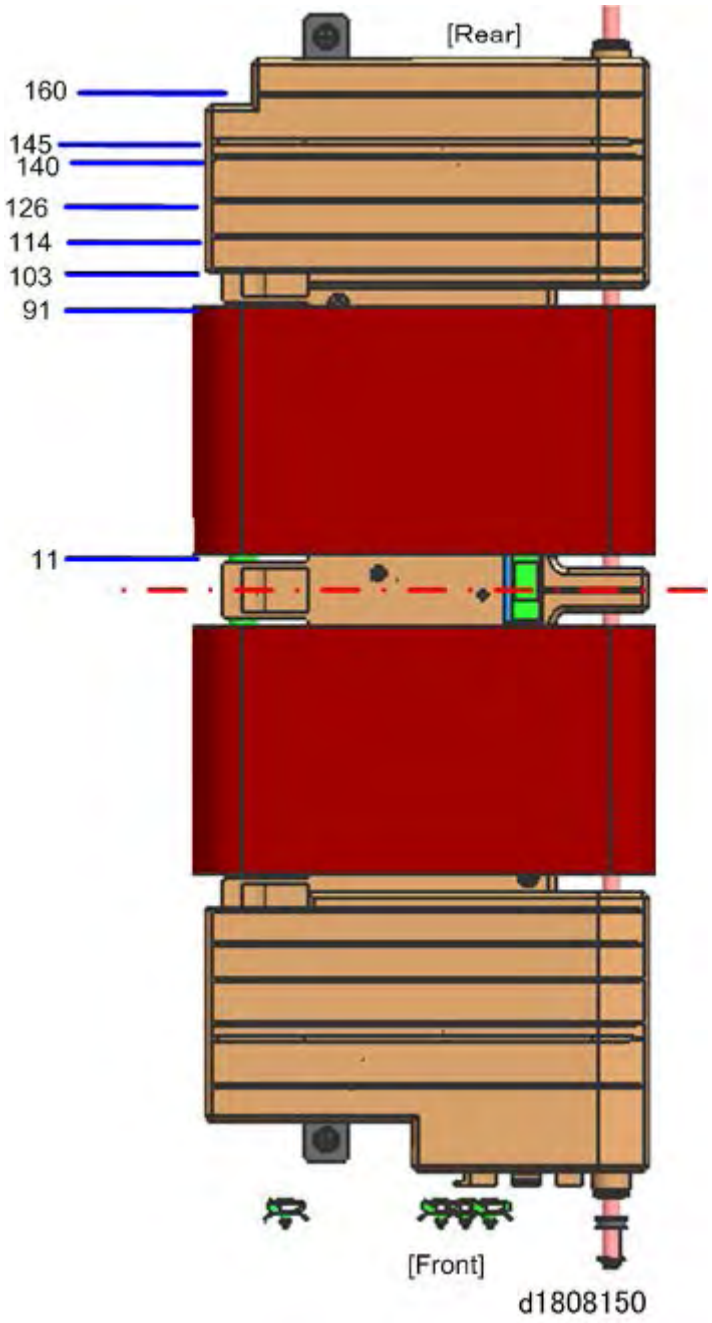
ITB Cleaning Unit (Bottom)



PTR Unit

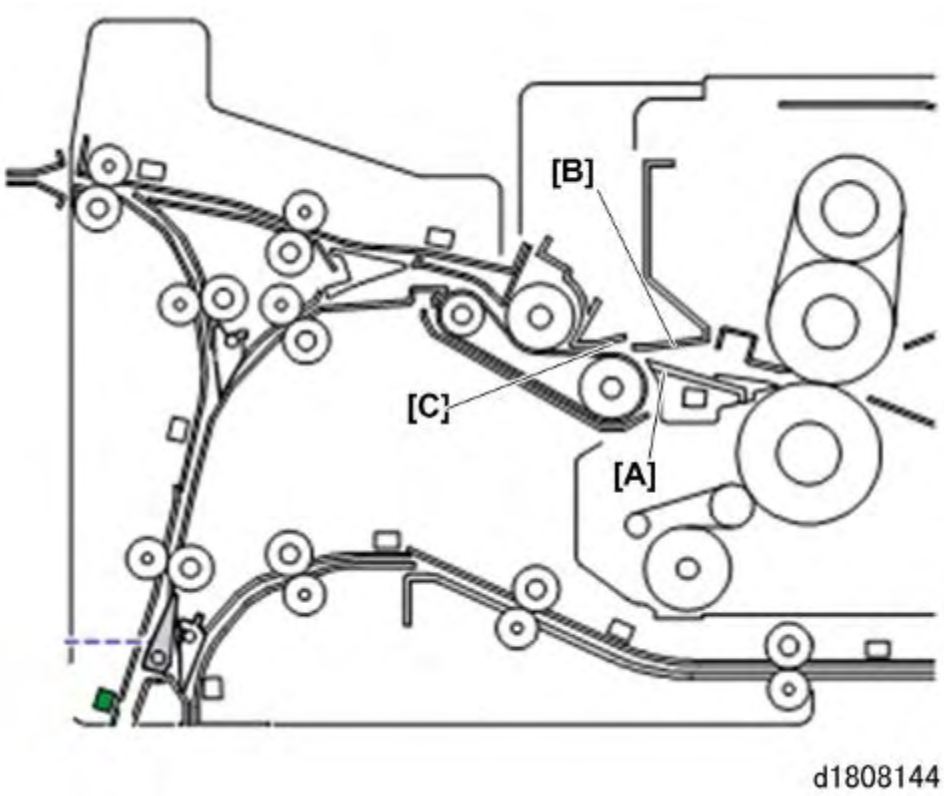

[Rear]
3
Anti-static brushes
162.6
147.6
134.6
124.6
112.6
94.6
84.6
63.6
54.6
46.6
33.6
18.8
8
25
48
60
71
89
103
136.5
146.5
162
[Front]
d1808151

PTB Unit



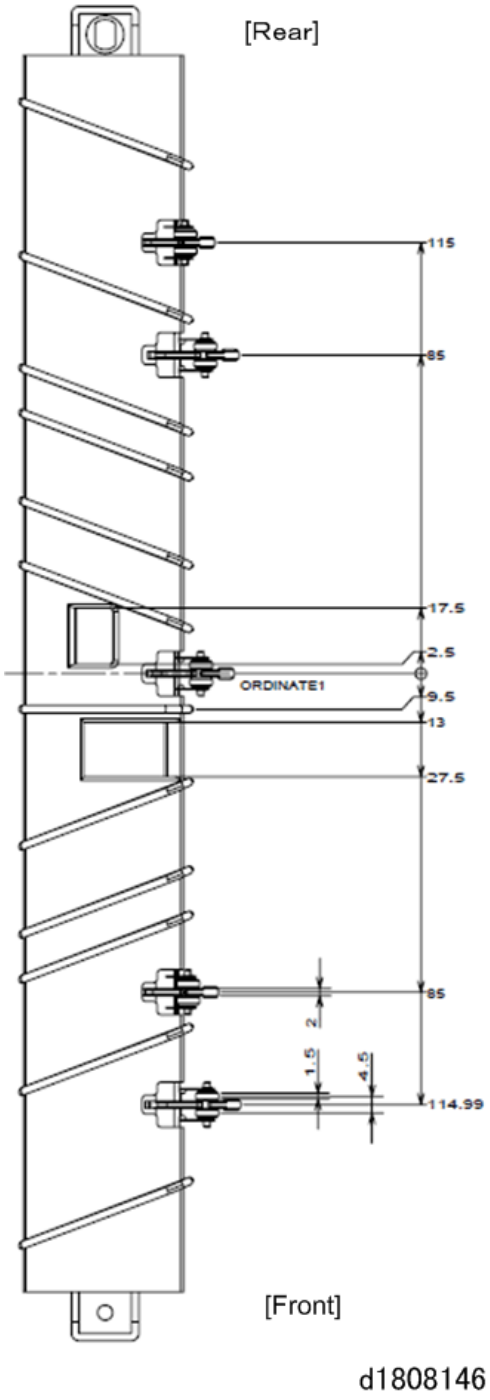
1.8.5 FUSING UNIT

General Layout

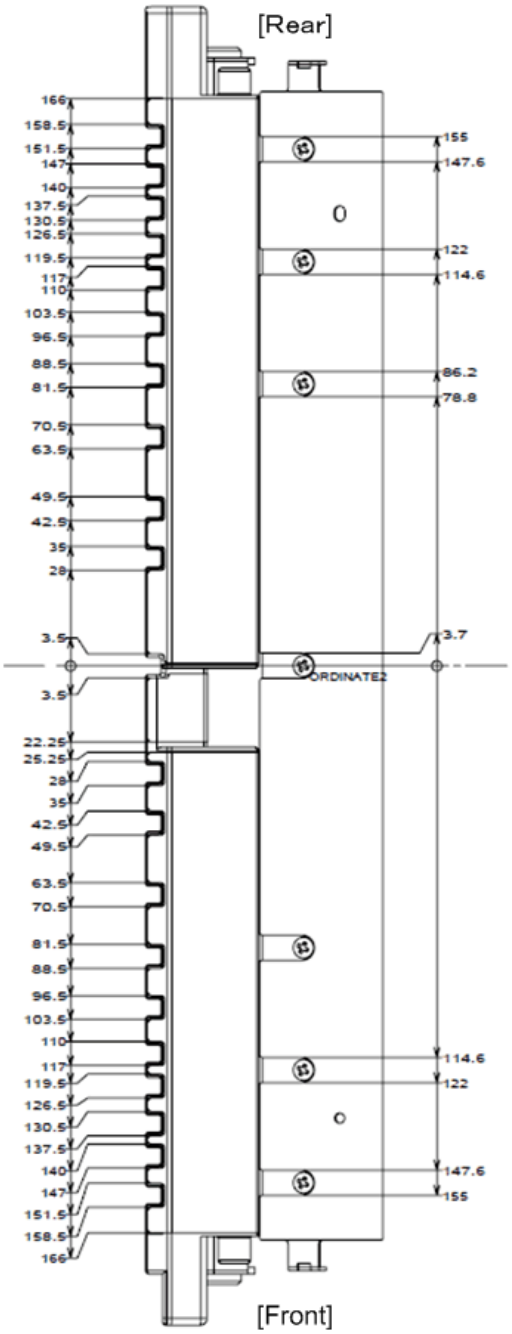


No.	Name
A	Fusing Exit Guide Plate (Upper)
B	Fusing Exit Guide Plate (Lower)
C	Exit Entrance Guide Plate (Upper)

Fusing Exit Guide Plate (Lower)

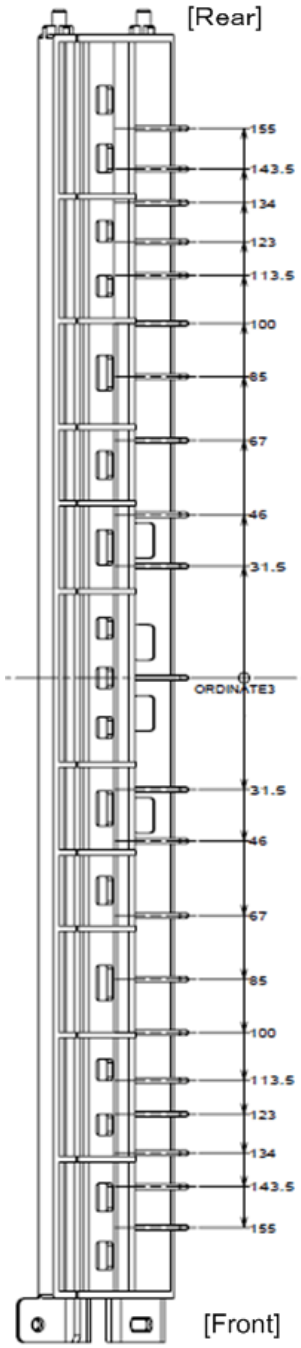


Fusing Exit Guide Plate (Upper)



d1808145

Exit Entrance Guide Plate (Upper)

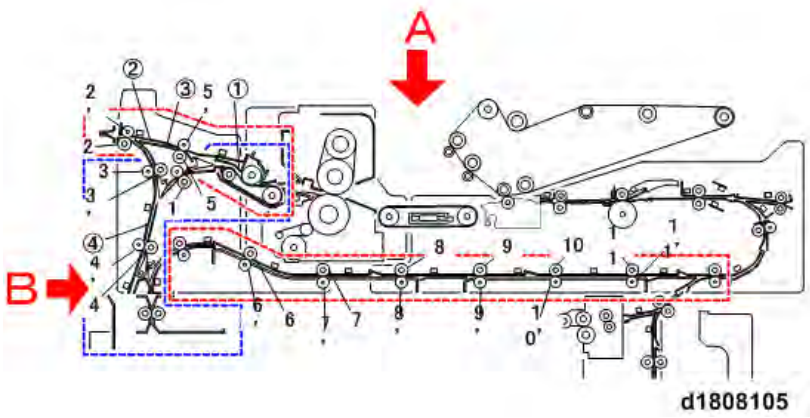


1.8.6 INVERT/EXIT UNIT

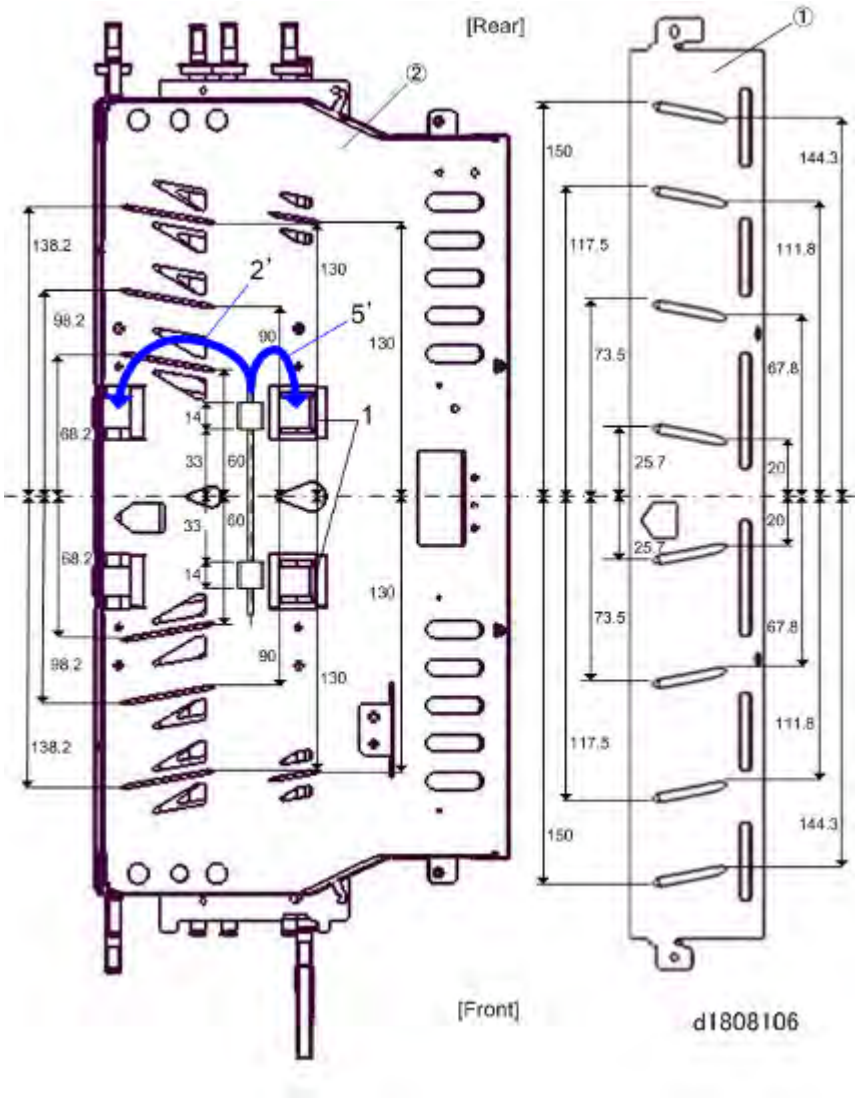
General Layout

Note

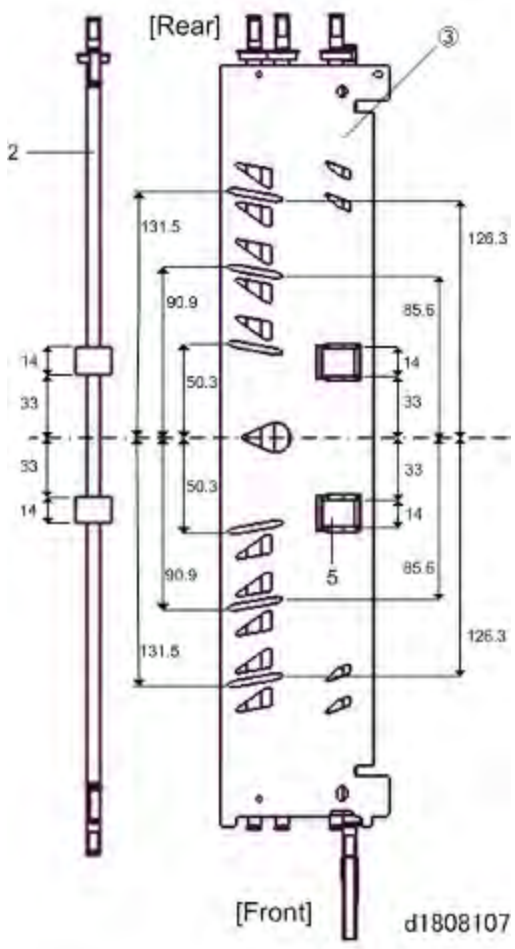
- The red letters and arrows in the diagram below indicate the angle of view so you can orient the map to the machine and identify the transport rollers and ribs



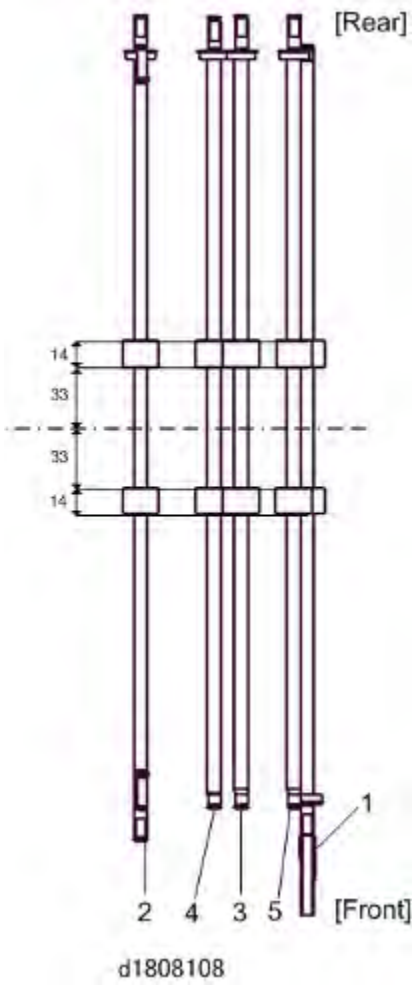
Straight-Through Exit 1: View A (Top)



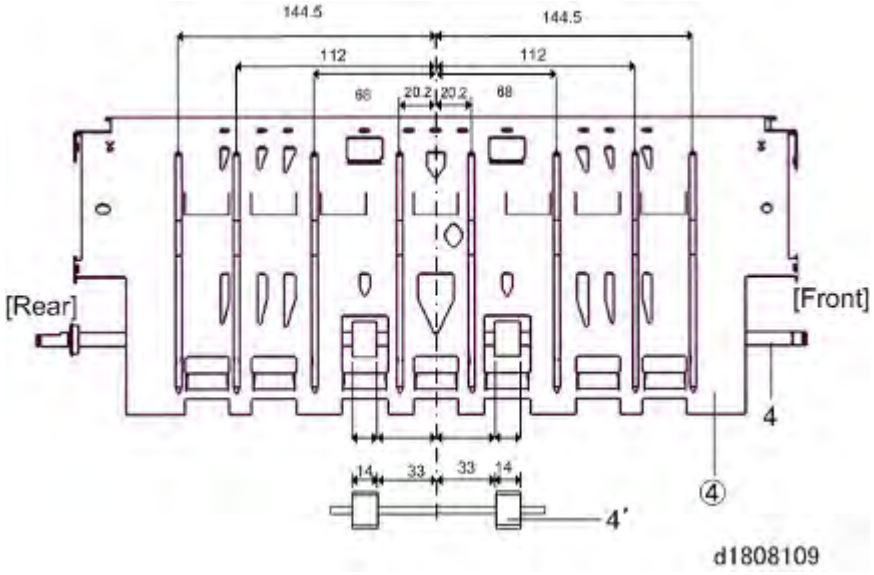
Straight-Through Exit 2: View A (Top)



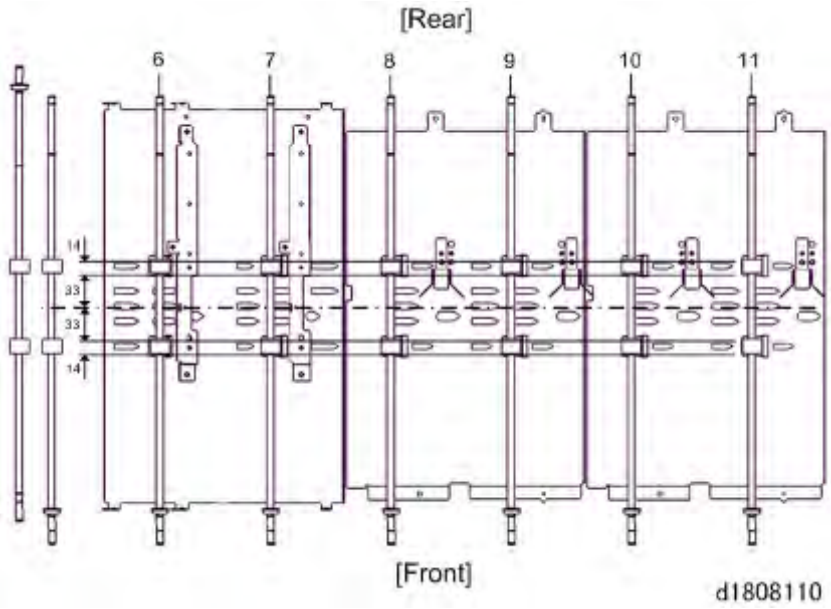
Rollers: View A (Top)



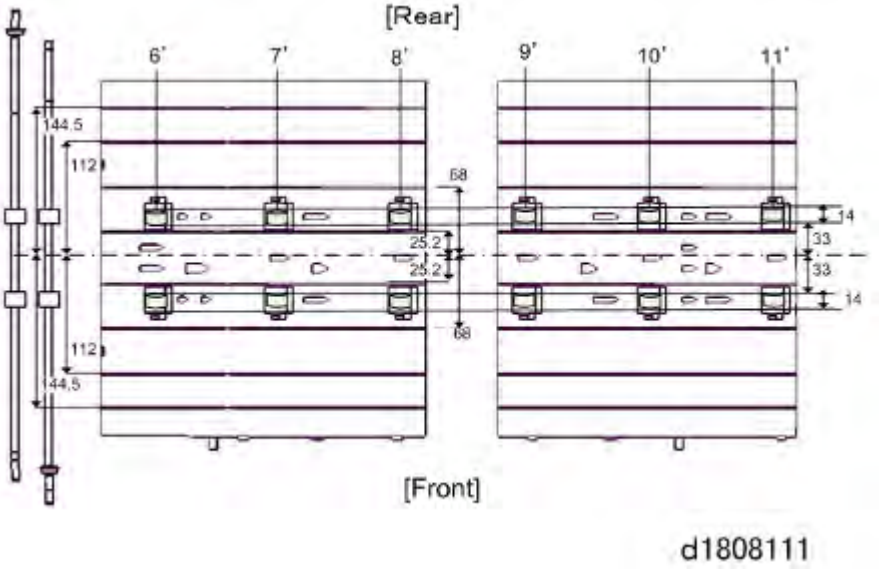
Invert/Exit: View B (Left)



Duplex 1: View A (Top)



Duplex 2: View A (Top)

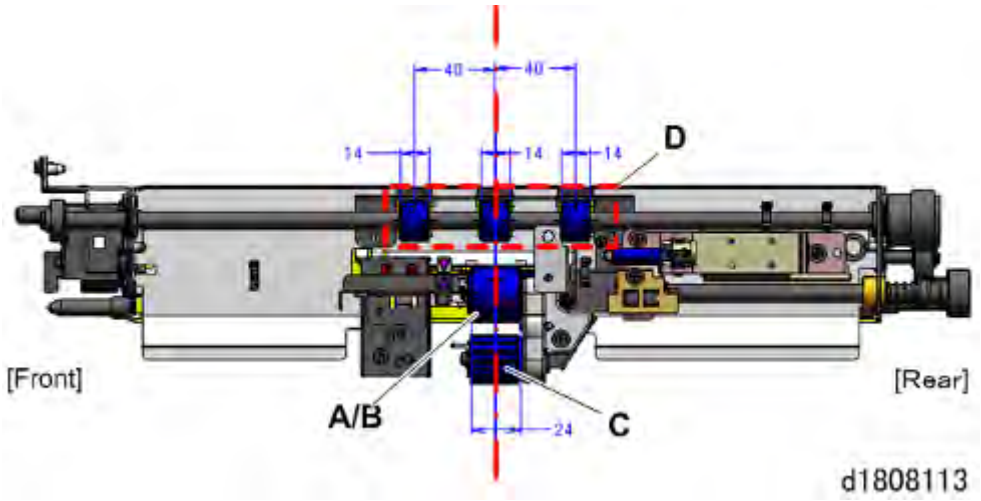


1.8.7 LCT A3

General Layout

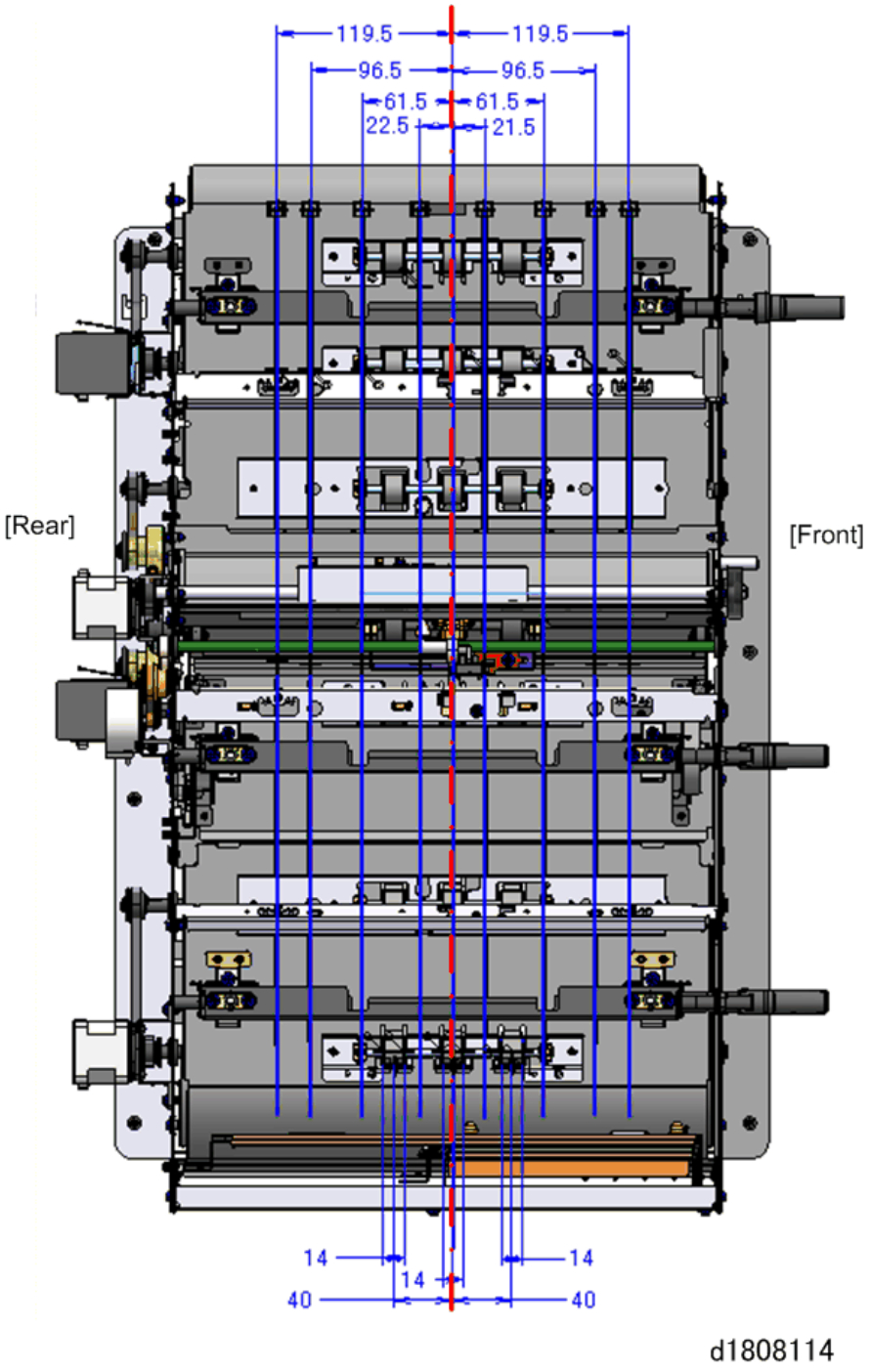
Note

- The layout diagram shown below applies to LCT Tray 4, Tray 5, Tray 6 because their mechanisms are the same.

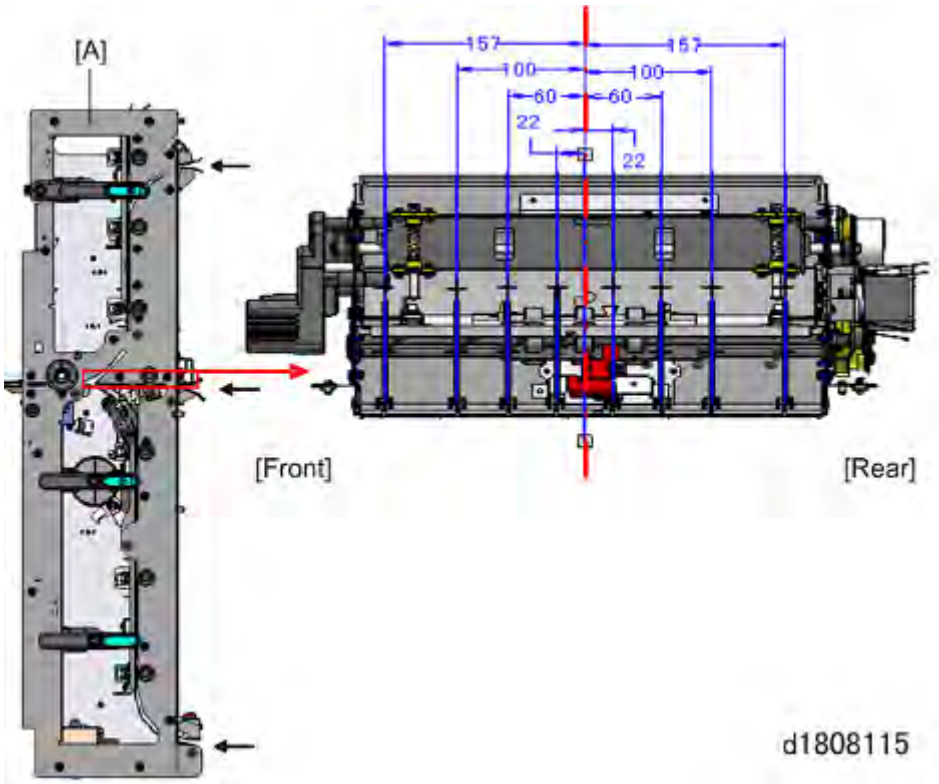


No.	Name
A	Pick-up Roller
B	Paper Feed Roller
C	Separation Roller
D	Grip Roller

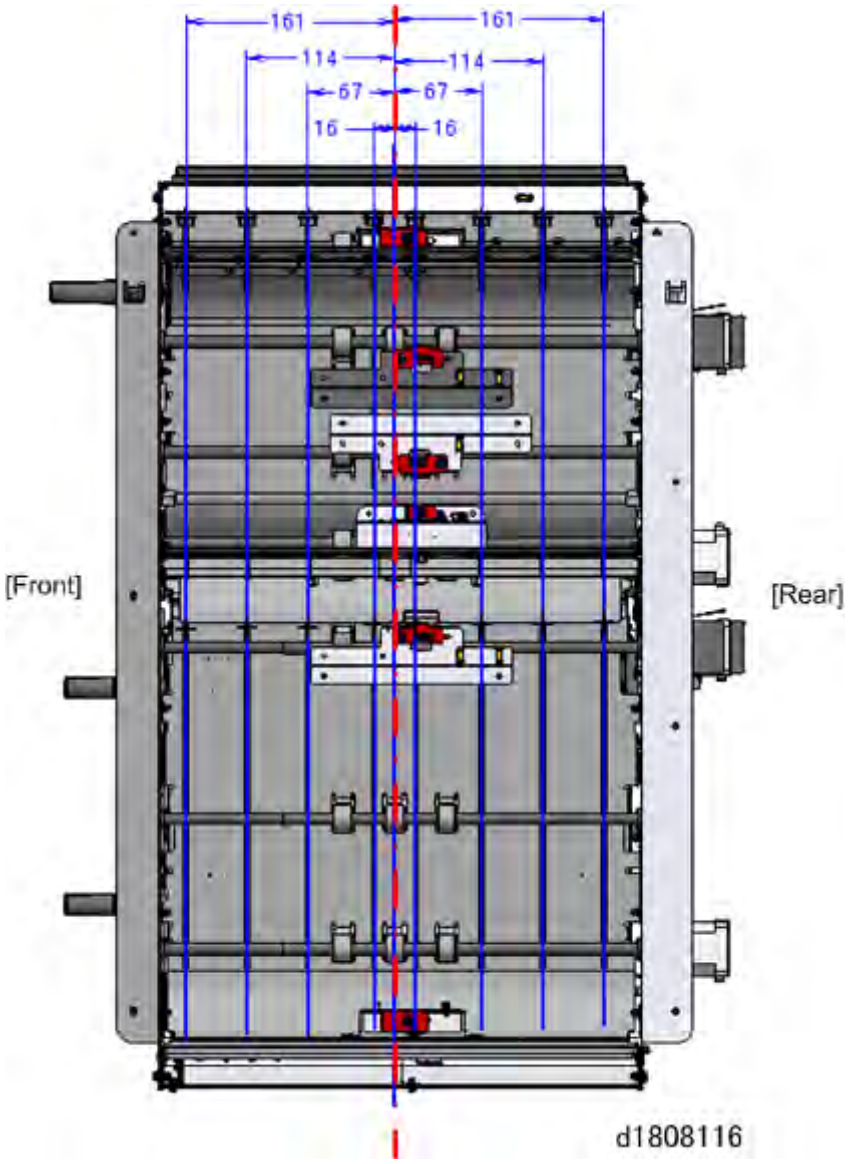
Paper Transport: Movable Guide Ribs and Rollers: Left View



Paper Transport: Tray 5 Transport Fixed Guide Ribs: Left View

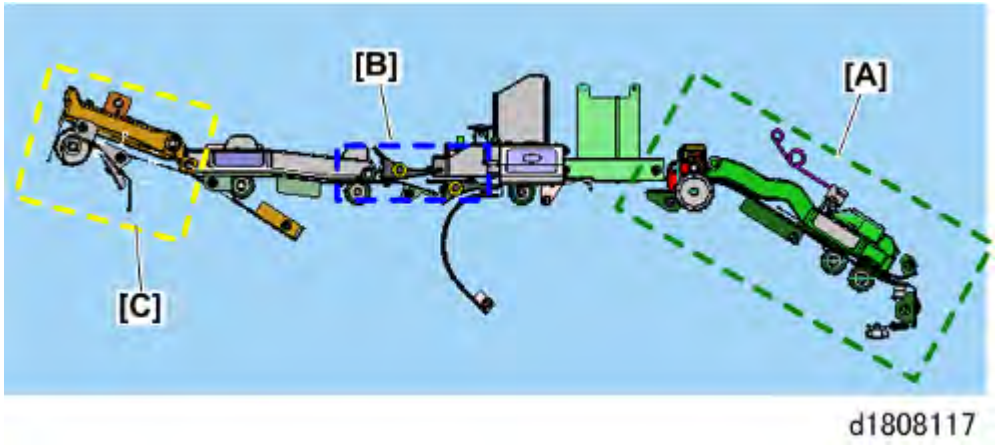


Paper Transport: Fixed Guide Plate Ribs: Right View



1.8.8 FINISHER

General Layout: Straight-Through to Shift Tray



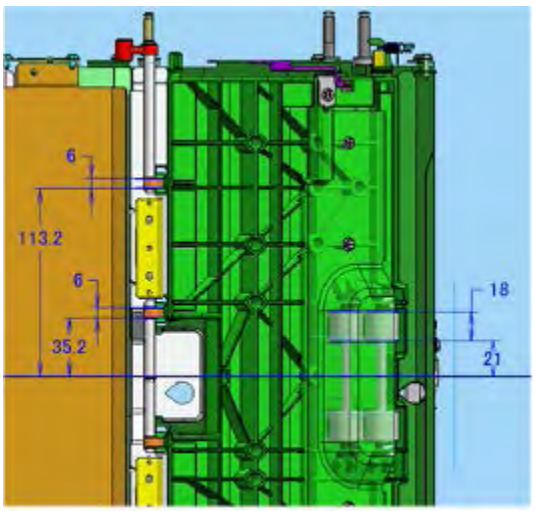
No.	Name
A	Straight Transport 1: Entrance, Paper Registration
B	Straight Transport 2: Post-Punch
C	Straight Transport 3: Exit to Shift Tray

Note

- The diagrams below show the transport rollers and ribs for the finisher. The diagrams are half images because either side is identical to the other.

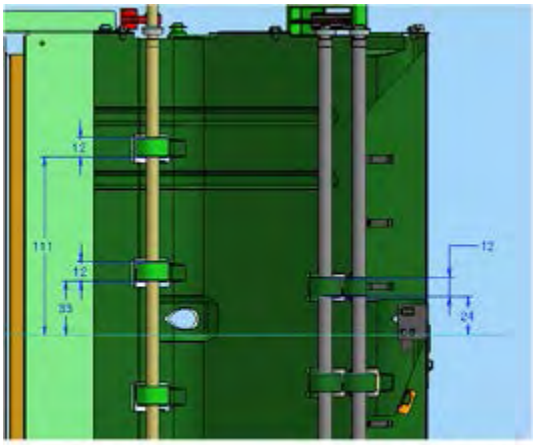
Straight Transport 1: Entrance, Paper Registration

Vertical Drive Rollers



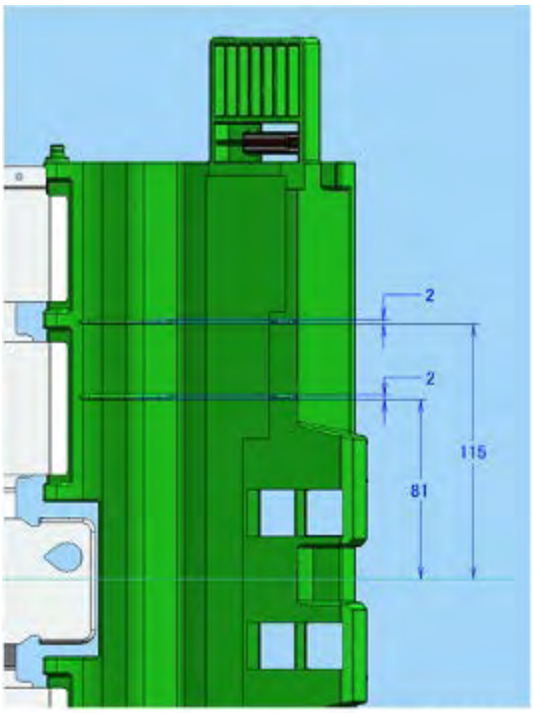
d1808118

Drive Rollers



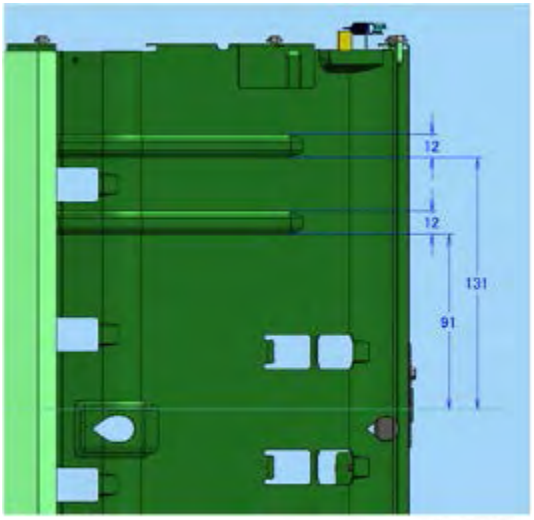
d1808119

Vertical Path Ribs



d1808120

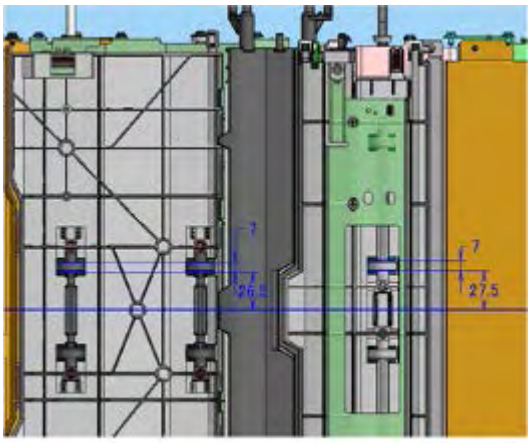
Drive Ribs



d1808121

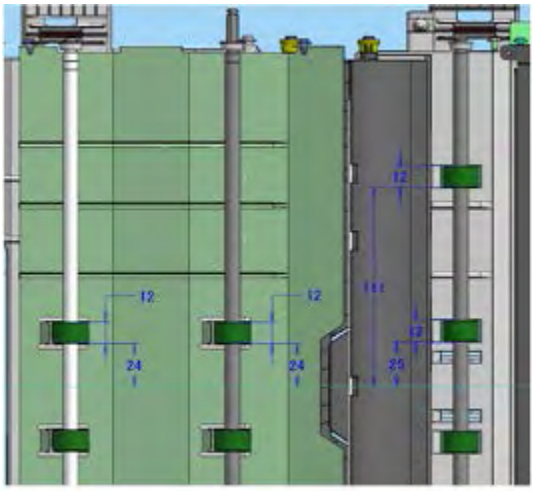
Straight Transport 2: Post-Punch

Vertical Drive Rollers



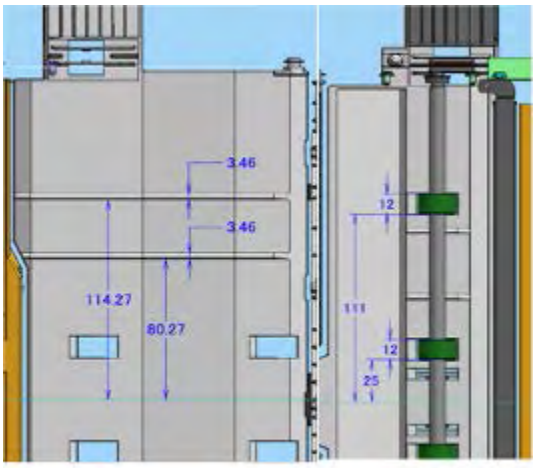
d1808122

Drive Rollers



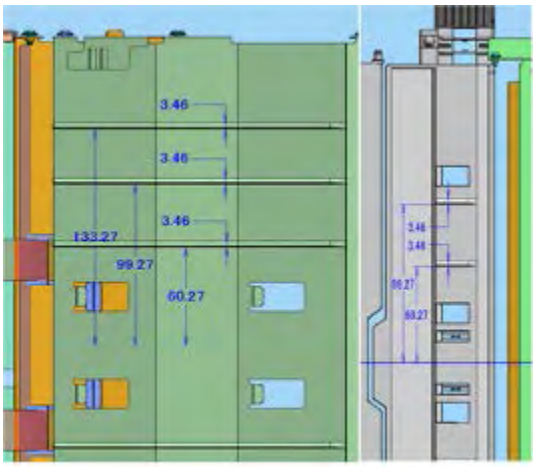
d1808123

Vertical Ribs



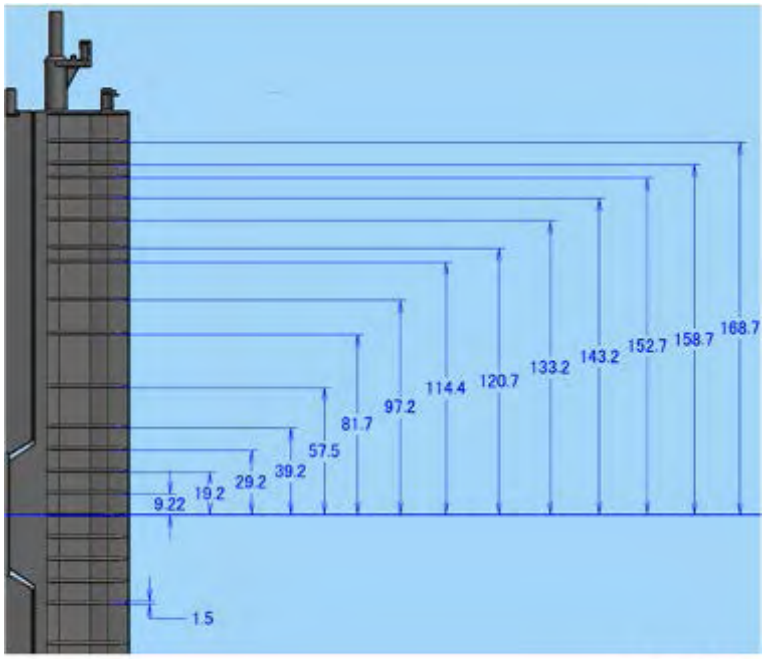
d1808124

Drive Ribs



d1808125

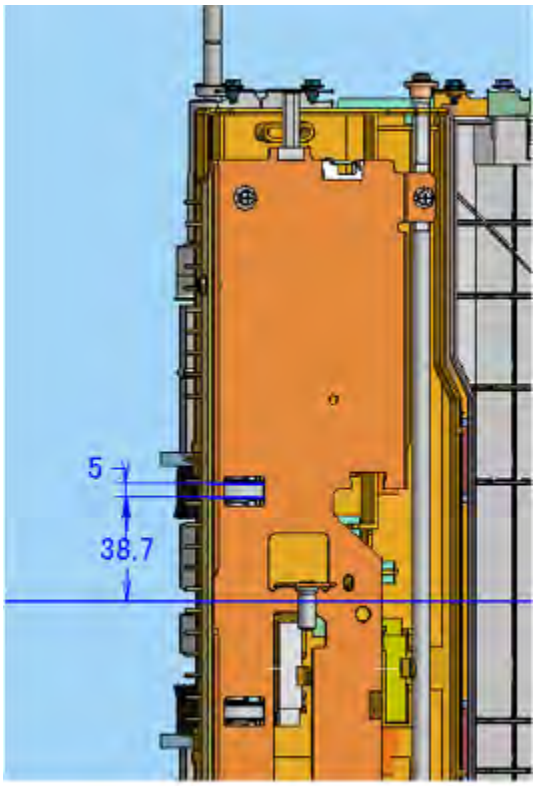
Vertical Drive, Junction Gate



d1808126

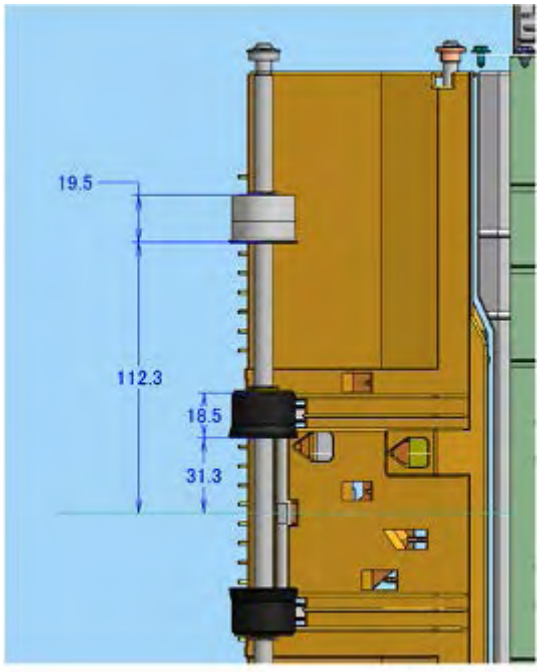
Straight Transport 3: Exit to Shift Tray

Vertical Drive Rollers



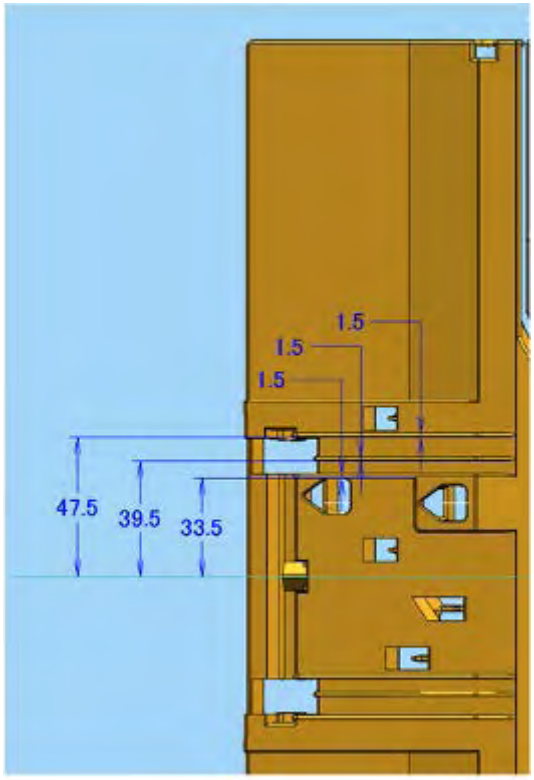
d1808127

Drive Rollers



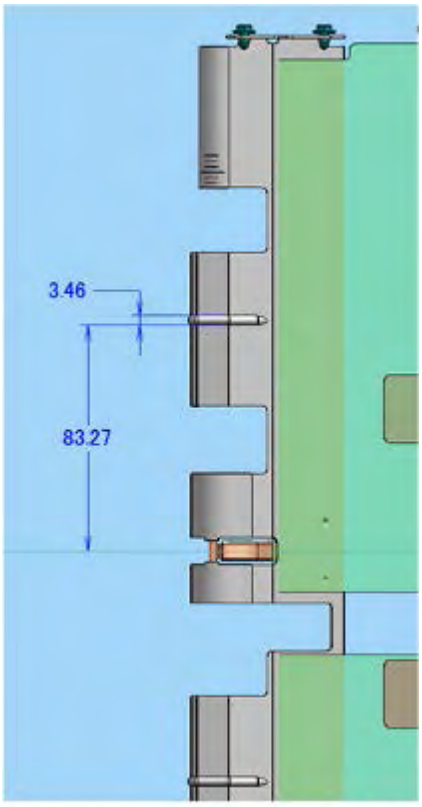
d1808128

Vertical Ribs



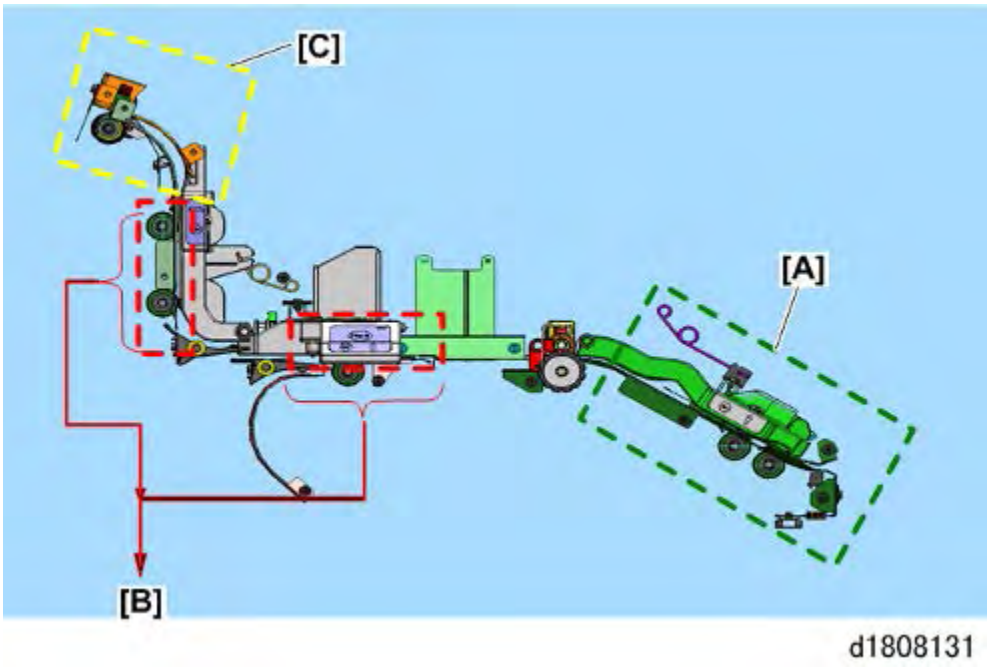
d1808129

Drive Ribs



d1808130

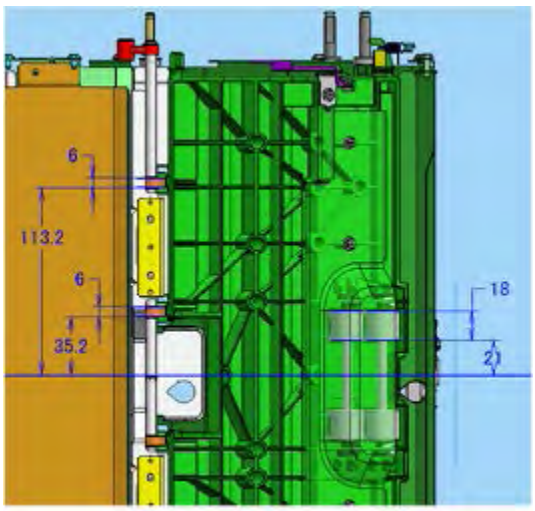
Proof Transport Path Layout



No.	Name
A	Proof Path 1: Entrance, Paper Registration
B	Proof Path 2: Post Punch, Proof Path
C	Proof Path 3: Proof Tray Exit

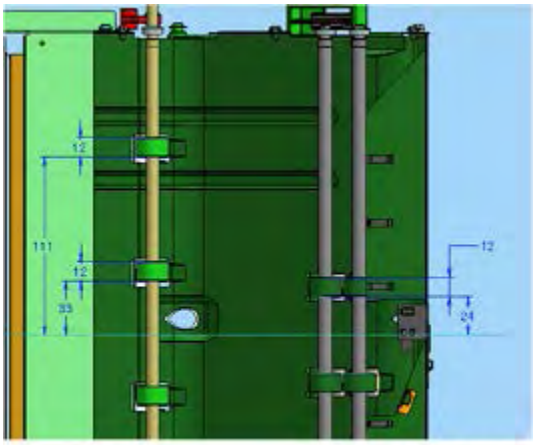
Proof Path 1: Entrance, Paper Registration

Vertical Rollers



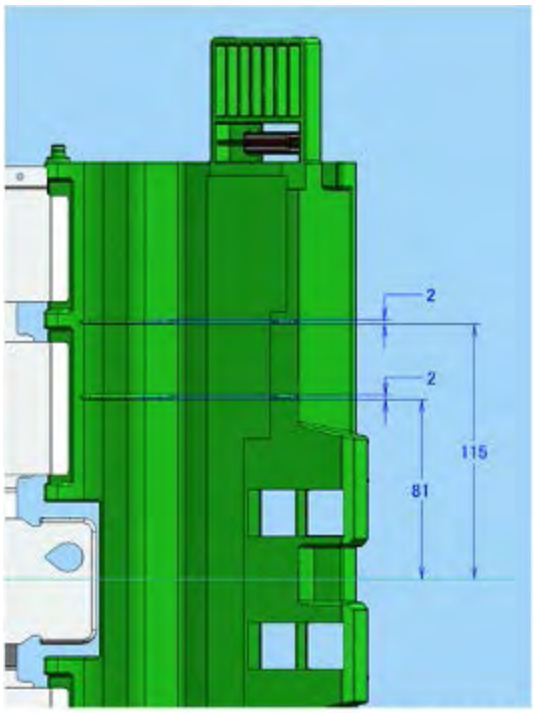
d1808132

Drive Rollers



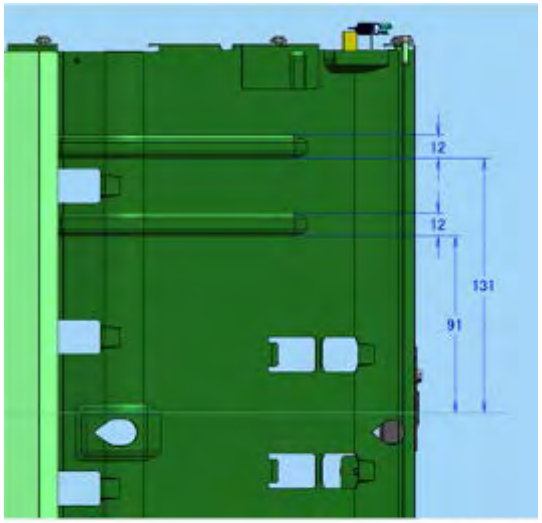
d1808133

Vertical Ribs



d1808134

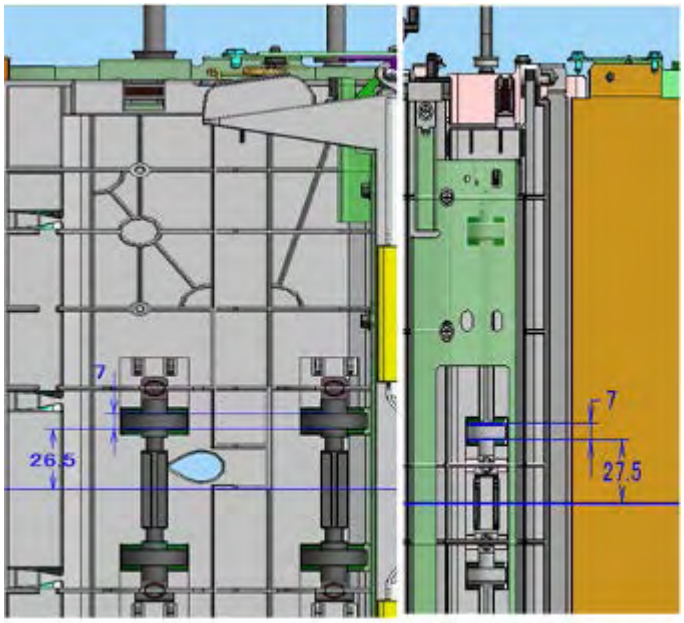
Drive Ribs



d1808135

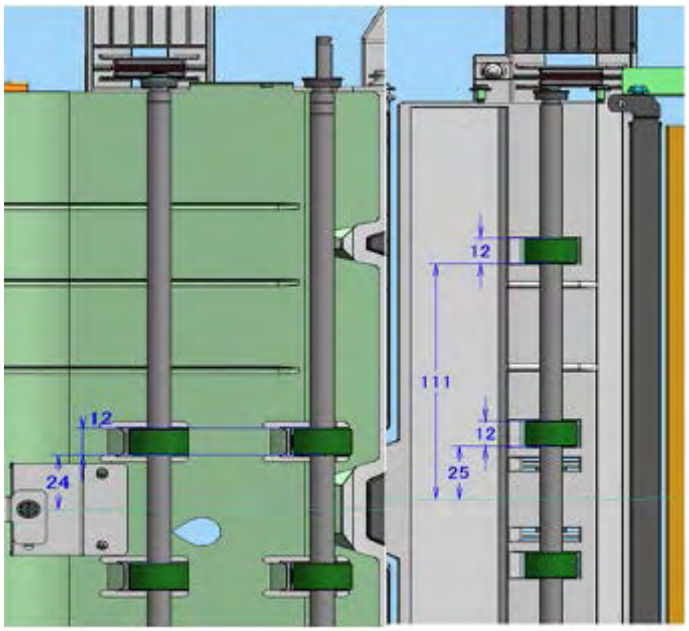
Proof Path 2: Post Punch, Proof Path

Vertical Rollers



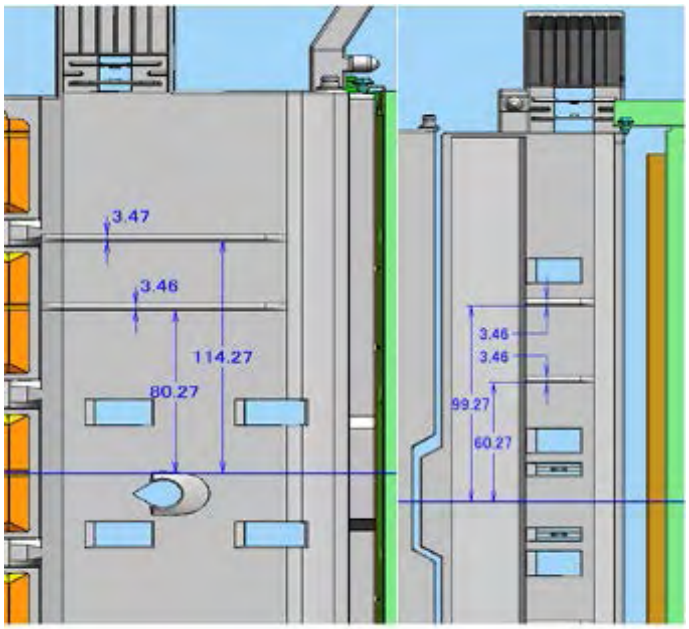
d1808136

Driver Rollers



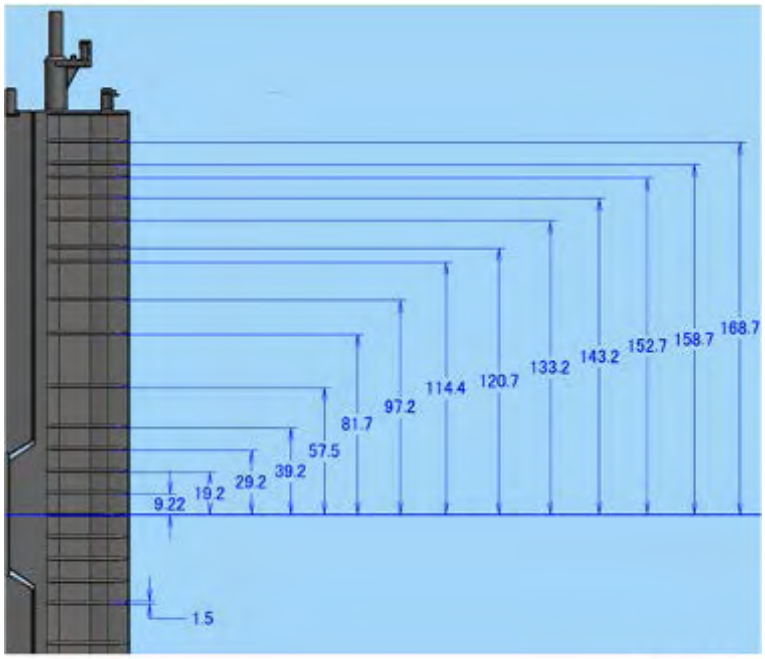
d1808137

Vertical Ribs



d1808138

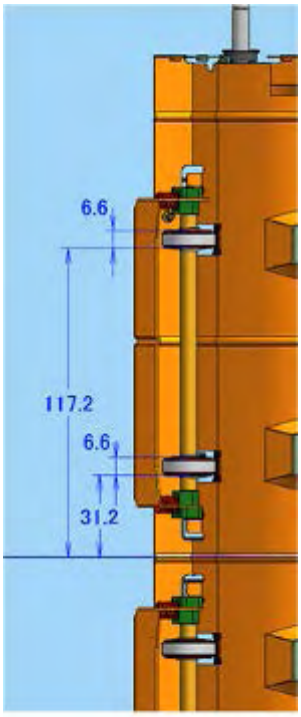
Transport Junction Gate Ribs



d1808139

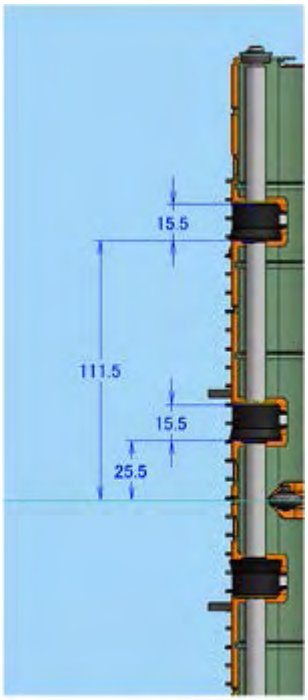
Proof Path 3: Proof Tray Exit

Vertical Rollers



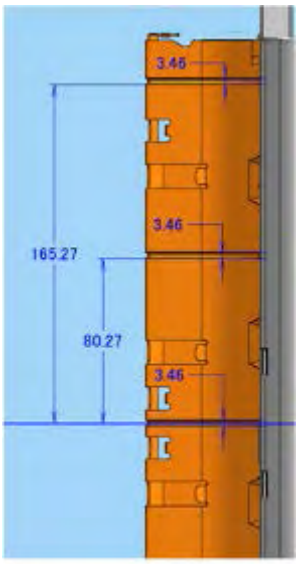
d1808140

Drive Rollers



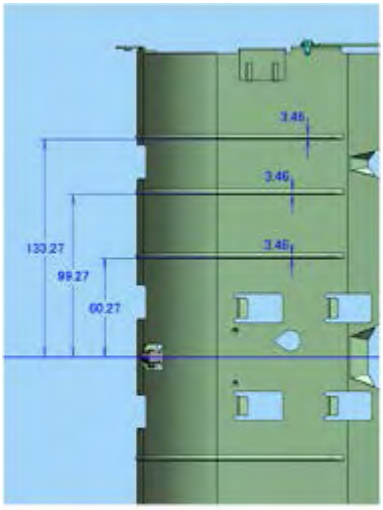
d1808141

Vertical Ribs



d1808142

Drive Ribs



d1808143

D449

PUNCH UNIT PU5020

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

PUNCH UNIT PU5020 (D449)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 1

1.1 MOTORS 1

1.1.1 PUNCH MOVEMENT MOTOR 1

1.1.2 PUNCH DRIVE MOTOR.....2

1.2 SENSORS 3

1.2.1 PUNCH UNIT HP SENSOR.....3

1.2.2 PUNCH RPS SENSOR.....3

1.2.3 PUNCH-OUT HOPPER FULL SENSOR 4

1.3 BOARD 5

1.3.1 PUNCH UNIT PCB 5

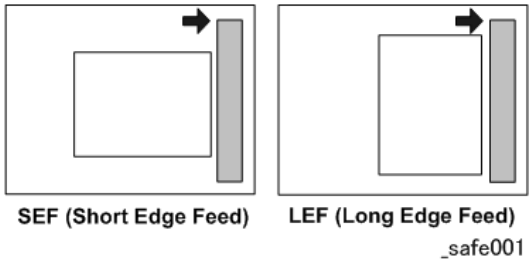
READ THIS FIRST

Symbols, Abbreviations and Trademarks

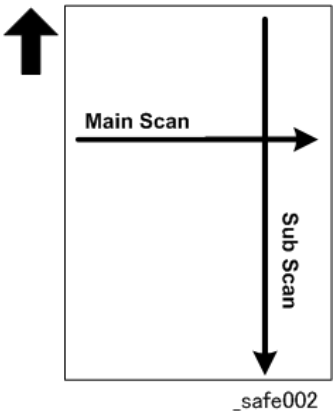
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

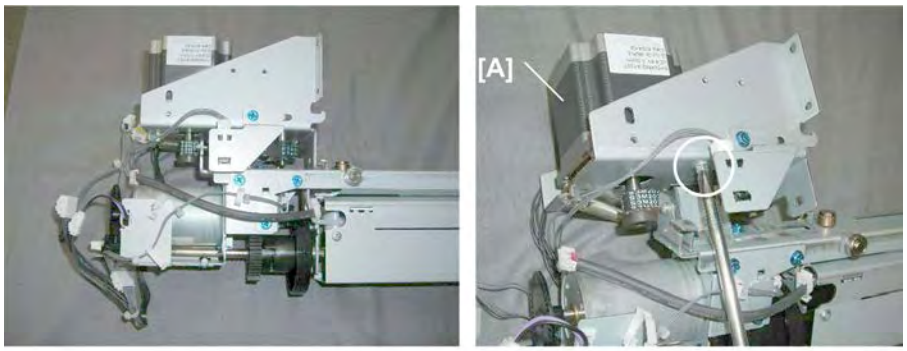
1. REPLACEMENT AND ADJUSTMENT

1.1 MOTORS

1.1.1 PUNCH MOVEMENT MOTOR

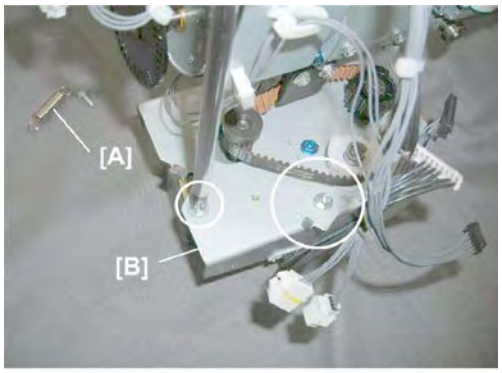
Preparation

- Punch unit (Refer to installation procedure.)



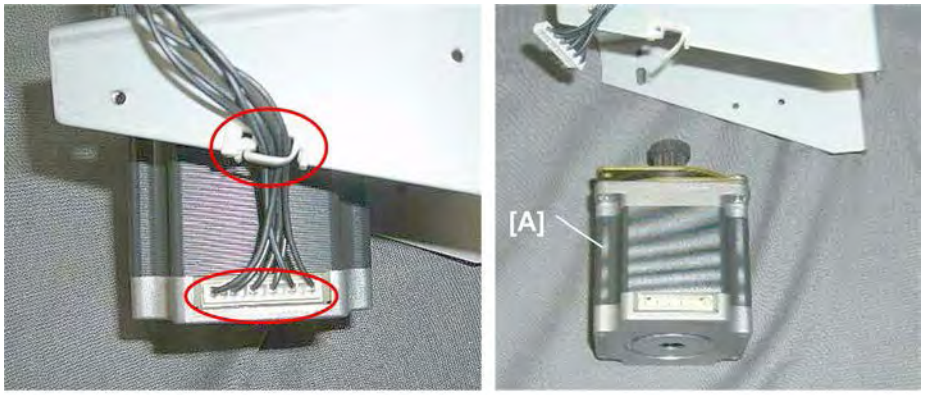
d434r177

1. Punch movement motor bracket [A] (x1)



d434r178

2. Remove:
   [A] Spring (x1)
   [B] Bracket (x1)



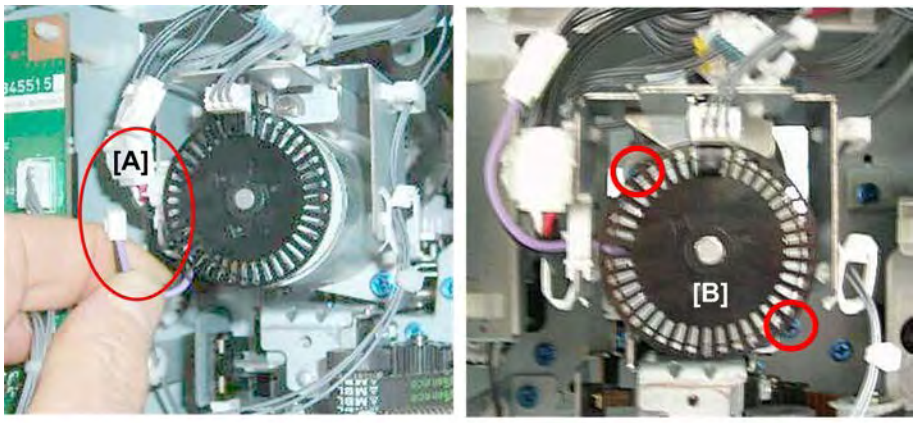
d434r179

3. Disconnect motor [A] (x1, x1)

1.1.2 PUNCH DRIVE MOTOR

Preparation

- Rear upper cover

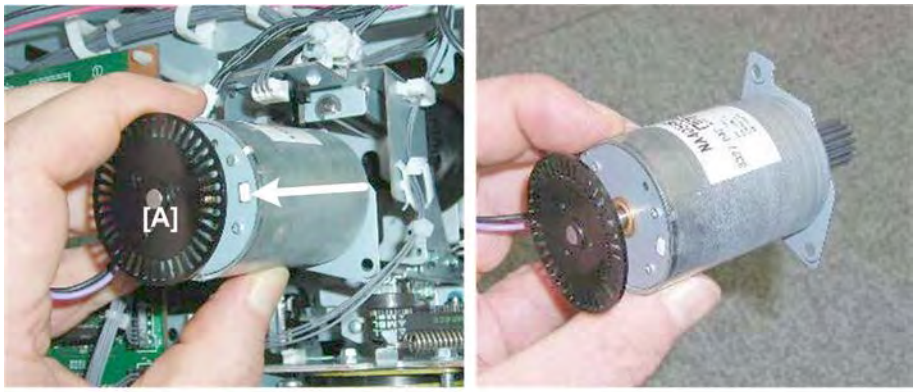


d434r181

1. Disconnect:

   [A] Motor (x1, x1)

   [B] Bracket (x2)



d434r182

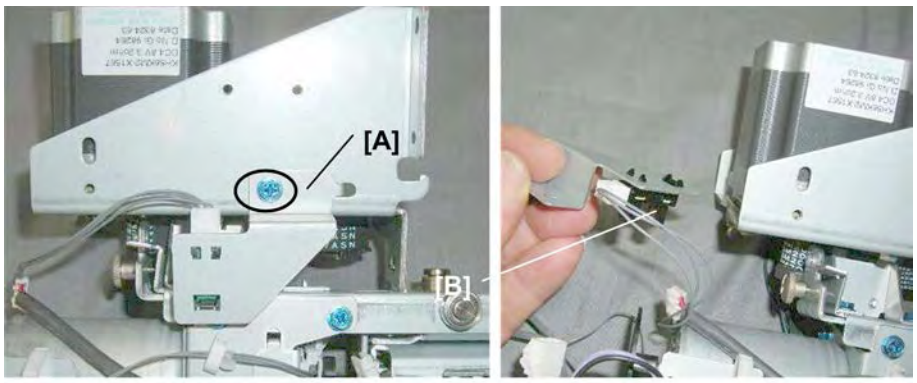
2. Remove motor [A].

1.2 SENSORS

1.2.1 PUNCH UNIT HP SENSOR

Preparation

- Punch unit (Refer to installation procedure)



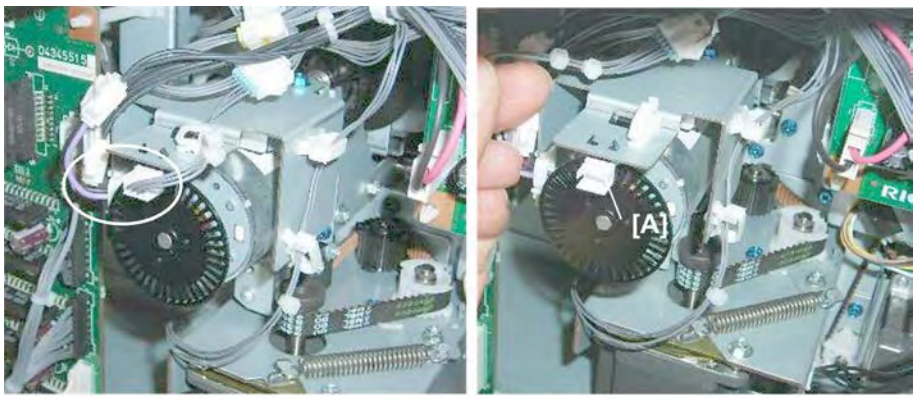
d434r180

1. Remove:
   [A] Sensor bracket (x1)
   [B] Sensor (x1, Pawls x5)

1.2.2 PUNCH RPS SENSOR

Preparation

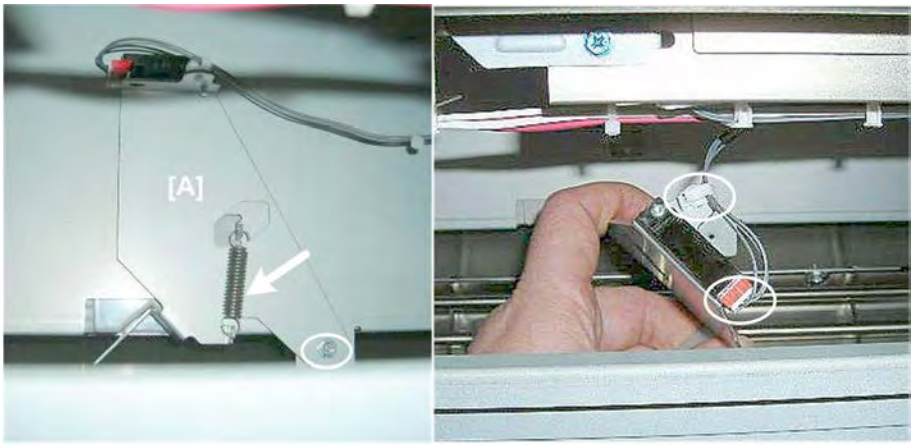
- Rear upper cover



d434r183

1. Sensor [A] (x1, x1, x5)

1.2.3 PUNCH-OUT HOPPER FULL SENSOR



d434r184

1. Sensor swing plate [A] (Spring x1, x1, x1, x1)

d434r184a

2. Sensor (x1)

1.3 BOARD

1.3.1 PUNCH UNIT PCB

Preparation

- Rear finisher upper cover
- Rear finisher lower cover

d434r412

1. Remove the punch unit PCB (x6, x4).

D517

MULTI BYPASS TRAY BY5010

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

MULTI BYPASS TRAY BY5010 (D517)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT 1

1.1 COMMON PROCEDURES 1

1.1.1 OPENING THE BYPASS TRAY 1

1.1.2 COVERS 2

Right Front Cover 2

Left Front Cover 3

Rear Cover 4

Top Cover 5

1.1.3 FEED TRAY 6

1.2 MOTORS 8

1.2.1 PAPER FEED MOTOR, PAPER TRANSPORT MOTOR 8

1.2.2 LIFT MOTOR 10

1.2.3 RELAY MOTOR 11

1.2.4 FAN 13

1.3 SENSORS 14

1.3.1 PAPER FEED SENSOR 14

1.3.2 LIFT SENSORS 14

1.3.3 PAPER END SENSOR 15

1.3.4 PAPER LENGTH SENSOR 16

1.3.5 PAPER WIDTH SENSOR 17

1.3.6 PAPER HEIGHT SENSORS 18

1.3.7 RELAY SENSOR 19

1.4 ROLLERS 20

1.4.1 OVERVIEW 20

1.4.2 ROLLER REMOVAL 21

1.5 SWITCH, SOLENOID, PCB 23

1.5.1 TRAY LIFT SWITCH 23

1.5.2 PICKUP SOLENOID 24

1.5.3 BYPASS TRAY PCB 25

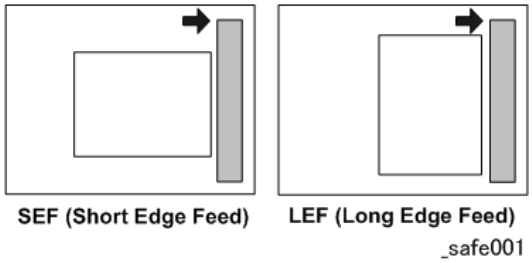
READ THIS FIRST

Symbols, Abbreviations and Trademarks

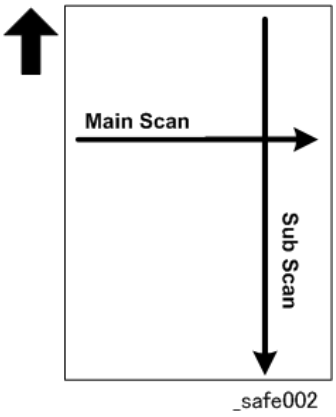
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

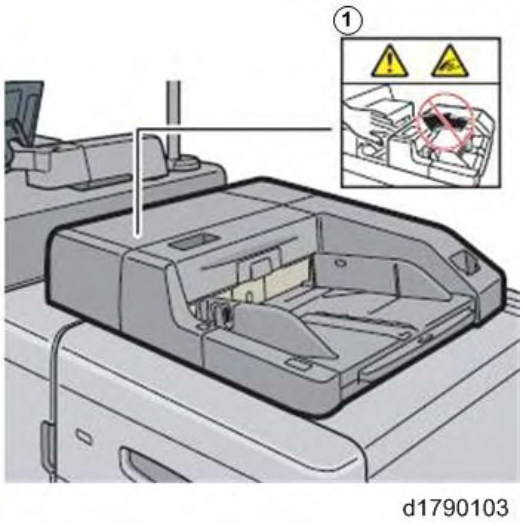
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Multi Bypass Tray BY5010



d1790103

①	To avoid injury to your fingers, keep you hands clear of the bypass tray when removing a paper jam.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)

Terms	Meaning
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

1.1 COMMON PROCEDURES

1.1.1 OPENING THE BYPASS TRAY

d517r801

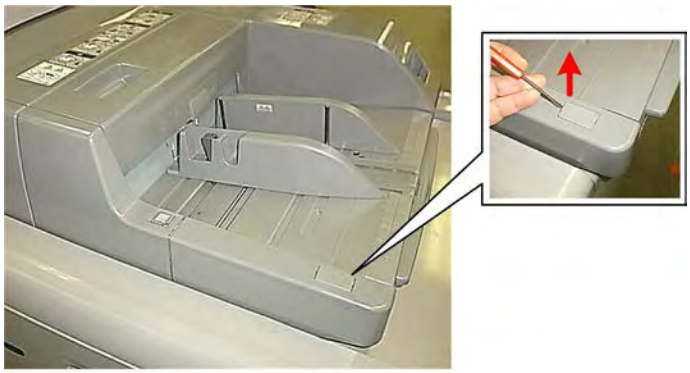
1. Pull in the direction indicated by the arrow at the front left cover.

Important

- When moving the LCT with the bypass unit attached, grip and push the body of the LCT unit.
- To avoid damaging the bypass tray, never attempt to push or rotate the assembled units by pulling or pushing on the bypass tray.

1.1.2 COVERS

Right Front Cover



d517r802

1. At the front, remove the screw cover.

d517r803

2. Remove the right front cover [1] (x1)

Left Front Cover

1. Remove the right front cover.

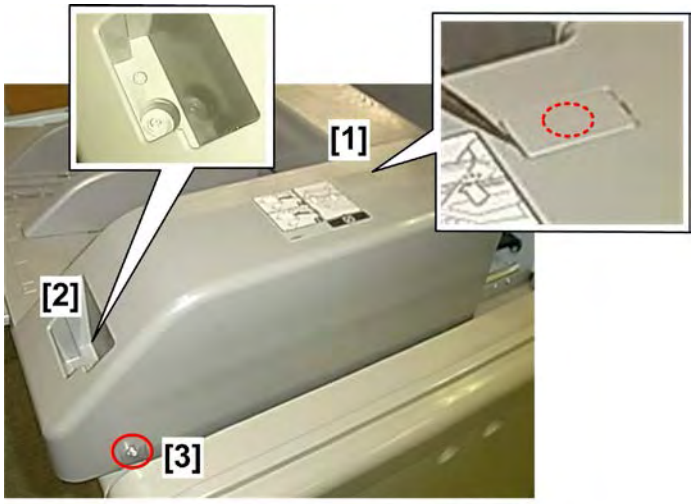
d517r804

2. Disconnect the right side [1] (x1).
3. Disconnect the left side [2] (x1). You need a short screwdriver to remove this screw.

d517r805

4. Remove the cover.

Rear Cover



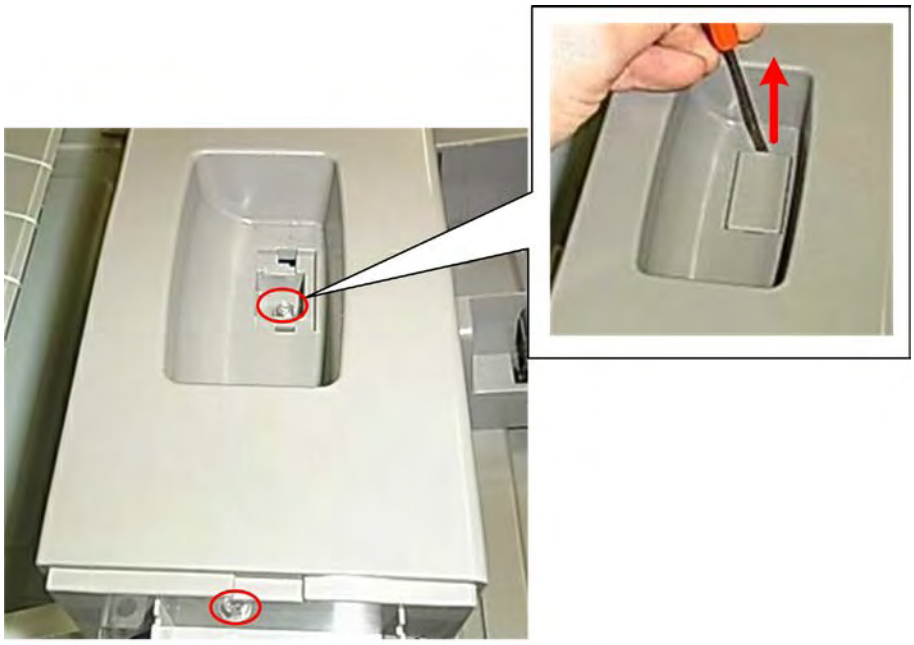
d517r806

1. Disconnect the rear cover.
   [1] Covered screw (x1)
   [2] Rear screw (x1)
   [3] Well screw (x1)

d517r807

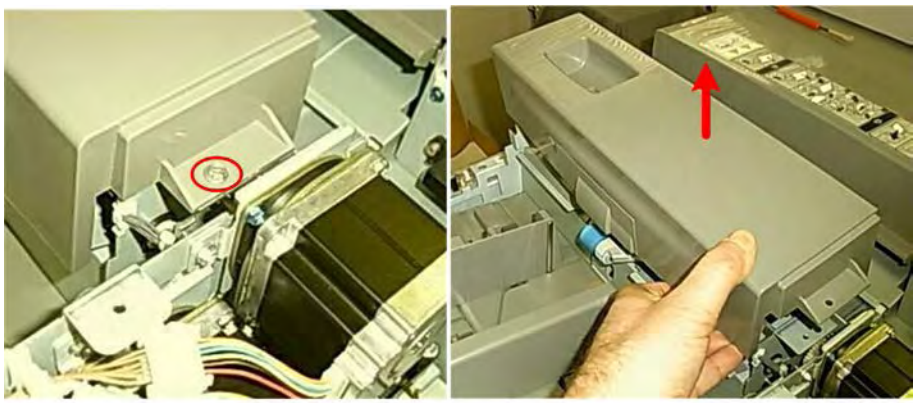
2. Remove the cover.

Top Cover



d517r808

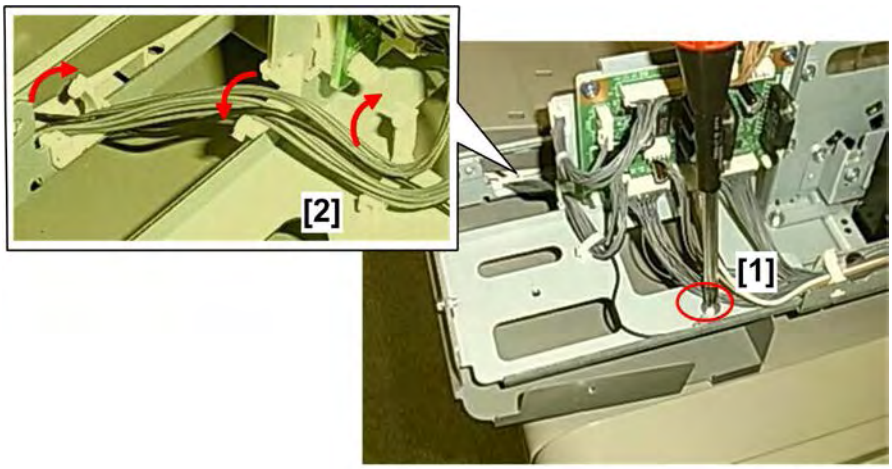
1. Remove the front covers, and the rear cover. (See previous sections).
2. At the front, remove the screw cover [1] and screw below, and then remove the front screw [2] (x2).



d517r809

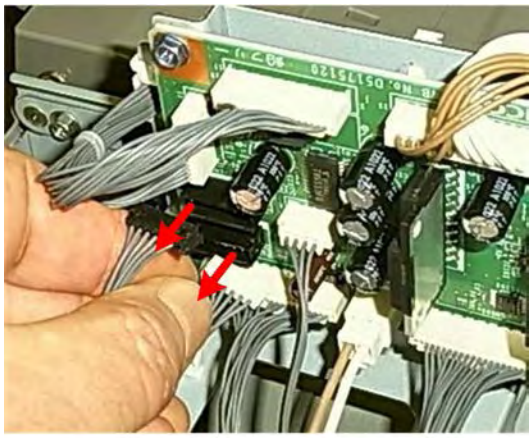
3. At the rear, disconnect the top cover and remove it (x1).

1.1.3 FEED TRAY



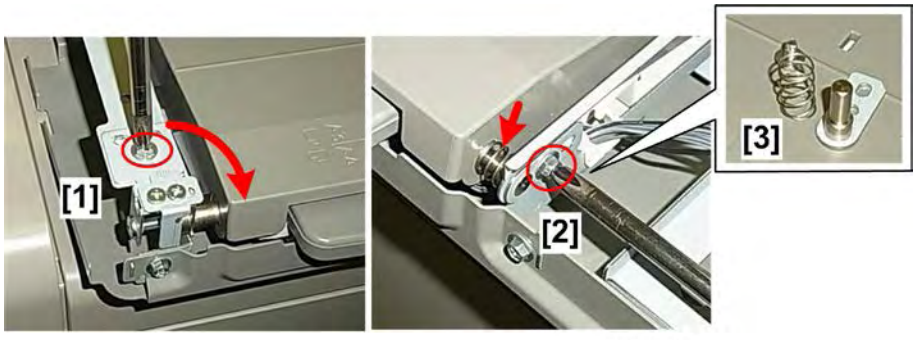
d517r810

1. Remove the covers.
2. At the right rear corner, disconnect the ground wire [1] and open the clamps [2] (x1, x3).



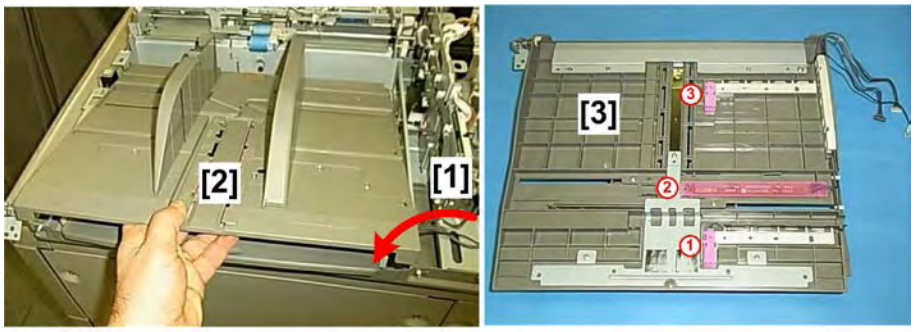
d517r811

3. Disconnect the harnesses (x2).



d517r812

4. At the front, disconnect hinge plate [1] and swing the hinge plate to the right (x1).
5. At the rear, disconnect hinge plate [2] (x1).
6. Carefully disconnect the hinge and spring [3].



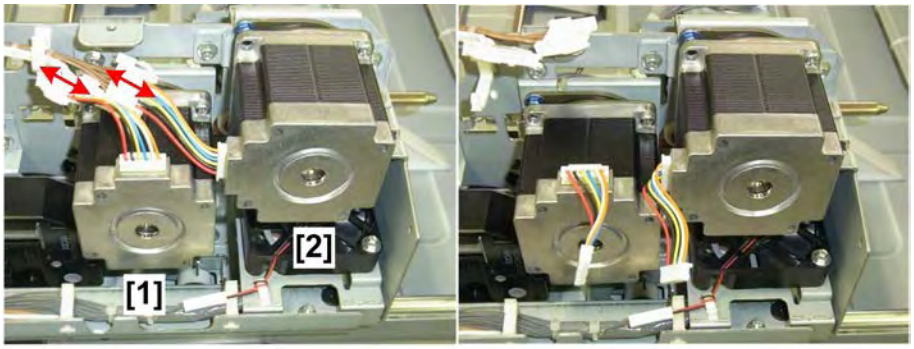
d517r813

7. Pull the harnesses through the frame [1].
8. Remove the feed tray [2].
9. Turn over the feed tray. There are three sensors on the bottom of the feed tray.

①	Paper end sensor
②	Paper width sensor
③	Paper length sensor

1.2 MOTORS

1.2.1 PAPER FEED MOTOR, PAPER TRANSPORT MOTOR

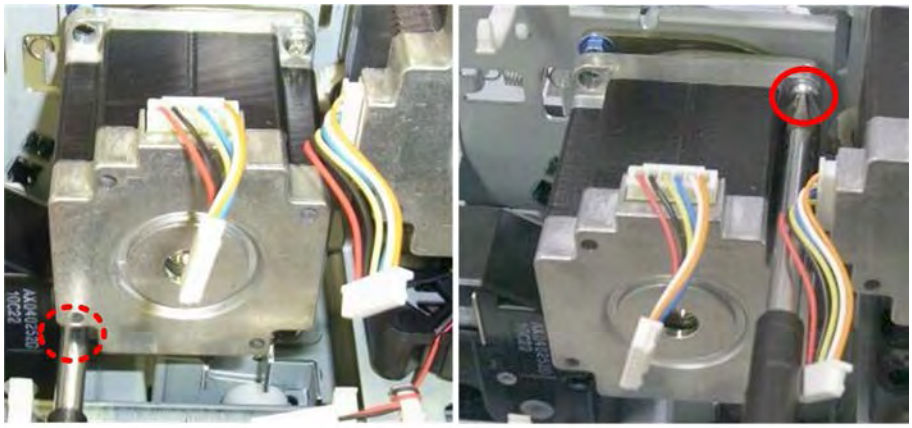


d517r824

1. Remove rear cover
2. Disconnect:

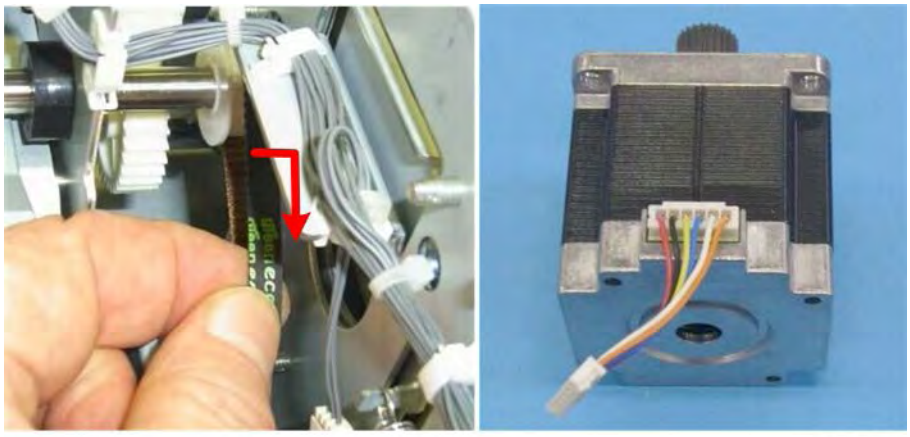
   [1] Paper feed motor (x1, x1)

   [2] Transport motor (x1)



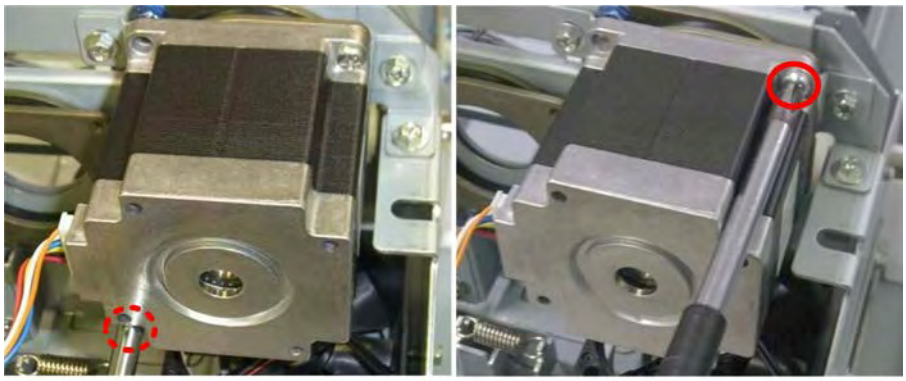
d517r825

3. Disconnect the transport motor (x2)



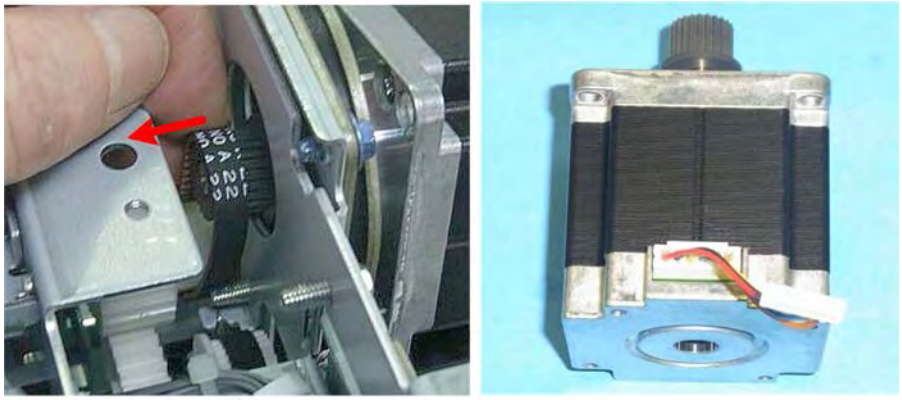
d517r826

4. Disconnect the timing belt behind the motor and remove the motor (x1).



d517r827

5. Disconnect the paper feed motor (x2).

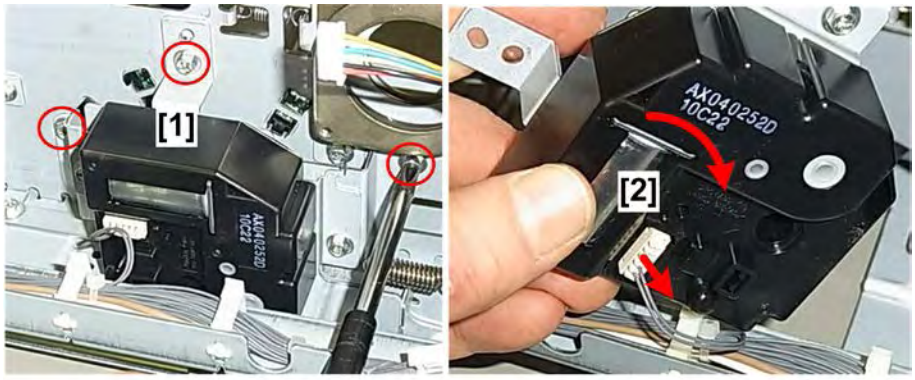


d517r828

6. Disconnect the timing belt behind the motor and remove the motor (x1).

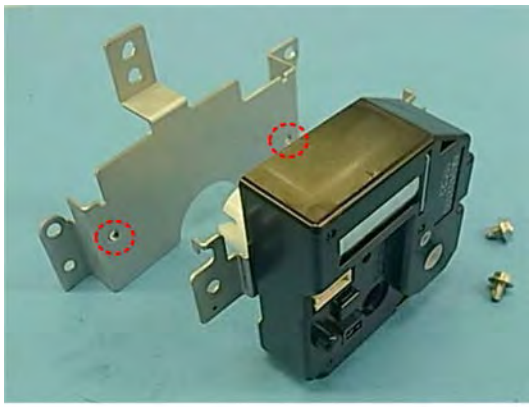
1.2.2 LIFT MOTOR

1. Remove rear cover
2. Remove the paper feed motor. page 8



d517r830

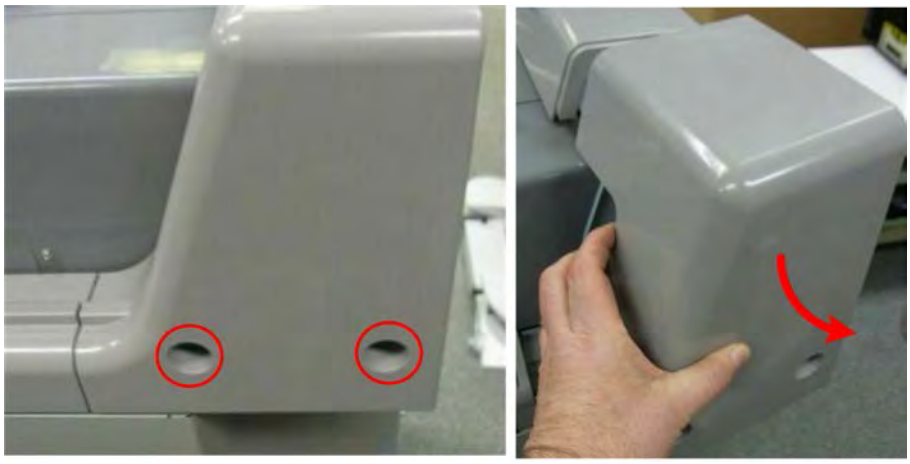
3. Disconnect the motor bracket [1] (x3).
4. Disconnect the motor [2] and remove it (x1).



d517r831

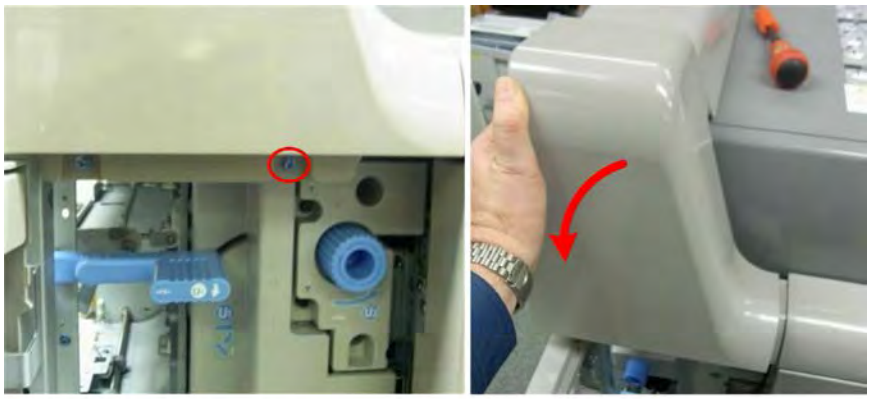
5. Separate the motor and bracket (x2).

1.2.3 RELAY MOTOR



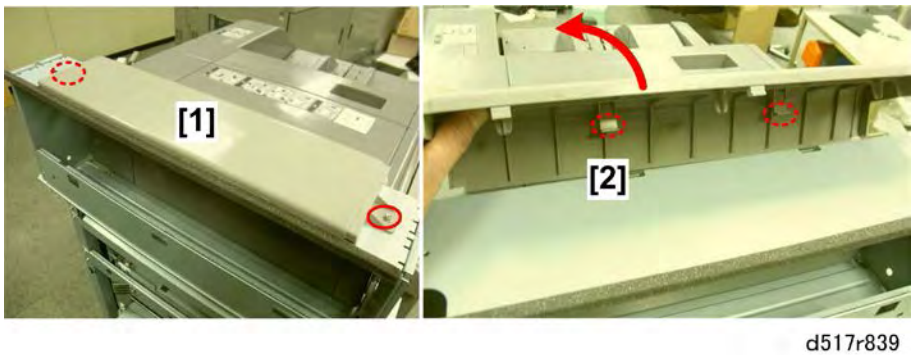
d517r837

1. Remove the rear outer cover unit (x2).



d517r838

2. Remove the front outer cover (x1).

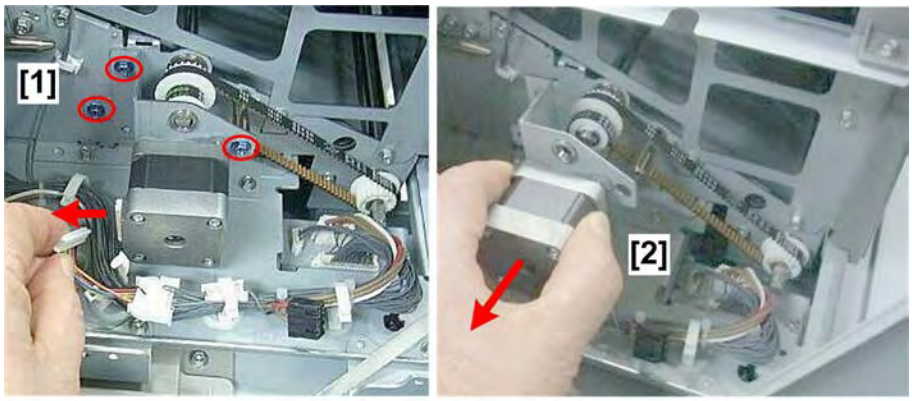


d517r839

3. Disconnect the top cover [1] (x2).
4. Remove the top carefully to avoid breaking the large tabs [2] under the cover.

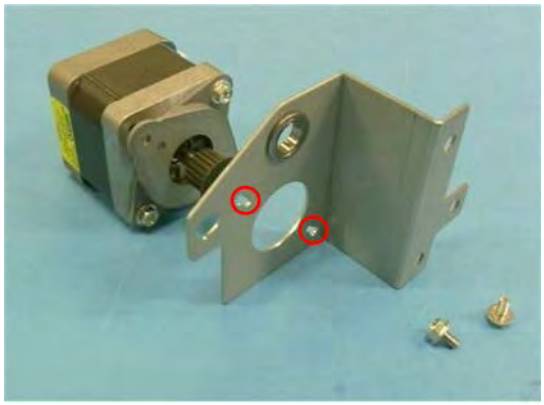
d517r840

5. Remove the rear inner cover (x1).



d517r841

6. At the rear, disconnect the relay motor bracket [1] and remove the motor [2] (x1, x3, x1)

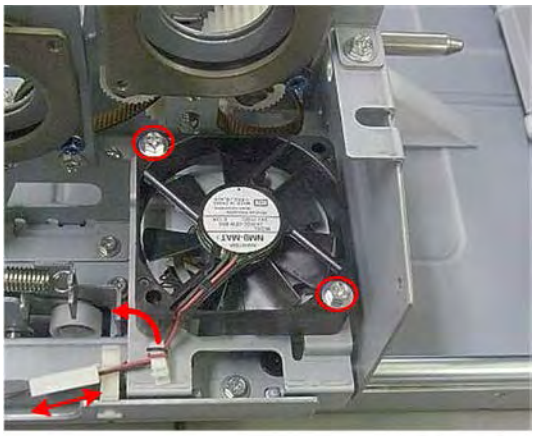


d517r842

7. Separate the motor and bracket (x2).

1.2.4 FAN

1. Remove:
   - Remove rear cover.
   - Paper Transport Motor. page 8



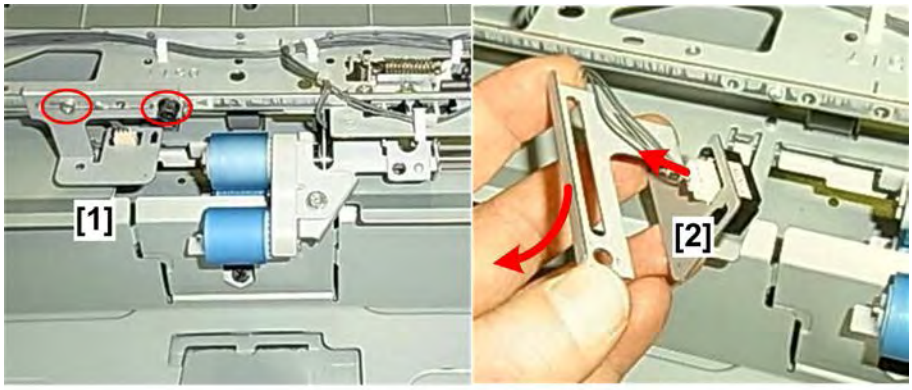
d517r829

2. Remove the fan (x1, x1, x2)

1.3 SENSORS

1.3.1 PAPER FEED SENSOR

1. Remove the front, rear, and top covers.

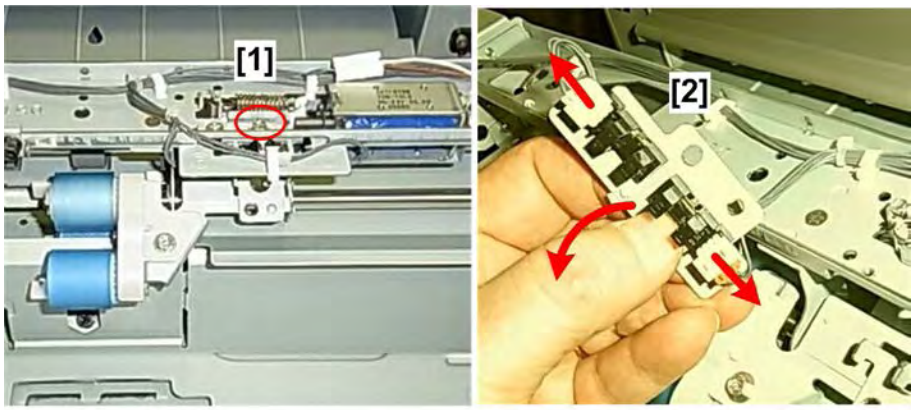


d517r835

2. Disconnect the sensor bracket [1] (x1, x1).
3. Remove the sensor [2] (x1, x3).

1.3.2 LIFT SENSORS

1. Remove the front, rear, and top covers.

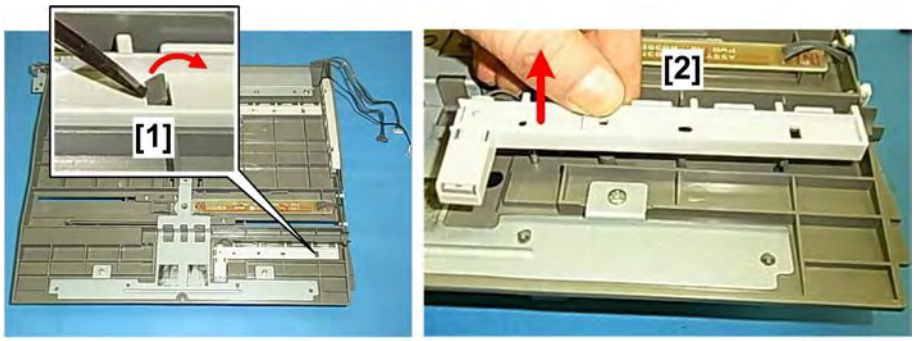


d517r836

2. Disconnect the sensor bracket [1] (x1).
3. Disconnect and remove the sensors (x1, x3 each).

1.3.3 PAPER END SENSOR

1. Remove the feed tray. page 6
2. Turn the feed tray upside down and lay it on a flat surface.



d517r814

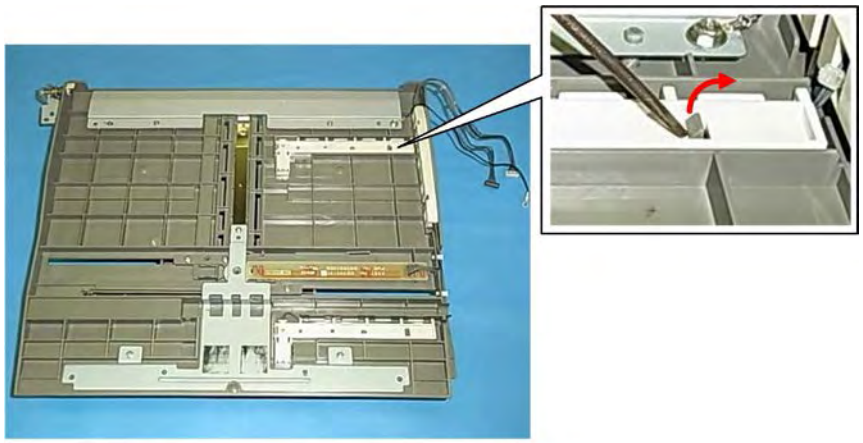
3. Release tab [1] and remove the sensor cover [2] (x1).

d517r815

4. Turn over the sensor cover [1].
5. Remove the sensor [2] (x1).

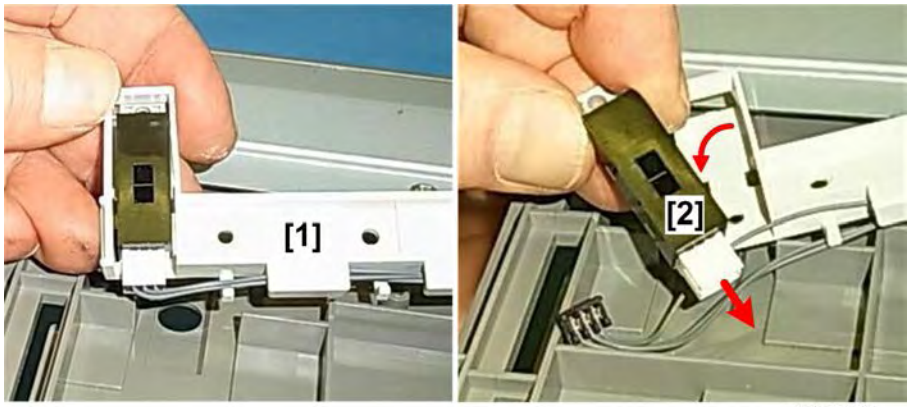
1.3.4 PAPER LENGTH SENSOR

1. Remove the feed tray page 6
2. Turn the feed tray upside down and lay it on a flat surface.



d517r819

3. Release the hook.

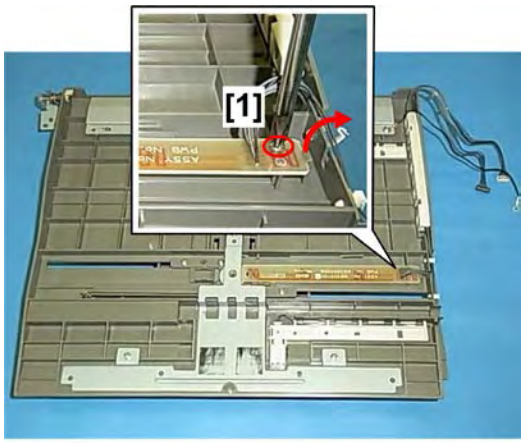


d517r820

4. Remove the sensor cover [1] and turn it over.
5. Remove the sensor [2] (x1)

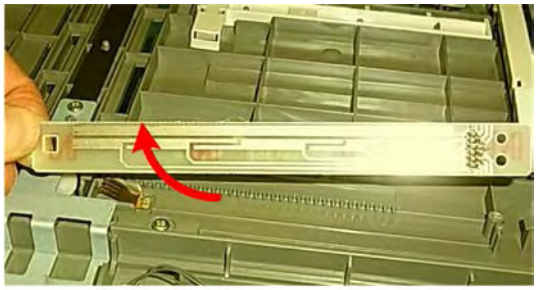
1.3.5 PAPER WIDTH SENSOR

1. Remove the feed tray. page 6
2. Turn the feed tray upside down and lay it on a flat surface.



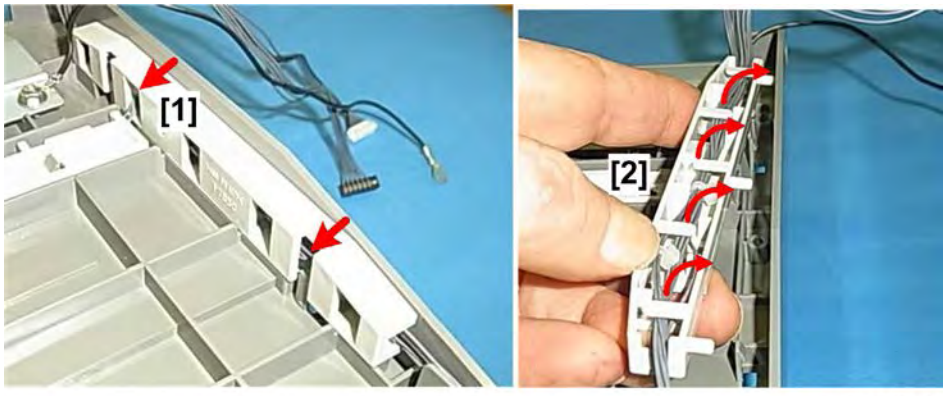
d517r816

3. Disconnect the sensor plate [1] (x1).



d517r817

4. Remove the sensor plate (x3).

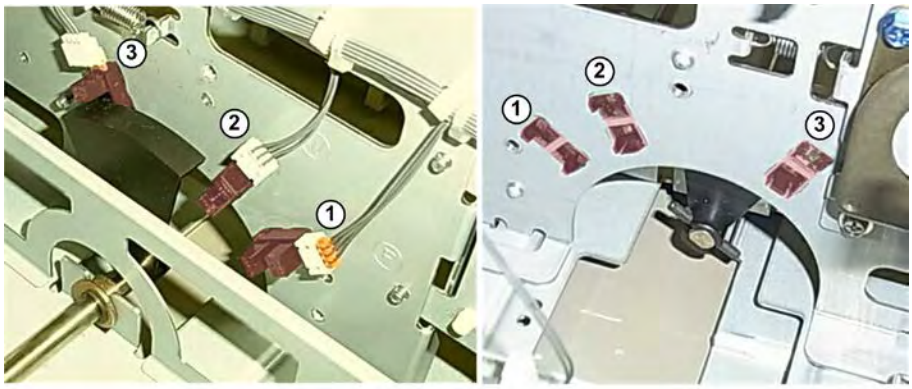


d517r818

5. Disconnect the sensor cover [1] (x2).
6. Turn the sensor cover over [2] and remove the sensor harness from the cover.

1.3.6 PAPER HEIGHT SENSORS

1. Remove
   - Front and rear covers
   - Feed Tray

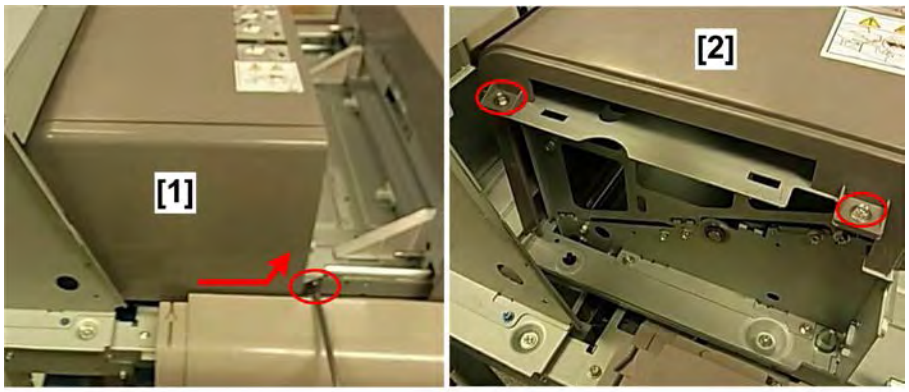


d517r832

2. Paper height sensors 1, 2, and 3 are mounted on the frame.
   - The left photo shows the sensors and connectors on the front side of the frame.
   - The right photo shows where the sensor pawls protrude from the back of the frame.
3. To remove a sensor, disconnect it from the frame and harness (x3, x1).

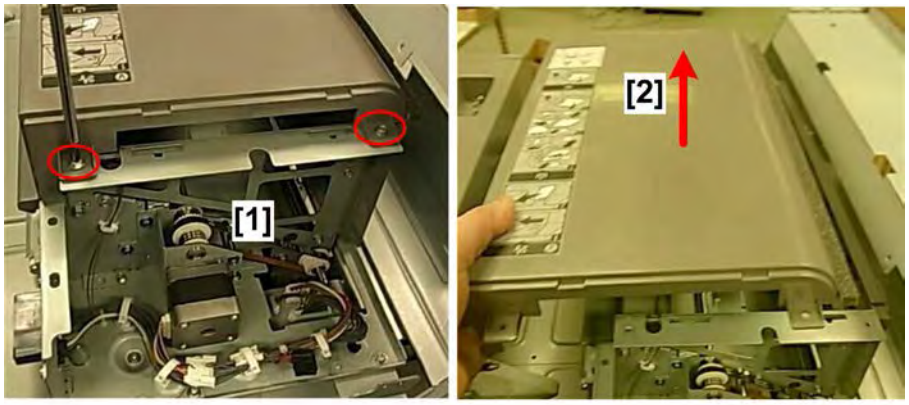
1.3.7 RELAY SENSOR

1. Remove the covers for the relay motor removal. page 11



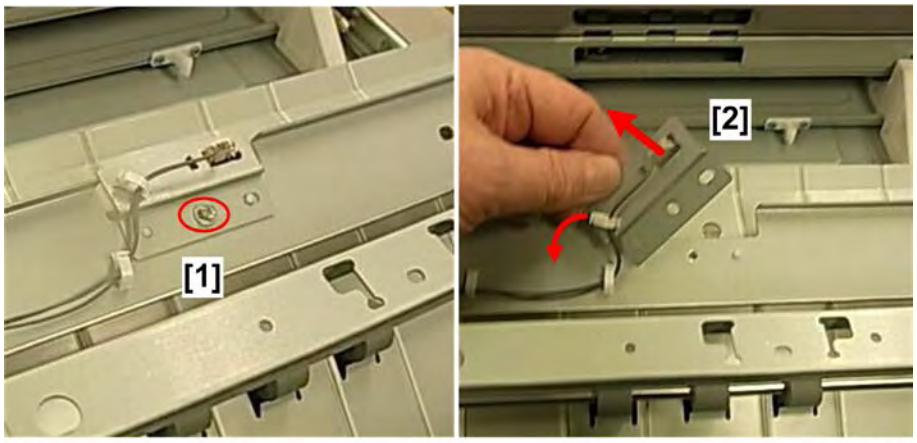
d517r843

2. Remove the front inner cover [1] (x1).
3. Disconnect the top cover [2] at the front (x2).



d517r844

4. Disconnect the top cover [1] at the rear (x2).
5. Remove the top cover [2].



d517r845

6. Remove the sensor bracket [1] (x1).
7. Remove the sensor [2] (x1, x1).

1.4 ROLLERS

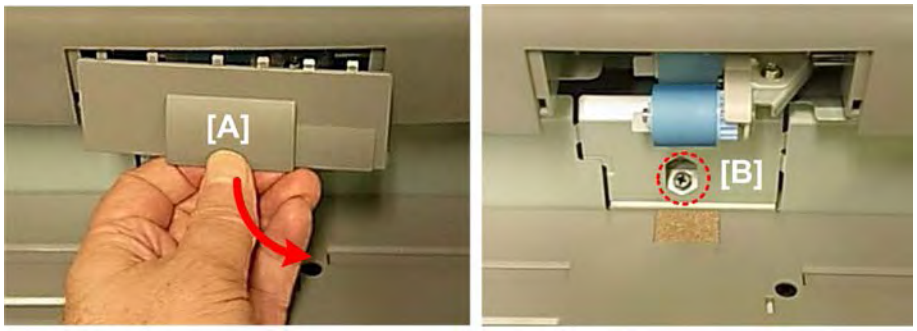
1.4.1 OVERVIEW

The bypass feed rollers can be accessed from the top of the LCIT.

1.4.2 ROLLER REMOVAL

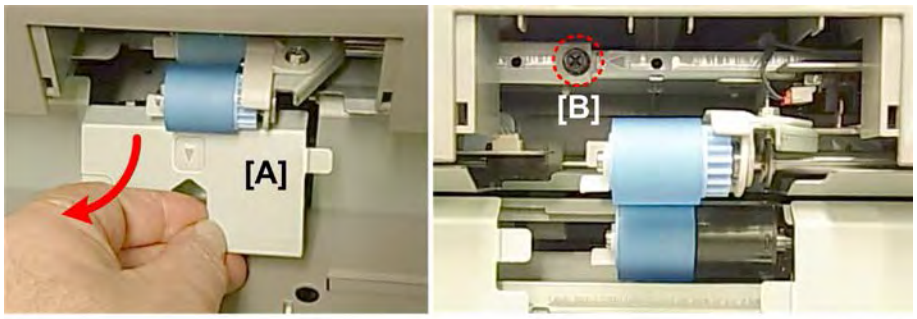
d517r751

1. The rollers are behind the snap-off cover.



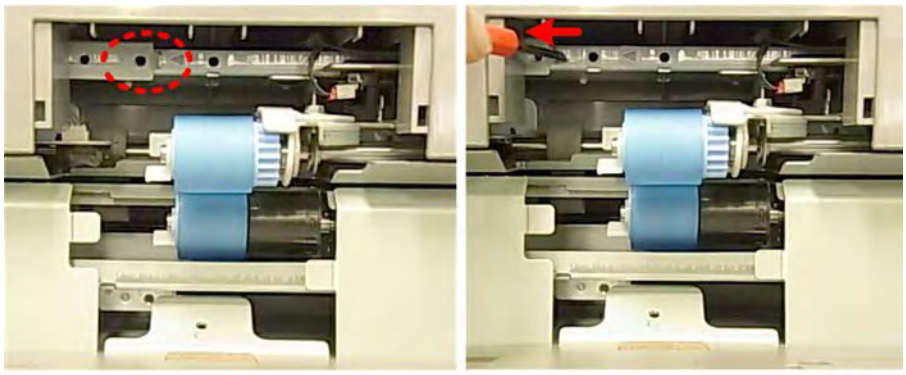
d571r752

2. Pull off cover [A].
3. Remove screw [B].



d517r753

4. Remove plate [A].
5. Remove screw [B].

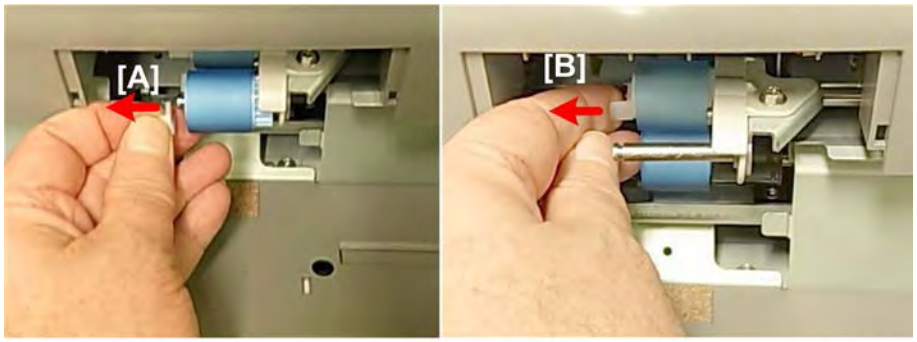


d517r754

6. Push the sensor positioning plate to the left.

Note

- If this plate is not pushed to the left, you will not be able to remove the feed roller.

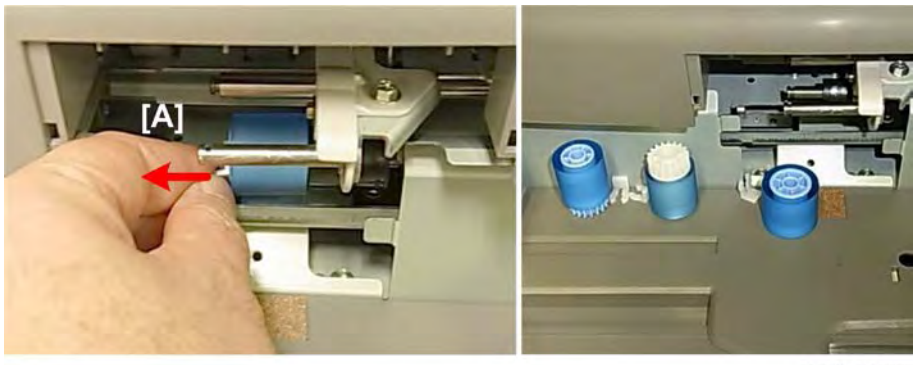


d517r755

7. Remove:

   [A] Pick-up roller snap ring and roller.

   [B] Feed roller snap ring and roller.

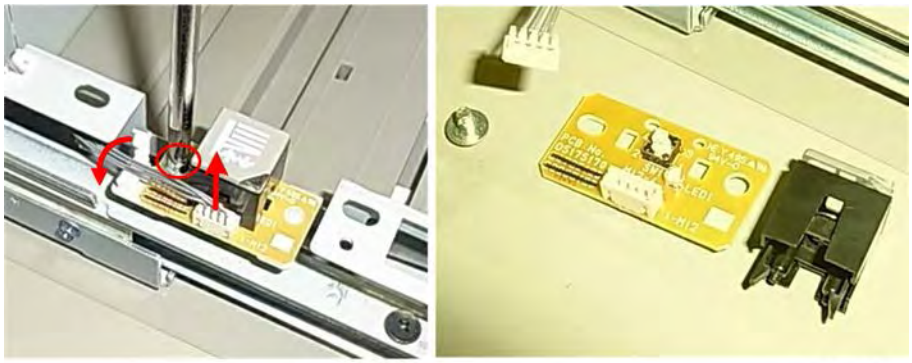


d517r756

8. Remove separation snap ring and roller [A].
9. Turn on the machine and wait for it to warm up.
10. Re-set the PM Count for the replaced rollers.

1.5 SWITCH, SOLENOID, PCB

1.5.1 TRAY LIFT SWITCH

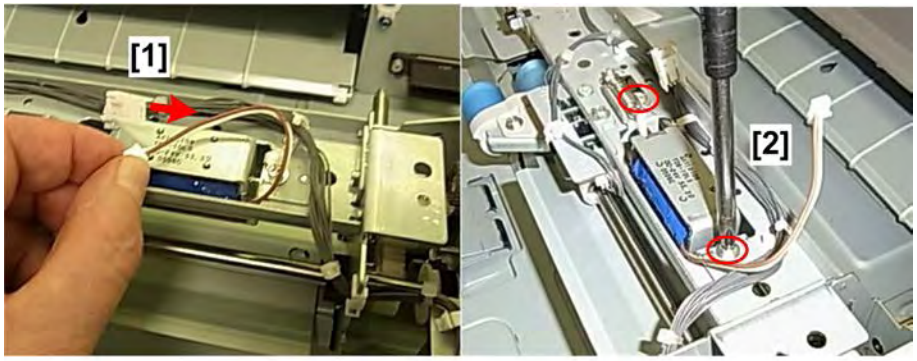


d517r846

1. Remove the front covers
2. Disconnect and remove the switch (x1, x1, x1)

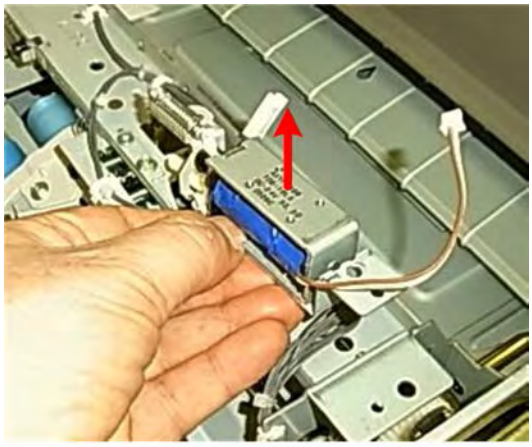
1.5.2 PICKUP SOLENOID

1. Remove the covers.



d517r833

2. Disconnect the solenoid [1] (x1).



d517r834

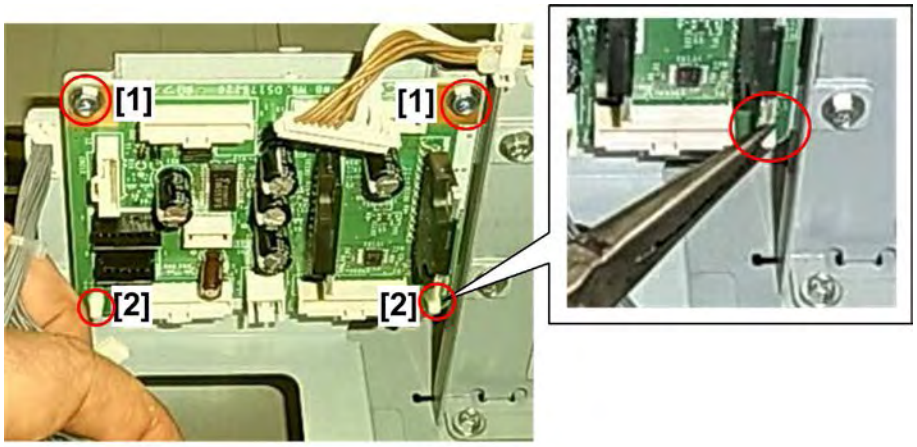
3. Remove the solenoid.

Re-installation

- When re-installing the solenoid, make sure that the arm of the solenoid is positioned above and in contact with the plate of the pick-up roller shaft below.
- To confirm correct installation, manually move the solenoid to the left and right. When the solenoid plunger is moved, the pick-up roller should move up and down smoothly.

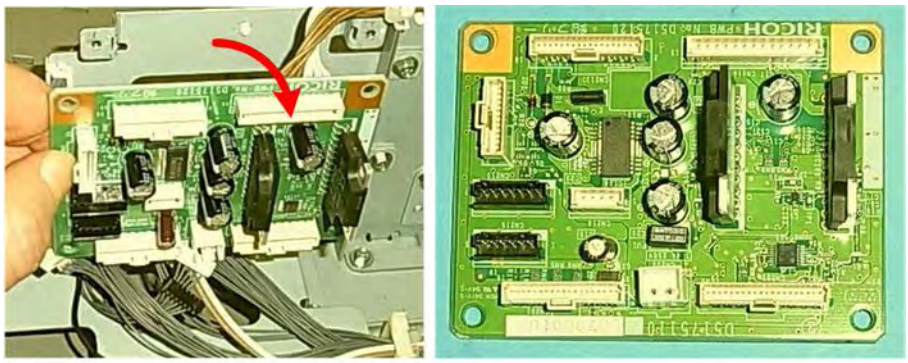
1.5.3 BYPASS TRAY PCB

1. Remove rear cover.



d517r822

2. Disconnect connectors (x9).
3. Disconnect the board at [1] and [2] (x2, x2).



d517r823

4. Remove the board.
5.

D520

TRIMMER UNIT TR5040

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

TRIMMER UNIT TR5040 (D520)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT 1

1.1 COMMON PROCEDURES 1

1.1.1 BEFORE YOU BEGIN 1

1.1.2 COVERS, TRAY UNIT, DOOR 2

Rear Cover 2

Left Upper Cover 3

Top Cover 3

Door 5

Left Lower Cover 6

Tray Unit 6

1.1.3 FEED UNIT 8

1.1.4 TRIM POSITIONING UNIT 11

1.1.5 TRANSPORT UNIT 14

1.2 TRIMMING BLADE, BLADE CRADLE 16

1.2.1 TRIMMING BLADE COVER 16

1.2.2 TRIMMING BLADE 18

1.2.3 BLADE CRADLE 21

1.3 MOTORS 22

1.3.1 CUTTER MOTOR 22

1.3.2 FEED UNIT 22

Feed Motor 22

1.3.3 TRIM POSITIONING UNIT 24

Cut Position Motor 24

Press Stopper Motor 24

Press Roller Motor 26

1.3.4 TRANSPORT UNIT 29

Exit Motor 29

1.3.5 TRAY UNIT 31

Tray Motor 31

1.4 SENSORS, SWITCHES 35

1.4.1 FEED UNIT 35

Entrance Sensor 35

1.4.2 TRIM POSITIONING UNIT 35

Stopper Assembly HP Sensor 35

Press Stopper HP Sensor 36
Press Roller HP Sensor 37
Stopper Sensor 39
1.4.3 TRIMMING UNIT 41
Scrap Hopper Full Sensor 41
Scrap Hopper HP Sensor 42
Trimming Blade HP Sensor 44
1.4.4 TRIMMING UNIT 45
Exit Sensor 45
1.4.5 TRAY UNIT 47
Booklet Sensor 1 47
Booklet Sensor 3 47
Exit Sensor 49
1.4.6 SWITCHES 51
Door Switch 51
Breaker Switch 53
1.5 BOARDS 55
1.5.1 MAIN BOARD 55
1.5.2 VOLTAGE REGULATOR 56

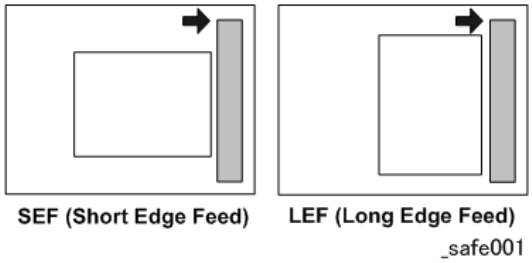
READ THIS FIRST

Symbols, Abbreviations and Trademarks

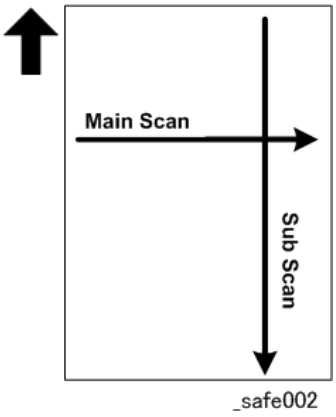
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

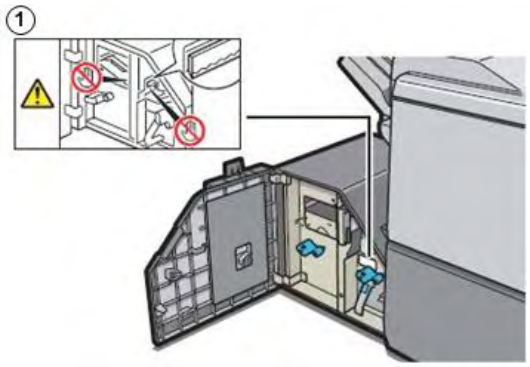
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Safety Label



d1790108

①	To avoid serious injury, work carefully around the cutting blade when removing a paper jam.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)

Terms	Meaning
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

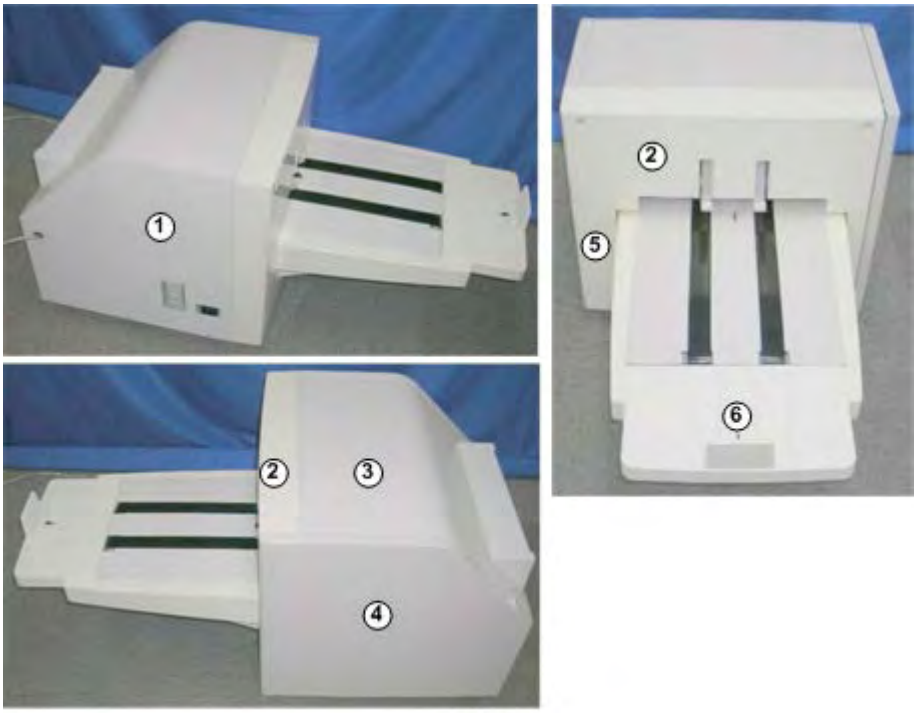
Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

1.1 COMMON PROCEDURES

1.1.1 BEFORE YOU BEGIN



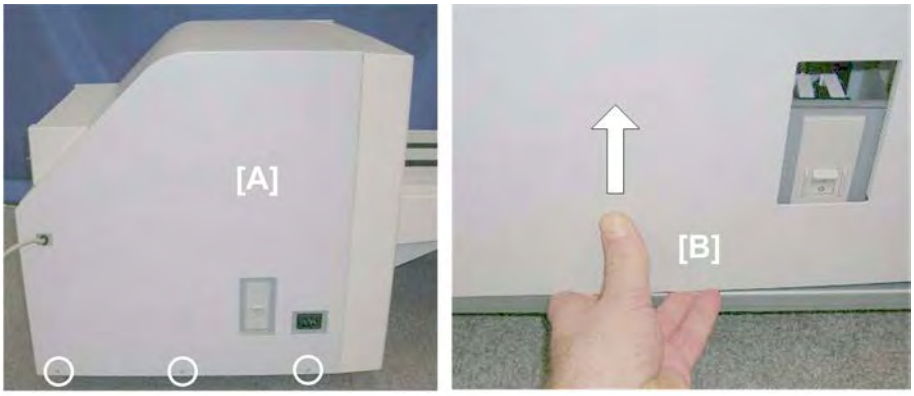
d455r000

Remove the covers, door, and tray in this order for major maintenance and cleaning:

①	Rear cover (x3)
②	Left upper cover (x2)
③	Top cover (x5)
④	Front door (x4)
⑤	Left bottom cover (x2)
⑥	Tray unit (x2, x2)

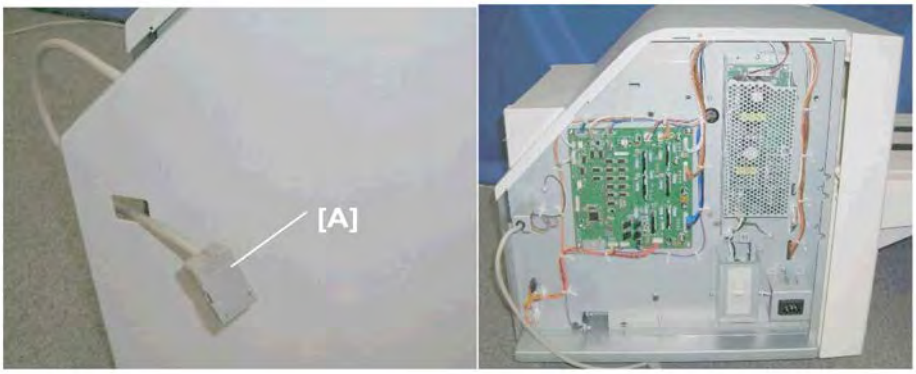
1.1.2 COVERS, TRAY UNIT, DOOR

Rear Cover



d455r010

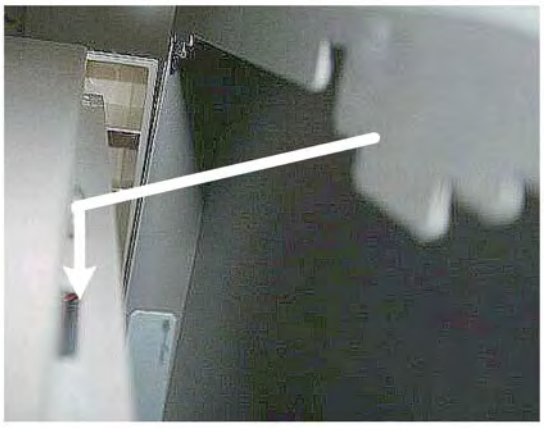
1. Rear cover [A] (x3)
2. Raise the bottom [B] to separate the metal tabs at the top.



d455r011

3. Pull I/F connector [A] through the hole.

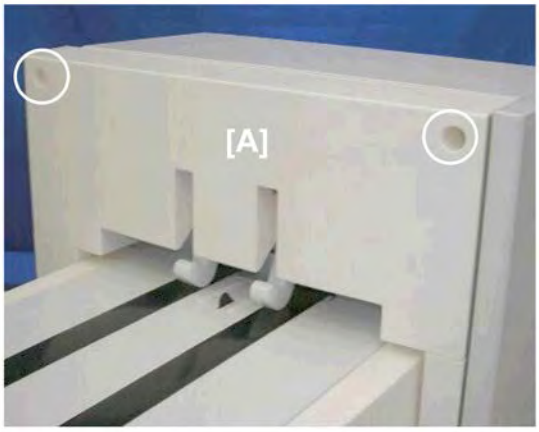
Re-installation



d455r012

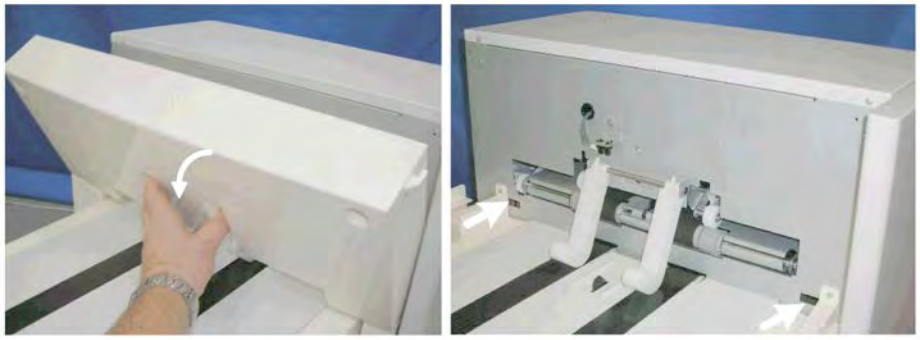
1. Be sure to engage the tabs on the top edge of the rear cover before re-attaching the bottom screws.

Left Upper Cover



d455r013

1. Left upper cover [A] (x2)



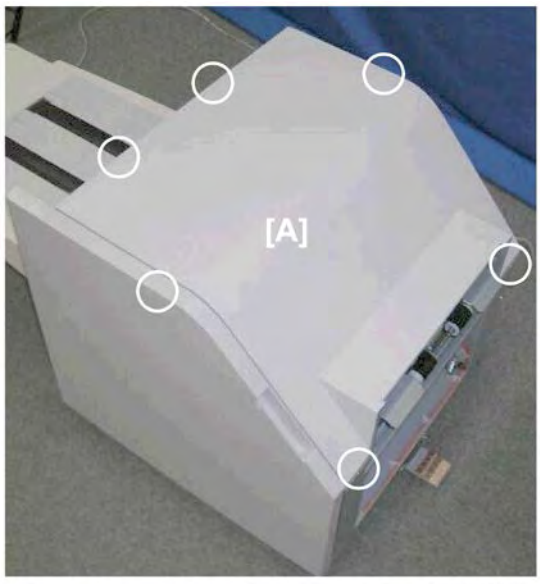
d455r014

2. Slowly pull the top away slowly and disengage the two tabs below.

Top Cover

Preparation

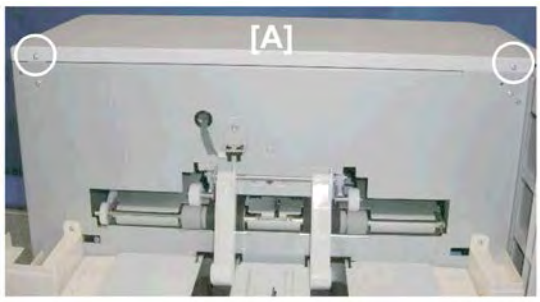
- Rear cover (x3)



d455r015

1. Remove six screws that hold the top cover [A].

2. Remove screws at:



d455r017

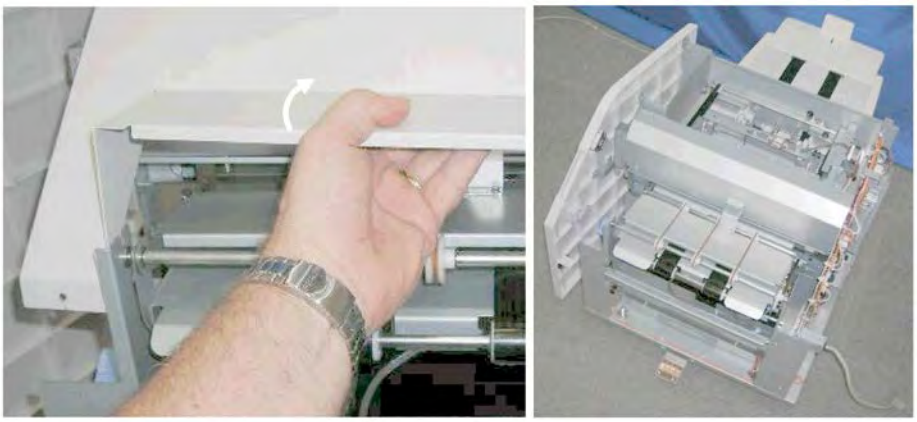
[A] Left (x2)

d455018

[B] Rear (x1)

d455r019

[C] Front (x2)



d455r020

3. Lift the top cover off.

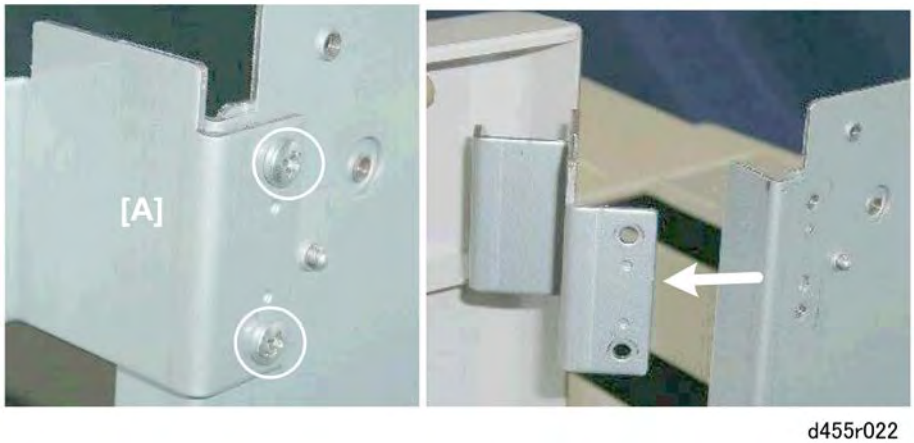
Door

Preparation (recommended)

- Rear cover (x3)
- Top cover (x6)

d455r021

1. Open the front door.



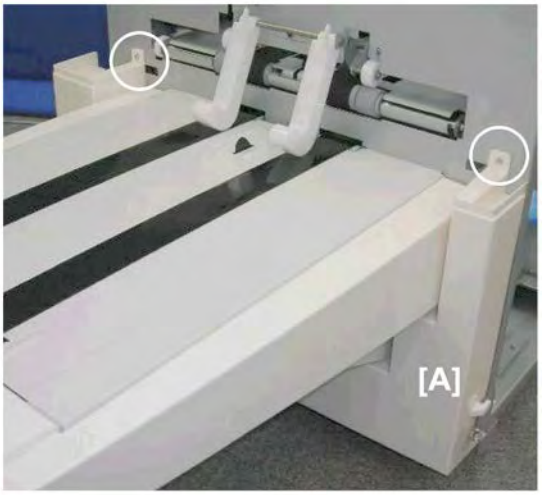
d455r022

2. Remove top hinge [A] (x2).
3. Lift the door off the post of its bottom hinge.

Left Lower Cover

Preparation

- Door (x2)
- Left upper cover (x2)



d455r023

1. Left lower cover [A] (x2)

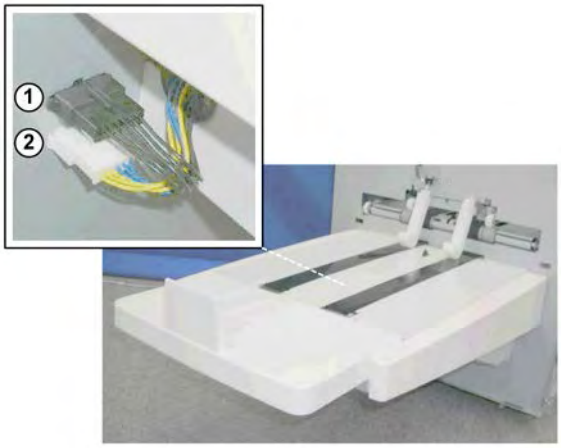
d455r024

2. Slowly pull the cover away and disengage both tabs from the holes below.

Tray Unit

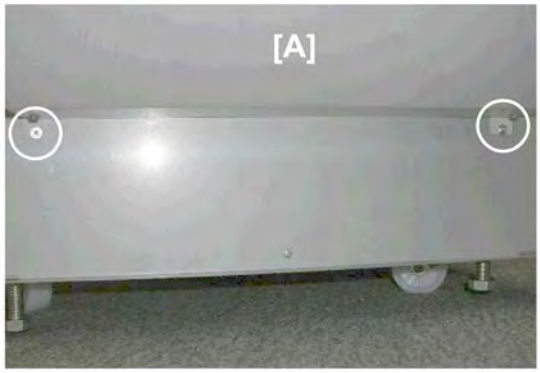
Preparation

- Left upper cover (x2)
- Door (x2)
- Left lower cover (x2)



d455r025

1. Remove two connectors at the left rear corner (x2).



d455r026

2. Remove two screws below the tray [A] (x2).

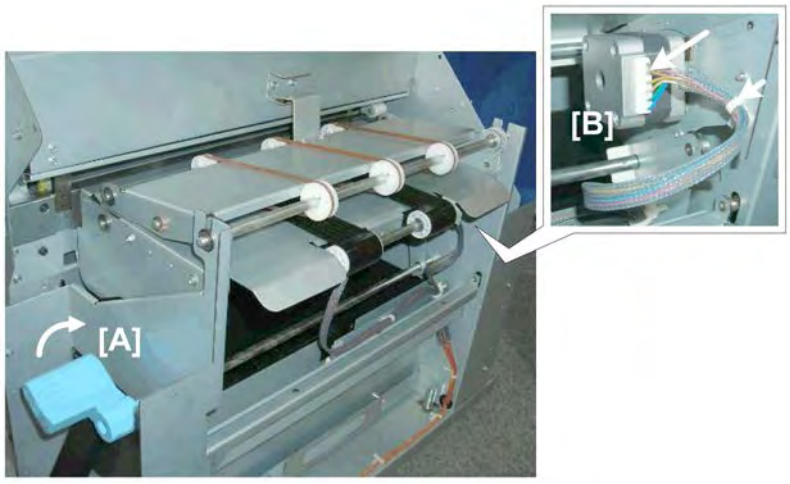
d455r027

3. Grip both sides of the tray [A], lift it straight up to disengage the four metal hooks from their holes, then pull the tray away from the side of the trimmer unit.

1.1.3 FEED UNIT

Preparation

- Rear cover (x3)
- Top cover (x5)

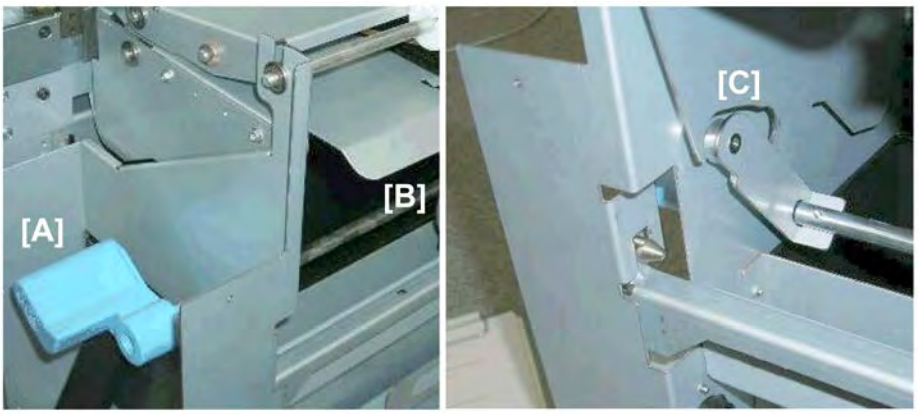


d455r030

1. Rotate lever A1 [A] clockwise to lower the feed unit.
2. Disconnect feed motor [B] (x1, x1)

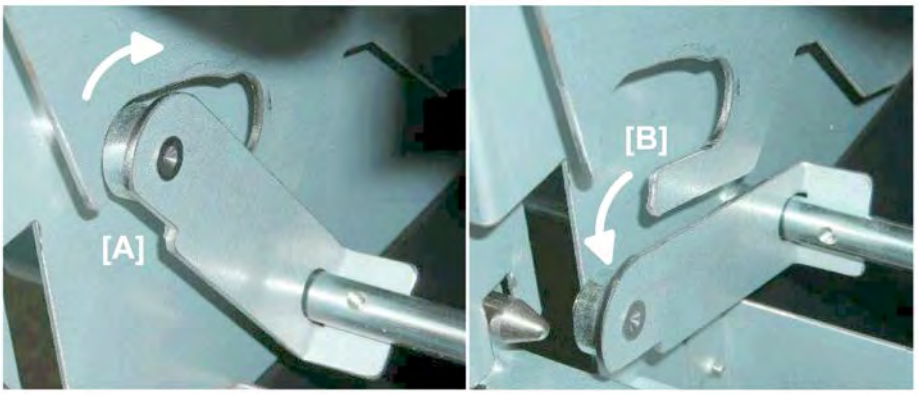
d455r031

3. Disconnect arm [A] (x2).



d455r032

4. Grip lever **A1** [A] with your left hand, and place your right hand at [B] under the feed unit.
5. Under the feed unit, look at the front where the arm roller and swing plate [C] are connected.

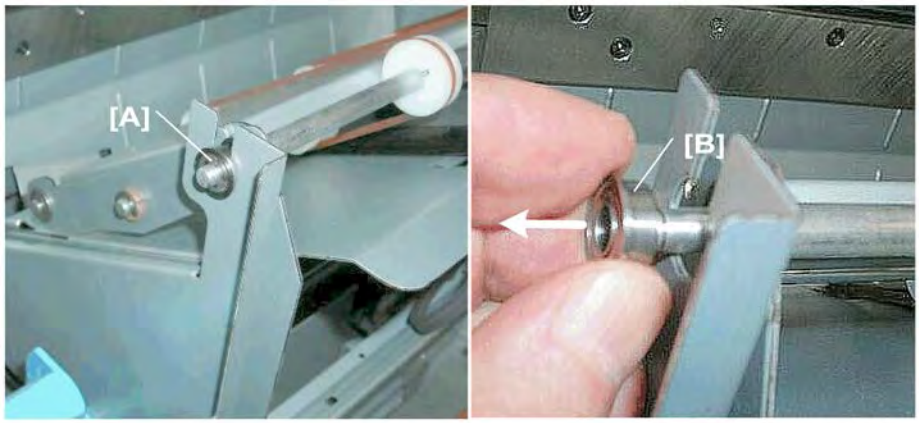


d455r033

6. While slowly raising the transport plate with your right hand, rotate lever **A1** toward you until the roller is aligned with the gap at [A].
7. While still holding the feed unit, rotate lever **A1** down to separate the roller and swing plate at [B]. This separates the rollers from the swing plates at the front and back.

d455r034

8. At the rear end of shaft [A], remove the e-ring (ℰ x1).

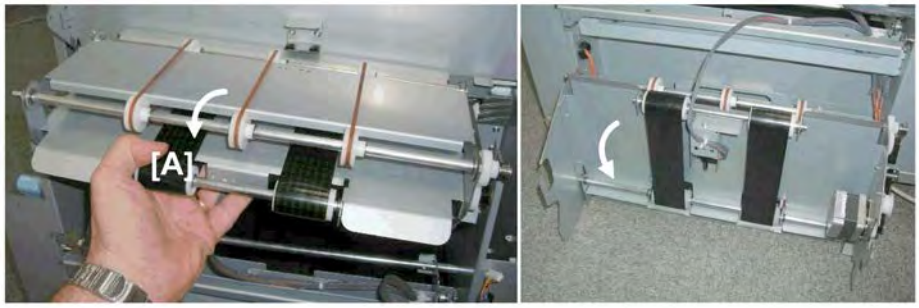


d455r035

9. At the front end of the shaft [A], remove the e-ring (x1).
10. Pull off the bushing [B].

Important

- A harness is still connected below the feed unit. Do not try to pull the feed unit away from the trimmer unit.

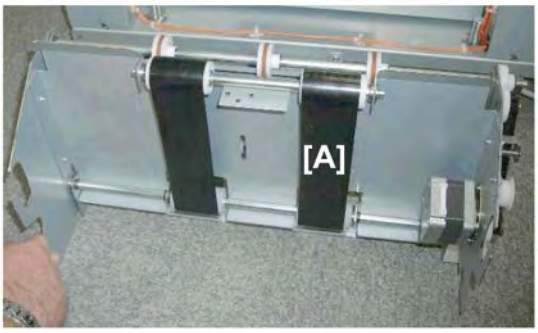


d455r036

11. Slowly lift the feed unit [A] and set it down against the trimmer unit as shown.

d455r037

12. Disconnect and remove the sensor bracket [A] (x1).



d455r038

The feed unit [A] is now completely separated from the trimmer unit.

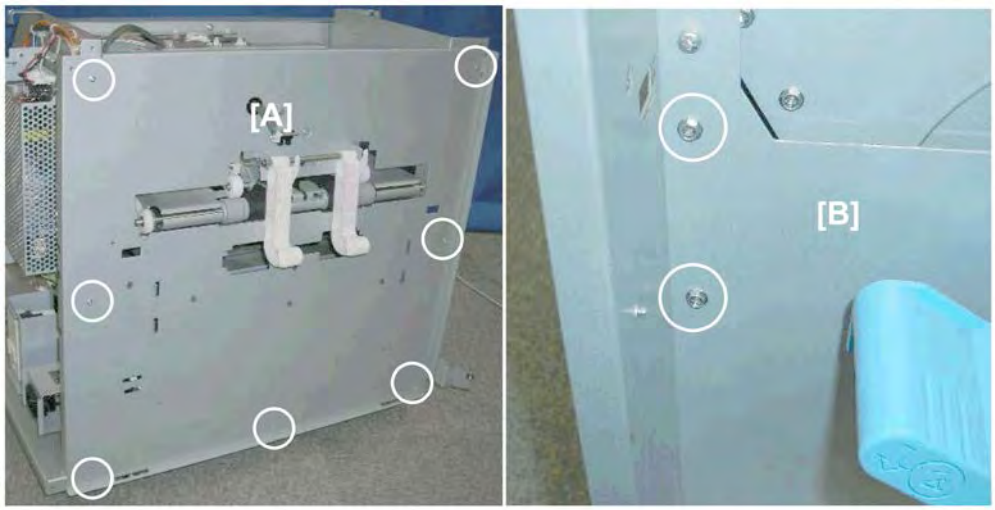
1.1.4 TRIM POSITIONING UNIT

Preparation

- Rear cover (x3) page 2
- Top cover (x5)
- Door (x2)
- Left upper cover (x2)
- Left lower cover (x2)
- Tray unit (x2, x2)

d455r041

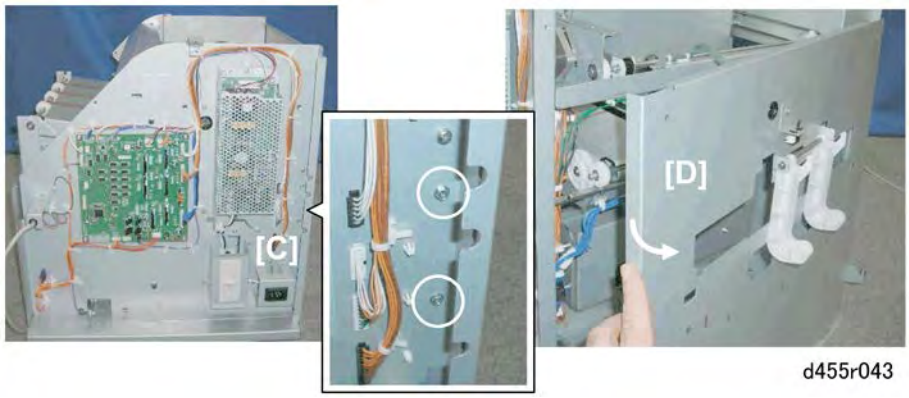
1. Disconnect sensor [A] and pull the harness out through the hole (x1).
2. Press in the releases on both sides of sensor [B], push it through its hole, then do the same for sensor [C].
3. Remove the left cover plate:



d455r042

[A] Left (x7)

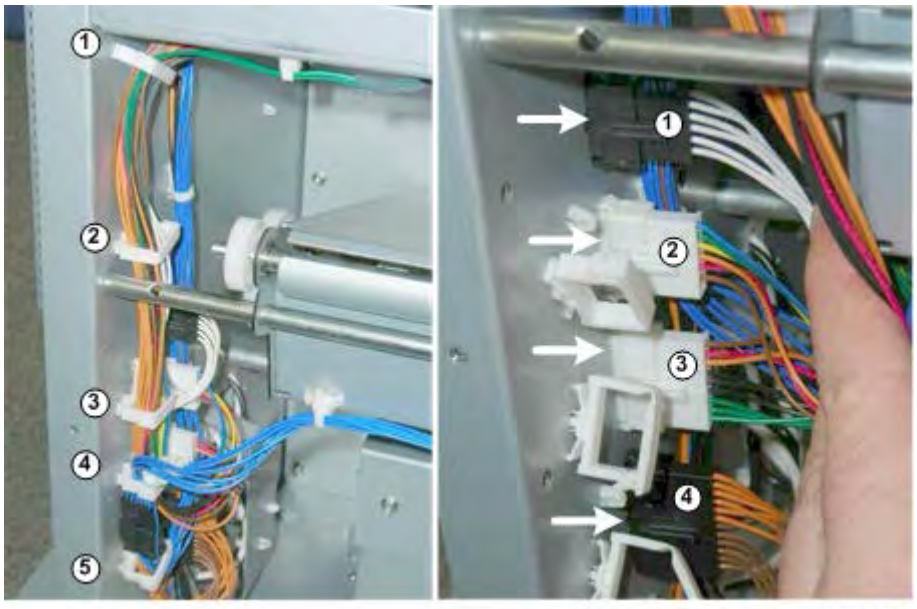
[B] Front (x2)



d455r043

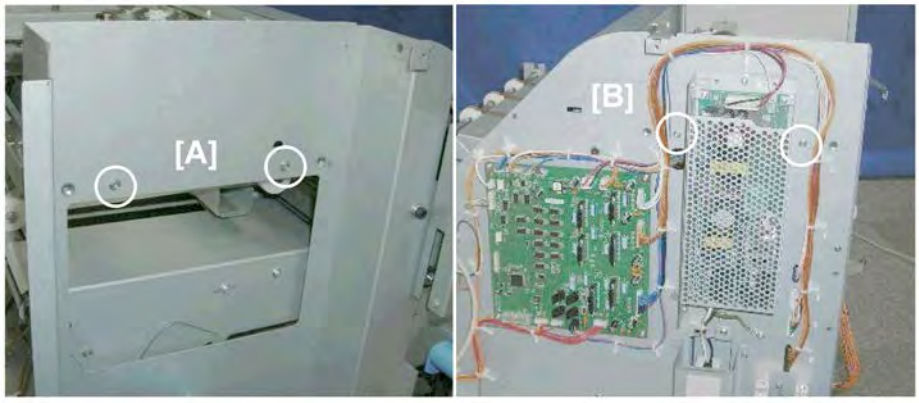
[C] Rear (x2)

[D] Remove the plate



d455r044

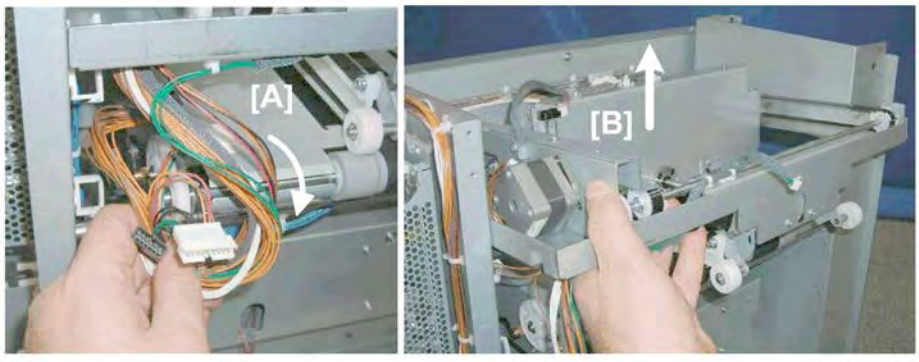
4. Open the harness clamps and pull out the harnesses (x5).
5. Close the harness clamps to prevent entangling the loose harnesses when the unit is removed.
6. Disconnect the harnesses connectors (x4)
7. Disconnect the unit:



d455r045

[A] Front (x2)

[B] Rear (x2)



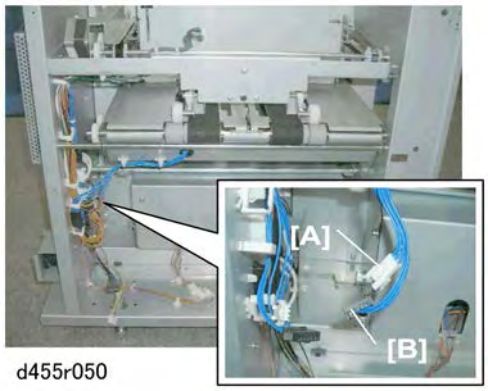
d455r046

8. Pull the harnesses [A] out from behind the shaft.
9. Lift the trim position unit [B] straight up and remove it.

1.1.5 TRANSPORT UNIT

Preparation

- Remove the trim positioning unit page 11

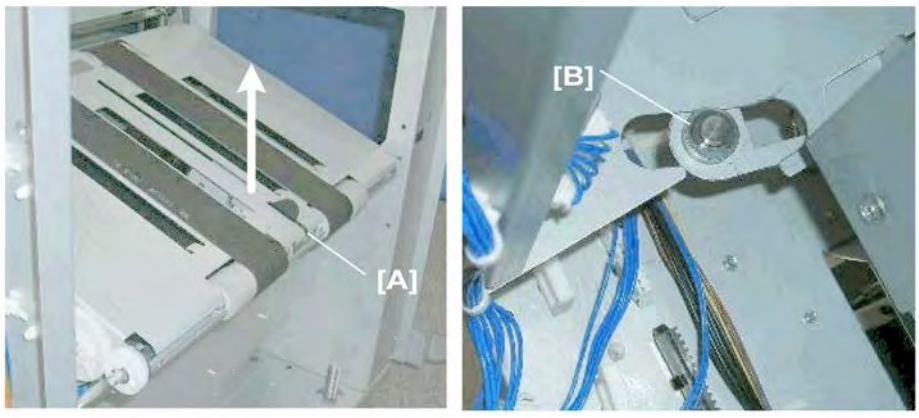


d455r050

1. Connectors [A] and [B] (x2)

d455r051

2. At the front [A], disconnect the swing frame shaft (x1).
3. At the rear [B], while supporting the middle of the unit with your right hand, disconnect the shaft (x1).



d455r052

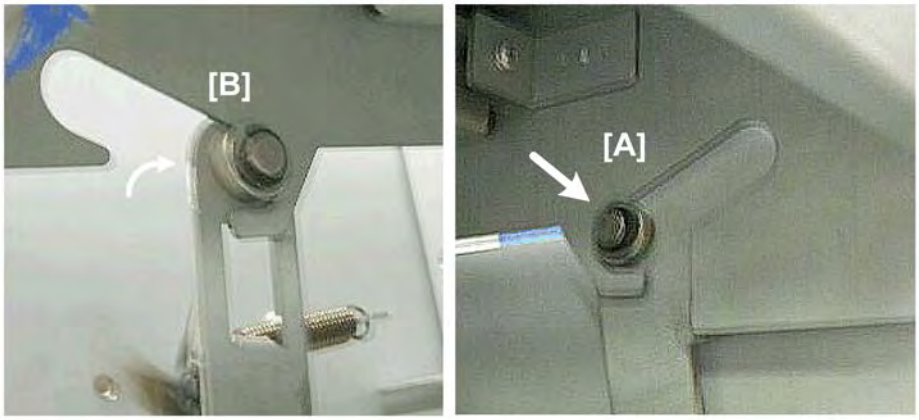
4. Raise the unit [A] with both hands until it is level.
5. Look at the rear where the roller [B] is connected to the swing frame.

6. While holding lever **A1** at the front, move the unit and pull the roller out of the gap at [B].

d455r053

7. Pull the transport unit away from the trimmer unit and set it on a flat surface.

Re-installation



d455r054

To set the transport unit on its rollers:

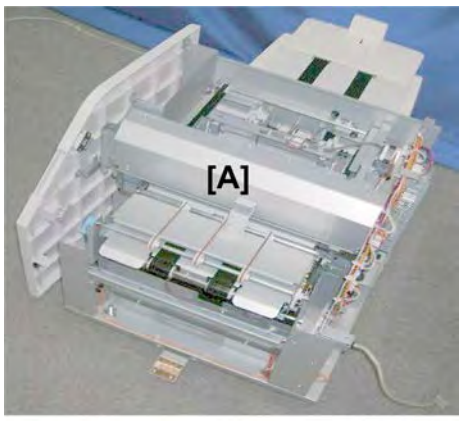
- At the **front**, set the roller in the cut-out in the swing frame [B].
- At the **rear**, set the roller in its cut-out [A].

1.2 TRIMMING BLADE, BLADE CRADLE

1.2.1 TRIMMING BLADE COVER

Preparation page 2

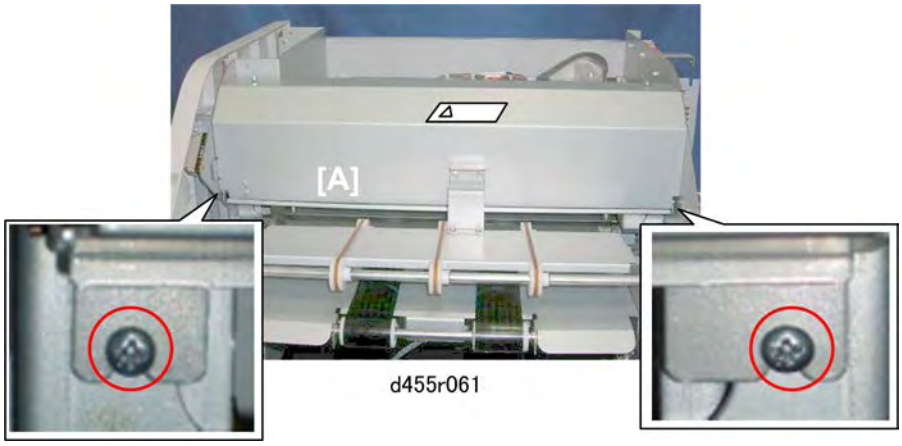
- Rear cover (x3)
- Left upper cover (x2)
- Top cover (x5)



d455r060

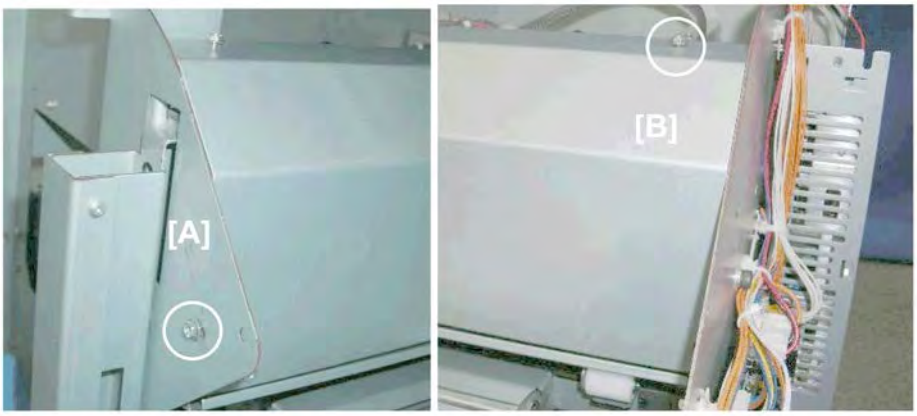
The trimming blade [A] cover protects the trimming blade

1. Disconnect the trimming blade cover in this order:



d455r061

[A] Side, bottom screws



d455r062

[A] Rear (x1)

[B] Front (x2)

d455r063

2. Separate the arm [A] from the bracket while you remove the cover.
3. The cleaning blade [B] is exposed.

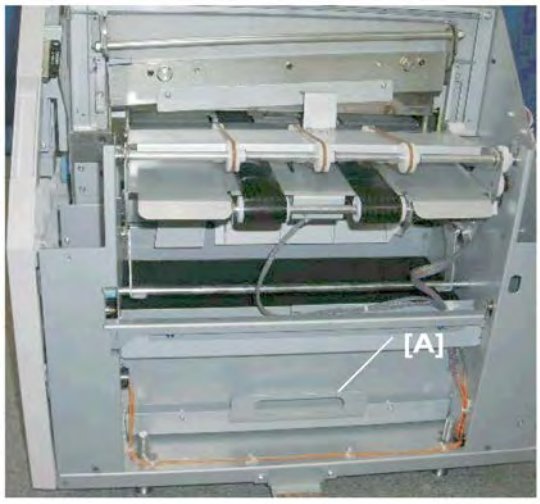
Important

- The blade is extremely sharp.
- Work carefully around the edge [C] of the blade and handle it carefully after it has been removed.

1.2.2 TRIMMING BLADE

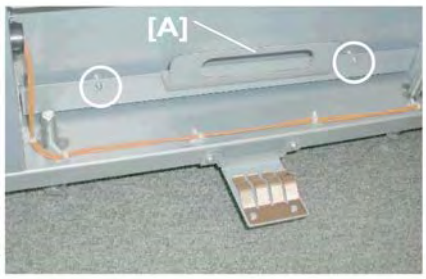
Preparation

- Rear cover (x3) page 2
- Left upper cover (x2)
- Top cover (x5)
- Trimming blade cover (x5) page 16



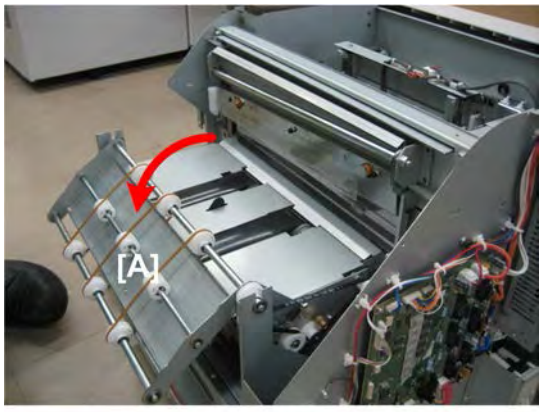
d455r070

1. Look for the handle [A], which is attached to the frame of the trimmer unit.



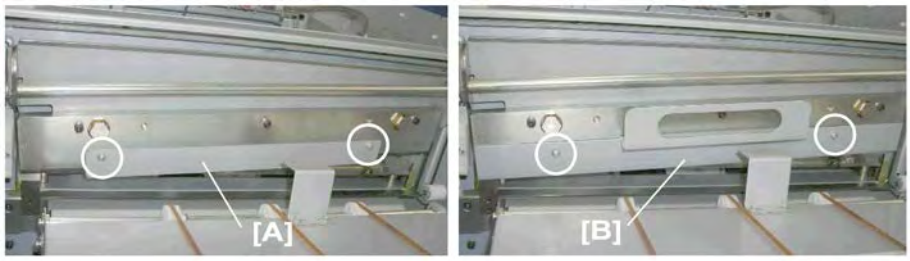
d455r071

2. Remove the handle [A] (x2)



d455r071a

3. Open the feed unit [A].



d455r072

- Remove the screws of the guard plate [A] (x2).

Important

- The guard plate is permanently attached to the blade; it will not come off after the screws have been removed.

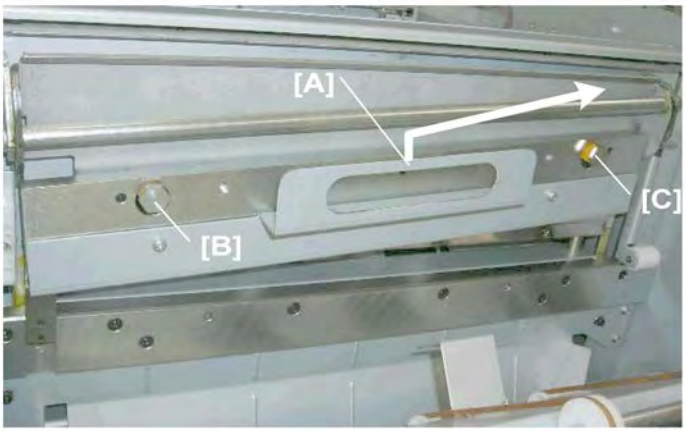
1. Use the guard plate screws to attach the handle [B] to the side of the guard plate (x2).

d455r073b

2. Use the Allen key (provided with the new blade) to remove the blade hex screws.
   - The blade is compressed by these screws and three very strong springs.
   - Insert the Allen key into the first hex screw [A].
   - Attach an adjustable wrench [B] as shown.
   - Raise the wrench to relieve tension on the springs.
   - Loosen each screw a full turn each to gradually relieve the tension on each screw.
   - Continue to loosen each screw in turns to remove them.

Important

- The screws should be removed gradually.
- To avoid stripping the threads of the other holes or screws, never remove any screw completely before the others.



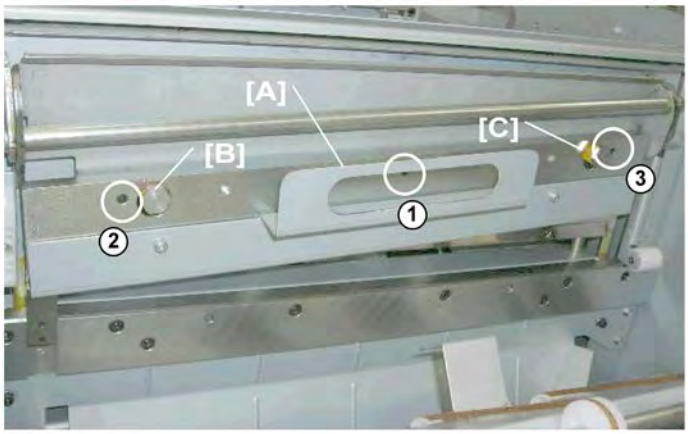
d455r074

3. Grip the handle [A] and slowly lift the blade off the heads of the large hex bolts [B] and [C].

Important

- Obey local laws and regulations regarding the disposal of items like the used trimming blade.

Re-installation



d455r075

1. Grip the new blade by the handle [A] and set it on the heads [B] and [C] of the hex bolts.

d455r073b

2. Position the screw [A] at the first hole.
3. Raise the plate with the wrench [B].
4. Insert the first screw in the hole, then turn it until the screw is firmly attached. Do not tighten it completely.
5. Start the other two screws in their holes while continuing to relieve tension on the springs with

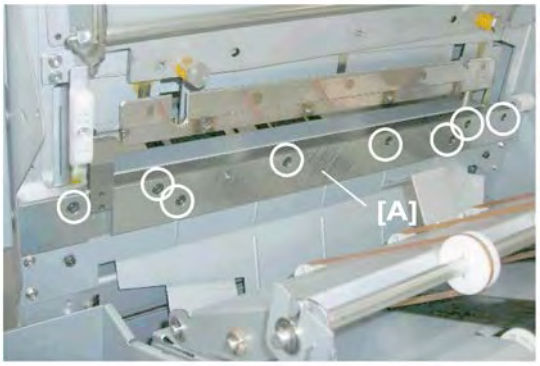
the wrench.

6. After all the screws have been attached, tighten them one by one by about one full turn until they are all tightened completely.
7. Attach the provided mylar to the new blade.

1.2.3 BLADE CRADLE

Preparation

- Trimming blade cover (x5) page 16
- Trimming blade (x3) page 18



d455r080

1. Use an Allen key to remove the hex bolts of the blade cradle [A] (x8)

d455r081

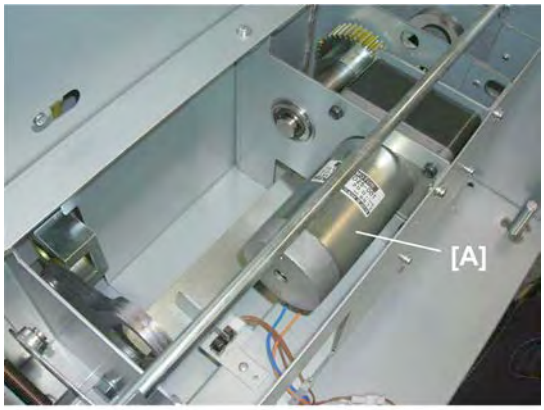
2. Remove the cradle and set it on a flat surface.

Important

- Obey local laws and regulations regarding the disposal of items like the blade cradle.

1.3 MOTORS

1.3.1 CUTTER MOTOR



d455r925

Important

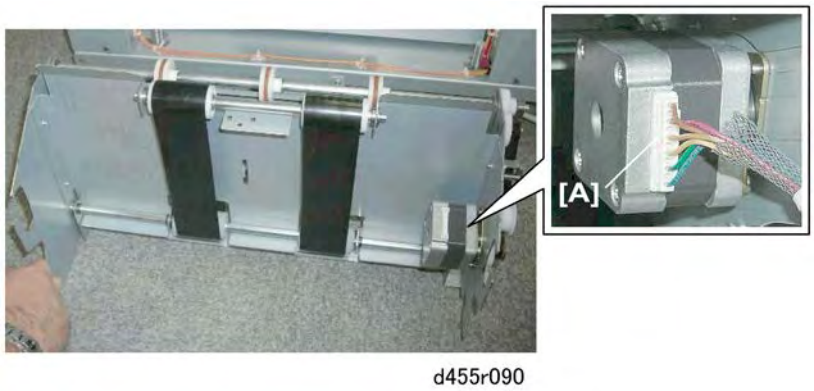
- Removing the cutter motor [A] is a dangerous procedure.
- Never attempt to remove the cutter motor.
- If the cutter motor fails, the trimmer unit must be replaced.

1.3.2 FEED UNIT

Feed Motor

Preparation

- Remove the paper feed unit. page 8



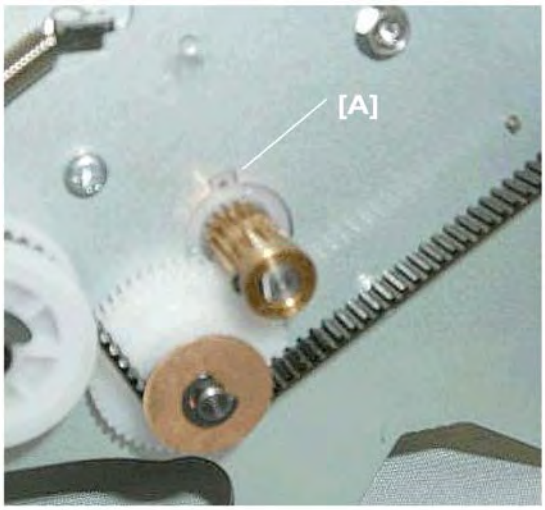
d455r090

1. Motor connector [A] (x1)

d455r091

2. Motor [A] (x2)

Re-installation



d455r092

1. Position the motor behind the frame.
2. Align the Teflon tooth [A] with its notch.
3. Press the motor against the frame and re-fasten the screws (x2).

Important

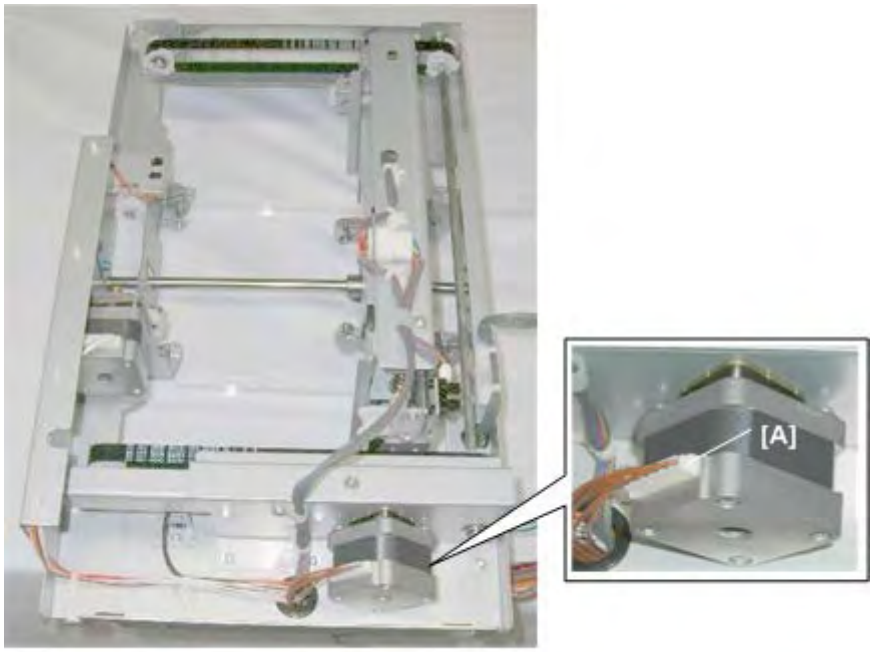
- The tooth must be seated properly in its notch, so that the motor mount is flat against the back of the frame.
- If the screws are re-attached while the tooth is out of the notch, the motor will not be straight and the gears will not mesh properly.

1.3.3 TRIM POSITIONING UNIT

Cut Position Motor

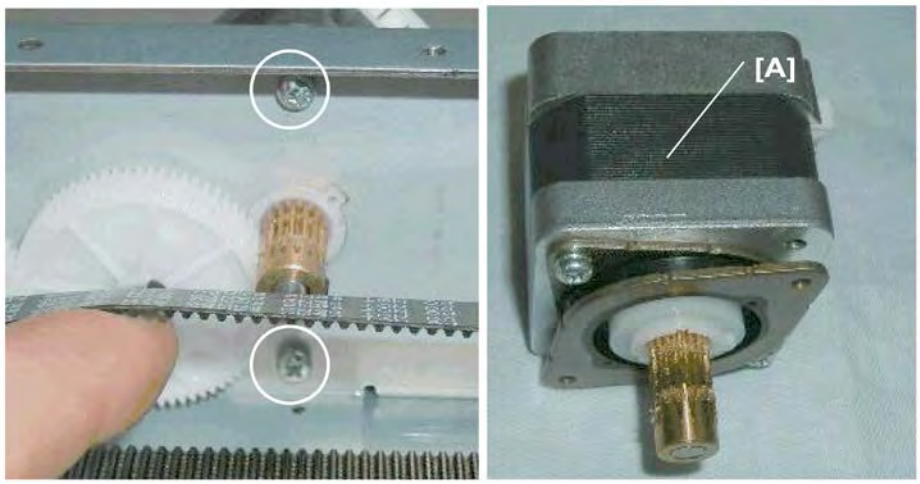
Preparation

- Trim positioning unit page 11



d455r100

1. Motor connector [A] (x1)



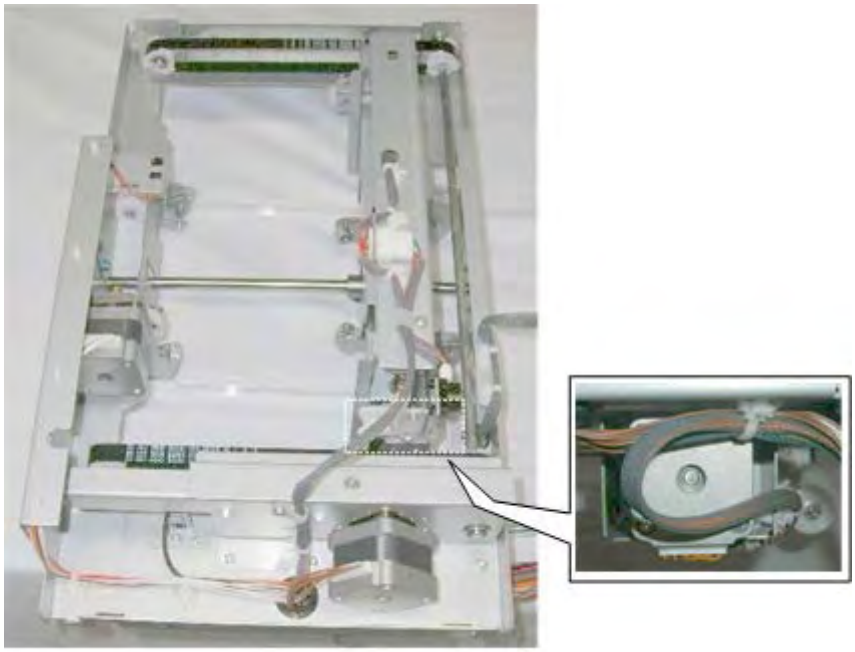
d455r101

2. Remove the screws on the other side, then remove the motor [A] (x2).

Press Stopper Motor

Preparation

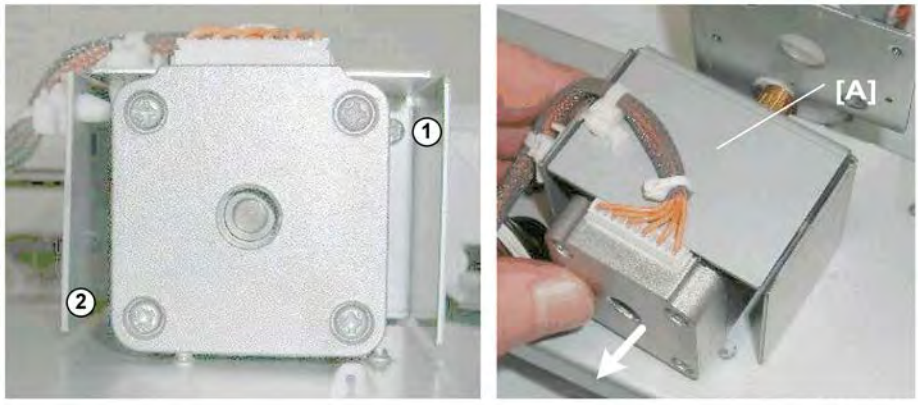
- Trim positioning unit page 11



d455r110

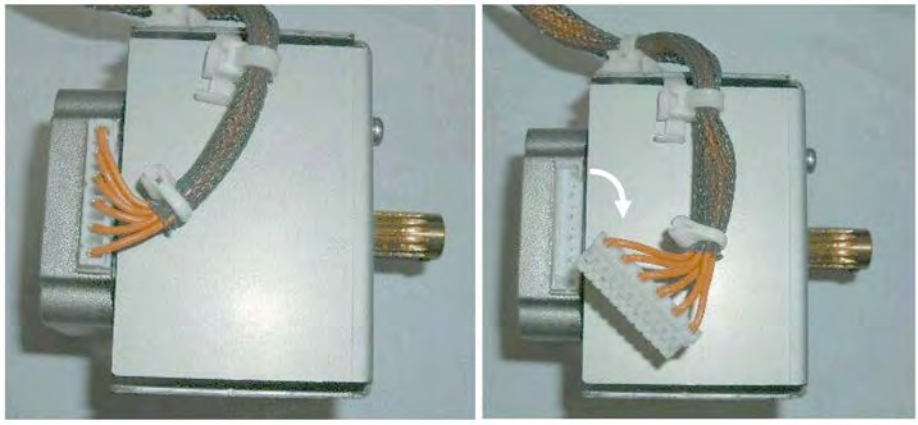
The press stopper motor is under the trim positioning unit.

1. Turn over the trim positioning unit so that you can see the motor.



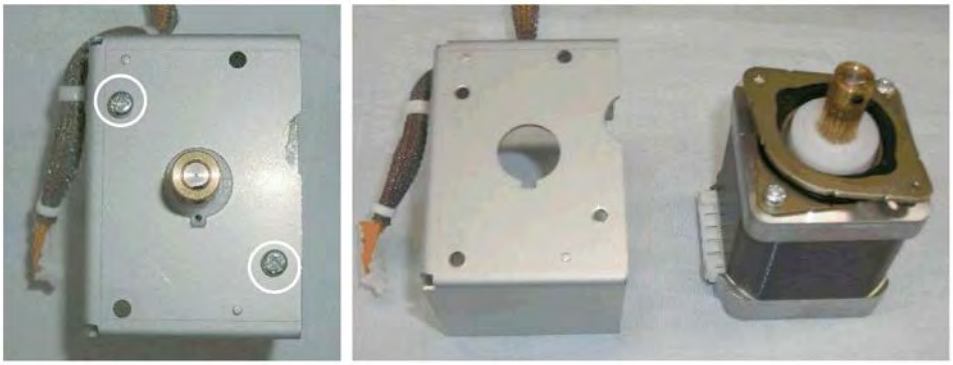
d455r111

2. Remove bracket screws ① and ②. (x2)
3. Pull away the bracket [A] with the motor.



d455r112

4. Disconnect the motor (x1).



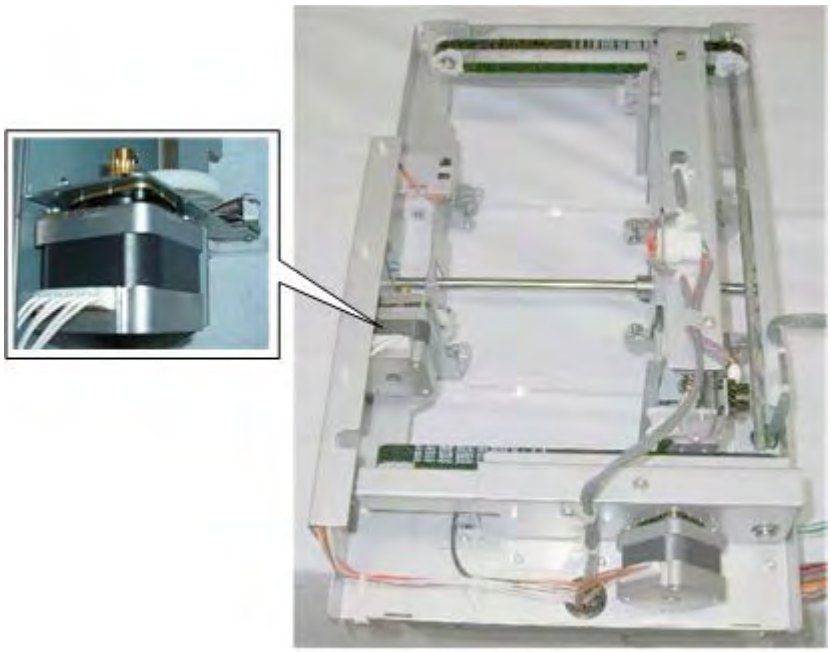
d455r113

5. Remove the motor from the bracket (x2).

Press Roller Motor

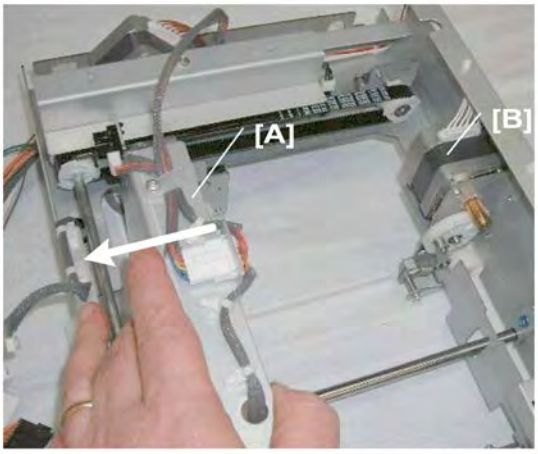
Preparation

- Trim positioning unit page 11



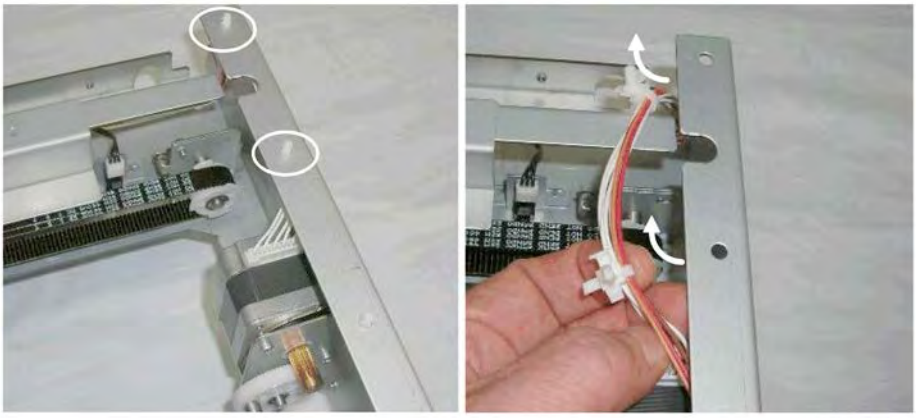
d455r120

The press roller motor is visible from the top of the trim positioning unit, near the center.



d455r121

1. Move the stopper assembly [A] away from the motor [B].



d455r122

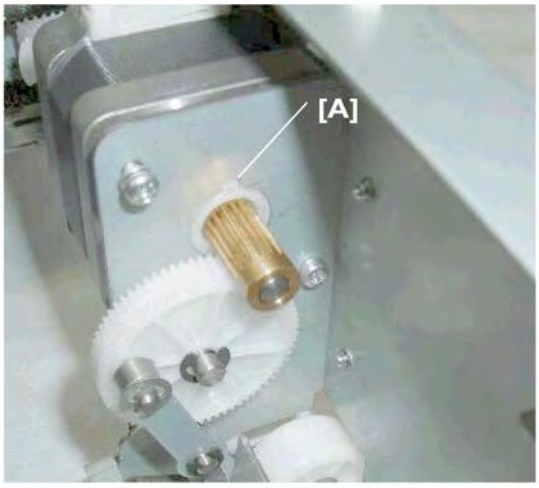
2. Remove the two standoffs ( ).

d455r123

3. Remove the motor (x1, x2).

d455r124

Re-installation



d455r125

1. Position the motor behind the frame.
2. Align the Teflon tooth [A] with its notch.
3. Press the motor against the frame and re-fasten the screws (x2).

Important

- The tooth must be seated properly in its notch, so that the motor mount is flat against the back of the frame.
- If the screws are re-attached while the tooth is out of the notch, the motor will not be straight and the gears will not mesh properly.

1.3.4 TRANSPORT UNIT

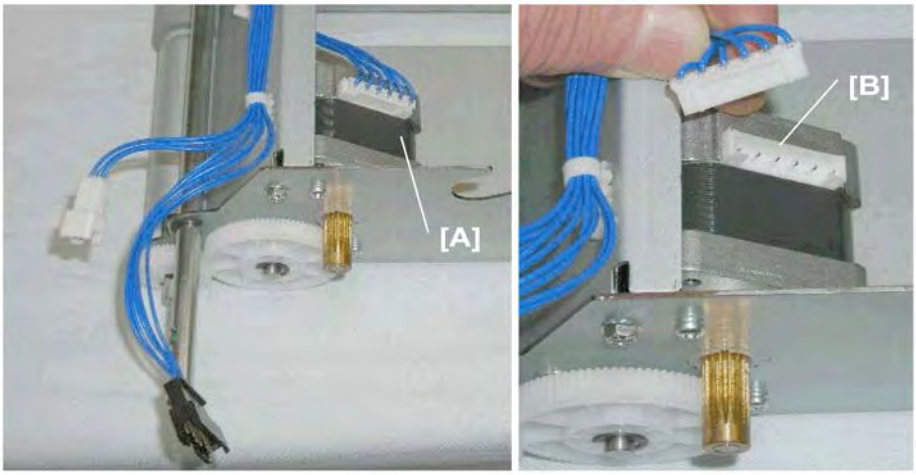
Exit Motor

Preparation

- Trim positioning unit page 11
- Transport unit page 14

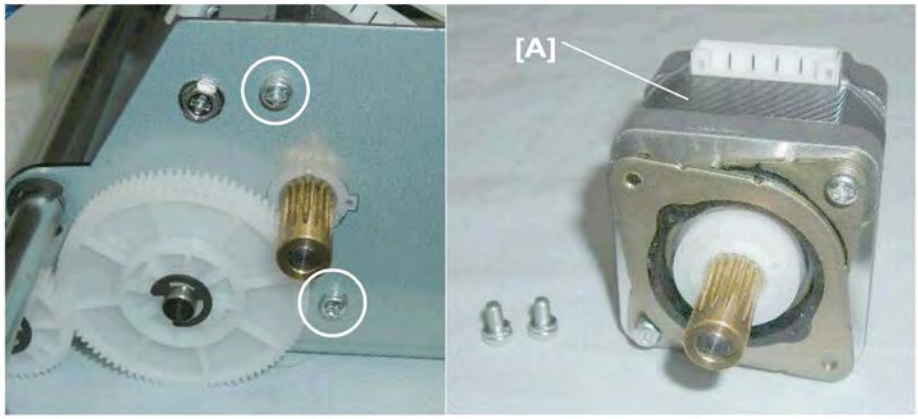
d455r130

1. The exit motor is under the left, rear corner of the transport unit.



d455r131

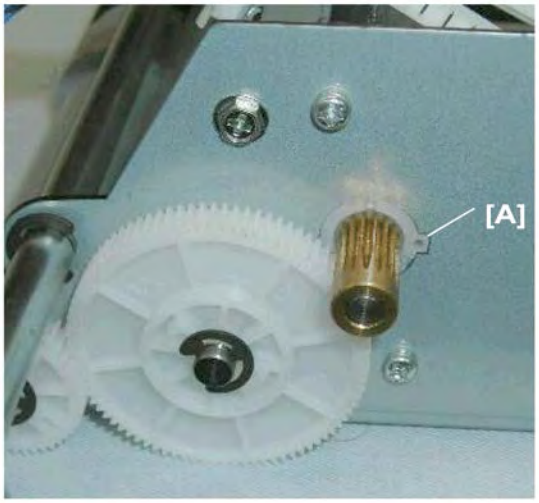
2. Turn the transport unit over so that you can see the motor [A].
3. Disconnect the motor at [B] (x1).



d455r132

4. Remove the motor [A] (x2).

Re-installation



d455r133

1. Position the motor behind the frame.
2. Align the Teflon tooth [A] with its notch.
3. Press the motor against the frame and re-fasten the screws (x2).

Important

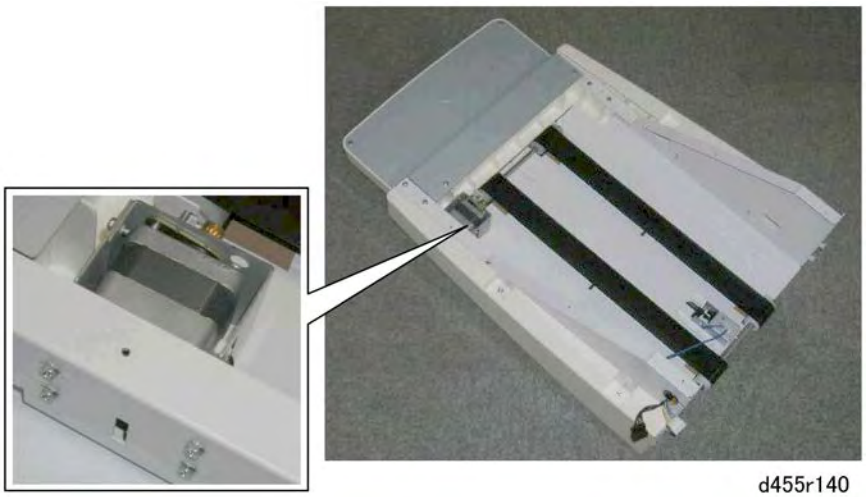
- The tooth must be seated properly in its notch, so that the motor mount is flat against the back of the frame.
- If the screws are re-attached while the tooth is out of the notch, the motor will not be straight and the gears will not mesh properly.

1.3.5 TRAY UNIT

Tray Motor

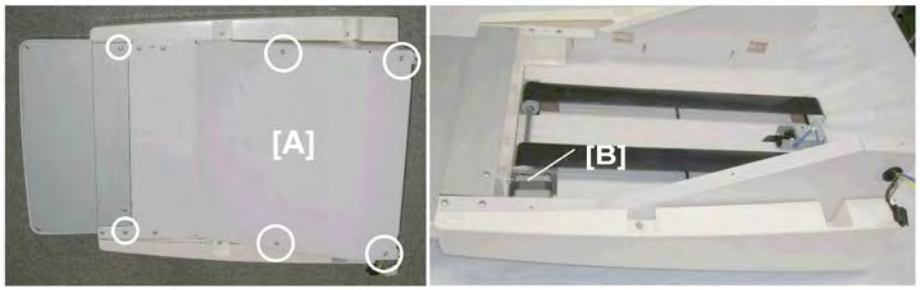
Preparation

- Left upper cover (x2) page 2
- Left lower cover (x2)
- Tray unit (x2, x2)



d455r140

1. The tray motor is on the bottom of the tray unit and covered by the bottom plate. (The photo above shows the tray unit with bottom plate removed.)

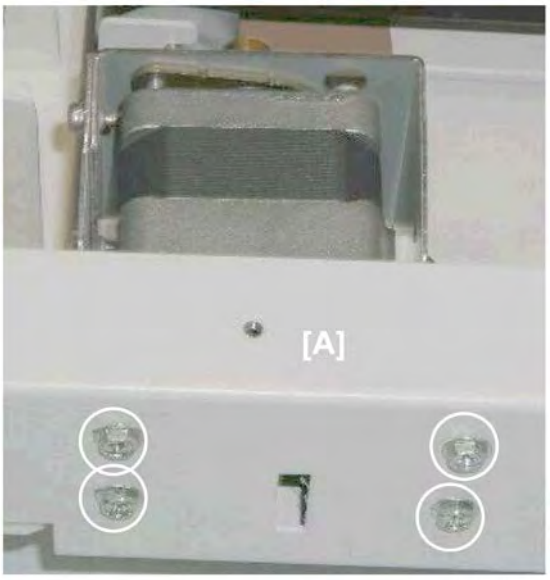


d455r141

2. Lay the tray unit upside down on a flat surface.
3. Remove bottom cover [A] (x 6) so that you can see the motor [B].

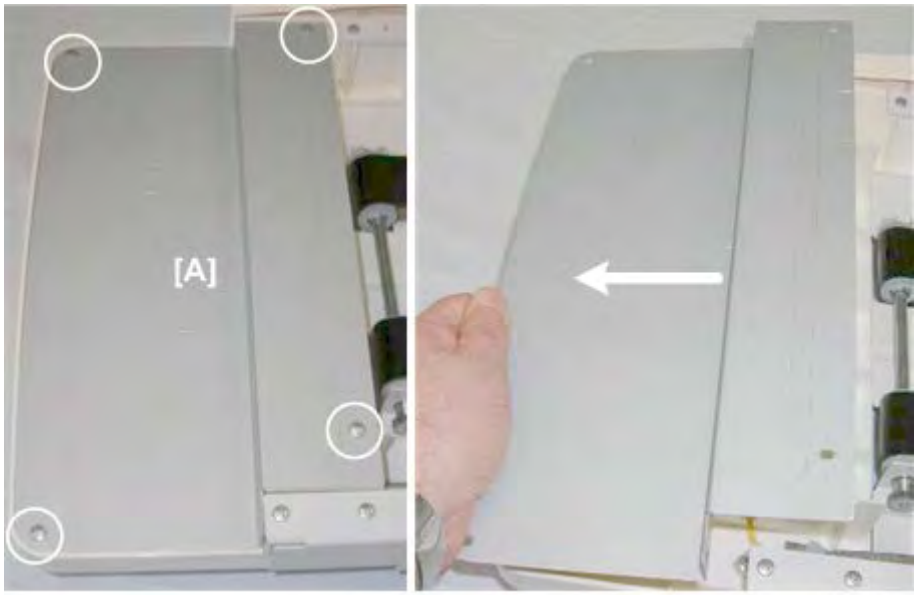
d455r142

4. Remove side panel [A]



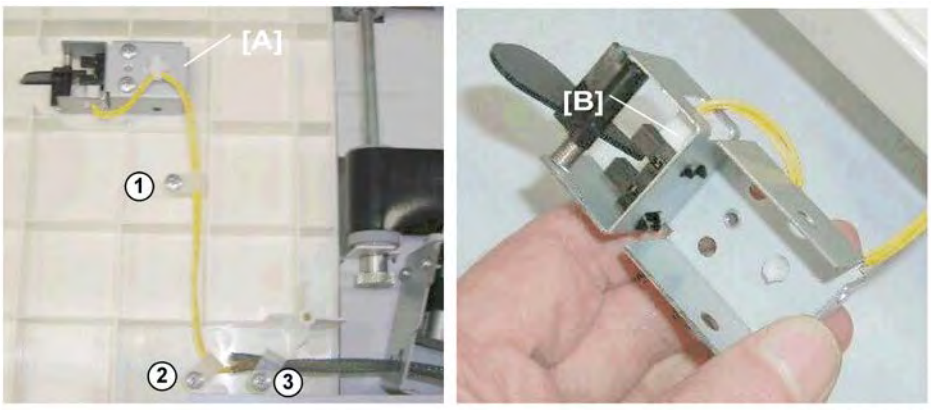
d455r143

5. Disconnect motor bracket [A] (x4).



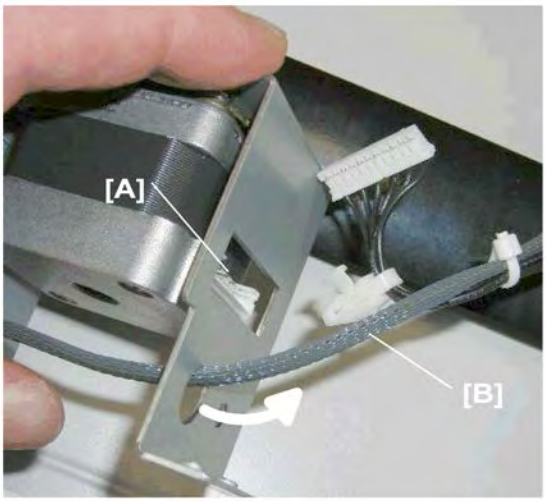
d455r144

6. Remove bottom end cover [A] (x4).



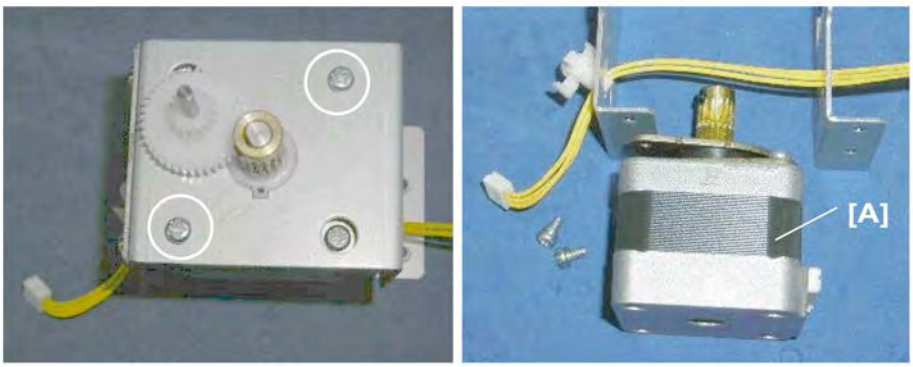
d455r145

7. Remove screws ,① ②, ③ (x3).
8. Disconnect sensor bracket [A] (x2)
9. Disconnect sensor [B] (x1)



d455r146

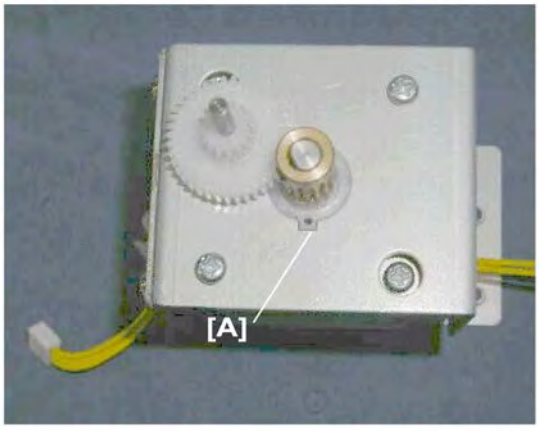
10. Disconnect motor [A] (x1).
11. Pull harness [B] through the hole.



d455r147

12. Remove the motor [A] (x2).

Re-installation



d455r148

1. Position the motor behind the frame.

2. Align the Teflon tooth [A] with its notch.
3. Press the motor against the frame and re-fasten the screws (x2).

Important

- The tooth must be seated properly in its notch, so that the motor mount is flat against the back of the frame.
- If the screws are re-attached while the tooth is out of the notch, the motor will not be straight and the gears will not mesh properly.

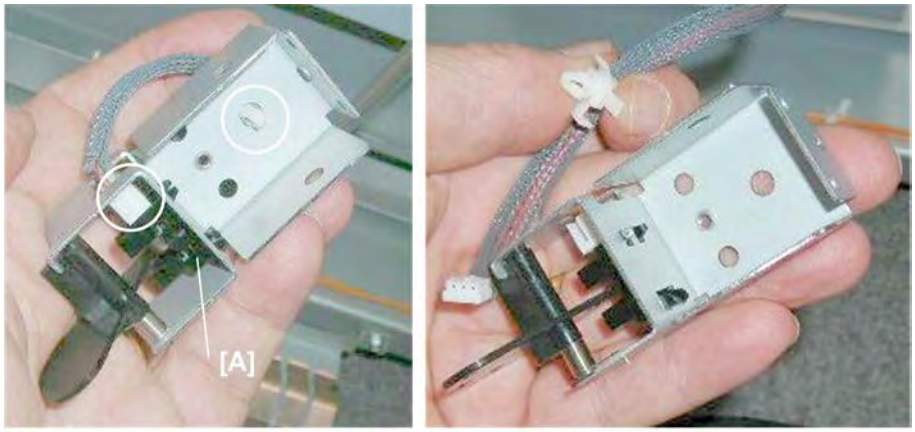
1.4 SENSORS, SWITCHES

1.4.1 FEED UNIT

Entrance Sensor

Preparation

- Feed unit page 8



d455r150

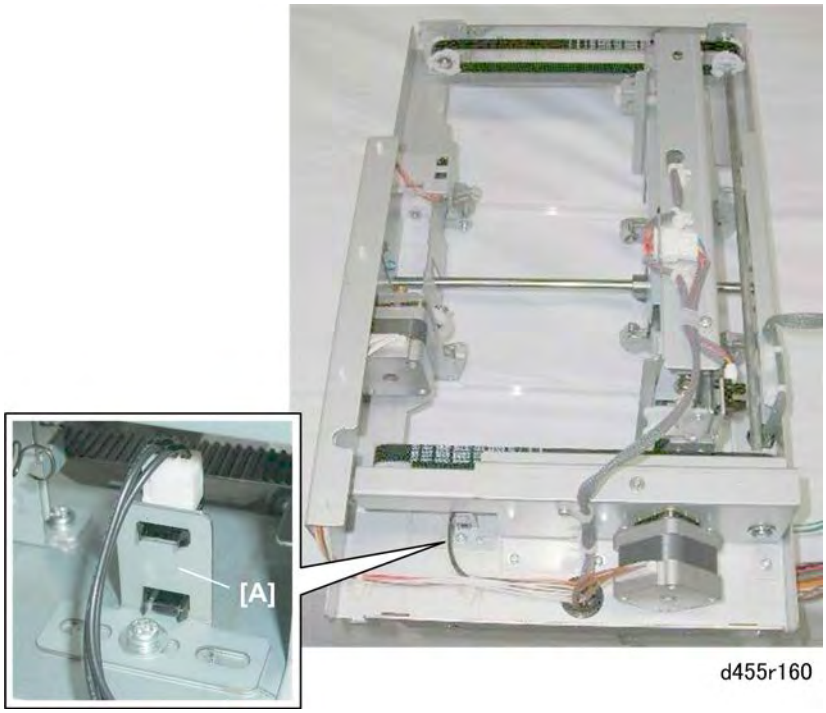
1. Disconnect and remove the sensor [A] (x1, x1, x5)

1.4.2 TRIM POSITIONING UNIT

Stopper Assembly HP Sensor

Preparation

- Trim positioning unit page 11



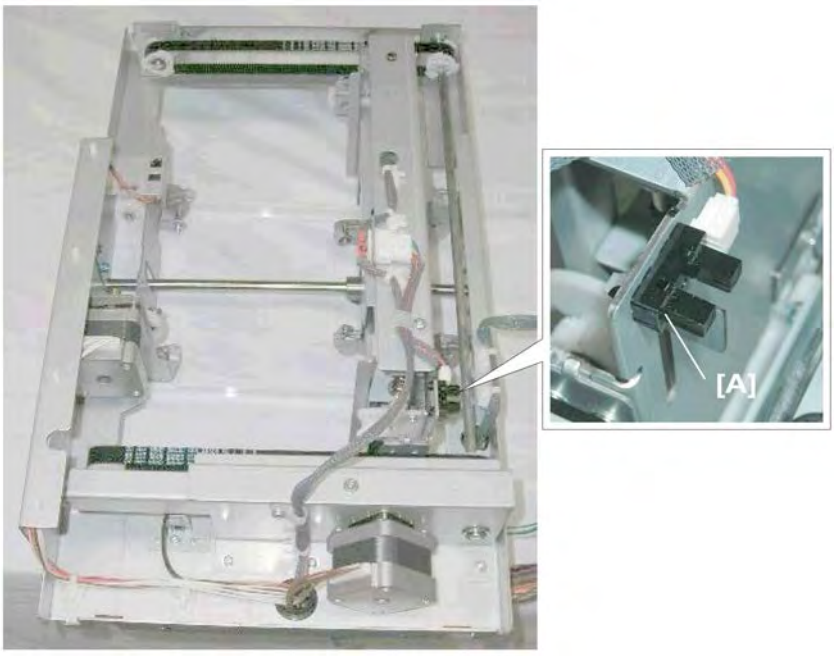
d455r160

1. The stopper assembly HP sensor is at the rear of the trim positioning unit.
2. Disconnect sensor [A] (x1, x5).

Press Stopper HP Sensor

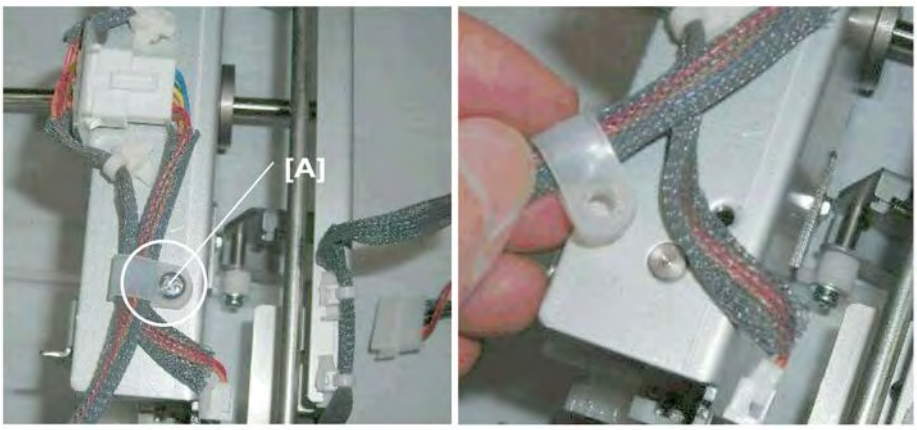
Preparation

- Trim positioning unit page 11



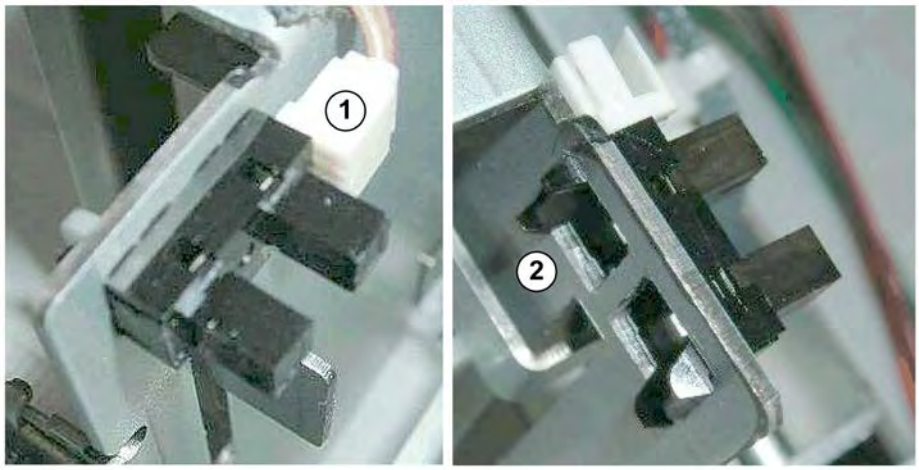
d455r170

1. The press stopper HP sensor [A] is located near the left, rear corner of the trim positioning unit.



d455r171

2. Remove clamp screw [A] (x1). This creates enough slack in the harness so that you can detach and re-attach the sensor connector.



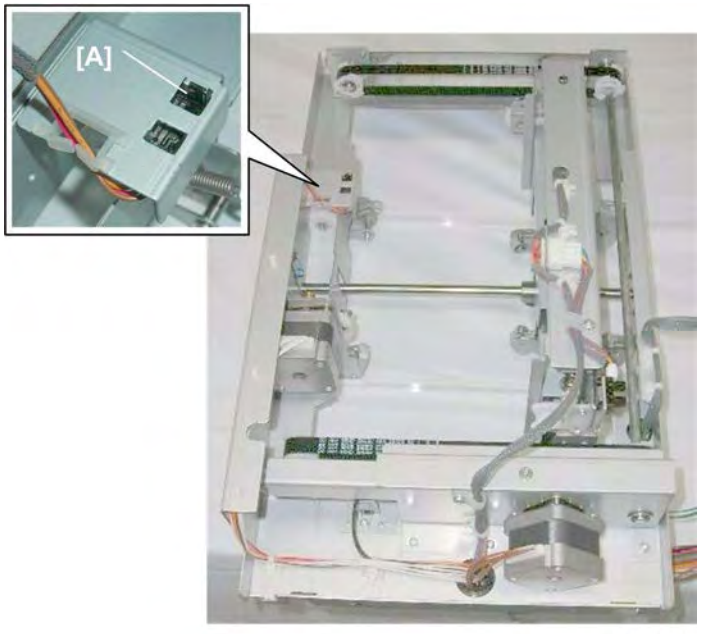
d455r172

3. Disconnect the sensor (x1, x5).

Press Roller HP Sensor

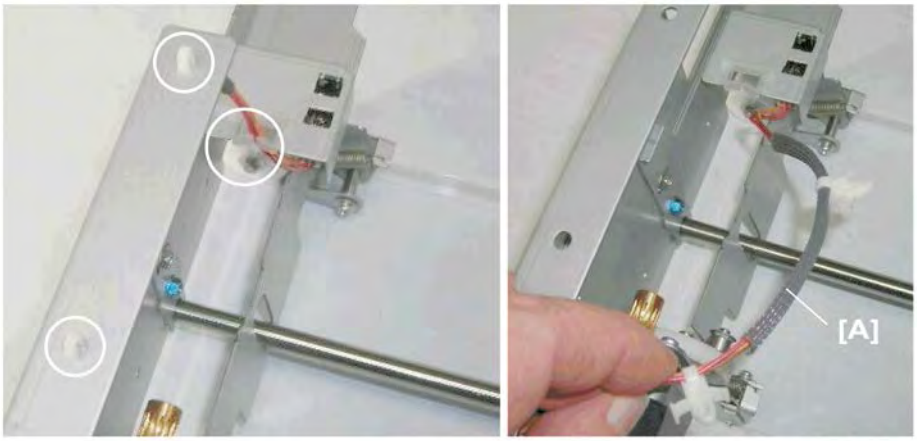
Preparation

- Trim positioning unit page 11



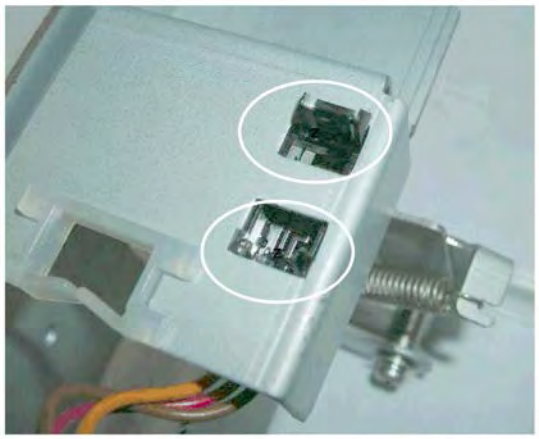
d455r180

1. The press roller HP sensor [A] is on the side, facing down.



d455r181

2. Free the harness [A] (x2,x1). This creates enough slack in the harness so that you can detach and re-attach the sensor connector.



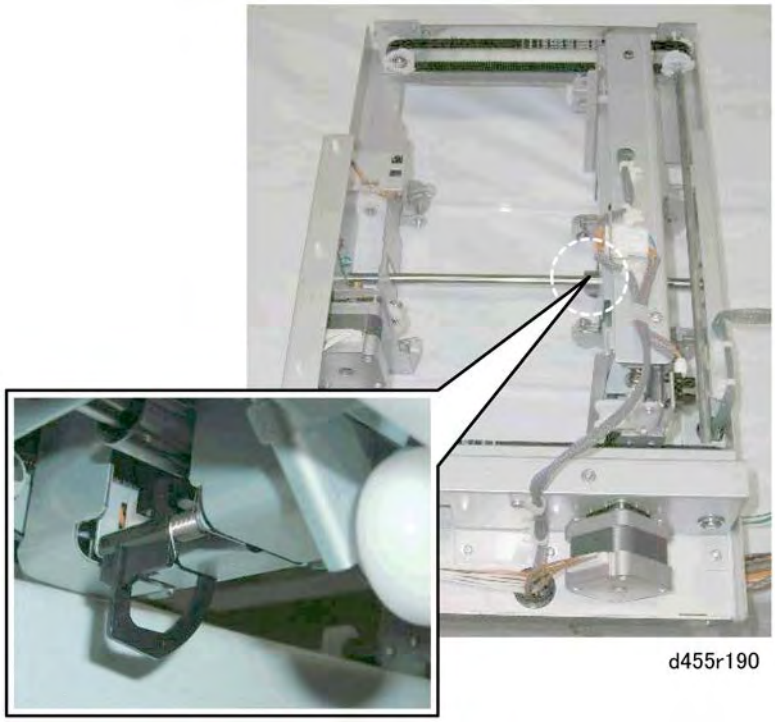
d455r182

3. Remove the sensor (x1,x5).

Stopper Sensor

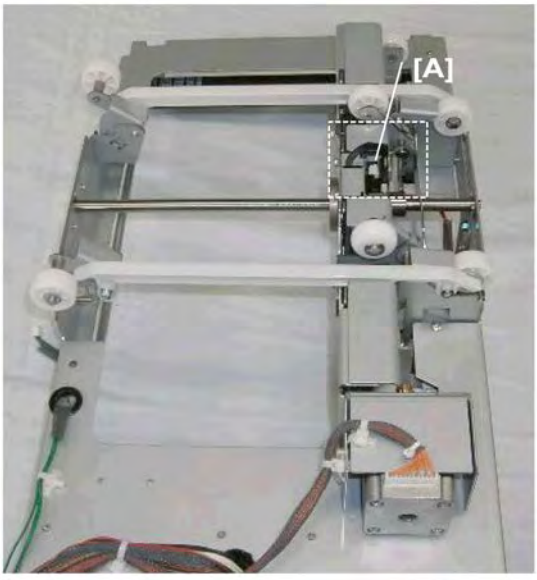
Preparation

- Trim positioning unit page 11



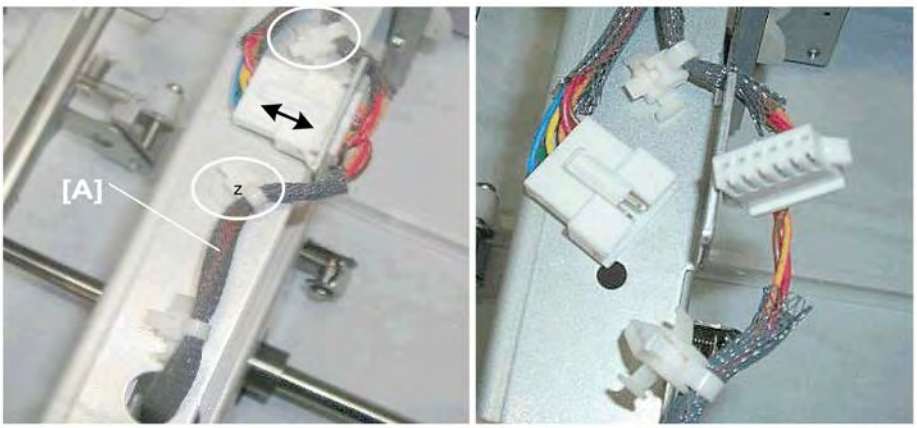
d455r190

1. This sensor is on the right side of the trim positioning unit, below the center.



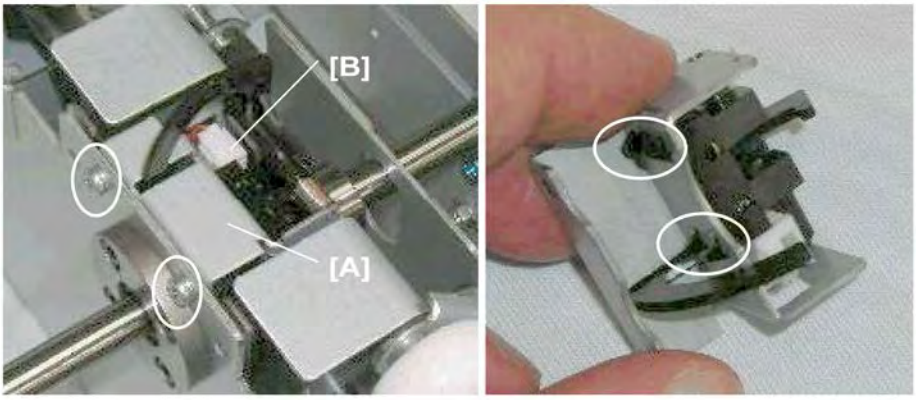
d455r191

2. Turn the trim positioning unit over so that you can see the sensor [A].



d455r192

3. Free the harness [A] (x2, x1). This creates enough slack in the harness so that you can disconnect and re-connect the sensor.



d455r193

4. Disconnect the sensor bracket [A] and sensor harness [B] (x2, x1).
5. Remove the sensor and actuator (x5).

1.4.3 TRIMMING UNIT

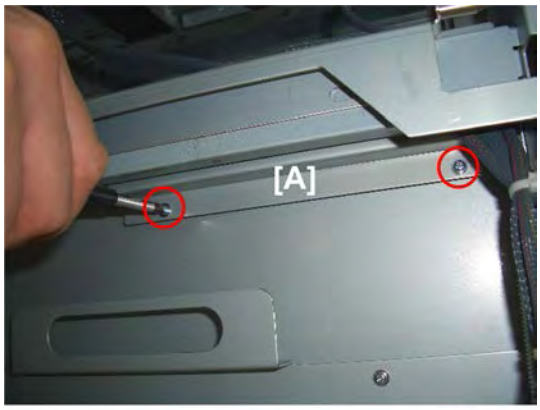
Scrap Hopper Full Sensor

Preparation

- Feed unit page 8

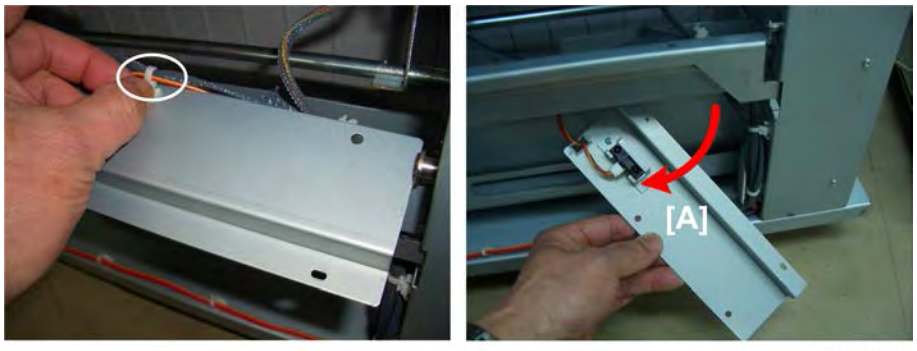
d455r200

1. The scrap hopper full sensor is visible on the right side of the trimmer unit, below the entrance.



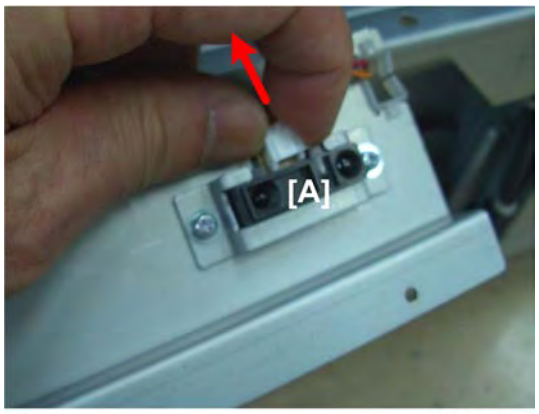
d455r201

2. Disconnect the plate [A] (x2).



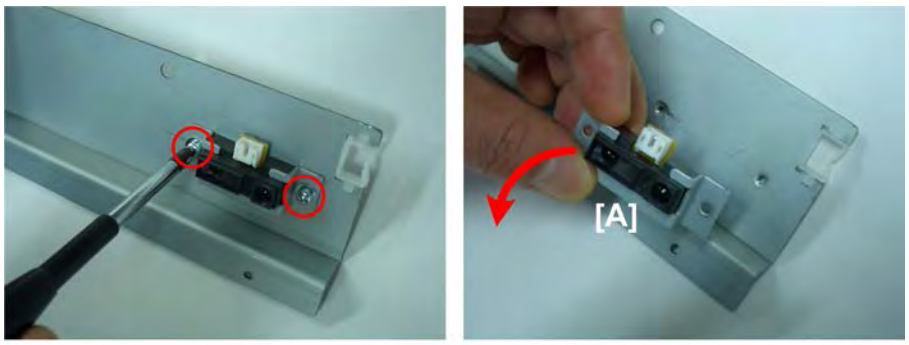
d455r202

3. Disconnect the harness and remove plate [A] (x1).



d455r203

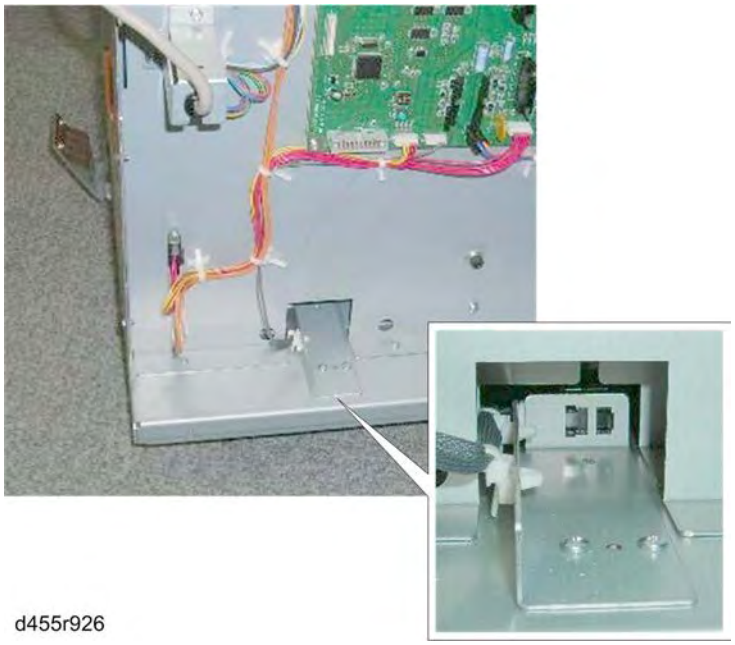
4. Disconnect sensor [A] (x1).



d455r203a

5. Remove the sensor and bracket [A] (x2).

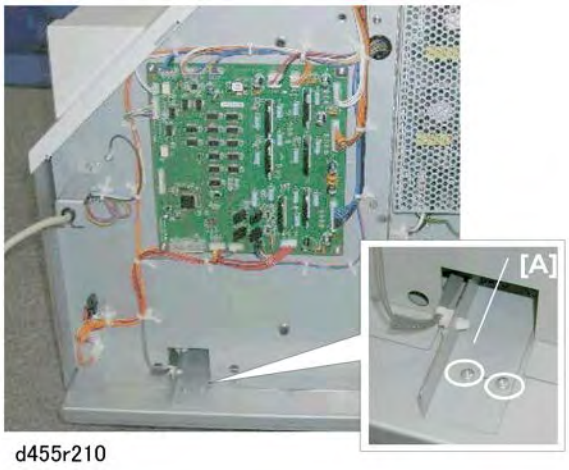
Scrap Hopper HP Sensor



d455r926

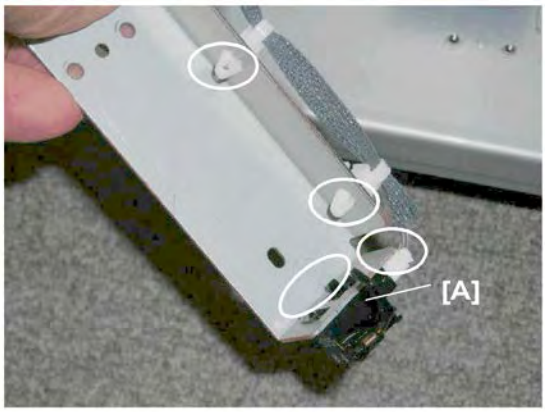
Preparation

- Rear cover page 2



d455r210

1. Remove sensor bracket [A] (x2).



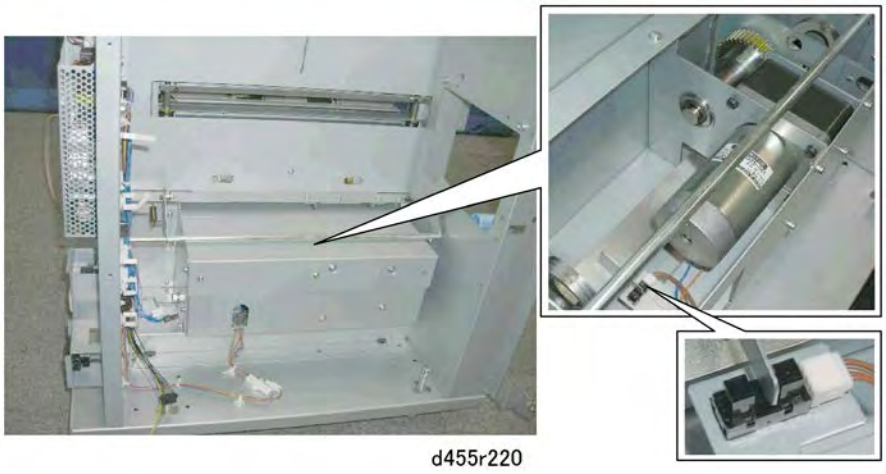
d455r211

2. Disconnect and remove sensor [A] (x2, x1, x5).

Trimming Blade HP Sensor

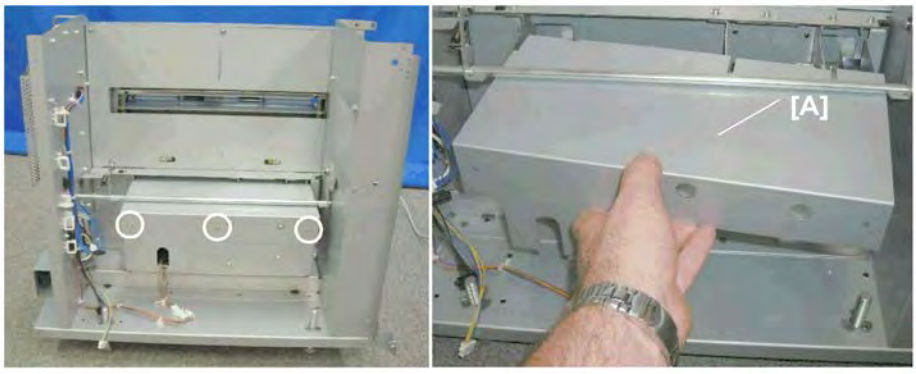
Preparation

- Trim position unit page 11
- Transport unit page 14



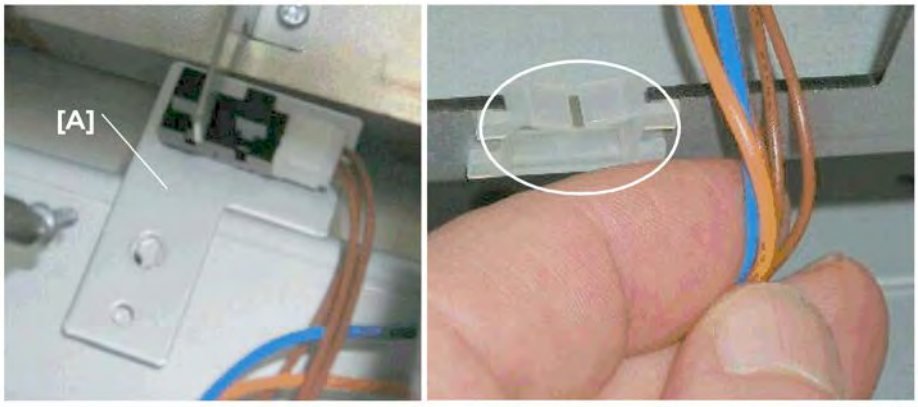
d455r220

1. The trimming blade HP sensor is located inside the trimming motor box, next to the blade motor.



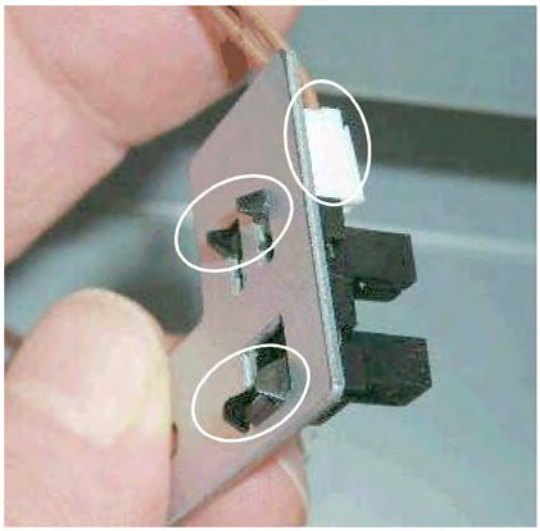
d455r221

2. Remove blade motor cover [A] (x3).



d455r222

3. Remove sensor bracket [A] (x1, x1)



d455r223

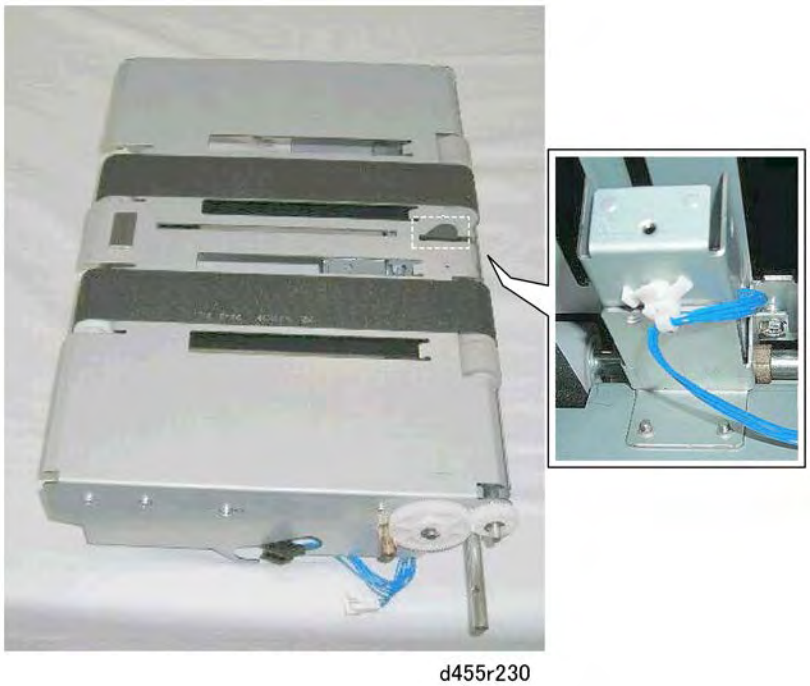
4. Disconnect and remove the sensor (x1, x5)

1.4.4 TRIMMING UNIT

Exit Sensor

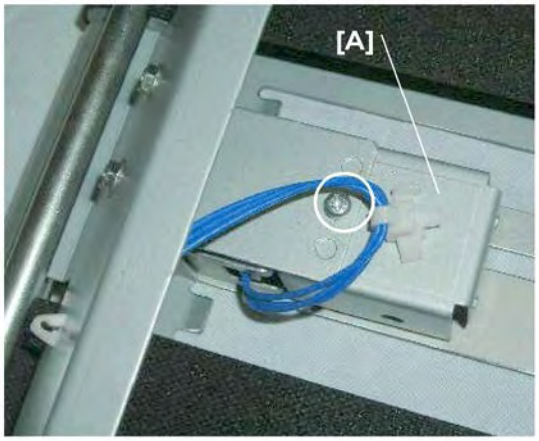
Preparation

- Trim position unit page 11
- Transport unit page 14



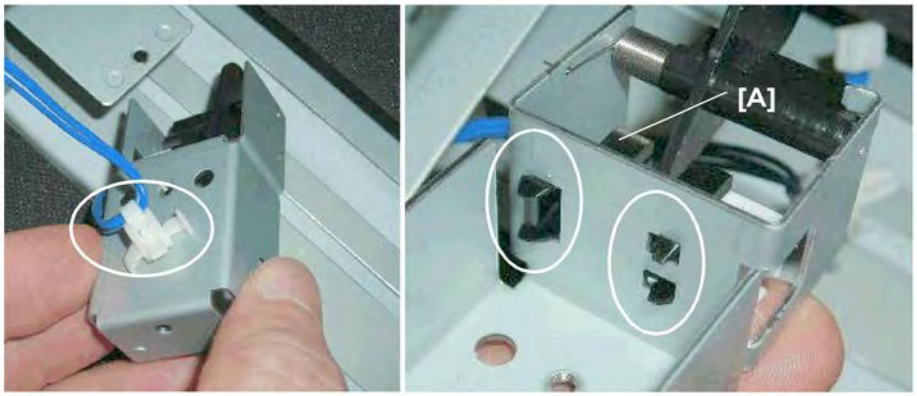
d455r230

1. The exit sensor is under the transport unit.



d455r231

2. Turn the transport unit over so that you can see the sensor.
3. Disconnect sensor bracket [A] (x1).



d455r232

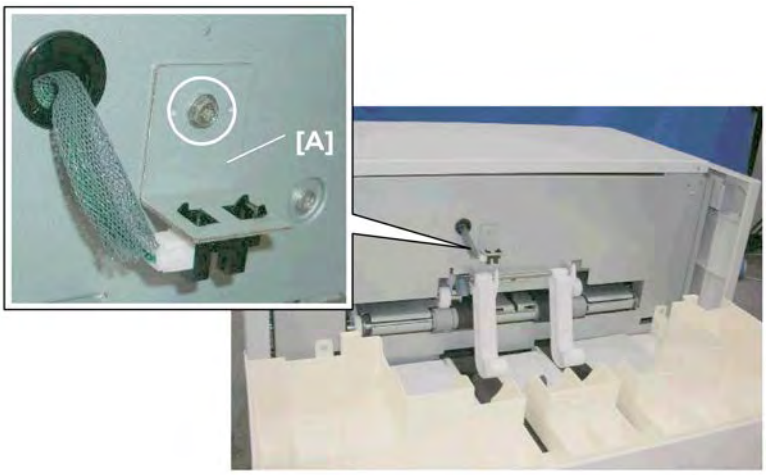
4. Disconnect and remove sensor [A] (x1, x1, x5)

1.4.5 TRAY UNIT

Booklet Sensor 1

Preparation

- Left upper cover (x2) page 2



d455r240

1. Disconnect sensor bracket [A] (x1).

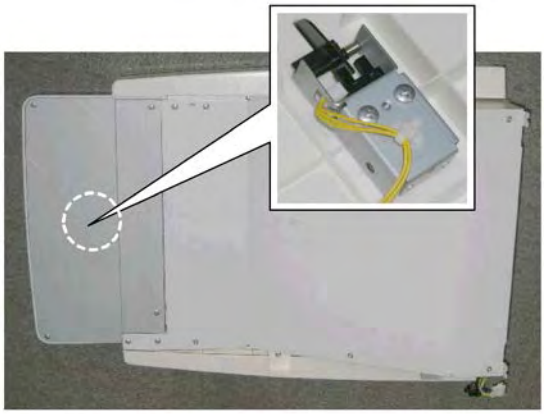
d455r241

2. Disconnect and remove sensor [A] (x1, x5)

Booklet Sensor 3

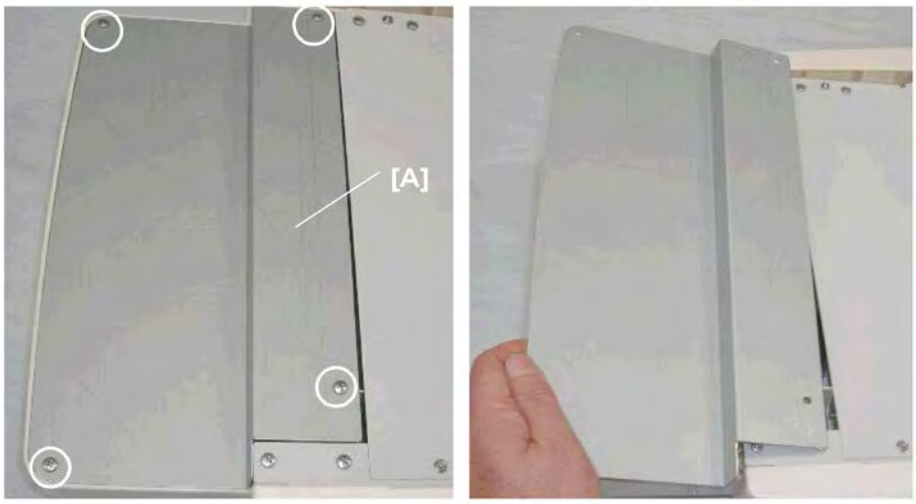
Preparation

- Left upper cover (x2) page 2
- Left lower cover (x2)
- Tray unit (x2, x2)



d455r250

1. This sensor is under the bottom end plate of the tray unit.

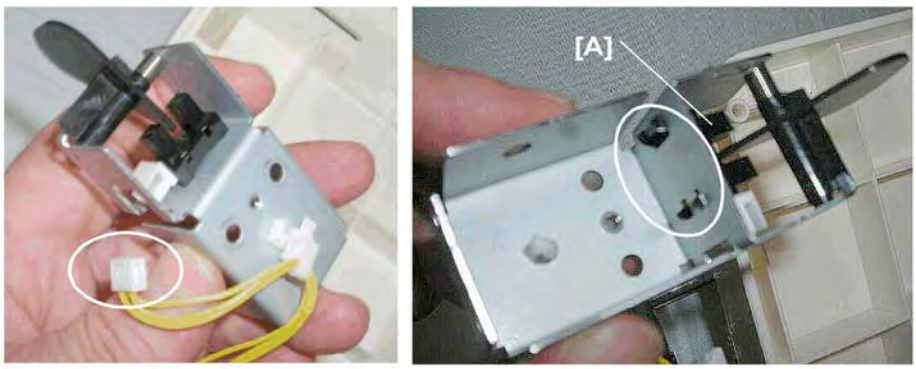


d455r251

2. Remove the bottom end cover [A] (x4).

d455r252

3. Disconnect sensor bracket [A] (x2).
4. Remove harness clamp screws ①, ②, ③ (x3).



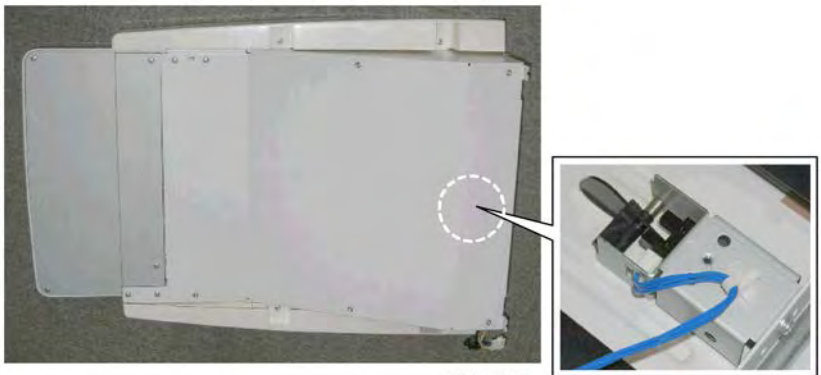
d455r253

5. Remove the sensor [A] (x1, x5).

Exit Sensor

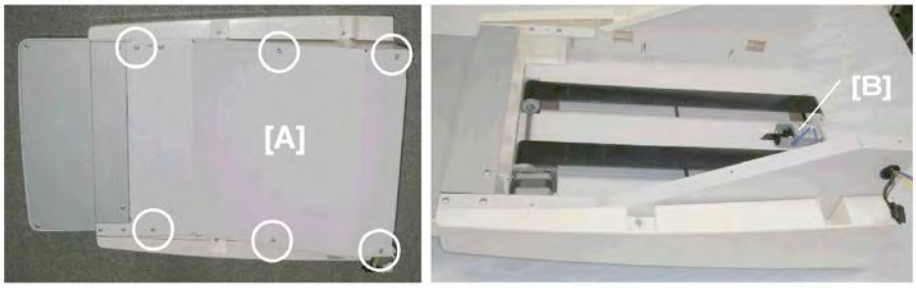
Preparation

- Left upper cover (x2) page 2
- Left lower cover (x2)
- Tray unit (x2, x2)



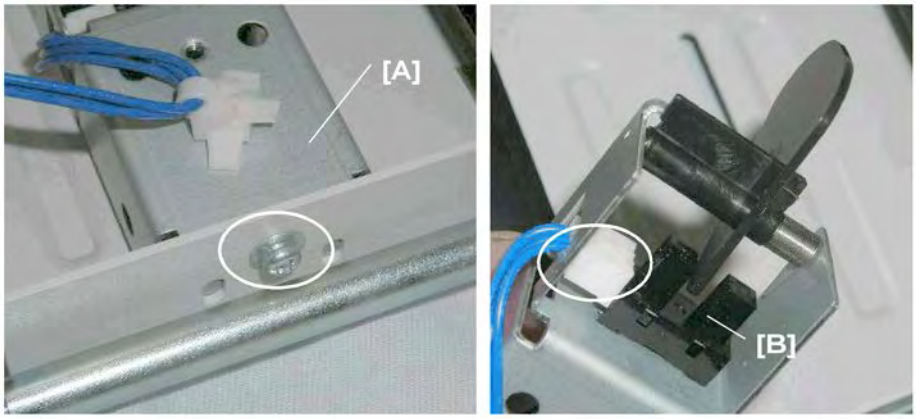
d455r260

1. The exit sensor is located under the bottom cover of the tray unit.



d455r261

2. Lay the tray unit upside down on a flat surface.
3. Remove bottom cover [A] (x6) so that you can see the sensor [B].



d455r262

4. Disconnect sensor bracket [A] and sensor [B] (x1, x1).

d455r263

5. Remove the sensor (x5)

1.4.6 SWITCHES

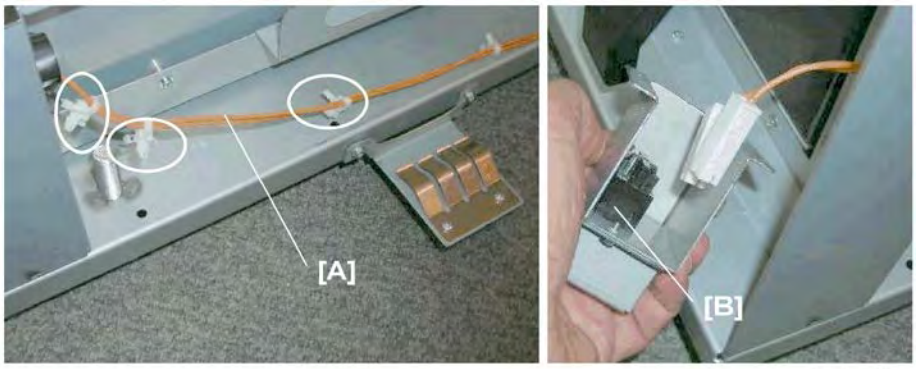
Door Switch

d455r270

1. Open the front door and locate the switch [A].

d455r271

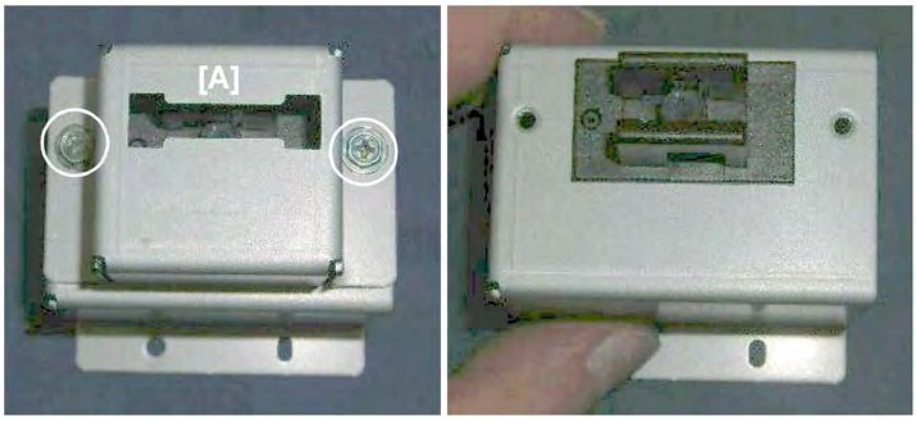
2. Remove switch bracket [A] (x2).



d455r272

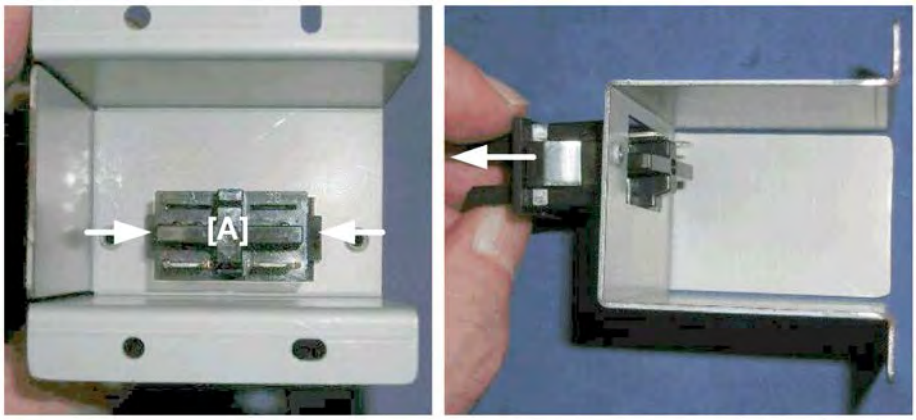
3. On the side, pull out three standoffs ( ) to free the harness [A]. This creates enough slack in the harness so that you can disconnect and reconnect the harness connectors.

4. Disconnect the switch [B] (x2).



d455r273

5. Remove switch cover [A] (x2).



d455r274

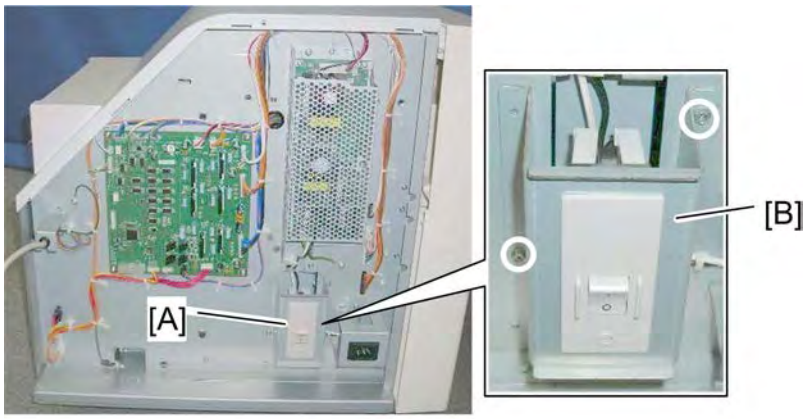
6. Press in on both sides of the switch [A].
7. Push the switch through the bracket and remove it.

d455r275

Breaker Switch

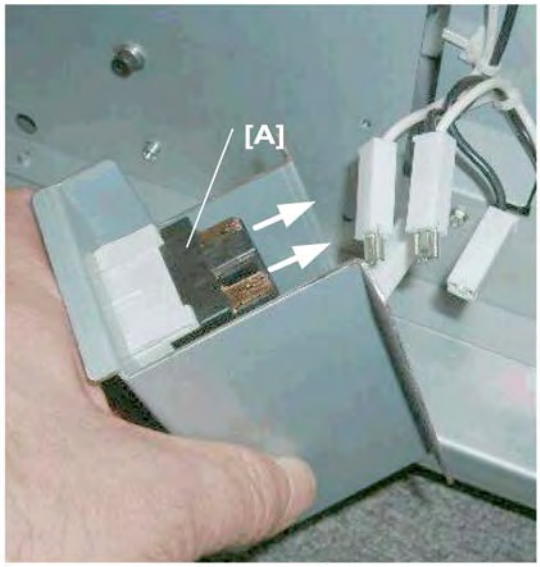
Preparation

- Rear cover page 2



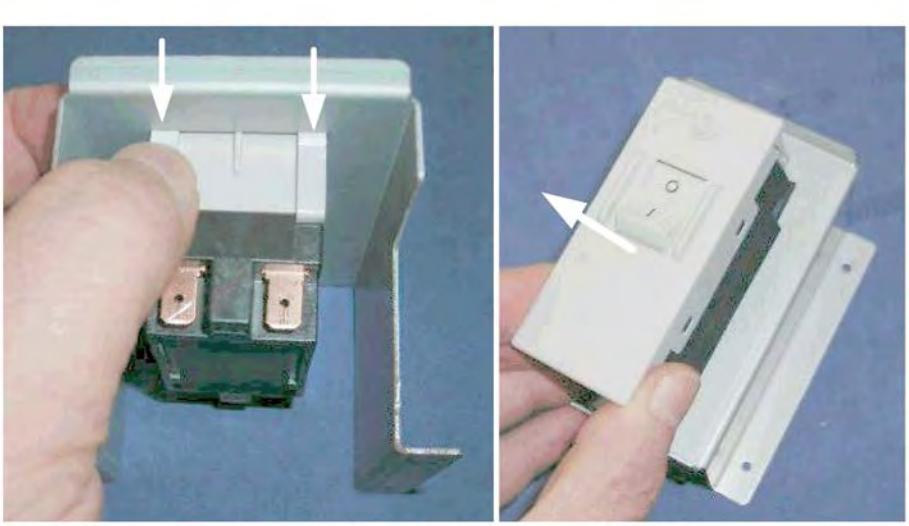
d455r280

1. Locate the breaker switch [A] at the rear.
2. Disconnect the switch bracket [B] (x2).



d455r281

3. Disconnect breaker switch [A] (x4).



d455r282

4. At each corner, press down the release and push the corner out.

d455r283

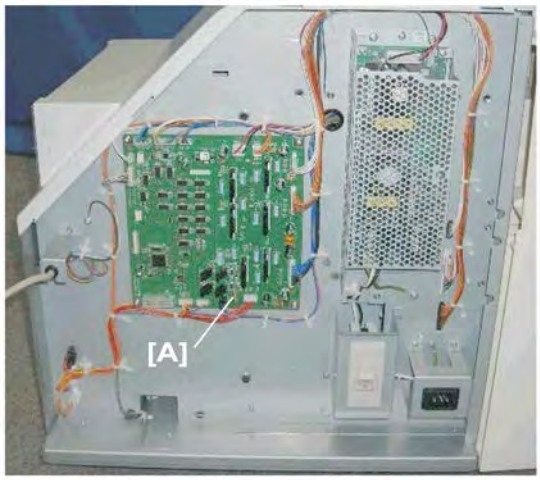
5. Pull the switch out of the bracket.

1.5 BOARDS

1.5.1 MAIN BOARD

Preparation

- Rear cover page 2



d455r290

1. The main board [A] is on the left.

d455r291

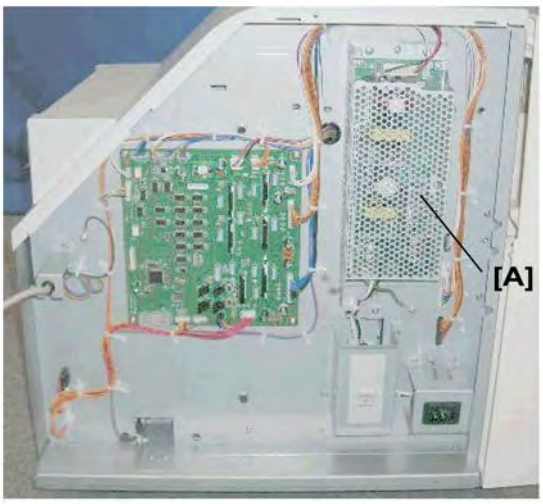
2. Remove the main board (x14, x4).

d455r292

1.5.2 VOLTAGE REGULATOR

Preparation

- Rear cover page 2

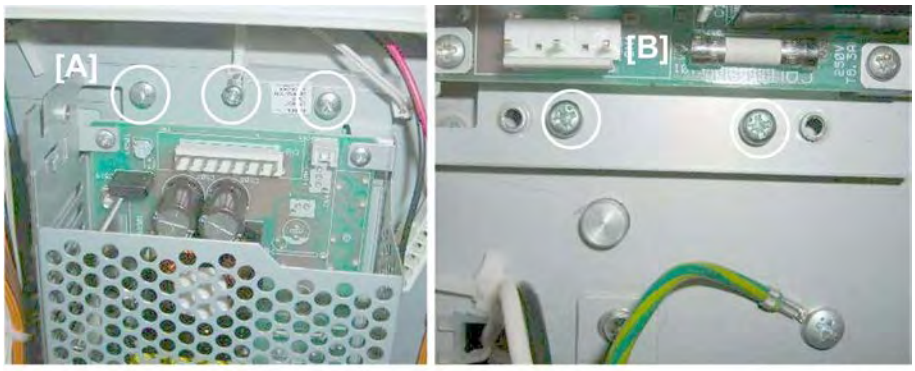


d455r300

1. The voltage regulator [A] is the board on the right, covered by the wire mesh

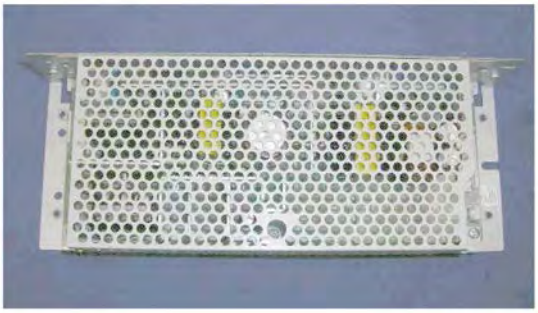
d455r301

1. Disconnect the board:
   [A] Top (x2)
   [B] Bottom (x1)



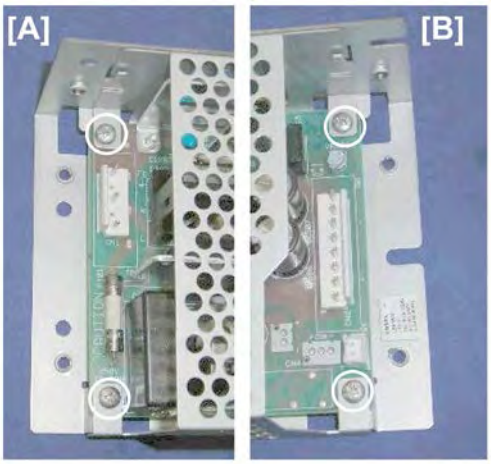
d455r302

2. Detach the board bracket:
   [A] Top (x3)
   [B] Bottom (x2)



d455r303

3. Lay the screen on a flat surface.



d455r304

4. Remove the screen:

   [A] Left side (x2).

   [B] Right side (x2).

d455r305

5. Remove the board (x1).

D732

LCIT RT5080

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

LCIT RT5080 (D732)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT 1

1.1 REMOVING TRAYS 1
1.2 DOORS AND COVERS 3
1.2.1 TOP COVERS 3
1.2.2 LEFT REAR COVER 4
1.2.3 RIGHT REAR COVER 5
1.2.4 RIGHT COVER 5
1.2.5 INNER COVERS 6
Inner Upper Cover 6
Inner Lower Cover 6
1.3 PAPER FEED 7
1.3.1 PAPER FEED UNIT 7
When reinstalling the paper feed unit 7
1.3.2 PAPER FEED, SEPARATION AND PICKUP ROLLERS 8
Top Tray (Tray 3) 8
Middle Tray (Tray 4) 10
Bottom Tray (Tray 5) 12
1.4 LCT MOTORS 14
1.4.1 TRANSPORT MOTORS, LCT EXIT MOTOR 14
3rd, 4th, and 5th Transport Motors ① ② ③ 14
LCT Exit Motor ④ 14
Feed Motors, Grip Motors 15
Reinstallation 15
1.4.2 LIFT MOTORS 16
3rd, 5th Lift Motors 16
4th Lift Motor 16
1.4.3 EXIT ROLLER LIFT MOTOR 17
1.4.4 COOLING FAN 19
1.5 ELECTRICAL COMPONENTS 20
1.5.1 PAPER FEED AND END SENSORS 20
When reinstalling the sensor bracket 20
1.5.2 LIFT SENSOR 21
1.5.3 LCT EXIT SENSOR 22
1.5.4 EXIT ROLLER LIFT SENSOR 23

1.5.5 REMOVING THE VERTICAL FEED UNIT.....24
1.5.6 4TH TRANSPORT, 4TH RELAY UPPER, LOWER SENSORS.....26
1.5.7 5TH RELAY SENSOR, 5TH TRANSPORT SENSOR 26
1.5.8 6TH RELAY SENSOR, 6TH TRANSPORT SENSOR 27
1.5.9 MAIN CONTROL BOARD.....27
1.5.10 PAPER HEIGHT, PAPER WIDTH SENSORS 28
Paper Height Sensors 28
Paper Width Sensors 28
1.6 ADJUSTMENT.....29
1.6.1 SIDE REGISTRATION ADJUSTMENT.....29
Double Feed Problem from LCT 30

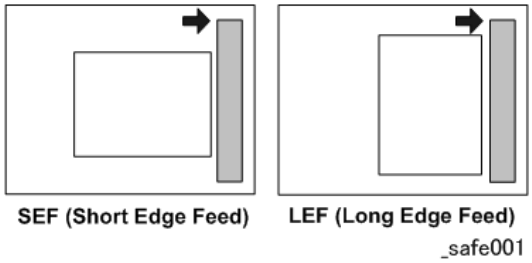
READ THIS FIRST

Symbols, Abbreviations and Trademarks

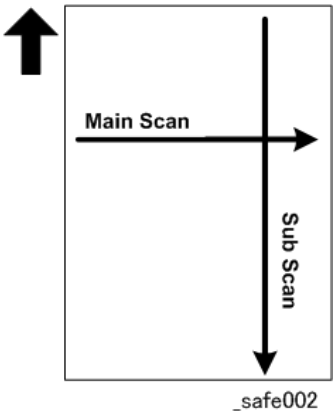
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

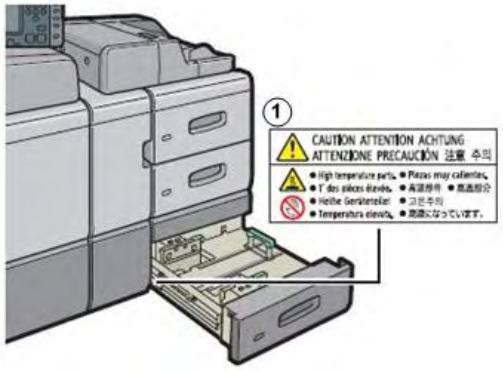
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Safety Label



d1790102

①	This label indicates parts that reach high temperature during operation. To avoid personal injury, do not touch these parts.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)

Terms	Meaning
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

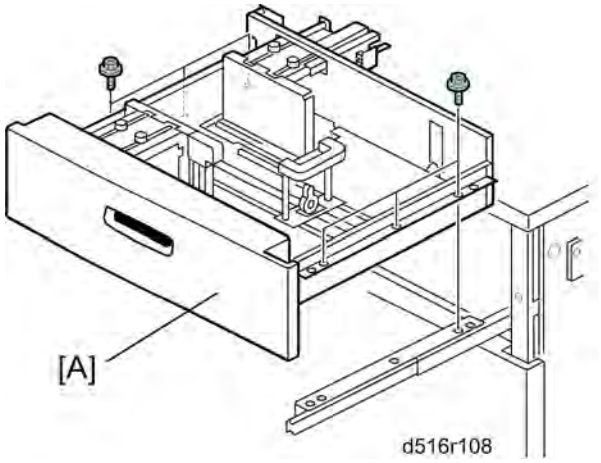
1.1 REMOVING TRAYS

⚠CAUTION

- Tray 4 weighs 27 kg (60 lb) empty. Trays 3 and 5 weigh 20 kg (44 lb) each empty.
- To prevent damage to the tray and personal injury, never attempt to lift a tray alone or without attaching the carrying handles, especially if a tray is loaded with paper.
- Two people on each side of the tray should lift the carrying handles together to lift and move the tray.
- Never remove the tray if the LCT has not been docked to the copier. Removing the tray while the LCT is standing alone can unbalance the LCT and cause it to fall over.

Note

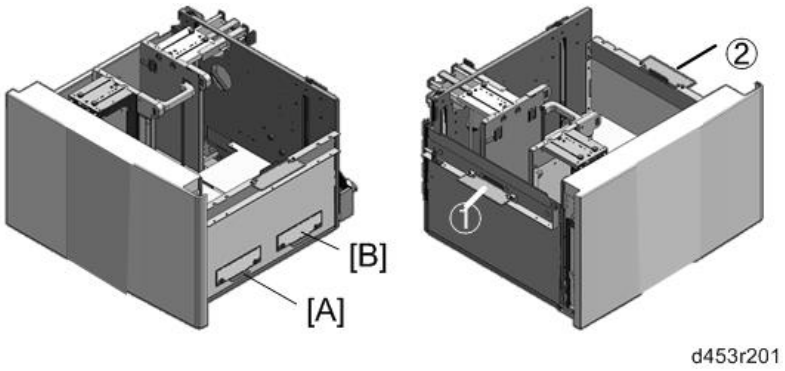
- Only one set of carrying handles is attached to the side of Tray 4. Follow the procedure below to attach and use these handles to move Tray 3, 4, or 5.



1. Pull the tray [A] out of the LCT until it stops.
2. Remove the screws from the right rail [B] (x3)
3. Remove the screws from the left rail [D] (x3)

Note

- You do not need to remove screw for the stopper pin bracket at the back of the left rail.



4. Remove carrying handles [A] and [B] from the right side of the tray (x 2 ea.)
5. Use the same screws to attach the carrying handles at ① and②.
6. With one person on each side of the tray, lift it carefully and remove it from the rails.

1.2 DOORS AND COVERS

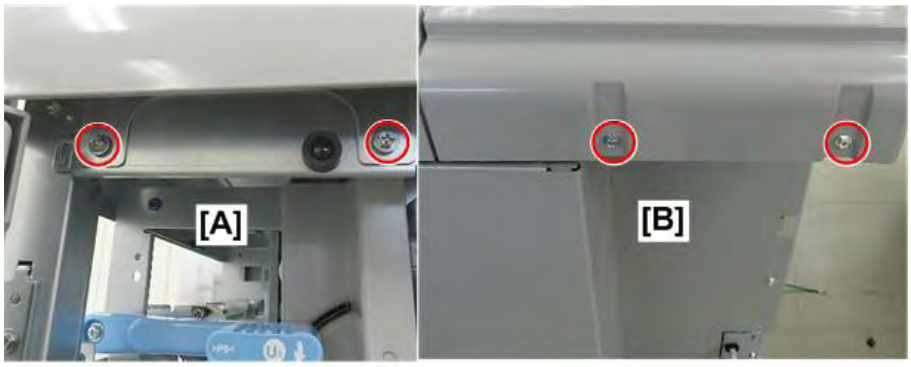
1.2.1 TOP COVERS

Note

- The top covers must be removed in order from left to right.

d7320041

1. Open the front door.



d7320042

2. Disconnect the front [A] and rear [B] (x4).

d7320043

3. Remove the top left cover.

d7320044

4. Remove the left flat cover (x2).

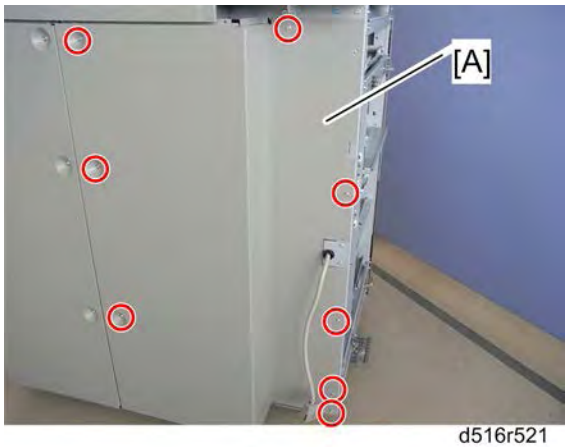
d7320045

5. Remove the center flat cover (x2).

d7320046

6. Remove the right flat cover (x2).

1.2.2 LEFT REAR COVER

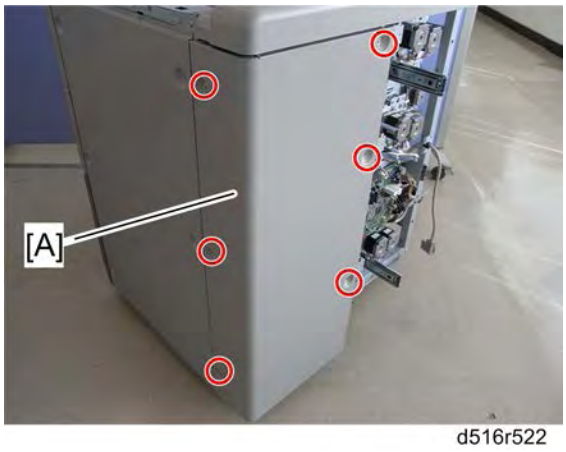


d516r521

1. Left rear cover [A] (x8)

1.2.3 RIGHT REAR COVER

1. Left rear cover



2. Right rear cover [A] (x6)

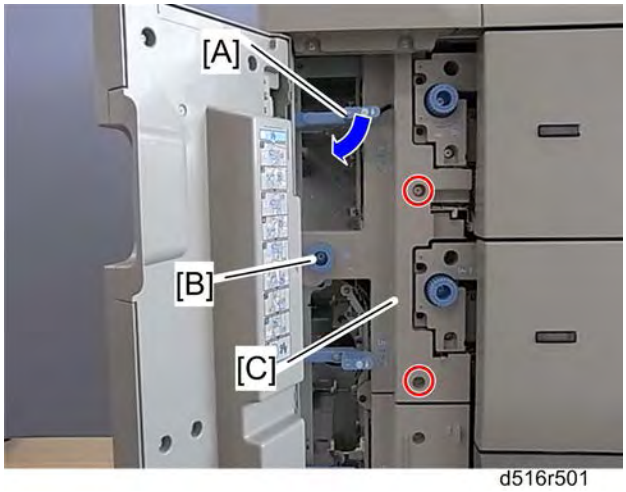
1.2.4 RIGHT COVER

1. Pull all the LCT trays out a short distance.
2. Right cover [A] (x6)

1.2.5 INNER COVERS

Inner Upper Cover

1. Open the front door.



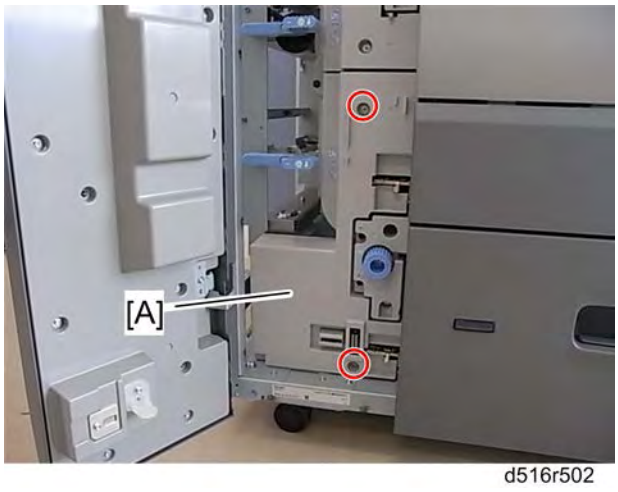
2. Pull down the **U1** lever [A].
3. Remove:

   [B] Knob (x1)

   [C] Inner upper cover (x2)

Inner Lower Cover

1. Open the front door.

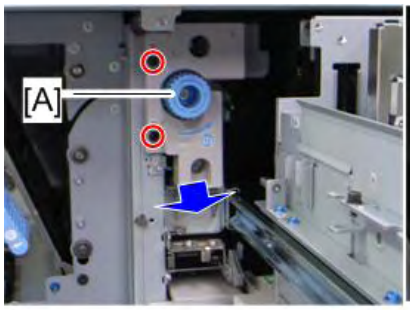


2. Inner lower cover [A] (x2)

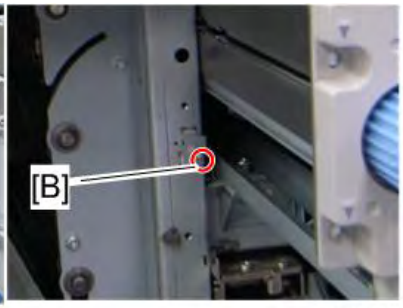
1.3 PAPER FEED

1.3.1 PAPER FEED UNIT

1. Pull out the top, middle or bottom tray.
2. Inner upper or lower cover page 6
   - For the paper feed unit in the top tray or middle tray, remove the inner upper cover.
   - For the paper feed unit in the bottom tray, remove the inner lower cover.

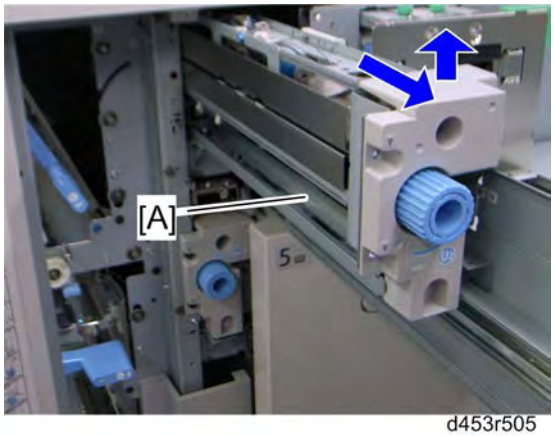


d453r503



d453r504

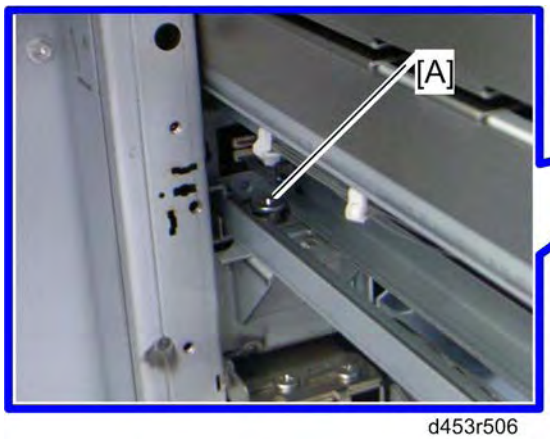
3. Pull the paper feed unit [A] (x 2).
4. Stopper bracket [B] (x 1)



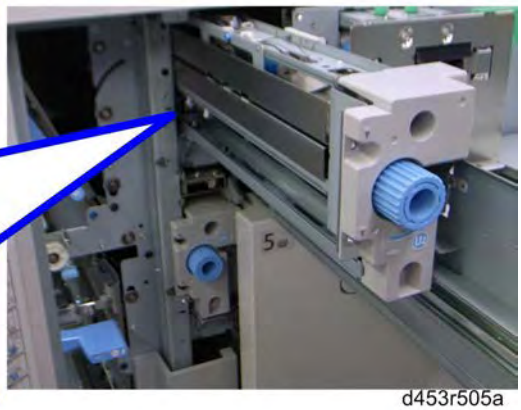
d453r505

5. Pull the paper feed unit [A] out fully, and then lift it.

When reinstalling the paper feed unit



d453r506



d453r505a

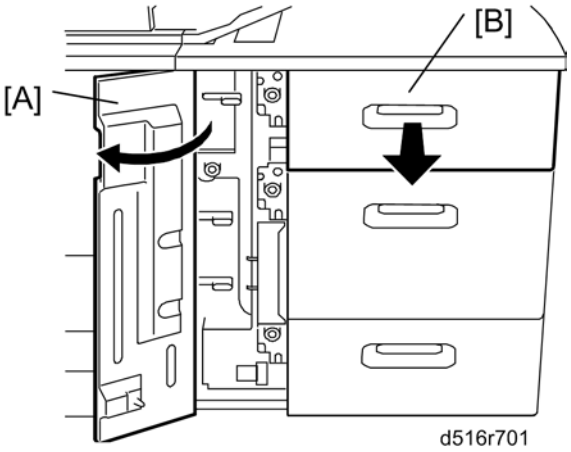
When reinstalling the paper feed unit, align the cutout in the slide rail with the stud screw, and then install the paper feed unit.

1.3.2 PAPER FEED, SEPARATION AND PICKUP ROLLERS

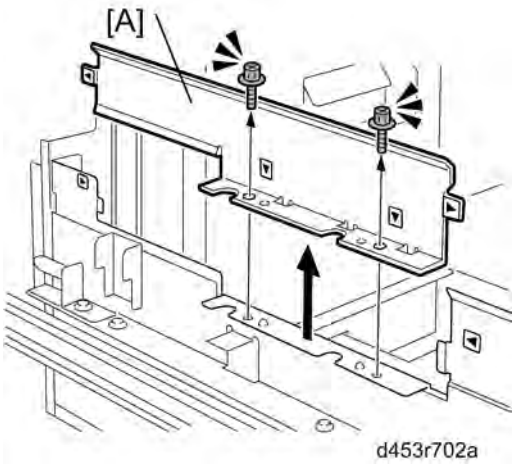
Top Tray (Tray 3)

⚠CAUTION

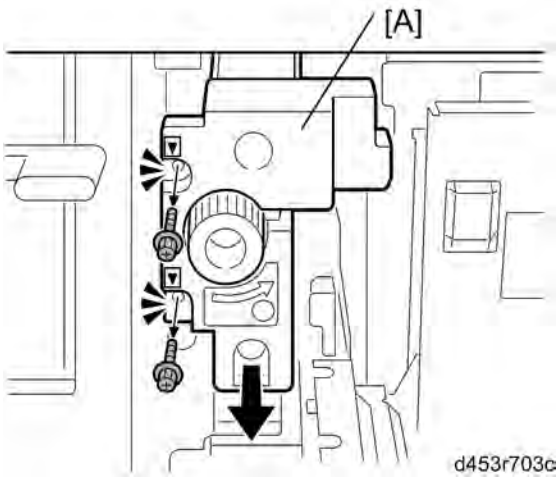
- Before doing this procedure, turn off the main machine and disconnect it from its power source.



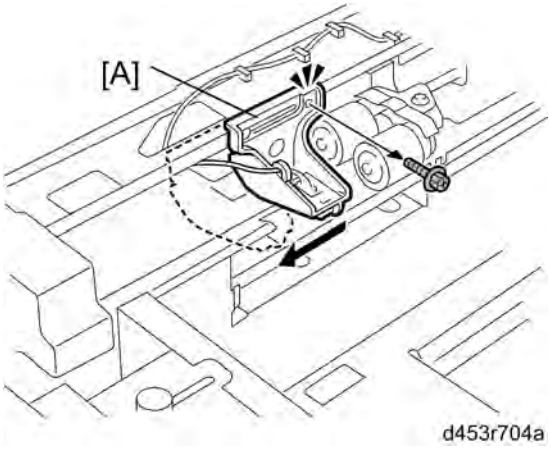
1. Open the front door [A].
2. Pull out the top tray [B] until it stops.



3. Side plate [A] (x 2)



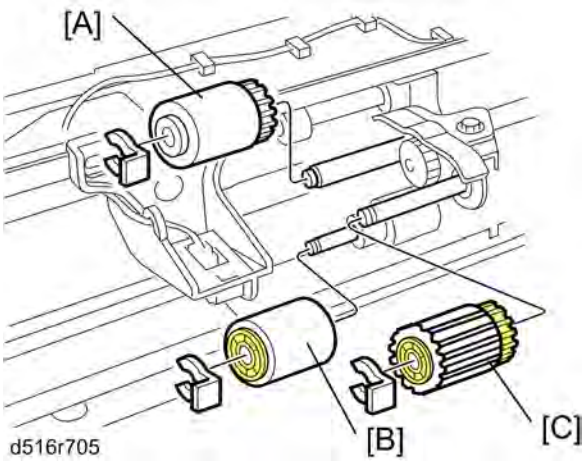
4. Pull the paper feed unit [A].



5. Slide the sensor bracket [A] to the front (x 1).

Important

- Note the original position of this bracket. It must be re-installed at its original position.



6. Remove:

[A]: Paper feed roller (x 1)

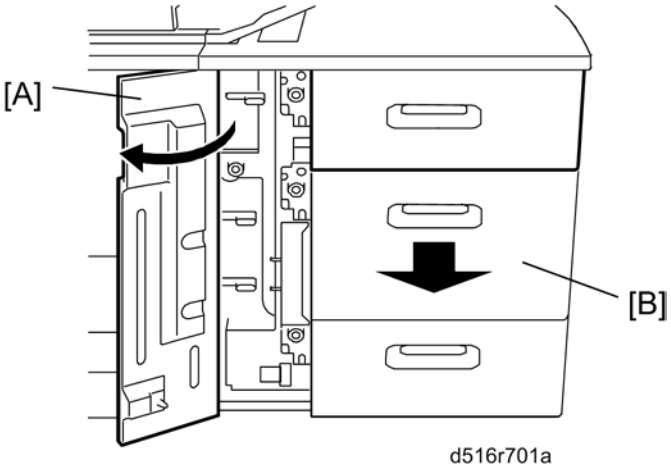
[B]: Separation roller (x 1)

[C]: Pickup roller (x 1)

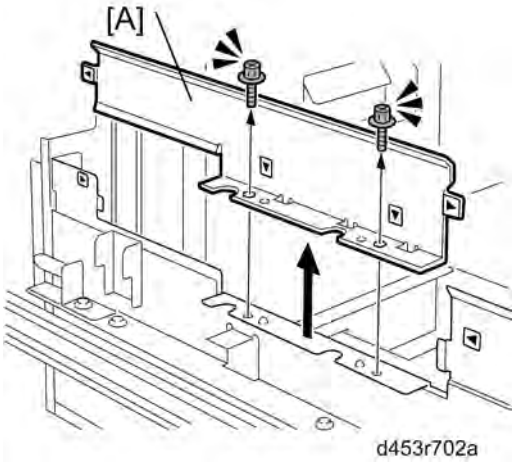
Middle Tray (Tray 4)

CAUTION

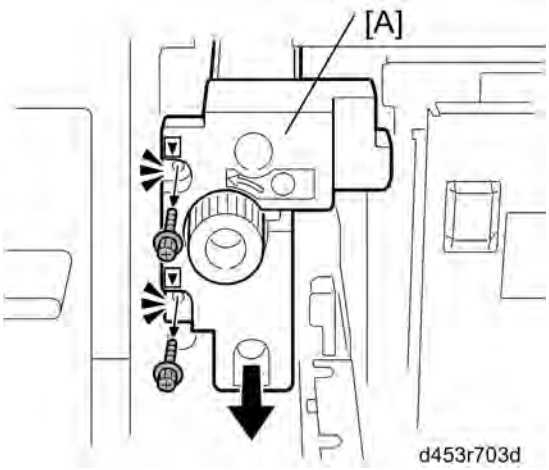
- Before doing this procedure, turn off the main machine and disconnect it from its power source.



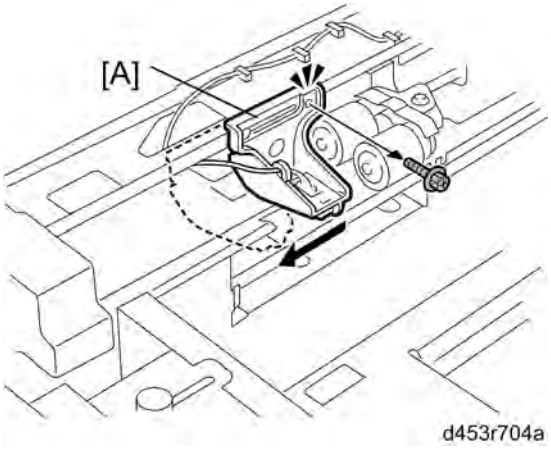
1. Open the front door [A].
2. Pull out the middle tray [B].



3. Side plate [A] (x 2)



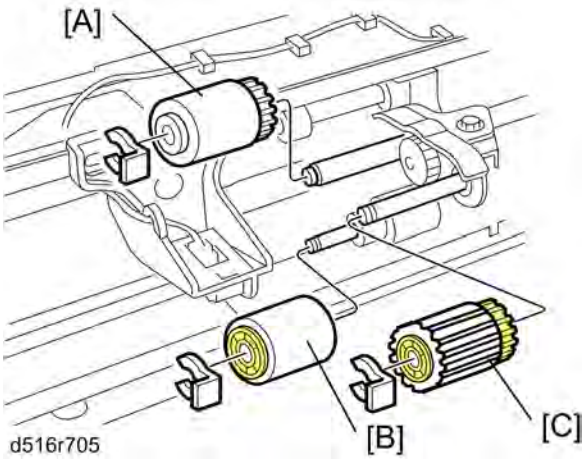
4. Pull the paper feed unit [A] (x 2).



5. Slide the sensor bracket [A] to the front (x 1).

Important

- Note the original position of this bracket. It must be re-installed at its original position.



6. Remove:

[A]: Paper feed roller (x 1)

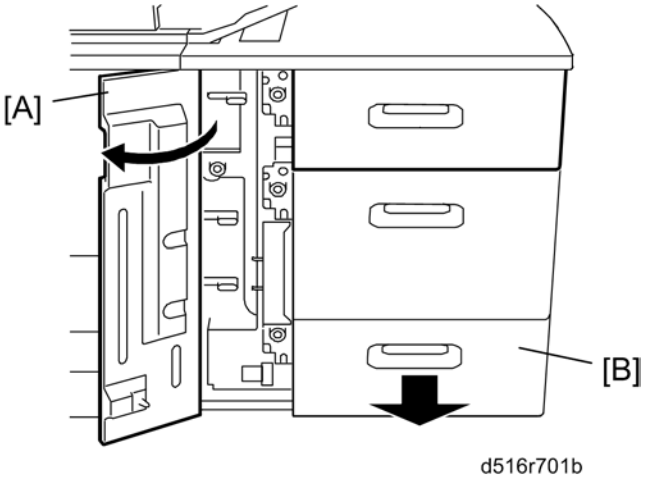
[B]: Separation roller (x 1)

[C]: Pickup roller (x 1)

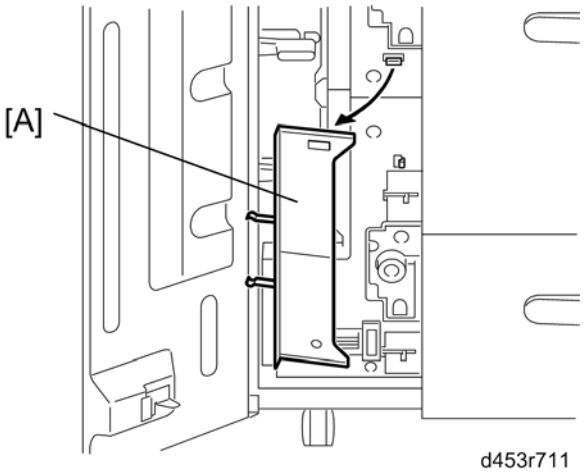
Bottom Tray (Tray 5)

⚠CAUTION

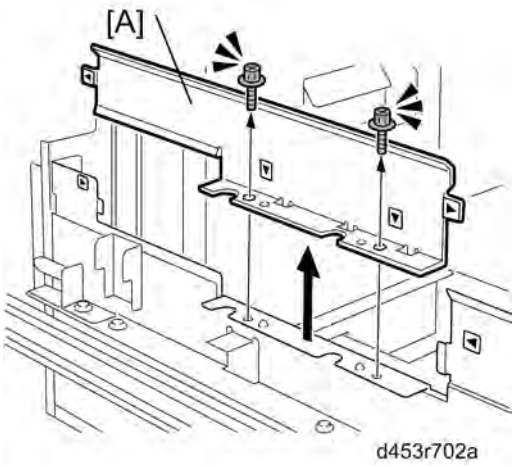
- Before doing this procedure, turn off the main machine and disconnect it from its power source.



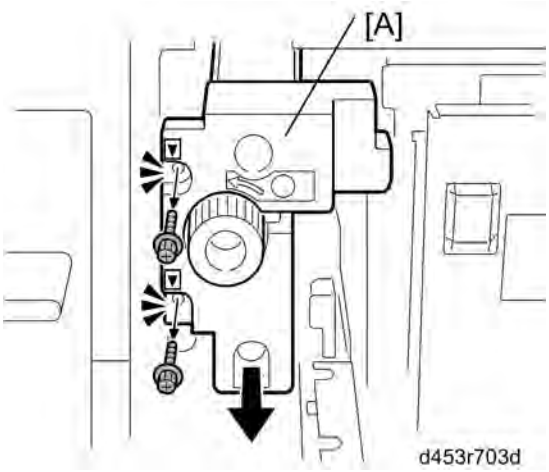
1. Open the front door [A].
2. Pull out the bottom tray [B].



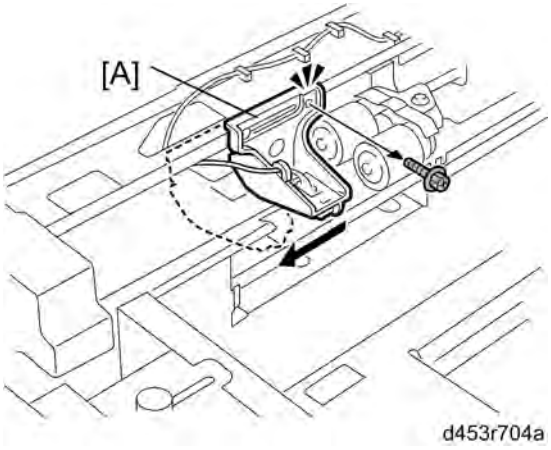
3. Paper end fence [A] if it is stored here.



4. Side plate [A] (x 2)



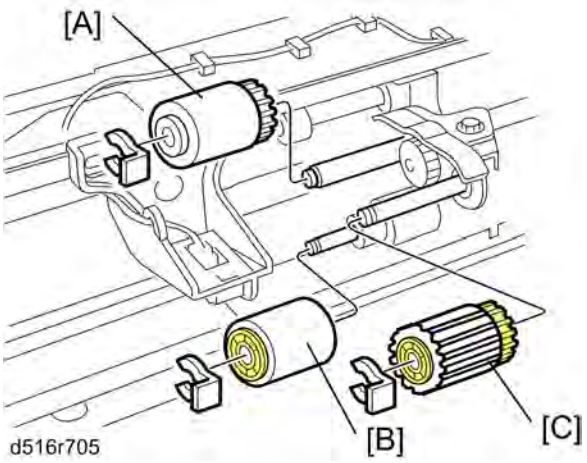
5. Pull the paper feed unit [A] (x 2).



6. Slide the sensor bracket [A] to the front (x 1).

Important

- Note the original position of this bracket. It must be re-installed at its original position.



7. Remove:

[A]: Paper feed roller (x 1)

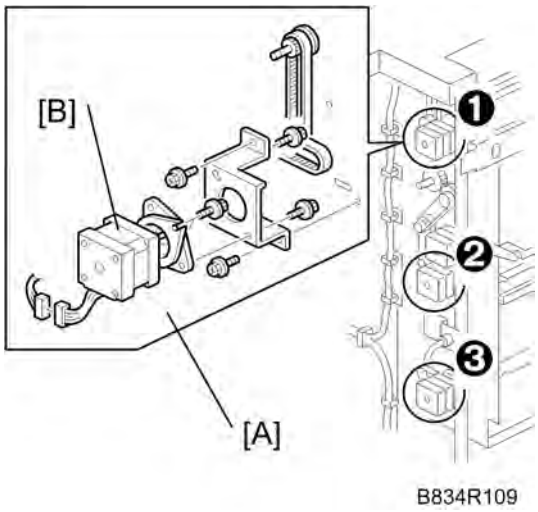
[B]: Separation roller (x 1)

[C]: Pickup roller (x 1)

1.4 LCT MOTORS

1.4.1 TRANSPORT MOTORS, LCT EXIT MOTOR

3rd, 4th, and 5th Transport Motors ① ② ③



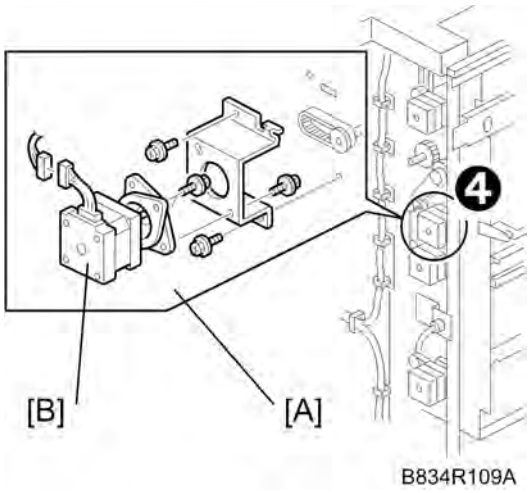
Remove:

- Left rear cover page 4

[A] Motor unit (x1, x1, x2)

[B] Motor (x2)

LCT Exit Motor ④



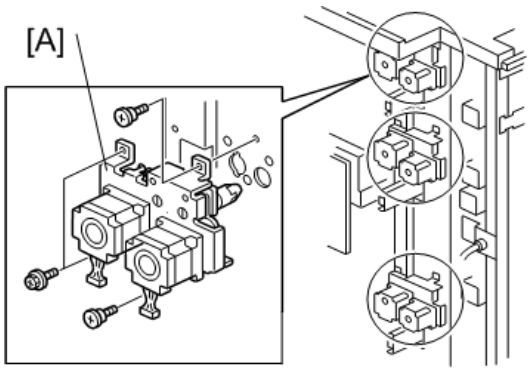
Remove:

- Left rear cover page 4

[A] Motor unit (x1, x1, x3)

[B] Motor (x2)

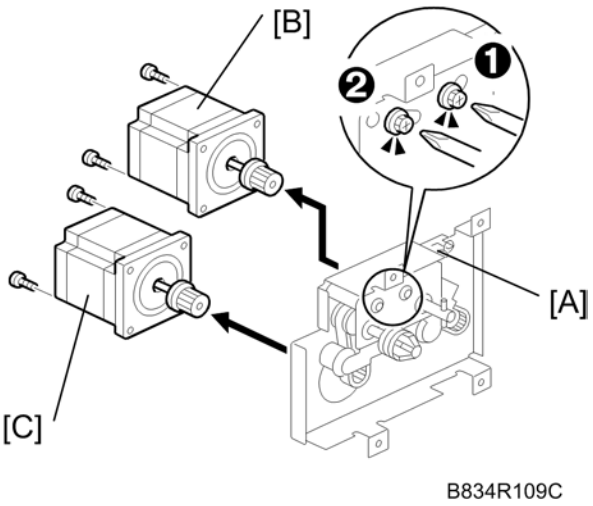
Feed Motors, Grip Motors



d7321001

Each paper feed unit has a pick-up feed motor ① and a grip motor ②. The removal procedure is the same for each feed tray.

1. Left rear cover page 4
2. Motor unit [A] (x4, x2, x2)



B834R109C

3. Remove:
   [A]: Springs (x2) (First, loosen the screws (x2) ①, ②.)
   [B]: Paper feed motor (x2, x1)
   [C]: Grip motor (x2, x1)

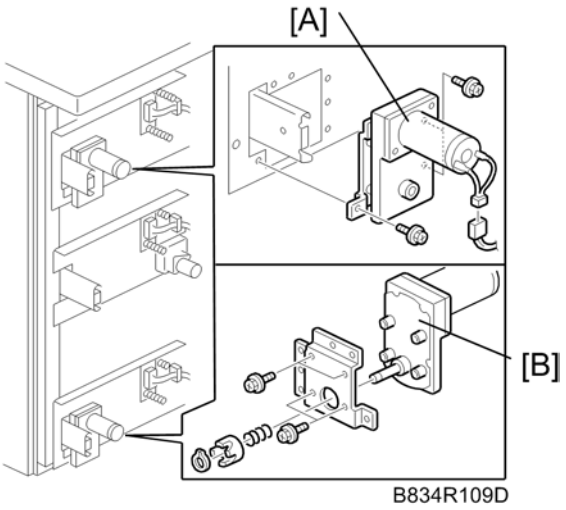
Reinstallation

Attach the tension spring, then tighten the screws to tighten the belts.

1.4.2 LIFT MOTORS

3rd, 5th Lift Motors

The procedure for removing the 3rd and 5th lift motors is the same.



Remove:

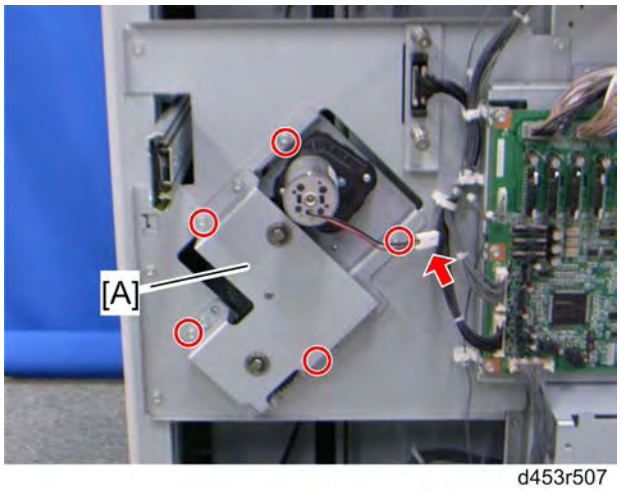
- Right rear cover page 5

[A]: Motor unit (x 3, x1).

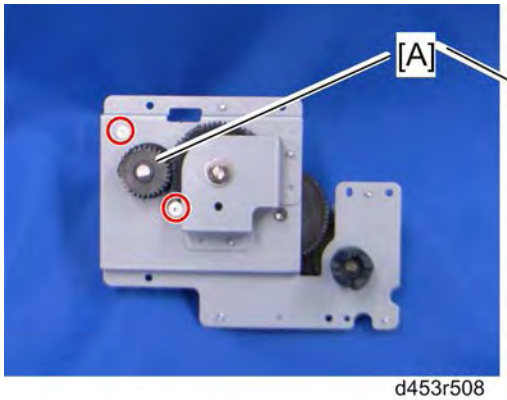
[B]: 3rd (or 5th) lift motor (x4, x1, Coupling x1, x1)

4th Lift Motor

1. Right rear cover



2. Motor unit [A] (x 5, x1)



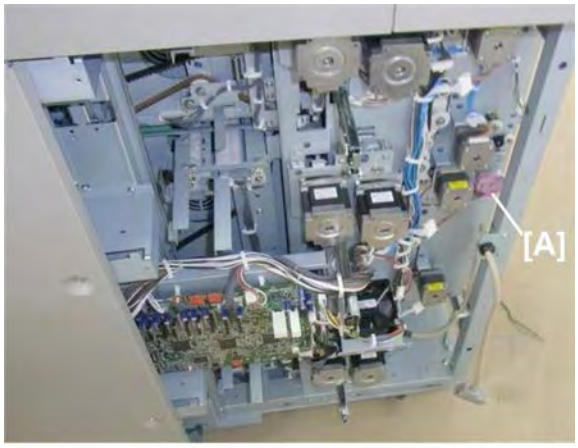
d453r508

d453r509

3. 4th lift motor [A] (x 2)

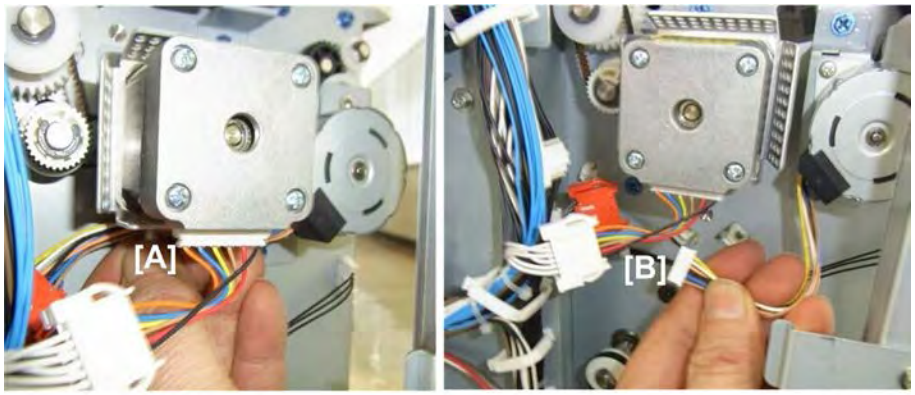
1.4.3 EXIT ROLLER LIFT MOTOR

1. Left rear cover page 4



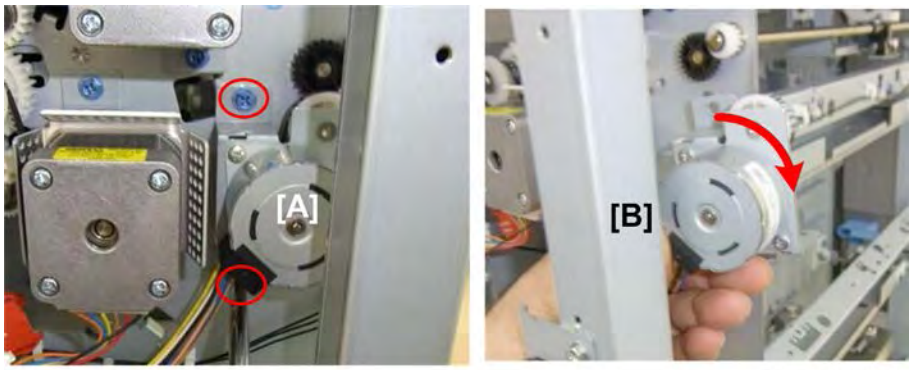
d516r001

2. The motor is located at [A].



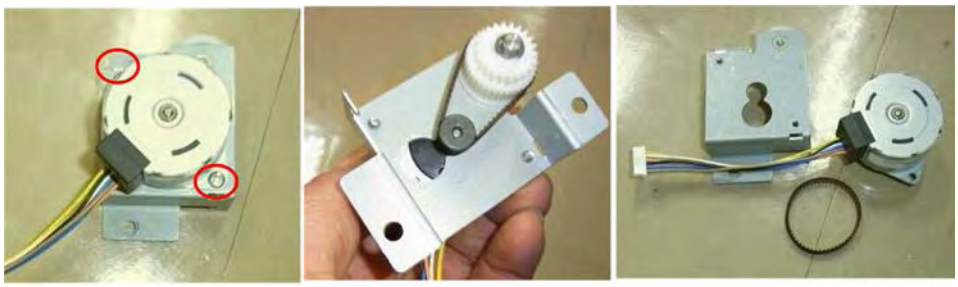
d516r002

3. Disconnect the motor at [A] and [B] (x1, x1)



d516r003

4. Disconnect the motor mount [A] (x1).
5. Remove the motor [B].

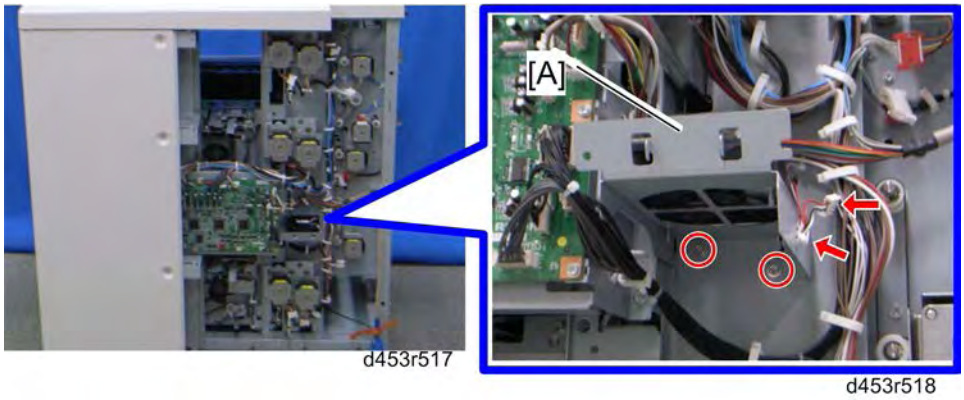


d516r004

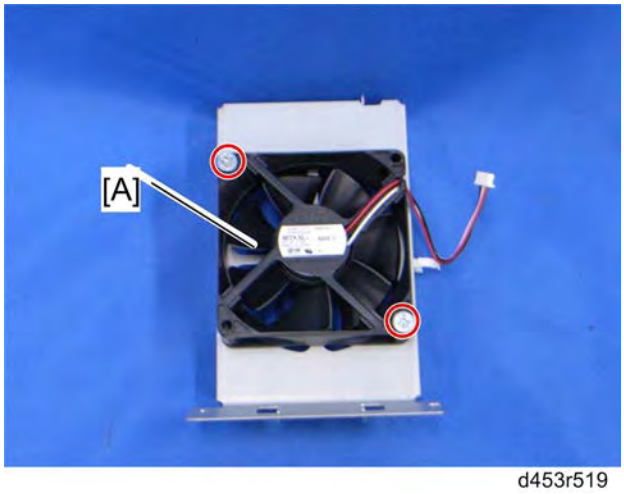
6. Separate the motor and bracket (x2, x1).

1.4.4 COOLING FAN

1. Left rear cover page 4



2. Fan bracket [A] (x 2, x 1, x 1)



3. Cooling fan [A] (x 2)

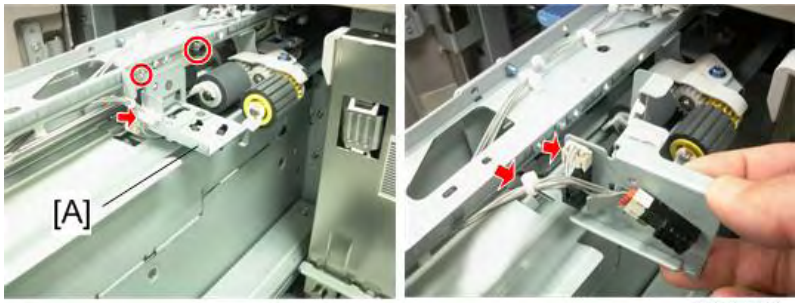
Important

- When reinstalling the cooling fan, make sure that the cooling fan is installed with its decals facing upward.

1.5 ELECTRICAL COMPONENTS

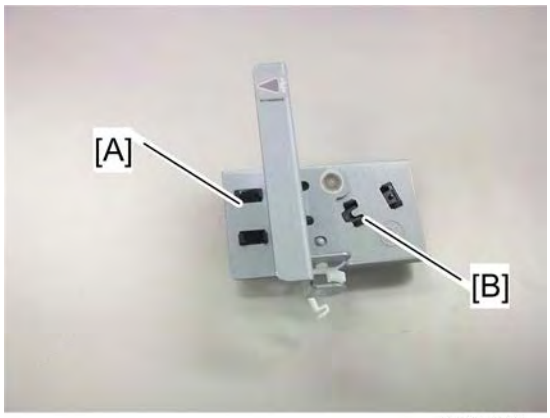
1.5.1 PAPER FEED AND END SENSORS

1. Pull out the paper feed unit



d516r510

2. Sensor bracket [A] (x1, black screw x1, x1, x 2)

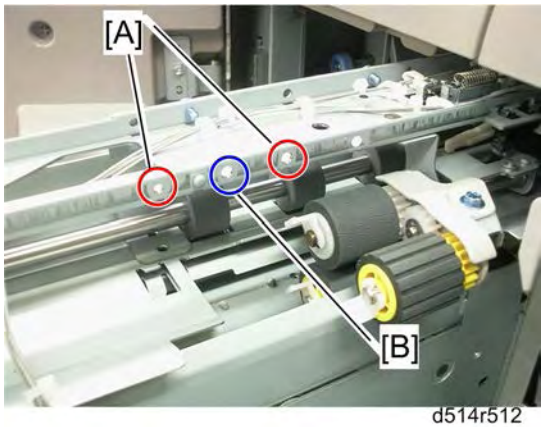


d516r511

3. Remove:
   [A]: Paper feed sensor (hooks)
   [B]: Paper end sensor (hooks)

When reinstalling the sensor bracket

- Make sure that the white connector is connected to the paper feed sensor and the red connector is connected to the paper end sensor.

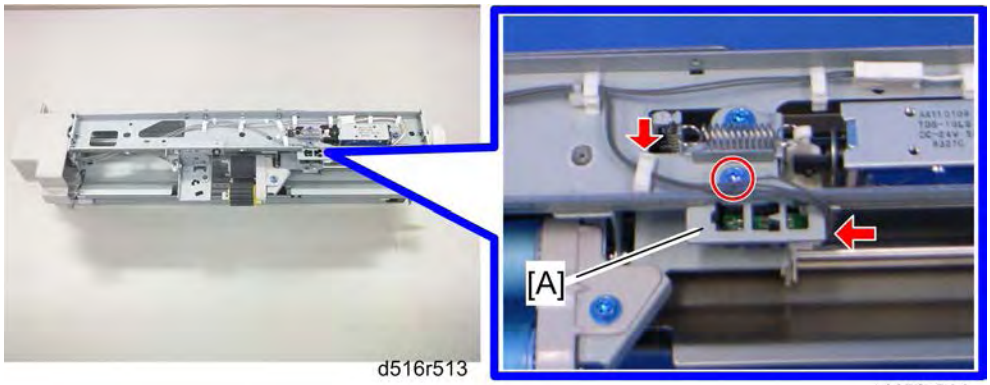


d514r512

- Use two holes [A] when attaching the sensor bracket. Do not use the hole [B].

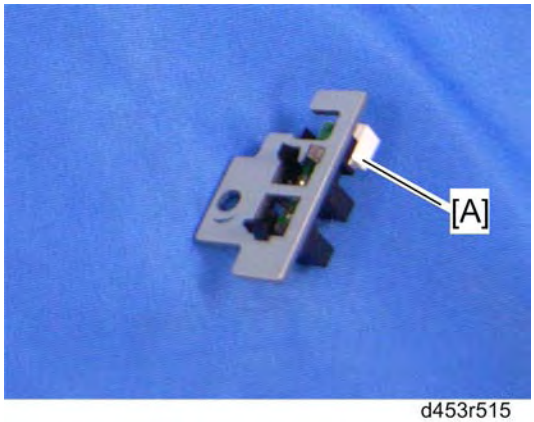
1.5.2 LIFT SENSOR

1. Paper feed unit page 7



d516r513
d453r514

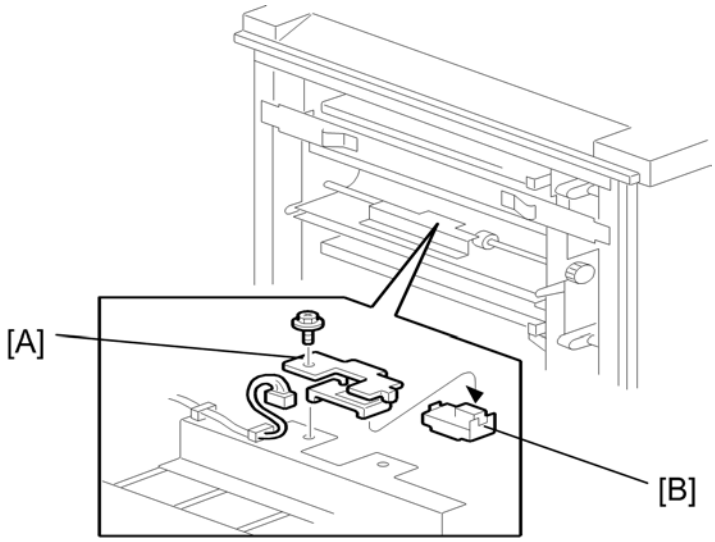
2. Sensor bracket [A] (x1, x1, x1)



d453r515

3. Lift sensor [A] (x3)

1.5.3 LCT EXIT SENSOR

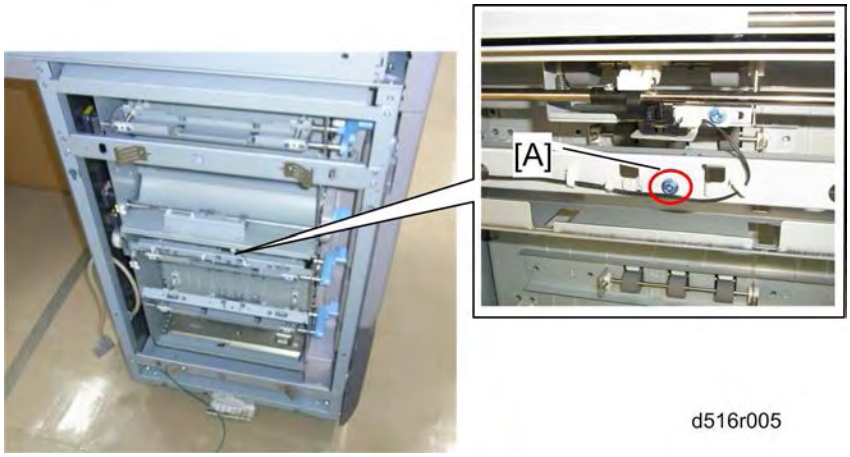


B834R105

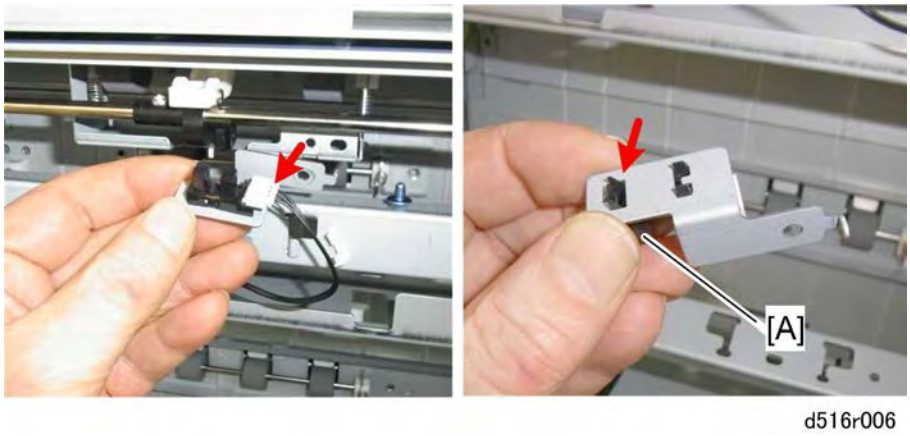
- Disconnect the LCT from the copier.
  [A] Exit sensor unit (x1, x1)
  [B] Exit sensor

1.5.4 EXIT ROLLER LIFT SENSOR

- Disconnect the LCT from the main machine.

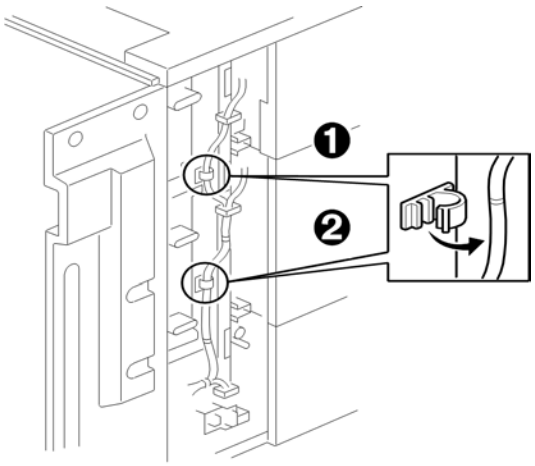


1. Sensor bracket [A] (x1)



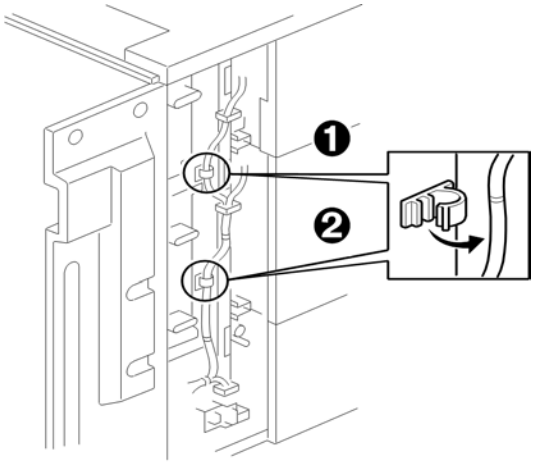
2. Exit roller lift sensor [A] (x1, x4)

1.5.5 REMOVING THE VERTICAL FEED UNIT



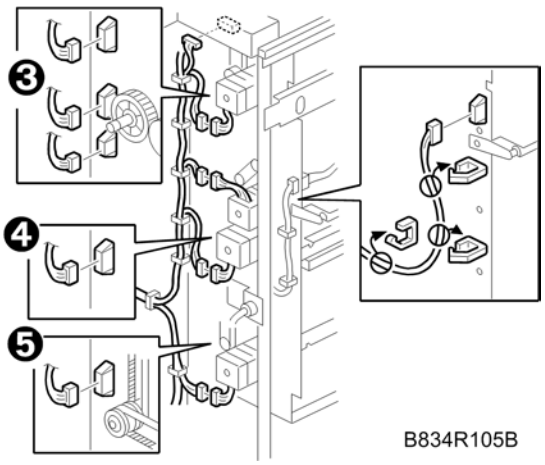
B834R105A

1. Open the front door.
2. Remove:
   - Inner upper cover page 6
   - Inner lower cover page 6
   - Left rear cover page 4



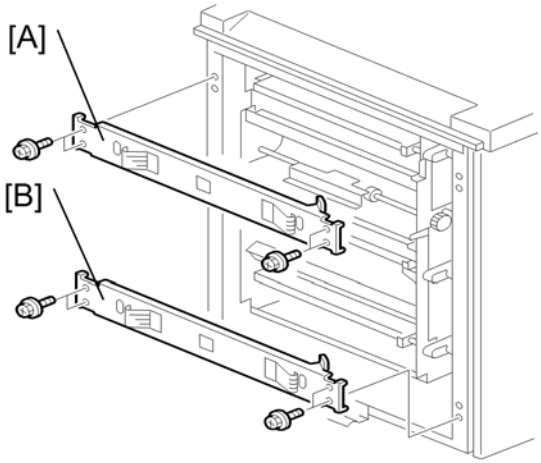
B834R105A

3. Disconnect the harness clamps ① and ② (x 2).



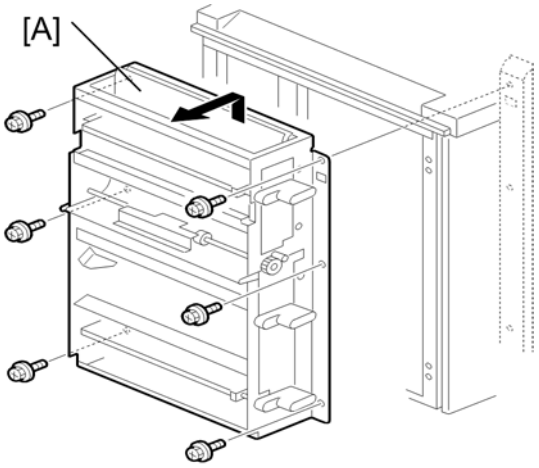
B834R105B

4. Disconnect the motor harnesses ③, ④, ⑤ (x 3, x11).



B834R105C

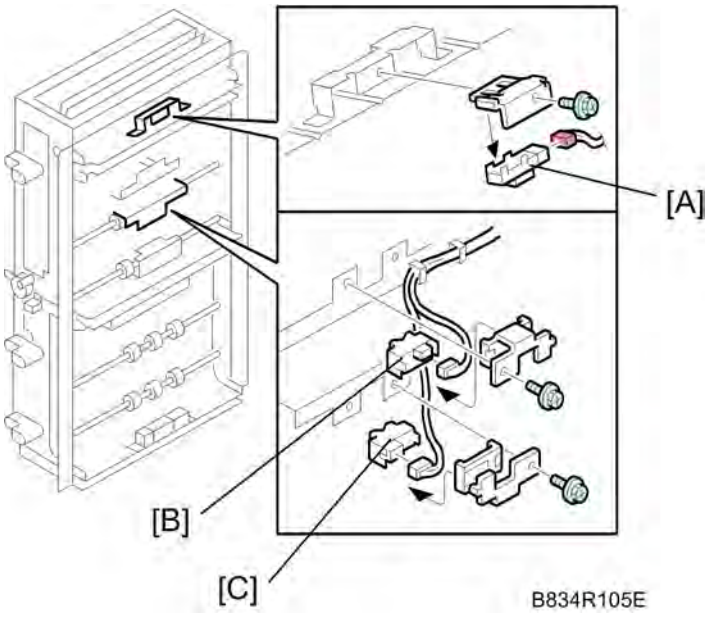
5. Remove:
   [A]: Upper stay (x 2)
   [B]: Lower stay (x 2)



B834R105D

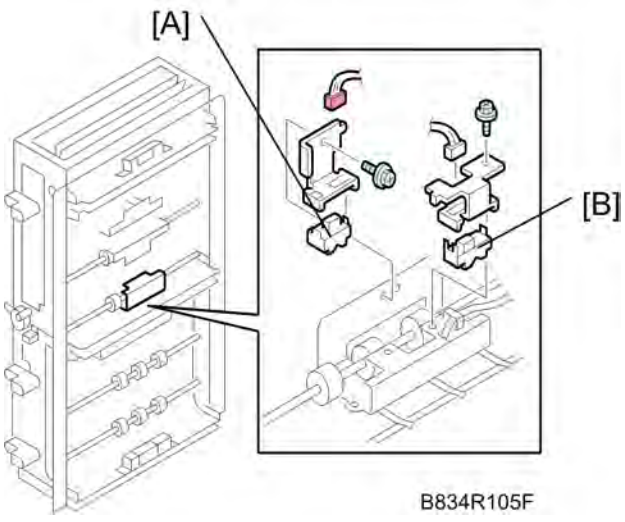
6. Vertical feed unit [A] (x 6)

1.5.6 4TH TRANSPORT, 4TH RELAY UPPER, LOWER SENSORS



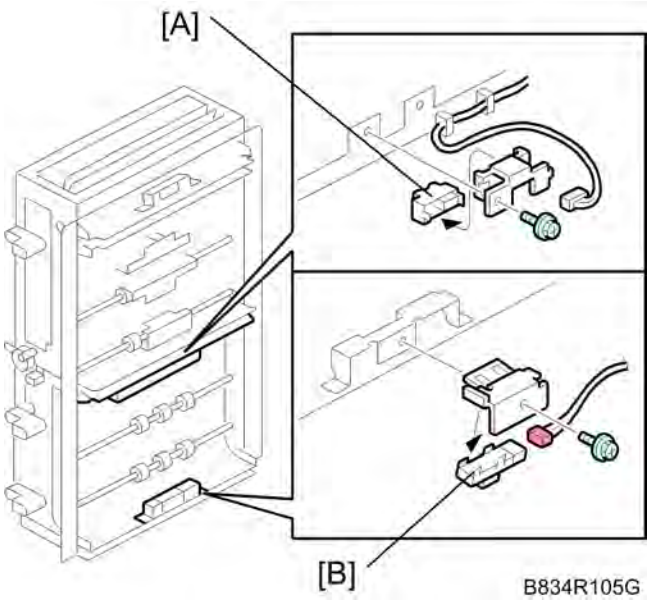
1. Vertical feed unit page 24
2. Remove:
   [A]: 3rd Transport sensor (x1, x1)
   [B]: 3rd Relay sensor – upper (x1, x1)
   [C]: 3rd Relay sensor – lower (x1, x1)

1.5.7 5TH RELAY SENSOR, 5TH TRANSPORT SENSOR



1. Vertical feed unit page 24
2. Remove:
   [A]: 4th Relay sensor (x1, x1)
   [B]: 4th Transport sensor (x1, x1)

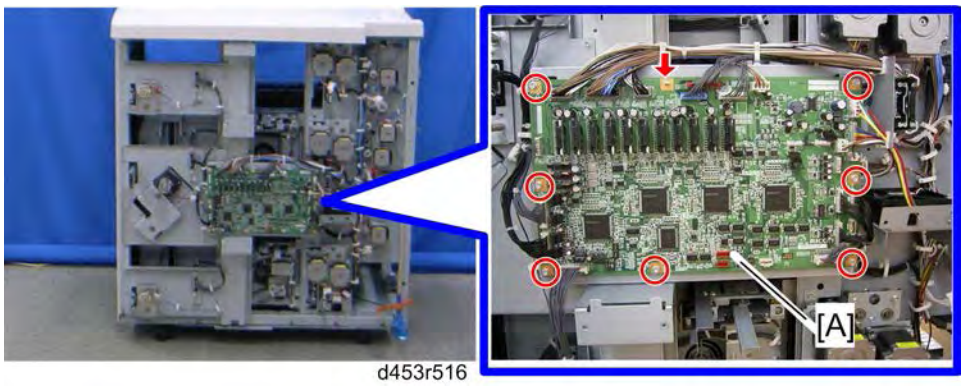
1.5.8 6TH RELAY SENSOR, 6TH TRANSPORT SENSOR



1. Vertical feed unit page 24
2. Remove:
   [A]: 5th Relay sensor (x1, x1)
   [B]: 5th Transport sensor (x1, x1)

1.5.9 MAIN CONTROL BOARD

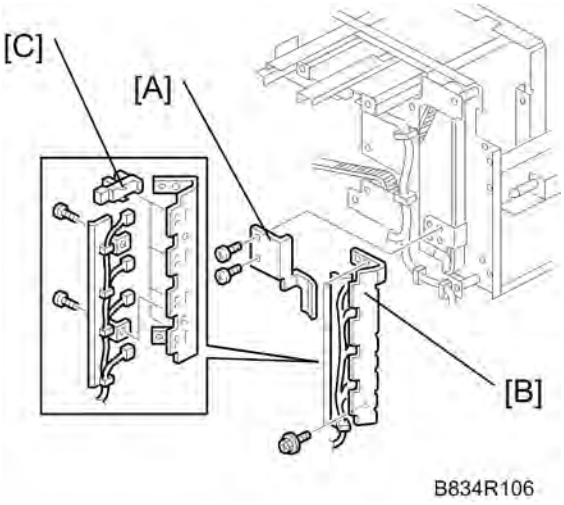
1. Left rear cover page 4
2. Right rear cover page 5



3. Main control board [A] (x 7, x1, x All).

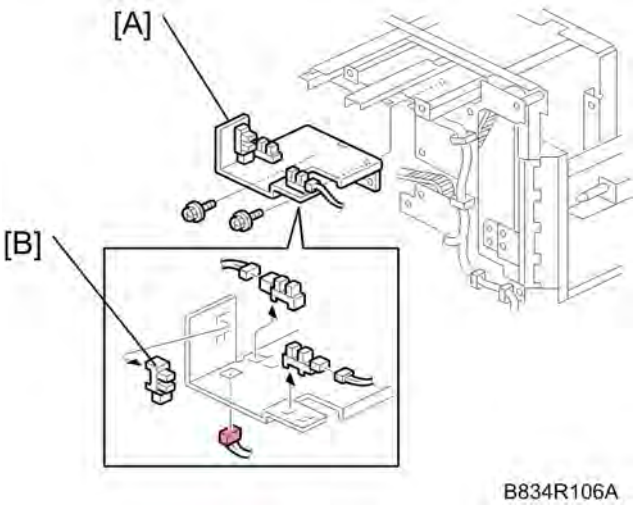
1.5.10 PAPER HEIGHT, PAPER WIDTH SENSORS

Paper Height Sensors



1. Left rear cover page 4
2. Remove:
   [A]: Paper height sensor unit (x 2, x 4).
   [B]: Clamp bracket (x 2)
   [C]: Paper height sensors (x 4) (x3, x 2 each)

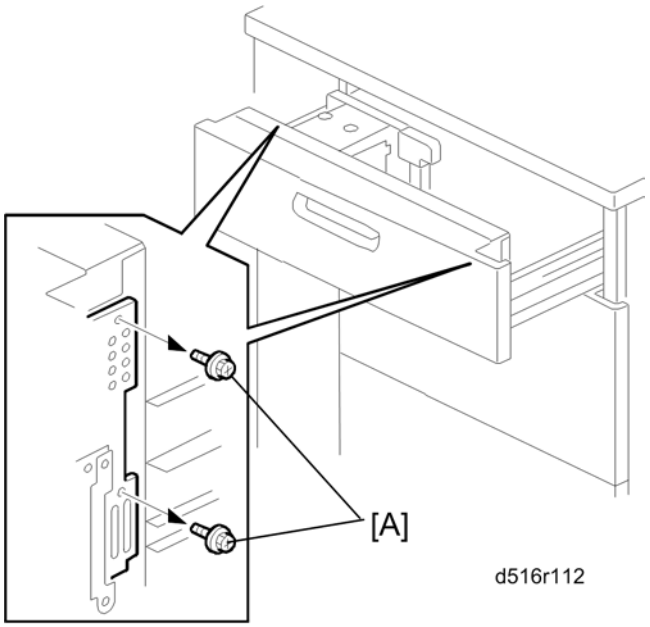
Paper Width Sensors



1. Left rear cover page 4
2. Remove:
   [A]: Paper width sensor unit (x 2, x 3)
   [B]: Paper width sensors (x 3) (x2 each)

1.6 ADJUSTMENT

1.6.1 SIDE REGISTRATION ADJUSTMENT



Normally the side registration of the image can be adjusted with SP1002-004 to -006 (Side-to-Side Registration – Tray 3, 4, 5). When the punch hole positions are not aligned from a particular feed station, adjust the side registration by changing the tray cover position for the tray, as described below. Then adjust the side registration of the image with the SP1002.

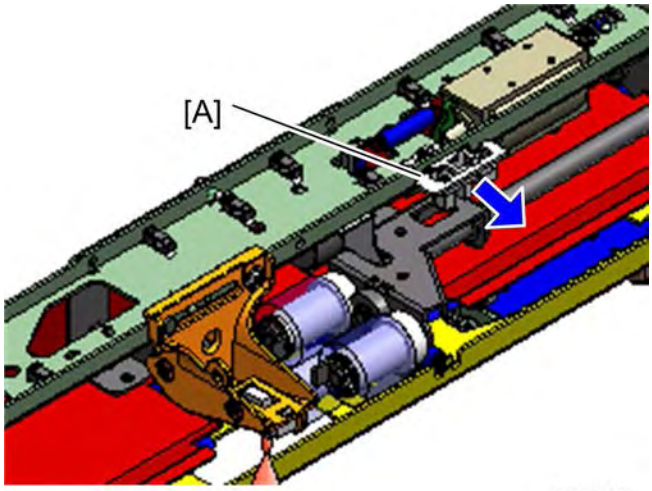
1. Pull out the tray.
2. Change the screw positions [A] at both the right and left sides as shown.

Note

- Adjustment range: 0 ± 2.0 mm adjustment step: 0.5 mm/step

Double Feed Problem from LCT

If double feed occurs several times when paper is fed from an LCT (Tray 3, 4 or 5), try to change the upper limit of the paper stack in the LCT tray. Changing the upper limit of the paper stack in the LCT tray can improve paper separation for the paper stack in the LCT tray.



g178t502

1. Remove the paper feed unit of the LCT unit. page 24
2. Loosen the screw on the paper lift sensor bracket [A].
3. Move the bracket 0.5 mm in the arrow direction as shown above.
4. Tighten the screw on the paper lift sensor bracket [A].

Important

- To return the upper limit position to the default position, move the paper lift sensor bracket 0.5 mm to the opposite side.
- Return the upper limit position to the default if a paper jam occurs at the paper feed sensor in the LCT.
-

D733

LCIT RT5070

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

LCIT RT5070 (D733)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT 1

1.1 DOORS AND COVERS 1
1.1.1 FRONT DOOR AND COVERS 1
Top Covers, Rear Cover 1
Right Cover 3
Door 3
1.1.2 INNER COVERS 5
1.2 TRAYS 6
1.2.1 TOP TRAY (TRAY 4) 6
1.2.2 MIDDLE TRAY (TRAY 5) 7
1.2.3 BOTTOM TRAY (TRAY 6) 7
1.3 PAPER FEED 9
1.3.1 PAPER FEED UNITS 9
Top Tray Paper Feed Unit 9
Middle Tray Paper Feed Unit 10
Bottom Tray Paper Feed Unit 12
1.3.2 PAPER FEED, SEPARATION AND PICKUP ROLLERS 13
Top Tray 13
Middle, Bottom Tray 13
1.4 MOTORS 15
1.4.1 PAPER FEED, GRIP MOTORS 15
1.4.2 6TH LIFT MOTOR 16
1.4.3 4TH TRANSPORT MOTOR 16
1.4.4 5TH TRANSPORT MOTOR 17
1.4.5 LCT EXIT MOTOR 18
1.4.6 6TH TRANSPORT MOTOR 19
1.4.7 4TH, 5TH LIFT MOTORS 20
1.4.8 COOLING FAN 21
1.5 ELECTRICAL COMPONENTS 22
1.5.1 PAPER FEED AND END SENSORS 22
1.5.2 LIFT SENSOR 23
1.5.3 IMAGE POSITION SENSOR BOARD, EXIT SENSOR 23
1.5.4 PAPER HEIGHT SENSORS, PAPER SIZE SENSORS 24

1.5.5 MAIN CONTROL BOARD.....25
Main Board.....25
Main Control Board Bracket.....25
1.6 ADJUSTMENT.....26
1.6.1 SIDE REGISTRATION ADJUSTMENT.....26
1.6.2 ADJUSTING IMAGE POSITION SENSOR STRENGTH AND SIDE-TO-SIDE REGISTRATION.....27
1.6.3 DOUBLE FEED PROBLEM FROM THE LCT.....29

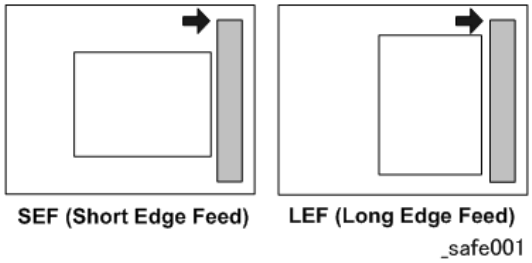
READ THIS FIRST

Symbols, Abbreviations and Trademarks

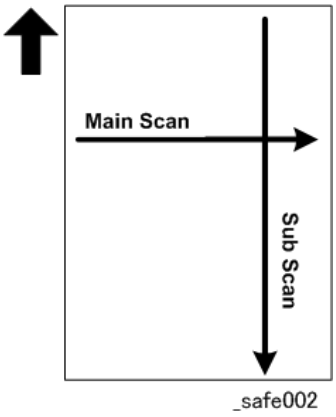
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

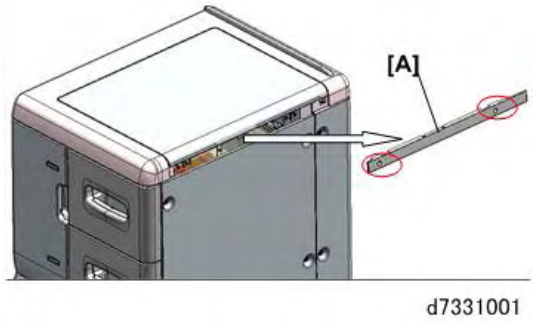
- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

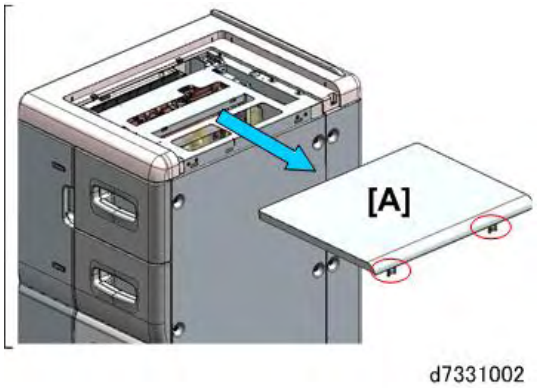
1.1 DOORS AND COVERS

1.1.1 FRONT DOOR AND COVERS

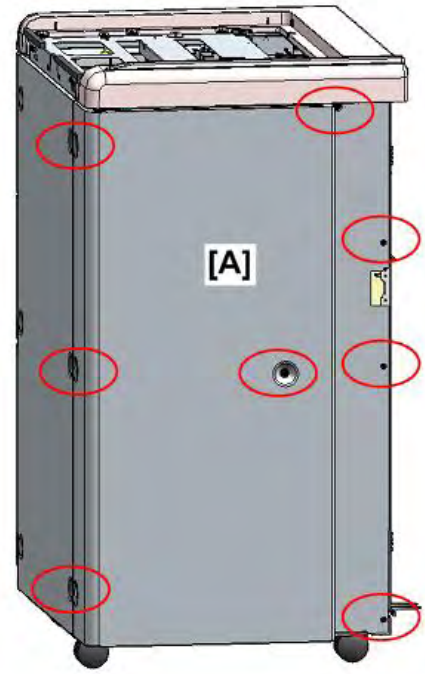
Top Covers, Rear Cover



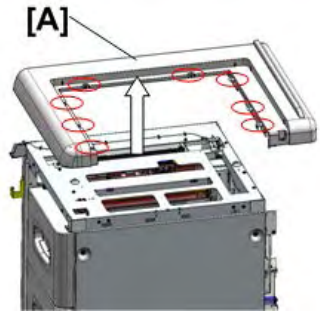
1. Top right edge cover (x2).



2. Disconnect top flat cover [A] and slide it in the direction of the arrow (x2).

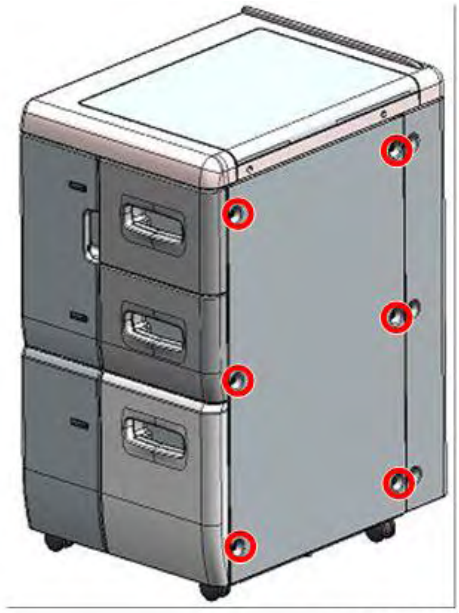


3. Remove rear cover [A] (x8)



4. Remove left edge cover [A] (x11).

Right Cover



d7331005

1. Remove right cover (x6)

Door

1. Remove top covers. (See previous section.)

d7331006

2. Free the harness, and then disconnect it (x2, x1).

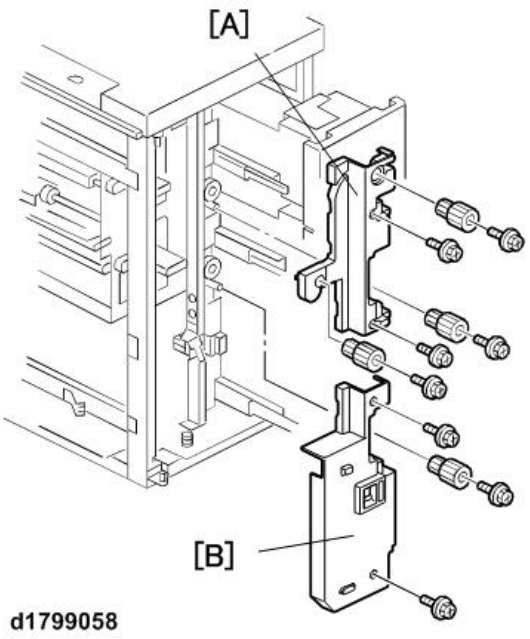
d7331007

3. Remove bracket screw (x1).

d7331008

4. Lift door off its hinges, and then remove it.

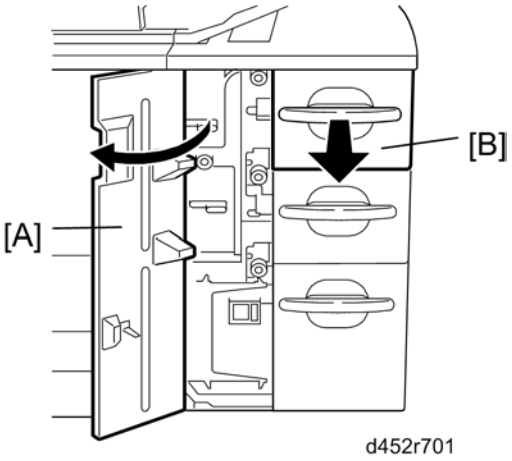
1.1.2 INNER COVERS



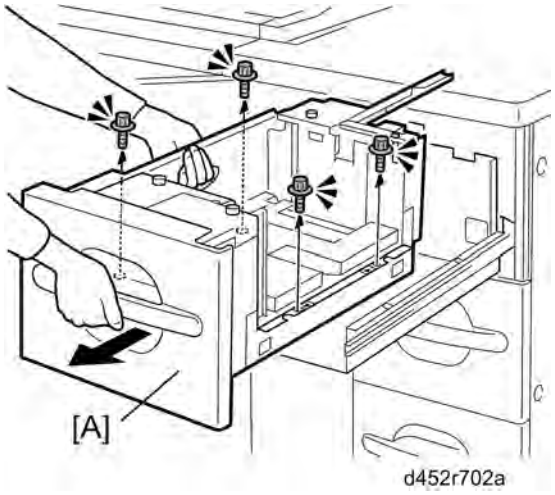
1. Remove inner cover [A] (x3, Knobs x3).
2. Remove inner cover [B] (x2, Knob x1).

1.2 TRAYS

1.2.1 TOP TRAY (TRAY 4)



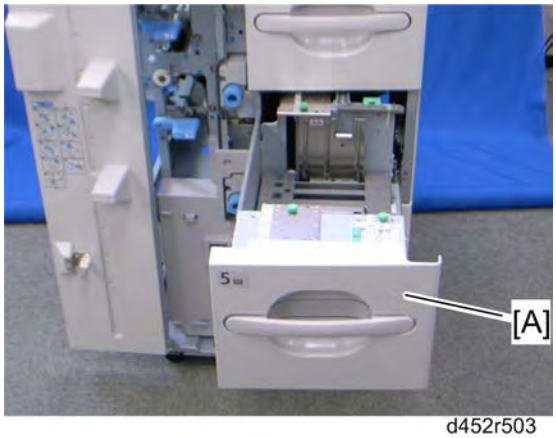
1. Open the front door [A].
2. Pull open the top tray [B] until it stops.



3. Lift the top tray [A] out of the drawer (x 4).

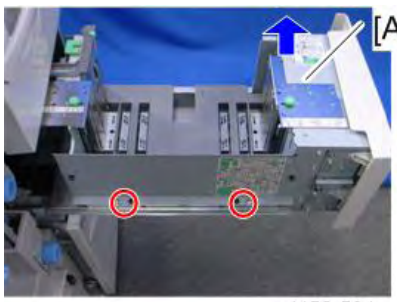
1.2.2 MIDDLE TRAY (TRAY 5)

1. Open the front door.

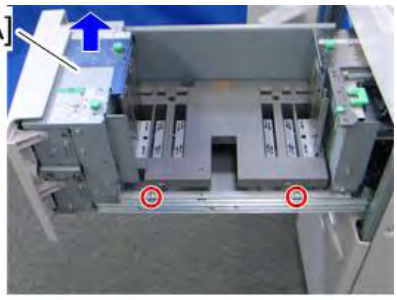


d452r503

2. Pull open the middle tray [A] until it stops.



d452r504



d452r505

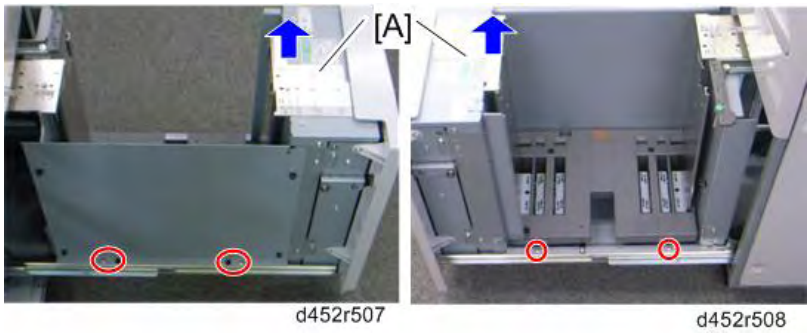
3. Lift the middle tray [A] out of the drawer (x 4, x 2).

1.2.3 BOTTOM TRAY (TRAY 6)

1. Open the front door.

d452r506

2. Pull open the bottom tray [A] until it stops.



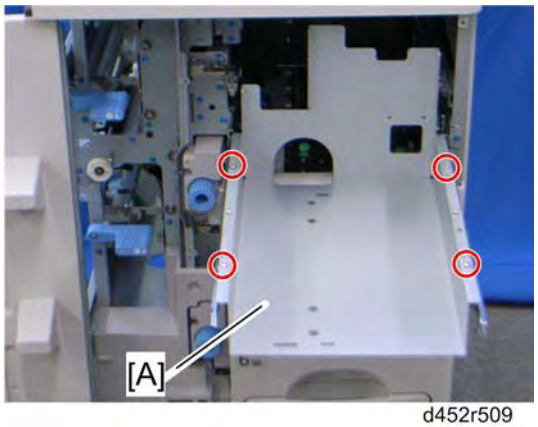
3. Lift the bottom tray [A] out of the drawer (x 4, x 2).

1.3 PAPER FEED

1.3.1 PAPER FEED UNITS

Top Tray Paper Feed Unit

1. Open the front door.
2. Remove:
   - Inner upper cover page 5
   - Rear cover page 1
   - Top tray page 6

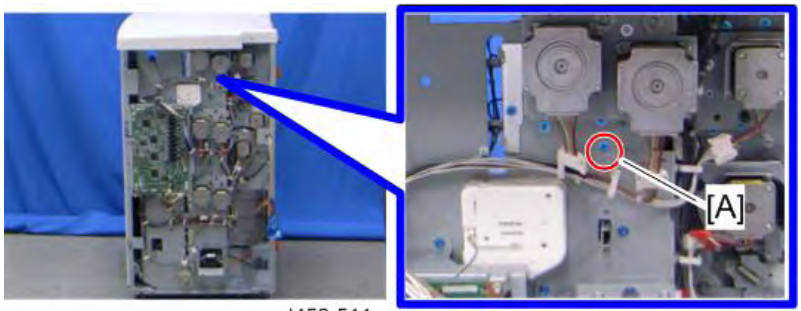


d452r509

3. Cover bracket [A] (x 4)

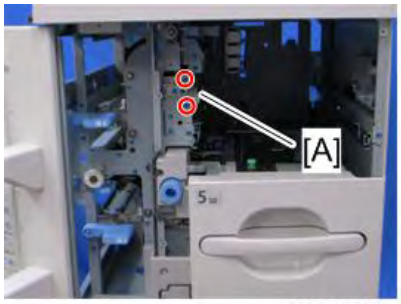
d452r510

4. Push the slide rails [A] into the machine.

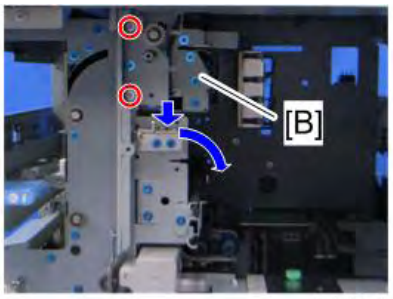


d452r511 d452r512

5. Remove the screw [A] at the rear, indicated by the triangle mark.

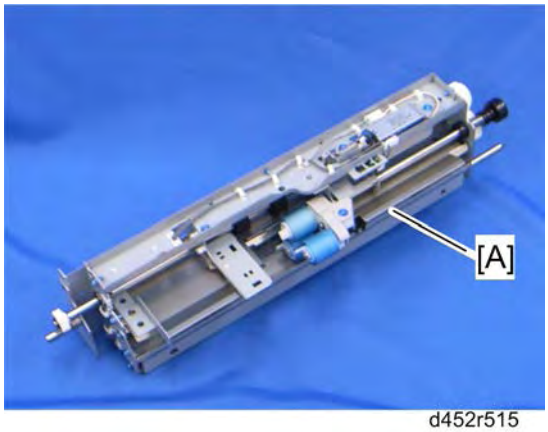


d452r513



d452r514

6. Stay [A] (x 2)
7. Pull the paper feed unit [B], and then move it to the lower right side (x 2).

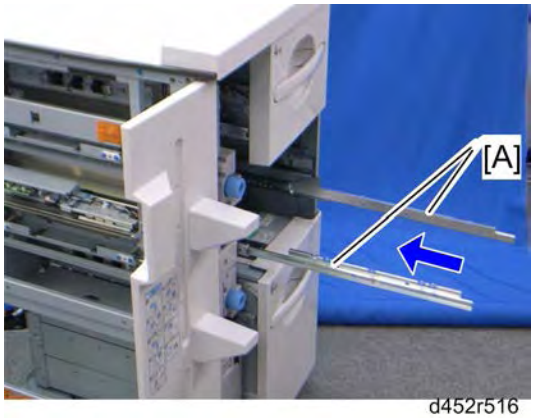


d452r515

8. Paper feed unit [A]

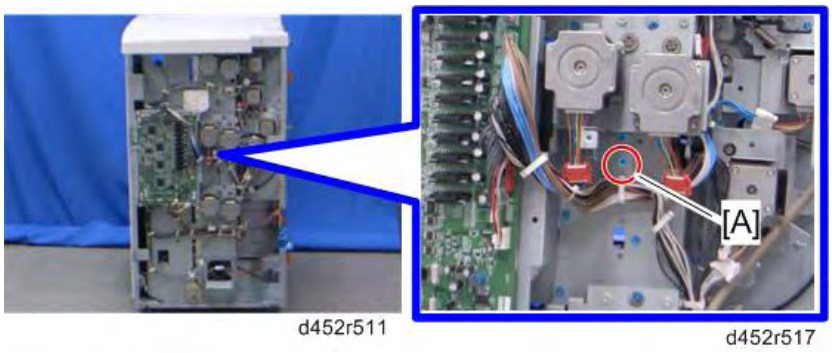
Middle Tray Paper Feed Unit

1. Open the front door.
2. Remove: page 1
   - Inner upper cover
   - Rear cover
   - Middle tray



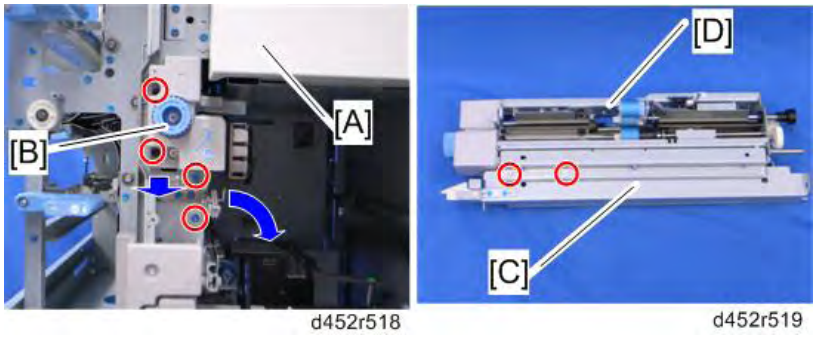
d452r516

3. Push the slide rails [A] into the machine.



d452r511 d452r517

4. Remove the screw [A] at the rear, indicated by the triangle mark.

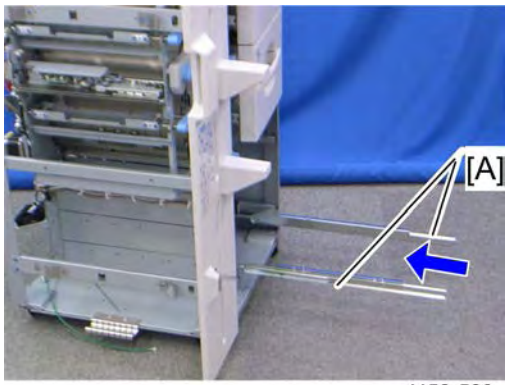


d452r518 d452r519

5. Pull out the top tray [A].
6. Pull the paper feed unit with stay [B], and then move it to the lower right side (x 2, x 2).
7. Stay [C] (x 2)
8. Paper feed unit [D]

Bottom Tray Paper Feed Unit

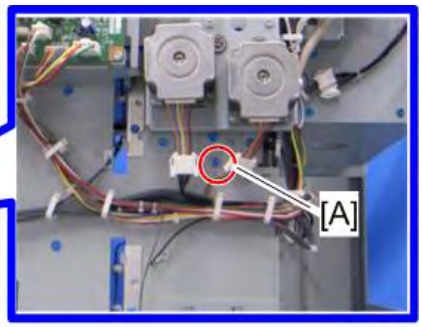
1. Open the front door.
2. Remove: page 1
   - Inner upper cover
   - Rear cover
   - Bottom tray



d452r520

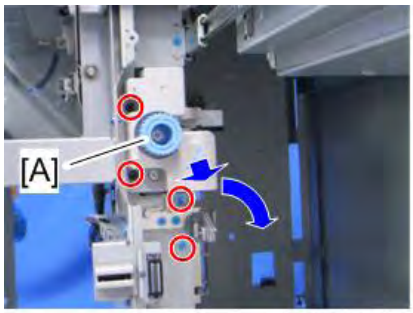
3. Push the slide rails [A] into the machine.

d452r511

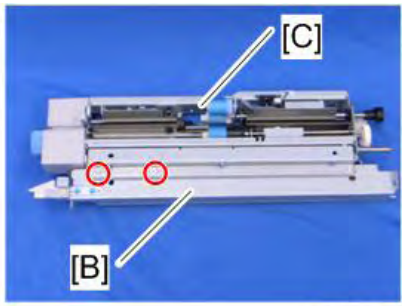


d452r521

4. Remove the screw [A] indicated by the triangle mark at the rear.



d452r522



d452r519

5. Pull out the middle tray.
6. Pull the paper feed unit with stay [A], and then move it to the right-lower side (x 2, x 2).
7. Stay [B] (x 2)
8. Paper feed unit [C]

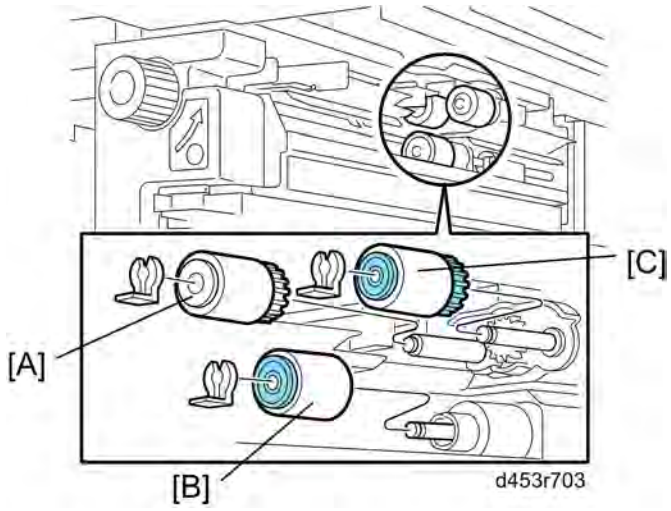
1.3.2 PAPER FEED, SEPARATION AND PICKUP ROLLERS

⚠CAUTION

- Before doing this procedure, turn off the main machine and disconnect it from its power source.

Top Tray

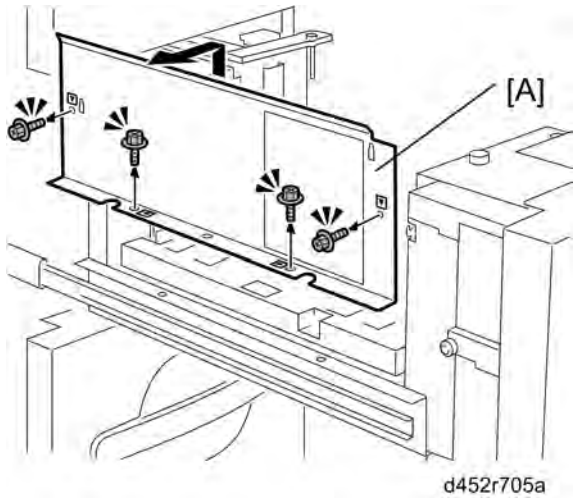
1. Top tray page 6



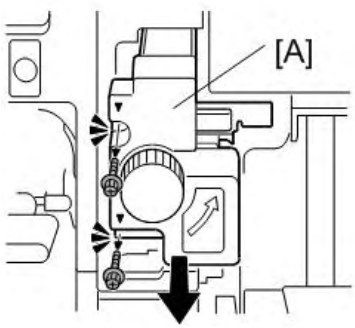
2. Remove:
   [A]: Paper feed roller (x 1)
   [B]: Separation roller (x 1)
   [C]: Pickup roller (x 1)

Middle, Bottom Tray

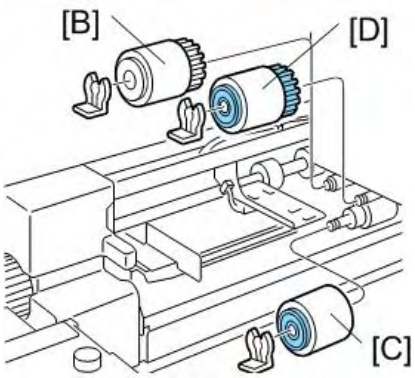
1. Middle tray or Bottom tray
2. Inner upper cover for the middle tray or Inner lower cover for the bottom tray page 5



3. Tray side plate [A] (x 4).



d452r706b

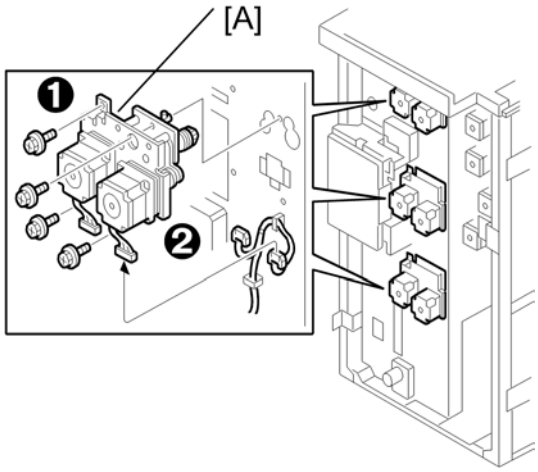


d452r707

4. Pull the paper feed unit [A].
5. Remove:
   [B]: Paper feed roller (x 1)
   [C]: Separation roller (x 1)
   [D]: Pickup roller (x 1)

1.4 MOTORS

1.4.1 PAPER FEED, GRIP MOTORS



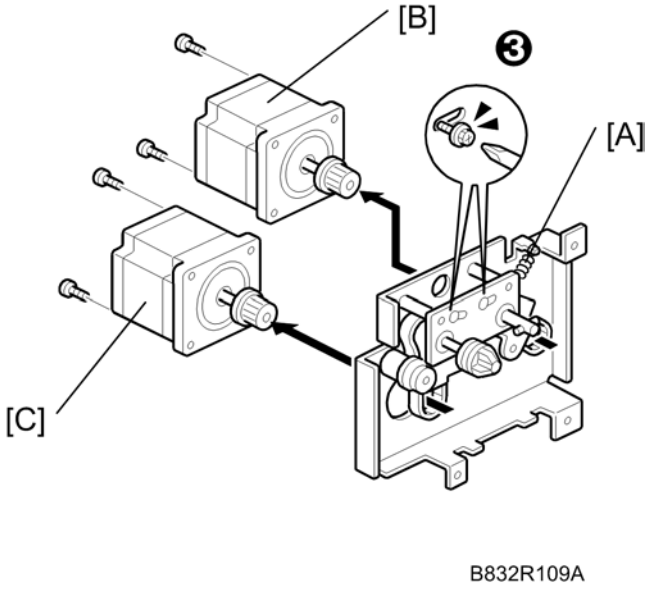
B832R109

Each paper feed unit has a paper feed motor ① and a grip motor ②.

The removal procedure is the same for each feed tray.

Remove:

1. Remove rear cover. page 1
   [A] Motor unit (x4, x2)



B832R109A

[A] Springs (x 2), First, loosen the screws ③ (x2)

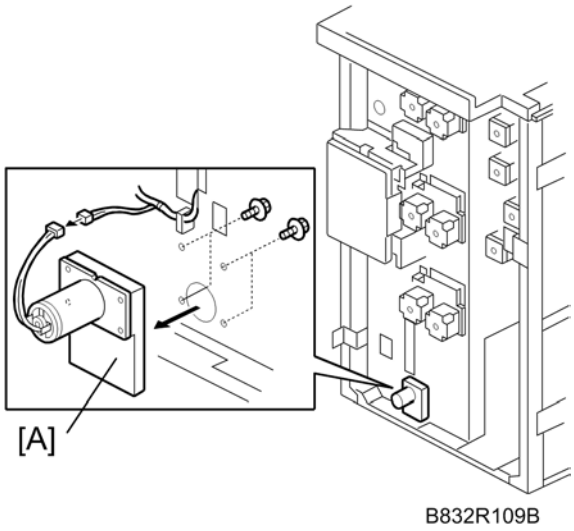
[B] Paper feed motor (x2)

[C] Grip motor (x2)

Reinstallation

- Attach the tension spring, then tighten the screws ③ to tighten the belts.

1.4.2 6TH LIFT MOTOR

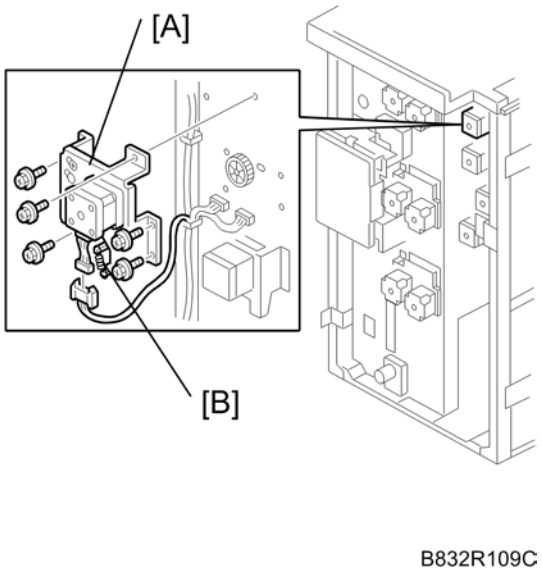


Remove: page 1

- Rear cover
- Right cover

[A] 6th lift motor (x 4, x1)

1.4.3 4TH TRANSPORT MOTOR

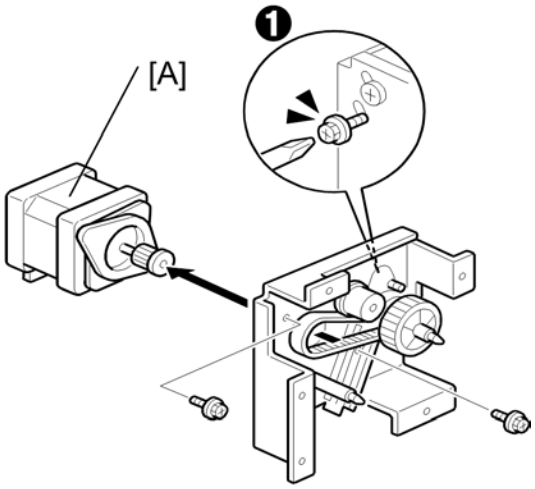


Remove:

- Rear cover page 1

[A] 4th Transport motor unit (x 5, x 1).

[B] Spring (x1). First, loosen screw ① (x 1).



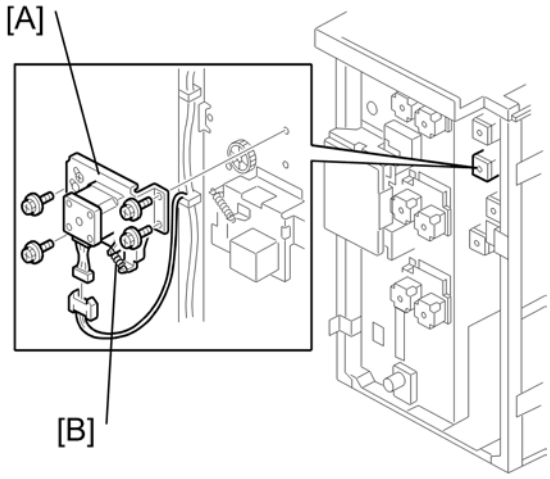
B832R109D

[A] 4th transport motor (x2, x1)

Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

1.4.4 5TH TRANSPORT MOTOR



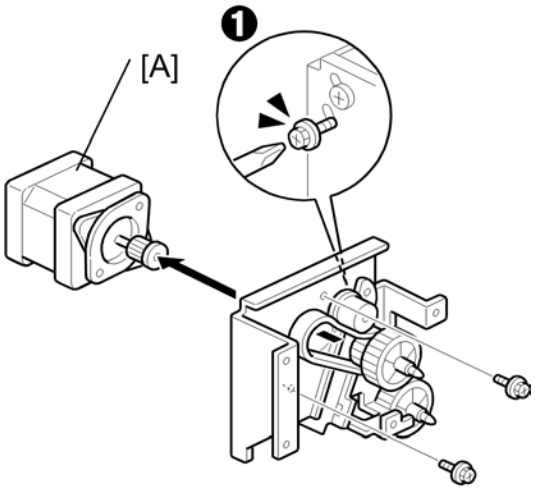
B832R109E

Remove:

- Rear cover page 1

[A] Motor unit (x4, x 1).

[B] Spring (x1). First, loosen screw ① (x 1).



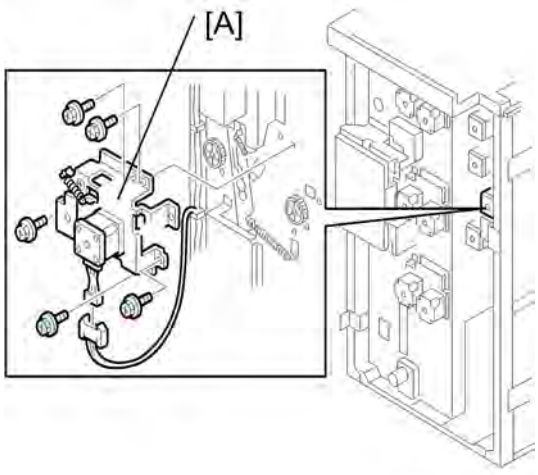
B832R109F

[A] 5th Transport motor (x2, x1)

Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

1.4.5 LCT EXIT MOTOR

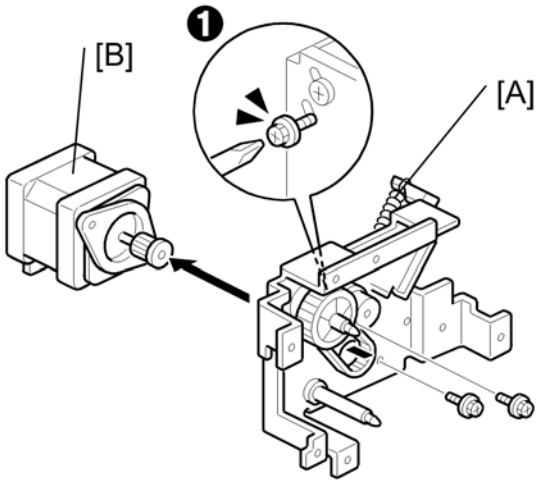


B832R109G

Remove:

- Rear cover page 1

[A] Motor unit (x6, x 1).



B832R109H

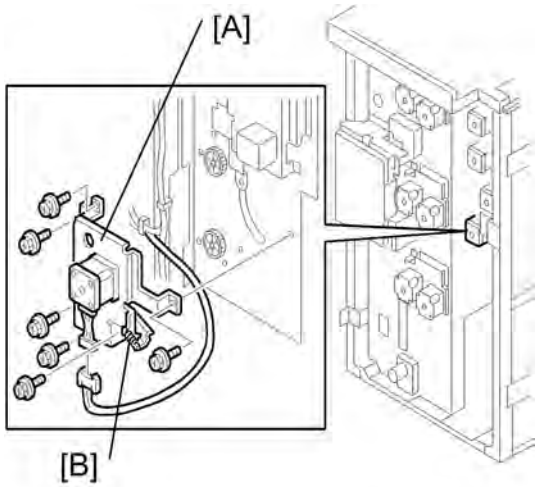
[A] Spring (x1). First, loosen screw ① (x 1).

[B] LCT exit motor (x2, x1)

Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

1.4.6 6TH TRANSPORT MOTOR



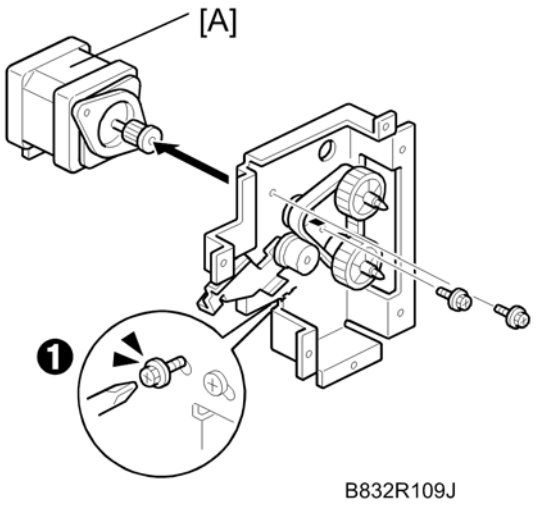
B832R109I

Remove:

- Rear cover page 1

[A] Motor unit (x6, x 1).

[B] Spring (x1). First, loosen screw ① (x 1).



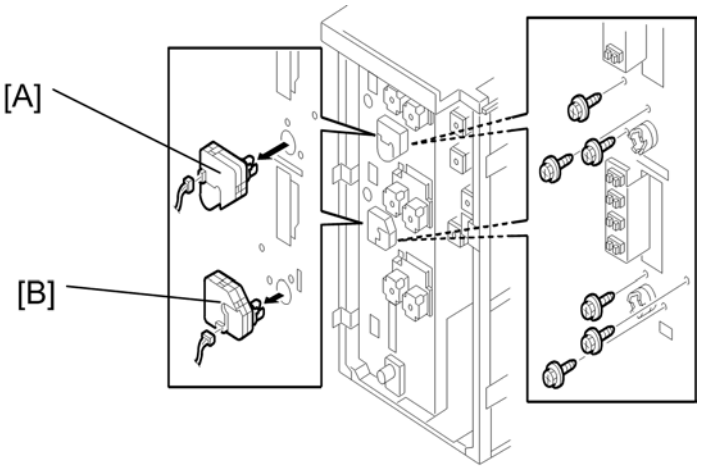
B832R109J

[A] LCT exit motor (x2, x1)

Reinstallation

- Be sure that the tension spring is connected, then tighten the screw ①.

1.4.7 4TH, 5TH LIFT MOTORS



B832R109L

Remove:

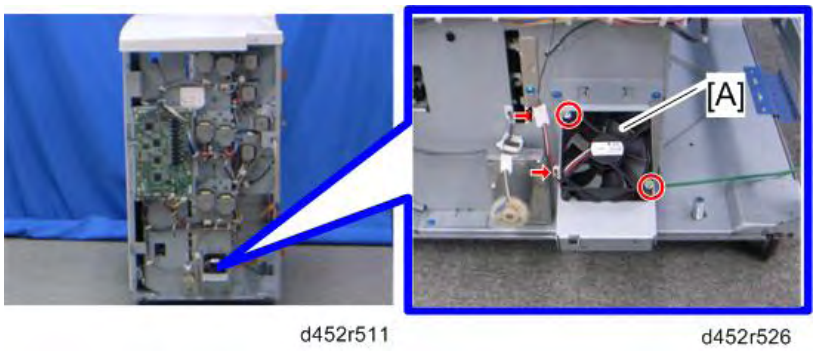
- Rear cover page 1
- Main control board bracket page 25

[A] 4th lift motor (x3, x 1)

[B] 5th lift motor (x3, x 1)

1.4.8 COOLING FAN

1. Rear cover. page 1



2. Cooling fan [A] (x 2, x 1, x 1)

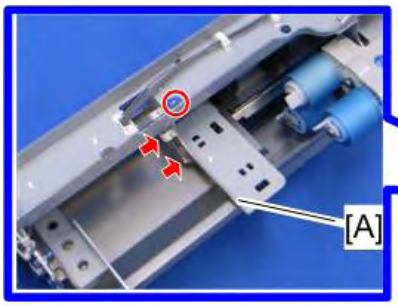
Important

- When reinstalling the cooling fan, make sure that the cooling fan is installed with its decals facing upward.

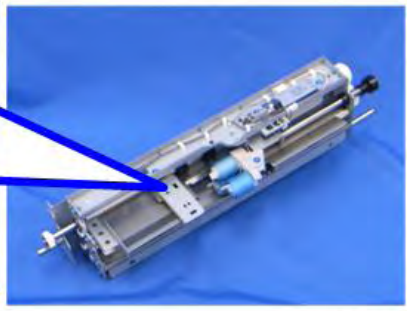
1.5 ELECTRICAL COMPONENTS

1.5.1 PAPER FEED AND END SENSORS

1. Paper feed unit page 9

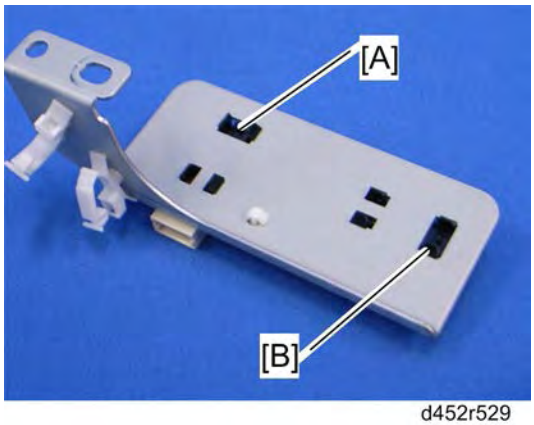


d452r528



d452r515

2. Sensor bracket [A] (x 1, x 3, x 1)



d452r529

3. Remove:

   [A]: Paper feed sensor (hooks)

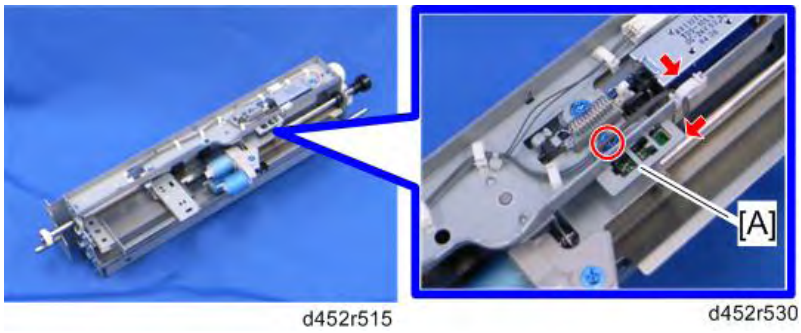
   [B]: Paper end sensor (hooks)

When reinstalling the sensor bracket

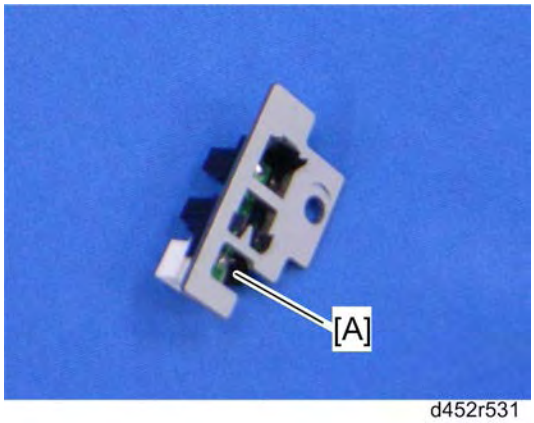
- Make sure that the white connector is connected to the paper feed sensor and the red connector is connected to the paper end sensor.

1.5.2 LIFT SENSOR

1. Paper feed unit page 9



2. Sensor bracket [A] (x 1, x 1, x 1)



3. Lift sensor [A] ( )

1.5.3 IMAGE POSITION SENSOR BOARD, EXIT SENSOR

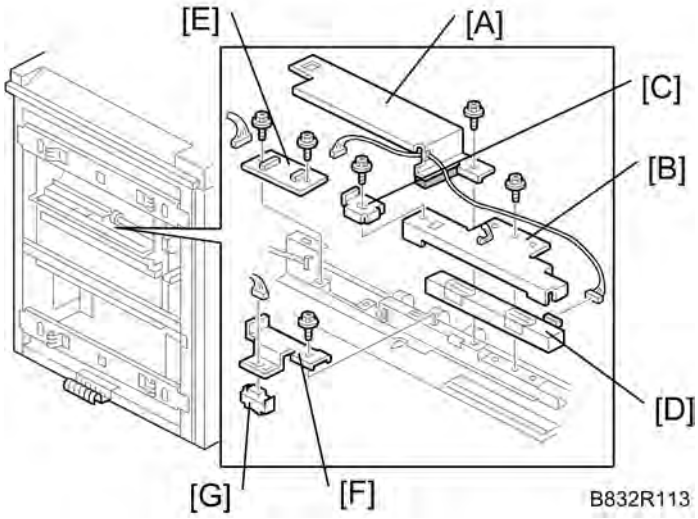


Image Position Sensor

1. Disconnect the LCT from the copier.
2. Remove:

   [A] Harness cover (x1, x1)

   [B] Image position sensor unit (x1, x1, x1)

[C] Stopper (x1)

[D] Image position sensor

- After replacing the image position sensor, do the procedure for image position sensor adjustment. page 27

Image Position Sensor Board

1. Remove:

   [E] Image position sensor board (x2, x1, x 2)

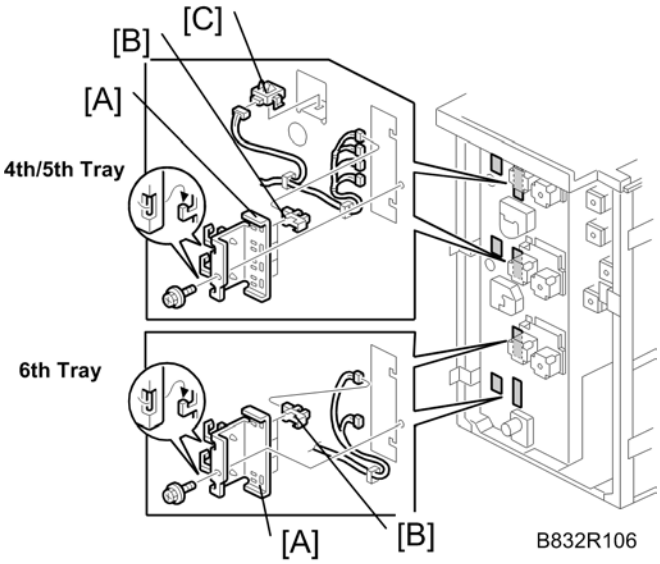
Exit Sensor

1. Remove:

   [F] Exit sensor unit (x1, x1, x 1)

   [G] Exit sensor

1.5.4 PAPER HEIGHT SENSORS, PAPER SIZE SENSORS



Remove:

- Rear cover page 1
- Right cover page 1

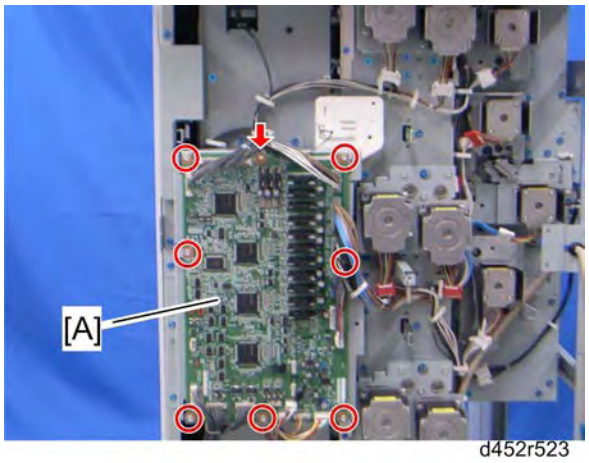
[A] Paper height sensor unit (x2, x 1, x 4).

[B] Paper height sensors (x 4 each)

[C] Paper size sensors (x 1 each)

1.5.5 MAIN CONTROL BOARD

Main Board



d452r523

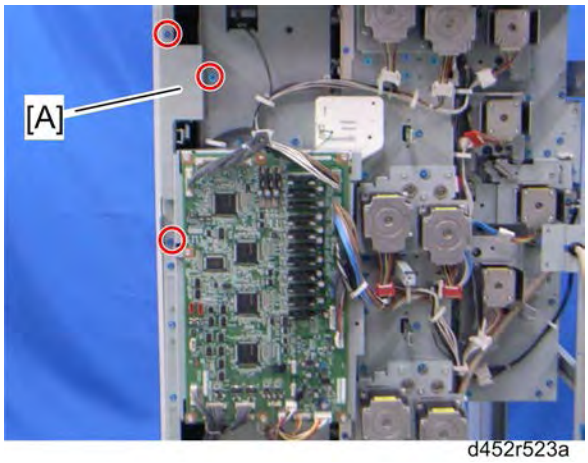
Remove:

- Rear cover page 1

  [A] Main control board (x 7, x 1, x All)

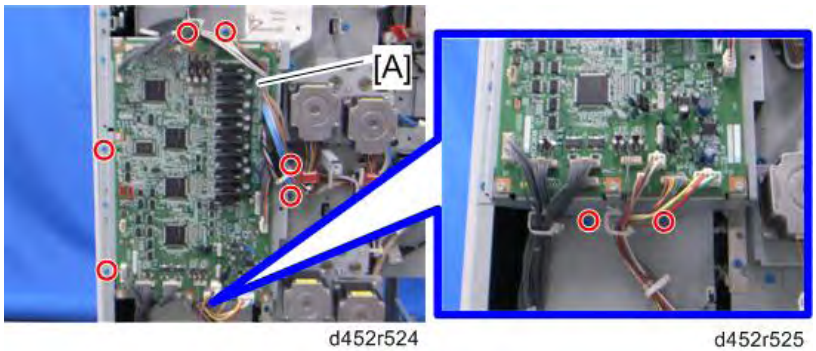
Main Control Board Bracket

1. Rear cover page 1



d452r523a

2. Bracket [A] (x 3)

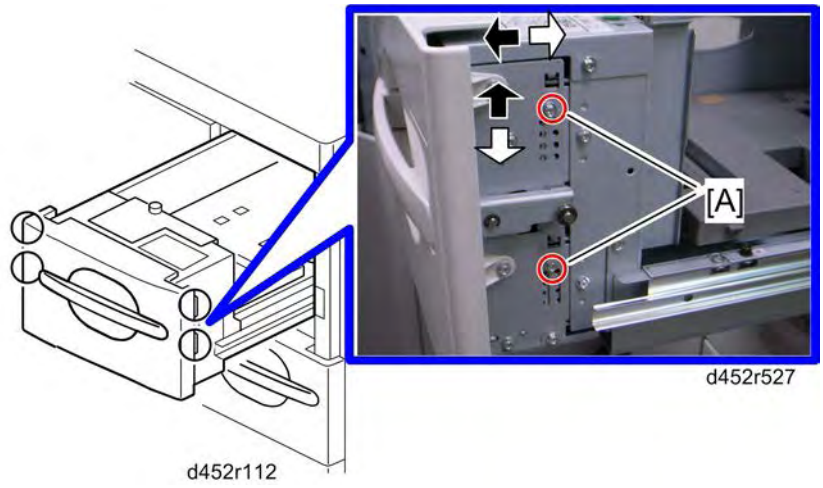


d452r524 d452r525

3. Main control board bracket [A] (x 8, x 3, x All)

1.6 ADJUSTMENT

1.6.1 SIDE REGISTRATION ADJUSTMENT



Normally the side registration of the image can be adjusted with SP1002 004-006 (Side-to-Side Registration – Tray 4, 5, 6). When the punch hole positions are not aligned from a particular feed station, adjust the side registration by changing the tray cover position for the tray, as described below. Then adjust the side registration of the image with SP1002.

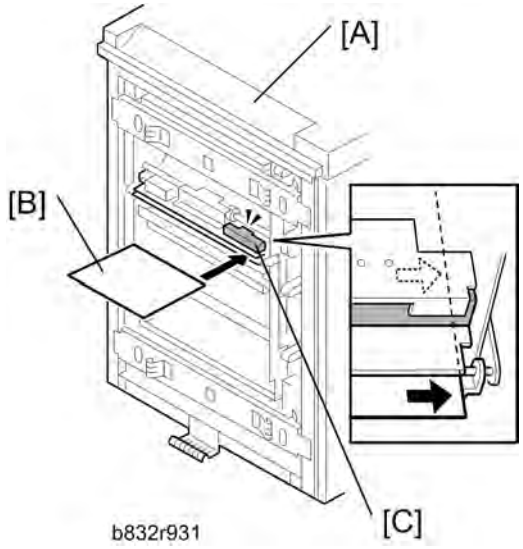
1. Pull out the tray.
2. Change the screw positions [A] at both the right and left sides as shown.

Important

- Adjustment range: 0 ± 2.0 mm adjustment step: 0.5 mm/step.

1.6.2 ADJUSTING IMAGE POSITION SENSOR STRENGTH AND SIDE-TO-SIDE REGISTRATION

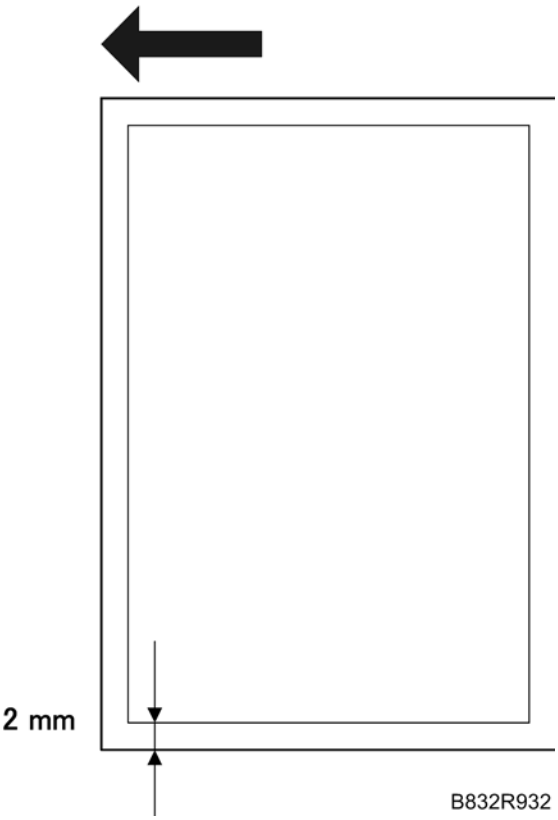
1. Turn off the main power of the main machine.



2. Disconnect the LCT from the mainframe with the LCT [A] separated from the mainframe, reconnect the LCT cable to the mainframe.
3. Turn on the main power switch.
4. Insert one sheet of plain white paper [B] in the paper path.
5. Make sure that the paper covers the entire area below the image position sensor (CIS) [C].
6. Enter the SP mode and do SP1910-002 (CIS Image Position Adjustment: LED Strength - LCT). This calibrates the amount of light to be emitted from the CIS.
7. Do SP1909 002 (CIS Image Position Adjustment: PWM After Adjustment - LCT).
   - If the displayed value is between Ah (10) and 28h (40), the CIS is calibrated successfully. (The display is in hexadecimal code.)
   - If the value is outside this range, do SP 1910-002 and 1909-002 again. If the value does not come between Ah and 28h, the CIS may be defective.
8. Exit the SP mode.
9. Reinstall the LCT to the side of the copier.
10. Push [User Tools]> [Adjust Settings for Operators].
11. Do "0111-4 to -7" for Trays 4, 5, 6, 7 and set the value for each tray to "Off".
12. Exit from [User Tools] > [Adjust Settings for Operators] and return to the SP mode menu.
13. Adjust the image positions in the main scan direction.
    - Do SP2902-003, select Pattern 27, then print the trimming pattern.
    - Do SP1002 and adjust the image position in the main scan direction for Trays 4, 5, 6, and 7.
    - Print the trimming pattern from each tray of the LCT and from the bypass tray (if installed).

- To do this, touch "Copy Window" in the SP display, select a tray, then push [Start].
- The distance of the test pattern line from the paper edge for each tray must be 2 mm. If it is not 2 mm, adjust with SP1002-004 to -007, depending on which tray is not within the specified 2 mm.

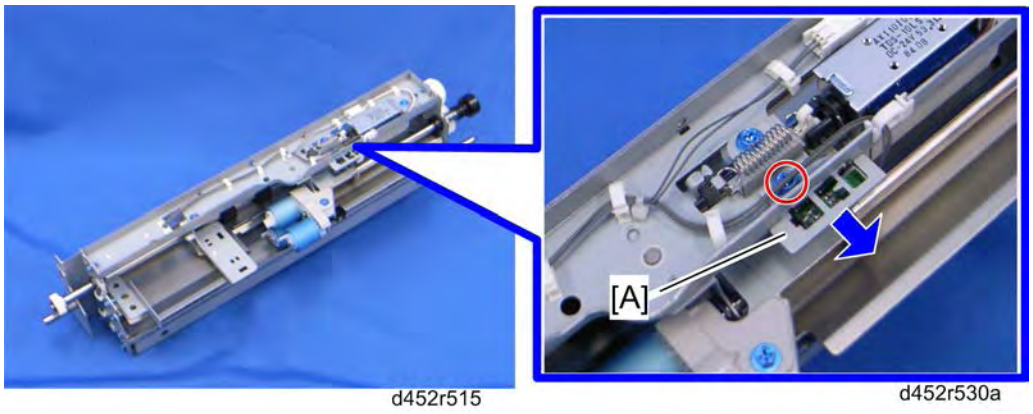
14. Do SP1912-002 (CIS Image Position Adjustment: Normal Paper). This sets the CIS for operation with standard copy paper.
15. Exit the SP mode.
16. Push [User Tools]> [Adjust Settings for Operators].
17. Once again, do "0111-4 to -7" (CIS Image Position Adjustment: Feed Setting) and reset the values for Trays 4, 5, 6, and 7 to "On".



1.6.3 DOUBLE FEED PROBLEM FROM THE LCT

If double feed occurs several times when paper is fed from an LCT, try to change the upper limit of the paper stack in the LCT tray

Changing the upper limit of the paper stack in the LCT tray can improve paper separation for the paper stack in the LCT tray.



d452r515 d452r530a

1. Remove the paper feed unit of the LCT unit page 9
2. Loosen the screw on the lift sensor bracket [A].
3. Move the bracket 0.7 mm in the arrow direction as shown above.
4. Tighten the screw on the lift sensor bracket [A].

Important

- To return the upper limit position to the default position, move the paper lift sensor bracket 0.7 mm to the opposite side.
- Return the upper limit position to the default if a paper jam occurs at the paper feed sensor in the LCT.

D734/D735
BOOKLET FINISHER
SR5060/FINISHER SR5050

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

BOOKLET FINISHER SR5060/ FINISHER SR5050 (D734/D735)

TABLE OF CONTENTS

1. AND ADJUSTMENT..... 13

1.1 COMMON PROCEDURES.....13

1.1.1 OVERVIEW 13

1.1.2 COVERS.....15

Rear Upper Cover 15

Rear Lower Cover 15

Lower Inner Cover: Rb10, Rb11.....16

Center Inner Cover: Rb14, Rb16.....17

Upper Inner Cover: Rb2, Rb8.....18

Front Door 18

Proof Tray 19

Corner Strip Cover 19

Top Right Cover 20

Top Rear Cover.....21

Shift Tray Jogger Unit.....22

Left Upper Cover.....23

Upper, Lower Right Panels 24

Shift Tray.....25

Booklet Tray.....25

1.1.3 BOOKLET UNIT 27

Booklet Stapler.....27

Booklet Unit Removal.....28

Handling and Moving the Booklet Unit 31

1.1.4 END FENCE 32

Exit Roller Cover 32

Shift Tray.....33

Shift Tray Base.....34

Left Lower Cover.....36

End Fence.....37

1.1.5 DRAG ROLLER UNIT.....39

1.2 HORIZONTAL PAPER FEED 41

1.2.1 ENTRANCE.....41

Entrance Roller Motor 41
Entrance Sensor 45
1.2.2 REGISTRATION 46
Registration Motor 46
Horizontal Transport Motor 47
1.3 PROOF TRAY 49
1.3.1 PROOF TRAY MOTORS 49
Proof Tray JG Motor 49
Proof Tray Vertical Transport Motor 50
Proof Tray Exit Motor 52
1.3.2 PROOF TRAY SENSORS 53
Proof Tray JG HP Sensor 53
Proof Tray Exit Sensor, Proof Tray Full Sensor 54
1.4 SHIFT TRAY 56
1.4.1 SHIFT TRAY SIDE-TO-SIDE MOVEMENT 56
Shift Motor 56
Shift Tray HP Sensors (Front, Rear) 57
1.4.2 SHIFT TRAY EXIT 58
Shift Tray Exit Motor 58
Shift Tray Exit Sensors (Long and Short) 59
1.4.3 DRAG ROLLER MOTORS, SENSORS 61
Preparation 61
Drag Roller Motor 62
Drag Roller Drive Motor 63
Drag Roller HP Sensor 64
1.4.4 SHIFT TRAY JOGGER UNIT 64
Shift Jogger Motor 64
Shift Tray Jogger Fence HP Sensor 66
Shift Jogger Retraction Motor 66
Shift Jogger Fence Retract HP Sensor 68
1.4.5 SHIFT TRAY OPERATION 69
Shift Tray Lift Motor 69
Paper Height Sensors 1, 2, 3 (Shift, Staple, Z-Fold) 70
Paper Height Sensor (TE), Shift Tray Upper Limit Switch 71
Shift Tray Full Sensors 1, 2, 3, 4 (500) 75
1.5 PRE-STACKER 77
1.5.1 PRE-STACK MOTORS 77
Pre-Stack Motor 77
Pre-Stack Release Motor, Pre-Stack Roller HP Sensor 79

1.6 CORNER STAPLER UNIT....84
1.6.1 CORNER STAPLER UNIT ENTRANCE....84
Stapler JG Motor....84
Stapler JG HP Sensor....85
Stapling Tray Entrance Sensor....86
Stapling Tray Entrance Motor....87
1.6.2 CORNER STAPLER SIDE-TO-SIDE JOGGING....88
Front Jogger Fence Motor....88
Jogger Fence HP Sensor (Front)....89
Rear Jogger Fence Motor....90
Jogger Fence HP Sensor (Rear)....92
1.6.3 CORNER STAPLING BOTTOM, TOP JOGGING....92
Positioning Roller Rotation Motor....92
Positioning Roller Motor....93
Positioning Roller HP Sensor....95
Leading Edge Stopper HP Sensor, Staple Tray Paper Sensor....96
Top Fence HP Sensor....97
1.6.4 CORNER STAPLING....98
Corner Stapler....98
Corner Stapler Movement Motor....100
Stapler Rotation Motor....101
Staple Trimmings Hopper Full, Hopper Set Sensor....102
Stapler Movement Sensors....104
1.6.5 CORNER STAPLED STACK FEED OUT....107
Stack Transport Motor....107
Stack Transport Unit HP Sensor....108
Stack Feed-Out Belt Motor....109
Stack Feed-Out Belt HP Sensor....110
Stack Junction Gate Motor....111
Stack JG HP Sensor....112
1.6.6 CORNER STAPLED STACK EXIT TO SHIFT TRAY....113
Exit Guide Motor....113
Exit Guide HP Sensor....115
1.7 BOOKLET UNIT....116
1.7.1 BOOKLET STAPLER....116
1.7.2 BOOKLET UNIT TRANSPORT, ENTRANCE....117
Fold Unit Entrance Sensor....117
1.7.3 BOOKLET SIDE-TO-SIDE JOGGING....117
Booklet Stapler Side Fence Motor....117

Booklet Stapler Side Fence HP Sensor (Front).....118
Booklet Stapler Jogger HP Sensor (Rear).....119
1.7.4 BOOKLET BOTTOM, TOP JOGGING.....119
Booklet Stapler Bottom Fence Motor.....119
Booklet Stapler Bottom Fence HP Sensor.....121
Booklet Stapler Top Fence Motor.....122
Booklet Top Fence HP Sensor.....123
1.7.5 BOOKLET PRESS FOR STAPLING.....123
Booklet Stapler Clamp Roller Motor, Booklet Stapler Exit Sensor.....123
Booklet Stapler Clamp Roller HP Sensor.....129
1.7.6 BOOKLET FOLDING.....130
Fold Roller Motor.....130
Fold Plate Cam HP Sensor.....132
Fold Plate HP Sensor.....132
1.7.7 BOOKLET EXIT.....134
Fold Roller Motor.....134
1.8 BOARDS.....136
1.8.1 MAIN BOARD.....136
1.8.2 PUNCH UNIT PCB.....138
1.8.3 SHIFT TRAY JOGGER UNIT PCB.....139
1.8.4 PSU.....140
1.9 SWITCHES.....143
1.9.1 FRONT DOOR SWITCH.....143
1.9.2 EMERGENCY SHIFT TRAY STOP SWITCH.....144
1.10 ROLLERS AND BRUSHES.....145
1.10.1 ROLLERS.....145
Drag Roller.....145
Positioning Roller.....145
Alignment Brush Roller.....146
1.10.2 DISCHARGE BRUSHES.....148
Shift Tray Exit.....148
Corner Stapler Entrance.....149
Booklet Unit Exit.....150
1.11 SPECIAL ADJUSTMENTS.....151
1.11.1 HORIZONTAL SKEW ADJUSTMENT.....151
[A] Adjustment: Rear Fence Low.....152
[B] Adjustment: Front Fence Low.....153
1.11.2 VERTICAL SKEW ADJUSTMENT.....154
1.11.3 BASE FENCE REPLACEMENT.....155

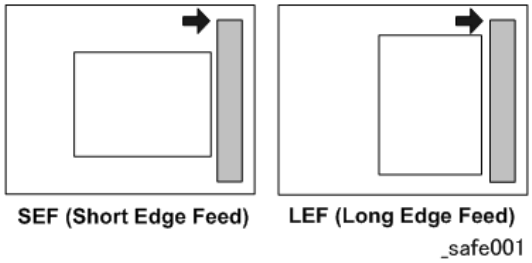
READ THIS FIRST

Symbols, Abbreviations and Trademarks

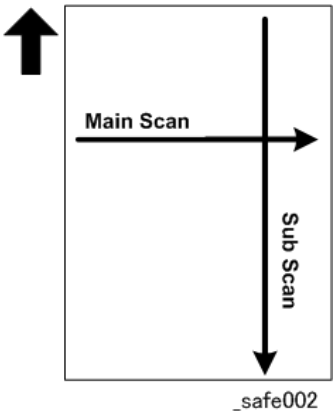
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

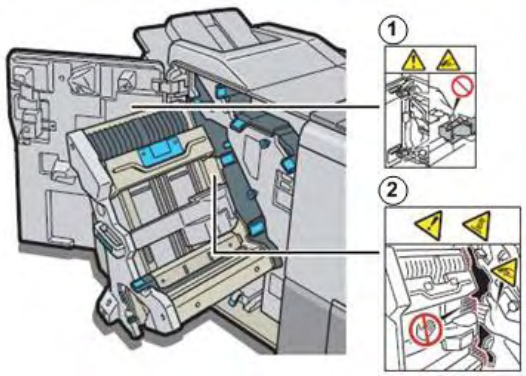
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Finisher SR5050

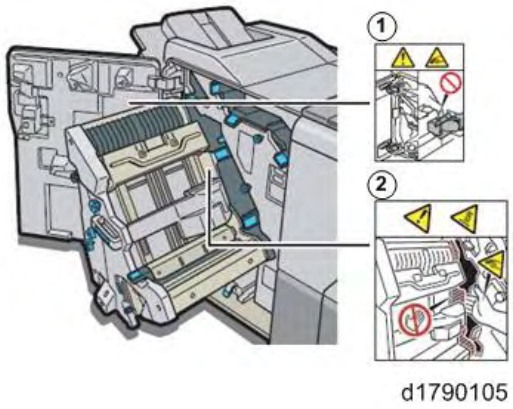


d1790104

①	To avoid injury, keep your hands clear of the hinges when opening and closing the finisher door.
②	To avoid injury, avoid the indicated parts that become hot during operation and locations where you could pinch your hand or fingers.

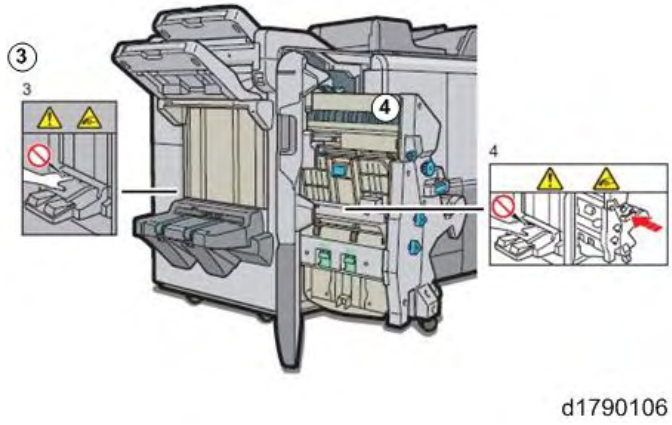
Booklet Finisher SR5060

Front



①	To avoid injury, keep your hands clear of the hinges when opening and closing the finisher door.
②	To avoid injury, avoid the indicated parts that become hot during operation and locations where you could pinch your hand or fingers.

Left Side



③	To avoid injury, never touch the booklet tray during operation.
④	To avoid injury, never touch the booklet tray when removing a paper jam, or when pulling out or pushing in the stacker/stapler unit.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)

Terms	Meaning
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

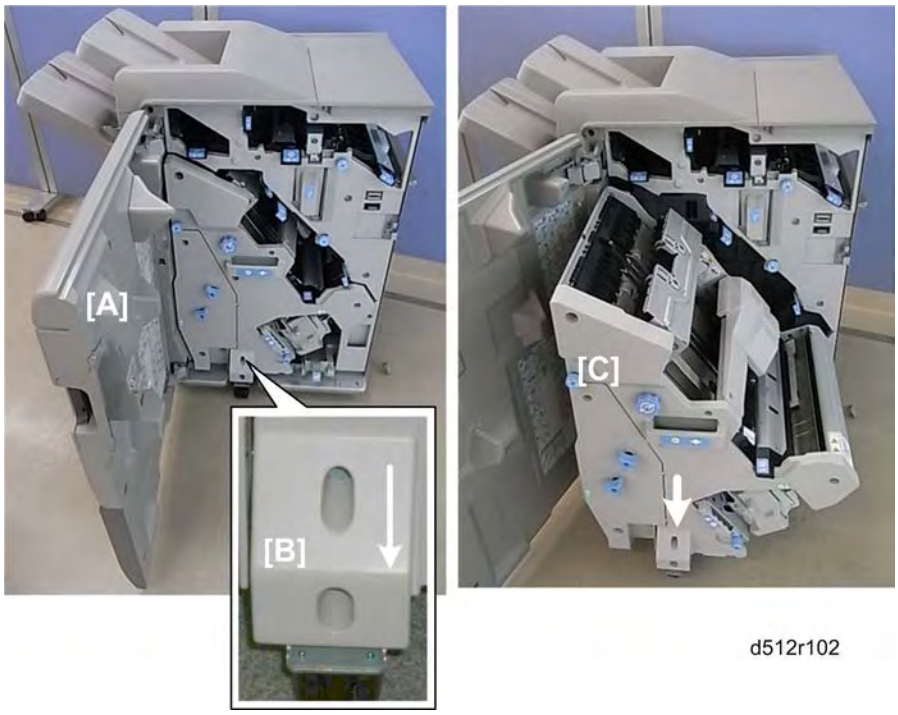
1. AND ADJUSTMENT

1.1 COMMON PROCEDURES

1.1.1 OVERVIEW

d7340040

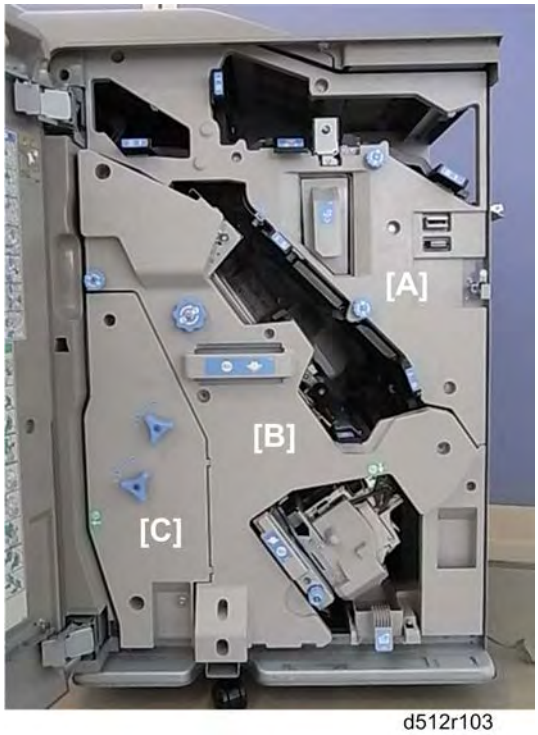
▪ [A]: Front ▪ [B]: Left	▪ [C]: Rear ▪ [D]: Right



[A] Open the front door.

[B] Adjustable caster

[C] Pull the stack/stapler unit out (pull handle **Rb12**).



- Inner covers:

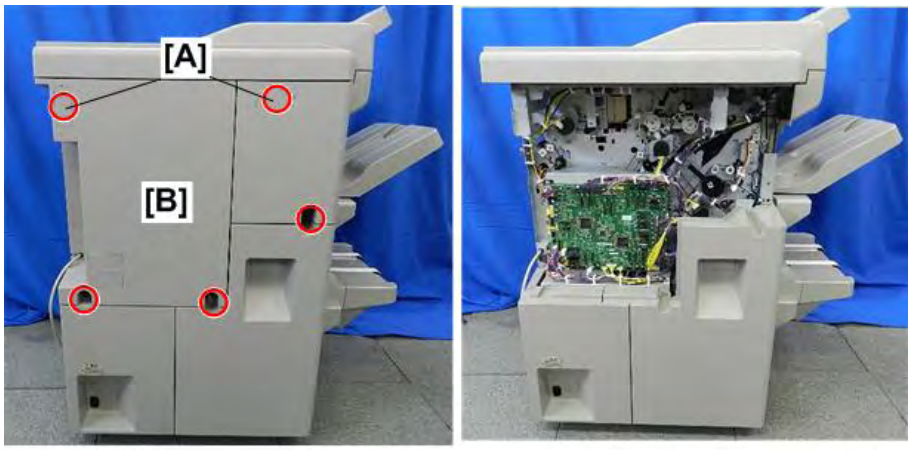
  [A] Upper: **Rb2**, **Rb8**

  [B] Center: **Rb14**, **Rb16**

  [C] Lower **Rb10**, **Rb11**

1.1.2 COVERS

Rear Upper Cover



1. Screw covers [A] (hooks)
2. Rear upper cover [B] (x5)

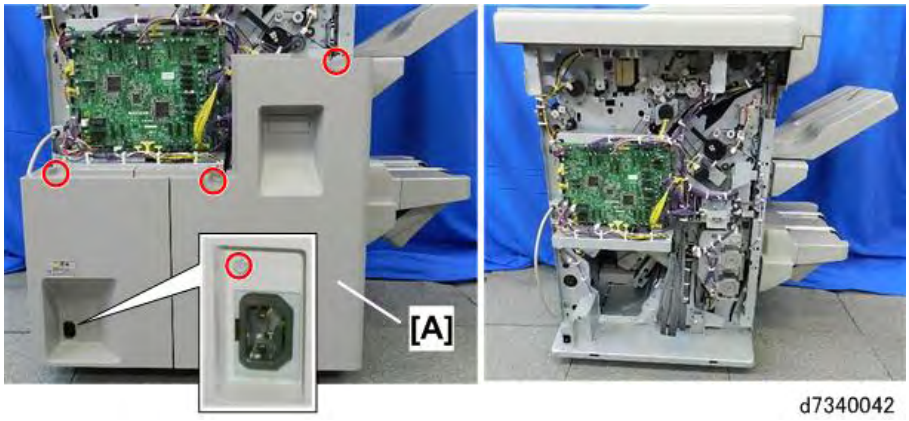
Important

- The rear upper cover must be removed before the rear lower cover.

Rear Lower Cover

Preparation

- Rear upper cover



1. Rear lower cover [A] (x4)

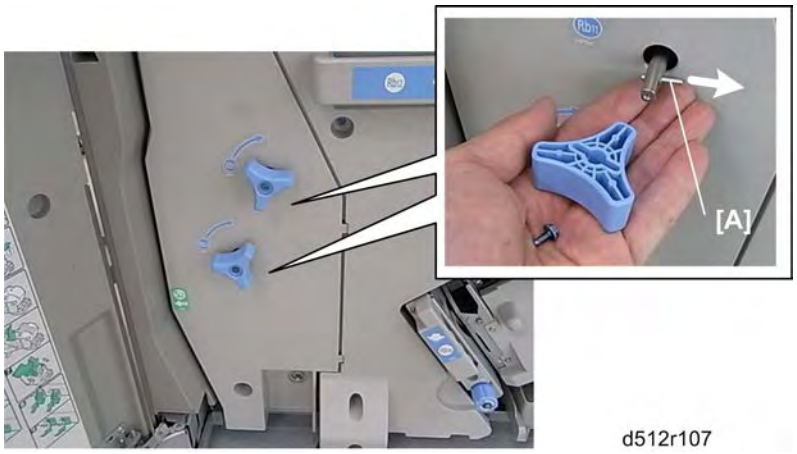
   The screw near the power connection point is difficult to see.

Re-installation

d512r106

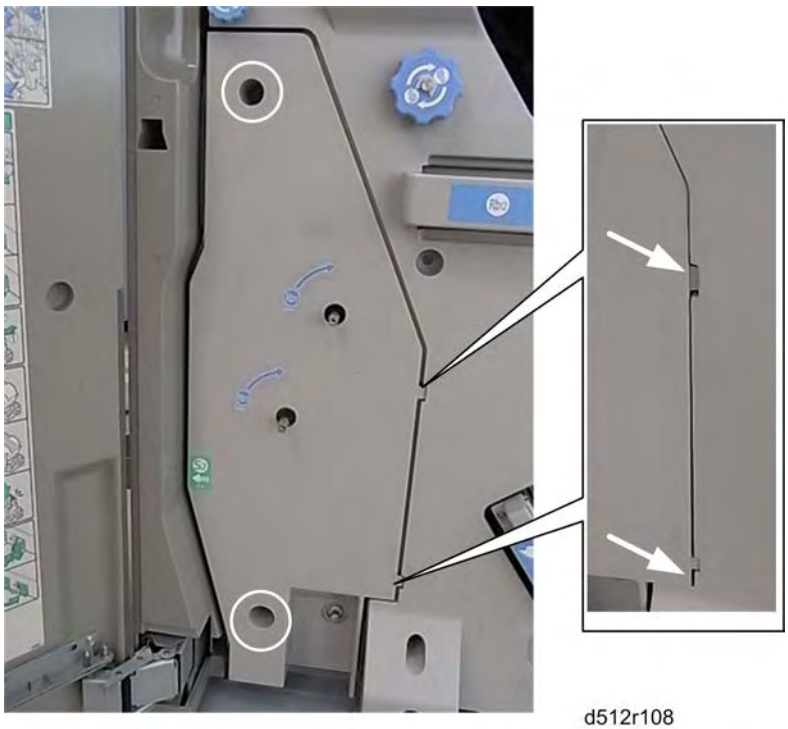
1. Engage both tabs on the bottom of the rear lower cover before fastening the screws.

Lower Inner Cover: *Rb10, Rb11*



d512r107

1. Remove handles **Rb11**, **Rb12** (x1 each, Pin x1 each).
2. Make sure that the pins [A] are removed and stored with the screws.



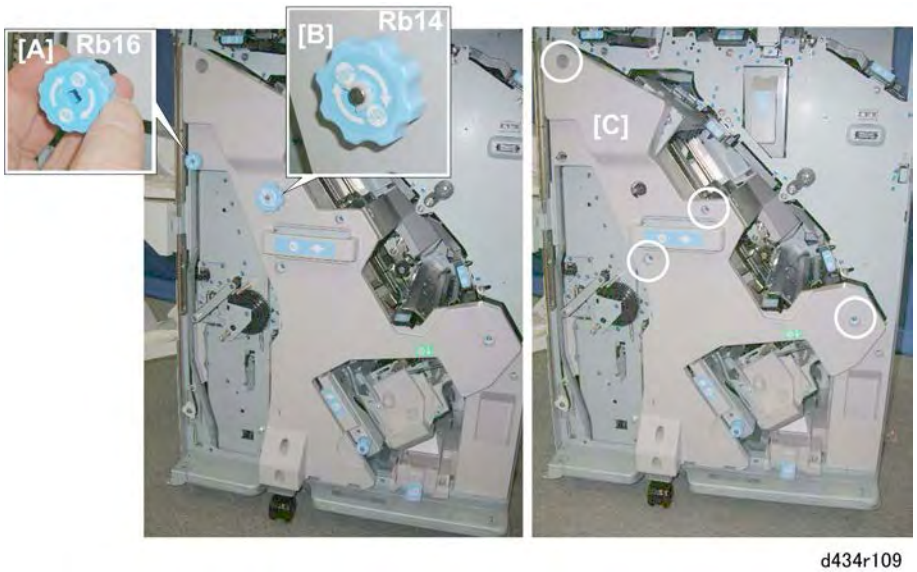
d512r108

3. Remove the cover (x2, Tabs x2).

Center Inner Cover: Rb14, Rb16

Preparation

- Lower inner cover



d434r109

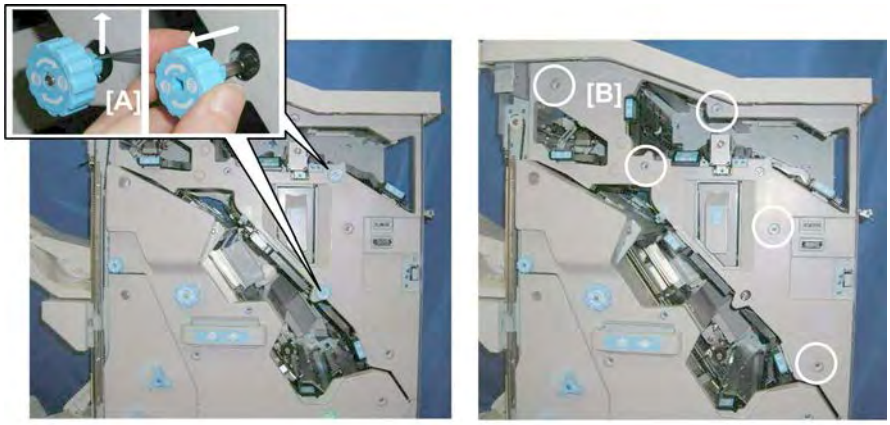
1. Remove:

   [A] **Rb16**

   [B] **Rb 14** (x1)

   [C] Cover (x4)

Upper Inner Cover: Rb2, Rb8



d434r110

1. Remove:

   [A] **Rb2**, **Rb8**.

   If these tab releases are stiff, use the point of a sharp tool to release these knobs, then pull them off. Work carefully to avoid breaking the tab releases.

   [B] Cover (x5)

Front Door

1. Open the front door.

d512r111

2. Remove the clip [A].
3. Lift off the door [B] from its bottom post.

Proof Tray

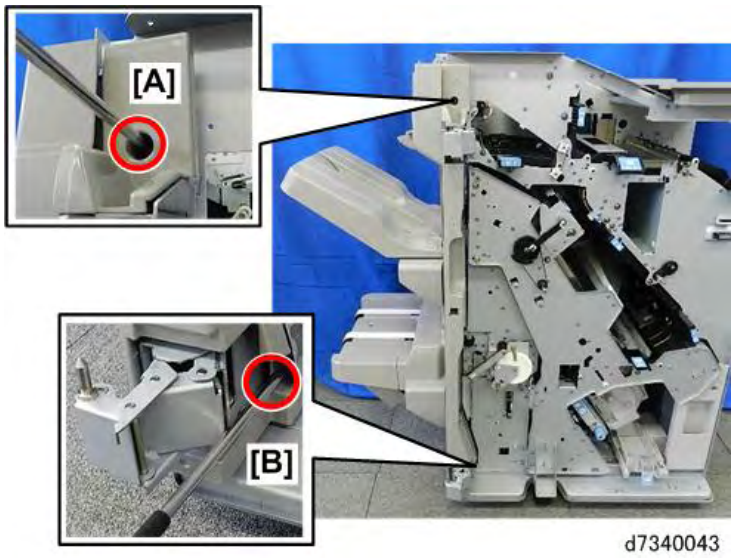
d7340045

1. Proof tray [A] (x2)

Corner Strip Cover

Preparation

- Front door page 18
- Proof tray page 19



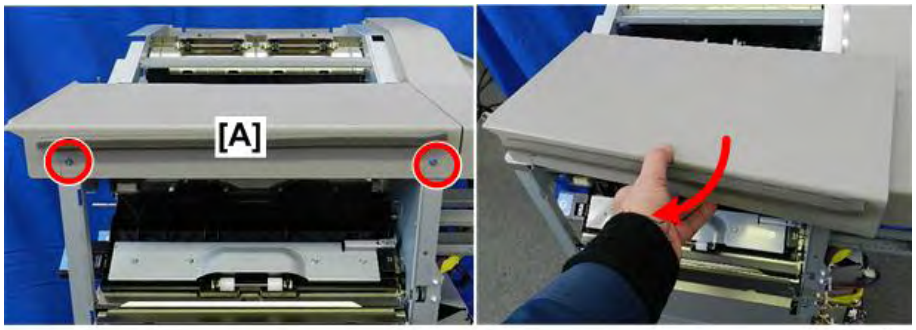
d7340043

1. Remove the top and bottom screws [A], [B] (x2).
2. Disconnect the tabs at the top and bottom.

d7340044

3. Twist the cover away from the corner.

Top Right Cover



d7340047

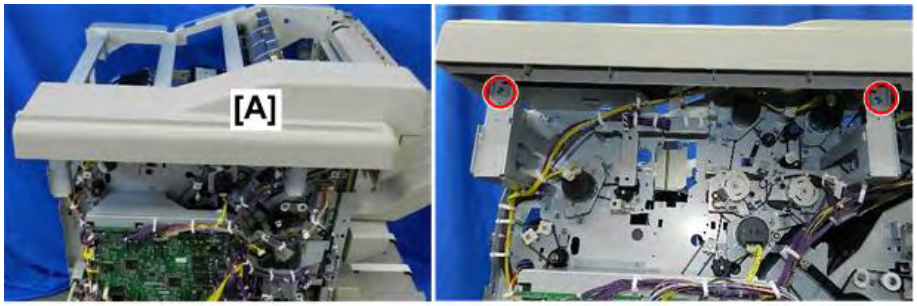
1. Top right cover [A] (x2)

Top Rear Cover

Preparation

Remove:

- Proof tray page 19
- Top right cover page 20
- Rear upper cover page 15

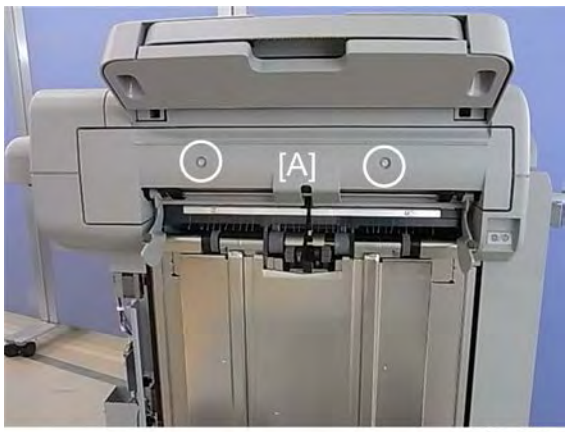


d7340046

1. Top rear cover [A] (x2).

Shift Tray Jogger Unit

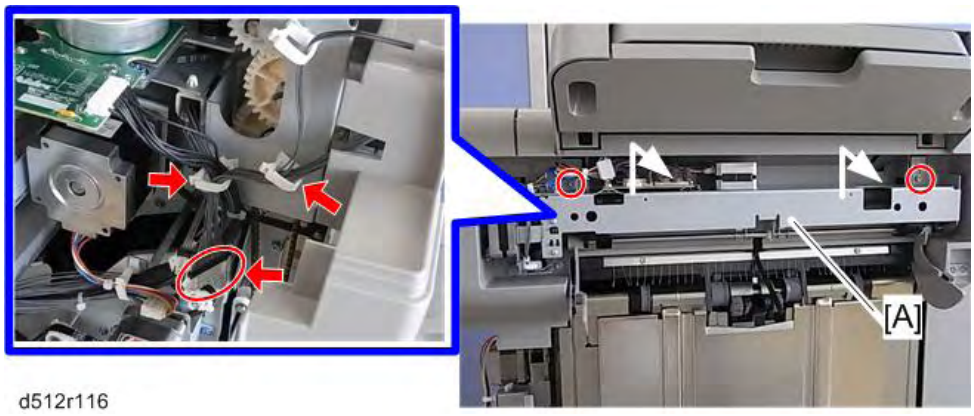
1. Top rear cover page 21



d512r115

2. Remove:

   [A] Jogger unit cover (x2)



d512r116

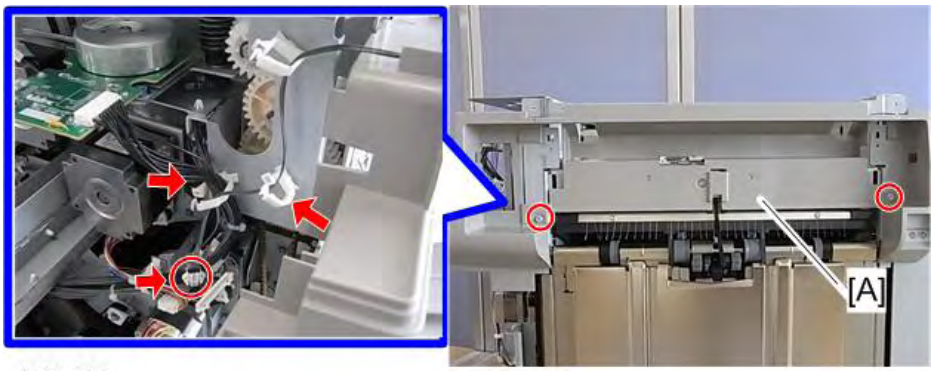
3. Lift the jogger unit [A] off (x2, x2, x1).

Left Upper Cover

Preparation

Remove:

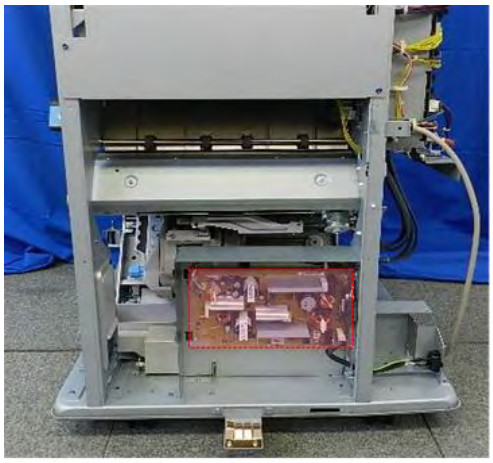
- Proof tray page 19
- Shift tray jogger unit page 22



d512r117

1. Remove the left upper cover [B] (x2, x1, x2).

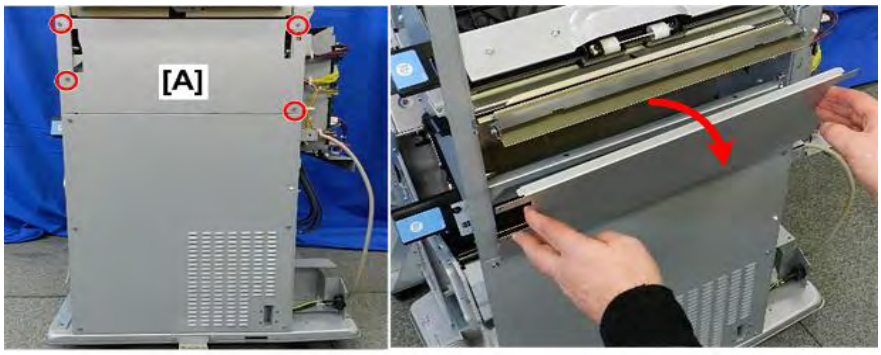
Upper, Lower Right Panels



d7340050

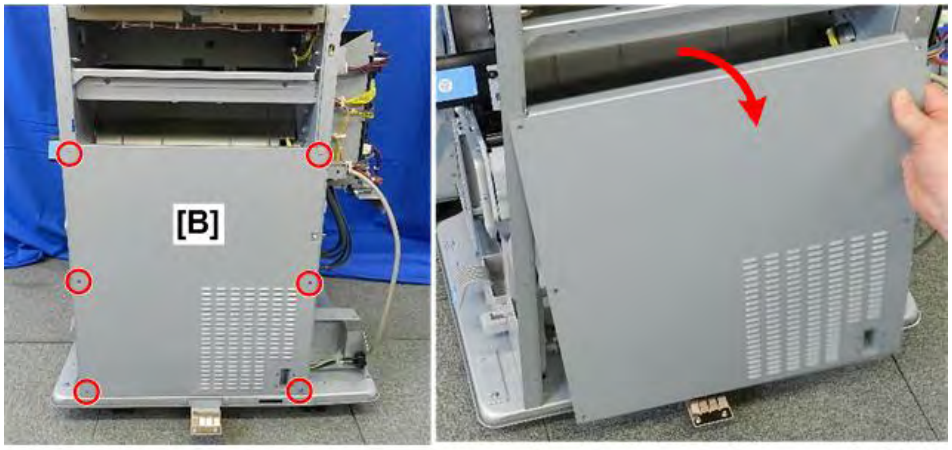
⚠CAUTION

- The lower right panel covers the PSU, which retains residual voltage after the system is switched off. Before removing the right panel for any procedure, switch the machine off and wait 30 min. for the charge on the PSU to dissipate.



d7340048

1. Remove upper right panel [A] (x4).



d7340049

2. Remove lower right panel [B] (x6).

Shift Tray

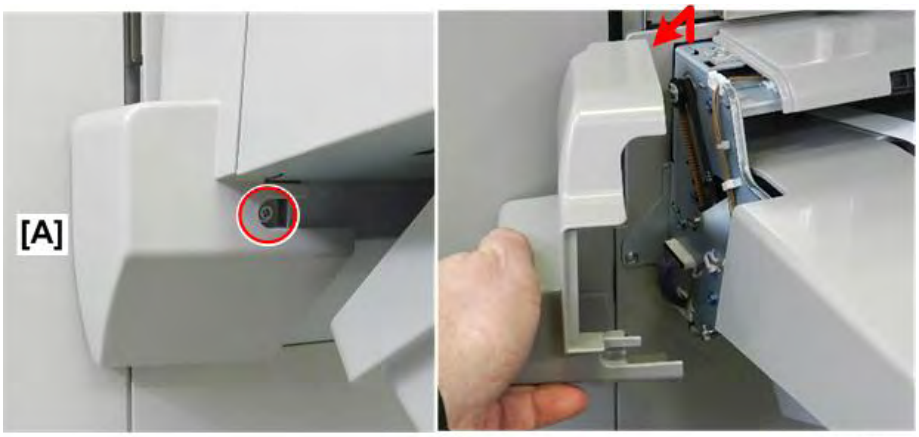
d434r122

1. While supporting the tray with one hand, pull gear [A] toward you to release the tray.
2. Lower the tray [B] slowly until it stops, then remove it. (x4)

Booklet Tray

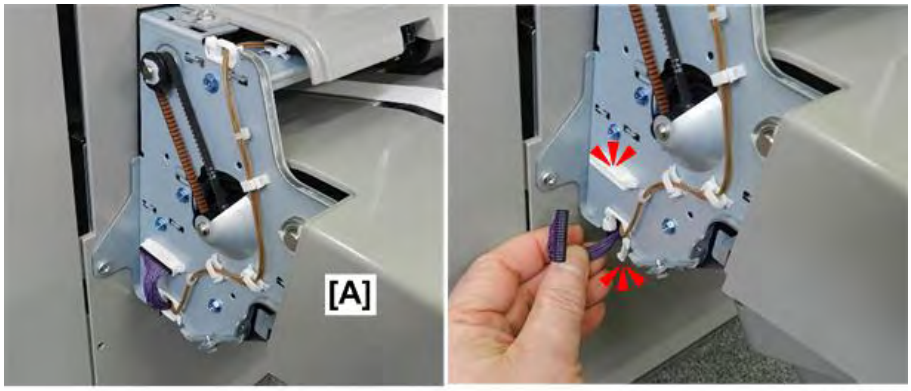
d7340051

1. The booklet tray is the lower tray.



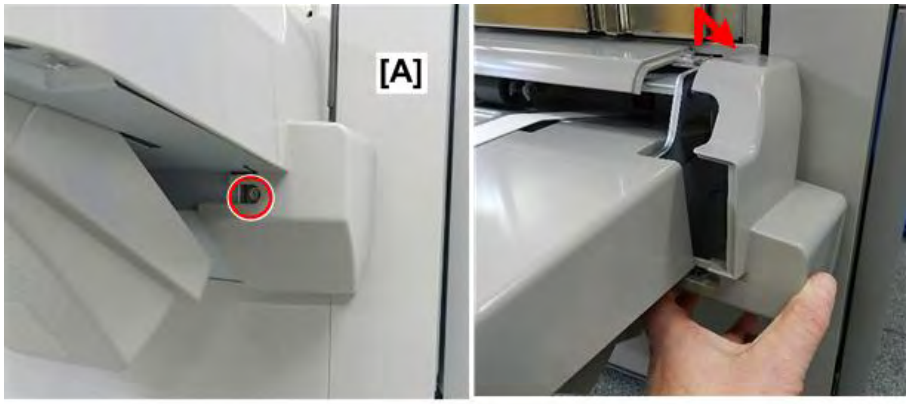
d7340052

2. At the rear [A] remove rear cover (x1).



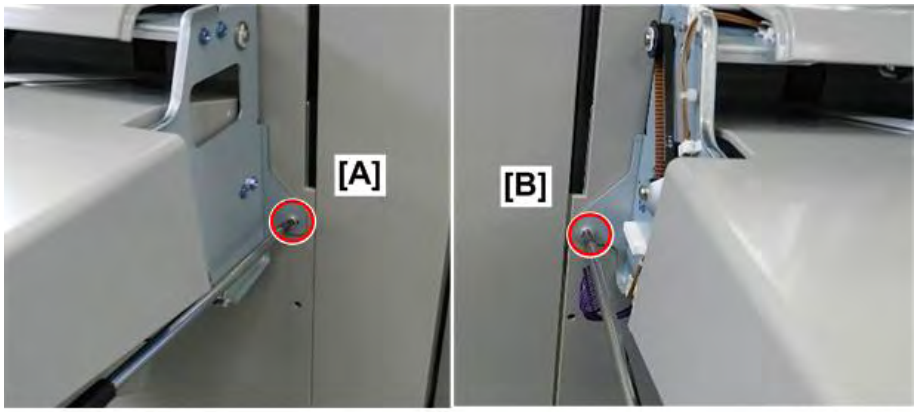
d7340053

3. At rear [A] disconnect tray (x1,x1).



d7340054

4. At front [A] remove front cover (x1).



d7340055

5. Disconnect tray bracket at front [A], rear [B] (x2).

d7340056

6. Lift tray off the side of the machine.

1.1.3 BOOKLET UNIT

Booklet Stapler

The booklet stapler weighs about 3 kg (6.6 lb.)

Preparation

- Open the front door.
- Pull stack/stapler unit out with **Rb12**.

d434r124

1. Remove both booklet staplers.
2. Remove booklet stapler unit cover [A] (x2)

d434r125

3. Remove stapler unit [A] (x1, x4)
4. Make sure connector [B] is disconnected.
5. Remove the stapler unit with its handle [C].

d434r126

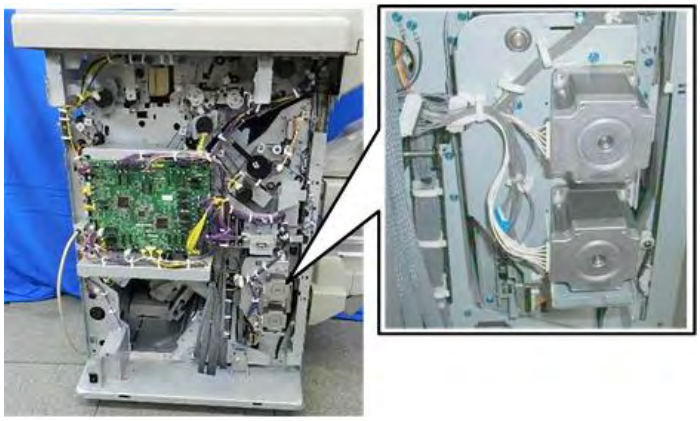
Booklet Unit Removal

Preparation

- Open the front door.
- Front door page 18
- Corner strip cover page 19
- Lower inner cover **Rb10**, **Rb11** page 16
- Booklet stapler (recommended) page 27

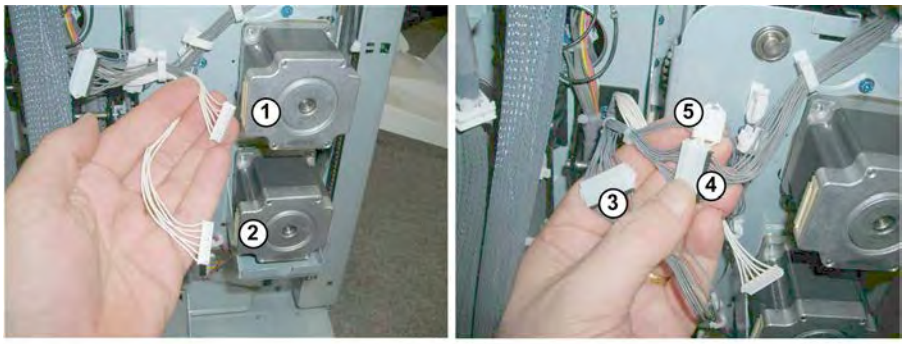
Note

- The booklet unit weighs about 18 kg (40 lb.) with the booklet stapler installed.
- The booklet stapler weighs about 3 kg (6.6 lb.)
- The booklet unit is lighter and easier to remove and re-install with the booklet stapler removed.



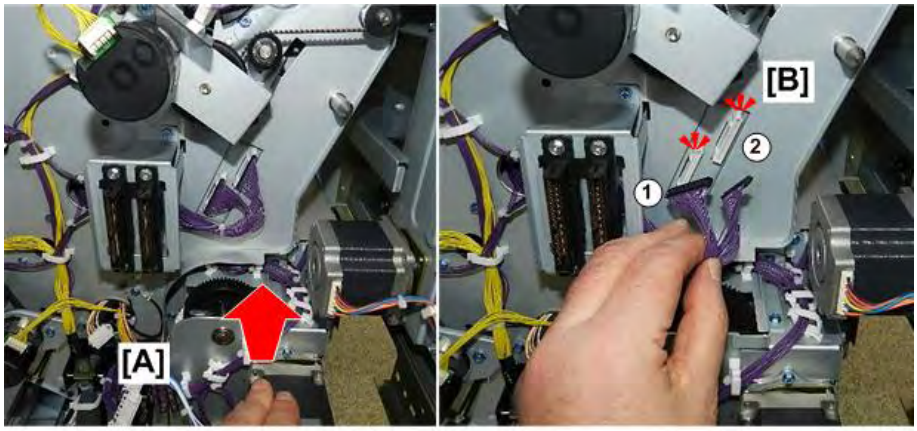
d7340057

1. Make sure that the stack/staple unit is closed.
2. Locate the two motors attached to the rear of the stack/staple unit.



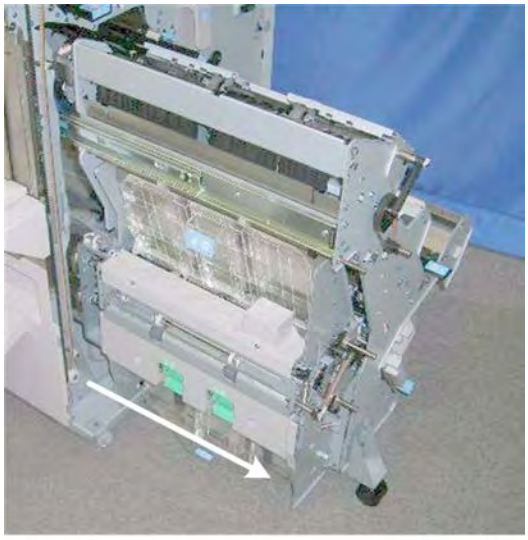
d434r128

3. Disconnect the two motors ①, ②(x2).
4. Disconnect the connectors of the other harnesses attached to the rear of the stack/staple unit at ③, ④, ⑤ (x2,x3).



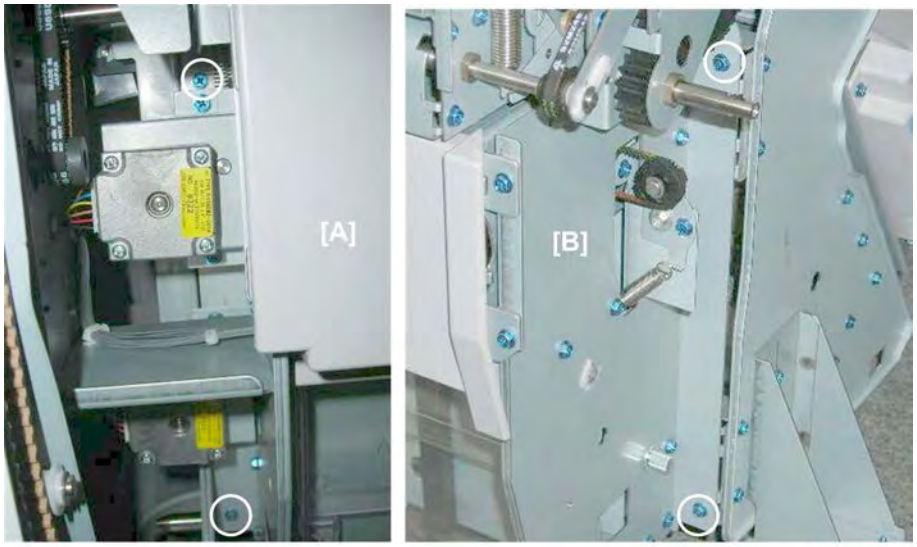
d7340058

5. Push the stack/staple unit [A] out about halfway, until you can see the two black connectors.
6. Disconnect the connectors [B] (x2).



d434r130

7. Pull the stack/staple unit out until it stops.

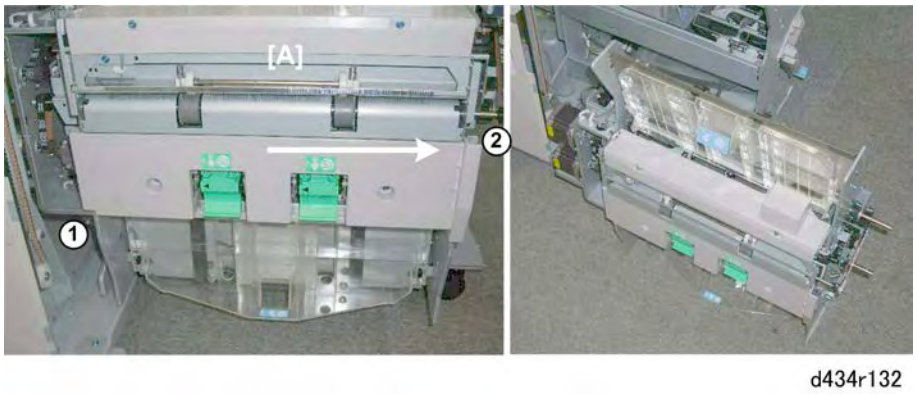


d434r131

8. Remove:

   [A] Rear (x2)

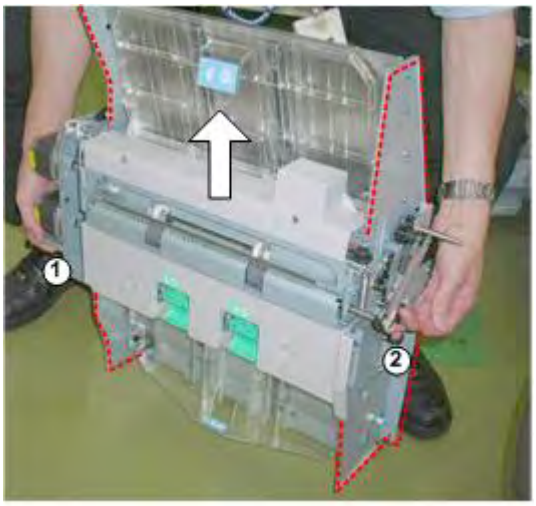
   [B] Front (x2)



d434r132

9. Grip the unit [A] at ① and ②, slide it to the right, and set it down on the floor.

Handling and Moving the Booklet Unit



d434r901

⚠CAUTION

- The metal edges of the booklet unit are sharp and can easily cut your hands or fingers. Always handle the unit carefully.

1. Always lift the booklet unit with your hands positioned at ① and ②.
2. Never attempt to lift the booklet unit by the edges (shown above by the red dotted lines).

1.1.4 END FENCE

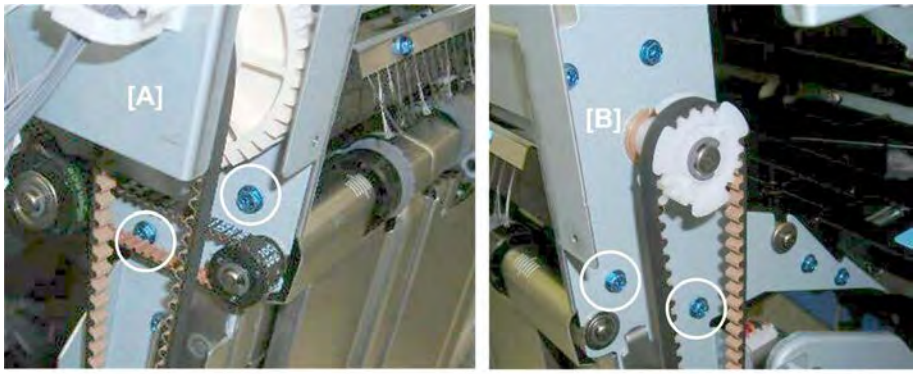
Preparation

- Booklet tray page 25
- Shift tray jogger unit. page 22
- Pull stack/stapler unit out with handle **Rb12**.

Exit Roller Cover

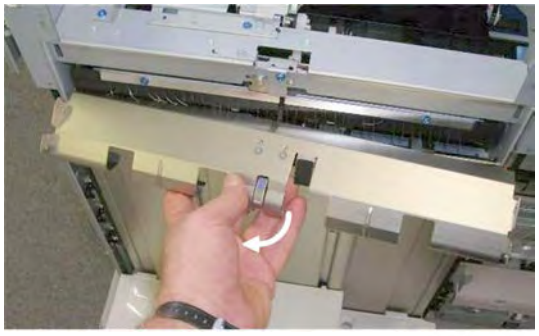
d434r133

1. This is the exit roller cover [A].



d434r134

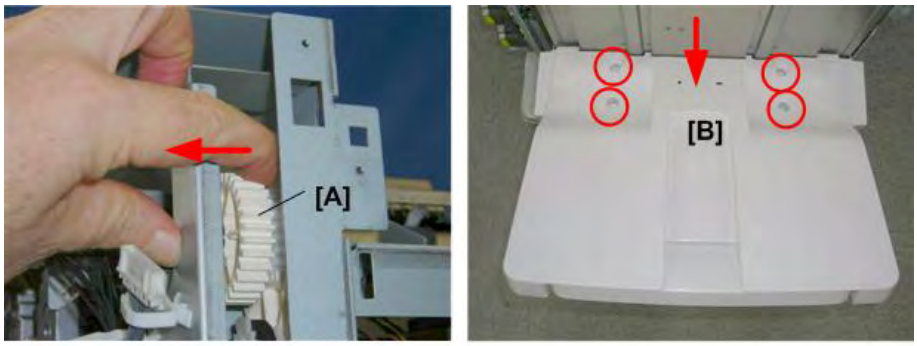
2. Remove:
   [A] Rear (x2)
   [B] Front (x2)



d434r135

3. Remove the cover.

Shift Tray



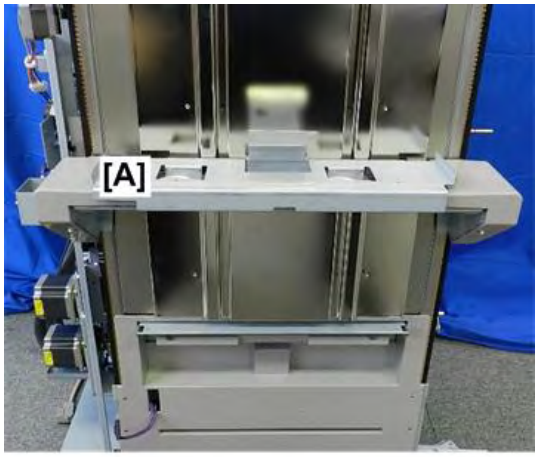
d434r137

1. Support the shift tray with your hand.
2. At the left rear corner, pull the gear [A] toward to release the tray, then lower the tray.
3. Remove the screws [B] (x3)

d434r138

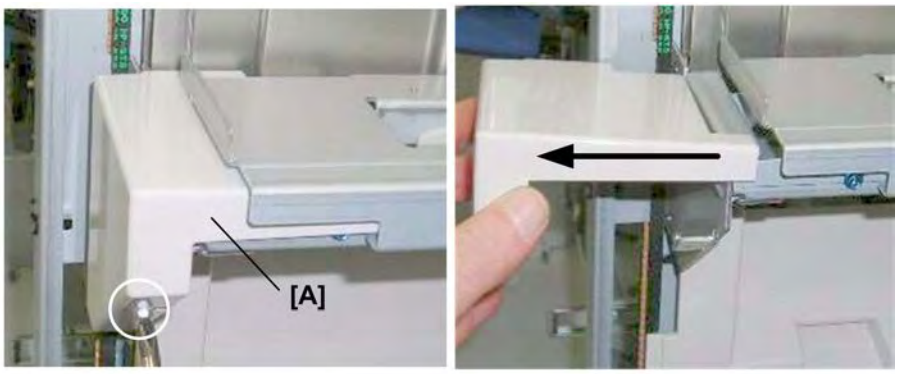
4. Support the tray [A] with your hand to prevent it from falling, then remove the last screw. (x1)

Shift Tray Base



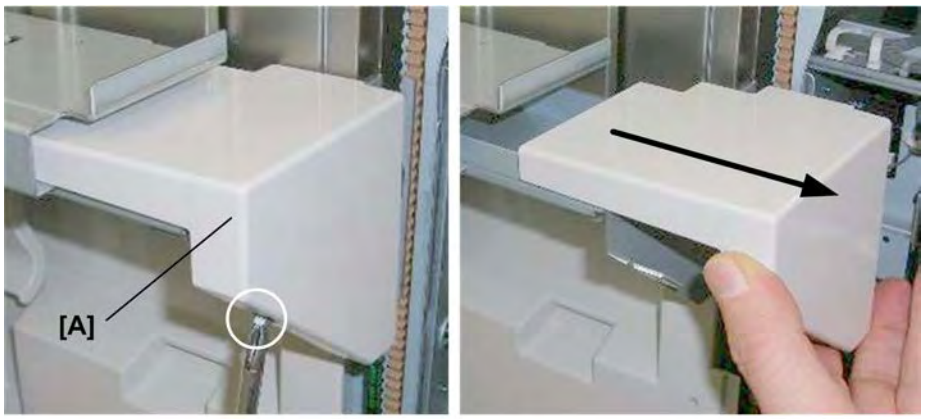
d7340059

1. This is the shift tray base [A].



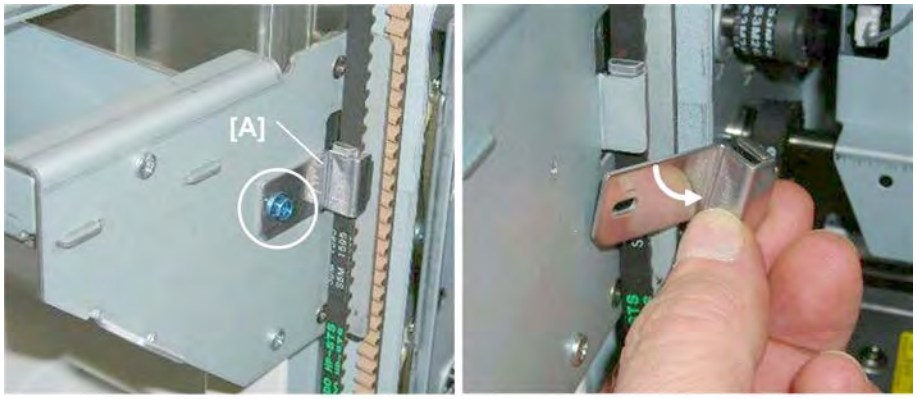
d434r140

2. Rear cover [A] (x1).
3. Slide the cover off. You do not need to remove the screw.



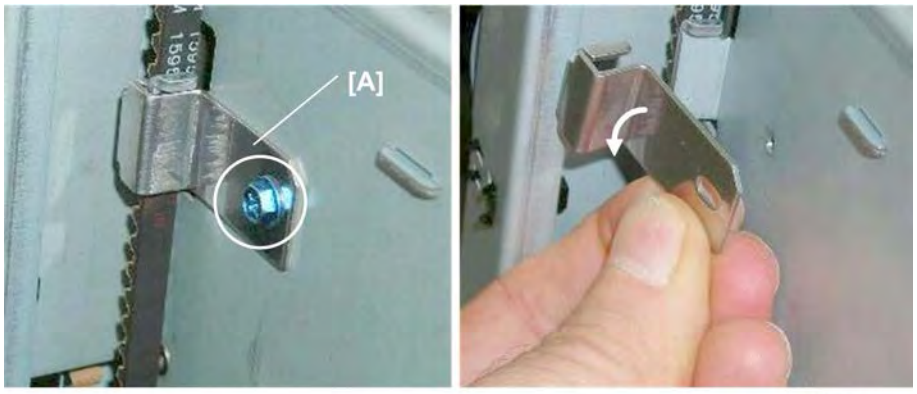
d434r141

4. Front cover [A] (x1)
5. Slide the cover off. You do not need to remove the screw.



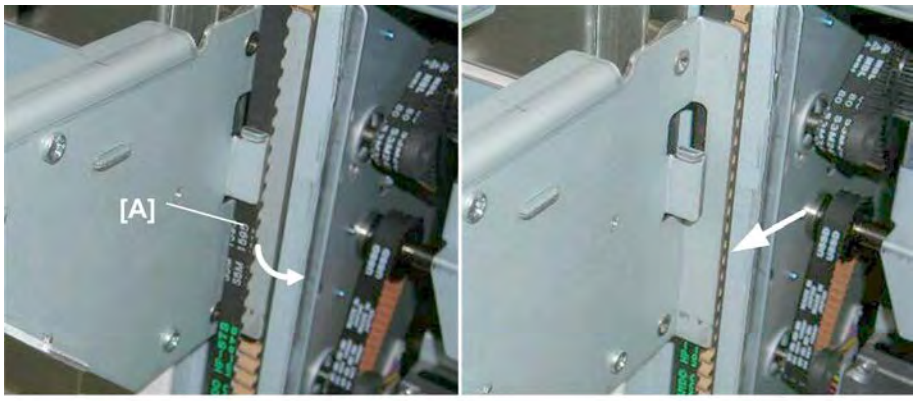
d434r142

6. Front belt clamp [A] (x1)



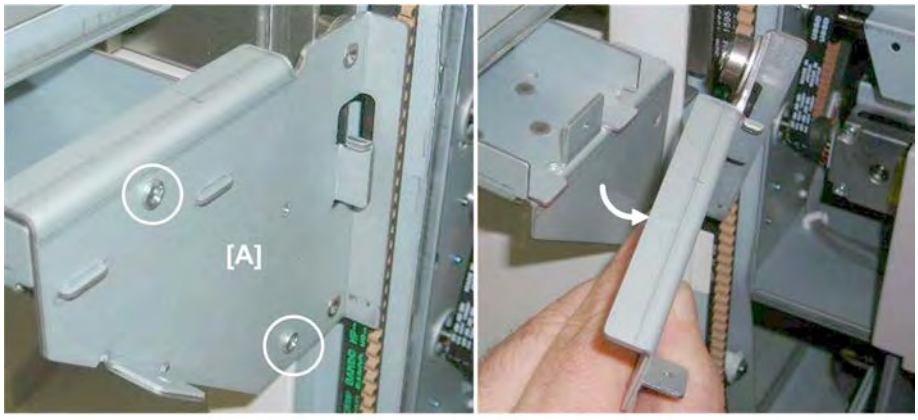
d434r143

7. Rear belt clamp [A] (x1)



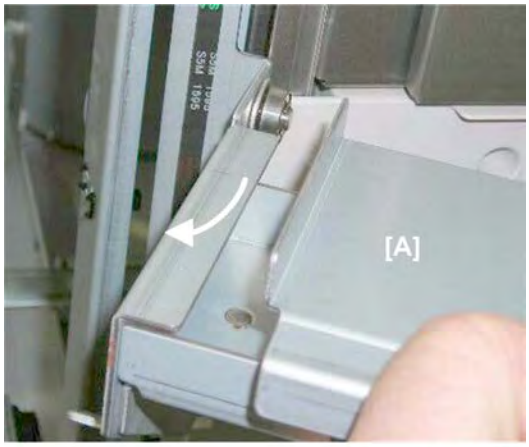
d434r144

8. At the front, pull the belt [A] out and set it behind the plate.



d434r145

9. Front base plate [A] (x2)



d434r146

10. Disconnect the rear end of the base [A] from the side fence (you do not need to remove the plate).

Left Lower Cover

d7340060

1. Disconnect metal bracket (x2).

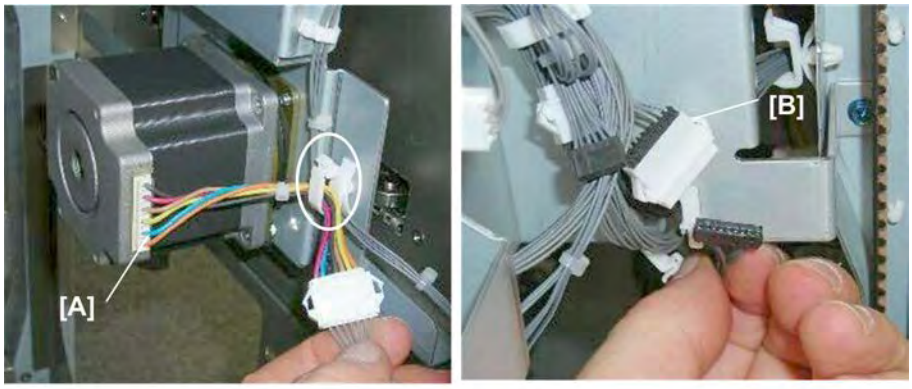
d7340061

2. Remove bracket.

d7340062

3. Remove left, lower cover.

End Fence

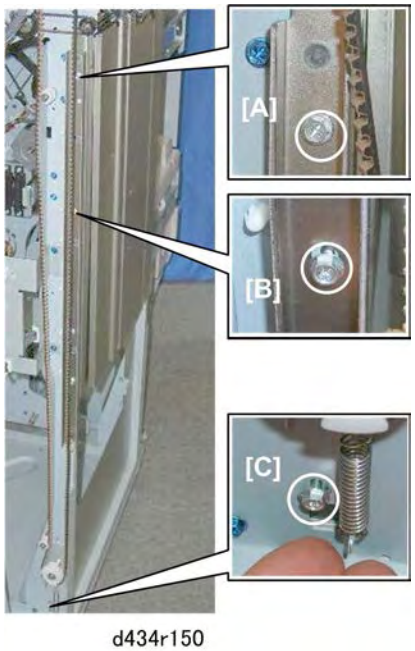


d434r149

1. Disconnect:

   [A] Motor (x 1, x1)

   [B] Half-turn sensor (x 1, x1)



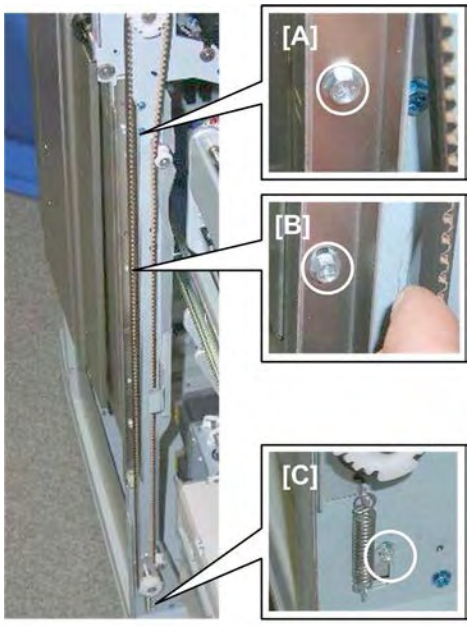
d434r150

2. Rear:

   [A] Top (x1)

[B] Center (x1)

[C] Bottom (x1)



d434r151

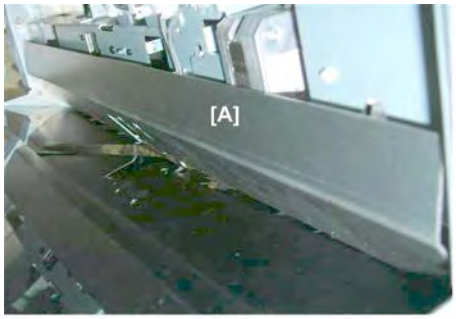
3. Front:

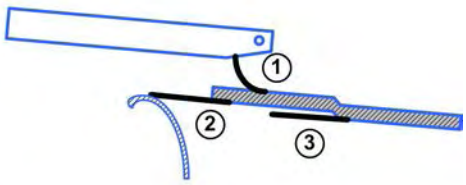
[A] Top (x1)

[B] Center (x1)

[C] Bottom (x1)

Re-installation





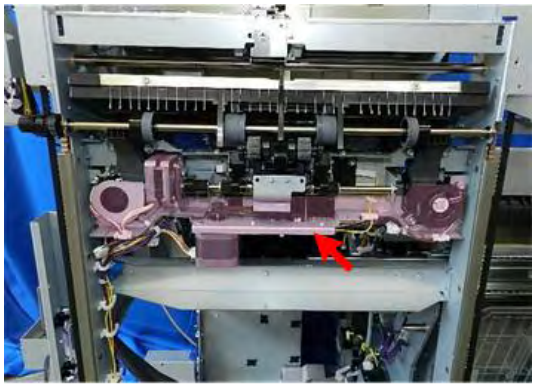
d512r152

1. When you re-attach the exit roller cover [A]:
   - Make sure the small mylar ① is set as shown above.
   - Make sure the large mylars ② and ⑧ are set as shown above.

1.1.5 DRAG ROLLER UNIT

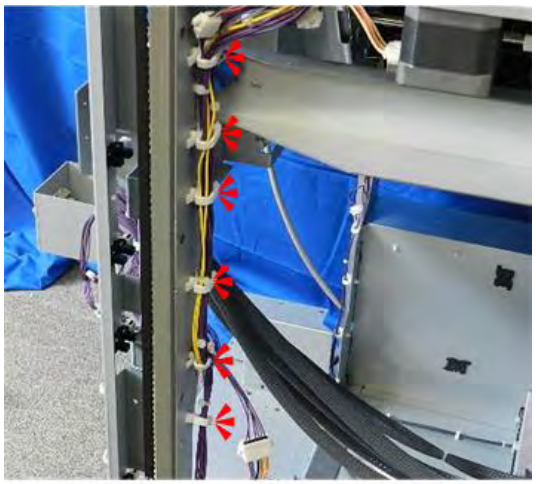
Preparation

- End fence page 32



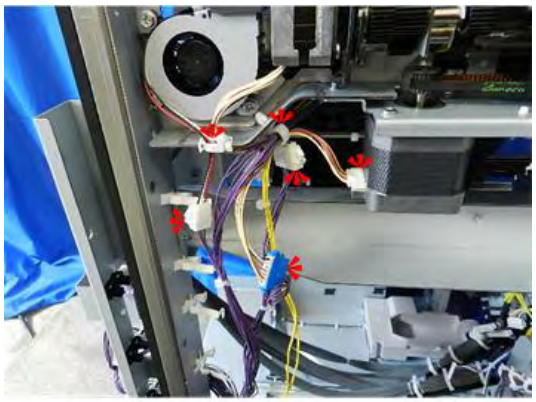
d7340063

1. This is the drag roller unit [A].



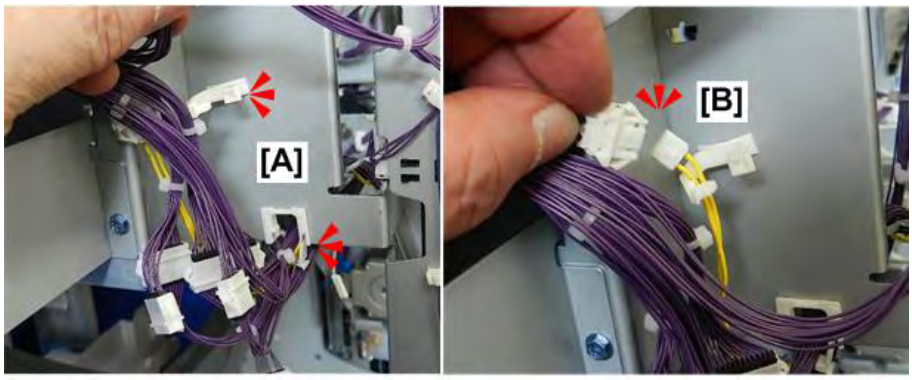
d7340064

2. Harness connectors (x6)



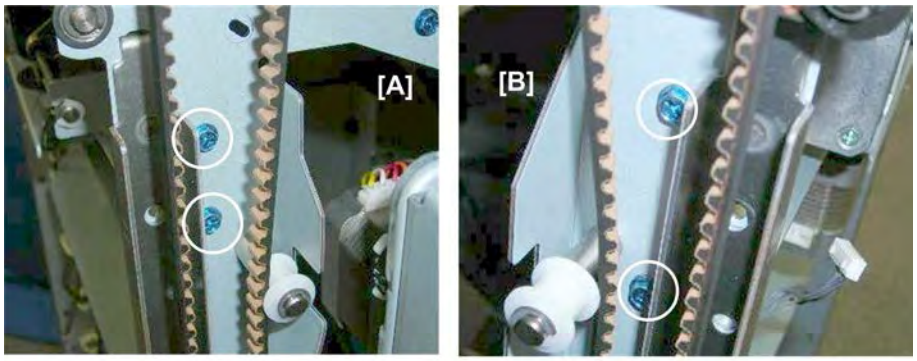
d7340065

3. Connectors (x2, x4)



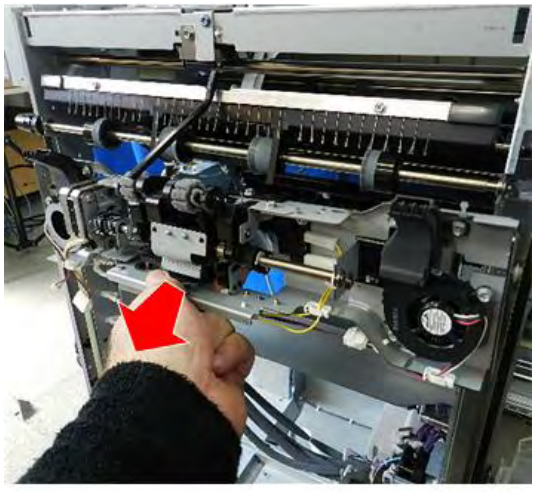
d7340066

4. Free harnesses [A] (x2).
5. Disconnect small harness [B] (x1)



d434r157

6. Remove:
   [A] Front (x2)
   [B] Rear (x2)



d7340067

7. Remove the drag roller unit.

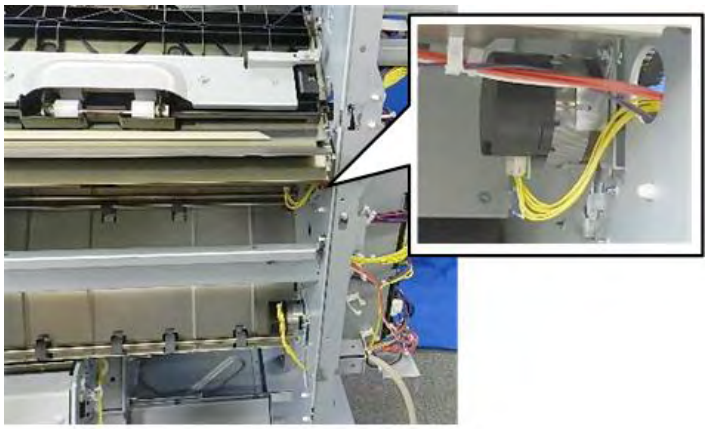
1.2 HORIZONTAL PAPER FEED

1.2.1 ENTRANCE

Entrance Roller Motor

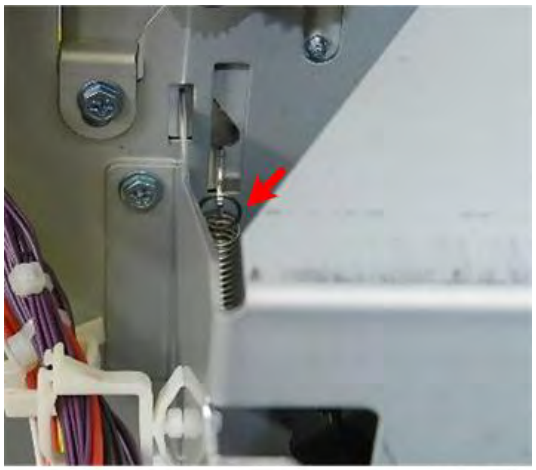
Preparation

- Rear upper cover page 15
- Rear lower cover page 15
- Right panels page 24



d7340068

1. The entrance roller motor is under the paper entrance guide.

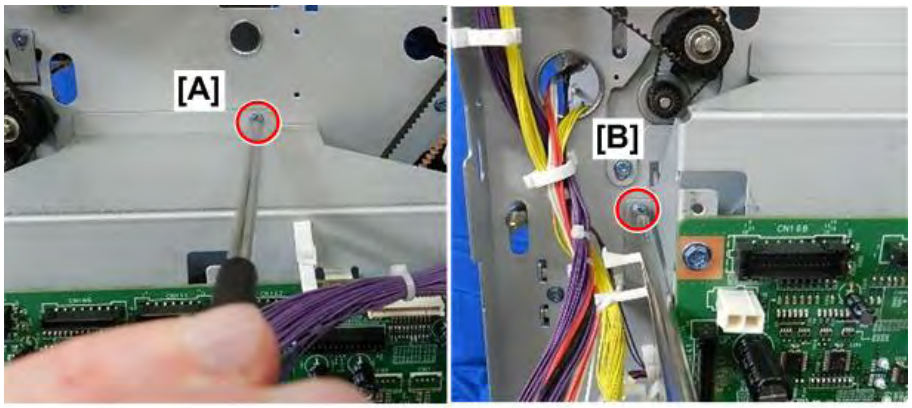


d7340069

2. A tension spring is attached to the motor bracket behind the main control board. The main control board mounting bracket must be removed in order to remove and re-attach this spring.

d7340070

3. Disconnect the main board (x17, x44).

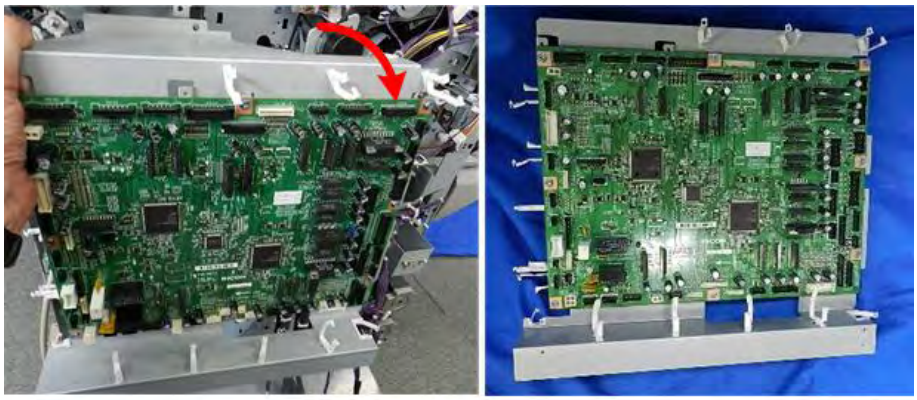


d7340071

4. Disconnect the board bracket at the top [A] and upper left corner [B] (x2).

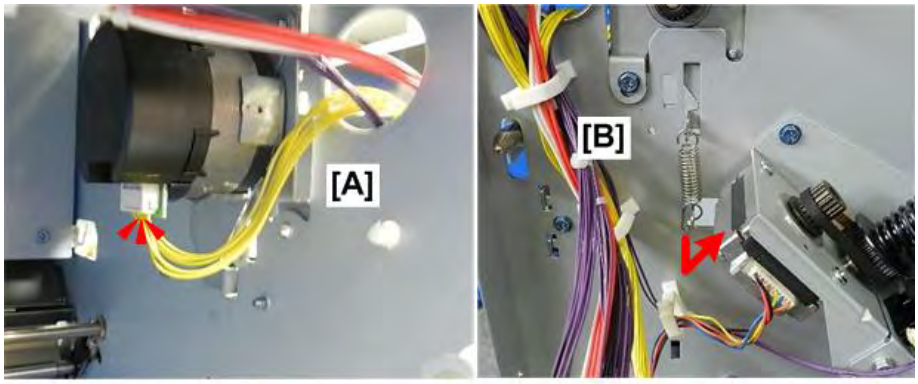
d7340072

5. Disconnect the board bracket at lower left corner [A] and right edge of the board [B] (x2).



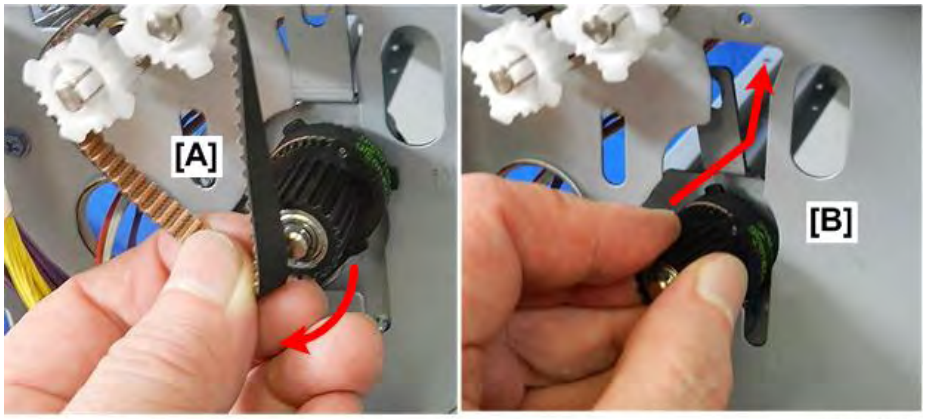
d7340073

6. Remove the bracket with main board attached.



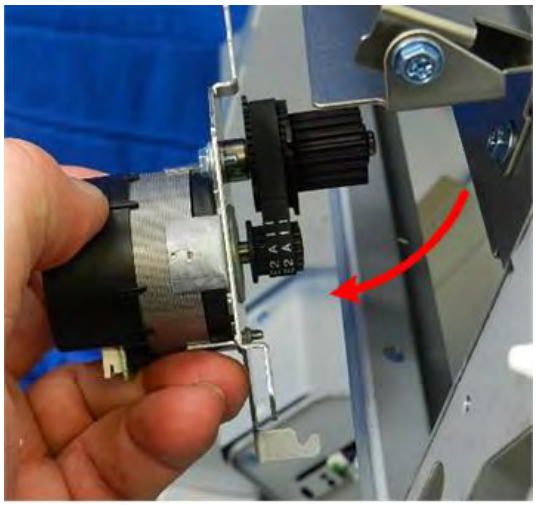
d7340074

7. On the other side of the frame [A] disconnect the motor (x1).
8. On the front of the frame [B] remove spring (x1).l



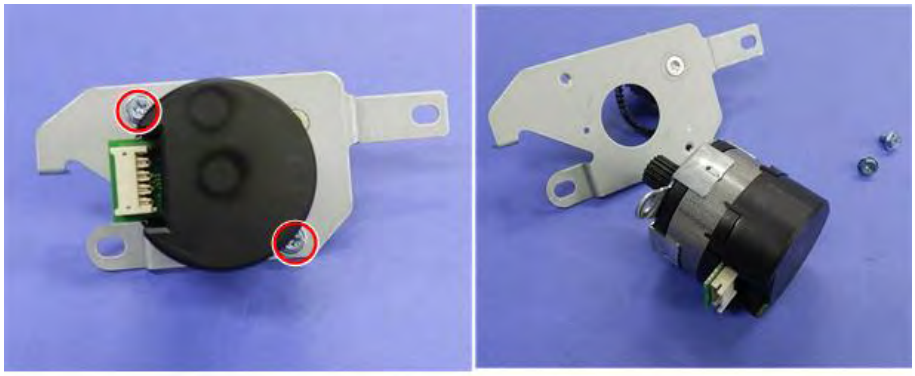
d7340075

9. Disconnect belt [A] (x1).
10. Twist and push the bracket through frame [B].



d7340076

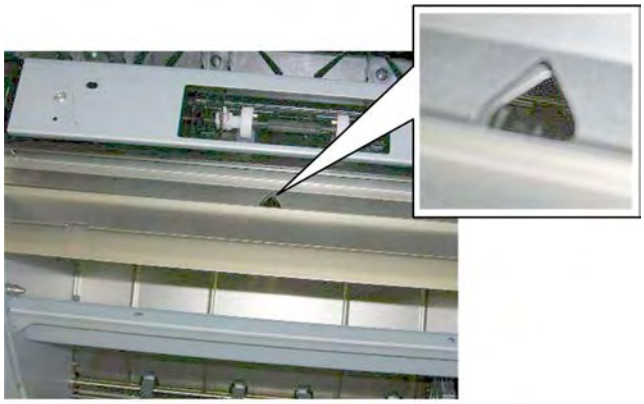
11. Remove bracket (with motor attached) from under entrance guide.



d7340077

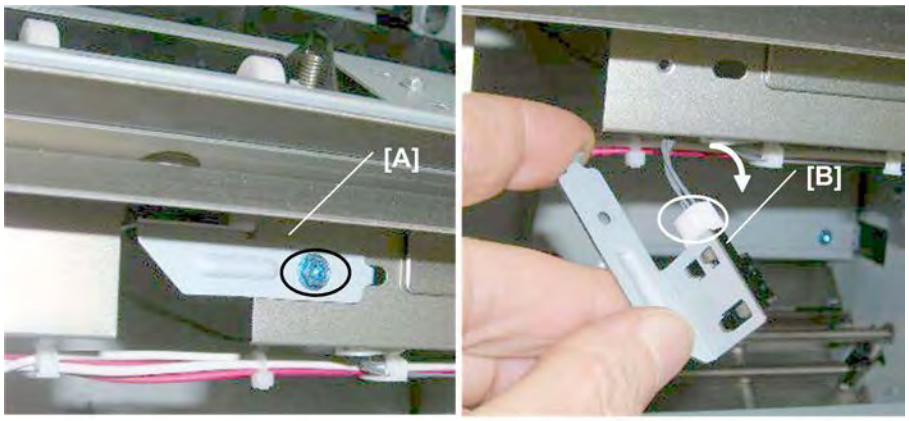
12. Separate motor and bracket (x2).

Entrance Sensor



d434r164

1. The entrance sensor port is above the paper guide.



d434r165

2. Remove:

   [A] Sensor bracket (x1)

   [B] Sensor (x1, x5)

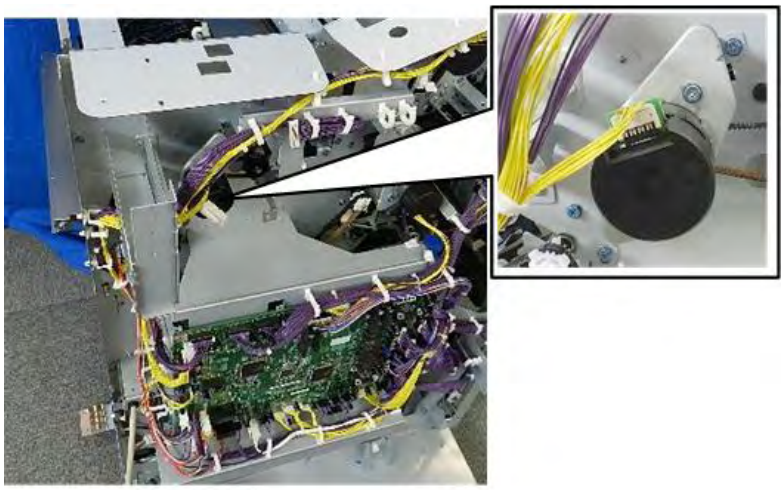
1.2.2 REGISTRATION

Registration Motor

Preparation

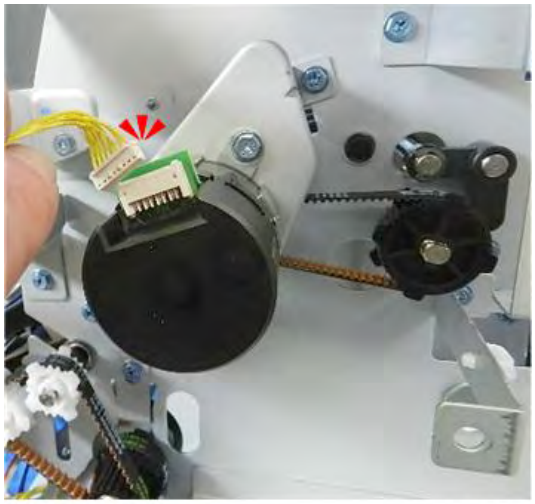
Remove:

- Rear upper cover page 15



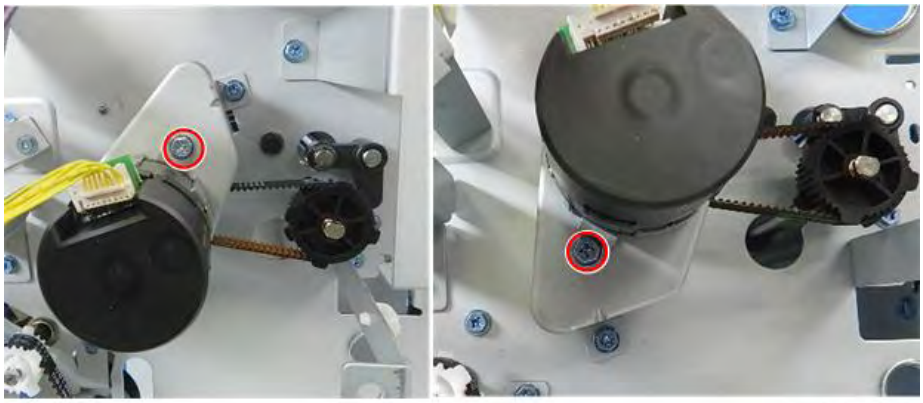
d7340078

1. The registration motor above the main board bracket at the rear.



d7340079

2. Disconnect motor (x1).



d7340080

3. Disconnect bracket (x2).

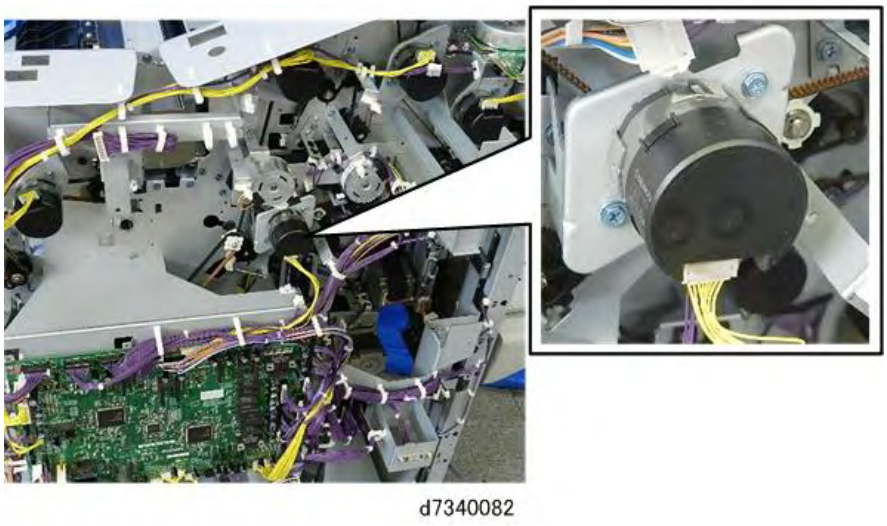
d7340081

4. Remove motor (x1).

Horizontal Transport Motor

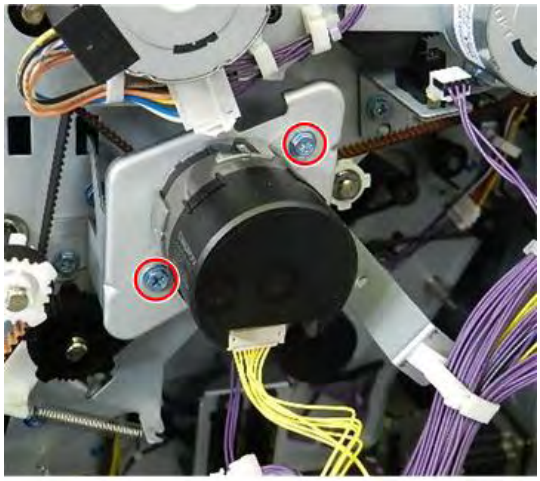
Preparation

- Rear upper cover * Rear Upper Cover



d7340082

1. The horizontal exit motor is above the right upper corner of the main board.



d7340083

2. Disconnect motor bracket (x2).

d7340084

3. Disconnect and remove motor (x1, x1).

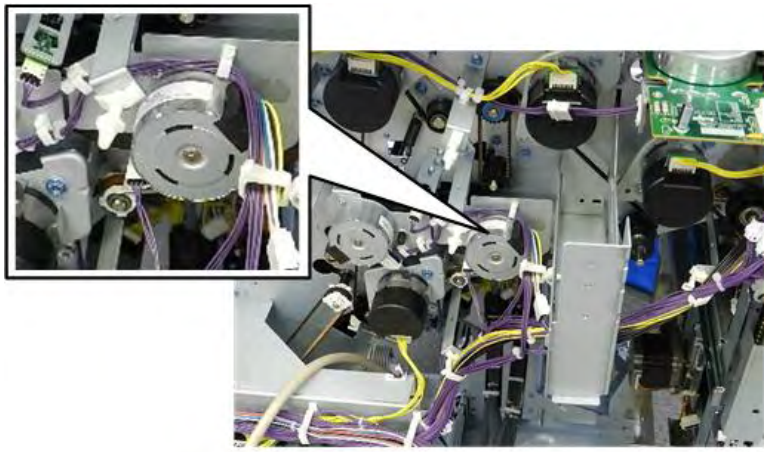
1.3 PROOF TRAY

1.3.1 PROOF TRAY MOTORS

Proof Tray JG Motor

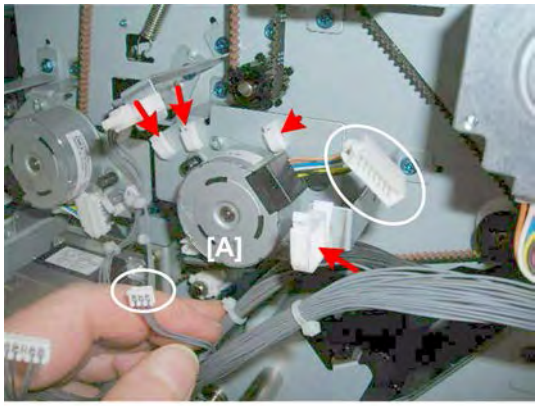
Preparation

- Rear upper cover page 15
- Punch unit PCB page 138



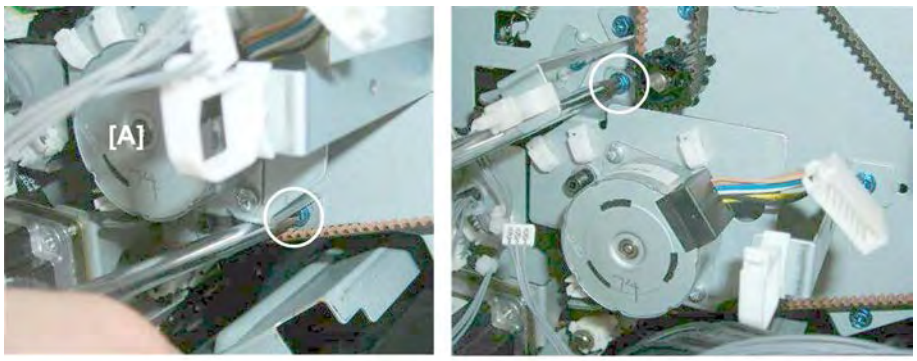
d7340088

1. The proof tray JG motor is located here.



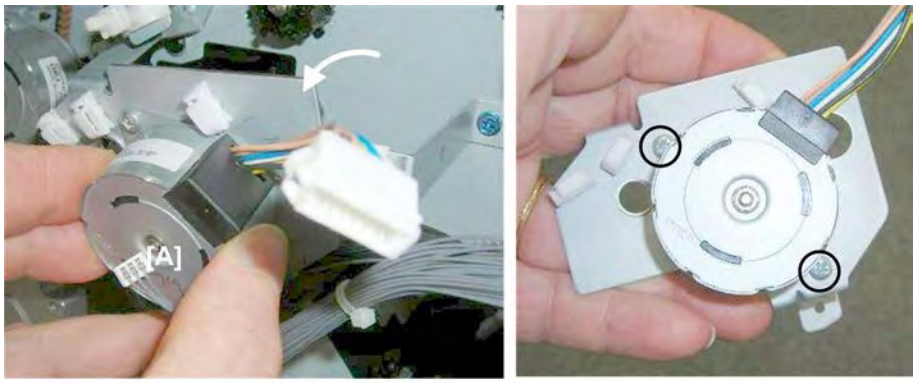
d434r186

2. Disconnect motor [A] (x4, x2)



d434r187

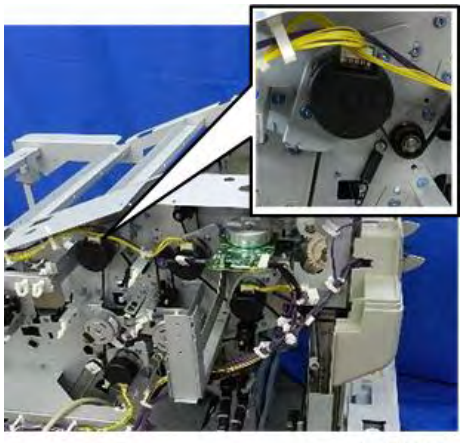
3. Bracket of the motor [A] (x2)



d434r188

4. Remove:
   [A] Motor with bracket
   [B] Bracket (x2)

Proof Tray Vertical Transport Motor



d7340089

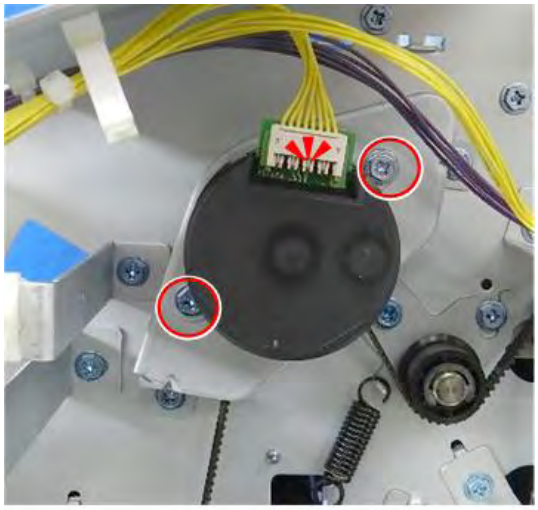
The proof tray vertical transport motor is located here, partially covered by the punch unit PCB (if the punch unit has been installed.)

Preparation

Remove:

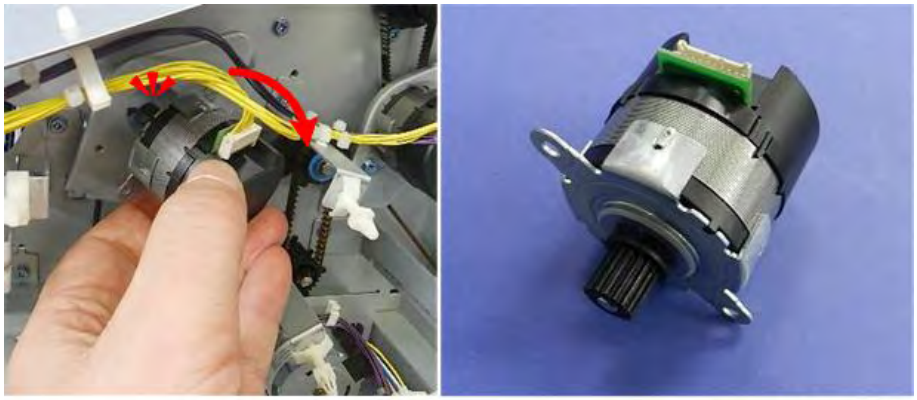
- Rear upper cover page 15

- Top rear cover page 21
- Punch unit PCB page 138



d7340090

1. Disconnect motor and bracket (x1, x2).



d7340091

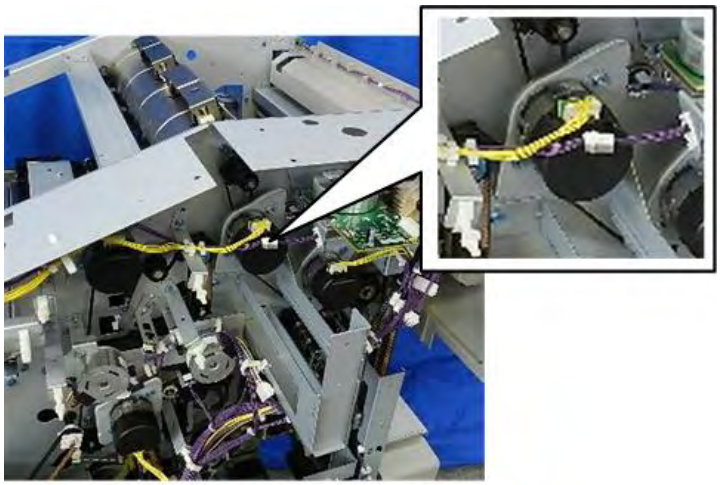
2. Remove motor (x1).

Proof Tray Exit Motor

Preparation

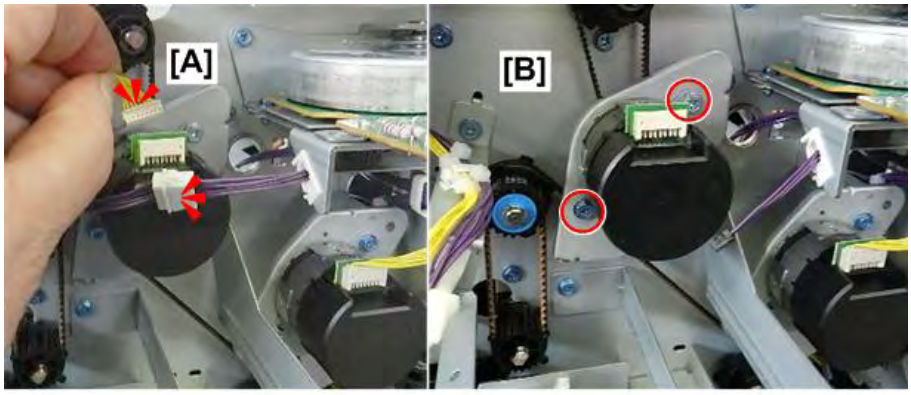
Remove:

- Rear upper cover page 15
- Rear lower cover page 15
- Top rear cover page 21



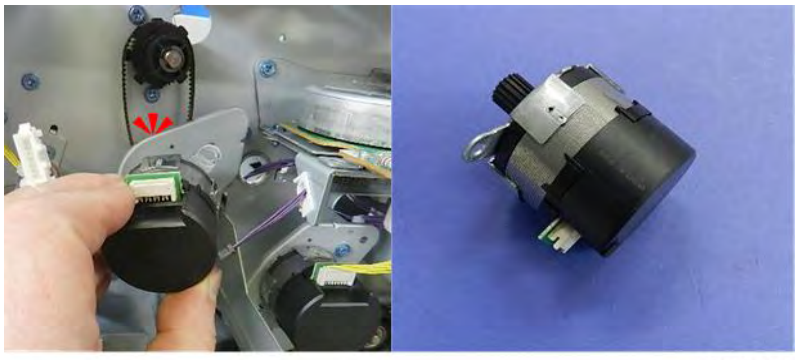
d7340092

1. The proof tray exit motor is located here.



d7340093

2. Disconnect motor and harness in front of motor [A] (x2).
3. Disconnect motor from bracket [B] (x2).



d7340094

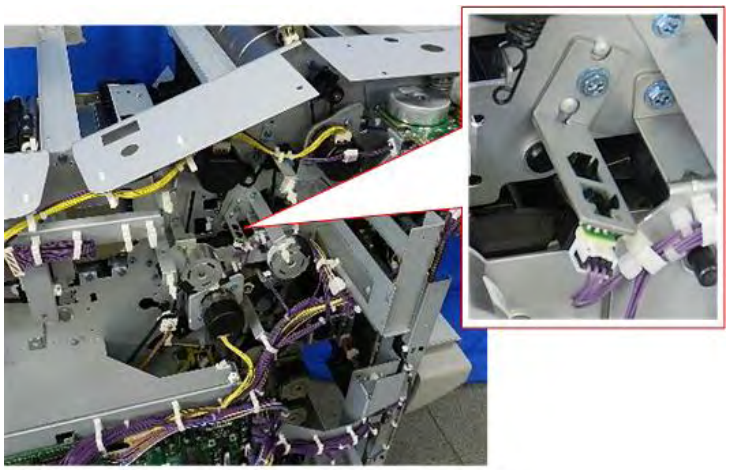
4. Remove motor (x1).

1.3.2 PROOF TRAY SENSORS

Proof Tray JG HP Sensor

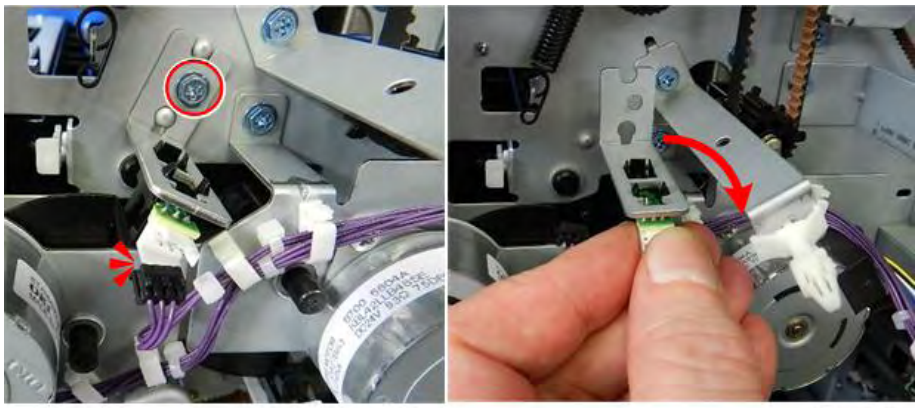
Preparation

- Rear upper cover page 15



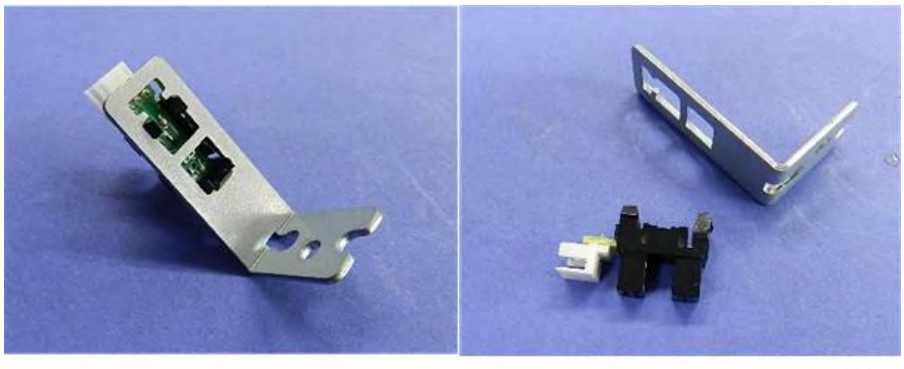
d7340095

1. The proof tray junction gate HP sensor is located here.



d7340096

2. Disconnect sensor and bracket and then remove bracket (with sensor attached) (x1, x2).



d7340097

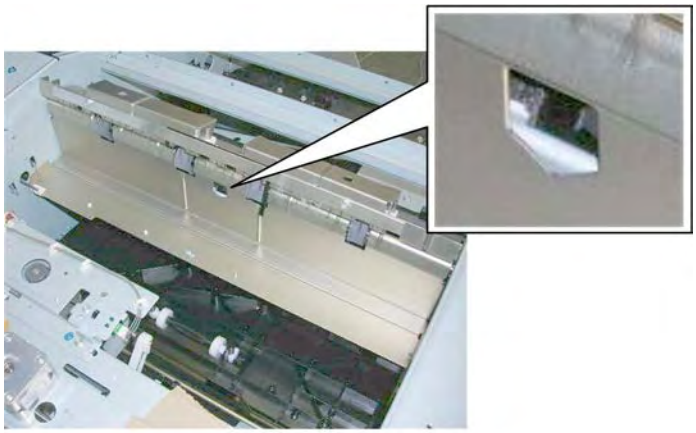
3. Separate sensor and bracket (x4).

Proof Tray Exit Sensor, Proof Tray Full Sensor

Preparation

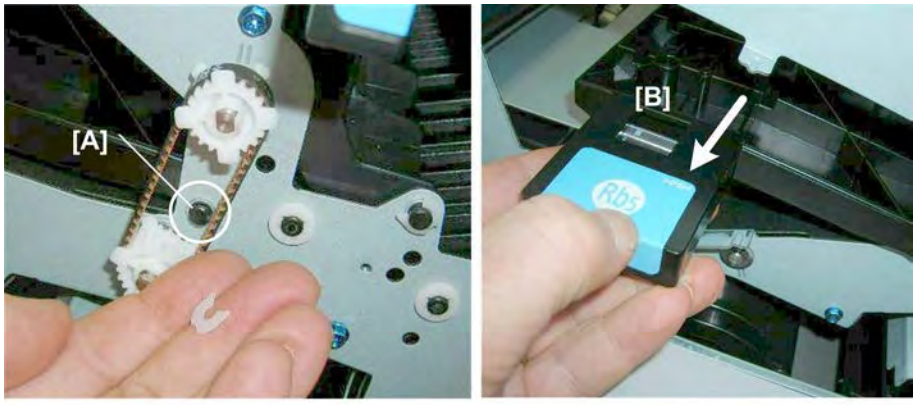
Remove:

- Upper inner cover page 18
- Top rear cover page 21
- Shift tray jogger unit page 22
- Left upper cover page 23
- Proof tray page 19



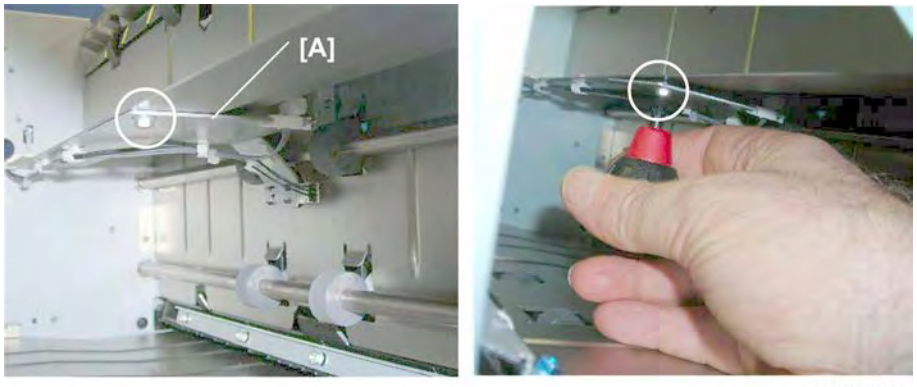
d434r198

1. These sensors are mounted on the same bracket under the paper path cover.



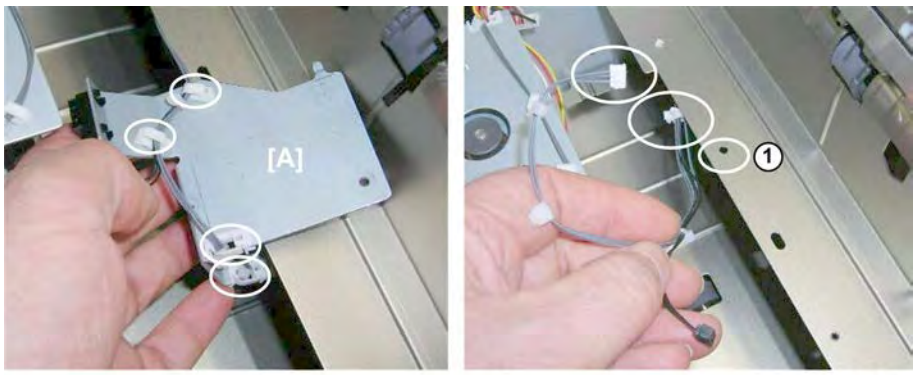
d434r199

2. At the front, disconnect the shaft [A] of plate Rb5. (x1)
3. Remove **Rb5** [B]



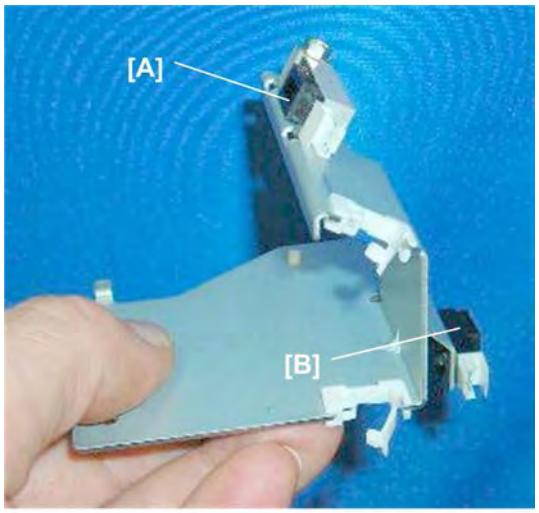
d434r200

4. Use a short screwdriver to remove bracket plate [A]. (x1)



d434r201

5. Use a pencil or marker to mark the color and location of the harnesses.
6. Disconnect a standoff ① to create slack in the harnesses.
7. Disconnect the bracket and sensors [A] (x4, x2).



d434r202

8. Remove:
   [A] Tray full sensor (x1)
   [B] Tray exit sensor (x5)

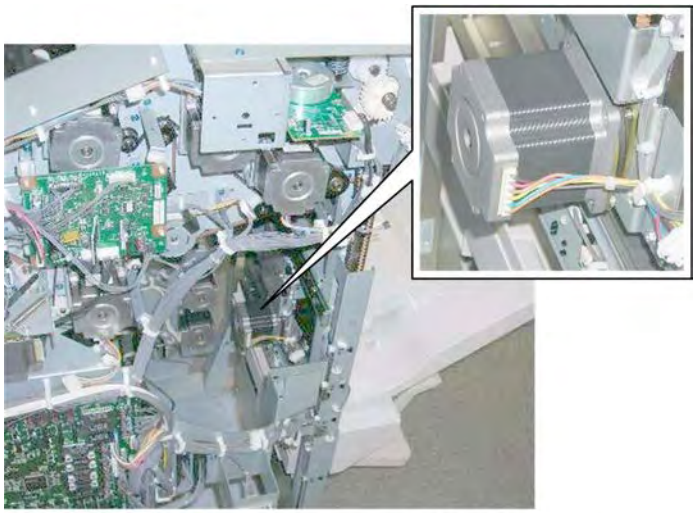
1.4 SHIFT TRAY

1.4.1 SHIFT TRAY SIDE-TO-SIDE MOVEMENT

Shift Motor

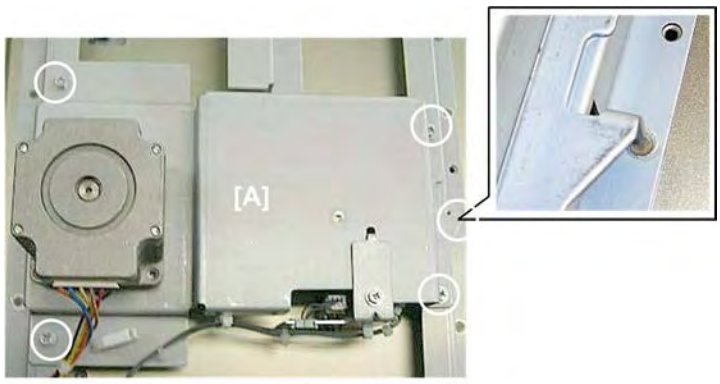
Preparation

- Remove end fence page 32



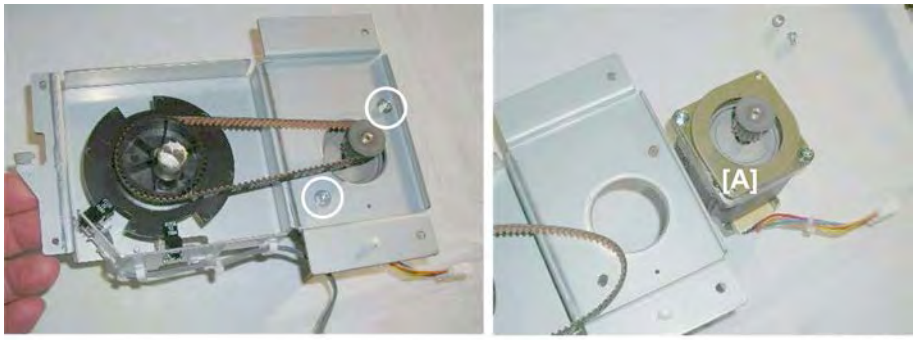
d434r203

1. The shift motor is visible inside the machine, but the end fence must be removed for servicing this motor.



d434r204

2. Lay the end fence on a flat surface.
3. Remove bracket [A] (x4, x1)



d434r205

4. Turn the bracket over and remove the motor [A] (x2, x1)

Shift Tray HP Sensors (Front, Rear)

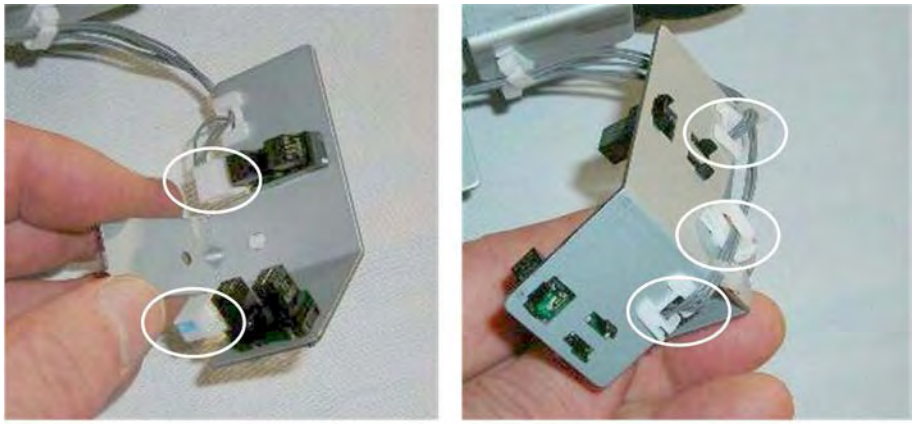
These sensors are mounted on the same bracket as the shift motor.

Preparation

- Remove end fence page 32

d434r206

1. Remove sensor bracket [A] (x1).



d434r207

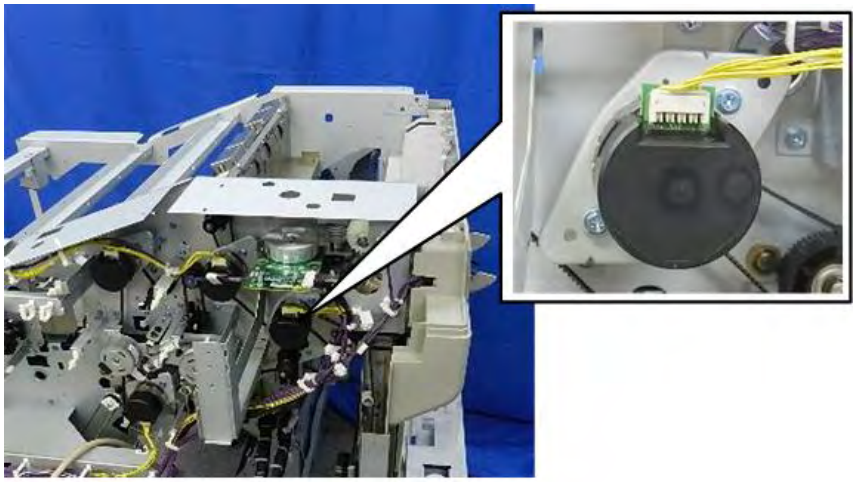
2. Remove sensors (x2, x3, x 5 each)

1.4.2 SHIFT TRAY EXIT

Shift Tray Exit Motor

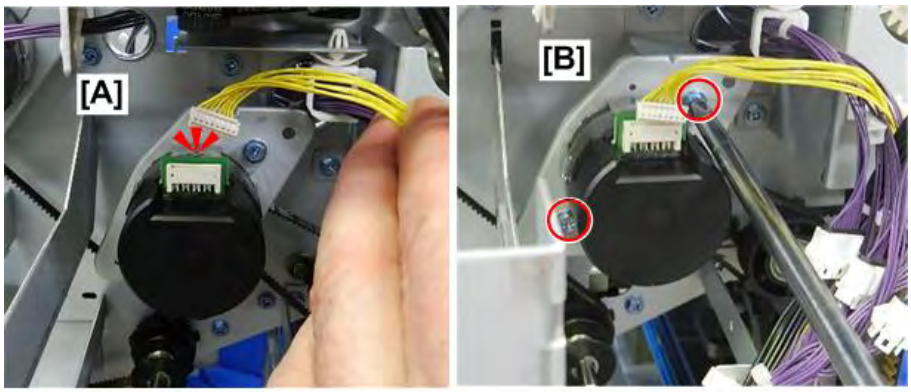
Preparation

- Rear upper cover page 15



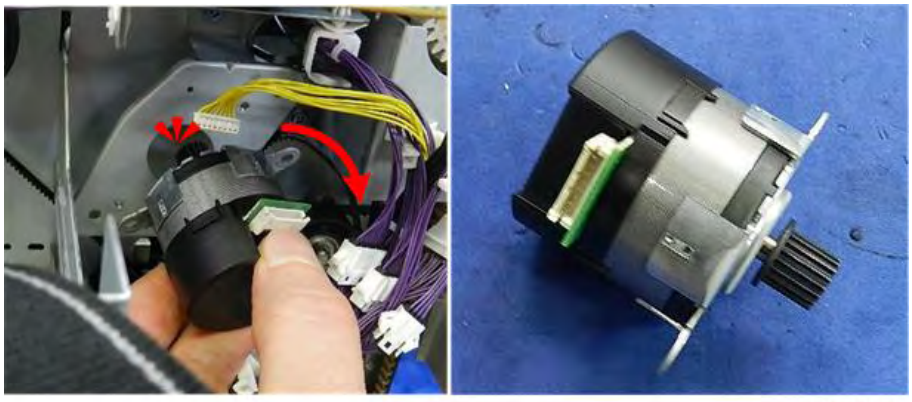
d7340085

1. The shift tray exit motor is under the shift tray lift motor board.



d7340086

2. Disconnect motor [A] (x1).
3. Disconnect bracket [B] (x2).



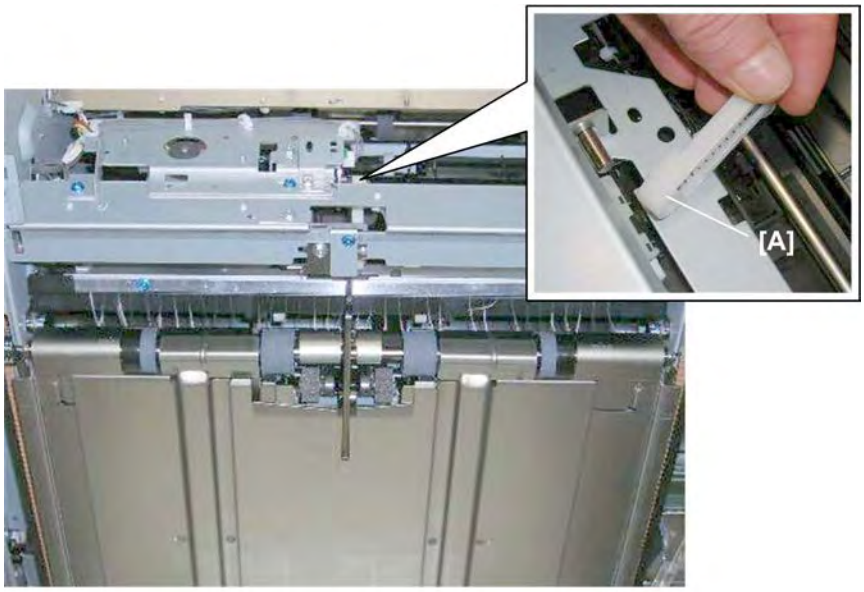
d7340087

4. Remove motor (x1).

Shift Tray Exit Sensors (Long and Short)

Preparation

- Remove proof tray page 19

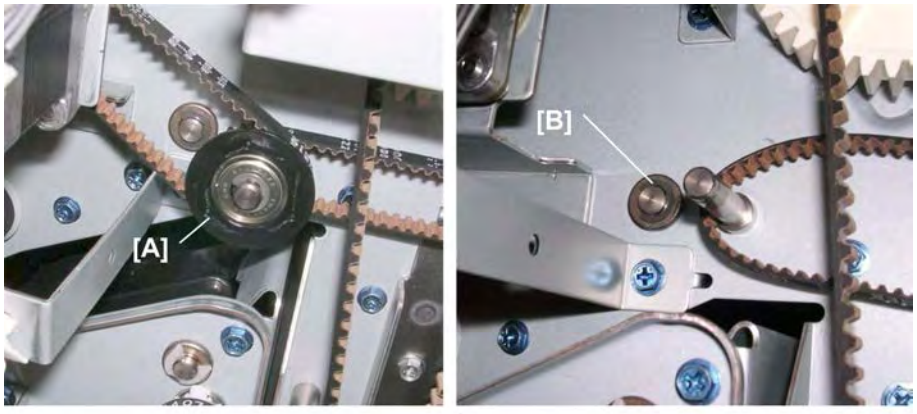


d434r208

1. Lift arm [A] (x1).

d434r209

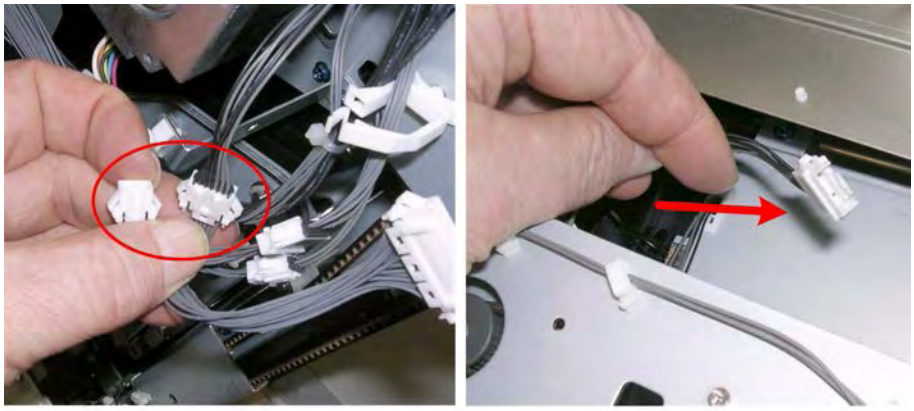
2. At the front, remove the bushing (x1).



d434r209a

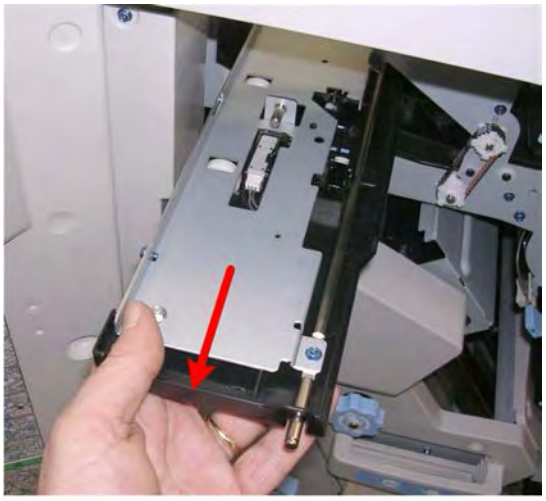
3. At the rear, remove:
   [A] Gear (x1, x2)

[B] Bushing (ℭ x1)



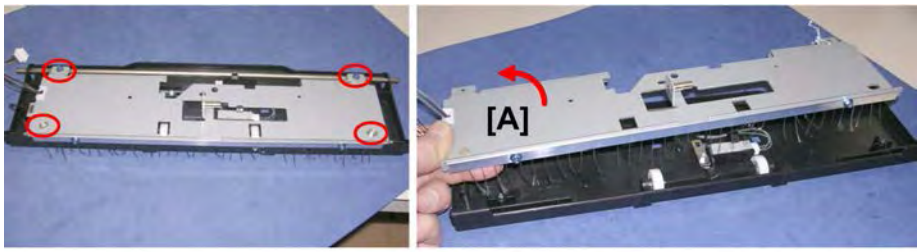
d434r209b

4. At the rear, disconnect the sensor harness.
5. Pull it though the hole into the machine.



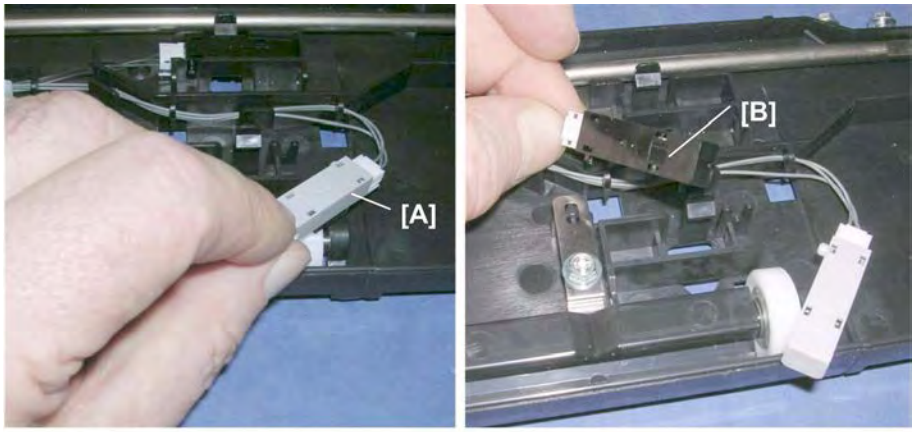
d434r209c

6. Pull the plate assembly out from the front of the machine.



d434r209d

7. Lay the assembly on a flat surface.
8. Remove the plate [A].



d434r209e

9. Remove:

   [A] Exit sensor (long) (x1, x1)

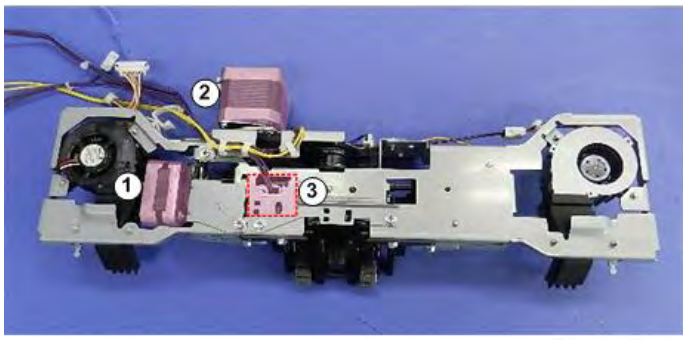
   [B] Exit sensor (short) (x1, x1)

1.4.3 DRAG ROLLER MOTORS, SENSORS

Preparation

Remove:

- End fence page 19
- Drag roller unit page 39

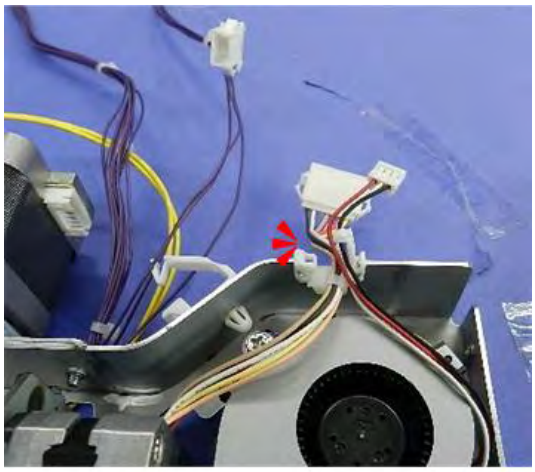


d7340098

These three components require removal of the drag roller unit.

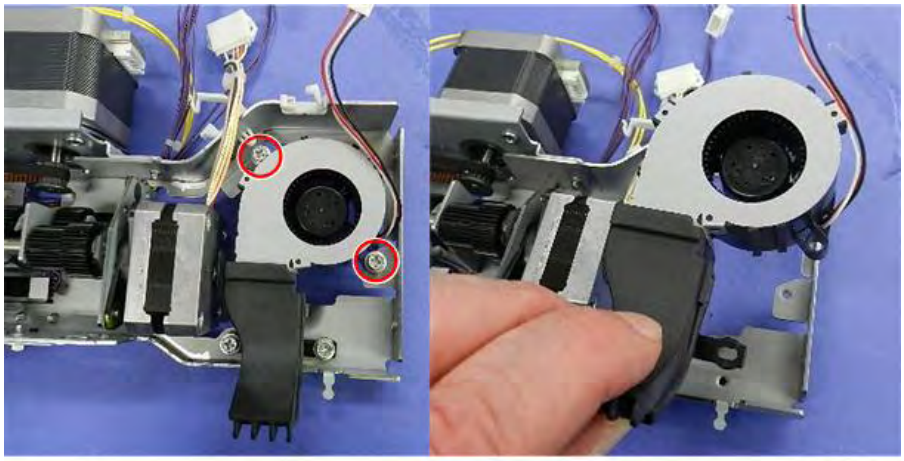
①	Drag roller motor
②	Drag roller drive motor
③	Drag roller HP sensor

Drag Roller Motor



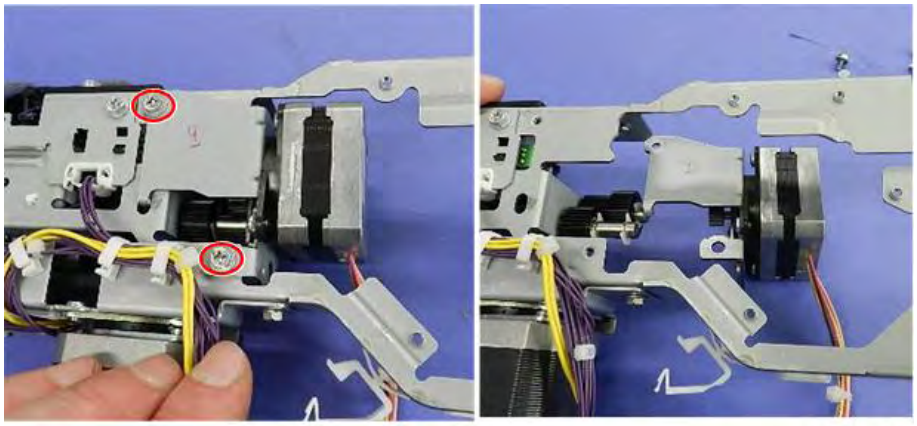
d7340099

1. Free the motor and fan harnesses (x1).



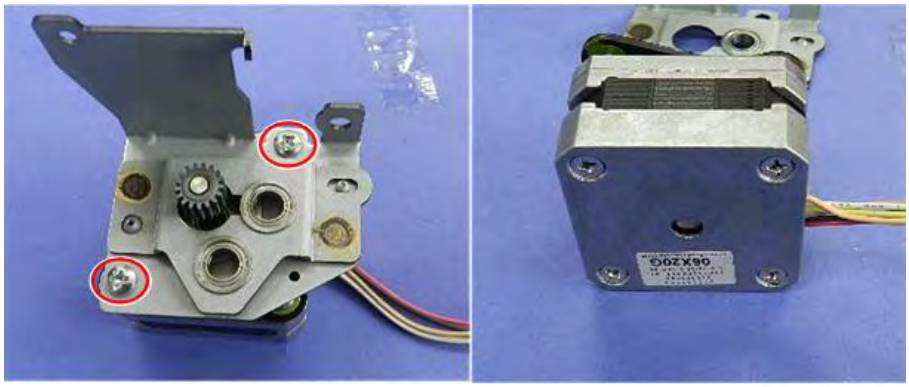
d7340100

2. Remove the fan (x2).



d7340101

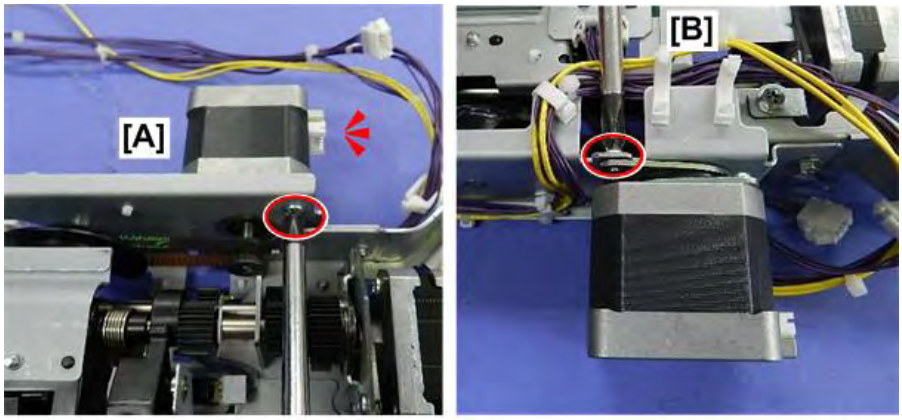
3. Remove bracket (with motor attached) (x2).



d7340102

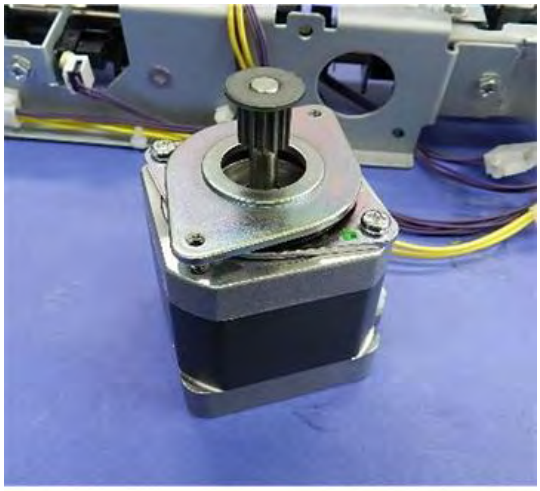
4. Separate motor and bracket (x2).

Drag Roller Drive Motor



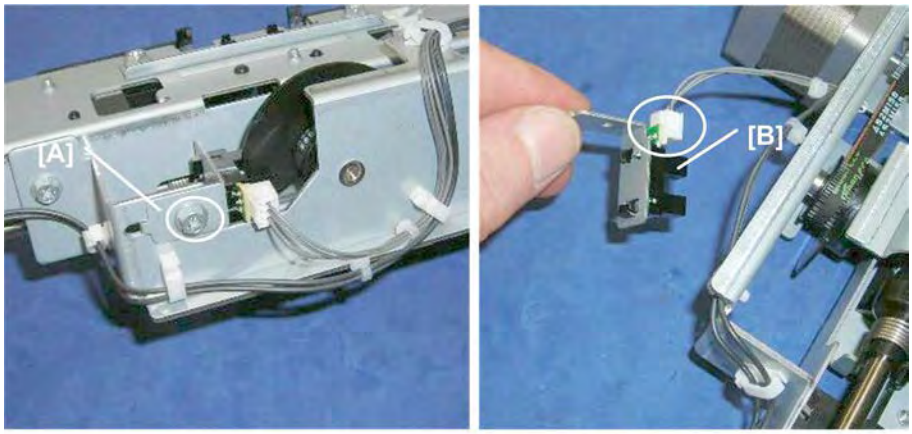
d7340103

1. Disconnect motor at [A] (x1).
2. Turn the unit over, and then disconnect at [B] (x1).



d7340104

Drag Roller HP Sensor

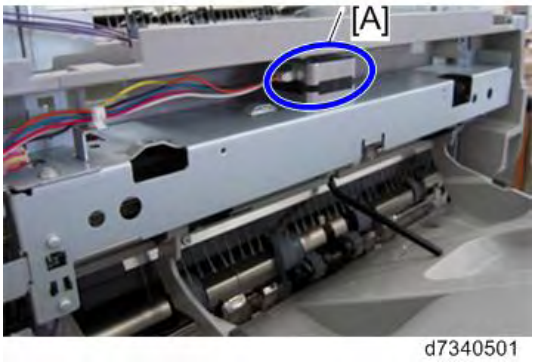


d434r215

1. Remove:
   [A] Sensor bracket (x1)
   [B] Sensor (x1, x5)

1.4.4 SHIFT TRAY JOGGER UNIT

Shift Jogger Motor

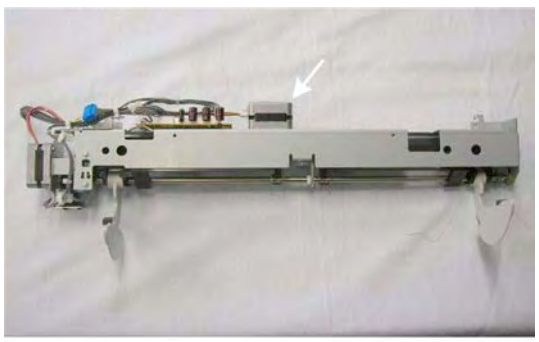


d7340501

This motor [A] is on top of the shift tray jogger unit, near the center.

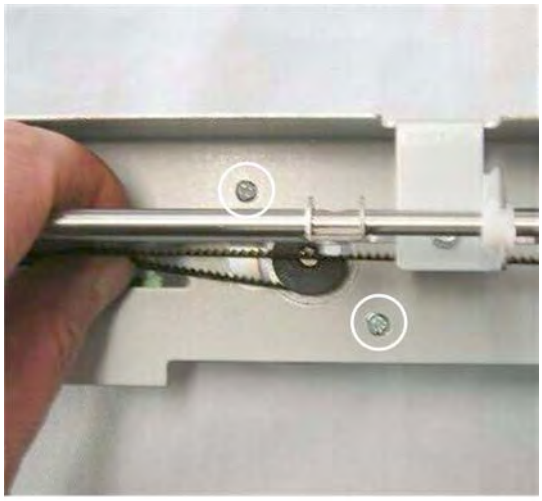
Preparation

- Shift tray jogger unit page 22



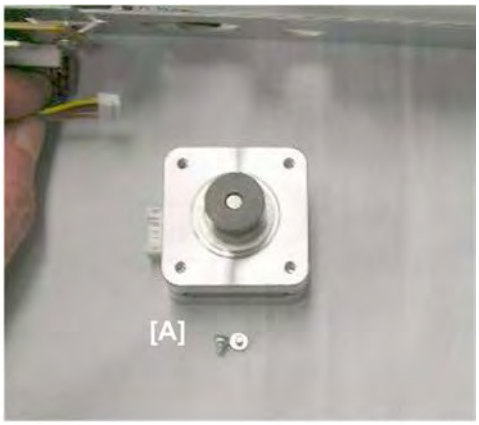
d434r218

1. This is the location of the motor with the shift jogger unit removed.



d434r219

2. Turn the unit over and disconnect the motor (x2, x1).



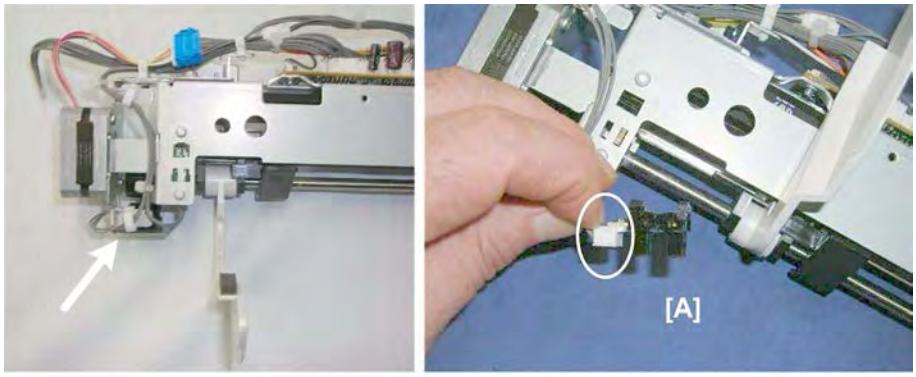
d434r220

3. Disconnect motor [A] (x1)

Shift Tray Jogger Fence HP Sensor

Preparation

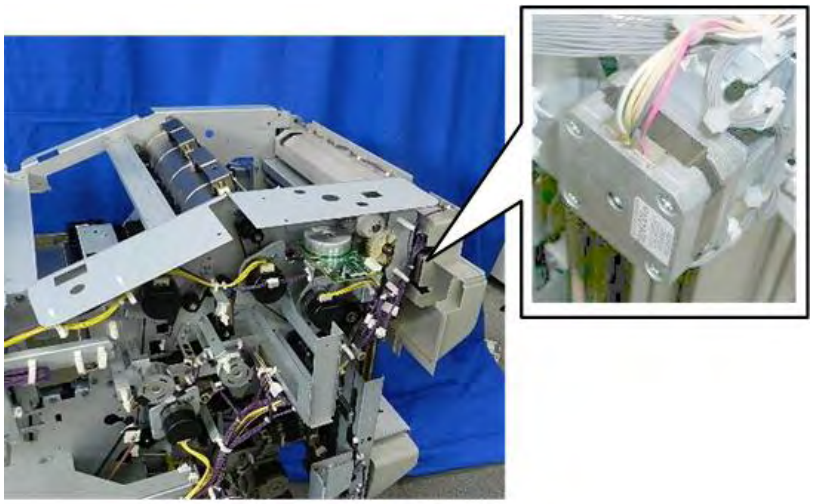
- Shift tray jogger unit page 22



d434r221

1. Remove sensor [A] (x1, x5)

Shift Jogger Retraction Motor

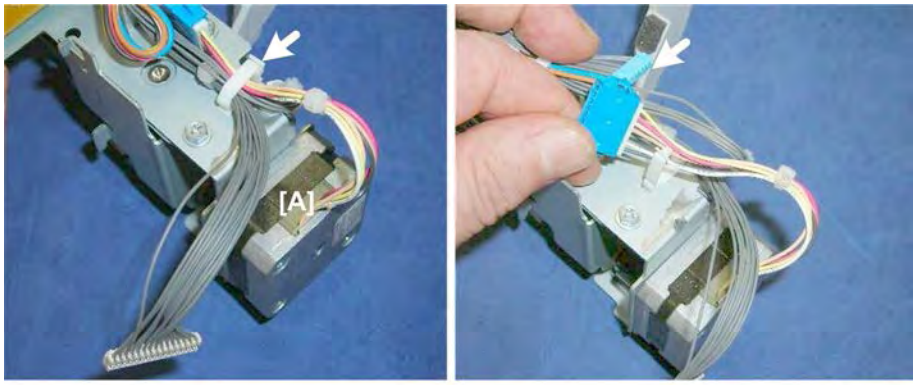


d7340105

This is the motor on the end of the shift tray jogger unit.

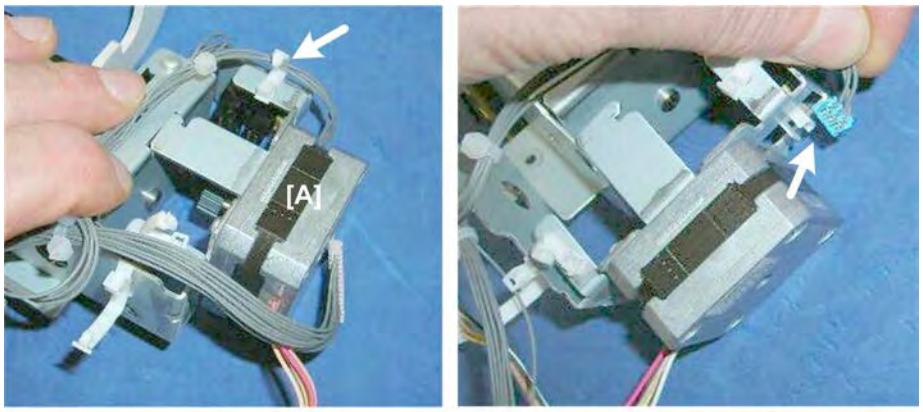
Preparation

- Shift tray jogger unit page 22



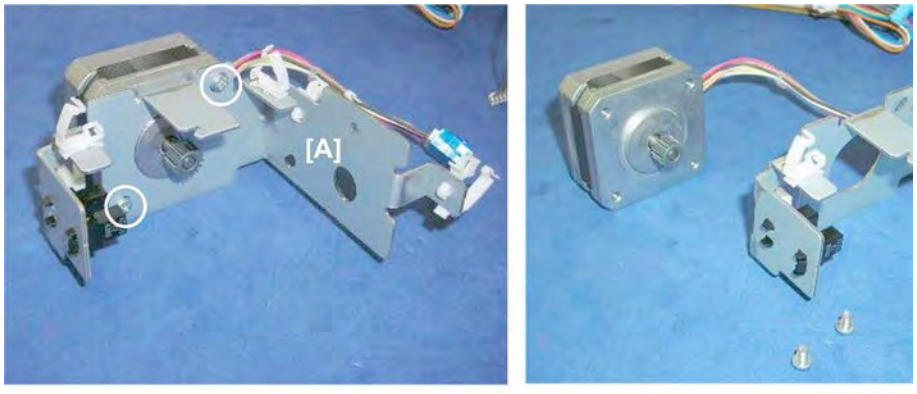
d434r223

1. Disconnect the motor harness [A] (x1, x1)



d434r224

2. Disconnect the retraction HP sensor on the same bracket as the motor [A] (x1)



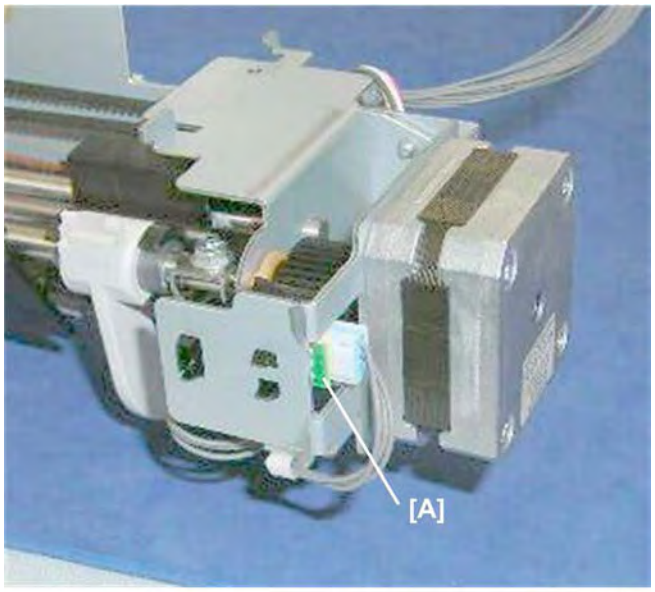
d434r225

3. Disconnect motor bracket [A] (x1, x2)

Shift Jogger Fence Retract HP Sensor

Preparation

- Shift tray jogger unit page 22



d434r226

1. Remove sensor [A] (x1, x5)

Note

- If it is difficult to remove the sensor directly from the frame (or re-install), do the procedure in the previous section to remove the shift jogger retraction motor bracket.

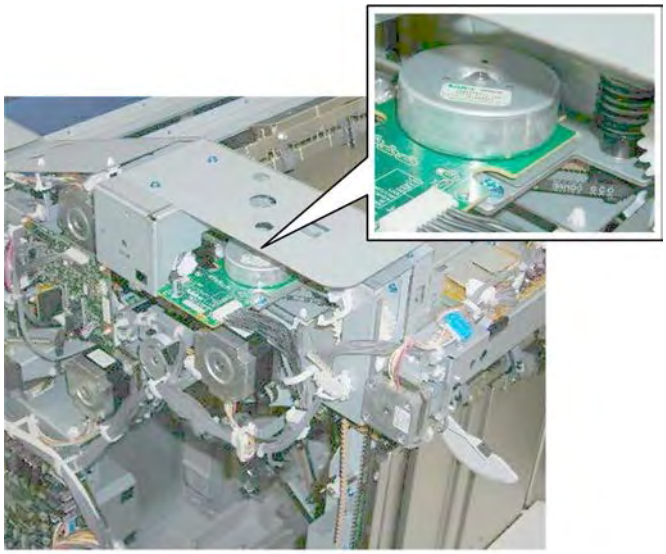
1.4.5 SHIFT TRAY OPERATION

Shift Tray Lift Motor

Preparation

Remove:

- Rear upper cover page 15
- Top rear cover page 21
- Proof tray page 19

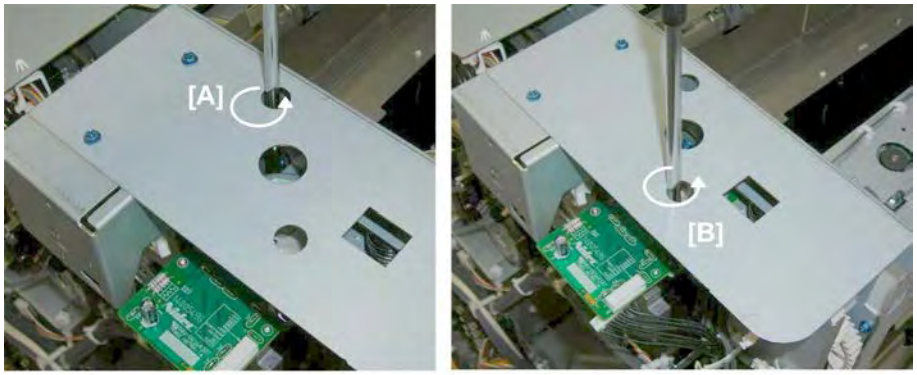


d434r227

1. The shift tray lift motor is near the left rear corner.

d434r228

2. Disconnect the motor drive board (☞ x1).

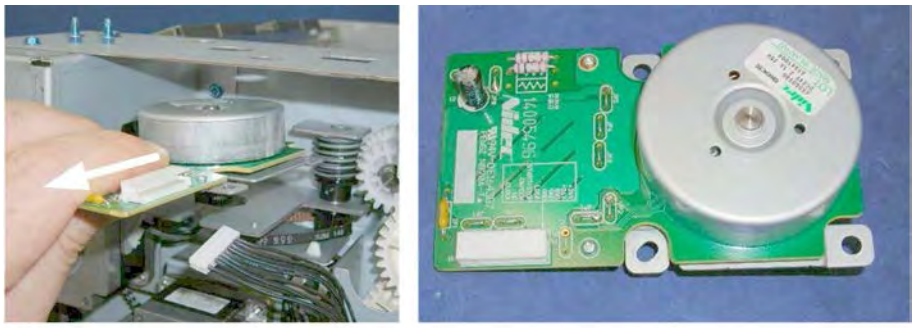


d434r229

3. Remove:

   [A] Rear (x1)

   [B] Front (x1)



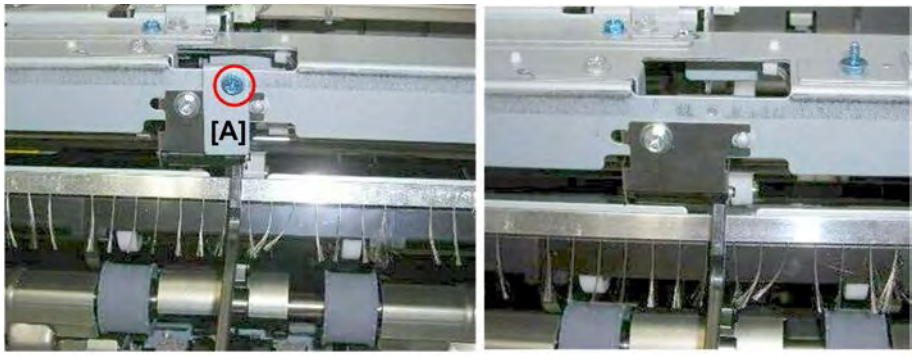
d434r230

4. Pull the motor and drive board motor out.

Paper Height Sensors 1, 2, 3 (Shift, Staple, Z-Fold)

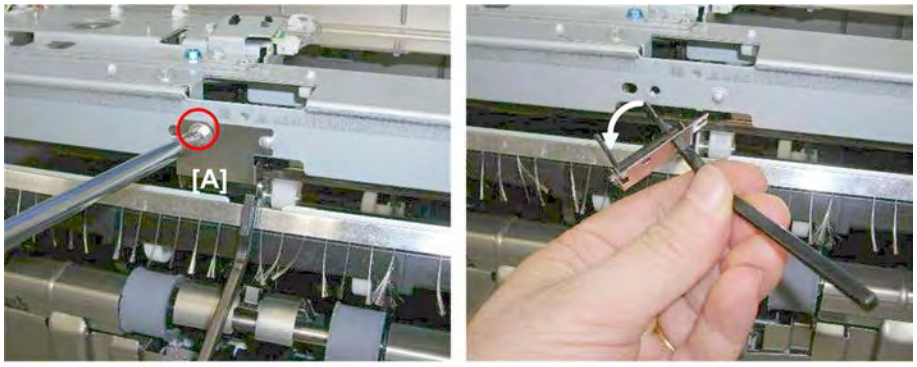
Preparation

- Proof tray page 19



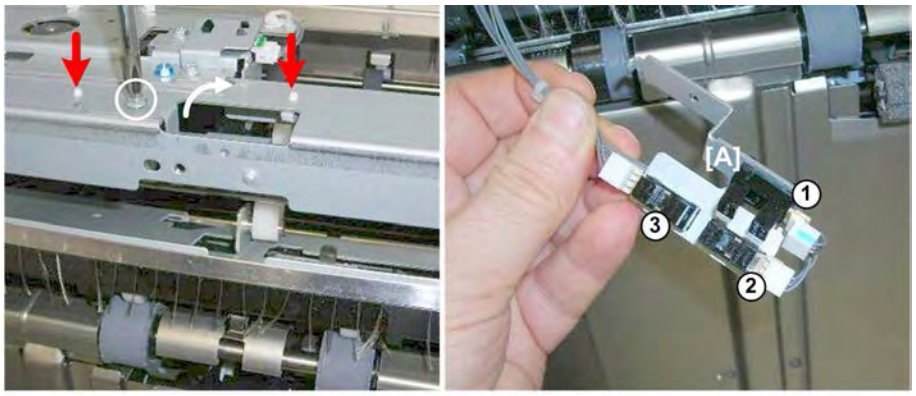
d434r231

1. Remove the protector plate [A] (x1).



d434r232

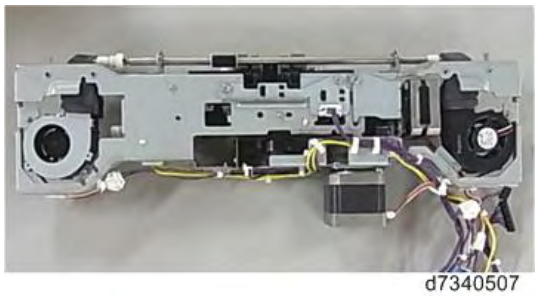
2. Remove feeler [A] (x1).



d434r233

3. Remove sensor bracket [A] (x1, Standoffs x2)
4. Sensors (x1 each)
   - ① Paper Height Sensor 1: Staple Mode
   - ② Paper Height Sensor 2: Shift Mode
   - ③ Paper Height Sensor 3: Z-Fold Mode

Paper Height Sensor (TE), Shift Tray Upper Limit Switch



d7340507

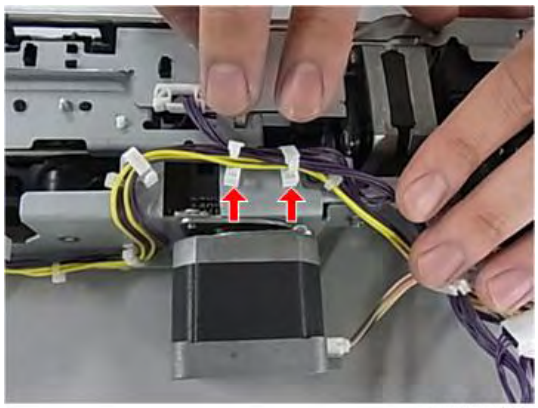
The actuator of the paper height sensor performs two functions:

- First, it rises and actuates the Paper Height Sensor (TE) [B] to detect tray full.
- Second, if the actuator rises far enough through the gap of the interrupt sensor (TE) it will trip the arm of a micro-switch [D]. This is a fail-safe device to switch the finisher off if one or more other sensors fail.

Preparation

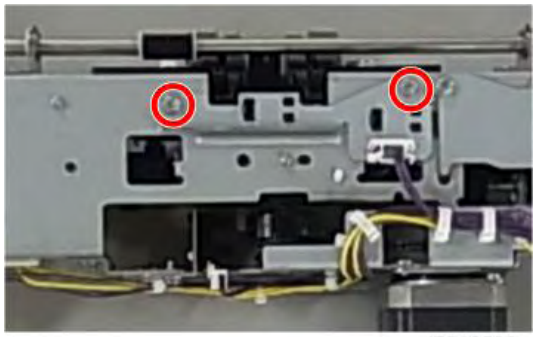
- End fence page 32
- Drag roller unit page 39

Paper Height Sensor (TE)



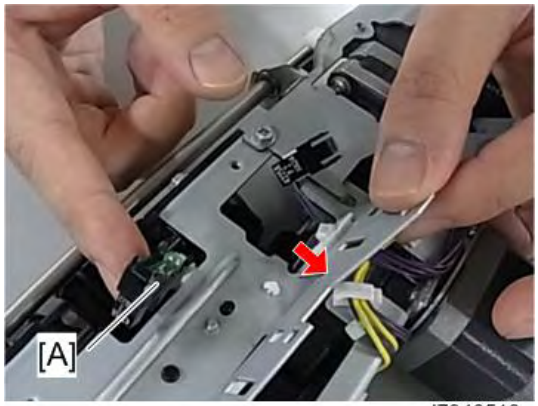
d7340508

1. Open clamps above motor (x2).



d7340509

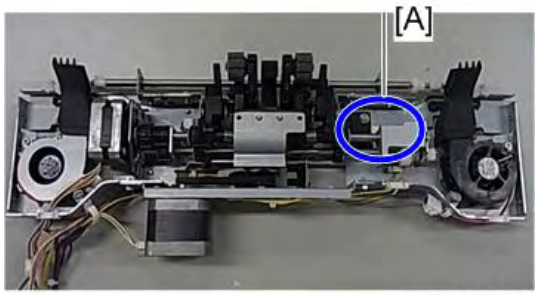
2. Disconnect (x2).



d7340510

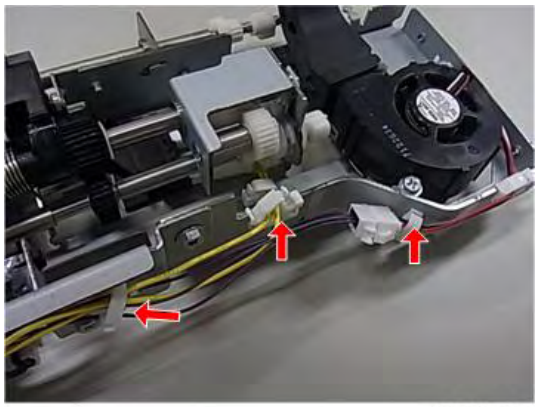
3. Remove sensor [A] (x1).

Shift Tray Limit Switch



d7340511

1. The switch is located at [A].

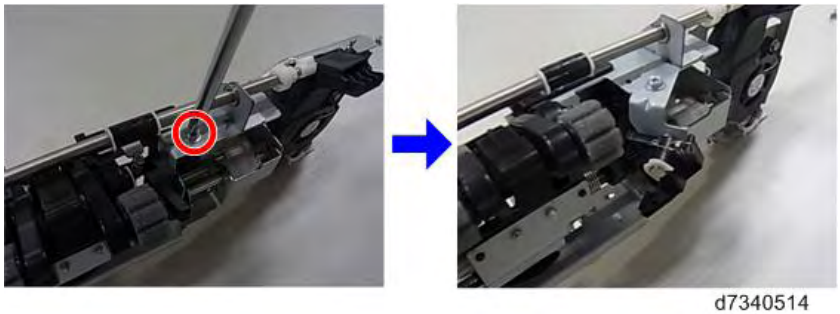


d7340512

2. Open the clamps (x3).

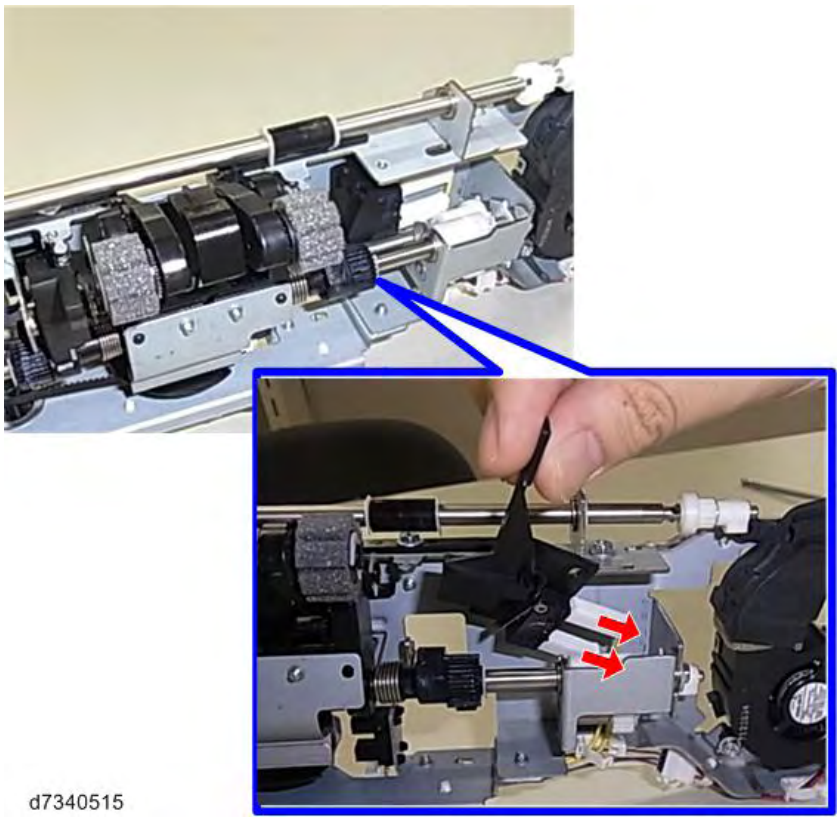
d7340513

3. Disconnect switch (x1).



d7340514

4. Remove lever screw (x1).



5. Disconnect switch (x2).

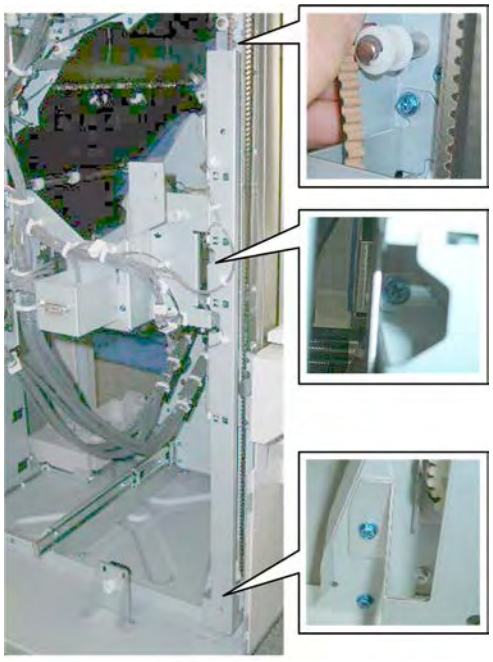
Shift Tray Full Sensors 1, 2, 3, 4 (500)

The tray full sensors are all mounted on the same vertical stay at the left rear corner of the finisher:

- Shift Tray Full Sensor (500)
- Shift Tray Full Sensor (1000)
- Shift Tray Full Sensor (1500)
- Shift Tray Full Sensor (2500)

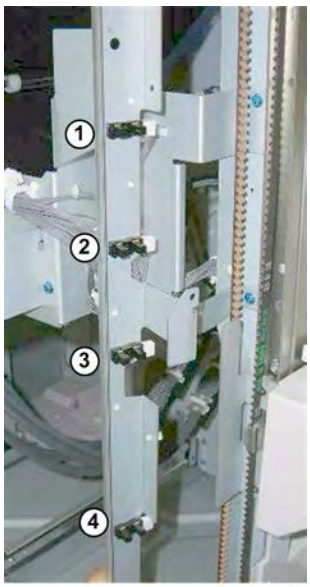
Preparation

- Rear upper cover page 15
- Rear lower cover page 15



d434r240

1. Remove the vertical stay cover (x3).

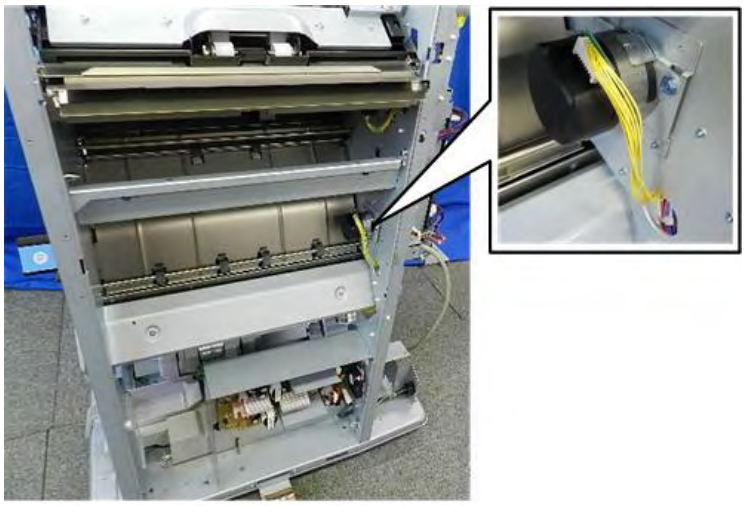


d434r241

2. The four sensors, (x1 each, x5 each)
   - ① Shift Tray Full Sensor (500)
   - ② Shift Tray Full Sensor (1000)
   - ③ Shift Tray Full Sensor (1500)
   - ④ Shift Tray Full Sensor (2500)

1.5 PRE-STACKER

1.5.1 PRE-STACK MOTORS



d7340106

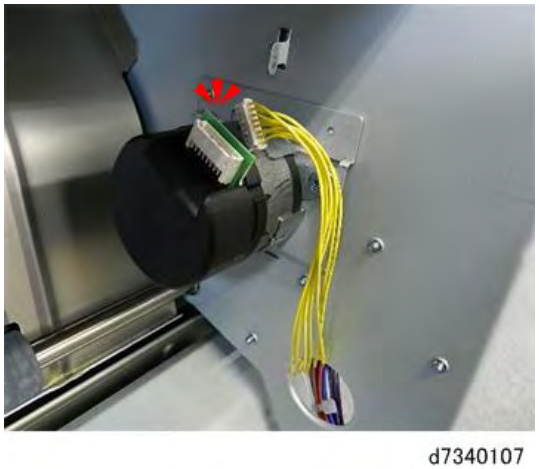
The pre-stack motor is visible from the right side of the finisher below the lock bar.

Pre-Stack Motor

Preparation

Remove:

- Rear upper cover page 15
- Rear lower cover page 15
- Right panels page 24

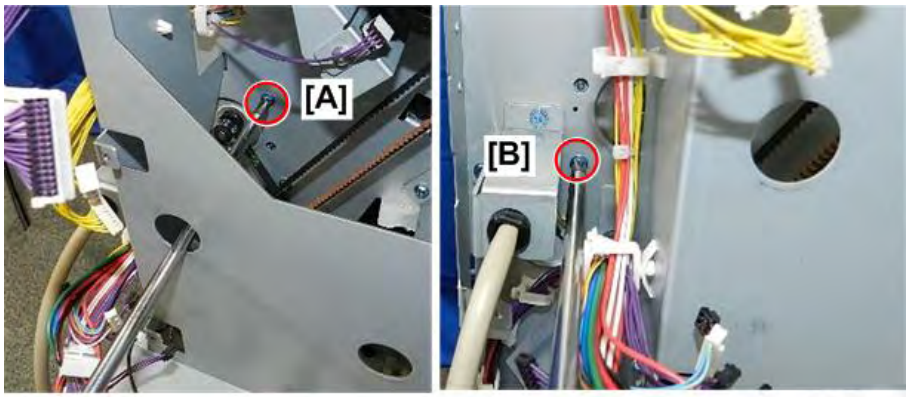


d7340107

1. Disconnect motor (x1).

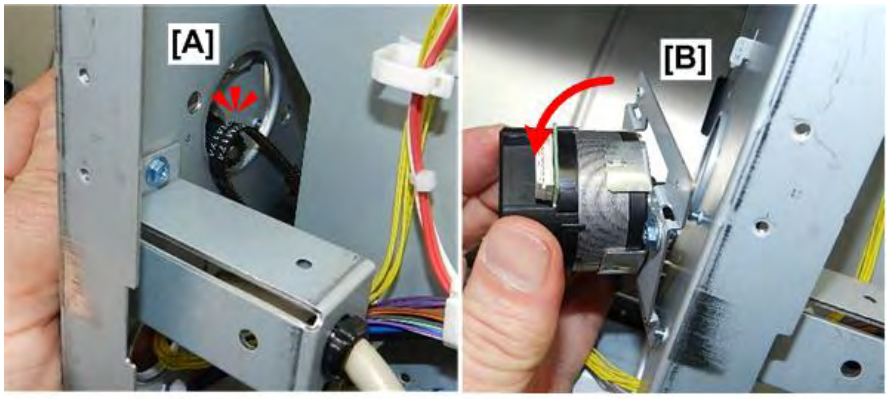
d7340108

2. Remove main board (x17, x44, x8). xref



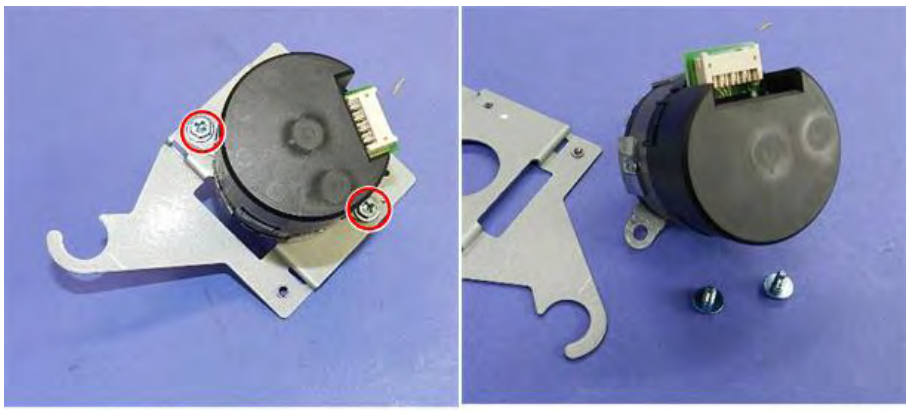
d7340109

3. Remove upper bracket screw [A] (x1).
4. Remove lower bracket screw [B] (x1).



d7340110

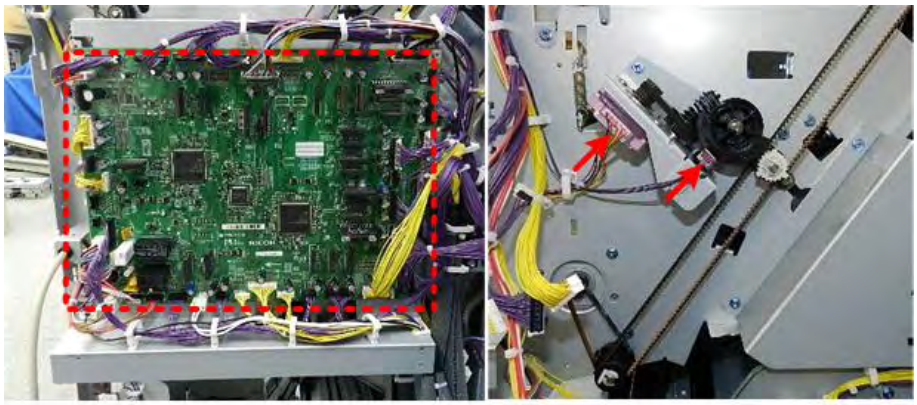
5. Disengage belt [A] (x1).
6. Remove bracket [B] (with motor attached).



d7340111

7. Separate bracket and motor (x2).

Pre-Stack Release Motor, Pre-Stack Roller HP Sensor



d7340112

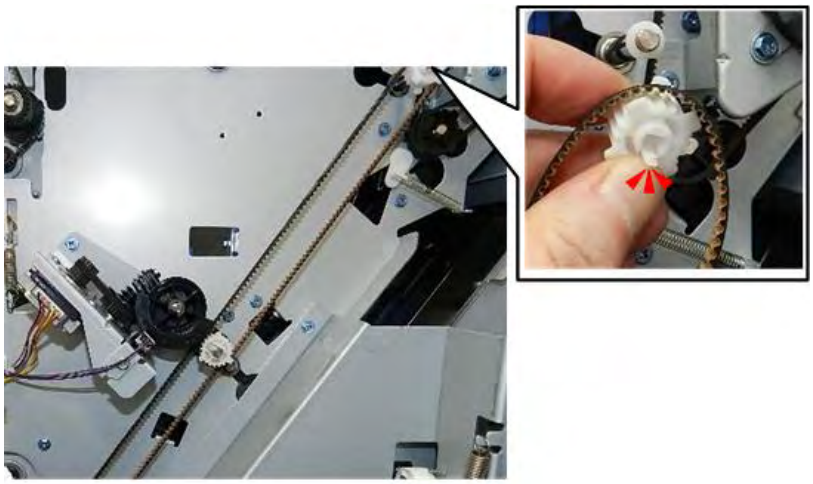
The pre-stack release motor and pre-stack roller HP sensor are behind the main board.

Preparation

Remove:

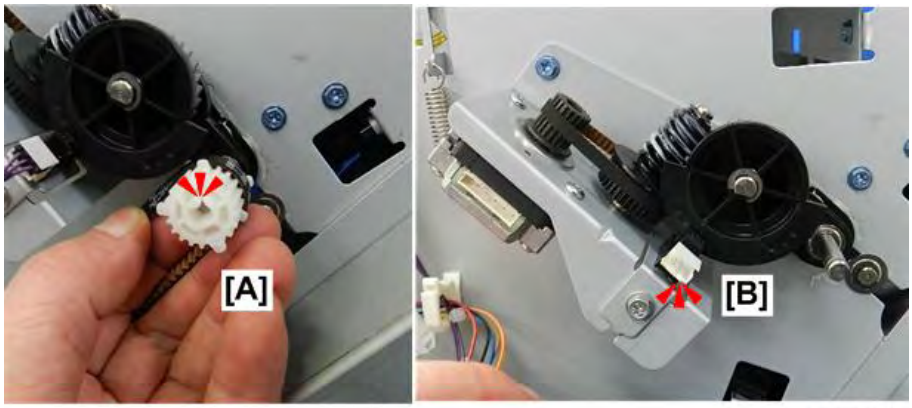
- Rear upper cover page 15
- Rear lower cover page 15
- Main board page 136

Pre-stack Release Motor



d7340113

1. Remove upper belt (x1). The white gear can be released by a tab with your fingernail.

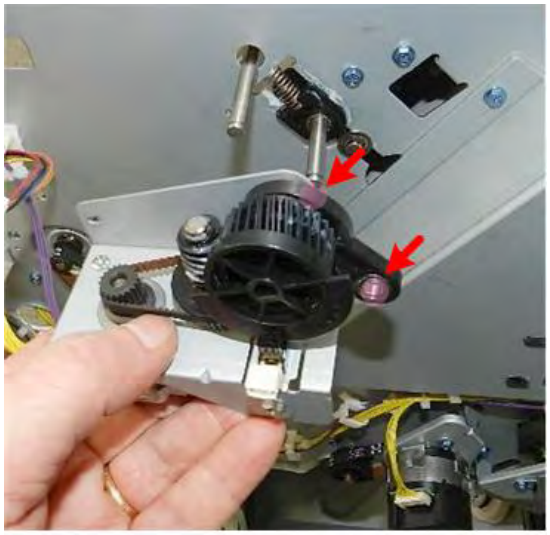


d7340114

2. Remove lower belt and gear (x1, x1). The white gear can be released by a tab with your fingernail.

d7340115

3. Remove e-ring (x1).



d7340117

4. Slowly, remove bracket and cam follower. Be careful to prevent the bushing and bearing of the cam follower from falling.

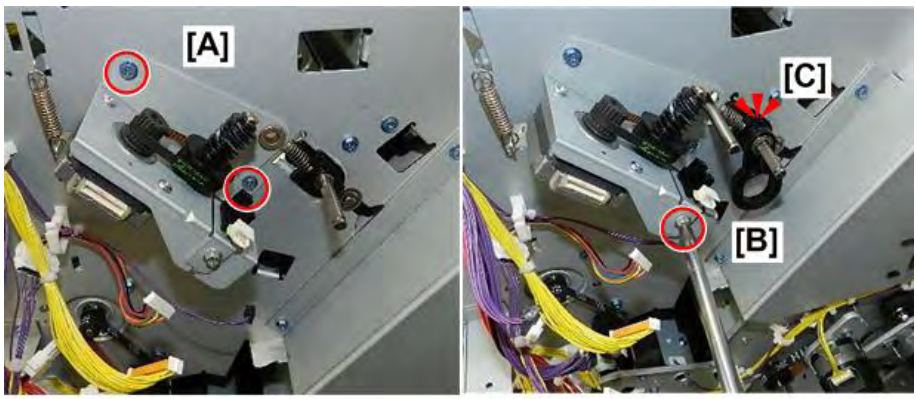
d7340118

5. Separate the bushing and cam follower from the bracket.

d7340119

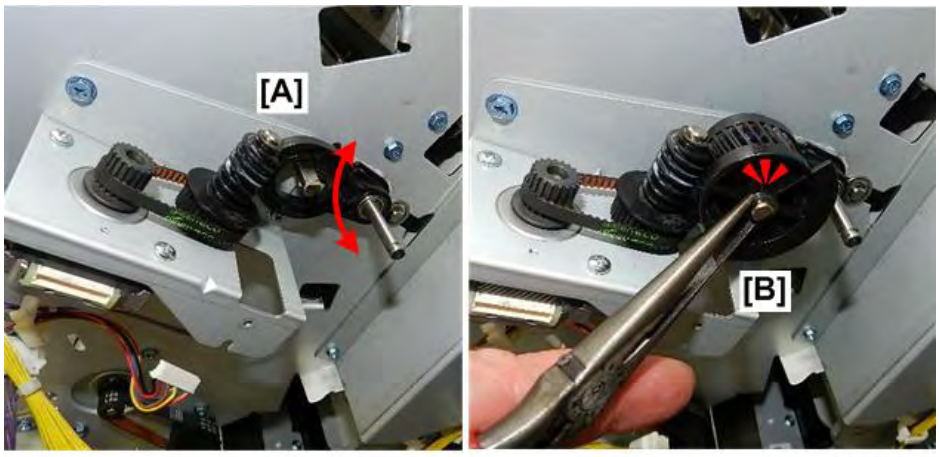
6. Separate motor and bracket (x2).

Re-installation



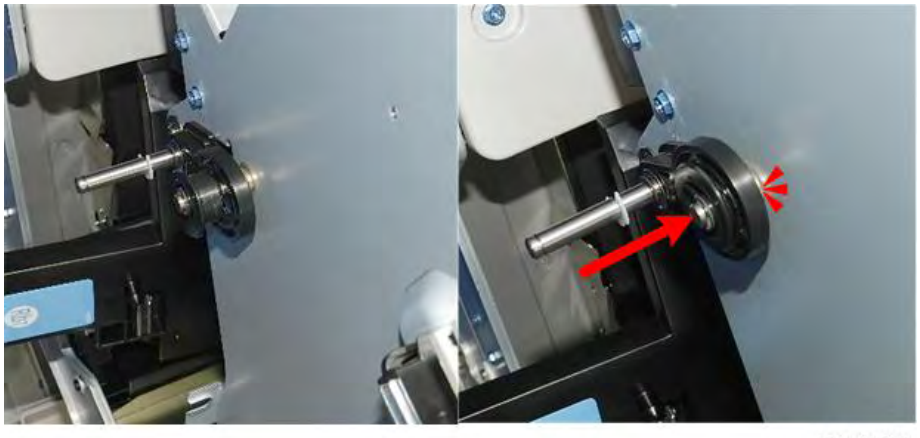
d7340120

1. Attach bracket [A] (x2).
2. Remove sensor bracket (with sensor attached) (x1).



d7340121

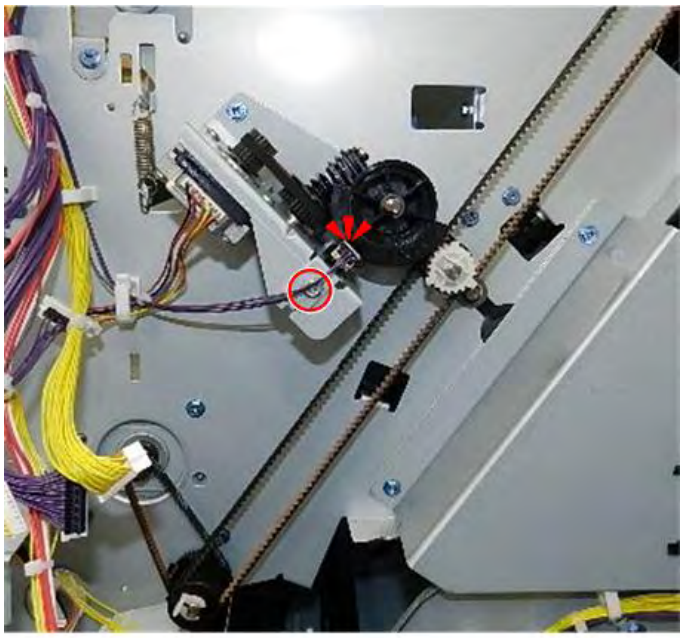
3. Set cam follower [A]. Make sure that it swings freely up and down.
4. Set the gear (x1).



d7340122

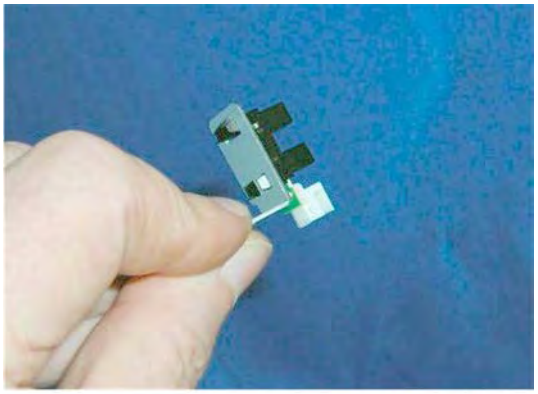
5. If the e-ring is difficult to set, check the cam follower at the front, and make sure that it and its bushing are flat and snug against the front frame.
6. You may need to keep pressure on the shaft so it does not slip while attaching the e-ring at the rear.

Pre-stack Roller HP Sensor



d7340123

1. Disconnect sensor harness (x1)
2. Remove sensor bracket (x1)



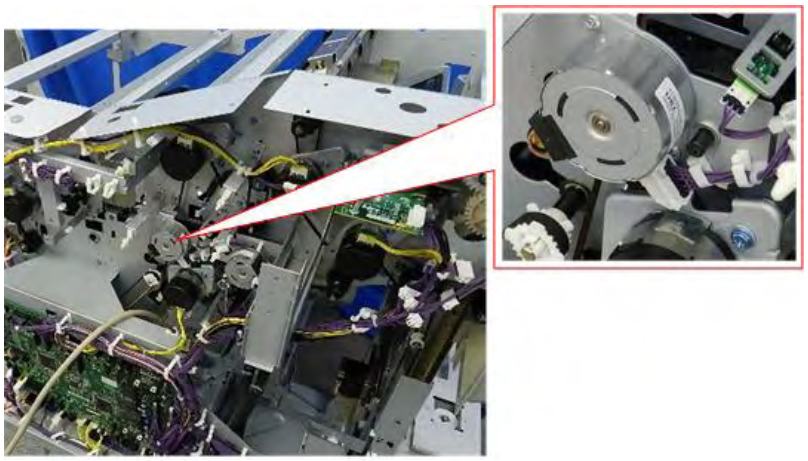
d434r252

3. Sensor (x4)

1.6 CORNER STAPLER UNIT

1.6.1 CORNER STAPLER UNIT ENTRANCE

Stapler JG Motor



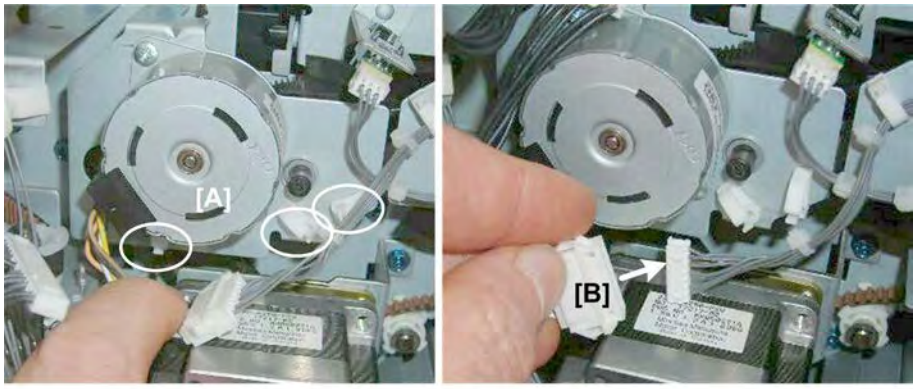
d7340124

The stapler junction gate motor is behind the punch unit PCB.

Preparation

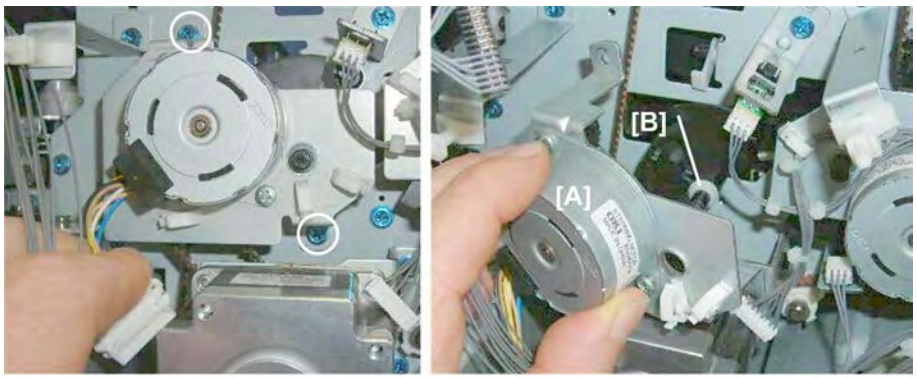
Remove:

- Rear upper cover page 15
- Punch unit PCB page 138



d434r254

1. Open the harness clamps of the motor [A] (x3)
2. Disconnect the motor at [B] (x1)



d434r255

3. Remove motor bracket [A] (x2)
   - Slowly, pull the bracket away.
   - Make sure the Teflon collar [B] does not fall off the end of the junction gate shaft. Remove it so that it does not accidentally slip off the end of the shaft.

Stapler JG HP Sensor

Preparation

Remove:

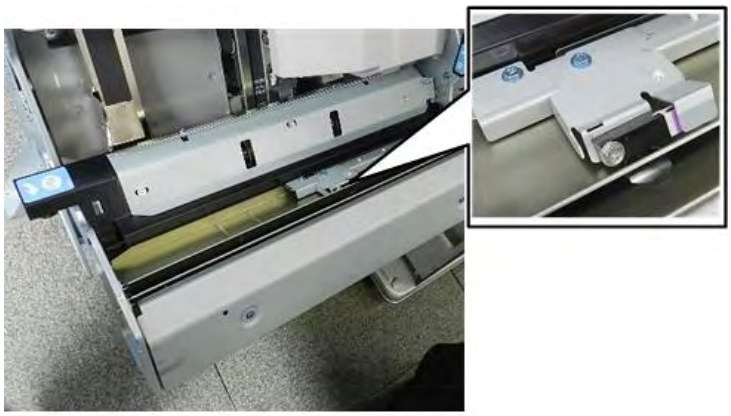
- Rear upper cover page 15
- Punch unit PCB page 138

d434r256

1. Remove sensor bracket [A] (x1, x).
2. Sensor (x5).

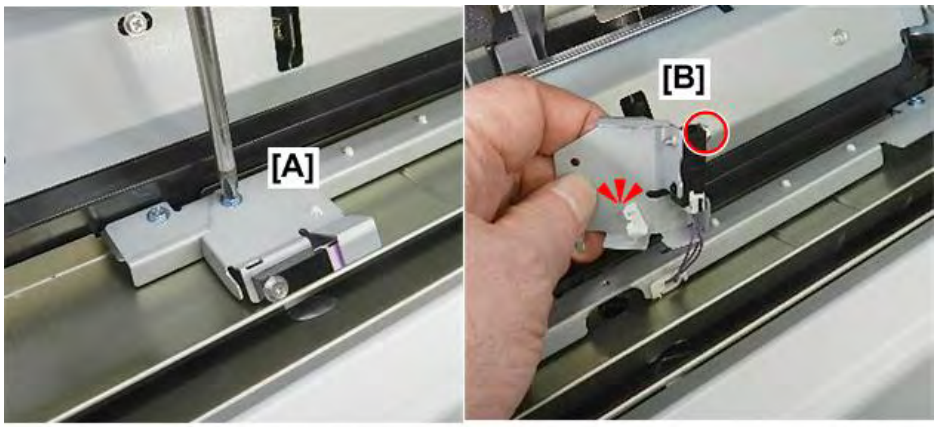
Stapling Tray Entrance Sensor

Preparation



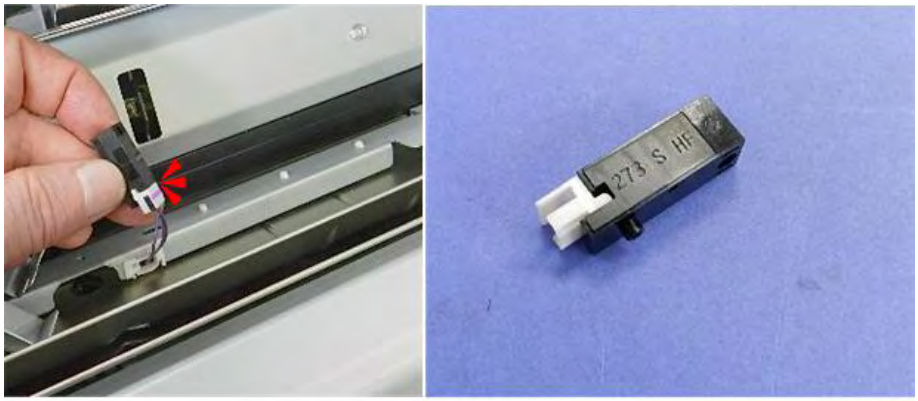
d7340125

1. Pull out the stack/staple unit.



d7340126

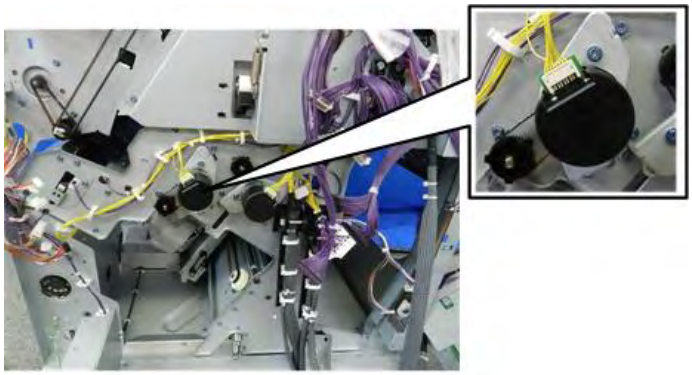
2. Disconnect bracket [A] (x1).
3. Disconnect harness, sensor (x1, x1).



d7340127

4. Remove sensor (x1).

Stapling Tray Entrance Motor



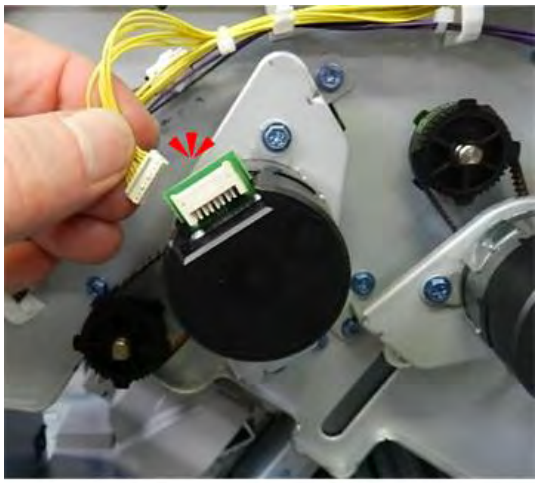
d7340128

The stapling tray entrance motor is on the back of the stack/staple unit.

Preparation

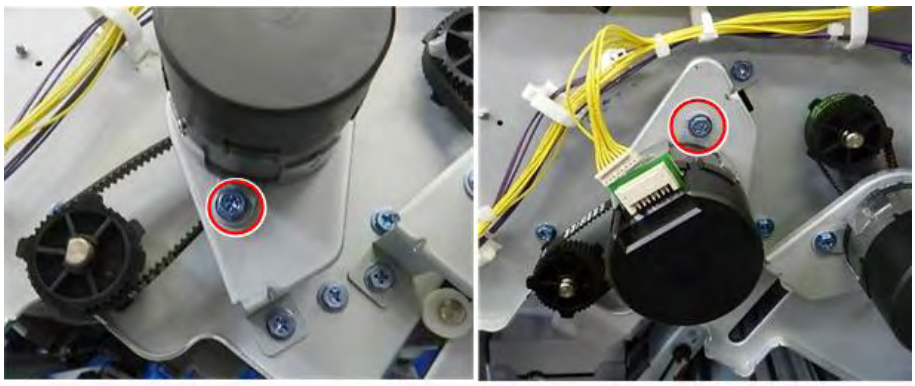
Remove:

- Rear upper cover page 15
- Rear lower cover page 15
- Main board page 136



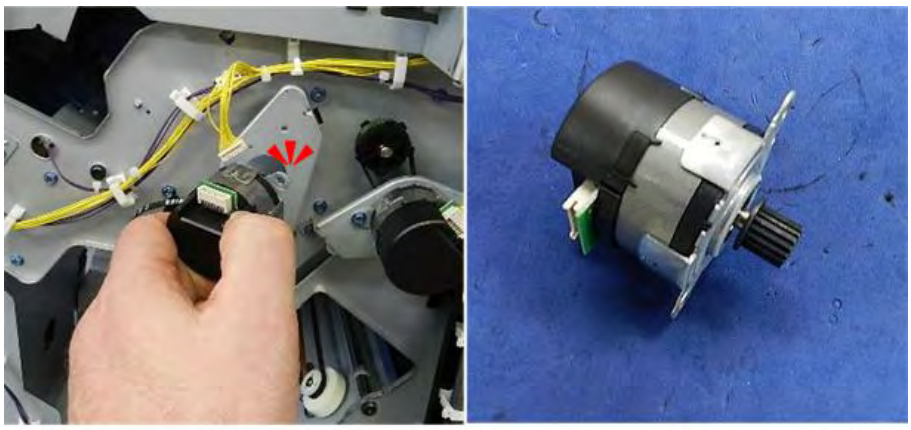
d7340129

1. Disconnect the motor (x1).



d7340130

2. Disconnect motor bracket (x2).

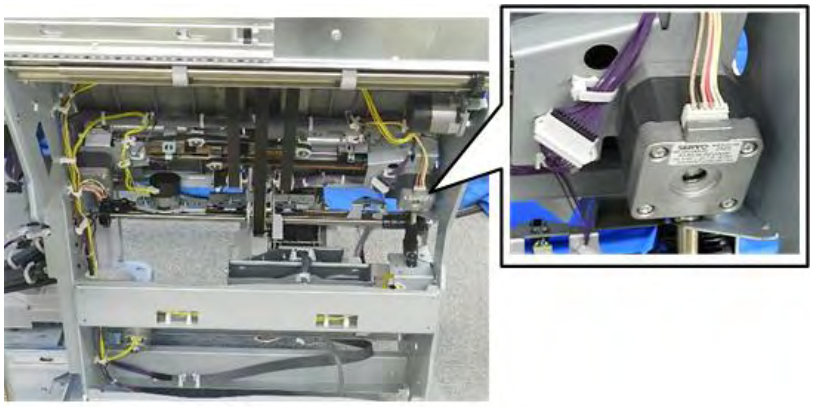


d7340131

3. Remove motor (x1).

1.6.2 CORNER STAPLER SIDE-TO-SIDE JOGGING

Front Jogger Fence Motor

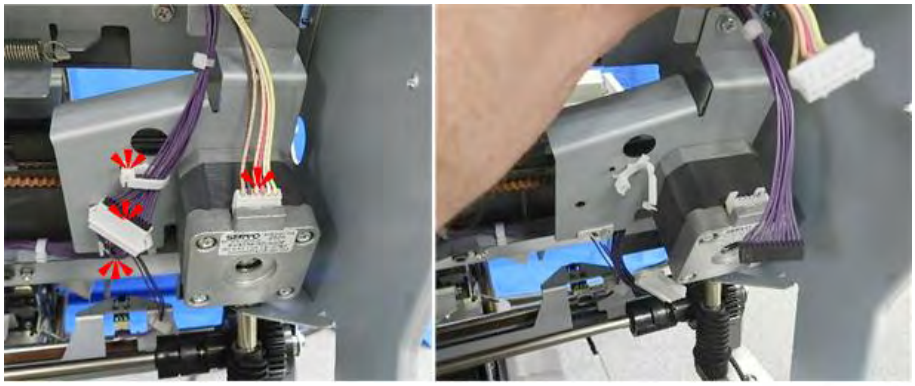


d7340132

The front jogger fence motor is behind the front plate of the stack/staple unit.

Preparation

- Remove booklet unit page 28

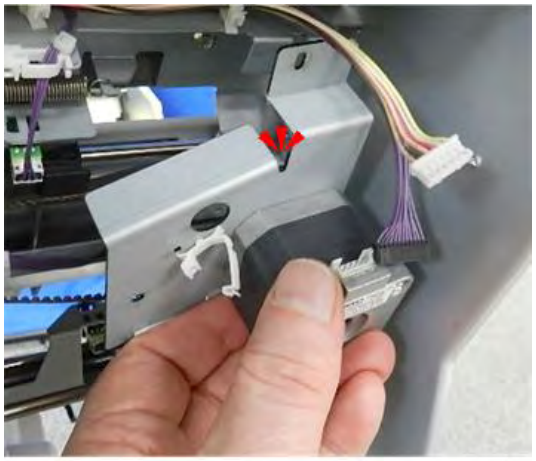


d7340133

1. Disconnect bracket and motor (x2, x2).

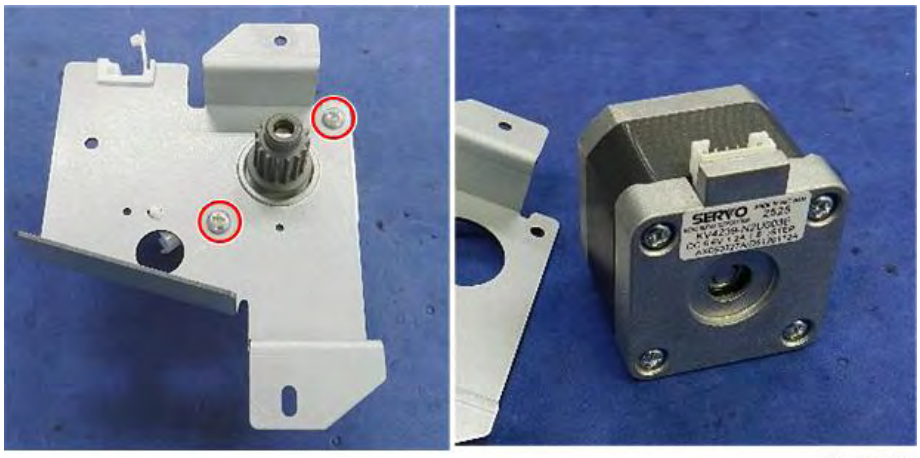
d7340134

2. Disconnect bracket (x2).



d7340135

3. Remove bracket (with motor attached) (x1).



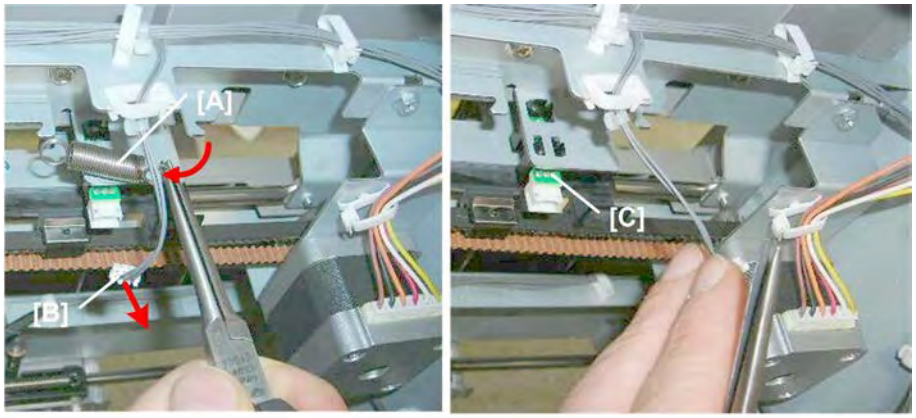
d7340136

4. Separate motor and bracket (x2).

Jogger Fence HP Sensor (Front)

Preparation

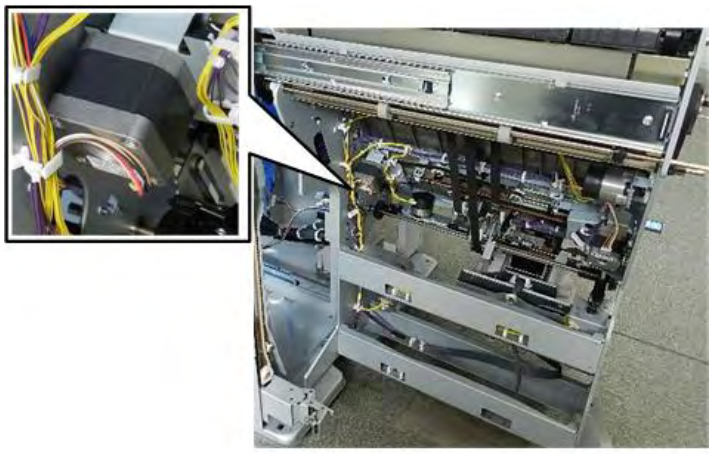
- Remove booklet unit page 28



d434r271

1. Disconnect:
   [A] x1
   [B] x1
   [C] x5

Rear Jogger Fence Motor

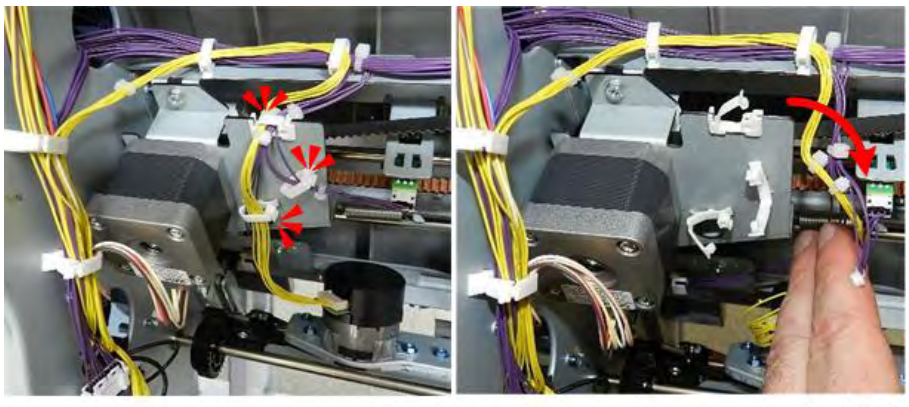


d7340137

The rear jogger fence motor is mounted on the rear plate of the stack/staple unit.

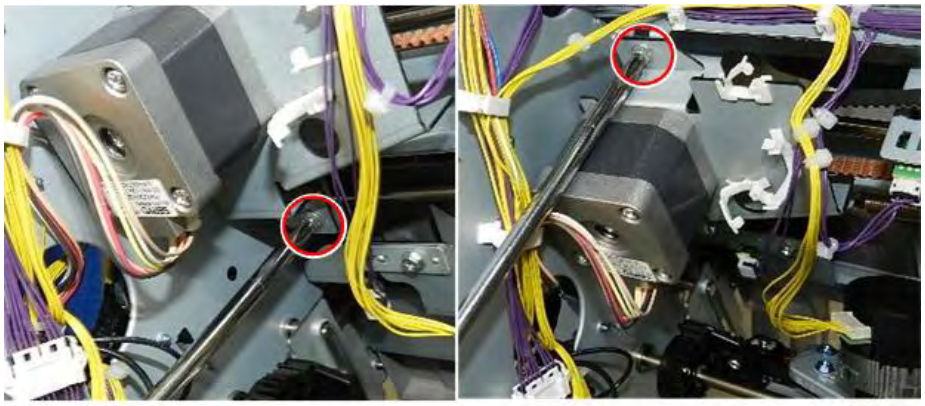
Preparation

- Remove booklet unit page 28



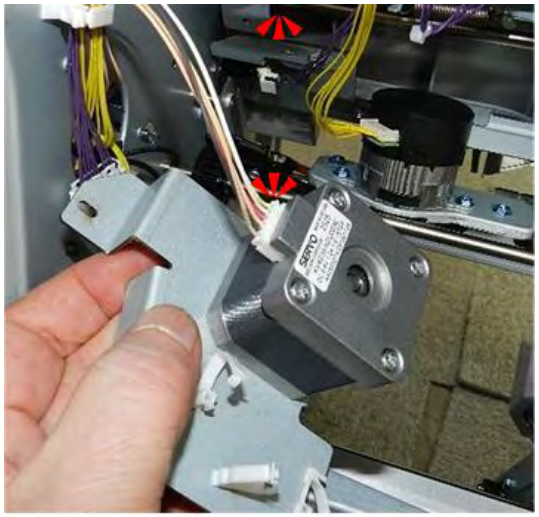
d7340138

1. Move the harnesses (x3).



d7340139

2. Disconnect bracket (x2).



d7340140

3. Remove bracket (with motor attached), and then disconnect motor (x1, x1).

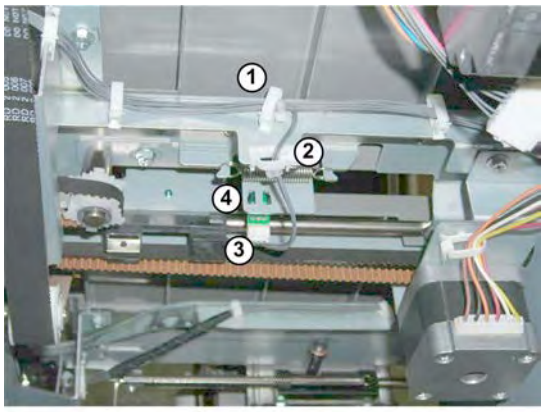
d7340141

4. Separate motor and bracket (x2).

Jogger Fence HP Sensor (Rear)

Preparation

- Remove booklet unit page 28

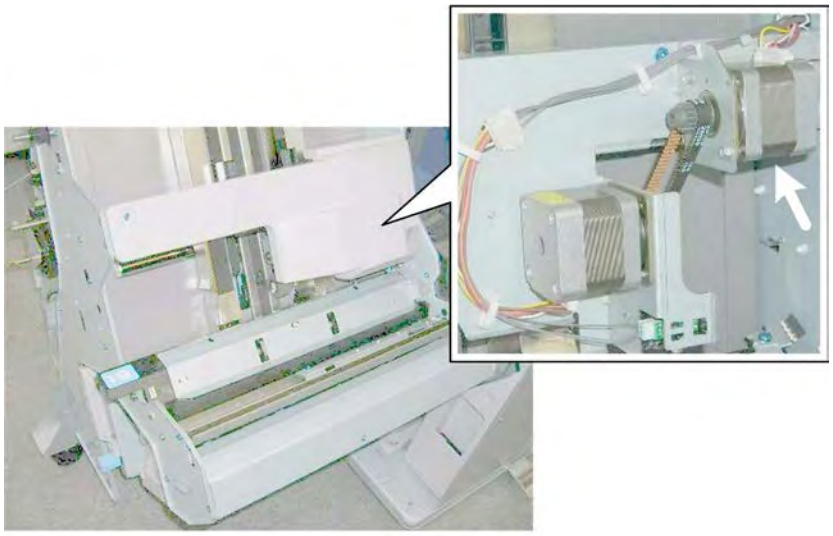


d434r276a

1. Disconnect and remove the sensor:
   - ① x1
   - ② x1
   - ③ x1
   - ④ x5

1.6.3 CORNER STAPLING BOTTOM, TOP JOGGING

Positioning Roller Rotation Motor

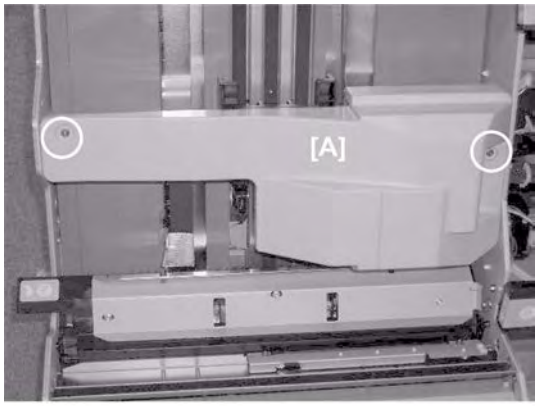


d434r277

The positioning roller rotation motor is under the motor cover on the right side of the stack/staple unit.

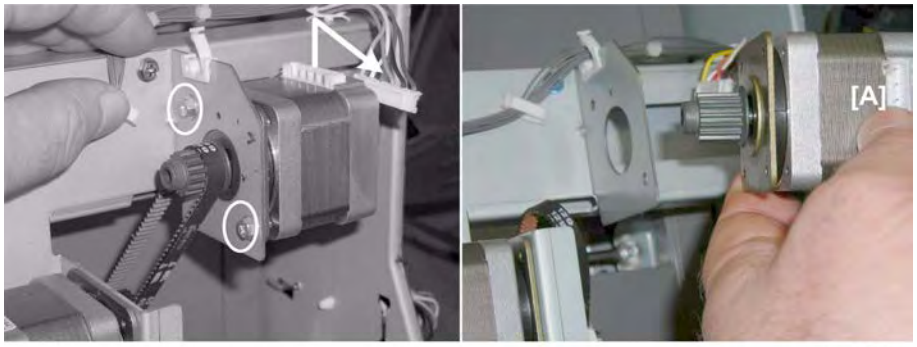
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12.**



d434r278

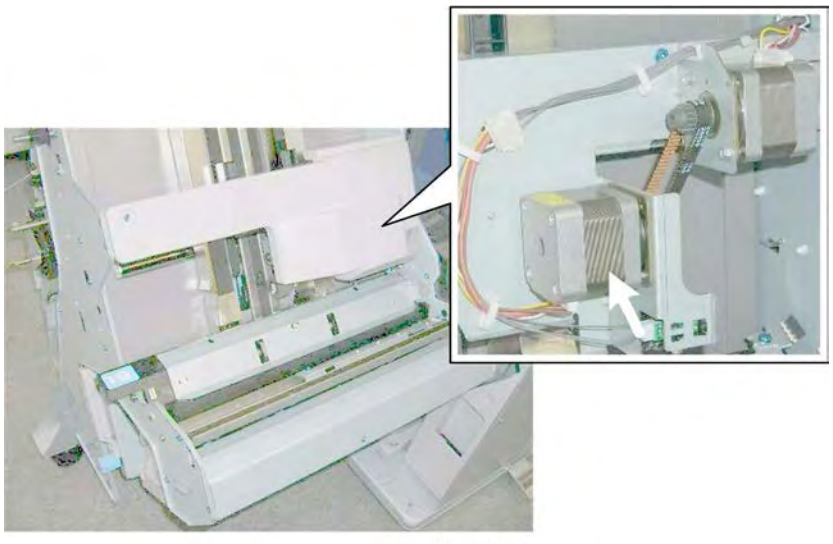
1. Remove motor cover [A] (x2)



d434r279

2. Remove motor [A] (x1, x1, x2)

Positioning Roller Motor

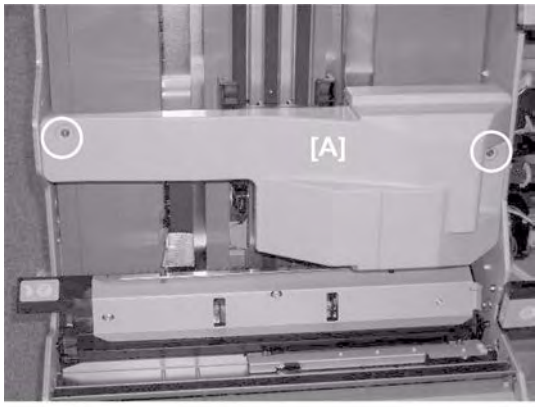


d434r280

The positioning roller motor is under the motor cover on the right side of the stack/staple unit.

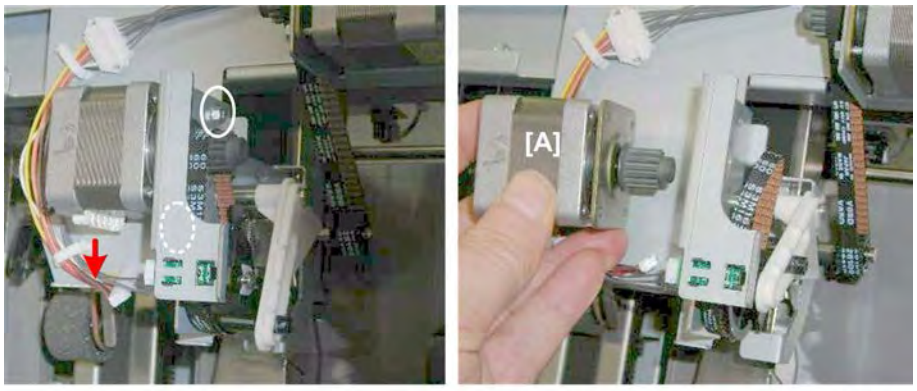
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12.**
- Right panel page 24



d434r281

1. Remove motor cover [A] (x2)



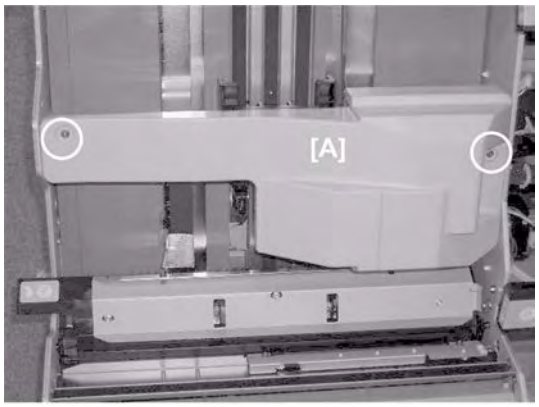
d434r282

2. Remove motor [A] (x1, x2, x1)

Positioning Roller HP Sensor

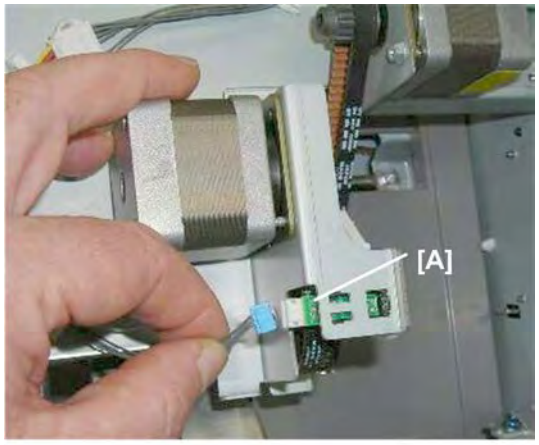
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12.**



d434r283

1. Remove motor cover [A] (x2).



d434r284

2. Remove sensor [A] (x1, x5)

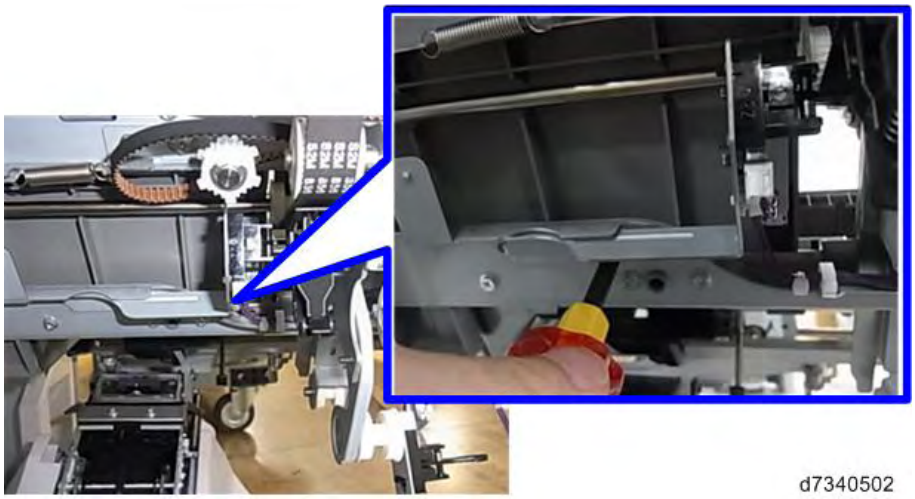
Leading Edge Stopper HP Sensor, Staple Tray Paper Sensor

Preparation

- Remove booklet unit page 28

Important

- The Leading edge stopper HP sensor shares the same bracket with the stack feed-out belt HP sensor. Use a marker to mark one of the harnesses to avoid incorrect connection at re-installation.



d7340502

1. Disconnect bracket (x1, x1).

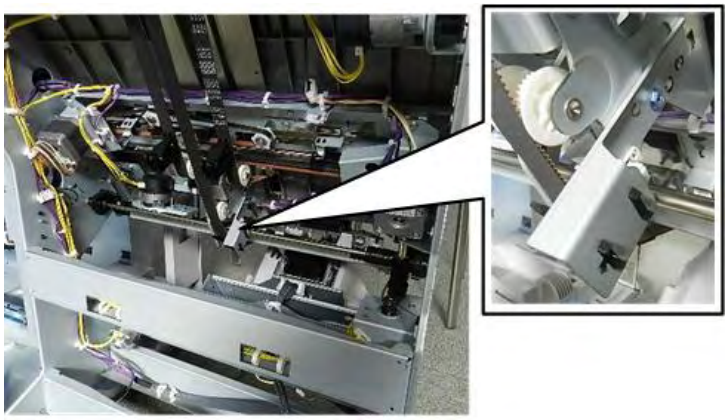
d7340503

2. Remove leading edge stopper HP sensor ① (x1, x5).
3. Remove staple tray paper sensor ② (x1, x1, x5).

Top Fence HP Sensor

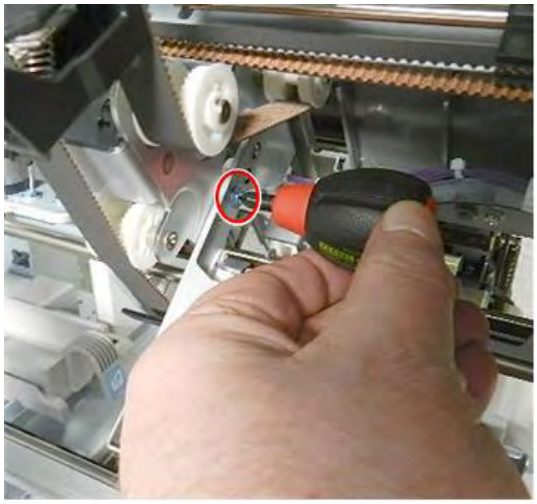
Preparation

- Remove booklet unit page 28



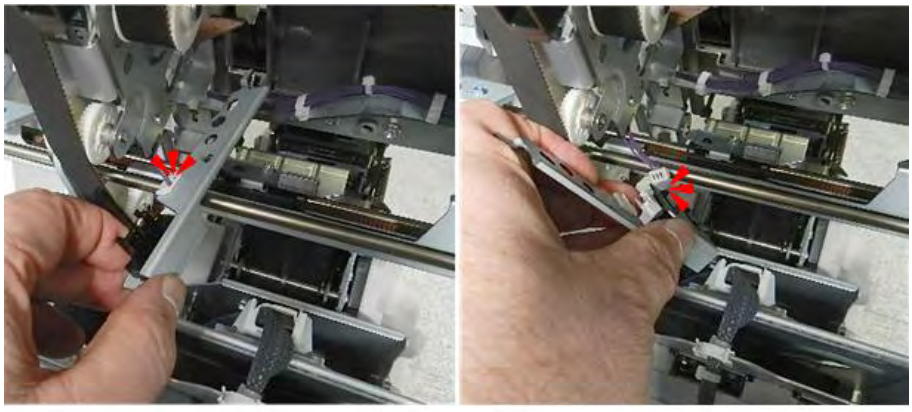
d7340142

1. This sensor is in the center of the unit.



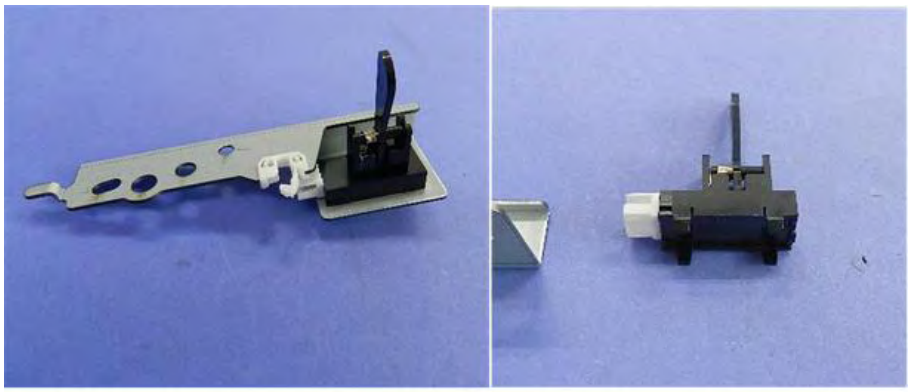
d7340145

2. Disconnect bracket (x1).



d7340143

3. Pull bracket away, and then disconnect harness (x1, x1).



d7340144

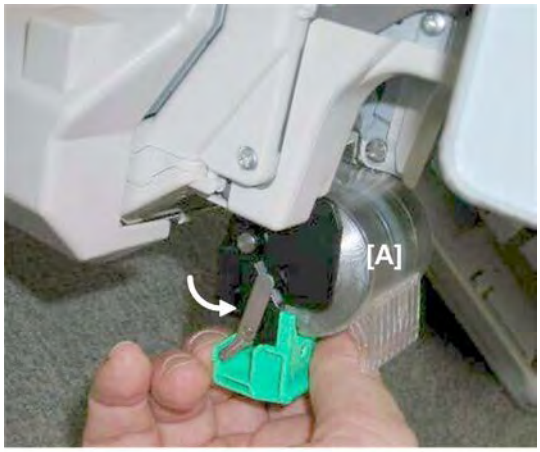
4. Separate bracket and sensor (x4).

1.6.4 CORNER STAPLING

Corner Stapler

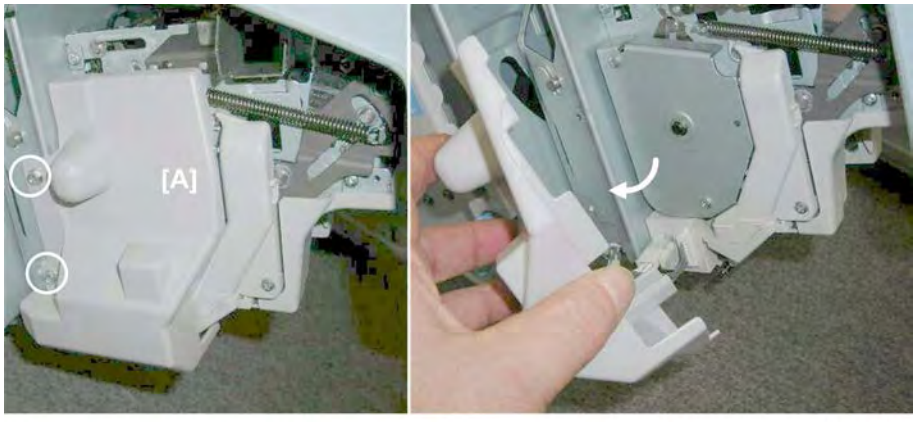
Preparation

- Pull the stack/staple unit with handle **Rb12.**



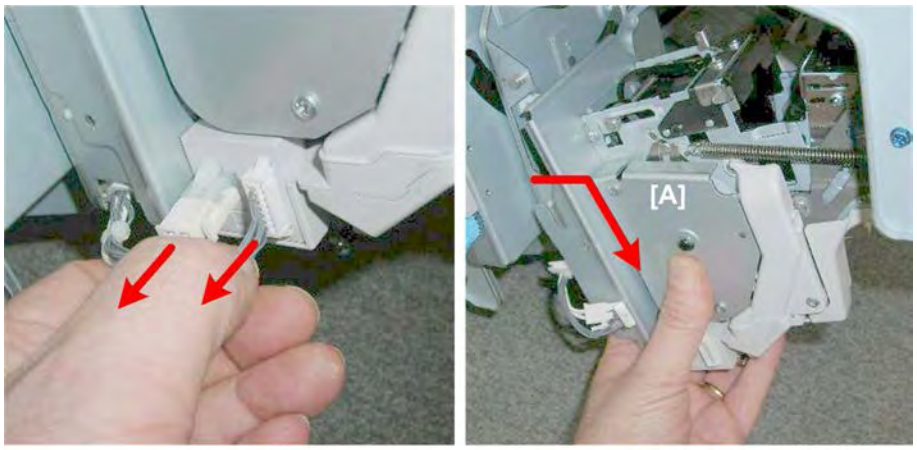
d434r316

1. Remove the stapler cartridge [A].



d434r317

2. Remove cover [A] (x2)

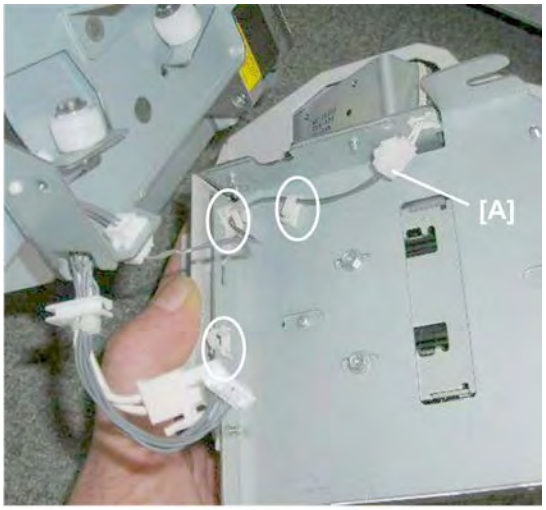


d434r318

3. Disconnect the stapler [A] (x2).
4. Lift the stapler off its posts but do NOT pull it away.

Important

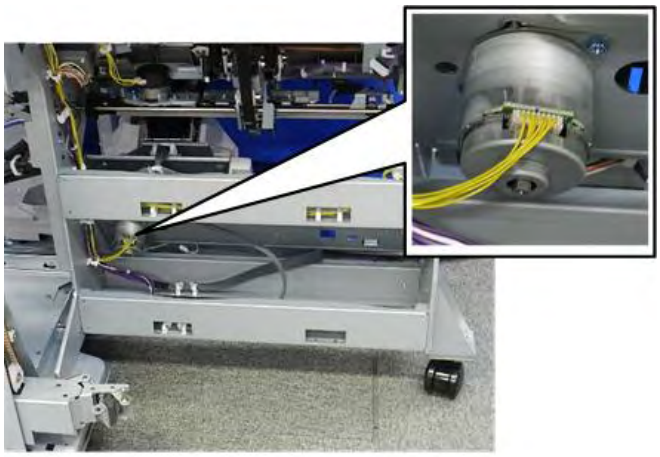
- This is still one harness connected inside the stapler.



d434r319

5. Disconnect harness [A] (x3, x1)

Corner Stapler Movement Motor

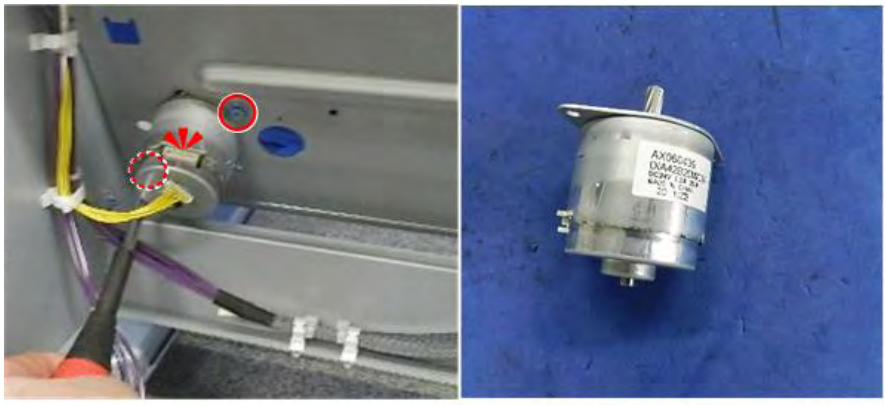


d7340146

The corner stapler movement motor is at the bottom of the corner stapler unit.

Preparation

- Remove booklet unit page 28



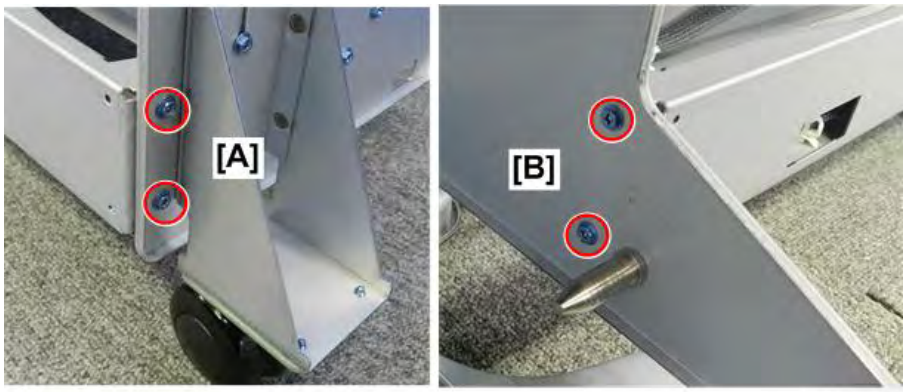
d7340149

1. Remove motor (x1, x2).

Re-installation

d7340147

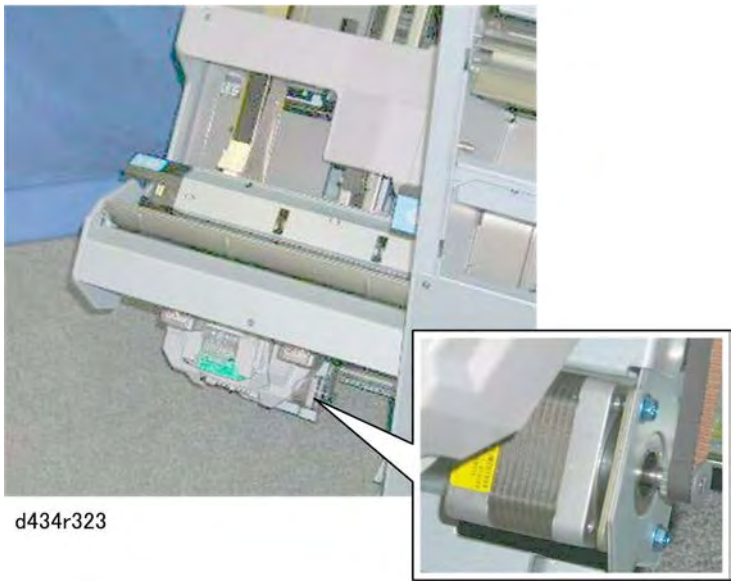
1. Re-attachment of the motor is difficult. Removal of this brace is recommended before you re-attach the motor.



d7340148

2. Disconnect and remove bracket:
   [A] Front (x2)
   [B] Rear (x2)

Stapler Rotation Motor



d434r323

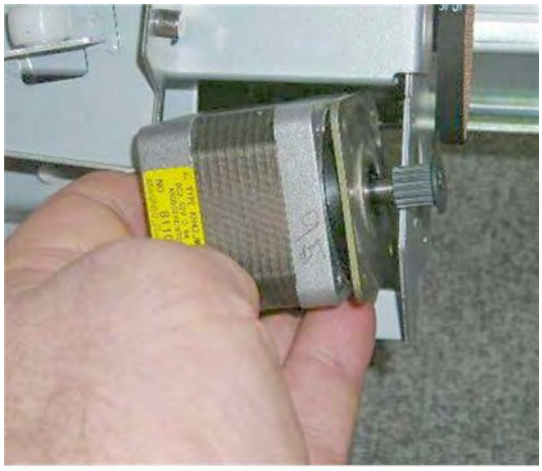
You can see the stapler rotation motor on the bottom of the corner stapler unit next to the corner stapler.

Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12.**

d434r324

1. Disconnect the motor at [A] (x1).
2. Remove the motor at [B] (x2, x1).



d434r325

Staple Trimmings Hopper Full, Hopper Set Sensor

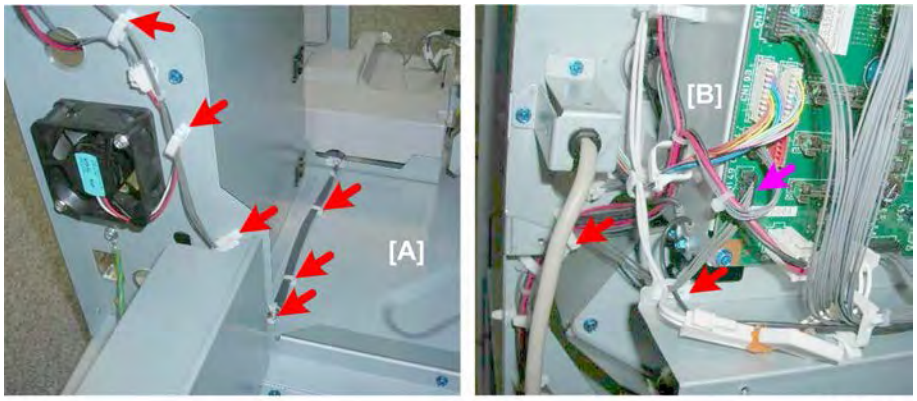
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12.**
- Rear upper cover page 15
- Rear lower cover page 15

Trimmings Hopper Unit

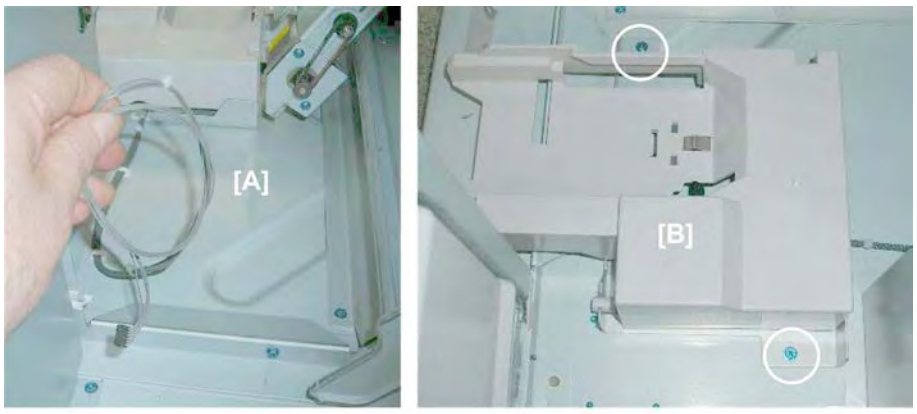
d434r326

1. Remove the staple trimmings hopper.



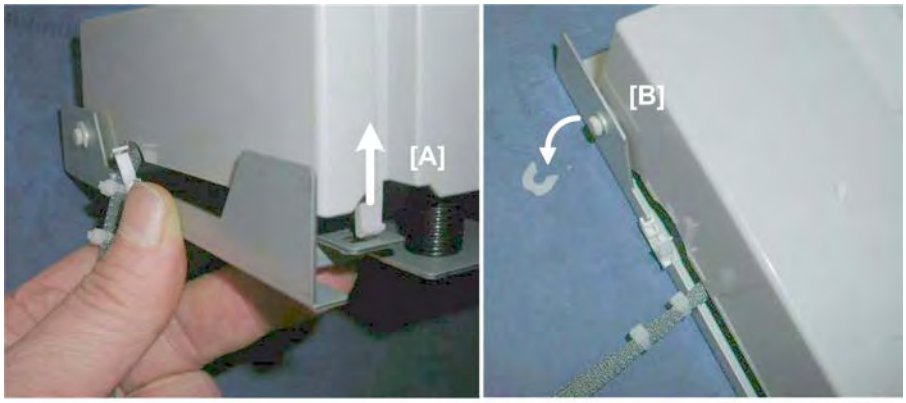
d434r327

2. Free the harness [A] and disconnect it from the main board [B] (x11, x1).



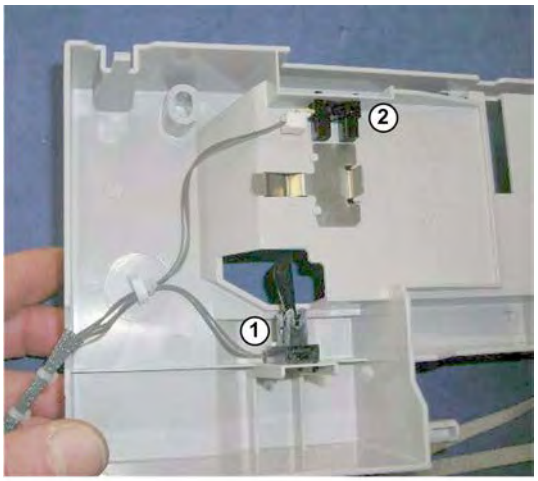
d434r328

3. Gather the disconnected harness [A].
4. Disconnect the trimmings collection unit [B] (x2).



d434r329

5. Disconnect tab [A] (Tab x1, x2).
6. Release hinge shaft [B] (x1).
7. Open the unit.



d434r330

8. Detach:
   ① Hopper set sensor (x5)
   ② Hopper full sensor

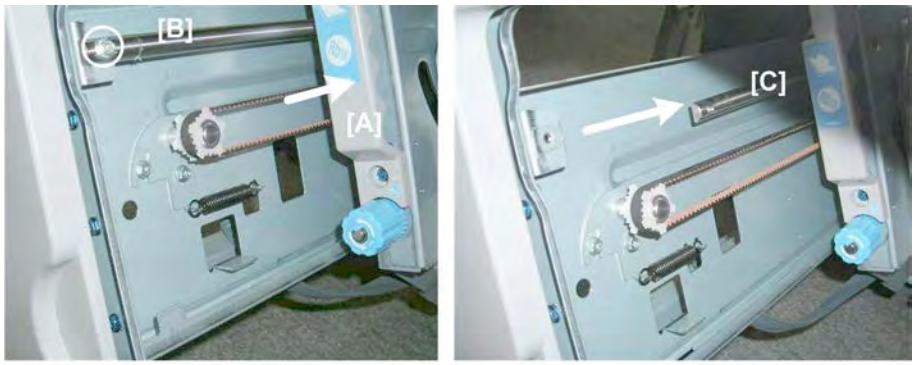
Stapler Movement Sensors

Common procedures

- Corner Stapler HP Sensor
- Corner Stapler Rotation HP Sensor (Rear)
- Corner Stapler Rotation HP Sensor (Front)

Preparation

- Pull out the stack/staple unit with handle **Rb12**.
- Remove corner stapler page 98

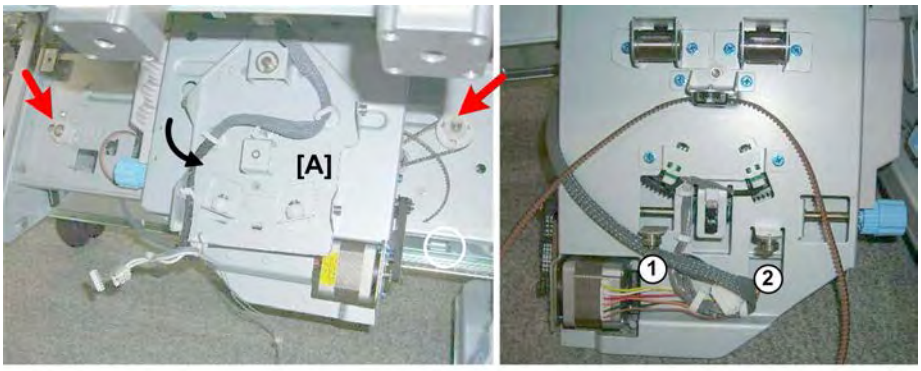


d434r331

1. Push the stapler to the rear [A].
2. Remove the screw of the stapler guide rail [B] (x1).
3. Push the guide rail [C] to the rear and remove it.

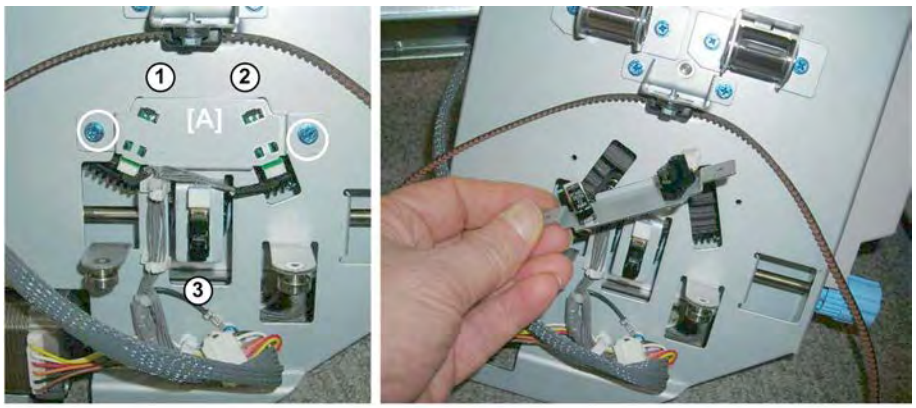
d434r332

4. Remove spring [A].
5. Loosen screw [B] (do not remove it).
6. Rotate the plate down to relieve tension on the belt.



d434r333

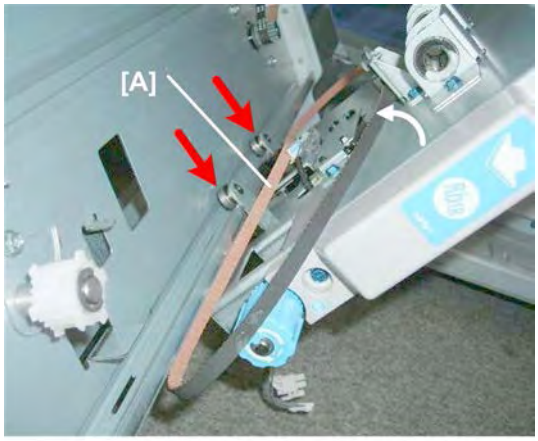
7. Disconnect the belt at the front and back.
8. Lift the stapler mount [A] off its rails and turn it toward the rear so you can see the back of the mount. The mount is on two steel rollers ① and ② that rest on the bottom rail of the corner stapler unit.



d434r334

9. Remove sensor bracket [A] (x2).
   Three sensors are on this bracket:
   ① Rotation HP sensor (rear) (x1, x5)
   ② Rotation HP sensor (front) (x1, x5)
   ③ Stapler HP sensor (x1, x5)

Re-installation



d434r335

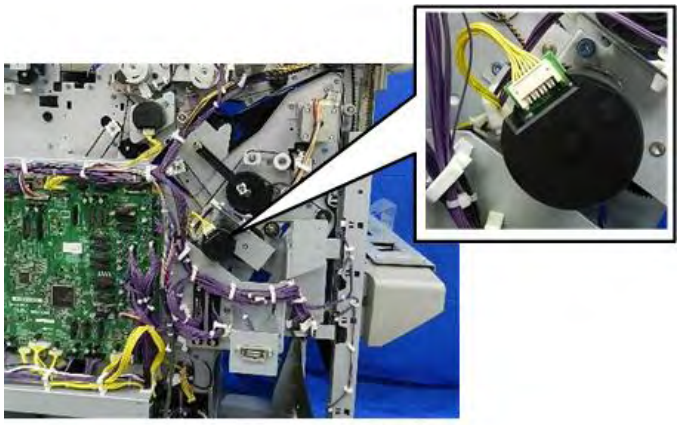
1. When you set the stapler mount on its rails, make sure the belt [A] is not tangled and above the two rollers.

1.6.5 CORNER STAPLED STACK FEED OUT

Stack Transport Motor

Preparation

- Rear upper cover page 15
- Rear lower cover page 15

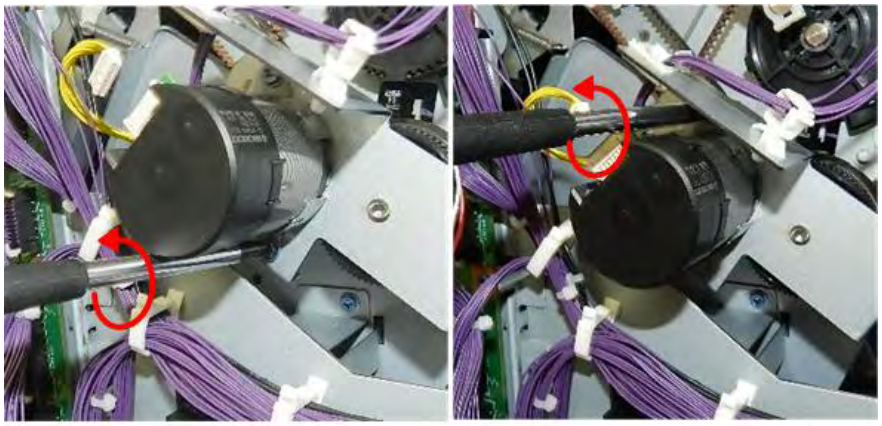


d7340150

1. The motor is located near the right edge of the main board.

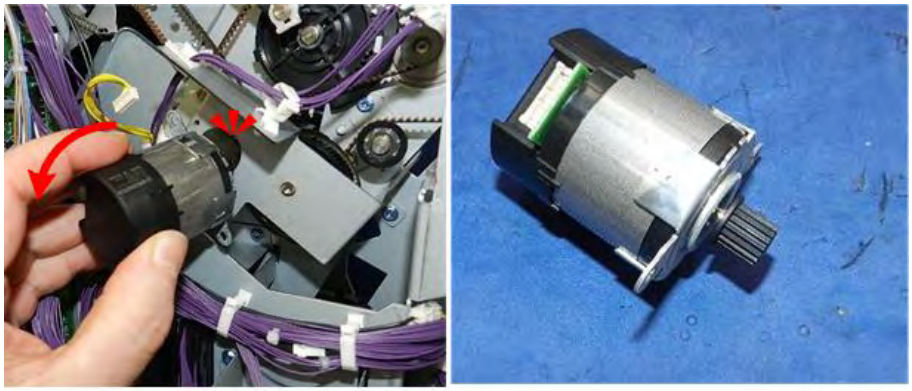
d7340151

2. Disconnect motor (x1).l



d7340152

3. Disconnect motor (x2).



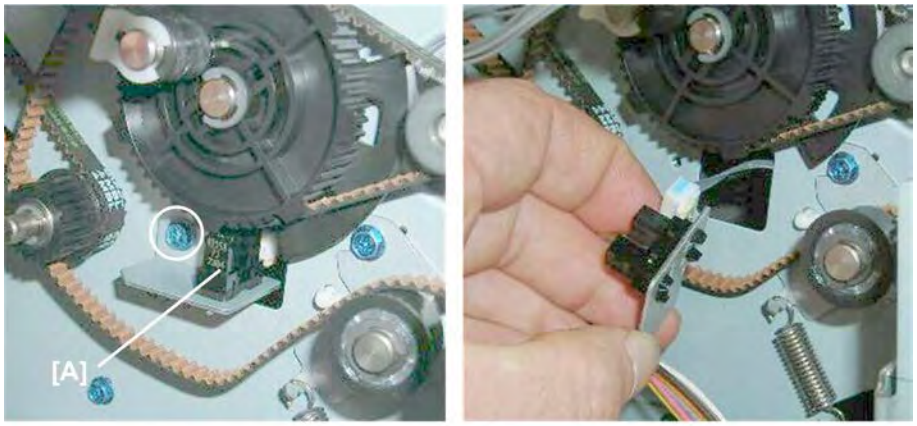
d7340153

4. Remove motor (x1).

Stack Transport Unit HP Sensor

Preparation

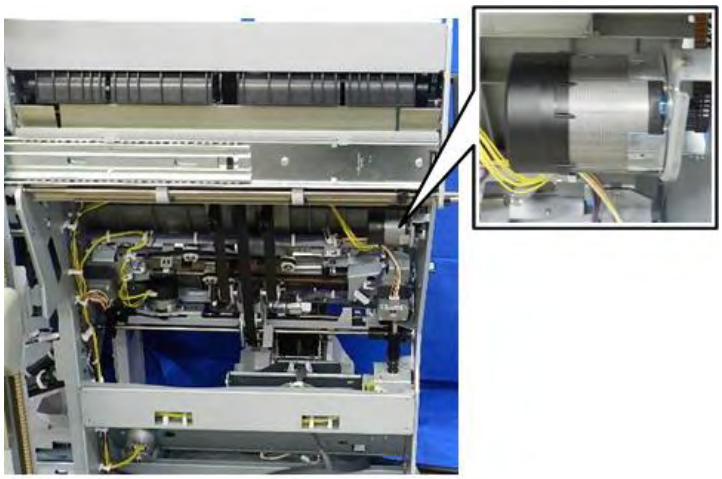
- Rear upper cover page 15
- Stack transport motor page 107



d434r336

1. Remove sensor bracket and sensor [A] (x1).
2. Remove the sensor (x1, x5)

Stack Feed-Out Belt Motor



d7340154

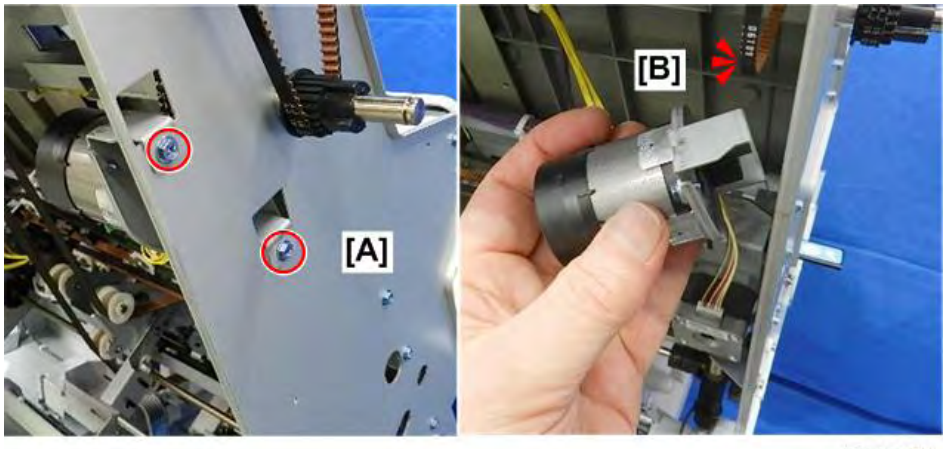
The stack feed-out belt motor is behind the front plate of the corner stack/staple unit.

Preparation

- Booklet unit page 28

d7340155

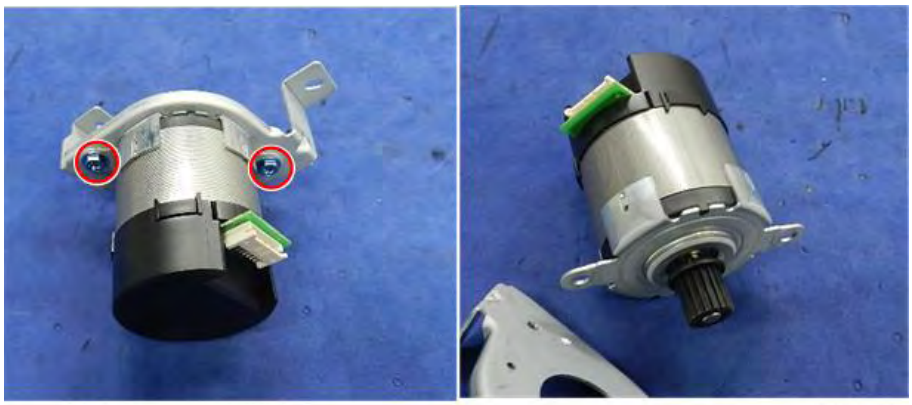
1. Disconnect motor (x1).



d7340156

2. At front [A] disconnect bracket (x2).

3. Remove bracket (with motor attached) from rear [B] (x1).



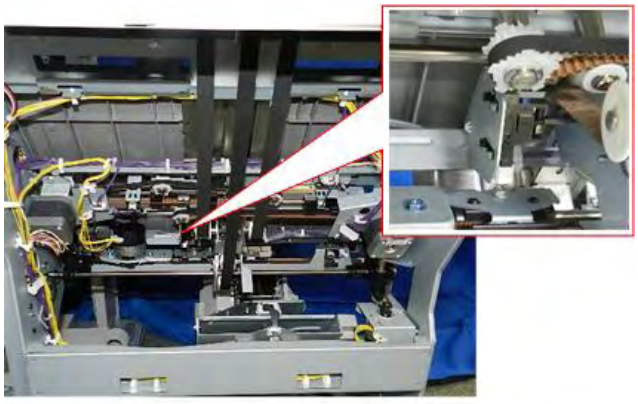
d7340157

4. Separate motor and bracket (x2).

Stack Feed-Out Belt HP Sensor

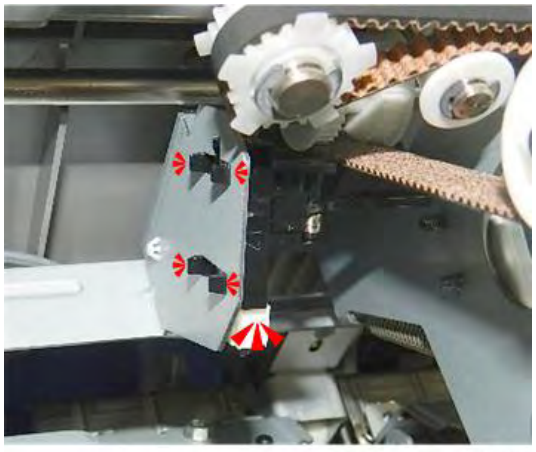
Preparation

- Remove booklet unit page 28



d7340158

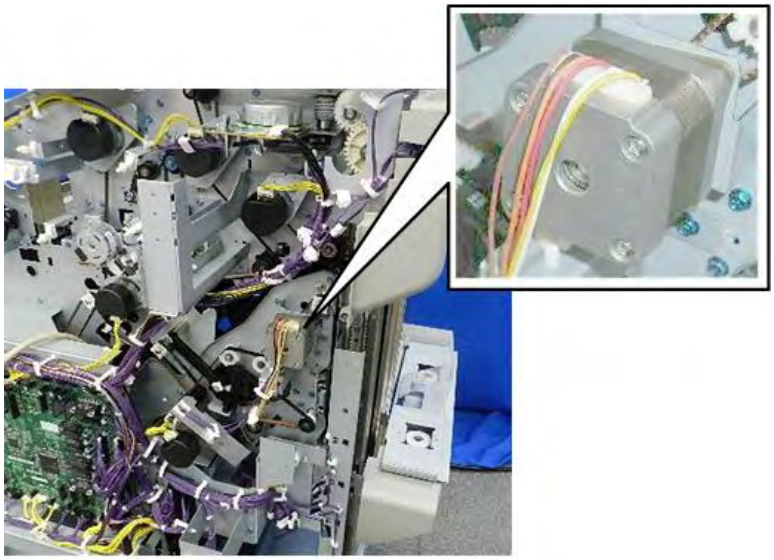
1. The sensor is to the left of the three belts.



d7340159

2. Disconnect and remove sensor (x4, x1).

Stack Junction Gate Motor

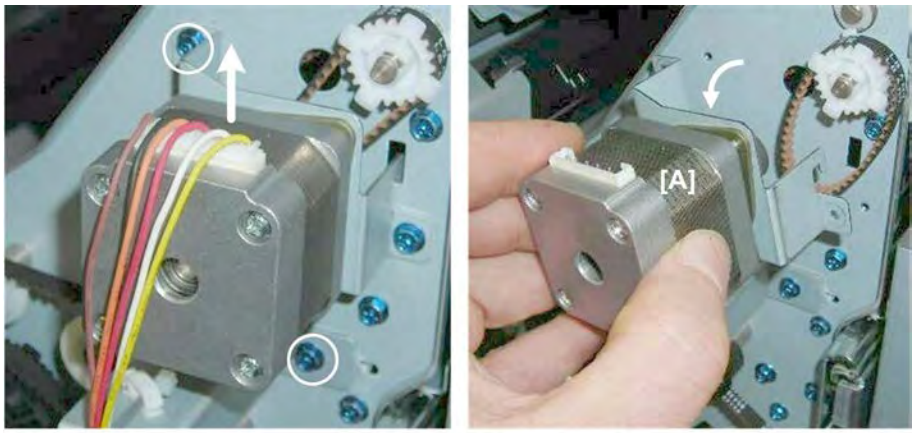


d7340160

The stack junction gate motor is on the back of the finisher.

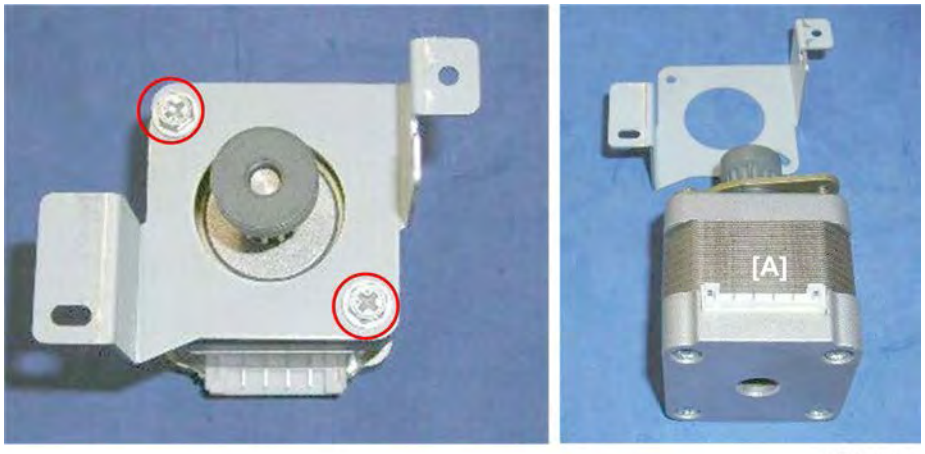
Preparation

- Rear upper cover page 15



d434r341

1. Remove motor [A] (x1, x2).



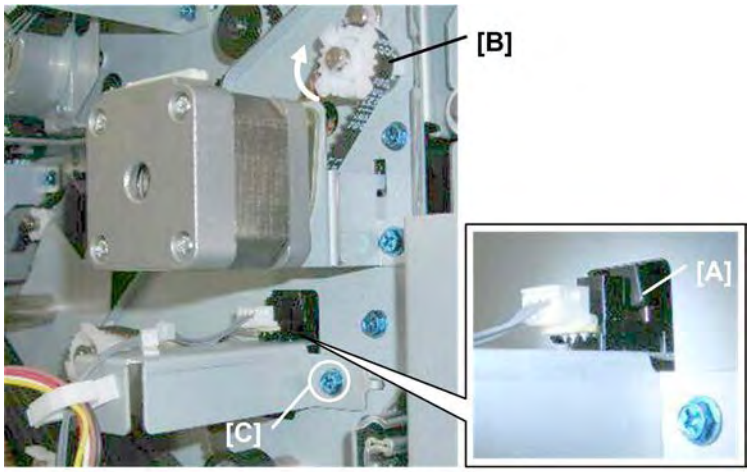
d434r342

2. Separate the bracket and motor [A] (x2).

Stack JG HP Sensor

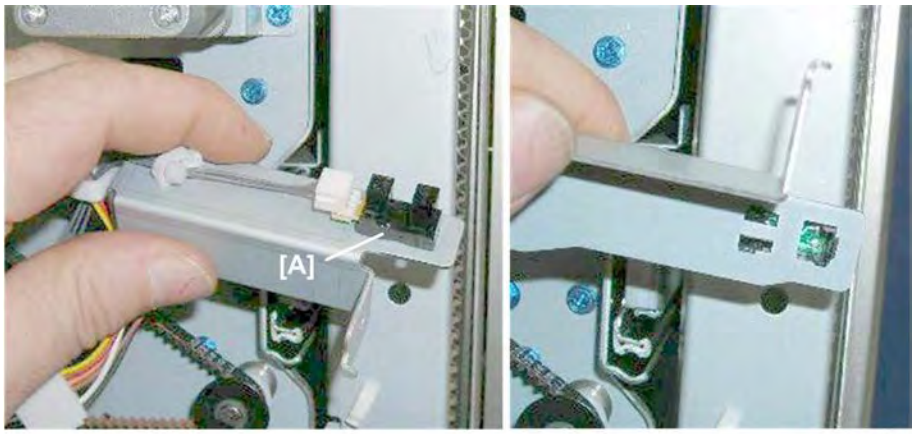
Preparation

- Rear upper cover page 15



d434r343

1. If the actuator [A] is in the gap of the sensor, rotate gear and belt [B] until the actuator is out of the gap.
2. Remove sensor bracket [C] (x1).

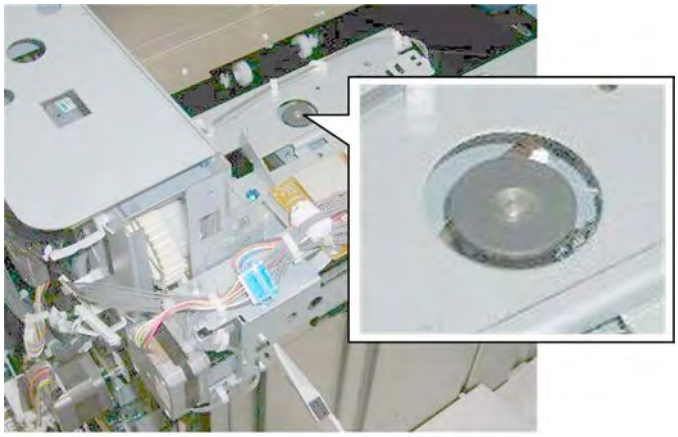


d434r344

3. Remove sensor [A] (x1, x5).

1.6.6 CORNER STAPLED STACK EXIT TO SHIFT TRAY

Exit Guide Motor

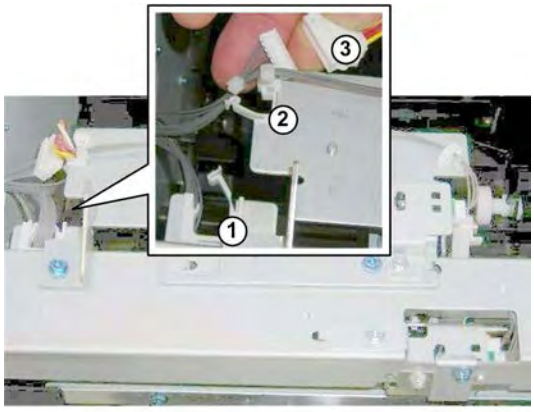


d434r345

The exit guide motor assembly is at the left rear corner of the finisher.

Preparation

- Proof tray page 19

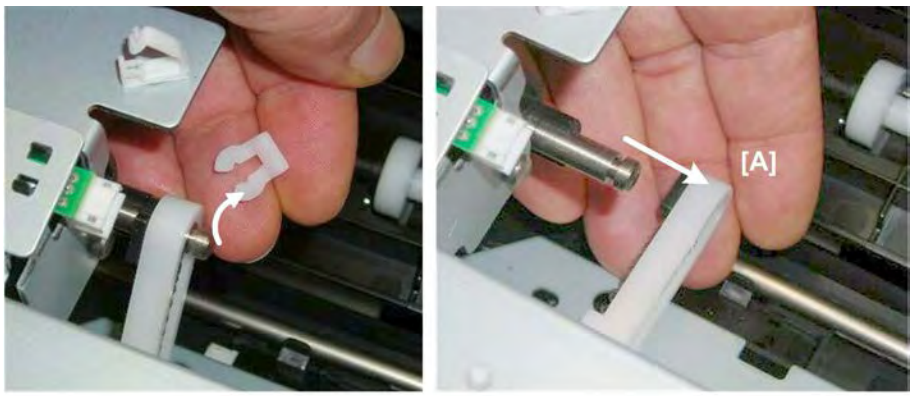


d434r346

1. Disconnect the harnesses (x2, x1).

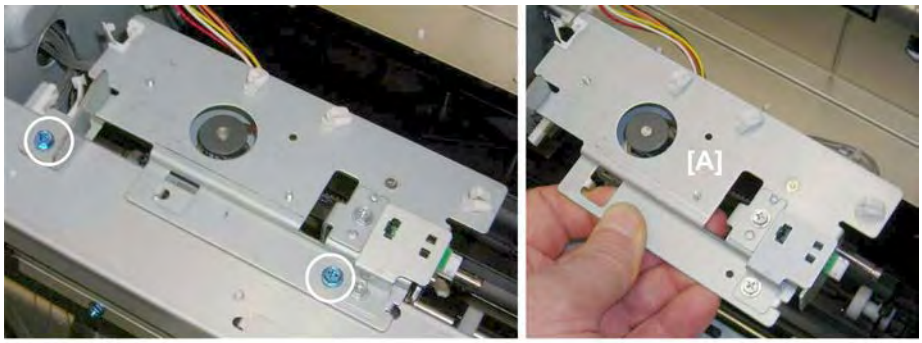
d434r347

2. Disconnect sensor harness [A] (x3, x1)



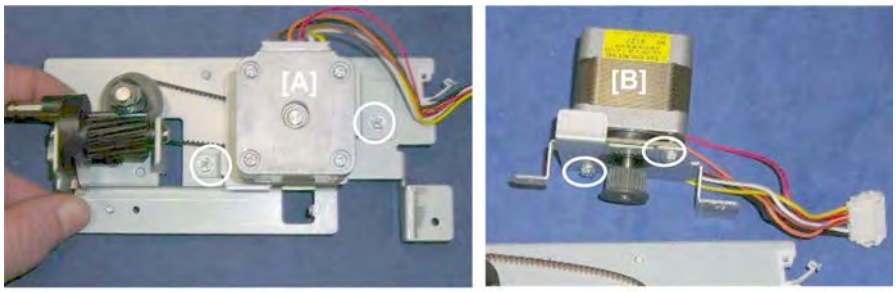
d434r348

3. Disconnect and remove rocker arm [A] (x1).



d434r349

4. Remove the exit guide plate assembly [A] (x2).



d434r350

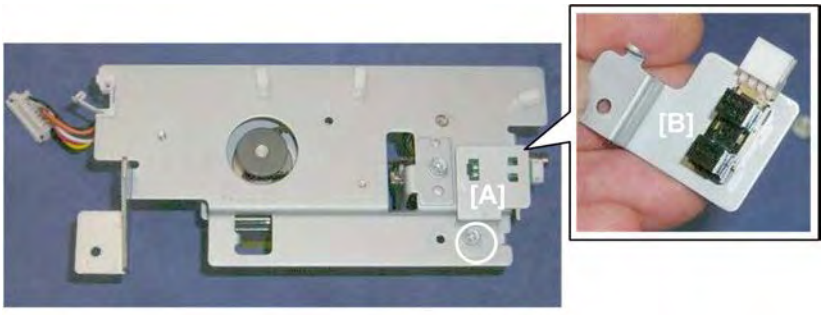
5. Disconnect motor [A] (x2, x1)
6. Separate the motor [B] and bracket (x2).

Exit Guide HP Sensor

Preparation

- Proof tray page 19

1. Remove the exit guide motor assembly (see the previous procedure)



1. Remove sensor bracket [A] (x1, x1)
2. Remove sensor [B] (x5).

1.7 BOOKLET UNIT

1.7.1 BOOKLET STAPLER

Preparation

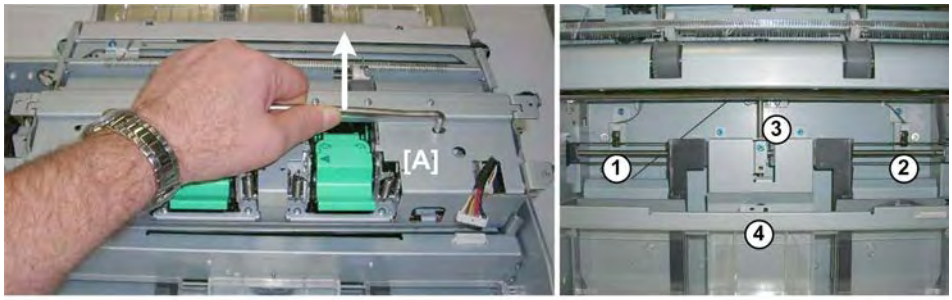
- Remove booklet unit page 28

Note

- This procedure describes removal of the booklet stapler after the booklet unit has been removed.
- Actually, the booklet stapler can be easily removed before removing the booklet unit.
- Removing the booklet stapler from the booklet stapler unit is recommended. This makes the booklet unit lighter and easier to handle.

d434r352

1. Remove cover [A] (x2).
2. Remove the stapler unit [B] (x4, x1)



d434r353

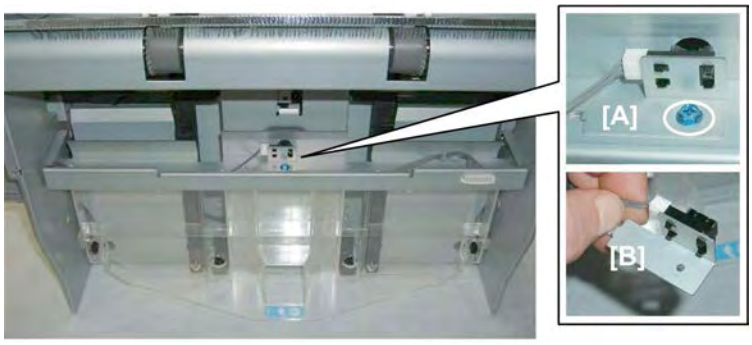
3. Lift the stapler unit [A] out with its handle.
4. Four sensors are behind the stapler unit:
   - ① Rear jogger fence HP sensor
   - ② Front jogger fence HP sensor
   - ③ Bottom fence HP sensor
   - ④ Folder unit entrance sensor

1.7.2 BOOKLET UNIT TRANSPORT, ENTRANCE

Fold Unit Entrance Sensor

Preparation

- Booklet unit page 28
- Booklet stapler page 27

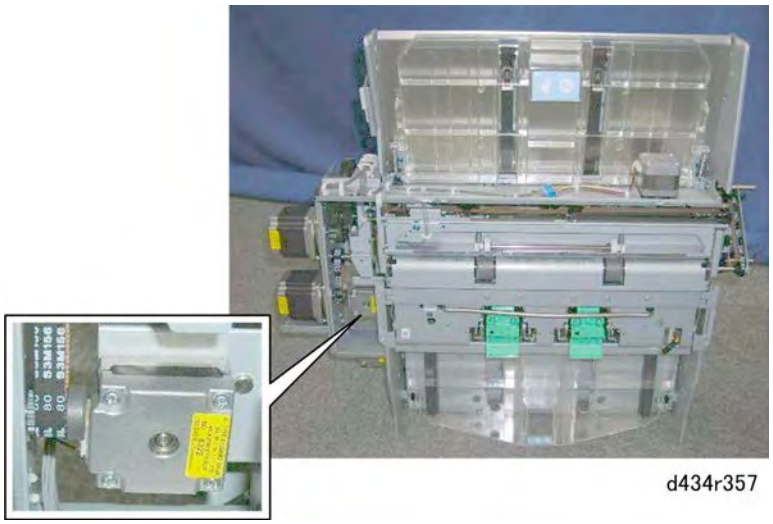


d434r354

1. Remove sensor bracket [A] (x1).
2. Remove sensor [B] (x1, x5)

1.7.3 BOOKLET SIDE-TO-SIDE JOGGING

Booklet Stapler Side Fence Motor

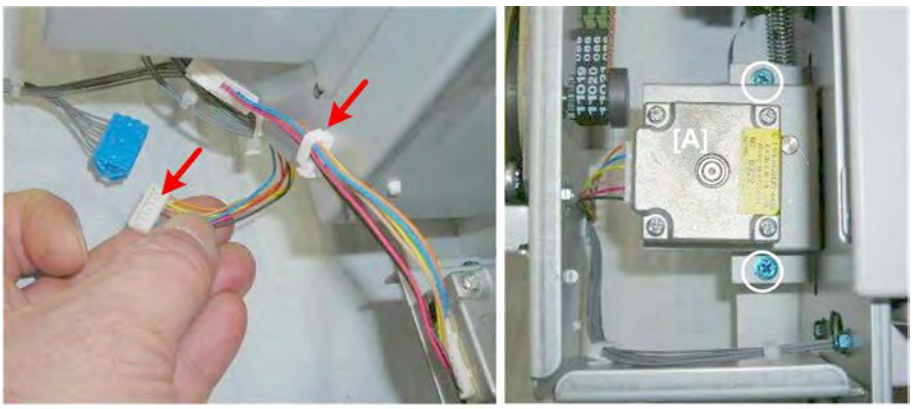


d434r357

The booklet stapler side fence motor is on the back of the booklet unit.

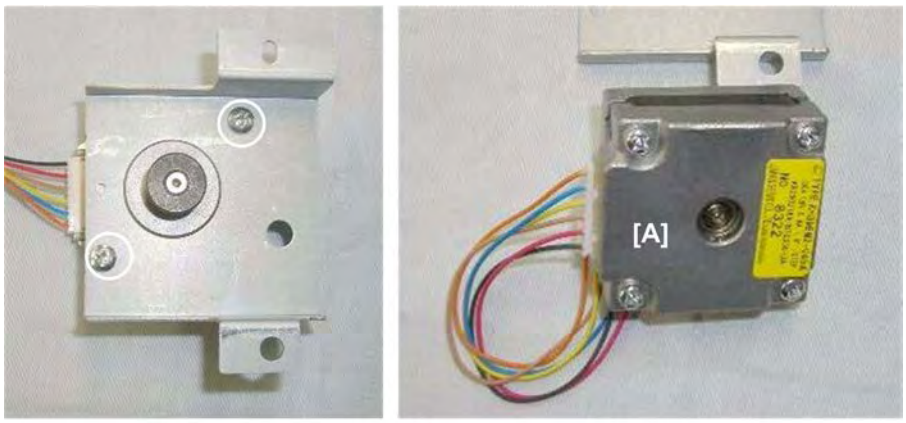
Preparation

- Booklet unit page 28



d434r358

1. Remove motor [A] (x1, x1, x2)



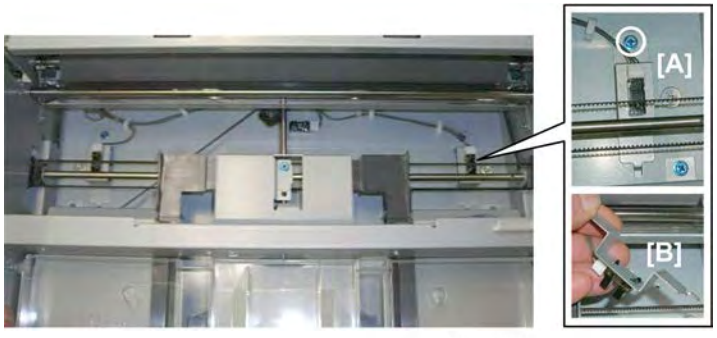
d434r359

2. Separate motor [A] from the bracket (x2).

Booklet Stapler Side Fence HP Sensor (Front)

Preparation

- Booklet unit page 28
- Booklet stapler page 27



d434r360

1. Remove:

   [A] Sensor bracket (x1)

   [B] Sensor (x1, x5)

Booklet Stapler Jogger HP Sensor (Rear)

Preparation

- Booklet unit page 28
- Booklet stapler page 27

d434r361

1. Remove:
   [A] Sensor bracket (x1)
   [B] Sensor (x1, x5)

1.7.4 BOOKLET BOTTOM, TOP JOGGING

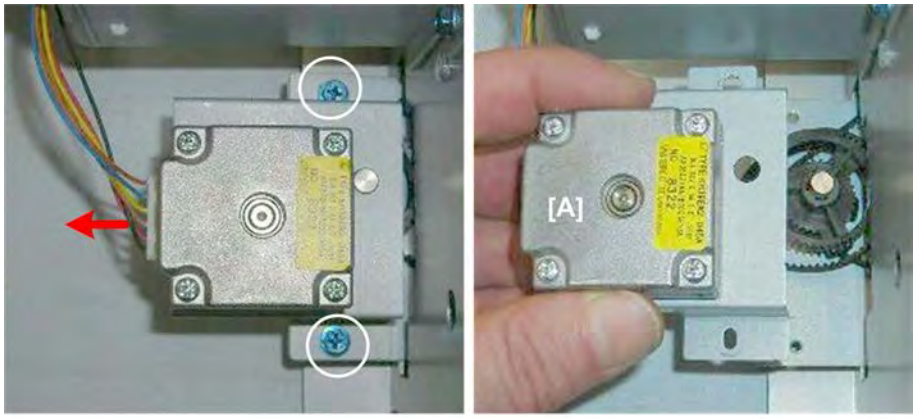
Booklet Stapler Bottom Fence Motor

d434r362

The booklet stapler bottom fence motor is on the back of the booklet unit.

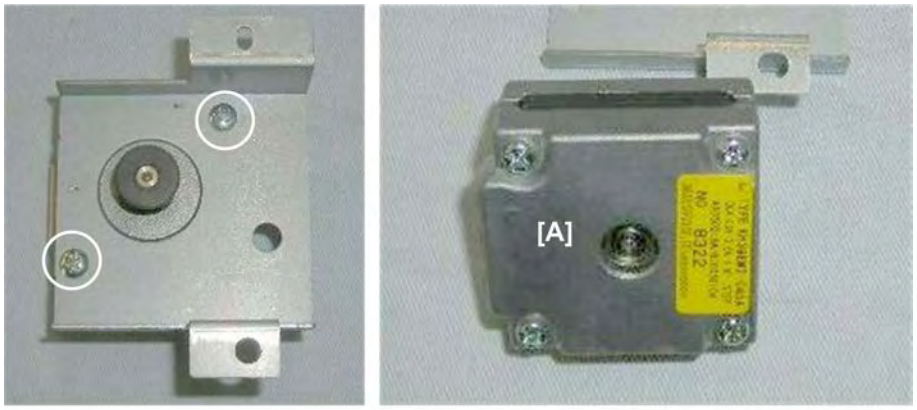
Preparation

- Booklet unit page 28



d434r363

1. Remove motor [A] (x2, x1).



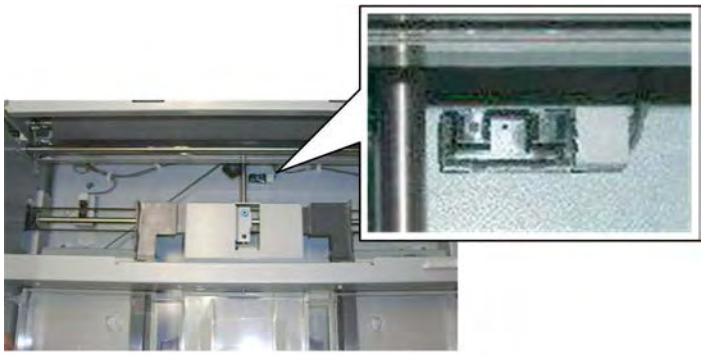
d434r364

2. Separate the motor [A] from the bracket (x2).

Booklet Stapler Bottom Fence HP Sensor

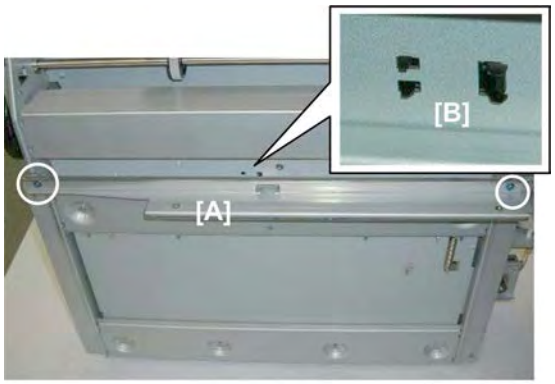
Preparation

- Booklet unit page 28
- Booklet stapler page 27



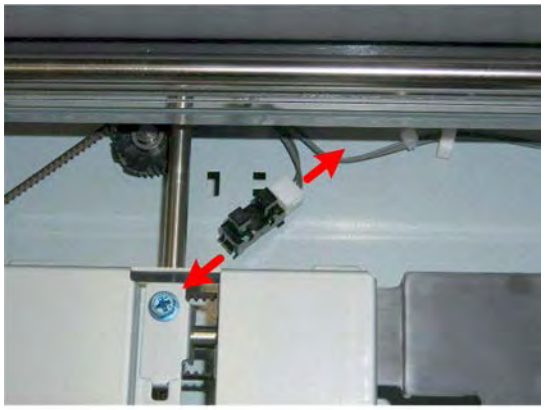
d434r365

1. The bottom fence HP sensor is fastened to the right plate of the booklet unit.



d434r366

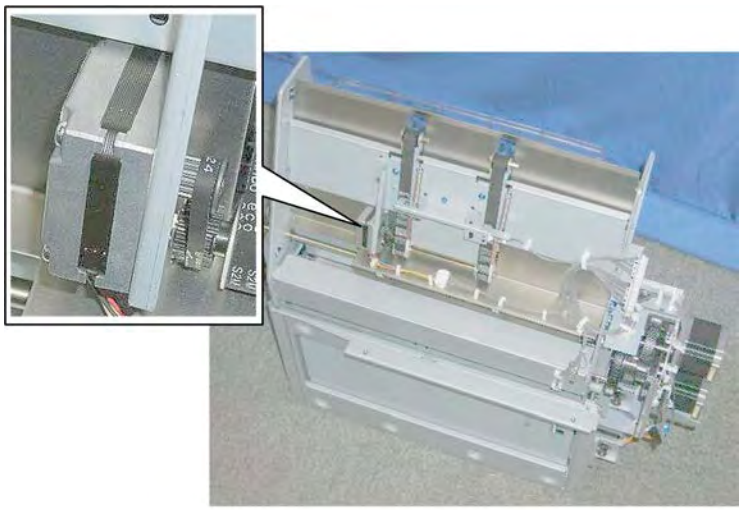
2. On the right side, remove brace [A] so that you can see the sensor pawls (x2).
3. Release the pawls [B] and push them through the plate (x5).



d434r367

4. Disconnect the sensor (x1).

Booklet Stapler Top Fence Motor

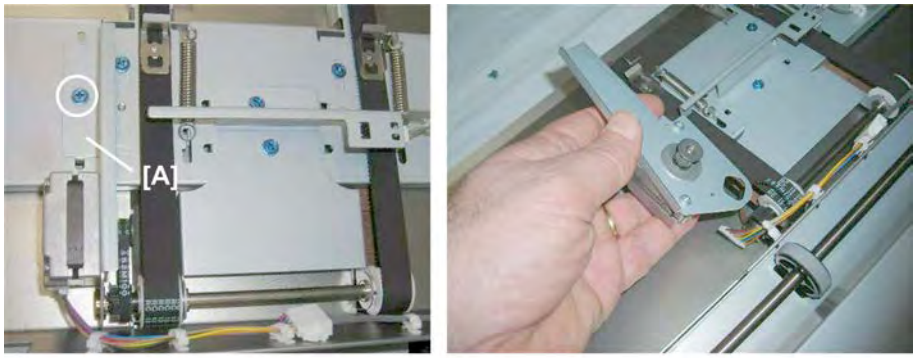


d434r368

The top fence motor and sensor are on top of the booklet unit.

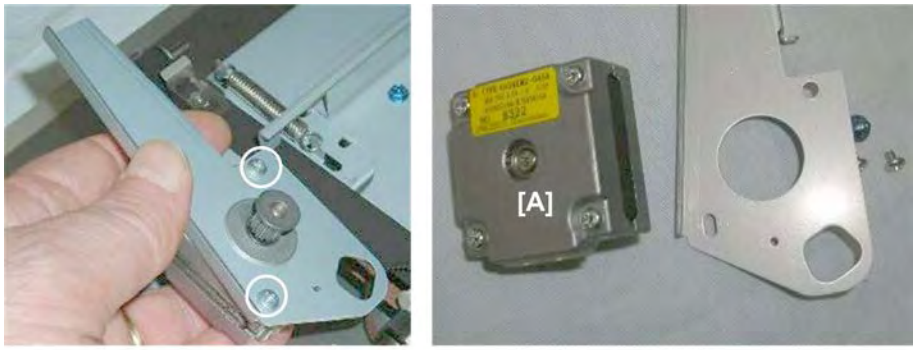
Preparation

- Booklet unit page 28



d434r369

1. Remove sensor bracket [A] (x1, x1)



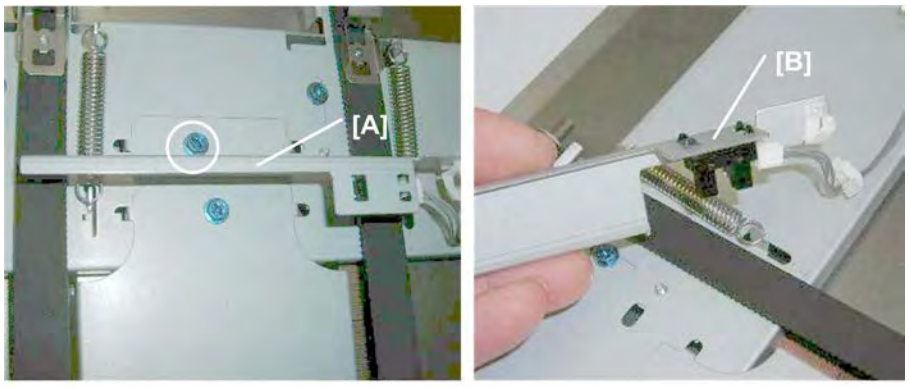
d434r370

2. Separate motor [A] from the bracket (x2)

Booklet Top Fence HP Sensor

Preparation

- Booklet unit page 28

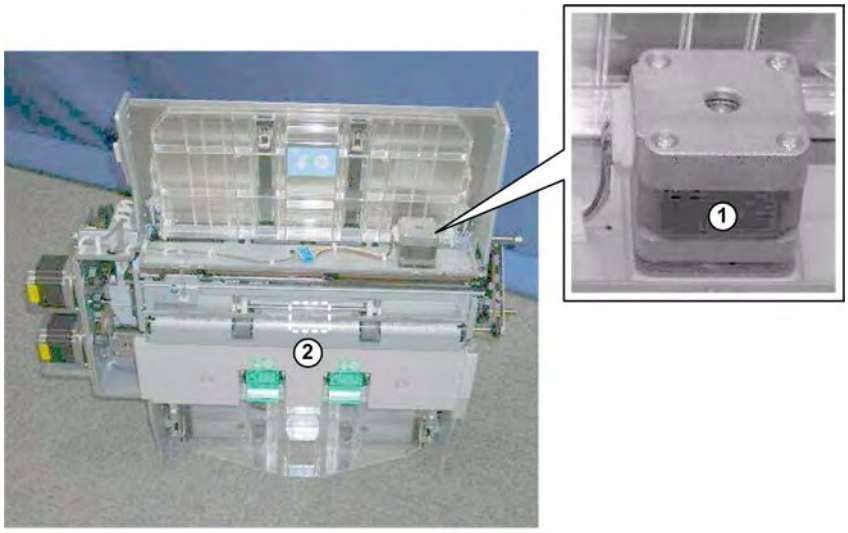


d434r371

1. Remove sensor bracket [A] (x1).
2. Remove sensor [B] (x1, x1, x5)

1.7.5 BOOKLET PRESS FOR STAPLING

Booklet Stapler Clamp Roller Motor, Booklet Stapler Exit Sensor



d434r372

The booklet stapler clamp roller motor ① and booklet stapler exit sensor ② cannot be removed until the motor base has been removed.

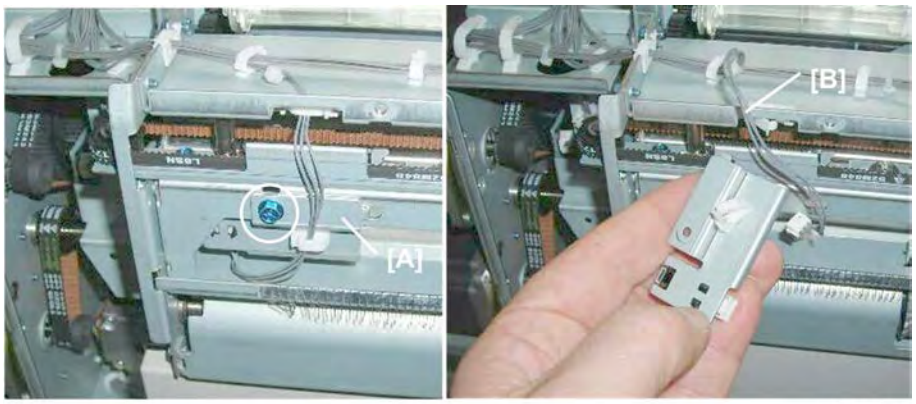
Preparation

- Booklet unit page 28

Motor Base Plate

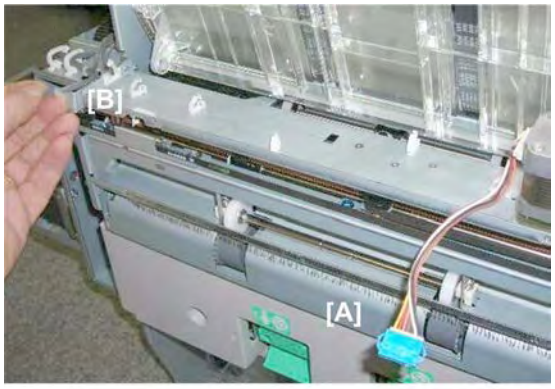
d434r373

1. Remove cover [A] (x2).



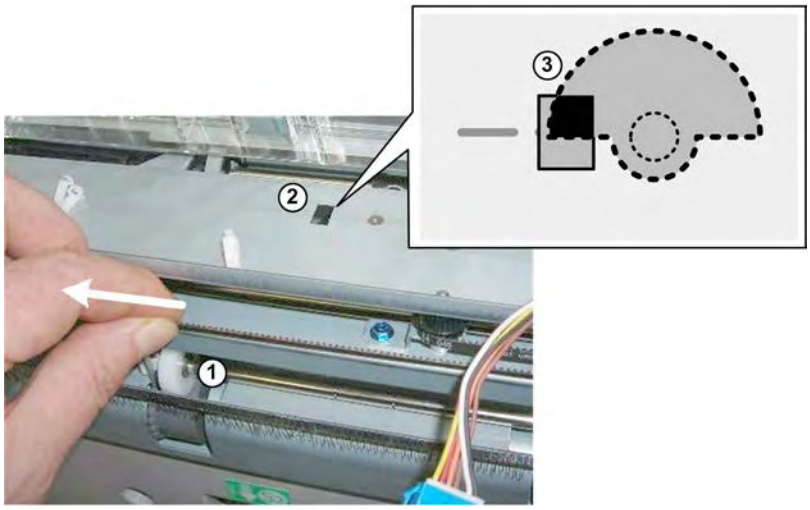
d434r374

2. Disconnect sensor bracket [A] and harness [B] (x1, x2, x1).



d434r375

3. Disconnect motor harness [A] (x6, x1).

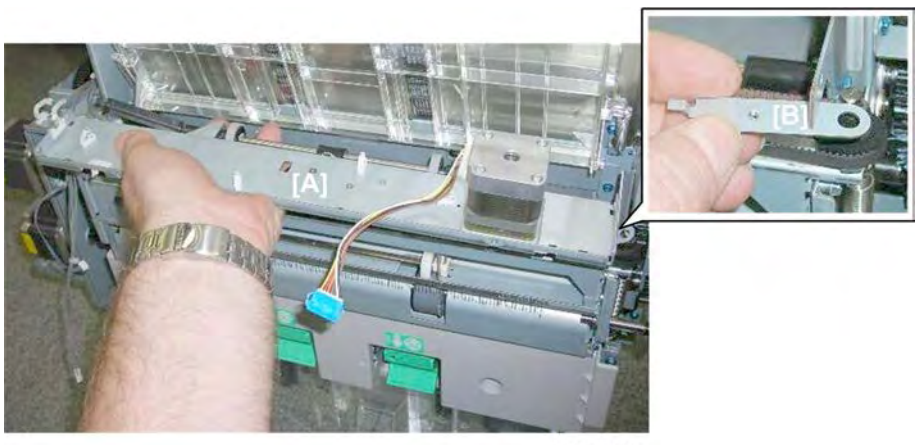


d434r376

4. Pull belt ① until you can see through the hole ② that the edge of the actuator ③ below the hole is aligned as shown.
   - The edge of the actuator and the line on the left side of the hole must be aligned.
   - This releases the clamp roller so that there is no pressure on the base plate.

d434r377

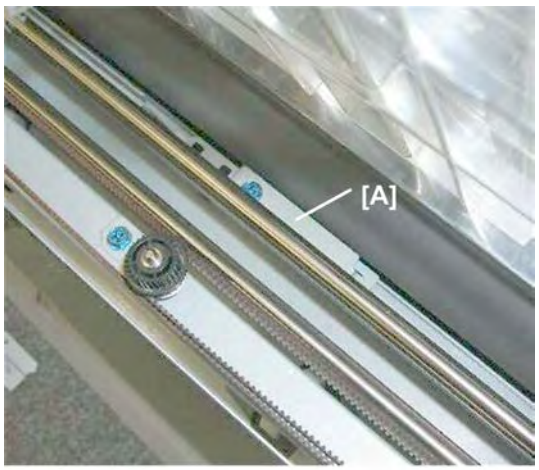
5. Remove:
   [A] Rear (x2)
   [B] Front (x3)



d434r378

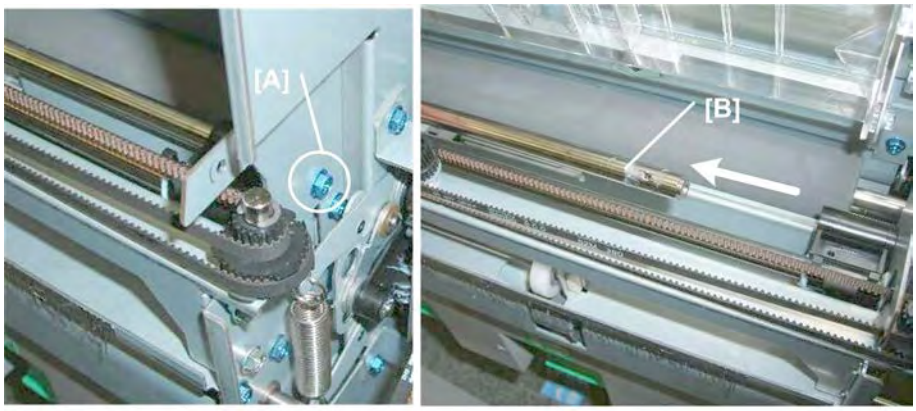
6. Remove base plate [A].
7. Remove end-piece [B].

Exit Sensor



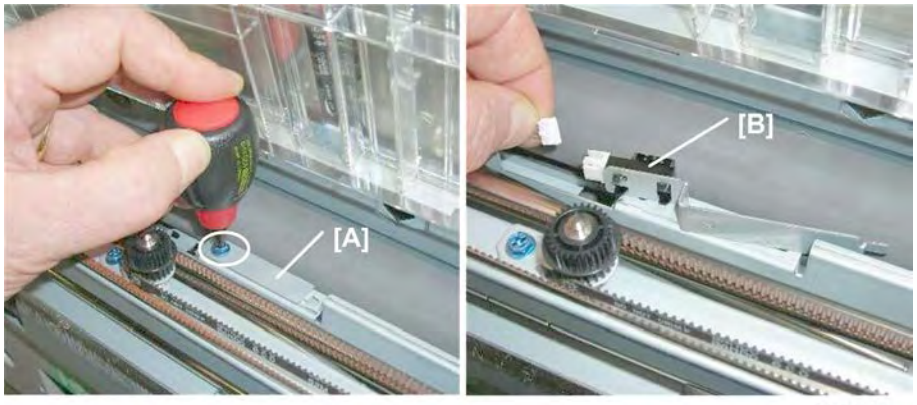
d434r379

A guide shaft blocks access to the exit sensor bracket [A].



d434r380

1. Remove guide shaft screw [A] (x1).
2. Rotate then slide the guide shaft [B] to the rear until you have enough space to remove the bracket screw. (The guide does not need to be removed.)



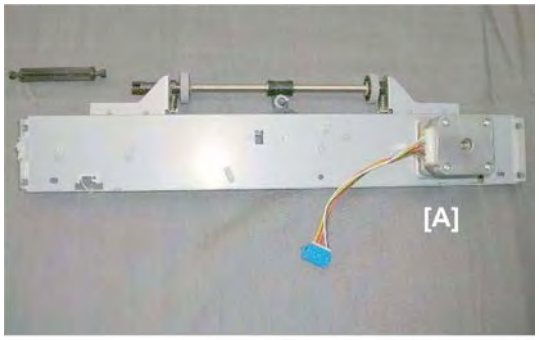
d434r381

3. Use a short screwdriver to remove the exit sensor bracket [A] (x1).
4. Disconnect the exit sensor [B] (x1, x5).

Booklet Stapler Clamp Roller Motor

Preparation

- Motor base plate (see above)



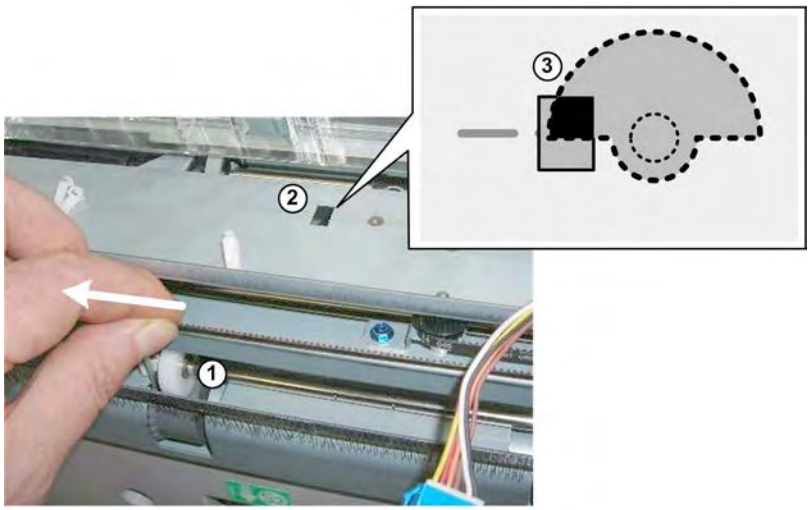
d434r382

1. Lay the motor base plate [A] on a flat surface.

d434r383

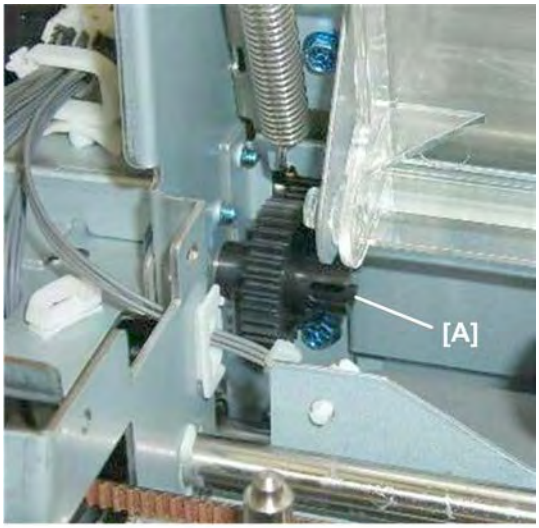
2. Turn the base plate over.
3. Remove motor [A] (x2, x1).

Re-installation



d434r376

- To make sure there is no pressure on the base plate, pull belt ① until you can see through the hole ② that the edge of the actuator ③ below the hole is aligned as shown.



d434r384

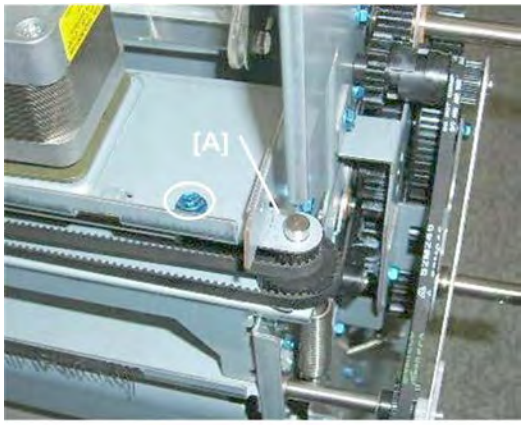
- Turn gear [A] so that you can see the cut-out. The post of the linkage must be re-inserted here when the motor base plate is re-installed.

d434r385

- After the motor base plate [A] has been re-installed, the linkage will not be straight. It will slant slightly from rear to front. This is normal.

d434r386

- Confirm that the ends of the vertical shafts fit correctly through the holes in the motor base plate before you re-attach any screws.



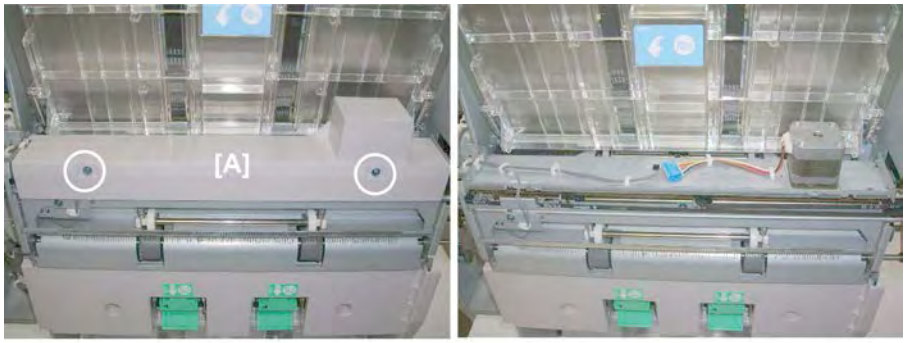
d434r387

- Re-attach end-piece [A] at the front before you re-attach any other screws.

Booklet Stapler Clamp Roller HP Sensor

Preparation

- Booklet unit page 28



d434r388

1. Remove cover [A] (x2).

d434r389

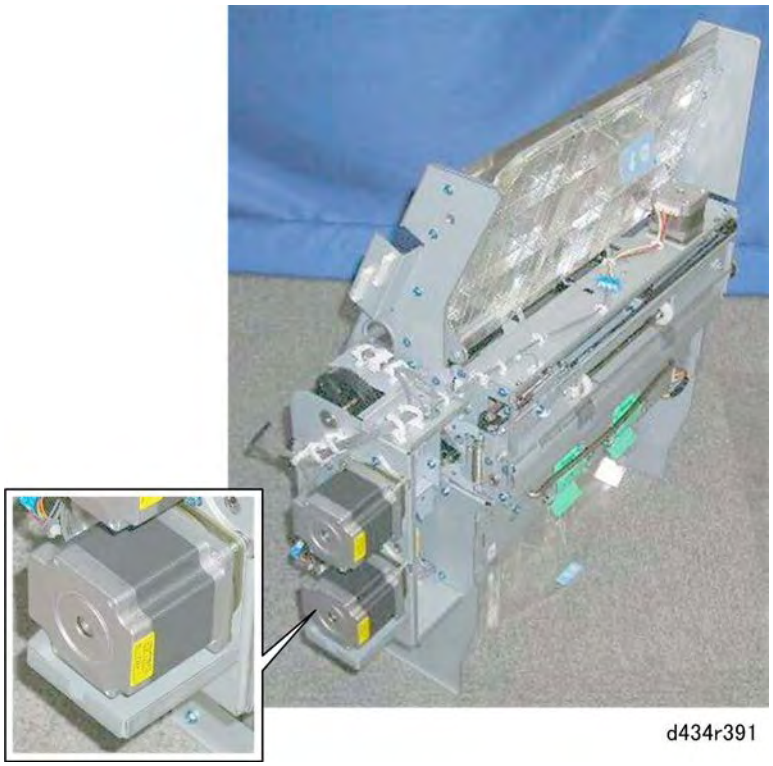
2. Remove sensor bracket [A] (x1).

d434r390

3. Remove sensor [A] (x1, x5).

1.7.6 BOOKLET FOLDING

Fold Roller Motor

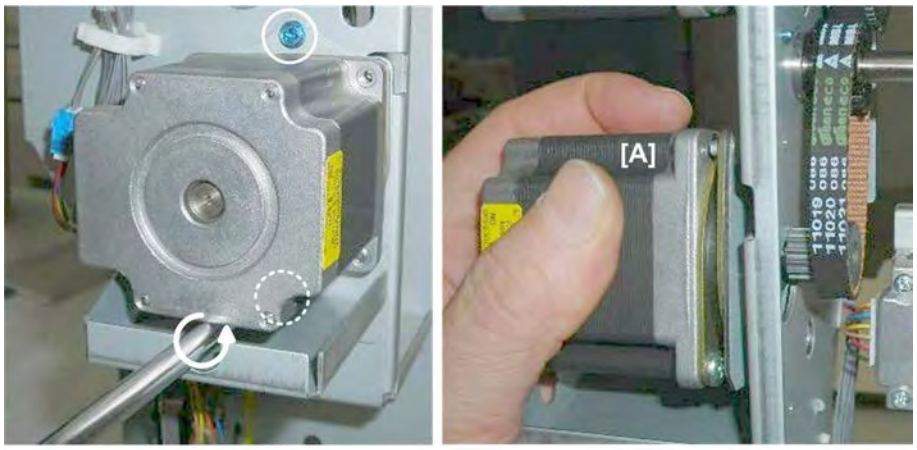


d434r391

The fold plate motor is on the back of the booklet unit, below the fold roller motor.

Preparation

- Booklet unit page 28



d434r392

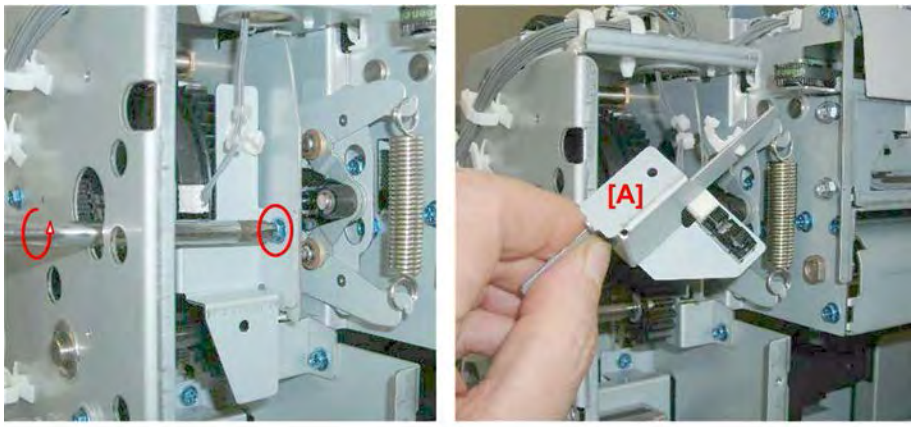
1. Remove motor [A] (x2, x1).

d434r393

Fold Plate Cam HP Sensor

Preparation

- Booklet unit page 28
- Fold roller motor (described in the previous section)



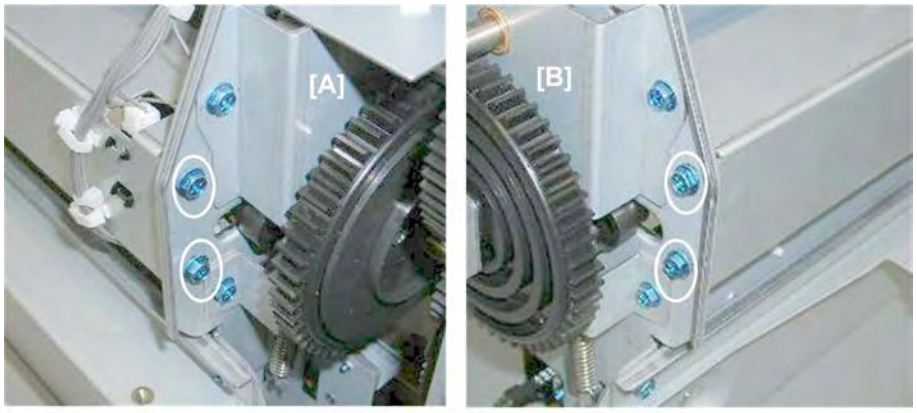
d434r394

1. Remove sensor bracket [A] (x1, x1, x1).
2. Sensor (x5)

Fold Plate HP Sensor

Preparation

- Booklet unit page 28



d434r395

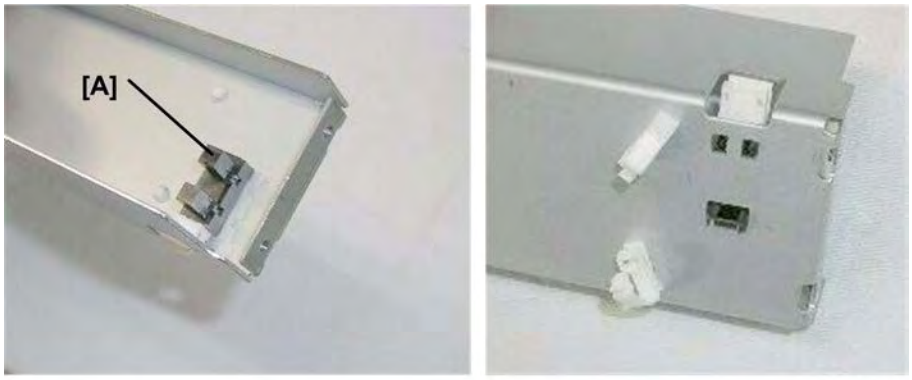
1. Remove:

   [A] Rear (x2)

   [B] Front (x2)

d434r396

2. Remove cross-brace [A] (x2, x1)

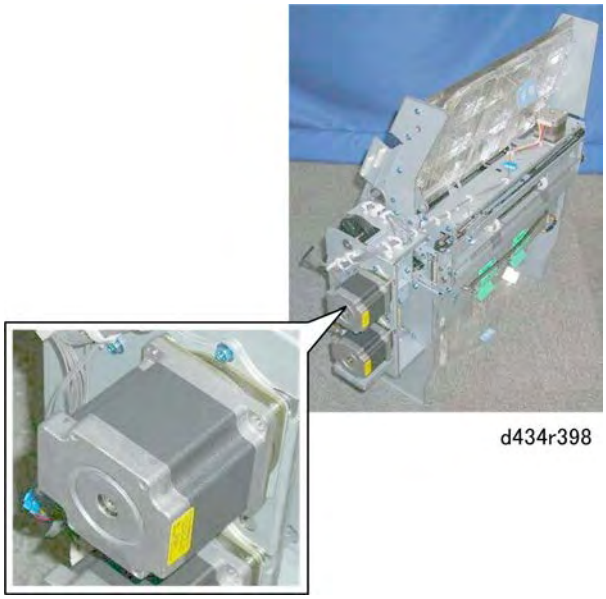


d434r397

3. Sensor [A] (x5)

1.7.7 BOOKLET EXIT

Fold Roller Motor

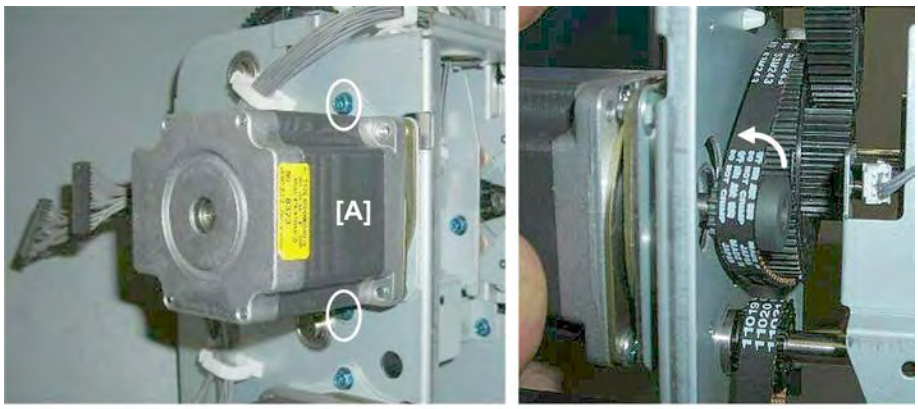


d434r398

The fold roller motor is on the back of the booklet unit, above the fold plate motor.

Preparation

- Booklet unit page 28



d434r399

1. Remove motor [A] (x2, x1).

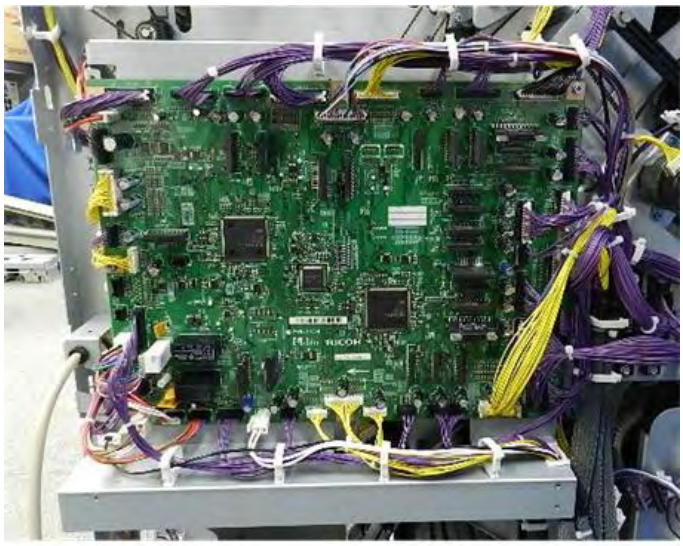
d434r400

1.8 BOARDS

1.8.1 MAIN BOARD

Preparation

- Rear upper cover page 15
- Rear lower cover page 15



d7340161

1. The main board is on the back of the machine.

d7340162

2. Disconnect the board (x44).
   - There are approximately 17 clamps around the board.
   - Open only as many clamps as necessary to remove the board. This will keep the connectors aligned and make it easier to re-connect them.

d7340163

3. Disconnect the board (x8).

d7340164

4. Remove the board.

1.8.2 PUNCH UNIT PCB

Preparation

- Rear upper cover page 15
- Rear lower cover page 15

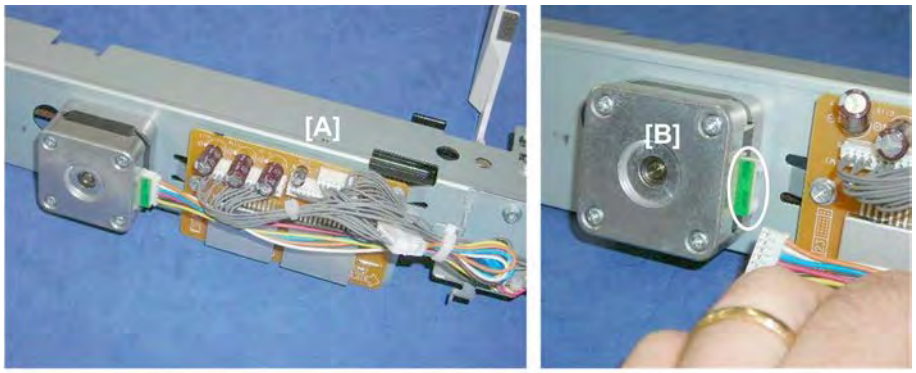
d434r412

1. Remove the punch unit PCB (x6, x4).

1.8.3 SHIFT TRAY JOGGER UNIT PCB

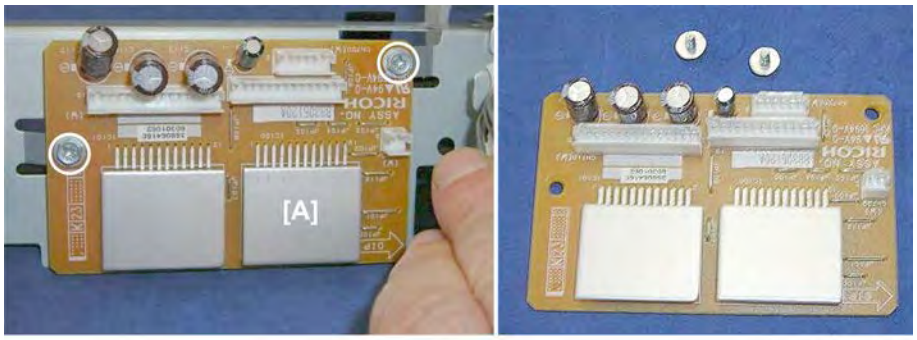
Preparation

- Shift tray jogger unit page 64



d434r413

1. Lay the shift jogger unit [A] on a flat surface.
2. Disconnect motor [B]. (x1)



d434r414

3. Remove PCB [A] (x5, x2).

1.8.4 PSU

Preparation

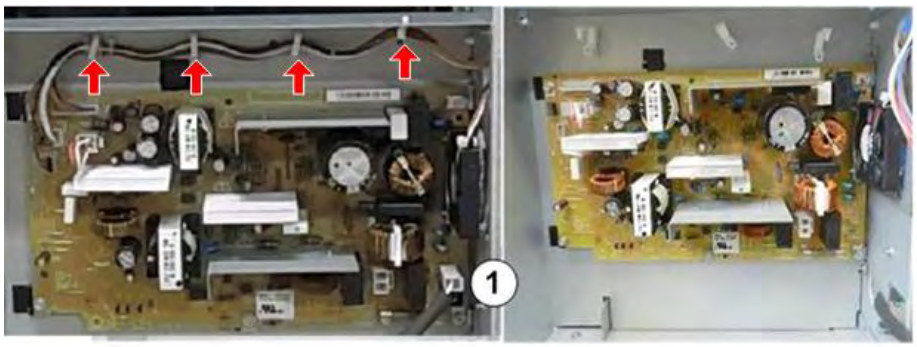
- Switch the system off.
- Disconnect the finisher from its power source.
- Wait at least 30 minutes.
- Right panels page 24

CAUTION

- The PSU will retain residual charge, even after the machine has been turned off.
- Allow at least 30 minutes for any residual charge to dissipate before you touch the PSU.

d7340165

1. The PSU is on the right, bottom edge of the unit.

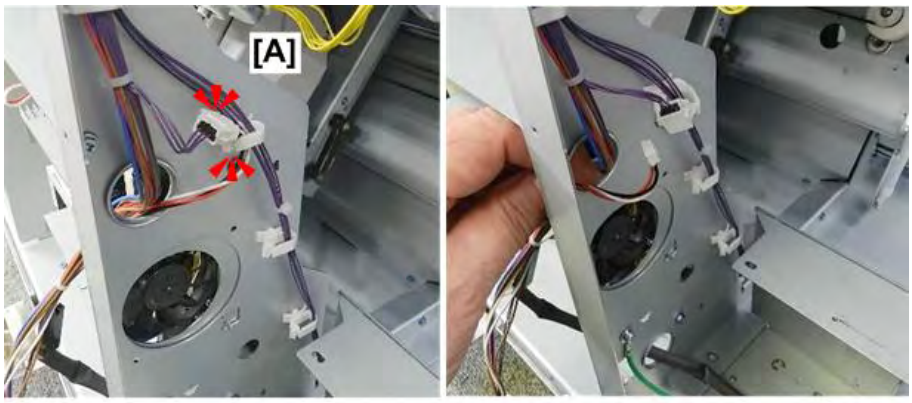


d7340506

2. Disconnect the board (x3, x5).

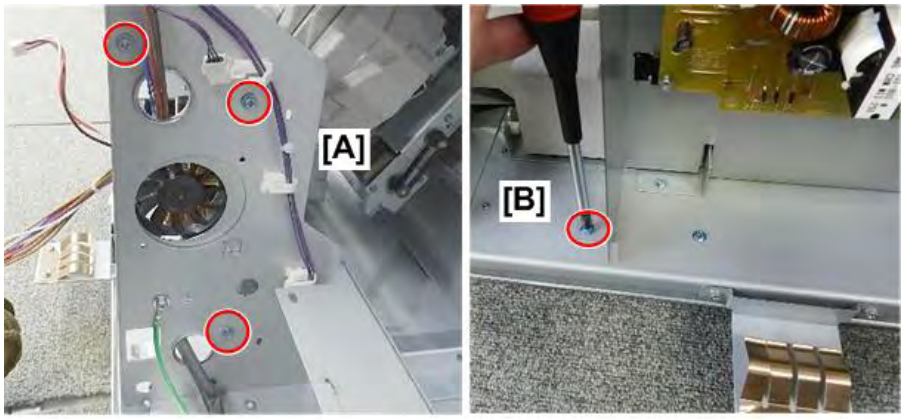
Important

- Be sure to re-connect the bayonet connectors at ① White over Black.



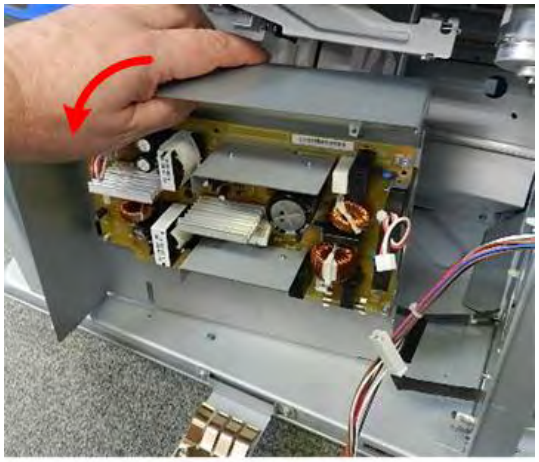
d7340167

3. At the rear [A] disconnect the fan (x1,x1).



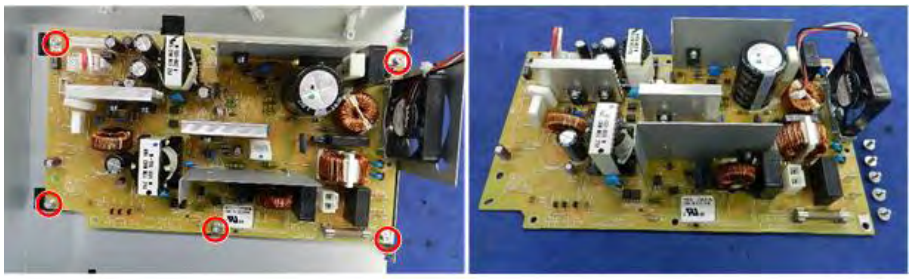
d7340168

4. Disconnect the board bracket:
   [A] Rear (x3)
   [B] Front (x1)



d7340169

5. Remove the bracket (with board attached).



d7340170

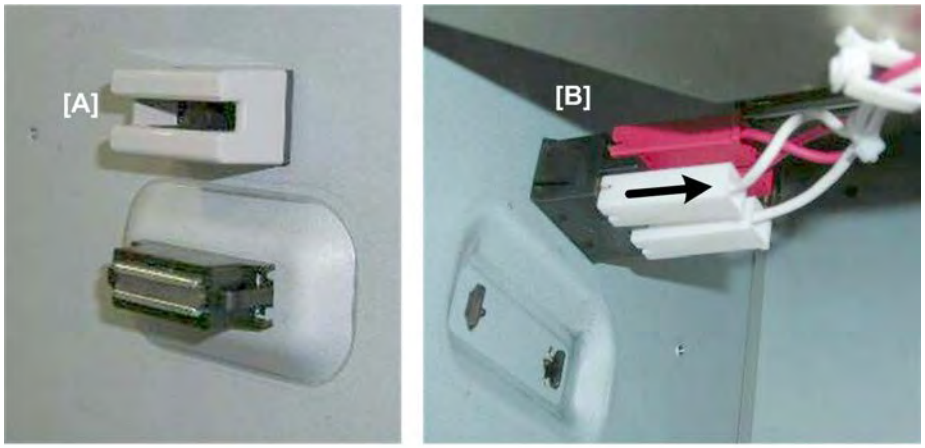
6. Separate board and bracket (x5).

1.9 SWITCHES

1.9.1 FRONT DOOR SWITCH

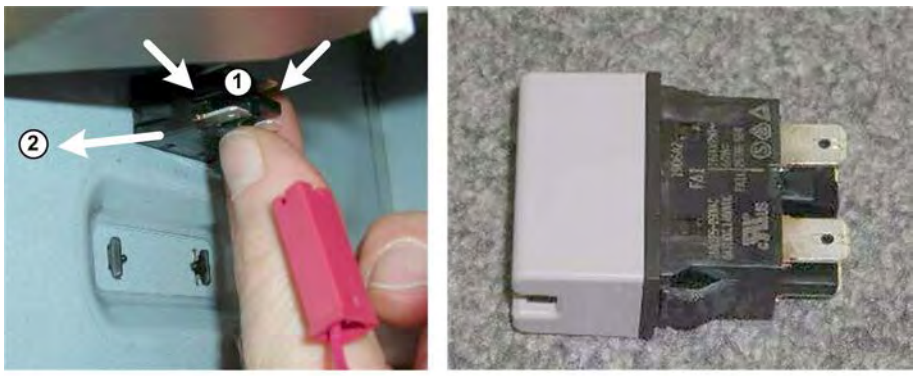
Preparation

- Open the front door.
- Upper inner cover page 18



d434r416

1. Locate the door switch [A] on the front.
2. Inside the finisher, disconnect switch [B] (x4).



d434r417

3. Pinch both sides of the switch and push it out.

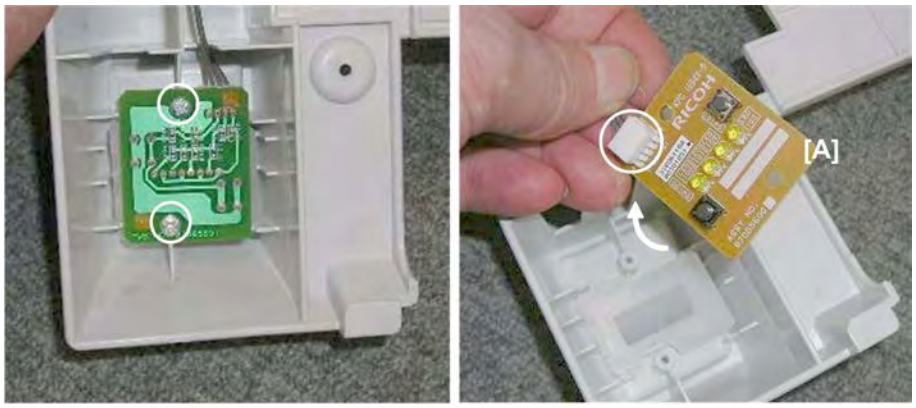
1.9.2 EMERGENCY SHIFT TRAY STOP SWITCH

Preparation

- Shift tray jogger unit page 64
- Left upper cover page 23

d434r420

1. The switch [A] is on the front end of the left upper cover.



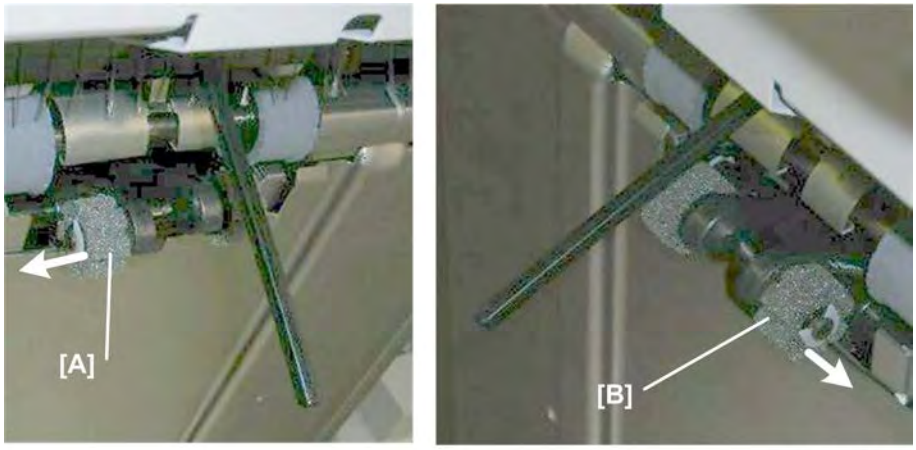
d434r421

2. Turn the cover over.
3. Remove the switch [A] (x2, x1).

1.10 ROLLERS AND BRUSHES

1.10.1 ROLLERS

Drag Roller



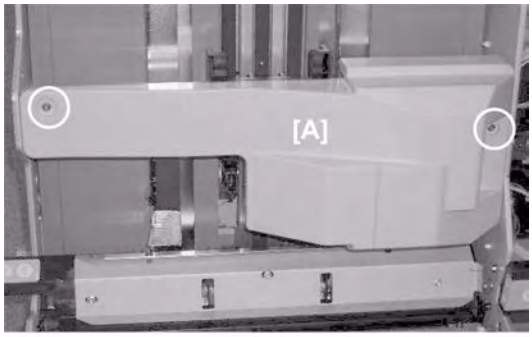
d434r422

1. Replace:
   [A] Rear (x1, Belt x1)
   [B] Front (x1, Belt x1)

Positioning Roller

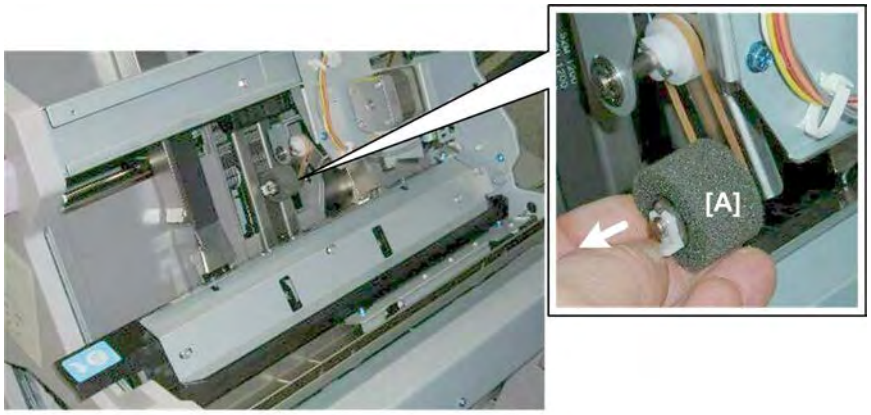
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12**.



d434r423

1. Remove motor cover [A] (x2).



d434r424

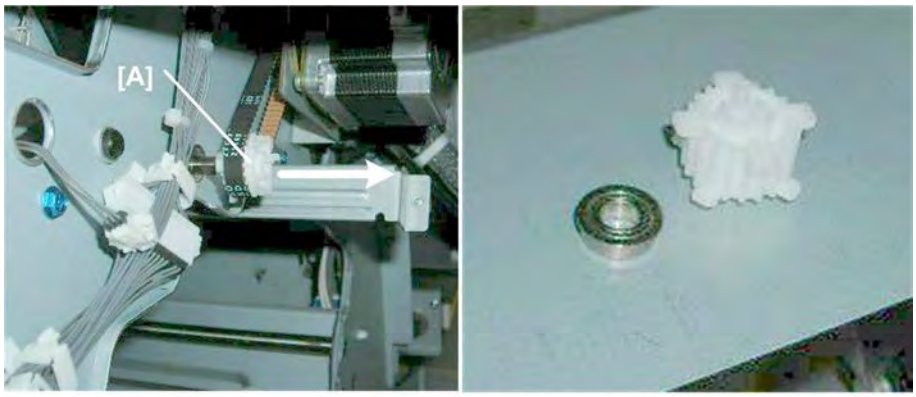
2. Replace sponge roller [A] (x1, x1)

Alignment Brush Roller

Preparation

- Open the front door.
- Lower inner cover **Rb10**, **Rb11** page 16
- Center inner cover **Rb14**, **Rb 16** page 17
- Right panel page 24

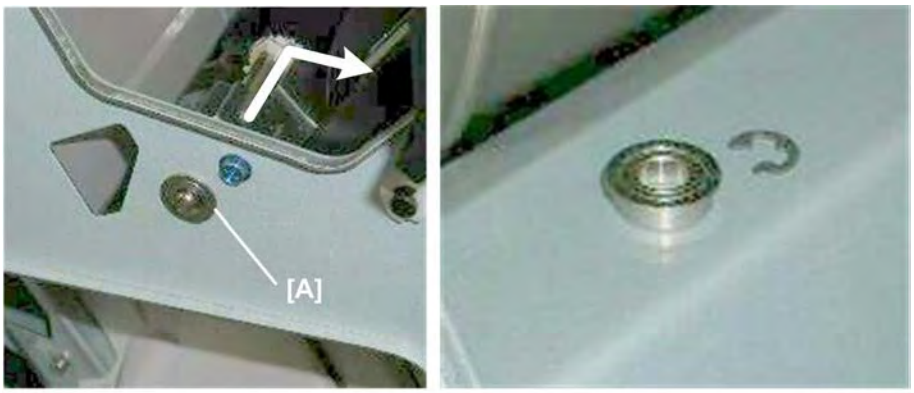
Rear



d434r425

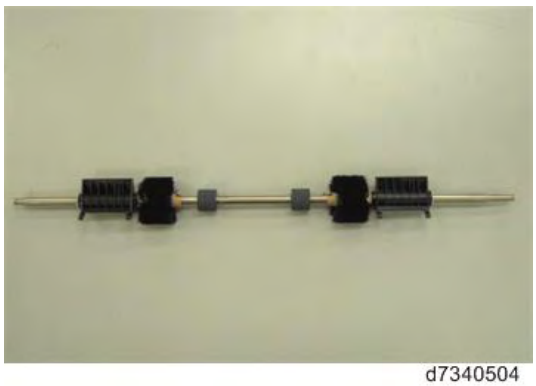
1. Remove gear [A].
2. Remove gear and bushing (x1, x1, Bushing x1)

Front



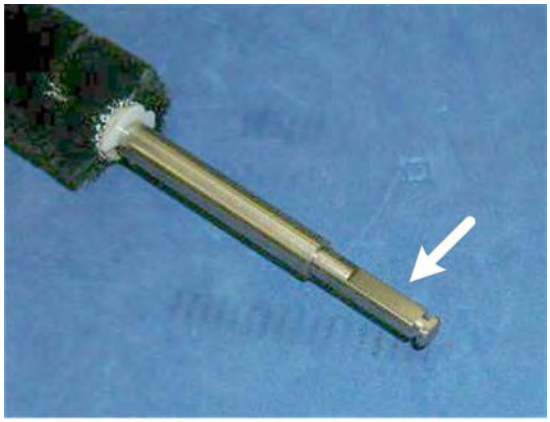
d434r426

1. Remove the bushing [A] (x1).
2. Remove the alignment brush roller.



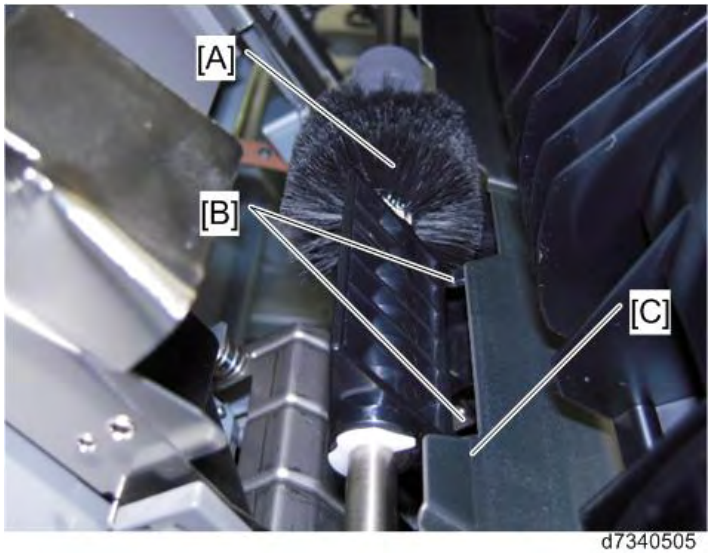
d7340504

Re-installation



d434r428

1. The end of the shaft with the flat bevel is the rear end of the shaft where the gear and belt must be re-attached.



d7340505

2. When you re-install the brush roller [A], make sure that pawl [B] of the guide is below plate [C].

1.10.2 DISCHARGE BRUSHES

Shift Tray Exit

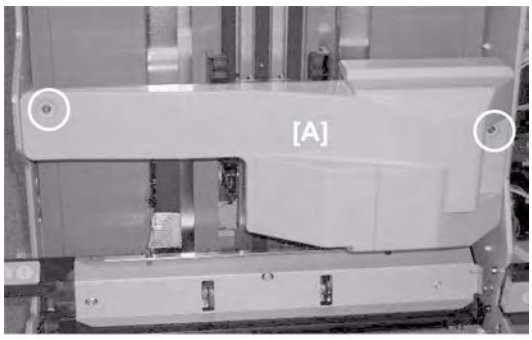
d434r429

1. Remove discharge brush [A] (x2).

Corner Stapler Entrance

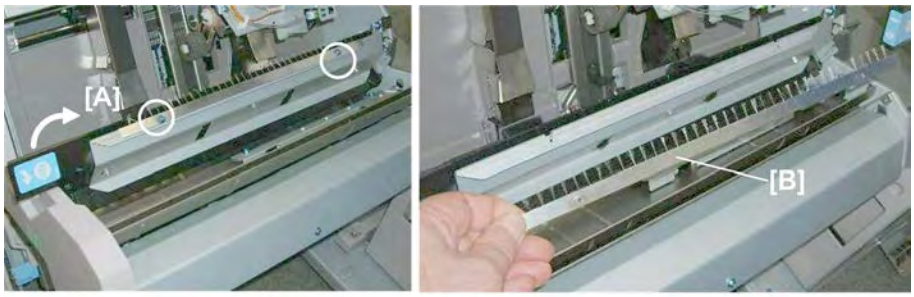
Preparation

- Open the front door.
- Pull out the stack/staple unit with handle **Rb12**.



d434r423

1. Remove cover [A] (x2)



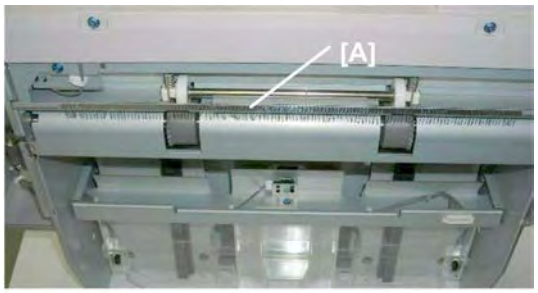
d434r430

2. Raise **Rb13** [A].
3. Remove discharge brush [B] (x2)

Booklet Unit Exit

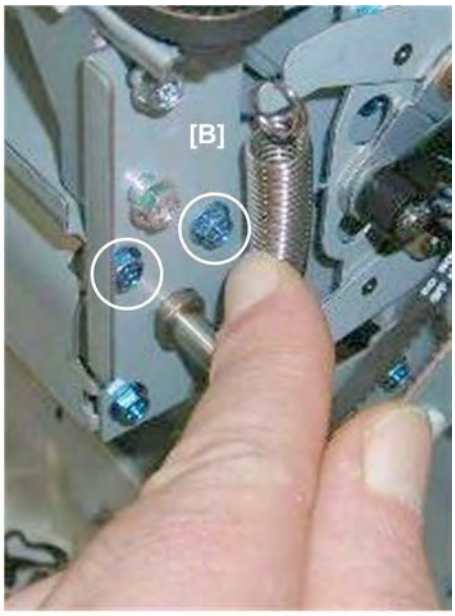
Preparation

- Booklet unit



d434r431

1. The discharge brush [A] is on the left side of the booklet unit.



d434r432

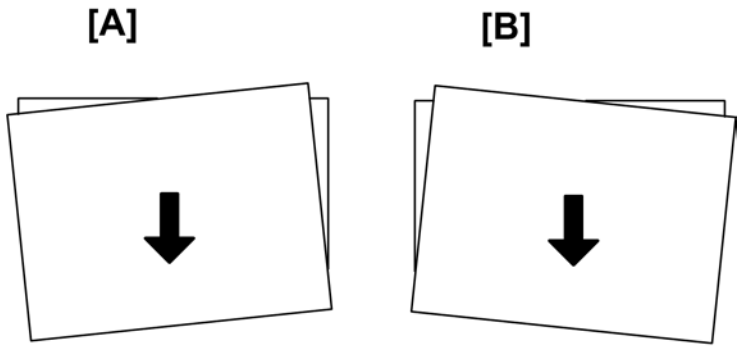
2. Remove:
   [A] Rear (x2)
   [B] Front (x2)

1.11 SPECIAL ADJUSTMENTS

1.11.1 HORIZONTAL SKEW ADJUSTMENT

The booklet unit is adjusted for optimum performance before the finisher is shipped from the factory. Do this adjustment only if the edges of folded booklets are not even.

1. Run a fold/staple job through the booklet unit with A3 (or DLT) paper.
2. Hold the folded sheet with the creased side pointing down and face-up (the same way that it came out of the finisher).

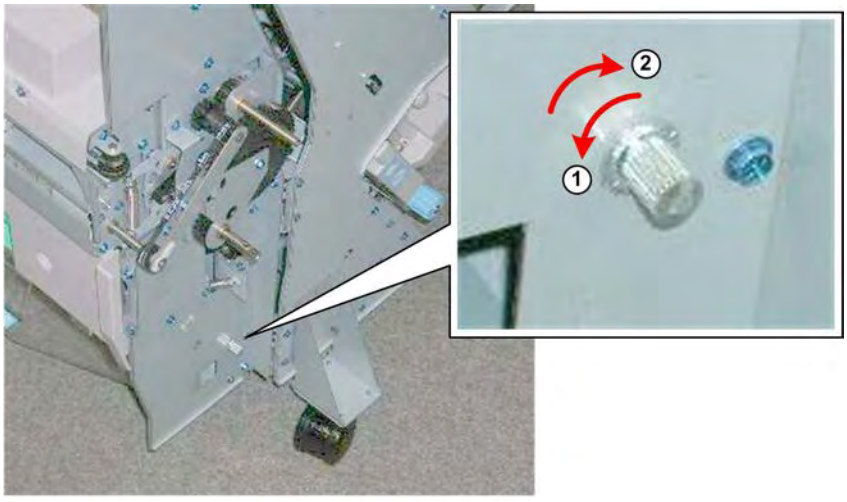


d512r434

3. Referring to the diagram above, determine if the skew is [A] or [B].
   - [A] indicates that the rear fence is low and must be raised.
   - [B] indicates that the front fence is low and must be raised.

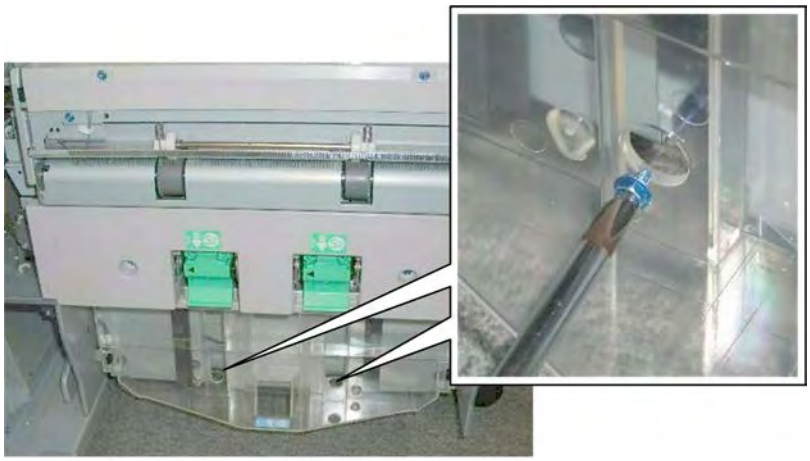
Preparation

- Pull the stack/staple unit out with handle **Rb12**
- Remove the lower inner cover **Rb10**, **Rb11**



d434r434a

1. Before doing any adjustment:
   - Rotate the knob counter-clockwise ① so that it is loose.
   - Rotate the knob clockwise ② until you feel some resistance, then stop.



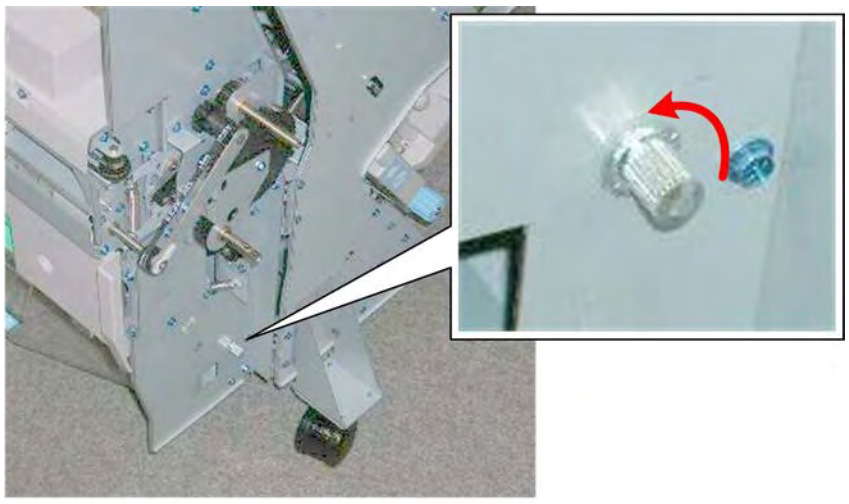
d434r435

2. Remove the screw.

Important

- There is only one screw to remove. Check both holes.
- The screw may be at the front or at the rear, depending on where it was attached before shipping from the factory.

[A] Adjustment: Rear Fence Low

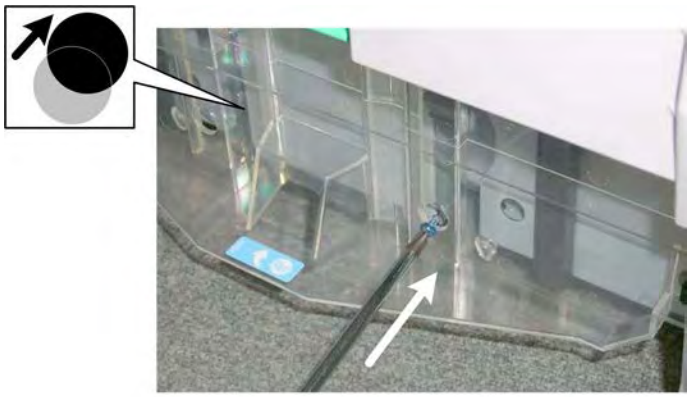


d434r436

1. For **[A] type skew**, turn the adjustment screw on the front of the booklet unit to the **left** (**clockwise**) to raise the rear fence.

Important

- Every notch adjusts the height 0.1 mm.



d434r437

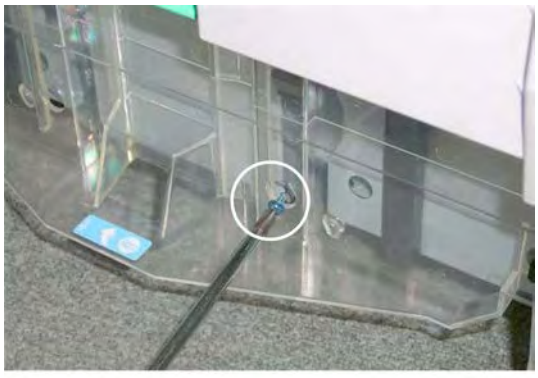
Turning the adjustment screw to the right may raise the rear fence so the holes at the rear will no longer be aligned.

2. Re-attach the screw in the front hole where the holes are aligned.

[B] Adjustment: Front Fence Low

d434r438

1. For **[B] type skew**, turn the adjustment screw on the front of the booklet unit to the **right** (**clockwise**) to raise the front fence.



d434r439

2. Re-attach the screw at the front hole.

1.11.2 VERTICAL SKEW ADJUSTMENT

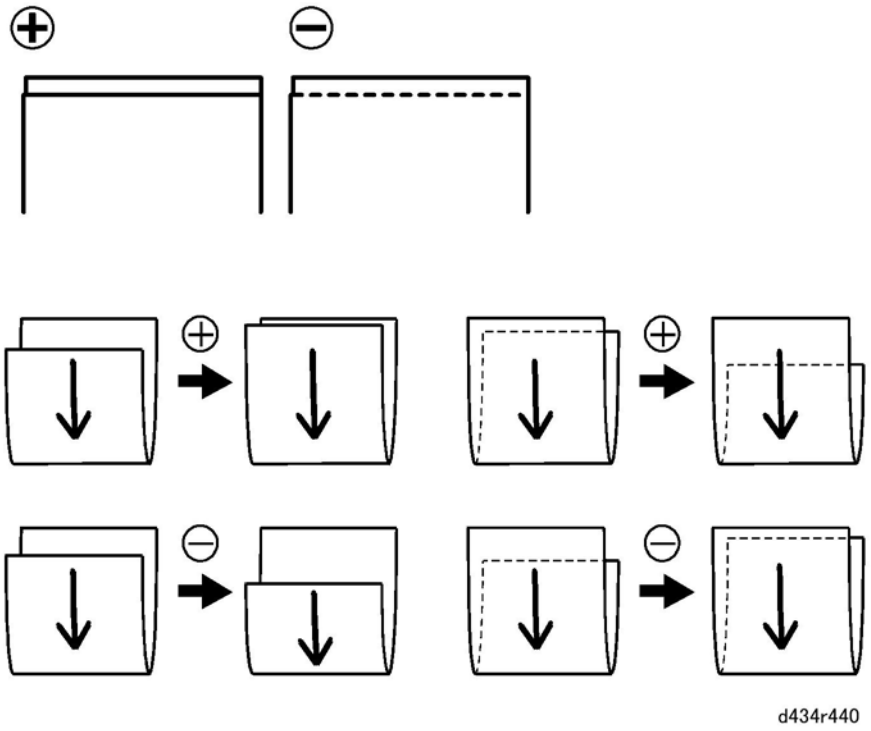
The booklet unit is adjusted for optimum performance before the finisher is shipped from the factory. Do this adjustment only if the edges of folded booklets are not even.

1. Switch the main machine and do a test run for booklet folding with either A3 or DLT paper

Important

- This procedure shows you how to test and adjust vertical skew for A3/DLT paper.
- This same adjustment can be done for other paper sizes as well with **SP6201**.

2. Look at the paper and determine what kind of skew (if any is present).



d434r440

3. Referring to the diagram, determine if the skew is positive or negative.
4. Measure the amount of skew.
5. Enter the SP mode
   - Europe, Asia: Use **SP6201-8** (this is for A3 paper).
   - North America: Use **SP 6201-15** (this is for DLT paper).

Important

- The illustration above shows the effects of +/- adjustment with **SP6201**.
- The vertical arrows show the direction of paper feed.

6. Enter one-half the measured amount of skew.
   - Example: If the measure amount of skew is -1.2 mm, enter -0.6 mm
   - The range for measurement is –2.0 mm to +2.0 mm in 0.2 mm steps for every notch adjustment.
7. Exit the SP mode, do another test print and repeat the adjustment procedure if necessary.

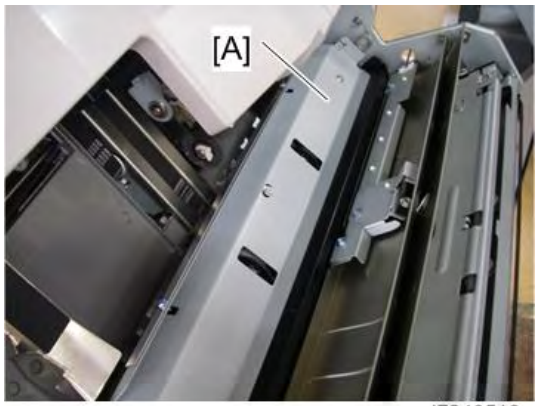
1.11.3 BASE FENCE REPLACEMENT

Before You Begin

- The base fences can be replaced separately or together.
- Only replacement of the front fence is described here. The replacement procedure for the rear base fence is the same.

Preparation

1. Pull out the stack/staple unit with handle **Rb12**.



d7340516

2. Remove entrance guide plate [A]

d7340517

3. Now you can access the front and rear of the base fence.
   - [A] is the front of the base fence.
   - [B] is the rear of the base fence.

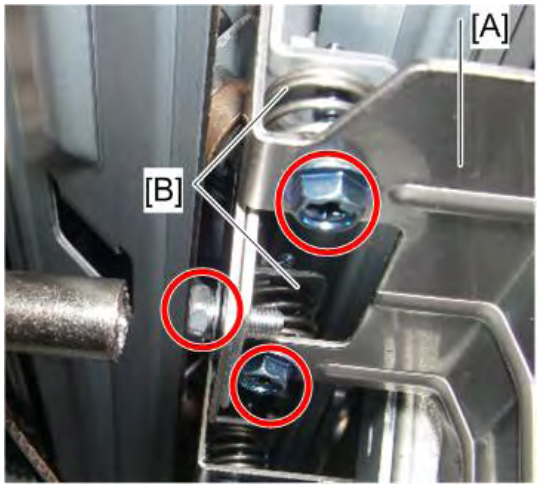
d7340518

4. Remove the screw (x1).

Note

- This screw is extremely tight, so to prevent damaging the head of the screw use a socket wrench or hex driver to remove it.

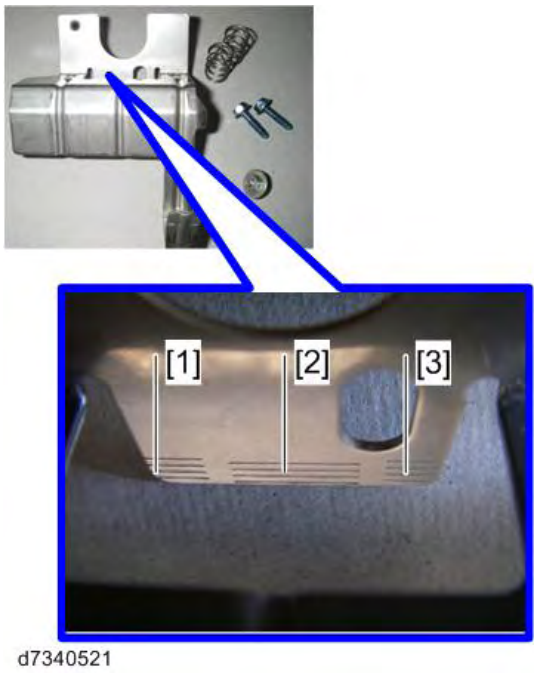
5. Look at the lower right corner of the staple unit.



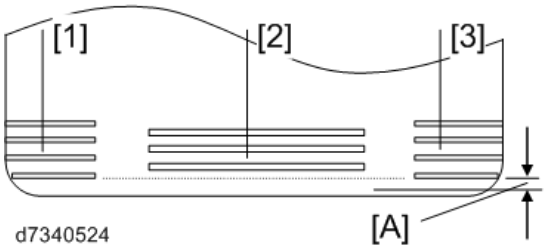
6. Remove the screws, and then carefully remove the front of the base fence [A] (x3).

Note

- Work carefully to prevent pressure spring [B] from flying off.

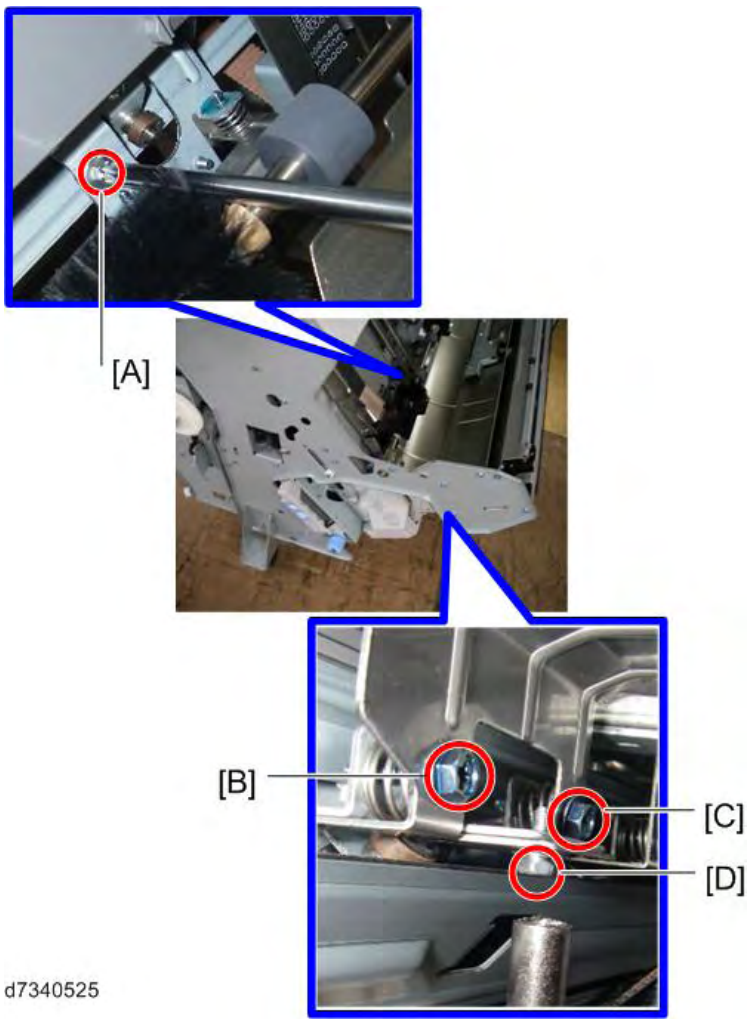


7. The new base fence is embossed with groups of lines [1], [2], [3].



Note

- The pitch of the lines [1], [2], [3] is 0.5 mm [A].



8. Attach the new front base fence (x4).

Note

- Pay attention to the use and order of screw attachment.
- Screw [A] is attached last.
- Screws [B] and [C] are used to adjust the position of the base fence.
- Leave screw [D] loose.

9. Set the front end of the fence bracket [A] so it is aligned with the embossed lines [1], [2], [3], adjust the position with screw [B], and then tighten screw [C].

D736

PERFECT BINDER GB5010

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

PERFECT BINDER GB5010 (D736)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 1

1.1 BASICS.....1

1.1.1 PARTS DANGEROUS TO TOUCH.....1

Covers Off.....1

Gluing Unit.....3

Trimming Unit.....7

1.1.2 USING THE DIALS.....8

Gluing Unit.....8

Trimming Unit.....10

1.2 COMMON PROCEDURES.....13

1.2.1 SETTING AND RELEASING LOW PERFORMANCE MODE.....13

1.2.2 INSERTER UNIT.....13

1.2.3 FRONT DOORS.....15

1.2.4 COVERS.....16

Rear Cover.....16

Rear Upper Cover.....16

Left Upper Cover.....17

Front Inner Cover: Upper.....18

Front Inner Cover: Lower.....18

1.2.5 SIGNATURE PATH EXIT UNIT.....20

1.2.6 COVER TRANSPORT UNIT.....24

1.2.7 TRIMMING UNIT.....26

1.2.8 OPENING LOCKED DOORS MANUALLY.....29

Front Doors.....29

Book Stack Door.....30

1.2.9 SIGNATURE THICKNESS SENSOR (S50) RECALIBRATION.....30

1.2.10 COVER SKEW ADJUSTMENT.....31

1.3 PATH ENTRANCE MOTORS.....33

1.3.1 VERTICAL TRANSPORT MOTOR (M5).....33

1.3.2 ENTRANCE MOTOR (M10).....34

1.4 SIGNATURE PATH EXIT UNIT.....35

1.4.1 RIPPLE IDLE ROLLERS.....35

1.4.2 TE PRESS ROLLER UNIT.....35

1.4.3 ANTI-STATIC BRUSH 39
1.5 STACKING TRAY 40
1.5.1 SWITCHBACK ROLLER 40
1.5.2 ANTI-STATIC BRUSH 41
1.5.3 JOGGER MOTORS (FRONT/BACK) (M4/M5) 43
1.6 MAIN GRIP UNIT 44
1.6.1 SIGNATURE THICKNESS SENSOR (S50) 44
1.6.2 GRIP MOTOR: FRONT (M23) 46
1.6.3 GRIP MOTOR (REAR) (M24) 49
1.6.4 GRIP UNIT ROTATION MOTOR (M21) 51
1.6.5 MAIN GRIP LIFT MOTOR (M22) 54
1.7 GLUING UNIT 55
1.7.1 FILTERS 55
Deodorization Filter: Gluing Unit 55
Deodorization Filter: Rear Upper Cover 56
1.7.2 GLUE HEATER 56
1.8 COVER TRANSPORT UNIT 61
1.8.1 SWITCHBACK ROLLERS: COVER TRANSPORT 61
1.8.2 TORQUE LIMITER 61
1.8.3 ANTI-STATIC BRUSHES: UPPER AND LOWER RIGHT 63
1.8.4 ANTI-STATIC BRUSH: LEFT 64
1.8.5 EXIT ROLLERS 1/2 UNIT 65
1.9 TRIMMING UNIT 67
1.9.1 TORQUE DIODE: SIGNATURE ROTATION UNIT 67
1.9.2 BLADE CRADLE 70
1.9.3 TRIMMING BLADE, TRIMMINGS CATCHER 73
Removing the Trimming Blade 73
Replacing the Trimmings Catcher 77
Installing the New Blade 78
1.9.4 BALL SCREW 80
1.9.5 TRIMMINGS BUFFER MOTOR (M37) 84
1.10 HORIZONTAL PATH ROLLERS 86
1.10.1 EXIT IDLE ROLLER UNIT 86
1.10.2 EXIT ROLLER, HORIZONTAL TRANSPORT ROLLER 5 87
1.10.3 HORIZONTAL TRANSPORT ROLLER 4 89
1.10.4 LEFT COVER TRANSPORT PATH GUIDE ROLLER 91
1.10.5 HORIZONTAL TRANSPORT ROLLER 1 AND IDLE ROLLERS 92
1.10.6 HORIZONTAL TRANSPORT ROLLER 2 93
1.10.7 HORIZONTAL TRANSPORT ROLLER 3 96

1.11 PERFECT BINDER BOARDS 101
1.11.1 MASTER CONTROL BOARD 102
1.11.2 WHEN INSTALLING A NEW EEPROM IN MASTER CONTROL BOARD 102
1. CV-REG-L 103
2. CV-REG-S 104
3. CV-CENT 105
4. CLCT-SB 106
5. ALG-F-A4 107
6. ALG-R-A4 108
7. ALG-F-L 109
8. ALG-R-L 110
9. GLUING 111
10. STK-DLV 112
11. GRP-CHNG 113
12. SIZE-H 114
13. SIZE-W 115
14. CV-LNG 116
15. 10RGT-1 117
16. 10RGT-2 118
17. 10RGT-3 119
18. 200RGT-1 120
19. 200RGT-2 121
20. 200RGT-3 122
21. SLD-MTR 123
22. STK-VR0 123
23. STK-VR25 123
24. GLU-LOW 123
25. GLU-UP 124
26. GLU-TEMP 124
27. GLU-MOVE 124
28. GLU-EDG1 125
29. GLU-EDG2 126
30. GLU-EDG3 127
31. GLU-EDG4 128
32. GLU-AMT1 129
33. GLU-AMT2 130
34. GLU-AMT3 131
35. GLU-AMT4 132

36. GLU-AMT5 133
37. GLU-AMT6 134
38. TBWRNLVL 134
39. TBPCOUNT 134
40. TBP-POSW 135
41. TBP-MVSW 136
1.11.3 SLAVE CONTROL BOARD 137
1.11.4 CUTTER CONTROL BOARD 137
1.11.5 RELAY BOARD 138
1.11.6 POWER SUPPLY UNIT 1 138
1.11.7 POWER SUPPLY UNIT 2 140
1.12 INSERTER 142
1.12.1 COMMON PROCEDURES 142
Rear Cover 142
Releasing Top and Middle Covers 142
Front Cover 143
1.12.2 FEED ROLLERS 144
Feed Roller: Tray A 144
Feed Roller: Tray B 145
1.12.3 SEPARATION ROLLERS 146
Separation Roller and Torque Limiter: Tray A 146
Separation Roller, Torque Limiter: Tray B 147
1.12.4 PICKUP ROLLERS 148
Pickup Roller: Tray A 148
Pickup Roller: Tray B 149
1.12.5 INSERTER CONTROL BOARD 150
When replacing the inserter control board 151

2. TROUBLESHOOTING 152

2.1 SERVICE CALL TABLES 152
2.2 JAMS 153
2.2.1 HANDLING PAPER JAMS 153
What Happens When a Jam Occurs 153
When a Jam Occurs at Power On 153
Power Loss During Glue Application 153
2.2.2 WHEN AN ERROR OCCURS 153
Low Performance Mode 153
Unlocking the Front Doors Manually 154
When the Book Stack Door Cannot Be Opened 155
Signature, Trimmings Removal 157

Removing Trimmings Jammed at the Blade....158
2.2.3 LOW PERFORMANCE MODE....159
Moving to Low Performance Mode....159
Low Performance Conditions....159
Canceling Low Performance Mode....159
2.3 SERVICE BOARD BASICS....160
2.3.1 SERVICE BOARD SWITCHES....160
2.3.2 SERVICE BOARD LEDS....161
Status Display....162
Details Display....163
2.4 SERVICE MODE....188
2.4.1 BEFORE YOU BEGIN....188
Bookbinder Adjustment Mode....188
How to Read the LEDs....191
2.4.2 CRITICAL ADJUSTMENTS....192
Adjustment 1: Cover Horizontal Registration Position Adjustment....192
Adjustment 2: Cover Center Adjustment....196
Adjustment 3: Stacking Tray Switchback Roller Adjustment....197
Adjustment 4: Jogger Motor Adjustment....199
Adjustment 5: Glue Amount Adjustment (Adj by Glue Removal Rod)..200
Adjustment 6: Gluing Unit Movement Adjustment....203
Adjustment 7: Glue Application at Corners Adjustment....205
Adjustment 8: Main Grip Position Adjustment....207
Adjustment 9: Trimming Position Adjustment....208
Adjustment 10: Square Cut Adjustment....211
Adjustment 11: Blade Replacement Alarm Frequency Setting....213
Adjustment 12: Setting Threshold Value for Shifting the Cutting Position....215
Adjustment 13: Cutting Position Change Setting for the Blade Cradle..216
2.4.3 OTHER ADJUSTMENTS....219
Signature Exit Motor Adjustment....219
Slide Motor HP Adjustment....220
Glue Temperature Setting....221
Shift to Energy Mode Setting....223
2.4.4 MAINTENANCE MODE....224
2.5 OUTPUT CHECKS....228
2.5.1 PERFECT BINDER OUTPUT CHECK....228
Self-Diagnostic Mode....228
Bookbinder Test Mode....233

2.5.2 INSERTER OUTPUT CHECK 236
Stand-by Mode, Service Mode 237
Error Display 238
Inserter Motor, Clutch Output Check 239
Sensor Output Check 242

3. SERVICE TABLES 245
3.1 SERVICE PROGRAM MODE 245

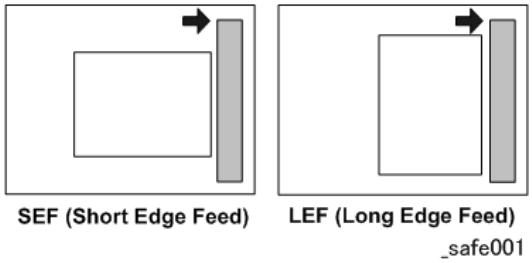
READ THIS FIRST

Symbols, Abbreviations and Trademarks

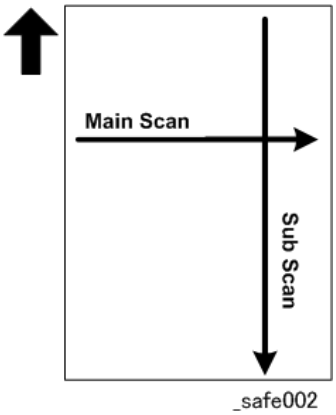
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

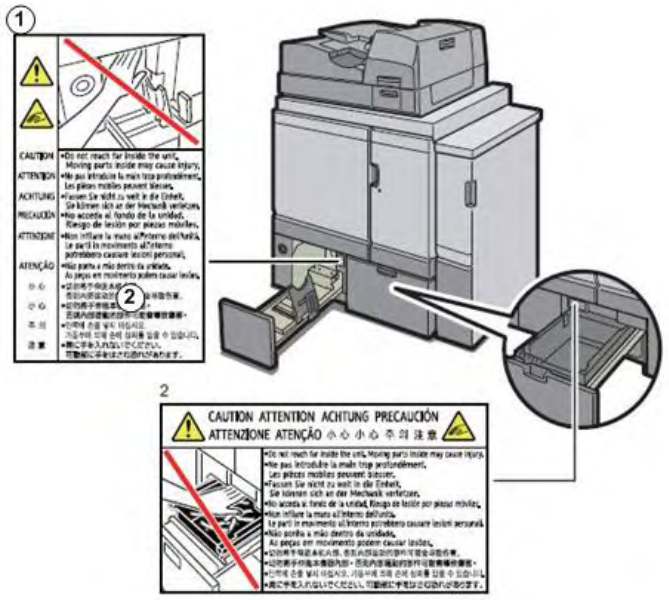
Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Perfect Binder GB5010



①	To avoid personal injury, keep your hand and fingers away from the lower left tray when removing bound booklets.
②	Never reach inside the unit where large moving parts could cause serious injury.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

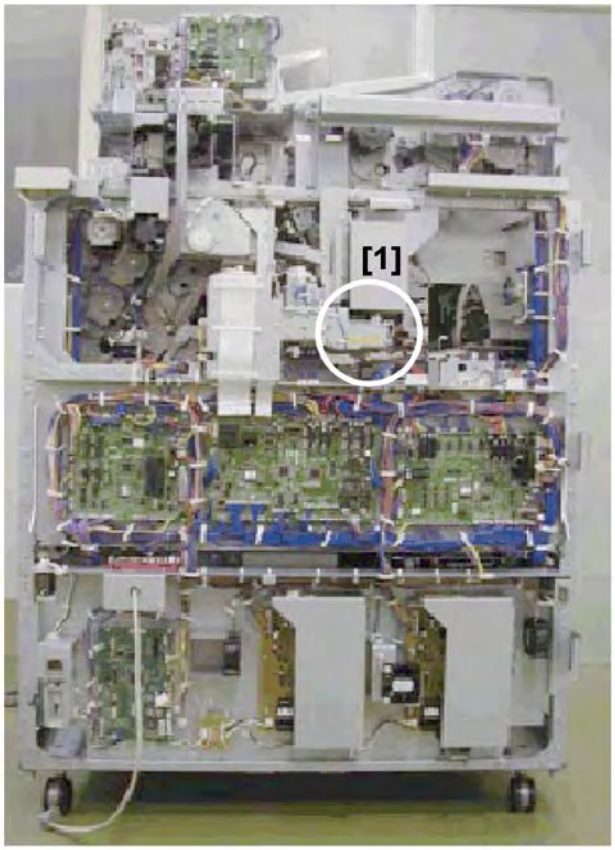
1.1 BASICS

1.1.1 PARTS DANGEROUS TO TOUCH

This section points out some areas inside the machine where you should exercise extra precaution when working around the machine with the covers off.

Covers Off

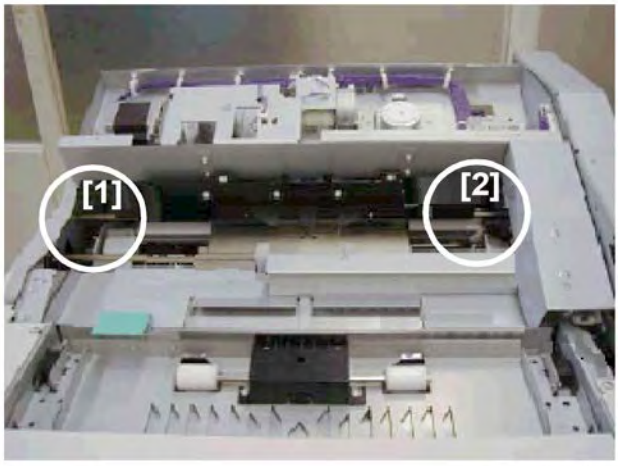
Rear



d391t8027a

[1]	Gluing Unit

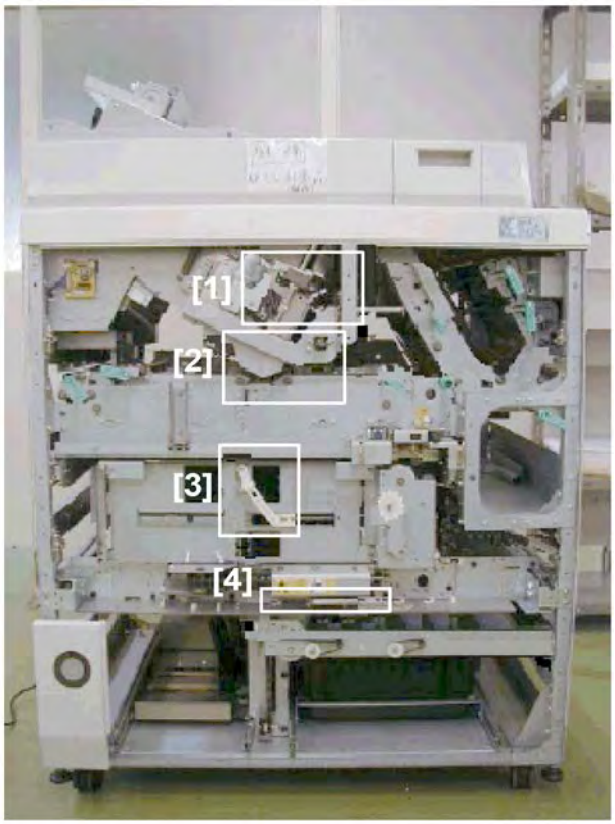
Top



d391t8027b

[1]	Sub Grip Area (Front)
[2]	Sub Grip Area (Rear)

Front



d391t8028a

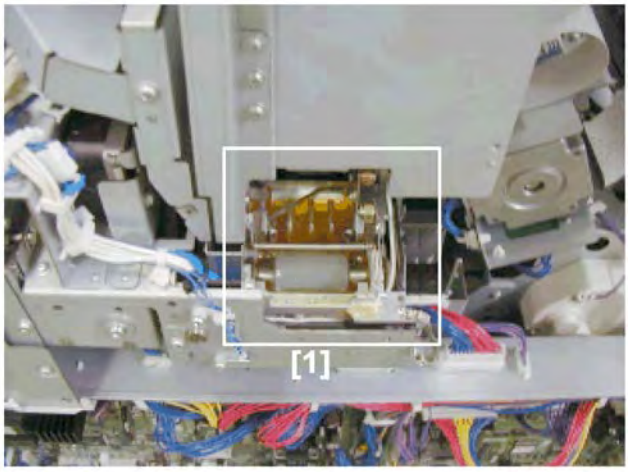
[1]	Main Grip Unit
[2]	Spine Plates
[3]	Gripper
[4]	Blade

Gluing Unit

The gluing unit becomes extremely hot to keep the glue melted and ready for use. The glue and gluing unit remain hot for several minutes after the bookbinder is turned off.

- Always allow the gluing unit to cool for a few minutes before removing the cover.
- After removing the covers, touch the gluing unit only when necessary and only after it has cooled completely.

Gluing Unit

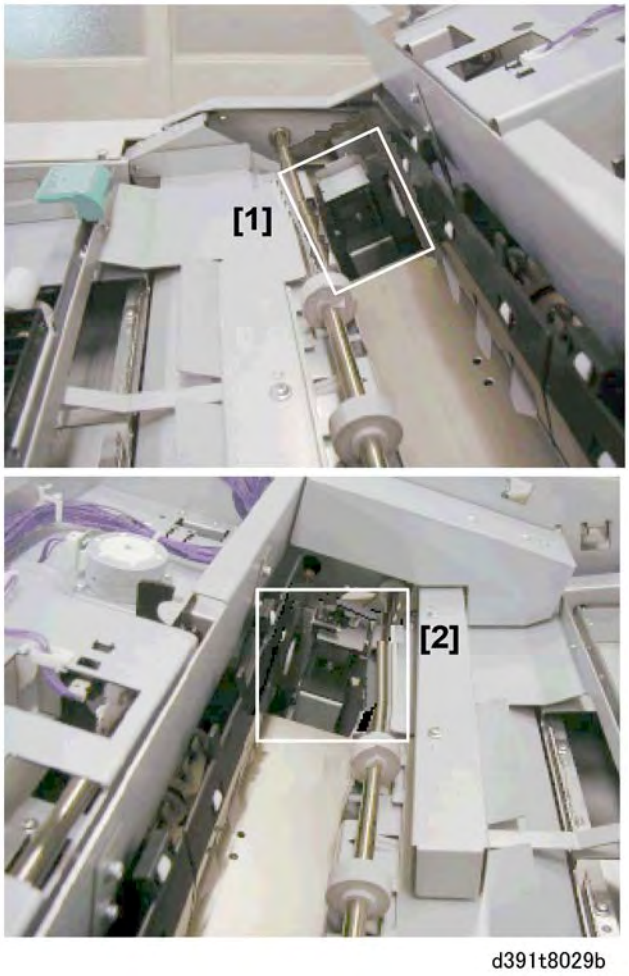


d391t8029a

[1]	Gluing Unit

The illustration shows the glue vat with the top cover removed.

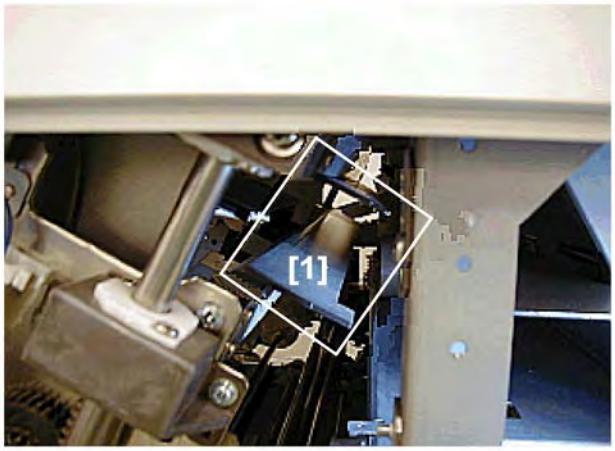
Sub Grip Unit: Front and Back



CAUTION

- Never put your fingers or a tool in or near the exposed areas of the sub grip unit at the front [1] or at the rear [2] while the bookbinder is powered on.

Main Grip Unit at Signature Turnover (from Sub Grip Unit)

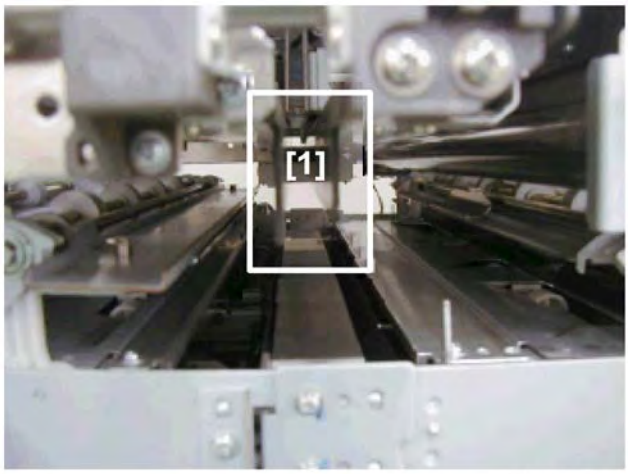


d391t8030a

⚠CAUTION

- Never put your fingers or a tool in or near the exposed areas of the main grip unit at [1] while the bookbinder is powered on.

Main Grip Unit at Turnover to Trimming Unit After Gluing

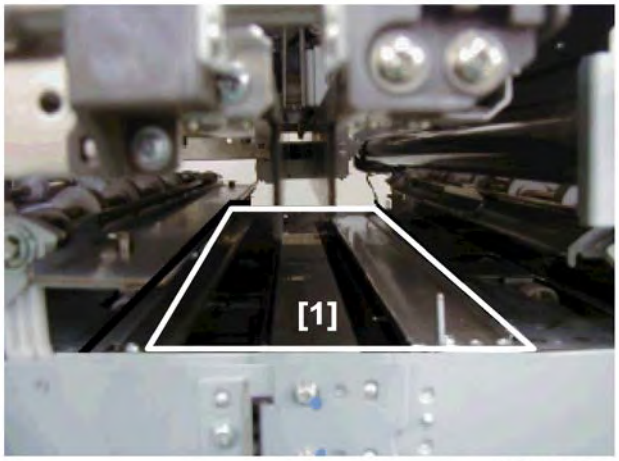


d391t8030b

⚠CAUTION

- Never put your fingers or a tool in or near the exposed areas of the main grip unit at [1] while the bookbinder is powered on.

Spine Fold Plate



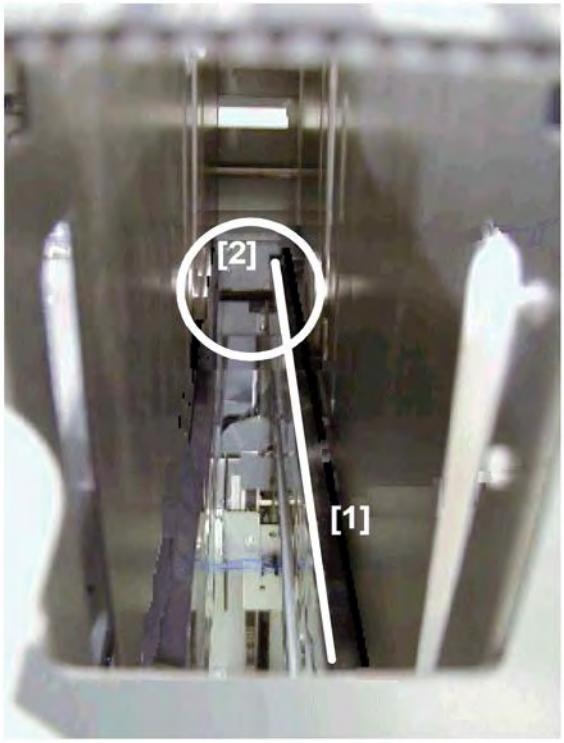
d391t8030c

⚠CAUTION

- Never put your fingers or a tool in or near the exposed areas of the spine plates at [1] while the bookbinder is powered on.

Trimming Unit

Gripper and Press Plate

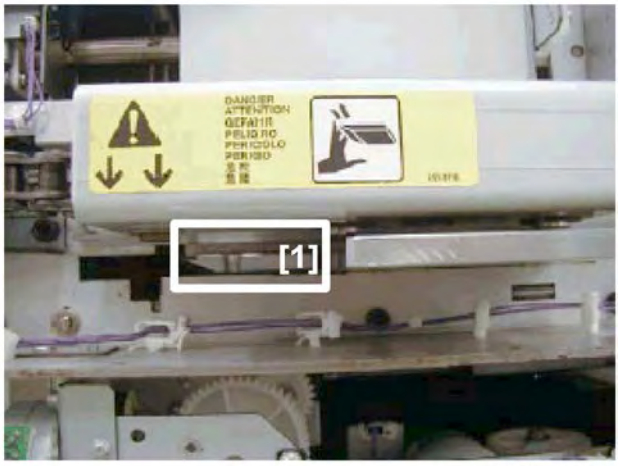


d391t8031a

⚠CAUTION

- Never put your fingers or a tool in or near the exposed areas of the press plates at [1] or gripper at [2] while the bookbinder is powered on.

Blade at Retracted Position



d391t8031b

⚠CAUTION

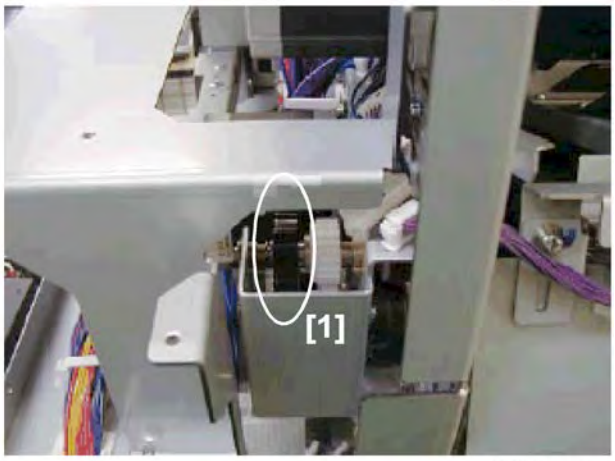
- The blade is extremely sharp. Never touch the edge of the blade [1]. Always work carefully where the blade is exposed.

1.1.2 USING THE DIALS

Gluing Unit

The gluing unit is equipped with two dials that are used to raise and lower the stacking tray and the main grip unit.

Stacking Tray Lift Dial



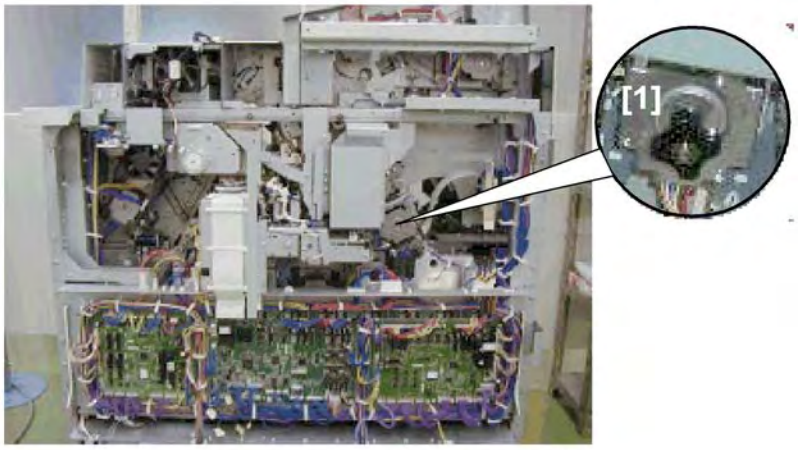
d391t8032b

The photo above shows the stacking tray lift dial [1] viewed from the rear of the bookbinder.

- Turn this dial clockwise to lower the stacking tray.
- Turn this dial counter-clockwise to raise the stacking tray.

.

Main Grip Unit Lift Dial



d391t8032c

The photo above shows the main grip lift dial [1] viewed from the rear of the bookbinder.

- Turn this dial clockwise to raise the grip unit
- Turn this dial counter-clockwise to lower the grip unit.

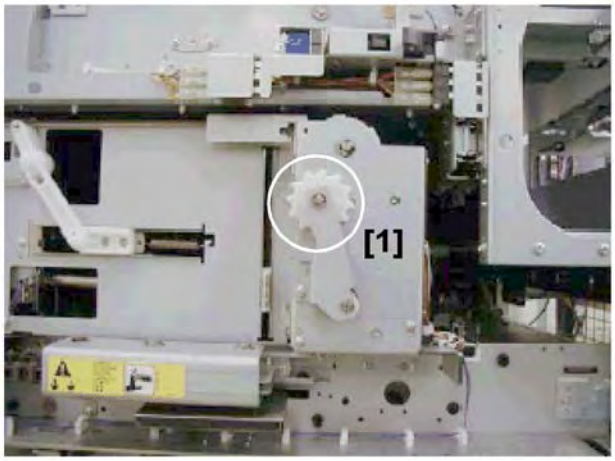
Trimming Unit

The trimming unit is equipped with four dials that:

- Raise the slide
- Open and close the grip
- Open and close the press plates
- Move the blade from side to side

There are also two pulleys where you can use a plus (+) screwdriver to raise and lower the book lift tray and move the trimmings buffer from side to side.

Slide Lift Dial

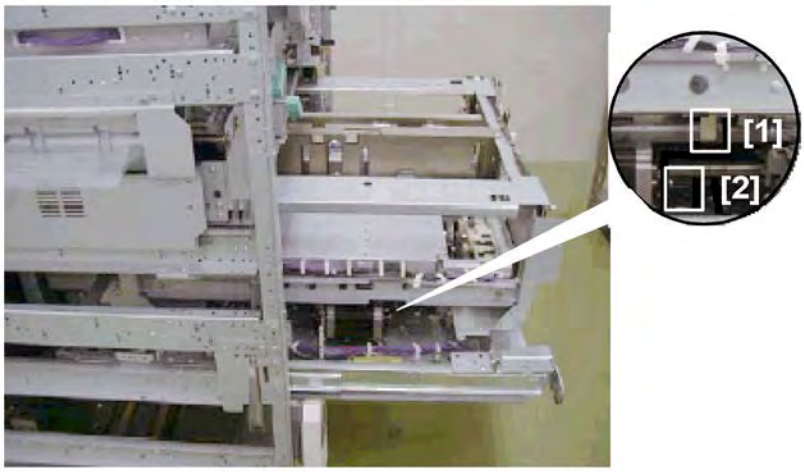


d391t8033a

The photo above shows the slide lift dial [1] viewed from the front:

- Turn clockwise to lift the slide.
- Turn counter-clockwise to lower the slide.

Main Grip/Press Plate Dials



The photo above shows the main grip unit pulled out and viewed from the front.

[1]	Main Grip Dial
[2]	Press Plate Dial

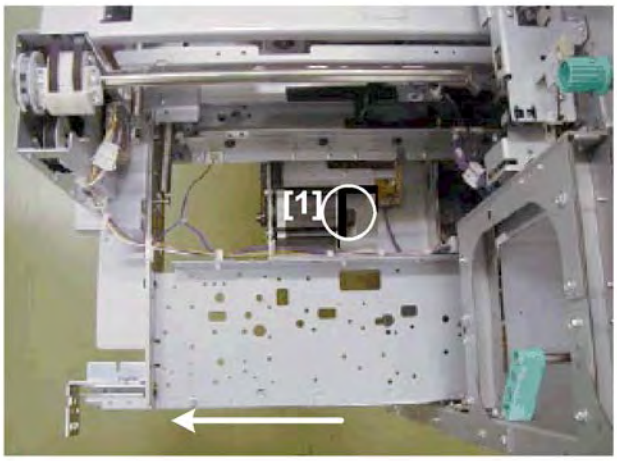
Main Grip Dial

- Turn clockwise to close the main grip.
- Turn counter-clockwise to open the main grip.

Press Plate Dial

- Turn clockwise to open the press plates.
- Turn counter-clockwise to close the press plates.

Blade Dial

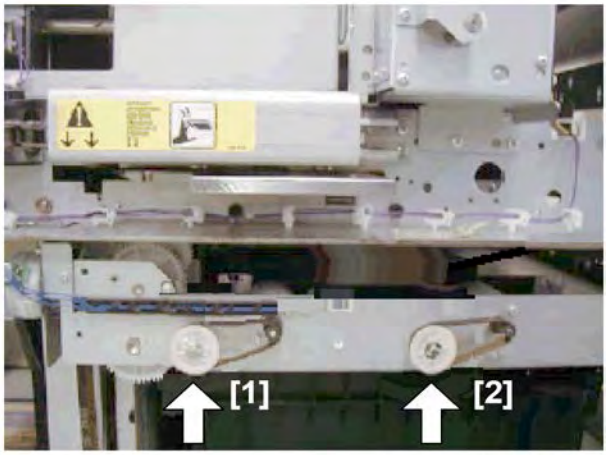


d391t8034b

The photo above shows the blade dial [1] with the trimming unit pulled out of the front of the bookbinder:

- Turn the dial clockwise to push the blade toward the cutting position.
- Turn the dial counter-clockwise to pull the blade away from the cutting position.

Book Lift Tray/Trimmings Buffer Pulleys



d391t8034c

The photo above shows the book tray lift pulley [1] and the trimmings buffer [2] viewed from the front.

Book tray lift pulley

- Turn the pulley clockwise to lower the tray.
- Turn the pulley counter-clockwise to raise the tray.

Trimmings buffer pulley

- Turn the pulley clockwise to move the trimmings buffer to the left.
- Turn the pulley counter-clockwise to move the trimmings buffer to the right.

1.2 COMMON PROCEDURES

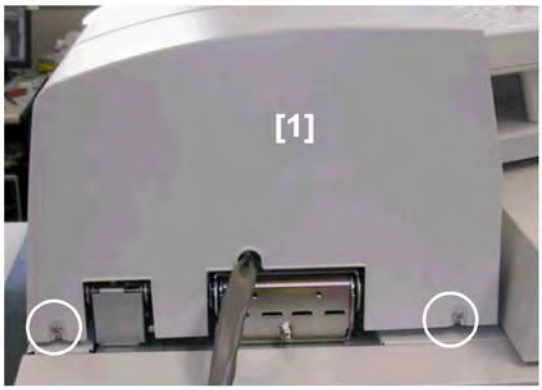
1.2.1 SETTING AND RELEASING LOW PERFORMANCE MODE

The bookbinder automatically enters the low performance mode if a bookbinding component malfunctions and binding is no longer possible.

- In low performance mode the bookbinder can continue to operate, but only for straight-through downstream delivery.
- The machine can be released from the low performance mode by the service technician only.
- Set the bookbinder in low service mode if a replacement part is not immediately available so the operator can continue to use the host machine.

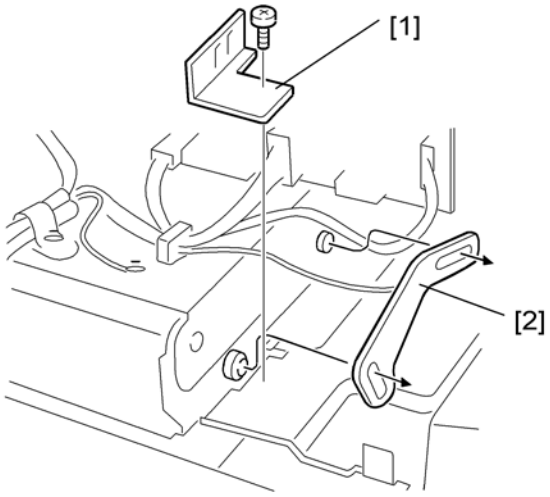
To set the machine in low performance mode, do **SP6536-001**.

1.2.2 INSERTER UNIT



d391r505

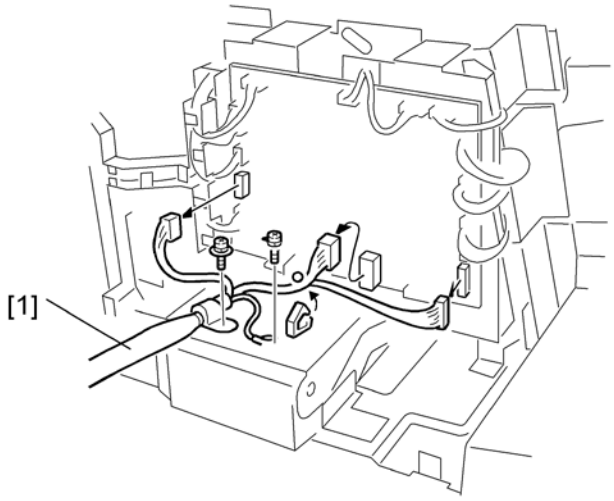
1. Remove inserter rear cover [1] (x2).



d391r501

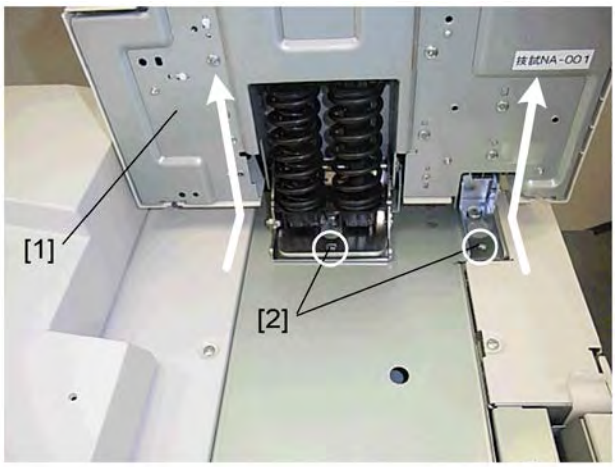
2. Remove:
   [1] Plate [1] (x1)
   [2] Limiter brace [2] (x2)

3. Remove the bookbinder rear upper cover.



d391r503

4. Disconnect the inserter I/F cable [1] (x2, x3).

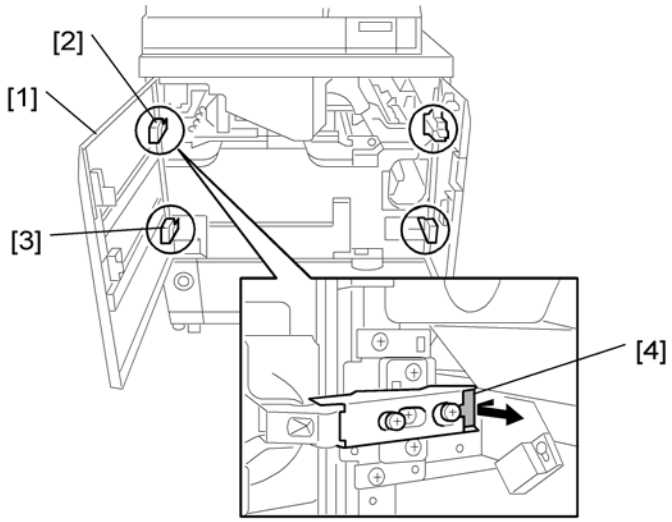


d391r504

5. Raise the inserter [1].
6. Disconnect the inserter [2] from the bookbinder and remove it (x2).

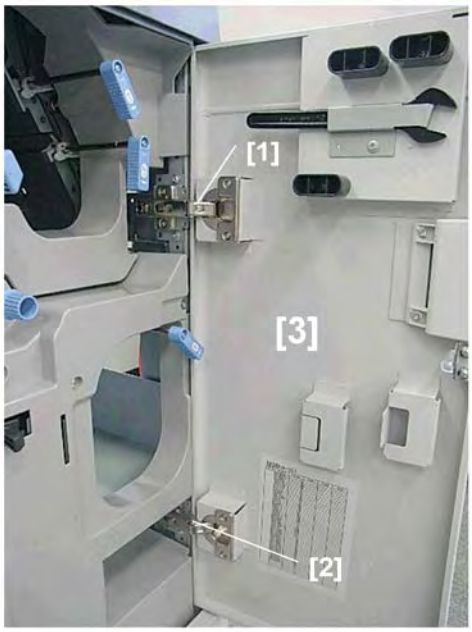
1.2.3 FRONT DOORS

1. Open the right front door and left front door.



d391r008

2. On the left door [1] remove the top hinge [2] and bottom hinge [3].
   - While holding the left front door with one hand, behind the top hinge push the black lever [4] in the direction of the arrow to release the top hinge.
   - Swing the top hinge out slightly.
   - While still supporting the left door with one hand, repeat the procedure to remove the bottom hinge.
   - Remove the left door.

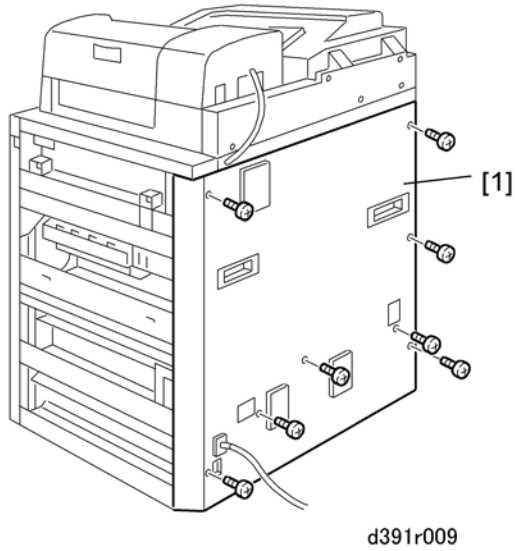


d391i315a

3. Repeat Step 2 to remove the top hinge [1] and bottom hinge [2] then remove the right front door [3]. (You may have to lower **Mk11** so you can remove the right door.)

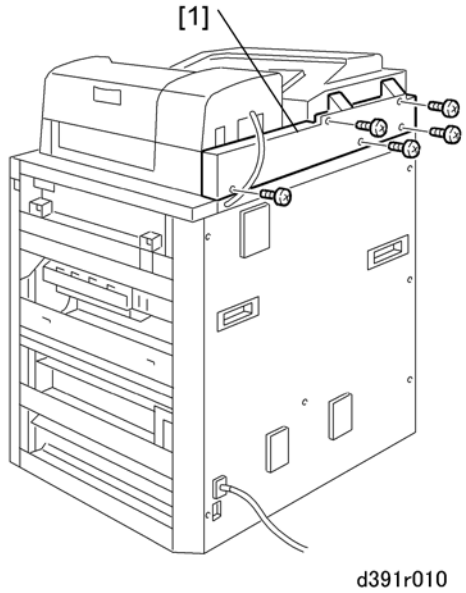
1.2.4 COVERS

Rear Cover



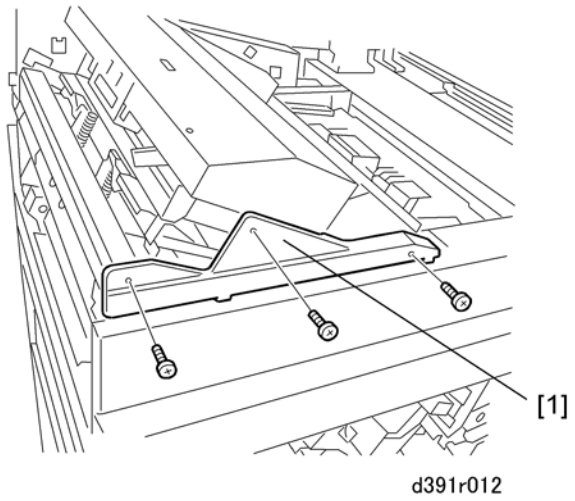
1. Rear cover [1] (x8)

Rear Upper Cover

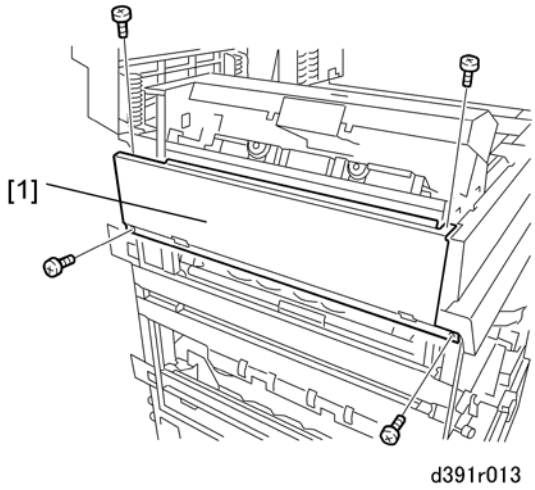


1. Rear upper cover [1] (x5)

Left Upper Cover

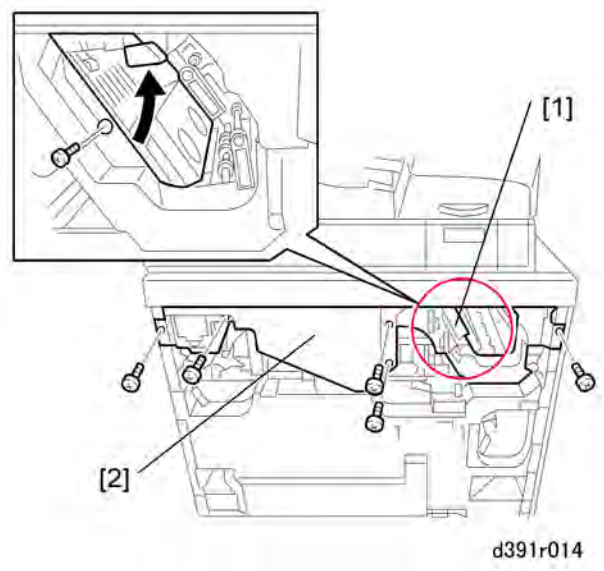


1. Open the inserter and upper cover.
2. Remove the front bar [1] of the stacking tray unit (x3).



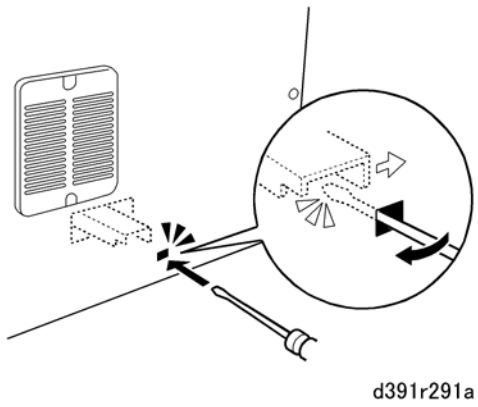
3. Remove the left upper cover [1] (x4).

Front Inner Cover: Upper

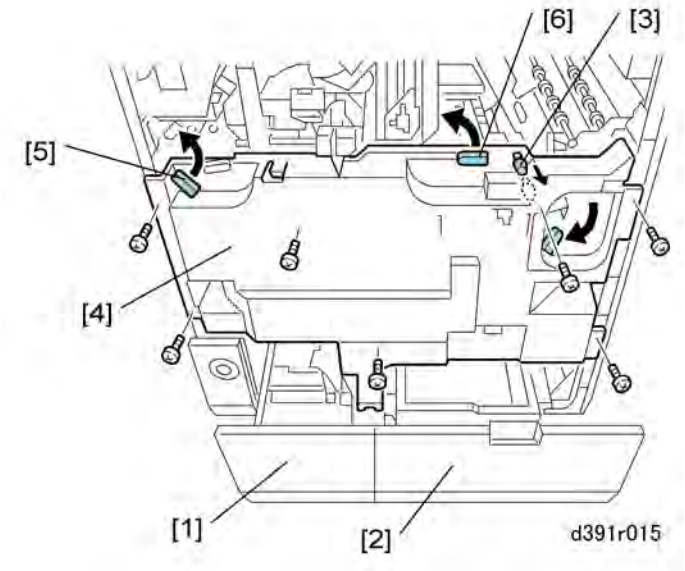


1. Remove both the left and right front door.
2. Raise jam lever **Mk12** [1].
3. Remove the front inner cover (upper) [2] (x6).

Front Inner Cover: Lower



1. At the right rear corner, unlock the book stack door.



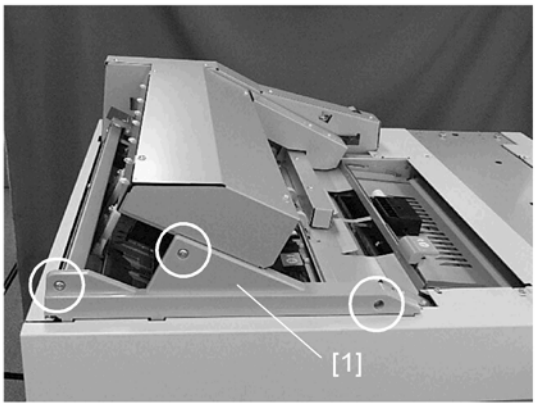
2. Pull out the book stacking tray [1] and trimmings box [2] together.
3. Pull off jam clear knob **Mk10** [3].

Important

- Mk10 must be reattached.

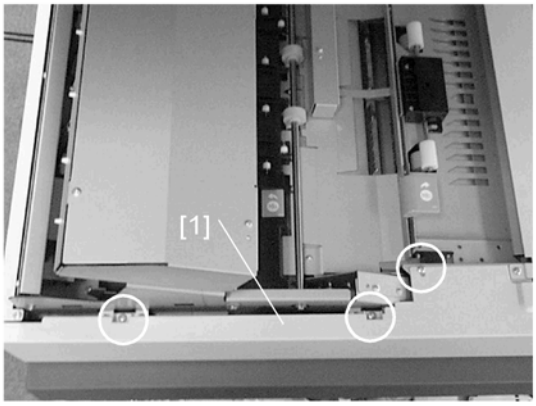
4. Remove the screws of the lower inner cover [4] (x7).
5. Raise the jam clear levers **Mk8** [5] and **Mk9** [6] as you remove the cover.
6. Return the jam clear levers to their original positions.

1.2.5 SIGNATURE PATH EXIT UNIT



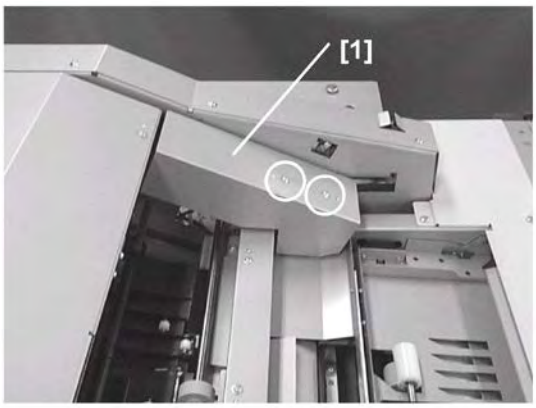
d391p040

1. Remove the inserter.
2. Remove the stacking tray front cover [1] (x3)



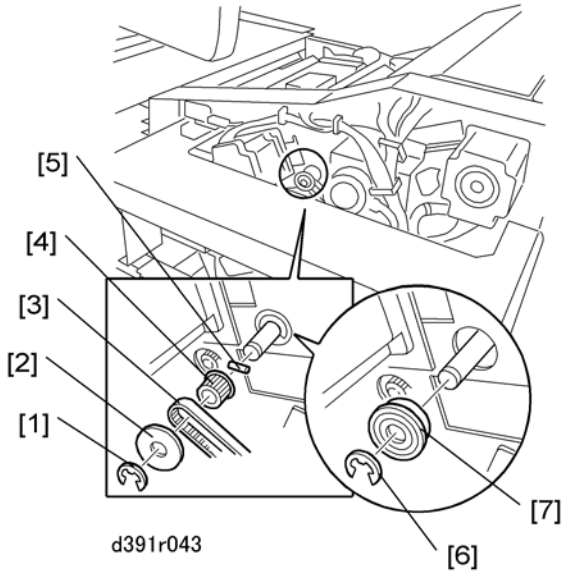
d391p041

3. Remove the top cover [1] (x3).

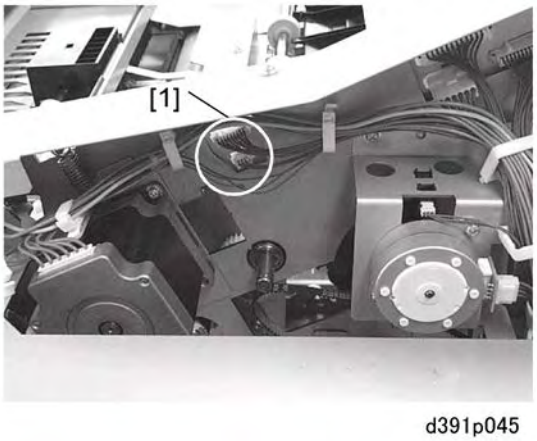


d391p042

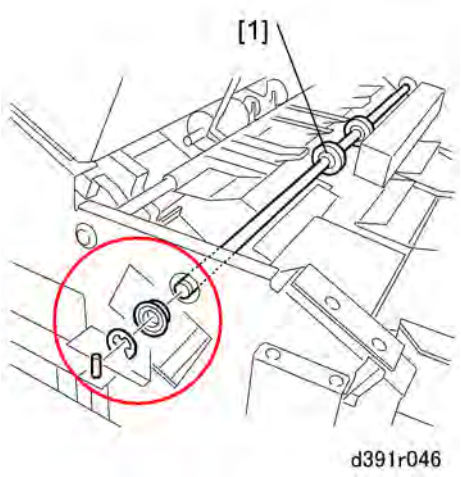
4. Remove the harness cover [1] (x2).



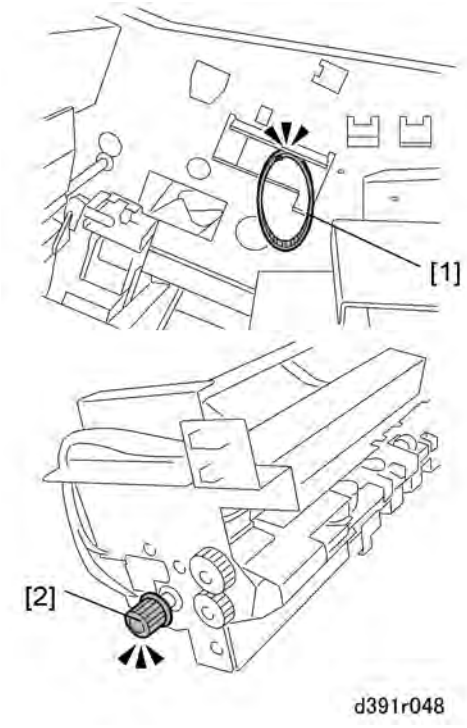
5. Remove the covers around the back and the rear upper cover.
6. Remove:
   [1] ℂx1
   [2] Flange x1
   [3] Belt x1
   [4] Gear x1
   [5] Lock pin x1
   [6] ℂx1
   [7] Bearing x1



7. Disconnect connectors [1] (x2).

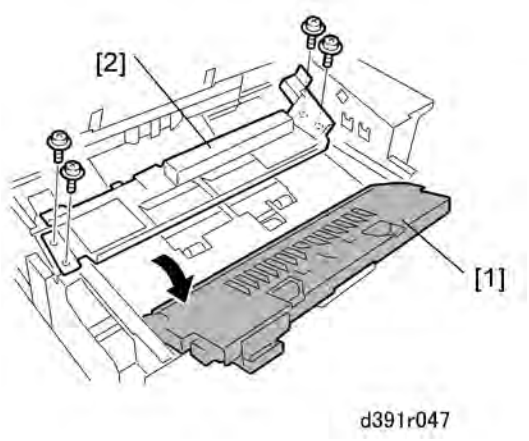


8. At the front, remove the signature exit roller [1] (Lock pin x1, ℂx1, Bearing x1).



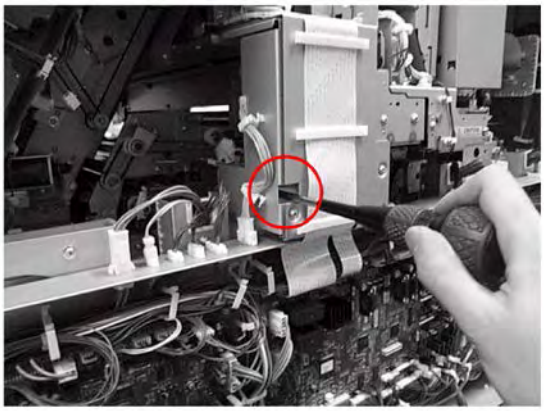
Before Removing the Signature Path Exit Unit:

- Remove the signature path exit unit carefully and avoid dropping the belt [1] of the drive motor into the bookbinder.
- The belt must be reattached to its gear [2] at reinstallation.
- First removing the TE press lever motor (M3) will make it easier to remove and reinstall the signature path exit unit.



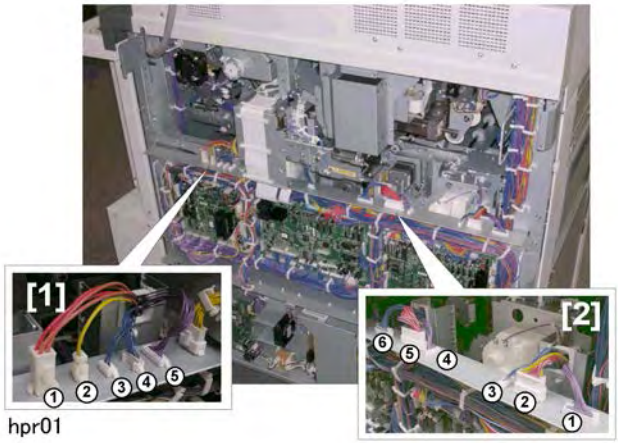
9. Open the transport guide [1].
10. Remove the signature path exit unit [2] (x 2 Left, x 2 Right)

1.2.6 COVER TRANSPORT UNIT



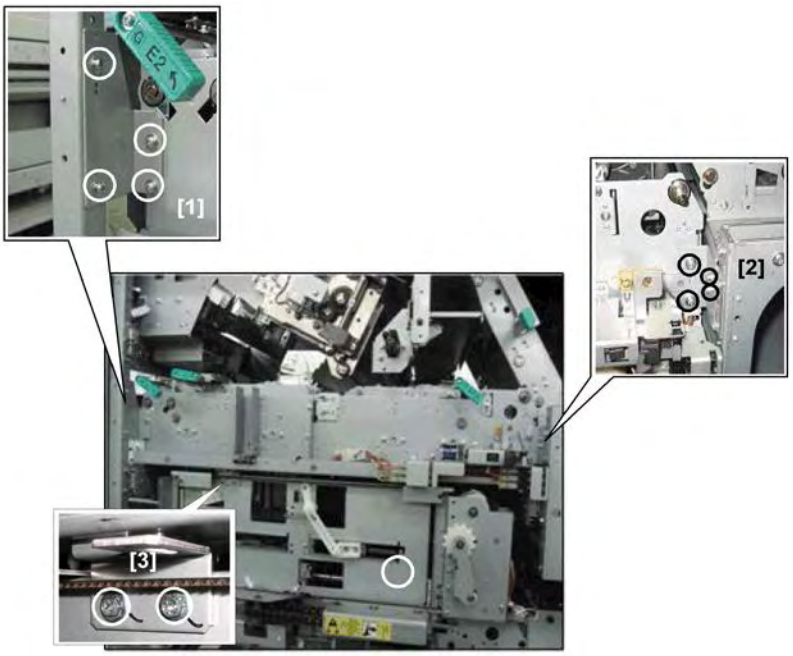
d391p141a

1. Remove:
   - Rear cover page 16
   - Both doors page 15
   - Front inner lower cover page 18
   - Front inner upper cover page 18
2. Remove screw (x1).



hpr01

3. Disconnect connectors at [1] (x5) and [2] (x6).



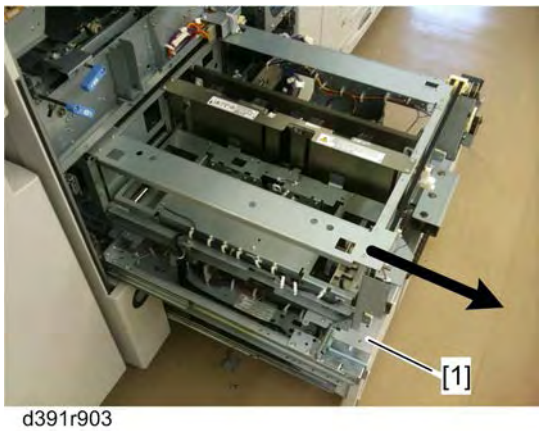
hpr02

4. Remove:

   [1] Left brace (x4)

   [2] Right brace (x4)

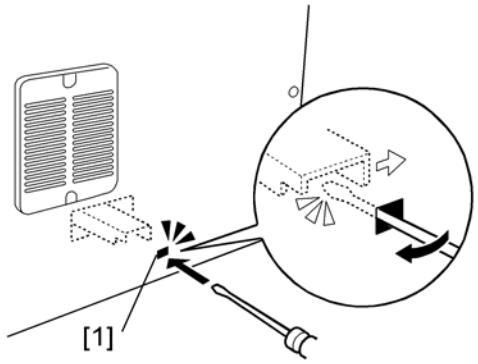
   [3] Lock plate (x2)



d391r903

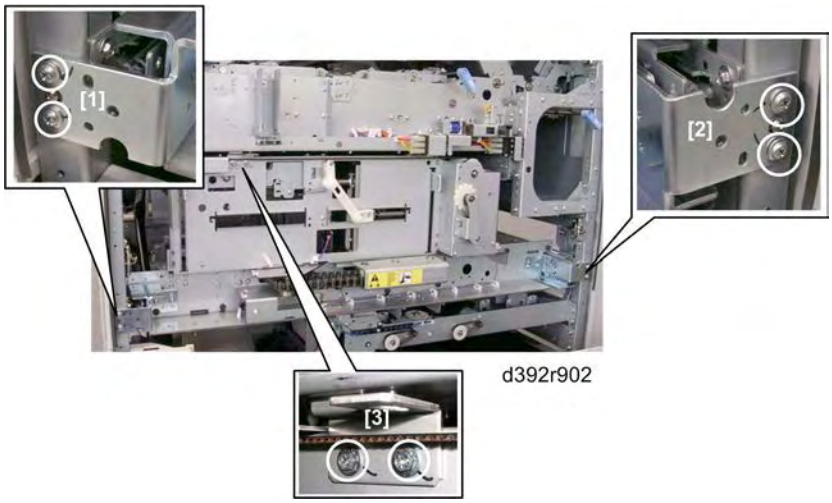
5. Pull out the cover transport unit [1] on its rails.

1.2.7 TRIMMING UNIT



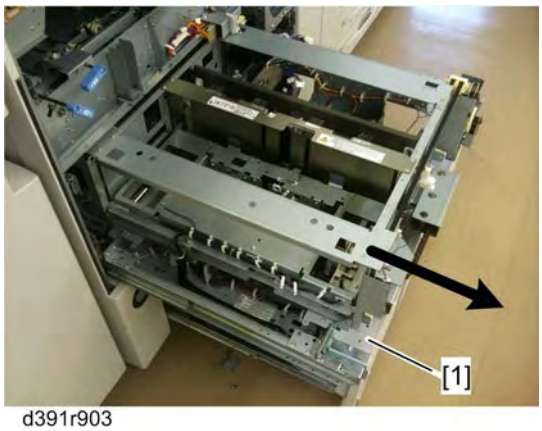
d391r291

1. Insert the tip of a small screwdriver into the small hole [1] near the left rear corner of the bookbinder.
2. Gently move the screwdriver in the direction of the arrow to release the stacking tray lock.
3. At the front pull open the book tray door and the trimmings box drawer.
4. Remove the front lower cover.
5. Confirm that all devices have been switched off and disconnected.



d392r902

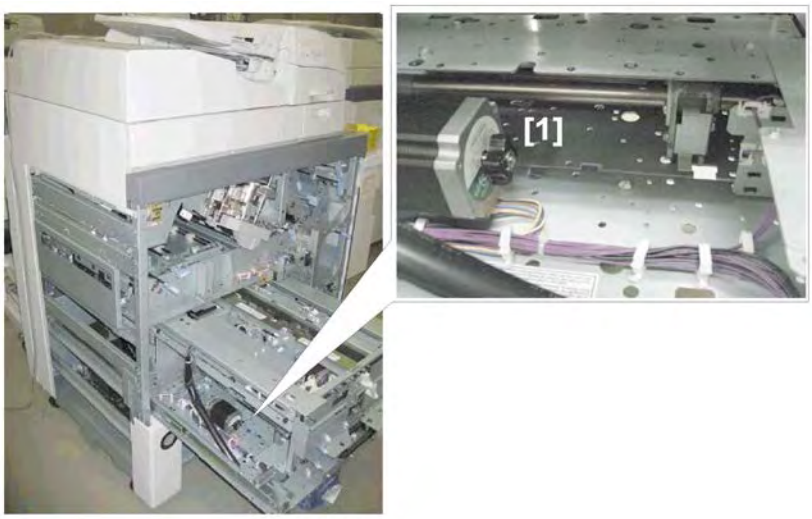
6. Remove:
   [1] Left brace (x2)
   [2] Right brace (x2)
   [3] Lock plate (x2)



d391r903

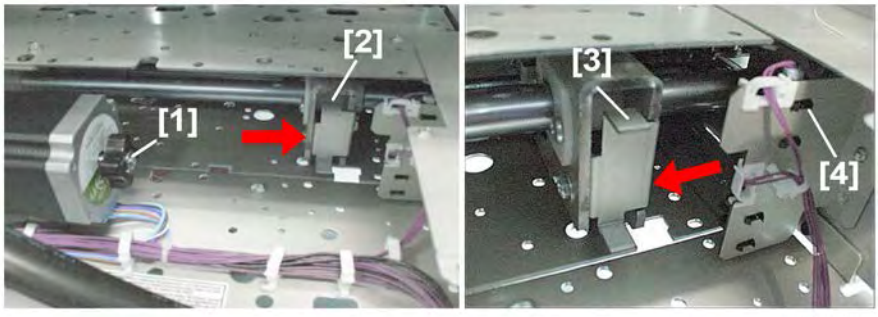
7. Pull out the trimming unit [1] on its rails.

Before Closing the Trimming Unit Drawer



d391r954

1. Check the area around the edge press plate motor (M36) [1].



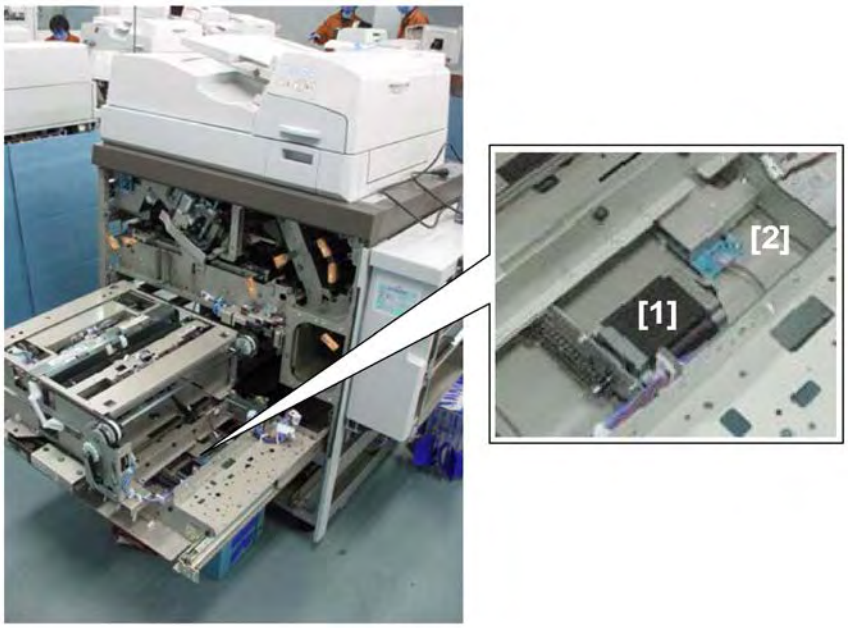
d391r955

2. Turning the motor knob [1] away from you releases the pressure exerted by the press plate but also moves the small plate [2] to the right. (You may have done this during the procedure.)
3. Check the position of the small plate [3] and confirm that it is not near the press limit sensor (S89) [4] as shown in the illustration on the right.
   - If the small plate is blocking the sensor, turn the knob [1] toward you to move the small plate [3] away from the sensor [4].

- If the small plate is blocking the sensor this will prevent the motor from operating and cause an error (SC750-54) when the system is turned on.

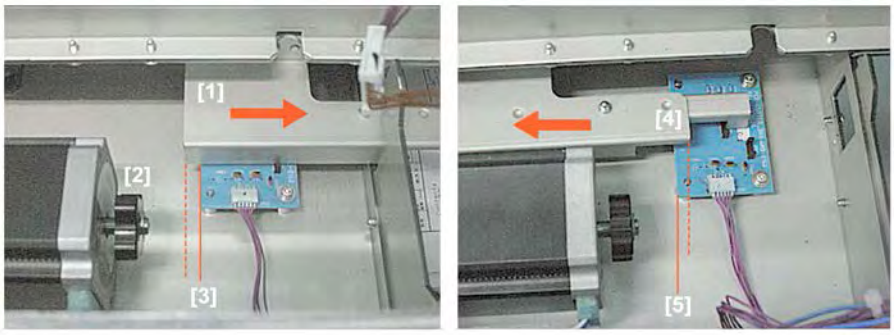
Important

- To prevent SC750-54 always check the position of the small plate [3] before closing the trimming unit drawer.



d391r956

4. Check the area around the cutter motor (M35) [1] and PCB [2] where the trimmer limit sensor (S86) is mounted.



d391r957

The illustration on the left shows the blade cradle at the rear, and the illustration on the right shows the blade cradle at the front.

5. If the edge of the plate [1] is not even with the left edge of the PCB, turn the motor knob [2] away from you to move the plate to the rear until the plate edge reaches the left edge of the PCB [3].

   -or-

   If the edge of the plate [4] is not even with the left edge of the PCB, turn the motor knob toward you to move the plate to the front until the plate edge reaches the left edge of the PCB [5].

If the edge of the plate is not aligned correctly with the left edge of the PCB, the this will prevent the motor from operating and cause an error (SC750-67) when the system is turned on.

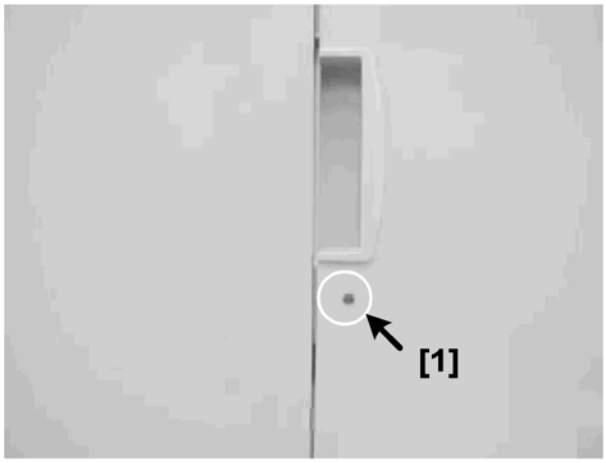
Important

- To prevent SC750-67 always check the position of the plate before closing the trimming unit drawer.

1.2.8 OPENING LOCKED DOORS MANUALLY

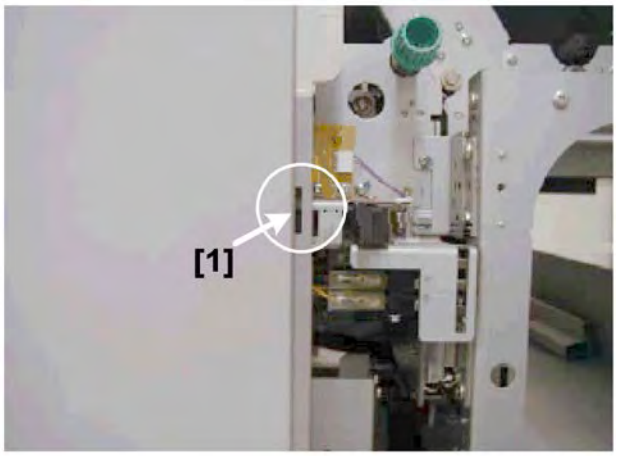
Front Doors

If the front doors remain locked after the power was turned off while the bookbinder was operating, cycling the bookbinder off/on will usually unlock the doors. However, if the front doors remain locked after cycling the machine off/on (or if you cannot switch the machine off/on), follow the procedure below to manually unlock the front doors.



d391t8022a

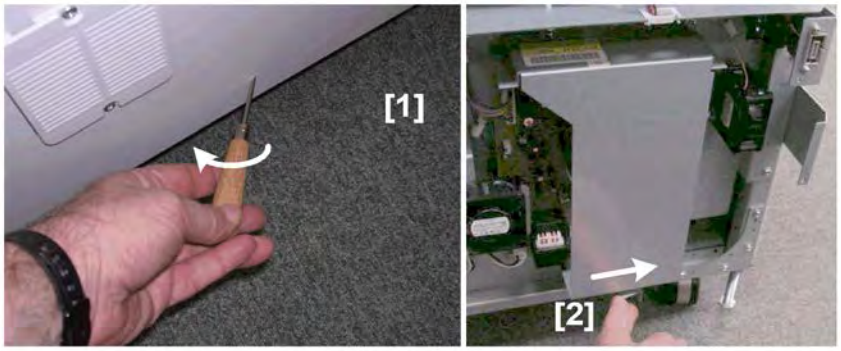
1. Insert the tip of a small screwdriver into the hole [1] and press in on the manual lock to release the doors.



d391t8022b

The manual release is located behind a cutout on the left edge of the left front door.

Book Stack Door



d391t8023c

1. Insert the tip of a small screwdriver into the small hole near the left rear corner of the bookbinder.
2. Move the screwdriver in the direction of the arrow to release the stacking tray lock.

Note

- If the rear cover has been removed, just push the lever [2] to the right to unlock the book stack door.

1.2.9 SIGNATURE THICKNESS SENSOR (S50) RECALIBRATION

The signature thickness sensor must be recalibrated after these components have been replaced:

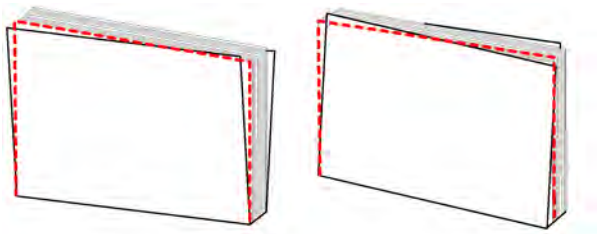
- Master control board
- EEPROM on the master control board
- Signature thickness sensor (S50)

The sensor is calibrated with SP mode on the main machine:

1. Do SP6521-001 to input the factory setting data of STK-VR0.
2. Do SP6521-002 to input the factory setting data of STK-VR25.

1.2.10 COVER SKEW ADJUSTMENT

Problem: Cover and signature not aligned correctly. (The cover & signature in the illustration below has not been trimmed.)

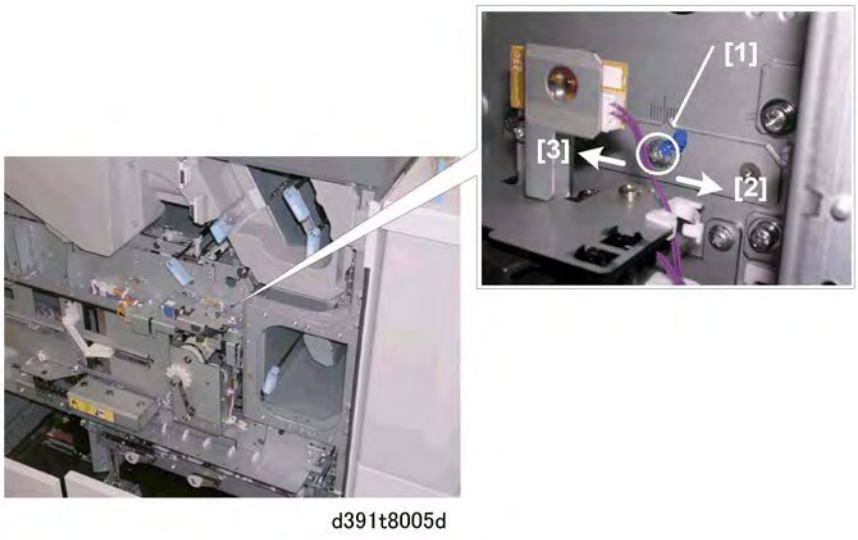


d391t8005a

Cause: Cover was not aligned correctly in the cover transport path before the signature and cover were jointed.

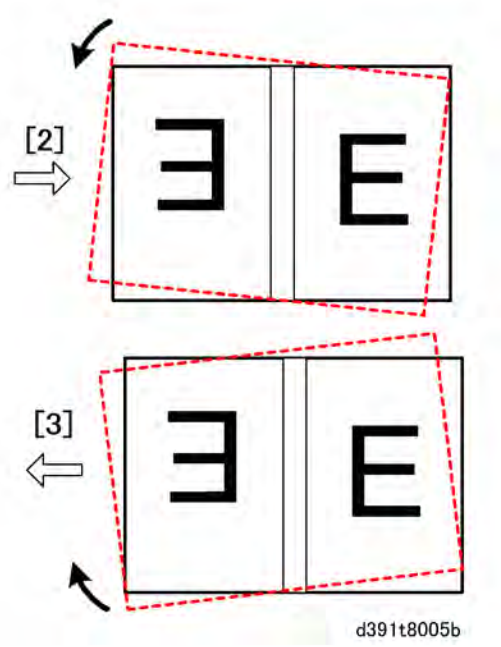
Solution: Adjust the position of the cover horizontal registration unit.

1. Remove the right and left front door.
2. Remove the lower inner cover (x6).



d391t8005d

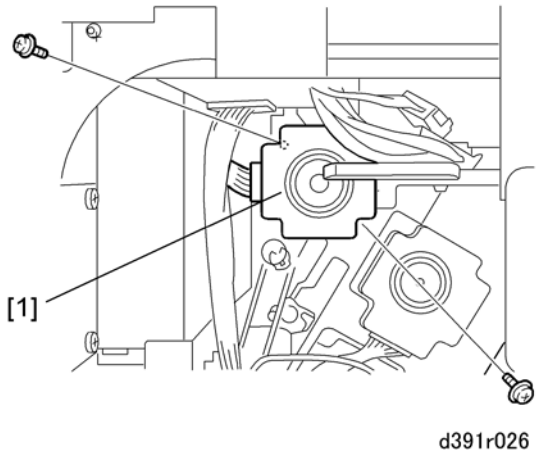
3. Loosen the screw on the scale indicator.
4. Move the scale to the right [2] or to the left [3] and then tighten the screw.
   The illustration below shows the effect of moving the scale.



5. Do some test prints and then repeat the adjustment until the cover and signature are correctly aligned.

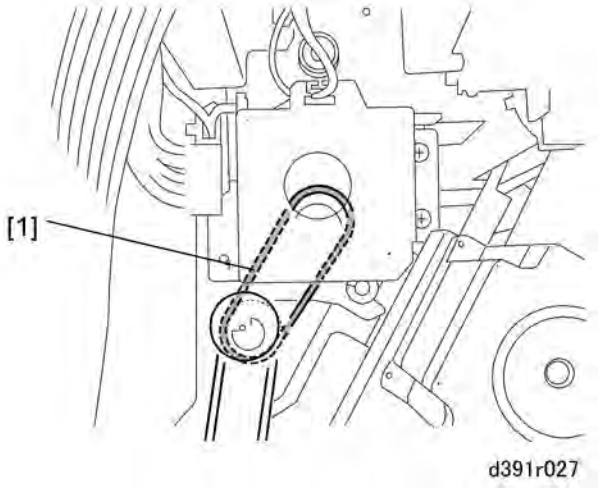
1.3 PATH ENTRANCE MOTORS

1.3.1 VERTICAL TRANSPORT MOTOR (M5)



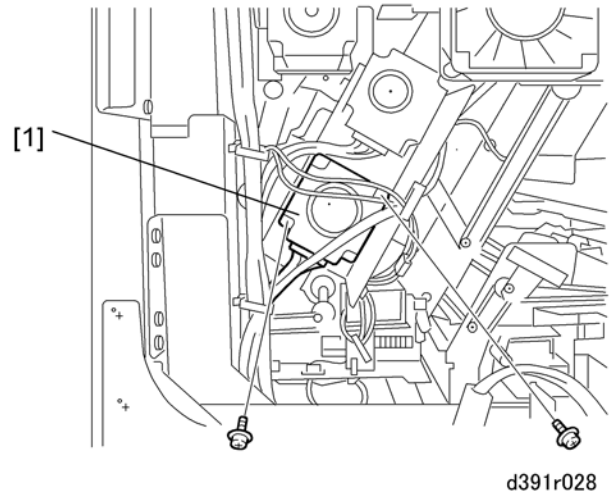
1. Remove the rear cover. page 16
2. Remove the vertical transport motor (M5 (INS)) [1] (x2, x1)

Re-installation



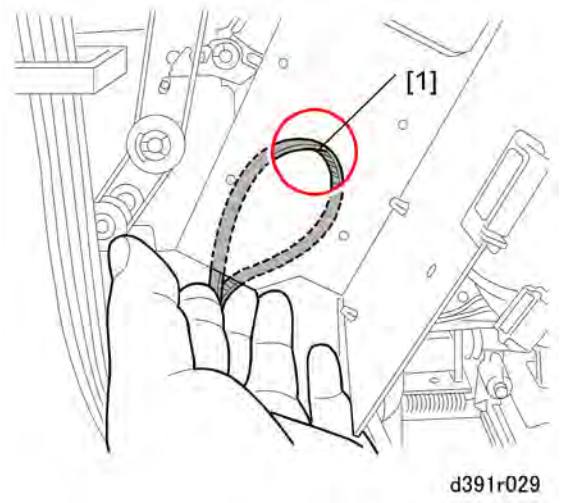
1. Be sure to reattach the timing belt [1] with the belt hung on the motor drive gear as shown above

1.3.2 ENTRANCE MOTOR (M10)



1. Remove the rear cover (x8). page 16
2. Remove the entrance motor (M10) [1] (x2, x1)

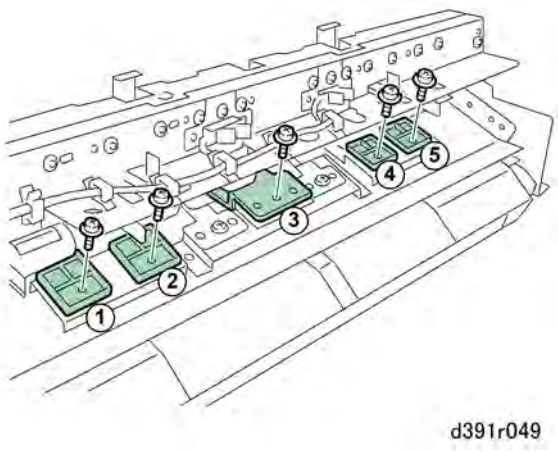
Reinstallation



1. Be sure to reattach the timing belt [1] with the belt hung on the motor drive gear as shown above.

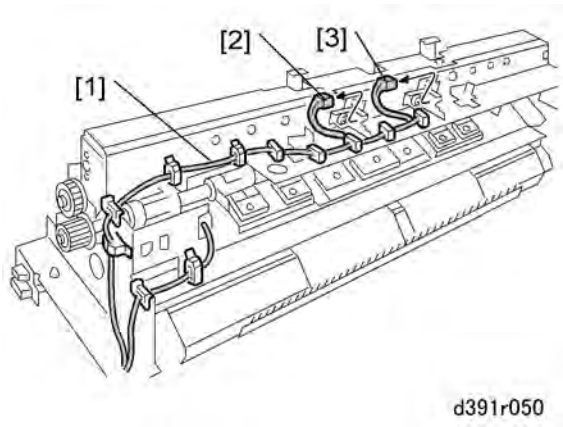
1.4 SIGNATURE PATH EXIT UNIT

1.4.1 RIPPLE IDLE ROLLERS

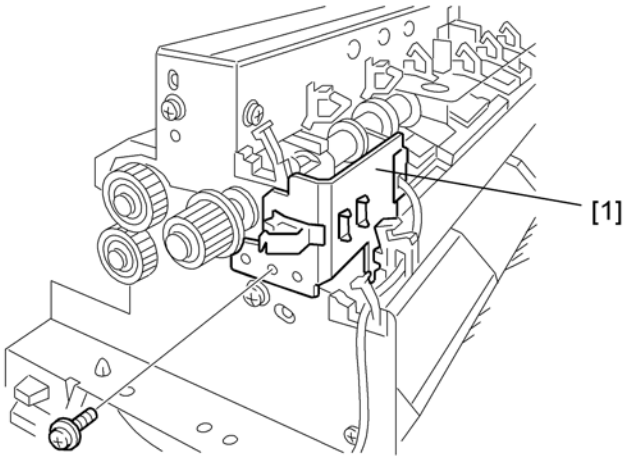


1. Remove the signature path exit unit. page 35
2. Remove the **5** ripple idle rollers (x1 ea.)

1.4.2 TE PRESS ROLLER UNIT

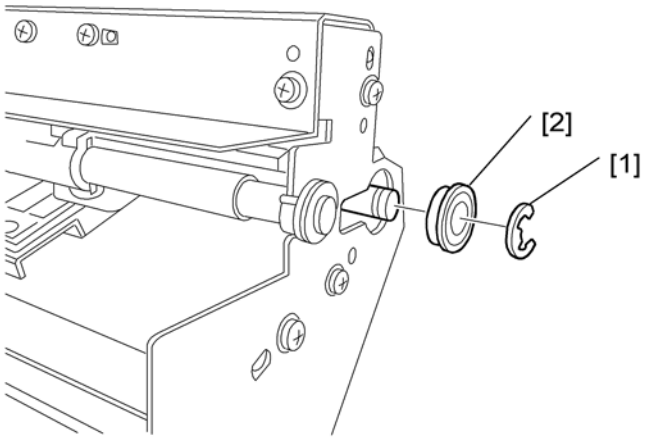


1. Remove the signature path exit unit. page 35
2. Release harness [1] (x11)
3. Disconnect sensors [2] and [3] (x2).



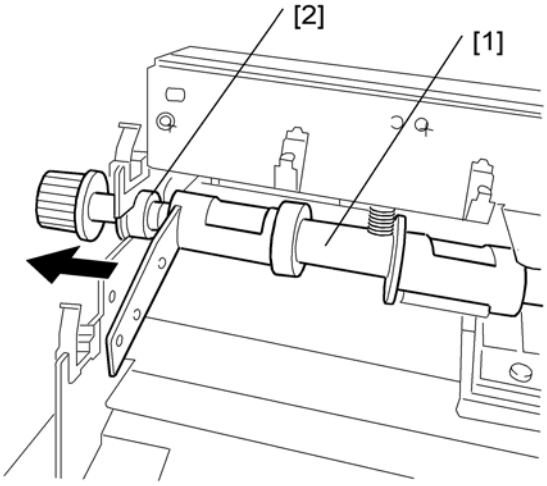
d391r051

4. Remove sensor plate [1] (x1).



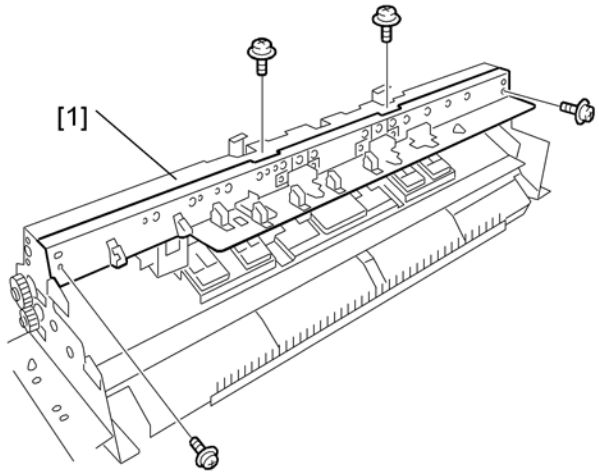
d391r052

5. Remove:
   [1] x1
   [2] Bearing x1



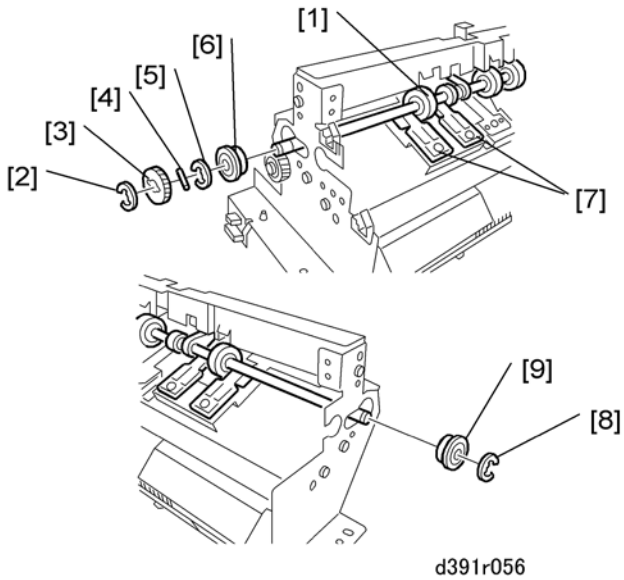
d391r053

6. Slide the pressure roller [1] in the direction of the arrow, release it from the ring [2], and then remove the roller.



d391r055

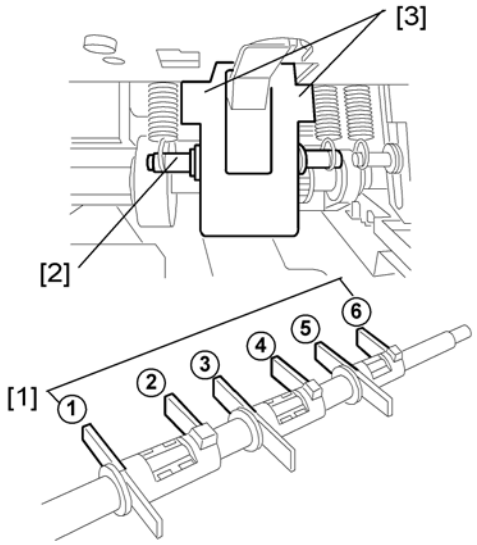
7. Remove the TE press plate unit [1] (x4).



d391r056

8. Remove the TE press roller unit [1].
   [2] x1
   [3] Gear x 1
   [4] Lock pin x1
   [5] x1
   [6] Bearing x1
   [7] Ripple idle rollers x2 (x1 ea.)
   [8] x1
   [9] Bearing x1

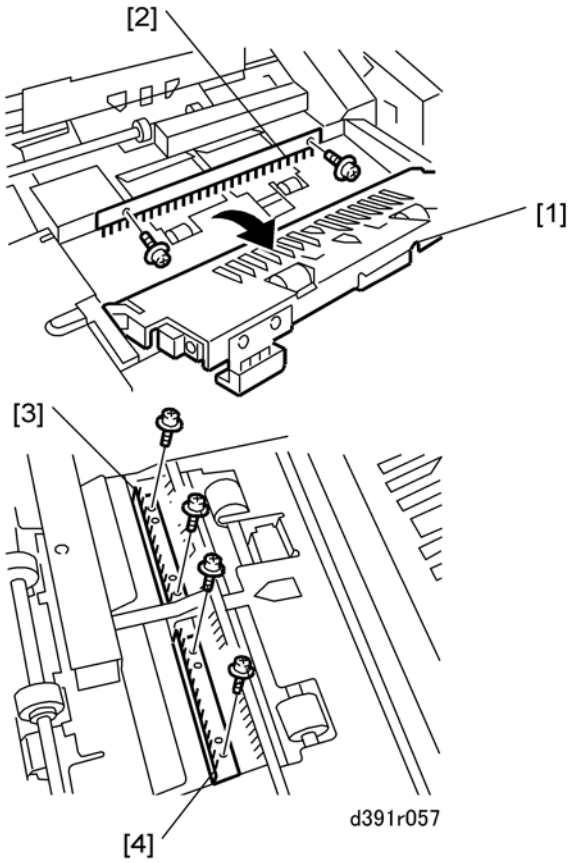
Reinstallation



d391r054

1. Pressure levers [1] must be positioned between the shaft of the TE pressure plate [2] and the rib [3].

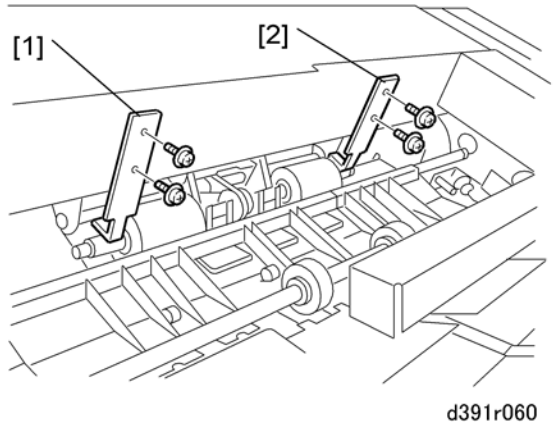
1.4.3 ANTI-STATIC BRUSH



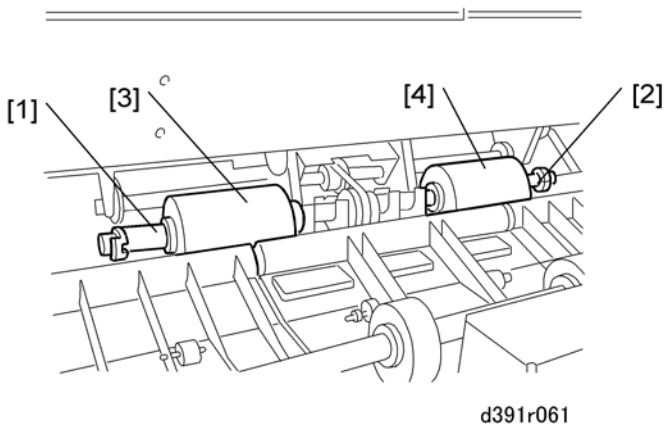
1. Remove:
   - Inserter unit page 13
   - Top cover page 35
2. Open the transport guide [1].
3. Remove the upper anti-static brush [2] (x2)
4. Remove the lower anti-static brushes.
   [3] Front (x2)
   [4] Rear (x2)

1.5 STACKING TRAY

1.5.1 SWITCHBACK ROLLER

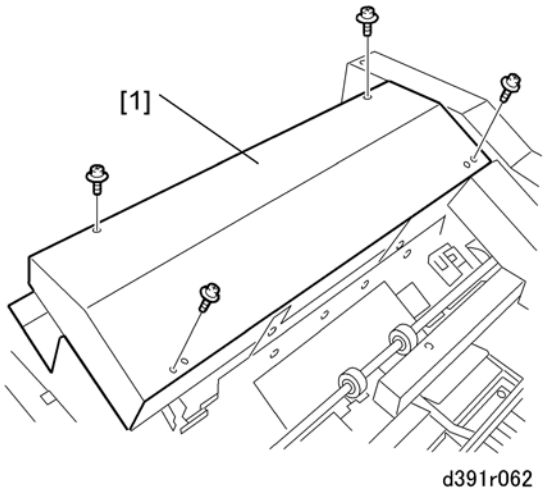


1. Remove:
   - Inserter page 13
   - Top cover page 35
2. Remove control plates [1] and [2] (x2 ea.)



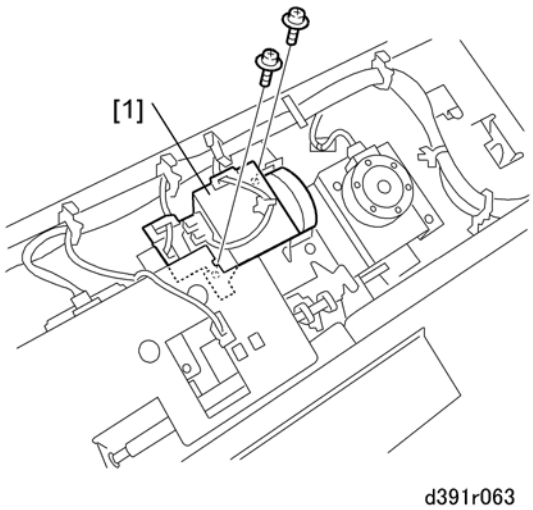
3. At the front and rear, remove:
   [1] Collar x1
   [2] Collar x1
4. Remove the switchback rollers [3] and [4].

1.5.2 ANTI-STATIC BRUSH



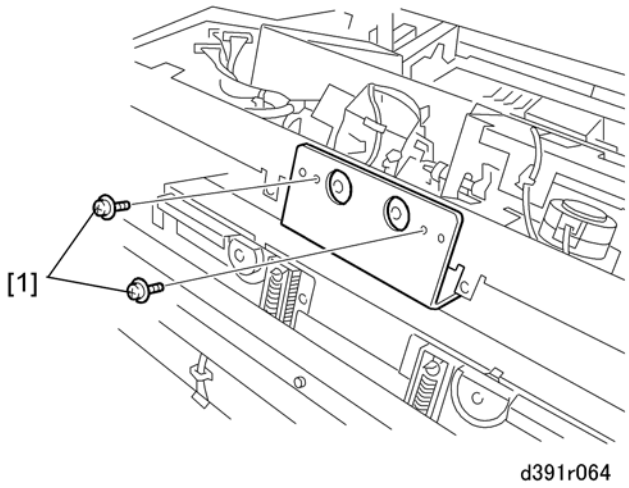
d391r062

1. Remove:
   - Inserter page 13
   - Top cover page 35
2. Remove the top cover of the jogging unit [1] (x4)

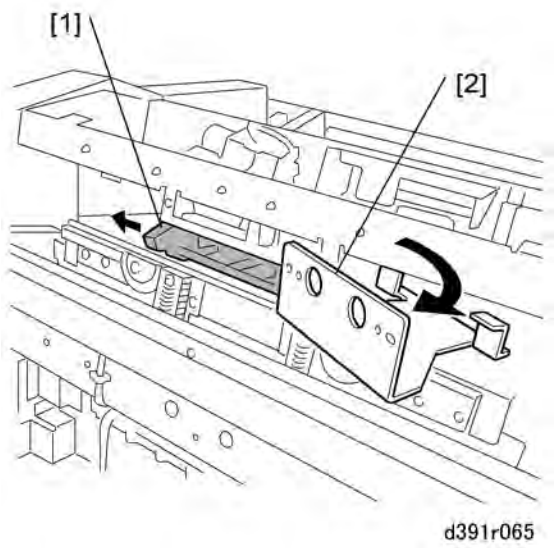


d391r063

3. Disconnect the stacking weight motor [1] (M6) (x2).
4. Slide the motor to the side and disconnect the timing belt.

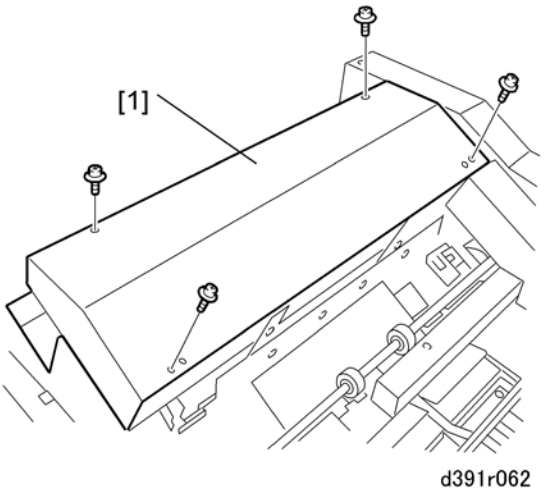


5. Remove the plate screws [1] (x2).

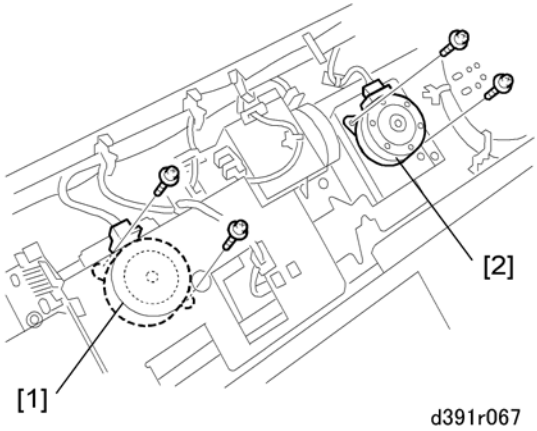


6. Shift the weight [1] to the left in the direction of the arrow as far as it will go.
7. Slowly rotate the anti-static brush [2] to the front and remove it.

1.5.3 JOGGER MOTORS (FRONT/BACK) (M4/M5)



1. Remove:
   - Inserter page 13
   - Top cover page 35
2. Remove the top cover of the jogging unit [1] (x4)



3. Remove:
   [1] Front jogger motor (M4) (x2, x1)
   [2] Rear jogger motor (M5) (x2, x1)

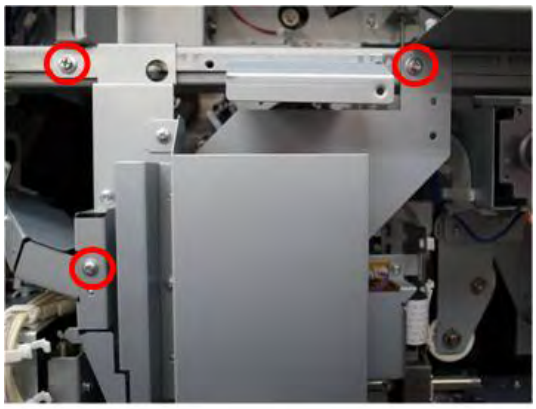
1.6 MAIN GRIP UNIT

1.6.1 SIGNATURE THICKNESS SENSOR (S50)

1. Do SP6538-003 to set the machine in grip release mode.
2. Shut the system down to cut off power to the main machine and perfect binder.
3. Disconnect all power cords.

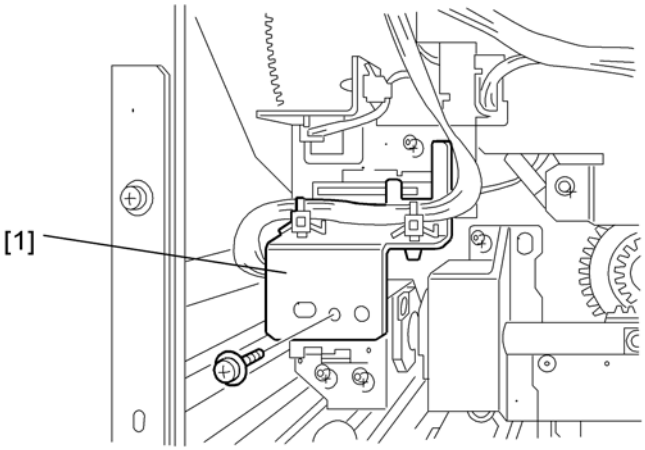
⚠WARNING

- Never service the Perfect Binder until all power to the system has been turned off.



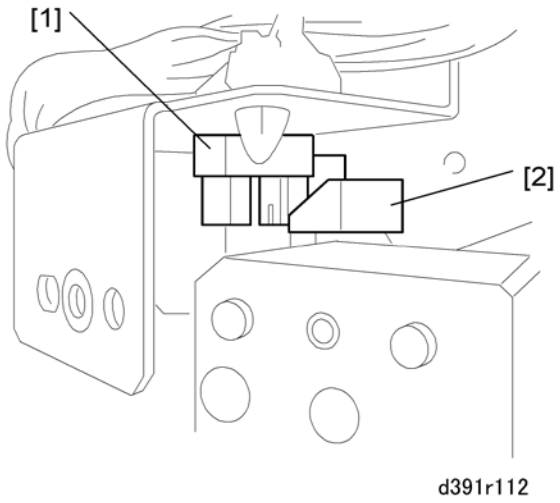
d391r128b

4. Remove the filter case bracket [1] (x3).



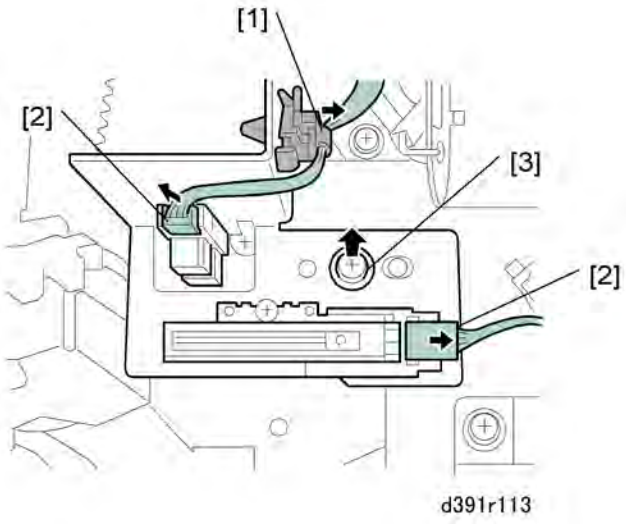
d391r111

5. Remove the rear cover of the bookbinder.
6. Remove the sensor plate [1] (x1).



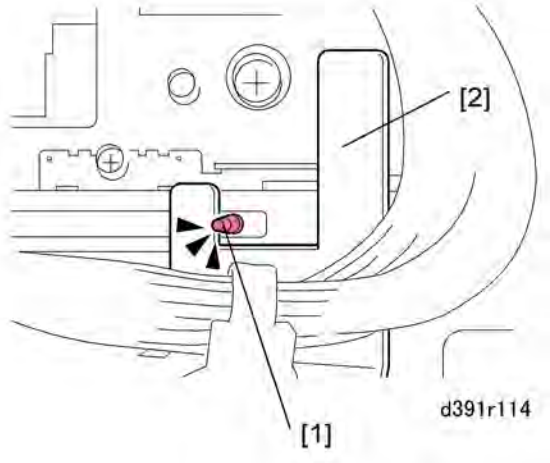
Important

- Work carefully with the protective plate removed to avoid hitting and damaging the exposed sensor [1] and actuator [2].



7. Remove the signature thickness sensor (S50)
   [1] Band x1
   [2] x2
   [3] x1

Reinstallation



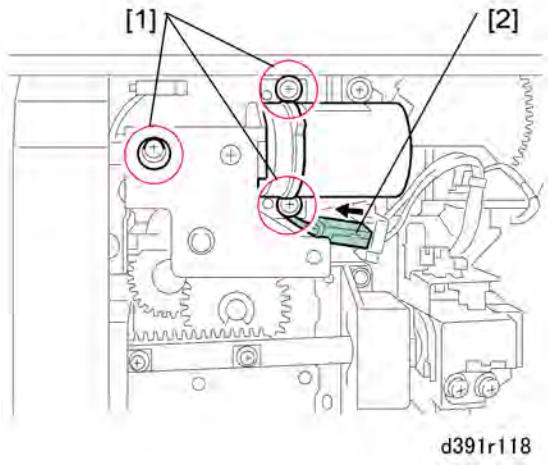
1. When reattaching the sensor plate confirm that the sensor pin [1] is positioned between the sides of the cutout [2] as shown above.
2. After replacement, the signature thickness sensor must be recalibrated. (See "Recalibrating Sensors".)

1.6.2 GRIP MOTOR: FRONT (M23)

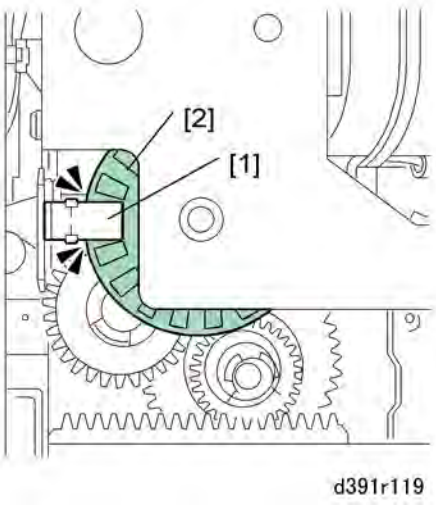
1. Do SP6538-003 to set the machine in grip release mode.
2. Shut the system down to cut off power to the main machine and perfect binder.
3. Disconnect all power cords.

⚠WARNING

- Never service the Perfect Binder until all power to the system has been turned off.

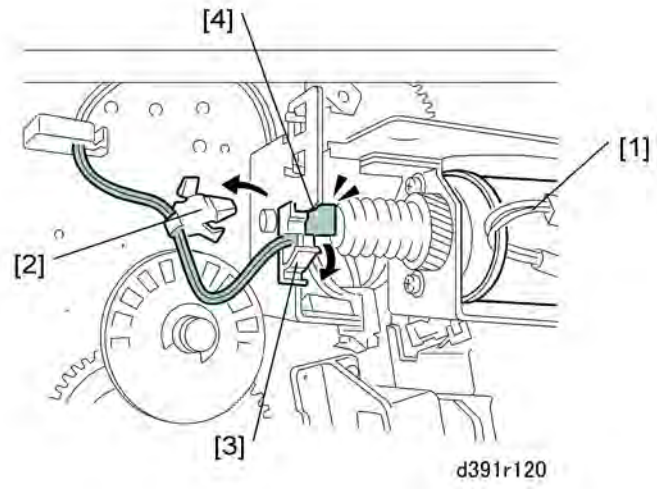


4. Remove the bracket screws [1] (x3).
5. Disconnect the connector [2] (x1).

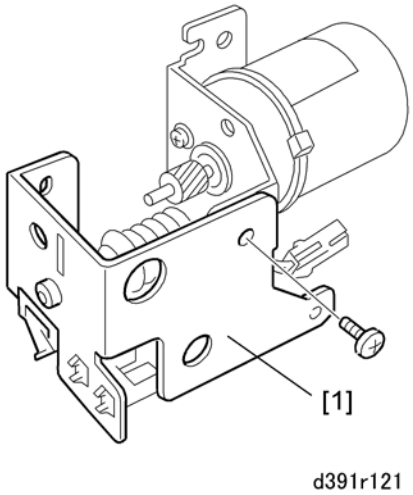


Important

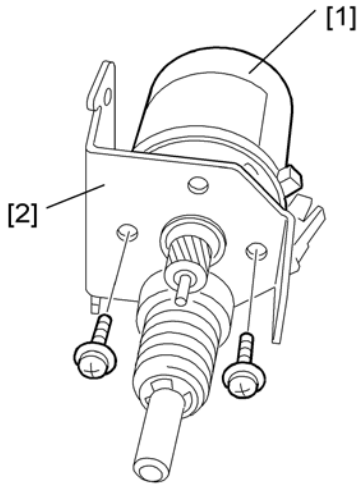
- Work carefully during removal to avoid damaging the encoder wheel [2] and sensor [1].



6. To free the motor [1], remove:
   [2] Band x1
   [3] x1
   [4] x1



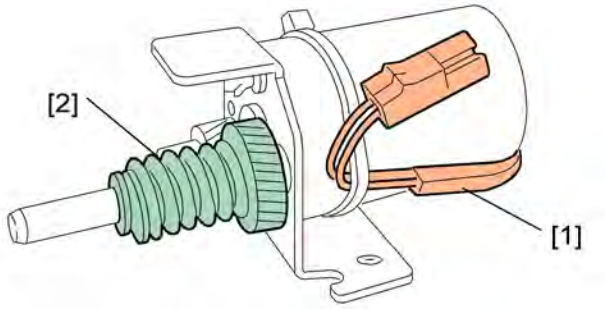
7. Remove the sensor bracket [1] (x2).



d391r122

8. Remove the motor [1] from the bracket [2] (x2).

Reinstallation



d391r123

Before reinstalling the motor confirm that the harness [1] and gear [2] are positioned as shown above.

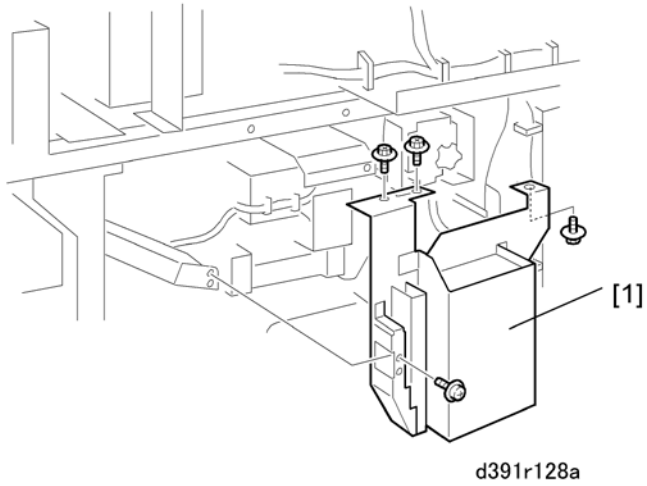
1.6.3 GRIP MOTOR (REAR) (M24)

1. Do SP6538-003 to set the machine in grip release mode.
2. Shut the system down to cut off power to the main machine and perfect binder.
3. Disconnect all power cords.

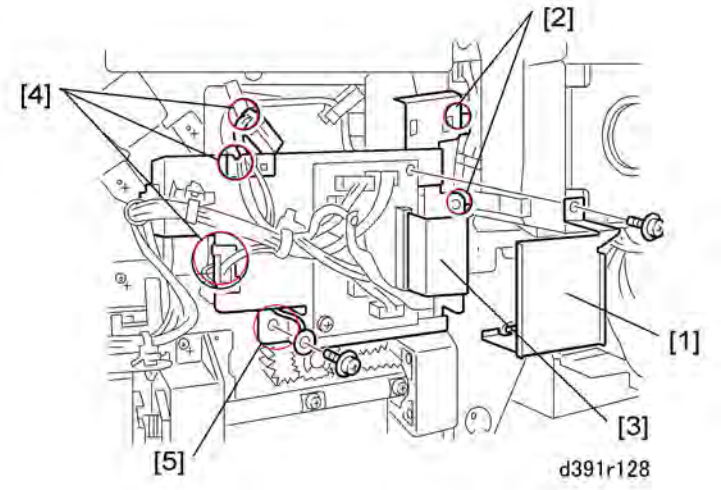
⚠WARNING

- Never service the Perfect Binder until all power to the system has been turned off.

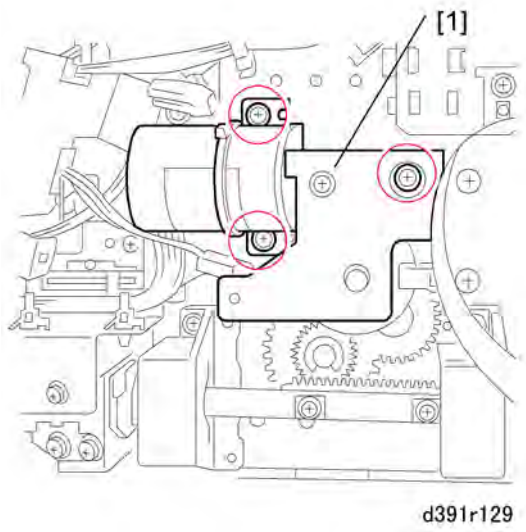
4. Remove the rear cover.
5. Remove the rear upper cover.



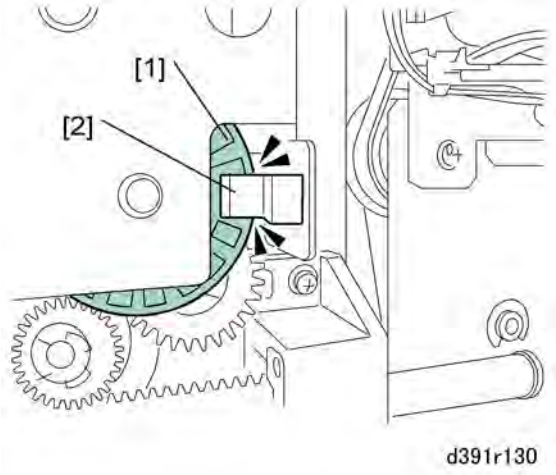
6. Remove the deodorization filter bracket [1] (x4).



7. Remove the relay board:
   [1] Plate (x1)
   [2] Flexible press plates x2
   [3] FFC x1
   [4] x3, x3
   [5] x1

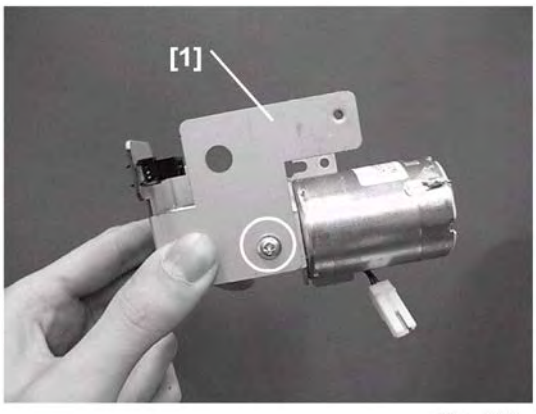


8. Disconnect the motor bracket [1] (x3).



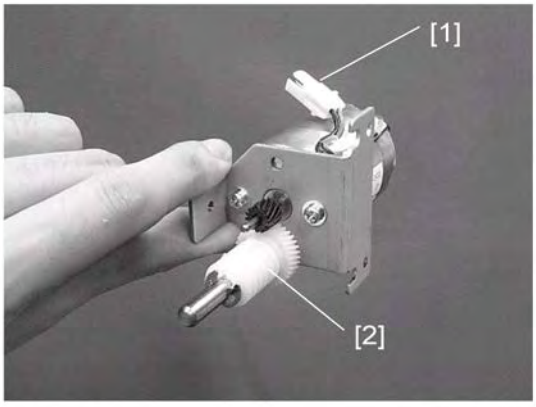
Important

- Work carefully during removal to avoid damaging the encoder wheel [1] and sensor [2].



9. Remove the sensor plate [1] (x1).

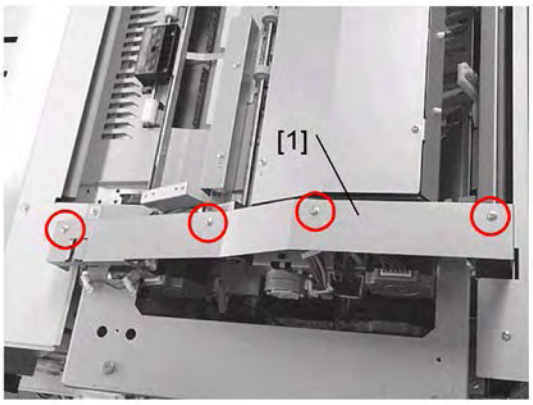
Reinstallation



d391p132

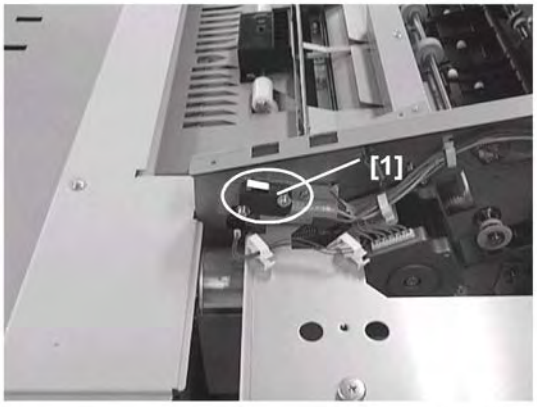
Before reinstalling the motor confirm that the harness [1] and gear [2] are positioned as shown above.

1.6.4 GRIP UNIT ROTATION MOTOR (M21)



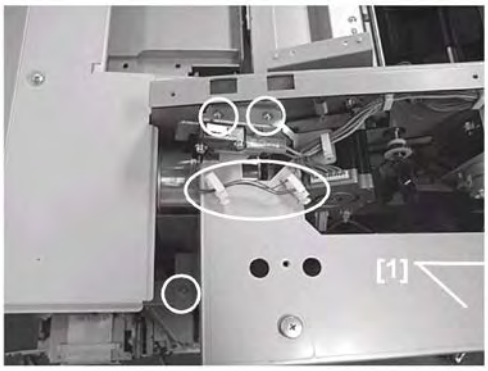
d391p133

1. Open the inserter.
2. Remove:
   - Top cover page 35
   - Rear upper cover page 16
   - Rear cover page 16
3. Remove the harness cover [1] (x4).

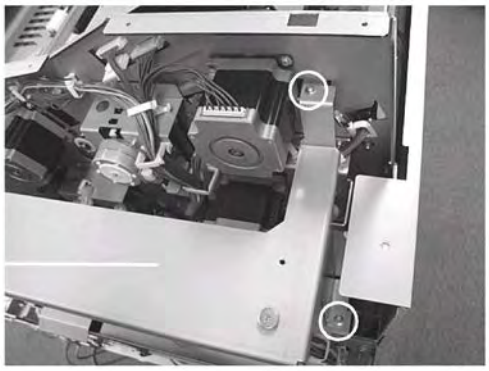


d391p134

4. Remove the top cover switch [1] (x2).

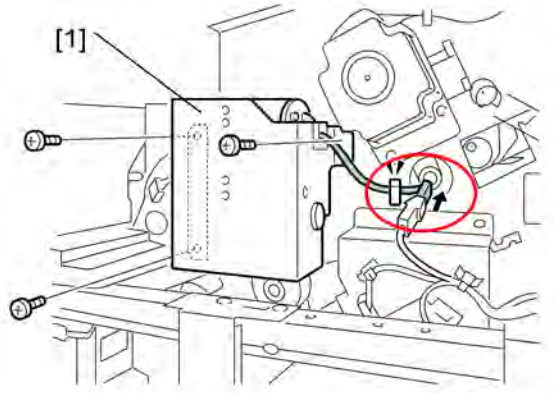


d391p135a



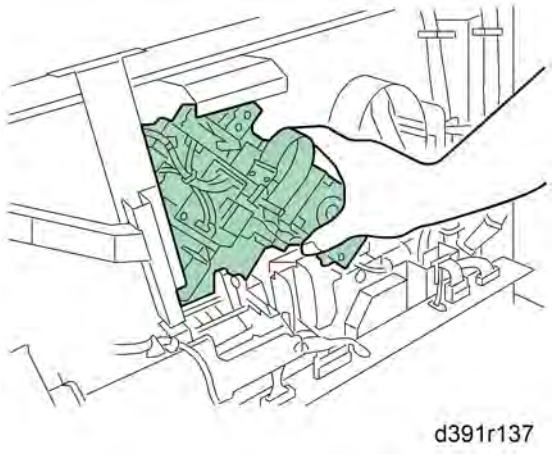
d391p135b

5. Remove the top cover frame [1] (x5).



d391r136

6. Remove the protection plate [1] (x1, x1, x3).

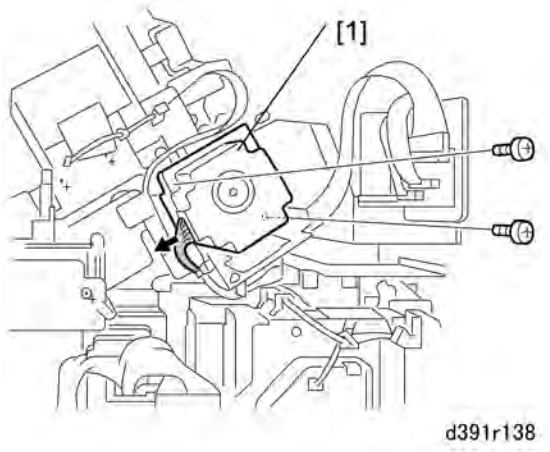


7. While holding the main gripper steady with one hand, remove the grip unit rotation motor.

Important

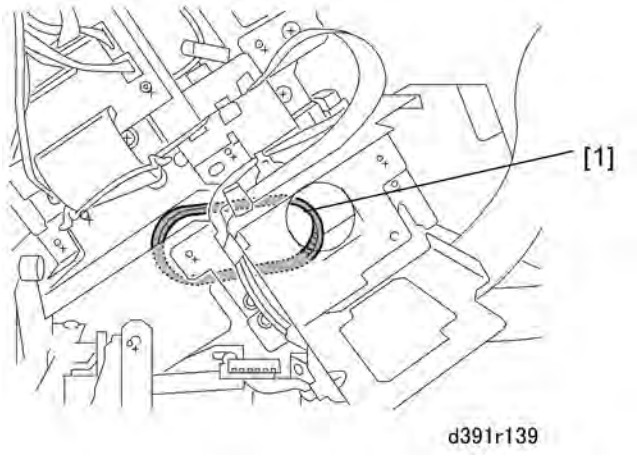
- Holding the main gripper steady prevents it from wobbling and disturbing the position of the main gripper.

1.6.5 MAIN GRIP LIFT MOTOR (M22)



1. Remove the rear cover. page 16
2. Remove the main gripper lift motor [1] (x1, x2).

Reinstallation



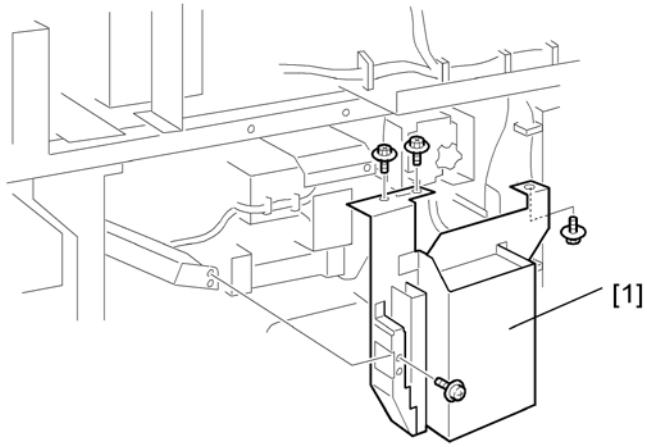
1. When you reinstall the main grip lift motor, do not forget to attach the belt [1].

1.7 GLUING UNIT

1.7.1 FILTERS

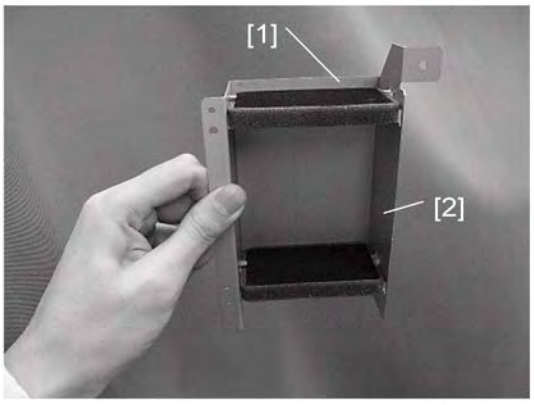
Deodorization Filter: Gluing Unit

1. Remove the rear cover. page 16
2. Remove the rear upper cover. page 16



d391r128a

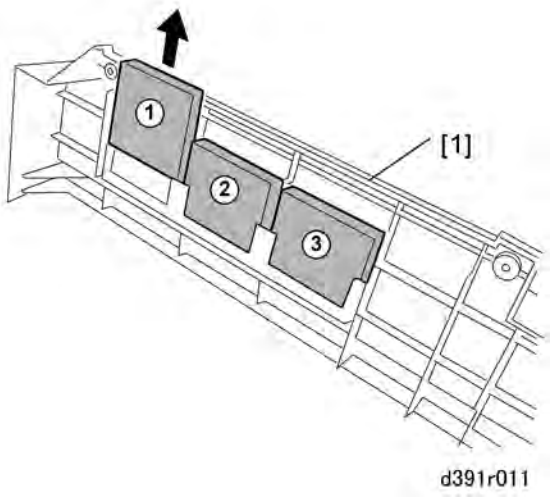
3. Remove the filter case [1] (x4).



d391b141

4. Remove the filter case [1] (x3).
5. Remove the filters [2].

Deodorization Filter: Rear Upper Cover



1. Remove rear upper cover [1] of the bookbinder (x5). page 16
2. Remove the deodorization filters (x3).

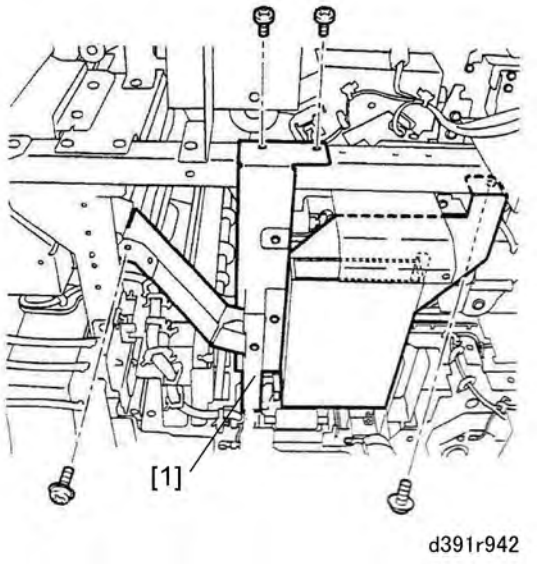
1.7.2 GLUE HEATER

1. Do SP6538-003 to set the machine in grip release mode.
2. Shut the system down to cut off power to the main machine and perfect binder.
3. Disconnect all power cords.

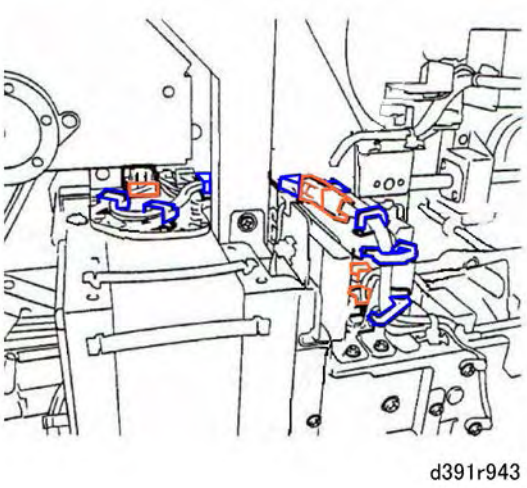
WARNING

- Never service the Perfect Binder until all power to the system has been turned off.

4. Remove:
   - Rear cover page 16
   - Rear upper cover page 16

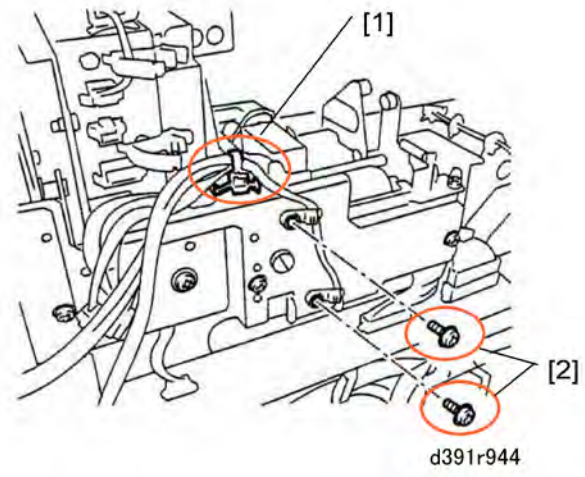


5. Remove the glue unit transport stay [1] (x4).



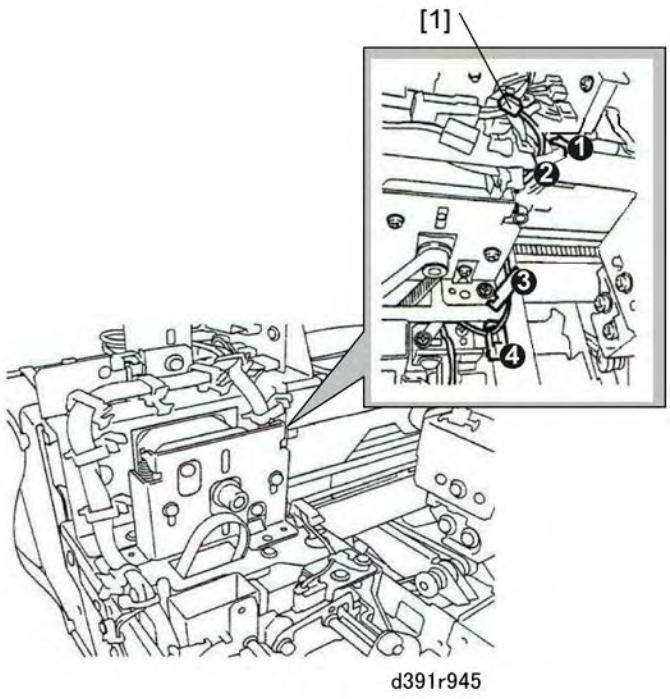
d391r943

6. Disconnect the harnesses (x8, x5).



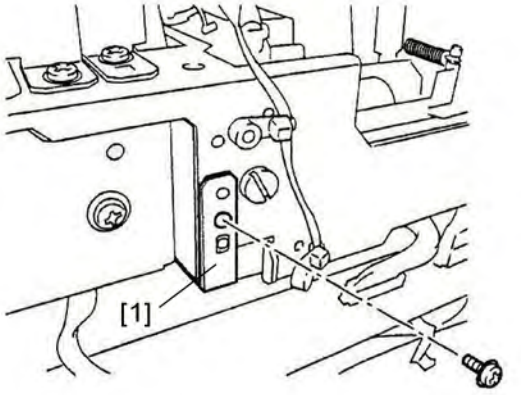
d391r944

7. Remove:
   [1] Standoff x1
   [2] x2



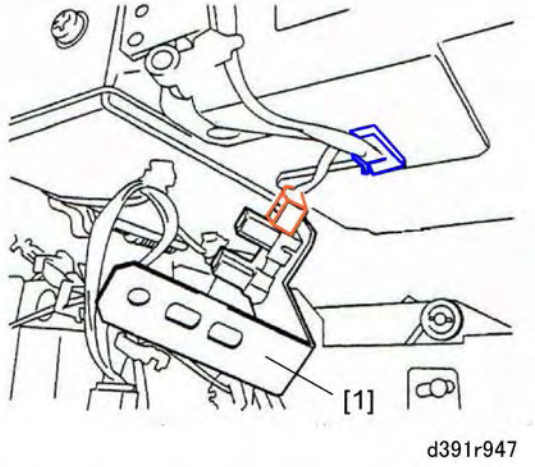
d391r945

8. Release the thermistor harness [1] at the front side of the glue heater unit (x4).



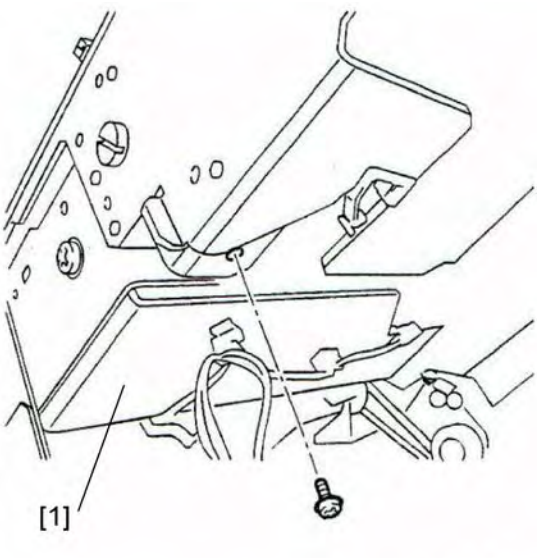
d391r946

9. Remove sensor bracket [1] (x1).



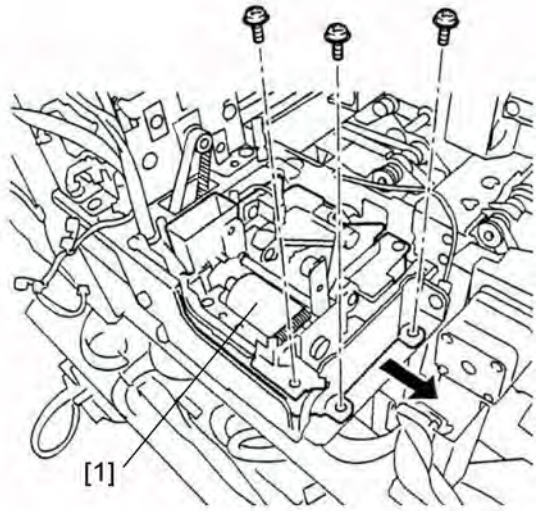
d391r947

10. Remove sensor bracket and sensor [1] (x1, x1).



d391r948

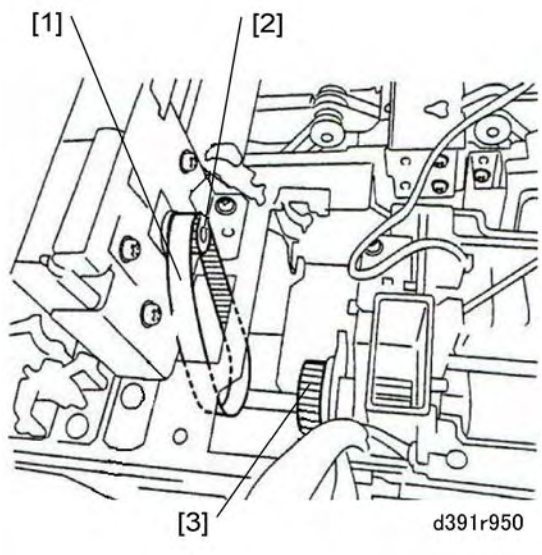
11. Remove the screw from the bottom of the glue heater unit [1] (x1).



d391r949

12. Remove the glue heater unit [1] (x3).

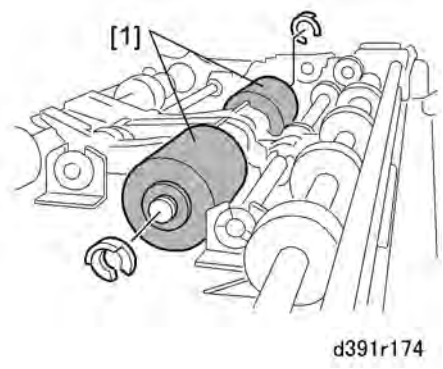
Reinstallation



1. Reconnect the timing belt [1] to the motor drive gear [2] and shaft gear [3].

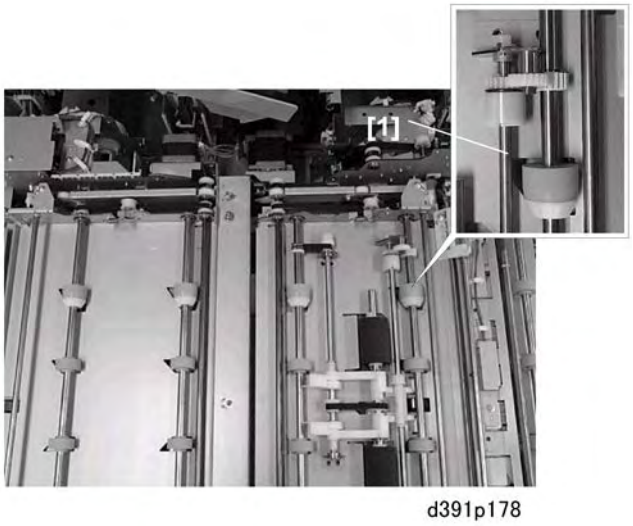
1.8 COVER TRANSPORT UNIT

1.8.1 SWITCHBACK ROLLERS: COVER TRANSPORT

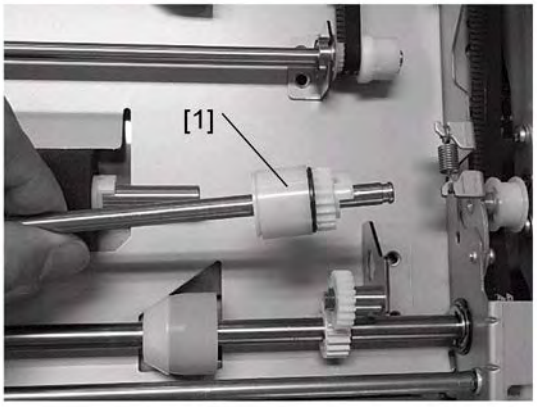


1. Open the right and left door.
2. Remove the switchback rollers [1] (x2).

1.8.2 TORQUE LIMITER



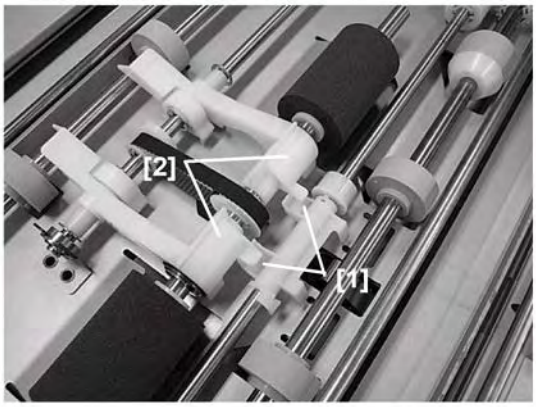
1. Pull out the cover transport unit drawer. page 61
2. Remove the roller release lever shaft [1] (x1, Bushing x1).



d391p179

3. Remove the torque limiter [1] (x1, Gear x1).

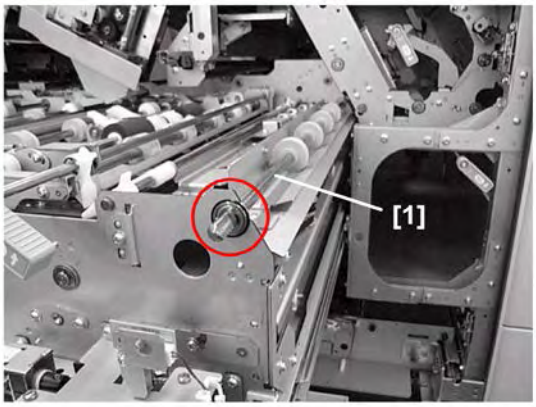
Reinstallation



d391p180

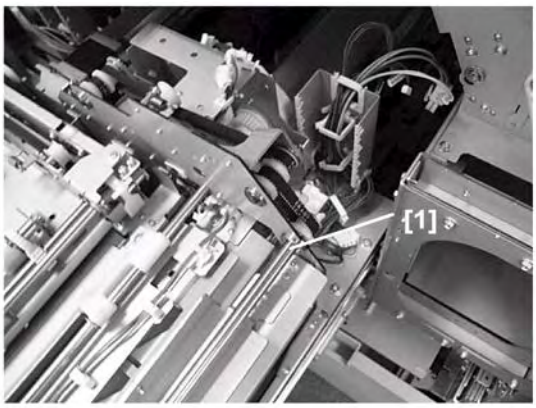
When you reinstall the roller release lever shaft, make sure that the pawls [1] of the shaft are below the roller holders [2].

1.8.3 ANTI-STATIC BRUSHES: UPPER AND LOWER RIGHT



d391p181

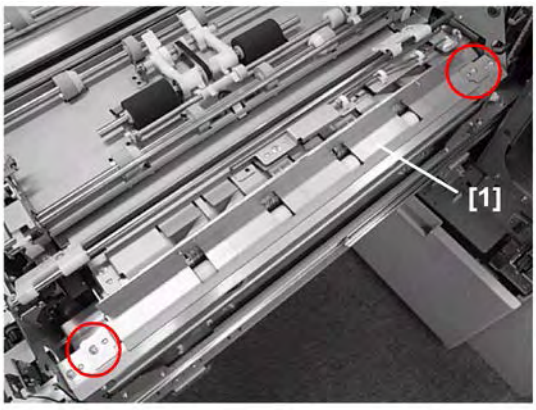
1. Pull out the cover transport unit.
2. Disconnect the roller [1] (ℭx1, Bearing x1).



d391p182

3. Push the shaft of roller [1] to the rear.
4. Remove bearing, free the timing belt, and remove the roller.

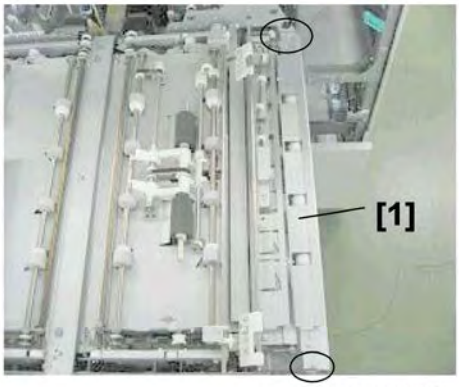
Anti-Static Brush: Upper Right



d391p183

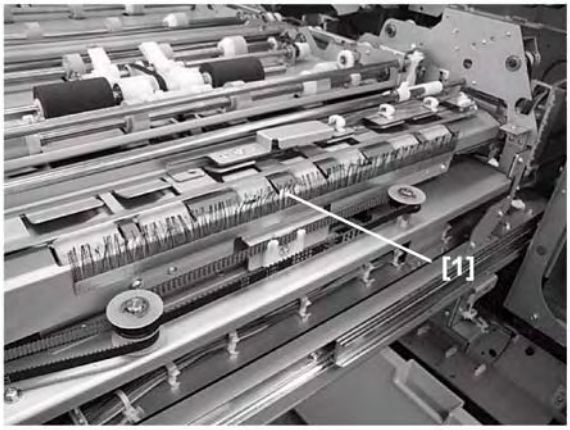
5. Remove the anti-static brush [1] (x2).

Anti-Static Brush: Lower Right



d391r0529

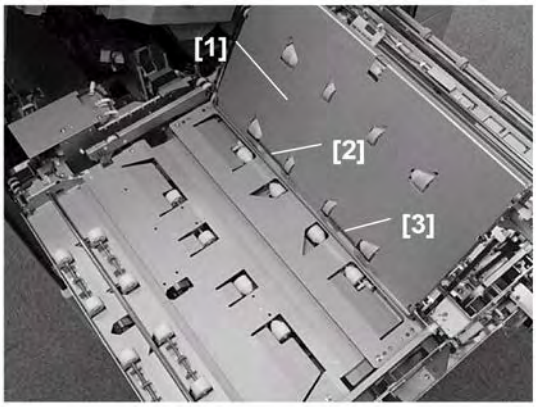
6. Remove the idle roller unit of transport roller 1 [1] (x2).



d391p187

7. Remove the anti-static brush [1].

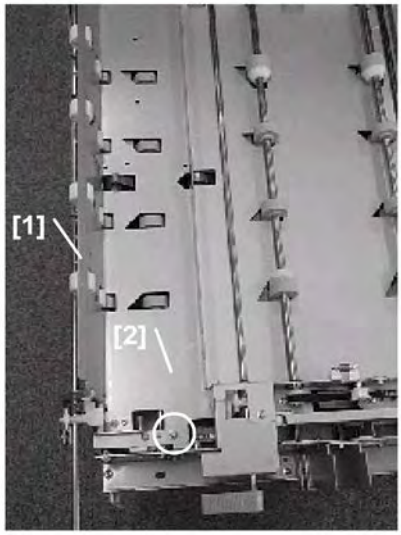
1.8.4 ANTI-STATIC BRUSH: LEFT



d391p188

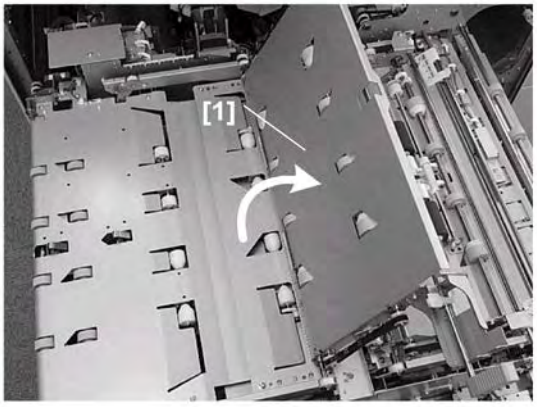
1. Pull out the cover transport unit. page 61
2. Open cover [1].
3. Remove anti-static brushes [2] and [3].

1.8.5 EXIT ROLLERS 1/2 UNIT



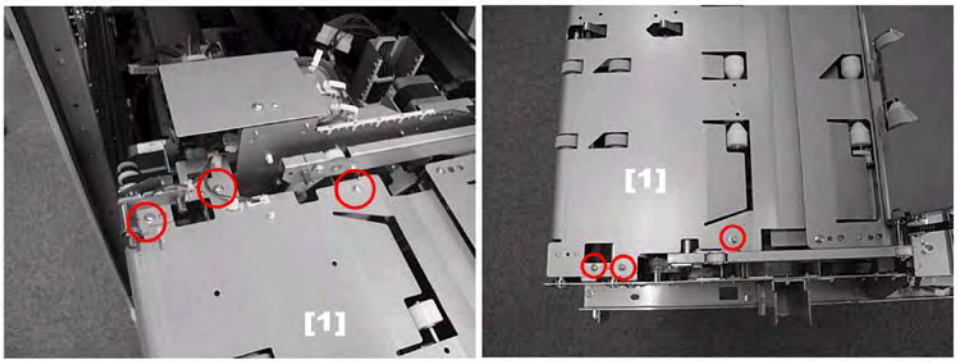
d391p199

1. Pull out the cover transport unit. page 61
2. Open cover [1].
3. Remove guide plate [2] (x1).
4. Remove exit idle roller unit.



d391p200

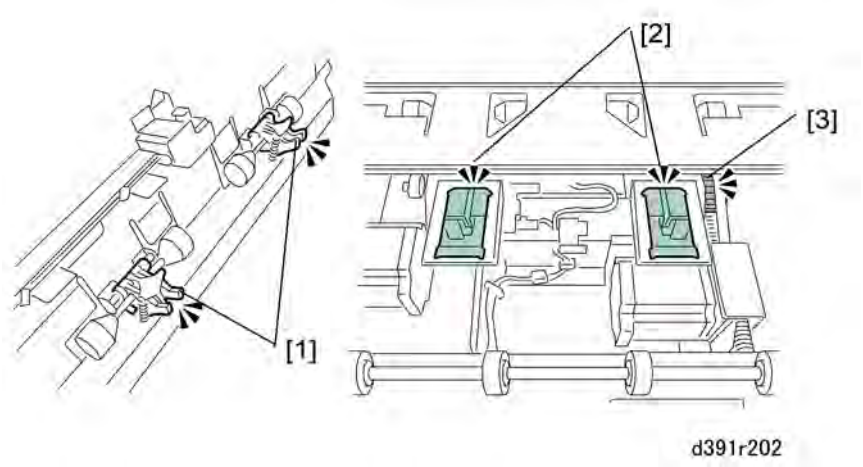
5. Open cover [1].



d391p201

6. Remove exit roller unit [1] (x6, x1).

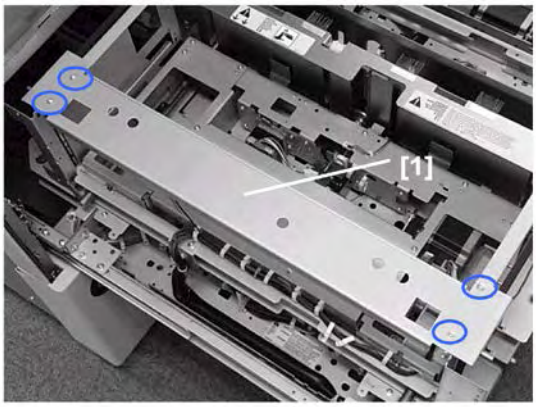
Reinstallation



Confirm that the pressure arms [1] on the rear of the exit roller unit are inserted into the holes [2] of the spine fold unit. If the fit is difficult, manually turn the gear [3] of the motor to move the spine fold unit.

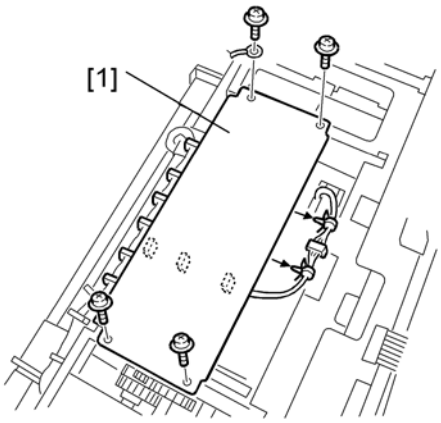
1.9 TRIMMING UNIT

1.9.1 TORQUE DIODE: SIGNATURE ROTATION UNIT



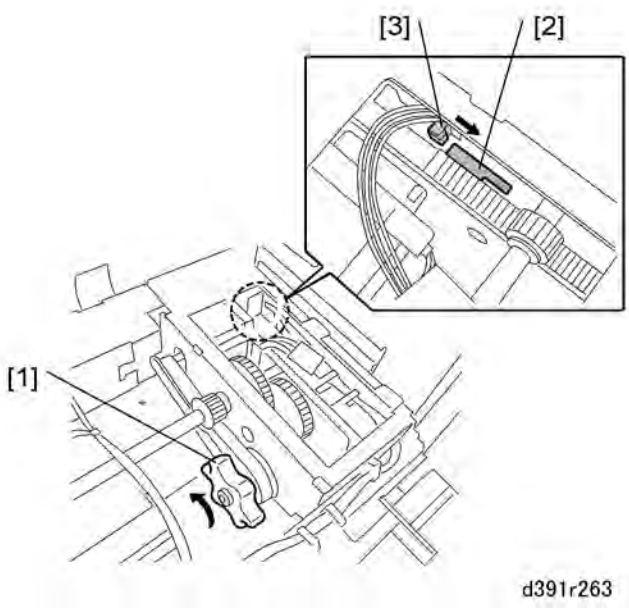
d391p261

1. Pull out the trimming unit drawer. page 67
2. Remove left stay [1] (x4).

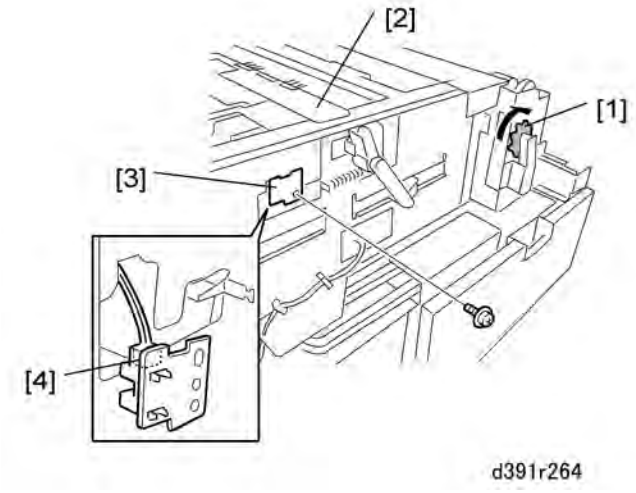


d391r262

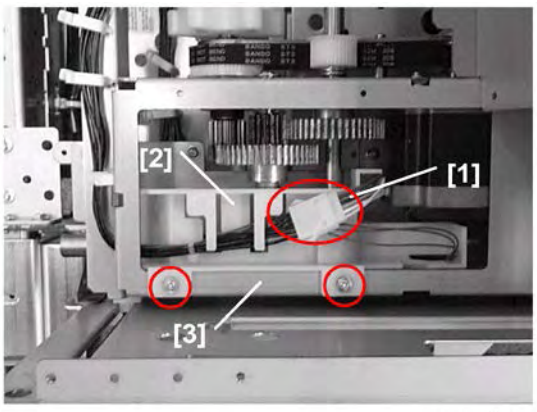
3. Remove harness plate [1] (x4, x9, x1)



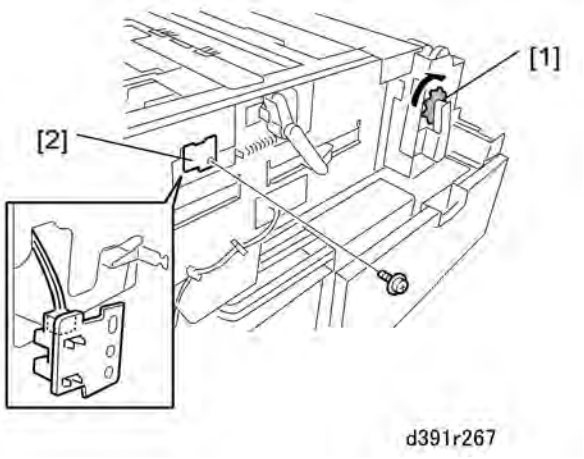
4. Rotate knob [1] counter-clockwise until sensor plate [2] separates from sensor [3].



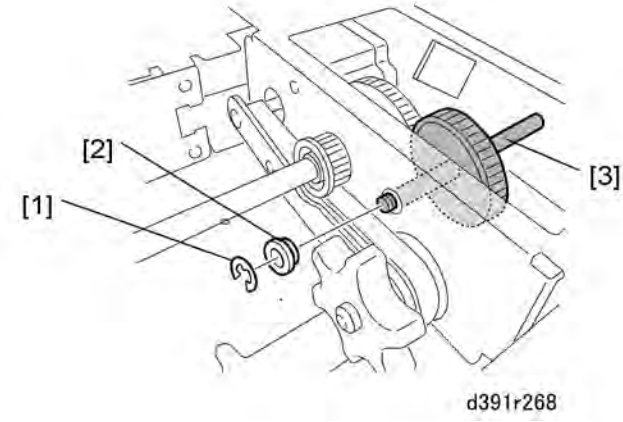
5. Rotate wheel [1] to raise the rotation unit [2] then remove sensor plate [3] (x1)
6. Disconnect sensor [4].



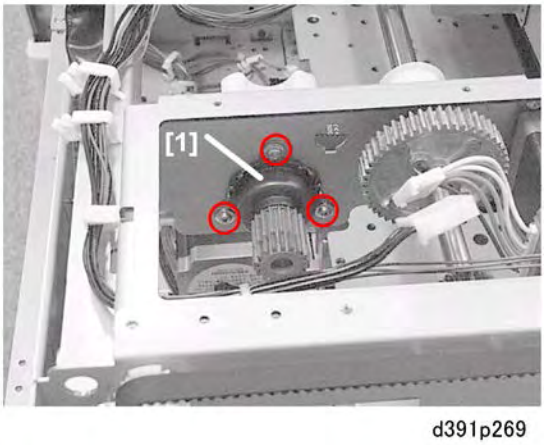
7. Release connector [1].
8. While gently pressing down on the rotation unit [2], remove harness guide [3] (x2).



9. Turn wheel [1] to move rotation unit until you can see the screw.
10. Remove the sensor plate [2] (x1).

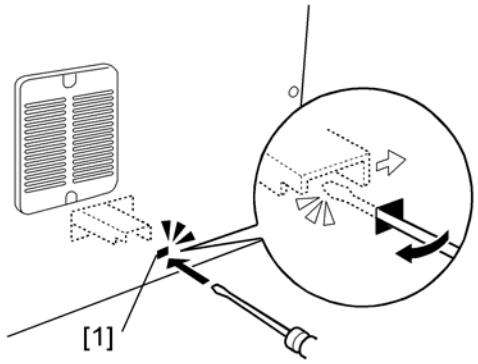


11. Remove:
    [1] x1
    [2] Shaft x1
    [3] Gear x1



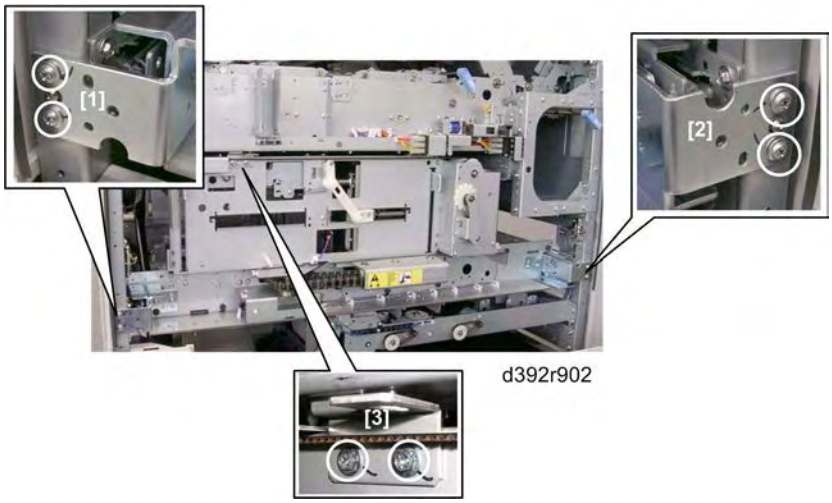
12. Move the rotation unit to a position where it is easy to work and remove the torque diode [1] (x3).

1.9.2 BLADE CRADLE



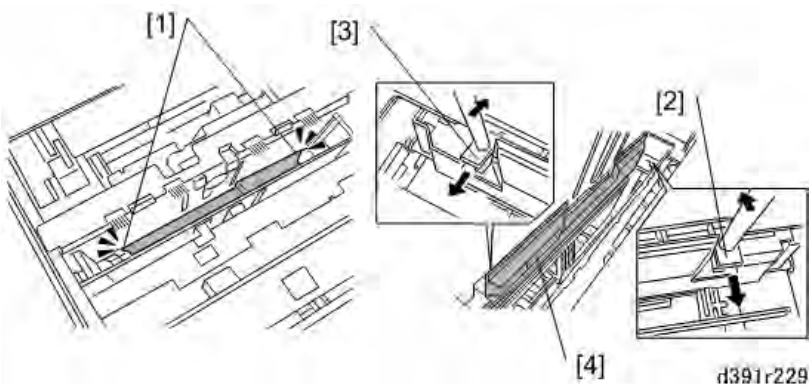
d391r291

1. Insert the tip of a small screwdriver into the small hole [1] near the left rear corner of the bookbinder.
2. Move the screwdriver in the direction of the arrow to release the stacking tray lock.
3. At the front open the book tray door and the trimmings box drawer.
4. Remove the front lower cover. page 18
5. Do SP6538-005 to set the machine in the blade replace mode.



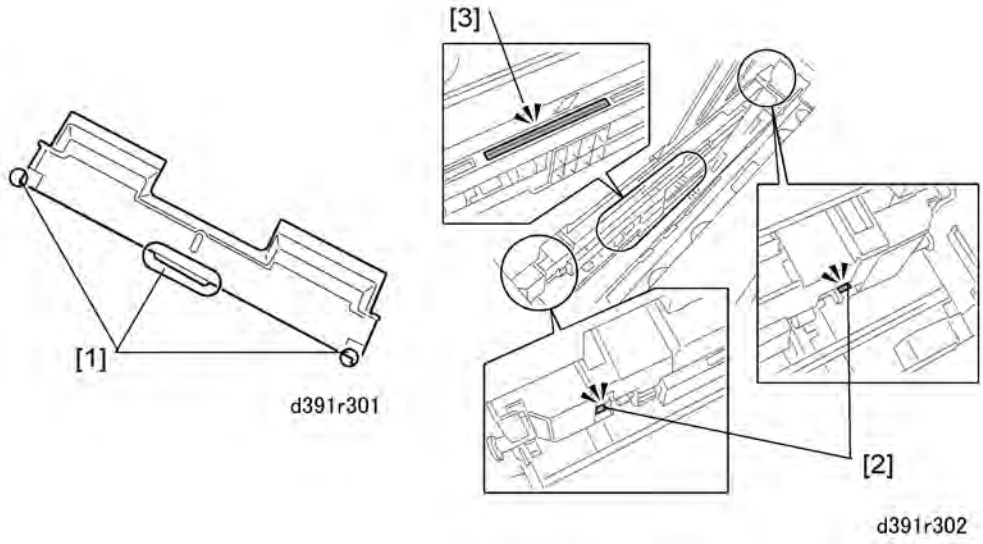
d392r902

6. Remove:
   [1] Left brace (x2)
   [2] Right brace (x2)
   [3] Lock plate (x2)
7. Pull out the trimming unit [4] on its rails.

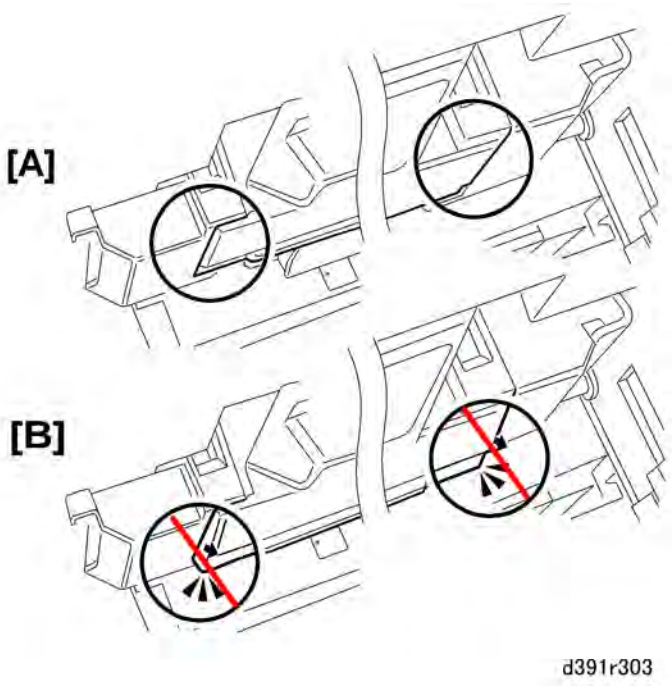


8. At the front and rear [1] insert a screwdriver at [2] and [3], press in the direction of the arrows to release the pawls of the blade cradle, then remove the blade cradle [4].

Reinstallation



1. When reinstalling the blade cradle confirm that the three pawls [1] of the cradle are inserted in the holes of the trimming unit [2] and locked in the groove [3].



2. After the blade cradle has been reinstalled, at the front and rear confirm that blade cradle is aligned correctly [A] and not floating away [B] from or misaligned with the trimming unit.

Important

- Always replace the trimming blade and trimmings catcher after replacing the cradle. (The trimming blade, trimmings catcher, and blade cradle should always be replaced together.)

1.9.3 TRIMMING BLADE, TRIMMINGS CATCHER

Important

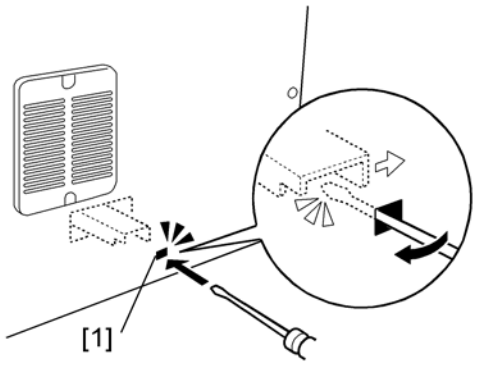
- The trimming blade and trimmings catcher are always replaced together.

Removing the Trimming Blade

1. Do SP6538-006 to set the machine in blade replace mode.
2. Shut the system down to cut off power to the main machine and perfect binder.
3. Disconnect all power cords.

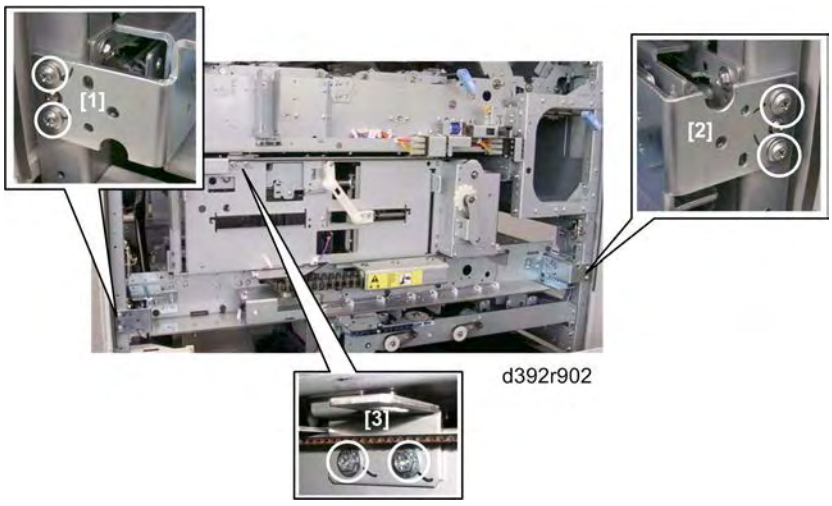
WARNING

- Never service the Perfect Binder until all power to the system has been turned off.



d391r291

1. Insert the tip of a small screwdriver into the small hole [1] near the left rear corner of the bookbinder.
2. Move the screwdriver in the direction of the arrow to release the stacking tray lock.
3. At the front open the book tray door and the trimmings box drawer.
4. Remove the front lower cover.

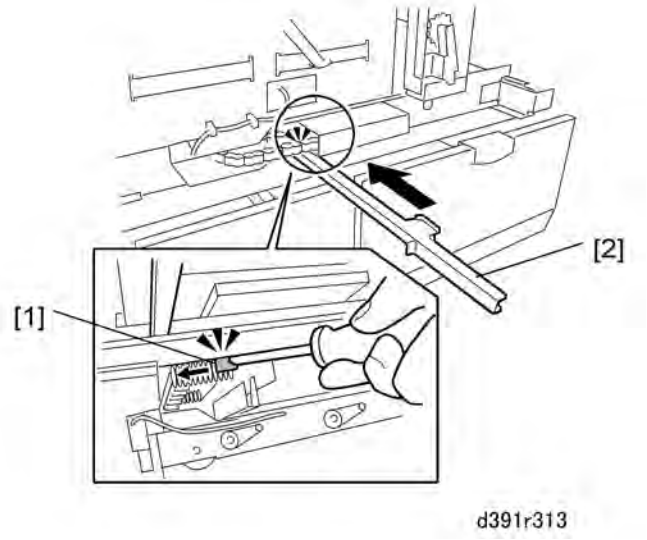


d392r902

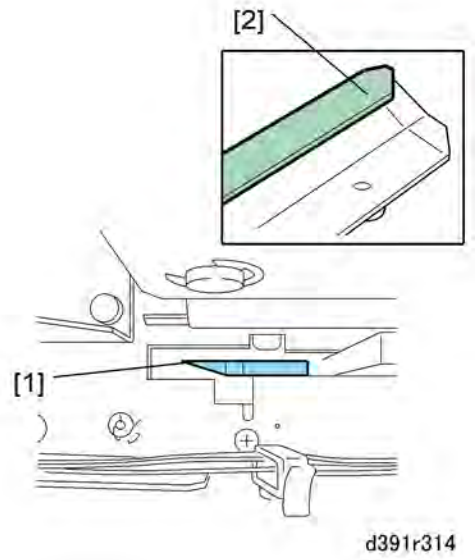
5. Remove:
   [1] Left brace (x2)
   [2] Right brace (x2)

[3] Lock plate (x2)

6. Pull out the trimming unit [4] on its rails.

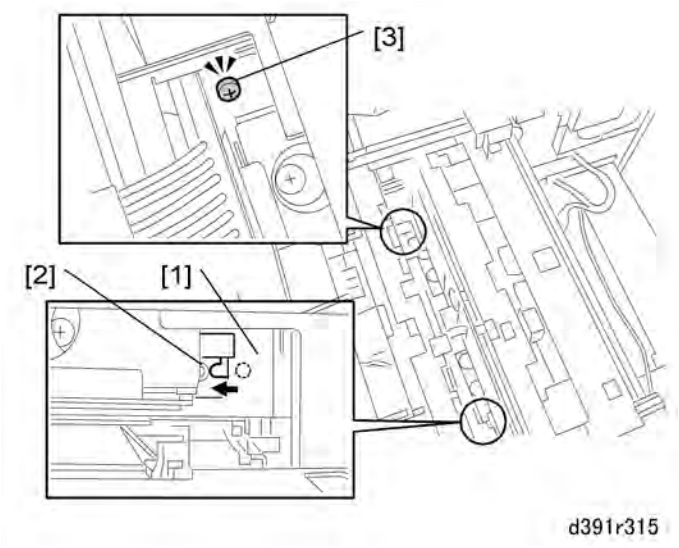


7. While pushing the lever [1] to the left with a screwdriver, insert the sheath [2] provided with the new blade along the edge of the old blade inside the bookbinder.



Important

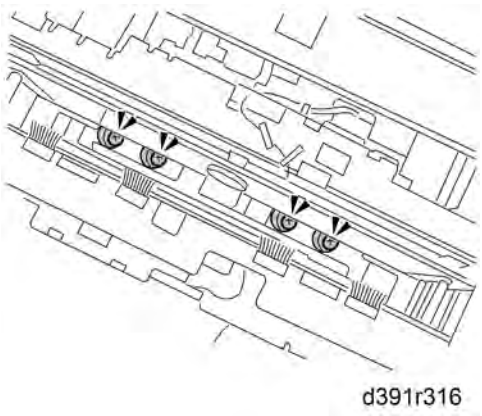
- Make sure that the edge of the blade [1] slides into the groove [2] of the sheath.



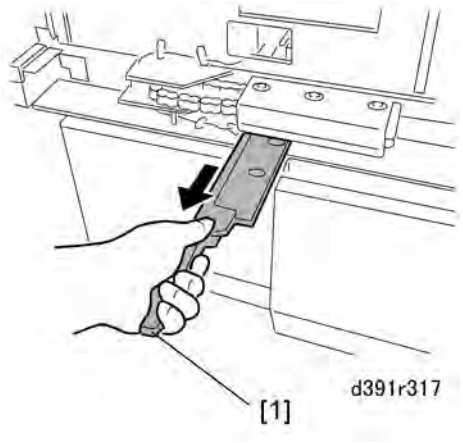
8. Press in the direction of the arrow so the home position of the sheath [1] lines up with the cutout of the blade [2].
9. Use the accessory screw (provided with the sheath) to fasten the sheath at [3] (x1).

Important

- Do not apply excessive force to this screw. Turn the screw until it is snug against the side of the sheath.



10. While holding the sheath press the blade slightly to the rear, and remove the blade screws (x4).

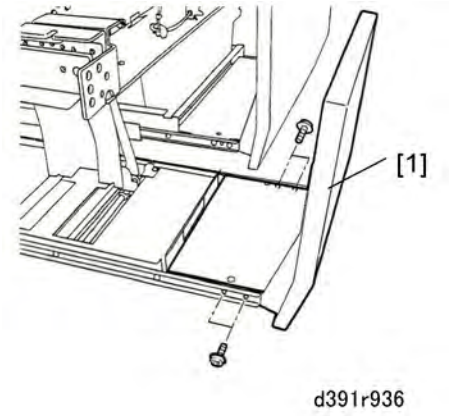


11. Hold the sheath by its grip and slowly pull the blade out.

CAUTION

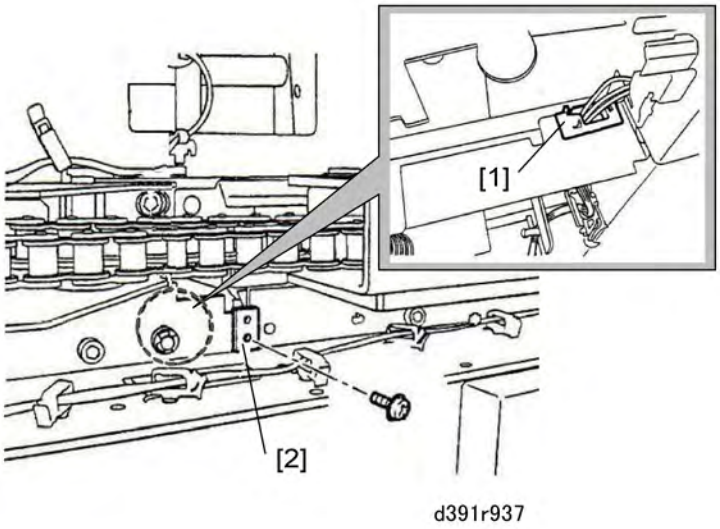
- To avoid serious injury, you must pull on the blade by the attached sheath. The edge of the blade can cause a serious cut if the sheath becomes separated.
- Always hold the sheath and blade with two hands, one on the handle and one hand on the end near the screw. Never hold the blade and sheath by only the handle.

Replacing the Trimmings Catcher



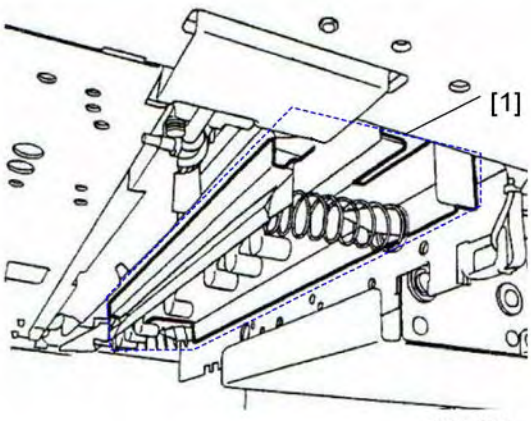
d391r936

1. Remove cover [1] (x4).



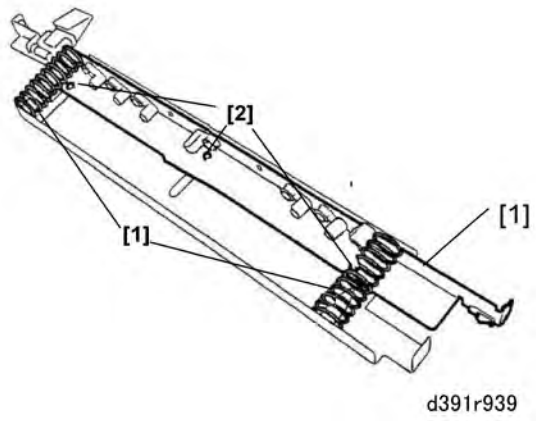
d391r937

2. Remove:
   [1] x1
   [2] Bracket (x1)



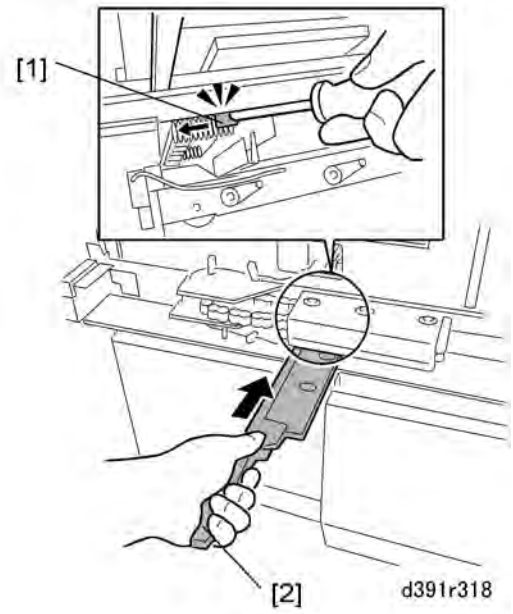
d391r938

3. Underneath the trimming unit remove the trimmings catcher unit [1].



4. Remove the slider plate [1].
   [1] Springs x 2
   [2] ℭ x 2

Installing the New Blade

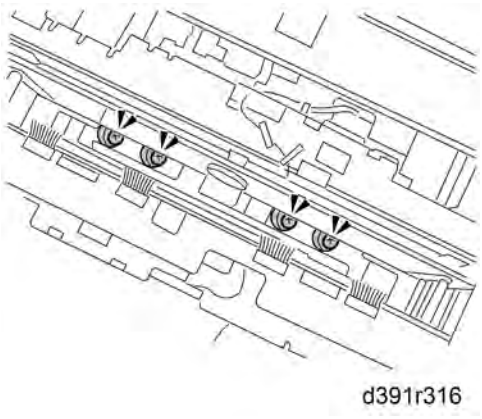


1. Pick up the new blade with the sheath attached.

⚠CAUTION

- Never remove the sheath of the new blade until the blade and sheath have been set in the trimmer unit.
- The sheath is removed only after the blade and attached sheath have been inserted in the trimmer unit.

2. While pushing the lever [1] to the left, push the new blade and sheath [2] into the bookbinder.

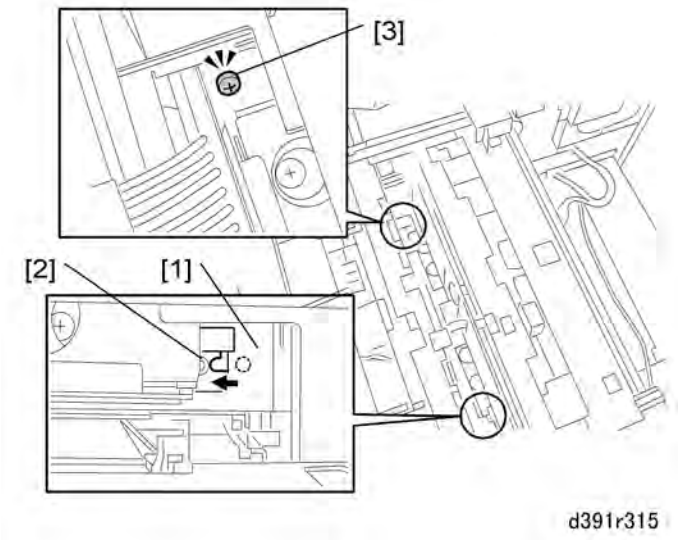


d391r316

3. While pressing the blade to the rear, attach the blade with the accessory screws (x4).

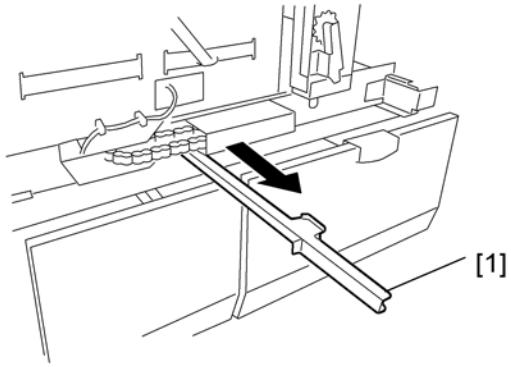
Important

- You must use the lock screws to fasten the blade. They are lock screws specially designed for use with the blade.



d391r315

4. Press in the direction of the arrow so the home position of the sheath [1] lines up with the cutout of the blade [2].
5. Remove the screw [3] to release the sheath from the blade (x1).



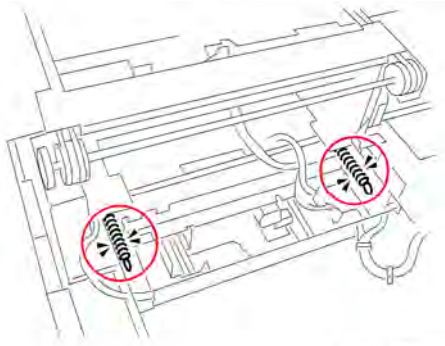
d391r321

6. Remove the sheath.
7. Make sure all the screws on the blade are tight.

Reinstallation

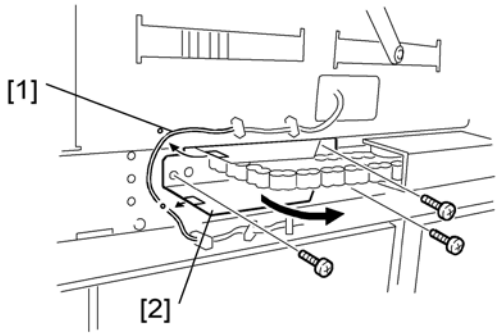
1. To prevent SC750-54 always check the position of the plate to the right of the edge press plate motor (M36) before you close the trimming unit drawer. page 67
2. To prevent SC750-67 always check to make sure that the blade cradle plate is aligned with the left edge of the PCB where the trimmer limit sensor (S86) is mounted. page 67

1.9.4 BALL SCREW



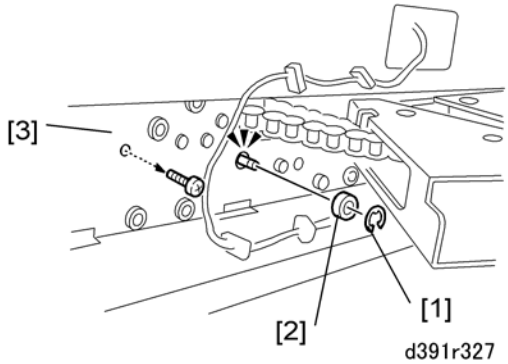
d391r325

1. Pull out the trimming unit drawer. page 67
2. Remove the springs to relieve the tension on the chain.



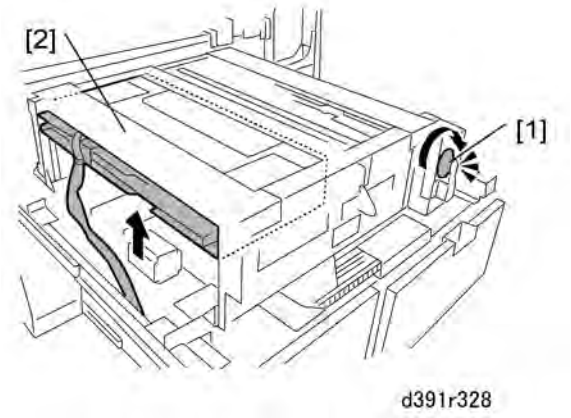
d391r326

3. Release harness [1] (x1).
4. After removing the screws, move the chain guide [2] in the direction of the arrow (x3).



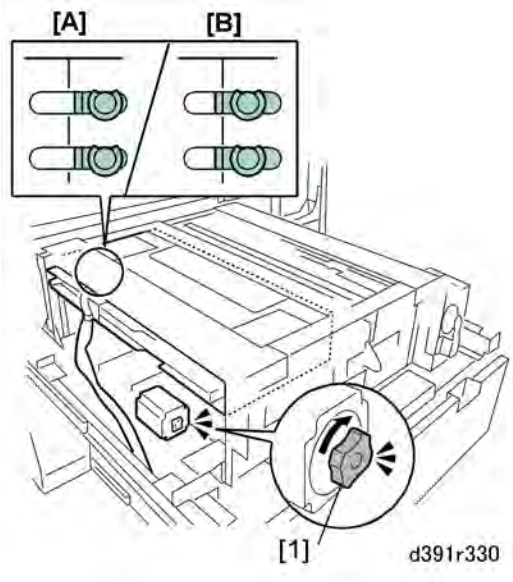
d391r327

5. Remove e-ring [1] and bearing [2]. (If the bearing is too difficult to remove now, you can remove it later when the ball screw is removed.)
6. Remove the sensor frame [3] (x1).



7. Turn knob [1] to raise the rotation unit [2] to its maximum height.

If a book is jammed at the edge press plate



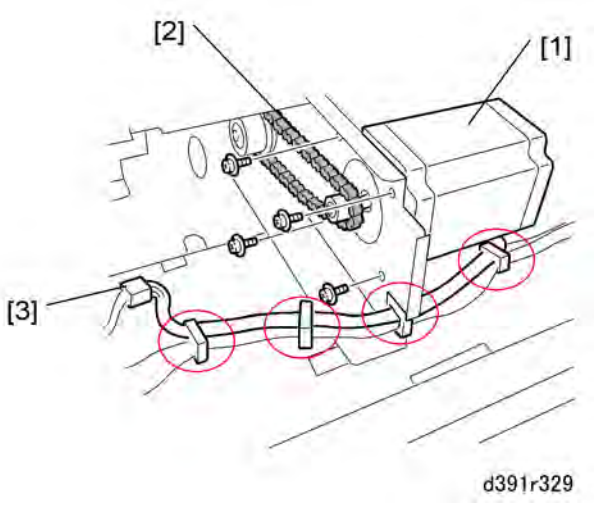
If a book is jammed at the edge press plate, rotate the knob [1] on the edge press plate motor clockwise about 10 times to relieve the pressure on the jam site before you attempt to remove the motor.

⚠CAUTION

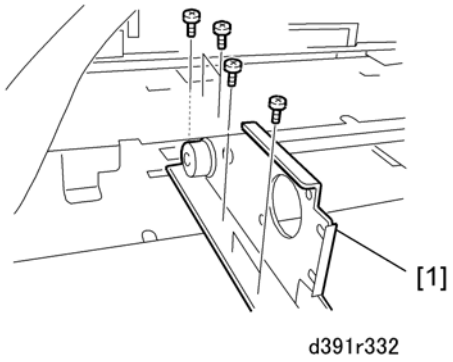
- The edge press plate exerts about 640 kg (1408b lb.) of pressure on a book caught and jammed in the trimming unit. Removing the edge press plate motor with this much pressure on the edge press plate could cause injury.

The reference line toward the rear tells whether to add pressure or reduce pressure:

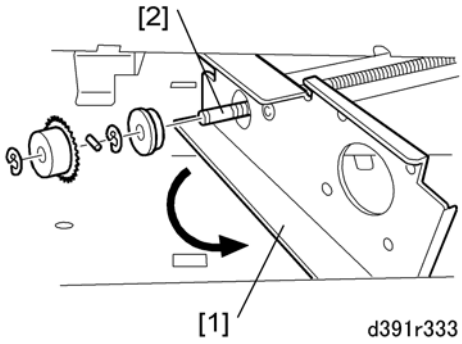
- If the line is off as shown at [A] this indicates too much pressure.
- If the line is off as shown at [B] this indicates too little pressure.



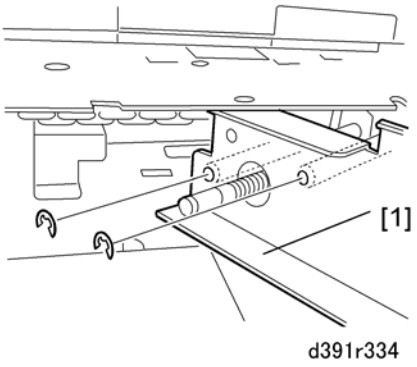
8. Disconnect the edge press plate motor (M36) [1] and chain [2] (x4, x1).
9. Mark the positions of the four harness clamps before you remove them.
10. Disconnect harness [3] (x8)



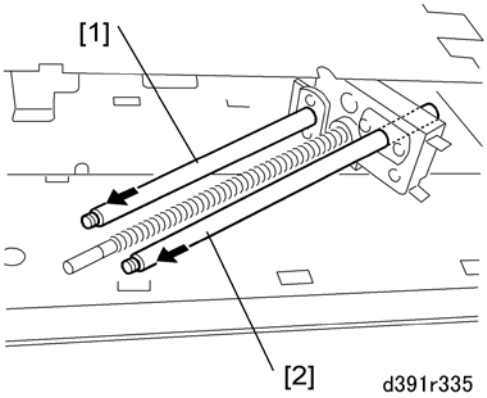
11. Remove the screws from the motor frame [1] (x6).



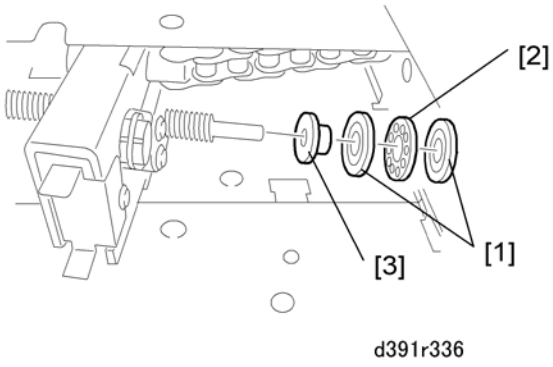
12. Move the motor frame [1] in the direction the arrow then remove the shaft [2] (x1, Sprocket x1, Lock pin x1, x1, Bearing x1)



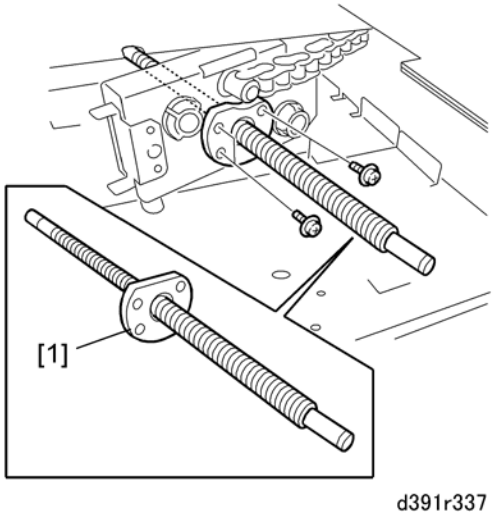
13. Remove the motor frame [1] (☡x2).



14. Pull out the shafts [1] and [2].



15. Remove the rings [1], bearing [2], and bushing [3] from the end of the ball screw.



16. Remove the ball screw [1] (x4). If it is difficult to remove, rotate the shaft.

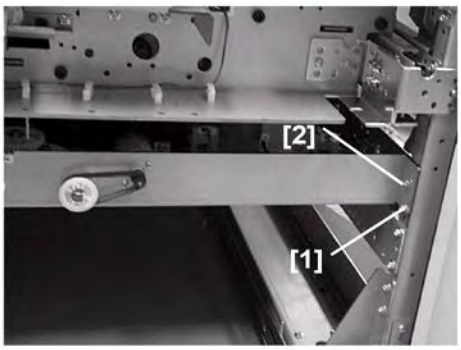
Important

- The screw shaft and ball screw are always replaced together as one unit. Never attempt to separate the ball screw and shaft (you will not be able to reassemble them).

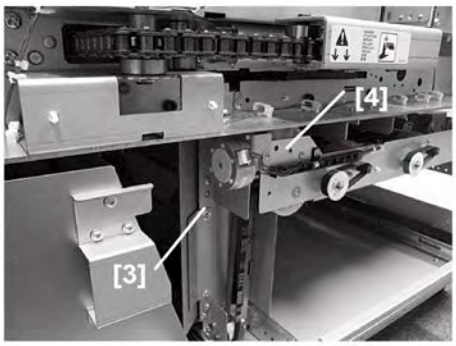
17. Reset the counter after replacing the ball screw unit.

1.9.5 TRIMMINGS BUFFER MOTOR (M37)

1. Open the book stack door. page 30
2. Pull out the book output tray.
3. Pull out the trimmings box drawer and remove the box from the drawer.

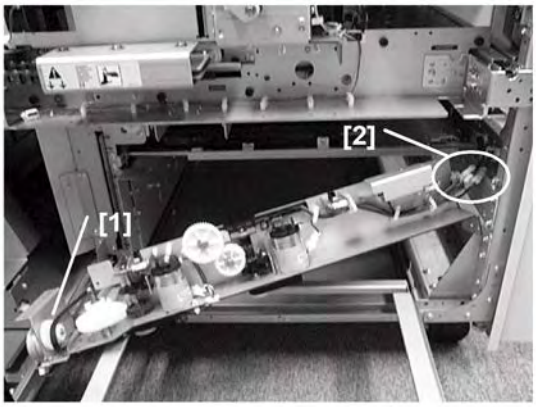


d391p346b



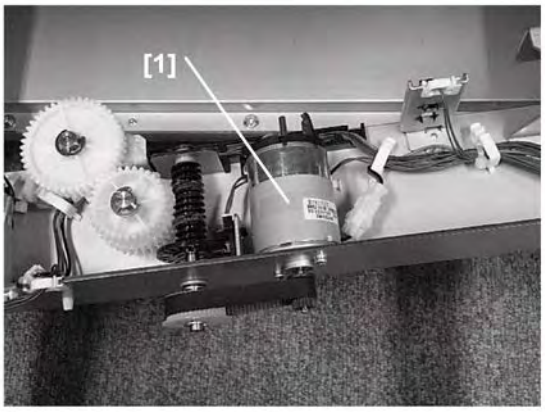
d391p346a

4. On the right loosen screw [1] and remove screw [2] (x2).
5. On the left remove the screw [3] and lower the trimmings buffer drive unit [4] (x2).



d391p347

6. Disconnect the timing belt [1] and connectors [2] to disconnect the drive unit (Timing belt x1, x5).

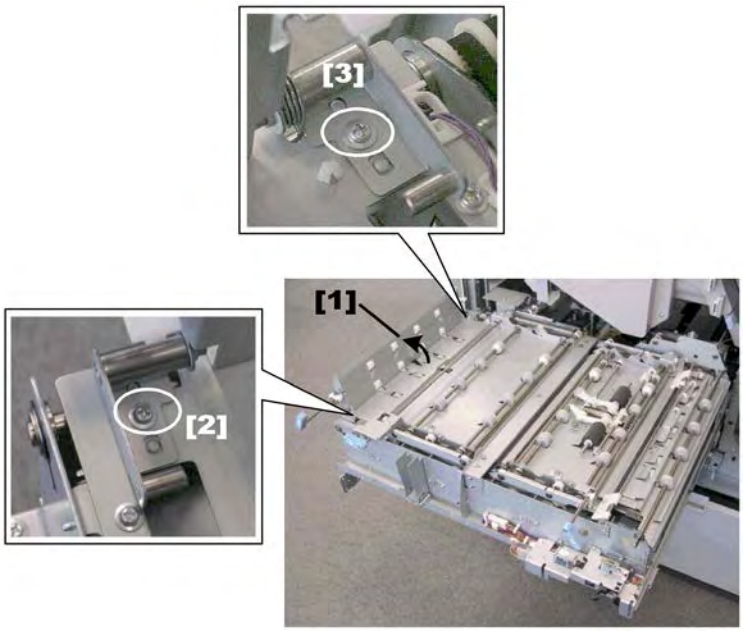


d391p348

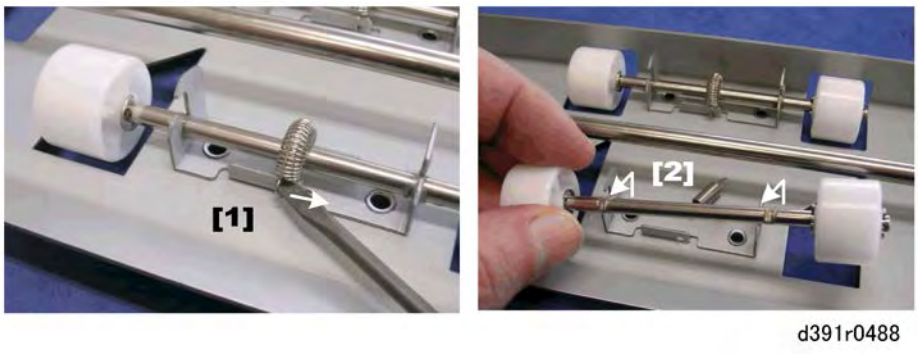
7. Remove the trimmings buffer motor (M37) (x2, x1).

1.10 HORIZONTAL PATH ROLLERS

1.10.1 EXIT IDLE ROLLER UNIT

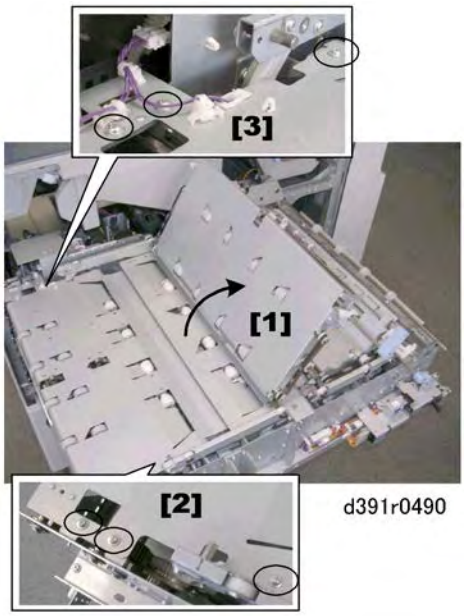


1. Pull out the cover transport unit. page 61
2. Raise lever **Mk8** to open the exit roller cover [1].
3. Remove the guide plates:
   [2] Front (x1)
   [3] Rear (x1)
4. Remove the exit roller cover [1].

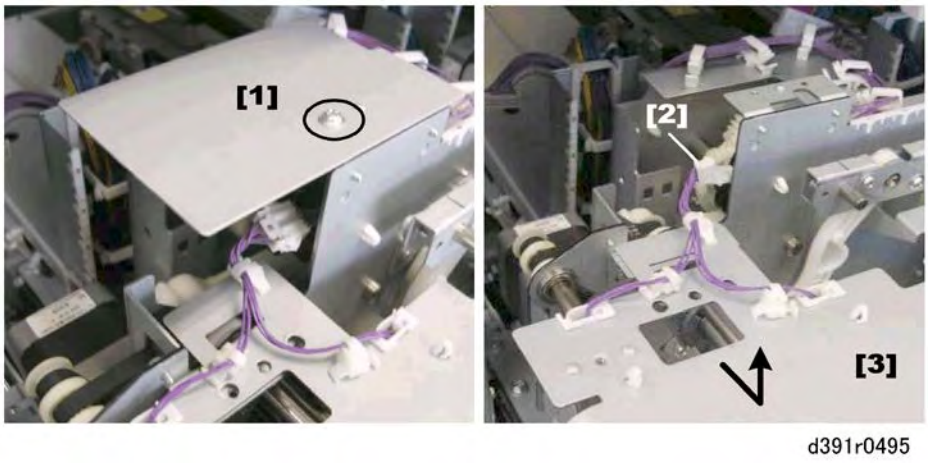


5. To remove the rollers, release and remove spring [1].
6. Rotate and pull out roller shaft [2] and remove the rollers (x2 ea.).

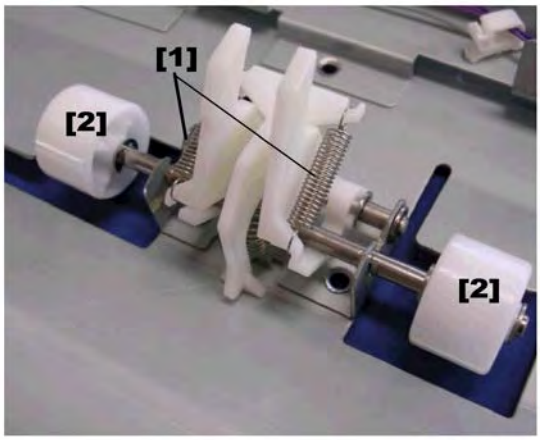
1.10.2 EXIT ROLLER, HORIZONTAL TRANSPORT ROLLER 5



1. Pull out the cover transport unit. page 61
2. Remove the exit idle roller unit. page 86
3. Raise lever **Mk8** to open the left horizontal path transport guide [1].
4. Remove:
   [2] Front (x3)
   [3] Rear (x3)

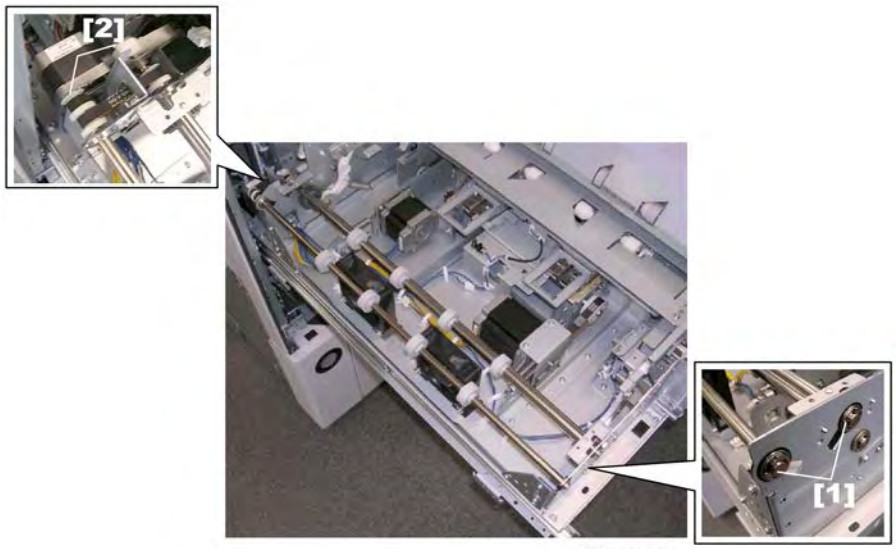


5. Remove the connector protection plate [1] (x1).
6. Disconnect the connector [2] (x1).
7. Remove the guide plate [3], turn it over, and lay it on a flat surface.



d391r0498

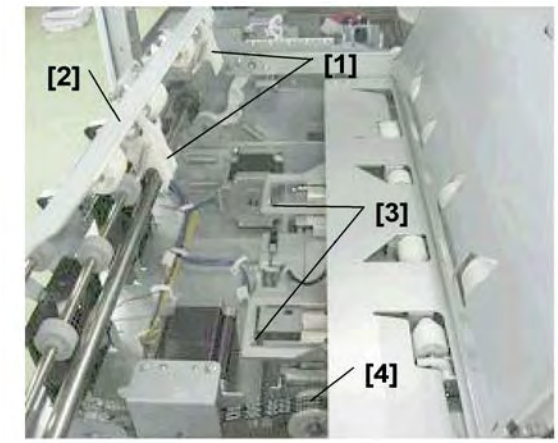
8. To replace the rollers: .
   [1] Springs x2
   [2] Rollers (℄x2)



d391r0499

9. Remove the exit roller and horizontal transport roller 5.
   [1] Front (℄x1, Bushing x2)
   [2] Rear (℄x2, Timing belts x3, Gears x2, Bushings x2).

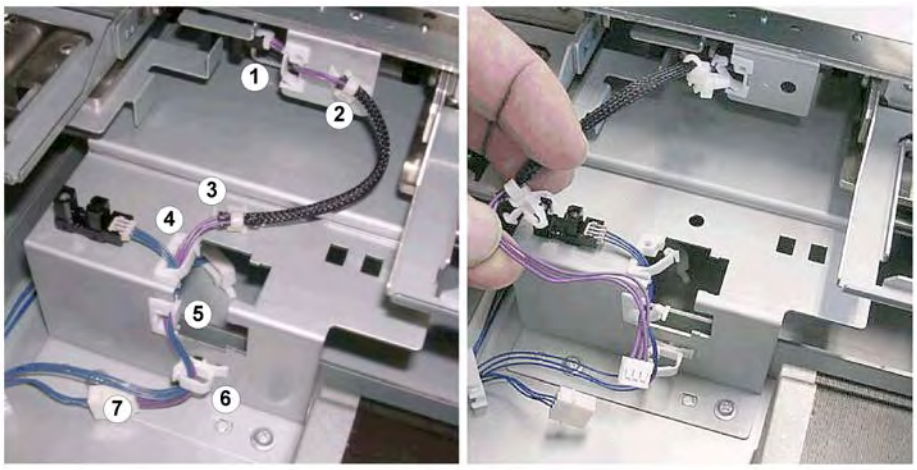
Reinstallation



d391r0500

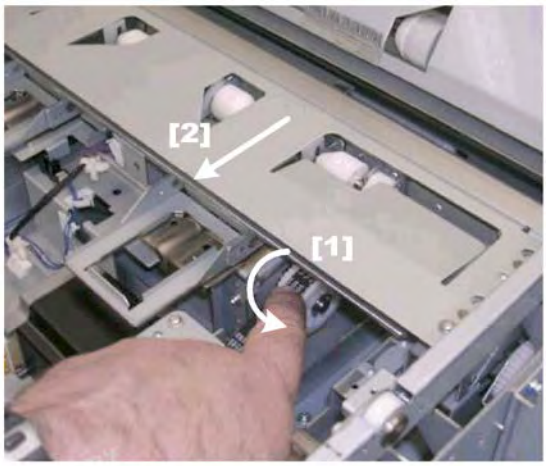
Make sure that the pressure arms [1] behind the exit unit [2] go through the holes of the left spine fold unit [3]. If this is difficult to do, turn the pulley [4] of the spine fold motor manually to move the left spine fold unit.

1.10.3 HORIZONTAL TRANSPORT ROLLER 4



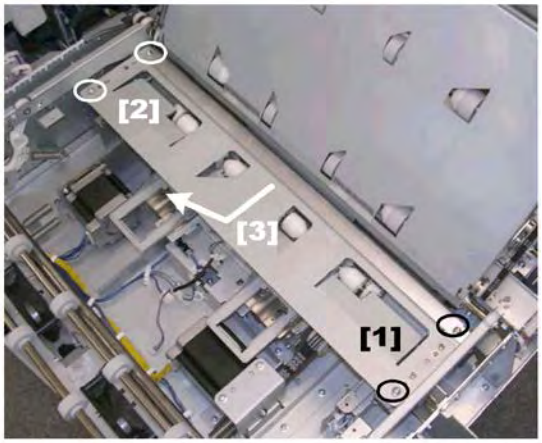
d391r0502

1. Pull out the cover transport unit. page 61
2. Remove the exit idle roller unit. page 86
3. Remove the exit roller unit. page 87
4. Disconnect harness:
   - x4 (1), (4), (5), (6)
   - Standoffs x2 (2), (3)
   - x1 (7)



d391r0507

5. Manually rotate the spine fold drive gear [1] to move the left spine fold unit [2] to the left.



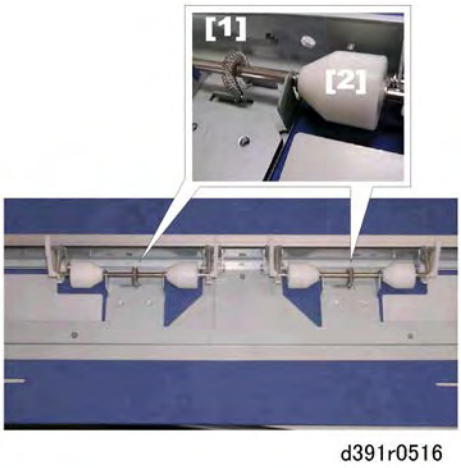
d391r0508

6. Remove the screws:
   [1] Front (x2)
   [2] Rear (x2)
7. Remove the left spine fold unit [3].

d391r0510

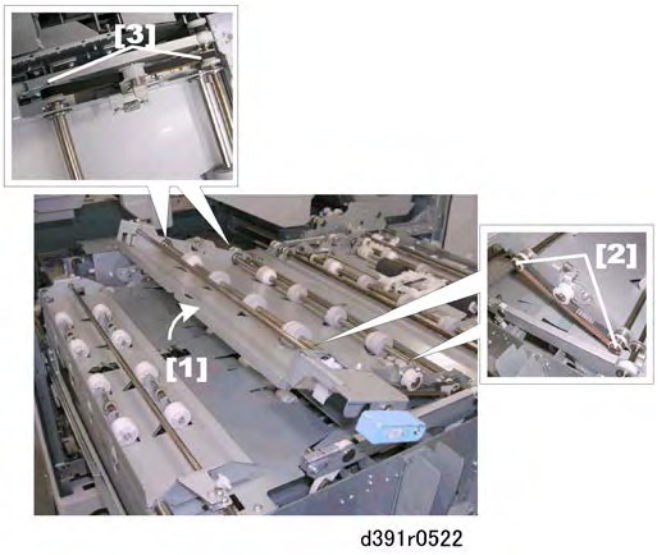
8. Remove the screws [1] (x2) then remove the brace [2] from the side of the left spine fold unit.

9. Remove the screws [1] (x3) and remove the roller bracket [2].
10. Turn over the roller bracket and lay it on a flat surface.



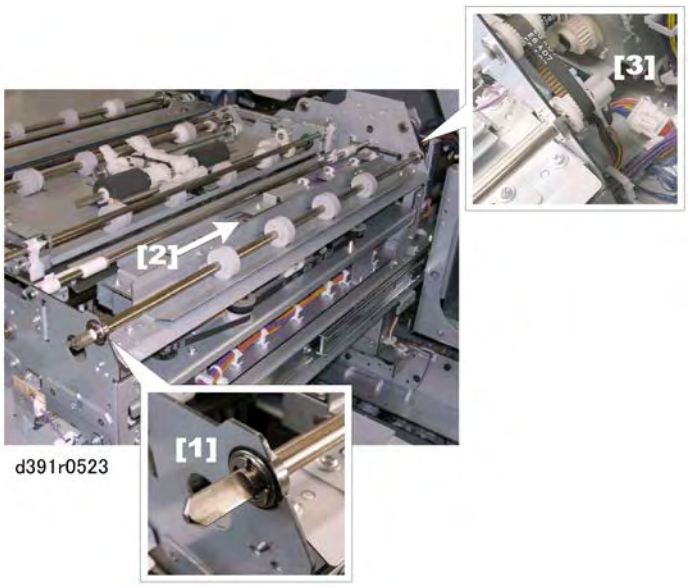
11. Remove the roller shafts [1] (Springs x1 ea.)
12. Remove the rollers [2] (x2 ea)

1.10.4 LEFT COVER TRANSPORT PATH GUIDE ROLLER

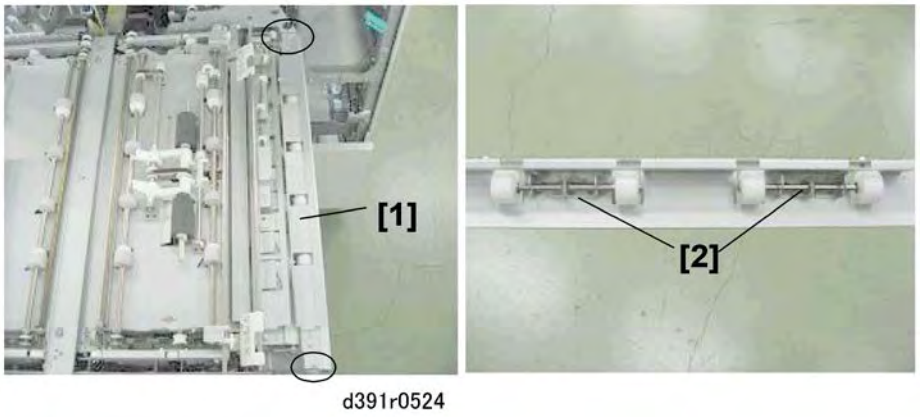


1. Pull out the cover transport unit. page 61
2. Raise lever **Mk7** to open the cover [1].
3. Replace the guide rollers:
   [2] Front (x2, Timing belt x1, Gears x2, Bushings x2)
   [3] Rear (x4, Timing belt x1, Gears x2, Bushings x2)

1.10.5 HORIZONTAL TRANSPORT ROLLER 1 AND IDLE ROLLERS

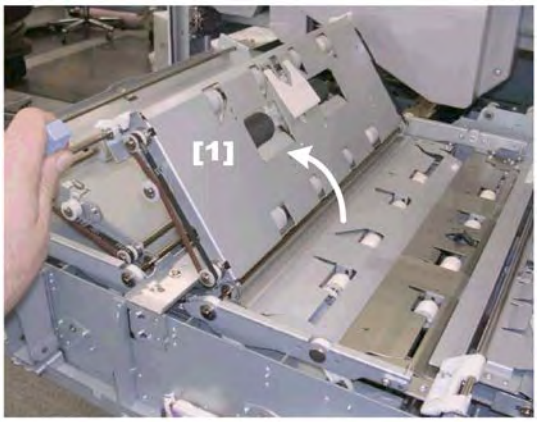


1. Pull out the cover transport unit. page 61
2. At the front disconnect the roller [1] (ℰx1, Bearing x1)
3. Push the roller [2] slightly to the rear.
4. At the rear disconnect the roller [3] (Timing belt x1, Gear x1, Bearing x1)



1. Remove the horizontal transport roller 1 idle roller unit [1] (x2).
2. Replace the rollers [2].

1.10.6 HORIZONTAL TRANSPORT ROLLER 2

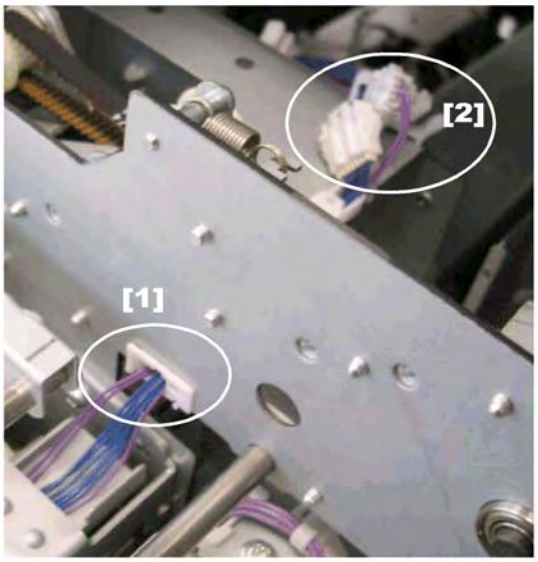


d391r0526

1. Pull out the cover transport unit. page 61
2. Raise lever **Mk9** [1] to see the rollers.

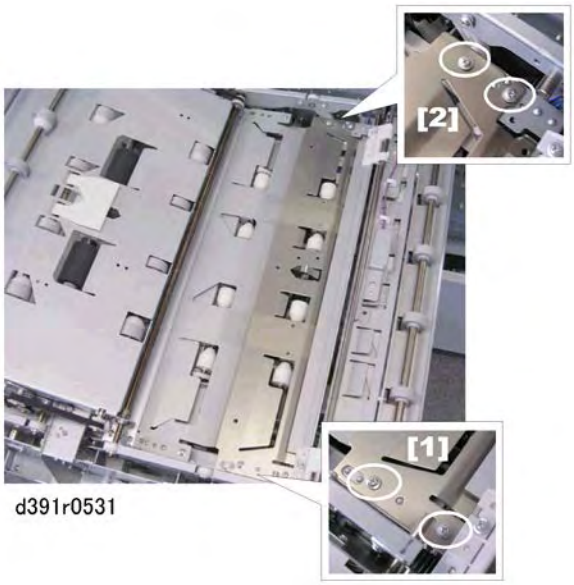
d391r0527

3. Remove the harness protection plate [1] (x1).



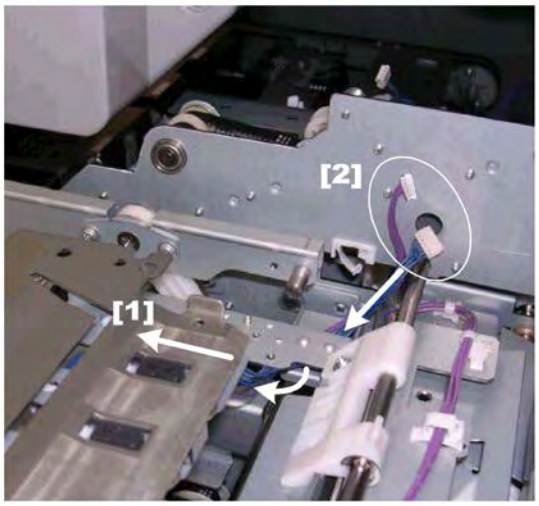
d392r0528

4. Disconnect the harness:
   [1] x1
   [2] x2



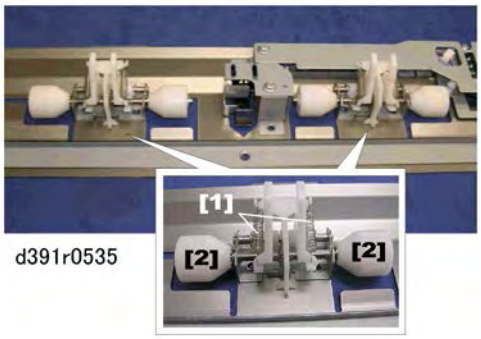
d391r0531

5. Remove the screws at the front [1] and rear [2] (x4).



d391r0534

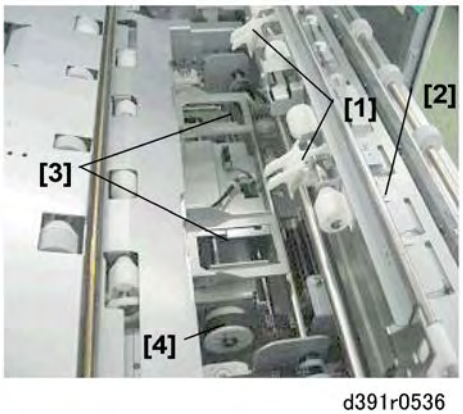
6. As you slowly remove the plate [1] guide the connectors [2] under the plate.
7. Turn over the plate and lay it on a flat surface.



d391r0535

8. Remove the roller shaft springs [1] (Springs x2 ea.)
9. Remove the rollers [2] (ℂx2 ea.)

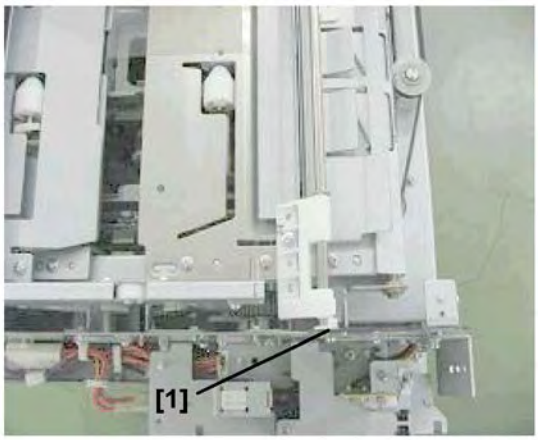
Reinstallation



d391r0536

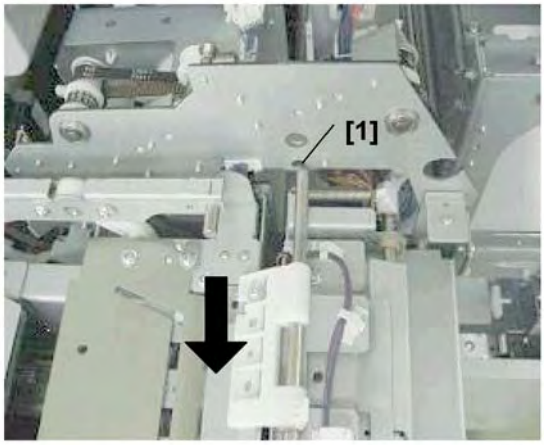
Make sure that the pressure arms [1] behind the exit unit [2] go through the holes [3] of the spine fold unit. If this is difficult to do, turn the pulley [4] of the spine fold motor manually to move the spine fold unit.

1.10.7 HORIZONTAL TRANSPORT ROLLER 3



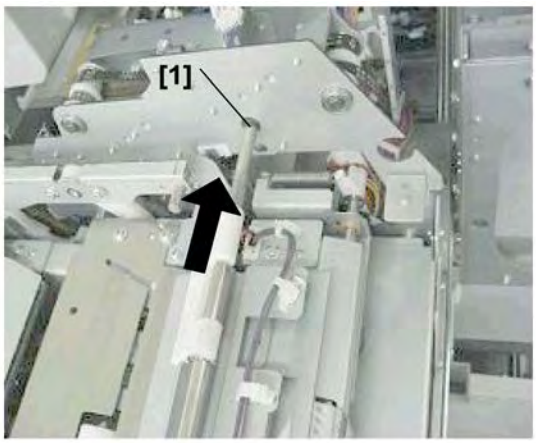
d391r920

1. Remove:
   - Horizontal transport roller 1 and idle rollers page 92
   - Horizontal transport roller 2 idle roller unit page 93
2. At the front disconnect the shaft [1].



d391r921

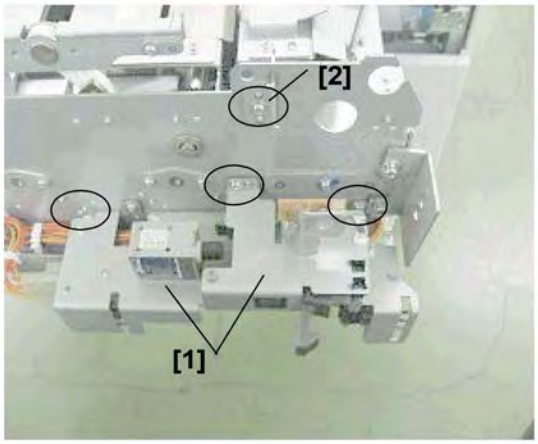
3. Pull the guide plate shaft forward and out of the hole at [1].



d391r922

4. Push the guide plate to the rear and through the hole at [1].

5. Pull the guide plate forward again to remove it from the shaft.

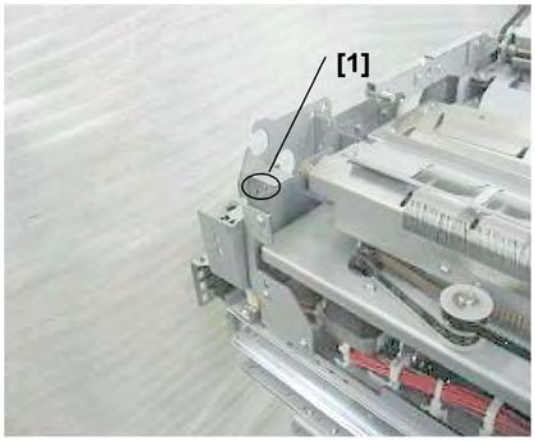


d391r923

6. Remove:

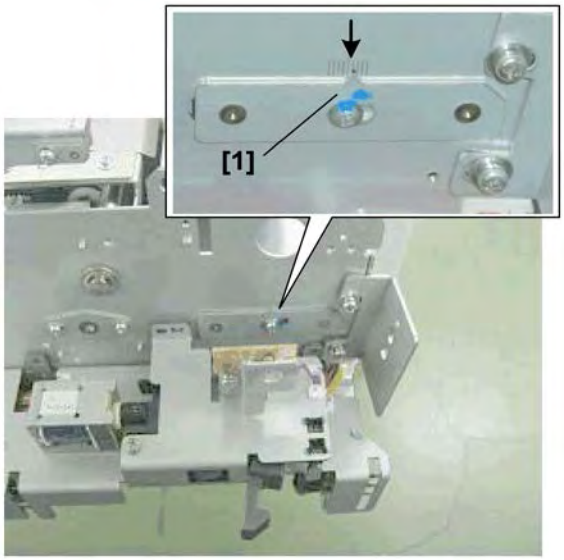
   [1] Front door interlock unit [1] (x3)

   [2] Guide standard plate [2] (x1)



d391r924

7. Remove plate [1] (x1)



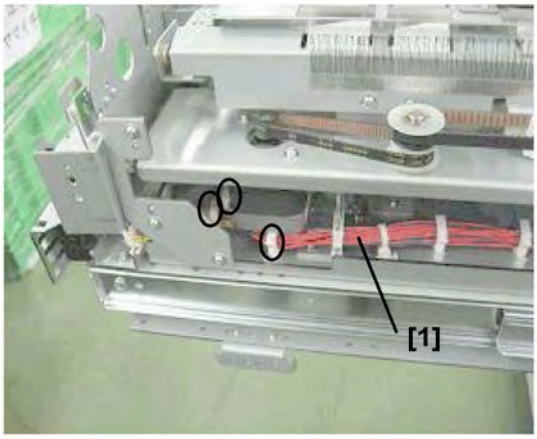
d391r925

8. Use a pen or pencil to mark the current position of the notch on the graduated scale.

Important

- The notch must be realigned at this mark when it is reattached.

9. Remove the notch plate [1] (x1).



d391r926

10. Disconnect the harness [1] (x2, x3).

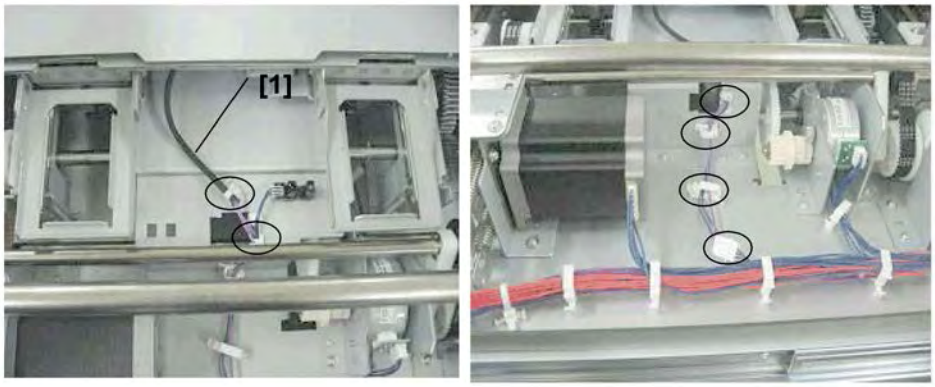
d391r927

11. Disconnect the harness:

[1] x1

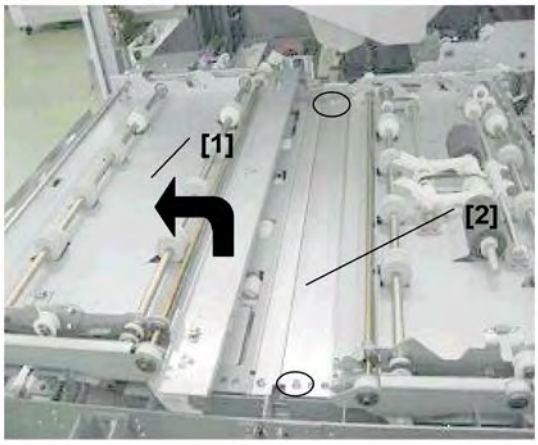
[2] x1

[3] x3



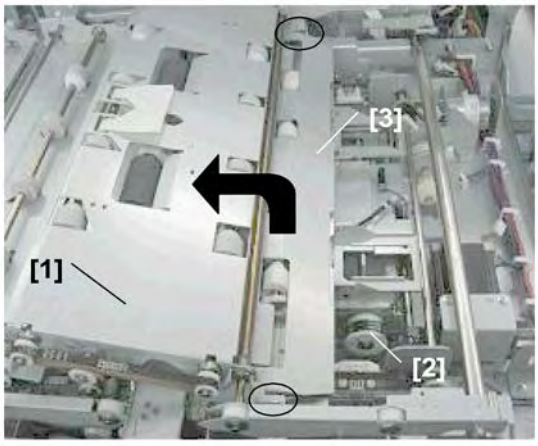
d391r928

12. Disconnect harness [1] (Band x1, x2, x4)



d391r929

13. Move the left transport path guide [1] to the left.
14. Remove the right spine fold plate [2] (x2).

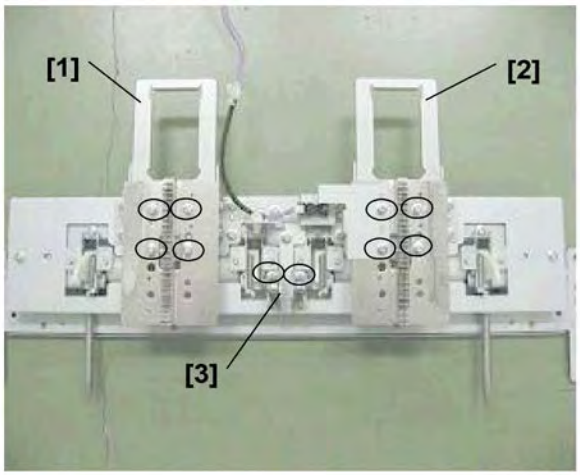


d391r930

15. Open the right cover transport path guide [1].
16. Manually turn the pulley [2] to move the right spine fold plate unit completely to the right.
17. Remove the right spine fold plate [3] (x2).

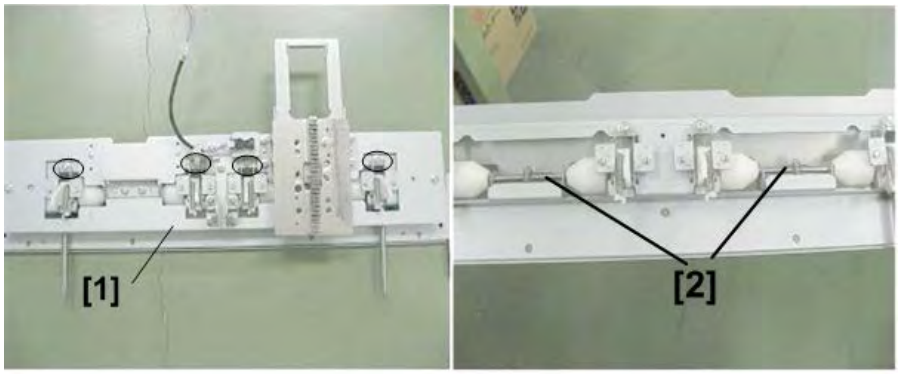
Important

- At reinstallation the right spine fold plate [3] must be parallel to the right cover transport path guide [1].



d391r931

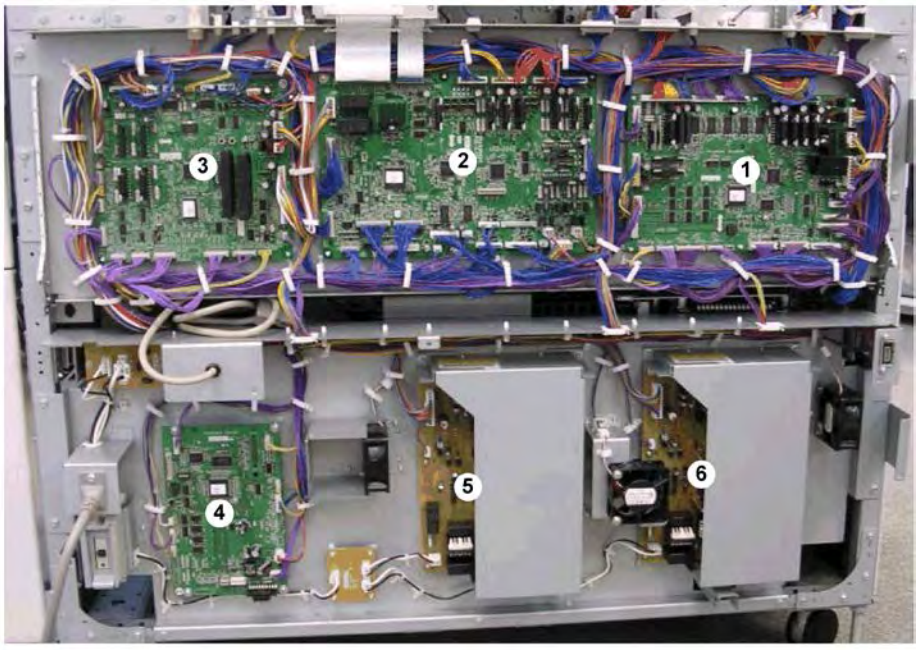
18. Remove plates [1], [2] (x4 ea.)
19. Remove the roller assembly screws [3] (x2).



d391r932

20. Remove the screws [1] (x4).
21. Replace the old roller set [2] with the new one.

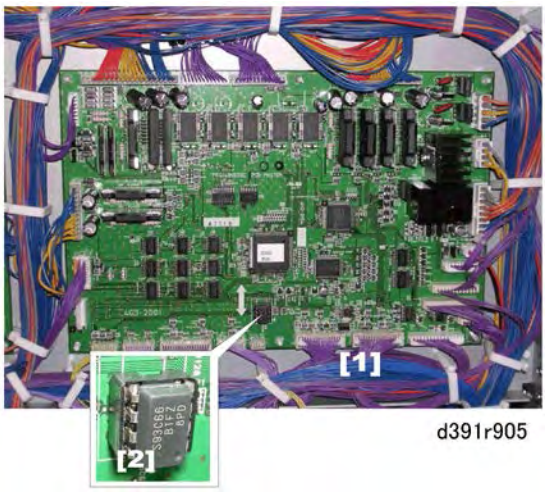
1.11 PERFECT BINDER BOARDS



d391r904

①	Master Control Board (PCB1)
②	Slave Control Board (PCB2)
③	Cutter Control Board (PCB3)
④	Relay Board (PCB12)
⑤	Power Supply Unit 1 (PCB20)
⑥	Power Supply Unit 2 (PCB21)

1.11.1 MASTER CONTROL BOARD



1. Remove the rear cover. page 16
2. Remove the master control board [1] (x all, x1, Standoffs x5).
3. Remove the EEPROM [2] from the old board and install it on the new board.

1.11.2 WHEN INSTALLING A NEW EEPROM IN MASTER CONTROL BOARD

New EEPROM has no setting data in itself. The factory setting data (41 settings) for each machine must be input when installing a new EEPROM in the master control board.

- Refer to the factory setting data sheet which has been kept in the right front door for details about necessary settings to be input in the EEPROM.
- Refer to "Troubleshooting > Service Mode > Critical Adjustments" of this manual for details about how to input the factory setting data in the EEPROM on the master controller board.

1. CV-REG-L

Cover Horizontal Registration Position Adjustment (Large size control; 298mm or more)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - The LED1 count indicates the sign of the value, plus (+) or minus (-). When LED1 is OFF, this indicates plus (+). When LED1 is ON, this indicates minus (-).
   - The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1 to 9) of the 2-digit decimal value. Flash duration: 300 ms
   - For example, if LED2 flashes twice and the LED3 flashes 4 times, this is read as "24". To adjust this value to the actual reading: 24 x 0.1 mm = 2.4 mm where "2.4 mm" is the actual value.
   - The LEDs remain OFF for 2 sec. if the current value is "0".
   - The LED2 and LED3 displays automatically alternate
4. Input a value for the "CV-REG-L" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

2. CV-REG-S

Cover Horizontal Registration Position Adjustment (Small size control; 297 mm or less)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	*	*	Up	*	*

1. Set the SW2 bank as shown above.
2. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
3. Input a value for the "CV-REG-S" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

3. CV-CENT

Cover Center Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "CV-CENT" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

4. CLCT-SB

Stacking Tray Switchback Roller Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "CLCT-SB" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

5. ALG-F-A4

Jogger Motor Adjustment (Front jogger motor; Small size; less than 298 mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	Up	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "ALG-F-A4" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

6. ALG-R-A4

Jogger Motor Adjustment (Rear jogger motor; Small size less; than 298 mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	Up	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "ALG-R-A4" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

7. ALG-F-L

Jogger Motor Adjustment (Front jogger motor; Large size; 298 mm or more)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	Up	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "ALG-F-L" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

8. ALG-R-L

Jogger Motor Adjustment (Rear jogger motor; Large size; 298 mm or more)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	Up	*	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "ALG-F-L" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

9. GLUING

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	Up	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLUING" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.
   - To lower the main grip unit to increase the pressure between the spine and gluing vat roller below, adjust in the plus (+) direction. The amount of glue will increase.
   - To raise the main grip unit to reduce the pressure between the spine and gluing vat roller below, adjust in the minus (-) direction. The amount of glue will decrease.

10. STK-DLV

Exit Motor Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	Up	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLUING" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

11. GRP-CHNG

Main Grip Position Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	Up	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GRP-CHNG" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

12. SIZE-H

Trimming Position Adjustment, Fore edge cut adjust

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "SIZE-H" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

13. SIZE-W

Trimming Position Adjustment, Bottom/Edge cut adjust

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "SIZE-W" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

14. CV-LNG

Trimming Position Adjustment, Fixed area shift between top/bottom edge

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "CV-LNG" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

15. 10RGT-1

Square Cut Adjustment, L1:Square Adj. For 10-Sheet Signature 1

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "10RGT-1" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

16. 10RGT-2

Square Cut Adjustment, L2:Square Adj. For 10-Sheet Signature 2

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	Up	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "10RGT-2" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

17. 10RGT-3

Square Cut Adjustment, L3:Square Adj. For 10-Sheet Signature 3

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	Up	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "10RGT-3" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

18. 200RGT-1

Square Cut Adjustment, L1:Square Adj. For 200-Sheet Signature 1

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	Up	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "200RGT-1" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

19. 200RGT-2

Square Cut Adjustment, L2:Square Adj. For 200-Sheet Signature 2

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	Up	*	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "200RGT-2" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

20. 200RGT-3

Square Cut Adjustment, L3:Square Adj. For 200-Sheet Signature 3

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	Up	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "200RGT-3" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

21. SLD-MTR

Slide Motor HP Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	Up	Up	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "SLD-MTR" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

22. STK-VR0

Stack Thickness Volume Adjustment: 0 mm

1. Enter the SP mode of the mainframe.
2. Do SP6521-001 to input the factory setting data of the STK-VR0.

23. STK-VR25

Stack Thickness Volume Adjustment: 25 mm

1. Enter the SP mode of the mainframe.
2. Do SP6521-002 to input the factory setting data of the STK-VR25.

24. GLU-LOW

Glue Remain Thermistor: Lower Limit

1. Enter the SP mode of the mainframe.
2. Do SP6522-001 to input the factory setting data of the GLU-LOW.

25. GLU-UP

Glue Remain Thermistor: Upper Limit

1. Enter the SP mode of the mainframe.
2. Do SP6522-002 to input the factory setting data of the GLU-UP.

26. GLU-TEMP

Glue Temperature Setting

1. Enter the SP mode of the mainframe.
2. Do SP6534-001 to input the factory setting data of the GLU-UP.

27. GLU-MOVE

Gluing Unit Movement Adjustment

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	Up	*	Up	*	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-MOVE" on the factory setting data sheet by pushing [PSW2] to add 0.1 mm to the current value or [PSW3] to subtract 0.1 mm from the current value.

28. GLU-EDG1

Glue Application at Corners Adjustment, Top Edge Corner: 3 Cuts

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	Up	*	*	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-EDG1" on the factory setting data sheet by pushing [PSW2] to add 1 mm to the current value or [PSW3] to subtract 1 mm from the current value.

29. GLU-EDG2

Glue Application at Corners Adjustment, Bottom Edge: 3 Cuts

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	Up	*	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-EDG2" on the factory setting data sheet by pushing [PSW2] to add 1 mm to the current value or [PSW3] to subtract 1 mm from the current value.

30. GLU-EDG3

Glue Application at Corners Adjustment, Top Edge: No Trimming or Top Only

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	Up	*	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-EDG3" on the factory setting data sheet by pushing [PSW2] to add 1 mm to the current value or [PSW3] to subtract 1 mm from the current value.

31. GLU-EDG4

Glue Application at Corners Adjustment, Bottom Edge: No Trimming or Top Only

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	Up	*	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-EDG4" on the factory setting data sheet by pushing [PSW2] to add 1 mm to the current value or [PSW3] to subtract 1 mm from the current value.

32. GLU-AMT1

Glue Amount Adjustment, 1 (stack thickness 0-1.4mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	*	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT1" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

33. GLU-AMT2

Glue Amount Adjustment, 2 (stack thickness 1.5-3.4mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT2" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

34. GLU-AMT3

Glue Amount Adjustment, 3 (stack thickness 3.5-6.4mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT3" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

35. GLU-AMT4

Glue Amount Adjustment, 4 (stack thickness 6.5-11.4mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT4" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

36. GLU-AMT5

Glue Amount Adjustment, 5 (stack thickness 11.5-22.4mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	Up	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT5" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

37. GLU-AMT6

Glue Amount Adjustment, 6 (stack thickness 22.5-25.0mm)

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	Up	*	Up	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "GLU-AMT6" on the factory setting data sheet by pushing [PSW2] to add 0.05 mm to the current value or [PSW3] to subtract 0.05 mm from the current value.

38. TBWRNLVL

Blade Replacement Alarm Frequency Setting

1. Enter the SP mode of the mainframe.
2. Do SP6533-001.

39. TBPCOUNT

Setting Threshold Value for Shifting the Cutting Position

1. Enter the SP mode of the mainframe.
2. Do SP6533-002.

40. TBP-POSW

Cutting Position Change Setting for the Blade Cradle

SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	Up	*	Up	Up	*

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "TBPCOUNT" on the factory setting data sheet by pushing [PSW2] to add "1" to the current value or [PSW3] to subtract "1" from the current value.

41. TBP-MVSW

Software DIP Switch Setting: 0-15

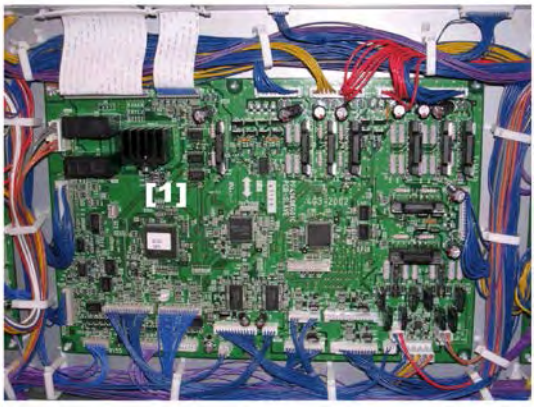
SW1			
1	**2**	**3**	**4**
Up	*	*	*

1. Set the SW1 bank as shown above.

SW2								Status
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
*	*	*	*	Up	*	Up	Up	DIP0
Up	*	*	*	Up	*	Up	Up	DIP 1
*	Up	*	*	Up	*	Up	Up	DIP 2
Up	Up	*	*	Up	*	Up	Up	DIP 3
*	*	Up	*	Up	*	Up	Up	DIP 4
Up	*	Up	*	Up	*	Up	Up	DIP 5
*	Up	Up	*	Up	*	Up	Up	DIP 6
Up	Up	Up	*	Up	*	Up	Up	DIP 7
*	*	*	Up	Up	*	Up	Up	DIP 8
Up	*	*	Up	Up	*	Up	Up	DIP 9
*	Up	*	Up	Up	*	Up	Up	DIP 10
Up	Up	*	Up	Up	*	Up	Up	DIP 11
*	*	Up	Up	Up	*	Up	Up	DIP 12
Up	*	Up	Up	Up	*	Up	Up	DIP 13
*	Up	Up	Up	Up	*	Up	Up	DIP 14
Up	Up	Up	Up	Up	*	Up	Up	DIP 15

2. Set the SW2 bank as shown above.
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Input a value for the "TBP-MVSW" on the factory setting data sheet by pushing [PSW2] to add "1" to the current value or [PSW3] to subtract "1" from the current value.

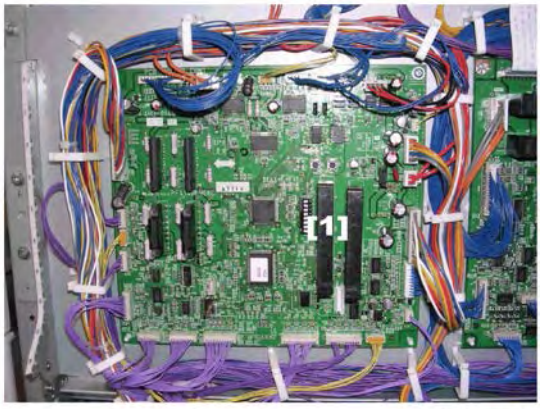
1.11.3 SLAVE CONTROL BOARD



d391r906

1. Remove the rear cover. page 16
2. Remove the slave control board [1] (FFC x all, x all, x1, Standoffs x5).

1.11.4 CUTTER CONTROL BOARD



d391r907

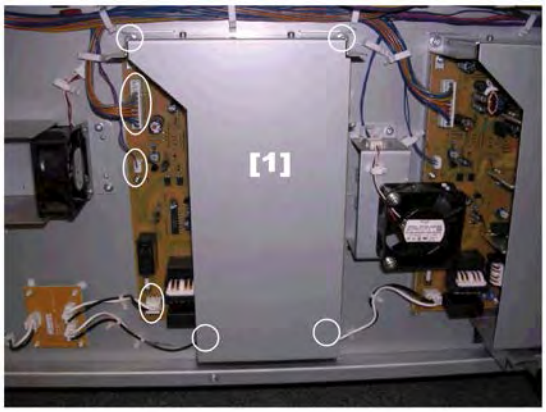
1. Remove the rear cover. page 16
2. Remove the cutter control board [1] (x all, x1, Standoffs x3).

1.11.5 RELAY BOARD

d391r908

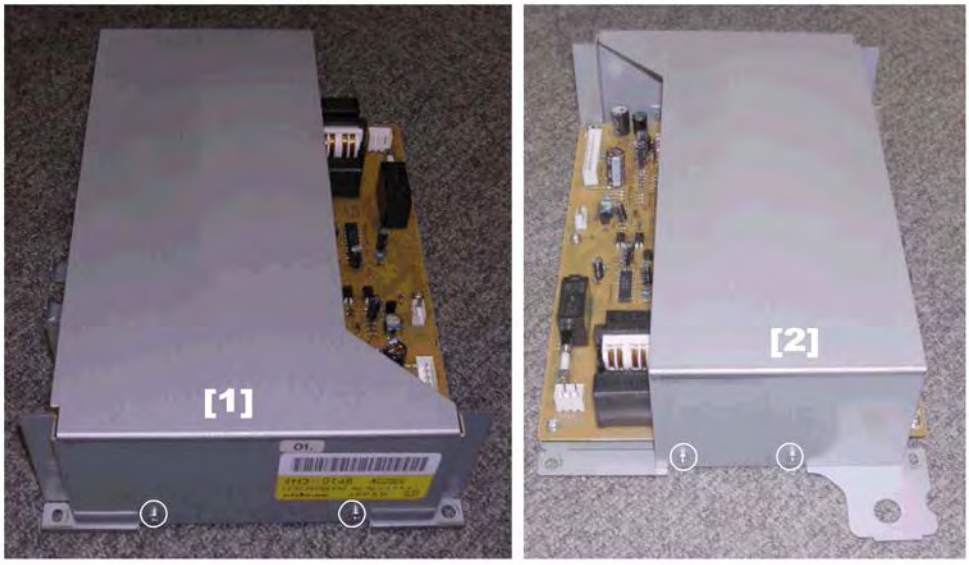
1. Remove the rear cover. page 16
2. Remove the relay control board [1] (x all, x4).

1.11.6 POWER SUPPLY UNIT 1



d391r909

1. Remove the rear cover. page 16
2. Remove power supply unit 1 assembly [1] (x 3, x4).



d391r910

3. Remove the protector plate.

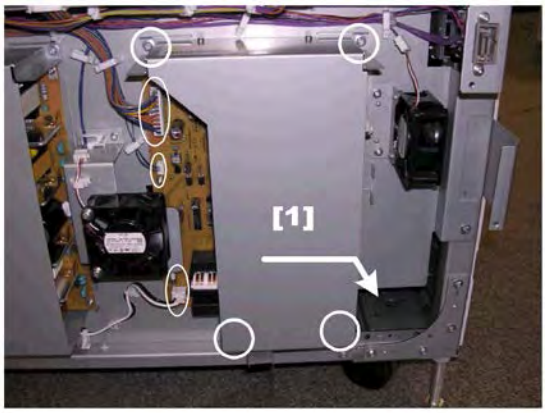
   [1] Top (x2)

   [2] Bottom (x2)

d391r911

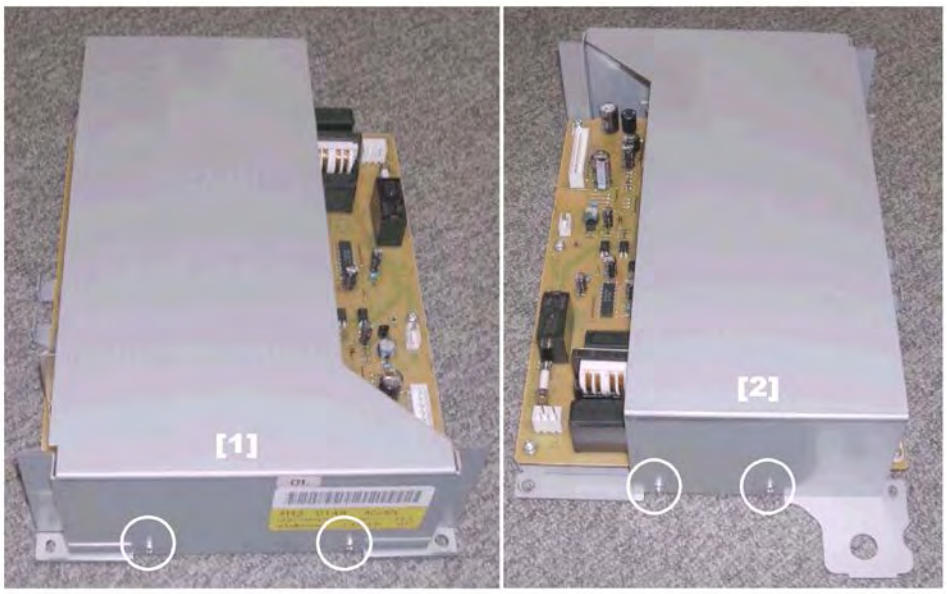
4. Remove the power supply unit 1 PCB [1] (x9).

1.11.7 POWER SUPPLY UNIT 2



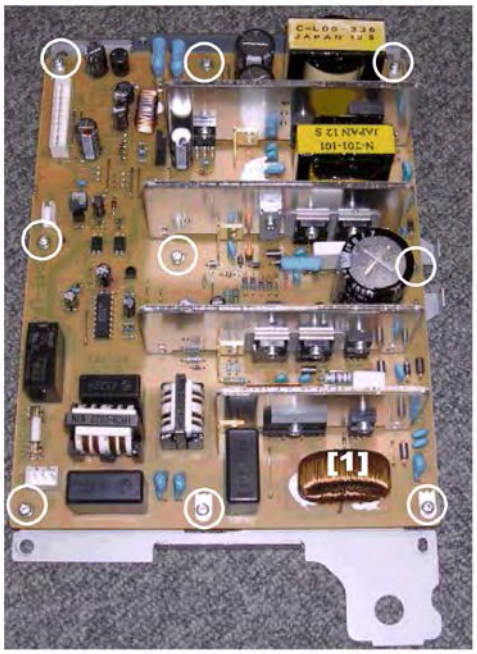
d391r912

1. Remove the rear cover. page 16
2. Remove power supply unit 2 assembly [1] (x 3, x4).
   Push the board to the right and pull it out from behind the fan. (It is not necessary to remove the fan.)



d391r913

3. Remove the protector plate.
   [1] Top (x2)
   [2] Bottom (x2)



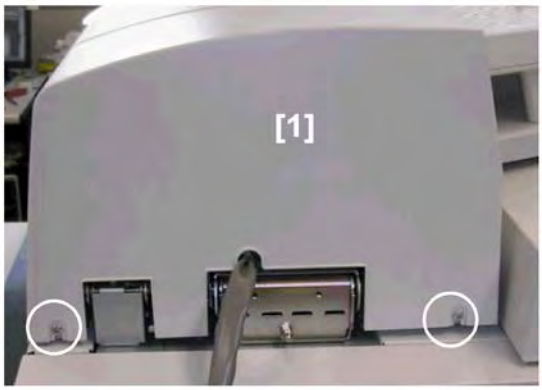
d391r914

4. Remove the power supply unit 2 PCB [1] (x9).

1.12 INSERTER

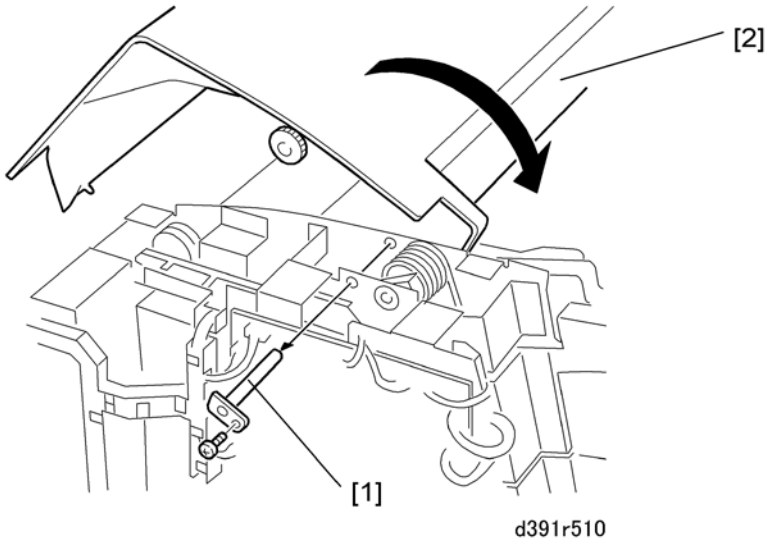
1.12.1 COMMON PROCEDURES

Rear Cover

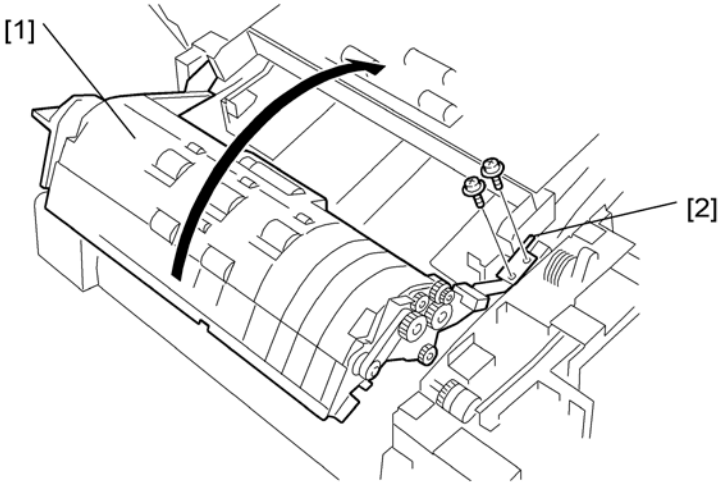


1. Rear cover [1] (x2).

Releasing Top and Middle Covers

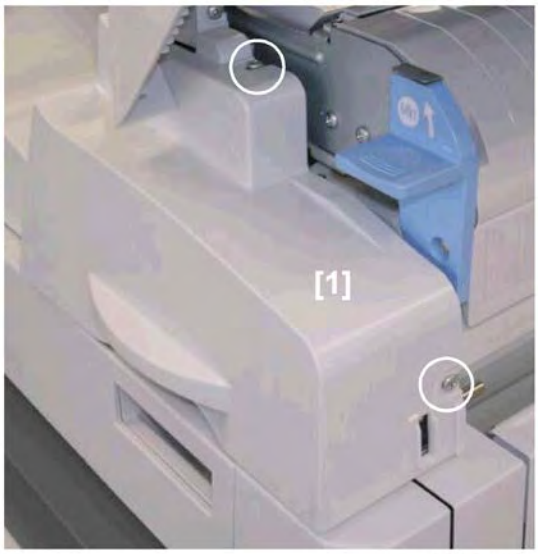


1. Remove rear cover. page 16
2. Remove the shaft [1] of the limiter brace (x1).
3. Open the top cover [2] completely.



4. Open the middle cover [1].
5. Remove the limiter brace [2] (x2).
6. Open the middle cover completely.

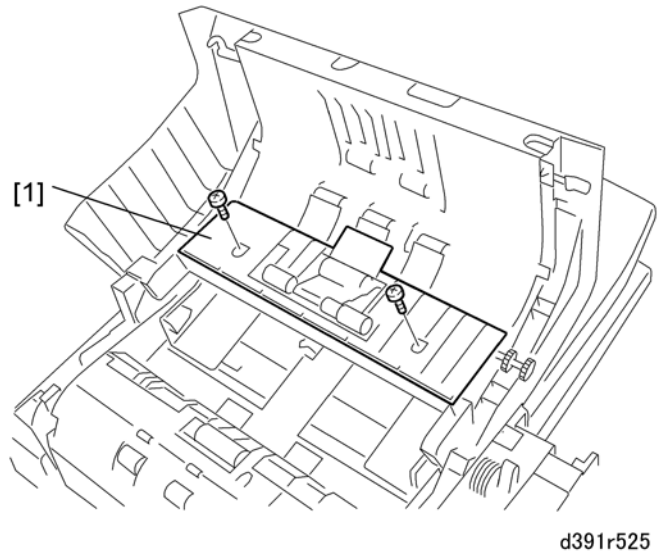
Front Cover



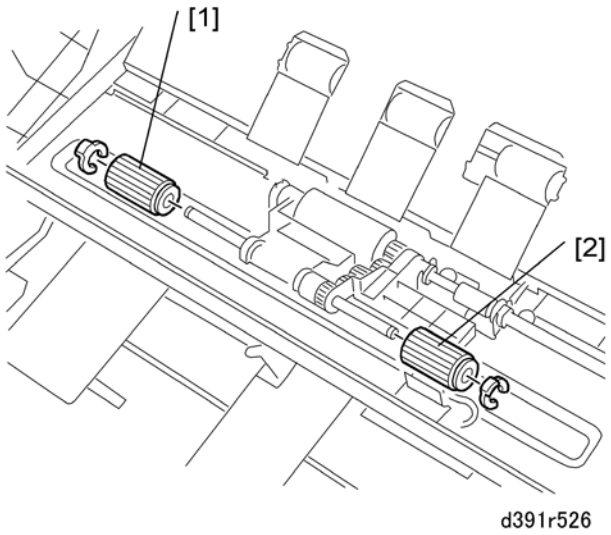
1. Release and open top cover.
2. Remove the front cover [1] (x2).

1.12.2 FEED ROLLERS

Feed Roller: Tray A



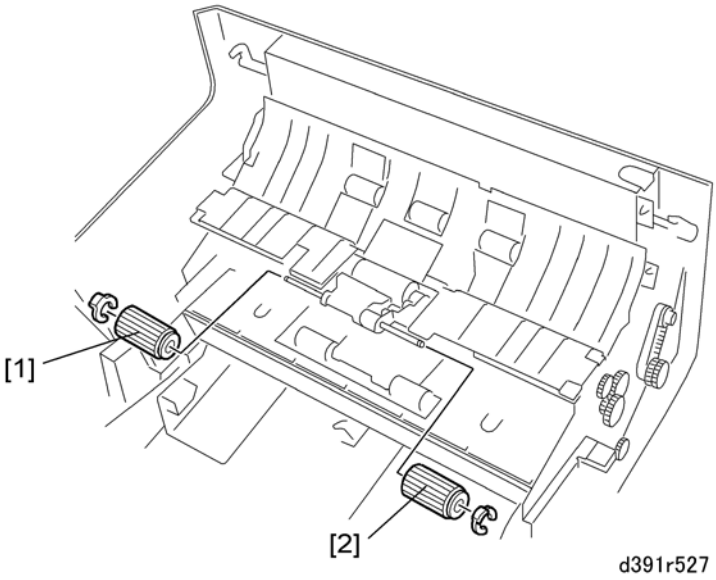
1. Remove the inserter rear cover. page 16
2. Release and open the top cover completely. page 142
3. Remove the transport guide [1] (x2).



4. Remove:
   [1] Feed roller (x1)
   [2] Feed roller (x1)

Feed Roller: Tray B

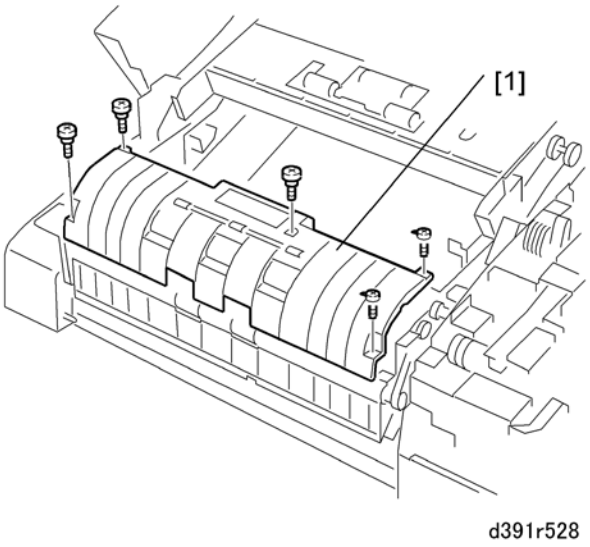
1. Remove the inserter rear cover. page 16
2. Release and open the top and middle cover completely. page 142



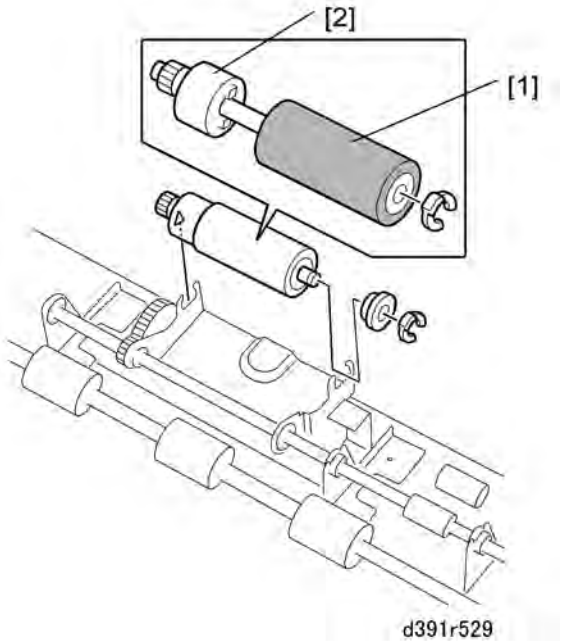
3. Remove:
   [1] Feed roller (ℭx1)
   [2] Feed roller (ℭx1)

1.12.3 SEPARATION ROLLERS

Separation Roller and Torque Limiter: Tray A

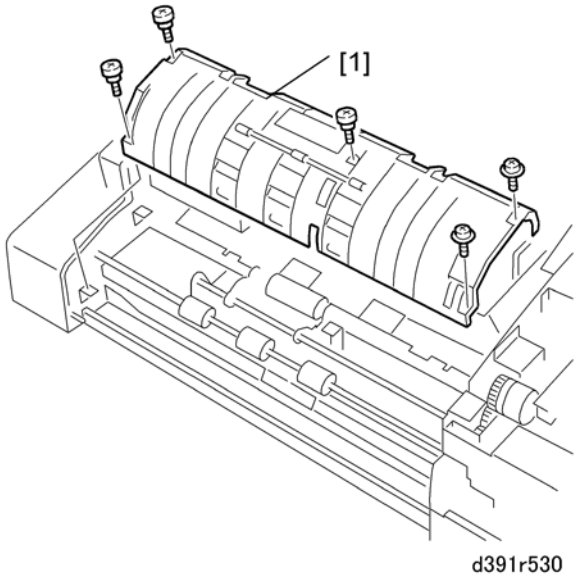


1. Remove the inserter rear cover. page 16
2. Release and open top cover completely. page 142
3. Remove transport guide [1] (x5).

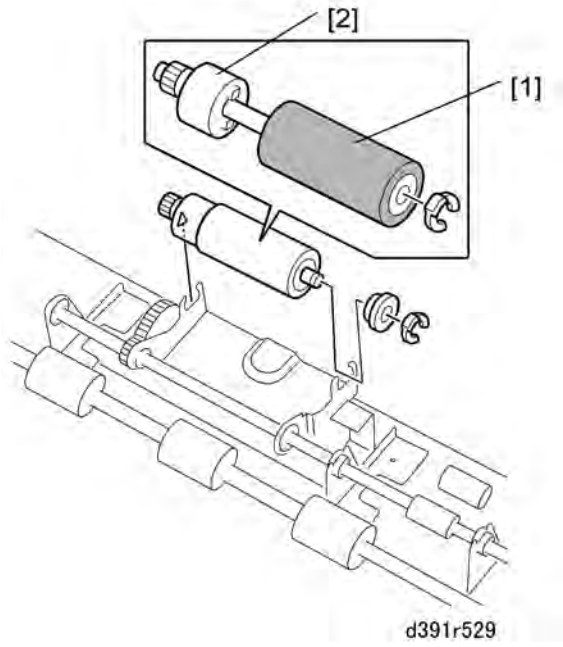


4. Remove the separation roller [1] (x1, Bushing x1)
5. Remove the torque limiter [2].
6. Reset the counter after replacing the separation roller or torque limiter.

Separation Roller, Torque Limiter: Tray B



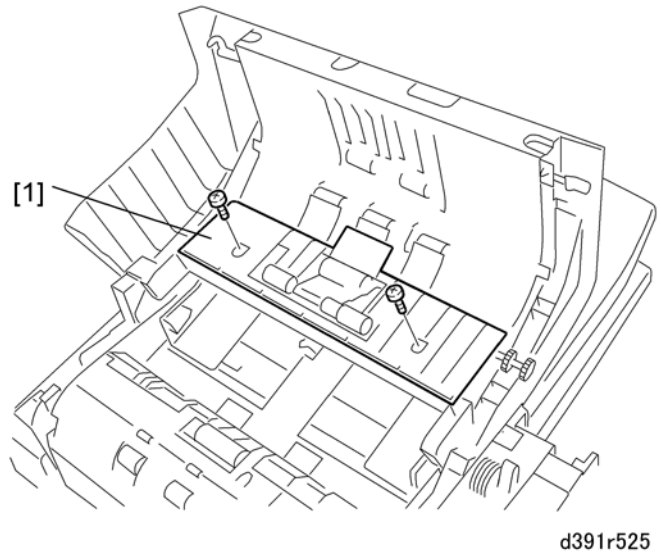
1. Remove the inserter rear cover. page 16
2. Release and open top and middle cover completely. page 142
3. Remove transport guide [1] (x5).



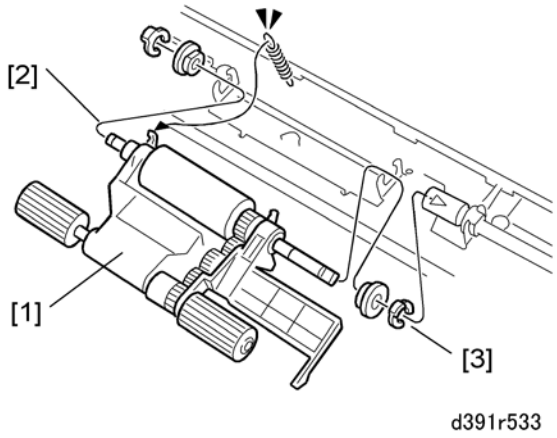
4. Remove the separation roller [1] (x1, Bushing x1)
5. Remove the torque limiter [2].
6. Reset the counter after replacing the separation roller or torque limiter.

1.12.4 PICKUP ROLLERS

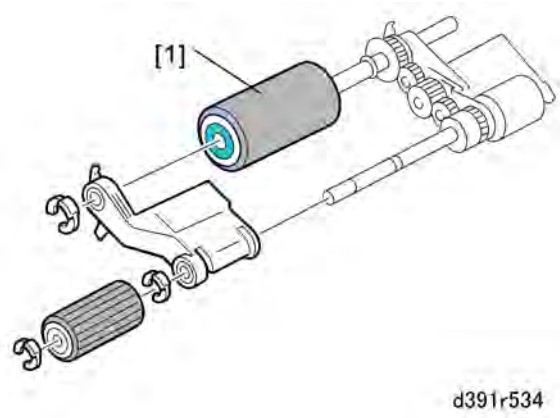
Pickup Roller: Tray A



1. Remove the inserter rear cover. page 16
2. Release and open top cover completely. page 142
3. Remove front transport guide [1] (x2).

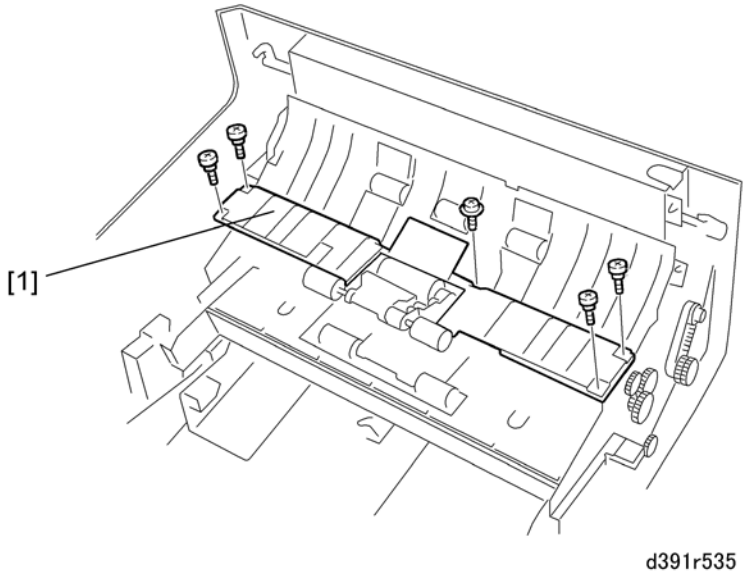


4. Remove the pickup roller unit [1]:
   [2] Front (Spring x1, x1, Bushing x1)
   [3] Rear (x1, Bushing x1)

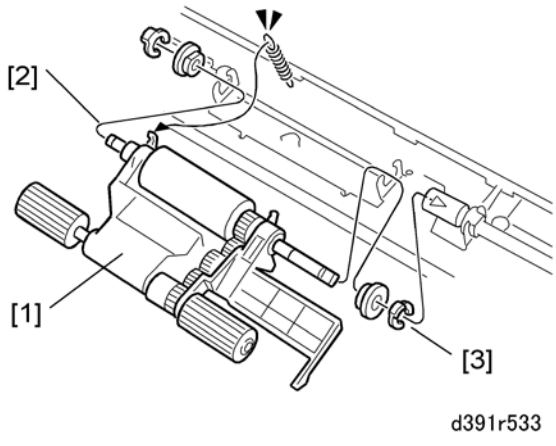


5. Remove the pickup roller [1] (ℂx3, Actuator x1)
6. Reset the counter after replacing the pickup roller.

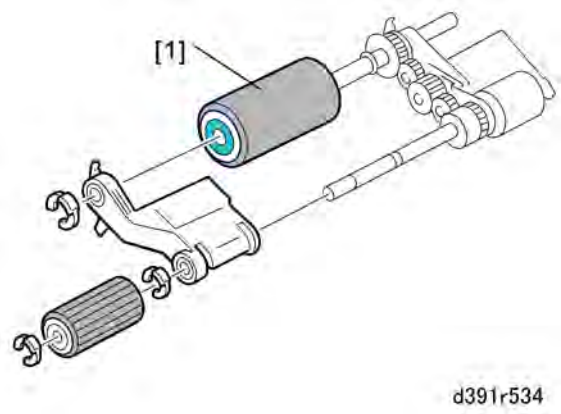
Pickup Roller: Tray B



1. Remove the inserter rear cover.
2. Release and open top and middle cover completely. page 142
3. Remove the rear transport guide [1] (x5).



4. Remove the pickup roller unit [1]:
   [2] Front (Spring x1, x1, Bushing x1)
   [3] Rear (x1, Bushing x1)



5. Remove the pickup roller [1] (x3, Actuator x1)
6. Reset the counter after replacing the pickup roller.

1.12.5 INSERTER CONTROL BOARD

1. Remove the inserter rear cover. page 16
2. Remove the inserter control board [1] (x all, x1, Standoffs x3).

When replacing the inserter control board

The adjustment of the paper width sensor output value for the Inserter Trays (upper/lower) is required when replacing the inserter control board. The following SP codes adjust the sensor output values for paper width for both upper and lower trays of the Inserter.

SP	Name
6-539-001	Interposer Tray VR Adj Upper Tray A4 Width
6-539-002	Interposer Tray VR Adj Upper Tray A4 Length
6-539-003	Interposer Tray VR Adj Upper Tray LT Width
6-539-004	Interposer Tray VR Adj Upper Tray LT Length
6-539-005	Interposer Tray VR Adj Lower TrayA4 Width
6-539-006	Interposer Tray VR Adj Lower TrayA4 Length
6-539-007	Interposer Tray VR Adj Lower TrayLT Width
6-539-008	Interposer Tray VR Adj Lower TrayLT Length

Note

- Once the adjustments for both PORTRAIT and LANDSCAPE are completed successfully, the A/D values (value converted from analog to digital) are saved onto the EEPROM of the Inserter.

2. TROUBLESHOOTING

2.1 SERVICE CALL TABLES

For details about "Service Call Tables" for this peripheral, see the main service manual.

2.2 JAMS

2.2.1 HANDLING PAPER JAMS

What Happens When a Jam Occurs

When a jam occurs open the cover at the jam location, remove the jammed paper and close the cover. However, the operator should be cautioned about opening the top cover of the bookbinder.

- The top cover should be opened when only absolutely necessary.
- Opening the top cover can disturb paper that is already on the stacking tray.

When a Jam Occurs at Power On

A jam alert will occur at power on if there is paper or a signature in the horizontal paper path, vertical path, signature path, inserter path, or on the stacking tray. Open the cover at the jam location, remove the jam, and close the cover. If the signature jams beyond the stacking tray, recovery processing executes automatically and upstream sheets are output to the stacking tray and stop there. However, if one of the aforementioned jams occurs in the paper path at power on, recovery processing does not execute until after the jam has been removed.

Power Loss During Glue Application

If the system is turned off while glue is being applied to a signature:

- The gluing unit begins to warm the glue after the power is turned on.
- After the glue has been warmed up, the glue vat returns to its home position.
- The bookbinder enters recovery mode automatically and paper once again starts exiting the signature path to the stacking tray.

2.2.2 WHEN AN ERROR OCCURS

Low Performance Mode

Cycling the system off/on usually restores the bookbinder to full operation after a jam has been removed.

- If an error occurs and cycling the machine off/on does not solve the problem, then the service technician must release the grip unit in the service mode, turn the bookbinder off, and then remove the jam.
- If a jam forces the bookbinder to enter the low performance mode, the bookbinder cannot recover from the error automatically. The jam must be removed and the machine reset by the service technician.

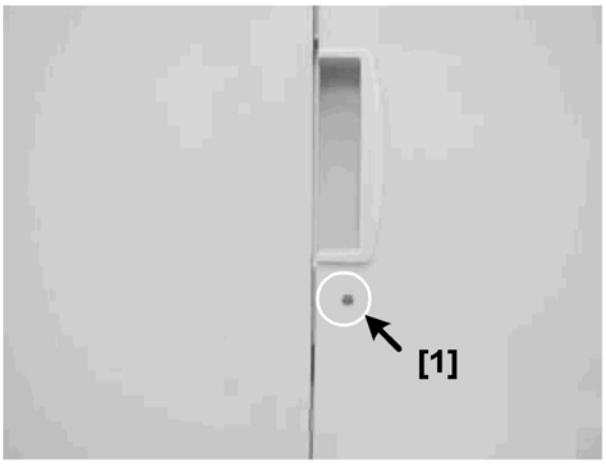
For more details about setting and releasing the low performance mode, see Section 3.

Unlocking the Front Doors Manually

If the front doors remain locked after the power was turned off while the bookbinder was operating, normally cycling the bookbinder off/on will unlock the doors.

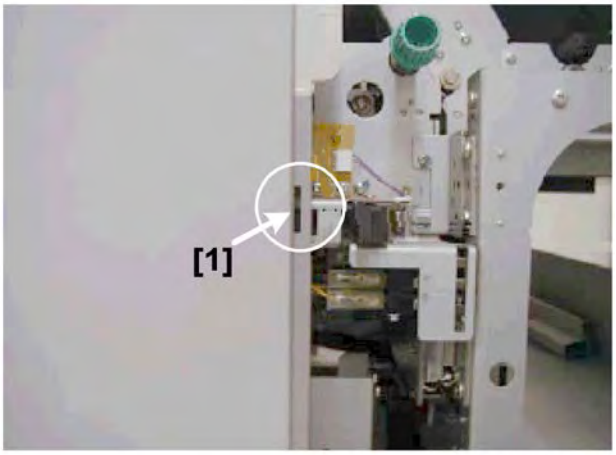
However, if the front doors remain locked after cycling the machine off/on (or if you cannot switch machine off/on), follow the procedure below to manually unlock the front doors.

1. Confirm that the bookbinder is turned off.



d391t8022a

2. At [1] insert the tip of a thin metal scale (or a thin screwdriver) and press in on the manual lock to release the doors.



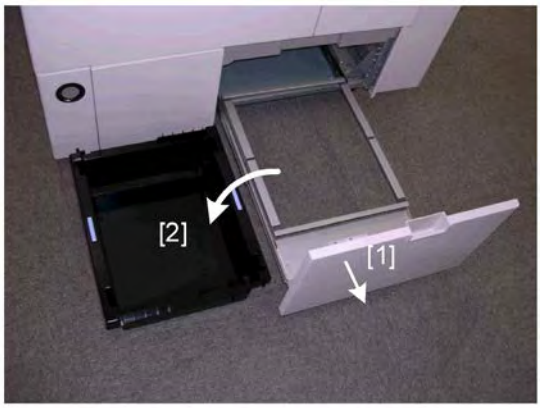
d391t8022b

The manual release is located behind a cutout [1] on the left edge of the left front door.

When the Book Stack Door Cannot Be Opened

Follow the procedure below if an problem occurs that prevents opening the book stacking tray. For example, a strip of trimming stuck to the blade and jammed between the trimming unit and trimming buffer could block these mechanisms and prevent the stacking tray door from opening.

1. Turn off the bookbinder and disconnect its power cord.
2. Pull out the trimmings drawer.

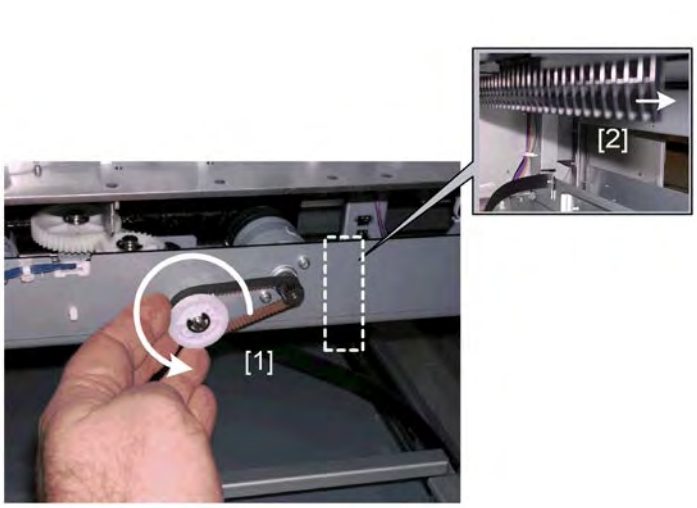


d391t8023d

3. Open the trimmings box drawer [1] and remove the trimmings box [2].

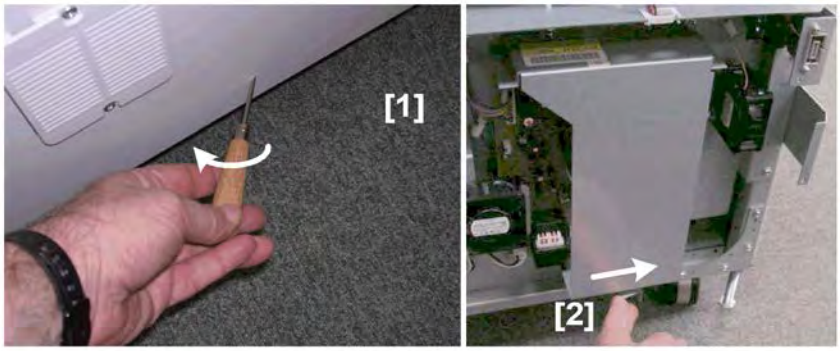
d391t8023a

4. Insert the tip of a small screwdriver into hole [1].



d391t8023b

5. Turn the trimmings buffer drive pulley [1] counter-clockwise to move the trimmings buffer [2] to the right.
6. Confirm the movement of the trimmings buffer by checking the position of the actuator of the trimmings buffer full sensor.
7. Continue to turn the trimmings buffer drive pulley until you see the actuator behind the hole, then stop turning.
   If the trimmings buffer will not move to the right because it is blocked by paper scraps, turn the pulley clockwise to move the buffer left, remove the scrap, then move the buffer to the right



d391t8023c

8. Insert the tip of a small screwdriver into the small hole [1] on the rear cover of the bookbinder.
9. Move the screwdriver in the direction of the arrow to release the stacking tray lock.

Note

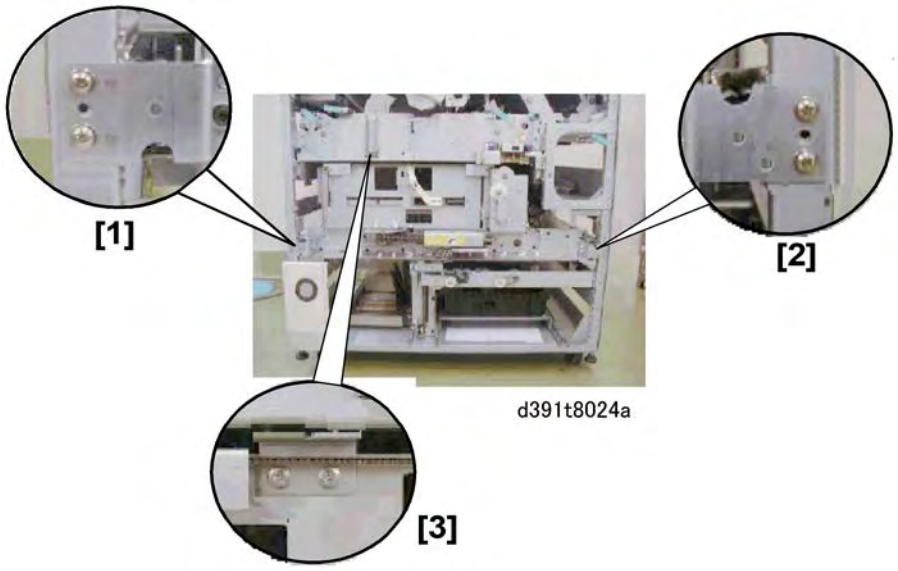
- If the rear cover has been removed, just push the lever [2] to the right to unlock the book stack door.

10. Open the book stack door.

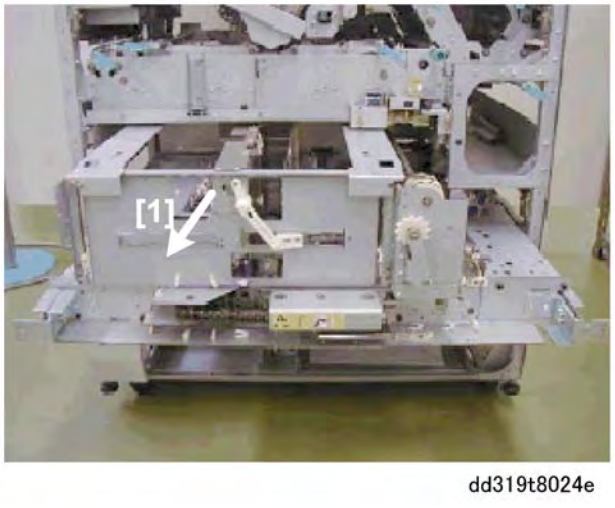
Signature, Trimmings Removal

Follow the procedure below if an problem occurs that prevents the removal of a signature or trimmings from the trimming unit. For example, a strip of trimming stuck to the blade and jammed between the trimming unit and trimming buffer could block the removal of the signature or trimmings.

1. Turn the bookbinder off.
2. Open the left and right door.
3. Remove the lower inner cover.



4. Remove the braces [1], [2], [3] from the trimming unit frame. (x3 ea.)

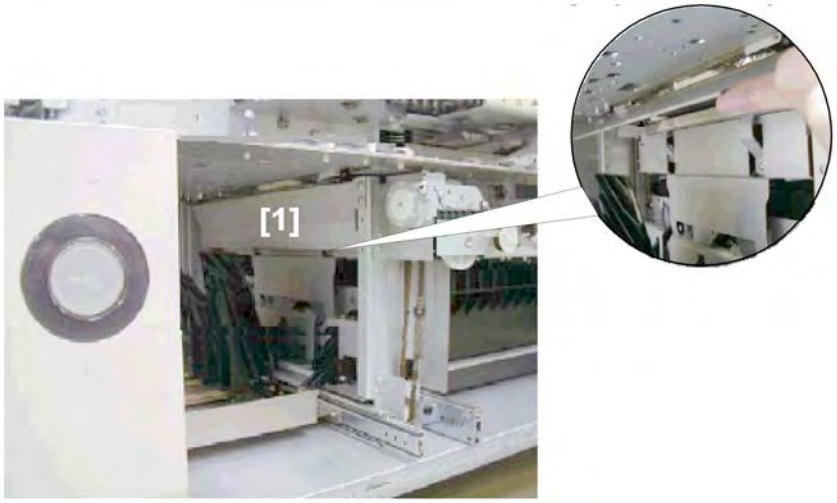


5. Pull out the trimming unit [1].
6. Retract the grip unit, open the press plates, or retract the blade, trimmings buffer as required.
7. Remove the signature and trimmings.

Removing Trimmings Jammed at the Blade

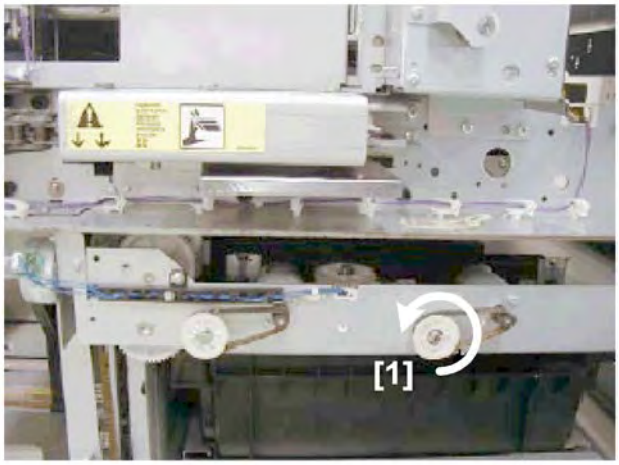
Follow the procedure below if an problem occurs that prevents the removal trimmings at the blade. For example, a strip of trimming stuck to the blade and jammed between the trimming unit and trimming buffer could block the removal of the signature or trimmings.

1. Turn off the bookbinder.
2. Remove the right and left door.
3. Remove the inner lower cover.



d391t8025a

4. Open the book stack delivery door.
5. Lift the cover [1] and check the area for trimmings. If you see any trimmings remove them. Continue with the procedure below if you cannot pull out the scraps.



d391t8025c

6. Rotate the trimmings buffer pulley [1] counter-clockwise to move the trimmings buffer to the right.
7. Follow the procedure in the previous section to remove the jammed scraps from the trimming unit.
8. Insert your hands from the front of the bookbinder to remove the jammed sheets, pulling them in the direction of paper feed or paper exit.

2.2.3 LOW PERFORMANCE MODE

Moving to Low Performance Mode

When an error occurs in a location that is neither located in nor affects paper feed in the horizontal feed path:

- The current settings are written in EEPROM so the horizontal feed path can still operate in lower performance mode. In low performance mode only the horizontal feed path can be used, but only for downstream delivery.
- The machine must be cycled off/on to put the bookbinder in the low performance mode.

Low Performance Conditions

Here is a summary of the conditions that put the bookbinder in the low performance mode:

- The error must have no effect on the operation of the horizontal transport path.
- If a jam does occur in the horizontal path, the jam can be easily removed.
- When the error occurred all units where in positions that permit horizontal paper transport.

Unit	Position Where Horizontal Transport Possible
Sub Grip	Sub grip HP sensor (S37)
Main Grip	Rotate HP Sensor (S43)
Gluing Unit	Glue Vat HP Sensor (S73)
Cover Path	Closed
Spine Plate	Closed

Canceling Low Performance Mode

See "Replacement and Adjustment > Common Procedures > Setting and Releasing Low Performance Mode".

2.3 SERVICE BOARD BASICS

This section describes use of the Service Mode for the bookbinder and inserter.

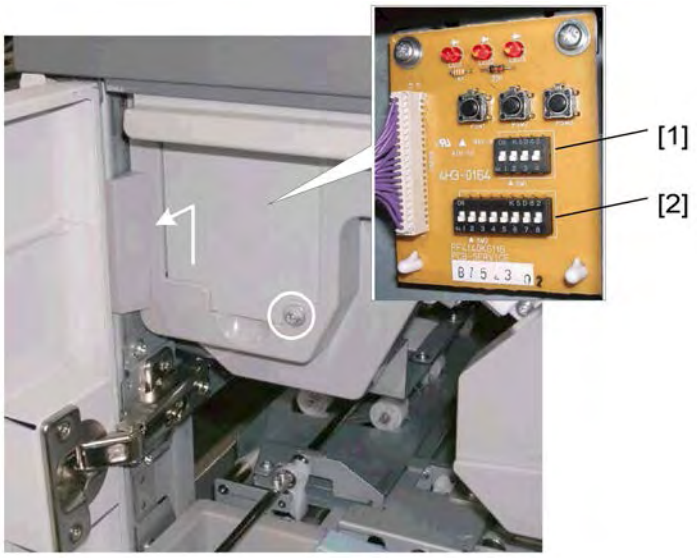
2.3.1 SERVICE BOARD SWITCHES

The two banks of DIP switches on the Service Board (SW1, SW2) are used to set modes and do settings.

Important

- The bookbinder enables a switch change on SW1 only after the system has been cycled off/on. The Service Board is located behind the left door near the front upper corner of the bookbinder (see below).

- The Service Board is located behind a protective cover held in place by one screw.
- The front door switches must be ON to set the machine in the Service Mode. This is done by opening the right and left front doors and inserting cardboard shims into the slots of the front door switches.



d391s901

- The SW1 bank [1] is used to switch between Service Mode and Normal Mode. This setting is not recognized until the machine has been cycled off on.
- The SW2 bank [2] is used for detailed Service Mode settings. The system does not need to be cycled off/on after changing the settings of these switches.

SW1 Settings

SW1				Mode	Comment
1	2	3	4		
*	*	*	*	Normal Mode	Factory setting
Up	*	*	*	Bookbinder Adjustment Mode	
*	Up	*	*	Bookbinder Test Mode 1	With signature trimming
*	Up	*	Up	Bookbinder Test Mode 2	Without signature trimming
Up	*	Up	*	Inserter Adjustment Mode	For inserter

SW2 Settings: Normal Mode

Refer to the sections below for more details about SW2 settings in the adjustment mode and test mode.

2.3.2 SERVICE BOARD LEDS

LED3 indicates status and details. Push [PSW3] to toggle between the **Status** and **Detail** display. For more about alarms, jams, errors, etc. please refer to the appropriate sections.

Display Items

Mode	Status	Detail
Normal Mode	Yes	No
Service Mode	Yes	No
Doors Open	Yes	Yes
Alarm	Yes	Yes
Jam	Yes	Yes
Error	Yes	Yes

Note: "Status" is automatically indicated. Press [PSW3] to indicate “detailed” status.

Status Display

The speed of the flashes at LED1 indicates normal status (medium/slow flashing) or abnormal status (rapid flashing). In the error status the display combinations of LED2 and LED3 give more information about the abnormal condition. When an error occurs in the Normal Mode or Service Mode, the LED1 display switches from Normal Mode to Error Mode.

Status	Mode/ Type of Abnormal Status	LED1	LED2	LED3	Comment
Normal	Normal Mode	FLASH	OFF	OFF	LED1 flash duration: 0.5 sec.
	Service Mode	FLASH	OFF	OFF	LED1 flash duration: 1 sec.
Abnormal	Error	FLASH	ON	ON	LED1 flash duration: 0.1 sec.
	Jam	FLASH	OFF	ON	
	Alarm	FLASH	ON	OFF	
	Open	FLASH	OFF	OFF	

Order of priority for indicating abnormal status:
Error > Jam> Alarm> Open
If multiple abnormal statuses occur, only one of the statuses is indicated according to the above order of priority.

Details Display

Once the status is determined from the above table (normal, error, jam, alarm, or open door), further information can be obtained by pressing [PSW3], which will change the signals displayed by the LEDs.

(1) Doors Open

LED1, LED2 distinguish between the Bookbinder and Inserter:

(LED1 lights, LED2 (OFF = Bookbinder, ON = Inserter))

- Count the number of times LED3 flashes to identify the location of the opened door/cover.

Bookbinder

LED1	LED2	LED3	Open Position	Comment
ON	OFF	FLASH	Count the number of flashes – LED3. x 1: Front Cover x 2: Top Cover x 3: Book Door x 4: Trim Scrap Box Door x 5: Glue Supply Drawer x 6: Relay Unit Front Door	Flash duration: 0.3 sec.

Inserter

LED1	LED2	LED3	Open Position	Comment
ON	ON	FLASH	Count the number of flashes – LED3. x 1: Joint x 2: Top Cover	Flash duration: 0.3 sec.

LED3 Flashes x times> LED3 OFF 1 sec.> LED Flashes x times> LED3 OFF...repeat

(2) Alarm

To indicate the detailed alarm status, LED1 lights and LED2, LED3 both flash. Flash duration: 0.3 sec. LED2 remains ON for 2 sec. to indicate "0". The LED2 and LED3 display alternate automatically:

Count the number of times LED2 and LED3 flash to identify the problem causing the alarm.

LED2 Flashes > OFF 1 sec.> LED3 Flashes > OFF 1 sec.> repeat

Example 1: Book Tray Full Display

Sequence	LED1	LED2	LED3	Comment
1	ON	FLASH x3	OFF	Flash duration: 0.3 sec.
2	ON	OFF	OFF	LED2, LED3 OFF 1 sec.
3	ON	OFF	FLASH x2	Flash duration: 0.3 sec.
4	ON	OFF	OFF	LED2, LED3 OFF 1 sec.

Example 2: Glue Vat Empty Display

Sequence	LED1	LED2	LED3	Comment
1	ON	ON	OFF	LED2 ON (2 sec.)
2	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)
3	ON	OFF	FLASH x6	Flash duration: 0.3 sec.
4	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)

Alarm Codes and LED Flash Equivalents Table (Switching with [PSW3] Presses)

Alarm Name	Alarm Information	
	LED2 Count	LED3 Count
Glue Near End	0	2
Stacking Tray Overflow	0	3
Paper Remains in Stacking Tray	0	5
Glue Out (Vat Empty)	0	6
Replace Gluing Unit	0	8
Bookbinding Malfunction	1	1
Trim Scrap Box Near Full	1	2
Trim Scrap Box Full	1	3

Alarm Name	Alarm Information	
	LED2 Count	LED3 Count
Near Time for Blade Replacement	2	1
Near Time for Blade Cradle Replacement	2	2
Blade Needs Replacement	2	3
Blade Cradle Needs Replacement	2	4
Book Tray Near Full	3	1
Book Tray Full	3	2

NOTE: "0" is indicated by the LED2 lighting for 2 sec.

(3) Error/Jam

For Error/Jam, [PSW3] must be pressed **TWICE** in order to obtain the exact information; obtain total of 4 signals from LED2 and LED3 (by toggling the signals pressing [PSW3]).

To indicate the error/jam status, LED1 lights and LED2, LED3 flash. Flash duration: 0.3 sec.

- The LEDs remain ON for 2 sec. to indicate "0".
- The LED2 and LED3 displays alternate automatically.

Example 1: Cause: Fan Lock Detection (Signature Fan 1 Lock: Front (FM8))

Sequence 1-4

Sequence	LED1	LED2	LED3	Comment
1	ON	FLASH x5	OFF	Flash duration: 0.3 sec.
2	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)
3	ON	OFF	FLASH x1	Flash duration: 0.3 sec.
4	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)

Display Switching with [PSW3] Presses

Sequence 5-8

	LED1	LED2	LED3	Comment
5	OFF	ON	OFF	LED2 ON (2 sec.)
6	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
7	OFF	OFF	FLASH (x10)	Flash duration: 0.3 sec.
8	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Jam Code and LED Flash Equivalence Table

Jam Name	Jam Information			
	Sequence 1-4		Sequence 5-8	
	LED2	LED3	LED2	LED3
Bookbinder				
At Power On	1	3	0	0
Door Open	1	4	0	0
Paper Lag	1	7	0	0
Entrance Sensor Late	1	0	1	1
Signature Path Sensor 1 Late	1	0	1	2
Signature Path Sensor 2 Late Jam	1	0	1	3
Timing Sensor Late	1	0	1	4
Stacking Tray Paper Late	1	0	1	5
Sub Grip Signature Late	1	0	1	6
Cover Path Sensor 1 Late	1	0	1	7
Cover Path Sensor 2 Late	1	0	1	8
Horizontal Path Exit Sensor Late	1	0	1	9
Cover Registration Sensor Late	1	0	1	10

Jam Name	Jam Information			
	Sequence 1-4		Sequence 5-8	
	LED2	LED3	LED2	LED3
Cover Registration Sensor Late (During Cover Switchback)	1	0	1	11
Cover Horizontal Registration Sensor: Small Sensor Late	1	0	1	12
Cover Horizontal Registration Sensor: Large Sensor Late	1	0	1	13
Entrance Sensor Lag	1	1	2	1
Signature Path Sensor 1 Lag	1	1	2	2
Signature Path Sensor 2 Lag	1	1	2	3
Timing Sensor Lag	1	1	2	4
Stacking Tray Paper Lag	1	1	2	5
Cover Path Sensor 1 Lag	1	1	2	7
Cover Path Sensor 2 Lag	1	1	2	8
Horizontal Path Exit Sensor Lag	1	1	2	9
Cover Registration Sensor Lag	1	1	2	10
Cover Registration Sensor Lag (During Cover Switchback)	1	1	2	11
Cover Horizontal Registration Sensor: Small Sensor Lag	1	1	2	12
Cover Horizontal Registration Sensor: Large Sensor Lag	1	1	2	13
Paper Size Mismatch	1	15	10	5
Cover Size Short	1	15	10	4
Trim Width Over	1	15	10	2
Finish Size Over	1	15	10	3

Jam Name	Jam Information			
	Sequence 1-4		Sequence 5-8	
	LED2	LED3	LED2	LED3
Inserter				
At Power On	1	3	0	0
Door Open	1	4	0	0
Separation Sensor: Tray A Late	1	0	6	2
Separation Sensor: Tray B Late	1	0	6	4
Vertical Transport Sensor 1 Late	1	0	6	6
Vertical Transport Sensor 2 Late	1	0	6	8
Entrance Sensor Late	1	0	6	10
Separation Sensor: Tray A Lag	1	1	6	3
Separation Sensor: Tray B Lag	1	1	6	5
Vertical Transport Sensor 1 Lag	1	1	6	7
Vertical Transport Sensor 2 Lag	1	1	6	9
Entrance Sensor Lag	1	1	6	11
Paper Size Mismatch	1	15	7	2
Relay Unit				
At Power On	2	1	0	0
Door Open	2	1	0	1
Paper Lag	2	1	0	2
Transport Sensor Late	2	1	0	3
Transport Sensor Lag	2	1	0	4
Data Error	2	1	0	5
Front Door Open	2	2	0	0

Error and LED Flash Count Equivalency Table

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
Bookbinder Internal Communication	Master<->Slave Control Board Communication Error 1	0	1	8	0
Bookbinder Internal Communication	Master<->Slave Control Board Communication Error 1	0	1	8	0
	Master<->Slave Control Board Communication Error 2			8	1
	Relay Unit<-> Master Control Board Error			8	2
	Slave<->Cutter Control Board Communication Error 1			8	3
	Slave<->Cutter Control Board Communication Error 2			8	4
EEPROM (Bookbinder)	EEPROM read error	0	5	0	1
	EEPROM write error			0	2
Inserter Communication	Communication initialization error	0	8	8	2
	Bookbinder <-> Inserter Communication Error 2			8	3
Power Supply Check	24V Check Signal Error 1	5	0	0	2
	24V Check Signal Error 2			0	3
	24V Check Signal Error 3			0	4
	24V Check Signal Error 4			0	5
Fan Lock Detection	Power Supply Fan: Right	5	1	0	1

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Power Supply Fan: Center			0	2
	Power Supply Fan: Left			0	3
	Spine Plate Fan: Lower Front			0	4
	Spine Plate Fan: Lower Rear			0	5
	Spine Plate Fan: Upper Front			0	6
	Spine Plate Fan: Upper Rear			0	7
	Signature Fan 2: Front			0	8
	Signature Fan 2: Rear			0	9
	Signature Fan 1: Front			0	10
	Signature Fan 1: Rear			0	11
	Glue Supply Fan: Upper			0	12
	Glue Supply Fan: Lower			0	13
Cutter, Signature Grip Motors	Main grip unit did not leave the HP position.	10	1	8	1
	Main grip unit did not arrive at the HP position after signature release.			8	2
	Grip end sensor did not detect operation end.			8	3
	Grip unit did not reach the grip end sensor.			8	4
Cutter, Trimmings Buffer Motors	Trimmings buffer did not leave the HP position on the left.	10	2	8	1

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Trimmings buffer did not reach the HP position on the left.			8	2
	Trimmings buffer did not leave the trimmings dump port.			8	3
	Trimmings buffer did not reach the trimmings dump port.			8	4
	The motor is not rotating.			8	5
	Trimmings buffer did not retract from the paper press plate sensor.			8	6
	Trimmings buffer did not reach the paper press plate sensor.			8	7
Book Buffer Tray, Book Tray/Motor	Buffer tray did not move toward the rear.	10	3	8	1
	Buffer tray did not move toward the front.			8	2
Cutter, Press Motors	Press plate did not leave the HP position at press.	10	4	8	1
	Press plate did not arrive at the HP position at release.			8	2
	Press plate did not leave END at press.			8	3
	Press plate did not arrive at END at release.			8	4

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Blade reached the limit position.			8	5
Cutter, Signature Slider Motors	Slide motor did not leave HP position.	10	5	8	1
	Rotate motor 2 did not reach home position.			8	2
Cutter, Signature Rotation Motor 1	Rotate motor 2 did not leave home position.	10	8	0	1
	Rotate motor 2 did not reach home position.			0	2
Cutter, Signature Rotation Motor 2	Rotate motor 2 did not leave home position.	10	9	0	1
	Rotate motor 2 did not reach home position.			0	2

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
Cutter Motor	Cutter blade did not move.	10	10	0	1
	The blade did not move away from the cutting point on the blade cradle.			0	2
	The blade did not move for a rear-to-front cut.			0	3
	The blade did not move away from the blade cradle to the front.			0	4

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	When moving from the front the blade did not reach the blade cradle.			0	5
	When moving from the rear the blade did not reach the blade cradle.			0	6
	The blade reached the limit position.			0	7
Book Stacking Unit, Book Lift Tray Motors	Book lift tray does not raise.	10	11	0	1
	Book lift tray does not lower.			0	2
	The motor is not rotating.			0	3
Book Stacking Unit, Book Tray Motors	Book collection buffer tray did not leave the home position.	10	12	0	1
	Book collection buffer tray did not reach the home position.			0	2
Cutter, Blade Cradle Motors	Blade cradle did not raise.	10	13	0	1
	Blade cradle did not lower.			0	2
Book Stacking Unit, Door Lock Solenoid	Book stacking tray, book drawer did not lock.	10	14	0	1
Glue Applicator, Glue Heater	Heater failed to start: Error 1	11	0	0	1
	Heater short.			0	2
	Heater wire break or short circuit			0	3
	Heater failed to start: Error 2			0	4

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Low temperature detected while regulating glue temperature.			0	5
	The thermostat inside the gluing unit detected an abnormally high temperature.			0	6
	Abnormal thermostat detection			0	7
	Glue level thermistor: Error 1			0	8
	Glue level thermistor: Error 2			0	9
	Glue level thermistor broken.			0	12
Glue Applicator, Glue Level Detection Sensors	The surface of the glue in the vat did not reach the lower limit position.	11	2	0	1
	The surface of the glue in the vat did not reach the upper limit (full) position.			0	2
	The glue surface has not dropped below the upper limit mark.			0	3
	Glue Level Thermistor Adjustment Error.			0	4
Sensor Automatic Adjustment (1)	The value for the adjustment of the timing sensor exceeded the upper limit.	11	4	0	1
	The value for the adjustment of the cover registration sensor exceeded the upper limit.			0	2

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	The value for the adjustment of the cover horizontal registration sensor (small) exceeded the upper limit.			0	3
	The value for the adjustment of the cover horizontal registration sensor (large) exceeded the upper limit.			0	4
Sensor Automatic Adjustment (2)	The value for the adjustment of the book exit sensor exceeded the upper limit.	11	4	0	5
	The value for the adjustment of the leading edge sensor exceeded the upper limit.			0	6
	The value for the adjustment of the entrance path sensor exceeded the upper limit.			0	7
	The value for the adjustment of the signature registration sensor exceeded the upper limit.			0	8
Sensor Automatic Adjustment (1)	The value for the adjustment of the timing sensor was lower than the lower limit.	11	4	1	1
	The value for the adjustment of the cover registration sensor was lower than the lower limit.			1	2
	The value for the adjustment of the cover horizontal registration sensor (small) was lower than the limit.			1	3

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	The value for the adjustment of the cover horizontal registration sensor (large) was lower than the limit.			1	4
Sensor Automatic Adjustment (2)	The value for the adjustment of the book exit sensor was lower than the lower limit.	11	4	1	5
	The value for the adjustment of the leading edge sensor was lower than the lower limit.			1	6
	The value for the adjustment of the entrance path sensor was lower than the lower limit.			1	7
	The value for the adjustment of the book registration sensor was lower than the lower limit.			1	8
Transport Path Sensors (1)	Trimming unit entrance sensor blocked by paper, cannot detect.	11	5	0	2
	Signature registration sensor could not detect the presence of paper.			0	3
	Could not detect the absence of paper at the book exit sensor.			0	6
	Trimming unit entrance sensor blocked by paper, cannot detect. Detection possible on grip side.			0	7
	Cannot detect presence of paper in main grip.			0	8

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Could not detect the absence of paper at the cutter entrance.			1	2
Transport Path Sensors (2)	Signature registration sensor could not detect the absence of paper.	11	5	1	3
	Could not detect the absence of paper at the book arrival sensor			1	4
	Could not dump trimmed scraps from the trimmings buffer. Or, scraps jammed between trimmings buffer and press plate.			1	6
	Could not detect the absence of paper at the sub grip signature sensor			1	7
	Could not detect the absence of paper at the main grip signature sensor			1	8
Signature Thickness Sensor	Signature thickness reading smaller than allowed minimum size.	11	6	0	1
	Signature thickness reading larger than allowed maximum size.			0	2
	The signature thickness reading did not change.			0	3
Glue Vat Motor	The glue vat HP sensor at the rear of the bookbinder failed to go ON.	11	7	0	1

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	The glue vat HP sensor at the rear of the bookbinder failed to go OFF.			0	2
Glue Vat Roller Motor	The glue vat roller was not rotating.	11	8	0	1
Glue Supply Motor	The glue supply motor did not arrive at its home position.	11	9	0	1
	The glue supply motor did not leave its home position.			0	2
Spine Fold Motor: Left	The spine fold plate did not reach the left HP sensor.	11	10	0	1
	The spine fold plate did not leave the left HP sensor position.			0	2
	The sensor did not turn ON.			0	3
	The sensor did not turn OFF.			0	4
	The spine plate HP sensor left and spine plate close sensor turned ON at the same time.			0	5
Spine Fold Motor: Right	The spine fold plate did not reach the right HP sensor.	11	11	0	1
	The spine fold plate did not leave the right HP sensor position.			0	2
	The sensor did not turn ON.			0	3
	The sensor did not turn OFF.			0	4

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	The spine plate HP sensor: right and spine fold close sensor turned ON at the same time.			0	5
Spine Plate Motor	The spine plate open sensor did not go ON.	11	12	0	1
	Spine plate open sensor did not go OFF.			0	2
	Spine plate close sensor did not go ON.			0	3
	Spine plate close sensor did not go OFF.			0	4
Front Door Lock	Front door did not close and lock.	11	13	0	1
	The front door lock did not release.			0	2
	Front doors detected open even though doors are closed and locked.			0	3
Switchback Roller Motor (Stacking Tray)	Switchback flapper HP sensor did not go ON.	12	0	0	1
	Switchback flapper HP sensor did not go OFF.			0	2
TE Press Lever Motor (Stacking Tray)	The press lever HP sensor did not go ON.	12	1	0	1
	The press lever HP sensor did not go OFF.			0	2
Jogger Fence Motor: Front	Jog Fence HP Sensor: Front/Small (S12) did not go ON.	12	2	0	1

Error Name	Error Details	Error Information			
		Sequence 1-4		Sequence 5-8	
		LED2	LED3	LED2	LED3
	Jog Fence HP Sensor: Front/Small (S12) did not go OFF.			0	2
	Jog Fence HP Sensor: Front/Large (S14) did not go ON.			0	3
	Jog Fence HP Sensor: Front/Large (S14) did not go OFF.			0	4
Jogger Fence Motor: Rear	Jog Fence HP Sensor: Rear/Small (S13) did not go ON.	12	3	0	1
	Jog Fence HP Sensor: Rear/Small (S13) did not go OFF.			0	2
	Jog Fence HP Sensor: Rear/Large (S15) did not go ON.			0	3
	Jog Fence HP Sensor: Rear/Large (S15) did not go OFF.			0	4

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
Switchback Roller Lift Motor (Stacking Tray)	Switchback roller HP sensor did not go ON.	12	4	0	1
	Switchback roller HP sensor did not go OFF.			0	2
Stacking Tray Lift Motor (1)	Stacking tray lower limit sensor did not go ON.	12	5	0	1
	Stacking tray lower limit sensor did not go OFF.			0	2
	The paper detection sensor on the front of the stacking tray did not go ON.			0	3
	The paper detection sensor on the front of the stacking tray did not go OFF.			0	4
	The paper detection sensor on the rear of the stacking tray did not go ON.			0	5
Stacking Tray Lift Motor (2)	The paper detection sensor on the rear of the stacking tray did not go OFF.	12	5	0	6
	Stacking tray over flow sensor did not go ON.			0	7
	The stacking tray lower limit sensor and its paper overflow sensor went on at the same time.			0	8
	Stacking tray over flow sensor did not go OFF.			0	9

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
	Stacking tray overflow sensor went off with the stacking tray at its highest position.			0	10
Stacking Tray Motor	Stacking tray HP sensor did not go ON.	12	6	0	1
	Stacking tray HP sensor did not go OFF.			0	2
Stacking Weight Motor	Stacking weight HP sensor did not go ON.	12	7	0	1
	Stacking weight HP sensor did not go OFF.			0	2
Cover Guide Motor: Left	The Cover Guide HP Sensor: Left (S27) did not go ON.	12	9	0	1
	Cover guide HP sensor: left and cover guide open sensor: left went ON at the same time.			0	2
	The Cover Guide Open Sensor: Left (S28) did not go ON.			0	5
Cover Guide Motor: Right	The Cover Guide HP Sensor: Right (S22) did not go ON.	12	10	0	1
	Cover guide HP sensor: right and cover guide open sensor: right went ON at the same time.			0	2
	The Cover Guide Open Sensor: Right (S23) did not go ON.			0	5
Cover Horizontal Registration	Cover Registration HP Sensor: Small/Large (S71, S72) did not go ON.	12	11	0	1

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
Motor	Cover Registration HP Sensor: Small/Large (S71, S72) did not go OFF.			0	2
Sub Grip Lift Motor	The sub grip HP sensor did not go ON.	13	0	0	1
	Sub Grip HP Sensor did not go OFF.			0	2
Sub Grip Size Motor	Sub grip size HP sensor did not go ON.	13	1	0	1
	Sub grip size HP sensor did not go OFF.			0	2
Sub Grip Open Motor	The sub grip open sensor did not go on.	13	2	0	1
	The sub grip open sensor did not go OFF.			0	2
	The sub grip close sensor did not go ON.			0	3
	The sub grip close sensor did not go OFF.			0	4
	The sub grip open sensor and sub grip close sensor went ON at the same time.			0	5
Signature Move Motor	Signature grip HP sensor did not go ON.	13	3	0	1
	Signature grip HP sensor did not go OFF.			0	2
	Signature main grip position sensor did not go ON.			0	3

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
	Signature main grip position sensor did not go OFF.			0	4
	Main grip rotate enable sensor did not go ON.			0	5
	Main grip rotate enable sensor did not go OFF.			0	6
	The signature HP sensor and signature main grip position sensor went ON at the same time.			0	7
Main Grip Lift Motor	The main grip HP sensor did not go ON.	13	4	0	1
	Main grip HP sensor did not go OFF.			0	2
	The main grip press sensor 1 did not go ON.			0	3
	The main grip press sensor 1 did not go OFF.			0	4
	The main grip press sensor 2 did not go ON.			0	5
	The main grip press sensor 2 did not go OFF.			0	6
	Book Exit Sensor (S64) did not go ON			0	7
	The main grip HP sensor at the high position did not turn ON.			0	8
	The main grip HP sensor at the high position did not turn OFF.			0	9

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
Grip Unit Rotation Motor	The main grip rotate HP sensor did not go ON.	13	5	0	1
	Main grip rotate HP sensor did not go OFF.			0	2
	The main grip rotate to binding position sensor did not go ON.			0	3
	Main grip rotate to binding position sensor did not go OFF.			0	4
	Main grip rotate hp sensor and rotate to binding position sensor went ON at the same time.			0	5
Grip Motor: Rear	The main grip open sensor rear did not go ON.	13	6	0	1
	The main grip open sensor rear did not go OFF.			0	2
	The main grip close sensor rear did not go ON.			0	3
	The main grip close sensor rear did not go OFF.			0	4
	Main grip encoder sensor: rear defective			0	5
	Main grip open sensor: rear and main grip close sensor: rear went ON at the same time.			0	6
Grip Motor: Front	The main grip open sensor: front did not go ON.	13	7	0	1
	The main grip open sensor: front did not go OFF.			0	2

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
	The main grip close sensor front did not go ON.			0	3
	The main grip close sensor: front did not go OFF.			0	4
	Main grip encoder: front sensor defective.			0	5
	Main grip open sensor: front and main grip close sensor: front went ON at the same time.			0	6
Signature Exit Motor	Signature exit path HP sensor did not go ON.	13	8	0	1
	Signature exit path HP sensor did not go OFF.			0	2
	Signature exit path press sensor did not go ON.			0	3
	Signature exit path press sensor did not go OFF.			0	4
Signature Exit Roller Motor	Leading edge sensor did not go ON	13	9	0	1
EEPROM (Inserter)	EEPROM read error	0	5	1	0
	EEPROM write error			1	1
Drive Switching Motor (Inserter)	Drive JG sensor did not go OFF within the prescribed time after the drive switching motor turned on.	14	0	0	1
	Drive JG sensor did not go ON within the prescribed time after the drive switching motor turned on.			0	2

Error Name	Error Details	Error Information			
		Cause Count		Details Count	
		LED2	LED3	LED2	LED3
Lift Motor: Tray A (Inserter)	Inserter Tray A (upper tray) failed to leave its lower limit sensor within the prescribed time after Tray A lift motor turned on.	14	1	0	1
	Inserter Tray A (upper tray) failed to arrive at its lower limit sensor within the prescribed time after Tray A lift motor turned on.			0	2
Lift Motor: Tray B (Inserter)	Inserter Tray B (lower tray) failed to leave its lower limit sensor within the prescribed time after Tray B lift motor turned on.	14	2	0	1
	Inserter Tray B (lower tray) failed to arrive at its lower limit sensor within the prescribed time after Tray B lift motor turned on.			0	2
Relay Unit	Relay Unit EEPROM Error.	2	0	0	0
	ASAP communication error.			0	1
	Relay Board <-> Master Control Board communication error			0	2
	Slave <-> Master Control Board communication error			0	3
	Slave <-> Cutter Control Board communication error			0	4
	Master <-> Inserter Control Board communication error			0	5

2.4 SERVICE MODE

2.4.1 BEFORE YOU BEGIN

The Service Mode settings can be performed independently on the bookbinder for both bookbinder and the inserter. When the bookbinder is turned on it obeys the settings on the Service Board and enters the mode selected with the settings on the SW1 bank.

Service Mode Settings

SW1				Mode	Comment
1	2	3	4		
*	*	*	*	Normal Mode	Factory setting
Up	*	*	*	Service Mode	
*	Up	*	*	Bookbinder Test Mode 1	
*	Up	*	Up	Bookbinder Test Mode 2	Without signature trimming
Up	*	Up	*	Inserter Adjustment Mode	For inserter

Bookbinder Adjustment Mode

Each unit in the bookbinder can be adjusted on the bookbinder itself. However, these adjustments must be done with the bookbinder turned on.

Sensor Adjustments

The LED strength of the photosensors can be adjusted.

1. Set the SW1 bank as shown below.

SW1			
1	2	3	4
Up	*	*	*

1. Set the SW2 bank switches for the item to adjust.

SW2								Adjustment
1	2	3	4	5	6	7	8	
Up	*	*	*	*	*	*	*	Timing Sensor
*	Up	*	*	*	*	*	*	Cover Registration Sensor
Up	Up	*	*	*	*	*	*	Cover Horizontal Registration Sensor: Small
*	*	Up	*	*	*	*	*	Cover Horizontal Registration Sensor: Large
Up	*	Up	*	*	*	*	*	Book Exit Sensor
*	Up	Up	*	*	*	*	*	Cutter Entrance Sensor
Up	Up	Up	*	*	*	*	*	Signature Registration Sensor
*	*	*	Up	*	*	*	*	Trimmings Buffer Full Sensor
Up	*	*	Up	*	*	*	*	Leading Edge Sensor
Up	Up	Up	Up	*	*	*	*	All Sensors

1. Push [PSW1] to confirm that there is no paper at the sensor position.

- While doing adjustments LED1, LED2 flash at 1 sec. intervals and LED3 remains off.
- When the adjustment of the D/A output value of an emitter sensor is within range for the receptor sensor A/D input, the D/A output is written to and store in the EEPROM. LED2 goes OFF after the adjustment is completed.
- If the value of the emitter sensor LED D/A output is changed when the value is at its maximum or minimum setting, and if this new setting is out of the acceptable range for the receptor sensor LED A/D input, this causes a sensor adjustment error (LED1 flashes at 0.1 sec. intervals, LED2, LED3 go ON).

Note:

- When a sensor adjustment error occurs, push [PSW2] to cancel the EEPROM write operation and shift to adjustment mode standby.
- Adjustment of the cutter entrance sensor, signature registration sensor, and all other sensors must be done with the front doors closed. Before adjusting the cutter entrance and signature registration sensors, for example, the signature grip motor and signature press motor must be moved to their adjustment positions. Doing these adjustments with the front doors open will cause a signature grip motor error or press motor error.

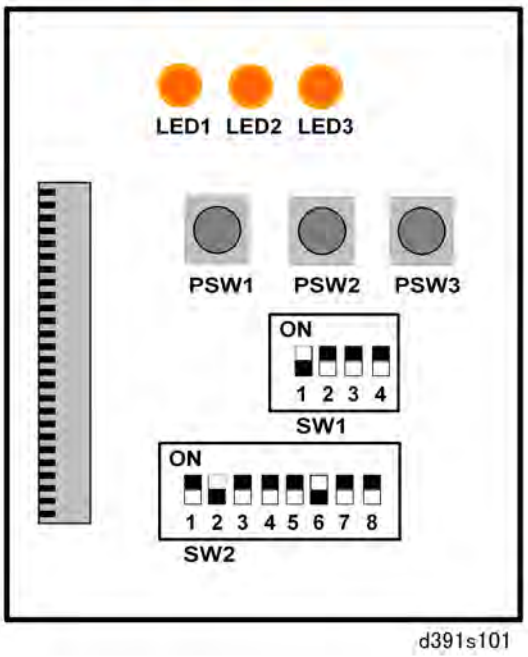
LED1	LED2	LED3	Status
FLASH	OFF	OFF	Adjustment mode standby, or adjustment completed.
FLASH	FLASH	OFF	Adjustment in progress. LED1, LED2 flash at 1 sec. intervals.
FLASH	ON	ON	Adjustment error. LED1 flashes at 0.1 sec. intervals.(Used for errors other than the all-sensor adjustment.)
FLASH	ON	FLASH	All sensor adjustment error (adjustment of all sensors at once failed). LED1 flashes at 0.1 sec. intervals. The LED3 flash count indicates which sensor adjustment failed.LED3 flash duration: 300 ms

LED3 Count	Target Sensor
1	Timing Sensor
2	Cover Registration Sensor
3	Cover Horizontal Registration Sensor: Small
4	Cover Horizontal Registration Sensor: Large
5	Book Exit Sensor
6	Cutter Entrance Sensor
7	Signature Registration Sensor
8	Trimmings Buffer Full Sensor
9	Leading Edge Sensor

LED3 Flashes x times> LED3 OFF 1 sec.> LED3 Flashes x times> LED3 OFF 1 sec.

How to Read the LEDs

1. Set DIP SW1 on the SW1 bank to ON.
2. Set the SW2 for the item that you want to check or adjust. For example, for the cover centering adjustment, DIP SW's 1 and 2 are set to ON as shown below.



3. Read the LED displays.
   - The three LEDs remain OFF for 2 sec. if the current value is "0".
   - When LED1 is OFF this indicates plus (+).
   - When LED1 is ON this indicates minus (-).
   - The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1 to 9) of the 2-digit decimal value. Flash duration: 300 ms

   For example, if LED1 is OFF and LED2 flashes twice the left digit is "2. If LED3 flashes 4 times the right digit is "4" and the setting is read as "24". However, the adjustment is done in "0.1 mm" steps so the reading must be adjusted:

   24 x 0.1 mm = 2.4 mm

   where "2.4 mm" the actual current value. (The value is positive because LED1 is OFF.)

2.4.2 CRITICAL ADJUSTMENTS

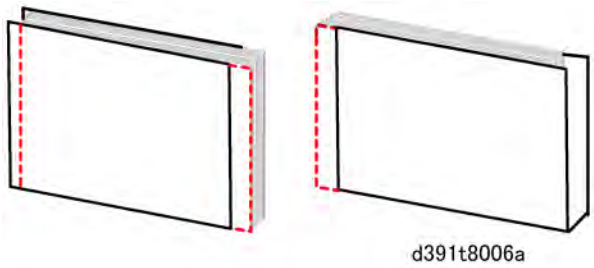
The following 13 adjustments are to be made either when requiring precise adjustment for the optimum performance of the bookbinder or after replacing the EEPROM on the main controller board.

Important

- These adjustments are not required if the EEPROM is removed from the old board and inserted into the new board.

Adjustment 1: Cover Horizontal Registration Position Adjustment

Do this adjustment when the cover has slipped up or down beyond either end of the signature spine.

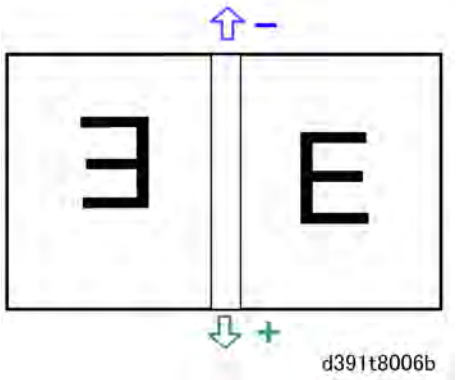


d391t8006a

- If the cover has slipped toward the front, adjust in the plus (+) direction.
- If the cover has slipped toward the rear, adjust in the minus (-) direction.
- Always check the position of the cover at both ends of the spine.

There are two types of adjustments that can be done for cover horizontal registration, depending on the size of the cover.

- Small Size Adjustment: Cover size 297 mm or less
- Large Size Adjustment: Cover size 298 mm or more



d391t8006b

1. Set the SW1 bank as shown below.

SW1			
1	2	3	4
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2								Status
1	2	3	4	5	6	7	8	
*	*	*	*	*	Up	*	*	Large size adjustment
Up	*	*	*	*	Up	*	*	Small size adjustment

- If the cover has slipped toward the front, adjust in the plus (+) direction.
- If the cover has slipped toward the rear, adjust in the minus (-) direction.
- Check the position of the cover at both ends of the spine.

1. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
2. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
3. LED1, LED2, LED3 light for 300 ms.
4. Look at LED1, LED2, LED3 to read the new adjusted value.
5. Repeat the steps above if you want to change the value again.
6. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
±5.0 mm	0.1 mm	0 mm

How Values of the Settings Are Displayed

- The LED1 count indicates the sign of the value, plus (+) or minus (-). When LED1 is OFF this indicates plus (+), when LED1 is ON this indicates minus (-).
- The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1 to 9) of the 2-digit decimal value. Flash duration: 300 ms
- For example, if LED2 flashes twice the LED3 flashes 4 times, this is read as "24". To adjust this value to the actual reading: 24 x 0.1 mm = 2.4 mm where "2.4 mm" is the actual value.
- The LEDs remain ON for 2 sec. if the current value is "0".
- The LED2 and LED3 displays automatically alternate.

Example 1: A Reading of 1.3 mm

	LED1	LED2	LED3	Comment
Left Digit	OFF	FLASH (x1)	OFF	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right Digit	OFF	OFF	FLASH (x3)	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Example 2: A Reading of –2.5 mm

	LED1	LED2	LED3	Comment
Left Digit	ON	FLASH (x2)	OFF	Flash duration: 300 ms
	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right Digit	ON	OFF	FLASH (x5)	Flash duration: 300 ms
	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)

Example 3: A Reading of 1.0 mm

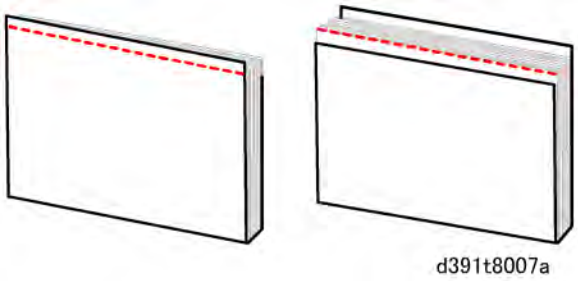
	LED1	LED2	LED3	Comment
Left Digit	OFF	FLASH (x2)	OFF	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right Digit	OFF	OFF	ON (2 sec.)	LED3 ON (2 sec.)
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Example 4: A Reading of –0.7 mm

	LED1	LED2	LED3	Comment
Left Digit	ON	ON (2 sec.)	OFF	LED2 ON (2 sec.)
	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right Digit	ON	OFF	FLASH (x7)	Flash duration: 300 ms
	ON	OFF	OFF	LED2, LED3 OFF (1 sec.)

Adjustment 2: Cover Center Adjustment

Do this adjustment when the fore edges of the signature and cover are not aligned. (The cover/signature in the illustration below have not been trimmed.) The cover slipped out the correct cover stop position before the glued spine of the signature was pressed down onto the cover.



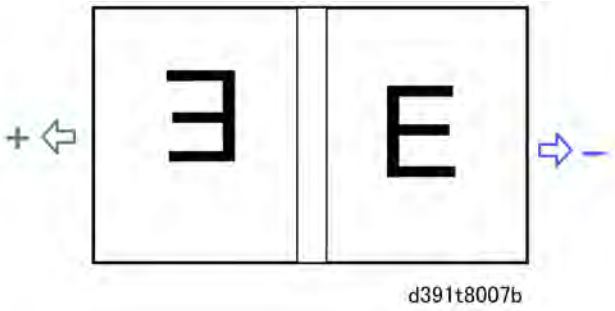
1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	*	*	Up	*	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.



- If the cover has slipped downstream, adjust in the plus (+) direction.
- If the cover has slipped upstream, adjust in the plus (+) direction.
- Check both sides of the cover at the fore edge to confirm that the cover is centered.

4. Push [PSW2] to add 0.1 mm to the current value.

   -or-

Push [PSW3] to subtract 0.1 mm from the current value.

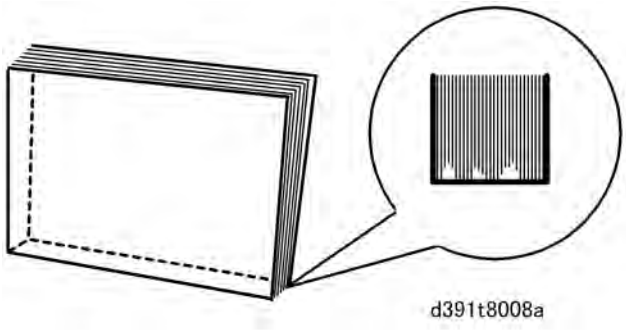
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby. LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
±5.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 3: Stacking Tray Switchback Roller Adjustment

Do the this adjustment for the switchback roller at the entrance of the stacking tray when you see that the trailing edges of the signature are not being aligned properly. Sheets of the signature are not aligned evenly at the spine (in the direction of paper feed) where the glue will be applied.



The distance set for switchback alignment during signature jogging in the stacking tray is not correct.

1. Set the SW1 bank as shown below.

SW1			
1	2	3	4
Up	*	*	*

2. Set the SW2 bank as shown below. R1

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	*	*	Up	*	*

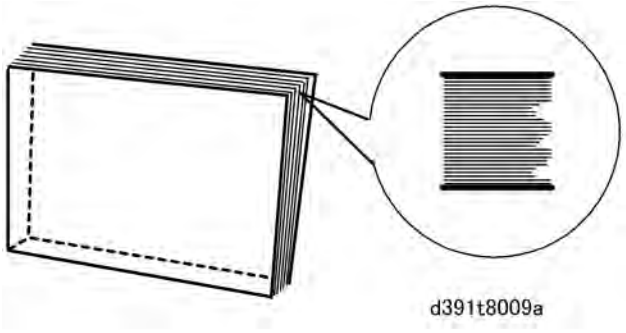
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - If you want to increase the length of time that the switchback roller remains in contact with the paper, adjust in the plus (+) direction.
   - If you want to reduce the length of time that the switchback roller remains in contact with the paper, adjust in the minus (+) direction.
4. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
±5.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 4: Jogger Motor Adjustment

Do this adjustment to change the amount of pressure applied by the jog fences to the sides of the signature in the stacking tray. The edges of the paper on the fore edge of the signature are not evenly aligned. (The cover/signature in the illustration below have not been trimmed.)



The front and rear jogger fences are not aligning the sheets during the jogging operation in the stacking tray as each sheet arrives in the tray.

There are two types of jogger motor adjustments, depending on the size of the paper being stacked to form the signature.

- Small Size Adjustment: Paper width less than 298 mm
- Large Size Adjustment: Paper size more than 298 mm

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank for the item to adjust.

SW2								Status
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
*	*	Up	*	*	Up	*	*	Front Jogger Motor: Small Size
Up	*	Up	*	*	Up	*	*	Rear Jogger Motor: Small Size
*	Up	Up	*	*	Up	*	*	Front Jogger Motor: Large Size
Up	Up	Up	*	*	Up	*	*	Rear Jogger Motor: Large Size

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   Adjusting the front jogger motor determines how far the front jogger fence moves to the rear when it pushes each sheet toward the rear fence. Adjusting the rear jogger motor determines how far the rear jogger fence moves the rear fence to the front and stops to set the standard position for jogging by the front fence.
   - To increase the distance the front jogger motor pushes the front fence toward the rear against the side of the stack, adjust in the plus (+) direction.
   - To decrease the distance the front jogger motor pushes the front fence toward the rear against the side of the stack, adjust in the minus (-) direction.
4. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
±3.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 5: Glue Amount Adjustment (Adj by Glue Removal Rod)

Do this adjustment when you see either excessive or insufficient glue being applied to the spine of the signature. This adjustment changes the gap between the glue removal rod and the surface of the signature when the roller touches the surface during the gluing unit's second pass from front to rear. This operation is done according to the thickness of the spine (see table below).

1. Set the SW1 bank as shown below.

SW1			
1	2	3	4
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2								
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Thickness**
*	*	*	*	Up	Up	Up	*	0 to 1.4 mm
Up	*	*	*	Up	Up	Up	*	1.5 to 3.4 mm
*	Up	*	*	Up	Up	Up	*	3.5 to 6.4 mm
Up	Up	*	*	Up	Up	Up	*	6.5 to 11.4 mm
*	*	Up	*	Up	Up	Up	*	11.5 to 22.4 mm
Up	*	Up	*	Up	Up	Up	*	22.5 to 25 mm

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - Raising the value of the setting increases the distance between the glue removal rod and the spine and increases the amount of glue applied to the spine.
   - Lowering the value of the setting decreases the distance between the glue removal rod and the spine and decreases the amount of glue applied to the spine.
4. Push [PSW2] to add 0.05 mm to the current value.

   -or-

   Push [PSW3] to subtract 0.05 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby. LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

   Adjustment Range

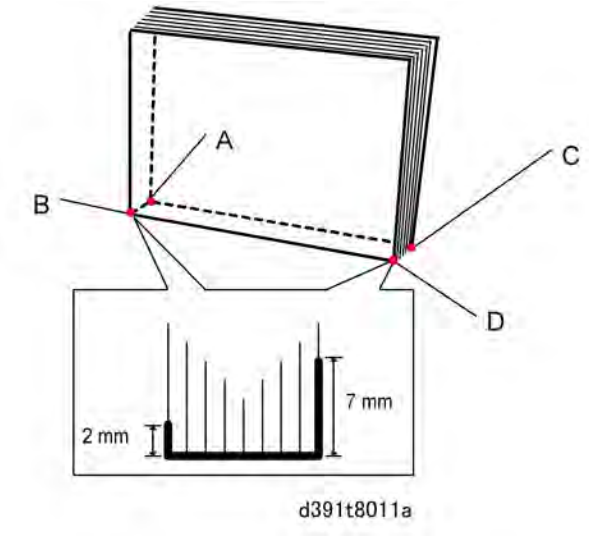
Adjustment Range	Steps	Default
±1.0 mm	0.05 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

   Note: Remember that changing the value by one step changes the actual value by only 0.05 mm.

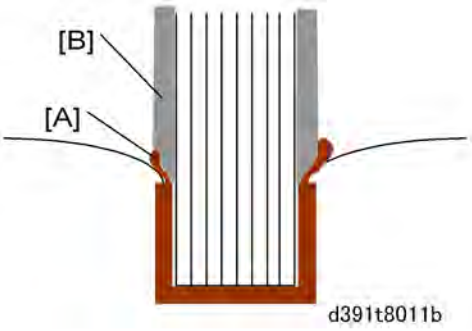
Checkpoints After Adjustment

After doing the adjustment print a sample and have it trimmed on its three edges: top, bottom, and fore edge. Confirm that the amount of glue (height) is within the specifications described below. If the measured amount of glue is not within specification, do the adjustment again.

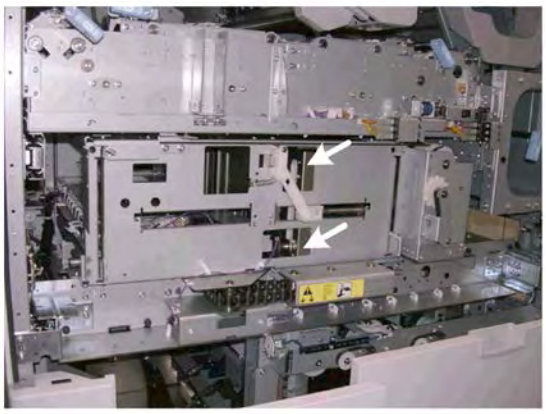


- The measured height of the glue at the top edge and bottom edge should be in the range 2.0 mm to 7.0 mm.
- The differences between the measured heights should be:
  |A - C| < 3.0 mm
  |B - D| < 3.0 mm

Problems Caused by Excess Glue



If there is an excessive amount of glue present when the signature and cover are joined, or when the three edges are trimmed, glue seepage at the corners could transfer from the signature [A] to the main grip [B] and interfere with operation. For this reason the amount of glue applied to the spine always must be within the ranges described above.

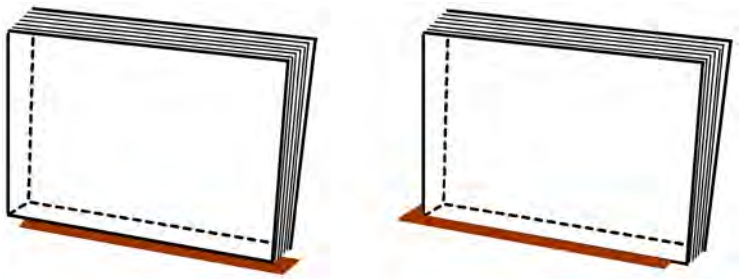


d391t8011c

If you suspect that trimmings are sticking to the blade you can visually check at the points shown above.

Adjustment 6: Gluing Unit Movement Adjustment

Do this adjustment when you see that the glue vat roller is not covering the edge of the signature completely during application of the glue to the spine.
Glue is applied in two passes by a roller in the glue unit that moves first from rear to front and then front to rear. No glue is being applied to the end of the signature spine at the top edge or the bottom edge. The starting point for the application of glue to the spine is not set correctly.



d391t8012a

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	Up	*	Up	*	*

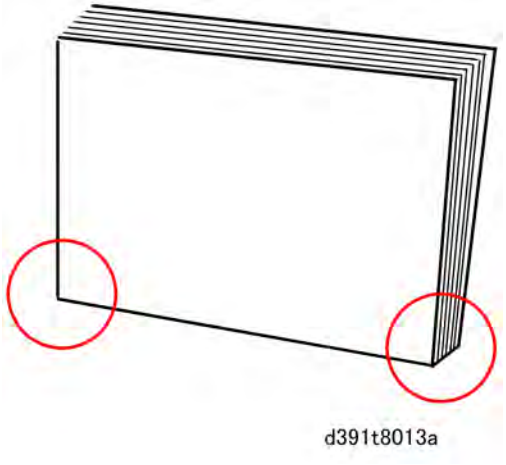
3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - To have the gluing unit apply more glue toward the front of the spine, adjust in the plus (+) direction.
   - To have the gluing unit apply more glue toward the rear of the spine, adjust in the minus (-) direction.
4. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby. LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range	Steps	Default
±8.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 7: Glue Application at Corners Adjustment

Do this procedure to adjust the size of the area at the ends of the spine where glue is applied if there is insufficient glue or an excessive amount of glue at either end the signature.



1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2								
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Status**
Up	Up	Up	*	*	Up	Up	*	Top Edge Corner: 3 Cuts
*	*	*	Up	*	Up	Up	*	Bottom Edge: 3 Cuts
Up	*	*	Up	*	Up	Up	*	Top Edge: No Trimming or Top Only
*	Up	*	Up	*	Up	Up	*	Bottom Edge: No Trimming or Top Only

Note

- "3 cuts" means the signature is trimmed 3 times (bottom, top, fore edge).
- "No Trimming or Top Only" means the signature is not trimmed or is trimmed only once at the top edge.

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - To increase the size of the area where glue is not applied at the corner of the spine, adjust in the plus (+) direction.
   - To decrease the size of the area where glue is not applied at the corner of the spine, adjust in the minus (-) direction.
4. Push [PSW2] to raise the current setting by "1".
   -or-
   Push [PSW3] to lower the current setting by "1".
   LED1, LED2, LED3 light for 300 ms.
5. Look at LED1, LED2, LED3 to read the new setting.
6. Repeat the steps above if you want to change the setting again.
7. Push [PSW1] to write the new setting into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

   Adjustment Range

Value	Corner Area	Comment
0	0 mm	Bottom Edge (Default): No Trimming or Top Cut Only
1	1 mm	
2	2 mm	Top Edge (Default): No Trimming or Top Cut Only
3	3 mm	
4	4 mm	
5	5 mm	

8. Read the current setting from the LED display. (See "How to Read the LEDs".)
   - The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1's) of the 2-digit decimal value. Flash duration: 300 ms
   - The LEDs remain OFF for 2 sec. if the current value is "0".
   - The LED2 and LED3 displays automatically alternate.

   Example 1: 2 mm Setting Reading

	LED1	LED2	LED3	Comment
Left Digit 10's	OFF	ON (2 sec.)	OFF	LED2 ON (2 sec.)
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Left Digit 1's	OFF	OFF	FLASH (x2)	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Adjustment 8: Main Grip Position Adjustment

Do this adjustment when you see that the signature is not being passed properly from the grip unit to the trimming unit below (this adjustment changes the location where the main grip unit grips the signature to pass it to the trimming unit).

1. Set the SW1 bank as shown below.

SW1			
1	2	3	4
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	2	3	4	5	6	7	8
*	Up	*	Up	*	Up	*	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - To make the grip unit grip the signature a lower position, adjust in the minus (-) direction.
   - There is no adjustment in the plus (+) direction.
4. Push [PSW3] to subtract 0.1 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby. LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

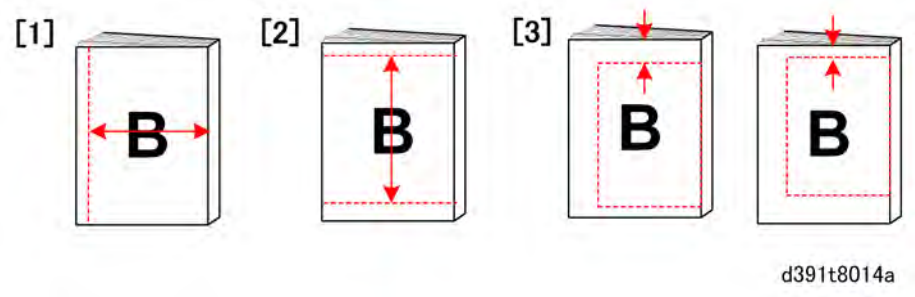
Adjustment Range

Adjustment Range	Steps	Default
-5.0 mm to 0 mm	0.1 mm	0 mm

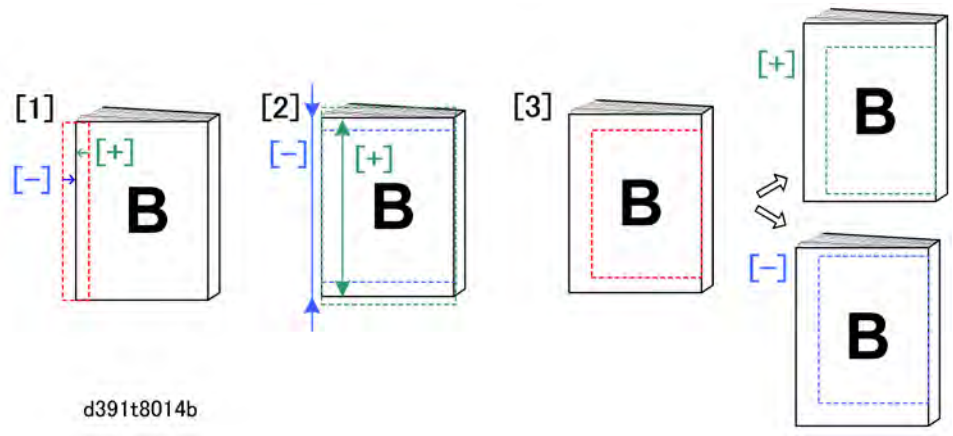
9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 9: Trimming Position Adjustment

Do this adjustment to correct the mechanical alignment of the signature and cutting blade if you see that cuts on the trimmed edges of the books are not aligned correctly.



Case [1]	The size of the book is not correct because the trimming position of the 3rd cut (fore edge) was not correct.
Case [2]	The size of the book is not correct because the trimming positions of the 1st (bottom) and 2nd (top) cuts are not correct.
Case [3]	The size of the book is not correct because the trimming position of either the 1st cut (bottom) or 2nd cut (top) is not correct.



For Case [1] above: Fore Edge Cut Shift

This adjustment elongates or reduces the width of the book by shift the fore edge cutting position toward or away from the fore edge.

- Raising the setting increases the area and the size of the book by shifting the cutting position toward the edge.
- Lowering the setting increases the area and the size of the book by shifting the 3rd cutting position away from the edge.

For Case [2] above: Top and Bottom Cut Shift

This adjustment elongates or reduces the height of the book by shifting the top and bottom cutting positions toward or away from the top and bottom edges of the book.

- Raising the setting increases the area and the size of the book by shifting the cutting positions toward the bottom and top edges.
- Lowering the setting increases the area and the size of the book by shifting the cutting positions away from the bottom and top edges.

For Case [3] above: Area Shift

This adjustment does not change the size of the area "B"; it shifts the area between the top and bottom edges.

- Raising the setting moves the area toward the bottom edge.
- Lowering the setting moves the area toward the top edge.

Important

- The minimum width of the trimming is 6 mm. Any adjustment that results in setting the trimming smaller than 6 mm will be ignored.

1. Setting Up for the Adjustment
2. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

3. Set the SW2 bank as shown below.

SW2								Status
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
*	*	*	*	Up	Up	*	*	Fore edge cut adjust
Up	*	*	*	Up	Up	*	*	Bottom/top edge cut adjust

SW2								Status
1	2	3	4	5	6	7	8	
*	Up	*	*	Up	Up	*	*	Fixed area shift between top/bottom edge

4. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   To adjust the finished size:
   - To make the finished book larger, adjust in the plus (+) direction.
   - To make the finished book smaller, adjust in the minus (-) direction.

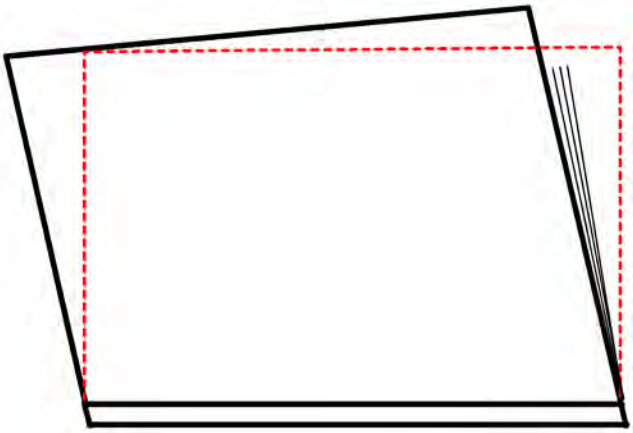
   To change the positions of the cuts but keep the same size for the finished book:
   - To make the width of the trimmed strip larger, adjust in the plus (+) direction.
   - To make the width of the trimmed strip smaller , adjust in the minus (-) direction.
5. Do a book binding and check the trimming cuts at the top, bottom, and fore edges.
6. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
7. LED1, LED2, LED3 light for 300 ms.
8. Look at LED1, LED2, LED3 to read the new adjusted value.
9. Repeat the steps above if you want to change the value again.
10. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
    LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range	Steps	Default
±5.0 mm	0.1 mm	0 mm

11. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 10: Square Cut Adjustment

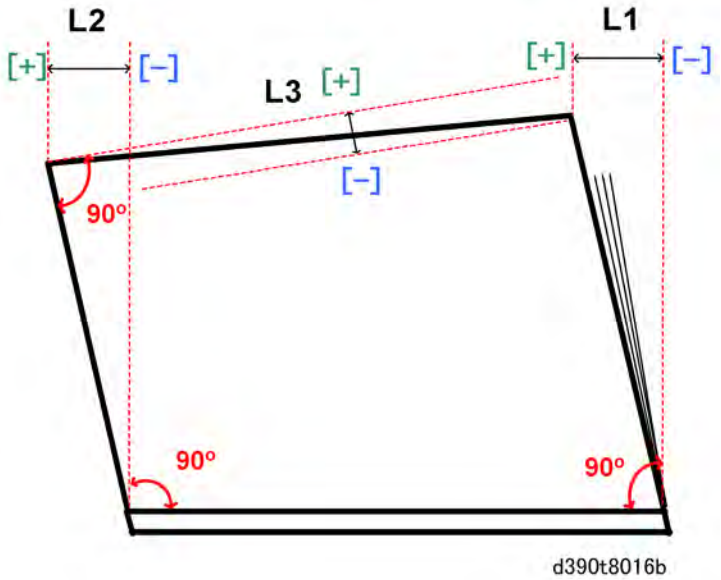
Do this adjustment to correct the amount of rotation of the signature when you see that cuts are the edges are not straight. These Service Mode settings affect the available settings in the User Tools.



d390t8016a

When the signature is rotated three times for the bottom, top, and fore edge trimming the inertia generated from the rotation of a heavy signature could make the signature rotate slightly beyond the optimum position for trimming (prescribed by motor pulse count in the firmware), causing the cuts to skew and giving the finished book a shape more like a trapezoid rather than a rectangle. Thicker and heavier signatures can generate different amounts of inertia so adjustments in the Service Mode can be done for signatures which can vary in size from 10 to 200 sheets (see table below). It follows then that adjustments will have to be done for each cut position if this problem occurs.

However, if adjustments are done they must be done in very small increments and there is no way do measurements before adjustment, so input for the adjusted values must account for the square angle of the cuts and the differences in the lengths.



d390t8016b

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2								Status
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Up	Up	*	*	Up	Up	*	*	L1: Square Adj. for 10-Sheet Signature 1
*	*	Up	*	Up	Up	*	*	L2: Square Adj. for 10-Sheet Signature 2
Up	*	Up	*	Up	Up	*	*	L3: Square Adj. for 10-Sheet Signature 3
*	Up	Up	*	Up	Up	*	*	L1: Square Adj. for 200-Sheet Signature 1
Up	Up	Up	*	Up	Up	*	*	L2: Square Adj. for 200-Sheet Signature 2
*	*	*	Up	Up	Up	*	*	L3: Square Adj. for 200-Sheet Signature 3

L1 (Top Edge Skew), **L2** (Bottom Edge Skew), **L3** (Fore Edge Skew)

3. (1) Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
   - To increase the amount of rotation, adjust in the plus (+) direction.
   - To decrease the amount of rotation, adjust in the minus (-) direction.
4. Push [PSW2] to add 0.1 mm to the current value.

   -or-

   Push [PSW3] to subtract 0.1 mm from the current value.

   LED1, LED2, LED3 light for 300 ms.
5. Look at LED1, LED2, LED3 to read the new adjusted value.
6. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.

7. Print another book with 3-edge trimming and the steps above if you want to change the value again.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
±10.0 mm	0.1 mm	0 mm

8. Read the current setting from the LED display. (See "How to Read the LEDs".)

Adjustment 11: Blade Replacement Alarm Frequency Setting

Do this adjustment to change the frequency of the blade replacement alarm if either problem occurs:

- Poor cutting even after the blade cradle has been replaced. (The blade replacement alert did not display even after the blade has exceeded its predicted service life: 40K cuts.)
- The blade replacement alert displays well before the end of the predicted service life of the blade: 40K cuts.

1. (1) Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	*	*	Up	Up	*

Procedure

3. Push [PSW1] then look at LED1, LED2, LED3 to read the value (frequency) of the current setting.
   - To delay the blade replacement alarm, adjust in the plus (+) direction.
   - To advance the blade replacement alarm, adjust in the minus (-) direction.

4. Push [PSW2] to add 1000 to the current value.
   -or-
   Push [PSW3] to subtract 1000 from the current value.
   LED1, LED2, LED3 light for 300 ms.
5. Look at LED1, LED2, LED3 to read the new adjusted value.
6. Repeat the steps above if you want to change the value again.
7. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range

Adjustment Range	Steps	Default
10,000 to 100,000	1000	40000

- The LED2 count indicates the left digit (10,000's) of the 2-digit decimal value, the LED3 count indicates the right digit (1,000's) of the 2-digit decimal value. Flash duration: 300 ms
- For example, if LED2 flashes 3 times and LED3 flashes 5 times, this means the value is 35,000 ((10,000 x 3)+(1000 x 5)) and the replacement alarm wil go off after the 35,000th cut.
- The LEDs remain OFF for 2 sec. if the current value is "0".
- The LED2 and LED3 displays automatically alternate.

Example 1: Alarm Set to Trigger After 35,000 Cuts

Digit	LED1	LED2	LED3	Comment
Left :10,000's	OFF	FLASH x3	OFF	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right 1,000's	OFF	OFF	FLASH x5	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Adjustment 12: Setting Threshold Value for Shifting the Cutting Position

Do this adjustment to force the cutting blade to shift to the next cutting position on the blade cradle before the standard number of cuts has been done. Lowering this setting shortens the predicted service life of the blade cradle. If trimming is executing poorly, we suggest doing the "Blade Cradle Cutting Position" adjustment described in the next section.

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	*	Up	*	*	Up	Up	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current threshold value.
   - To increase the threshold (increase the number of cuts done at each position), adjust in the plus (+) direction.
   - To decrease the threshold (decrease the number of cuts done at each position), adjust in the minus (-) direction.
4. Push [PSW2] to add 10 to the current value.
   -or-
   Push [PSW3] to subtract 10 from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new threshold value.
7. Repeat the steps above if you want to change the threshold value again.
8. Push [PSW1] to write the new threshold value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Adjustment Range	Steps	Default
100 to 1000	10	550

Threshold Value Display

- The LED2 count indicates the left digit (100's) of the 2-digit decimal value, the LED3 count indicates the right digit (10's) of the 2-digit decimal value. Flash duration: 300 ms
- For example, if LED2 flashes 5 times and LED3 flashes 5 times, this means the value is 550 ((100 x 5)+(10 x 5)) and the blade cradle will be moved to another cutting position every 550 cuts.
- The LEDs remain OFF for 2 sec. if the current value is "0".
- The LED2 and LED3 displays automatically alternate.

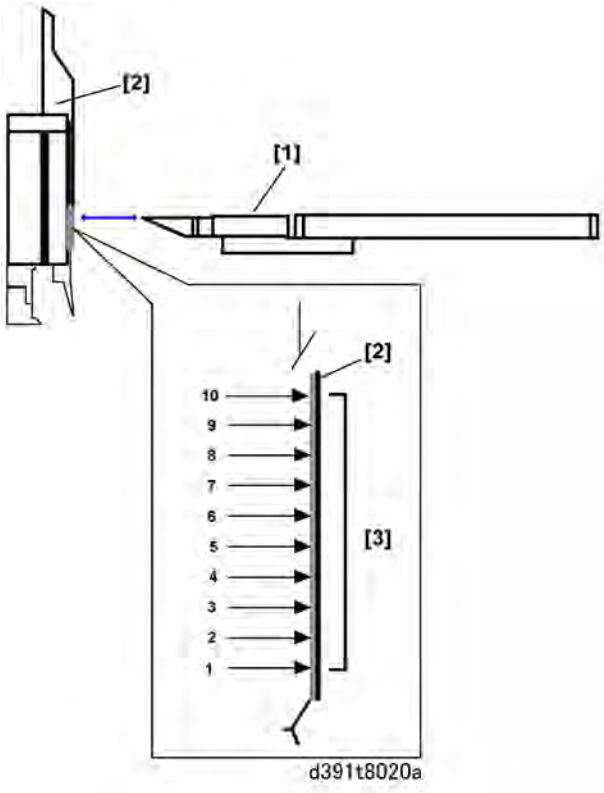
Example 1: 550 Cut Threshold

	LED1	LED2	LED3	Comment
Right Digit (100)	OFF	FLASH (x5)	OFF	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right Digit (10)	OFF	OFF	FLASH (x5)	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Adjustment 13: Cutting Position Change Setting for the Blade Cradle

Do this adjustment to change the blade cradle to another cutting position. Changing this setting resets the number of cuts for the present cradle location to "0". This adjustment forces the blade cradle to shift immediately to the next higher cutting position before the standard number of cuts has been done.

- Changing this setting resets the number of cuts at the current cutting position on the cradle to zero so cutting can no longer continue there.
- Raising this setting by "1" will lower the blade cradle by 1 mm to the next higher cutting position.
- The maximum number of cuts at each position is 550. The service life of the blade cradle is 5,500 cuts (550 cuts and each of the 10 positions).



[1]	Blade
[2]	Blade Cradle
[3]	Cutting Positions 1 to 10.

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	Up	*	Up	*	Up	Up	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting for the frequency of shifts in the cuttingi position.
   - To shift cutting to a point on the blade cradle that has not yet been used for cutting, adjust in the plus (+) direction.
   - To shift cutting to a point on the blade cradle that has already been for cutting, adjust in the minus (-) direction. (This adjustment is only rarely used.)
4. Push [PSW2] to increase the current setting by "1".
   -or-
   Push [PSW3] to decrease the current setting by "1".
   LED1, LED2, LED3 light for 300 ms.
5. Look at LED1, LED2, LED3 to read the new value for the frequency of blade cradle shifts.
6. Repeat the steps above if you want to change the value again.
7. Push [PSW1] to write the new value for the frequency of blade cradle shifts into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

   Setting Range

Adjustment Range	Steps	Default
0 to 5	1	0

Blade Cradle Shift Frequency Display

- The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1's) of the 2-digit decimal value. Flash duration: 300 ms
- The LEDs remain OFF for 2 sec. if the current value is "0".
- The LED2 and LED3 displays automatically alternate.

Example 1: Blade Shift Frequency Setting of "2"

Digit	LED1	LED2	LED3	Comment
Left: 10's	OFF	ON (2 sec.)	OFF	LED2 ON (2 sec.)
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Right: 1's	OFF	OFF	FLASH x2	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

2.4.3 OTHER ADJUSTMENTS

Signature Exit Motor Adjustment

Do this procedure when you see that the signature is not feeding properly to the trimming unit (this adjustment changes the length of time that the signature exit roller remains in contact with the signature during transport to the trimming).

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	Up	*	Up	*	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW3] to subtract 0.1 mm from the current value.
   - To increase the length of time the signature exit roller remains in contact with the signature when it is transported to the trimming unit, adjust in the plus (+) direction.
   - To decrease the length of time the signature exit roller remains in contact with the signature when it is transported to the trimming unit, adjust in the minus (-) direction.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby. LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range

Adjustment Range	Steps	Default
±5.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Slide Motor HP Adjustment

Do this adjustment to fine adjust the size of the finished book.

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Up	*	*	Up	Up	Up	*	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Push [PSW2] to add 0.1 mm to the current value.
   -or-
   Push [PSW2] to subtract 0.1 mm from the current value.
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range

Adjustment Range	Steps	Default
±2.0 mm	0.1 mm	0 mm

9. Read the current setting from the LED display. (See "How to Read the LEDs".)

Glue Temperature Setting

Do this adjustment to set the temperature of the glue.

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	Up	*	*	Up	Up	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current temperature setting.
   - To raise the temperature, adjust in the plus (+) direction.
   - To lower the temperature, adjust in the minus (-) direction.
4. Push [PSW2] to raise the current temperature setting by "1".
   -or-
   Push [PSW3] to lower the current temperature setting by "1".
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new temperature setting.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new temperature setting into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.

Adjustment Range

Adjustment Range	Steps	Default
151°C to 155°C (303.8°F to 311°F)	1	153

9. Read the current setting from the LED display. (See "How to Read the LEDs".)
   - The LED2 count indicates the left digit (10's) of the 2-digit decimal value, the LED3 count indicates the right digit (1's) of the 2-digit decimal value. Flash duration: 300 ms
   - For example, if LED2 flashes 5 times and LED3 flashes 5 times, this means the value is 153°C ((10 x 5)+(1 x 3) +100) and the current temperature is set for 153°C.
   - The LEDs remain OFF for 2 sec. if the current value is "0".
   - The LED2 and LED3 displays automatically alternate.

   Example 1: Current Temperature 153C

	LED1	LED2	LED3	Comment
Left Digit 10's	OFF	FLASH (x5)	OFF	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)
Left Digit 1's	OFF	OFF	FLASH (x3)	Flash duration: 300 ms
	OFF	OFF	OFF	LED2, LED3 OFF (1 sec.)

Shift to Energy Mode Setting

Do this adjustment to set the idle time that triggers the independent energy save mode for the bookbinder. One of the following times can be selected. (Default: 30 min.):

0 (No energy save mode), 10, 15, 20, 30, 40, 50, 60, 90 min.; 2, 3, 4 hours

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2							
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
*	Up	*	*	*	Up	Up	*

3. Push [PSW1] then look at LED1, LED2, LED3 to read the current setting.
4. Push [PSW2] to increase the current setting by "1".
   -or-
   Push [PSW3] to decrease the current setting by "1".
5. LED1, LED2, LED3 light for 300 ms.
6. Look at LED1, LED2, LED3 to read the new adjusted value.
7. Repeat the steps above if you want to change the value again.
8. Push [PSW1] to write the new value into the EEPROM and shift to adjustment mode standby.
   LED1 flashes at 1 sec. intervals, LED2, LED3 go OFF.
   Adjustment Range

Value	Idle Time		Value	Idle Time
0	No shift		**6**	50 min.
1	10 min.		**7**	60 min.
2	15 min.		**8**	90 min.
3	20 min.		**9**	2 hr.

Value	Idle Time		Value	Idle Time
4 (Default)	30 min.		**10**	3 hr.
5	40 min.		**11**	4 hr.

2.4.4 MAINTENANCE MODE

Some of the units inside the bookbinder must be moved and the grippers released before doing maintenance.

1. Set the SW1 bank as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

2. Set the SW2 bank as shown below.

SW2								Status
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Up	*	*	*	*	*	Up	*	Grip release 1
*	Up	*	*	*	*	Up	*	Move main grip to rotation sensor HP
Up	Up	*	*	*	*	Up	*	Move main grip to binding position
*	*	Up	*	*	*	Up	*	Grip release 2
Up	*	Up	*	*	*	Up	*	Not Used
*	Up	Up	*	*	*	Up	*	Move blade cradle to replace position
Up	Up	Up	*	*	*	Up	*	Move blade to replace position
*	*	*	Up	*	*	Up	*	Open cover path
Up	*	*	Up	*	*	Up	*	Close cover path

SW2								Status
1	2	3	4	5	6	7	8	
*	Up	*	Up	*	*	Up	*	Lower stacking tray
Up	Up	*	Up	*	*	Up	*	Position units for shipping
*	*	Up	Up	*	*	Up	*	Move trimmings buffer left
Up	*	Up	Up	*	*	Up	*	Move trimmings buffer right

3. Push [PSW1] to have the bookbinder perform the operation selected with the SW2 bank DIP SWs.
4. To prevent any interference with the moving units, the LEDs indicate that no other operations can be performed.

Operation Details

Operation	What Happens
Grip release 1	Pushing [PSW1] one time: 1) Releases the sub grip, 2) Releases the main grip, 3) Opens the spine fold plate, 4) Retracts the cover guides and opens the signature path, 5) Releases the cutter grip. If the main grip is at the binding position, after it is released it moves to the upper HP grip sensor. If the gluing unit is not in its home position at the rear, the grip cannot release. In this case, move the gluing unit manually to its home position at the rear of the machine so the main grip can release. Always confirm that the gluing unit is not hot before you try to push it to the rear.
Move main grip to rotation sensor HP	Pushing [PSW1] rotates the main grip to its rotate home position. Always do this before you try to draw the cover transport unit out of the machine.
Move main grip to binding position	Pushing [PSW1] rotates the main grip to the binding home position. The main grip raises after it moves to the binding position. Always do this before you try to pull the gluing unit to the front.

Operation	What Happens
Grip release 2	Pushing [PSW1] one time: 1) Opens the spine fold plate, 2) Releases the sub grip, 3) Releases the main grip, 4) Opens the spine fold unit, 5) Retracts the cover guides and opens the signature exit path. If the main grip is at the binding position, after it is released it moves to the upper HP grip sensor. If the gluing unit is not in its home position at the rear, the grip cannot release. In this case, move the gluing unit manually to its home position at the rear of the machine so the main grip can release. Always confirm that the gluing unit is not hot before you try to push it to the rear.
Move blade cradle to replace position	Pushing [PSW1] moves and positions the blade cradle, press, and blade so the blade cradle can be replaced. Do this before blade cradle replacement.
Move blade to replace position	Pushing [PSW1] moves the blade cradle to its initial position 10.5 away from its HP sensor so the blade can be replaced. Do this before blade replacement.
Open cover path	Pushing [PSW1] opens the cover path.
Close cover path	Pushing [PSW1] closes the cover path.
Lower stacking tray	Pushing [PSW1] lowers the stacking tray so the stacking tray switchback roller can be replaced. Do this before stackng tray switchback roller replacement.
Position units for shipping	Every push on [PSW1] moves each unit to its position for shipping. Do this to move each unit to its initial position before moving or shipping the bookbinder to another location.
Move trimmings buffer left	Pushing and holding down [PSW1] moves the trimmings buffer to the left. The trimmings buffer moves to the limit of its movement and stops.
Move trimmings buffer right	Pushing and holding down [PSW1] moves the trimmings buffer to the right. The trimmings buffer moves to the limit of its movement and stops.

LED1	LED2	LED3	Status
FLASH	OFF	OFF	Maintenance Mode Standby, or Maintenace Operation End
ON	FLASH	OFF	Maintenance Mode in progress. LED1 flashes at 1 sec. intervals.
FLASH	ON	ON	Operation not possible. LED1 flashes at 0.1 sec. intervals.

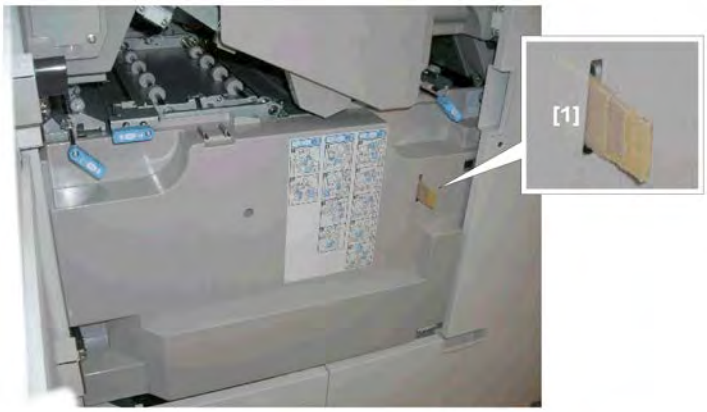
2.5 OUTPUT CHECKS

2.5.1 PERFECT BINDER OUTPUT CHECK

Self-Diagnostic Mode

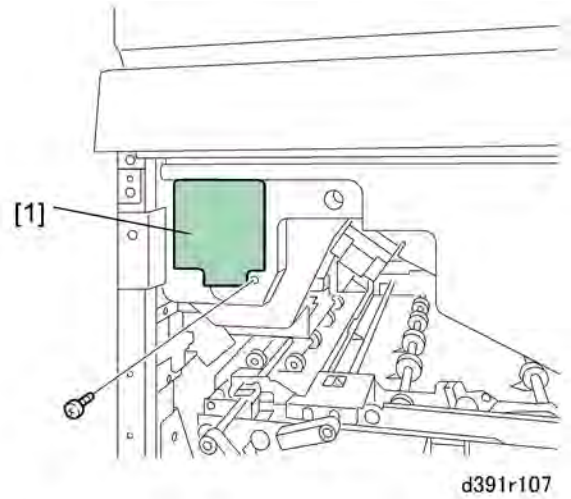
Do this procedure to check the operation of moving parts.

1. If the system is on, switch it off.
2. Open the right and left front doors.
3. Close the right door.



d391r951

4. Insert piece of cardboard or folded piece of paper into the slot [1] of the left door switch.



d391r107

5. Remove the service board cover [1] (x1).
6. Set the SW1, SW2 banks as shown below.

SW1			
1	**2**	**3**	**4**
Up	*	*	*

7. Set the SW2 bank as shown below.

SW2								Status
1	2	3	4	5	6	7	8	
Up	*	*	*	*	*	Up	Up	Glue Vat Empty Sensor
*	Up	*	*	*	*	Up	Up	Glue Tank Full Sensor
Up	Up	*	*	*	*	Up	Up	Jog Fence HP Sensor: Front
*	*	Up	*	*	*	Up	Up	Jog Fence HP Sensor: Rear
Up	*	Up	*	*	*	Up	Up	Jog Fence HP Sensor: Front Large
*	Up	Up	*	*	*	Up	Up	Jog Fence HP Sensor: Rear Large
Up	Up	Up	*	*	*	Up	Up	Glue Tank HP Sensor: Front
*	*	*	Up	*	*	Up	Up	Trimmings Buffer Full Sensor
Up	*	*	Up	*	*	Up	Up	Press Limit Sensor (S89)
*	Up	*	Up	*	*	Up	Up	Blade Limit Sensor: Front
Up	Up	*	Up	*	*	Up	Up	Blade Limit Sensor: Rear
Up	Up	Up	Up	*	*	Up	Up	Check all, excluding press limit and blade limit sensors

8. Push [PSW1] to start self-diagnostic mode.
   - While in the self-diagnostic mode LED1, LED2 flash for 1 sec. and LED3 remains off.
   - If the self-diagnostic check succeeds (no problems detected), LED2 goes OFF. If the limit sensor self-diagnosis is OK, LED1, LED2, LED3 flash for 1 sec.
   - If the self-diagnosis does not succeed, LED1 flashes at 0.1 sec. intervals, and LED2, LED3 light. If the "All Check" fails, LED3 indicates the item where the check failed.

LED1	LED2	LED3	What It Means
FLASH	OFF	OFF	Self-diagnostic check standby, or check OK.
FLASH	FLASH	OFF	Self-diagnosis in progress. LED1, LED2 flash at 1 sec. intervals.
FLASH	ON	ON	Self-diagnostic check failed. LED1 flashes at 0.1 sec. intervals.
		FLASH	Check All self-diagnosis failed. LED1 flashes at 0.1 sec. intervals. The LED3 flash count indicates which self-diagnostic check failed. LED3 flashes at 300 ms intervals.
FLASH	FLASH	FLASH	Limit sensor self-diagnostic check OK. LED1, LED2, LED3 flash at 1 sec. intervals.
FLASH	FLASH	FLASH	Operation not possible. LED1, LED2, LED3 flash at 0.1 sec. intervals.

Check All Self-Diagnosis Failure

LED3 Count	Failure Point
1	Glue Vat Empty Sensor
2	Glue Tank Full Sensor
3	Jog Fence HP Sensor: Front
4	Jog Fence HP Sensor: Rear
5	Jog Fence HP Sensor: Front Large
6	Jog Fence HP Sensor: Rear Large
7	Glue Tank HP Sensor: Front
8	Trimmings Buffer Full Sensor

LED3 Flashes x times>LED3 OFF 1 sec.>LED3 Flashes x times> LED3 OFF 1 sec.

Details About Self-Diagnosis

Check Point	Check Method
1. Glue Vat Empty Sensor 2. Glue Tank Full Sensor	▪ No glue pellets in the glue hopper ▪ Confirms whether the A/D input value at the receptor sensor does not detect glue when D/A output value of the emitter sensor is set at standard value. ▪ Confirms whether the A/D input value at the receptor sensor does detect glue when D/A output value of the emitter sensor is set at zero.
3. Jog Fence HP Sensor: Front 4. Jog Fence HP Sensor: Rear 5. Jog Fence HP Sensor: Front Large 6. Jog Fence HP Sensor: Rear Large	▪ Confirms that the jog fences are moving and that the sensors are going ON/OFF.
7. Glue Tank HP Sensor: Front	▪ Confirms that the gluing unit is moving and that the front sensor is going ON/OFF. The main grip unit is moved to the binding position before this sensor is checked if it is not already at the binding position.
8. Trimmings Buffer Full Sensor	▪ Pulls all trimmings from the trimmings buffer. ▪ Confirms whether the A/D input value at the receptor sensor does not detect trimmed scraps when D/A output value of the emitter sensor is set at standard value. ▪ Confirms whether the A/D input value at the receptor sensor does detect trimmed scraps when D/A output value of the emitter sensor is set at zero.

Check Point	Check Method
Press Limit Sensor	▪ Confirms that the press unit operates and that there is no limit sensor error. ▪ If the self-diagnostic check succeeds, turn the bookbinder off and move the press unit to the limit position manually so the unit is out of the error position.
Blade Limit Sensor (Movement to Front/Rear)	▪ Confirms that the blade moves and that there is no limit sensor error. If the self-diagnostic check succeeds, turn the bookbinder off and move the cutter blade to the limit position manually so the unit is out of the error position.

Bookbinder Test Mode

Do these procedures to test each operation inside the bookbinder. This test mode enables the detection of jams, errors, door open, etc. and suspends operation of the bookbinder if one occurs. However, no alarms are issued.

Note

- Do not use paper longer than 297 mm for testing in no cut or single cut mode because paper longer than this will not stack properly in the stacking tray. Operation cannot be guaranteed with paper longer than 297 mm.
- The finished size of the book may be too large in no-cut mode (depending on the number of sheets in the signature) when the cover and signature are joined if the short edge of the signature is more than 221 mm.

1. Set the SW1 bank as shown below.

SW1				Status
1	2	3	4	
*	Up	*	*	Trimming Enabled
*	Up	*	Up	No Trimming

2. Set the SW2 bank as shown below.

SW2							
1	2	3	4	5	6	7	8
x	x	x	x	x	x	x	Up

3. Push [PSW1] then do the procedures in the order described below.
4. Perform the stacking operation: 1) Transport sheets to stacking tray from bookbinder entrance, 2) Start stacking operation,
5. Perform cover transport from the inserter unit (or bookbinder entrance): 1) Signature transport, 2) Start cover transport after signature has been stacked.
6. Perform book output: 1) Start binding operation, 2) Glue application, 3) Book trimming Once the stacking tray returns to the signature turnover position, stacking in the tray can resume.

7. Loop to Step 4 above.
   - On the SW2 bank SW1, SW2, SW3 set the finished sizes of the signature and cover, and SW5 sets the transport speed of the signature and cover.
   - When [PSW1] is pushed to start signature transport and stacking, the size and speed latch.
   - The setting of SW6 on the SW2 bank determines whether the cover is fed from the host machine or the inserter on top of the bookbinder.
   - The cover feed source is enabled at power on and cannot be changed as long as the power remains on.

1. Turn off the system.

Signature, Cover Finished Size Settings (SW1 to 4 on SW2 Bank)

SW2				Signature Size	Cover Size	Finished Size
1	2	3	4			
*	*	*	*	A4 LEF	A3 SEF	B5
Up	*	*	*	-	-	-
*	Up	*	*	A4 LEF (Special)	SR A3 (SEF)	A4
Up	Up	*	*	Exe LEF	279.4 X 378.3 mm SEF	STMT
*	*	Up	*	B5 LEF	B4 SEF	A5
Up	*	Up	*	9 X 12 in. LEF	13 X 19.2 in. SEF	LTR
*	Up	Up	*	LTR LEF	LTR SEF	COM
Up	Up	Up	*	A4 LEF	A3 SEF	COM
*	*	*	Up	A4 LEF	A3 SEF	203.0 X 283.0 mm
Up	*	*	Up	LTR LEF	LTR SEF	208.9 X 265.4 mm
*	Up	*	Up	-	-	-
Up	Up	*	Up	Exe LEF	279.4 X 378.3 mm	177.1 X 252.7 mm

SW2				Signature Size	Cover Size	Finished Size
1	2	3	4			
*	*	Up	Up	B5 LEF	B4 SEF	175.0 X 243.0 mm
Up	*	Up	Up	-	-	-
*	Up	Up	Up	-	-	-
Up	Up	Up	Up	-	-	-

Note: "LEF" in the table above denotes standard size paper longer in main scan direction than sub scan direction.

SW2 Bank SW5: Signature and Cover Size Speeds

SW5	Signature Speed	Cover Speed
*	651mm/s	651mm/s
Up	434mm/s	434mm/s

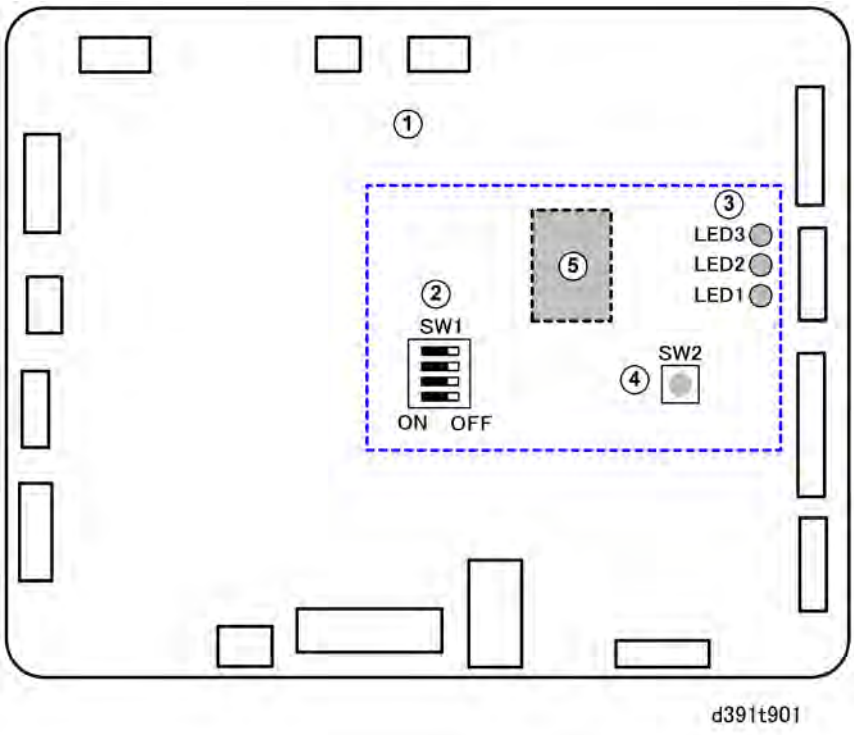
SW2 Bank SW6: Cover Feed Source

SW6	Cover Feed Source
*	Mainframe
Up	Inserter (Cover is fed only from the lower tray.)

The cover feed source is enabled at power on and cannot be changed as long as the power remains on.

2.5.2 INSERTER OUTPUT CHECK

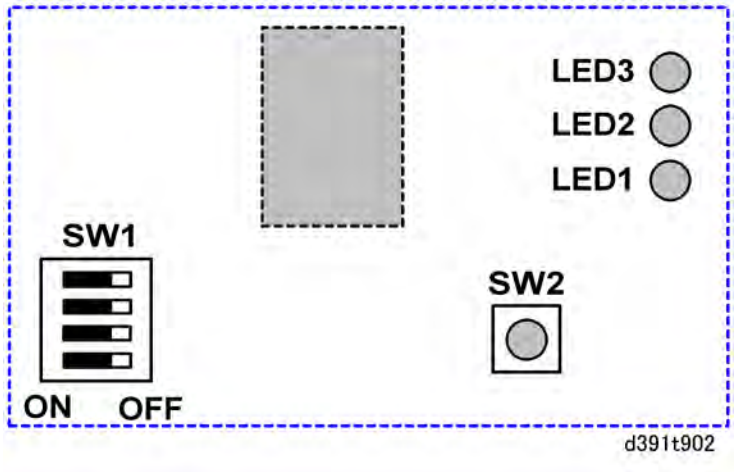
The inserter motors and sensors are tested with the DIP switches and LEDs on the inserter control board.



Inserter Control Board (Rear Cover Removed)

①	Inserter control board
②	DIP switches (Default OFF: Standby Mode)
③	LEDs 1, 2, 3
④	SW2 (a push-switch)
⑤	CPU (IC7)

Stand-by Mode, Service Mode



Mode		LED3	LED2	LED1
Standby Mode	Nothing Open	OFF	OFF	Flashing: 0.5 sec.
	Top Cover Open	OFF	ON	
	Inserter Open	ON	OFF	
Service Mode		OFF	OFF	Flashing: 1 sec.

Note: To set the inserter in the Service Mode, set the Perfect Binder in the Service Mode.

Error Display

If a problem is detected in the inserter, the LEDs display changes in the order described below.

(a) > (b) > (c) > (d)

(a) Jam or error

All LEDS light for 1 sec, all go off for 1 sec.

(b) Error cause

One or more LED goes ON for 1 sec, then OFF for 1 sec.

The combination of which LEDs go ON/OFF indicate the problem and location.

LED 3	LED 2	LED 1	Problem	Location
OFF	OFF	ON	Late paper jam	Tray A Lift Motor (M3 (INS))
OFF	ON	OFF	Lag paper jam	Tray A Lift Motor (M3 (INS))
OFF	ON	ON	At power on	Drive Switch Motor (M2 (INS))
ON	OFF	OFF	Firmware error	CPU flash memory
ON	OFF	ON	Cover open jam	Top cover
ON	ON	OFF	Paper size mismatch	Paper tray fences on Tray A, B

(c) Sensor where jam detected

One or more LED goes ON for 0.5 sec, then OFF for 0.25 sec.

The LEDs that go ON/OFF indicate the affected sensor or component.

LED 3	LED 2	LED 1	Sensor	Component
OFF	OFF	ON	Tray A Registration Sensor (S5 (INS))	Tray A Lift Motor (M3 (INS))
OFF	ON	OFF	Tray B Registration Sensor (S13 (INS))	Tray A Lift Motor (M3 (INS))
OFF	ON	ON	Transport Sensor 1 (S14 (INS))	Drive Switch Motor (M2 (INS))
ON	OFF	OFF	---	CPU flash memory

LED 3	LED 2	LED 1	Sensor	Component
ON	OFF	ON	Transport Sensor 2 (S18 (INS))	---
ON	ON	OFF	Paper width sensors	---

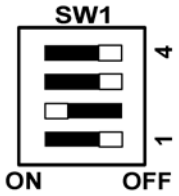
(d) Refresh and return to (a9

All LEDS light for 0.75 sec, all go off for 0.75 sec. then the display loops to (a).

Inserter Motor, Clutch Output Check

To check start/top operation of each motor

1. Open the left door.
2. Insert piece of cardboard or folded piece of paper into the slot of the left door switch.
   If the right door has been removed, insert piece of cardboard or folded piece of paper into the slot of the left door switch.
3. Remove the Service Board cover of the bookbinder.
4. On the SW1 bank set DIP SW1 to ON.
1. Remove the rear cover of the inserter (x2).



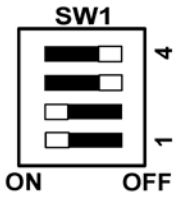
2. On the inserter control board set the DIP SWs as shown above.
3. Turn on the host machine.
4. Push and release SW2 to start the operation of each motor.

Press	What Happens
1	Push [SW2]. Starts Drive Switch Motor (M2 (INS)), rotates the pinion gear that moves the rack with the main drive gear of the tray feed motor to the front to engage the drive roller of Tray A and stops.
2	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 250 mm/s for Tray A, press [SW2] to stop.

Press	What Happens
3	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 500 mm/s for Tray A, press [SW2] to stop.
4	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 1100 mm/s for Tray A, press [SW2] to stop.
5	Push [SW2]. Starts Drive Switch Motor (M2 (INS)), rotates the pinion gear that moves the rack with the main drive gear of the tray feed motor to the rear to engage the drive roller of Tray B and stops.
6	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 250 mm/s for Tray B, press [SW2] to stop.
7	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 500 mm/s for Tray B, press [SW2] to stop.
8	Push [SW2] to run Tray Feed Motor (M1 (INS)) at 1100 mm/s for Tray B, press [SW2] to stop.
9	Push [SW2] to run Vertical Transport Motor (M5 (INS)) at 1100 mm/s, press [SW2] to stop.
10	Push [SW2]. Starts Tray A Lift Motor (M3 (INS)), lifts Tray A, then stops.
11	Push [SW2]. Starts Tray A Lift Motor (M3 (INS)), lowers Tray A, then stops.
12	Push [SW2]. Starts Tray B Lift Motor (M4 (INS)), lifts Tray B, then stops.
13	Push [SW2]. Starts Tray B Lift Motor (M4 (INS)), lowers Tray B, then stops.
14	Push [SW2]. Switches ON Tray A Registration Clutch (CL1 (INS)), Tray B Registration Clutch (CL2 (INS)) then both switch OFF.
15	Loops to "1" above.

To check continuous motor feed

1. Open the left door.
2. Insert piece of cardboard or folded piece of paper into the slot of the left door switch.
   If the right door has been removed, insert piece of cardboard or folded piece of paper into the slot of the left door switch.
3. Remove the Service Board cover of the bookbinder.
4. On the SW1 bank set DIP SW1 to ON.
1. Remove the rear cover of the inserter (x2).



2. Set the DIP SWs as shown above.
3. Turn on the host machine.
4. Push and release SW2 to test continuous operation of a motor.

Press	What Happens
1	Lifts Tray A, positions it for paper feed.
2	Turns on motors for 50-sheet feed.
3	Lowers Tray A.
4	Lifts Tray B, positions it for paper feed.
5	Turns on motors for 50-sheet feed.
6	Lowers Tray B.
7	Loops to "1" above.

Note:

- The first execution runs paper separation at 500 mm/s, paper feed at 1100 mm/s.
- The second execution runs paper separation at 250 mm/s, paper feed at 325 mm/s.
- These sequence repeats for the 2nd, 3rd tests, and so on.

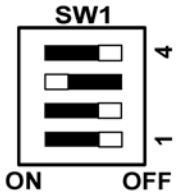
Sensor Output Check

1. Remove the rear cover of the inserter (x2).

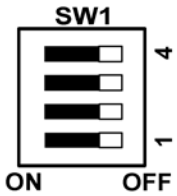
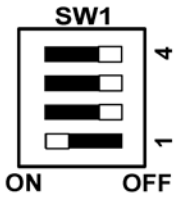
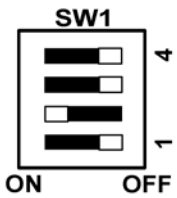
2. Set the DIP SWs as shown above.
3. Turn on the host machine.

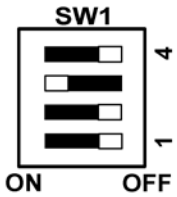
Sensor Output Check

1. Open the left door.
2. Insert piece of cardboard or folded piece of paper into the slot of the left door switch.
   If the right door has been removed, insert piece of cardboard or folded piece of paper into the slot of the left door switch.
3. Remove the Service Board cover of the bookbinder.
4. On the SW1 bank set DIP SW1 to ON.
5. Remove the rear cover of the inserter (x2).



6. Set the DIP SWs as shown above.
7. Turn on the host machine.
8. Set the DIP SWs and do the procedures as shown in the table below.

DIP SW	Procedure
	**Sensor Check 1** 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: Tray A Paper Set Sensor (S1 (INS)) ▪ LED2: Tray A Paper Feed Sensor (S4 (INS)) ▪ LED3: Tray A Registration Sensor (S5 (INS))
	**Sensor Check 2** 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: Tray A Paper Out Sensor (S3 (INS)) ▪ LED2: Tray B Paper Out Sensor 1 (S8 (INS)) ▪ LED3: Tray B Paper Out Sensor 2 (S9 (INS))
	**Sensor Check 3** 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: Tray B Paper Set Sensor (S6 (INS)) ▪ LED2: Tray B Paper Feed Sensor (S10 (INS)) ▪ LED3: Tray B Registration Sensor (S13 (INS))

DIP SW	Procedure
	Sensor Check 4 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: Transport Sensor (S14 (INS)) ▪ LED2: --- Not Used --- ▪ LED3: Transport Sensor 2 (S18 (INS))
	**Sensor Check 5** 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: Tray A Lower Limit Sensor (S11 (INS)) ▪ LED2: Tray B Lower Limit Sensor (S12 (INS)) ▪ LED3: Drive Switch Sensor (S16 (INS))
	Sensor Check 6 1. Set the DIP SWs as shown on the left. 2. Push [SW2] three times. 3. After each switch press check the status of each LED in this order: LED1, LED2, LED3. ▪ ON: Paper present ▪ OFF: No paper Each LED displays the status of these sensors: ▪ LED1: --- Not Used --- ▪ LED2: Top Cover Switch (S17 (INS)) ▪ LED3: Inserter Cover Sensor (S15 (INS))

3. SERVICE TABLES

3.1 SERVICE PROGRAM MODE

For details about "Service Program Mode" for this peripheral, see the main service manual.

D737

RING BINDER RB5020

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

RING BINDER RB5020 (D737)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 1

1.1 COMMON PROCEDURES.....1

1.1.1 BEFORE YOU BEGIN.....1

Handling the Binder Unit.....1

Standoffs on Harnesses.....2

1.1.2 RING CARTRIDGE.....3

1.1.3 REAR COVER.....4

1.1.4 TOP COVER.....4

1.1.5 REMOVING THE BINDER UNIT.....6

1.1.6 BINDER UNIT COVERS.....8

Clamp Unit Cover.....9

Pre-Bind Jogger Left Cover.....10

Pre-Bind Jogger Bottom Cover.....10

Pre-Bind Jogger Front Cover.....11

Pre-Bind Jogger Top Cover.....11

Ring Supply Unit Upper Right Cover.....12

Ring Supply Unit Right Cover.....12

1.1.7 SEPARATING PRE-BIND JOGGER FROM BINDER UNIT.....13

1.1.8 CLAMP UNIT.....15

1.1.9 PRE-PUNCH JOG UNIT.....16

1.1.10 PUNCH UNIT.....18

1.1.11 SP6504 ADJUSTMENT.....19

Checking the Position of the Punched Holes.....19

Hole Position Adjustment.....20

1.2 SENSORS.....22

1.2.1 PRE-PUNCH JOGGER HP SENSOR (S301).....22

1.2.2 CHAD BOX SENSOR (S308).....23

1.2.3 PRE-BIND JOGGER SENSORS.....23

Side Fence 1 HP Sensor (S601).....23

Paddle Roller HP Sensor (S602).....25

Clamp HP Sensor (S603).....26

Alignment Pin HP Sensor (S604), Alignment Pin Up Sensor (S610).....27

Shutter HP Sensor (S605).....29

50-Sheet Detection Sensor (S606) 30
Stack Thickness Sensor (S607) 31
Paper LE Detect Sensor (S609) 33
Stack Tamper HP Sensor (S612) 34
Shutter HP Sensor (S613) 35
Runout Roller HP Sensor (S614) 35
1.2.4 RING SUPPLY UNIT SENSORS 36
Ring Cartridge Sensor (S801) 36
Ring Cartridge Type Sensor (S805) 37
Rings Reversed Sensor (S802) 38
50/100 Ring Detection Sensor (S804) 39
Ring Near-End Sensor (S803) 40
1.2.5 CLAMP UNIT SENSORS 41
Binder Unit HP Sensor (S701) 41
Bind Timing Sensor (S702) 42
Ring Switch HP Sensor (S706) 43
Ring Switch Timing Sensor (S707) 44
1.2.6 OUTPUT BELT SENSORS 45
Output Belt 1 HP Sensor (S401) 45
Output Belt 2 HP Sensor (S402) 46
Output Belt Unit Entrance Sensor (S404) 47
Output Belt Rotation HP Sensor (S403) 48
1.2.7 STACKER UNIT SENSORS 51
Obstacle Detection Switch (S506) 51
Book Position Sensor Pair (S507E/S507R) 52
Stack Height Sensor Pair (S052E/S502R) 55
Stacker Detect Sensor (S504) 59
Tray Detection Sensor (S505) 60
1.3 MOTORS 62
1.3.1 PRE-PUNCH JOG UNIT MOTOR 62
Side Jogger Motor (M302) 62
1.3.2 PRE-BIND JOGGER MOTORS 64
Paddle Roller Motor (M601) 64
Alignment Pin Motor (M602) 65
Paddle Roller Lift Motor (M603) 66
Side Fence 1 Motor (M604) 68
Side Fence 2 Motor (M606) 70
Spine Clamp Motor (M605) 72
Runout Roller Motor (M609) 73

Stack Tamper Motor (M607) 74
Shutter Motor (M608) 76
Runout Press Roller Motor (M610) 77
Fan Motor (M611) 79
1.3.3 CLAMP UNIT MOTORS 80
Clamp Unit Motor (M701) 80
50/100 Clamp Adjust Motor (M702) 81
1.4 BOARDS 83
1.4.1 MAIN CONTROL BOARD 83
1.4.2 BINDER CONTROL BOARD 84
Removing the Binder Control Board 84
Doing the SP adjustments 84
1.4.3 PSU 85

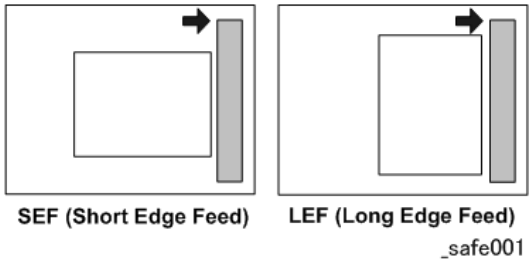
READ THIS FIRST

Symbols, Abbreviations and Trademarks

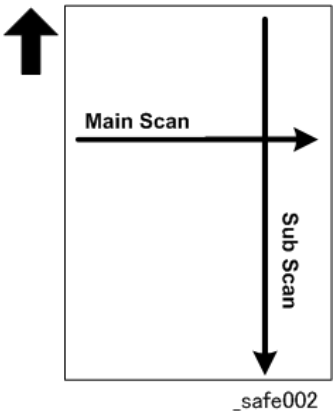
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

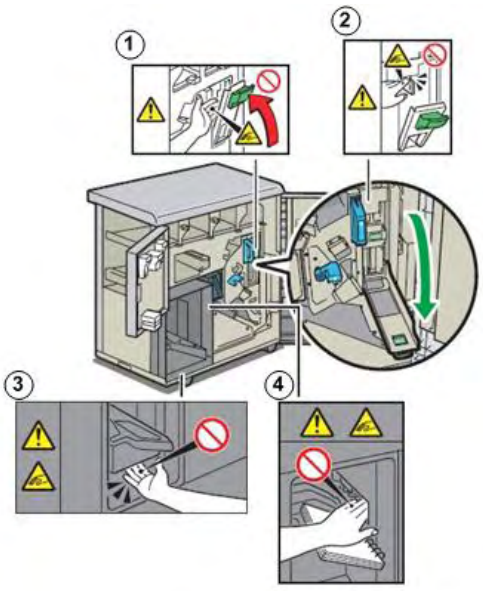
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Safety Label



d1790109

①	To avoid injury, keep the fingers of your other hand clear of the cartridge cover when you close it.
②	To avoid injury, avoid touching the parts at the indicated location.
③	To avoid injury, never touch the ring binder tray while the ring binder is operating.
④	To avoid injury, never put your hand into the paper exit when removing bound booklets.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)

Terms	Meaning
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

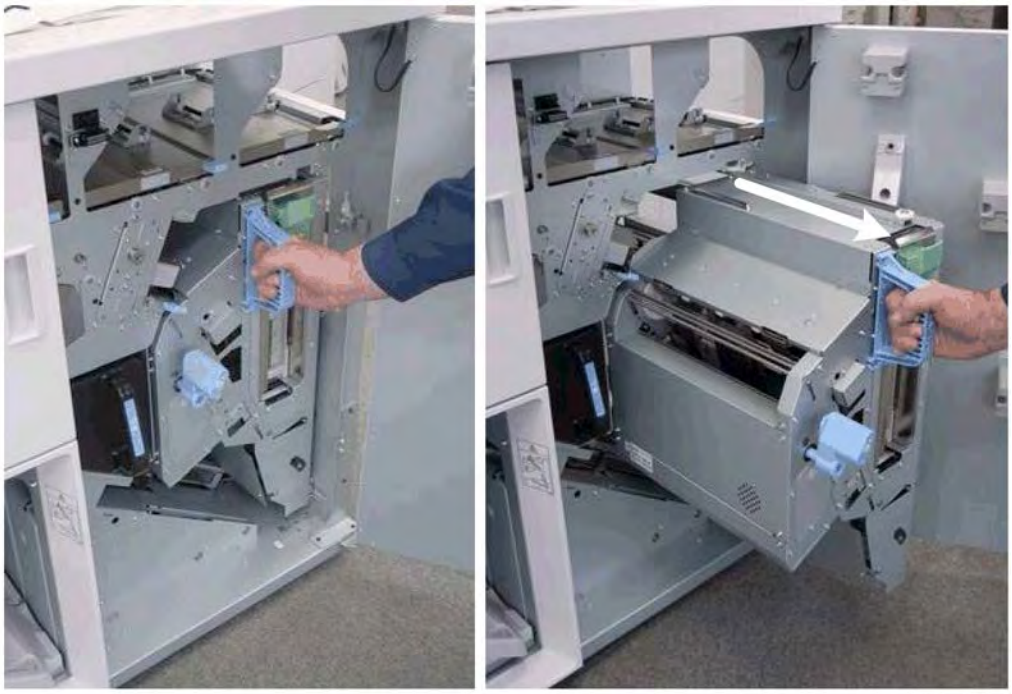
1. REPLACEMENT AND ADJUSTMENT

1.1 COMMON PROCEDURES

1.1.1 BEFORE YOU BEGIN

Handling the Binder Unit

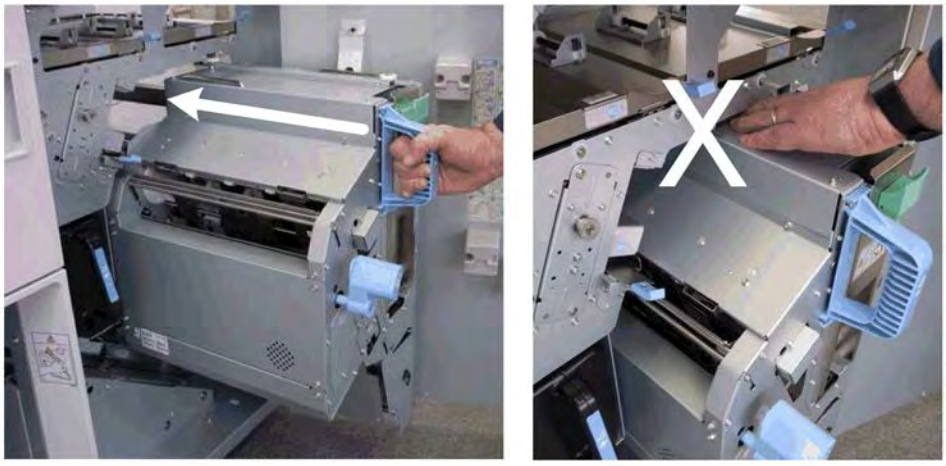
Pulling out the Binder Unit



d392r901

1. Open the front door.
2. Grip handle **Mc8** and slowly pull the binder unit out of the finisher until it stops. (There are no wires attached to the binder unit.)

Pushing in the Binder Unit



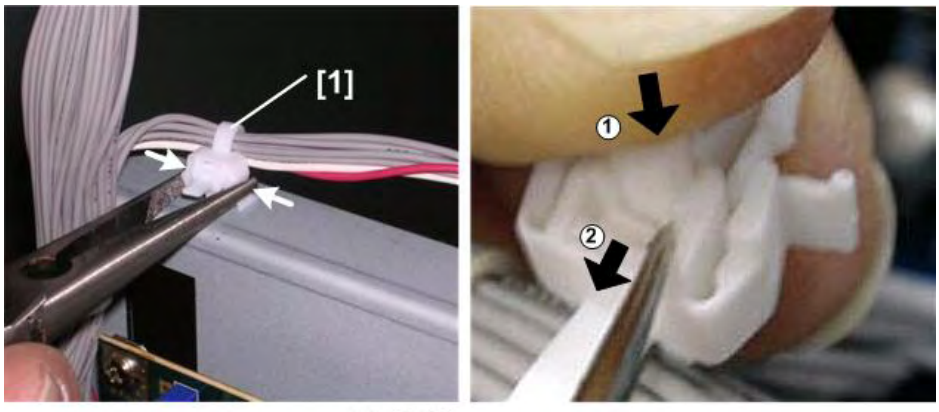
d392r902

1. Check the right side of the binder unit and confirm that all the screws are installed and that the binder unit is squarely mounted on its two rails.
2. Grip handle **Mc8** and slowly push the binder unit into the finisher until it stops.

⚠CAUTION

- Always grip handle **Mc8** when pulling out or pushing in the binder unit.
- Never touch any other surface of the binder unit when it is moving.
- To avoid injury the fingers, never push on the top of the binder unit to slide it back into the finisher as shown above.

Standoffs on Harnesses



d392r0104

Some harnesses are locked by plastic bands [1] to plastic standoffs that are attached to the frame. When releasing a harness, do not remove the band:

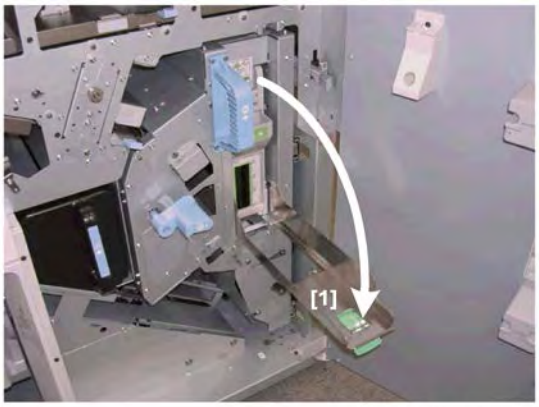
- Use a pair of needle-nose pliers to press in the base of the stand off and lift it out of its hole.
- The base of a removed standoff can be quickly re-inserted into its hole.

If you must remove the band:

- Press the end of the band loop.
- Use a sharp tool to press down the lock band below (or above) the looped band to separate the serrations of the bands and release the loop.

1.1.2 RING CARTRIDGE

Always remove the ring cartridge before removing the binder unit for servicing.



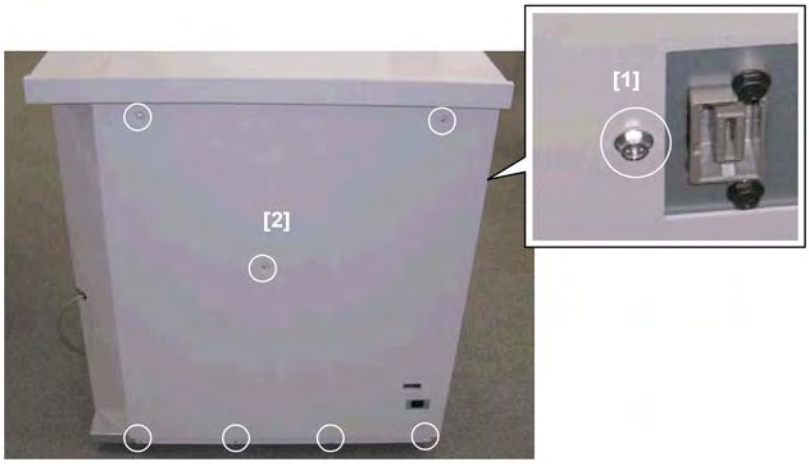
d392r0901a

1. Open the right front door.
2. Lower the release [1].

d392r0901b

3. Pull out the ring cartridge [1] and lift it out of the frame.

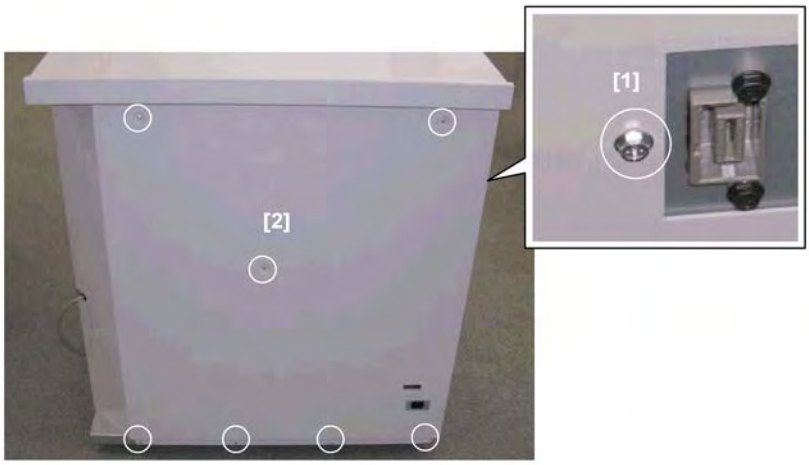
1.1.3 REAR COVER



d392r0305a

1. Remove the rear cover
   [1] Left, rear edge(x1).
   [2] Rear cover (x7).

1.1.4 TOP COVER

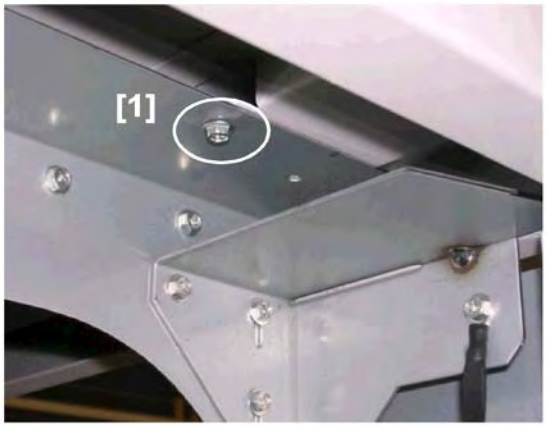


d392r0305a

1. Remove the rear cover
   [1] Left, rear edge(x1).
   [2] Rear cover (x7).

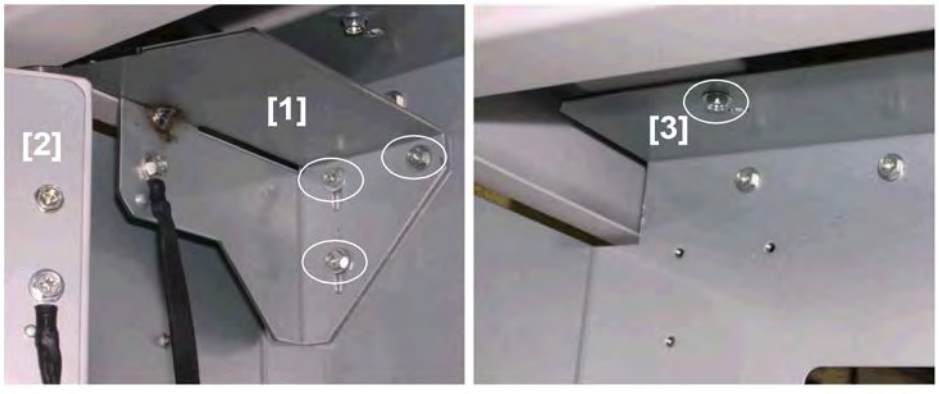
d392r0305f

2. Disconnect the top cover at the rear:
   [1] Right rear corner (x1)
   [2] Left rear corner (x1).



d392r0305g

3. Disconnect the top cover at the front right corner [1] (x1)



d392r0305h

4. At the front left corner, remove:
   [1] Door plate (x3)
   [2] Left door
   [3] Top cover (x3)

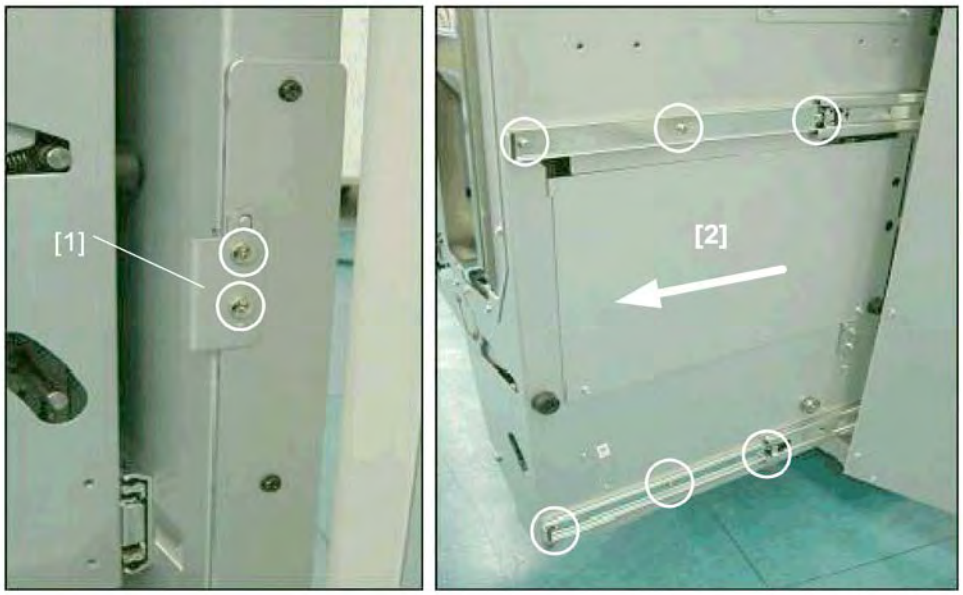
d392r0305i

5. Lift off the top cover [1].

1.1.5 REMOVING THE BINDER UNIT

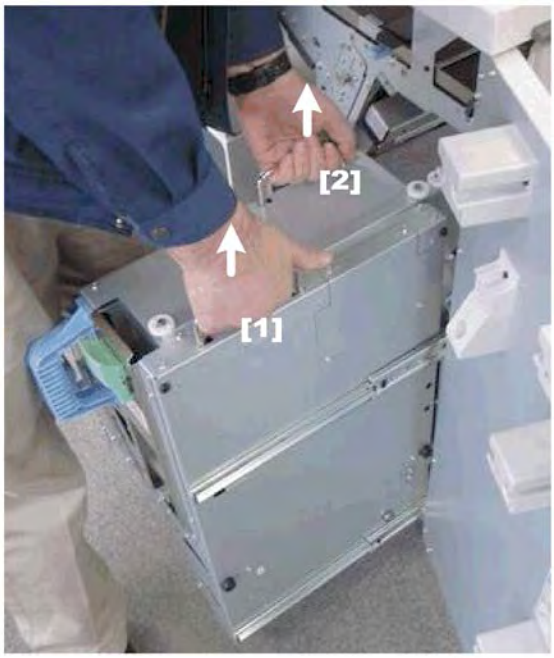
It is recommended that the binder unit be removed for all servicing and maintenance.

- Some of the binder unit covers can be removed with the binder unit still mounted on the rails.
- However, the binder unit wobbles on the rails and slips easily back into the machine and does not provide a stable platform for removing sensors or motors.



d392r0101a

1. Open the right front door.
2. Pull out the binder until it stops.
3. Remove:
   [1] Stopper (x2)
   [2] Binder unit screws (x6)

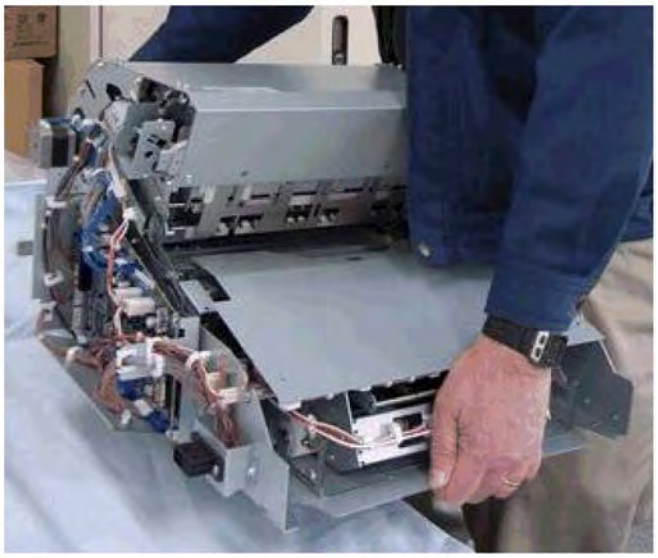


d392r010i

4. Lift the binder unit by its handles [1] and [2], pull it straight up and then slightly to the left to disengage the right side of the unit from the frame and rail.

⚠CAUTION

- The binder unit is heavy and weighs about 22 kg (50 lb.)



d392r903

5. Hold the binder unit from the rear with a firm grip under the top and bottom of the unit as shown below.

d392r0101j

6. Lay the binder on its right side with its rubber stoppers down.

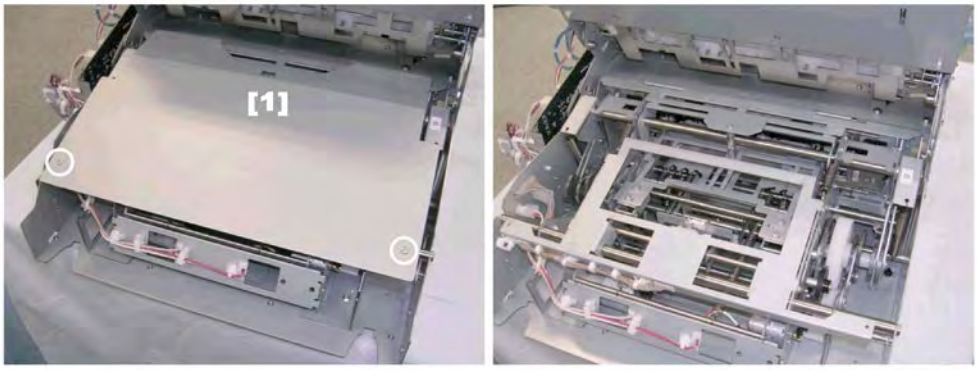
1.1.6 BINDER UNIT COVERS

d392r1008

Binder Unit Covers

①	Pre-Bind Jogger	Front Cover
②		Top Cover
③		Left Cover
④		Bottom Cover
⑤	Clamp Unit	Clamp Unit Cover
⑥	Ring Supply Unit	Right Cover
⑦		Upper Right Cover

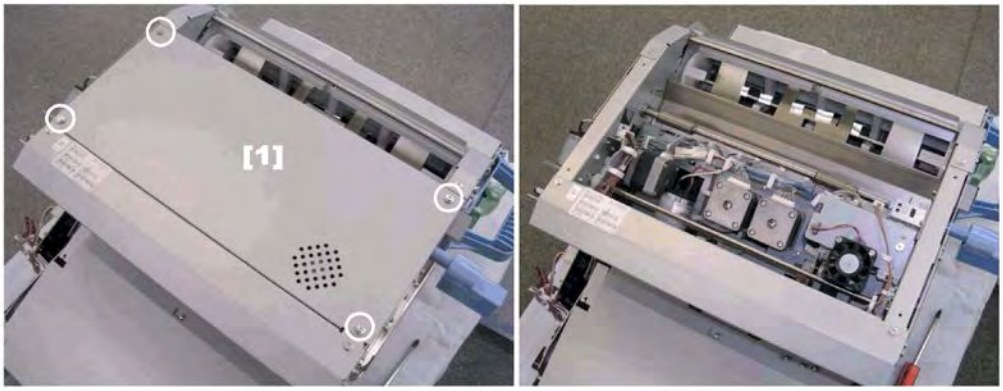
Clamp Unit Cover



d392r1001

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails and set it on a flat surface. page 13
4. Remove the clamp unit cover [1] (x2).

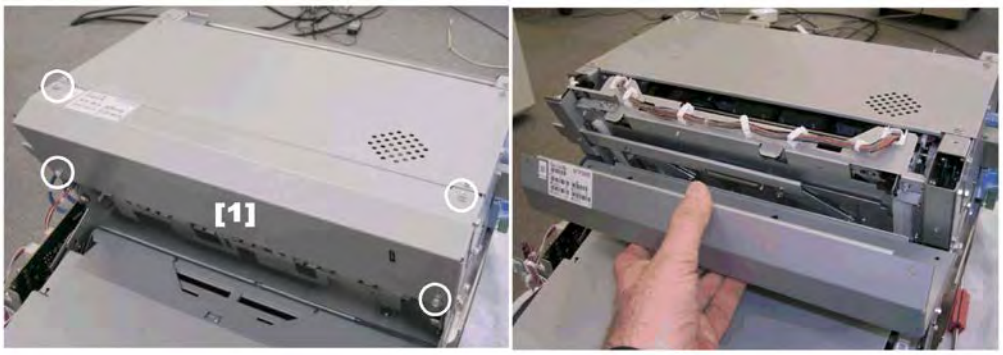
Pre-Bind Jogger Left Cover



d392r1002

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails and set it on a flat surface. page 6
4. Remove the pre-bind jogger side cover [1] (x4).

Pre-Bind Jogger Bottom Cover

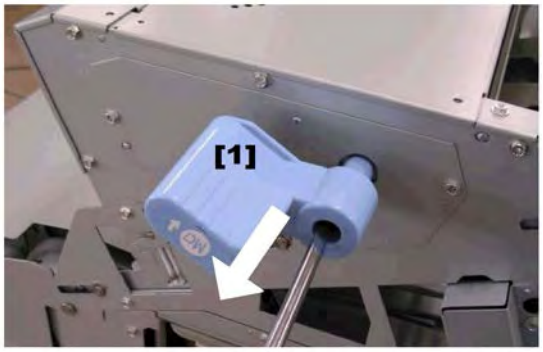


d392r1003

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails and set it on a flat surface. page 6
4. Remove the pre-bind jogger bottom cover [1] (x4).

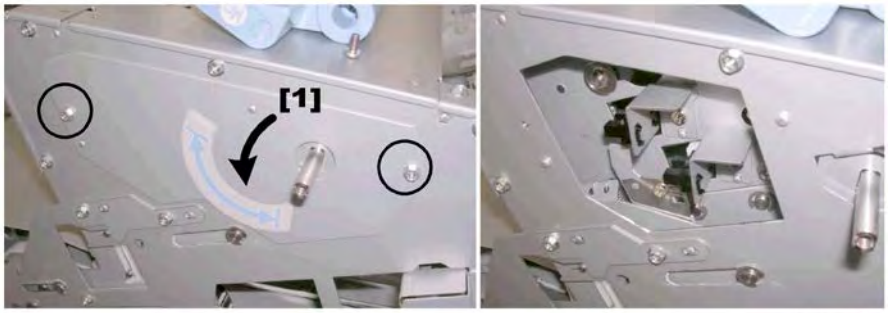
Pre-Bind Jogger Front Cover

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails and set it on a flat surface. page 6



d392r908

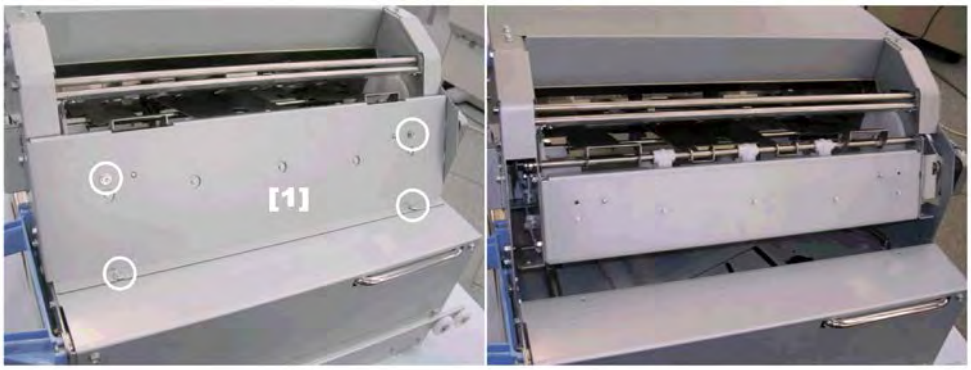
4. Remove lever **Mc8** [1] (x1).



d392r909

5. Remove the pre-bind jogger front cover [1] (x2).

Pre-Bind Jogger Top Cover



d392r1005

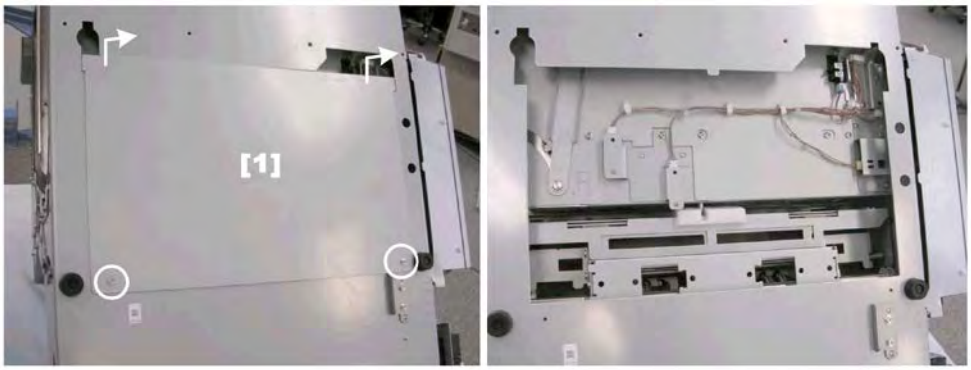
1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails and set it on a flat surface. page 6
4. Remove the pre-bind jogger top cover [1] (x4).

Ring Supply Unit Upper Right Cover

d392r1006

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails. page 6
4. Lay the binder unit down on its left side (stoppers up).
5. Remove the right upper cover [1] (x2).

Ring Supply Unit Right Cover

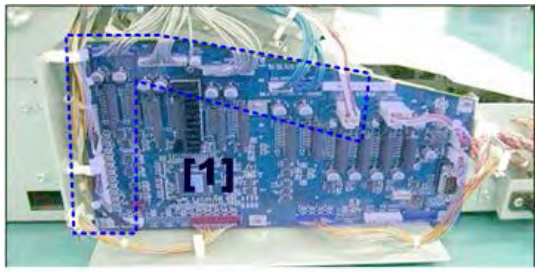


d392r1007

1. Open the right front door.
2. Remove the ring cartridge.
3. Remove the binder unit from its rails. page 6
4. Lay the binder unit down on its left side (stoppers up).
5. Remove the right cover [1] (x2).

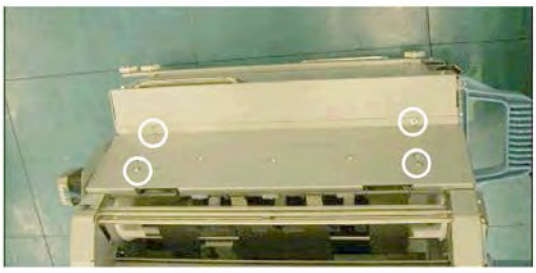
1.1.7 SEPARATING PRE-BIND JOGGER FROM BINDER UNIT

Follow this procedure to separate the pre-bind jogger from the binder unit.



d392r0101c

1. Open the right front door and remove the ring cartridge.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Disconnect the binder unit control board [1] (x11, x2)

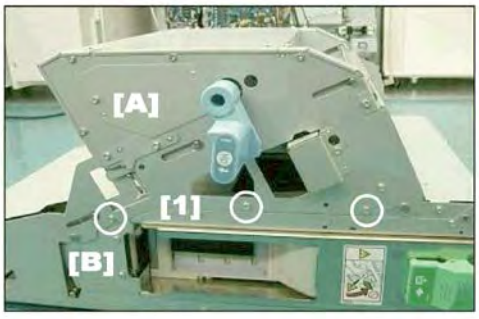


d392r0101d

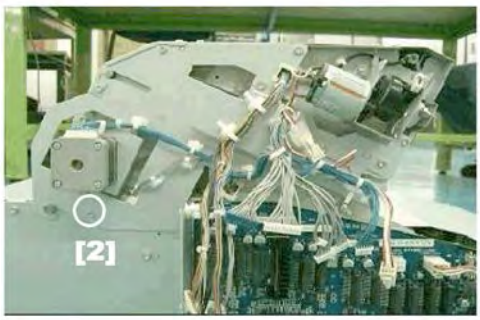
4. Remove the pre-bind jogger top cover [1] (x4).

d392r0101e

5. Remove handle **Mc8** [1] (x4).

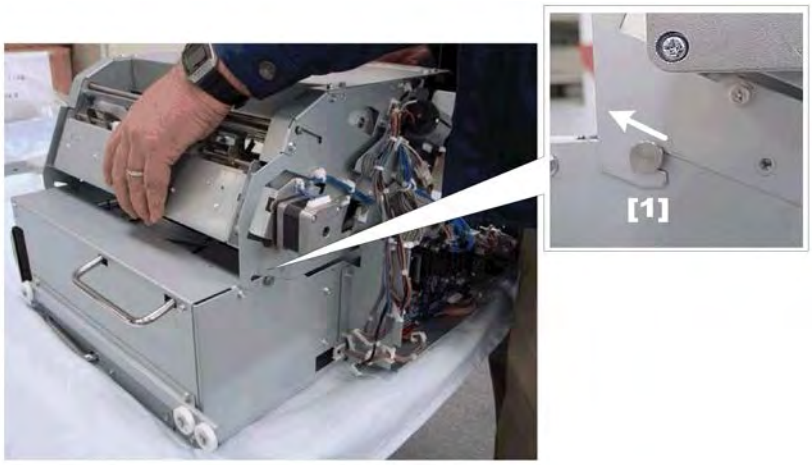


d391r0101f



d392r010g

6. To separate the pre-bind jogger [A] from the binder unit [B], remove:
   [1] Front (x3)
   [2] Rear (x1)



d392r904

7. Slide the hooks [1] of the pre-bind jogger off the studs on both sides, and lift off binder unit.

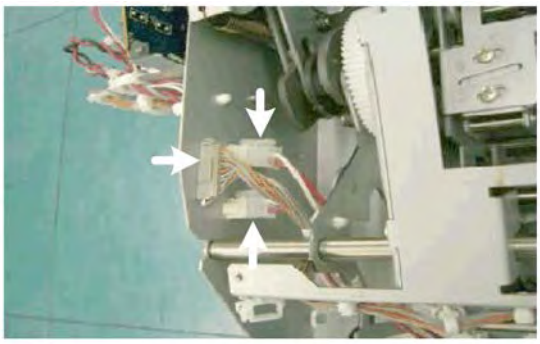
d392r0101k

8. Set the separated pre-bind jogger [1] on a clean flat surface.
9. If you replace the pre-bind jogger, do SP 6505 to 6507. (See Section 5 of the main service manual.)

1.1.8 CLAMP UNIT

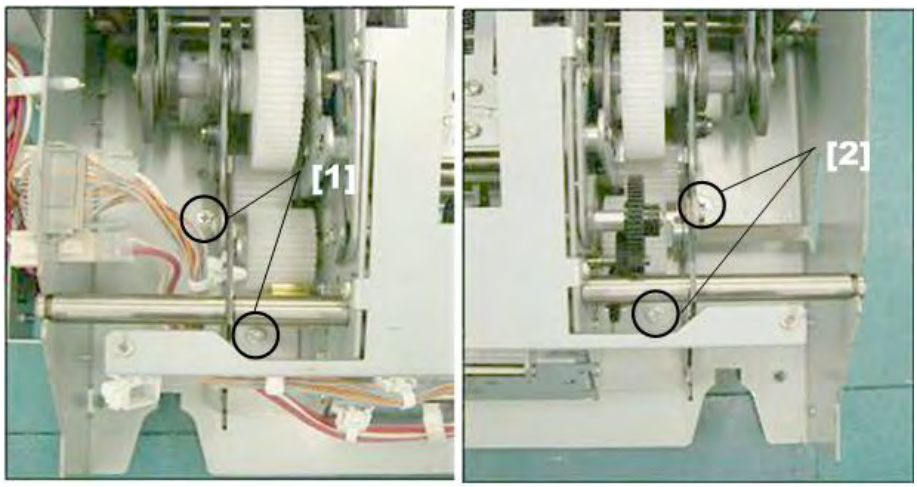
d392r0102a

1. Open the right front door and remove the ring cartridge.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Separate the pre-bind jogger from the binder unit. page 13
4. Remove the clamp unit cover [1] (x2).



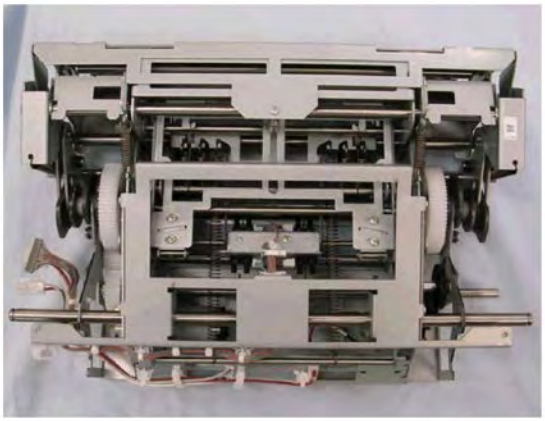
d392r0102b

5. At the lower left corner, disconnect the connectors [1] (x3).



d392r0102c

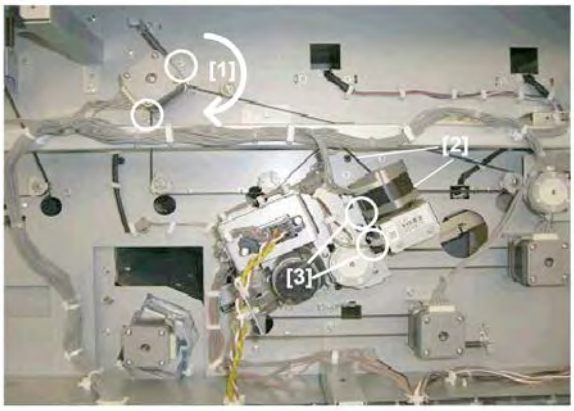
6. Disconnect the clamp unit at the bottom.
   [1] Left (x2).
   [2] Right (x2)



d392r0102e

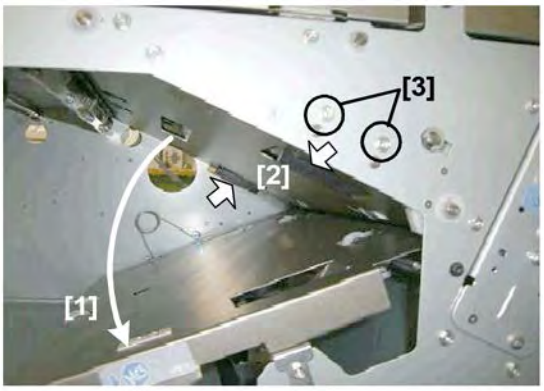
7. Remove the clamp unit from the binder unit and lay it on a flat surface.

1.1.9 PRE-PUNCH JOG UNIT



d392b0305b

1. Remove the rear cover.
2. Loosen the motor bracket [1] (x2).
3. While turning the loosened bracket slightly to the right, disconnect the timing belt [2] from the gear.
4. Disconnect the motor and sensor [3] (x2).
5. Open the right front doors.



d392r0305c

6. Lower plate **Mc3** [1] so that you can see the side fences [2].

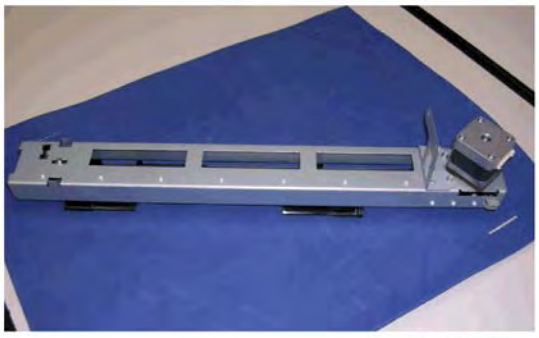
7. Push the flaps of the front and rear side fences to the center.
8. Remove the screws [3] (x2).

d392r0305d

9. At the rear, remove the rear screws [1] (x2).

d392r0305e

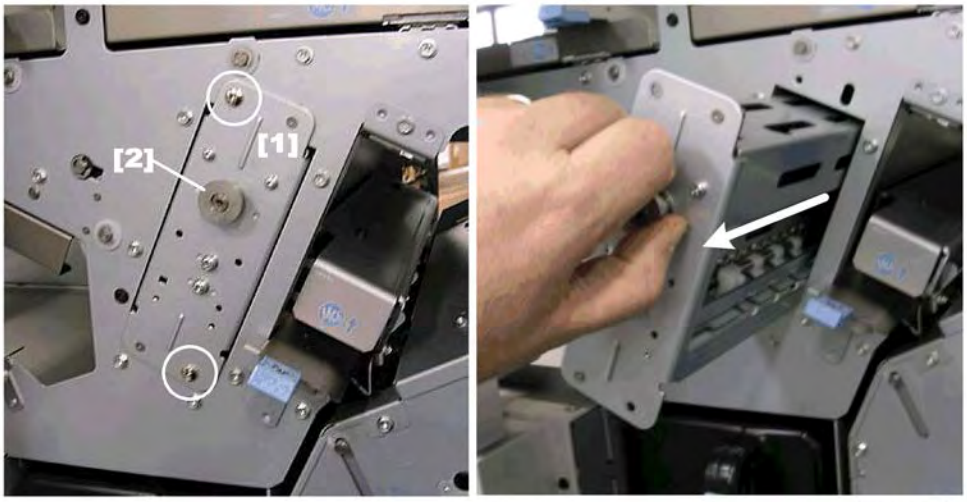
10. Raise the pre-punch jog unit [1] slightly and slowly pull it out of the finisher.



d392r0306a

11. Set the pre-punch jogger unit [1] on a flat surface.
12. After replacing the pre-punch jog unit, do SP6504. (See "SP6504 Adjustment" in "Common Procedures".)

1.1.10 PUNCH UNIT



d392r1101

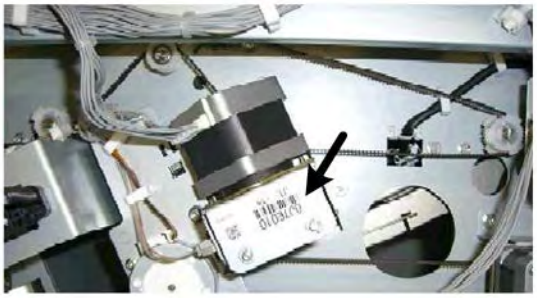
1. Open the left and right front doors.
2. Remove the screws of the punch unit [1] (x2).
3. Grasp the knob [2] and pull the punch unit out.

d392r1102

1.1.11 SP6504 ADJUSTMENT

These adjustments must be done after one or more of the following items has been replaced:

- Binder unit control board (sub board)
- Ring binder main board
- Pre-punch jogger unit
- Pre-punch jogger HP sensor (S301)



d392r0407a

1. The setting for this SP code is written on the white label attached to the plate below the side jogger motor (M302).
2. Multiply the value by "0.1". For example, if the value is "-19" then
   -19 x 0.1 = -1.9
3. Go into the SP mode, execute SP6504-1 (A4 LEF) or SP6504-2 (LT LEF) and enter the number.

Checking the Position of the Punched Holes

1. Close the front door of the Ring Binder.

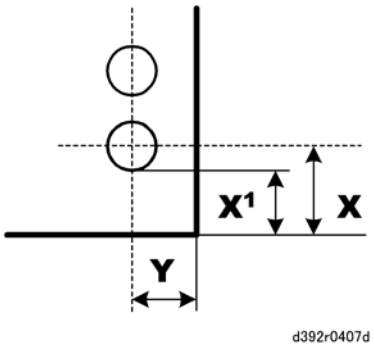
   Important

   - After the following adjustment, keep the front door of the Ring Binder closed and turn main power switch OFF and ON.

1. Do SP6504 and enter the number printed on the label attached to the punch unit. (For more details about SP6504, please refer to Section 5 of the main machine service manual.)
2. Do a run with the ring binder in the punch only mode (no ring binding).

   Important

   - Use paper in the weight range 70 to 90 g/m^2.



3. With a punched sheet face-down as shown above, use a micrometer to measure the distances, **X**, **Y**, and **X1**.

   Standard Values

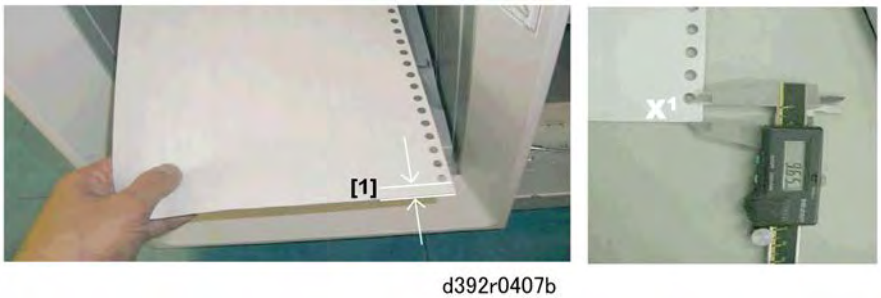
	A4 (mm)	LT (mm)	Note
X	8.8	12.7	Last hole center to paper edge.
Y	**6**	**6**	Last hole center to paper edge.
X1	5.625	9.525	Last hole edge to paper edge.

Important

- The distance "**Y**" is determined by the size of the punch unit (A4 or LT) and cannot be adjusted.
- "**Y**" is the same distance for both A4 and LT.
- If "**Y**" is out of adjustment, the punch unit must be replaced.

Hole Position Adjustment

Here is an example of how to adjust X1.

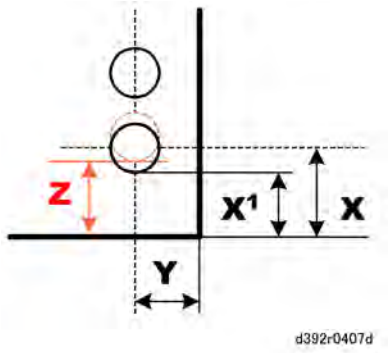


1. Close the front door of the Ring Binder.

Important

- After the following adjustment, keep the front door of the Ring Binder closed and turn main power switch OFF and ON.

2. Use a micrometer to measure X^1 at [1]. If the measurement is not standard, we will call this value Z in the following steps, and the red circle in the following diagram shows the non-standard position of the punch hole.

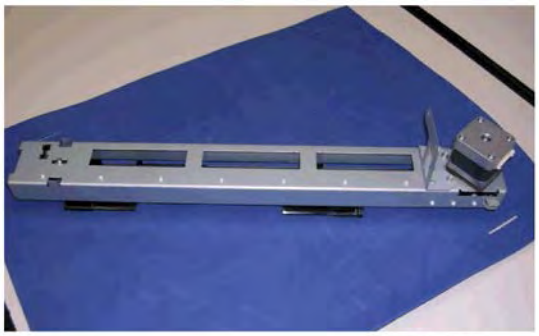


3. In this example, "**Z**" is measured at "9.65". This does not match the standard for LT (**X^1** = 9.525).
4. Subtract the measured value "**Z**" (9.65) from the standard value "**X^1**" (9.525) and multiply it by "2".
   9.525 - 9.65 = -0.125 x 2 = -0.250
5. Do SP6504 again and adjust the setting by adding the value derived from the calculation above (in this example "-0.250")
   - The actual adjustment is done by adjusting the movement of the pre-punch jogger fences so that the hole-punch position is lowered "**-0.125**".
   - The firmware does this automatically by dividing the entered value (-0.25) by 2 (-0.125), so 9.65 – 0.125 = 9.525 mm.
   - If the measured distance "Z" is less than **X^1**, then the adjustment must raise the hole-punch position. In this case, the value of SP6504 must be increased in order to raise the hole position.

1.2 SENSORS

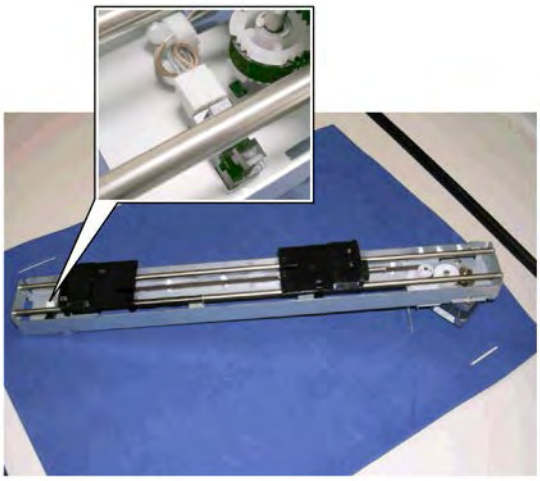
1.2.1 PRE-PUNCH JOGGER HP SENSOR (S301)

1. Remove the rear cover. page 4
2. Remove the pre-punch jogger unit. page 16



d392r0306a

3. Set the pre-punch jogger unit on a flat surface.



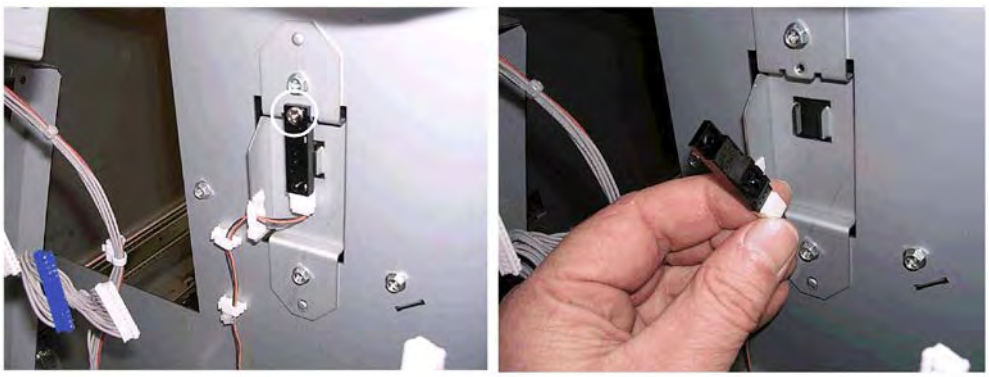
d392r03036f

4. Turn over the pre-punch jogger unit
5. Remove the pre-punch jogger HP sensor (S301) (x1, x1)
6. After replacing the pre-punch jogger HP sensor (S301), do SP6504. (See Section 5 of the main service manual.)

1.2.2 CHAD BOX SENSOR (S308)

d392r0613a

1. Remove the rear cover. page 4
2. Remove the main control board bracket [1] (x 27, x8).



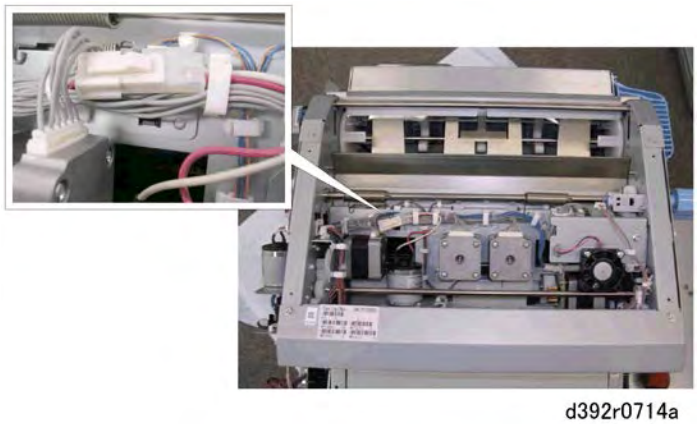
d392r0613b

3. Remove the sensor (x1, x1).

1.2.3 PRE-BIND JOGGER SENSORS

Side Fence 1 HP Sensor (S601)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface.



d392r0714a

3. Remove the pre-bind jogger side cover.

d392r0714b

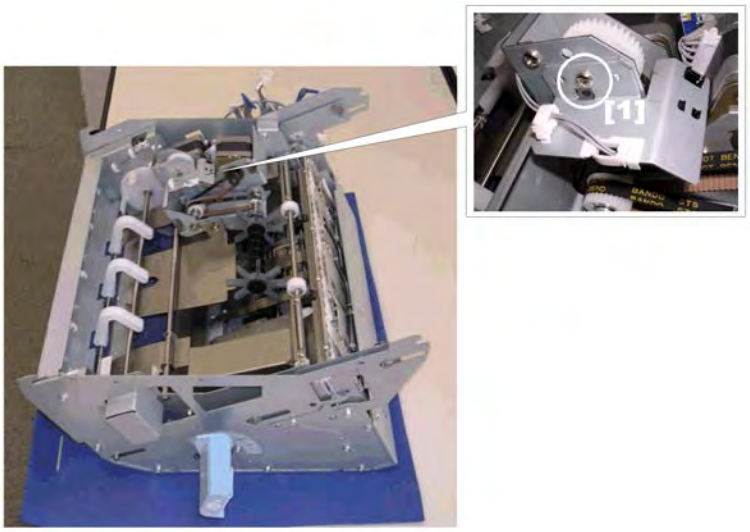
4. Disconnect and move aside the harnesses and clamps (x2, x2).
5. Remove the screw (x1).

d392r0714c

6. Remove:
   [1] Sensor bracket (x1)
   [2] Sensor (x3, x1)

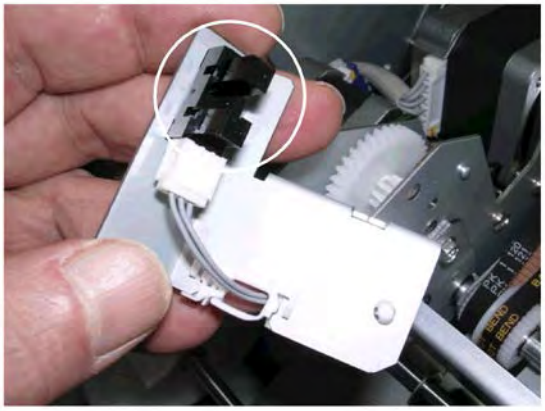
Paddle Roller HP Sensor (S602)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Separate the pre-bind jogger from the binder unit. page 13



d392r0714d

4. Set the pre-bind jogger unit on its side with the open end up.
5. Remove the screw [1] and sensor bracket (x1).



d392r0714e

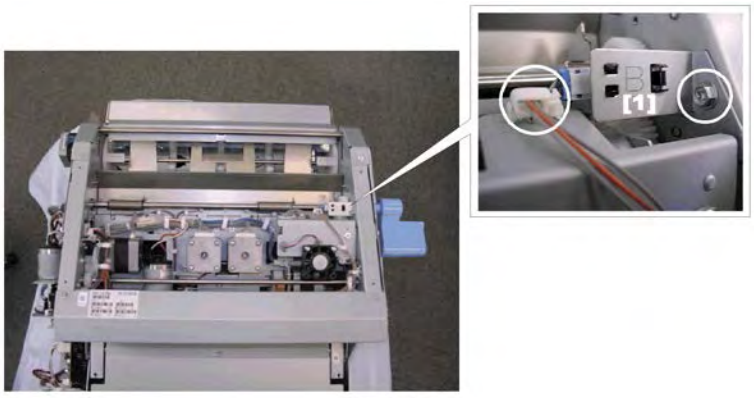
6. Remove the sensor (x3, x1)

Clamp HP Sensor (S603)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the pre-bind jogger left cover. page 10

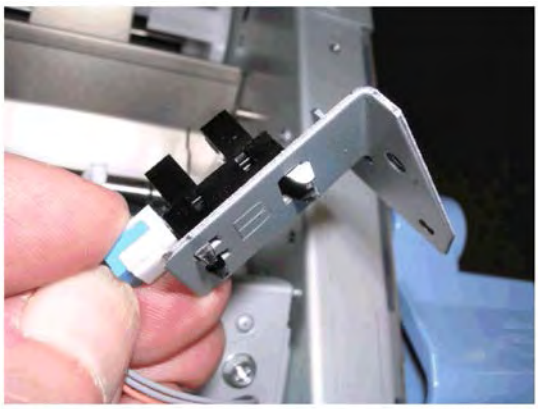
d392r0714f

4. Rotate lever **Mc7** to lock it.



d392r0714g

5. Remove sensor bracket [1] (x1, x1).

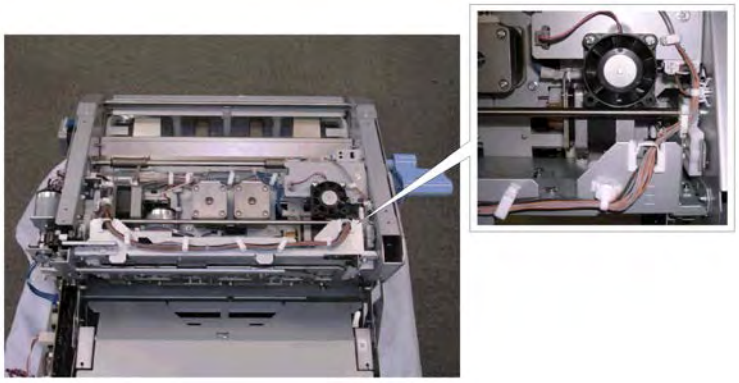


d392r0714h

6. Remove the sensor (x1, x3)

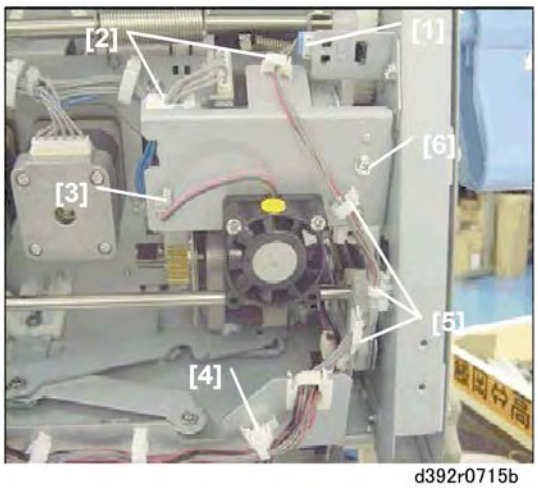
Alignment Pin HP Sensor (S604), Alignment Pin Up Sensor (S610)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



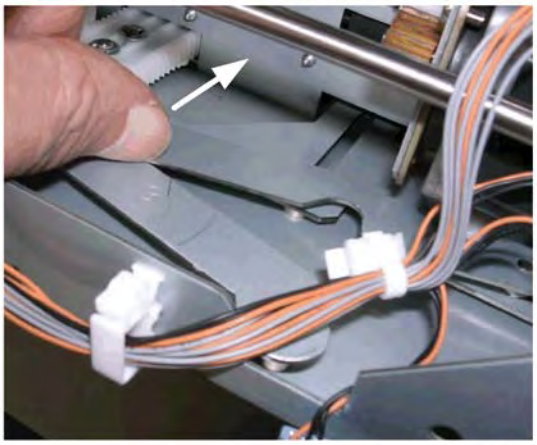
d392r0715a

3. Remove the pre-bind jogger left cover.
4. Remove the pre-jog binder bottom cover.



d392r0715b

5. Remove:
   - [1] x1
   - [2] x2
   - [3] x1
   - [4] x2
   - [5] x3
   - [6] x1

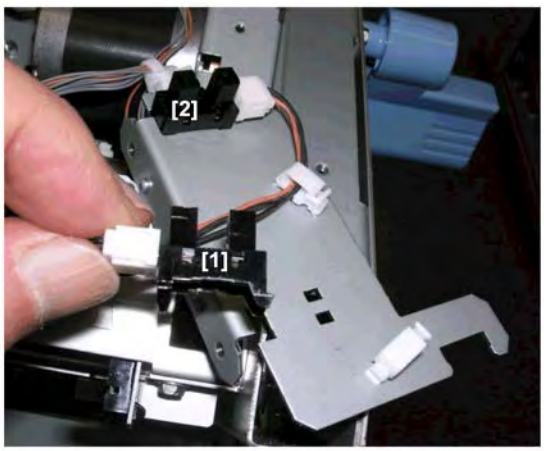


d392r0715d

6. Push up the arms of the scissors lift to raise the actuator away from the sensor on the right.

d392r0715c

7. Under the unit base remove the sensor bracket screws (x2).

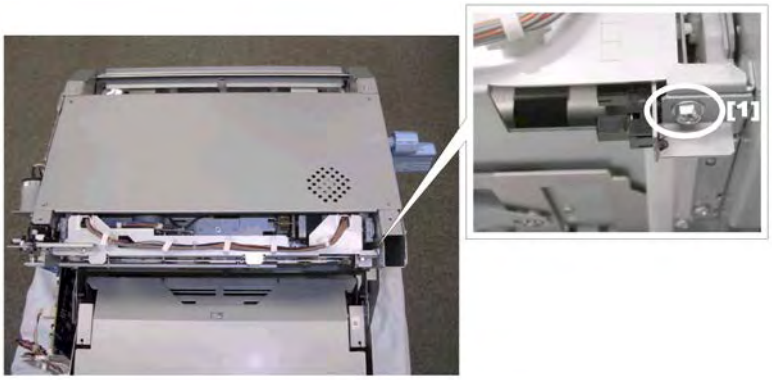


d392r0715e

8. Remove:
   [1] Alignment pin HP sensor (S604) (x1, x1, x3)
   [2] Alignment pin up sensor (S610) (x1, x1, x3)

Shutter HP Sensor (S605)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface.
3. Remove the pre-bind jogger unit bottom cover.



d392r0716a

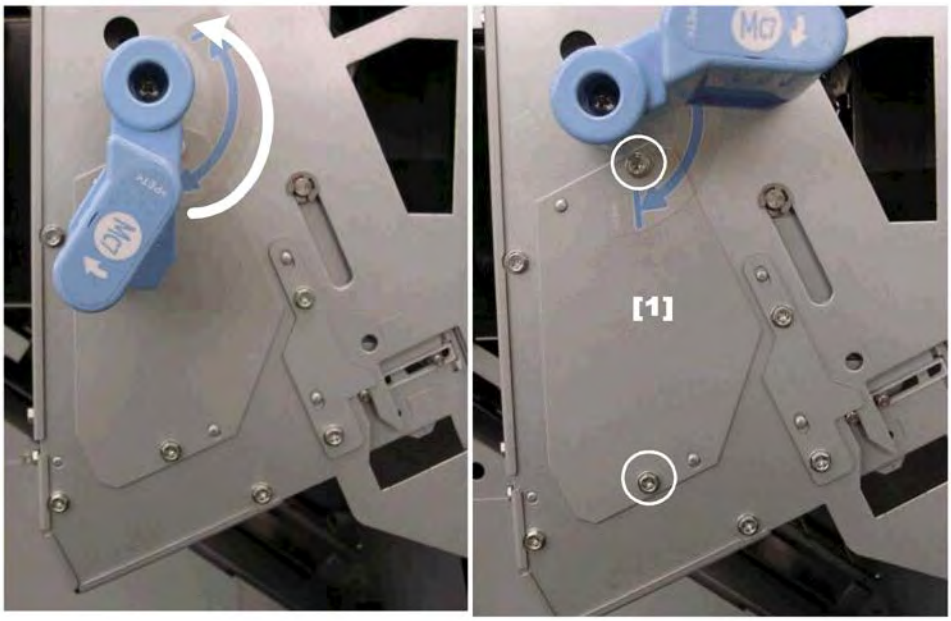
4. Remove the sensor bracket [1] (x1).

d392r0716b

5. Remove the sensor (x3, x1)

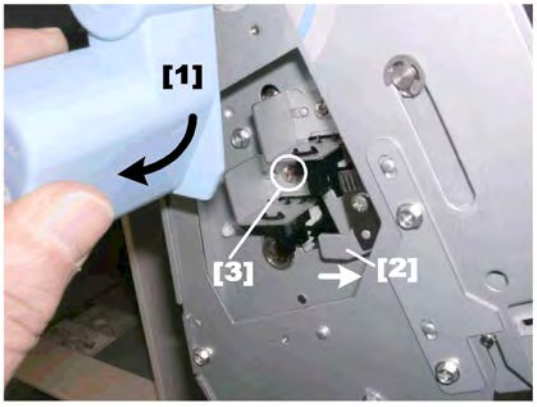
50-Sheet Detection Sensor (S606)

1. Open the right front door.
2. Pull the binder unit out on its rails.



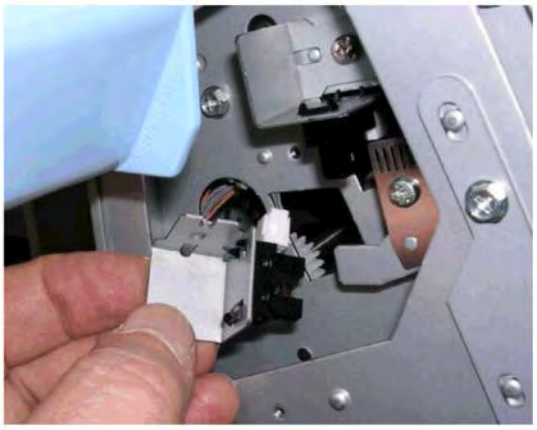
d392r0716c

3. Rotate lock lever **Mc7** so that you can see the screws of the front cover [1].
4. Remove the front cover (x2).



d392r0716d

5. Lower lever **Mc7** [1] to move the actuator [2] away from the sensor.
6. Remove sensor bracket screw [3] (x1).

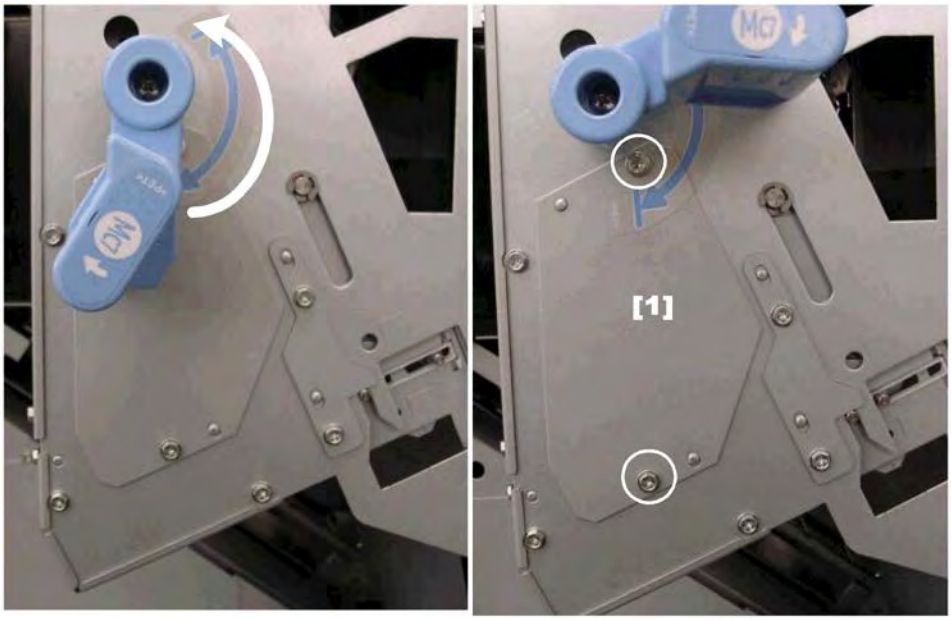


d392r0716e

7. Remove the sensor bracket.
8. Remove the sensor (x3, x1).

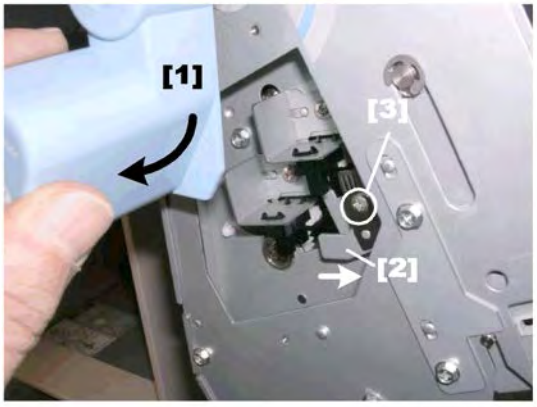
Stack Thickness Sensor (S607)

1. Open the right front door.
2. Pull the binder unit out on its rails.



d392r0716c

3. Rotate lock lever **Mc7** so that you can see the screws of the front cover [1].



d392r0716d

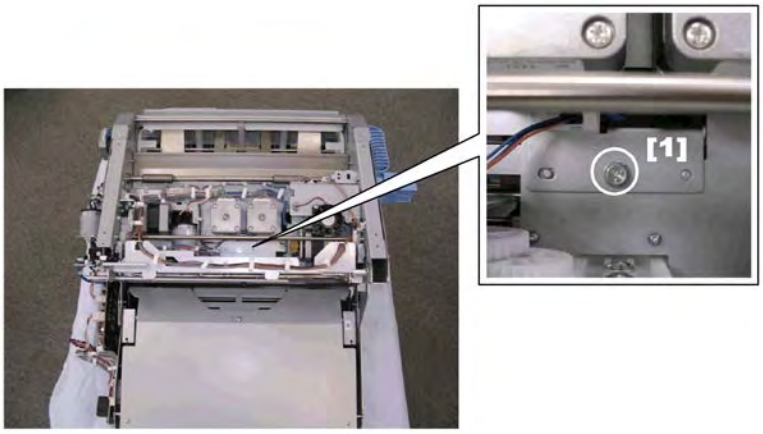
4. Lower lever **Mc7** [1] to move the actuator [2] away from the sensor.
5. Remove sensor bracket screw [3] (x1).

d392r0716f

6. Remove the sensor bracket.
7. Remove the sensor (x3, x1).

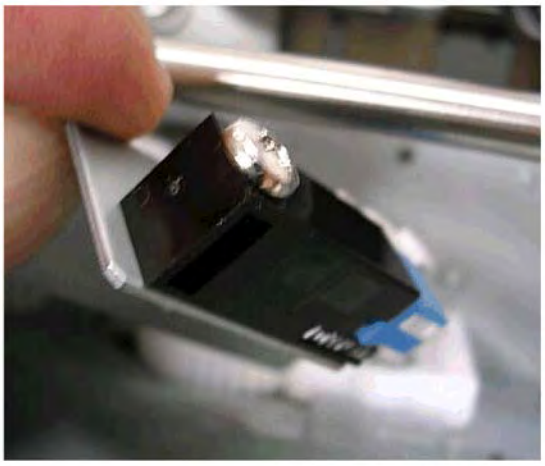
Paper LE Detect Sensor (S609)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the pre-bind jogger left cover. page 10
4. Remove the pre-bind jogger bottom cover. page 10



d392r0717a

5. Remove the sensor bracket [1] (x1).

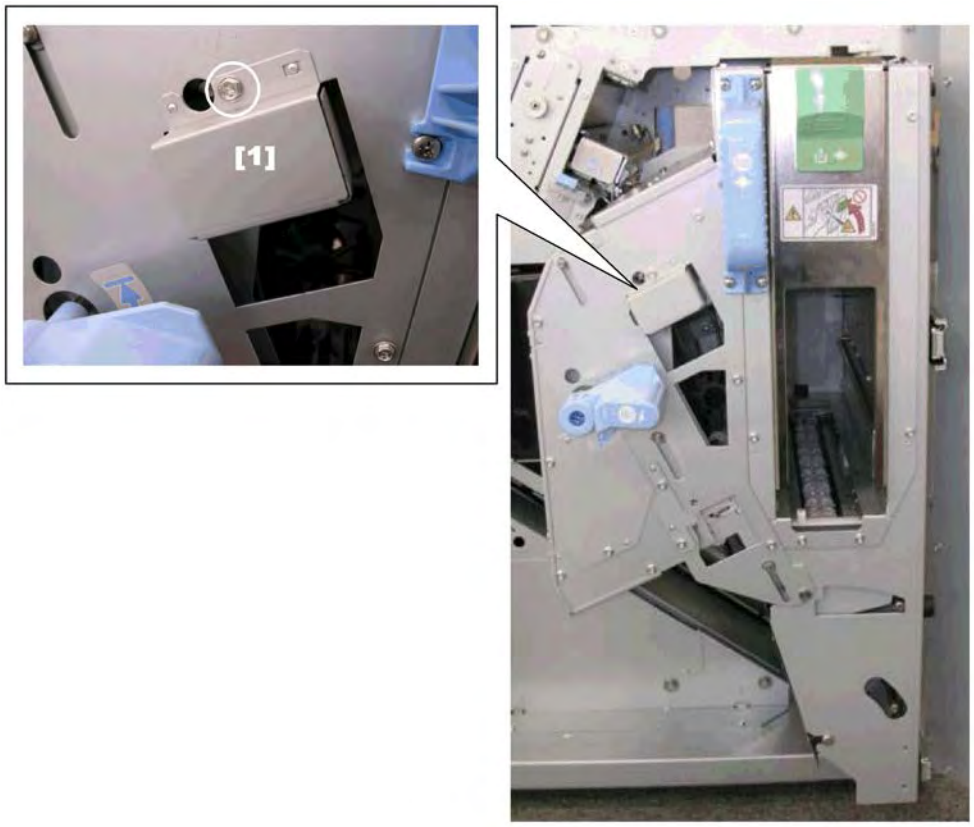


d392r0717b

6. Remove the sensor (x1, x1)

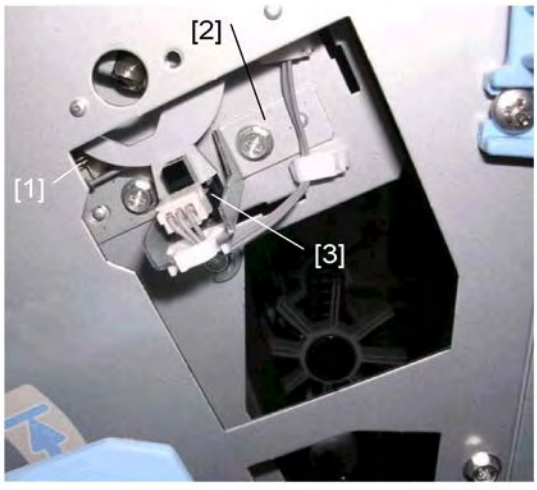
Stack Tamper HP Sensor (S612)

1. Open the right front door.
2. Pull the binder unit out on its rails.



d392r0717c

3. Remove sensor cover [1] (x1).



d392r0717d

4. Remove:

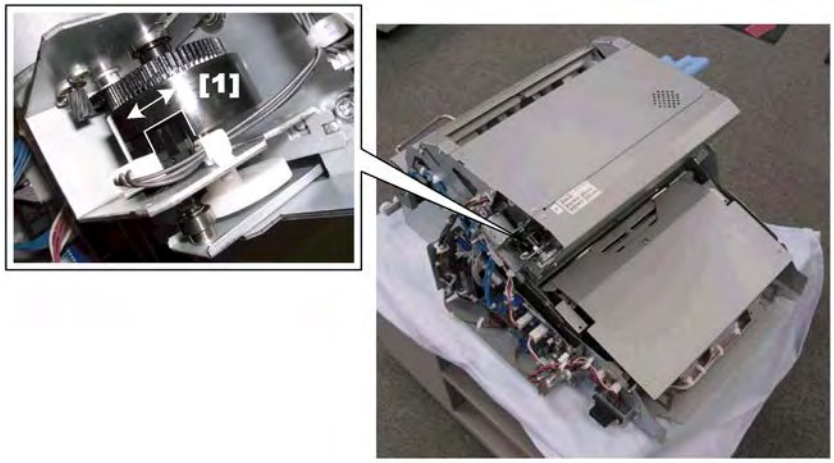
   [1] Spring x1

   [2] Sensor bracket x2

   [3] Sensor (x1, x1, x3)

Shutter HP Sensor (S613)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface.

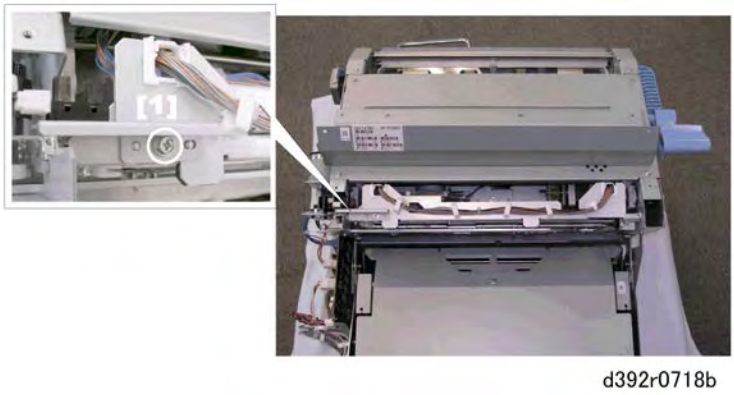


d392r0718a

3. Turn the actuator [1] to the left or right until the cutout is over the sensor.
4. Remove the sensor (x1, x1, x3).

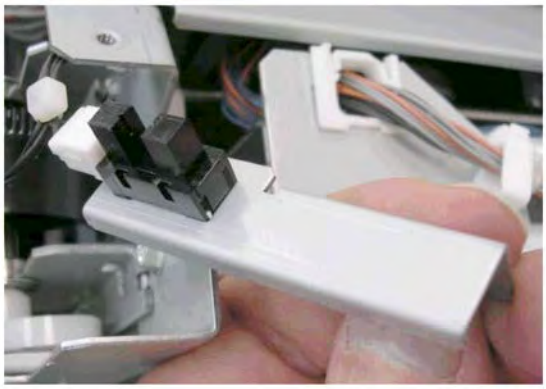
Runout Roller HP Sensor (S614)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface.
3. Remove the pre-bind jogger bottom cover.



d392r0718b

4. Remove the sensor bracket [1] (x1).



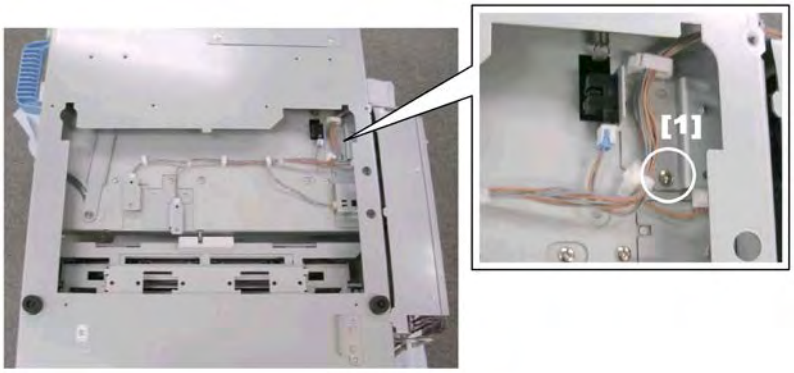
d392r0718c

5. Remove the sensor (x1, x3).

1.2.4 RING SUPPLY UNIT SENSORS

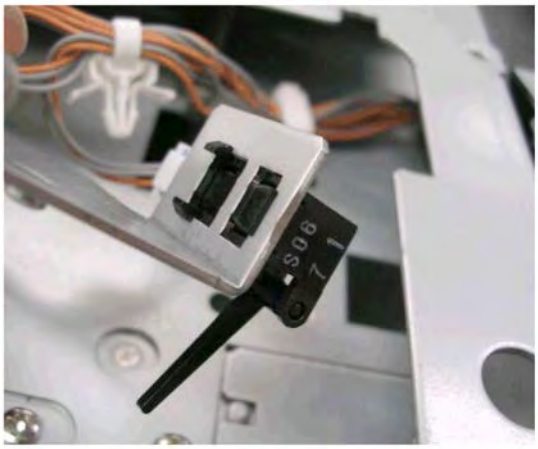
Ring Cartridge Sensor (S801)

1. Open the right front door.
2. Remove the binder unit from its rails. page 6
3. Lay the binder unit on its left side, and remove the ring supply unit right cover. page 12



d392r0719h

4. Remove the sensor bracket [1] (x1, x1).

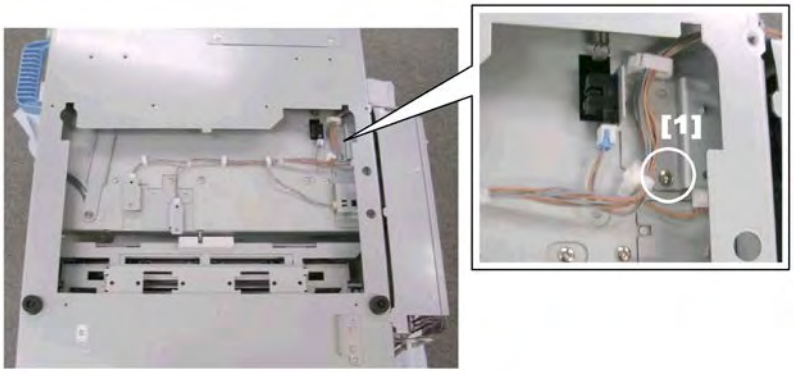


d392r0719j

5. Remove the sensor (x1, x3).

Ring Cartridge Type Sensor (S805)

1. Open the right front door.
2. Remove the binder unit from its rails. page 12
3. Lay the binder unit on its left side, and remove the ring supply unit right cover. page 12



d392r0719h

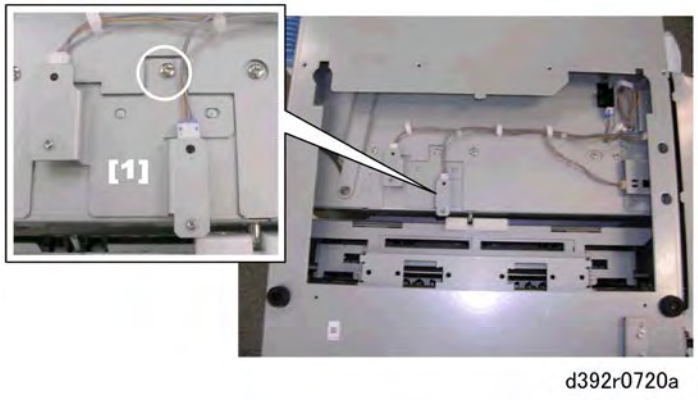
4. Remove the sensor bracket [1] (x1, x1).

d392r0719i

5. Remove the sensor [1] (x1, x, x3).

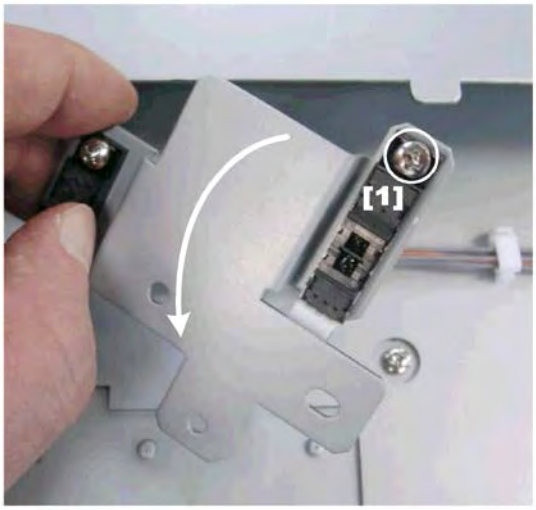
Rings Reversed Sensor (S802)

1. Open the right front door.
2. Remove the binder unit from its rails. page 6
3. Lay the binder unit on its left side, and remove the ring supply unit right cover. page 12



d392r0720a

4. Remove sensor bracket [1] (x1).

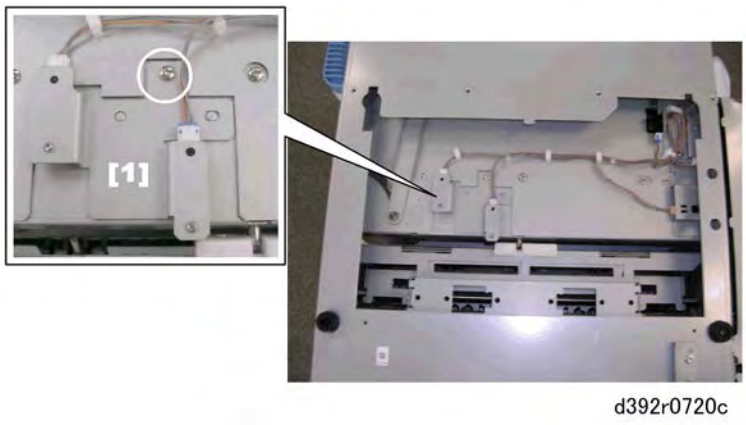


d392r0720b

5. Remove the sensor [1] (x1, x1).

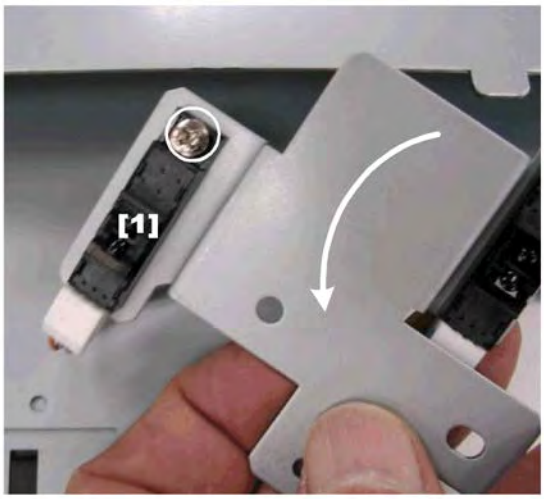
50/100 Ring Detection Sensor (S804)

1. Open the right front door.
2. Remove the binder unit from its rails. page 6
3. Lay the binder unit on its left side, and remove the right cover. page 12



d392r0720c

4. Remove sensor bracket [1] (x1).

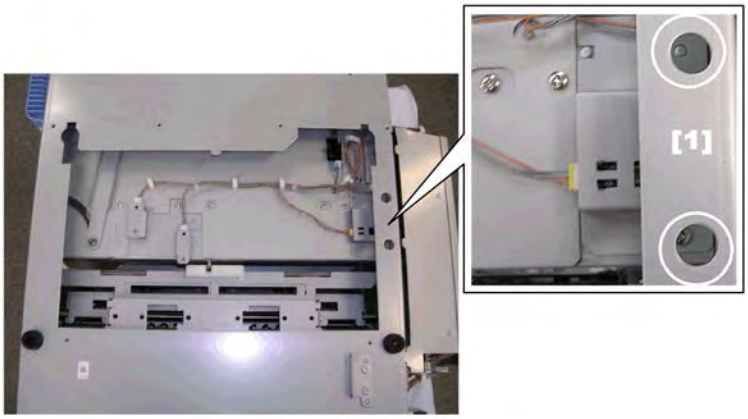


d392r0720d

5. Remove the sensor [1] (x1, x1).

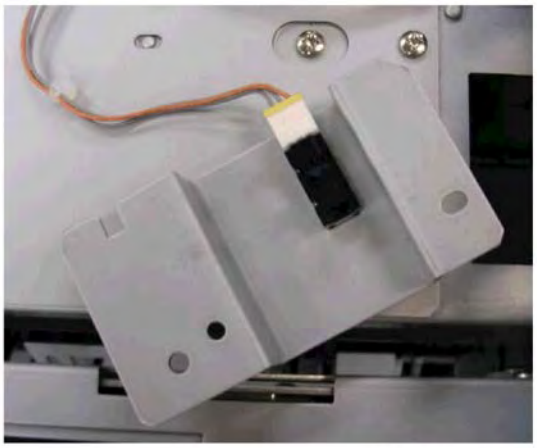
Ring Near-End Sensor (S803)

1. Open the right front door.
2. Remove the binder unit from its rails. page 6
3. Lay the binder unit on its left side and remove the right cover. page 12



d392r0720e

4. Remove the sensor bracket [1] (x2)



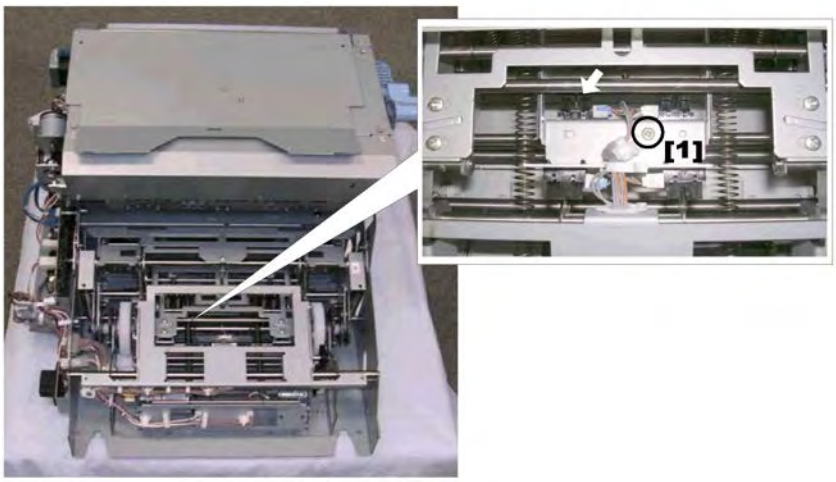
d392r0720f

5. Disconnect the sensor (x1, x3).

1.2.5 CLAMP UNIT SENSORS

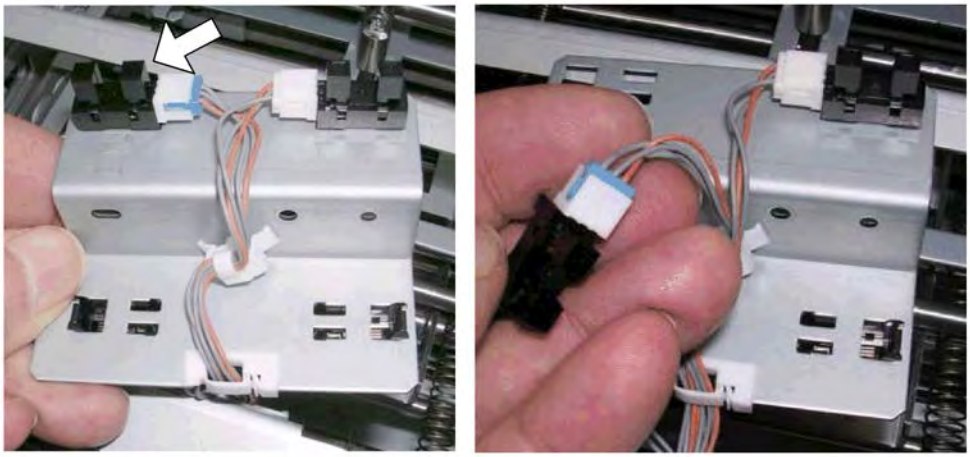
Binder Unit HP Sensor (S701)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the clamp unit cover. page 9



d392r0719a1

4. Remove the sensor bracket [1] (x1).

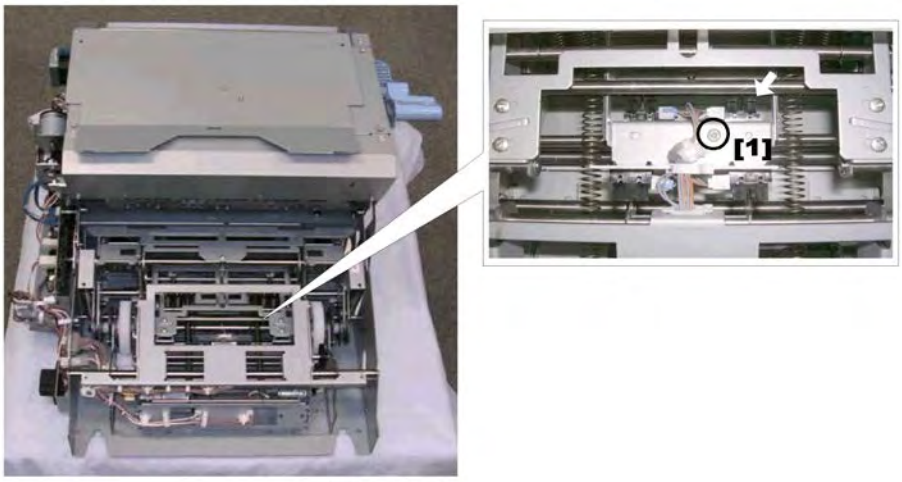


d392r0719b

5. Pull the bracket straight out.
6. Remove the sensor (x1, x3).

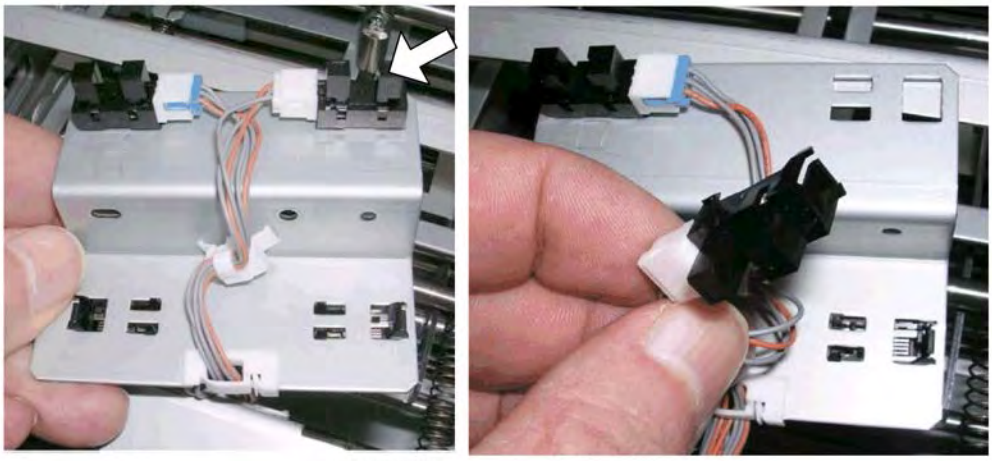
Bind Timing Sensor (S702)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the clamp unit cover. page 9



d392r0719a2

4. Remove the sensor bracket [1] (x1).

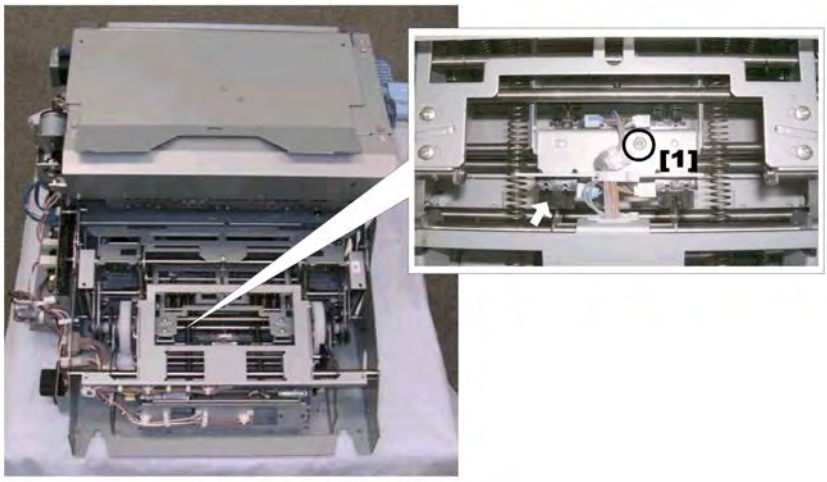


d392r0719d

5. Pull the bracket straight out.
6. Remove the sensor (x1, x3).

Ring Switch HP Sensor (S706)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the clamp unit cover. page 9



d392r0719a3

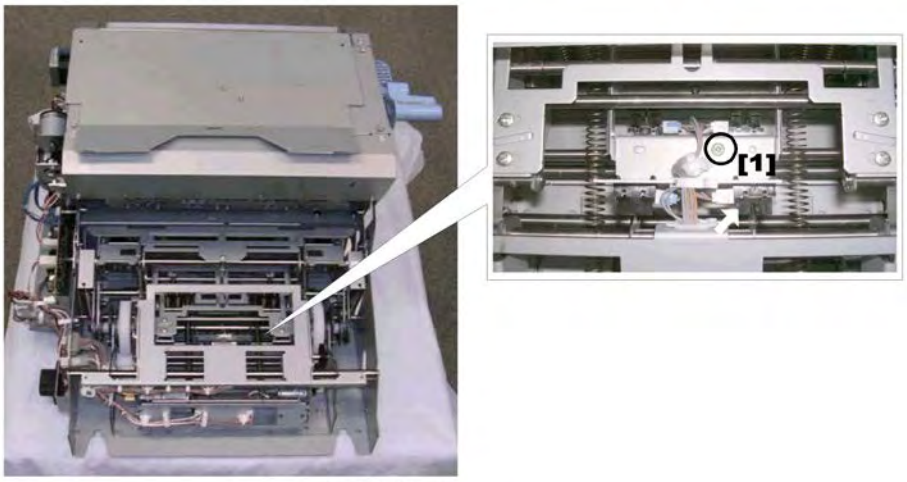
4. Remove the sensor bracket [1] (x1).

d392r0719e

5. Pull the bracket straight out and turn it over.
6. Remove the sensor (x1, x3).

Ring Switch Timing Sensor (S707)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the clamp unit cover. page 9



d392r0719a4

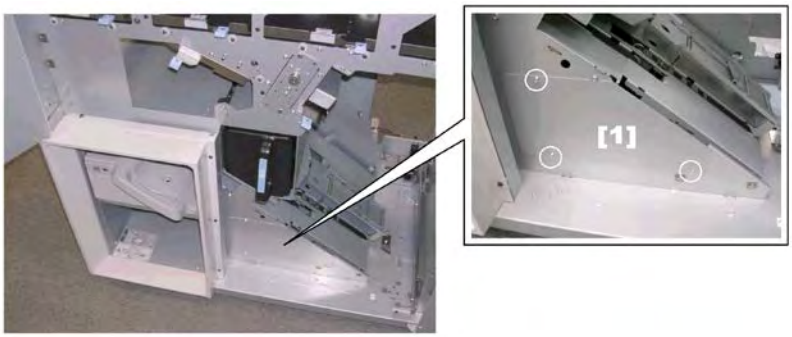
4. Remove the sensor bracket [1] (x1).

d392r0719f

5. Pull the bracket straight out and turn it over.
6. Remove the sensor (x1, x3).

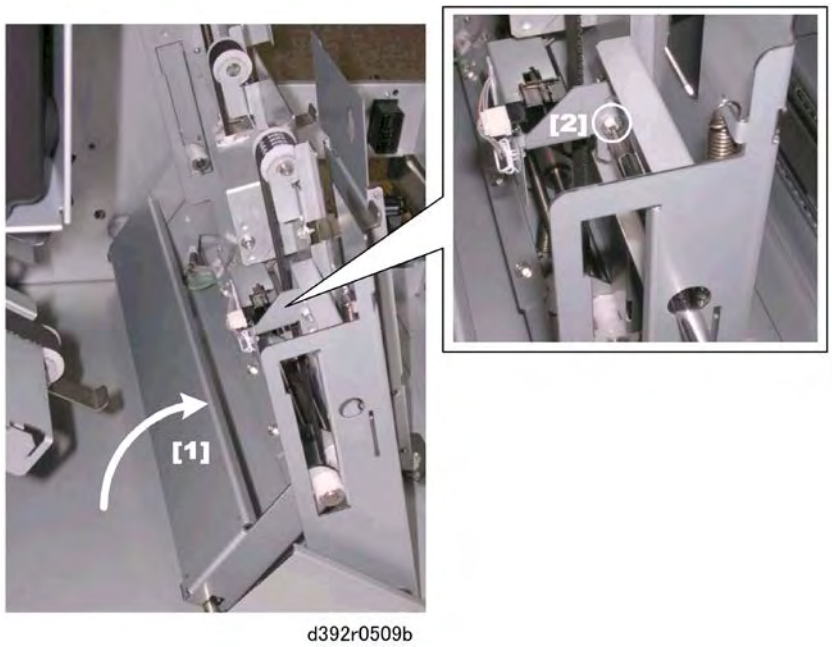
1.2.6 OUTPUT BELT SENSORS

Output Belt 1 HP Sensor (S401)



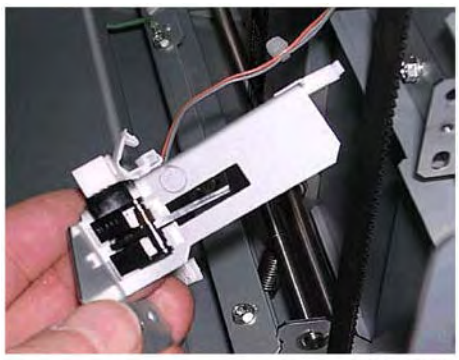
d392r0509a

1. Open the right and left front doors.
2. Remove base cover [1] (x3).



d392r0509b

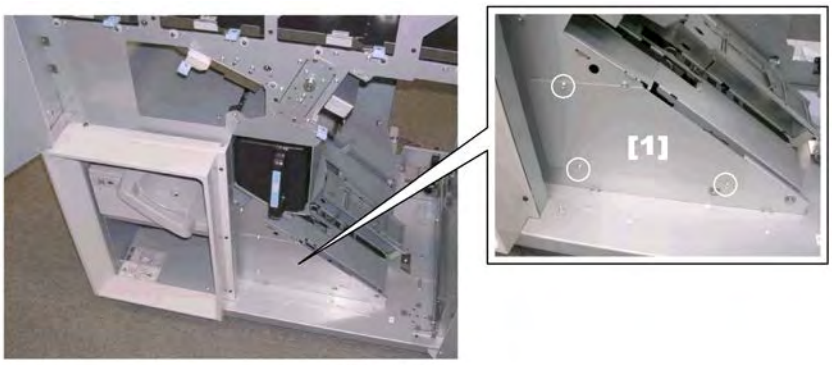
3. Raise output tray 1 [1] until it stops and remains open.
4. Remove the sensor bracket [2] (x1).



d392r0509d

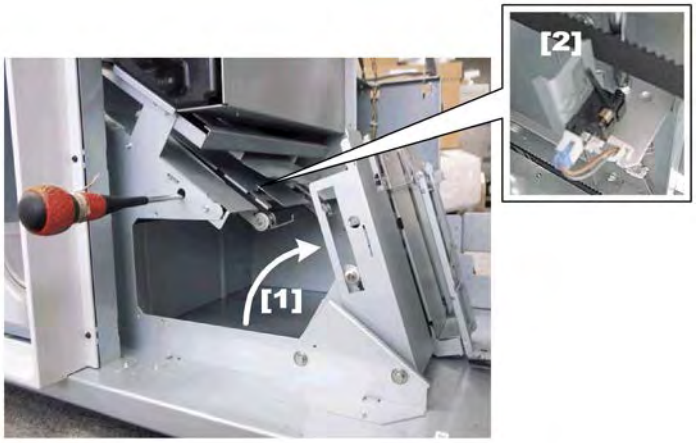
5. Remove the sensor (x1, x1, x3).

Output Belt 2 HP Sensor (S402)



d392r0509a

1. Open the right and left front doors.
2. Remove base cover [1] (x3).



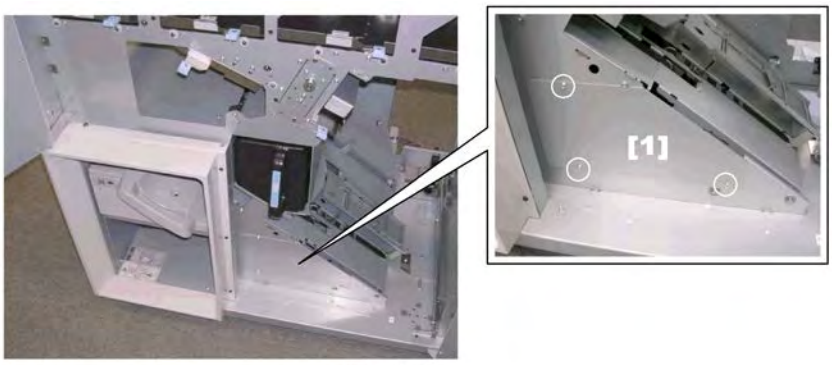
d392r905

3. Raise output tray 1 [1] until it stops and remains open.
4. Remove the sensor bracket [2] (x1).

d392r0509f

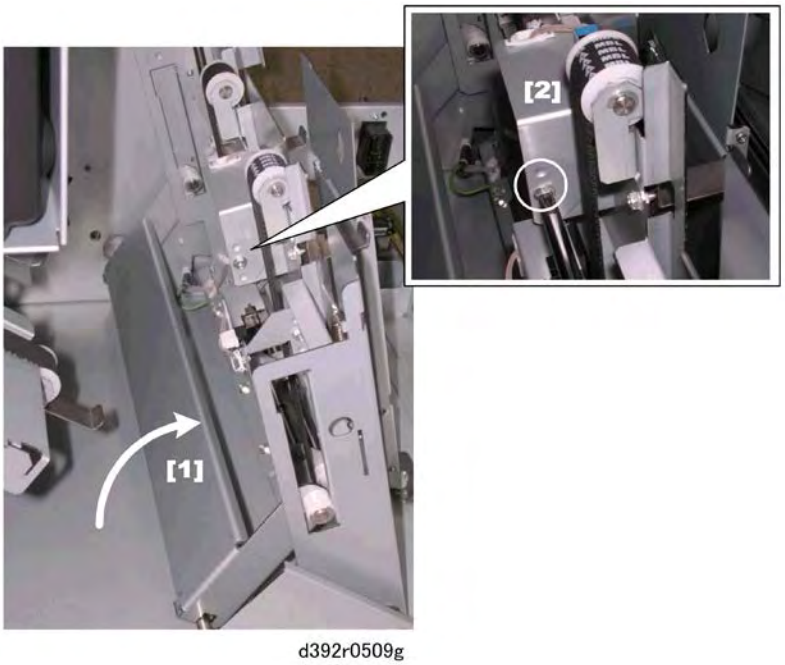
5. Remove the sensor (x1, x1, x3).

Output Belt Unit Entrance Sensor (S404)



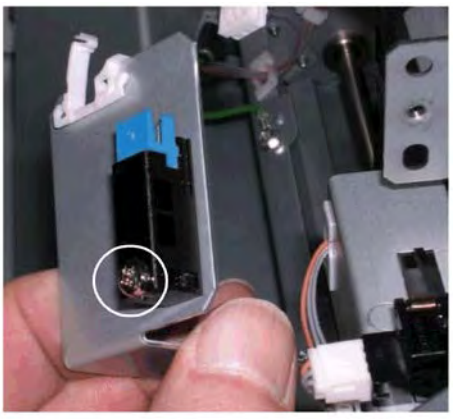
d392r0509a

1. Open the right and left front doors.
2. Remove base cover [1] (x3).



d392r0509g

3. Raise output tray 1 [1] until it stops and remains open.
4. Remove the sensor bracket [2] (x1).



d392r0509h

5. Remove the sensor (x1, x1, x1).

Output Belt Rotation HP Sensor (S403)

d392r0511a

1. Remove the rear cover.
2. At the front, remove the stacker cover [1].

Important

- The screw at [2] has a washer. Do not lose the washer. Be sure to reinstall the screw with the washer at this corner.

d392r0511b

3. Spin the timing belt of the tray lift motor to lower the tray. (This may take about 1 minute.)

d392r0511c

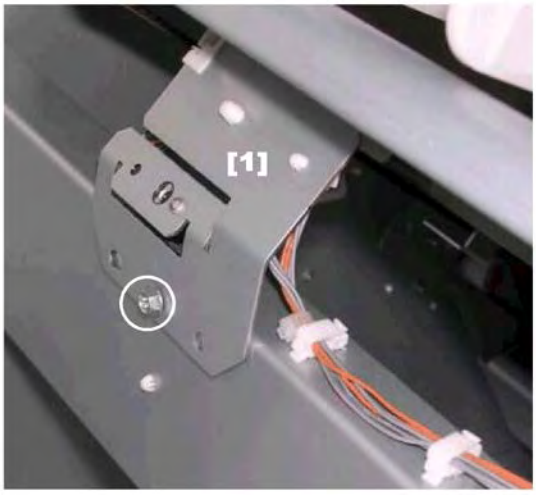
4. Remove the screws of the panel [1] (x4).

d392r0511d

5. At the back of the finisher, remove the panel rear screw (x1).

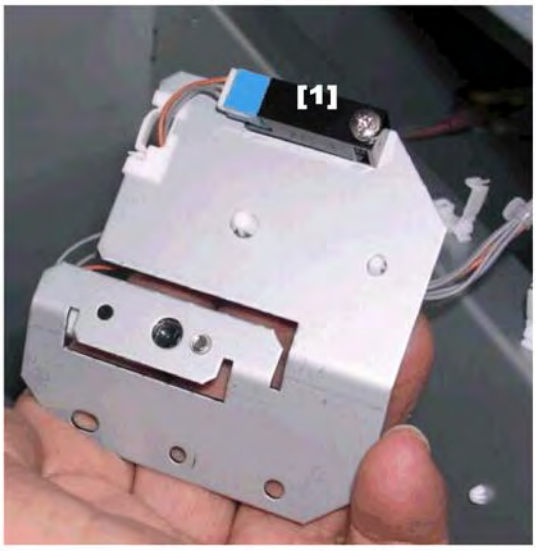
d392r0511e

6. Remove the panel.



d392r0511f

7. Remove the sensor bracket [1] (x1).

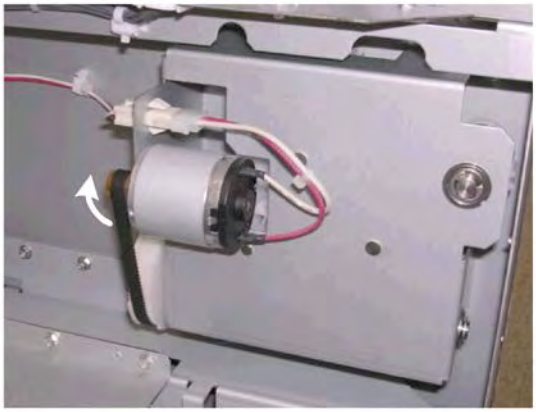


d392r0511g

8. Remove the sensor (x1, x1, x1).

1.2.7 STACKER UNIT SENSORS

Obstacle Detection Switch (S506)

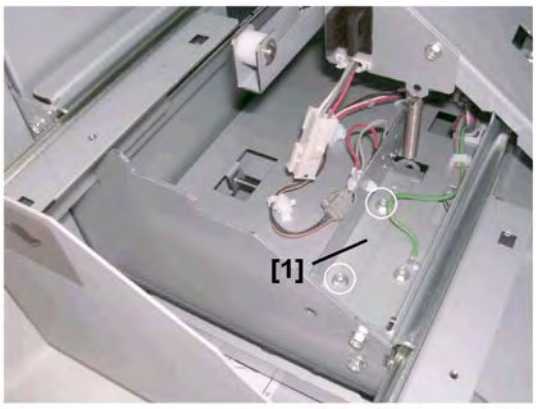


d392r0512a

1. Remove the rear cover.
2. Spin the timing belt of the tray lift motor to lower the tray. (This may take about 1 minute.)

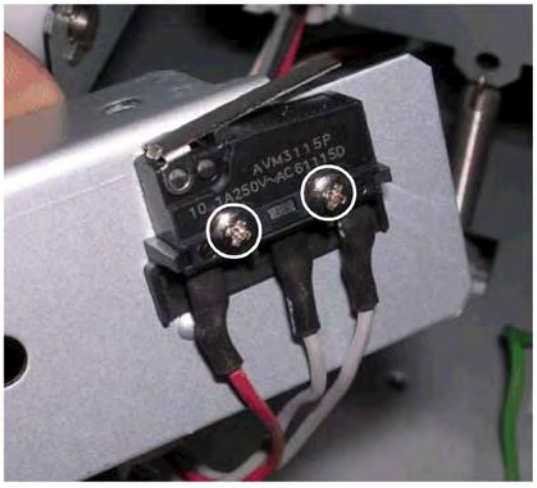
d392r0512b

3. Remove the cover (x2).



d392r0512c1

4. Remove the sensor bracket [1] (x2).

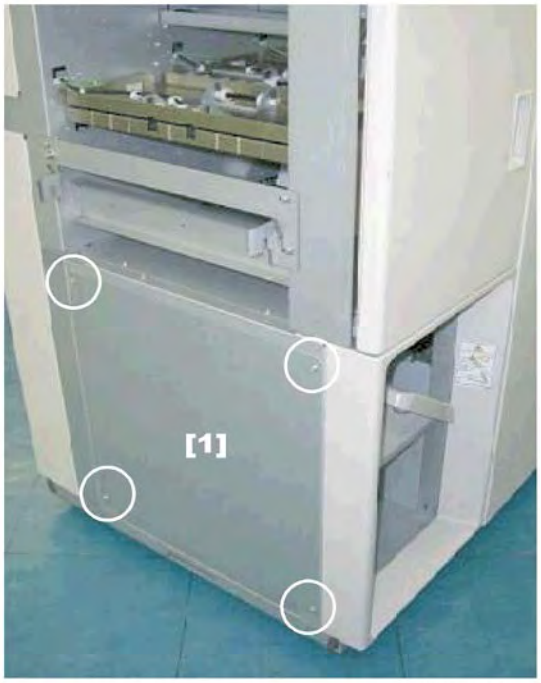


d392r0512d

5. Remove the micro-switch (Standoff x1, x1, x2).

Book Position Sensor Pair (S507E/S507R)

Book Position Sensor (S507E)



d392r0508a

1. Remove panel [1] from the left side of the finisher (x4).

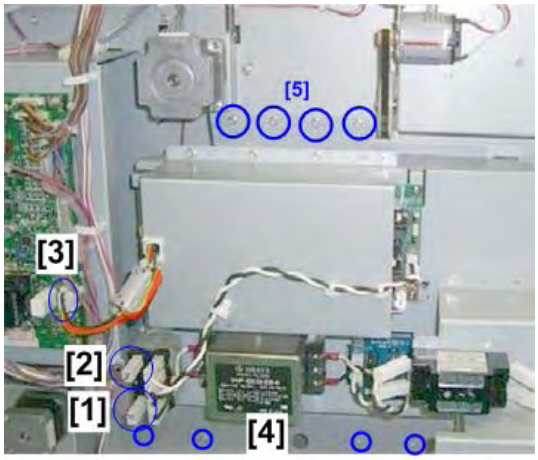
d392r0508e

2. Remove the sensor bracket [1] (x1).

d398r0508f

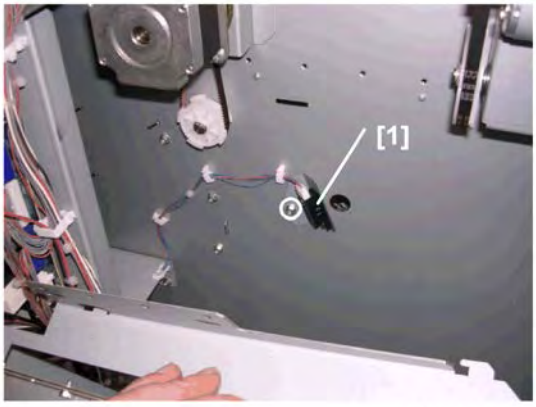
3. Remove the sensor (x1, x1)

Book Position Sensor (S507R)



d392r0510a

1. Remove the rear cover.
2. Remove:
   [1] Red connector (x1)
   [2] Black connector (x1)
   [3] Red, black connector (x1)
   [4] Lower screws (x4)
   [5] Upper screws (x4)



d392r0510b

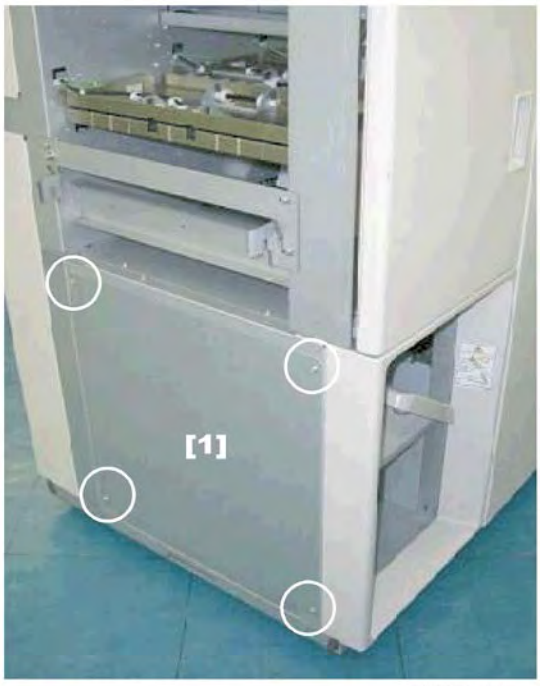
3. Remove the sensor bracket (x1).

d392r0510c

4. Remove the sensor (x1, x1).

Stack Height Sensor Pair (S052E/S502R)

Stack Height Sensor (S502E)



d392r0508a

1. Remove panel [1] from the left side of the finisher (x4).

d392r0508b

2. Remove the sensor [1] (x1, x1).

Stack Height Sensor (S502R)

d392r0511a

1. Remove the rear cover.
2. At the front, remove the stacker cover [1].

Important

- The screw at [2] has a washer. Do not lose the washer. Be sure to reinstall the screw with the washer at this corner.

d392r0511b

3. Spin the timing belt of the tray lift motor to lower the tray. (This may take about 1 minute.)

d392r0511c

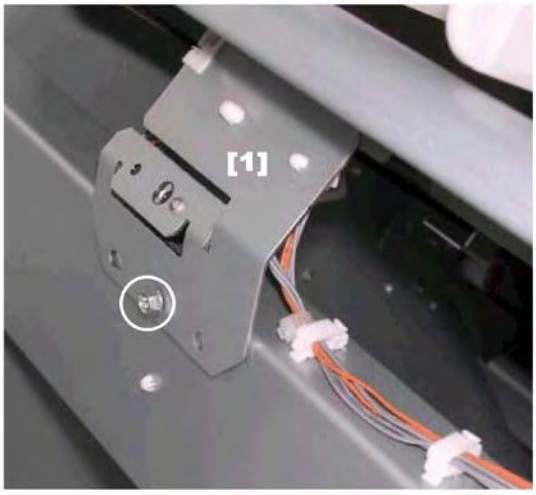
4. Remove the screws of the panel [1] (x4).

d392r0511d

5. At the back of the finisher, remove the panel rear screw (x1).

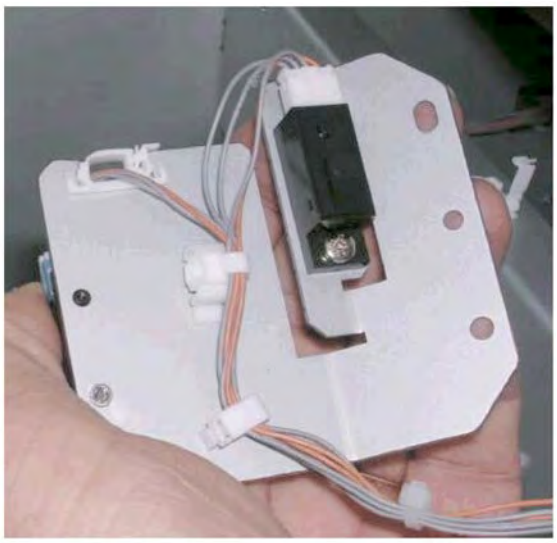
d392r0511e

6. Remove the panel.



d392r0511f

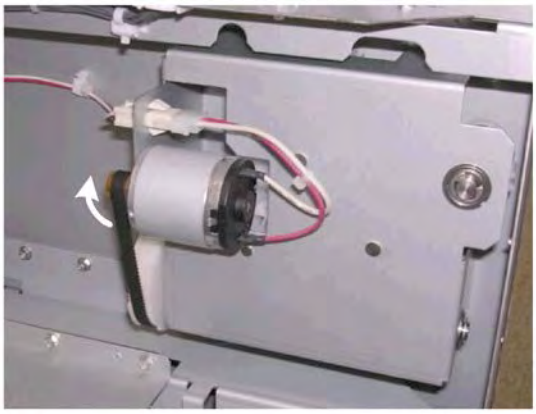
7. Remove the sensor bracket [1] (x1).



d392r0511h

8. Remove the sensor (x1, x1, x1).

Stacker Detect Sensor (S504)



d392r0512a

1. Remove the rear cover.
2. Spin the timing belt of the tray lift motor to lower the tray. (This may take about 1 minute.)

d392r0512b

3. Remove the cover (x2).

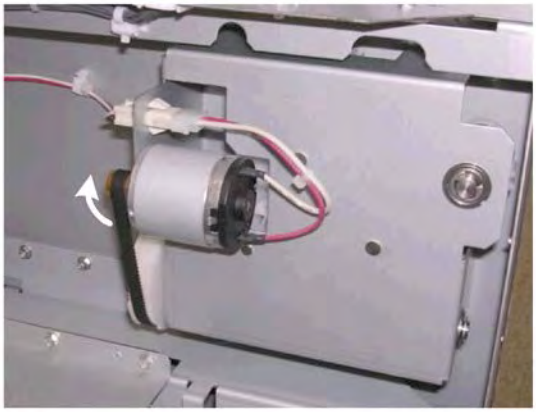
d392r0512c2

4. Remove the sensor bracket [1] (x2).

d392r0512e

5. Remove the sensor (x, x1).

Tray Detection Sensor (S505)

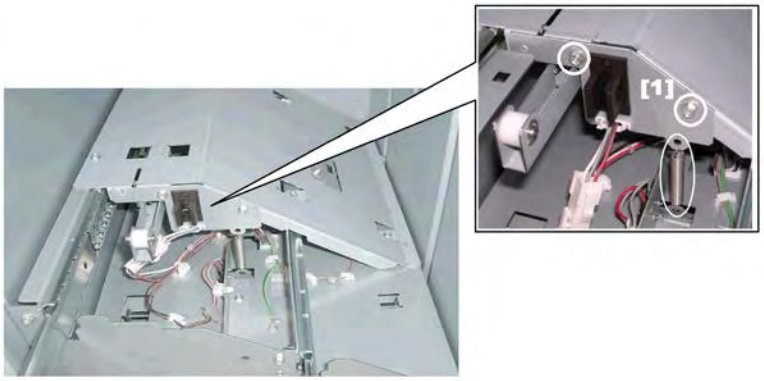


d392r0512a

1. Remove the rear cover.
2. Spin the timing belt of the tray lift motor to lower the tray. (This may take about 1 minute.)

d392r0512b

3. Remove the cover (x2).



d392r0512c3

4. Remove the sensor bracket [1] (x2, Spring x).

d392r0512f

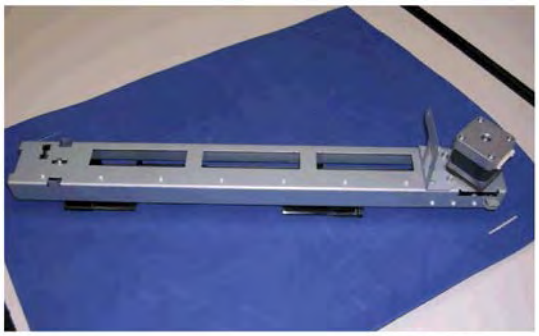
5. Remove the sensor (x1, x1).

1.3 MOTORS

1.3.1 PRE-PUNCH JOG UNIT MOTOR

Side Jogger Motor (M302)

1. Remove the rear cover.
2. Remove the pre-punch jogger unit. page 16

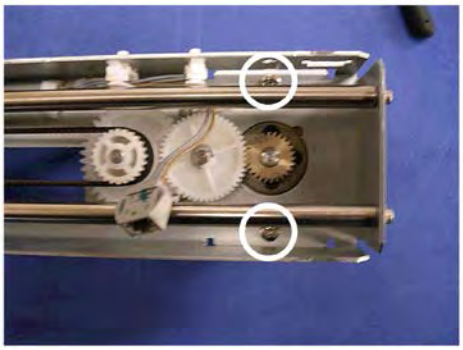


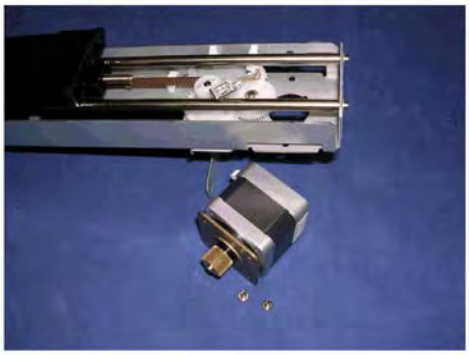
d392r0306a

3. Set the pre-punch jogger unit on a flat surface.

d392r0306b

4. Turn the pre-punch jog unit over.





d392r0306c

5. Remove the motor (x1, x1, x2).

Reinstallation

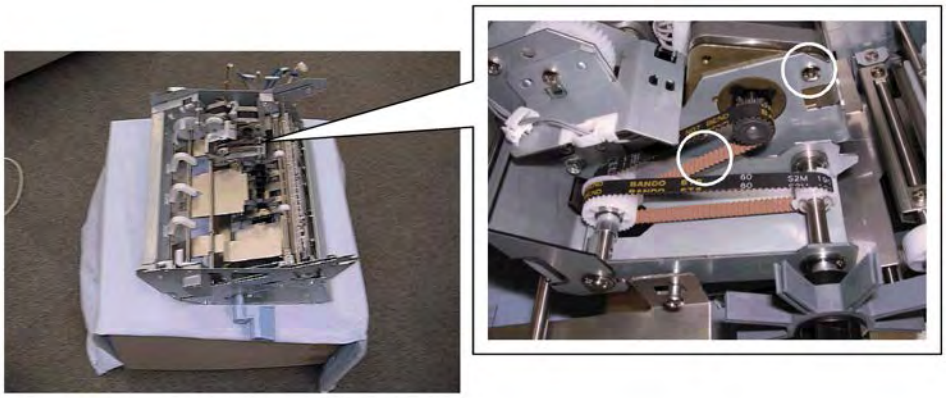
d392r0306e

1. Reattach the motor as shown above, so that the motor connector [1] is positioned properly.

1.3.2 PRE-BIND JOGGER MOTORS

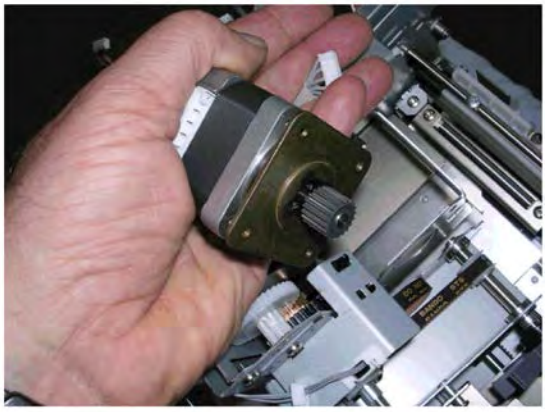
Paddle Roller Motor (M601)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Separate the pre-bind jogger unit from the binder unit. page 13



d392r0721a

4. Turn the pre-bind jogger unit onto its left side.
5. Disconnect the motor (x2, x1).

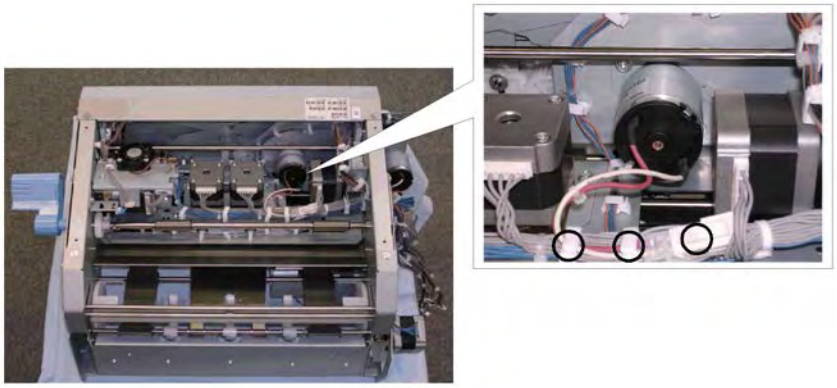


d392r0721b

6. Remove the motor (x1).

Alignment Pin Motor (M602)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the pre-bind jogger left cover. page 10



d392r0721c

4. Disconnect the motor (x2, x1).

d392r0721d

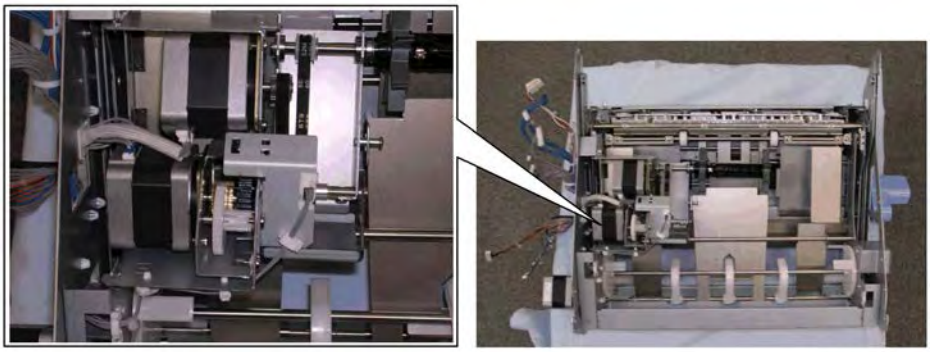
5. Remove the motor bracket and motor (x2).

d392r0721e

6. Remove the motor bracket (x2).

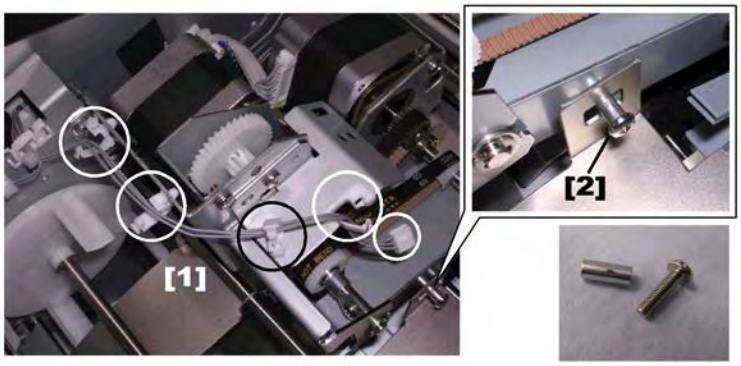
Paddle Roller Lift Motor (M603)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Separate the pre-bind jogger from the binder unit. page 13



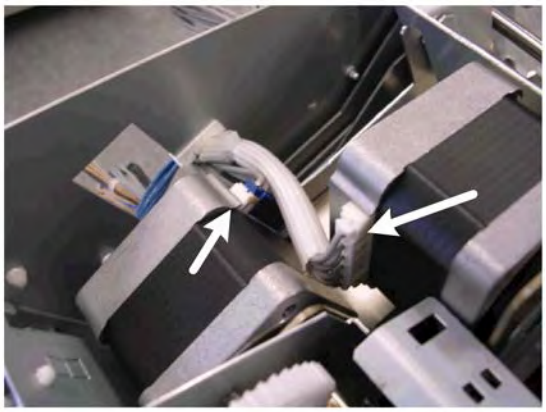
d392r0722a

4. Lay the jogger unit on its left side.



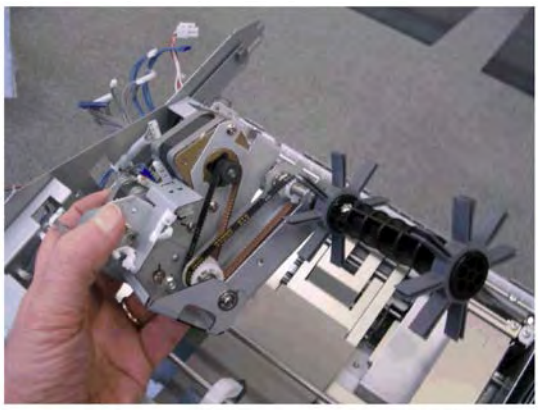
d392r0722b

5. Disconnect the sensor and open the harness clamps [1] (x4, x1).
6. Remove the screw and sleeve [2] (x1).



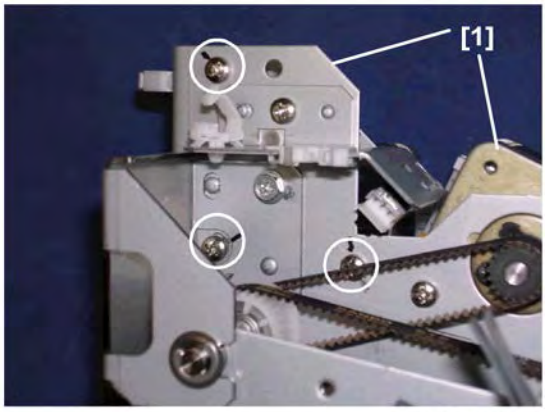
d392r0722c

7. Disconnect both motors (x2).



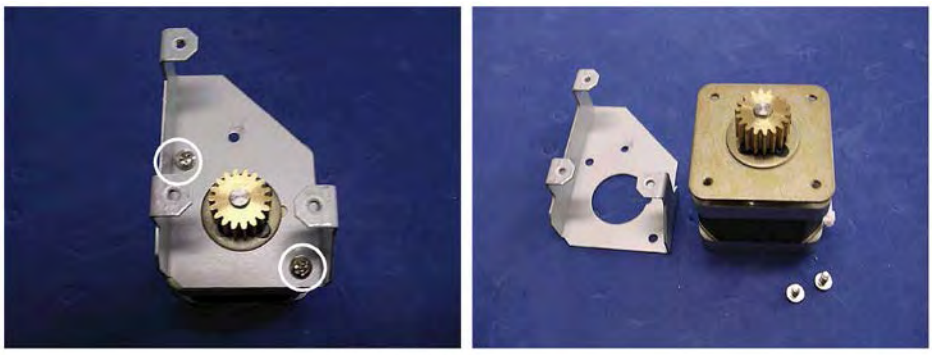
d392r0722d

8. Remove the paddle roller lift assembly.



d392r0722e

9. Disconnect the motor and bracket [1] and remove them from the paddle roller lift assembly (x3).

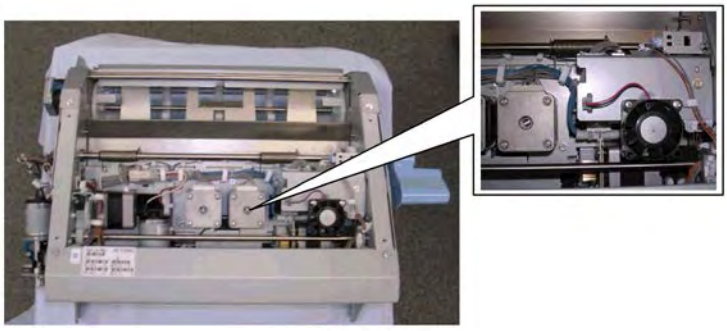


d392r0722f

10. Remove the motor from the bracket (x2).

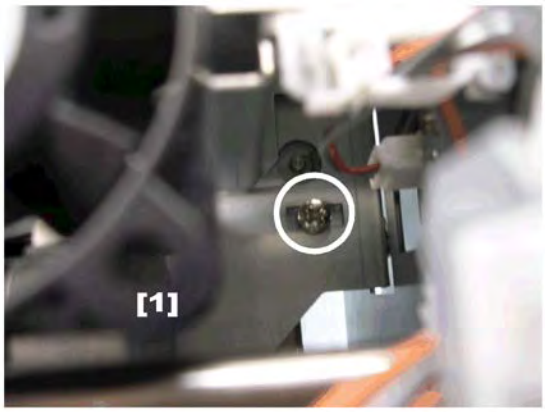
Side Fence 1 Motor (M604)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



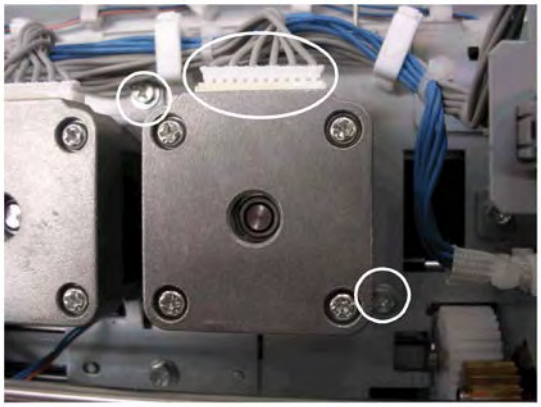
d392r0723a

3. Remove the pre-bind jogger left cover.



d392r0723c

4. Below the left corner of the fan [1], loosen (Do not remove!) the screw to release tension on the timing belt.

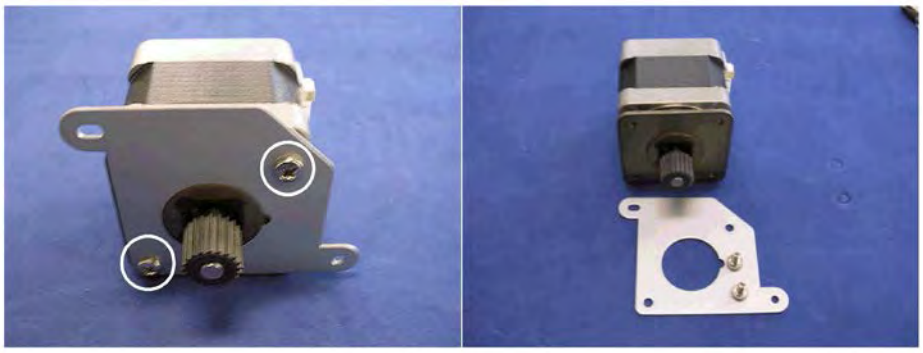


d392r0723b

5. Disconnect the motor and remove the screws (x1, x2).

d392r0723d

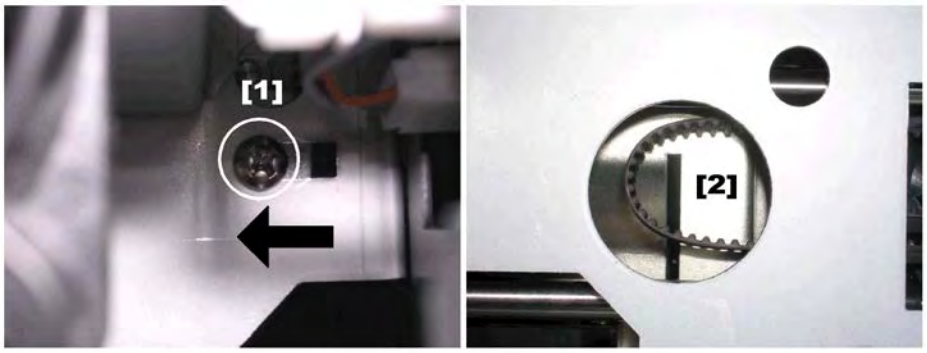
6. Remove the motor.



d392r0723e

7. Separate the bracket and the motor (x2).

Re-installation

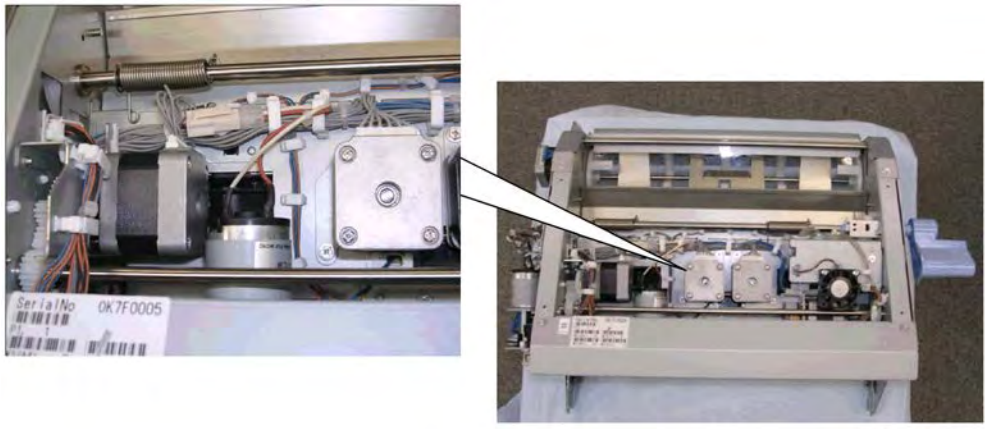


d392r0723f

1. Make sure the tension screw [1] is completely to the left, then tighten it.
   This provides maximum exposure of the belt [2] below the hole, and prevents it from moving when the motor is re-installed.
2. Reinstall the motor (x1, x2).
3. Loosen the tension screw, push it to the right to apply tension to the belt, then re-tighten the screw.

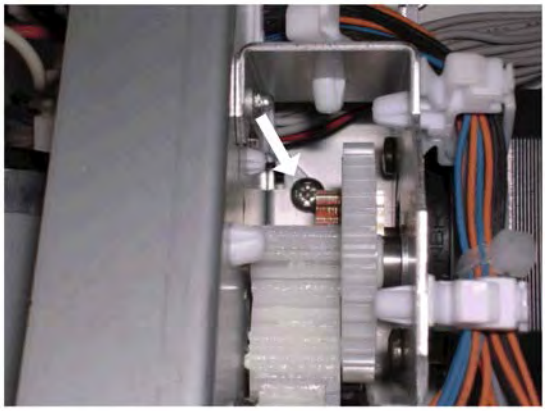
Side Fence 2 Motor (M606)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



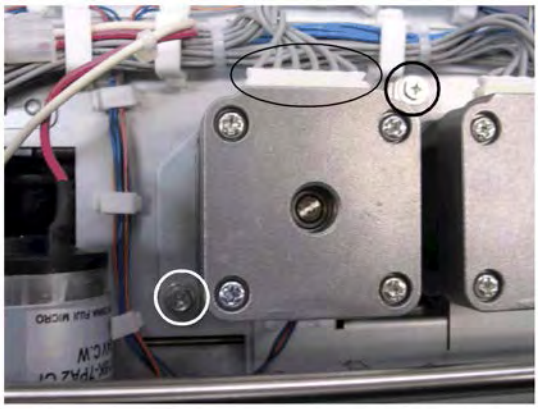
d392r0723g

3. Remove the pre-bind jogger left cover.



d392r0723i

4. Behind the white gears, loosen (Do not remove!) the screw to release tension on the timing belt.



d392r0723h

5. Disconnect the motor and remove the screws (x1, x2).

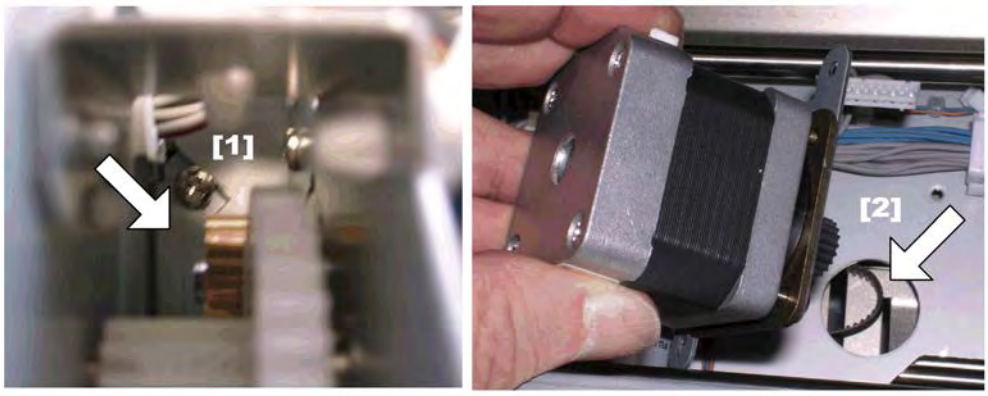
d392r0723j

6. Remove the motor.

d392r0723k

7. Separate the bracket and the motor (x2).

Re-installation

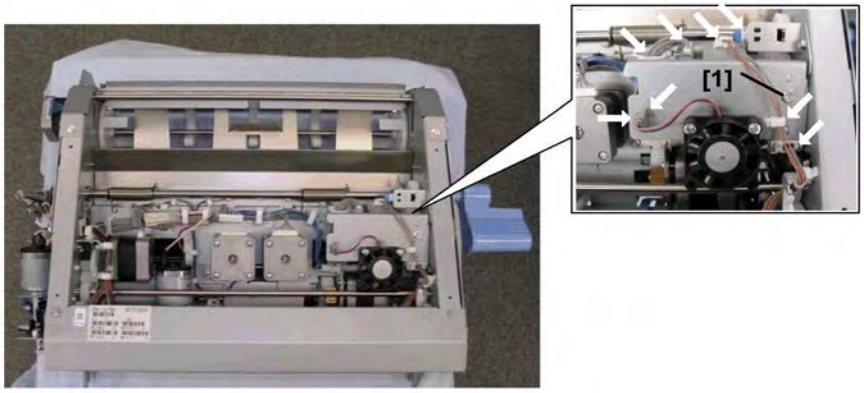


d392r0723l

1. Make sure the tension screw [1] is completely to the down, then tighten it.
   This provides maximum exposure of the belt [2] below the hole, and prevents it from moving when the motor is re-installed.
2. Reinstall the motor (x1, x2).
3. Loosen the tension screw, push it up to apply tension to the belt, then re-tighten the screw.

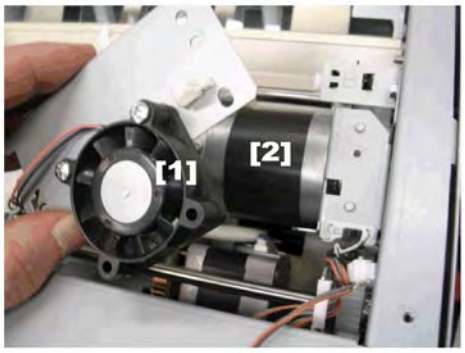
Spine Clamp Motor (M605)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6
3. Remove the pre-bind jogger left cover. page 10



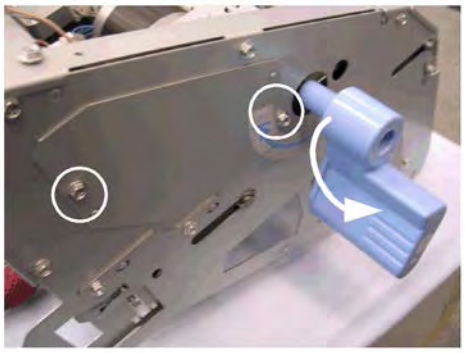
d392r0724a

4. Remove the connectors and harness clamps (x2, x6).
5. Remove screw [1] (x1).



d392r0724b

6. Remove the motor and bracket [1] to expose the motor [2].

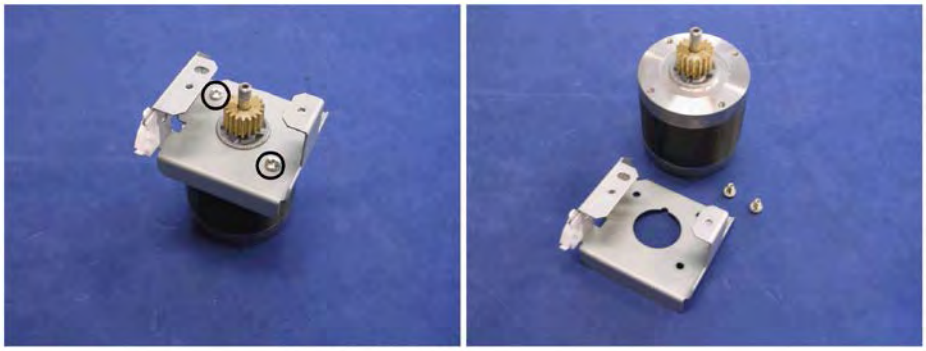


d392r0724c

7. Turn lever **Mc7** to expose the front cover.
8. Remove the front cover (x2).

d392r0724d

9. Remove the screws [1] and remove the motor bracket [2] (x2).

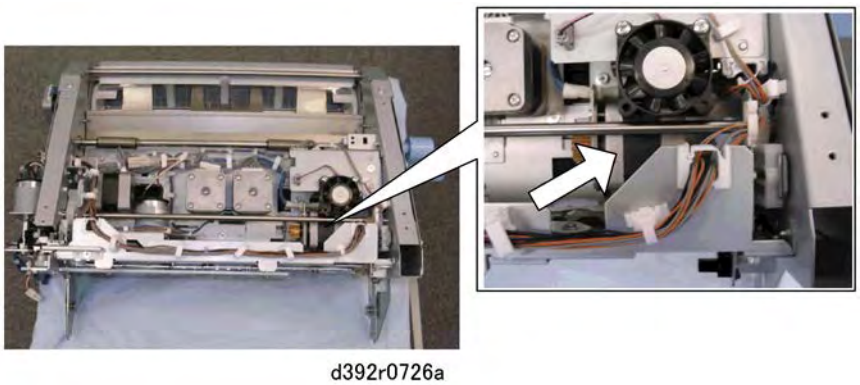


d392r0724e

10. Separate the bracket and the motor (x2).

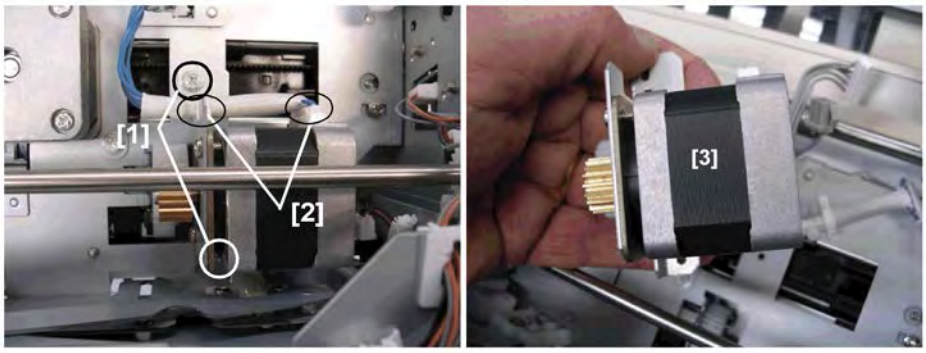
Runout Roller Motor (M609)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



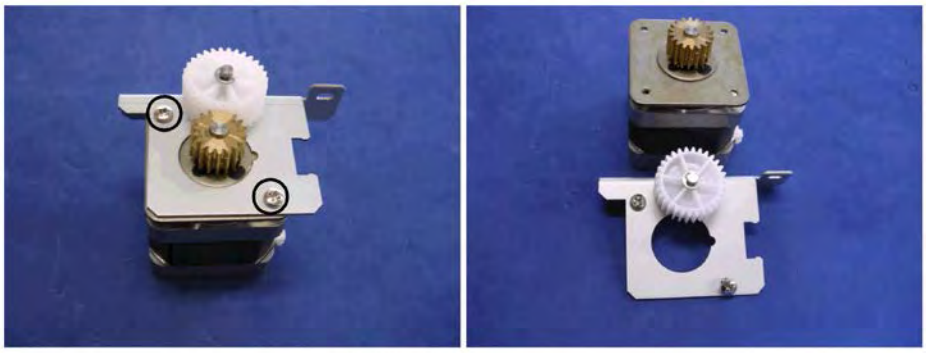
d392r0726a

3. Remove the pre-bind jogger left cover. page 10
4. Remove the pre-bind jogger bottom cover. page 10
5. Remove the spine clamp motor (M605).



d392r0726b

6. Disconnect:
   [1] Motor bracket (x2)
   [2] Motor (x1, x1)
7. Remove the motor bracket with the motor [3].

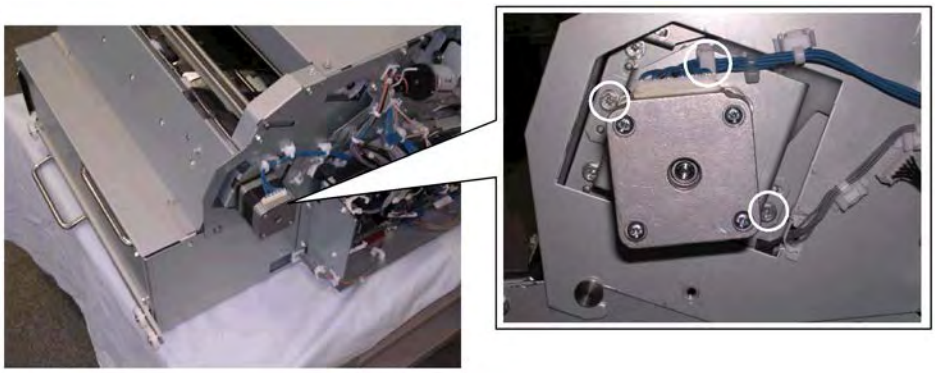


d392r0726c

8. Separate the bracket and the motor (x2).

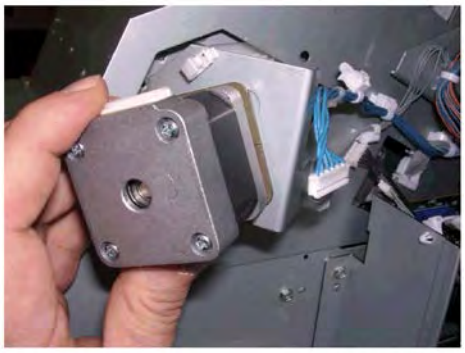
Stack Tamper Motor (M607)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



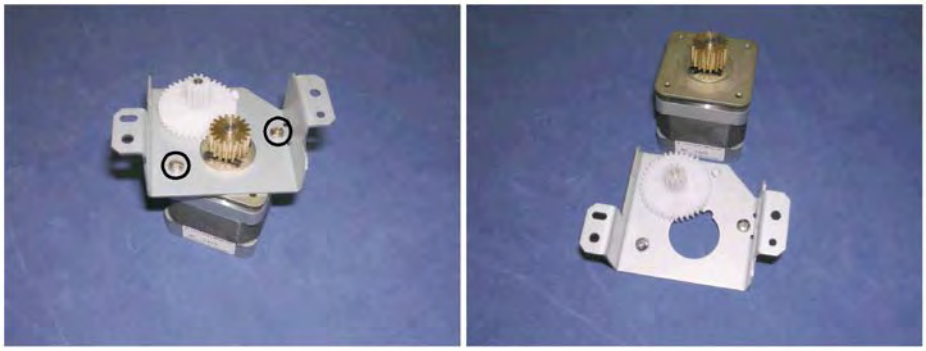
d392r0724f

3. Disconnect the motor bracket (x2, x1, and x1).



d392r0724g

4. Remove the motor bracket.

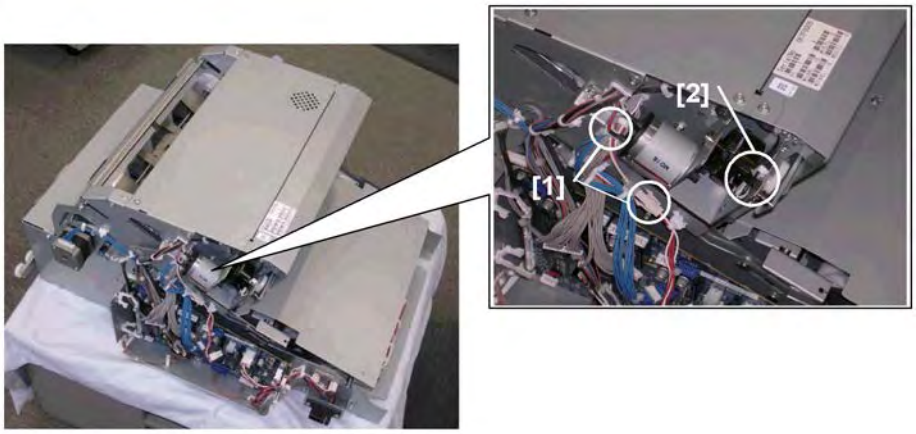


d392r0724h

5. Separate the bracket and the motor (x2).

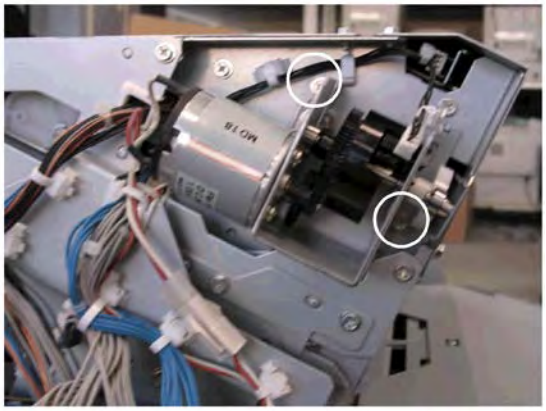
Shutter Motor (M608)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



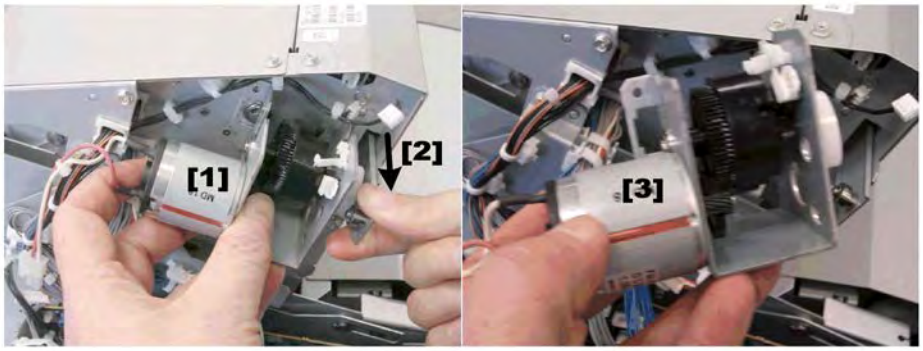
d392r0725a

3. Disconnect:
   [1] Motor [1] (x1, x1)
   [2] Sensor [2] (x1, x1)



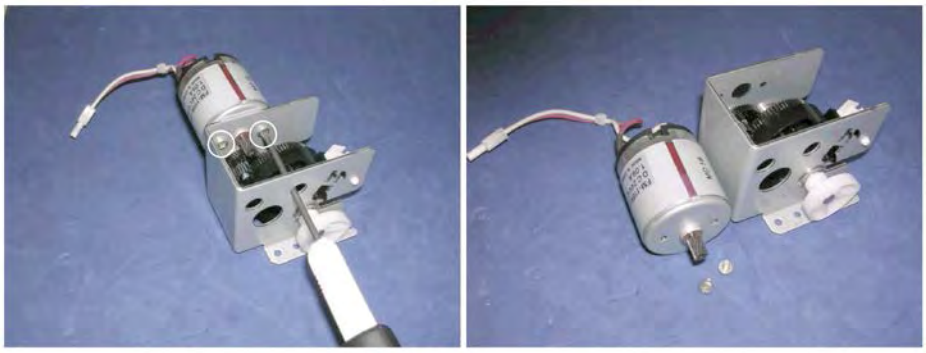
d392r0725b

4. Disconnect the motor bracket (x2).



d392r0725c

5. While holding the motor [1] on the left, pull out the spring-loaded cam follower [2] then remove the bracket [3] with the motor.

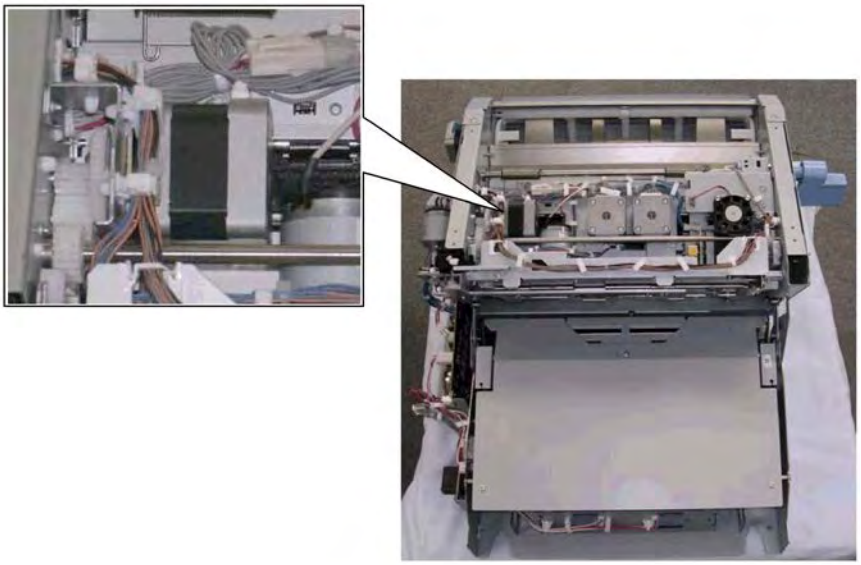


d392r925d

6. Separate the bracket and the motor (x2).

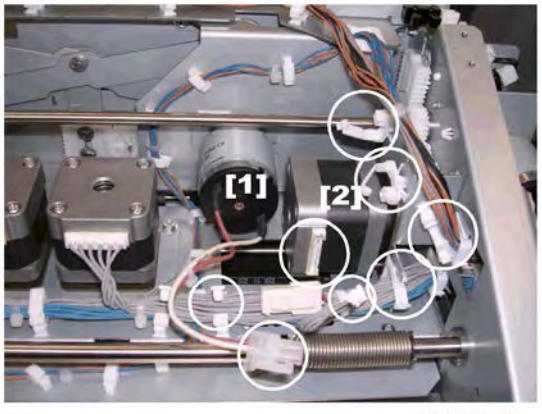
Runout Press Roller Motor (M610)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



d392r0727a

3. Remove the pre-bind jogger left cover.

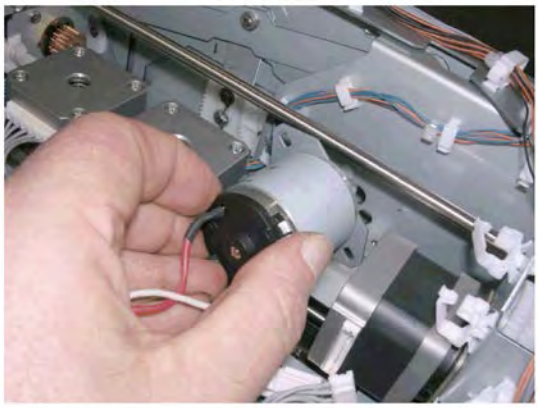


d392r0727b

4. Disconnect the pin alignment motor [1], and the runout press roller motor [2] (x2, x5, x1).

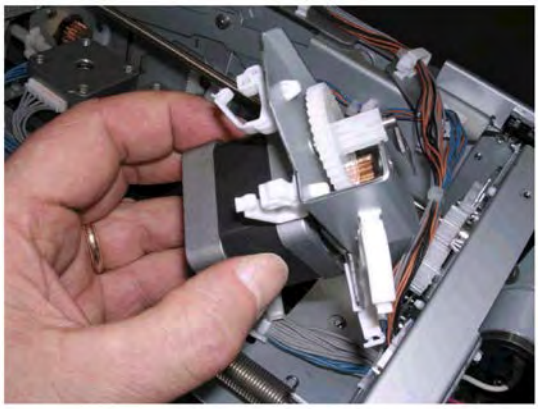
d392r0727c

5. Disconnect the pin alignment motor bracket (x2).



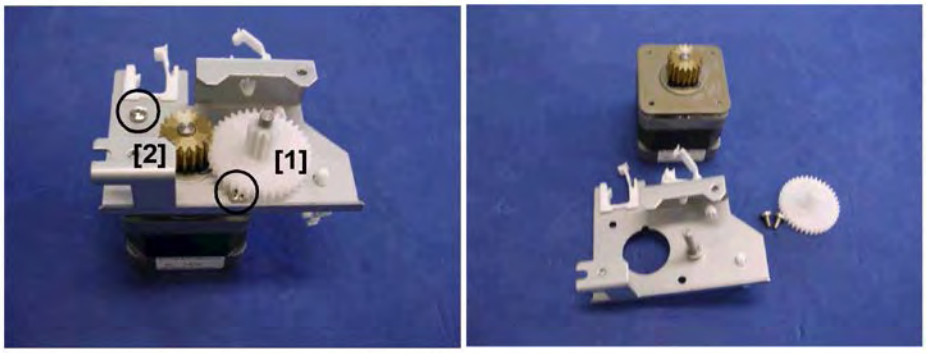
d392r0727d

6. Remove the pin alignment motor.



d392r0727e

7. Remove the runout press roller motor bracket.

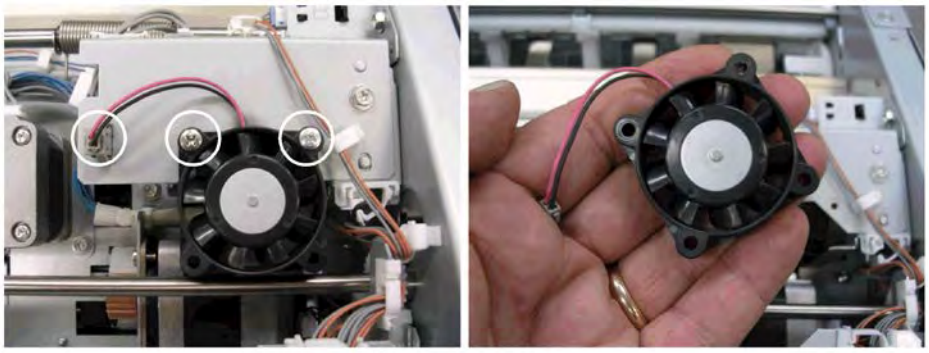


d392r0727f

8. Remove the timing gear [1], then separate the bracket [2] and the motor (x2).

Fan Motor (M611)

1. Open the right front door and pull out the binder unit.
2. Remove the left cover of the pre-bind jogger unit. page 10



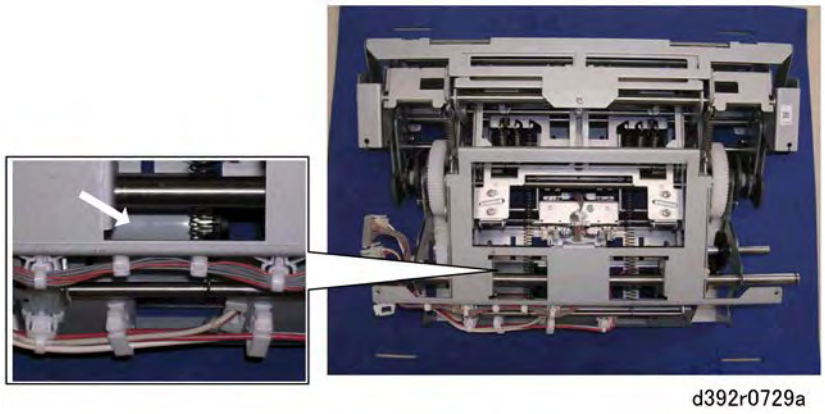
d392r0728a

3. Remove the fan motor (x1, x2).

1.3.3 CLAMP UNIT MOTORS

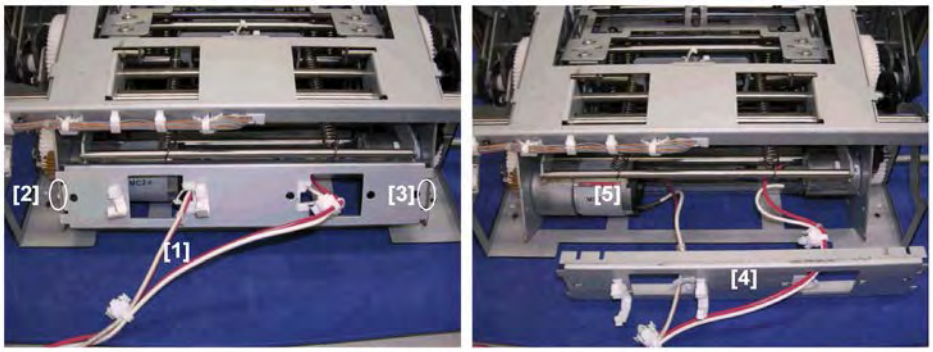
Clamp Unit Motor (M701)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



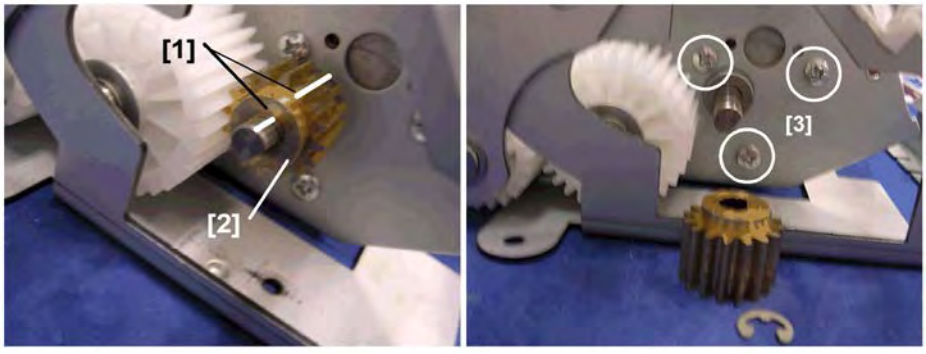
d392r0729a

3. Remove the clamp unit.



d392r0729b

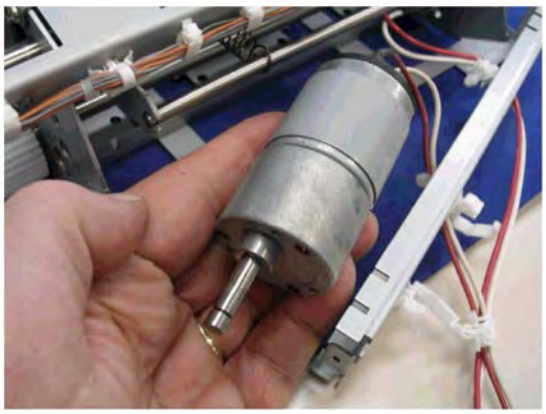
4. Release the harnesses [1] (x2, x4).
5. Remove screws [2] and [3] from the left and right ends of the brace.
6. Pull off the brace [4] to expose the motor [5].



d392r0729c

7. Mark the shaft and timing gear [1] with a black marker. (This will make it easier to reattach the gear at reinstallation.)
8. Remove the e-ring [2] and pull off the gear.

9. Remove the motor screws [3].

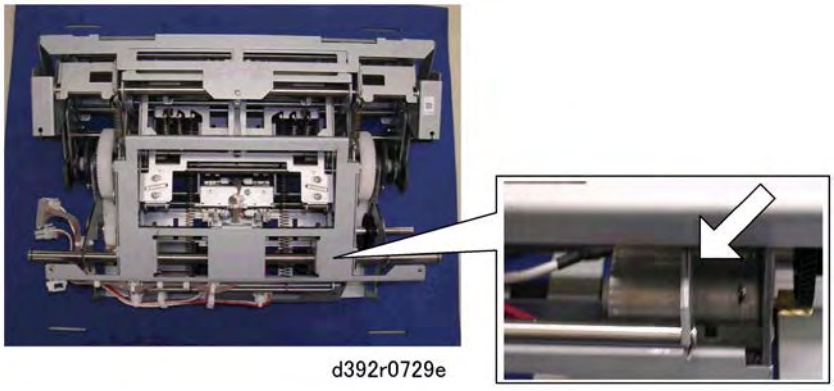


d392r0729d

10. Remove the motor.

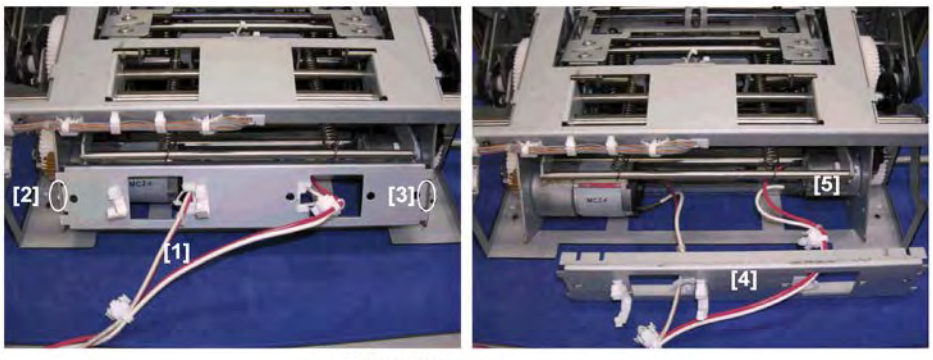
50/100 Clamp Adjust Motor (M702)

1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



d392r0729e

3. Remove the clamp unit. page 15



d392r0729f

4. Release the harnesses [1] (x2, x4).
5. Remove screws [2] and [3] from the left and right ends of the brace.

6. Pull off the brace [4] to expose the motor [5].

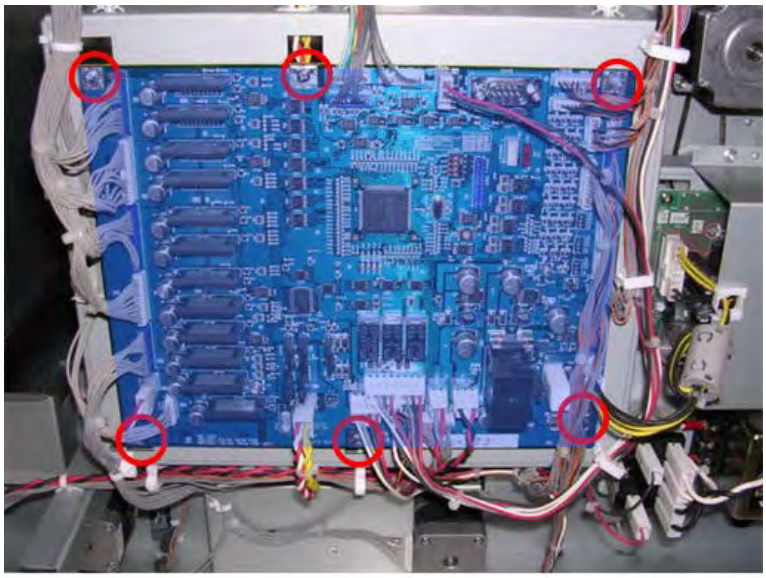
d392r0729g

7. Disconnect the harnesses and remove the motor (x2).

1.4 BOARDS

1.4.1 MAIN CONTROL BOARD

1. Remove the rear cover. page 4



d392r1103

2. Remove the main control board (x all, x5, x1 at upper right corner).
3. After you install the new board, do SP6504 to SP6507. (See Section 5 of the main Service Manual.)

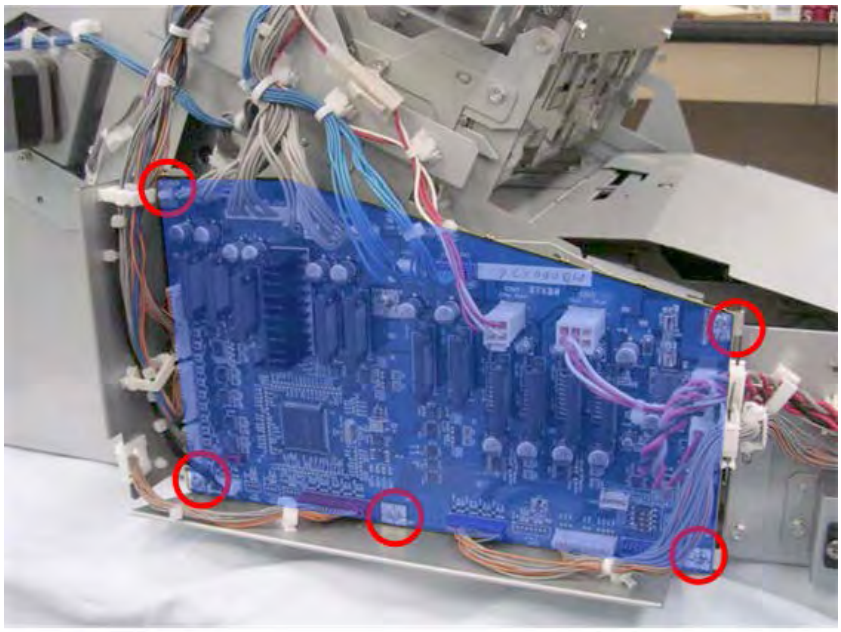
Important

- When adjusting SP6504, close the front door of the Ring Binder.
- After SP6504 adjustment, keep the front door of the Ring Binder closed and turn main power switch OFF and ON.

1.4.2 BINDER CONTROL BOARD

Removing the Binder Control Board

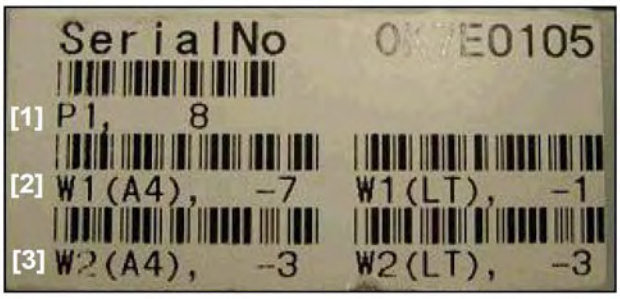
1. Open the right front door.
2. Remove the binder unit from its rails and set it on a flat surface. page 6



d392r1104

3. Remove the binder control board from the side of the binder unit (x All, x4, x1 at upper left corner).
4. Install the new board.

Doing the SP adjustments



d392r0103b

1. Locate the label attached to the bottom cover of the pre-bind jogger unit (shown above).
2. Enter the SP mode and enter the values on the label.
   - Do SP6505 and enter the value of the 1st line [1].
   - Do SP6506 and enter the 1st value of the 2nd line [2] for A4 or the 2nd value for LT.
   - Do SP6507 and enter the 1st value of the 3rd line [3] for A4 or the 2nd value for LT.

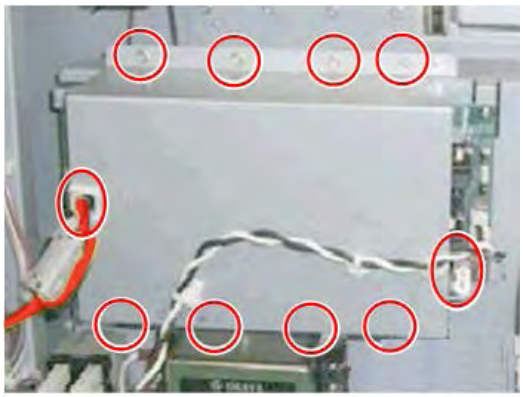
Important

- The A4 punch unit must be installed for punching and binding A4 sheets; the LT punch unit must be installed for punching and binding LT sheets. Also, the proper size rings (A4 or LT) must be installed in the ring cartridge.

3. Also, input the value of SP6504. (See Section 5 of the main Service Manual.)

1.4.3 PSU

1. Remove the rear cover.



d392r1105

2. Remove the protection plate (x2, x1, x8).

d392r1106

3. Remove the PSU (x1, x5).

D738

COVER INTERPOSER TRAY

CI5020/CI5030

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

COVER INTERPOSER TRAY
CI5020/CI5030 (D738)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 1

1.1 COMMON PROCEDURES.....1
1.1.1 COVERS.....1
1.1.2 1ST, 2ND TRAYS.....3
1.1.3 FEED UNITS.....4
1.2 BOARDS.....5
1.2.1 TRAY UNIT CONTROL BOARD.....5
1.2.2 MAIN CONTROL BOARD.....5
1.3 MOTORS.....6
1.3.1 VERTICAL TRANSPORT MOTOR.....6
1.3.2 HORIZONTAL TRANSPORT MOTOR.....6
1.3.3 1ST, 2ND LIFT MOTORS.....7
1.3.4 1ST, 2ND FEED MOTORS.....7
1.3.5 1ST, 2ND TRANSPORT MOTORS.....8
1.3.6 1ST, 2ND PICK-UP MOTORS.....9
1.4 SENSORS.....11
1.4.1 PAPER WIDTH SWITCH, SET SENSORS, LENGTH SENSOR.....11
1.4.2 1ST TRANSPORT SENSOR.....13
1.4.3 FEED UNIT SENSORS.....13
1.4.4 2ND VERTICAL TRANSPORT, EXIT SENSORS.....14
1.4.5 ENTRANCE SENSOR.....15
1.5 ROLLERS.....16
1.5.1 SEPARATION ROLLER.....16
1.5.2 FEED BELT UNIT & PICK-UP ROLLER.....17
1.5.3 FEED BELT.....18

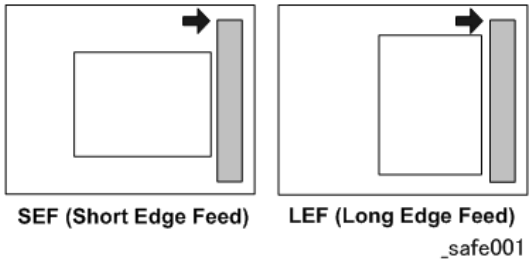
READ THIS FIRST

Symbols, Abbreviations and Trademarks

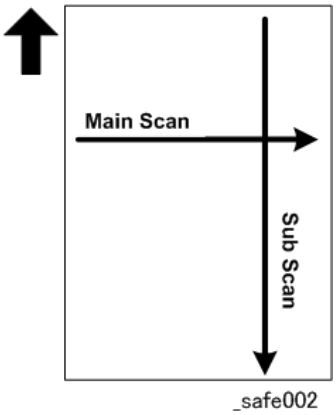
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

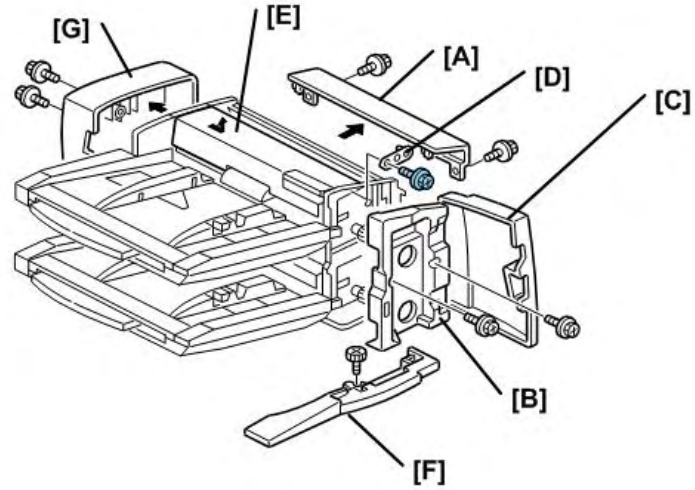
1. REPLACEMENT AND ADJUSTMENT

1.1 COMMON PROCEDURES

1.1.1 COVERS

d7380001

1. Open the vertical feed cover [A].



d7380002

2. Remove:

   [A] Top cover (x2)

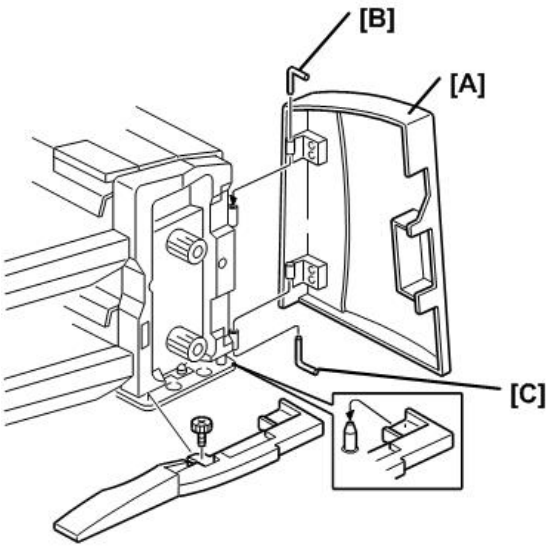
   [B] Inner cover with front door [C] (x2)

   [D] 1st tray cover holder (x1)

   [E] 1st tray cover. Slide the cover toward you to remove it from the inside pins.

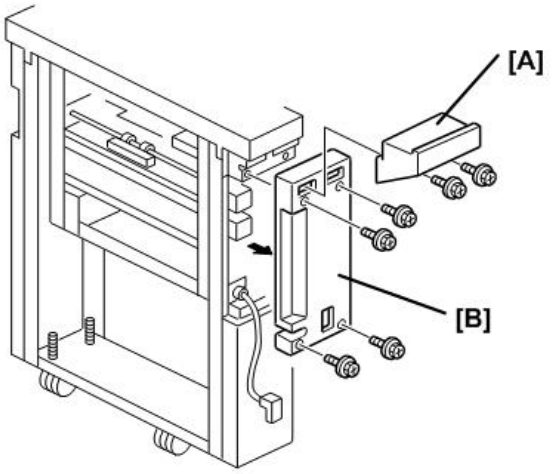
   [F] Base cover (Knob (x1)

   [G] Tray unit rear cover (x2)



d7380003

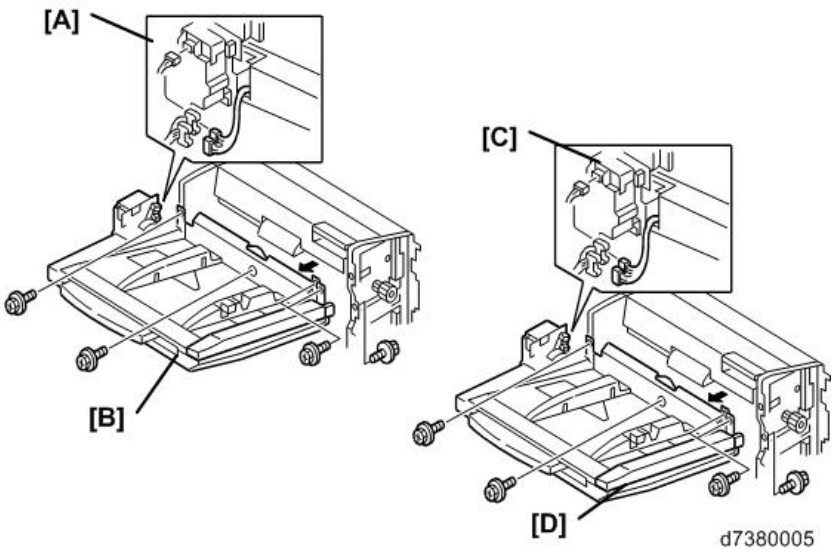
3. Remove front door [A] (L-pins x2)
   - * Swing the upper L-pin [B] out of its groove and pull it up.
   - * Swing the lower L-pin [C] out of its groove and pull it down.



d7380004

4. Remove:
   [A] Rear top cover of the feed unit (x2)
   [B] Feed unit rear upper cover (x4)

1.1.2 1ST, 2ND TRAYS



1. Remove:
- Inner cover with tray unit front door
- Tray unit rear cover

1. 1st Tray

   Disconnect [A]
   - 1st lift motor (x1, x1)
   - White connectors (x2)

   [B] 1st tray (x5)

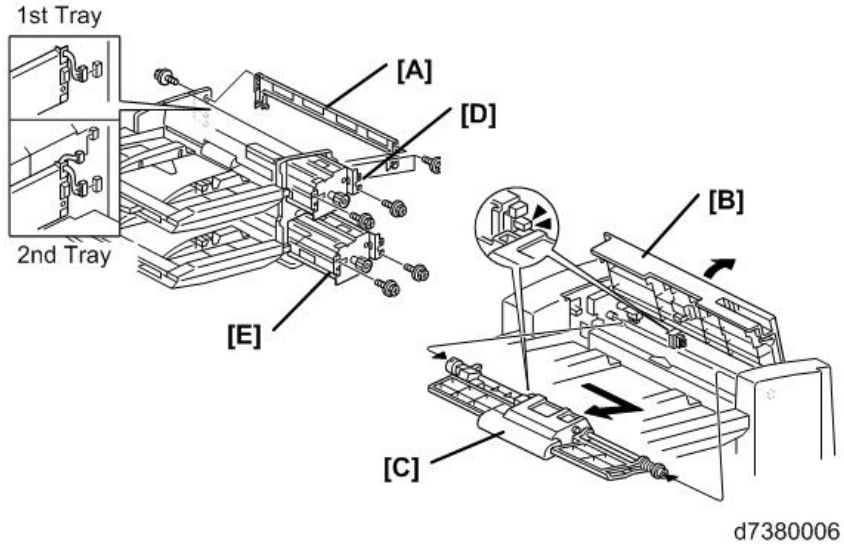
2. 2nd Tray

   Remove:
   - Inner cover with tray unit front door
   - Tray unit rear cover

3. Disconnect [C]:
   - 2nd lift motor (x1, x1)
   - Red, blue connectors (x2)

   [D] 2nd tray (x5)

1.1.3 FEED UNITS



1st Feed Unit

Remove:

- Top cover
- Inner cover with front door
- Tray unit rear cover

[A] Stay (x5)

[B] Open the 1st tray cover and hold it open

[C] 1st feed belt unit

[D] 1st feed unit (x, x1)

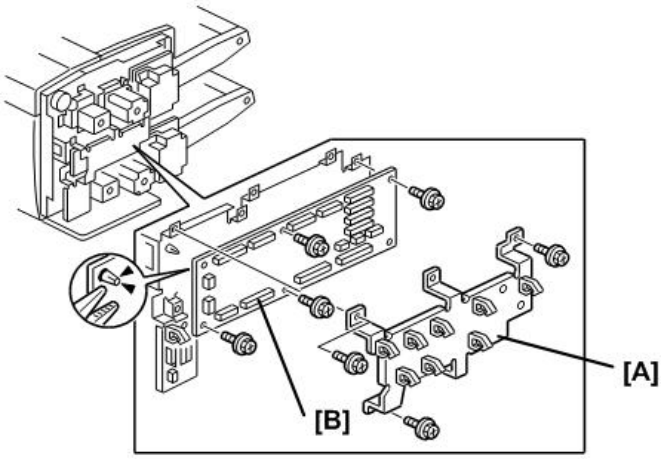
2nd Feed Unit

- Open the vertical feed cover
- Remove inner cover with tray unit front door
- 2nd feed belt unit (same as [C])

[E] 2nd feed unit (x2, x2)

1.2 BOARDS

1.2.1 TRAY UNIT CONTROL BOARD



d7380007

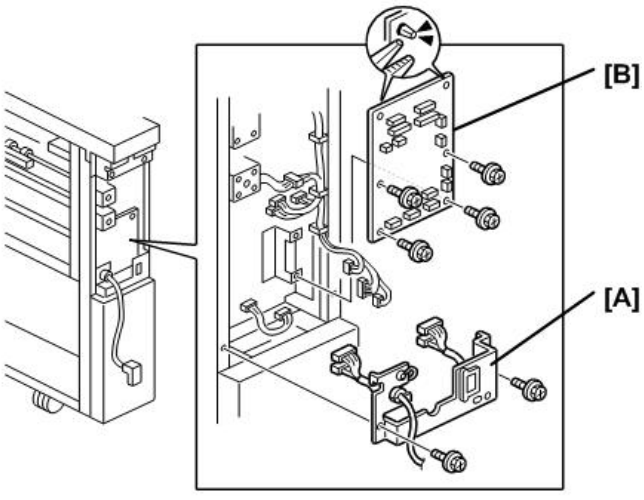
Remove:

- Tray unit rear cover (x2)

  [A] Board cover (x3, x8)

  [B] Tray unit control board (x 17, x5, x1)

1.2.2 MAIN CONTROL BOARD



d7380008

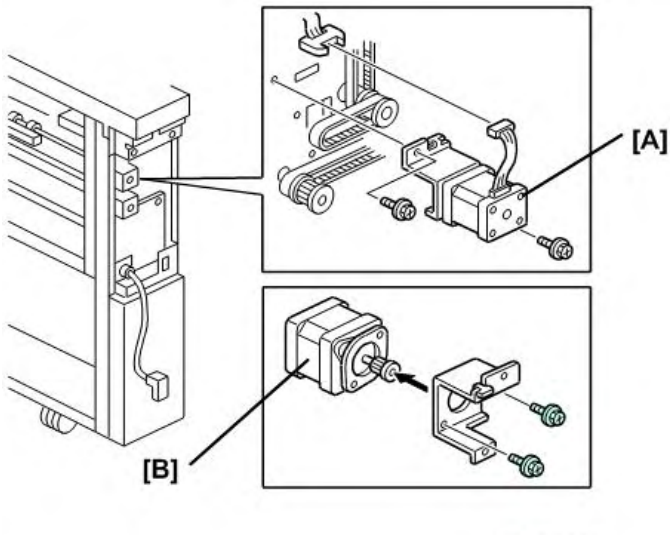
- Remove transport unit rear upper cover

  [A] Connector bracket (x2)

  [B] Main control board (x4, x2, x14, x2)

1.3 MOTORS

1.3.1 VERTICAL TRANSPORT MOTOR



d7380009

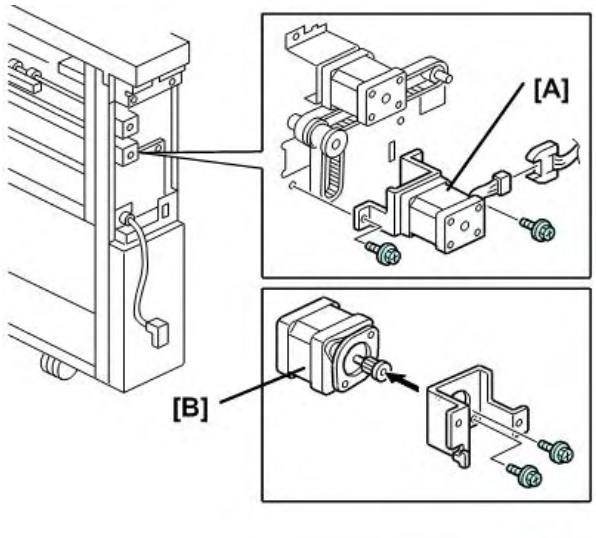
Remove:

- Remove transport unit rear cover

  [A] Motor unit (x2, x1, x1)

  [B] Vertical transport motor (x2)

1.3.2 HORIZONTAL TRANSPORT MOTOR



d7380010

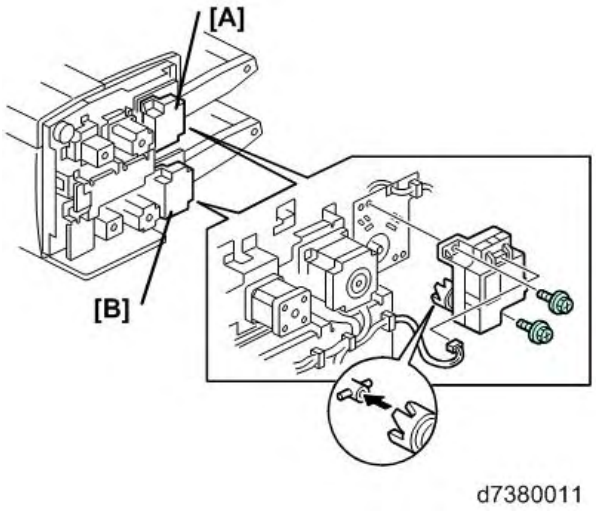
Remove:

- Transport unit rear cover

[A] Motor unit (x2, x1, x1)

[B] Horizontal transport motor (x2)

1.3.3 1ST, 2ND LIFT MOTORS

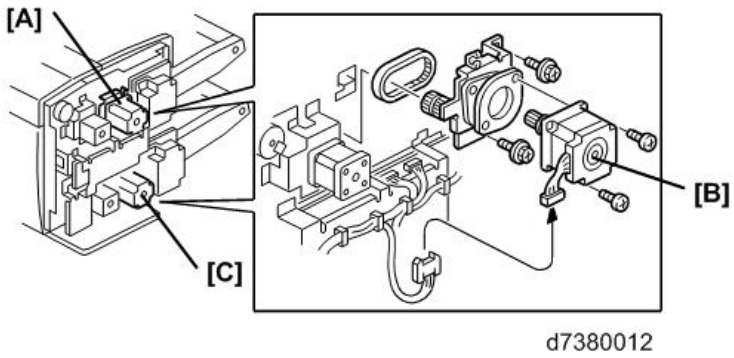


- Tray unit rear cover

  [A] 1st lift motor (2, x1)

  [B] 2nd lift motor (x2, x1)

1.3.4 1ST, 2ND FEED MOTORS



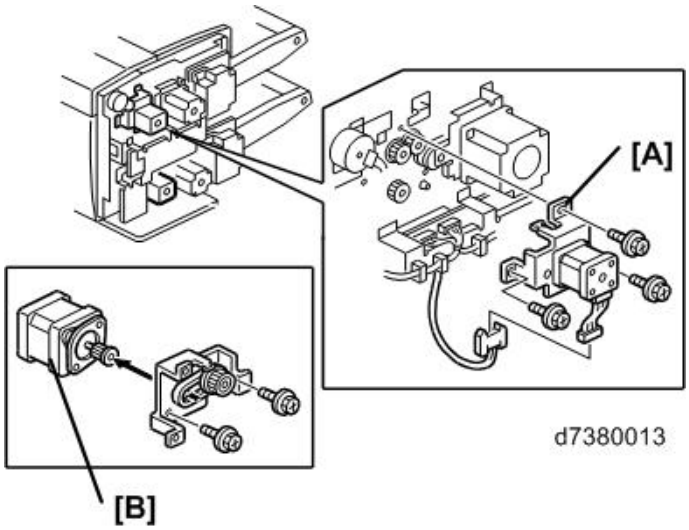
- Tray unit rear cover

  [A] 1st feed motor unit (x3, x2, x1)

  [B] 1st feed motor (x2, x1)

  [C] 2nd feed motor unit, 2nd feed motor (x5, x1, x1)

1.3.5 1ST, 2ND TRANSPORT MOTORS



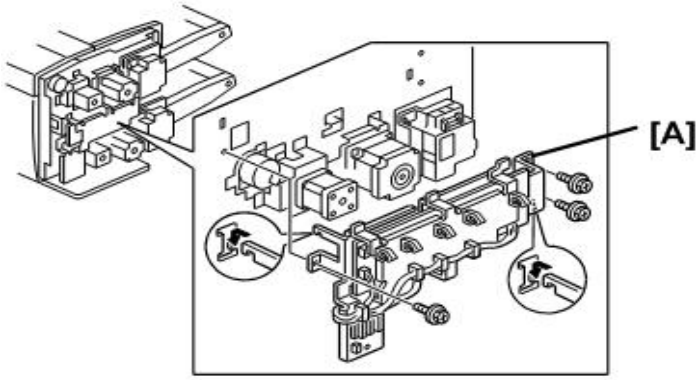
- Tray unit rear cover

1st Transport Motor

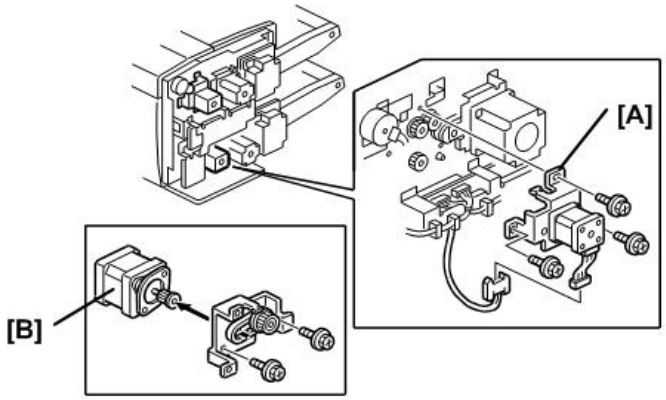
[A] 1st transport motor unit (x3, (x1)

[B] 1st transport motor (x2, x1)

2nd Transport Motor



- Tray unit control board unit [A] (Hooks, x3, x9)



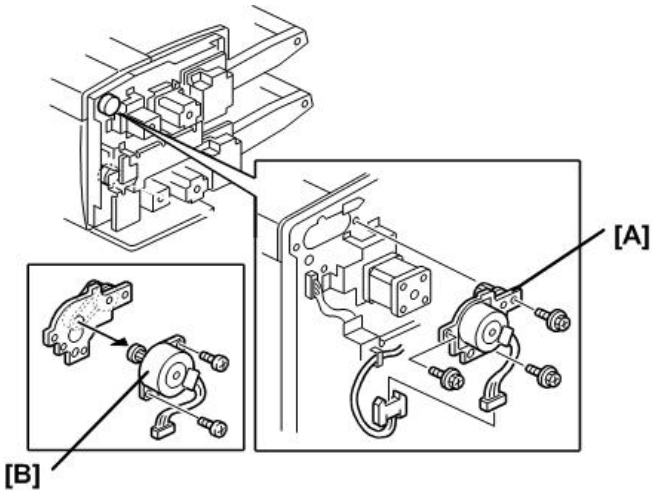
d7380041

[A] 2nd transport motor unit (x3)

[B] 2nd transport motor (x2, x1)

1.3.6 1ST, 2ND PICK-UP MOTORS

1st Pick-up Motor



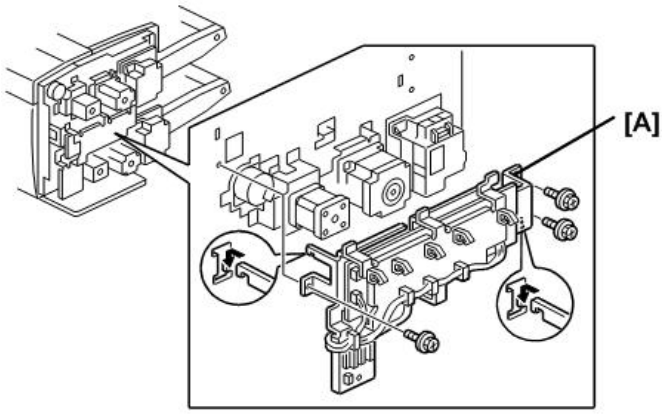
d7380014

- Tray unit rear cover

  [A] 1st pick-up motor unit (x1, x3)

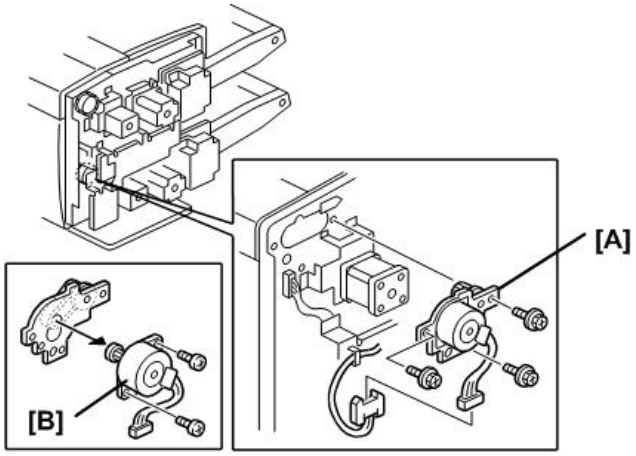
  [B] 1st pick-up motor (x2, x1)

  2nd Pick-up Motor



d7380042

- Tray unit control board unit (Hooks, x3, x9)



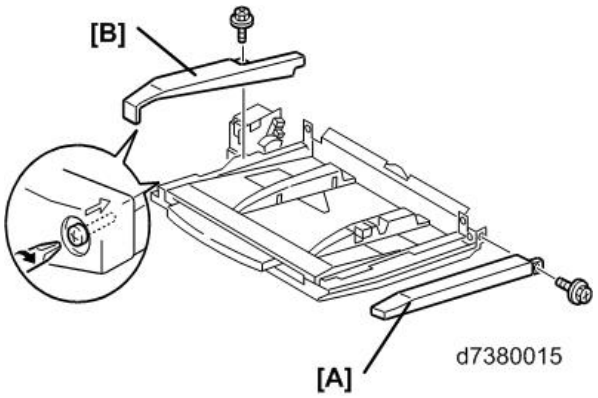
d7380043

[A] 2nd pick-up motor unit (x1, x3)

[B] 2nd pick-up motor (x2, x1)

1.4 SENSORS

1.4.1 PAPER WIDTH SWITCH, SET SENSORS, LENGTH SENSOR

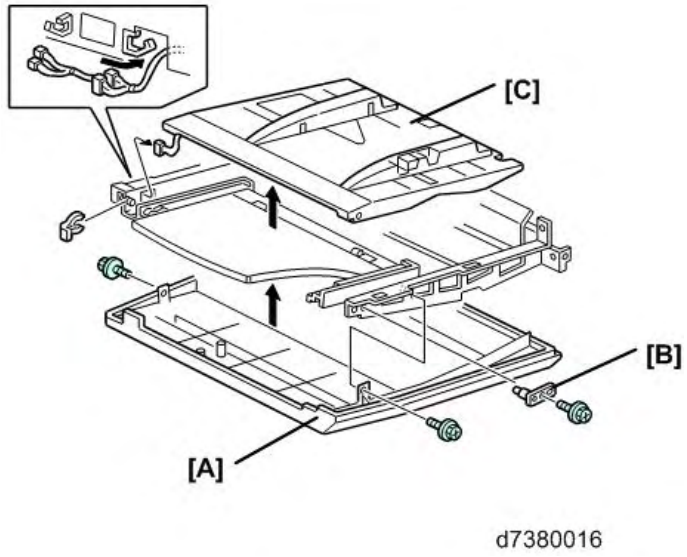


Remove:

- 1st or 2nd paper tray

  [A] Front cover (x1)

  [B] Rear cover (x1)

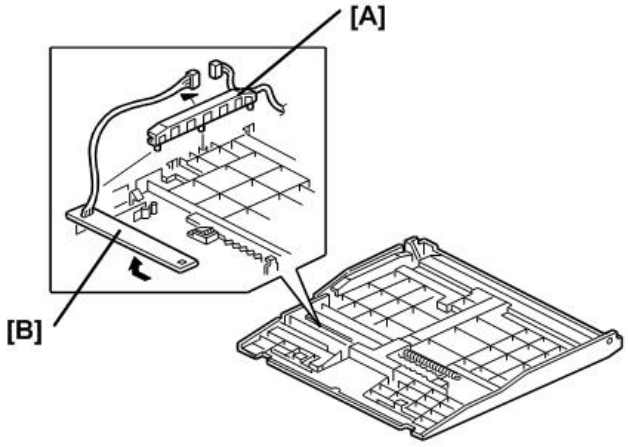


[A] Bottom cover (x2)

[B] Holder pin (x1, Spring x1)

[C] Bottom plate

Turn over the bottom plate so it is facing up.

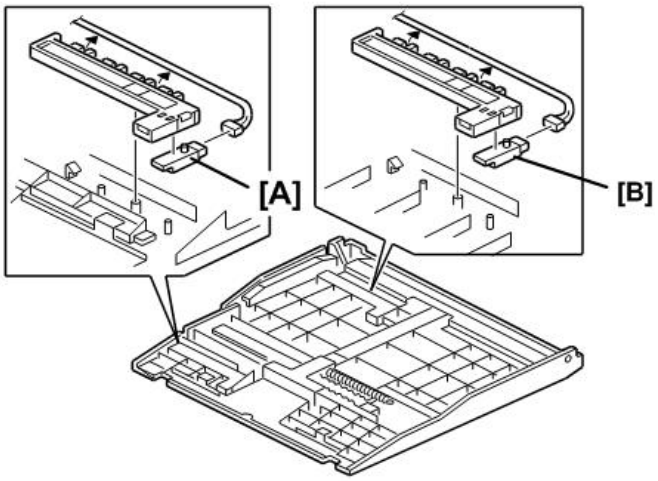


d7380017

Remove:

[A] Harness cover (x2)

[B] Paper width switch (x2, x4, x1)

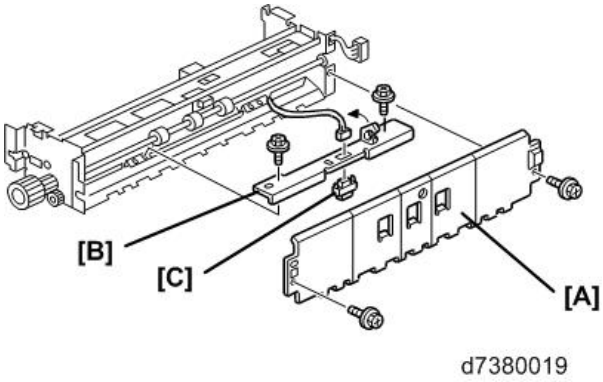


d7380018

[A] Paper set sensor (x1, x1)

[B] Paper length sensor (x1, x1)

1.4.2 1ST TRANSPORT SENSOR



d7380019

- Top cover
- Vertical feed cover
- Stay

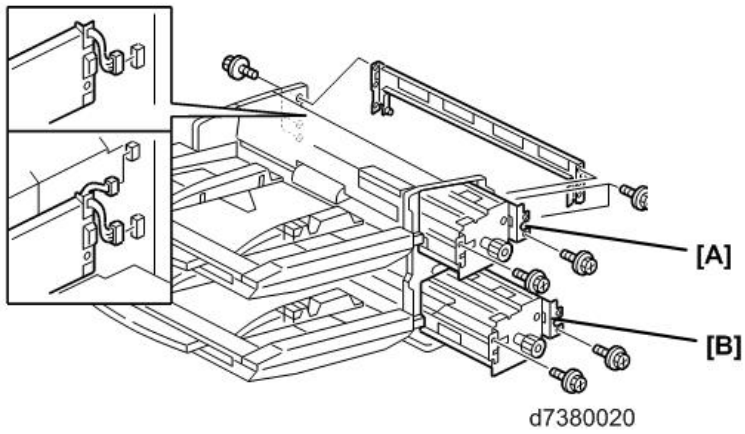
  Remove:

  [A] Upper paper guide (x2)

  [B] Sensor unit (x2, x1, x1)

  [C] 1st transport sensor (x2)

1.4.3 FEED UNIT SENSORS

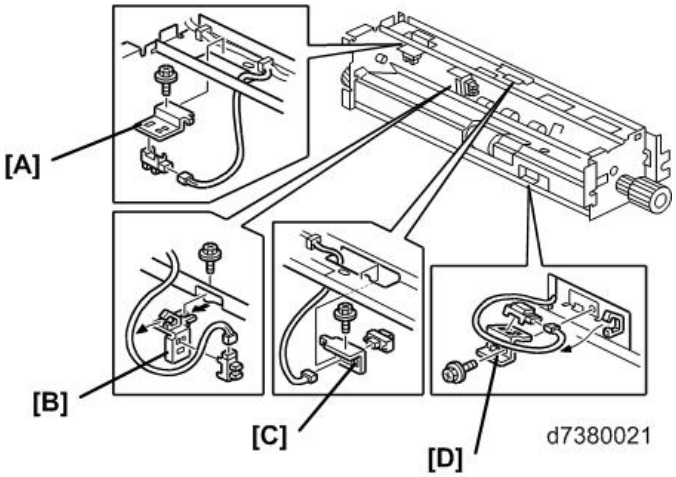


d7380020

Remove:

[A] 1st feed unit

[B] 2nd feed unit



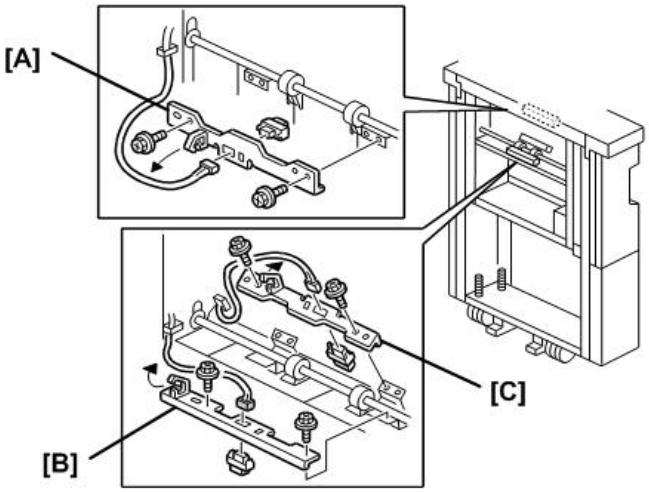
[A] Pickup roller HP sensor bracket, sensor (x1, x1, x2)

[B] Bottom plate position sensor bracket, sensor (x1, x1, x1, x2)

[C] 1st Vertical transport sensor bracket, sensor (x1, (x1, x2)

[D] Paper Feed sensor bracket, sensor (x1, x1, x1, x2)

1.4.4 2ND VERTICAL TRANSPORT, EXIT SENSORS



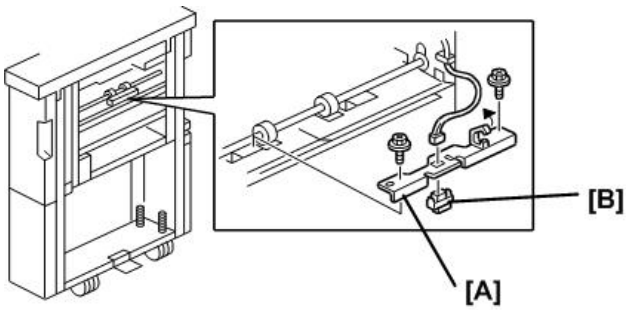
Remove:

[A] 2nd vertical transport sensor bracket, sensor (x1, x1, x1, x2)

[B] Vertical exit sensor bracket, sensor (x2, x1, x1, x2)

[C] Exit sensor bracket, sensor (x2, x1, x1, x2)

1.4.5 ENTRANCE SENSOR



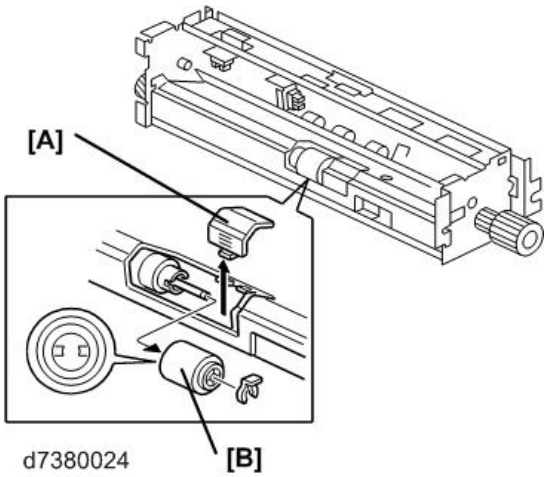
d7380023

[A] Sensor bracket (x2, x1, x1)

[B] Entrance sensor (x2)

1.5 ROLLERS

1.5.1 SEPARATION ROLLER

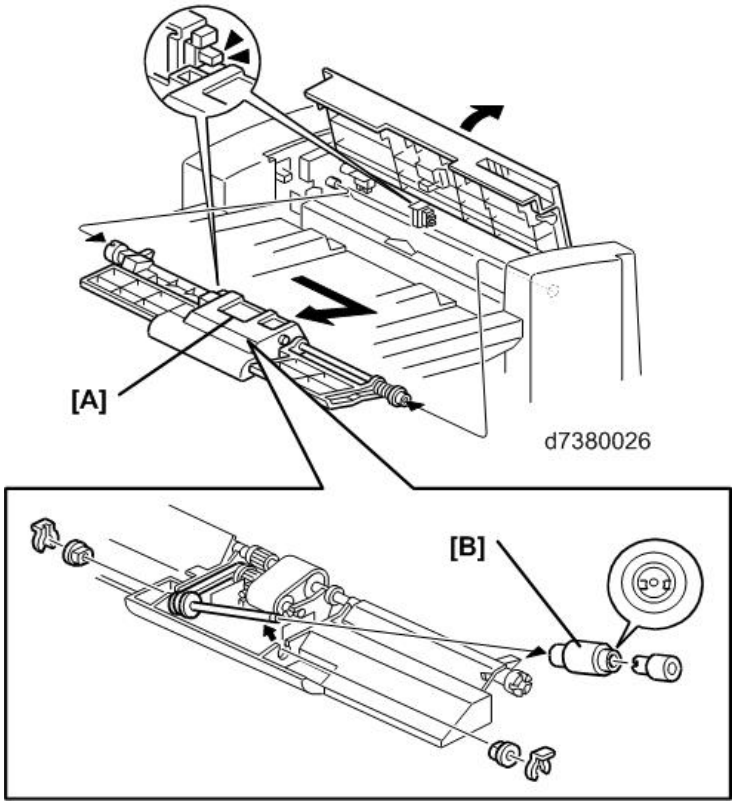


- Remove 1st (or 2nd) feed unit

  [A] Cover

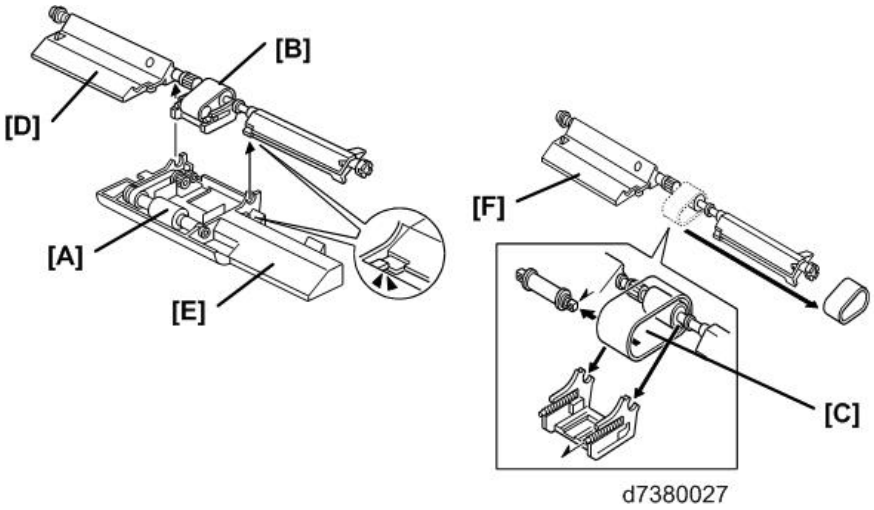
  [B] Separation Roller (x1)

1.5.2 FEED BELT UNIT & PICK-UP ROLLER



- Open the 1st tray cover.
  [A] Feed belt unit
- The unit is spring loaded. Push it to the right to release it, then lift it out.
  [B] Pick-up roller (x2, x2)

1.5.3 FEED BELT



- Feed belt unit

[A] Pick-up roller unit.

- Pull the unit away from the bushings in the direction of the arrow.

[B] Feed belt holder

- Hold the feed belt holder by the sides, then lift up to separate from the holder.
- Pull slowly to avoid losing the springs.

[C] Feed belt.

Re-assembly

1. Position the pick-up roller unit [A] and feed belt holder [B] as shown above.
2. On the rear side, slide out the bushing, and rotate guide plate [D] until its stepped side attaches at [E] as shown above, then snap the guide plate on.
3. On the front side, rotate guide plate [F] until its flat side is parallel with [D], then snap it on. Viewed from the bottom, the plates must be aligned.

D740

MULTI-FOLDING UNIT FD5020

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

MULTI-FOLDING UNIT FD5020 (D740)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 13

1.1 EXTERIOR AND INNER COVERS.....13

1.1.1 FRONT DOOR UPPER COVER.....13

1.1.2 TOP COVER.....14

1.1.3 INNER UPPER COVER.....14

1.1.4 FRONT DOOR.....15

1.1.5 FOLDING UNIT COVER.....15

1.1.6 INNER LOWER COVER.....16

1.1.7 REAR UPPER COVER.....16

1.1.8 REAR LOWER COVER.....16

1.1.9 TOP REAR COVER.....17

1.1.10 TOP TRAY.....17

1.1.11 TOP TRAY RIGHT COVER.....18

1.1.12 PULLING OUT THE FOLDING UNIT DRAWER.....18

1.2 ELECTRICAL COMPONENTS: REAR SIDE.....19

1.2.1 MAIN BOARD.....19

1.2.2 HORIZONTAL TRANSPORT MOTOR.....20

1.2.3 TOP TRAY EXIT MOTOR.....21

1.2.4 TOP TRAY TRANSPORT MOTOR.....22

1.2.5 ENTRANCE JG (JUNCTION GATE) MOTOR.....23

1.2.6 DYNAMIC ROLLER LIFT MOTOR.....23

1.2.7 CREASE MOTOR.....24

1.2.8 DYNAMIC ROLLER TRANSPORT MOTOR.....25

1.2.9 REGISTRATION ROLLER RELEASE MOTOR.....26

1.2.10 REGISTRATION ROLLER TRANSPORT MOTOR.....27

1.3 ELECTRICAL COMPONENTS: 1ST STOPPER.....28

1.3.1 FOLD PLATE MOTOR.....28

1.3.2 DIRECT-SEND JG MOTOR.....29

1.3.3 1ST FOLD MOTOR.....30

1.3.4 FM6 PAWL MOTOR.....31

1.3.5 2ND FOLD MOTOR.....32

1.3.6 JOGGER FENCE MOTOR.....33

1.3.7 1ST STOPPER UNIT.....33

1.3.8 1ST STOPPER MOTOR....36
1.3.9 JOGGER FENCE HP SENSOR....36
1.3.10 1ST STOPPER PAPER SENSOR....37
1.3.11 1ST STOPPER HP SENSOR....38
1.3.12 REGISTRATION SENSOR....39
1.4 ELECTRICAL COMPONENTS: 2ND STOPPER....41
1.4.1 2ND STOPPER UNIT....41
1.4.2 2ND STOPPER MOTOR....43
1.4.3 2ND STOPPER HP SENSOR....43
1.4.4 2ND STOPPER PAPER SENSOR....44
1.4.5 BYPASS EXIT PAPER SENSOR....45
1.5 ELECTRICAL COMPONENTS: 3RD STOPPER....46
1.5.1 3RD STOPPER UNIT....46
1.5.2 3RD STOPPER MOTOR....47
1.5.3 3RD STOPPER PAPER SENSOR....48
1.5.4 3RD STOPPER HP SENSOR....49
1.5.5 DIRECT-SEND JG (JUNCTION GATE) HP SENSOR....50
1.5.6 REGISTRATION ROLLER HP SENSOR....51
1.5.7 FOLD PLATE HP SENSOR....52
1.5.8 ENTRANCE JG (JUNCTION GATE) HP SENSOR....53
1.5.9 TOP TRAY EXIT SENSOR....53
1.5.10 ENTRANCE SENSOR....54
1.5.11 TOP TRAY PAPER PATH SENSOR....55
1.6 ELECTRICAL COMPONENTS: MAIN 1....56
1.6.1 TOP TRAY FULL SENSOR (E)....56
1.6.2 TOP TRAY FULL SENSOR (R)....57
1.6.3 VERTICAL PATH PAPER SENSOR....57
1.6.4 HORIZONTAL PATH PAPER SENSOR....58
1.6.5 HORIZONTAL PATH EXIT SENSOR....59
1.6.6 DISCHARGE BRUSH 1....60
1.6.7 DISCHARGE BRUSH 2....60
1.6.8 DISCHARGE BRUSH 3....61
1.6.9 PSU....61
1.6.10 FIRST FOLD UNIT....62
When installing the first fold unit....66
1.6.11 DYNAMIC ROLLER HP SENSOR....67
1.7 ELECTRICAL COMPONENTS: MAIN 2....68
1.7.1 BYPASS ENTRANCE PAPER SENSOR....68
Reinstalling the bypass entrance paper sensor....69

1.7.2 FIRST/ SECOND/ THIRD FOLD ROLLER 70
When reinstalling the first, second and third fold rollers 74
1.7.3 FOURTH / FIFTH FOLD ROLLER 76
1.7.4 CREASE ROLLERS 79
Crease Rollers: Idle Rollers 79
Crease Rollers: Drive Rollers 81
1.8 FOLD ADJUSTMENTS 83
1.8.1 FINE FOLD ADJUSTMENT 83
Before You Begin 83
FM1 Z-Folding 84
FM2 Half Fold: Single-sheet Fold and Multi-sheet Fold 86
FM3 Letter Fold-out: Single-sheet Fold and Multi-sheet Fold 88
FM4 Letter Fold-in: Single-sheet Fold and Multi-sheet Fold 91
FM5 Double Parallel Fold 94
FM6 Gate Fold 95
1.9 SKEW ADJUSTMENT 98
1.9.1 MANUAL ADJUSTMENTS BY SERVICE TECHNICIAN 98
Before You Begin 98
Front and Rear 99
Skew Correction Reference Diagrams and Table 100
General Procedure 102
Stopper Adjustment Procedures 105

READ THIS FIRST

Safety, Conventions, Trademarks

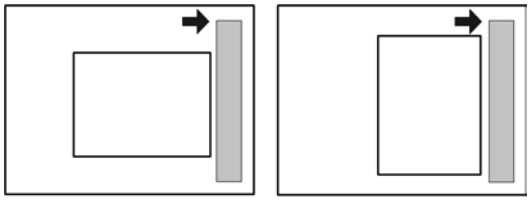
Conventions

Common Terms

This is a list of symbols and abbreviations used in this manual.

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp (metal: fusing unit)
	Hook (or tab release)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw (common screw)
	Shoulder screw

Symbol	What it means
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt



d074c001

The notations "SEF" and "LEF" describe the direction of paper feed, with the arrows indicating paper feed direction.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the finisher or other property.

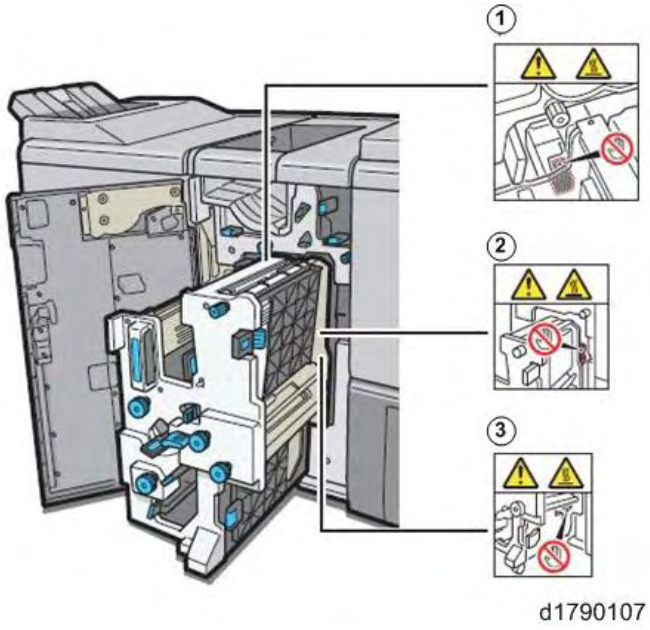
Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Safety Labels



①	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.
②	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.
③	To avoid injury, avoid touching the indicated area where parts can become very hot during operation. Work carefully when removing a paper jam.

General Safety Instructions

For your safety, please read this manual carefully before you use this product. Keep this manual handy for future reference.

Safety Information

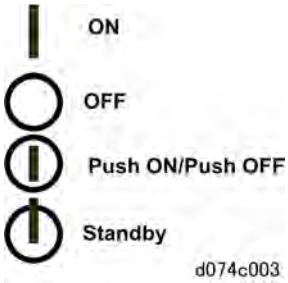
Always obey the following safety precautions when using this product.

Safety During Operation

In this manual, the following important symbols and notations are used.

Switches and Symbols

Where symbols are used on or near switches on machines for Europe and other areas, the meaning of each symbol conforms with IEC60417.



Responsibilities of the Customer Engineer

Reference Material for Maintenance

- Maintenance shall be done using the special tools and procedures prescribed for maintenance of the machine described in the reference materials (service manuals, technical bulletins, operating instructions, and safety guidelines for customer engineers).
- Use only consumable supplies and replacement parts designed for use of the machine.

Before Installation, Maintenance

Installation, Disassembly, and Adjustments

⚠CAUTION

- After installation, maintenance, or adjustment, always check the operation of the machine to make sure that it is operating normally. This ensures that all shipping materials, protective materials, wires and tags, metal brackets, etc., removed for installation, have been removed and that no tools remain inside the machine. This also ensures that all release interlock switches have been restored to normal operation.
- Never use your fingers to check moving parts causing spurious noise. Never use your fingers to lubricate moving parts while the machine is operating.

Special Tools

⚠CAUTION

- Use only standard tools approved for machine maintenance.
- For special adjustments, use only the special tools and lubricants described in the service manual. Using tools incorrectly, or using tools that could damage parts, could damage the machine or cause injuries.

During Maintenance

General

⚠CAUTION

- Before you begin a maintenance procedure: 1) Switch the machine off, 2) Disconnect the power plug from the power source, 3) Allow the machine to cool for at least 10 minutes.
- Avoid touching the components inside the machine that are labeled as hot surfaces.

Power

⚠WARNING

- Always disconnect the power plug before doing any maintenance procedure. After switching off the machine, power is still supplied to the main machine and other devices. To prevent electrical shock, switch the machine off, wait for a few seconds, then unplug the machine from the power source.
- Before you do any checks or adjustments after turning the machine off, work carefully to avoid injury. After removing covers or opening the machine to do checks or adjustments, never touch electrical components or moving parts (gears, timing belts, etc.).
- After turning the machine on with any cover removed, keep your hands away from electrical components and moving parts. Never touch the cover of the fusing unit, gears, timing belts, etc.

Organic Cleaners

⚠CAUTION

- During preventive maintenance, never use any organic cleaners (alcohol, etc.) other than those described in the service manual.
- Make sure the room is well ventilated before using any organic cleaner. Use organic solvents in small amounts to avoid breathing the fumes and becoming nauseous.
- Switch the machine off, unplug it, and allow it to cool before doing preventive maintenance. To avoid fire or explosion, never use an organic cleaner near any part that generates heat.
- Wash your hands thoroughly after cleaning parts with an organic cleaner to contamination of food, drinks, etc. which could cause illness.

Power Plug and Power Cord

⚠WARNING

- Before servicing the machine (especially when responding to a service call), always make sure that the power plug has been inserted completely into the power source. A partially inserted plug could lead to heat generation (due to a power surge caused by high resistance) and cause a fire or other problems.
- Always check the power plug and make sure that it is free of dust and lint. Clean it if necessary. A dirty plug can generate heat which could cause a fire.
- Inspect the length of the power cord for cuts or other damage. Replace the power cord if necessary. A frayed or otherwise damaged power cord can cause a short circuit which could lead to a fire or personal injury from electrical shock.
- Check the length of the power cord between the machine and power supply. Make sure the power cord is not coiled or wrapped around any object such as a table leg. Coiling the power cord can cause excessive heat to build up and could cause a fire.
- Make sure that the area around the power source is free of obstacles so the power cord can be removed quickly in case of an emergency.
- Make sure that the power cord is grounded (earthed) at the power source with the ground wire on the plug.
- Connect the power cord directly into the power source. Never use an extension cord.
- When you disconnect the power plug from the power source, always pull on the plug, not the cable.

After Installation, Servicing

Disposal of Used Items

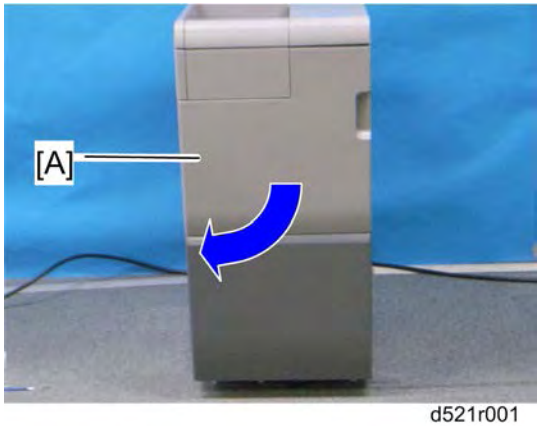
⚠CAUTION

- Always dispose of used items in accordance with the local laws and regulations regarding the disposal of such items.

1. REPLACEMENT AND ADJUSTMENT

1.1 EXTERIOR AND INNER COVERS

1.1.1 FRONT DOOR UPPER COVER

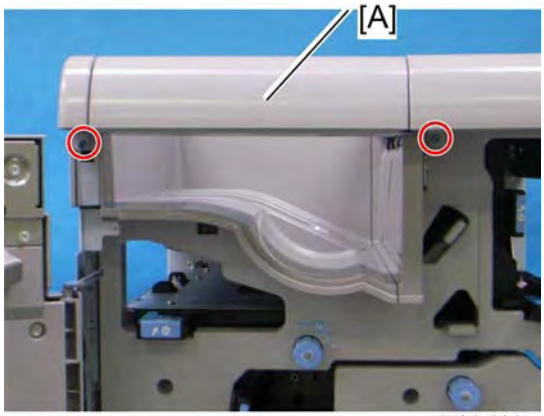


d521r001

1. Open the front door [A].

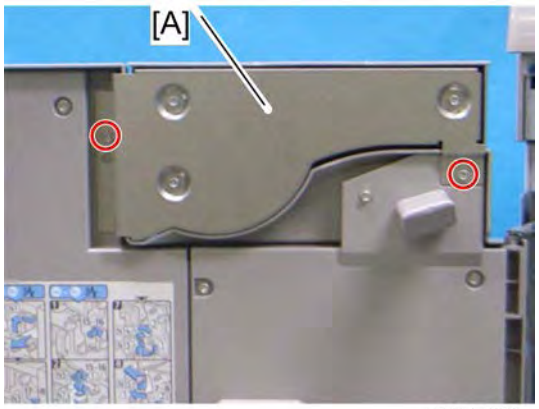
d521r002

2. Hinge cover [A] (x 1)



d521r099

3. Cross-piece [A] (x 2)

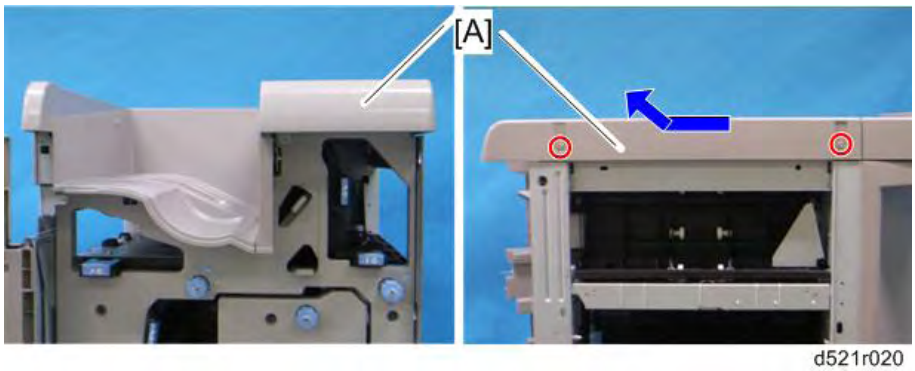


d521r100

4. Front door upper cover [A] (x 2)

1.1.2 TOP COVER

1. Open the front door.
2. Hinge cover page 13
3. Cross-piece

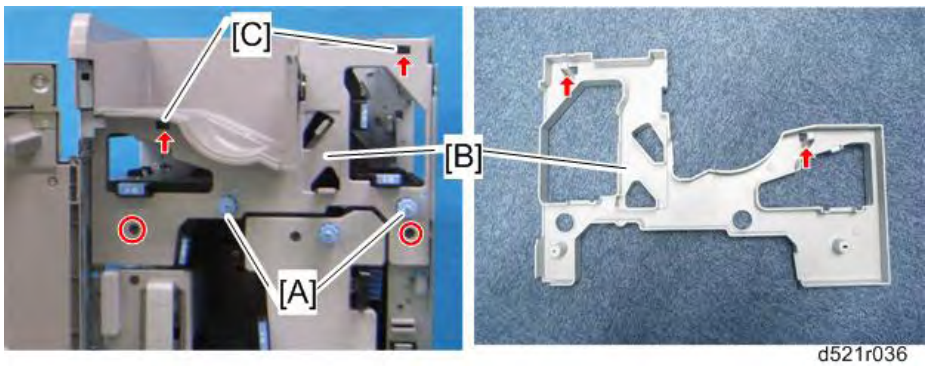


d521r020

4. Top cover [A] (x 2)

1.1.3 INNER UPPER COVER

1. Top cover page 14

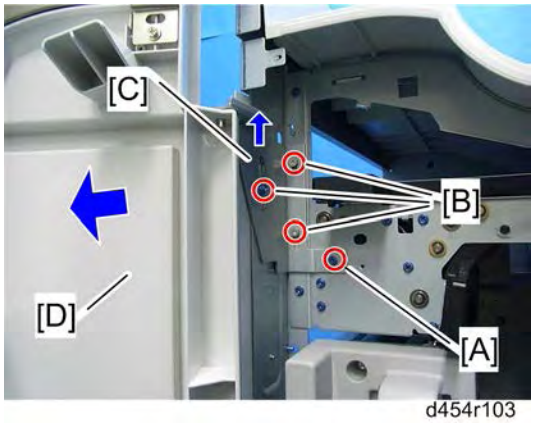


d521r036

2. Remove the knobs [A] (x 1 each).
3. Inner upper cover [B] (x 2)
   - Release the hooks [C] to remove the inner upper cover.

1.1.4 FRONT DOOR

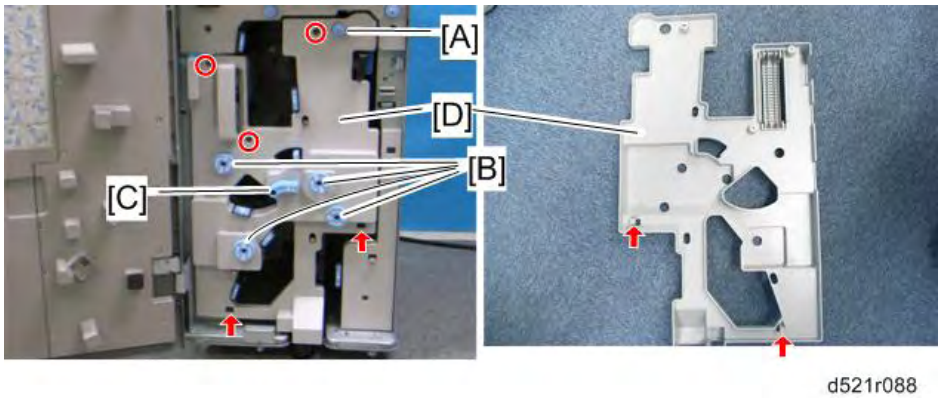
1. Top cover page 14
2. Inner upper cover page 14



3. Remove the screw [A].
4. Loosen three screws [B].
5. Lift up the hinge bracket [C].
6. Front door [D]

1.1.5 FOLDING UNIT COVER

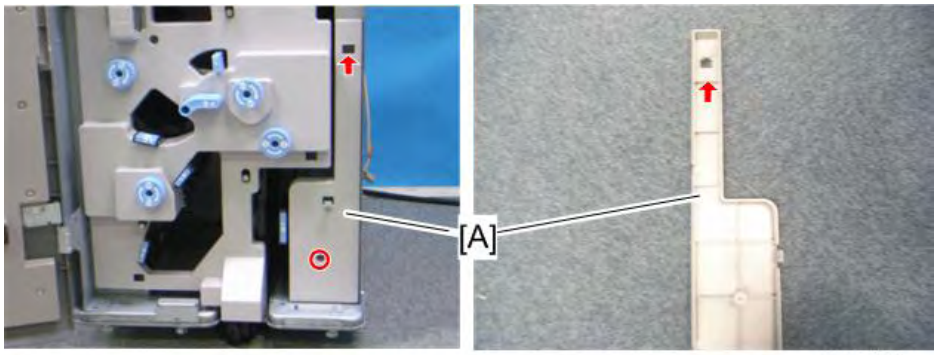
1. Open the front door.



1. Remove the knob [A] (x 1).
2. Remove four knobs [B] (x 1 each).
3. Remove the lever [C] (x 1).
4. Folding unit cover [D] (x 3, hook x 2)

1.1.6 INNER LOWER COVER

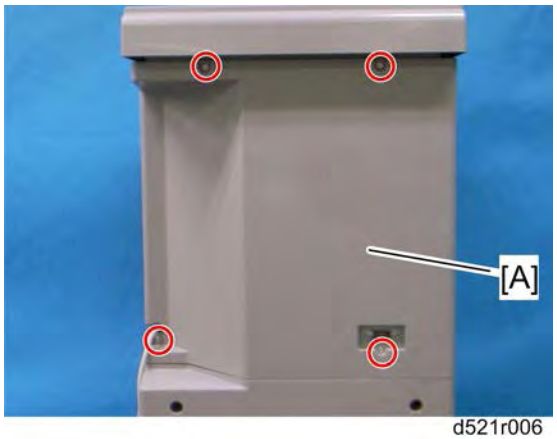
1. Open the front door.



d521r092

2. Inner lower cover [A] (x 1, hook)

1.1.7 REAR UPPER COVER

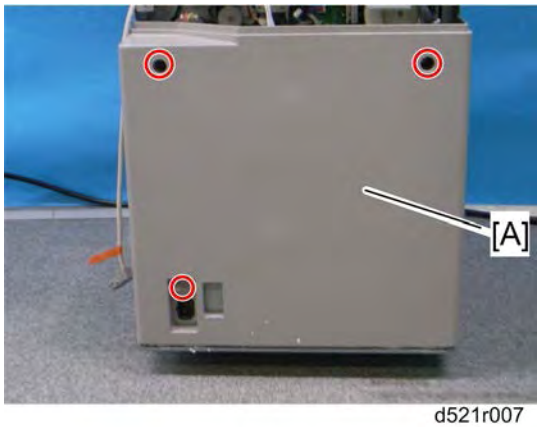


d521r006

1. Rear upper cover [A] (x 4)

1.1.8 REAR LOWER COVER

1. Rear upper cover page 16

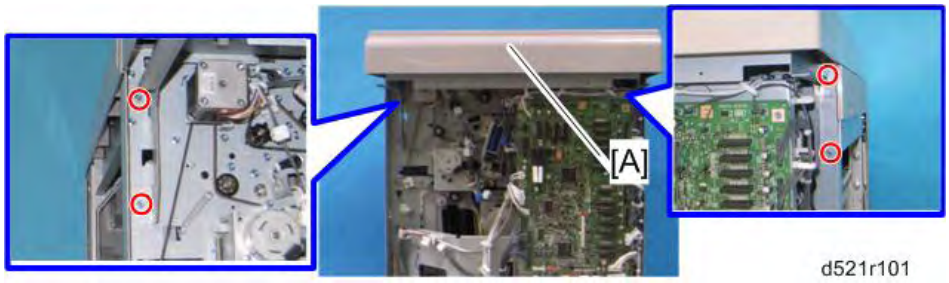


d521r007

2. Rear lower cover [A] (x 3)

1.1.9 TOP REAR COVER

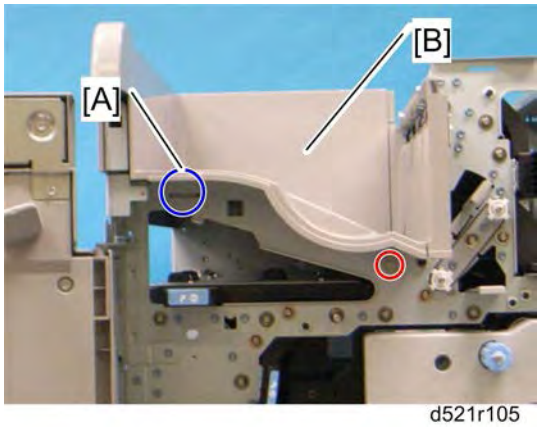
1. Rear upper cover page 16



2. Top rear cover [A] (x 4)

1.1.10 TOP TRAY

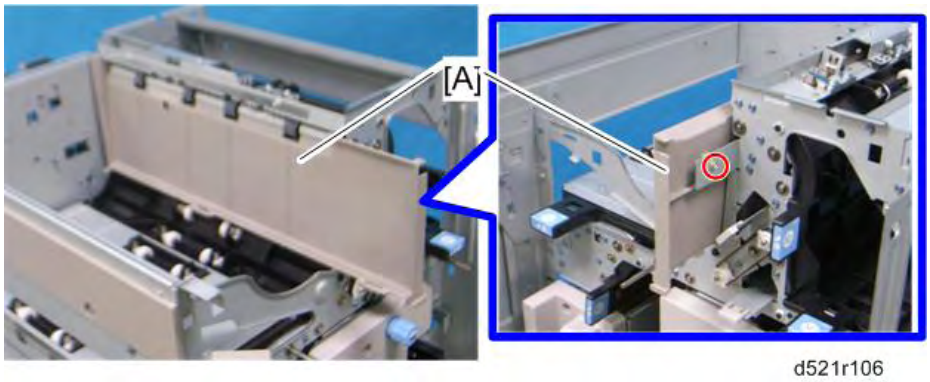
1. Top rear cover page 17
2. Inner upper cover page 14



3. Release the hook [A], and remove the top tray [B] (x 1).

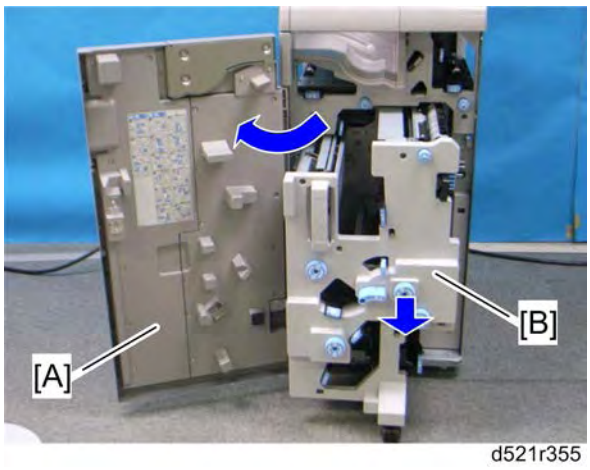
1.1.11 TOP TRAY RIGHT COVER

1. Top tray page 17



2. Top tray right cover [A] (x 1)

1.1.12 PULLING OUT THE FOLDING UNIT DRAWER

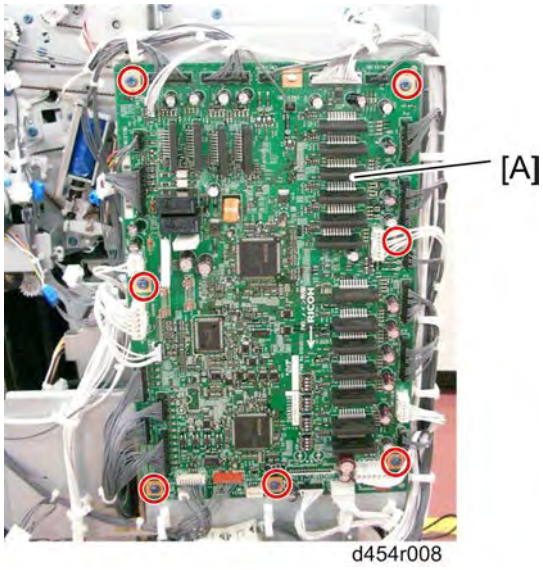


1. Open the front door [A]
2. Pull out the folding unit drawer [B].

1.2 ELECTRICAL COMPONENTS: REAR SIDE

1.2.1 MAIN BOARD

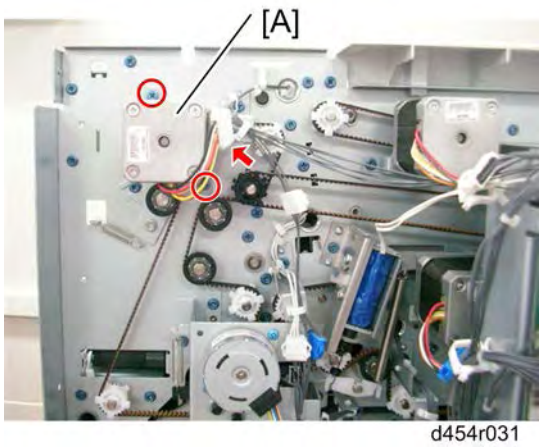
1. Rear upper cover page 16



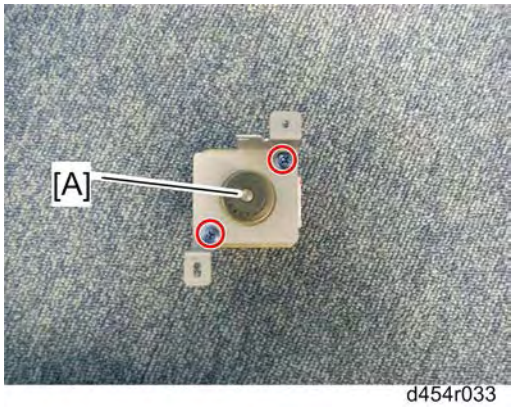
2. Main board [A] (x all, x 7)

1.2.2 HORIZONTAL TRANSPORT MOTOR

1. Rear upper cover page 16
2. Top rear cover page 17



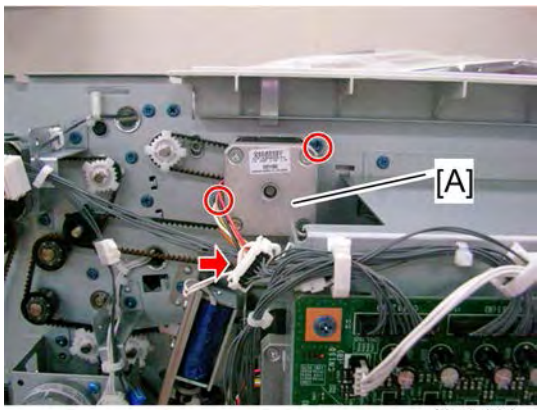
3. Horizontal transport motor bracket [A] (x 1, x 2)



4. Horizontal transport motor [A] (x 2)

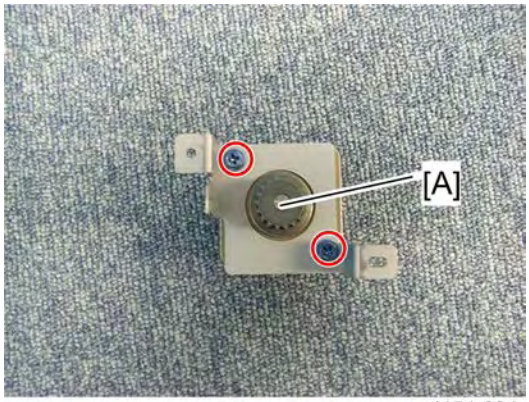
1.2.3 TOP TRAY EXIT MOTOR

1. Rear upper cover page 16
2. Top rear cover page 17



d454r032

3. Top tray exit motor bracket [A] (x 1, x 1, x 2)

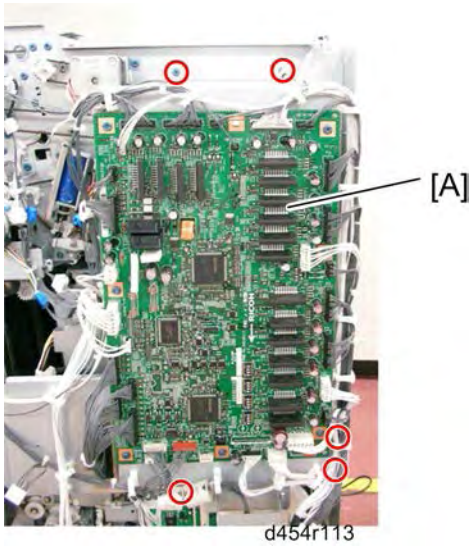


d454r034

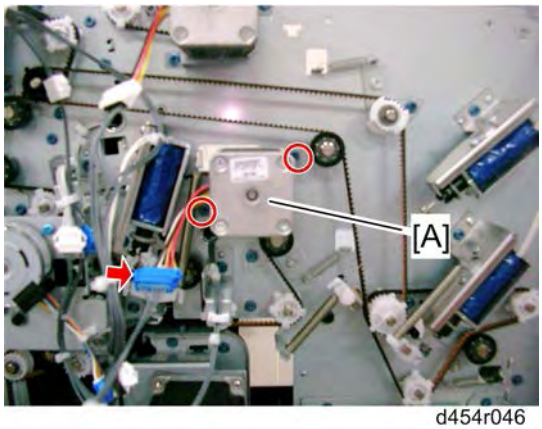
4. Top tray exit motor [A] (x 2)

1.2.4 TOP TRAY TRANSPORT MOTOR

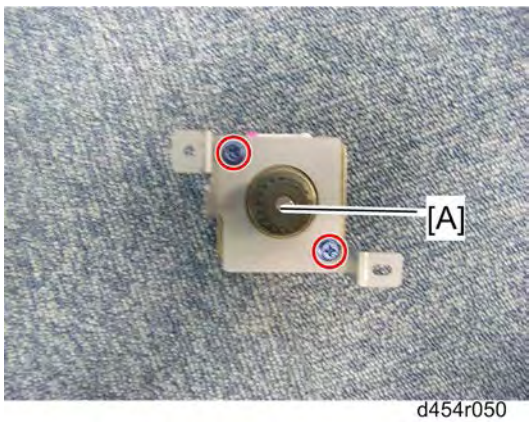
1. Rear upper cover page 16
2. Top rear cover page 17



3. Main board bracket [A] (x all, x 5, ground cable x 1)



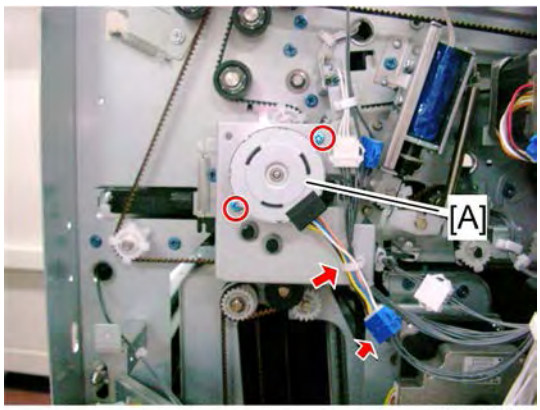
4. Top tray transport motor bracket [A] (x 1, x 2)



5. Top tray transport motor [A] (x 2)

1.2.5 ENTRANCE JG (JUNCTION GATE) MOTOR

1. Rear upper cover page 16

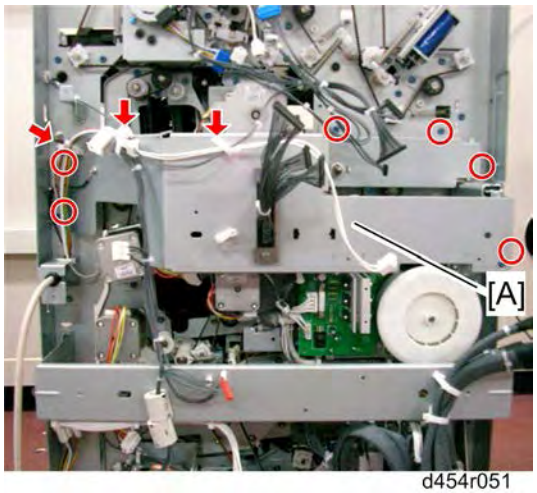


d454r016

2. Entrance JG motor [A] (x 1, x 1, x 2)

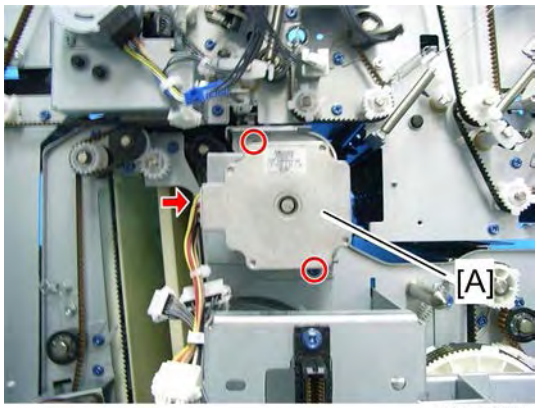
1.2.6 DYNAMIC ROLLER LIFT MOTOR

1. Rear upper cover page 16
2. Top rear cover page 17
3. Main board bracket page 22



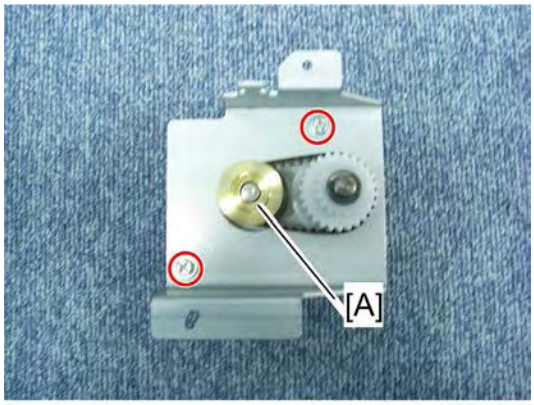
d454r051

4. Rear upper stay [A] (x 3, x 6)



d454r052

5. Dynamic roller lift motor bracket [A] (x 1, x 2)

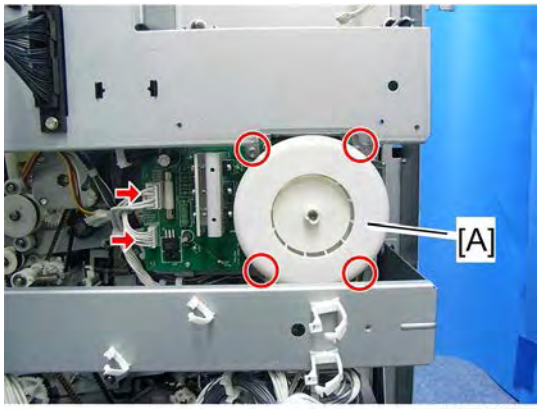


d454r055

6. Dynamic roller lift motor [A] (x 2)

1.2.7 CREASE MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16
3. Top rear cover page 17
4. Main board bracket page 22

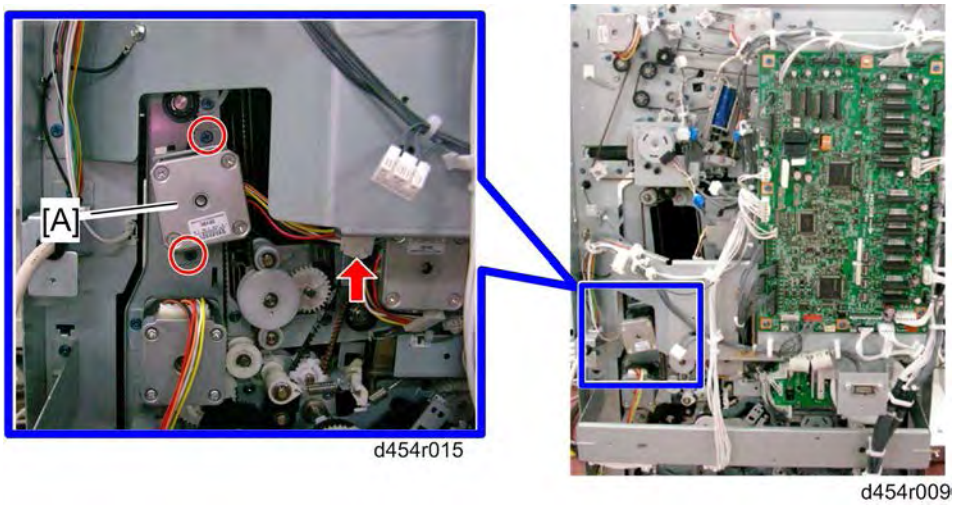


d454r049

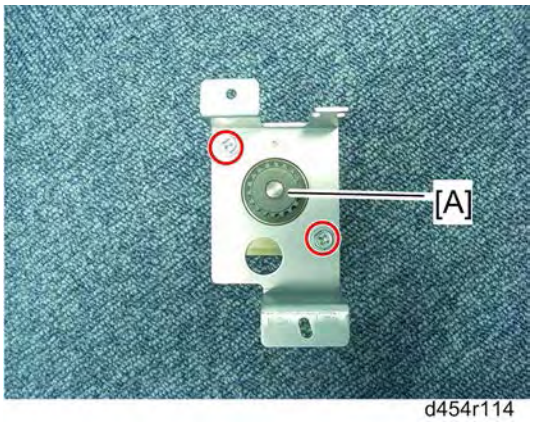
5. Crease motor [A] (x 2, x 4)

1.2.8 DYNAMIC ROLLER TRANSPORT MOTOR

1. Rear upper cover page 16



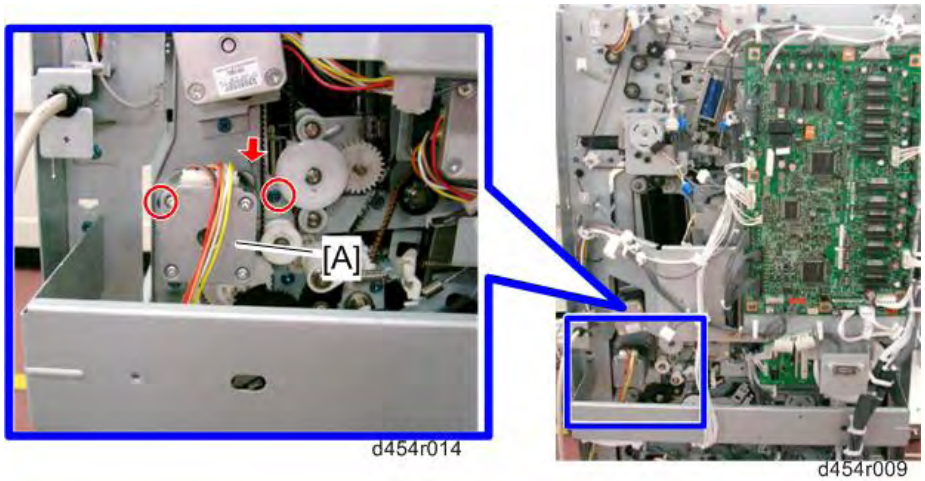
2. Dynamic roller transport motor bracket [A](x 1, x 2)



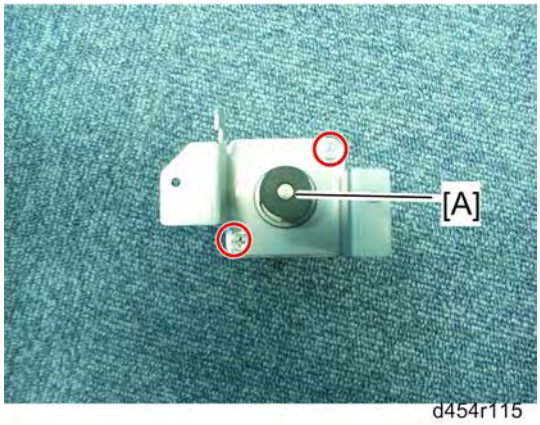
3. Dynamic roller transport motor (x 2)

1.2.9 REGISTRATION ROLLER RELEASE MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16



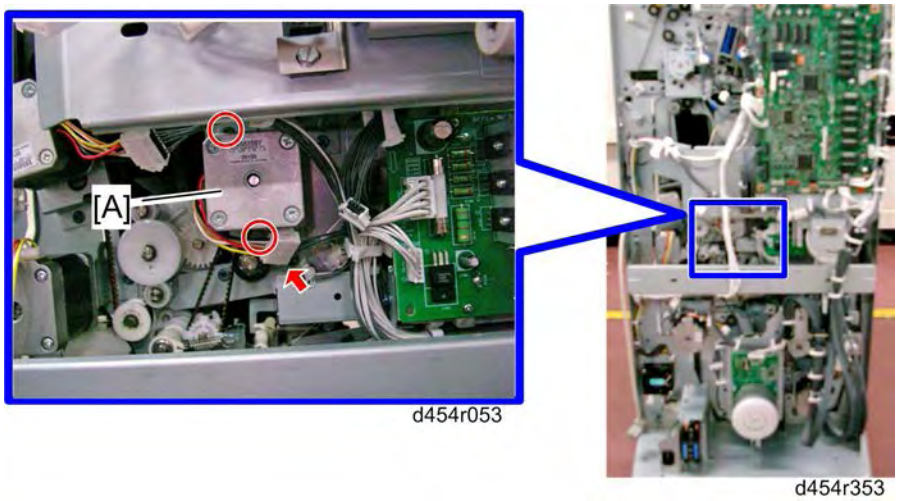
3. Registration roller release motor bracket [A] (x 1, x 2)



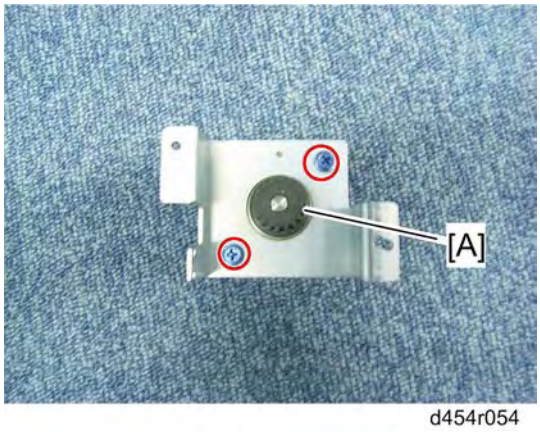
4. Registration roller release motor [A] (x 2)

1.2.10 REGISTRATION ROLLER TRANSPORT MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16



3. Registration roller transport motor bracket [A] (x 1, x 2)

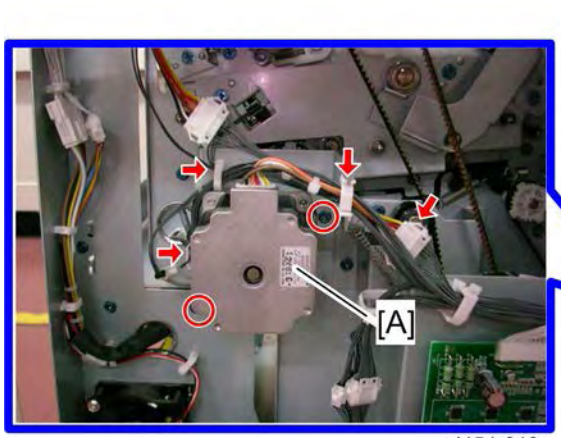


4. Registration roller transport motor [A] (x 2)

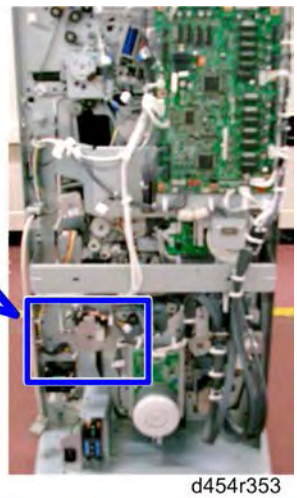
1.3 ELECTRICAL COMPONENTS: 1ST STOPPER

1.3.1 FOLD PLATE MOTOR

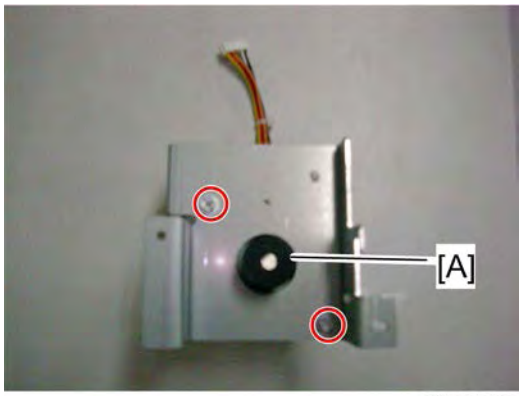
1. Rear upper cover page 16
2. Rear lower cover page 16



d454r013


d454r353

3. Fold plate motor bracket [A] (x 3, x 1, x 2)

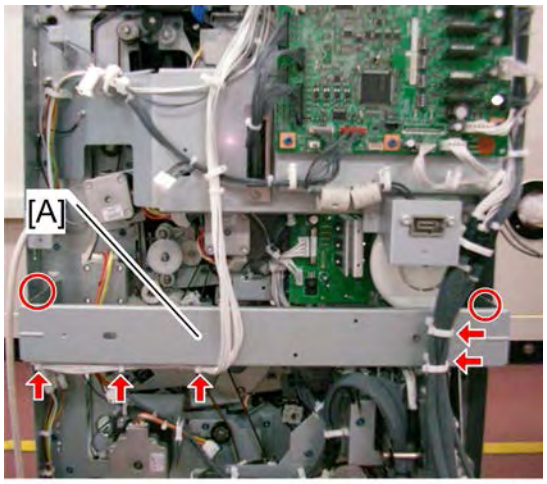


d454r018

4. Fold plate motor [A] (x 2)

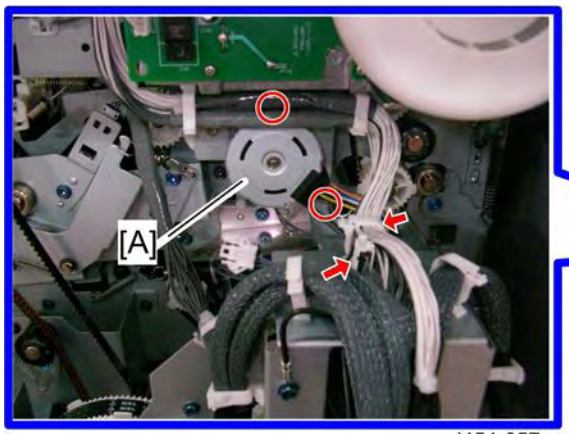
1.3.2 DIRECT-SEND JG MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16

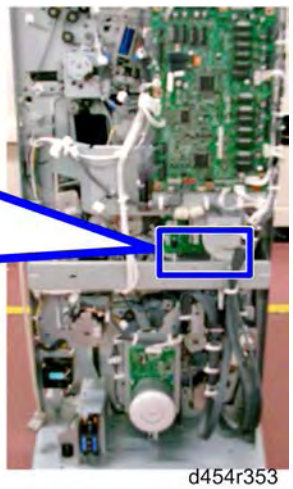


d454r354

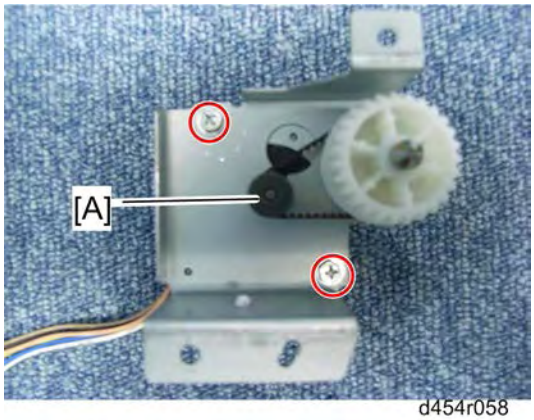
3. Rear lower stay [A] (x 5, x 2)



d454r057


d454r353

4. Direct-Send JG motor bracket [A] (x 1, x 1, x 2)

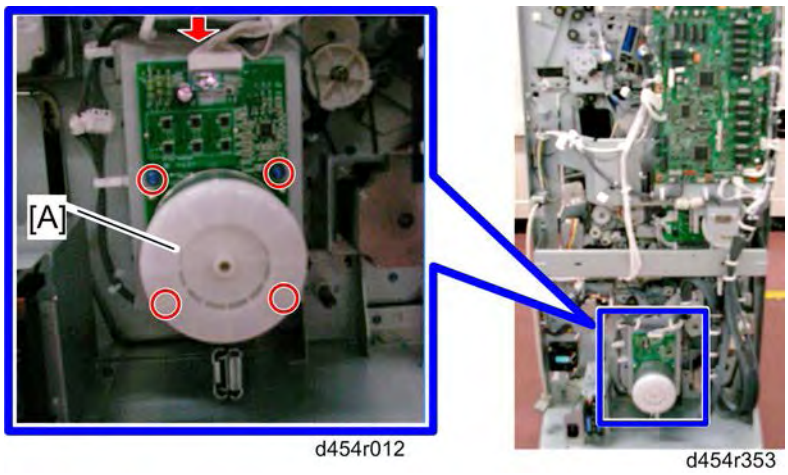


d454r058

5. Direct-Send JG motor [A] (x 2)

1.3.3 1ST FOLD MOTOR

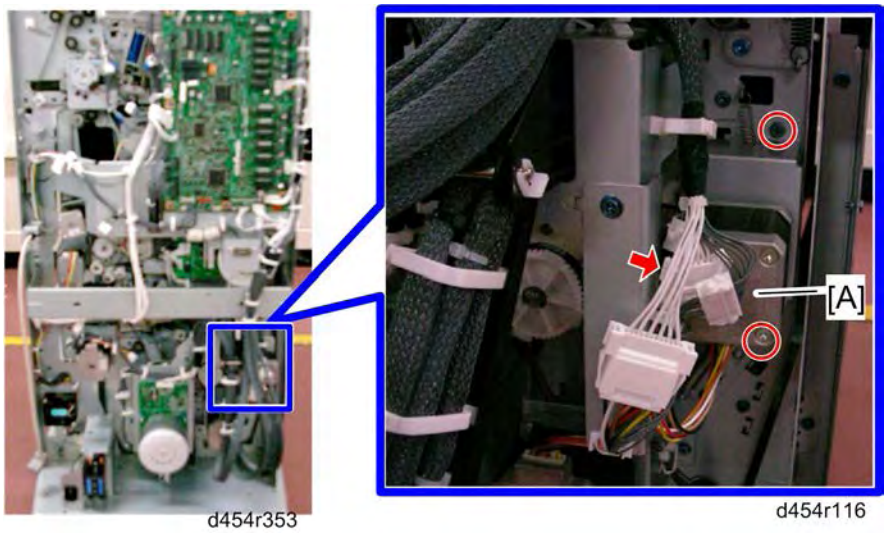
1. Rear upper cover page 16
2. Rear lower cover page 16



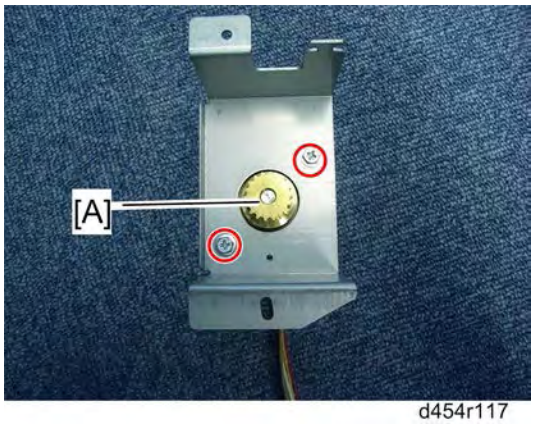
3. 1st fold motor [A] (x 1, x 4)

1.3.4 FM6 PAWL MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16



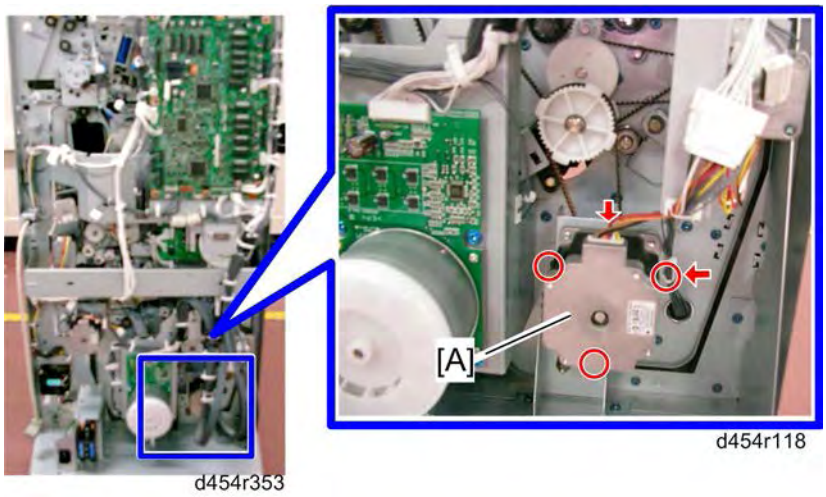
3. FM6 pawl motor bracket [A] (x 1, x 1, x 2)



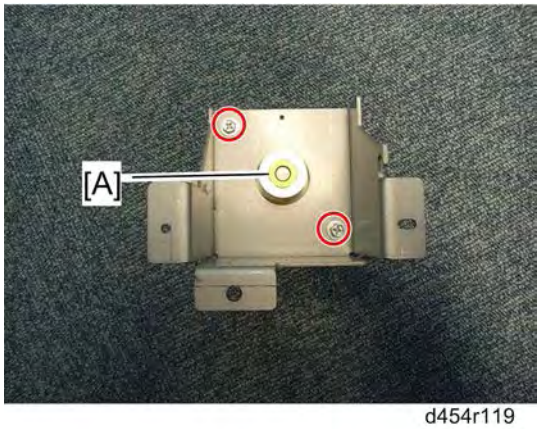
4. FM6 pawl motor [A] (x 2)

1.3.5 2ND FOLD MOTOR

1. Rear upper cover page 16
2. Rear lower cover page 16



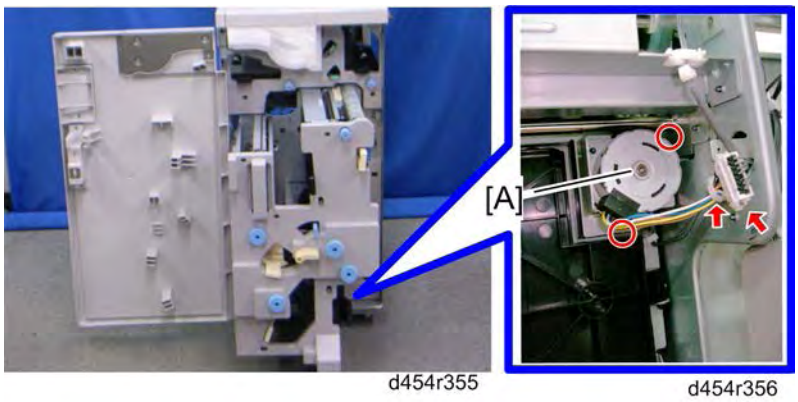
3. 2nd fold motor bracket [A] (x 1, x 1, x 3)



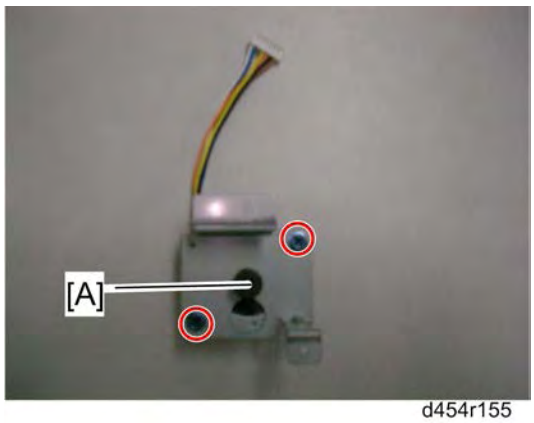
4. 2nd fold motor [A] (x 2)

1.3.6 JOGGER FENCE MOTOR

1. Pull out the folding unit drawer page 18



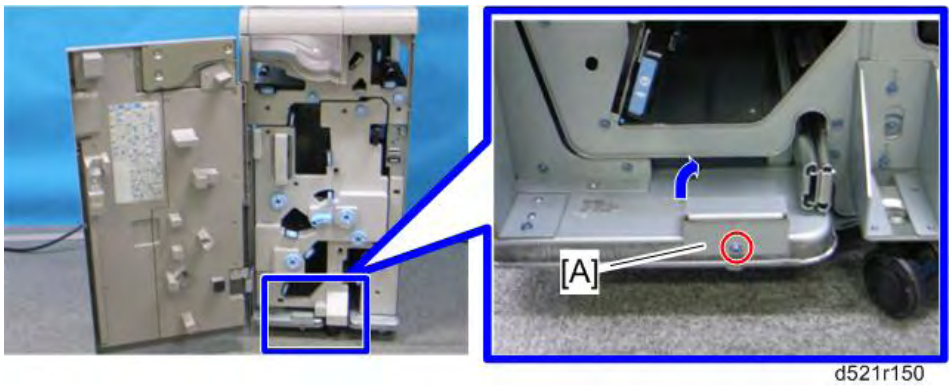
2. Jogger fence motor bracket [A] (x 1, x 1, x 2)



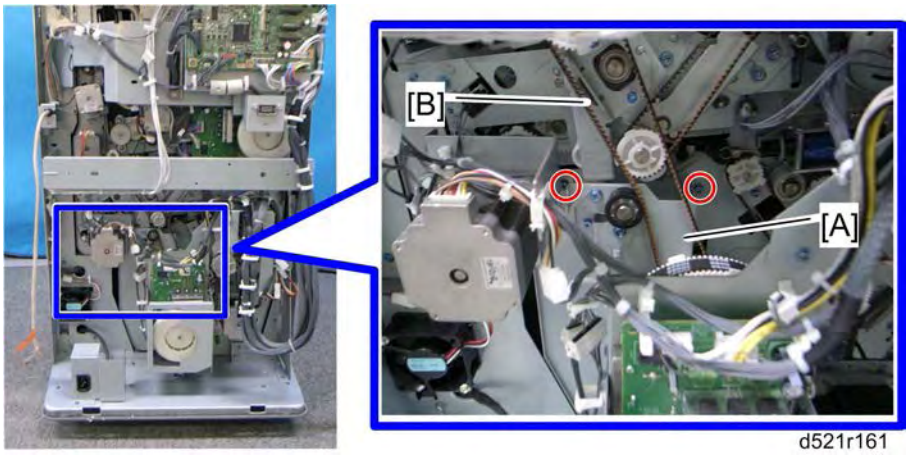
3. Jogger fence motor [A] (x 2)

1.3.7 1ST STOPPER UNIT

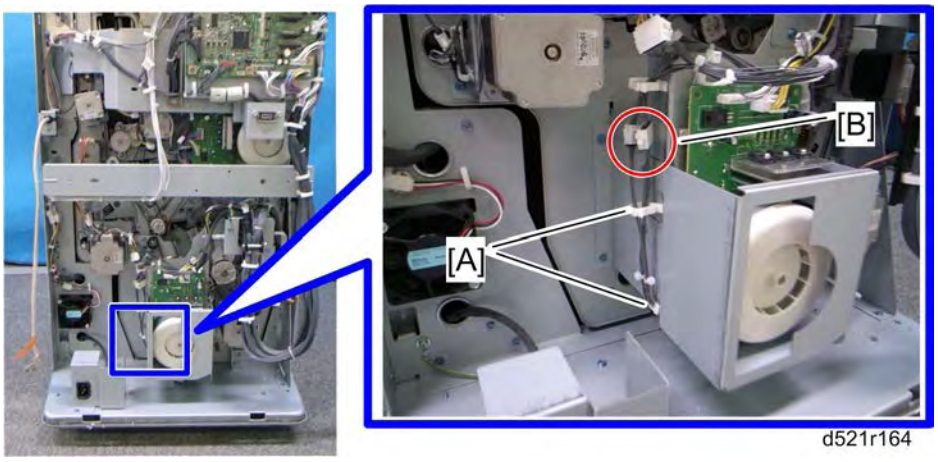
1. Folding unit cover page 15
2. Rear upper cover page 16
3. Rear lower cover page 16



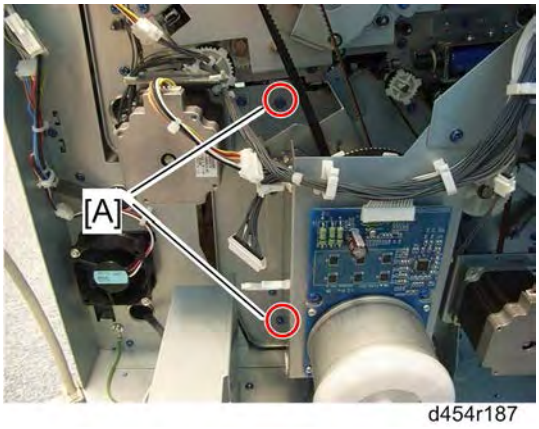
4. Drawer stopper [A] (x 1)



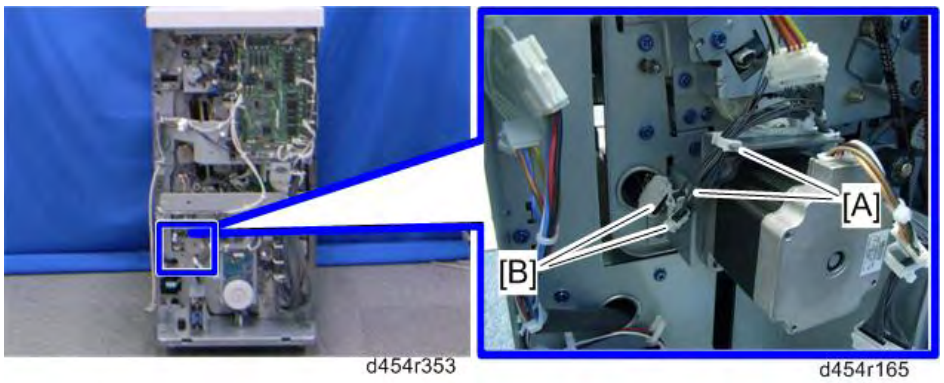
5. Belt tension bracket [A] (x 2)
   - Release the timing belt [B] to take out the belt tension bracket.



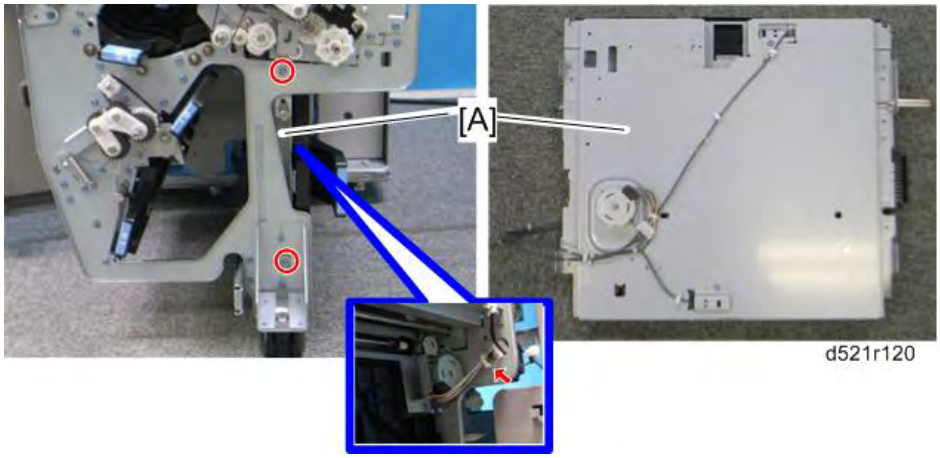
6. Release two clamps [A].
7. Disconnect two connectors [B].



8. Remove two screws [A].



9. Release two clamps [A].
10. Disconnect two connectors [B].
11. Pull out the folding unit drawer page 18



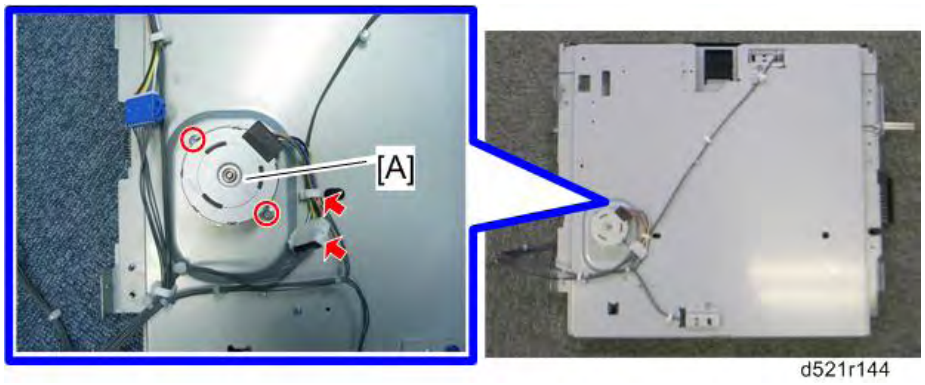
12. Hold the 1st stopper unit [A], and then remove it (x 2, x 1).

Important

- The 1st stopper unit cannot hang the folding unit drawer without the two screws. If you remove the 1st stopper unit without any support, the 1st stopper unit can fall and be broken.

1.3.8 1ST STOPPER MOTOR

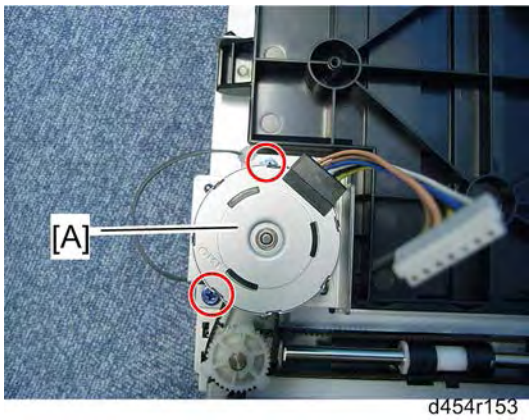
1. 1st stopper unit (☛page 33)



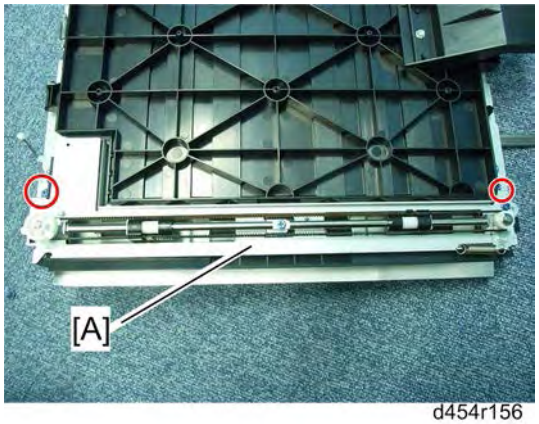
2. 1st stopper motor [A] (x 1, x 1, x 2)

1.3.9 JOGGER FENCE HP SENSOR

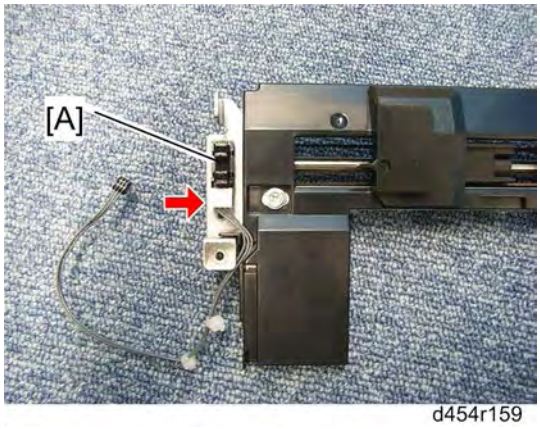
1. 1st stopper unit page 33



2. Jogger fence motor bracket [A] (x 2)



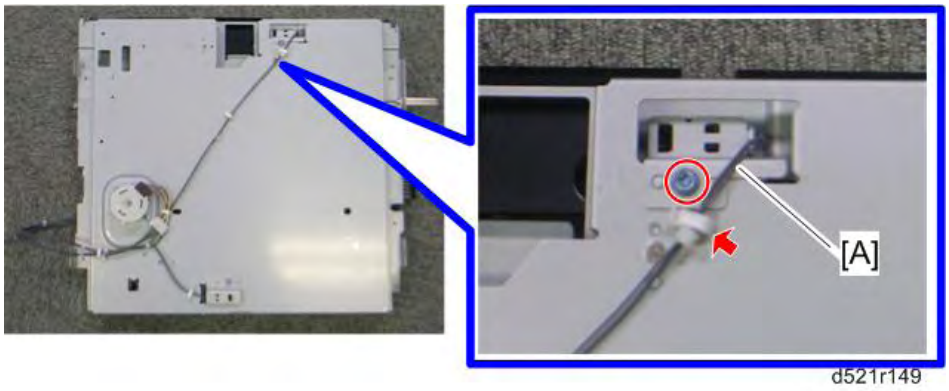
3. Jogger fence timing belt bracket [A] (x 2)



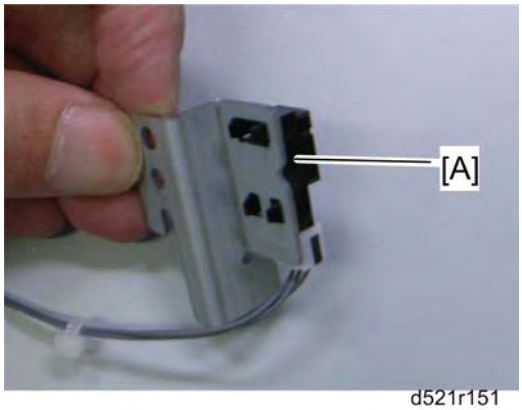
4. Jogger fence HP sensor [A] (hooks, x 1)

1.3.10 1ST STOPPER PAPER SENSOR

1. 1st stopper unit page 33



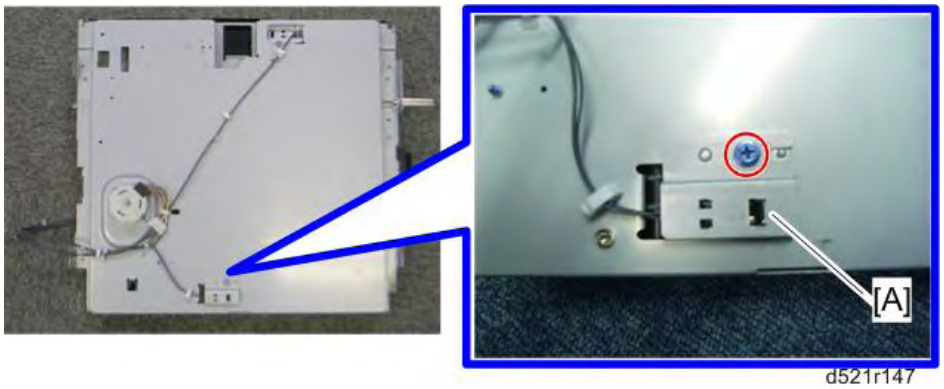
2. 1st stopper paper sensor bracket [A] (x 1)



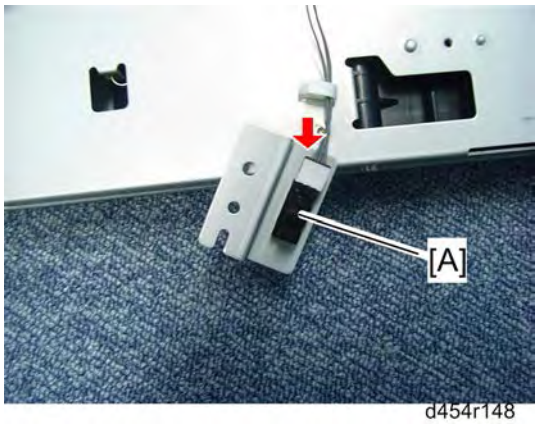
3. 1st stopper paper sensor [A] (hooks)

1.3.11 1ST STOPPER HP SENSOR

1. 1st stopper unit page 33



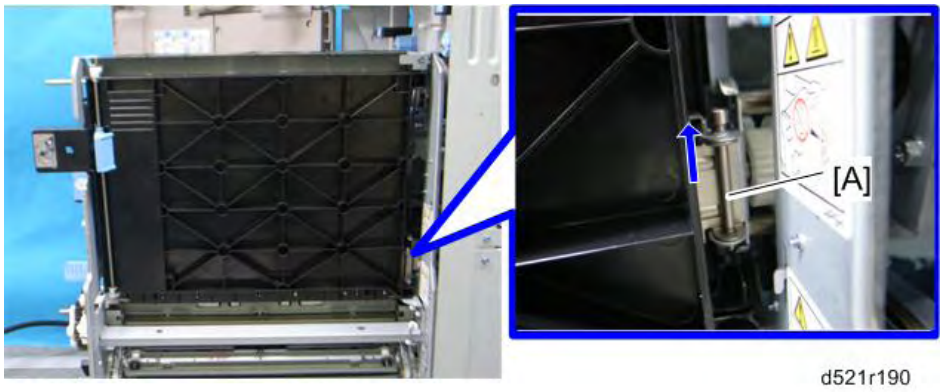
2. 1st stopper HP sensor bracket [A] (x 1)



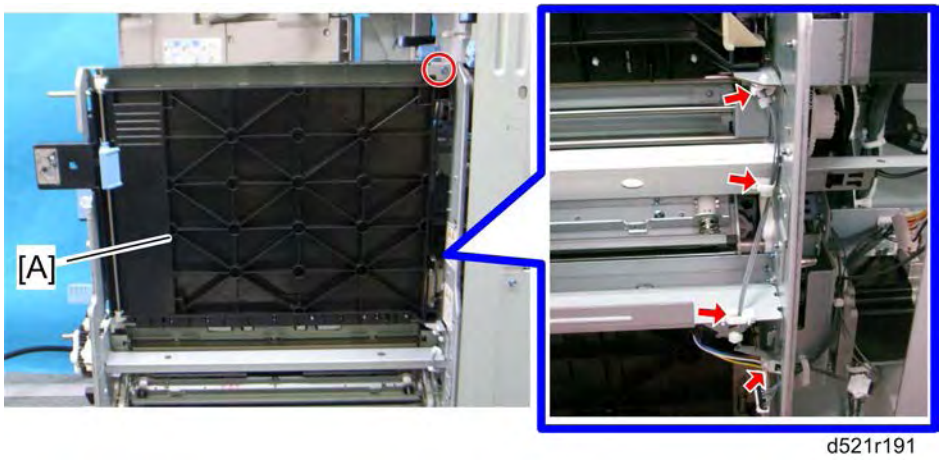
3. 1st stopper HP sensor [A] (hooks)

1.3.12 REGISTRATION SENSOR

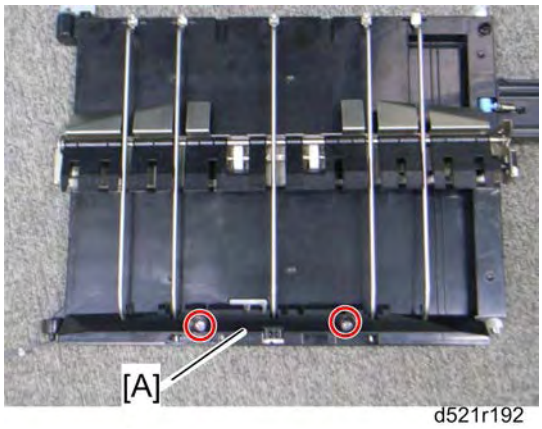
1. Pull out the folding unit drawer page 18



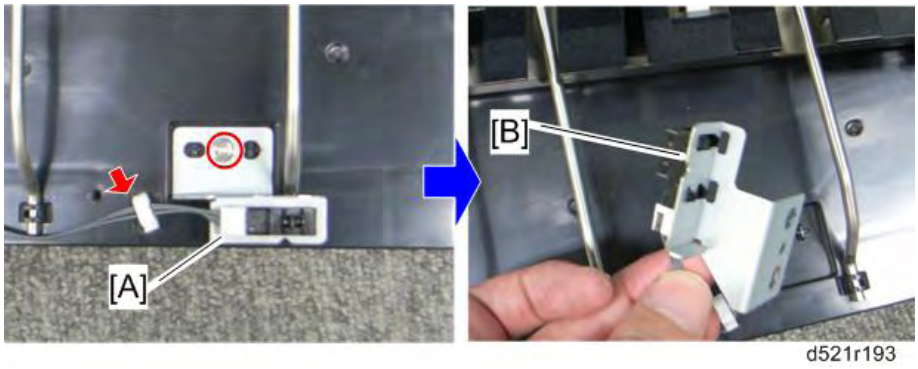
2. Pull out the pin [A] (x 1)



3. Jam removal door [A] (x 1, x 3, x 1)



4. Dynamic roller bottom guide [A] (x 2)

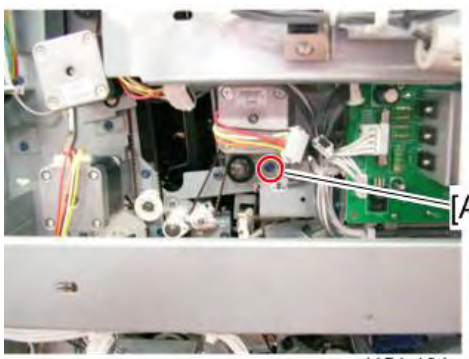


5. Registration sensor bracket [A] (x 1, x1)
6. Registration sensor [B] (hooks, x 1)

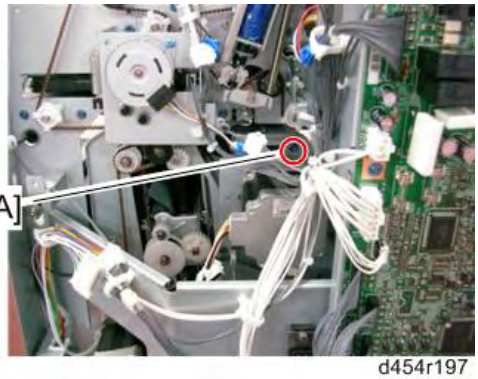
1.4 ELECTRICAL COMPONENTS: 2ND STOPPER

1.4.1 2ND STOPPER UNIT

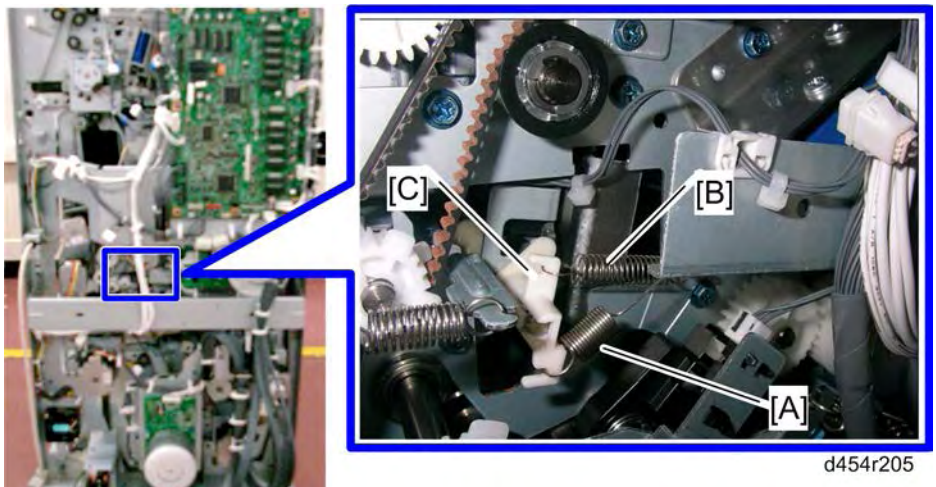
1. 1st stopper unit * page 33
2. Jam removal door page 39



d454r194


d454r197

3. Remove two screws [A] at the rear side of the folding unit drawer.

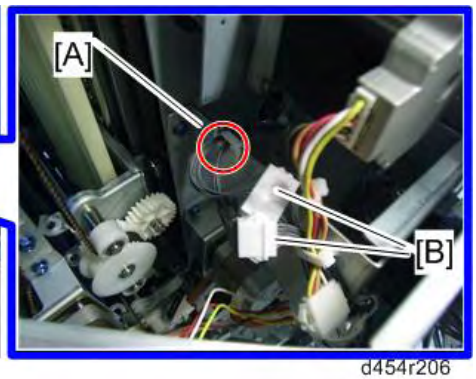


d454r205

d454r353

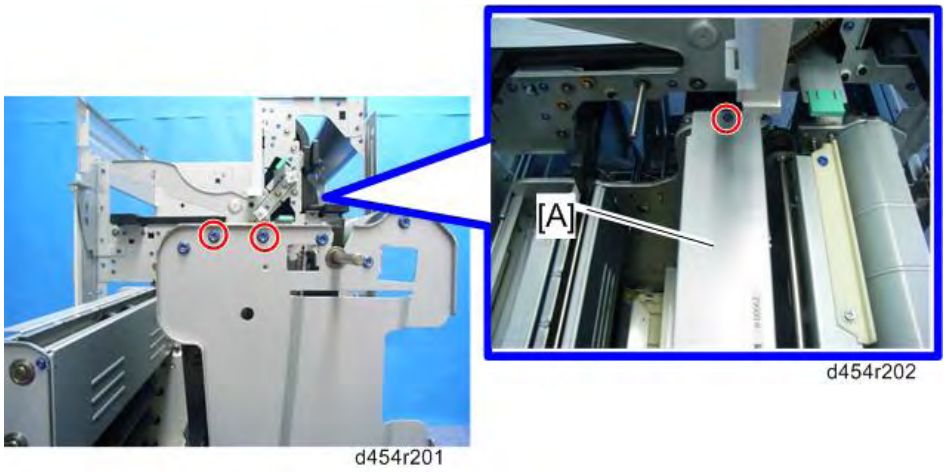
4. Remove the spring [A] for the solenoid spring [B] for the guide plate.
5. Remove the arm [C] for the guide plate.

d454r353



d454r206

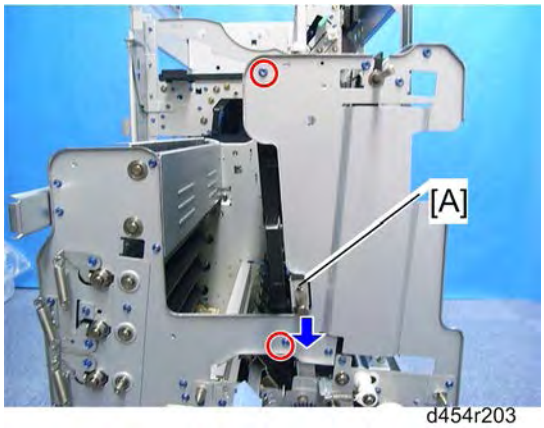
6. Release the clamp [A] and disconnect two connectors [B].
7. Pull out the folding unit drawer.



d454r202

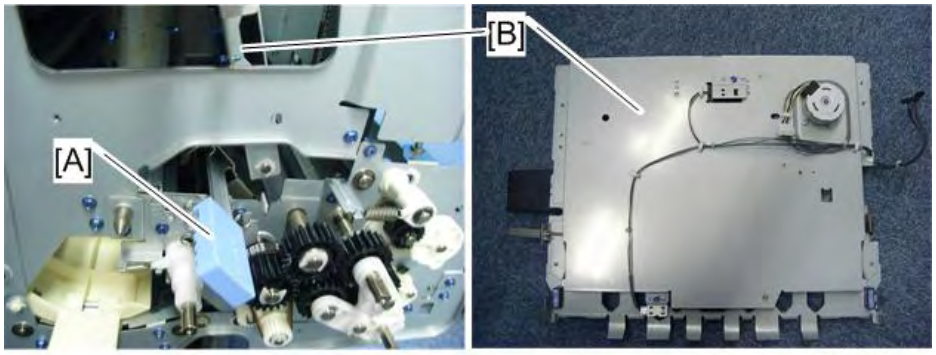
d454r201

8. Top stay [A] (x 3)



d454r203

9. Move down the 2nd stopper unit [A] a little bit (x 2).

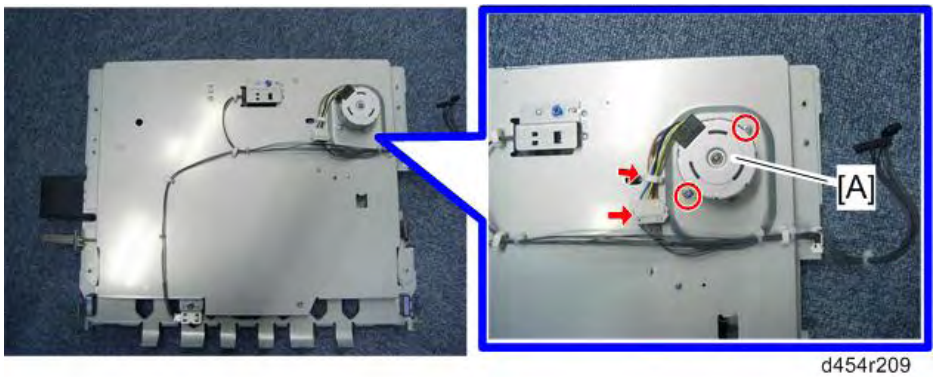


d454r207

10. Open the jam removal door [A], and then remove the 2nd stopper unit [B].

1.4.2 2ND STOPPER MOTOR

1. 2nd stopper unit page 41

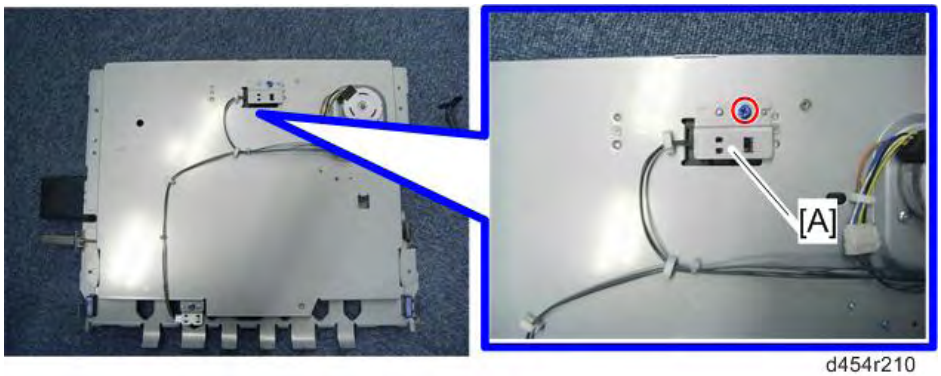


d454r209

2. 2nd stopper motor [A] (x 1, x 1, x 2)

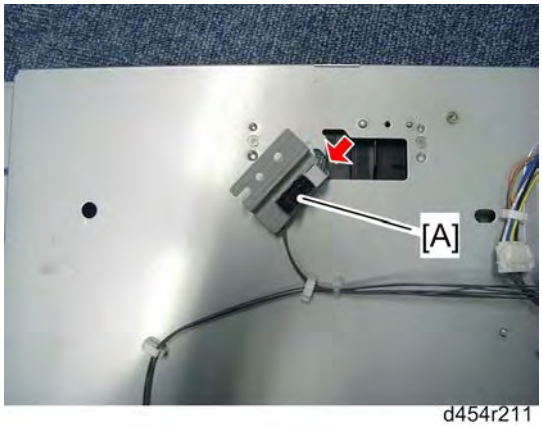
1.4.3 2ND STOPPER HP SENSOR

1. 2nd stopper unit page 41



d454r210

2. 2nd stopper HP sensor bracket [A] (x 1)

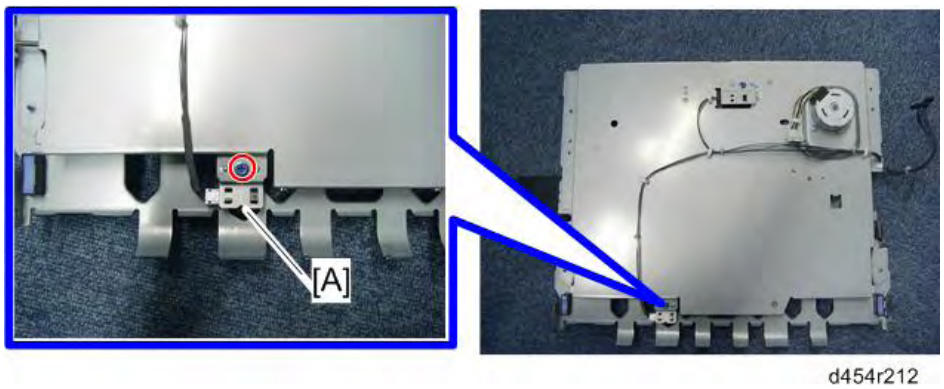


d454r211

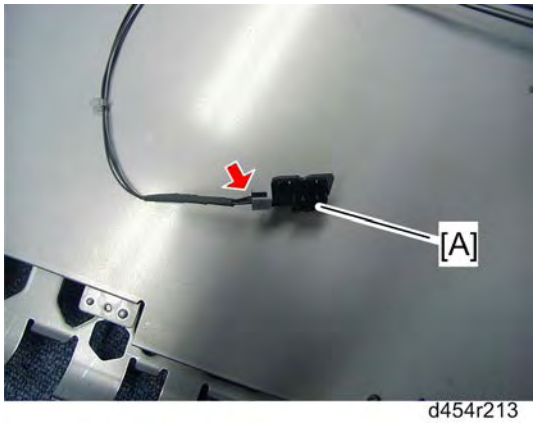
3. 2nd stopper HP sensor [A] (hooks, x 1)

1.4.4 2ND STOPPER PAPER SENSOR

1. 2nd stopper unit page 41



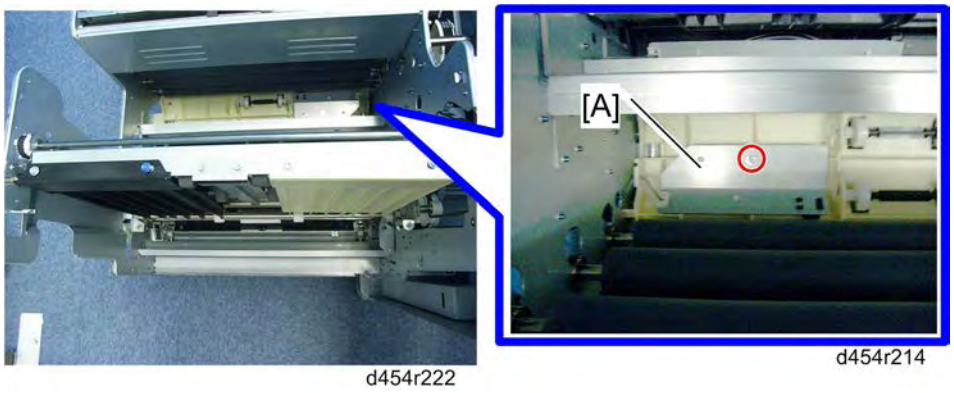
2. 2nd stopper paper sensor bracket [A] (x 1)



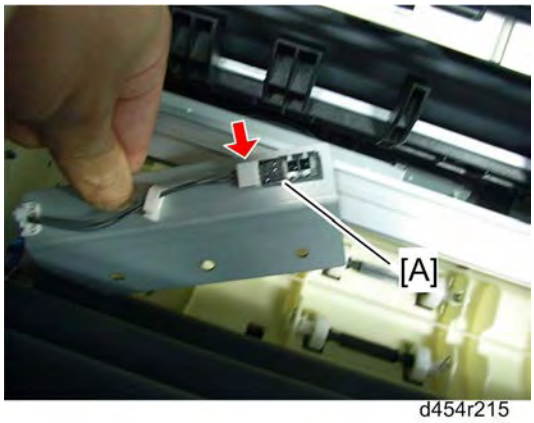
3. 2nd stopper paper sensor [A] (x 1)

1.4.5 BYPASS EXIT PAPER SENSOR

1. Pull out the folding unit drawer page 18
2. 2nd stopper unit page 41



3. Bypass exit paper sensor bracket [A] (x 1)

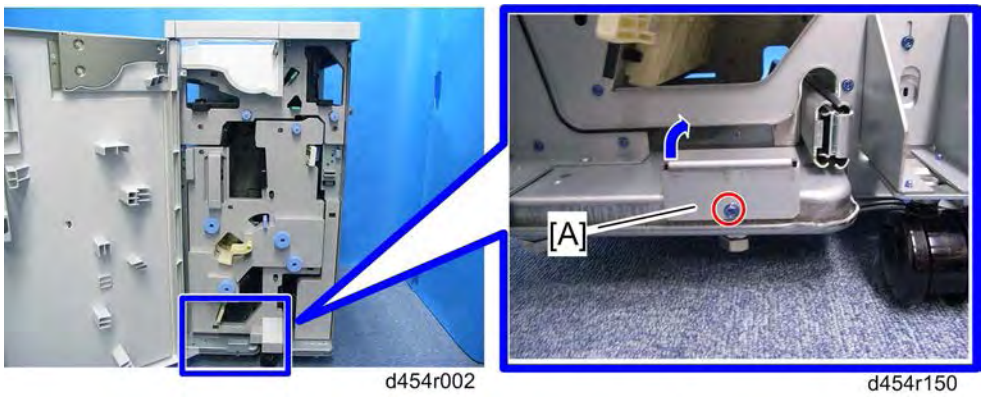


4. Bypass exit paper sensor [A] (x 1)

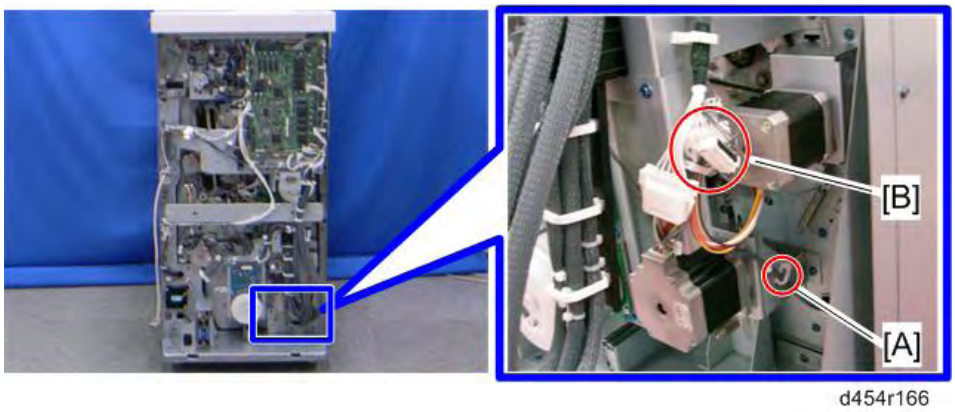
1.5 ELECTRICAL COMPONENTS: 3RD STOPPER

1.5.1 3RD STOPPER UNIT

1. Folding unit cover page 15
2. Rear upper cover page 16
3. Rear lower cover page 16

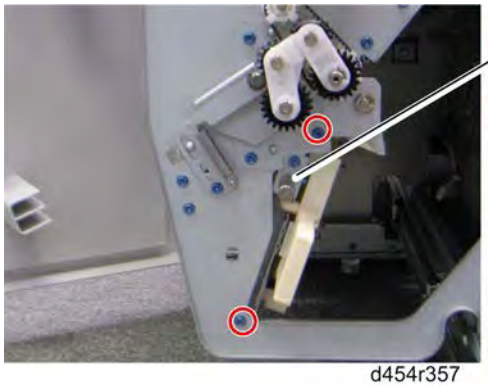


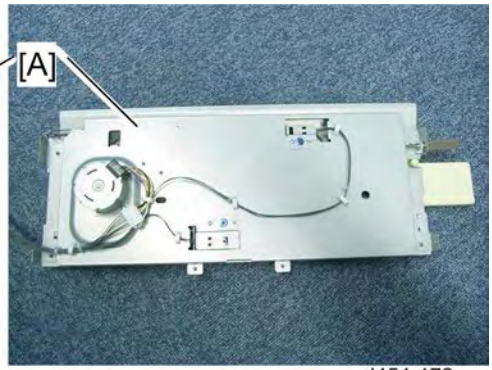
4. Drawer stopper [A] (x 1)



5. Release the clamp [A].
6. Disconnect two connectors [B].
7. 2nd fold motor bracket page 32

8. Remove two screws [A].


d454r357



d454r172

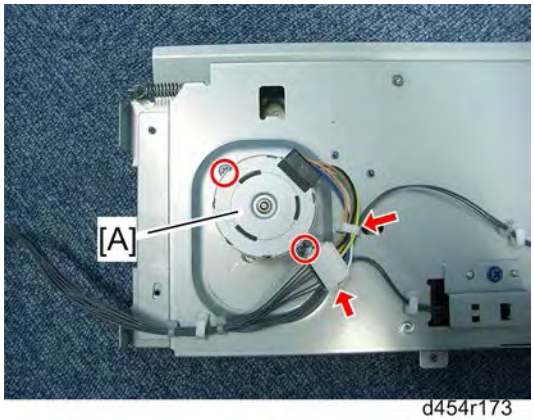
9. Hold the 3rd stopper unit [A], and then remove it (x 2).

Important

- The 3rd stopper unit cannot hang the folding unit drawer without the two screws. If you remove the 1st stopper unit without any support, the 3rd stopper unit can fall and be broken.

1.5.2 3RD STOPPER MOTOR

1. 3rd stopper unit page 46



d454r173

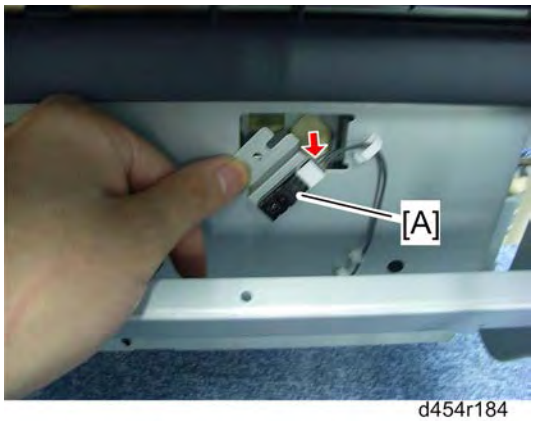
2. 3rd stopper motor [A] (x 1, x 1, x 2)

1.5.3 3RD STOPPER PAPER SENSOR

1. Pull out the folding unit drawer. page 18

d454r183

2. 3rd stopper paper sensor bracket [A] (x 1)

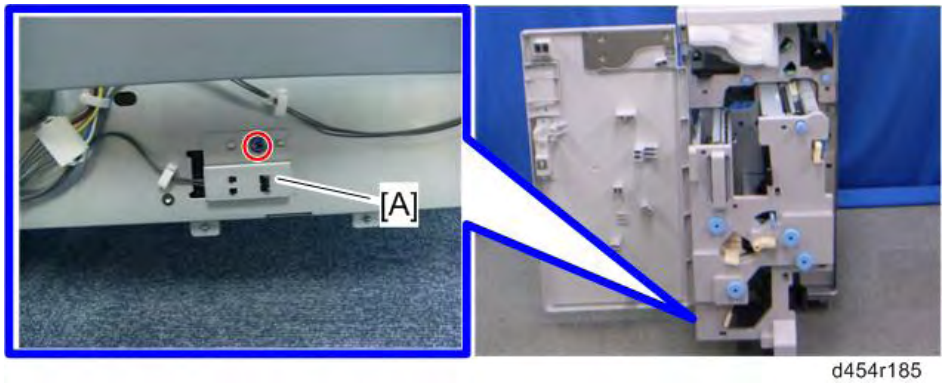


d454r184

3. 3rd stopper paper sensor [A] (x 1)

1.5.4 3RD STOPPER HP SENSOR

1. Pull out the folding unit drawer. page 18



d454r185

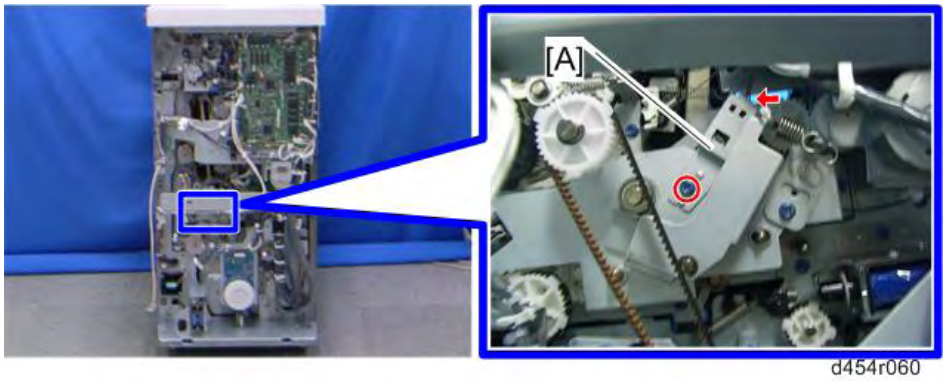
2. 3rd stopper HP sensor bracket [A] (x 1)

d454r186

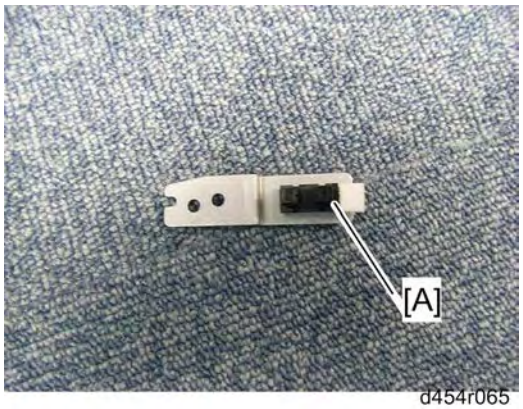
3. 3rd stopper HP sensor [A] (x 1)

1.5.5 DIRECT-SEND JG (JUNCTION GATE) HP SENSOR

1. Rear upper cover page 16
2. Rear lower cover page 16



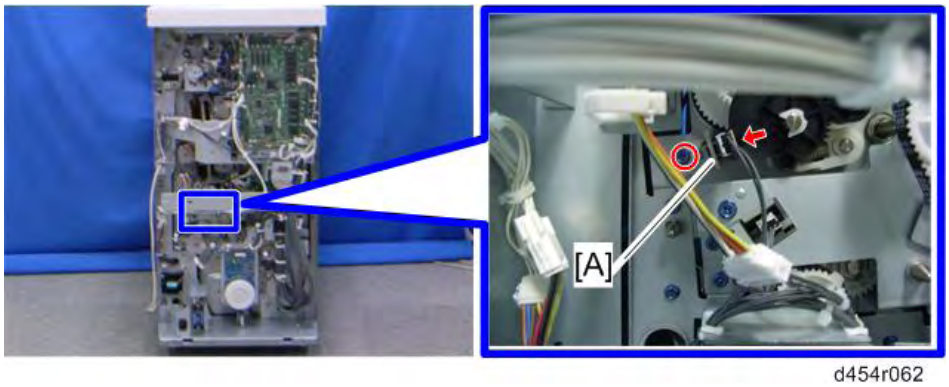
3. Direct-Send JG HP sensor bracket [A] (x 1, x 1)



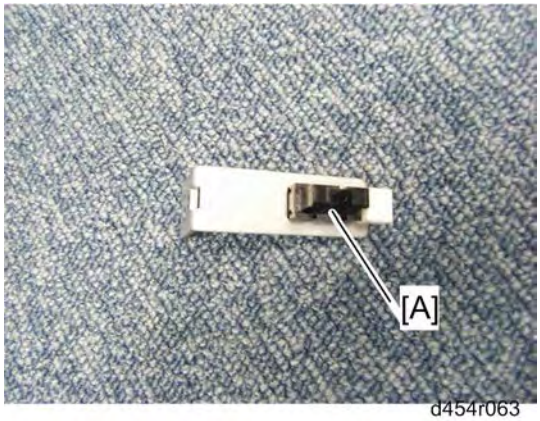
4. Direct-Send JG HP sensor [A] (hooks)

1.5.6 REGISTRATION ROLLER HP SENSOR

1. Rear upper cover page 16
2. Rear lower cover page 16



3. Registration roller HP sensor bracket [A] (x 1, x 1)

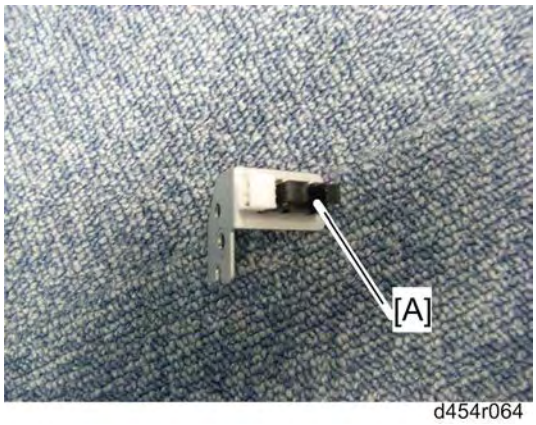


4. Registration roller HP sensor [A] (hooks)

1.5.7 FOLD PLATE HP SENSOR

1. Rear upper cover page 16
2. Rear lower cover page 16

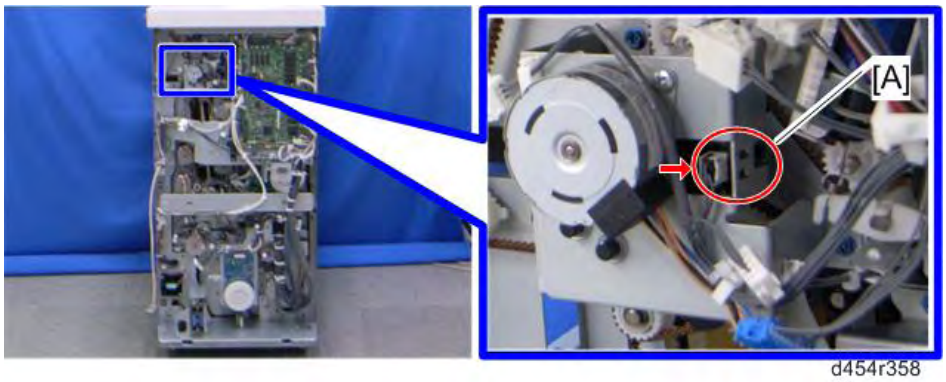
3. Fold plate HP sensor bracket [A] (x 1, x 1)



4. Fold plate HP sensor [A] (hooks)

1.5.8 ENTRANCE JG (JUNCTION GATE) HP SENSOR

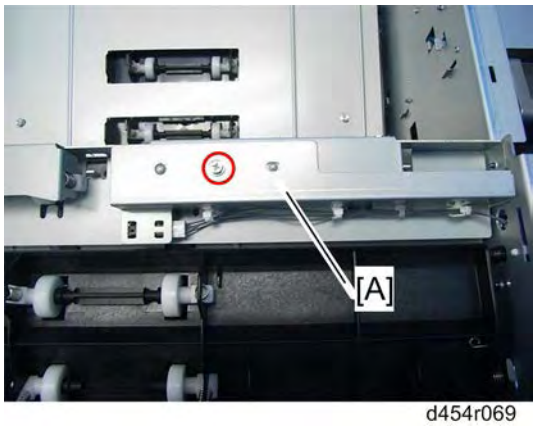
1. Rear upper cover page 16



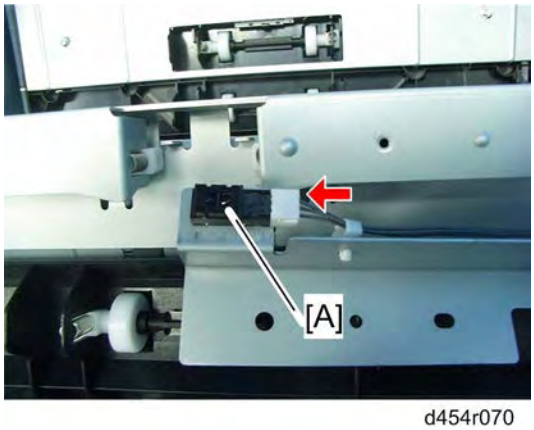
2. Entrance JG HP sensor [A] (hooks, x 1)

1.5.9 TOP TRAY EXIT SENSOR

1. Top cover page 14

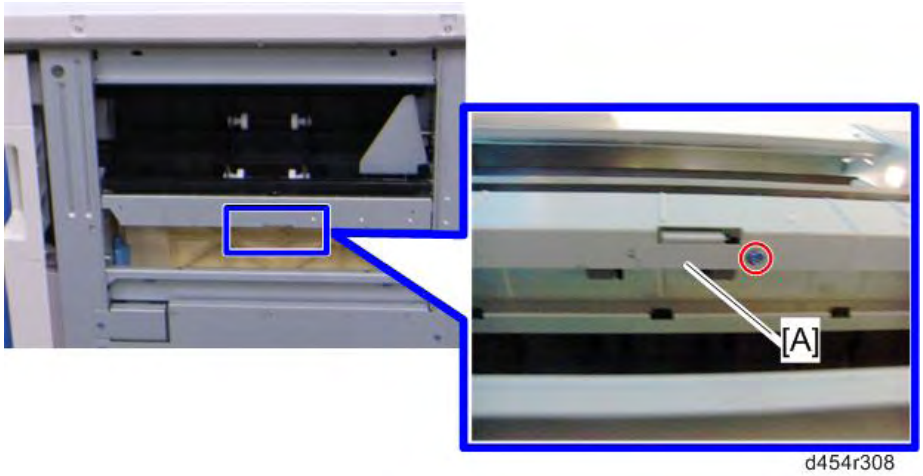


2. Top tray exit sensor bracket [A] (x 1)



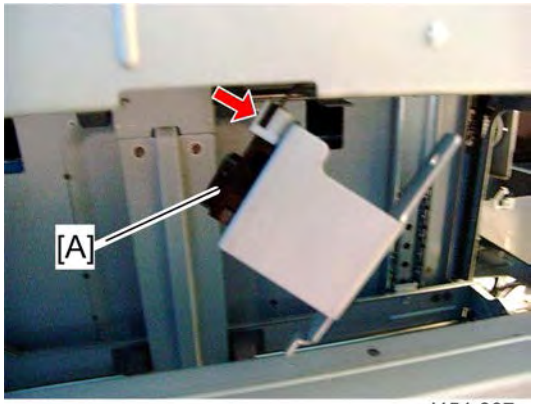
3. Top tray exit sensor [A] (x 1)

1.5.10 ENTRANCE SENSOR



d454r308

1. Entrance sensor bracket [A] (x 1)

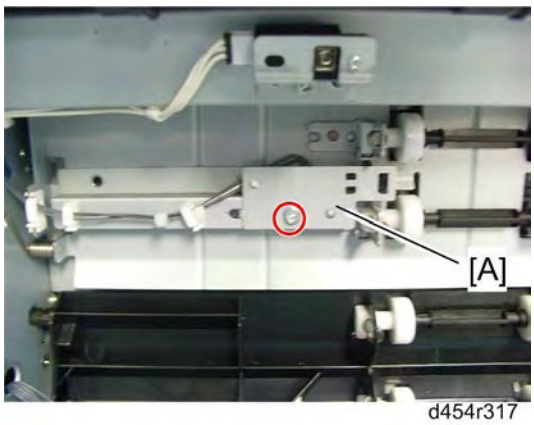


d454r307

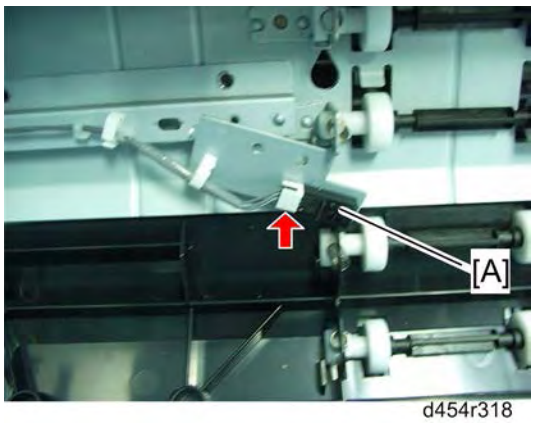
2. Entrance sensor [A] (hooks, x 1)

1.5.11 TOP TRAY PAPER PATH SENSOR

1. Top tray right cover page 18



2. Top tray paper path sensor bracket [A] (x 1)

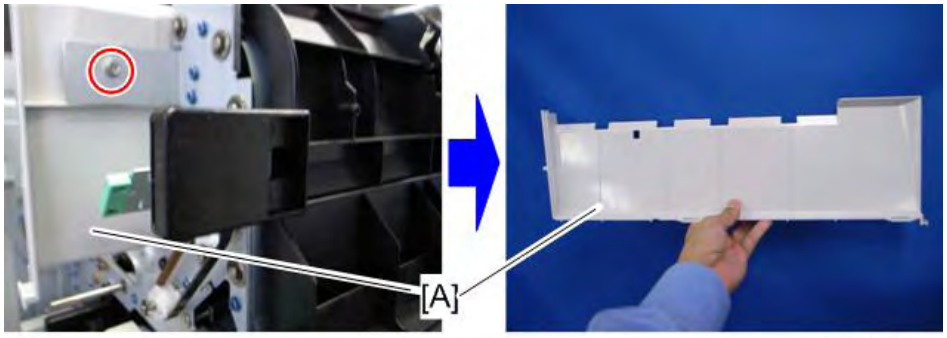


3. Top tray paper path sensor [A] (hooks, x 1)

1.6 ELECTRICAL COMPONENTS: MAIN 1

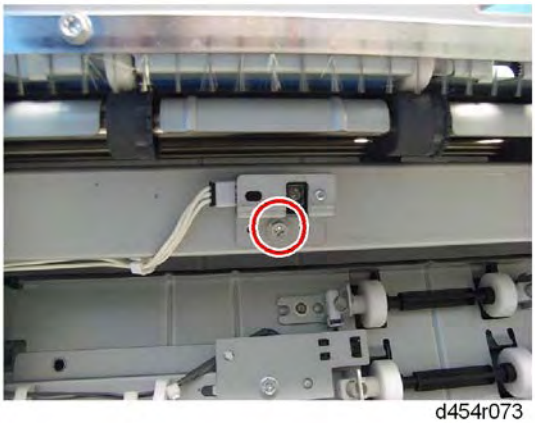
1.6.1 TOP TRAY FULL SENSOR (E)

1. Top tray page 17

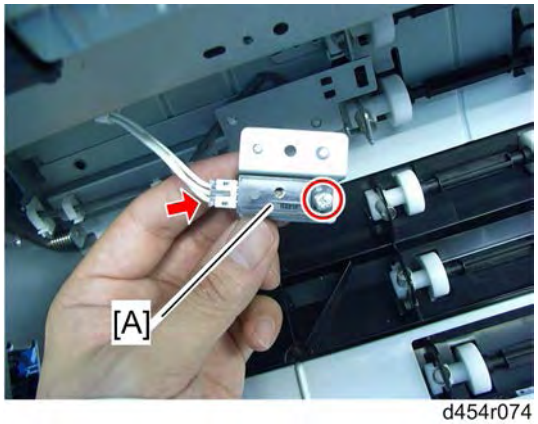


d454r361

2. Paper exit cover [A] (x 1)


d454r073

3. Top tray full sensor (E) bracket (x 1)

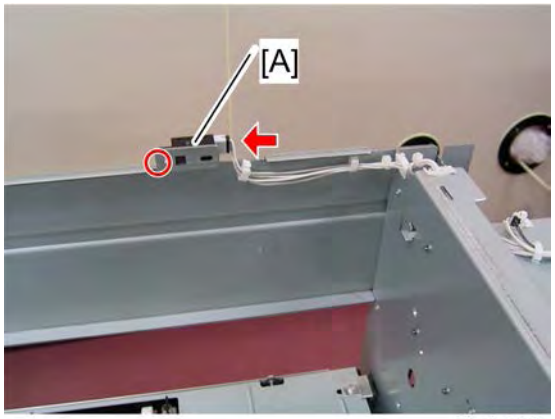


d454r074

4. Top tray full sensor (E) [A] (x 1, x 1)

1.6.2 TOP TRAY FULL SENSOR (R)

1. Top tray page 17

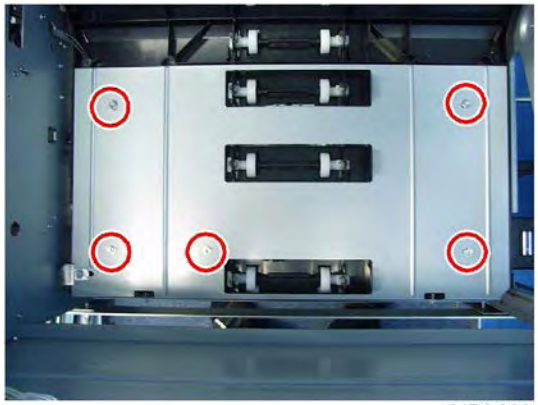


d454r067

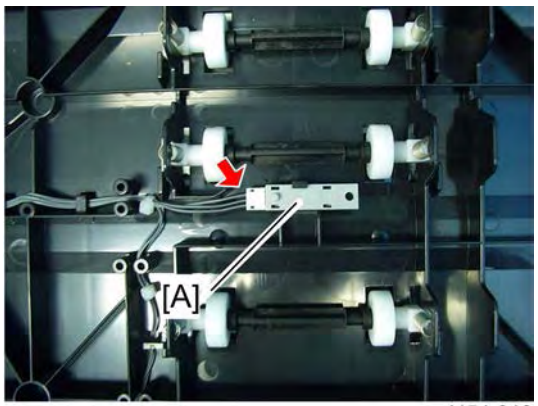
2. Top tray full sensor (R) [A] (x 1, x 1)

1.6.3 VERTICAL PATH PAPER SENSOR

1. Top tray page 17


d454r309

2. Remove the bracket (x 5)

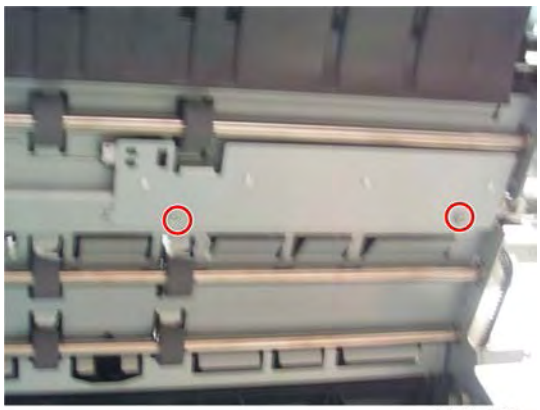


d454r312

3. Vertical path paper sensor [A] (x 1, hooks)

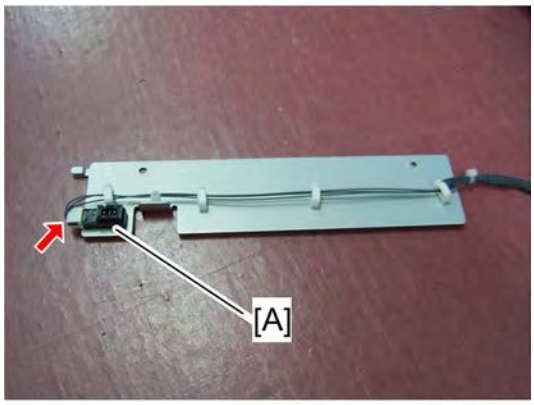
1.6.4 HORIZONTAL PATH PAPER SENSOR

1. Top tray page 17



d454r371

2. Remove the bracket (x 2)

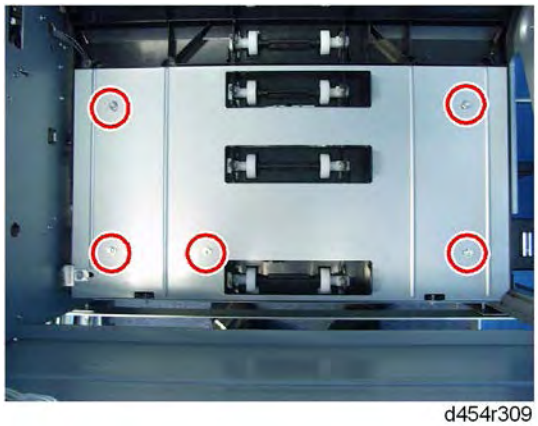


d454r372

3. Horizontal path paper sensor [A] (x 1)

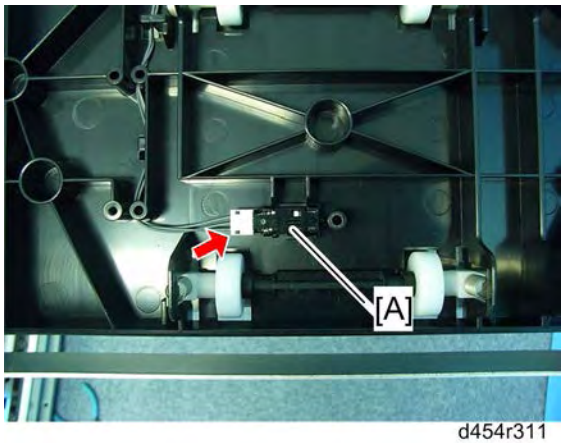
1.6.5 HORIZONTAL PATH EXIT SENSOR

1. Top tray page 17



d454r309

2. Remove the bracket (x 5)

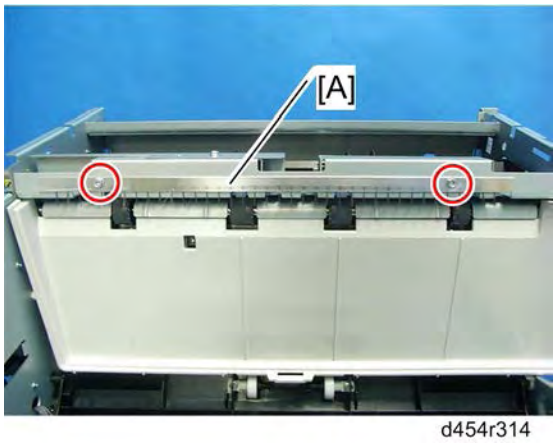


d454r311

3. Horizontal path exit sensor ([A] x 1)

1.6.6 DISCHARGE BRUSH 1

1. Top cover page 14

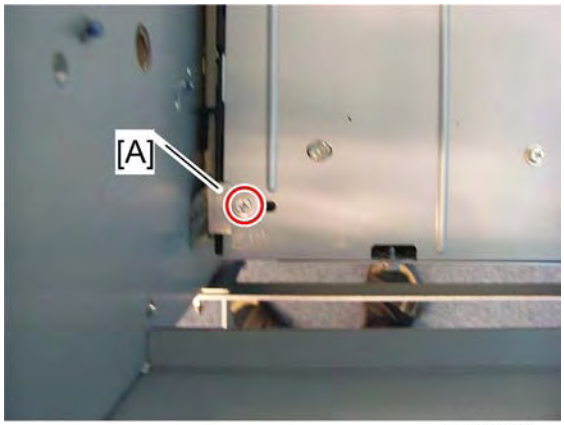


d454r314

2. Discharge brush 1 [A] (x 2)

1.6.7 DISCHARGE BRUSH 2

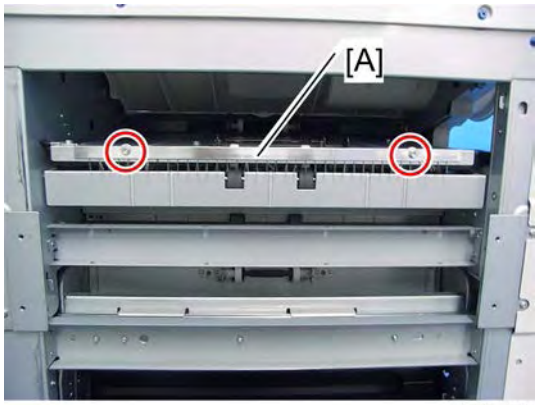
1. Top tray page 17



d454r313

2. Discharge brush 2 [A] (x 1)

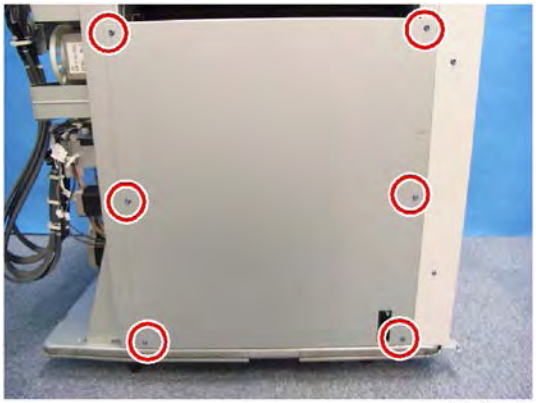
1.6.8 DISCHARGE BRUSH 3



d454r350

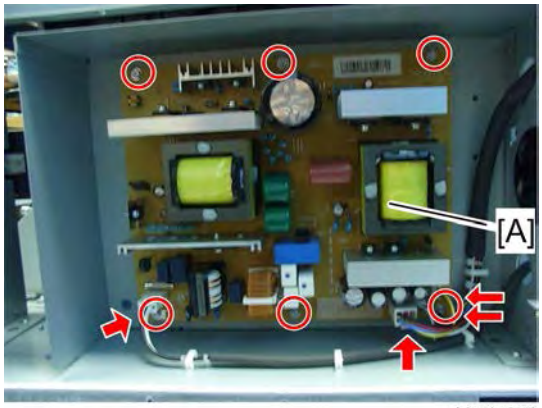
1. Discharge brush 3 [A] (x 2)

1.6.9 PSU



d454r349

1. Left lower bracket (x 6)

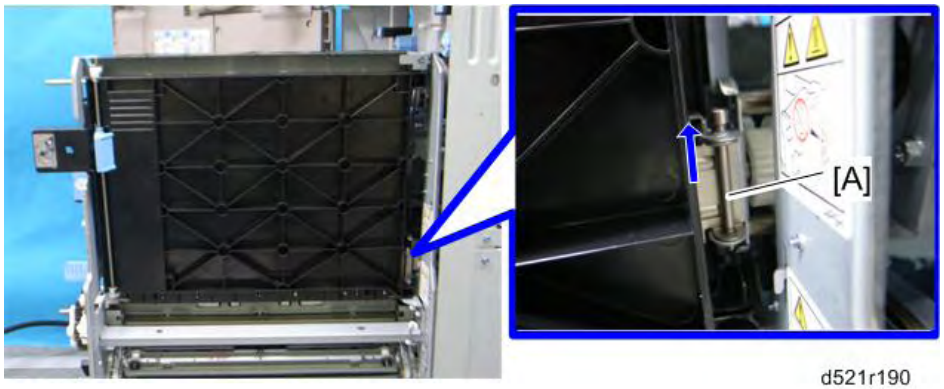


d454r178

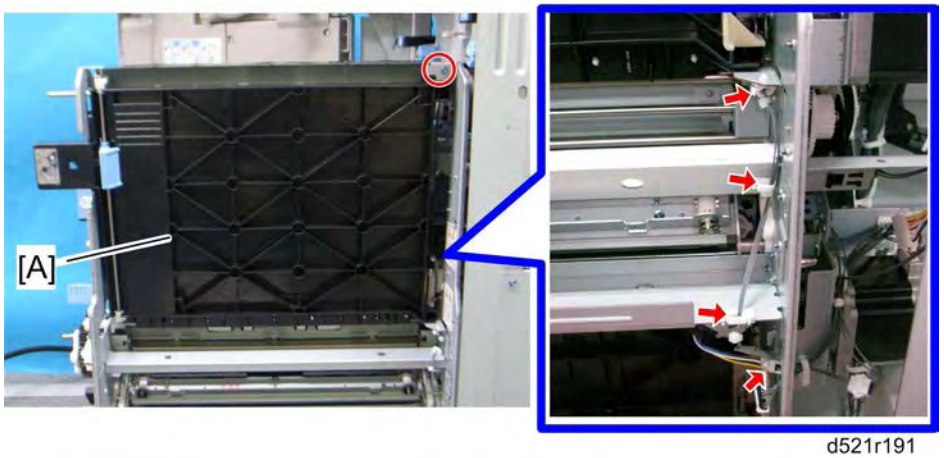
2. PSU [A] (x 6, x 4)

1.6.10 FIRST FOLD UNIT

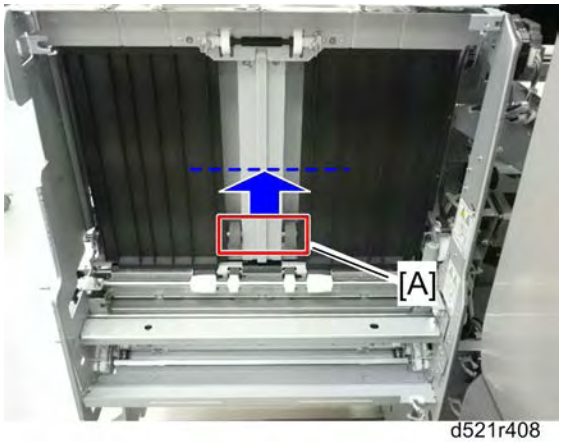
1. 1st stopper unit page 33



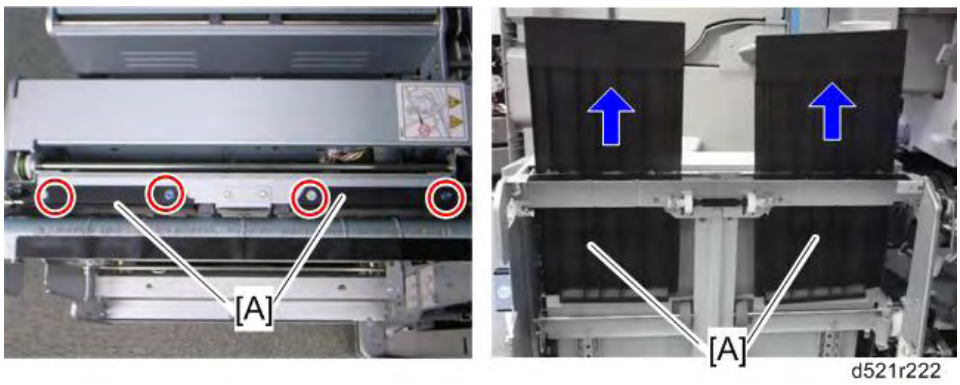
2. Pull out the pin [A] (x 1)



1. Jam removal door [A] (x 1, x 3, x 1)

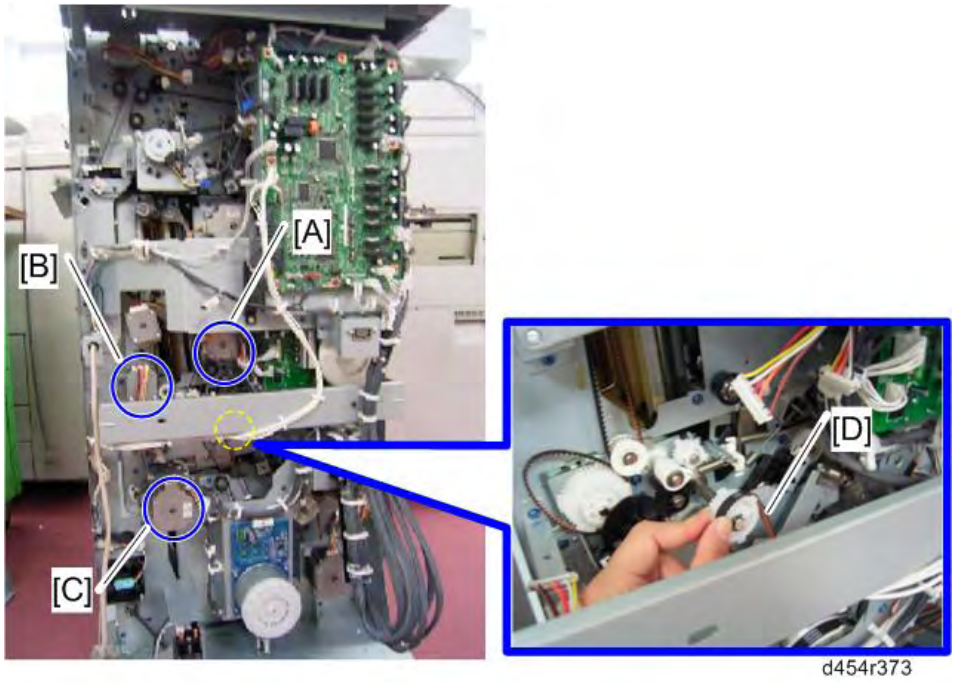


2. Lift up the dynamic roller [A].



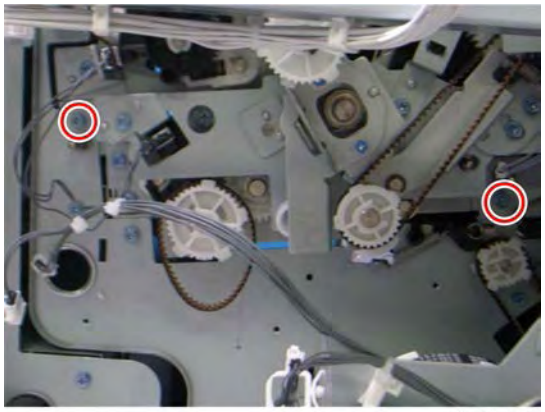
d521r222

3. Lift up two guide plates [A] (each x 2).

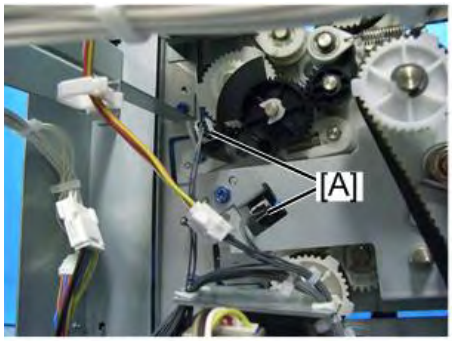


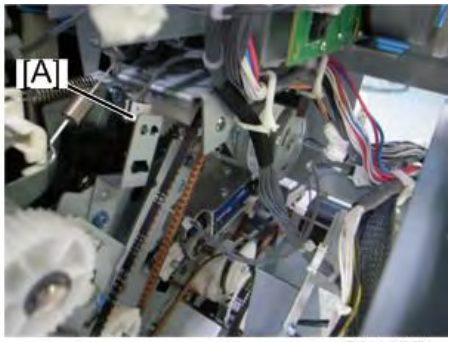
d454r373

4. Registration roller transport motor bracket [A] page 27
5. Registration roller release motor bracket [B] page 26
6. Fold plate motor bracket [C] page 28
7. Timing belt of the 1st plate motor [D]


d521r235

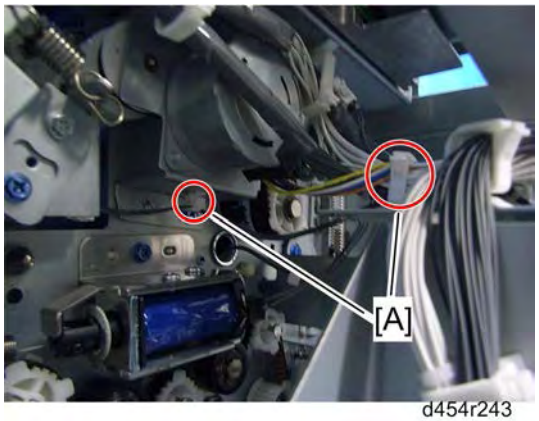
8. Remove two screws on the rear side.





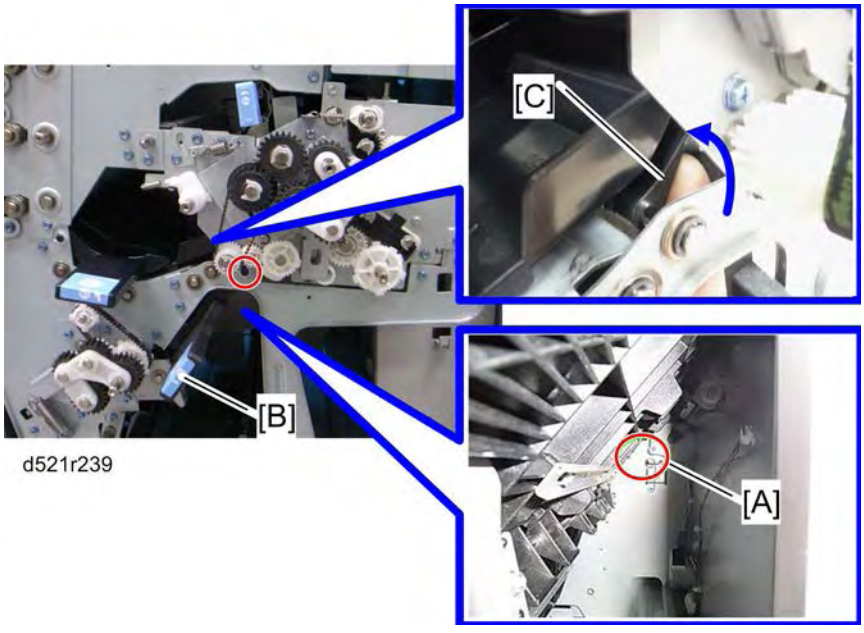
d521r227

9. Disconnect four harnesses [A] on the rear side.



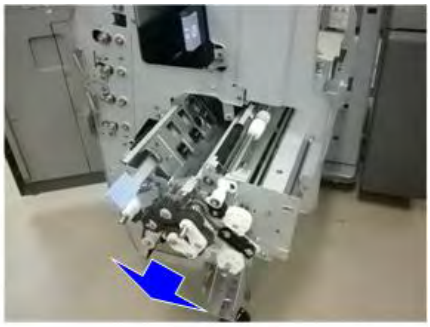
d454r243

10. Release two clamps [A].



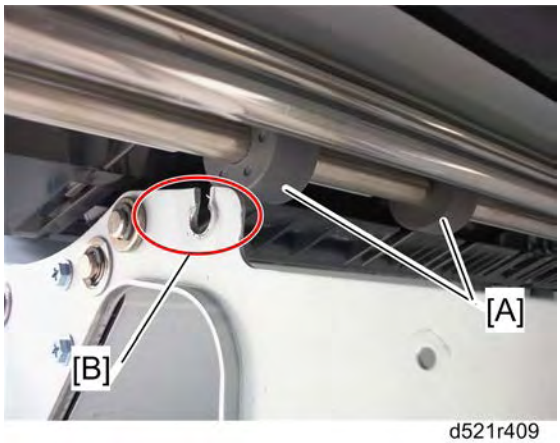
d521r239

11. Remove the spring [A] at the rear frame of the folding unit drawer.
12. Lower guide plate [B] (x 1)
    - First, push the lower guide plate to the rear side while keeping the upper guide plate [C] open.
    - Secondly, take out the lower guide plate [B].



d521r250

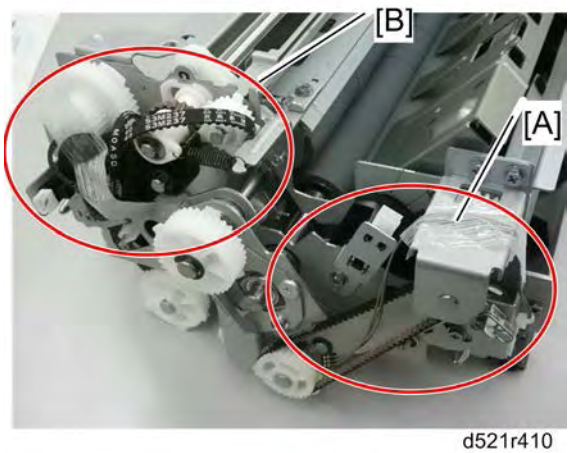
13. Pull the first fold unit [A] until it stops (x 3).



d521r409

    - At this time, one of the transport rollers [A] at the bottom of the first fold unit is caught in the frame [B] of the fold unit drawer.
14. Lift the first fold unit little bit, and then remove it.

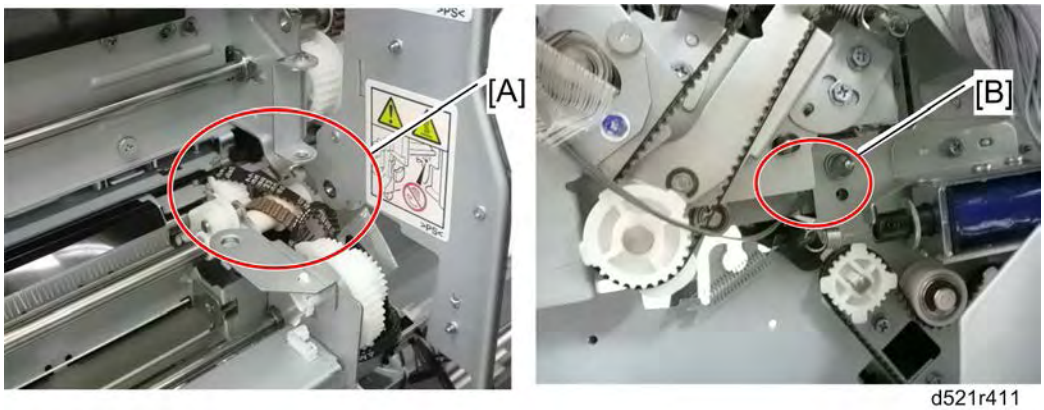
When installing the first fold unit



d521r410

Attach the harness [A] and timing belts [B] tightly to the first fold unit with tapes so that the harness and timing belts are not caught in any parts when installing the first fold unit into the fold unit drawer.

If the first fold unit is not completely installed in the fold unit drawer, check the following:

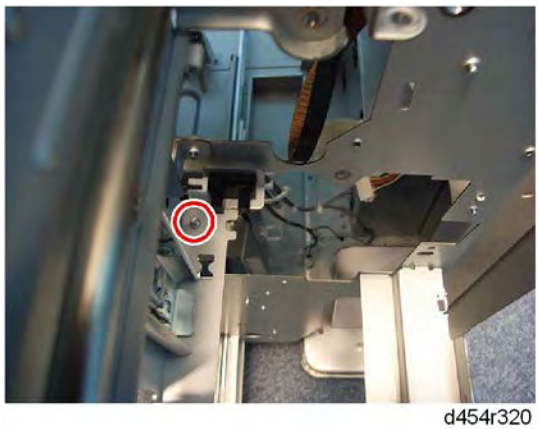


d521r411

- The timing belts are not caught [A] between the rear frame of the fold unit drawer and frame of the first fold unit.
- The harness of the first fold unit is pinched [B] between the rear frame of the fold unit drawer and frame of the first fold unit.

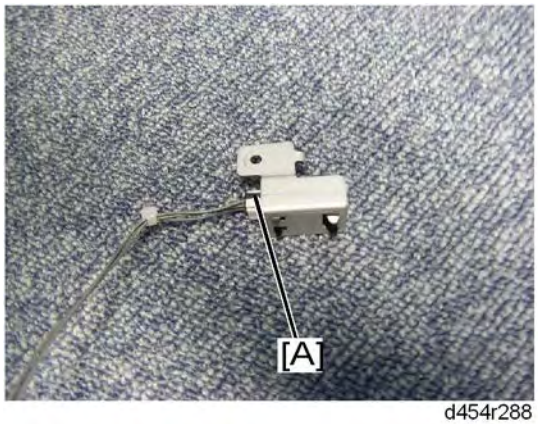
1.6.11 DYNAMIC ROLLER HP SENSOR

1. First fold unit page 30



d454r320

2. Dynamic roller HP sensor bracket (x 1)



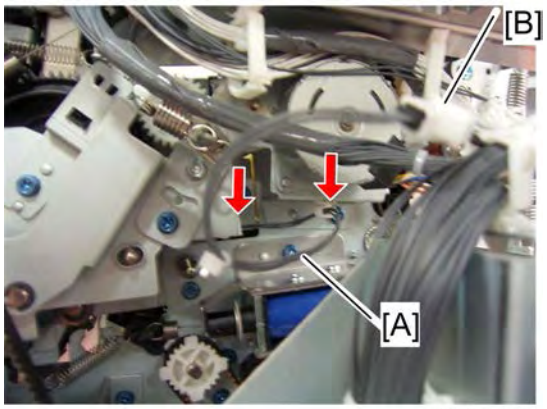
d454r288

3. Dynamic roller HP sensor [A] (x 1)

1.7 ELECTRICAL COMPONENTS: MAIN 2

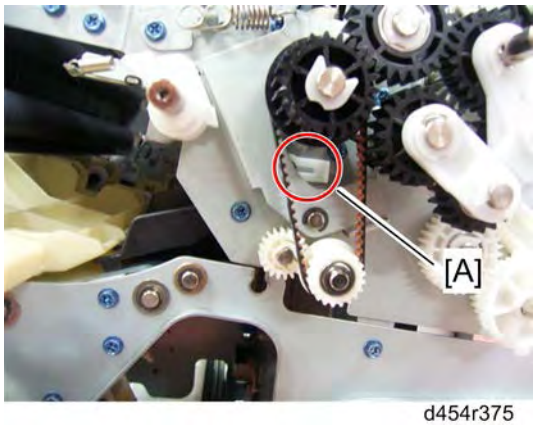
1.7.1 BYPASS ENTRANCE PAPER SENSOR

1. Folding unit cover page 15
2. Rear upper cover page 16
3. Rear lower cover page 16



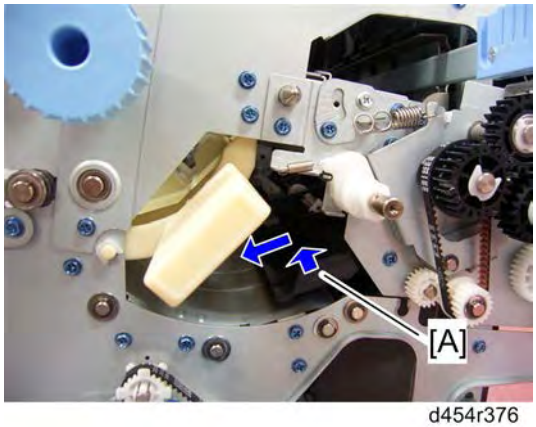
d454r374

4. Disconnect the bypass entrance paper sensor harness [A] from the connector [B] (x 2).



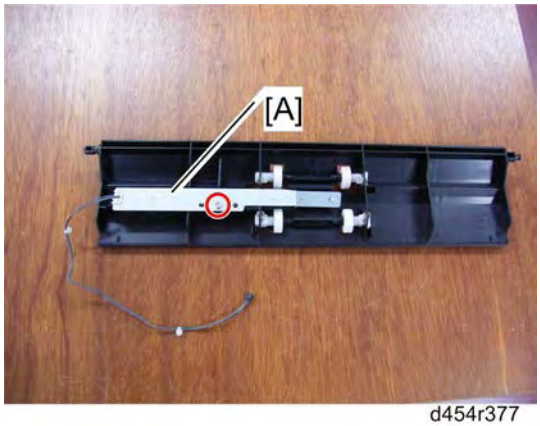
d454r375

5. Remove the clip [A] for the bypass entrance guide plate.



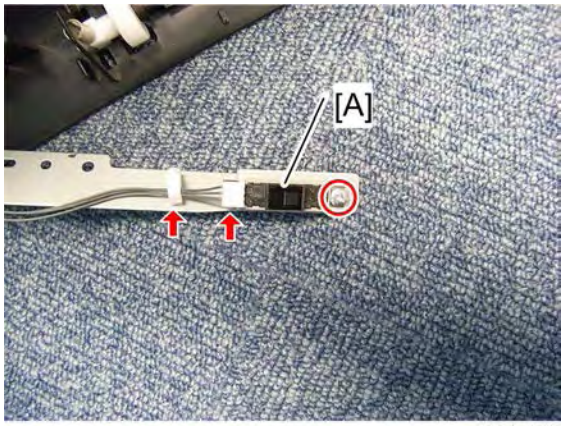
d454r376

6. Push the bypass entrance guide plate [A] to the rear, then slide it to the left, and remove it.



d454r377

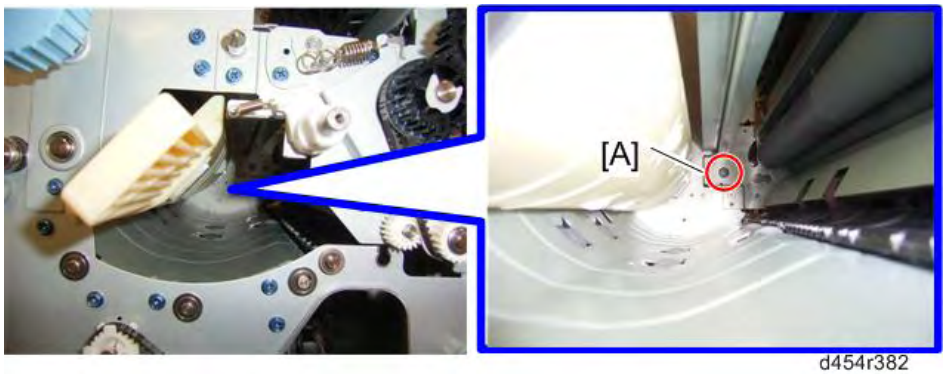
7. Bypass entrance paper sensor bracket [A] (x 1)



d454r286

8. Bypass entrance paper sensor [A] (x 1, x 1, x 1)

Reinstalling the bypass entrance paper sensor

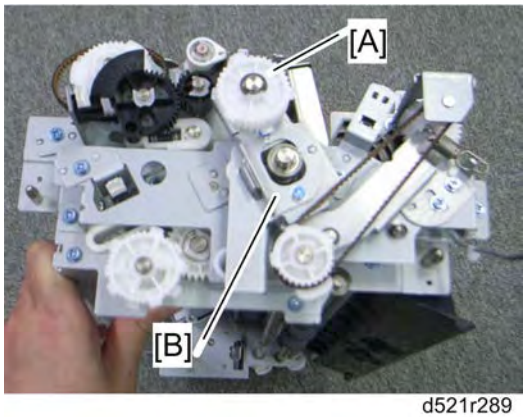


d454r382

Put the harness of the bypass entrance paper sensor through the hole [A] in the rear frame of the drawer.

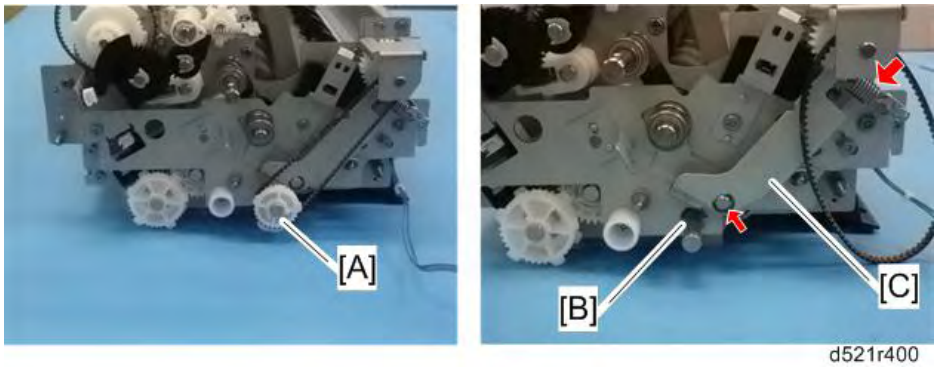
1.7.2 FIRST/ SECOND/ THIRD FOLD ROLLER

1. First fold unit page 62



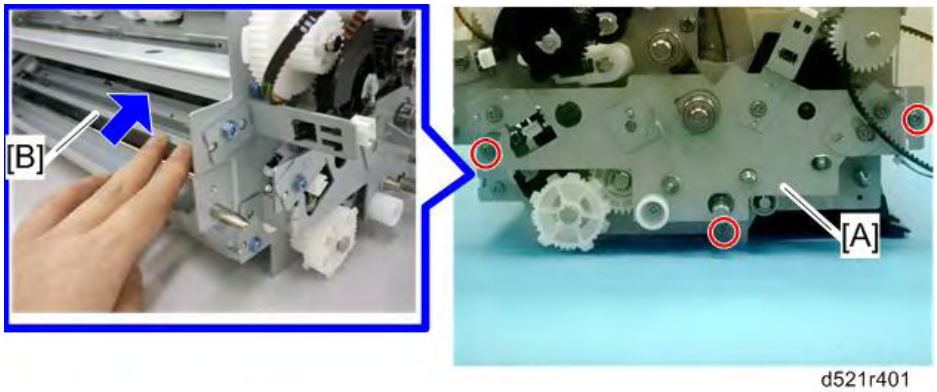
d521r289

2. First fold roller gear [A] (x 1, pin x 1, spacer x 1)
3. Pressure release bracket [B]



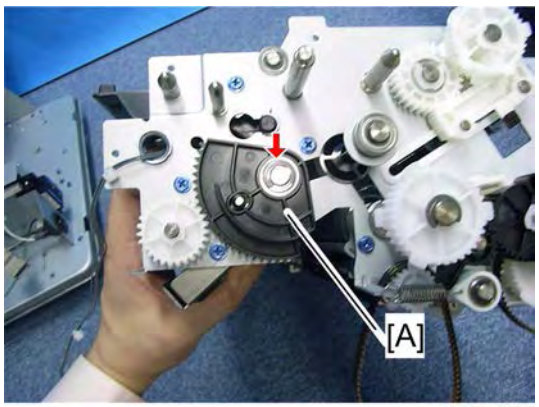
d521r400

4. Rear cam gear [A] (x 1, timing belt x 1)
5. Bushing [B] (x 1)
6. Rear tension bracket [C] (spring x 1, x 1)



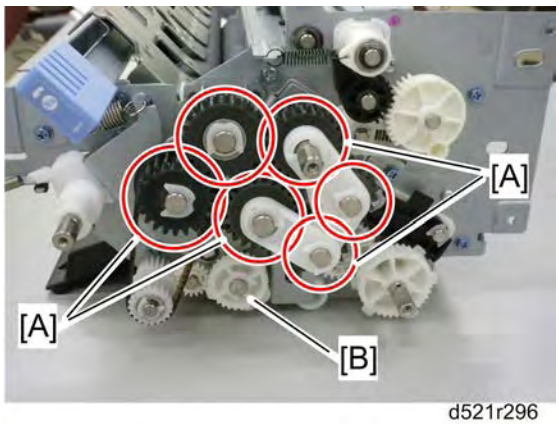
d521r401

7. Rear bracket [A] (x 3)
   - When removing the rear bracket, slide the fold assist plate [B] in the arrow direction.



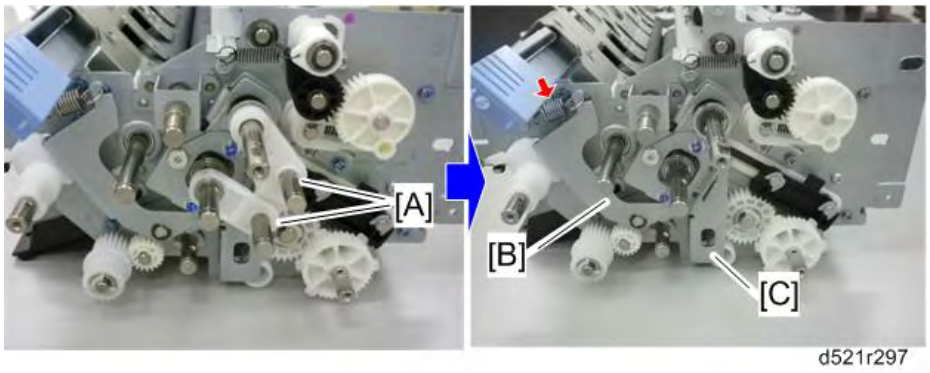
d454r293

8. Remove the gear [A] (x 1)



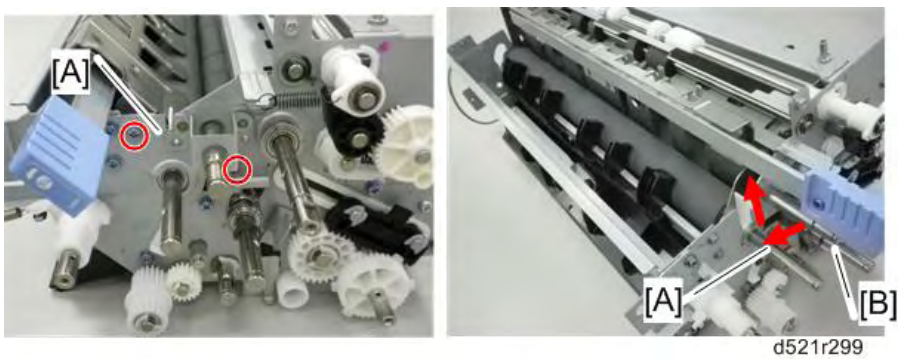
d521r296

9. Remove six gears (clip x 1 each, pin x 1 each for four gears [A]).
10. Cam gear [B] (x 1, pin x 1)



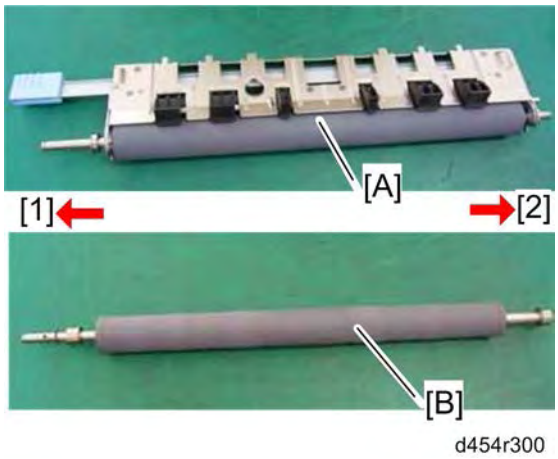
d521r297

11. Remove the gear links [A].
12. Front tension bracket [B] (spring x 1, x 1)
13. Frond shaft holder bracket [C] (x 1, bushing x 1, spacer x 1)



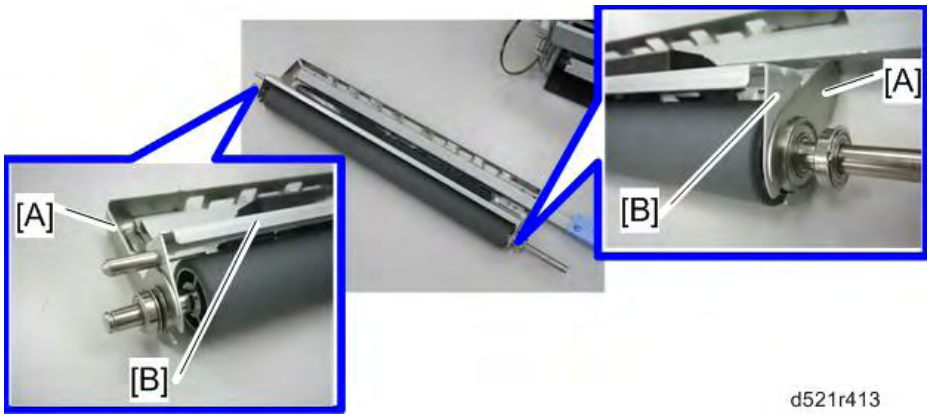
d521r299

14. Front bracket [A] (x 2)
15. Third fold roller with the guide plate and direct send junction gate[B]
16. Second fold roller [C].

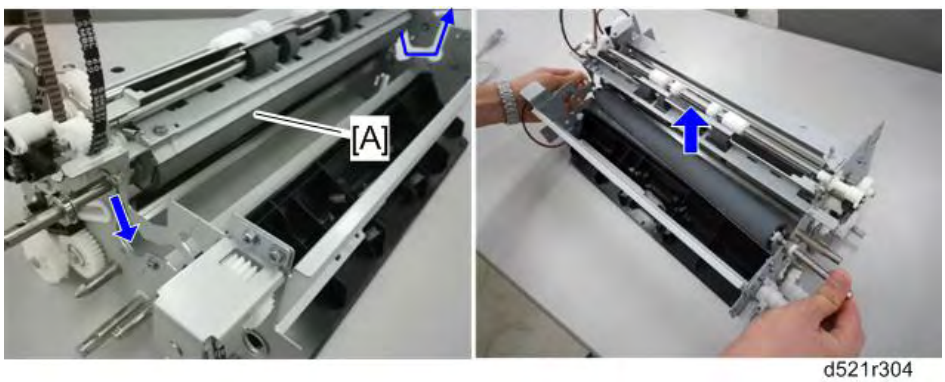


[1]: Front side, [2]: Rear side

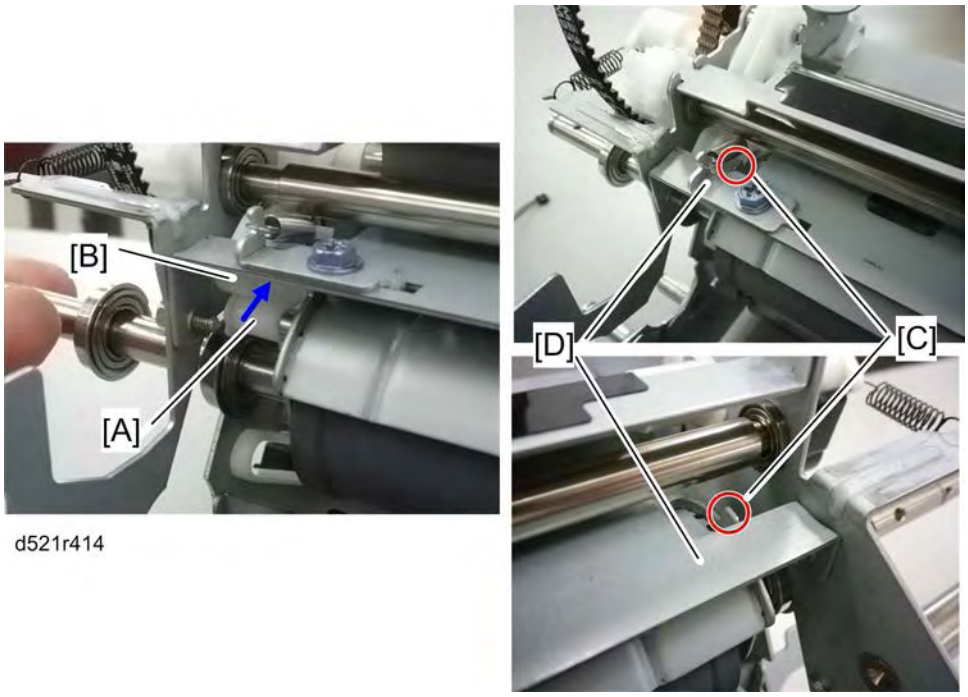
- [A]: Third fold roller with the guide plate and direct send junction gate
- [B]: Second fold roller



When assembling the third fold roller with direct send junction gate and guide plate, install the guide plate [A] and direct send junction gate [B] in the third fold roller unit as shown above. (The arms of the guide plate should be placed on the outer side of the arms of the direct send junction gate.)



17. First fold roller with roller bracket [A]

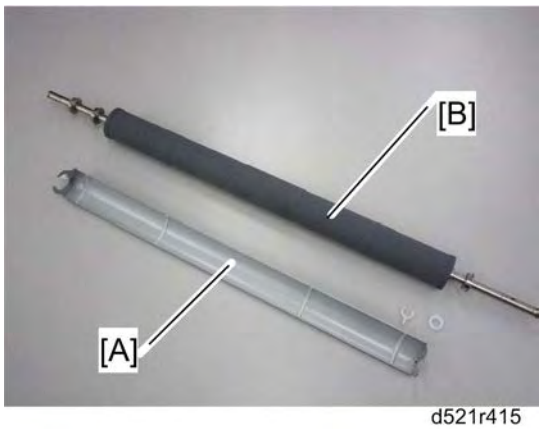


d521r414

- When reinstalling the first fold roller, insert the white pivot [A] in the rail [B].
- Make sure that two projections [C] hook the stay bracket [D].

d521r412

18. Roller stopper [A]

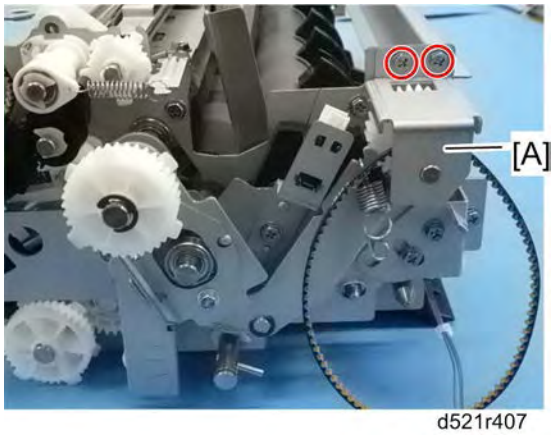


d521r415

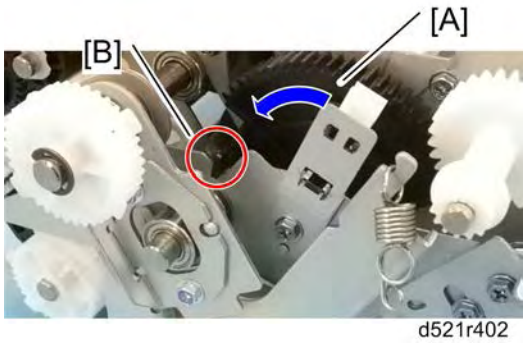
19. Roller bracket [A]
20. First fold roller [B] (spacer x 1)

When reinstalling the first, second and third fold rollers

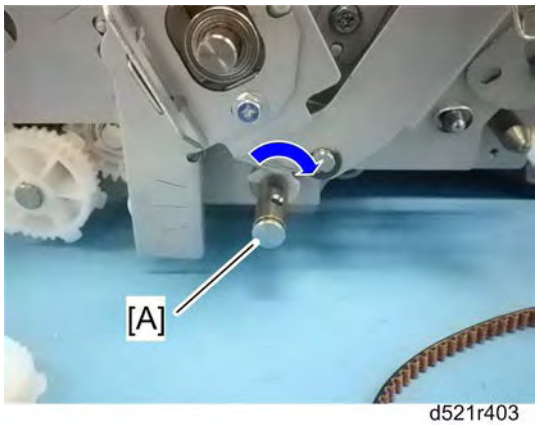
The rear cam gear (removed in step 10) must be adjusted when reinstalling the first, second and third fold rollers. Do the following procedure.



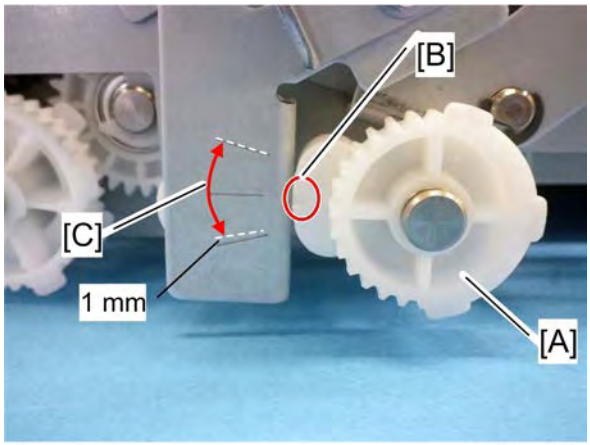
1. Remove the rear gear holder [A] (x 2).



2. Turn the direct send junction gate gear [A] to the left until the direct send junction gate gear stops at the edge [B] of the frame.

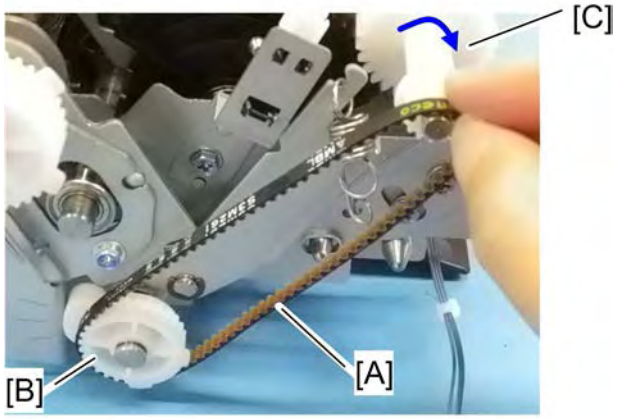


3. Turn the cam gear shaft [A] clockwise until the cam gear shaft is stopped.



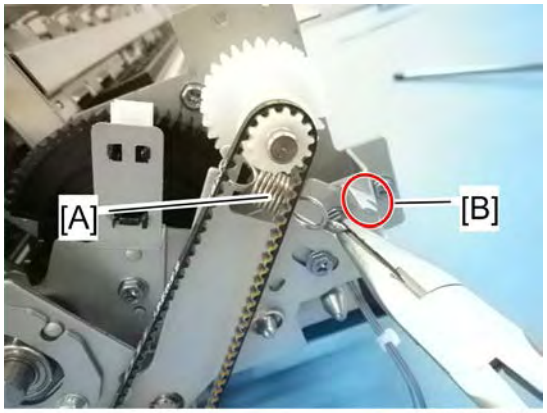
d521r404

4. Set the pin and rear cam gear [A] on the cam gear shaft.
   - Make sure that the notch [B] of the rear cam gear is positioned within the proper range [C]. The lowest position is 1 mm above the lowest of the three lines.



d521r405

5. Hook the timing belt [A] over the rear cam gear [B] first, and then hook the timing belt over the idle gear [C] while rotating the idle gear clockwise.
6. Check if the notch position of the rear cam gear is positioned within the proper range again.
7. Attach the rear cam gear (x 1).
8. Attach the rear idle gear holder (x 2).

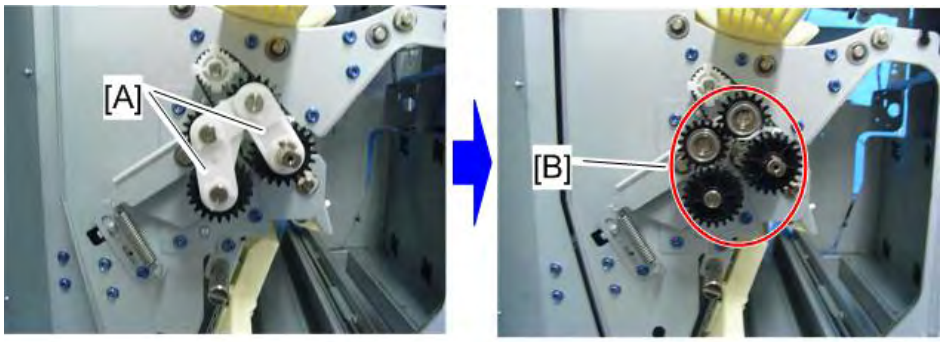


d521r406

9. Hook the tension spring [A].

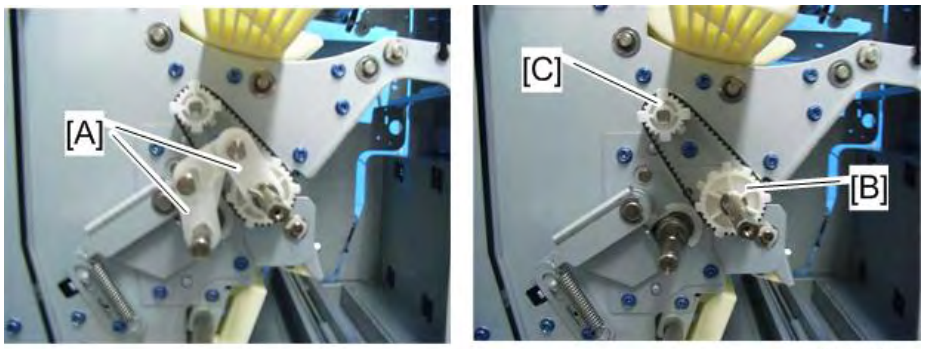
1.7.3 FOURTH / FIFTH FOLD ROLLER

1. Rear upper cover page 16
2. Rear lower cover page 16
3. Drawer stopper page 46



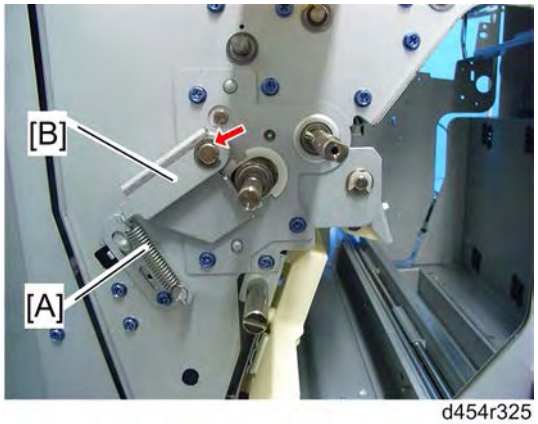
d454r321

4. Remove the links [A] on the front side (clip x 2 each).
5. Remove four gears [B].



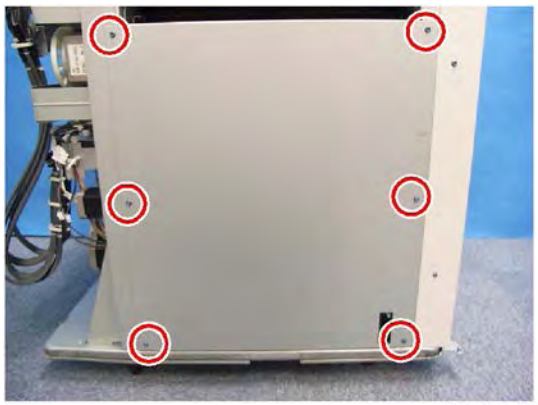
d454r323

6. Remove the links [A] (pin x 1 each)
7. Remove the gear [B] (ℭ x 1), and the gear [C] (timing belt x 1).



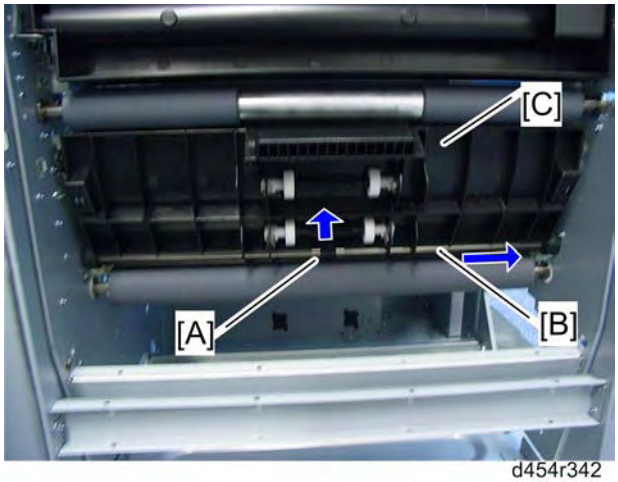
d454r325

8. Remove the spring [A] and the tension bracket [B] (ℭx 1).



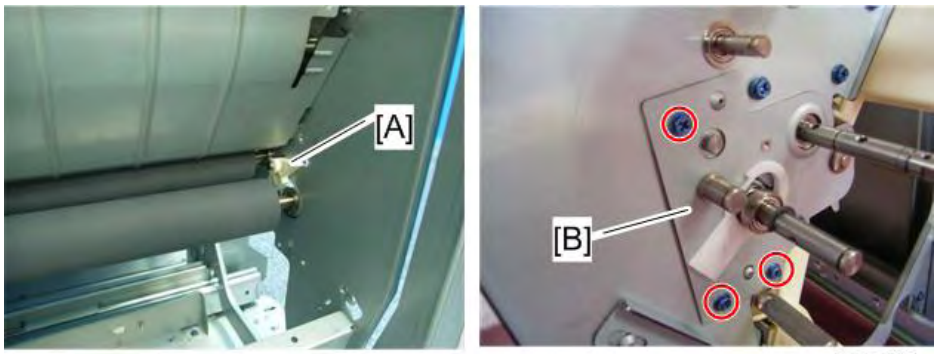
d454r349

9. Left lower bracket (x 6)



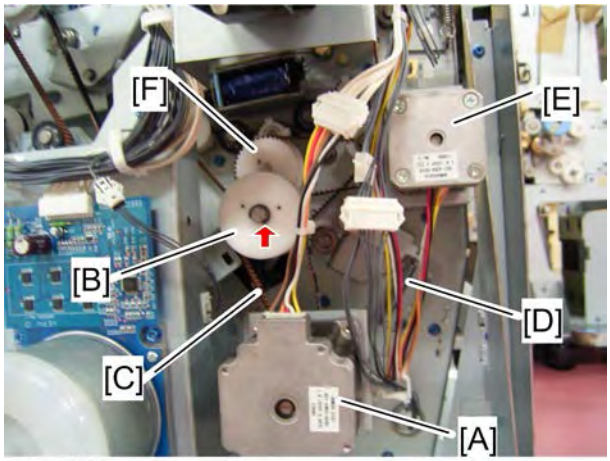
d454r342

10. Lift up the hook [A] to release the guide plate shaft [B].
11. Move the guide plate shaft [B] to the front side (arrow direction), and then remove the guide plate [C].



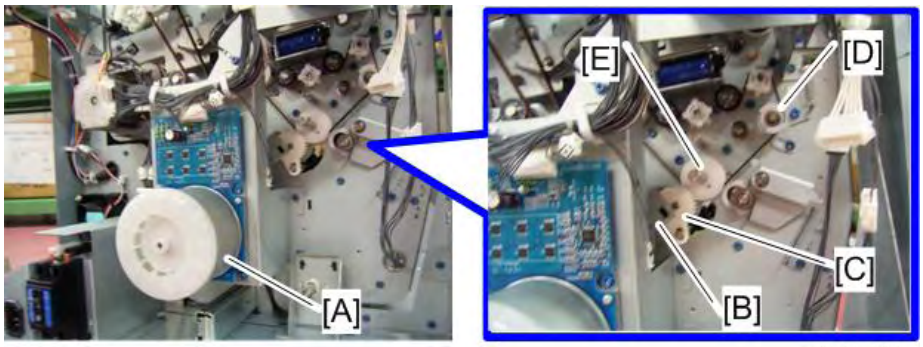
d454r327

12. Remove the cam [A] on the front side.
13. Fold roller fixing front plate [B] (x 3)



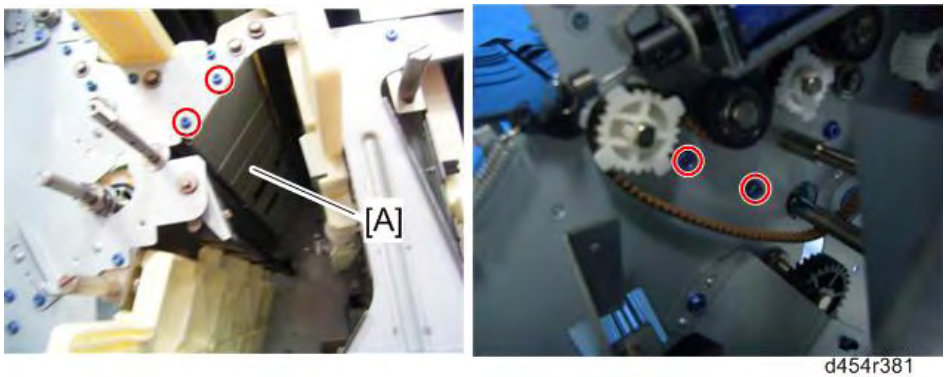
d454r341

14. 2nd fold motor [A] page 32
15. 2nd fold pulley gear [B] (x 1) and idle gear
16. Timing belt [C]
17. Spring [D]
18. FM6 pawl motor [E] page 31
19. Pulley gear [F]



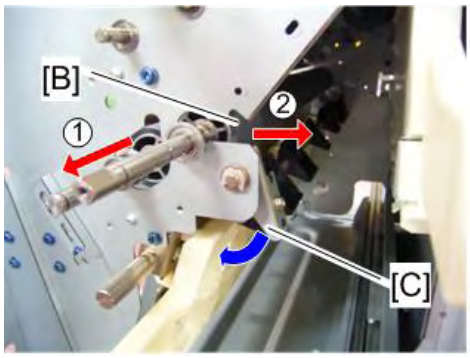
d454r380

20. 1st fold motor [A] page 30
21. FM6 pawl HP sensor bracket [B]
22. FM6 pawl cam gear [C]
23. Release the tension bracket [D], and then remove the transmission pulley gear [E] (pin x 1)



d454r381

24. Remove the entrance guide plate [A] at the 2nd fold unit (x 4).

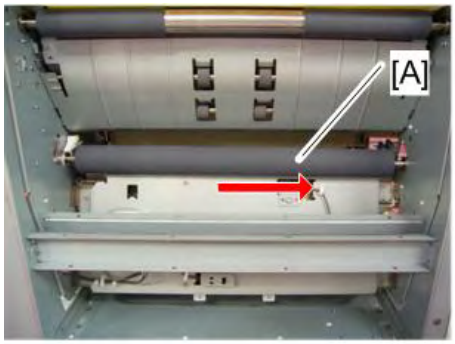


d454r379

25. Hold the fourth fold roller cam [A] at the rear of the drawer unit.
26. Pull the fourth fold roller [B] to the front side ①.
27. Keep the FM6 pawl [C] open, and then remove the fourth fold roller ②.

Note

- Hold the holder [A] when pulling the fourth fold roller [B] in the ① direction.



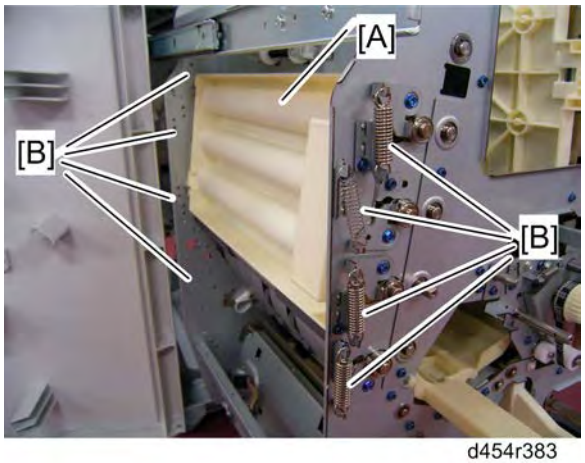
d454r340

28. Remove the fifth fold roller [A].

1.7.4 CREASE ROLLERS

Crease Rollers: Idle Rollers

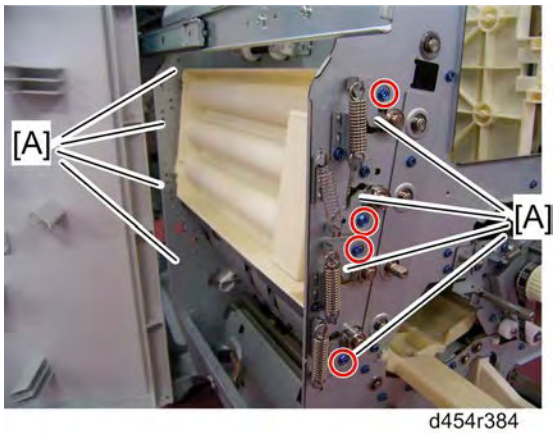
1. Folding Unit Cover page 15
2. Drawer stopper page 46
3. Pull out the folding unit drawer fully page 18



d454r383

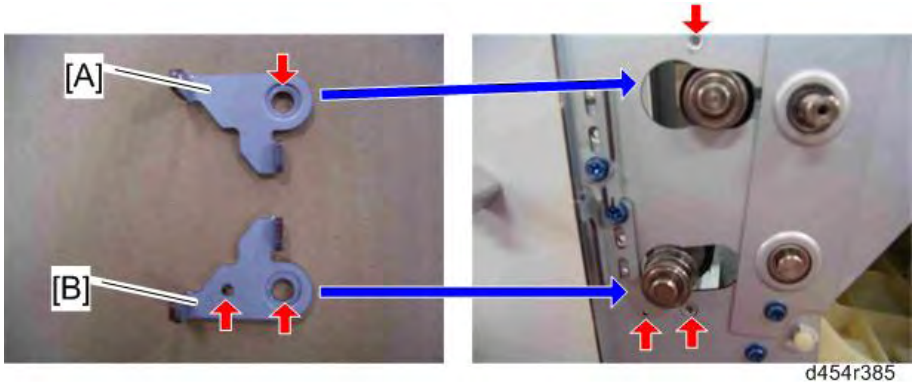
4. Crease jam removal door [A]

5. Tension springs [B] (front: 4, rear: 4)
   - The lowest spring should be a black one when reinstalling the springs.



d454r384

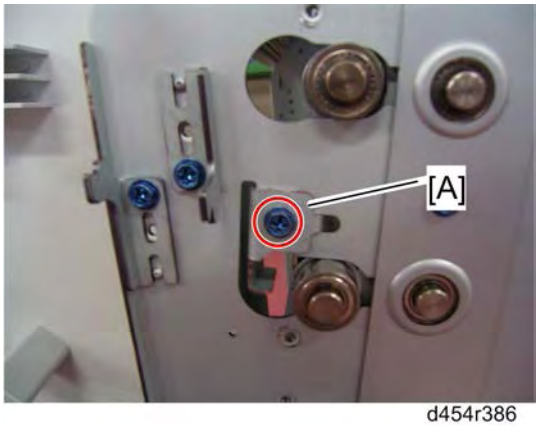
6. Tension brackets [A] (x 1 each/ front: 4, rear: 4)



d454r385

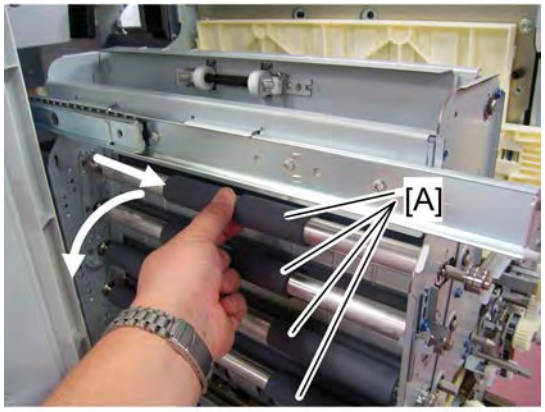
There are two types of tension brackets at the crease roller area. The difference between these brackets is the number of screw holes ([A]: one hole, [B]: two holes).

- Attach a bracket [A] with one hole to the crease roller frame with one hole.
- Attach a bracket [B] with two holes to the crease roller frame with two holes.



d454r386

7. Magnet attachment bracket [A] (x 1)

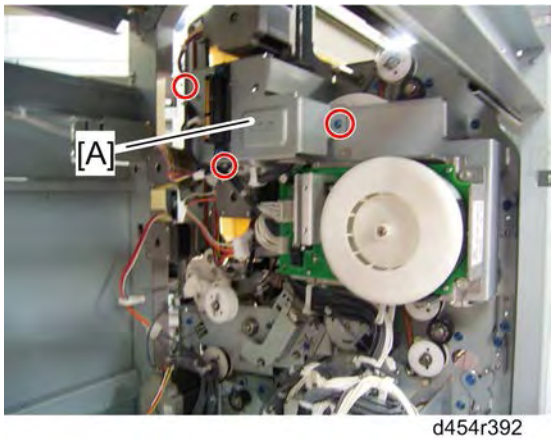


d454r387

8. Crease rollers: idle rollers [A]

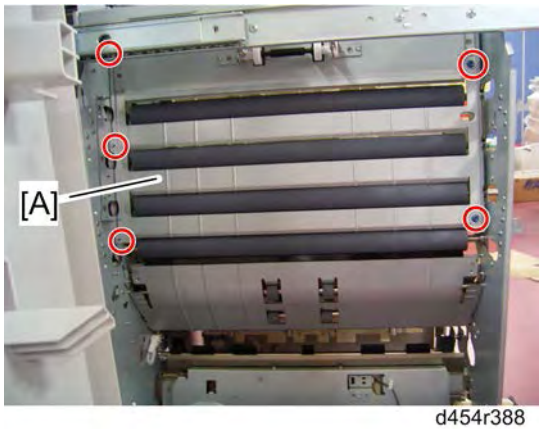
Crease Rollers: Drive Rollers

1. Crease Rollers: Idle Rollers (described above)
2. Rear upper cover page 16
3. Rear lower cover page 16
4. Main board bracket page 22
5. Rear upper stay page 23



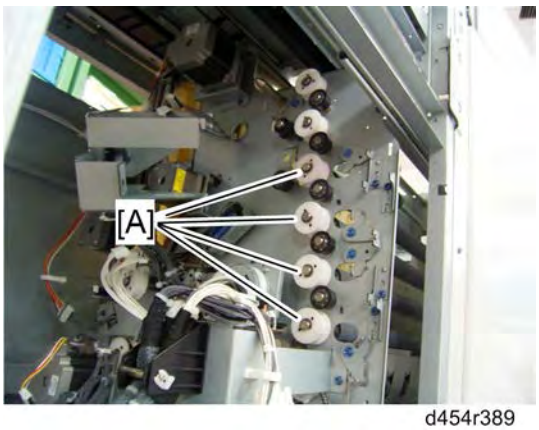
d454r392

6. Drawer connector bracket [A] (x 3)
7. Crease motor page 24



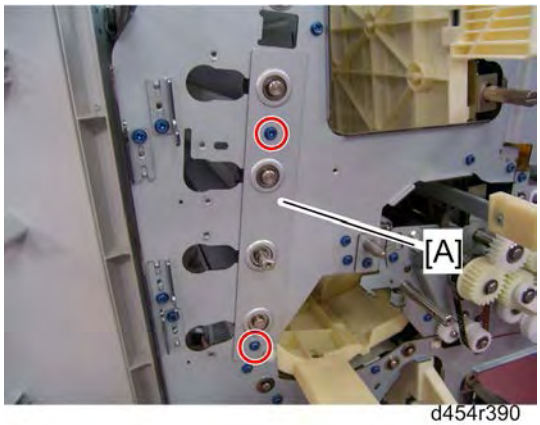
d454r388

8. Crease path guide plate [A] (x 5)



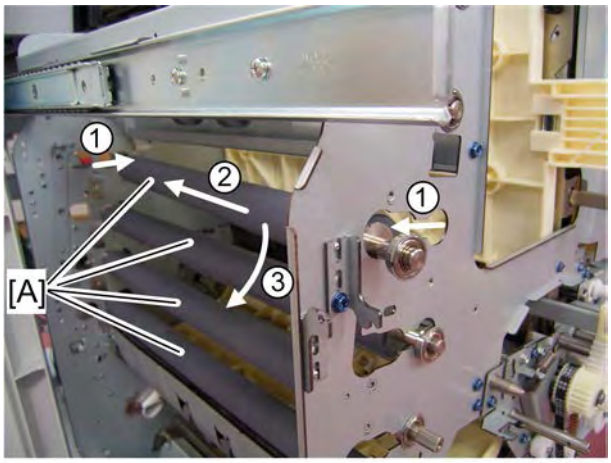
d454r389

9. Crease roller pulley gears [A] (ℭ x 1 each)



d454r390

10. Crease roller fixing plate [A] (x 2)



d454r391

11. Crease rollers: drive rollers [A]

1.8 FOLD ADJUSTMENTS

1.8.1 FINE FOLD ADJUSTMENT

Before You Begin

The fold positions can be adjusted in the User Tools (Operators and Skilled Operators), the engine SP mode and Advanced Settings.

- Administrator Log-in is required to adjust Advanced Settings.
- Advanced Settings is enabled only for Custom Paper.
- Advanced Settings should be specified for each Custom Paper Profile.

Advanced Settings

Mode	Fold	Advanced Settings*[1]	SP
FM1	1st	54 Adjust Z-fold Position 1	-
	2nd	55 Adjust Z-fold Position 2	-
FM2	1st	56 Half Fold Position: Single-sheet Fold	-
FM3	1st	57 Letter Fold-out Posn 1: Single-sheet Fld	-
	2nd	58 Letter Fold-out Posn 2: Single-sheet Fld	-
FM4	1st	59 Letter Fold-in Posn 1: Single-sheet Fold	-
	2nd	60 Letter Fold-in Posn 2: Single-sheet Fold	-
FM5	1st	61 Double Parallel Fold Position 1	-
	2nd	62 Double Parallel Fold Position 2	-
FM6	1st	63 Adjust Gate Fold Position 1	-
	2nd	64 Adjust Gate Fold Position 2	-
	3rd	65 Adjust Gate Fold Position 3	-

*[1]: These numbers are the same for the advanced settings of Administrator. These settings can be adjusted for each paper profile.

Adjustment Settings for Skilled Operators and Engine SP modes

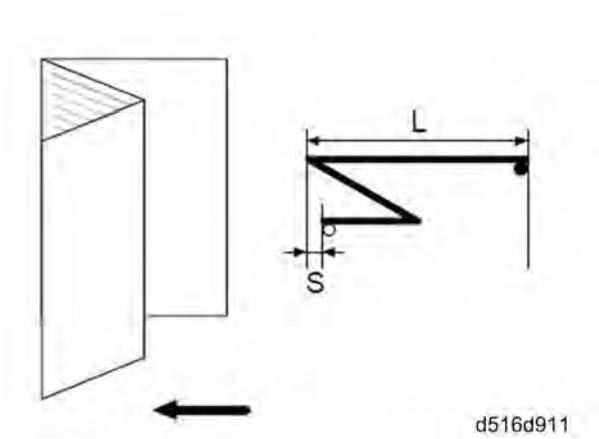
Mode	Fold	User Tools*2	SP
FM3	1st	0601 Half Fold Position (Multi-sheet Fold)	6-752-101 to -111
FM4	1st	0602 Letter Fold-out Position 1 (Multi-sheet Fold)	6-753-101 to -111
	2nd	0603 Letter Fold-out Position 2 (Multi-sheet Fold)	6-754-101 to -111
FM5	1st	0604 Letter Fold-in Position 1 (Multi-sheet Fold)	6-755-101 to -111
	2nd	0605 Letter Fold-in Position 2 (Multi-sheet Fold)	6-756-101 to -111

*2: These numbers are the same for the User Tools (Operators and Skilled Operators).

FM1 Z-Folding

54: Adjust Z-fold Position 1

Adjust the width of the bottom end segment (S) of Z-folded sheets when using the multi-folding unit.



Press [+] to increase and [-] to reduce (S).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All sizes	S	0 mm	-4 to 4 mm
Pitch Adj.	**0.2 mm**		

55: Adjust Z-fold Position 2

Adjust the overall fold size (L) of Z-folded sheets when using the multi-folding unit. Press [+] to increase and [-] to reduce (L).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

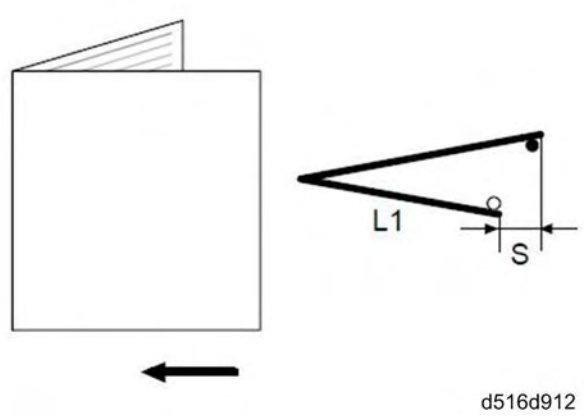
Size	Setting	Default	Range
All sizes	L	0 mm	-4 to 4 mm
Pitch Adj.	**0.2 mm**		

FM2 Half Fold: Single-sheet Fold and Multi-sheet Fold

56: Half Fold Position: Single-sheet Fold

Adjust the fold position (S) of half folded sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S).

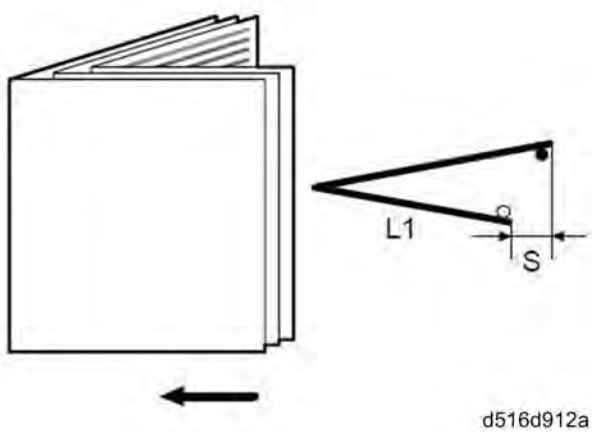
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All sizes	L1	0 mm	-4 to 4 mm
Pitch Adj.	**0.2 mm**		

0601: Half Fold Position (Multi-sheet Fold)/ SP6-752-101 to -111

Adjust the folded position (S) of half folded sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range	SP
A3 SEF	S	0 mm	±4 mm	6-752-101
B4 SEF	S	0 mm	±4 mm	6-752-102
A4 SEF	S	0 mm	±4 mm	6-752-103
B5 SEF	S	0 mm	±4 mm	6-752-109
13”x19” SEF	S	0 mm	±4 mm	6-752-110
12”x18” SEF	S	0 mm	±4 mm	6-752-107
11”x17” SEF (DLT SEF)	S	0 mm	±4 mm	6-752-104
$8_{1/2}$"x14" SEF (LG SEF)	S	0 mm	±4 mm	6-752-105
$8_{1/2}$"x11" SEF (LT SEF)	S	0 mm	±4 mm	6-752-106
8K (8-Kai)	S	0 mm	±4 mm	6-752-108
Other (Custom)	S	0 mm	±4 mm	6-752-111

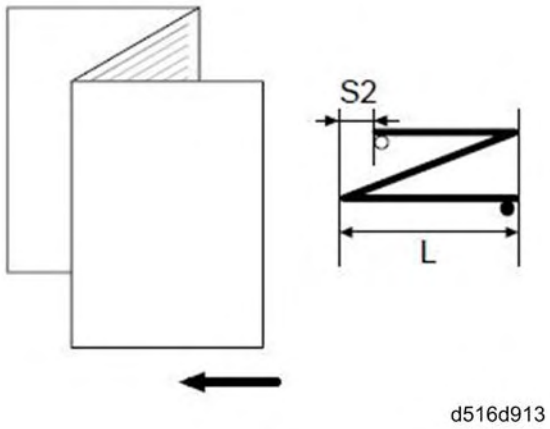
Size	Setting	Default	Range	SP
Pitch Adj.	**0.2 mm**			

FM3 Letter Fold-out: Single-sheet Fold and Multi-sheet Fold

57 Letter Fold-out Posn 1: Single-sheet Fld

Adjust the fold position for the bottom segment (S2) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S2).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Sizes	S2	0 mm	±3 mm B5 SEF ±4 Other
Pitch Adj.	**0.2 mm**		

58: Letter Fold-out Posn 2: Single-sheet Fld

Adjust the overall fold size (L) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

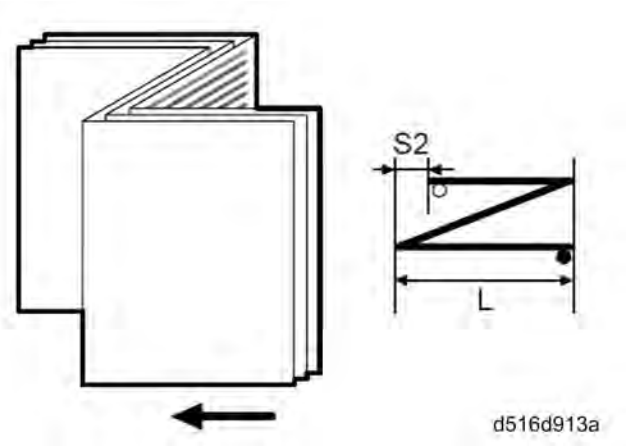
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Sizes	L	0 mm	±3 mm B5 SEF ±4 Other
Pitch Adj.	**0.2 mm**		

0602: Letter Fold-out Position 1 (Multi-sheet Fold)/ SP6-753-101 to -108

Adjust the fold position for the bottom segment (S2) of letters fold-out sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S2).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range	SP
B4 SEF	S2	0 mm	±4 mm	6-753-101
A4 SEF	S2	0 mm	±4 mm	6-753-102
B5 SEF	S2	0 mm	±3 mm	6-753-107
$8_{1/2}$"x14" SEF (LG SEF)	S2	0 mm	±4 mm	6-753-103
$8_{1/2}$"x11" SEF (LT SEF)	S2	0 mm	±4 mm	6-753-104
Other (Custom)	S2	0 mm	±4 mm	6-753-108
Pitch Adj.	**0.2 mm**			

0603: Letter Fold-out Position 2 (Multi-sheet Fold)/ SP6-754-101 to -108

Adjust the overall fold size (L) of letters fold-out sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

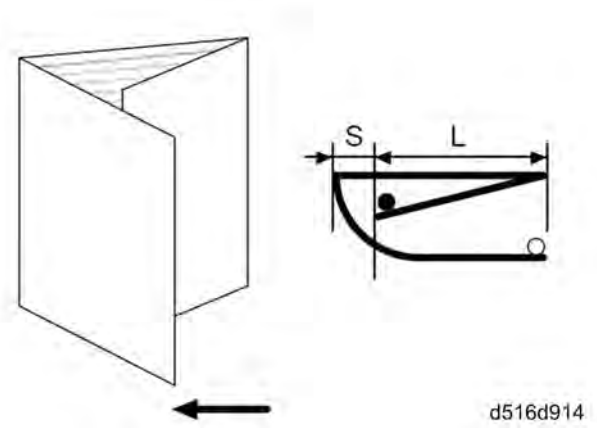
Size	Setting	Default	Range	SP
B4 SEF	L	0 mm	±4 mm	6-754-101
A4 SEF	L	0 mm	±4 mm	6-754-102
B5 SEF	L	0 mm	±3 mm	6-754-107
$8_{1/2}$"x14" SEF (LG SEF)	L	0 mm	±4 mm	6-754-103
$8_{1/2}$"x11" SEF (LT SEF)	L	0 mm	±4 mm	6-754-104
Other (Custom)	L	0 mm	±4 mm	6-754-108
Pitch Adj.	**0.2 mm**			

FM4 Letter Fold-in: Single-sheet Fold and Multi-sheet Fold

59: Letter Fold-in Posn 1: Single-sheet Fold

Adjust the fold position of the bottom segment (S) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Sizes	S	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

60: Letter Fold-in Posn 2: Single-sheet Fold

Adjust the overall fold size (L) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

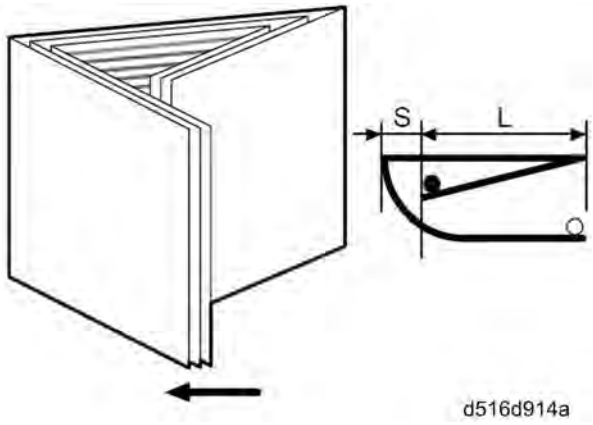
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Supported Sizes	L	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

0604: Letter Fold-in Position 1 (Multi-sheet Fold)/ SP6-755-101 to -111

Adjust the fold position of the bottom segment (S) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (S).

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range	SP
A3 SEF	S	0 mm	±4 mm	6-755-101
B4 SEF	S	0 mm	±4 mm	6-755-102
A4 SEF	S	0 mm	±4 mm	6-755-103
B5 SEF	S	0 mm	±4 mm	6-755-109
12”x18” SEF	S	0 mm	±4 mm	6-755-107
11”x17” SEF (DLT SEF)	S	0 mm	±4 mm	6-755-104
$8_{1/2}$"x14" SEF (LG SEF)	S	0 mm	±4 mm	6-755-105
$8_{1/2}$"x11" SEF (LT SEF)	S	0 mm	±4 mm	6-755-106
8K (8-Kai)	S	0 mm	±4 mm	6-755-108
Other (Custom)	S	0 mm	±4 mm	6-755-110
Pitch Adj.	**0.2 mm**			

0605: Letter Fold-in Position 2 (Multi-sheet Fold)/ SP6-756-101 to -111

Adjust the fold position(L) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

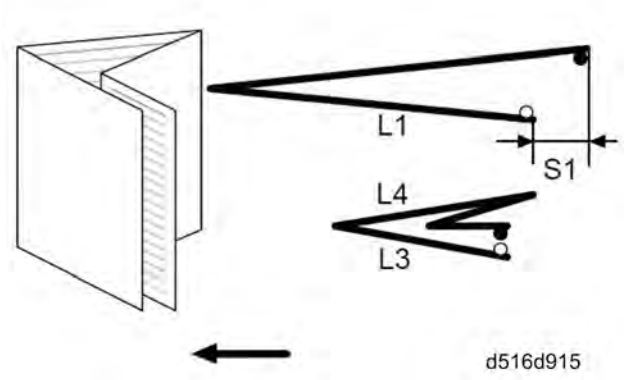
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range	SP
A3 SEF	L	0 mm	±4 mm	6-756-101
B4 SEF	L	0 mm	±4 mm	6-756-102
A4 SEF	L	0 mm	±4 mm	6-756-103
B5 SEF	L	0 mm	±4 mm	6-756-109
12”x18” SEF	L	0 mm	±4 mm	6-756-107
11”x17” SEF (DLT SEF)	L	0 mm	±4 mm	6-756-104
$8_{1/2}$"x14" SEF (LG SEF)	L	0 mm	±4 mm	6-756-105
$8_{1/2}$"x11" SEF (LT SEF)	L	0 mm	0 to 4 mm	6-756-106
8K (8-Kai)	L	0 mm	±4 mm	6-756-108
Other (Custom)	L	0 mm	±4 mm	6-756-110
Pitch Adj.	**0.2 mm**			

FM5 Double Parallel Fold

61: Double Parallel Fold Position 1

Adjust the fold position of the bottom segment 1 (S1) of double parallel-folded sheets when using the multi-folding unit.]



Press [+] to increase and [-] to reduce (S1).

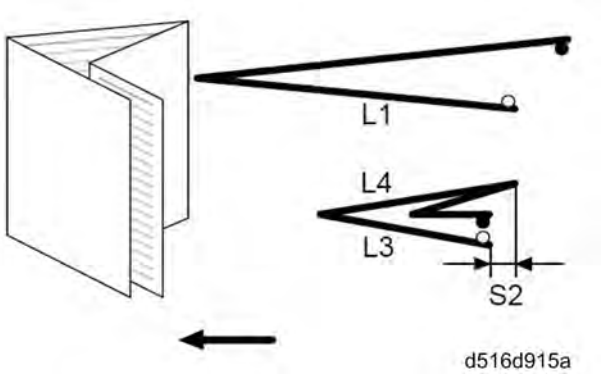
The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Supported Sizes	S1	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

62: Double Parallel Fold Position 2

Adjust the fold position of the bottom segment 2 (S2) of double parallel-folded sheets when using the multi-folding unit.



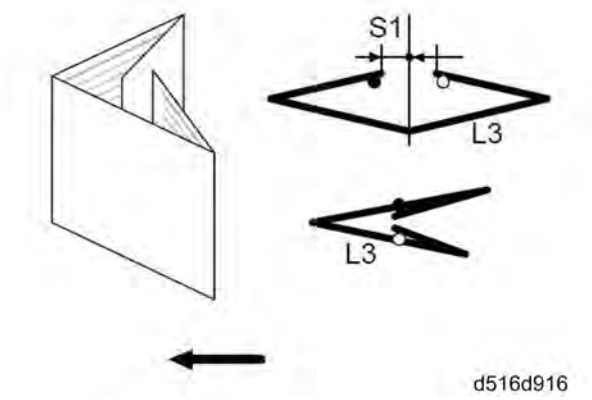
Press [+] to increase and [-] to reduce (S2).
The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

Size	Setting	Default	Range
All Supported Sizes	S2	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

FM6 Gate Fold

63: Adjust Gate Fold Position 1

Adjust the fold width of the bottom segment 1 (S1) of gate folded sheets when using the multi-folding unit.



Press [+] to increase and [-] to reduce (S1).
The upper right illustration shows a partly opened, gate folded sheet, and the lower right illustration shows a fully folded sheet.
The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

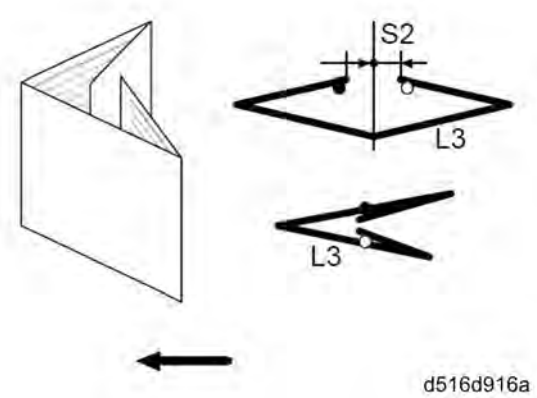
Size	Setting	Default	Range
All Supported Sizes	S1	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

Note

- You cannot specify this setting when using 12"x 18"L paper.

64: Adjust Gate Fold Position 2

Adjust the fold width of the bottom segment 2 (S2) of gate folded sheets when using the multi-folding unit.



Press [+] to increase and [-] to reduce (S2).

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

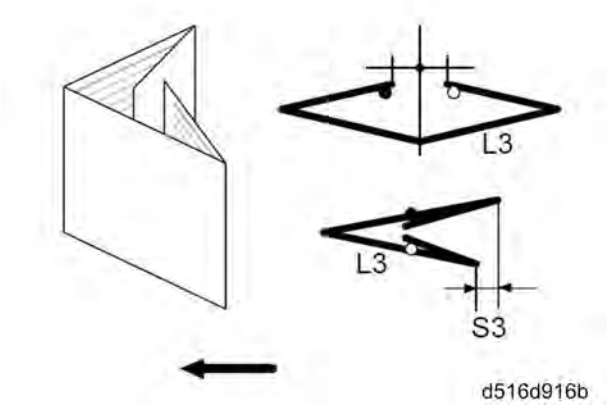
Size	Setting	Default	Range
All Supported Sizes	S2	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

Note

- You cannot specify this setting when using 12"x 18"L paper.

65: Adjust Gate Fold Position 3

Adjust the fold position of the bottom segment 3 (S3) of gate folded sheets when using the multi-folding unit.



Press [+] to increase and [-] to reduce (S3).

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The mark ● indicates the leading edge (relative to the paper feed direction), and the mark ○ indicates the trailing edge.

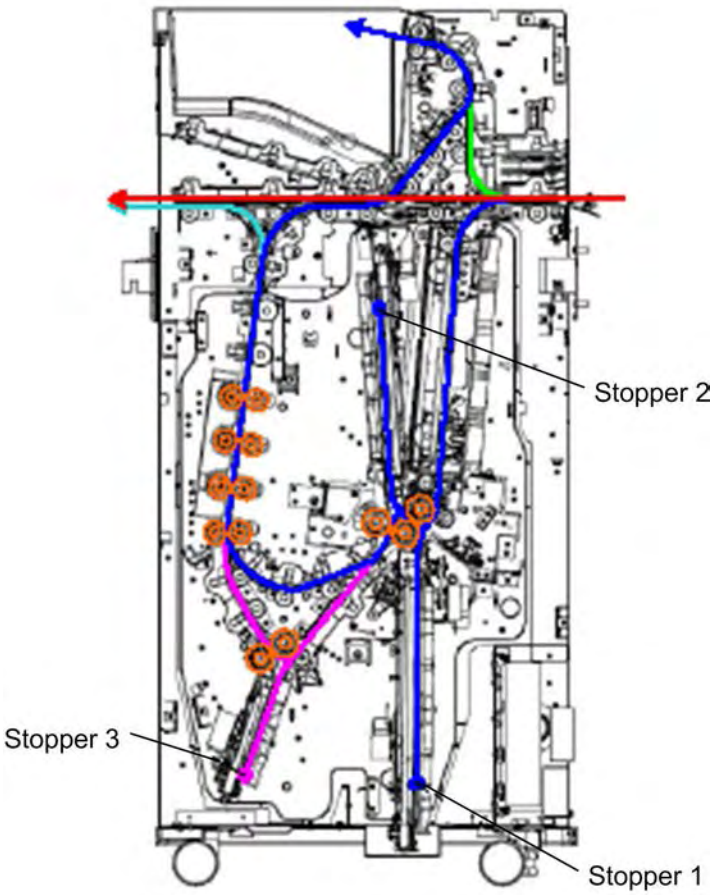
Size	Setting	Default	Range
All Supported Sizes	S3	0 mm	±4 mm
Pitch Adj.	**0.2 mm**		

1.9 SKEW ADJUSTMENT

1.9.1 MANUAL ADJUSTMENTS BY SERVICE TECHNICIAN

Before You Begin

These adjustments can be done by the service technician adjusting the set and adjustment screws on the multi-folder unit.



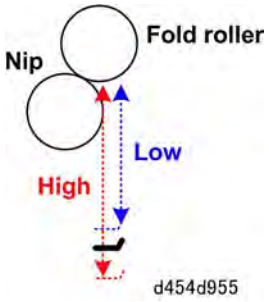
d454d925

The illustration above shows the positions of the three stoppers inside the machine. The positioning of the stoppers is critical because this determines the types of folding.

Front and Rear

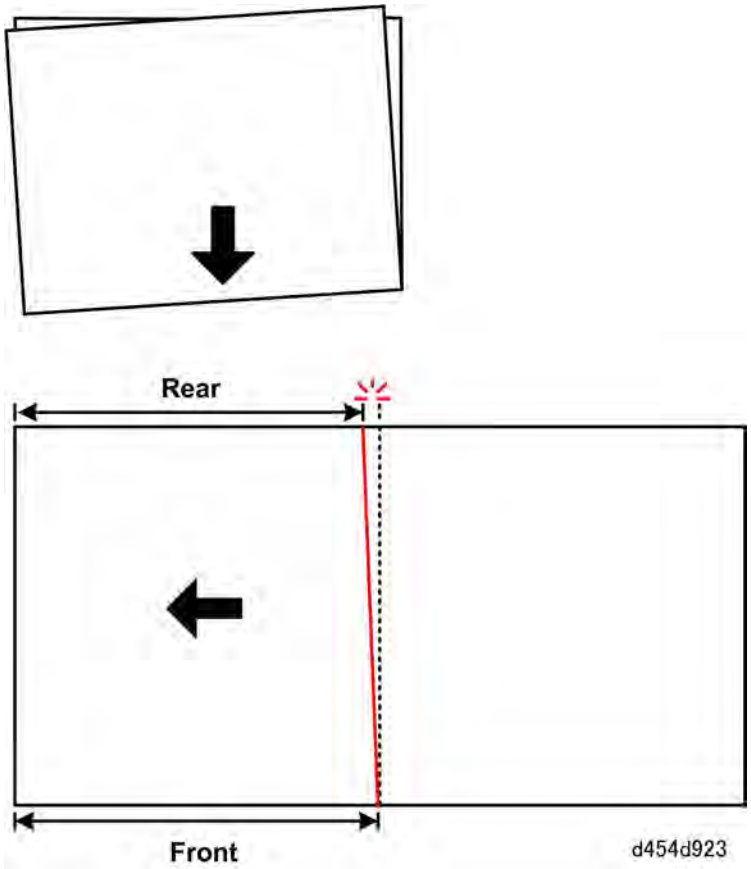
The terms "Front" and "Rear" are critical to understanding how paper is skewing during folding. These terms are defined relative to the positioning of the paper in the paper path as it feeds and exits.

- "High" means the distance from the nip of the fold roller to the stopper is too far on one end of the fence.
- "Low" means the distance from the nip of the fold roller to the stopper is too short.



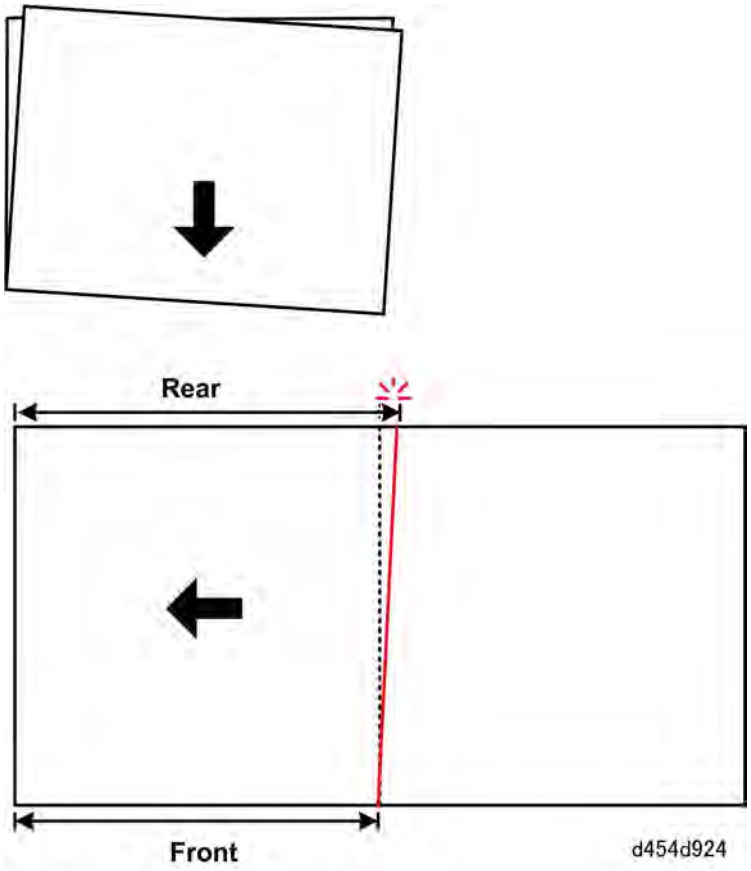
Two examples are shown below.

Example 1: High (Stopper Too Far From The Nip)



The black arrow shows the direction of paper feed from right to left. When the skew sheet is opened the **Front** edge is **longer** than the **Rear** edge.

Example 2: FM2: Low (Stopper to Close to the Nip)



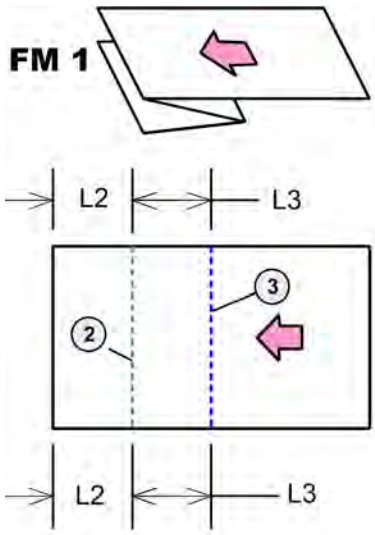
The black arrow shows the direction of paper feed from right to left. When the skew sheet is opened the **Front** edge is **shorter** than the **Rear** edge.

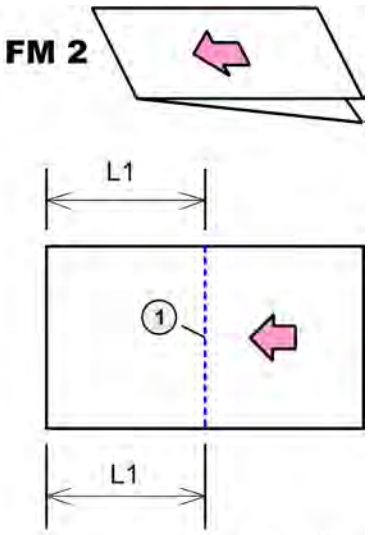
Skew Correction Reference Diagrams and Table

Skew Correction Reference Diagrams

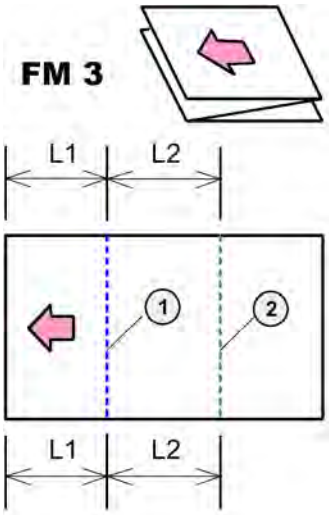
Key

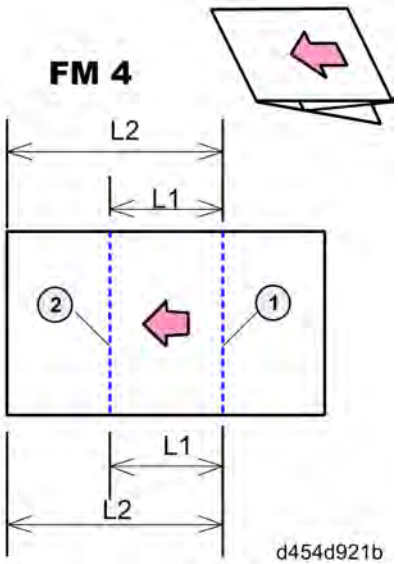
Symbol/Color	What It Means
①	Stopper 1 needs adjustment
②	Stopper 2 needs adjustment
③	Stopper 3 needs adjustment
Blue line	Peak fold (points left)
Green line	Valley fold (points right)



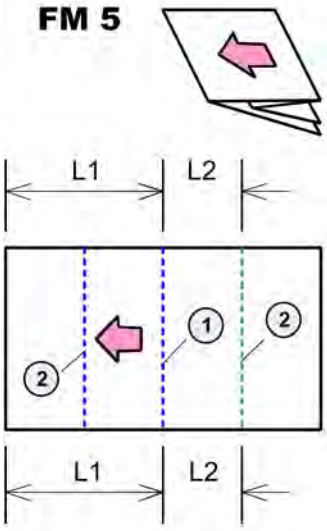


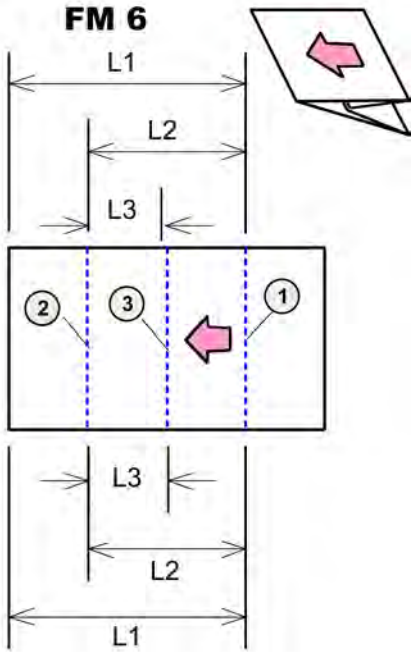
d454d921a





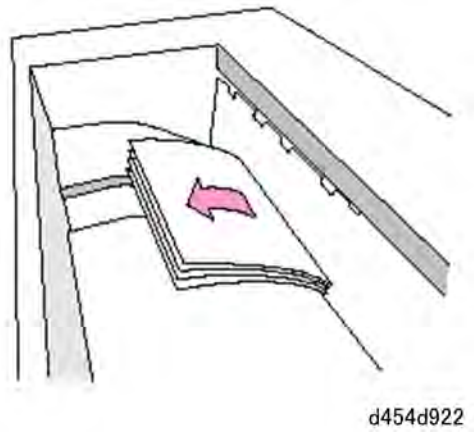
d454d921b





d454d921c

General Procedure



1. Retrieve the first folded paper from the top of the multi-folder. The first sheet is on the bottom of the stack.
2. If a fold is skewed, spread the paper out in the direction of paper feed shown in the diagrams above.
3. Carefully measure the distances between the folds between L1, L2, L3.
4. Compare the **Front** and **Rear** measurements.
5. Refer to the table below to determine where the paper is skewing and what type of adjustment is required.

Skew Correction Reference Table

	L1	L2	L3	S1	S2	S3
FM1	---	**F** Long	**F** Long	---	Lower **F**	Raise **F**
	---	**F** Short	**F** Short	---	Raise **F**	Lower **F**
FM2	**F** Long	---	---	Raise **F**	---	---
	F Short	---	---	Lower **F**	---	---
FM3	**F** Long	**F** Long	---	Raise **F**	Lower **F**	---
	F Short	**F** Short	---	Lower **F**	Raise **F**	---
FM4	**F** Long	**F** Long	---	Raise **F**	Lower **F**	---
	F Short	**F** Short	---	Lower **F**	Raise **F**	---
FM5	**F** Long	**F** Long	---	Raise **F**	Lower **F**	---
	F Short	**F** Short	---	Lower **F**	Raise **F**	---
FM6	**F** Long	**F** Long	**F** Long	Lower **F**	Lower **F**	Raise **F**

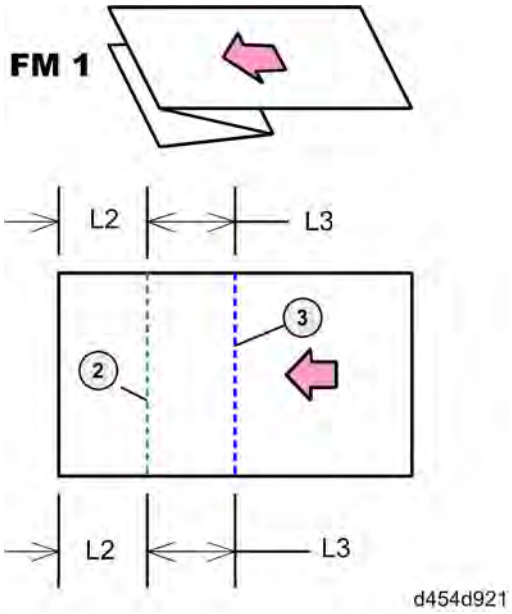
	L1	L2	L3	S1	S2	S3
	F Short	**F** Short	**F** Short	Raise **F**	Raise **F**	Lower **F**

Table Key

You must refer to the "Skew Correction Reference Diagrams". The following abbreviations are used in the table above.

Term	What It Means
F Long	**Front** measurement of L1, L2, or L3 is **longer** than **Rear**..
F Short	**Front** measurement of L1, L2, or L3 is **shorter** than **Rear**..
S1, S2, S3	Refers to Stopper 1, Stopper 2, Stopper. In the diagrams these are annotated as:①, ②, ③ respectively.
Raise **F**	Raise the front end of the stopper fence. For more, see below.
Lower **F**	Lower the front end of the stopper fence. For more, see below.

Example: FM1 (Z-fold)



First, compare the L2 measurements.

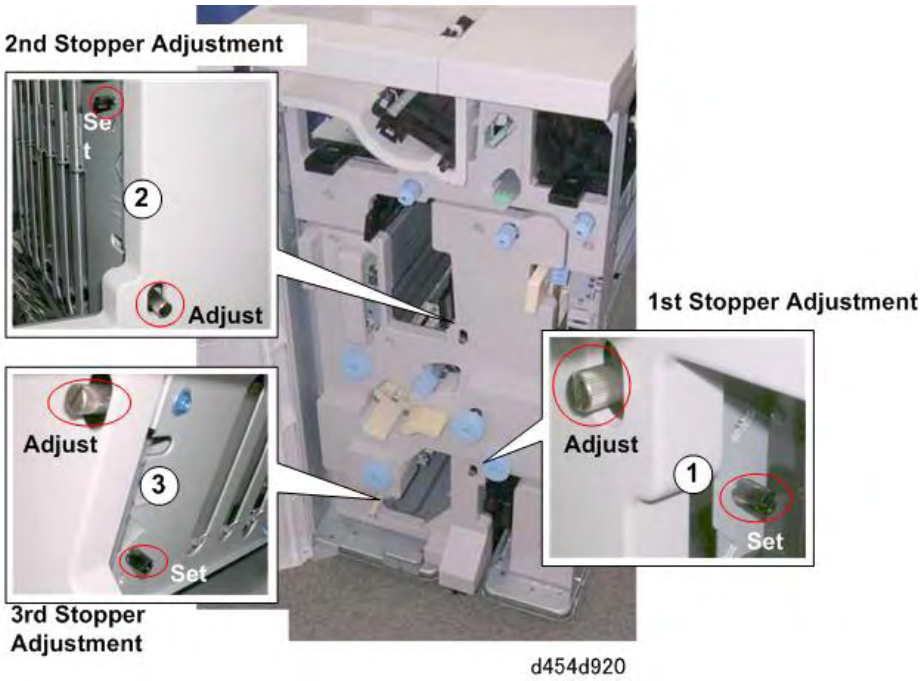
- In this example, imagine that L2 is longer at the front than at the rear.
- Look at the table, in the row for FM1, and the column for L2.
  - ‘F Long’ means Front measurement longer than Rear
  - ‘F Short’ means Rear measurement longer than Front
- L2 is longer at the front, so we have an ‘F Long’ situation.
- Then look at the next line, below ‘F Long’. It says ‘Lower F on S2’.
- This means you must lower the front end of stopper 2.

Then, compare the L3 measurements.

- In this example, imagine that L3 is longer at the front than at the rear.
- Look at the table, in the row for FM1, and the column for L3.
  - ‘F Long’ means Front measurement longer than Rear
  - ‘F Short’ means Rear measurement longer than Front
- L3 is longer at the front, so we have an ‘F Long’ situation again.
- Then look at the next line, below ‘F Long’. It says ‘Raise F on S3’.
- This means you must raise the front end of stopper 3.

Stopper Adjustment Procedures

1. Use the "Skew Correction Reference Diagrams" and "Skew Correction Reference Table" in the previous section to determine the location of the skew and which stopper needs adjustment.
2. Now you are ready to do the adjustment on the multi-folder unit.



3. The illustration above shows the location for each stopper adjustment.
   - Each stopper is equipped with two screws.
   - The black plastic screw is the Set screw and the metal silver screw is the Adjustment screw.

4. Remove the Set screw.

d454d942

5. Turn the Adjustment screw to do the adjustment for the stopper.

   1st, 3rd Stopper

   - Turn the Adjustment screw **clockwise** to **lower** the front end of the fence.

     -or-

   - Turn the Adjustment screw **counter-clockwise** to **raise** the front of the fence.

   2nd Stopper

   - Turn the Adjustment screw **clockwise** to **raise** the front end of the fence.

     -or-

   - Turn the Adjustment screw **counter-clockwise** to **lower** the front of the fence.

d454d943

6. Fasten the Set screw in the hole of the diagonal cutout near the hole where you removed it.

   Note

   - The diagonal cut may be above or below the original hole, depending on which stopper you are adjusting.
   - The photo above shows the Set screw for Stopper 2.

7. Tighten the Set screw so the plate holds the adjustment.

D741

DECURLER UNIT DU5030

REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

DECURLER UNIT DU5030 (D741)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT..... 1

1.1 DECURLER UNIT AND ELECTRICAL COMPONENTS.....1

1.1.1 DECURL UNIT.....1

Removal Procedure 1

Maintenance Position.....3

SP Settings After Installing a New Decurl Unit.....4

1.1.2 DDRB.....4

1.1.3 DECURL UNIT MOTOR 5

1.1.4 DECURL UNIT FAN.....7

1.1.5 DECURL FEED MOTOR 8

1.1.6 DECURL UNIT HP AND LIMIT SENSOR.....10

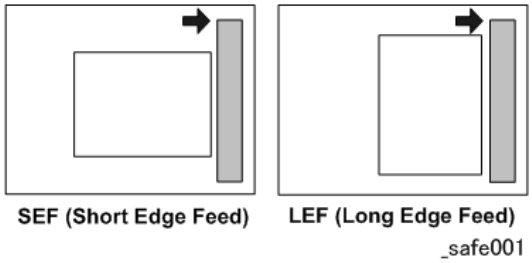
READ THIS FIRST

Symbols, Abbreviations and Trademarks

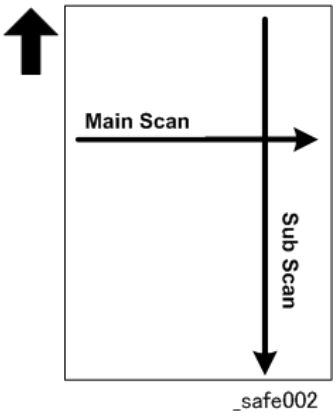
Conventions

Symbol	What it means
	Binding screw (shoulder hexagonal head)
	Binding screw (round flathead)
	Black screw (heavy, fusing unit, TCRU)
	Bushing
	C-ring
	Clip
	Connector
	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
	Gear
	Harness clamp
	Harness clamp: metal: fusing unit
	Hook (or tab release: sensors)
	Knob screw (black)
	Knob screw (sliver)
	Pivot screw
	Screw: most common: silver

Symbol	What it means
	Shoulder screw
	Shoulder screw (black)
	Spring
	Standoff
	Stud screw
	Tapping screw (for plastic)
	Timing belt
	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)

Terms	Meaning
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
PB	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft®, and Windows® are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript® is a registered trademark of Adobe Systems, Incorporated.
- PCL® is a registered trademark of Hewlett-Packard Company.
- Ethernet® is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

1. REPLACEMENT AND ADJUSTMENT

1.1 DECURLER UNIT AND ELECTRICAL COMPONENTS

1.1.1 DECURL UNIT

Removal Procedure

⚠CAUTION

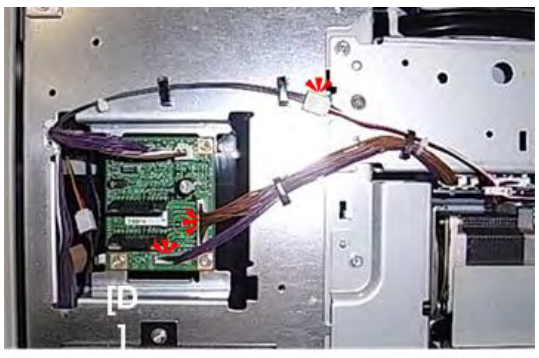
- Most parts in the decurl unit have been precisely adjusted at the factory. Do not remove the parts for which replacement procedures are not mentioned in this manual. Otherwise, adjustment for the decurl unit requires special tools.

Only the following parts can be replaced without decurl unit adjustment.

- DDRB (Decurl Drive Board)
- Decurl Unit Motor
- Decurl Feed Motor
- Decurl Unit HP and Limit Sensor
- Decurl Unit Fan

d7410032

1. Remove the left cover of the main machine (x7)



d7410033

2. Disconnect the DDRB (x3).

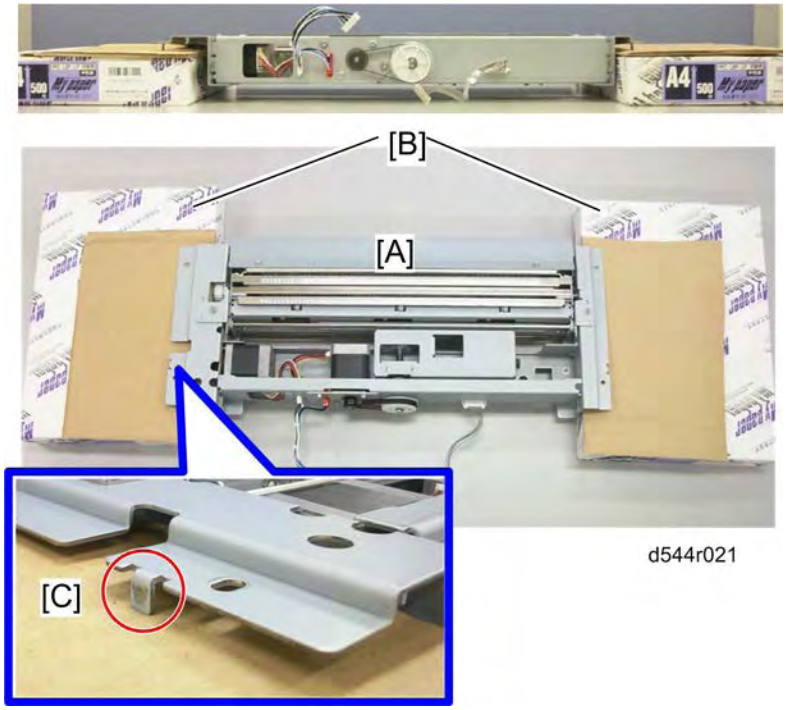
d7410034

3. Remove lower bracket (x2).

d7410035

4. Remove the decurl unit (x4).

Maintenance Position

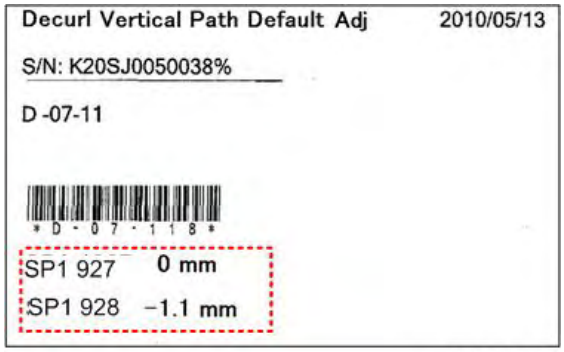


Lay the Decurl Unit [A] on temporary supports [B].

- The entrance guide of the decurl unit must not touch the floor or any object. Otherwise, the mylars on the entrance gate may be bent or folded.
- Keep this position during maintenance.
- Place an object like a sheet of cardboard on the supports so that the frame projection [C] does not damage the supports.

SP Settings After Installing a New Decurl Unit

1. Switch on the machine and enter the SP mode.



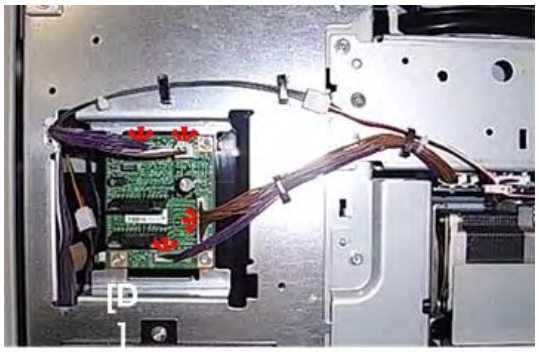
d999i016

2. Refer to the accessory sheet and enter the settings for SP1927 and SP1928.
3. Exit SP mode and turn off the main machine.

1.1.2 DDRB

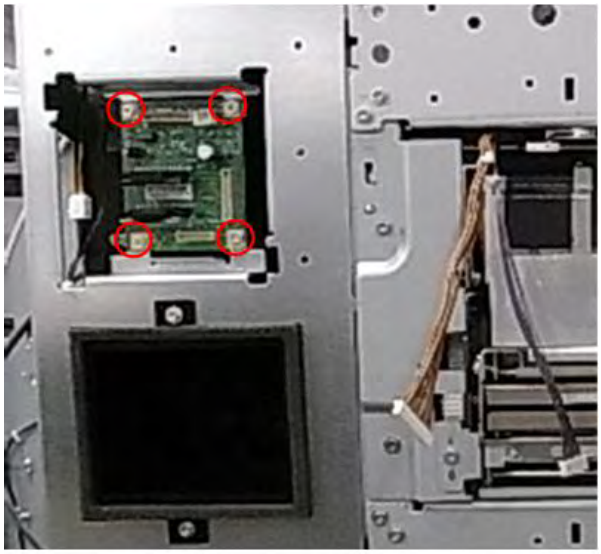
d7410032

1. Remove the left cover of the machine (x7).



d7410037

2. Disconnect the DDRB (x4).

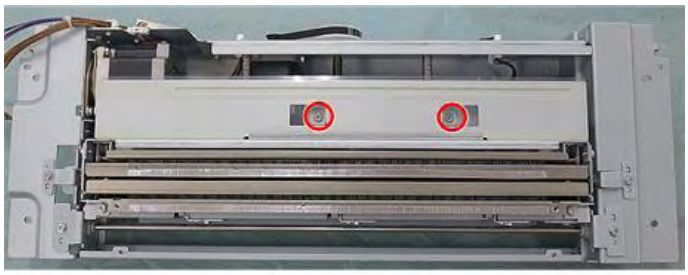


d7410038

3. Remove the DDRB (x4).

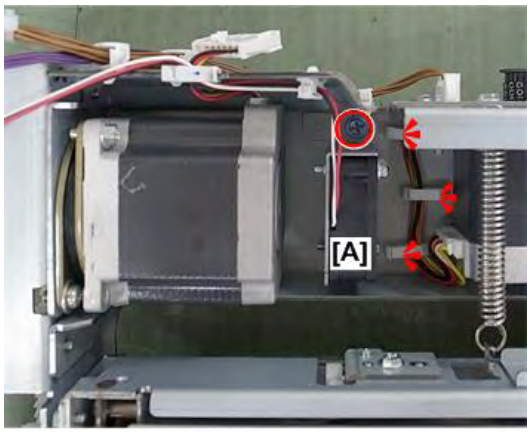
1.1.3 DECURL UNIT MOTOR

1. Remove the decurl unit page 1



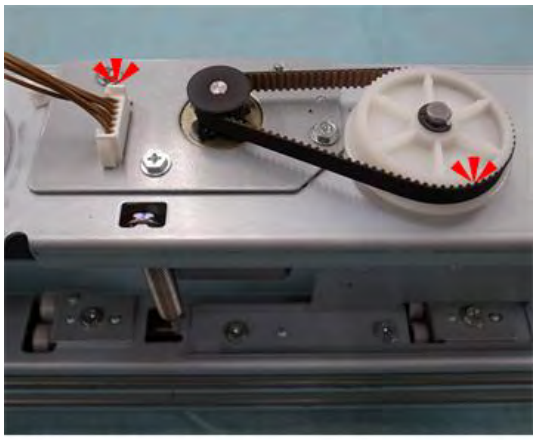
d7410036

2. Remove decurl unit cover bracket (x2)



d7410048

3. Disconnect the fan bracket [A] and free the harness so you can move it to access the motor (x1, x3).



d7410040

4. Disconnect the connector and remove the belt (x1, x1).

d7410041

5. Remove the motor bracket (with motor attached) (x2).

d7410042

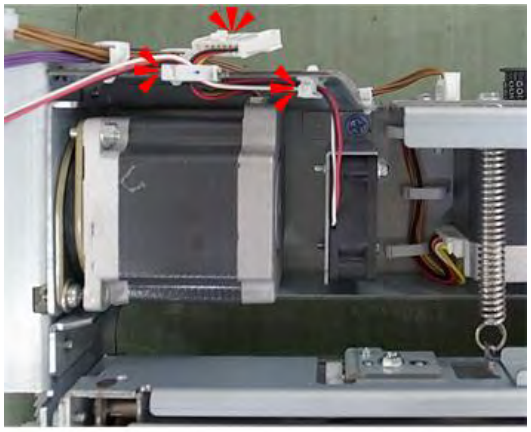
6. Separate the motor and bracket (x1, x2).

1.1.4 DECURL UNIT FAN

1. Remove the decurl unit. page 1

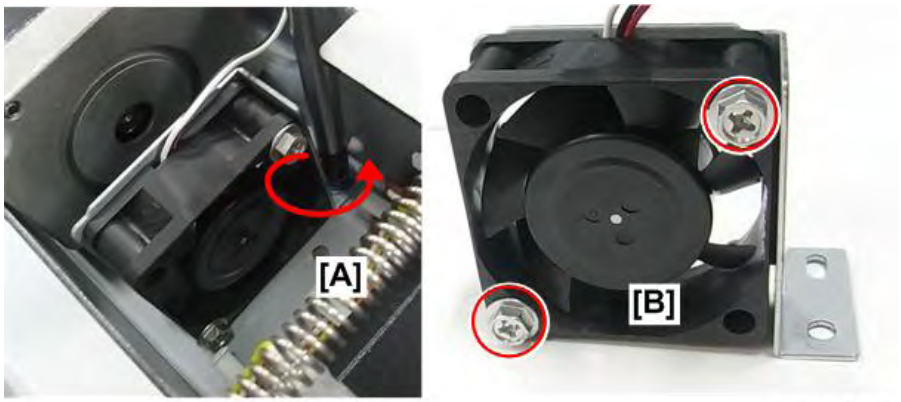
d7410036

2. Remove decurl unit cover bracket (x2)



d7410031

3. Disconnect fan harness (x2, x1).



d7410047

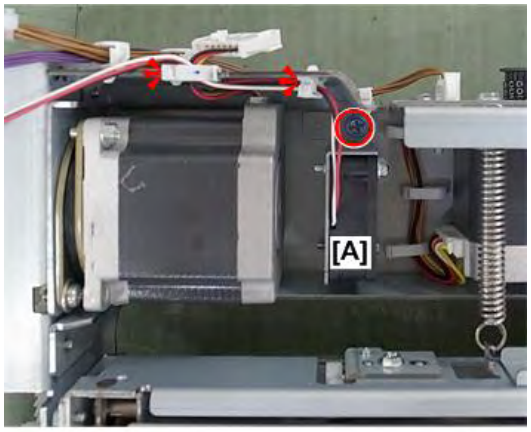
4. Remove the fan bracket [A] (with fan attached) (x1).
5. Separate the fan [B] and bracket (x2).

1.1.5 DECURL FEED MOTOR

1. Remove the decurl unit. page 1

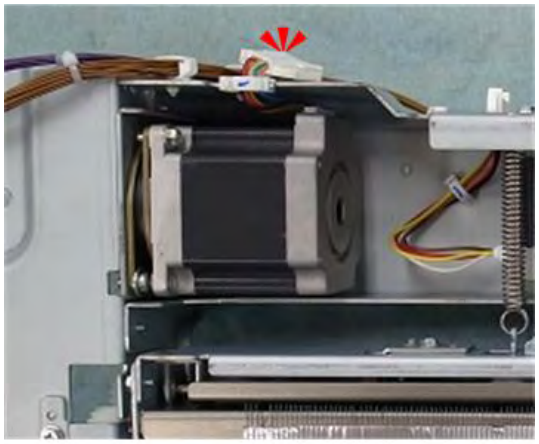
d7410036

2. Remove decurl unit cover bracket (x2)



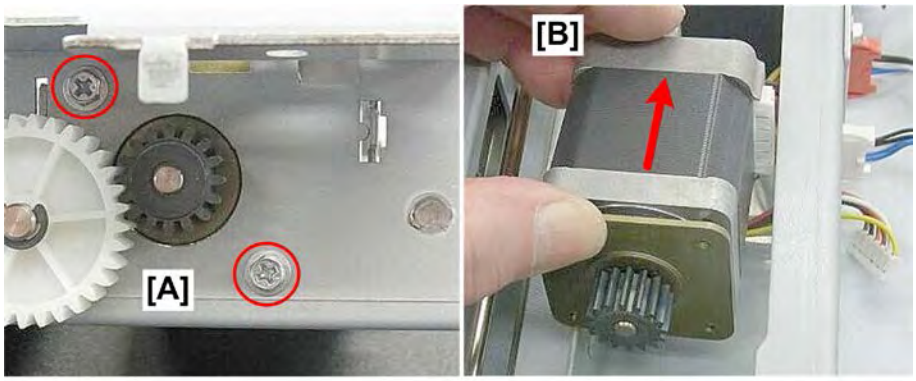
d7410039

3. Disconnect the fan bracket [A] and free the harness so you can move it to access the motor (x1, x2).



d7410043

4. Disconnect the motor harness (x1).



d544r013

5. At the rear side of the unit [A], disconnect the motor (x2).
6. Pull the motor [B] out from rear to front.

d544r014

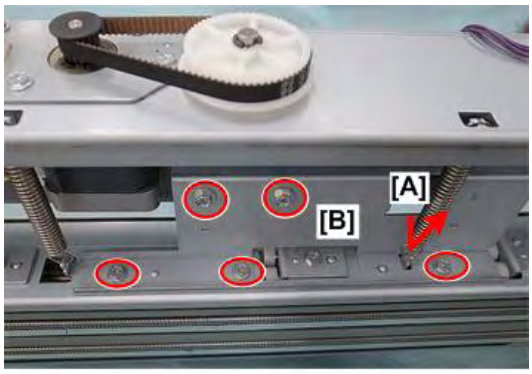
7. Remove the motor.

1.1.6 DECURL UNIT HP AND LIMIT SENSOR

1. Remove the decurl unit. page 1

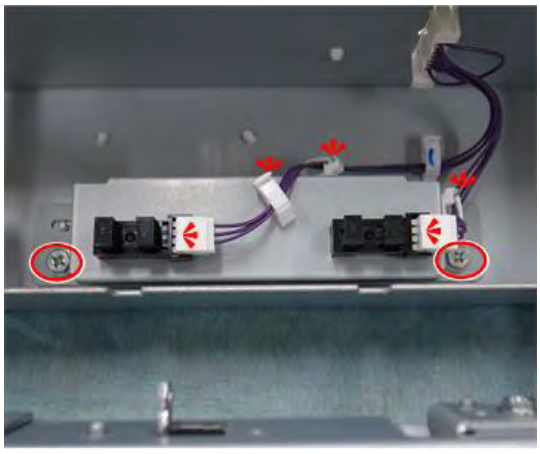
d7410036

2. Remove decurl unit cover bracket (x2)



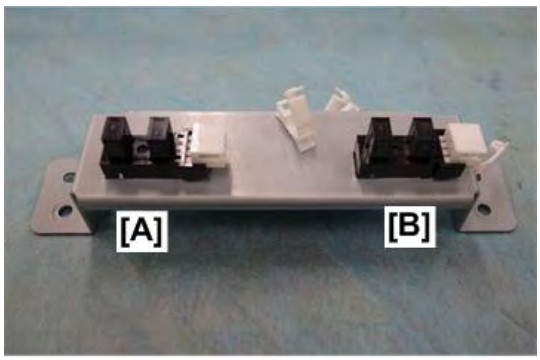
d7410044

3. Remove right spring [A] (x1).
4. Remove cover bracket [B] (x5).



d7410045

5. Remove the sensor bracket (with sensors attached) (x3, x2, x2).



d7410046

[A]	Decurl unit HP sensor
[B]	Decurl unit limit sensor