Model Ta-C2/P2 Machine Code: D194/D195/D203/D204 M195/M196/M207/M208

Troubleshooting

TABLE OF CONTENTS

Servicing	15
Customer Engineers	15
Reference Material for Maintenance	15
Warnings, Cautions, Notes	15
Before You Begin	16
Safety	16
About the Display for Options	16
Difference between Service Technician and TCRU	17
About this manual	17
Relation between Print Mode and Settings	18
Print Mode	18
Applied Setting Items for Custom Paper Setting	18
Transfer	18
Fusing	21
1. SC Codes	
SC Table Key	23
Service Call Codes	23
Service Call Conditions	23
SC Logging	24
Service Call 101-195	25
SC100 (Engine: Scanning)	25
Service Call 202-286	37
SC200 (Engine: Image Writing)	37
Service Call 300-398	49
SC300 (Engine: Charge, Development)	49
Service Call 400-498	72
SC400 (Engine: Around the Drum)	72
Service Call 501-595	97
SC500 (Engine: Paper transport 1: Paper Feed, Duplex, and Transport)	97
Service Call 600-672 (Controller)	170
SC632 to SC653, SC670 to SC672	170
Service Call 620-689 (Engine)	182
SC600 (Engine: Communication and Others)	182

Service Call 700-740	201
SC700 (Engine: Peripherals)	201
ADF	201
Finisher/ Booklet Finisher	206
Multi-Folding Unit	237
High Capacity Stacker	250
Trimmer Unit	259
Cover Interposer Tray	263
Service Call 750-790	268
SC700 (Engine: Peripherals)	268
Perfect Binder	268
Ring Binder	526
Vacuum Feed LCIT	546
RPIP Interface Box	558
Service Call 816-899	559
SC816 to SC899	559
Service Call 900-998 (Controller)	590
SC900 to SC998	590
Service Call 995 (Engine)	595
SC995 (Engine: Others)	595
2. JAM Codes	
Jam Detection	
Jam Displays	597
Jam Removal	597
Printer Engine Jam History	598
How to check	598
Display	598
Jam Code Descriptions	599
ADF	599
Main Machine+A3 LCIT	599
Vacuum Feed LCIT	603
Vacuum Feed LCIT (2nd)	604
Vacuum Feed LCIT (3rd)	606

Cover Interposer	606
Finisher/Booklet Finisher	608
Multi-Folding Unit	609
High Capacity Stacker 1 (Upstream)	611
High Capacity Stacker 2 (Downstream)	612
Trimmer Unit	613
Ring Binder	614
Perfect Binder	615
Buffer Pass Unit.	617
RPIP Interface Box	618
Others	618
3. Troubleshooting: Paper Delivery Problems	
Main Machine Paper Transport Problems	621
J032 Appears	621
Cause	621
Solution	622
J033 Appears (Paper Weight 7)	623
Cause	623
Solution	623
J033/J082 Appears (Small size paper, Metallic Paper, and Paper Weight 7 or larger)	623
Cause	623
Solution	625
Frequent Paper Misfeeds	625
J080 Appears (Paper Delay in Specific Papers)	627
Cause	627
Solution	628
J099 Appears (Main Machine Tray)	628
Wrong Detection of Double Feeding 1	630
Cleaning the Double-Feed Sensor 1 (LED) and Double-Feed Sensor 2 (Receptor)	631
Wrong Detection of Double Feeding 2	633
Cause	633
Solution	633
Paper Skew	634

Cause	634
Solution	635
Adjusting the Registration Gate Position	636
J097 Appears (Skew Detection)	639
Cause	639
Solution	640
J098 Appears (Shift Over)	641
Cause	642
Solution	642
Cleaning the CIS	645
Efficient SP for Paper Jam Analyzing	646
Fan on Optional Buffer Pass Unit Generates Noise	646
Solution	646
White Spots Due to Paper Dusts	646
Cause	646
Solution	647
Cleaning the Transfer Unit	647
Cleaning the Paper Tray Unit of Main Machine	650
Cleaning the LCIT (RT5090) Paper Tray	652
Cleaning the Paper Feed Unit of Vacuum Feed LCIT (RT5100)	655
Cleaning the Bridge Unit	659
Cleaning the Paper Feed Unit of the Multi Bypass Tray (BY5010)	660
Roller Marks on Paper Edges (Merge)	661
Cause	661
Solution	662
Cleaning the Optional Buffer Pass Unit	664
Cleaning the Duplex Guide Plate	666
Disturbed Images, Scratches, Streaks, Waves and Creases (Line Speed Fine-tuning)	667
Cause	667
Solution (1)	669
Solution (2: Custom Paper Settings)	669
Solution (3: Service Only)	670
Cleaning the Exit Unit Entrance Roller	672

Cleaning the Cooling Belt	673
Cleaning the Paper Exit Relay Roller	674
Cleaning the Paper Exit Roller	675
Cleaning the Paper Exit Inverter Roller	675
Scratches, Streaks, Waves or Creases (Decurl Unit Line Speed Adjustment)	677
Cause	677
Solution	677
Roller Marks by Paper Exit Inverter Roller	679
Cause	679
Solution	679
Roller Marks on Coated Paper (after Continuous Large-volume Printing)	680
Cause	680
Solution	680
Waves on Short-Grained Paper	680
Cause	680
Solution	681
Fusing Jam When Printing with High Coverage (J033/J034/J083)	681
Cause	681
Solution	682
Jams Related to insufficient Separation on Thin Paper	684
Cause	684
Solution	685
Jams Related to Duplex/Invert in Short Grain and Thickest Paper	686
Cause	686
Solution	686
Roller Marks on Buffer Pass Unit	687
Cause	687
Solution	688
Paper Feed Problems (Input Tray)	691
A3LCIT / Bypass Tray / Cover Interposer Tray	691
No Feeding (Common)	691
No Feeding (Envelope)	693
No Feeding 1	694

No Feeding 2	697
Attaching the Tab Sheet Holder (A3 LCIT)	698
Cleaning the Paper Feed Path	699
Cleaning the Paper Feed Path in the A3 LCIT (Trays 3-5)	700
Cleaning the Paper Feed Path in the Multi Bypass Tray (Tray 6)	702
Cleaning the Paper Feed Rollers and Paper Feed Belt in the Cover Interposer	705
No Feeding 3	706
Adjusting the Upper Limit Position (A3 LCIT)	707
No Feeding 4	712
Adjusting the Upper Limit Position (Bypass Tray)	714
No Feeding 4 (Cover Interposer Tray)	718
Double Feeding 1	720
Double Feeding 2	721
J099 Appears (Vacuum Feed LCIT)	723
Double Feeding	724
J430, 431,445, 446, 460, or 461 Appears	725
No Feeding	730
Attaching the Tab Sheet Holder (Vacuum Feed A3 LCIT)	731
4. Troubleshooting: Post-Processing Option	
Finishing Problems	733
Finisher/Booklet Finisher	733
Large Paper Not Stacked Properly	733
When bundle to be bound is poorly aligned	736
Trailing Edge of Stapled Sheets Close to the Paper Exit	738
Leading edge 4mm pitch edges getting dirty	739
Paper edges get dirty caused by dirt of paper transfer rollers	742
Only the Cover Is Discharged During Saddle Stitching (JAM129)	743
Thin, Coated Paper Eject Error (Stapled Sheets)	745
Multi-Folding Unit	748
Folded Sheets Are Not Stacked Properly	748
Z-Folding Is Not Performed Correctly	749
Matte Paper Scratched During Folding	750
Folds Soiled by Multi-Sheet Folding	753

Edges of Letter Fold Bent	755
Poor Folding	756
Folding Deviation	757
High Capacity Stacker	763
Delivered Sheets Are Severely Curled	763
Delivered Sheets Are Not Aligned	766
Premature Detection of Full When Paper Discharged to Shift Tray	768
Marks Left by the Paper Holder	<i>77</i> 1
Prevent Loosening of Screws to the Cart's Handle	772
Ring Binder	773
Ring Binder Recognition: SC756-48	773
Others	774
Curling	774
Solution	775
5. Improving Throughput	
Improving Throughput	
Improving Metallic Paper Productivity	777
Cause	777
Solution	777
Reducing the Waiting Time	778
Cause	778
Solution	778
Improving Fusing Capability	779
Cause	779
Solution	780
Improving Productivity when Loading the Different Types/Thicknesses of paper	782
Cause	782
Solution	782
6. Detailed Procedures of SC Occur	
Detailed Procedures of SC Occur	785
Recovering SC591-00	785
Recovering SC499-03, Preventive Maintenance of Intermediate Transfer Scale	785
Intermediate Transfer Belt: How to Clean the ITB Speed Feedback Sensor	

After cleaning the ITB Speed Feedback Sensor	789
SC441: ITB Drive Motor Error Measure Flow	790
Recovering from SC756-48	792
7. Troubleshooting: Image Quality Problems	
Image Index	
Large classification: Lines/Streaks	793
Middle classification: Streaks	793
Middle classification: Bands	795
Large classification: Spots	797
Middle classification: Spots	797
Large classification: Full page	798
Middle classification: Unprinted	799
Middle classification: Unevenness	801
Middle classification: Dirtied printouts	803
Middle classification: Disturbed image	804
Middle classification: Scratches	805
Middle classification: Shifted image	806
Others	807
8. Image Quality Problem: Lines	
Streaks	
Horizontal Black Streaks (Image Edge)	809
Cause	809
Solution	810
Horizontal White Streaks	811
Cause	812
Solution	813
Whiter at the Trailing Edge	813
Cause	814
Solution	815
Vertical Black Streaks	815
Cause	815
Solution	816
Vertical Black (color) Streaks (1)	817

Cause	817
Solution	818
Vertical Black (color) Streaks (2)	821
Cause	821
Solution	821
Vertical Black (color) Streaks (3)	822
Cause	822
Solution	822
Vertical White Streaks (1)	823
Cause	823
Solution	825
Vertical White Streaks (2)	831
Cause	831
Solution	832
Glossy Lines at the Edge of the Paper	835
Cause	835
Solution	835
Vertical Gloss Streaks	836
Cause	836
Solution	838
Vertical Streaks when Feeding Thick (360 g/m²) Paper: Vacuum Feed LCIT	842
Cause	842
Solution (Customer Engineer only)	842
Bands	844
Vertical White Bands	844
Cause	844
Solution (Customer Engineer only)	844
Banding (General)	845
Solution	845
Banding (63 mm intervals)	846
Cause	847
Solution	847
Banding (189 mm intervals)	848

Cause	848
Solution	849
9. Image Quality Problem: Spots	
Spots	851
Black (color) Spots (1)	851
Cause	851
Solution	851
Black (color) Spots (2)	855
Cause	856
Solution	856
White Spots/Toner Blasting	857
Cause	857
Solution	858
Blister-like White Spots	860
Cause	860
Solution	861
Medaka (White Spots)	862
Cause	863
Solution	863
Patchy Image at the Leading Edge	864
Cause	864
Solution	865
10. Image Quality Problem: Full Page	
Unprinted	867
Fainter Leading Edge	867
Solution	868
Fainter Trailing Edge	871
Cause	871
Solution	871
Unprinted: When Using a Transparent Film	875
Cause	875
Solution	875
Unprinted: Around Clear-toner Images	876

Cause	876
Solution	877
Worm Holes: Text or Edge of an Image	877
Cause	878
Solution	879
Worm Holes: When Using the Clear Toner	881
Cause	882
Solution	883
Uneven Density	886
Low Image Density of Black Area	886
Cause	886
Solution	886
Horizontal White Streaks: Around Black Text	887
Cause	888
Solution 1	888
Solution 2	889
Uneven Density between Left and Right of an Image: 40 mm Interval	890
Solution	890
Uneven density: 63 mm Interval	891
Solution	891
Uneven Density: 189 mm Interval (1)	891
Solution	891
Uneven Density: 189 mm Interval (2)	892
Cause	893
Solution 1	893
Solution 2 (Customer Engineer only)	893
Uneven Density within 90 mm of the Trailing Edge	894
Solution	894
Uneven Density (Textured Paper)	895
Cause	895
Solution	896
Mottling	898
Causa	898

Solution	899
Worm Track	905
Cause	905
Solution	906
Envelopes: Creases, Wavy Streaks	909
Cause	910
Solution	910
Blurred Image: Around a Clear Image	911
Cause	911
Solution	912
Residual Image: Negative Ghost	912
Cause	913
Solution	913
Residual Gloss (Gloss Ghost)	915
Cause	915
Solution	916
Residual Gloss (Gloss Ghost): Multiple	920
Cause	920
Solution	920
Uneven Gloss: Partly	923
Solution	924
Uneven Gloss: Wavy	924
Cause	925
Solution 1	925
Solution 2	926
Uneven Gloss: Side 2	926
Solution	928
Uneven Gloss: Thick Paper	932
Solution	933
irtied Printouts	936
Dirty Background	936
Solution 1	936
Solution 2	937

Toner Scattering: Lines	938
Solution	939
Trade-off of the ITB guide plate	940
Toner Scattering: Trailing Edge	940
Solution	941
Removing the Guide Plate	943
Trade-off of the ITB guide plate	943
Toner Scattering: Around a Solid Fill Image	943
Stained Paper Edges	944
Solution (Adjusting the fusing temperature)	944
Solution (Process Speed Adjustment)	945
Disturbed Image	946
Skew	946
Scratches, Others	947
Matte Paper Scratched During Folding	947
Cause	947
Solution	948
Insufficient Gloss: Clear Image	949
Cause	949
Solution	950
Milky Transparency	950
Solution	952
11. Advanced Instructions	
Operating Procedure for Color Calibration	957
Shortening the Leading/Trailing Edge Margins	
Adjusting the Image Position	
Adjusting the Image Position on Side 1	
Adjusting the Image Position on Side 2 in Alignment with Side 1 (Registration to Align Front and Images Using Template)	Back
TCRU Procedures: Preparations	
TCRU Procedures: Printing and Measuring the Template	
TCRU Procedures: Entering the Value	
TCRU Procedures: Checking the Adjustment Results	
. a.ta acadores. enecking me / tajesinem readme	, 00

TCRU Procedures: Further Reducing the Off-Registration for Side 1 and Side 2				
TCRU Procedures: Cases for which it is Necessary to Reconfirm Front/Back (Recommended)	•			
Service Technician Procedures: Front and Back Registration Adjustment by Using NICE Model Only)				
Adjusting the Image Position on Side 2	974			
Life Prediction of Developer	978			
Capturing the Engine Debug Log	979			
Overview	979			
Procedures for Capturing the Engine Debug Log via the Capturing Log Function	980			
Procedures for Capturing the Engine Debug Log via the Service Slot Board	980			
Procedures for Capturing the Engine Debug Log via the Debug Cable	981			
Capturing the TDCU Log	984			
Capturing Other Logs	986			
12. Fuses				
Fuses	987			
PSU2	987			
PSU3	987			
PSU4	988			
PSU5	988			
AC Drive	989			
NRYF	989			

Servicing

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.

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.

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.

ACAUTION

 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.

Mportant !

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

U Note

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

Before You Begin

Safety

MARNING

- 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.

ACAUTION

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.

- 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.

Difference between Service Technician and TCRU

About this manual

The TCRU Troubleshooting Guide is provided for the customer who made a TCRU contract and users can maintain the machine and measure the troubles under TCRU contents.

Troubleshooting as a service manual contains TCRU contents and also contents for the service technician.

For the service technician contents, it mentions at each measurements.

Relation between Print Mode and Settings

Print Mode

Five print modes and using toners are listed below:

Print Mode	K	С	М	Special Color			
rrini Mode	N.	C	//\	ĭ	Clear	Clear(Q)	White
B/W	✓	-	-	-	-	-	-
FC	✓	✓	✓	✓	-	-	-
FCS	✓	✓	✓	✓	✓	-	-
FCS Quality	✓	✓	✓	✓		✓ *1	✓ *1
S Only	-	-	-	-	√ *1	√ *1	√ *1

^{* 1:} Using one of these special colors

Clear(Q): High Quality Setting must be selected for the job

Applied Setting Items for Custom Paper Setting

Some of setting items of custom paper settings are prepared for each print mode.

For items that are instructed on this troubleshooting, modify the correct items for each print mode below.

Transfer

Image Transfer Electric Current

Print Mode	Items Applied	
B/W	022: [Image Transfer Current: B&W]	
FC, FCS, FCS Quality	023: [Image Transfer Current: FC: Black] 025: [Image Transfer Current: FC: Magenta] 026: [Image Transfer Current: FC: Yellow] 027: [Image Transfer Current: FC: Special]	

^{-:} N/A

Print Mode	Items Applied
S Only	028: [Image Transfer Current: Special]

Paper Transfer Electric Current

Print Mode	Items Applied
B/W	029: [Paper Transfer Current: B&W: Side 1] 030: [Paper Transfer Current: B&W: Side 2]
FC, FCS	035: [Paper Transfer Current: FC: Side 1] 036: [Paper Transfer Current: FC: Side 2]
FCS Quality	037: [Paper Trnsfr. Current: FC: Side 1: Qual.] 038: [Paper Trnsfr. Current: FC: Side 2: Qual.]
S Only	043: [Paper Transfer Current: Special: Side 1] 044: [Paper Transfer Current: Special: Side 2]

Paper Transfer Voltage (Texture Paper Mode Enabled)

Print Mode	Items Applied
B/W	050: [Txt Ppr: Ppr Trns Voltage: B&W: Side 1] 051: [Txt Ppr: Ppr Trns Voltage: B&W: Side 2]
FC, FCS	052: [Txt Ppr: Paper Trnsf Voltage: FC: Side 1] 053: [Txt Ppr: Paper Trnsf Voltage: FC: Side 2]
FCS Quality	054: [Txt. Pp.: Pp. Trn. VI.: FC: Sd. 1: Qul.] 055: [Txt. Pp.: Pp. Trn. VI.: FC: Sd. 2: Qul.]
S Only	056: [Txt Ppr: Paper Trnsf Voltage: S: Side 1] 057: [Txt Ppr: Paper Trnsf Voltage: S: Side 2]

Paper Transfer Leading/Trailing Edge Correction, Correction Distance

Print Mode	Items Applied
D (\A)	031: [Paper Transfer Current; Lead Edge: B&W] 032: [Ppr Transfer Current Lead Edg Dist: BW]
B/W	033: [Paper Transfer Current; Trail Edge: B&W]
	034: [Ppr Transfer Current Trail Edg Dist: BW]
FC, FCS, FCS Quality	039: [Paper Transfer Current; Lead Edge: FC] 040: [Ppr Transfer Current Lead Edg Dist: FC]
	041: [Paper Transfer Current; Trail Edge: FC]
	042: [Ppr Transfer Current Trail Edg Dist: FC]
S Only	045: [Paper Transfer Current; Lead Edge: S] 046: [Ppr Transfer Current Lead Edg Dist: S]
3 Ciliy	047: [Paper Transfer Current; Trail Edge: S] 048: [Ppr Transfer Current Trail Edg Dist: S]

Paper Transfer CV Setting

Print Mode	Items Applied	
	060: [Ppr Trns CV Start Timing: B&W: Side 1]	
	062: [Ppr Trns CV Cntrl Duratn: B&W: Side 1]	
	064: [Ppr Trnsf Cnstnt Voltage: B&W: Side 1]	
D /\A/	061: [Ppr Trns CV Start Timing: B&W: Side 2]	
B/W	062: [Ppr Trns CV Cntrl Duratn: B&W: Side 1]	
	063: [Ppr Trns CV Cntrl Duratn: B&W: Side 2]	
	064: [Ppr Trnsf Cnstnt Voltage: B&W: Side 1]	
	065: [Ppr Trnsf Cnstnt Voltage: B&W: Side 2]	
	066: [Ppr Trns CV Start Timing: FC: Side 1]	
	067: [Ppr Trns CV Start Timing: FC: Side 2]	
FC, FCS, FCS Quality	068: [Ppr Trns CV Cntrl Duratn: FC: Side 1]	
	069: [Ppr Trns CV Cntrl Duratn: FC: Side 2]	
	070: [Ppr Trnsf Constant Voltage: FC: Side 1]	
	071: [Ppr Trnsf Constant Voltage: FC: Side 2]	

Print Mode	Items Applied	
	072: [Ppr Trns CV Start Timing: S: Side 1]	
	073: [Ppr Trns CV Start Timing: S: Side 2]	
S O-l.	074: [Ppr Trns CV Cntrl Duratn: S: Side 1]	
S Only	075: [Ppr Trns CV Cntrl Duratn: S: Side 2]	
	076: [Ppr Trnsf Constant Voltage: S: Side 1]	
	077: [Ppr Trnsf Constant Voltage: S: Side 2]	

Fusing

Adjust fusing temperature to transfer paper (089, 090, 091, 092)

Print Mode	SP1-131-001	Items Applied	
D (M. EC	1: Productivity Mode	089: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Prod]	
B/W, FC	0: Fusing Quality Mode	090: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Qual]	
	1: Productivity Mode	091: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Prod: S]	
FCS, FCS Quality, S Only	0: Fusing Quality Mode	092: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Qual: S]	

Adjust adding fusing temperature (093, 094, 095, 096)

Print Mode	Items Applied
B/W, FC	093: [Adjust Adding Fusing Temperature 1] 095: [Adjust Adding Fusing Temperature 2]
FCS, FCS Quality S Only	094: [Adjst Addng Fusng Tempratre 1: Special] 096: [Adjst Addng Fusng Tempratre 2: Special]

Other settings for fuser

Print Mode	Items Applied
	009: [Adj. Erase Margin of Leadg. Edge: Prod.]
	011: [Adj. Erase Margin of Trailg. Edge: Prod.]
	085: [Fusing Heat Roller Temp. Adjust.: Prod.]
	087: [Fusing Pressr. Rllr. Temp. Adjst.: Prod.]
	097: [Fusing Nip Width Setting: Productivity]
B/W, FC, FCS, S only	099: [Adjust Cleang. Web Mtr. Intrvl.: Prod.]
	102: [Fusr Blt Smthng: Ppr Typ/Wt Coef: Prod]
	127: [Process Speed Setting: Productivity]
	129: [Paper Feed Interval Setting: Productivity]
	131: [Rdc. Init. CPM: Low Tmp. Envir.: Prod.]
	133: [Rdc. In. CPM: N./H. Temp. Envr.: Prod.]
	010: [Adj. Erase Margin of Leadg. Edge: Qual.]
	012: [Adj. Erase Marg. of Trailg. Edge: Qual.]
	086: [Fusing Heat Roller Temp. Adjust.: Qual.]
	088: [Fusing Pressr. Rllr. Temp. Adjst.: Qual.]
	098: [Fusing Nip Width Setting: Quality]
FCS Quality	100: [Adjust Cleang. Web Mtr. Intrvl.: Qual.]
	103: [Fusr Blt Smthng: Ppr Typ/Wt Coef: Qual]
	128: [Process Speed Setting: Quality]
	130: [Paper Feed Interval Setting: Quality]
	132: [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]
	134: [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]

SC Table Key

Service Call Codes

Service Call Conditions

ACAUTION

- At job end or when the machine is switched off, both sides of the ITB unit are lowered and separated from the drums.
- · However, after a power failure or accidental disconnection of the power cord, or after a machine issues an SC code after a malfunction, both or one side of the ITB may remain up against the drums.
- To avoid damage to the ITB, both sides of the ITB must be checked and lowered before the ITB unit can be pulled out of the unit.

Pattern	Display	Display How to reset	
A	The SC is displayed on the operation panel, and the machine cannot be used (safety-related SC).	Execute CE reset SP mode, and switch main power from OFF to ON.	Occurrence & alarm count ↓ Immediate alarm
В	When a function is selected, the SC is displayed on the operation panel, and the machine cannot be used (downtime mitigation).	Switch main power from OFF to ON.	Occurrence & alarm count Power OFF ON Alarm count and alarm only if recurrence
С	No display on the operation panel, and use is permitted.	Count only logging.	Occurrence ↓ Logging count & alarm count

Pattern	Display	How to reset	SC call or SC alarm in customer support system
D	The SC is displayed on the operation panel, and the machine cannot be used (machine-error SC).	Switch main power from OFF to ON.	Occurrence & alarm count ↓ Power OFF → ON ↓ Alarm count and alarm only if recurrence



- When an ordinary SC (type D) is generated, an automatic reboot is performed. When an event is reported by the customer support system, even in the event of an ordinary SC, reboot is not performed. During automatic reboot, a confirmation screen is displayed after the reboot.
- When automatic reboot occurs twice continuously, an SC is displayed without rebooting, and logging count is performed. Also, when an SMC print is output, an * mark is added alongside the SC number for clarity.
- Automatic reboot can be enabled or disabled with SP5-875-001 (SC automatic reboot setting) (default value: 0: Manual reboot).

SC Logging

When an SC is generated, the "total count value when the SC is generated" and the "SC code" are logged. However, if the total count value during the SC is the same as last time, logging is not performed.

Logged data can be checked by outputting an administrative report (SMC print). The SC history is logged up to the last 10 entries, and if there are more than 10 entries, data are progressively deleted starting from the oldest.

ſ

Service Call 101-195

SC100 (Engine: Scanning)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-01	D	Lamp Error (Scanning)
		The white level peak did not reach the prescribed threshold when the white plate was scanned.
		LED defective
		IDB (LED driver) defective
		SBU defective
		IPU defective
		Power/signal harness defective
		Condensation in scanner unit
		Mirrors or lenses dirty or positioned incorrectly
		White plate dirty or installed incorrectly

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Cycle the machine off/on.
		Reconnect the power/signal harness.
		Reattach/clean the mirrors.
		Adjust sub scan registration with positioning pins after reattach the mirrors.
		Clean the lenses.
		Replace the lens block if lens is detached.
		Clean the white plate.
		Because white plate is attached between the scale and the exposure glass, it has to be peeled off the exposure glass with the scale in order to get access (clean). Once white plate has been peeled off, attach a new scale (Without debris getting in).
		Replace the LED board.
		Replace the IDB board.
		Replace the SIO board.
		Replace the SBU board.
		Replace the IPU board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		Lamp Error (LED illumination adjustment)	
		LED error was detected.	
		LED defective	
		IDB (LED driver) defective	
			Power/signal harness defective
SC101-02	D	Cycle the machine off/on.	
		Reconnect the power/signal harness.	
		Replace the LED board.	
		Replace the IDB board.	
		Replace the SIO board.	
		Replace the power/signal harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LED Illumination Adjustment Error
		The white level peak reached the prescribed threshold when the white plate was scanned after a specified number of adjustments.
		LED defective
		IDB (LED driver) defective
		SBU defective
		IPU defective
SC102-00	SC102-00 D	Power/signal harness defective
		Cycle the machine off/on.
		Reconnect the power/signal harness.
		Replace the LED board.
		Replace the IDB board.
		Replace the SBU board.
		Replace the IPU board.
		Replace the SIO board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Scanner Home Position Error 1
		The scanner home position sensor does not go OFF.
		Details:
		Error detection timing
		 During homing (when the machine is turned ON or when it returns from energy save mode)
		 During an automatic adjustment (when the machine is turned ON or when it returns from energy save mode)
SC120-00	D	During a scan from the ADF or exposure glass.
		Scanner motor driver defective
		Scanner motor defective
		Scanner HP sensor defective
		Harness defective
		Timing belt, pulley, wire, or carriage not installed correctly
		Cycle the machine off/on.
		Replace the scanner motor.
		Replace the HP sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Scanner Home Position Error 2
		The scanner home position sensor does not go ON.
		Details:
		Error detection timing
		During homing
		During an automatic adjustment
		During a scan from the ADF or exposure glass.
SC121-00	D	Scanner motor driver defective
		Scanner motor defective
		Scanner HP sensor defective
		Harness defective
	Timing belt, pulley, wire, or carriage not installed correctly	
		Cycle the machine off/on.
		Replace the scanner motor.
		Replace the HP sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Black level detection error
		The black level cannot be adjusted within the target during auto gain control.
		SBU defective
	-00 D	IPU defective
SC141-00		Power/signal harness defective
		Cycle the machine off/on.
		Reconnect the power/signal harness.
	Replace the SBU board.	
		Replace the IPU board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-00	D	White level detection error
		The white level cannot be adjusted to the second target level within the target during auto gain control.
		SBU defective
		LED defective
		IDB (LED driver) defective
		IPU defective
		Power/signal harness defective
		Scanner drive error
		Condensation in scanner unit
		Mirrors or lenses dirty or positioned incorrectly
		White plate dirty or installed incorrectly
		Cycle the machine off/on.
		Reconnect the power/signal harness.
		Reattach/clean the mirrors.
		Adjust sub scan registration with positioning pins after reattach the mirrors.
		Clean the lenses.
		Replace the lens block if lens is detached.
		Clean the white plate.
		Because white plate is attached between the scale and the exposure glass, it has to be peeled off the exposure glass with the scale in order to get access (clean). Once white plate has been peeled off, attach a new scale (Without debris getting in).
		Replace the SBU board.
		Replace the LED board.
		Replace the IDB board.
		Replace the IPU board.
		Replace the SIO board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	SBU Communication Error
		Connection to SBU cannot be confirmed. (Connection detection error)
		Cannot communicate with the SBU, or the communication result is abnormal.
		SBU defective
SC144-00		The other side of the communication (BCU, IPU etc.) defective
30144-00		Power/signal harness defective
		Cycle the machine off/on.
		Reconnect the power/signal harness.
		Replace the SBU board.
		Replace the IPU board.
		Replace the BCU board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IPU Error (LSYNC abnormal)
		An error occurred during the self-diagnostic test performed every time the machine is turned on, or returns to full operation from energy save mode.
		IPU (BCU, iCTL) board defective (ASIC-LEO connection failure, LSYNC abnormal, etc.)
	D	SBU defective
66171.01		LVDB_U defective
SC161-01		Cable between SBU and IPU (or BCU) defective
		Power harness of LVDB_U disconnected.
		Replace the IPU (or BCU) board.
		Replace the lens block.
		Replace LVDB_U.
		Check the cable between SBU and IPU (or BCU)
		Reconnect the LVDB_U power harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IPU error (Ri response abnormal)
		The machine detects an error during an access to the Ri.
SC161-02	D	 IPU (BCU, iCTL) board defective (Ri response abnormal, etc.) Disconnected LVDB_D power harness.
		Replace the IPU (or BCU) board.
		Reconnect the LVDB_D power harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC161-06	D	IPU error (M2P error)
		M2P error occurs if the image transfer from controller to IPU board is not delayed, that causes the image problems
	NoiseConnector not set properlyIPU defect	
		Cycle the machine off/on. Replace the IPU board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		CIS transmission error
		The data read from the ASIC register on the CIS were not as expected. Details: Occurs when a serial communication error between the CIS board
	D	and the DF board is detected. Occurs also when an error is detected during initialization of the ASIC on the CIS.
SC185-00		This can happen during initialization and feeding. The first and second consecutive occurrences of each constitute jams. The third occurrence constitutes an SC.
		Connector or harness between DF board and CIS board is disconnected or defective
		ASIC on the CIS is defective
		Boot failure of ASIC on the CIS
		Reconnect the power/signal harness. Panlage the CIS and CIPP.
		 Replace the CIS and CIPB. Replace the ADF main control board.
		Replace the power/signal harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC186-00	D	CIS LED error	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During initialization:
		The ratio between the average values of leading-edge area and rear-edge area is out of specification.
		Shading data peak value is below specification.
		During scanning:
		Shading data peak value is below specification.
		Details:
		During initialization:
		 Occurs when one out of two CIS LEDs is malfunctioning, causing the difference between the average values of leading-edge area and rear-edge area to be large (CIS LED error detection).
		 Occurs when both of the CIS LEDs are malfunctioning (unlit), causing the shading data peak value to be extremely low (CIS white level adjustment).
		During scanning:
		 Occurs when both of the CIS LEDs are malfunctioning (unlit), causing the shading data peak value to be extremely low (CIS scan control, gray balance adjustment/confirmation).
		 The first and second consecutive occurrences of each constitute initial/feed jams. The third occurrence constitutes an SC.
		During initialization:
		One or two out of two CIS LEDs are defective
		During scanning:
		Both of the CIS LEDs are defective.
		Reconnect the power/signal harness.
		Replace the CIS and CIPB.
		Replace the CIS background white roller.
		Replace the power/signal harness.
		Replace the ADF main control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		CIS black level error
		The black level scanned by CIS is abnormal.
		Details:
SC187-00	D	Occurs when abnormality is detected in the process of black level generation – detection.
		The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC.
		CIS defective
		Replace the CIS and CIPB

CIS white level error The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC.	 The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC. 	The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC. SC188-00 D	The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC. CIS defective White roller behind the CIS damaged, dirty, or not installed	The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC. CIS defective White roller behind the CIS damaged, dirty, or not installed correctly.	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
White roller behind the CIS damaged, dirty, or not installed	correctly.	Reconnect the power/signal harness.	noodiniodi nio potrol/ digital namodi	Replace the CIS and CIPB.			 CIS white level error The shading data peak value read out from the CIS is abnormal. Details: Occurs when abnormality is detected in the process of CIS shading data peak detection. The first and second consecutive occurrences constitute initial jams. The third occurrence constitutes an SC. CIS defective White roller behind the CIS damaged, dirty, or not installed correctly.
	• D				SC188-00	D	
		 CIS defective White roller behind the CIS damaged, dirty, or not installed 	CIS defective White roller behind the CIS damaged, dirty, or not installed correctly.	 CIS defective White roller behind the CIS damaged, dirty, or not installed correctly. Reconnect the power/signal harness. Replace the CIS and CIPB. 			The first and second consecutive occurrences constitute initial jams.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		CIS gray balance adjustment error
		The difference between gray balance adjustment target value and the value scanned from the GS20 chart was out of specification upon execution of gray balance adjustment confirmation (SP4-705-002).
		Details:
SC189-00	D	Occurs when gray balance adjustment fails.
		The first occurrence constitutes an SC (not an initial jam).
		CIS defective
		The adjustment chart degraded due to scratches and smudges
		Replace the adjustment chart. (Degradation due to scratches and smudges)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Machine serial number error
SC195-00	D	Comparison of the product identification code in the machine serial number (11 digits).
30173-00		The product identification code in the machine serial number (11 digits) does not match.
		Re-enter the machine serial number.

Service Call 202-286

SC200 (Engine: Image Writing)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC202-01	D	Polygon Motor: ON Timeout Error: Bk
SC202-03	D	Polygon Motor: ON Timeout Error: Ma
SC202-05	D	Polygon Motor: ON Timeout Error: S
		After the polygon motor turned on, or within 15 sec. after the rpm's changed, the motor did not enter READY status.
		The interface harness to the polygon motor driver damaged or not connected correctly.
		Polygon motor or polygon motor driver defective
		IPU defective (XSCRDY Signal Error)
		PSU2 defective (Power for Polygon Motor error, fuse defective)
		1. Cycle the machine off/on.
		2. Reconnect the harness between laser unit and IPU.
		3. Replace the laser unit.
		4. Replay the polygon harness.
		5. Replace the IPU.
		6. Replace the PSU2
		Do not replace the Polygon Motor

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC203-00	D	Polygon Motor: OFF Timeout Error: Bk
SC203-03	D	Polygon Motor: OFF Timeout Error: Ma
SC203-05	D	Polygon Motor: OFF Timeout Error: S

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The XSCRDY signal (polygon ready) never becomes inactive (H) after the polygon motor went OFF.
		Detail:
		If error is not detected, XSCRDY signal (polygon ready) becomes inactive (H) within 3 seconds. Detection is done in 450ms continuation (50ms x 10 times)
		The interface harness to the polygon motor driver damaged or not connected correctly.
		Polygon motor or polygon motor driver defective
		IPU defective (XSCRDY Signal Error)
		PSU2 defective (Power for Polygon Motor error, fuse defective)
		1. Cycle the machine off/on.
		2. Reconnect the harness between laser unit and IPU.
		3. Replace the laser unit.
		4. Replay the polygon harness.
		5. Replace the IPU.
		6. Replace the PSU2
		Do not replace the Polygon Motor

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC204-00	D	Polygon Motor: XSCRDY Signal Error: Bk
SC204-03	D	Polygon Motor: XSCRDY Signal Error: Ma
SC204-05	D	Polygon Motor: XSCRDY Signal Error: S
		Inactive (H) occurred at least once after the polygon motor was rotated normally.
		Detail:
		In order to reduce false detection of inactive (H) due to noise or the like and detect the state of the XSCRDY signal in a timely way, if inactive (H) is detected for 9.2ms or longer (equal/greater than previous model), it is judged an error. SC detection operates via polling at intervals of 50ms.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The interface harness to the polygon motor driver damaged or not connected correctly.
		Polygon motor or polygon motor driver defective
		IPU defective (XSCRDY Signal Error)
		PSU2 defective (Power for Polygon Motor error, fuse defective)
		1. Cycle the machine off/on.
		2. Reconnect the harness between laser unit and IPU.
		3. Replace the laser unit.
		4. Replay the polygon harness.
		5. Replace the IPU.
		6. Replace the PSU2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC210-01	С	Trailing Edge Beam Error: Bk
SC210-02	С	Trailing Edge Beam Error: Cy
SC210-03	С	Trailing Edge Beam Error: Ma
SC210-04	С	Trailing Edge Beam Error: Ye
SC210-05	С	Trailing Edge Beam Error: S
		During measurement of main magnification of the given color, the trailing edge beam detection signal was not detected, or the magnification could not be detected, or the detect magnification ended up outside the specified range.
		Details:
		These are detected only during measurement of main magnification. Once 6ms elapses after the start of measurement, it checks the measured value and issues SC if either 1 of the errors occur, a trailing edge beam error flag or a measurement completion flag.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Magnification setting error
		Laser unit defective
		 Synchronized Optical Unit , Laser Synchronization Detector defective, or LD board defective
		Synchronized harness damaged, or disconnected
		1. Cycle the machine off/on.
		2. Check the magnification setting value.
		3. When SP2-102-013 value is more than +-100 from the default value, do the following:
		Set SP2-102-013 to default value
		• Set SP2-102-028 to "0"
		• Execute SP2-184-005.
		• Execute SP2-111-004.
		4. Replace the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC220-01	D	Leading Edge: LD1 synchronization detection error: Bk
SC220-02	D	Leading Edge: LD1 synchronization detection error: Cy
SC220-03	D	Leading Edge: LD1 synchronization detection error: Ma
SC220-04	D	Leading Edge: LD1 synchronization detection error: Ye
SC220-05	D	Leading Edge: LD1 synchronization detection error: S

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The leading edge LD1 synchronization detection signal of the corresponding color was not output within 100 ms while the polygon mirror motor was operating at normal speed.
		Details:
		 After LD lit, a synchronization detection flag was detected via polling at 100ms intervals. When an error is detected twice in a row, it issues SC.
		Laser unit defective
		Condensation
		 Synchronized Optical Unit , Laser Synchronization Detector defective, or LD board defective
		Synchronized harness damaged, or disconnected
		1. Cycle the machine off/on.
		2. Check for condensation.
		3. Replace the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC230-01	D	FGATE ON error: Bk
SC230-02	D	FGATE ON error: Cy
SC230-03	D	FGATE ON error: Ma
SC230-04	D	FGATE ON error: Ye
SC230-05	D	FGATE ON error: S
		The FGATE signal did not turn ON even if the specified period passed after the writing process of the corresponding color started. Details:
		After the specified period passed from the start of printing (STTRIG signal ON), it checks for the FGATE signal of the corresponding color to be ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Harness between IPU and LDB defective
		IPU defective
		LDB defective
		1. Cycle the machine off/on.
		2. Reconnect the harness between IPU to LDB.
		3. Replace the IPU.
		4. Replace the laser unit.
		5. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC231-01	D	FGATE OFF error: Bk
SC231-02	D	FGATE OFF error: Cy
SC231-03	D	FGATE OFF error: Ma
SC231-04	D	FGATE OFF error: Ye
SC231-05	D	FGATE OFF error: S

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The FGATE signal did not turn OFF even if the specified period passed after the writing process of the corresponding color ended. The FGATE signal did not turn OFF when the next job of the corresponding color started.
		Details:
		 After the specified period passed from the FGATE signal of the corresponding color coming ON, it checks for the FGATE signal to be OFF.
		IPU defective
		Harness error between IPU and LDB (Disconnection, contact failure)
		LDB defective
		1. Cycle the machine off/on.
		2. Reconnect the harness between IPU to LDB
		3. Replace the IPU.
		4. Replace the laser unit.
		5. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC240-01	D	LD error: Bk
SC240-02	D	LD error: Cy
SC240-03	D	LD error: Ma
SC240-04	D	LD error: Ye
SC240-05	D	LD error: S

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LD currents exceeded the rated value after LD lighting
		Details:
		If the LD current exceeds 1.4 times the factory default, or exceeds the settable value, then it issues SC. To prevent false detection due to noise, it becomes an error if it exceeds the value twice in a row.
		VCSEL defective (LD destroyed, deterioration of current/light output characteristics, PD failure) LDB defective
		Cycle the main power off/on.
		Replace the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC260-01	С	Laser Thermistor Error: Bk
SC260-03	С	Laser Thermistor Error: Ma
SC260-05	С	Laser Thermistor Error: S
		• The reading of the thermistor in the laser unit was less than 10 °C (50 °F), indicating that the thermistor has disconnected.
		• The reading of the thermistor in the CK or YM laser unit was more than 80 °C (176 °F), indicating that the thermistor has shorted out.
		Details:
		The machine detects this SC when the machine turns on and recovers from energy saver mode.
		Thermistor defective
		Harness defective or contact failure.
		IOB defective
		Reconnect the harness between laser unit and IOB.
		2. Replace the laser unit.
		3. Replace the IOB.
		4. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC265-02	С	Skew correction error: Cy
SC265-03	С	Skew correction error: Ma
SC265-04	С	Skew correction error: Ye
SC265-05	С	Skew correction error: S
		The skew control pulse total (SP2-104-007 to 010) is not within range. Detail When MUSIC executed, if the accumulated skew pulse qty. exceeds ±50 pulses, it issues SC. Skew motor defective Laser unit defective
		 Harness between Laser unit to IOB defective/disconnected IBO defective Reconnect the harness between Laser unit to IOB Replace the laser unit. Replace the IOB. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC270-01	D	LD ASIC communication error: Bk
SC270-02	D	LD ASIC communication error: Cy
SC270-03	D	LD ASIC communication error: Ma
SC270-04	D	LD ASIC communication error: Ye
SC270-05	D	LD ASIC communication error: S
SC270-10	D	LD ASIC communication error: Others

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		On startup: Written to and read the same register but the values were different.
		VTEC: Monitored the parity and retried three times.
		Details:
		On startup: Data 0x5A5A and 0xA5A5 are written to a predetermined register. Then the register is read and the read data is compared to the are compared
		VTEC: Monitors parity during communication. If it does not match, retries up to three times. The second retry constitutes an SC.
		SC270-01 to 05
		Harness between LDB to BCU defective/ disconnected
		LDB defective
		BCU defective
		SC270-10
		IPU defective (Write power +5VLD Error)
		Interlock switch defective
		SC270-01 to 05
		1. Cycle the machine off/on.
		2. Reconnect the harness between LDB to BCU.
		3. Replace the laser unit.
		4. Replace the BCU.
		5. Replace the harness.
		SC270-10
		1. Cycle the machine off/on.
		2. Replace the IPU
		3. Replace the interlock switch

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC274-01	D	Image transfer error: Bk
SC274-02	D	Image transfer error: Cy
SC274-03	D	Image transfer error: Ma

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC274-04	D	Image transfer error: Ye
SC274-05	D	Image transfer error: S
		A fatal error occurred with the image-related data received by the LDB of the corresponding color. Details:
		 It checks for a break in cabling when the power is turned ON. Data receipt is monitored continuously during printing and when an error occurs it issues SC.
		IPU defective USB cable error (disconnection, contact failure) LDB defective
		 Cycle the machine off/on. Reconnect the USB cable between LDB and IPU. Replace the USB cable. Replace the IPU Replace the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC276-01	D	Microcomputer communication error: Bk
SC276-02	D	Microcomputer communication error: Cy
SC276-03	D	Microcomputer communication error: Ma
SC276-04	D	Microcomputer communication error: Ye
SC276-05	D	Microcomputer communication error: S

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The LDB (microcomputer) of the corresponding color is not working normally.
		Details:
		The microcomputer toggles the port output for input to write control ASIC and the write control ASIC monitors whether this signal is toggled within the time allowed.
		LDB defective
		Cycle the machine off/on.
		Replace the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC285-00	D	MUSIC error
		The results of MUSIC pattern reading failed 4 times while the machine is turned ON. (SC496 occurred 4 times in a row)
		Pattern density defection
		Belt flawed or smudged
		TM sensor smudged or defective
		Skew Motor drive error
		Check the image density and adjust the manual ProCon :Exe - Density Adjustment (SP3011-2)
		2. Clean/Replace the ITB.
		3. Clean/Replace the TM/ID sensor.
		4. Replace the laser unit.

1

Service Call 300-398

SC300 (Engine: Charge, Development)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC300-01	D	Charge Roller Power Pack Output Error (K)
SC300-02	D	Charge Roller Power Pack Output Error (C)
SC300-03	D	Charge Roller Power Pack Output Error (M)
SC300-04	D	Charge Roller Power Pack Output Error (Y)
SC300-05	D	Charge Roller Power Pack Output Error (S)
		The interrupt that checks the status of the PCU power pack every 10 ms detected SC signals 15 times consecutively. Details:
		In case of an overcurrent, the Charge Roller Power Pack outputs SC signals. The machine monitors it, and issues an SC when an error occurs.
		High voltage harness shorted.
		Leakage around the charge roller caused by a conductive object.
		 Leak of the charged bias caused by the drum exposure layer error (Exposure layer disappearance, drum surface is damaged).
		Charge Bias Power Pack defective
		1. Check the charge roller.
		Remove the conductive object and clean the charge roller.
		2. Check the harness of charge bias power pack.
		Replace the harness if it is shorted.
		3. Check the drum.
		Replace the drum if exposure layer is damaged (the aluminum bare pipe part appears).
		4. Replace the charge bias power pack.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC312-01	D	Charge FB Voltage Error (K)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC312-02	D	Charge FB Voltage Error (C)
SC312-03	D	Charge FB Voltage Error (M)
SC312-04	D	Charge FB Voltage Error (Y)
SC312-05	D	Charge FB Voltage Error (S)
		From 80ms after AC power is turned ON, the unit monitors the FB voltage of AC charge for movement 15 times at intervals of 20ms; if 0.3V or less is detected 15 times in a row, it lights the SC of the corresponding color and judges the mechanism to be working.
		 High-voltage harness damaged or not connected correctly. Charge roller or drum not installed Charge bias power pack defective
		Check the harness of charge bias power pack.
		Reconnect / Replace the harness
		Check the charge roller.
		Set the charge roller if not set.
		Check the drum.
		Set the drum if not set.
		Replace the charge bias power pack.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC320-01	D	Development Power Pack Output Error (K)
SC320-02	D	Development Power Pack Output Error (C)
SC320-03	D	Development Power Pack Output Error (M)
SC320-04	D	Development Power Pack Output Error (Y)
SC320-05	D	Development Power Pack Output Error (S)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When SC signals are detected 25 times consecutively in 20ms intervals (500 msec).
		Details:
		When the development power pack is shorted, the development power pack detects it by means of an SC signal (HIGH level). The IOB monitors the SC signals as explained above.
		Development power pack shorted
		Disconnect the high voltage cable from the output terminal of the development power pack of the corresponding color, and check the following points.
		PWM: Check the signal of the corresponding color.
		If the signal is fixed to HIGH during photocopying process, replace the harness or the IOB.
		Check the output of the development power pack of the corresponding color.
		If the output is fixed to HIGH during photocopying process, replace the power pack.
		 If the output is normal during photocopying process, test the resistance between the highvoltage cable and the ground. If resistance is "0" or nearly "0", replace the high-voltage harness or PCU.

SC324 RTB 158

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC324-01	D	Development Motor Error(K)
SC324-02	D	Development Motor Error (C)
SC324-03	D	Development Motor Error (M)
SC324-04	D	Development Motor Error (Y)
SC324-05	D	Development Motor Error (S)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		At motor startup
		When the LOCK signal is not detected for at least 1 sec. from after 1 sec. elapses since the motor START signal is ON.
		When motor running normally
		When the motor START signal is being output, if the LOCK signal is not detected for 1 sec. or more.
		Malfunction due to Development Motor being unplugged
		Malfunction due to abnormal increase in development unit torque (such as overload due to bearing lock).
		Malfunction due to motor driver failure
		Reconnect the motor harness
		Remove internal overload of development unit and return to the normal torque
		Replace the Development Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC328-00	D	Development motor: Y: Lock
		Error detected by the TDCU.
		If a command sent from the TDCU indicates an error, the engine issues an SC.
		ASAP command: Motor lock detection setting value (engine to TDCU): 0x5B
		ASAP command: SC detection notification (TDCU to engine): 0x56_0x01
		Details:
		When the motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times consecutively, the machine determines that the motor is not running correctly. The machine issues an SC and stops the motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connecter disconnected
		Harness broken
		IOB defective
		Unit torque increased.
		Replace the motor.
		Reconnect the connector.
		Replace the harness.
		Replace the IOB.
		Replace the unit.
		Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC328-01	D	Toner supply motor error (K): Bottle
SC328-02	D	Toner supply motor error (C) : Bottle
SC328-03	D	Toner supply motor error (M) : Bottle
SC328-04	D	Toner supply motor error (Y) : Bottle
SC328-05	D	Toner supply motor error (S) : Bottle

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Detected a lock signal which indicates overcurrent in the toner supply bottle motor. Details:
		When a toner supply bottle motor is on, it is checked every 100 milliseconds for lock signals (motor overcurrent 670mA). The following steps are executed every second.
		If the lock signal was detected 9 times in 10 samplings, the lock counter increases by one. When the lock counter value is 25 or larger, the SC is issued.
		If the lock signal was detected 8 times or less in 10 samplings, the lock counter is cleared.
		Note:
		If the samplings end before reaching the tenth time (due to bottle replacement etc.), the lock counter value is kept as is. Sampling starts again the next time the motor runs.
		The lock counter is cleared when the machine is turned off (also when the machine enters sleep mode, in which the plotter is turned off) or when an SC is issued.
		Toner is not filled in all colors after determining the SC with any color until the machine stops.
		The foregoing detection is not performed if all revisions of the board (6 bit) are 0.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Toner bottle not set correctly or the torque is large. Toner bottle broken or defective Motor defective
		 Toner bottle not set correctly, toner bottle broken, or large torque: After the machine stops, ask the user to remove the toner bottle, shake it and set it again. Then cycle the machine off/on to return from SC status.
		 Toner bottle broken or defective: Ask the user to remove the toner bottle and set a normal bottle. Then cycle the machine off/on to return from SC status.
		 Motor defective: Turn off the machine and replace the motor. Then cycle the machine off/on to return from SC status.
		Reset or replace the toner bottle.Replace the toner bottle motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC336-01	D	Developer Set Error (K)
SC336-02	D	Developer Set Error (C)
SC336-03	D	Developer Set Error (M)
SC336-04	D	Developer Set Error (Y)
SC336-05	D	Developer Set Error (S)
		When the TD sensor control voltage (Vtcnt) is 4.3V, the TD sensor output (Vt) is less than 0.7V.
		Details: When executing TD sensor initialization (SP3-030), the machine checks the development unit for the presence of developer. If the error condition is detected at this point, the machine determines that there is no developer and issues the SC.
		There is an extremely low amount of developer.
		Replace the developer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC348-01	D	Toner supply error (K) : Sub hopper 1 (front)
SC348-02	D	Toner supply error (C) : Sub hopper 1 (front)
SC348-03	D	Toner supply error (M) : Sub hopper 1 (front)
SC348-04	D	Toner supply error (Y) : Sub hopper 1 (front)
SC348-05	D	Toner supply error (S) : Sub hopper 1 (front)
		Error occurs if ID Pattern adhesion (SP3-300-***) < Lower limit threshold (SP3-301-***), and Toner Supply Clutch cumulative time (SP3-301-***) > Feed counter threshold (SP3301-031).
		K (222 222 222 222 222 222 222 222 222 2
		ID Pattern adhesion (SP3-300-001)
		Lower limit threshold (SP3-301-091)
		Toner Supply Clutch cumulative time (SP3-301-041)
		C
		• ID Pattern adhesion (SP3-300-002)
		Lower limit threshold (SP3-301-092)
		Toner Supply Clutch cumulative time (SP3-301-042)
		M
		ID Pattern adhesion (SP3-300-003)
		Lower limit threshold (SP3-301-092)
		Toner Supply Clutch cumulative time (SP3-301-043)
		Y
		ID Pattern adhesion (SP3-300-004)
		Lower limit threshold (SP3-301-092)
		Toner Supply Clutch cumulative time (SP3-301-044)
		S
		ID Pattern adhesion (SP3-300-005)
		Lower limit threshold (SP3-301-095)
		Toner Supply Clutch cumulative time (SP3-301-045)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Details:
		This SC is issued when the toner end sensor 1 continues detecting the presence of toner falsely. The presence of toner may be detected falsely in the following situations.
		Toner end sensor 1 cleaner spring broken
		Toner end sensor 1 cleaner spring not set correctly
		Toner end sensor 1 defective
		Toner end sensor 1 cleaner spring broken
		Toner end sensor 1 cleaner spring not set correctly
		Toner end sensor 1 defective
		Replace the toner supply unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC348-11	D	Toner supply error (K) : Sub hopper 2 (Rear)
SC348-12	D	Toner supply error (C) : Sub hopper 2 (Rear)
SC348-13	D	Toner supply error (M) : Sub hopper 2 (Rear)
SC348-14	D	Toner supply error (Y) : Sub hopper 2 (Rear)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Error occurs if ID Pattern adhesion (SP3-300-***) < Lower limit threshold (SP3-301-***), and Sub hopper 1 toner filling counter interval (SP3-301-***) > Threshold (SP3301-031). K
		ID Pattern adhesion (SP3-300-001)
		 Lower limit threshold (SP3-301-091)
		 Sub hopper 1 toner filling counter interval (SP3-152-041)
		С
		ID Pattern adhesion (SP3-300-002)
		 Lower limit threshold (SP3-301-092)
		 Sub hopper 1 toner filling counter interval (SP3-152-042) M
		 ID Pattern adhesion (SP3-300-003)
		Lower limit threshold (SP3-301-092)
		 Sub hopper 1 toner filling counter interval (SP3-152-043)
		Υ
		 ID Pattern adhesion (SP3-300-004)
		 Lower limit threshold (SP3-301-092)
		 Sub hopper 1 toner filling counter interval (SP3-152-044)
		Details:
		This SC is issued when the toner end sensor 2 continues detecting the presence of toner falsely. The presence of toner may be detected falsely in the following situations.
		Toner end sensor 2 cleaner sheet broken
		 Toner end sensor 2 cleaner sheet not set correctly
		Toner end sensor 2 defective
		Diaphragm pump defective
		Toner end sensor 2 cleaner spring broken
		 Toner end sensor 2 cleaner spring not set correctly
		Toner end sensor 2 defective
		Replace the Sub hopper 2 (Rear).
		Replace the diaphragm pump.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC351-01	С	Development sleeve home position signal detection error (K)
SC351-02	С	Development sleeve home position signal detection error (C)
SC351-03	С	Development sleeve home position signal detection error (M)
SC351-04	С	Development sleeve home position signal detection error (Y)
SC351-05	С	Development sleeve home position signal detection error (S)
		Under the DEMS is enable (SP3-600-040 is set to "1"), the home position sensor cannot detect the home position signal within specified time during development motor rotating. Details:
		This SC is issued when the toner end sensor 1 continues detecting the presence of toner falsely. This presence of toner may be detected falsely in the following situations.
		Toner end sensor1 cleaner spring broken
		Toner end sensor 1 cleaner spring not set correctly
		Toner end sensor 1 defective
		Drum Motor HP Sensor defective/loose connection/harness damaged/Connecter disconnected
		Drum Motor HP Sensor r smudged
		Check if the Drum Motor HP Sensor connector is connected correctly.
		Check the Drum Motor HP Sensor for abnormality.
		Replace the Drum Motor HP Sensor if it is abnormal.
		Check the Drum Motor HP Sensor for smudges. Blow it with air and check again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC360-01	D	TD sensor adjustment error (K)
SC360-02	D	TD sensor adjustment error (C)
SC360-03	D	TD sensor adjustment error (M)
SC360-04	D	TD sensor adjustment error (Y)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC360-05	D	TD sensor adjustment error (S)
		During TD sensor initialization, the TD sensor output voltage (Vt) cannot be adjusted to the target range (target value \pm 0.2V).
		TD sensor defective Developer is not new
		Replace the development unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC361-01	D	TD sensor output error: Upper Limit (K)
SC361-02	D	TD sensor output error: Upper Limit (C)
SC361-03	D	TD sensor output error: Upper Limit (M)
SC361-04	D	TD sensor output error: Upper Limit (Y)
SC361-05	D	TD sensor output error: Upper Limit (S)
		The TD sensor output (Vt) (SP3-210-001 to 004) exceeded 4.7 V 20 times consecutively.
		TD sensor connecter disconnected(Loose connection) Toner density extremely low
		 Check the TD sensor connection. Replace the development unit if TD sensor harness is damaged. Replace the developer. If the problem persists, replace the development unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC362-01	D	TD sensor output error: Lower limit (K)
SC362-02	D	TD sensor output error: Lower limit (C)
SC362-03	D	TD sensor output error: Lower limit (M)
SC362-04	D	TD sensor output error: Lower limit (Y)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC362-05	D	TD sensor output error: Lower limit (S)
		The TD sensor output (Vt) (SP3-210-001 to 005) fell below 0.5 V 10 times consecutively.
		TD sensor not connected correctly TD sensor defective
		1. Check the TD sensor connection.
		2. Replace the development unit if TD sensor harness is damaged.
		3. Replace the developer.
		4. If the problem persists, replace the development unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC370-01	D	ID sensor calibration error (F)
SC370-02	D	ID sensor calibration error (C)
SC370-03	D	ID sensor calibration error (R)
		The voltage reading during process control for Vsg_reg was not within the correct range (4.0 \pm 0.5 V).
		Intermediate Transfer Belt corrugation / belt skew
		Check the Intermediate Transfer Belt condition.
		Correct the belt if corrugation/belt skew is occurred.
		If none of the above apply, an ID sensor failure is very likely so replace the ID sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC371-01	D	ID sensor output error (F)
SC371-02	D	ID sensor output error (C)
SC371-03	D	ID sensor output error (R)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The ID sensor voltage reading of the light reflected directly (Vsg_reg) is below 0.5 V.
		ID sensor connector disconnected/loose connection ID sensor defective
		Check if the ID sensor connector is connected. Connect it if disconnected.
		Replace the ID sensor if defective.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC372-01	С	ID sensor LED current upper limit error (F)
SC372-02	С	ID sensor LED current upper limit error (C)
SC372-03	С	ID sensor LED current upper limit error (R)
		The ID sensor LED current exceeds the upper limit (SP3-320-015)
		• ID sensor smudged
		ID sensor deteriorated
		ITB deteriorated (smudges, filming)
		Check the ID sensor window. Wipe it with a damp cloth if dirty (never use dry cloth).
		If the ID sensor is deteriorated, replace it.
		If the ITB is smudged, check the ITB unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC373-01	D	ID Sensor Pattern Density High Error (K)
SC373-02	D	ID Sensor Pattern Density High Error (C)
SC373-03	D	ID Sensor Pattern Density High Error (Y)
SC373-04	D	ID Sensor Pattern Density High Error (M)
SC373-05	D	ID Sensor Pattern Density High Error (S)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		ID Pattern adhesion (SP3-300-001 to 005) > Upper limit threshold (SP3-301-081 to 085)
		Excessive toner supply
		Replace the toner supply unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC374-01	D	ID Sensor Pattern Density Low Error (K)
SC374-02	D	ID Sensor Pattern Density Low Error (C)
SC374-03	D	ID Sensor Pattern Density Low Error (M)
SC374-04	D	ID Sensor Pattern Density Low Error (Y)
SC374-05	D	ID Sensor Pattern Density Low Error (S)
		ID Pattern adhesion (SP3-300-001 to 005) < Lower limit threshold (SP3-301-091 to 095) for three times in a row.
		Abnormal development bias (Continuity fault) Image transfer error
		Check development bias continuity. Check the image transfer unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC381-01	D	Potential sensor output high error (K)
SC381-02	D	Potential sensor output high error (C)
SC381-03	D	Potential sensor output high error (M)
SC381-04	D	Potential sensor output high error (Y)
SC381-05	D	Potential sensor output high error (S)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Vd(700) greater than 800[-V]
		Potential sensor dirty (foreign object, such as toner, entering the probe window)
		 Check if the potential sensor probe is dirty. Use a blower brush to clean the window of the potential sensor probe, then check the sensor again.
		If this does not solve the problem, replace the potential sensor probe.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC382-01	D	Potential sensor output low error (K)
SC382-02	D	Potential sensor output low error (C)
SC382-03	D	Potential sensor output low error (M)
SC382-04	D	Potential sensor output low error (Y)
SC382-05	D	Potential sensor output low error (S)
		Vd(700) lesser than 500[-V]
		Potential sensor probe connector disconnected
		Potential sensor probe defective
		Potential sensor board defective
		Replace the potential sensor probe.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC390-00	С	Drum Motor error (k) 1
		When the main power on
		The machine issues this SC if counter of SP7-987-001 is "3"
		Error at motor startup/motor running normally
		When an error command from TDCU detected and if 1 is added to the SP7-987-001 counter and the resulting value of SP7-987-001 is 3.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Return to the normal torque by clearing the overload in the PCU. And then execute SP7-988-001 and reset counter SP7-987-001.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC391-00	А	Drum Motor error (C)1
		At motor startup/motor running normally
		When an error command from TDCU detected and if 1 is added to the SP7-987-002 counter and the resulting value of SP7-987-002 is 3.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Return to the normal torque by clearing the overload in the PCU. And then execute SP7-988-002 and reset counter SP7-987-002.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC392-00	А	Drum Motor error (M) 1
		At motor startup/motor running normally
		When an error command from TDCU detected and if 1 is added to the SP7-987-003 counter and the resulting value of SP7-987-003 is 3.
		Malfunction due to abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Return to the normal torque by clearing the overload in the PCU. And then execute SP7-988-003 and reset counter SP7-987-003.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC393-00	Α	Drum Motor error (Y) 1
		At motor startup/motor running normally
		When an error command from TDCU detected and if 1 is added to the corresponding SP7-987-004 counter and the resulting value of corresponding SP7-987-004 is 3.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Return to the normal torque by clearing the overload in the PCU. And then execute SP7-988-004 and reset counter SP7-987-004.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC394-00	Α	Drum Motor error (S) 1
		At motor startup/motor running normally
		When an error command from TDCU detected and if 1 is added to the corresponding SP7-987-005 counter and the resulting value of corresponding SP7-987-005 is 3.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Return to the normal torque by clearing the overload in the PCU. And then execute SP7-988-005 and reset counter SP7-987-005.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-01	D	Drum motor error (K): Encoder pulse not detected
SC395-05		
SC396-01	D	Drum motor error (C): Encoder pulse not detected
SC396-05		5.5 n.s. (3), <u>5</u> 5 p. 5 p
SC397-01	D	Drum motor error (M): Encoder pulse not detected
SC397-05		Profit filed of the (M). Effected poise fiel defected
SC398-01	D	Drum motor error (Y): Encoder pulse not detected
SC398-05		Droill motor error (1). Encoder poise not defected
SC399-01	D	Drum motor error (S): Encoder pulse not detected
SC399-05		Droill motor error (5). Encoder poise not defected
		After the drum motor starts up, if the encoder fails to interrupt within 100ms.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Drum motor defective
		Drum motor connector unplugged
		Motor driver defective
		Clear the overload in the PCU
		Replace the drum motor
		Reconnect the drum motor connector
		Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-02	D	Drum motor error (K): Encoder pulse lack
SC395-10		Droin motor error (ix). Elecater poise rack
SC396-02	D	Drum motor error (C): Encoder pulse lack
SC396-10		Droin moior error (C). Encoder poise rack
SC397-02	D	Drugs mater error (AA). Encoder mules leick
SC397-10		Drum motor error (M): Encoder pulse lack

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC398-02	D	Drum motor error (Y): Encoder pulse lack
SC398-10		Droin motor error (1). Encoder poise tack
SC399-02	D	Drum motor error (S): Encoder pulse lack
SC399-10		Drum motor error (3). Encoder pulse lack
		Error occurs when the number of pulses per time of 1 drum encoder cycle is counted and the total number of pulses drops below 75% (1500 pulses) of the number of pulses per normal cycle.
		Drum motor defective
		Drum motor connector unplugged
		Motor driver defective
		Clear the overload in the PCU
		Replace the drum motor
		Reconnect the drum motor connector
		Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-03	D	Drum motor error (K): Encoder chattering(Excessive pulse)
SC395-15		Drum motor error (K): Encoder chattering(Excessive pulse)
SC396-03	D	Drum motor error (C): Encoder chattering(Excessive pulse)
SC396-15		Drum motor error (C). Encoder challering(Excessive pulse)
SC397-03	D	Drum motor error (Y): Encoder chattering(Excessive pulse)
SC397-15		Drum motor error (1). Encoder challering(Excessive pulse)
SC398-03	D	Drum motor error (Y): Encoder chattering(Excessive pulse)
SC398-15		Droin moior error (1). Encoder challering(Excessive pulse)
SC399-03	D	Drum motor error (S): Encoder chattering(Excessive pulse)
SC399-15		Droin motor error (3). Encoder challering(Excessive poise)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Error occurs when the number of chattering per time of 1 drum encoder cycle is counted and the chatter exceeds 25% of the number of pulses per normal cycle.
		The condition for counting the occurrence of chatter is to count up when encoder data is 75% or less of the ideal count value.
		Drum motor defective
		Drum motor connector unplugged
		Motor driver defective
		Clear the overload in the PCU
		Replace the drum motor
		Reconnect the drum motor connector
		Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-41	D	Drum motor error (K): Hole error
SC396-41	D	Drum motor error (C): Hole error
SC397-41	D	Drum motor error (Y): Hole error
SC398-41	D	Drum motor error (Y): Hole error
SC399-41	D	Drum motor error (S): Hole error
		If the hole becomes HorL with three-phase.
		 Drum motor defective Drum motor connector unplugged Motor driver defective
		 Clear the overload in the PCU Replace the drum motor Reconnect the drum motor connector Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-51	D	Drum motor error (K): Cumulative speed error
SC396-51	D	Drum motor error (C): Cumulative speed error
SC397-51	D	Drum motor error (M): Cumulative speed error
SC398-51	D	Drum motor error (Y): Cumulative speed error
SC399-51	D	Drum motor error (S): Cumulative speed error
		The RPM of the motor is checked every 10ms and when it is off the target value by +/-3%, it counts up and when it is within +/-3%, it counts down; an error occurs when the count of the counter is 40 or more (400ms or more).
		 Drum motor defective Motor driver defective Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		 Clear the overload in the PCU Replace the drum motor Reconnect the drum motor connector Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-52	D	Drum motor error (K): Overload error
SC396-52	D	Drum motor error (C): Overload error
SC397-52	D	Drum motor error (M): Overload error
SC398-52	D	Drum motor error (Y): Overload error
SC399-52	D	Drum motor error (S): Overload error
		If the load exceeds the limit for 3 seconds, the safety standard is determined NG and the control turns it OFF.
		Abnormal increase in PCU torque (overload due to the cleaning blade getting caught)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Clear the overload in the PCU
		Replace the drum motor
		Reconnect the drum motor connector
		Replace the TDCU (motor driver)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-55	D	Drum motor error (K): Traction output shaft overload error
SC396-55	D	Drum motor error (C): Traction output shaft overload error
SC397-55	D	Drum motor error (M): Traction output shaft overload error
SC398-55	D	Drum motor error (Y): Traction output shaft overload error
SC399-55	D	Drum motor error (S): Traction output shaft overload error
		Occurs if the status of the hole has changed, but the encoder signal has not changed. The deceleration mechanism is slipping due to the overload on the output shaft.
		Malfunction due to abnormal increase in PCU torque (overload due to the cleaning blade getting caught)
		Clear the overload in the PCU

SC399-06 RTB 117

Service Call 400-498

SC400 (Engine: Around the Drum)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC400-01	D	Development Gamma High Error (K)
SC400-02	D	Development Gamma High Error (C)
SC400-03	D	Development Gamma High Error (M)
SC400-04	D	Development Gamma High Error (Y)
SC400-04	D	Development Gamma High Error (S)
		Development gamma > 3.0
		Details:
		This SC is issued when the development gamma measured during process control was greater than 3.0
		Toner density too high
		Condensation
		Replace the developer.
		If condensation has formed, wait a while and repeat process control.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC401-01	D	Development Gamma Low Error (K)
SC401-02	D	Development Gamma Low Error (C)
SC401-03	D	Development Gamma Low Error (M)
SC401-04	D	Development Gamma Low Error (Y)
SC401-05	D	Development Gamma Low Error (S)

1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Development gamma > 0.3 Details: This SC is issued when the development gamma measured during process control was smaller than 0.3 • Toner density error • The dustproof glass is dirty. • Image Transfer Power Pack defective • PCDU set error • Check the toner supply system. • Clean the dust shield glass. • Replace the Image Transfer Power Pack.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC402-51	D	Development gamma calculation error: Insufficient data (K)
SC402-52	D	Development gamma calculation error: Insufficient data (C)
SC402-53	D	Development gamma calculation error: Insufficient data (M)
SC402-54	D	Development gamma calculation error: Insufficient data (Y)
SC402-55	D	Development gamma calculation error: Insufficient data (S)
		The number of valid data that can be used for development gamma calculation is smaller than 2.
		Toner density error Condensation
		 Replace the developer. If condensation has formed, wait a while and repeat process control.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC402-61	D	Development gamma calculation error: LD unlit (K)
SC402-62	D	Development gamma calculation error: LD unlit (C)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC402-63	D	Development gamma calculation error: LD unlit (M)
SC402-64	D	Development gamma calculation error: LD unlit (Y)
SC402-65	D	Development gamma calculation error: LD unlit (S)
		Unable to draw gradation pattern
		Details:
		This SC is issued when the potential sensor fails to detect the gradation pattern created during process control.
		LD unlit
		Check the LD system and electric components.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC403-01	С	Development Start Voltage (Vk) High Error (K)
SC403-02	С	Development Start Voltage (Vk) High Error (C)
SC403-03	С	Development Start Voltage (Vk) High Error (M)
SC403-04	С	Development Start Voltage (Vk) High Error (Y)
SC403-05	С	Development Start Voltage (Vk) High Error (S)
		Development Start Voltage (Vk) > 300 [-V] Details: This SC is issued when the development start voltage measured during process control exceeded 300[-V].
		Toner density error Replace the developer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC404-01	С	Development Start Voltage (Vk) Low Error (K)
SC404-02	С	Development Start Voltage (Vk) Low Error (C)
SC404-03	С	Development Start Voltage (Vk) Low Error (M)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC404-04	С	Development Start Voltage (Vk) Low Error (Y)
SC404-05	С	Development Start Voltage (Vk) Low Error (S)
		Development Start Voltage (Vk) < 300 [-V]
		Details:
		This SC is issued when the development start voltage measured during process control was smaller than 300[-V].
		Toner density error
		Condensation
		Replace the developer.
		If condensation has formed, wait a while and repeat process control.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC410-01	С	Potential sensor (Vr) Detection Error (K)
SC410-02	С	Potential sensor (Vr) Detection Error (C)
SC410-03	С	Potential sensor (Vr) Detection Error (M)
SC410-04	С	Potential sensor (Vr) Detection Error (Y)
SC410-05	С	Potential sensor (Vr) Detection Error (S)
		Residual Voltage (Vr) > 200[-V] Details: This SC is issued when the residual voltage measured during process control exceeded 200 [-V].
		OPC drum deteriorated.
		Replace the OPC drum.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC411-01	С	Potential sensor (Vd) Adjustment Error (K)
SC411-02	С	Potential sensor (Vd) Adjustment Error (C)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC411-03	С	Potential sensor (Vd) Adjustment Error (M)
SC411-04	С	Potential sensor (Vd) Adjustment Error (Y)
SC411-05	С	Potential sensor (Vd) Adjustment Error (S)
		Failed to adjust the DC charge bias to the target range: Vd*± 8V. Details:
		This SC is issued when the machine fails to adjust the DC charge bias to the target range: Vd*± 8V during process control.
		Charge roller dirty
		Replace the charge roller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC412-01	С	Potential sensor (Vpl) Adjustment Error (K)
SC412-02	С	Potential sensor (Vpl) Adjustment Error (C)
SC412-03	С	Potential sensor (Vpl) Adjustment Error (M)
SC412-04	С	Potential sensor (Vpl) Adjustment Error (Y)
SC412-05	С	Potential sensor (Vpl) Adjustment Error (S)
		Failed to adjust the LD power to the target range: Vpl*±5V. Details: This SC is issued when the machine fails to adjust the LD power to the target range: Vpl*±5V during process control. • OPC drum deteriorated (Filming etc.) • Charge roller dirty
		Replace the OPC drum. Replace the charge roller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC421-01	С	OPC home position signal detection error (K)
SC421-02	С	OPC home position signal detection error (C)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC421-03	С	OPC home position signal detection error (M)	
SC421-04	С	OPC home position signal detection error (Y)	
SC421-05	С	OPC home position signal detection error (S)	
		Under the DEMS is enable (SP3-600-040 is set to "1"), the home position sensor cannot detect the home position signal within specified time during drum motor rotating.	
		Home position sensor defective/Loose connection/Harness broken/Connecter disconnected Home position sensor smudged	
		 Check the Drum Motor HP Sensor connector. Check the Drum Motor HP Sensor harness. Replace the Drum Motor HP Sensor if it is found to be defective. Check the sensor for smudges. Blow it with air and check again. 	

SC440 RTB 157

SC441 RTB 101

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC441-**	D	ITB Drive Motor Error	
		*see the table below.	
		Error when Low is not detected in the LOCK signal 10 times in a row during the time from 1000ms elapsing after ITB driver motor startup and input of the motor stop signal.	
		Motor rotation error due to abnormal increase in ITB unit torque and change in load	
		Rotation error due to slip between ITB and drive roller	
		Motor connector unplugged	
		Motor driver defective	
		ITB Drive Motor defective	
		Refer to page 790 "SC441: ITB Drive Motor Error Measure Flow"	

SC441: branch number details

01 Encoder 0: no pulse	-
------------------------	---

02	Encoder 0: pulse lack	-
03	Encoder 0: chattering	-
05	-	Encoder 1: no pulse
06	Encoder 0: no pulse	Encoder 1: no pulse
07	Encoder 0: pulse lack	Encoder 1: no pulse
08	Encoder 0: chattering	Encoder 1: no pulse
10	-	Encoder 1: pulse lack
11	Encoder 0: no pulse	Encoder 1: pulse lack
12	Encoder 0: no pulse	Encoder 1: pulse lack
13	Encoder 0: chattering	Encoder 1: pulse lack
15	-	Encoder 1: chattering
16	Encoder 0: no pulse	Encoder 1: chattering
17	Encoder O pulse lack	Encoder 1: chattering
18	Encoder 0: chattering	Encoder 1: chattering
51	A	ccumulation speed error
52	(Consecutive load error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC442-01	D	Image Transfer (K) Contact error
SC442-02	D	Image Transfer (YMC) Contact error
SC442-03	D	Image Transfer (S) Contact error
		Even though the ITB Contact Motor rotates, the Image Transfer Contact Sensor failed to detect the specified sensor feeler status within specified time.
		 Image Transfer Contact Sensor dirty ITB Contact Motor/ Image Transfer Contact Sensor defective Harness damaged, disconnected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		Clean the parts.	
		Replace the ITB Contact Motor/ Image Transfer Contact Sensor.	
		Reconnect the harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC443-01	С	Image transfer roller end-of-life (K)	
SC443-02	С	Image transfer roller end-of-life (C)	
SC443-03	С	Image transfer roller end-of-life (M)	
SC443-04	С	Image transfer roller end-of-life (Y)	
SC443-05	С	Image transfer roller end-of-life (S)	
		Resistance level of the image transfer roller was "R+3" during image transfer voltage detection.	
		Image transfer roller resistance increased through time (Roller end- of-life)	
		Connection fault between the image transfer power pack and the image transfer roller (High voltage harness broken, connector disconnected, or contact failure of image transfer roller bushes, etc.)	
		Image transfer power pack defective	
		Replace the image transfer roller	
		Reconnect or replace the high voltage harness or the unit.	
		Fix or replace the image transfer power pack.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC444-00	D	Image transfer (K) set error
		The image transfer contact sensor (K) detected "feeler present (separation)" before HP actuation of image transfer contact (K).
		Lever not installed
		Image Transfer Contact Sensor (K) smudged
		Image Transfer Contact Sensor (K) defective
		Harness broken
		Connection fault
		Put in contact after installing lever
		If smudged: cleaning
		If defective or broken: replacement
		Problem with connection: reconnection

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC450-01	D	ITB Power Pack error (leak): DC
SC450-02	D	ITB Power Pack error (leak): AC
		An interrupt checks the status of the power pack every 10 ms. This SC is issued if a problem exists with 50 consecutive samplings (500 ms).
		Paper Transfer Power Pack (AC/DC) output current is leaking.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Remove the high voltage cable from the output terminal of the Paper Transfer Power Pack (AC/DC) and check the following items.
		PWM signal check
		If signal is fixed during image transfer, replace the cable or the IOB.
		ITB power pack output check (SP2-312-007)
		If 11.8kV or greater: increased resistance due to Paper Transfer Bias Roller life
		Replace the Paper Transfer Bias Roller.
		If less than 11.8kV: leak due to debris around the paper transfer or poor harness connection or PP failure.
		Inspect and clean around the PTR
		Inspect and reconnect the harness
		Replace the Paper Transfer Power Pack (AC/DC)
		If output is fixed during image transfer, replace Paper Transfer Power Pack (AC/DC).
		If output is normal during image transfer, replace the high voltage cable, ITB or the transfer roller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC450-11 D		Paper Transfer Power Pack (AC/DC) Error (low output)
		The ITB roller resistance level was "R-3" (detected voltage was lower than 0.1kV).
		Paper Transfer Power Pack (AC/DC) defective
	D	 Problem with input harness to the Paper Transfer Power Pack (AC/DC) (loose connection, harness broken, or connector disconnected).
		Fix or replace the Paper Transfer Power Pack (AC/DC).
		 Check the input harness and connector of the Paper Transfer Power Pack (AC/DC).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC451-**	D	PTR/ITB Cleaning Motor Error * see the table below.
		Error at motor startup A lock signal was not detected for 1 second or longer after 1 second has passed from the motor START signal switching ON. Error during motor running normally
		A Lock signal was not detected for 1 second or longer during the motor START signal being output.
		Connector unplugged of PTR/ITB Cleaning Motor. Abnormal increase in paper transfer unit torque (such as overload due to bearing lock) Cause and solution added Motor driver defective PTR/ITB Cleaning Motor defective
		 Reconnect the motor connector Remove the cause of overloading inside the paper transfer unit Replace the motor driver Replace the PTR/ITB Cleaning Motor.

C451: branch number details

01	Encoder 0: no pulse	-
02	Encoder 0: pulse lack	-
03	Encoder 0: chattering	-
05	-	Encoder 1: no pulse
06	Encoder 0: no pulse	Encoder 1: no pulse
07	Encoder 0: pulse lack	Encoder 1: no pulse
08	Encoder 0: chattering	Encoder 1: no pulse
10	-	Encoder 1: pulse lack
11	Encoder 0: no pulse	Encoder 1: pulse lack
12	Encoder 0: no pulse	Encoder 1: pulse lack

13	Encoder 0: chattering	Encoder 1: pulse lack	
15	-	Encoder 1: chattering	
16	Encoder 0: no pulse	Encoder 1: chattering	
17	Encoder 0 pulse lack	Encoder 1: chattering	
18	Encoder 0: chattering	Encoder 1: chattering	
41	Hole error		
51	Accumulation speed error		
52	Consecutive load error		

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC452-00	D	PTR Lift Error
		Even though the PTR lift motor rotates, the PTR lift sensor failed to detect the specified sensor feeler status within specified time.
		Details:
		During home-positioning (operation for fixing the separated status) (separation movement)
		The sensor failed to detect the transition from "feeler present" to "feeler absent" (separation) within 2000 msec from the start of PTR lift motor rotation.
		 During normal contact/separation movement (printing/process control/MUSIC/forced toner consumption)
		Contact movement:
		The sensor failed to detect the transition from "feeler absent" to "feeler present" (contact) within 2000 msec from the start of PTR lift motor rotation.
		Separation movement:
		The sensor failed to detect the transition from "feeler present" to "feeler absent" (separation) within 2000 msec from the start of PTR lift motor rotation.

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During contact/separation movement under special conditions (paper jam, paper end etc.)
		Separation movement:
		The sensor failed to detect the transition from "feeler present" to "feeler absent" (separation) within 2000 msec from the start of PTR lift motor rotation.
		Detection timing: During contact/separation movement
		Detection interval: 10msec or less
		PTR Separation Sensor smudged
		 PTR Separation Motor/sensor defective
		 Harness broken or problem with connection (such as a disconnected connector)
		If smudged: cleaning
		If defective or broken: replacement
		Problem with connection: reconnection

SC453 RTB 159 RTB 164

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	C453-00 C	Paper Transfer Roller end-of-life
		The paper transfer roller resistance level was "R+3".
SC453-00		Paper transfer roller resistance increased through time (Roller end- of-life)
		 Connection fault between the Paper Transfer Power Pack (AC/DC) and the paper transfer roller (High voltage harness broken, connector disconnected, or contact failure of paper transfer roller bushes, etc.)
		Paper Transfer Power Pack (AC/DC) defective
		Replace the paper transfer roller. RTB 157
		Reconnect or replace the high voltage harness or the unit.
		Fix or replace the Paper Transfer Power Pack (AC/DC).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC460-00	D	Separation Power Pack Error (Leak)
		An interrupt checks the status of the power pack every 10 ms. This SC is issued if a problem exists with 50 consecutive samplings (500 ms). Details:
		SC issued when the separation power pack output current is leaking.
		The IOB checks for SC signals as described above.
		Separation Power Pack AC output is leaking.
		If using normal paper is OK such as 70W, it may be because of the paper
		→ Try changing the paper
		Leak due to debris around the paper transfer or poor harness connection or separation power pack defective
		→Inspect and clean around the paper transfer, inspect and reconnect the harness
		→ Replace the separation power pack
		Increased resistance due to Paper Transfer Bias Roller life
		→ Replace the Paper Transfer Bias Roller.
		Remove the high voltage cable from the output terminal of the separation power pack and check the following items.
		PWM: D(ac)signal check
		If signal is fixed during image transfer, replace the cable or the IOB.
		Separation power pack output check
		If output is fixed during image transfer, replace the power pack.
		If output is normal during image transfer, replace the high voltage cable or the discharge plate. RTB 157

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC471-00	D	Belt position ready timeout
		When the belt position is initialized, the meandering of the intermediate transfer belt is not ready after 400s elapses from the start of belt startup.

U

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Belt Centering Sensor error Steering control mechanism fault
		 Replace the Belt Centering Sensor Clear the steering control mechanism fault Re-set the intermediate transfer belt

SC472 RTB 40

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC472-00	D	Steering control homing error
		 With the initial photo sensor ON, the belt centering motor is driven the prescribed number of pulses in direction CW, but it fails to change to OFF. With the initial photo sensor ON, the belt centering motor is driven the prescribed number of pulses in direction CCW, but it fails to change to ON.
		Belt Centering Motor error Belt Centering Roller HP Sensor error
		 Replace the Belt Centering Motor. Replace the Belt Centering Roller HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC474-00	D	ITB Position Error 1
SC474-01	D	ITB Position Error 2
SC474-02	D	ITB Position Error 3

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SC474-00
		 The absolute value is 800 um or greater after the belt position moving average process.
		 This SC is not applied during belt position initialization and during power ON startup.
		SC474-01
		 Front overrun sensor is detected ON 10 times in a row at 10 ms intervals.
		SC474-02
		Rear overrun sensor is detected ON 10 times in a row at 10 ms intervals.
		SC474-00
		Belt Centering Sensor error
		Steering control mechanism fault
		SC474-01
		Initial belt position setting error
		Belt Centering Sensor error
		Front Overrun Sensor error
		Steering control mechanism fault
		SC474-02
		Initial belt position setting error
		Belt Centering Sensor error
		Rear Overrun Sensor error
		Steering control mechanism fault

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SC474-00
		Clean or replace the belt centering sensor
		Clear the steering control mechanism fault
		Re-set the belt
		SC474-01
		Re-set the belt
		Replace the Front Overrun Sensor
		SC474-02
		Re-set the belt
		Replace the rear overrun sensor

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC477-00	D	Belt Centering Sensor Error
SC477-01	D	Intermediate transfer belt positioning light adjustment error
		 SC477-00 Belt centering sensor detects state C SC477-01 The belt centering sensor voltage is 1V or less and the PWM value of output voltage VL is MAX (80%) for 62 samplings in a row.
		SC477-00 • Belt Centering Sensor error SC477-01 • Belt Centering Sensor error • Belt Centering Sensor dirty.
		 SC477-00 Replace the Belt Centering Sensor. SC477-01 Clean/Replace the Belt Centering Sensor. Initialize belt centering sensor PWM value

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC480-00	D	Drum cleaning motor: Bk: Lock
		Error detected by the TDCU.
		If a command sent from the TDCU indicates an error, the engine issues an SC.
		ASAP command: Motor lock detection setting value (engine to TDCU): 0x5B
		ASAP command: SC detection notification (TDCU to engine): 0x57_0x08
		Details:
		When the motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times consecutively, the machine determines that the motor is not running correctly. The machine issues an SC and stops the motor.
		Motor defective
		Connecter disconnected
		Harness broken
		IOB defective
		Unit torque increased.
		Replace the motor.
		Reconnect the connector.
		Replace the harness.
		Replace the IOB.
		Replace the unit.
		Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC480-01	D	Drum Cleaning Motor Error (K)
SC480-02	D	Drum Cleaning Motor Error (C)
SC480-03	D	Drum Cleaning Motor Error (M)
SC480-04	D	Drum Cleaning Motor Error (Y)
SC480-05	D	Drum Cleaning Motor Error (S)

SC	No.	Level	Error Name/Error Condition/Major Cause/Solution
			Error at motor startup
			A lock signal was not detected for 1 second or longer after 1 second has passed from the motor START signal switching ON.
			Error during motor running normally
			A Lock signal was not detected for 1 second or longer during the motor START signal being output.
			 Drum Cleaning Motor connector disconnected Abnormal increase in drum cleaning unit torque (such as overload due to bearing lock). Motor driver failure
			 Reconnect the drum cleaning motor connector Remove the cause of overload inside the drum cleaning unit Replace the Drum Cleaning Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC485-00	D	Main Unit Used Toner Motor Lock
		Error at motor startup A lock signal was not detected for 1 second or longer after 1 second has passed from the motor START signal switching ON.
		Error during motor running normally
		A Lock signal was not detected for 1 second or longer during the motor START signal being output.
		 Motor connector disconnected Abnormal increase in waste toner unit torque (overload due to toner clogged in the waste toner circuit or bearing lock) Motor driver defective
		 Reconnect the main unit used toner motor connector Remove the cause of overload inside the waste toner unit Replace the Main Unit Used Toner Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Used Toner Transport Motor Error
		Signals sent from the lock detection sensor were either ON or OFF 50 times consecutively.
		Overload or lock of waste toner bottle agitation paddle
		Overload or lock of primary storage transport screw or paddle
		3. Waste toner collection drive defective
		4. Used Toner Transport Motor defective
		5. Bottle Waste Toner Lock Detection smudged or defective
SC486-00	D	Bottle Waste Toner Lock Detection connector disconnected or harness broken
		7. Used Toner Transport Motor connector disconnected or harness broken
		8. IOB defective
		Replace waste toner bottle
		2. Clean with air, replace parts
		3. Check harness connection, replace harness
		4. Remove toner, clean bearings, replace defective parts
		5. Replace defective parts
		6. Replace IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Machine Waste Toner Lock Detection Error
		The IOB detects the signal frequency of the unit's waste toner and the engine software samples it at a frequency of 200ms. SC lights if the waste toner lock detection is abnormal 10 times in a row.
		Physical obstruction is blocking waste toner transport path
		Machine waste toner motor defective
SC488-00 D	D	Used Toner Transport Motor Sensor defective
	_	Harness broken
		Connection fault
		Physical obstruction is blocking waste toner transport path: Replace or clean the waste toner transport section.
		Used Toner Transport Motor Sensor defective or harness broken: Replace parts.
		Connection fault: Reconnect it.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC496-**	С	MUSIC Sensor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SC is issued if any of the following abnormalities occur.
		Number of patches abnormal
		-11: front, -12: center, -13: rear
		ITB scratched
		-21: front, -22: center, -23: rear, -30: others
		Main scan registration abnormal
		-51: C, -52: M, -53: Y, -54: S
		Sub scan registration abnormal
		-41: C, -42: M, -43: Y, -44: S
		Main scan magnification abnormal
		-61: C, -62: M, -63: Y, -64: S
		Main scan magnification error diffusion abnormal
		-71: C, -72: M, -73: Y, -74: S
		Skew error
		-81: C, -82: M, -83: Y, -84: S
		Pattern density abnormal
		ITB scratched or smudged
		TM sensor smudged or defective.
		Skew Motor defective
		Check the image density (Execute Density Adjustment with SP3-011-002)
		→Especially if -11/-12/-13
		2. Check the intermediate transfer belt (cleaning/replacement)
		→Especially if -21/-22/-23/-30
		4. Replace the Laser Unit
		*If -41 or after, execute 1, 2, 3
		→Especially if -21/-22/-23/-30 3. Check the TM/ID sensor(cleaning/replacement) 4. Replace the Laser Unit

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC497-00	С	Temperature/Humidity Sensor Error (PCU)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		One of the following occurred.
		 The temperature sensor output was less than 0.5V or more than 2.8V for three seconds (one second x 3), indicating a problem with the temperature sensor.
		• The humidity sensor output was more than 2.4V for three seconds (one second x 3), indicating a problem with the humidity sensor.
		Details:
		Detection is repeated after power off/on.
		If either of temperature/humidity sensors works correctly, the working sensor will be used even after the SC is issued.
		The machine continues working with the assumption that the temperature is 23 degrees centigrade (if there is a problem with the temperature sensor) and/or the humidity is 50% (if there is a problem with the humidity sensor).
		Connector disconnected or harness broken
		PCU Temperature/Humidity Sensor defective
		 Connector disconnected or harness broken: Revert connection. PCU Temperature/Humidity Sensor defective: Replace the sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC498-00	С	Temperature/Humidity Sensor Error (Main)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		One of the following occurred.
		 The temperature sensor output was less than 0.5V or more than 2.8V for three seconds (one second x 3), indicating a problem with the temperature sensor.
		• The humidity sensor output was more than 2.4V for three seconds (one second x 3), indicating a problem with the humidity sensor.
		Details:
		Detection is repeated after power off/on.
		If either of temperature/humidity sensors works correctly, the working sensor will be used even after the SC is issued.
		The machine continues working with the assumption that the temperature is 23 degrees centigrade (if there is a problem with the temperature sensor) and/or the humidity is 50% (if there is a problem with the humidity sensor)
		Connector disconnected or harness broken
		ITB Temperature/Humidity Sensor defective
		 Connector disconnected or harness broken: Revert connection. ITB Temperature/Humidity Sensor defective: Replace the sensor.

SCN	Vo.	Level	Error Name/Error Condition/Major Cause/Solution
SC49	9-03	С	Intermediate transfer control error: Other than during light adjustment
SC49	9-40	С	Intermediate transfer control error: during light adjustment

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		If intermediate transfer FB control error issued from TDCU
		SC499-03
		If SC499 is issued at any time other than while executing light adjustment (during normal operation, during MUSIC/process control, during initial phase acquisition, during speed adjustment value acquisition under encoder control), always set the branch number to 3, without distinguishing between main sensor or sub sensor.
		SC499-40
		If SC499 is issued while executing light adjustment, set the branch number to 40.
		Belt scale dirty
		Transfer Belt Speed Feedback Sensor dirty.
		Transfer Belt Speed Feedback Sensor defective
		Connector disconnected or harness broken
		TDCU defective
		Clean the belt scale
		Clean the Transfer Belt Speed Feedback Sensor.
		Restore the connection.
		Replace the TDCU.
		For details about troubleshooting of SC499, Refer to page 785 "Recovering SC499-03, Preventive Maintenance of Intermediate Transfer Scale"

Service Call 501-595

SC500 (Engine: Paper transport 1: Paper Feed, Duplex, and Transport)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-00	В	1 st Tray (Tandem Tray) Feed Error
		 One of the following occurred at the start of the job: The 1st Pickup Roller Lift Sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate. The 1st Pickup Roller Lift Sensor was on before the pick-up solenoid switched on. When the tray lowered, the 1st Pickup Roller Lift Sensor did not go off within 1.5 sec.
		The paper end sensor of the tandem tray did not detect the lower limit within 10 sec. Note: Another paper tray cannot be used until the problem is resolved.
		Tray 1 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
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC502-00	В	2nd Tray (Universal Cassette) Feed Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		One of the following occurred at the start of the job: • The 2nd Pickup Roller Lift Sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate.
		The 2nd Pickup Roller Lift Sensor was on before the pick-up solenoid switched on.
		When the tray lowered, the 2nd Pickup Roller Lift Sensor did not go off within 1.5 sec.
		The paper end sensor of the tandem tray did not detect the lower limit within 10 sec.
		Note: Another paper tray cannot be used until the problem is resolved.
		Tray 2 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
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-01	В	A3 LCIT: 1st Tray (Top Tray): Upper Limit Detection Error
SC504-01	В	A3 LCIT: 2 nd Tray (Middle Tray): Upper Limit Detection Error
SC505-01	В	A3 LCIT: 3 rd Tray (Bottom Tray) : Upper Limit Detection Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The following status was detected 3 times consecutively: The lift sensor did not become on before pick-up solenoid is on at the start of tray initialization.
		Pick-up Solenoid defective/ Connector disconnected
		Lift Sensor defective/ Connector disconnected
		Related harness broken
		Main Control Board defective
		Replace the Pick-up Solenoid.
		Reconnect the Pick-up Solenoid connector.
		Replace the Lift Sensor
		Reconnect the Lift Sensor connector.
		Replace the corresponding harness.
		Replace the Main Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-02	В	A3 LCIT: 1st Tray (Top Tray): Upper Limit Detection Error
SC504-02	В	A3 LCIT: 2 nd Tray (Middle Tray): Upper Limit Detection Error
SC505-02	В	A3 LCIT: 3 rd Tray (Bottom Tray) : Upper Limit Detection Error

L

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During Tray initialization, the tray bottom plate was lifted but the lift sensor did not detect it after a specified time (8 seconds).
		Lift Motor defective
		Connector disconnected
		lift sensor defective
		connector disconnected
		Related harness broken
		Main Control Board defective
		Replace the Lift Motor
		Reconnect the Lift Motor connection.
		Replace the Lift Sensor.
		Reconnect the Lift Sensor connection.
		Replace the corresponding harness.
		Replace the Main Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-12	В	Vacuum Feed LCIT 1 : 1st Tray Error : Lift timeout

SC503, 504, 505: Additional codes added RTB 112 $\,$

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		 Paper Height Middle Sensor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace or reconnect the Lift motor. Replace or reconnect the Paper Height Middle Sensor. Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed).
		 Replace or reconnect the Upper Limit Sensor 1. Replace or reconnect the Upper Limit Sensor 2. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-13	В	Vacuum Feed LCIT 1: 1st Tray Error (Lowering Timeout)
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Paper Height Middle Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Lift motor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		 Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed).
		Replace or reconnect the Paper Height Middle Sensor.
		 Replace or reconnect the upper limit detection solenoid (if vacuum feed banner sheet tray is installed).
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-14	В	Vacuum Feed LCIT 1: 1st Tray Error (Paper overload error)
		If vacuum feed banner sheet tray is not installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		If vacuum feed banner sheet tray is installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Paper Height Middle Sensor were both ON 5 times consecutively.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Paper overload
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 Lower Limit Sensor defective/disconnected (If vacuum feed banner sheet tray is not installed)
		 Paper Height Middle Sensor defective/disconnected (If vacuum feed banner sheet tray is installed)
		 A harness to one of the parts listed above is broken.
		PCB defective
		Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		 Replace or reconnect the Lower Limit Sensor (If vacuum feed banner sheet tray is not installed).
		 Replace or reconnect the Paper Height Middle Sensor (If vacuum feed banner sheet tray is installed).
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-15	В	Vacuum Feed LCIT 1: 1st Tray Error (Bottom plate ascending too much)
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		 Over Limit Sensor defective/disconnected Upper Limit Sensor 1 defective/disconnected Upper Limit Sensor 2 defective/disconnected A harness to one of the parts listed above is broken.
		PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-16	В	Vacuum Feed LCIT 1: 1st Tray Error (Separation Front Fan error)
SC503-17	В	Vacuum Feed LCIT 1: 1st Tray Error (Separation Rear Fan error)
SC503-18	В	Vacuum Feed LCIT 1: 1st Tray Error (Float Fan error)
SC503-19	В	Vacuum Feed LCIT 1: 1st Tray Error (Separation Fan error)
SC503-20	В	Vacuum Feed LCIT 1: 1st Tray Error (Suction Fan 1 error)
SC503-21	В	Vacuum Feed LCIT 1: 1st Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective
		 Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-22	С	Vacuum Feed LCIT 1: 1st Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON.
		 During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-23	С	Vacuum Feed LCIT 1: 1st Tray Error (Paper Height Sub Sensor error)
		During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-24	В	Vacuum Feed LCIT 1: 1st Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		The Paper Feed Belt Unit is not properly set.
		Paper Feed Belt Unit connector defective or disconnected
		Harness broken
		PCB defective
		Set the Paper Feed Belt Unit.
		Replace or reconnect the Paper Feed Belt Unit connector.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-12	В	Vacuum Feed LCIT 2: 2nd Tray Error (Lifting Timeout)
		 Either of the following conditions has been detected 5 times consecutively in total. During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started. During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		 Lift motor defective/disconnected Paper Height Middle Sensor defective/disconnected Lower Limit Sensor defective/disconnected Upper Limit Sensor 1 defective/disconnected Upper Limit Sensor 2 defective/disconnected A harness to one of the parts listed above is broken. PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace or reconnect the Lift motor. Replace or reconnect the Paper Height Middle Sensor. Replace or reconnect the Lower Limit Sensor. Replace or reconnect the Upper Limit Sensor 1. Replace or reconnect the Upper Limit Sensor 2. Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-13	В	Vacuum Feed LCIT 1: 2nd Tray Error (Lowering Timeout)
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		Lift motor defective/disconnected Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace or reconnect the Lift motor.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-14	В	Vacuum Feed LCIT 1: 2nd Tray Error (Paper overload error)
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		Paper overload
		Lower Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-15	В	Vacuum Feed LCIT 1: 2nd Tray Error (Bottom plate ascending too much)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		Over Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-16	В	Vacuum Feed LCIT 1: 2nd Tray Error (Separation Front Fan error)
SC504-17	В	Vacuum Feed LCIT 1: 2nd Tray Error (Separation Rear Fan error)
SC504-18	В	Vacuum Feed LCIT 1: 2nd Tray Error (Float Fan error)
SC504-19	В	Vacuum Feed LCIT 1: 2nd Tray Error (Separation Fan error)
SC504-20	В	Vacuum Feed LCIT 1: 2nd Tray Error (Suction Fan 1 error)
SC504-21	В	Vacuum Feed LCIT 1: 2nd Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-22	С	Vacuum Feed LCIT 1: 2nd Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)
		During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON.
		During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC504-23	С	Vacuum Feed LCIT 1: 2nd Tray Error (Paper Height Sub Sensor error)	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-24	В	Vacuum Feed LCIT 1: 2nd Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		 The Paper Feed Belt Unit is not properly set. Paper Feed Belt Unit connector defective or disconnected Harness broken
		 PCB defective Set the Paper Feed Belt Unit. Replace or reconnect the Paper Feed Belt Unit connector. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-12	В	Vacuum Feed LCIT 2: 1st Tray Error (Lifting Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace or reconnect the Lift motor. Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed).
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-13	В	Vacuum Feed LCIT 2: 1st Tray Error (Lowering Timeout)
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Paper Height Middle Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Lift motor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		 Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed).
		Replace or reconnect the Paper Height Middle Sensor.
		 Replace or reconnect the upper limit detection solenoid (if vacuum feed banner sheet tray is installed).
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-14	В	Vacuum Feed LCIT 2: 1 st Tray Error (Paper overload error)
		If vacuum feed banner sheet tray is not installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		If vacuum feed banner sheet tray is installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Paper Height Middle Sensor were both ON 5 times consecutively.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Paper overload
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 Lower Limit Sensor defective/disconnected (If vacuum feed banner sheet tray is not installed)
		 Paper Height Middle Sensor defective/disconnected (If vacuum feed banner sheet tray is installed)
		 A harness to one of the parts listed above is broken.
		PCB defective
		 Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Upper Limit Sensor 1.
		 Replace or reconnect the Upper Limit Sensor 2.
		 Replace or reconnect the Lower Limit Sensor (If vacuum feed banner sheet tray is not installed).
		 Replace or reconnect the Paper Height Middle Sensor (If vacuum feed banner sheet tray is installed).
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-15	В	Vacuum Feed LCIT 2: 1st Tray Error (Bottom plate ascending too much)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		Over Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-16	В	Vacuum Feed LCIT 2: 1st Tray Error (Separation Front Fan error)
SC505-17	В	Vacuum Feed LCIT 2: 1st Tray Error (Separation Rear Fan error)
SC505-18	В	Vacuum Feed LCIT 2: 1 st Tray Error (Float Fan error)
SC505-19	В	Vacuum Feed LCIT 2: 1st Tray Error (Separation Fan error)
SC505-20	В	Vacuum Feed LCIT 2: 1st Tray Error (Suction Fan 1 error)
SC505-21	В	Vacuum Feed LCIT 2: 1st Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-22	С	Vacuum Feed LCIT 2: 1st Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)
		During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON.
		During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-23	С	Vacuum Feed LCIT 2: 1st Tray Error (Paper Height Sub Sensor error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-24	В	Vacuum Feed LCIT 2: 1st Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		 The Paper Feed Belt Unit is not properly set. Paper Feed Belt Unit connector defective or disconnected
		Harness brokenPCB defective
		 Set the Paper Feed Belt Unit. Replace or reconnect the Paper Feed Belt Unit connector. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-12	В	Vacuum Feed LCIT 2: 2nd Tray Error (Lifting Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		Lower Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-13	В	Vacuum Feed LCIT 2: 2nd Tray Error (Lowering Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-14	В	Vacuum Feed LCIT 2: 2nd Tray Error (Paper overload error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		Paper overload
		Lower Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-15	В	Vacuum Feed LCIT 2: 2nd Tray Error (Bottom plate ascending too much)
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		Over Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-16	В	Vacuum Feed LCIT 2: 2nd Tray Error (Separation Front Fan error)
SC506-17	В	Vacuum Feed LCIT 2: 2nd Tray Error (Separation Rear Fan error)
SC506-18	В	Vacuum Feed LCIT 2: 2nd Tray Error (Float Fan error)
SC506-19	В	Vacuum Feed LCIT 2: 2nd Tray Error (Separation Fan error)
SC506-20	В	Vacuum Feed LCIT 2: 2nd Tray Error (Suction Fan 1 error)
SC506-21	В	Vacuum Feed LCIT 2: 2nd Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-22	С	Vacuum Feed LCIT 2: 2nd Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON.
		 During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-23	С	Vacuum Feed LCIT 2: 2nd Tray Error (Paper Height Sub Sensor error)
		During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC506-24	В	Vacuum Feed LCIT 2: 2nd Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		The Paper Feed Belt Unit is not properly set.
		Paper Feed Belt Unit connector defective or disconnected
		Harness broken
		PCB defective
		Set the Paper Feed Belt Unit.
		Replace or reconnect the Paper Feed Belt Unit connector.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-00	С	Tandem Tray Rear Fence Motor Error (1st Tray)
		During Tandem control, Rear Fence Return Sensor or Rear Fence HP Sensor does not switch on within 10 s after the Rear Fence Drive Motor is turned on.
		Rear Fence HP Sensor and Rear Fence Return Sensor switch on simultaneously.
		Rear Fence Drive Motor defective, connector disconnected
		 Paper or other foreign object is caught in the sensor (Rear Fence Return Sensor, Rear Fence HP Sensor).
		 Paper or other foreign object is caught between the Tray and Rear Fence Drive Motor.
		 Mechanical factors result in heavy load and there is no operation or slow operation.
		Sensor (Rear Fence Return Sensor, Rear Fence HP Sensor) defective
		Reset the Tandem Tray.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-12	В	Vacuum Feed LCIT 3: 1st Tray Error (Lifting Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace or reconnect the Lift motor. Replace or reconnect the Paper Height Middle Sensor. Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed). Replace or reconnect the Upper Limit Sensor 1. Replace or reconnect the Upper Limit Sensor 2. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-13	В	Vacuum Feed LCIT 3: 1st Tray Error (Lowering Timeout)
		If vacuum feed banner sheet tray is not installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		If vacuum feed banner sheet tray is installed
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Paper Height Middle Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Lift motor defective/disconnected
		 Lower Limit Sensor defective/disconnected (if vacuum feed banner sheet tray is not installed)
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		 Replace or reconnect the Lower Limit Sensor (if vacuum feed banner sheet tray is not installed).
		Replace or reconnect the Paper Height Middle Sensor.
		 Replace or reconnect the upper limit detection solenoid (if vacuum feed banner sheet tray is installed).
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-14	В	Vacuum Feed LCIT 3: 1 st Tray Error (Paper overload error)
		If vacuum feed banner sheet tray is not installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		If vacuum feed banner sheet tray is installed
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Paper Height Middle Sensor were both ON 5 times consecutively.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Paper overload
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 Lower Limit Sensor defective/disconnected (If vacuum feed banner sheet tray is not installed)
		 Paper Height Middle Sensor defective/disconnected (If vacuum feed banner sheet tray is installed)
		 A harness to one of the parts listed above is broken.
		PCB defective
		Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		 Replace or reconnect the Lower Limit Sensor (If vacuum feed banner sheet tray is not installed).
		 Replace or reconnect the Paper Height Middle Sensor (If vacuum feed banner sheet tray is installed).
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-15	В	Vacuum Feed LCIT 3: 1st Tray Error (Bottom plate ascending too much)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		Over Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-16	В	Vacuum Feed LCIT 3: 1st Tray Error (Separation Front Fan error)
SC507-17	В	Vacuum Feed LCIT 3: 1st Tray Error (Separation Rear Fan error)
SC507-18	В	Vacuum Feed LCIT 3: 1st Tray Error (Float Fan error)
SC507-19	В	Vacuum Feed LCIT 3: 1st Tray Error (Separation Fan error)
SC507-20	В	Vacuum Feed LCIT 3: 1st Tray Error (Suction Fan 1 error)
SC507-21	В	Vacuum Feed LCIT 3: 1st Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-22	С	Vacuum Feed LCIT 3: 1st Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)
		During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON.
		During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC507-23	С	Vacuum Feed LCIT 3: 1st Tray Error (Paper Height Sub Sensor error)	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC507-24	В	Vacuum Feed LCIT 3: 1 st Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		 The Paper Feed Belt Unit is not properly set. Paper Feed Belt Unit connector defective or disconnected Harness broken PCB defective
		 Set the Paper Feed Belt Unit. Replace or reconnect the Paper Feed Belt Unit connector. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-12	В	Vacuum Feed LCIT 3: 2nd Tray Error (Lifting Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Lower Limit Sensor or the Paper Height Middle Sensor does not become OFF 8 seconds after the lift motor started.
		 During tray initialization, the Lower Limit Sensor or the Paper Height Middle Sensor was ON and the lift motor started lifting the plate but the Upper Limit Sensor 1 or 2 does not become ON 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		Lower Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-13	В	Vacuum Feed LCIT 3: 2nd Tray Error (Lowering Timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Either of the following conditions has been detected 5 times consecutively in total.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was ON and the Lower Limit Sensor was OFF and the lift motor started lowering the plate but the Upper Limit Sensor 1 or 2 is still ON 8 seconds after the lift motor started.
		 During tray initialization, the Upper Limit Sensor 1 or 2 was OFF and both Lower Limit Sensor and the Paper Height Middle Sensor were OFF and the lift motor started lowering the plate but both the Lower Limit Sensor and the Paper Height Middle Sensor are still OFF 40 seconds after the lift motor started.
		Lift motor defective/disconnected
		Lower Limit Sensor defective/disconnected
		Paper Height Middle Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Paper Height Middle Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC508-14	В	Vacuum Feed LCIT 3: 2nd Tray Error (Paper overload error)	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		During tray initialization, the Upper Limit Sensor 1 or 2 and the Lower Limit Sensor were both ON 5 times consecutively.
		Paper overload
		Lower Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		 A harness to one of the parts listed above is broken.
		PCB defective
		Reduce the number of sheets of paper loaded in the tray.
		Replace or reconnect the Lower Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-15	В	Vacuum Feed LCIT 3: 2nd Tray Error (Bottom plate ascending too much)
		The tray is set and the Over Limit Sensor detected that the bottom plate ascended too much.
		Over Limit Sensor defective/disconnected
		Upper Limit Sensor 1 defective/disconnected
		Upper Limit Sensor 2 defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Over Limit Sensor.
		Replace or reconnect the Upper Limit Sensor 1.
		Replace or reconnect the Upper Limit Sensor 2.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-16	В	Vacuum Feed LCIT 3: 2nd Tray Error (Separation Front Fan error)
SC508-17	В	Vacuum Feed LCIT 3: 2nd Tray Error (Separation Rear Fan error)
SC508-18	В	Vacuum Feed LCIT 3: 2nd Tray Error (Float Fan error)
SC508-19	В	Vacuum Feed LCIT 3: 2nd Tray Error (Separation Fan error)
SC508-20	В	Vacuum Feed LCIT 3: 2nd Tray Error (Suction Fan 1 error)
SC508-21	В	Vacuum Feed LCIT 3: 2nd Tray Error (Suction Fan 2 error)
		During operation of the corresponding fan, rotation of the fan was not detected for 1 second (Fans are always monitored during operation).
		 Fan defective/disconnected Harness to the corresponding fan is broken. PCB defective Replace or reconnect the fan. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-22	С	Vacuum Feed LCIT 3: 2nd Tray Error (Paper Height Middle Sensor or Lower Limit Sensor error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 During bottom plate ascension, the encoder count after Lower Limit Sensor OFF exceeded 70 but the Paper Height Middle Sensor does not become ON. During tray initialization, both the Lower Limit Sensor and the Paper Height Middle Sensor were ON for 100 msec.
		 Lower Limit Sensor defective/disconnected Paper Height Middle Sensor defective/disconnected A harness to one of the parts listed above is broken. PCB defective
		 Replace or reconnect the Lower Limit Sensor. Replace or reconnect the Paper Height Middle Sensor. Replace the broken harness. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-23	С	Vacuum Feed LCIT 3: 2nd Tray Error (Paper Height Sub Sensor error)
		During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lifting the plate.
		 During tray initialization, the status of the Paper Height Sub Sensor does not change within 3 seconds after the lift motor starts lowering the plate.
		Lift motor defective/disconnected
		Paper Height Sub Sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift motor.
		Replace or reconnect the Paper Height Sub Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC508-24	В	Vacuum Feed LCIT 3: 2nd Tray Error (Belt unit set error)
		The Paper Feed Belt Unit is not set even though the tray is set.
		The Paper Feed Belt Unit is not properly set.
		Paper Feed Belt Unit connector defective or disconnected
		Harness broken
		PCB defective
		Set the Paper Feed Belt Unit.
		Replace or reconnect the Paper Feed Belt Unit connector.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-01	В	Bypass Tray Error (Upper Limit Detection Error)
		The following status was detected 5 times consecutively at the beginning of tray initialization: the Upper Limit Sensor was OFF before Pickup Solenoid is ON.
		 Pickup Solenoid defective or disconnected Upper Limit Sensor defective/disconnected
		A harness to one of the parts listed above is broken.PCB defective
		Replace or reconnect the Pickup Solenoid.
		Replace or reconnect the Upper Limit Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Bypass Tray Error (Lifting Timeout)
		During tray initialization, the bottom plate was lifted but the Upper Limit Sensor does not become ON within 10 seconds.
		Lift Motor defective or disconnected
	2 B	Upper Limit Sensor defective/disconnected
SC509-02		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift Motor.
		Replace or reconnect the Upper Limit Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Bypass Tray Error (Lowering Timeout)
		At Paper End, or when the Lift Switch was pressed with the bottom plate at the upper limit position, the bottom plate was lowered but the Lower Limit Sensor does not become ON within 10 seconds.
		Lift Motor defective or disconnected
SC509-03		Lower Limit Sensor defective/disconnected
3C309-03		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the Lift Motor.
		Replace or reconnect the Lower Limit Sensor.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC511-01	В	Vacuum Feed LCIT 1: Lift Motor Error
SC511-02	В	Vacuum Feed LCIT 2: Lift Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC511-03	В	Vacuum Feed LCIT 3: Lift Motor Error
		When the pressure release HP sensor is detecting "H (interception)", the Lift Motor is driven a specified number of pulses but the pressure release HP sensor is still detecting "H (interception)".
		When the pressure release HP sensor is detecting "L (transmission)", the Lift Motor is driven a specified number of pulses but the pressure release HP sensor is still detecting "L (transmission)".
		LCIT exit Lift Motor defective/disconnected
		Pressure release HP sensor defective/disconnected
		A harness to one of the parts listed above is broken.
		PCB defective
		Replace or reconnect the LCIT exit Lift Motor.
		Replace or reconnect the pressure release HP sensor
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC513-00	D	Registration Gate Position Error
		Home position on/off was not detected within the time limit.
		Gate Retract HP Sensor connector disconnected and defective
		Gate Retract HP Sensor disconnected and defective
		Defective operation due to overload
		Defective operation due to the motor driver defective
		Gate Retract HP Sensor shield deformed/broken/incorrectly attached
		Cycle the machine off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC514-00	D	Registration Shift Position Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Home position on/off was not detected within the time limit.
		Shift Unit Motor connector disconnected and defective
		Shift Unit HP Sensor connector disconnected and defective
		Defective operation due to overload
		Defective operation due to the motor driver defective
		Shift Unit HP Sensor shield deformed/broken/incorrectly attached

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC515-00	D	CIS cleaning fan Error
		During fan lock detection
		Overload
		Fan stopped by foreign object
	Connector disconnected	
		Reconnect the connector
		Replace the CIS Cleaning Fan

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC520-00	D	Fusing Motor Error	
		Error at motor startup A lock signal was not detected for 1 second or longer after 1	
		second has passed from the motor START signal switching ON.	
		Error during motor running normally	
		A Lock signal was not detected for 1 second or longer during the motor START signal being output.	
		Motor connector disconnected	
		Abnormal increase in Fusing Roller torque (overlock	Abnormal increase in Fusing Roller torque (overload due to the
		bearing lock, etc.)	
	Motor driver defective		
		Reconnect the Fusing Motor connector	
		Eliminate the overload in the Fuser Unit	
		Replace the Fusing Motor	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC526-01	D	Grip Motor 1 (Tray 1) Rotation Error
SC526-02	D	Grip Motor 2 (Tray 2) Rotation Error
		2 seconds after motor startup, the motor lock error signal (LOCK signal) was detected for 1200 msec or more.
		 Grip Motor defective Harness broken Connector disconnect
		Replace the Grip Motor. Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC527-01	D	Buffer Pass Unit: Cooling Fan Alarm 1
SC527-02	D	Buffer Pass Unit: Cooling Fan Alarm 2

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC527-03	D	Buffer Pass Unit: Cooling Fan Alarm 3
SC527-04	D	Buffer Pass Unit: Cooling Fan Alarm 4
SC527-05	D	Buffer Pass Unit: Exhaust Fan Alarm 1
SC527-06	D	Buffer Pass Unit: Exhaust Fan Alarm 2
SC527-07	D	Buffer Pass Unit: Exhaust Fan Alarm 3
SC527-08	D	Buffer Pass Unit: Exhaust Fan Alarm 4
		Observe the Lock signal. If the Lock signal is not acquired continuously for 10 seconds (10 times), rotation is judged as abnormal.
		Corresponding Buffer Pass Unit fan defective Harness broken Connector disconnect
		Replace the defective Buffer Pass Unit fan. Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC530-00	D	Heat Sink Cooling Suction Fan Error
SC530-01	D	Heat Sink Cooling Exhaust Fan Error
SC531-00	D	Paper Cooling Intake Fan Error
SC531-01	D	Paper Cooling Exhaust Fan 1 Error
		Paper Cooling Exhaust Fan 2 Error
		The branch numbers for the Paper Cooling Exhaust Fan 1 Error and Paper Cooling Exhaust Fan 2 Error are the same. Therefore, if error SC531-01 occurs, perform visual inspection to determine the error source.
SC535-00	D	Belt Cooling Fan
SC535-01	D	Pressure Roller Cooling Fan Error
SC535-02	D	Main Unit Relay Fan Error
SC538-00	D	Controller Box Intake Fan 1 Error

SC535-00 RTB 41 1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC538-01	D	Controller Box Intake Fan 2 Error
SC539-00	D	Development Unit Cooling Fan 1 Error
SC539-01	D	Development Unit Cooling Fan 2 Error
SC539-02	D	Development Unit Cooling Fan 3 Error
		During fan lock detection
		Fan stopped due to overload or foreign object
		Connector disconnected.
		Check the connector. Replace the defective fan.

S	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC	541-00	А	Thermistor disconnection: Heating Roller Thermopile
			Heating Roller Thermopile detected 0 degree or lower 50 seconds consecutively after the heater was turned on.
			Thermistor disconnection Connecter contact failure
			Replace the Heating Roller Thermopile.
			Reconnect the connector.
			Replace the fuser unit.

SC540

RTB 159: New SC code

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC542-01	Α	Reload Failure: Heating Roller Thermopile
		Heating Roller Thermopile detected a temperature below 80 degrees 60 seconds consecutively after the heater was turned on.
		Thermistor deformed or floating Input voltage out of specification
		Replace the Heating Roller Thermopile
		Use within the input voltage specification.
		Replace the fuser unit.
		Replace the heater.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC542-02	Α	Reload Failure: Heating Roller Thermopile
		180 seconds after start of heater control, Heating Roller Thermopile detected that temperature has not been reached for reload permission.
		After the operation of overheat prevention mechanism Heater broken
		Replace the Heating Roller Thermopile
		Use within the input voltage specification.
		Replace the heater.
		Replace the fuser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC543-00	Α	Overheat detection (software): Heating Roller Thermopile
		Heating Roller Thermopile detected a temperature of 255 degrees or higher continuously for 10 seconds or longer.
		Measurement period: 100 milliseconds
		Triac shorted.
		IOB board defective.
		fuser unit controller software runaway
		Replace the IOB board.
		Replace the fuser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC544-00	А	Overheat detection (hardware): Heating Roller NC Sensor
		Heating Roller NC Sensor detected 270 degrees or higher.
		Triac shorted. IOB board defective.
		Fuser unit controller software runaway
		• -

SC545 RTB 60

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC545-01	A	Heater lit continuously : Heating Roller Fusing Lamps
SC545-02		The DUTY of heater was equal to the maximum DUTY (excluding 0%) for 90 seconds continuously after the heater was turned on during Ready status/preheating/low-power and the fuser unit stopped.
		Excluded time: 300 seconds
		The time it takes to reach the reload temperature/waiting target temperature at rated input -25% + heater tolerance is excluded (300 seconds).
		 Thermistor deformed or floating Heater disconnection After the operation of overheat prevention mechanism
		 Replace the Heating Roller Thermopile Replace the Heating Roller Fusing Lamps. Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC546-00	Α	Thermistor disconnection: Heating Roller Thermistor
		Heating Roller Thermistor detected 0 degree or lower 50 seconds consecutively after the heater was turned on
		Thermistor disconnection Connecter contact failure
		Replace the Heating Roller Thermistor
		Reconnect the connector.
		Replace the Fuser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Zero Cross Error (Relay contact welded)
		Fusing relay contact welded
SC547-01		Fusing relay defective (contact welded)
		Fusing relay drive circuit defective
		Turn the main power off/on.
		If turning the main power switch off and on does not solve the problem:
		If the fusing relay is damaged, replace the AC control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Zero Cross Error (Relay contact defective)
		Fusing relay contact defective
SC547-02		Fusing relay defective (contact opened)
		Fusing relay drive circuit defective
		Turn the main power off/on.
		If turning the main power switch off and on does not solve the problem:
		If the fusing relay is damaged, replace the AC control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Zero Cross Error (low frequency error)
		The AC power supply frequency is low or unstable.
SC547-03		Unstable commercial power supply frequency
		Turn the main power off/on.
		 If turning the main power switch off and on does not solve the problem:
		 Check the power supply line from the wall socket.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC548-00	Α	Software High Temperature Detection: Heating Roller Thermistor
		Heating Roller Thermistor detected 255 degrees or higher 10 seconds consecutively.
		Measurement period: 100 milliseconds
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		Replace the IOB board.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC549-00	Α	Hardware High Temperature Detection: Heating Roller Thermistor
		Heating Roller Thermistor detected 260 degrees or higher.
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		• -

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC550-01	D	Fuser Belt Smoothing Roller Motor Error
		 Error at motor startup A lock signal was not detected for 2 second or longer after 1 second has passed from the motor START signal switching ON. Error during motor running normally A Lock signal was not detected for 2 second or longer during the motor START signal being output.
		Motor connector disconnected Abnormal increase in Fuser Belt Smoothing Roller torque (overload due to the bearing lock, etc.) Motor driver defective -

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC551-00	Α	Thermistor disconnection: Pressure Roller NC Sensor
		Pressure Roller NC Sensor detected 0 degree or lower 75 seconds consecutively after the heater was turned on
		Thermistor disconnection Connecter contact failure
		Replace the Pressure Roller NC Sensor.
		Reconnect the connector.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC552-01	А	Reload Failure: Pressure Roller NC Sensor
		Pressure Roller NC Sensor detected a temperature below 45 degrees 75 seconds consecutively after the heater was turned on.
		Thermistor deformed or floating Input voltage out of specification
		Check for fusing lamp disconnection
		Replace the Pressure Roller NC Sensor
		Replace the Pressure Roller Thermostat
		Replace the Pressure Roller Fusing Lamp

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC552-02	Α	Reload Failure: Pressure Roller NC Sensor
		Reload temperature is not reached 190 seconds after motor control is started.
		Lamp disconnection After the operation of overheat prevention mechanism
		Check for fusing lamp disconnection
		Replace the Pressure Roller NC Sensor
		Replace the Pressure Roller Thermostat
		Replace the Pressure Roller Fusing Lamp

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC553-00	Α	Overheat detection (software): Pressure Roller NC Sensor
		Pressure Roller NC Sensor detected 220 degrees or higher 1 second consecutively.
		Measurement period: 100 milliseconds
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		Replace the IOB board.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC554-00	Α	Overheat detection (hardware): Pressure Roller NC Sensor
		Pressure Roller NC Sensor detected 230 degrees or higher.
		• Triac shorted.
		IOB board defective. Fuser Unit controller software runaway
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC555-00	Α	Heater lit continuously: Pressure Roller Fusing Lamp
		The DUTY of Pressure Roller Fusing Lamp was equal to the maximum DUTY (excluding 0%) for 80 seconds continuously after the heater was turned on during Ready status/preheating/low-power and the fuser unit stopped.
		Excluded time: 100 seconds
		The time it takes to reach the reload temperature/waiting target temperature at rated input -25% + heater tolerance is excluded (100 seconds).
		 Thermistor deformed or floating Heater disconnection Overheating prevention device worked.
		Replace the Pressure Roller NC Sensor Replace the Pressure Roller Fusing Lamp Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC557-00	С	Zero Cross Error (high frequency)
		The AC power supply frequency is high or unstable.
		Unstable commercial power supply frequency, noise
		Check the frequency of the commercial power supply line

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC558-00	С	Fuser Belt Smoothing Roller Contact Error Detection
		"Separation→pressure contact / pressure contact → separation" control performed incorrectly 3 times consecutively is detected.
		Fuser Belt Smoothing Roller Contact Motor defective
		Fuser Belt Smoothing Roller Contact Sensor defective
		Feeler deformed/damaged
		Contact mechanism damaged
		Replace the Fuser Belt Smoothing Roller Contact Motor.
		Replace the Fuser Belt Smoothing Roller Contact Sensor
		Replace the Feeler of Fuser Belt Smoothing Roller Contact Sensor.
		Replace the fuser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC559-00	Α	Fusing jam: 3 counts
		Fusing jam (fusing exit sensor late jam) was detected 3 times consecutively. • Each occurrence of a fusing jam is counted and SC559-00 is issued when the count reaches 3
		The fusing jam counter is not reset even if the machine is turned off and on.
		This SC can be set ON/OFF. The factory setting is OFF; set it ON when requested by the customer.
		SP1-142-001:
		0: OFF (factory setting)
		1: ON (set by service personnel at the request of customer)
		Fuser Unit defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Enter the SP mode and clear SP5-810-001, and then cycle the machine off/on. If the problem is not solved, do the following:
		Check the Fuser Belt Stripper, Pressure Roller Stripper, Fuser Unit Exit Sensor, Accordion Jam Sensor
		Check the fusing belt stripper plate, pressure roller stripper pawls, and fusing exit sensor.
		 If you can identify the defective parts, replace the fuser belt stripper, pressure roller striper, fuser unit exit sensor or accordion jam sensor individually.
		If you cannot identify the defective parts, replace the fuser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC561-00	А	Thermistor disconnection: Heating Roller NC Sensor
		Heating Roller NC Sensor detected 0 degree or lower 35 seconds consecutively after the heater was turned on
		Thermistor disconnection Connecter contact failure
		Replace the Heating Roller NC Sensor.
		Reconnect the connector
		Replace the unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC562-01	Α	Reload Failure: Heating Roller Thermistor
		Heating Roller Thermistor detected failure to reach the reload target temperature (-40 degrees) 120 seconds after motor control is started.
		Thermistor deformed or floatingInput voltage out of specification
		Replace the Heating Roller Thermistor
		Use within the input voltage specification.
		Replace the fusing lamp.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC563-00	Α	Overheat detection (software): Heating Roller NC Sensor
		Heating Roller NC Sensor detected 255 degrees or higher 10 seconds consecutively.
		Measurement period: 100 milliseconds
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		Replace the IOB board.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC564-00	Α	Overheat detection (hardware): Heating Roller NC Sensor
		Heating Roller NC Sensor detected 270 degrees or higher.
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		Replace the triac.
		Replace the IOB board.
		Replace the Fuser Unit.

1

SC565 RTB 60

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC565-00	Α	Heater lit continuously: Heating Roller Fusing Lamp
		The DUTY of heater was equal to the maximum DUTY (excluding 0%) for 25 seconds continuously after the heater was turned on during Ready status/preheating/low-power and the fuser unit stopped.
		Excluded time: 85 seconds
		The time it takes to reach the reload temperature/waiting target temperature at rated input -25% + heater tolerance is excluded (85 seconds).
		Thermistor deformed or floating
		Heater disconnection
		After the operation of overheat prevention mechanism
		Replace the sensor.
		Replace the Heating Roller Fusing Lamp.
		Replace the fuser unit.

SC568 RTB 157a

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC569-01	D	
SC569-02		Pressure Release Error: Pressure Roller Cam Position Sensors (A / B)
SC569-03		
		• SC569-01
		Pressure release/Home position/control failed 3 times consecutively.
		• SC569-02
		Failure for pressure release control is detected (SC occurs even once).
		• SC569-03
		Pressure release sensor B shows High.
		Pressure release motor defective
		Pressure release sensor defective
		Pressure release mechanism defective

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• SC569-01/-02
		Replace the pressure roller lift motor.
		Replace the Pressure Roller Cam Position Sensors.
		Replace the feeler.
		Replace the Fuser Unit.
		• SC569-03
		Replace the Fuser Unit.
		Replace the Pressure Roller Cam Position Sensors.
		Reconnect the sensor connector.

SC570 RTB 171

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC570		Fan Error
SC570-00	D	Ozone Exhaust Fan (K)
SC570-01	D	Ozone Exhaust Fan (C)
SC570-02	D	Ozone Exhaust Fan (M)
SC570-03	D	Ozone Exhaust Fan (Y)
SC570-04	D	Ozone Exhaust Fan (S)
SC570-05	D	Controller Box Ozone Collecting Fan
		During fan lock detection
		Overload
		Fan stopped due to foreign object
		Connecter disconnected.
		Reconnect the connector, or replace the fan

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC571-00	Α	Thermistor disconnection: Pressure Roller Thermistor
		Pressure Roller Thermistor detected 0 degree or lower 120 seconds consecutively after the heater was turned on
		Pressure Roller Thermistor disconnection Connecter contact failure
		Replace the Pressure Roller Thermistor.
		Reconnect the connector.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC573-00	А	Overheat detection (software): Pressure Roller Thermistor
		Pressure Roller Thermistor detected 220 degrees or higher 10 seconds consecutively. Measurement period: 100 milliseconds
		 Triac shorted. IOB board defective. Fuser Unit controller software runaway
		Replace the IOB board. Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC574-00	Α	Overheat detection (hardware): Pressure Roller Thermistor
		Pressure Roller Thermistor detected 230 degrees or higher.
		Triac shorted.
		IOB board defective.
		Fuser Unit controller software runaway
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC576-00	Α	Thermistor disconnection: Fusing Roller NC Sensor
		Fusing Roller NC Sensor detected 0 degree or lower 35 seconds consecutively after the heater was turned on
		Fusing Roller NC Sensor disconnection Connecter contact failure
		Replace the Fusing Roller NC Sensor
		Reconnect the connectors
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC580-01	D	Temperature Decrease Detection: Heating Roller Thermopile
		Disconnection during paper feed
		The thermopile 1 detected -10 degrees less than target temperature after correction continuously for 150 seconds or longer after inspection start trigger (A).
		Removal time: 50 seconds (excludes removal time)
		Replace the fusing lamp.
		Replace the Heating Roller Thermopile.
		Replace the Fuser Unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC581-01	D	Secondary Power Cord Not Connected
		The main power cord is connected but the secondary power cord is not connected.
		The secondary power cord is not connected.
		Circuit breaker is off.
		Harness broken
		AC drive/IOB defective.
		Turn the machine off and plug in the secondary power cord again.
		Check that the circuit breaker is on. If off, turn it on.
		Replace the harness.
		Replace the AC drive/IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC582		Fan Error
SC582-00	D	Rear Box Exhaust Fan
SC582-01	D	Rear Box Heat Sink Collecting Fan
SC583-00	D	Transport/Fusing Exhaust Fan
SC583-01	D	Feed Motor Cooling Fan
SC584-00	D	Rear Box Ozone Exhaust Fan
SC585-00	D	Fusing Exit Exhaust Fan
SC585-01	D	Paper Exit Guide Cooling Fan
SC592-00	D	PSU Cooling Fan 1
SC592-01	D	PSU Cooling Fan 2
SC592-02	D	PSU Cooling Fan 3
SC596-00	D	Controller Box Exhaust Fan (Bottom)
SC596-01	D	Controller Box Exhaust Fan (Top Left)
SC596-02	D	Controller Box Exhaust Fan (Top Right)

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC596-03	D	Air Box Exhaust Fan (Bottom)
SC596-04	D	Air Box Exhaust Fan (Top)
		During fan lock detection
		Overloaded
		Fan stopped due to foreign object
		Connector disconnected
		Reconnect the connector.
		Replace the fan.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC586		Stepper Motor Error
SC586-10	D	Vertical Transport Motor
SC586-11	D	Bank Exit Sensor
SC586-12	D	Tray 1 Paper Feed Motor
SC586-13	D	Tray 2 Paper Feed Motor
SC586-14	D	Tray 1 Grip Motor
SC586-15	D	Tray 2 Grip Motor
SC586-20	D	Registration Timing Motor
SC586-21	D	Shift Roller Motor
SC586-22	D	Duplex Transport Motor 2
SC586-23	D	Registration Entrance Motor
SC586-24	D	Registration Gate Motor
SC586-25	D	Shift Unit Motor
SC586-30	D	Duplex Transport Motor 1
SC586-31	D	Invert/Duplex Motor
SC586-32	D	Exit Relay Motor

SC586-25 RTB 97

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC586-33	D	Invert/Exit Motor
SC586-40	D	Decurl Motor
SC586-41	D	Decurler Paper Transport Motor
		Detection period: 100 ms
		SC if error detected 2 times consecutively
		Driver overheating protection
		Stepper Motor harness broken.
		Stepper Motor shorted.
		Harness disconnected.
		Reconnect the connectors.
		Replace the Stepper Motor.
		Replace the harnesses.
		Replace the PCB.
		Replace the following boards.
		• -10 to 15: PFB
		• -20 to 25: DRB
		• -30 to 33: TDCU
		• -40, -41: DDRB

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC587-00	SC587-00 C	Main Unit Temperature Sensor Error	
		When errors are detected 3 times consecutively during 1-minute periods, it is judged that an error has occurred and SC is issued.	
		 -10 degrees or lower is detected for the measurement temperature of the main unit temperature sensor. 	
		80 degrees or higher is detected for the measurement temperature of the main unit temperature sensor.	
		Connector disconnected or broken	
			Thermistor defective.
		Connector disconnected or broken	
		→ Reconnect the connector.	
		Sensor defective	
		→Replace the sensor.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC587-01	С	Heat Pipe Temperature Sensor Error	
		When errors are detected 3 times consecutively during 1-minute periods, it is judged that an error has occurred and SC is issued.	
		However, detection starts after the power is turned on and permission has been given to use SP.	
		 -10 degrees or lower is detected for the measurement temperature of the main unit temperature sensor. 	
		80 degrees or higher is detected for the measurement temperature of the main unit temperature sensor.	
			Connector disconnected or broken
		Thermistor defective	
		Connector disconnected or broken	
		→ Reconnect the connector.	
		Sensor defective	
		→ Replace the sensor.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC589-01	D	Toner Bottle Motor Error (Driver Error Detection):K
SC589-02	D	Toner Bottle Motor Error (Driver Error Detection):C
SC589-03	D	Toner Bottle Motor Error (Driver Error Detection):M
SC589-04	D	Toner Bottle Motor Error (Driver Error Detection):Y
		The driver error detection signal for the Toner Bottle Cap Motor and Toner Bottle Motor errors is monitored at 100ms intervals. When errors are detected 3 times consecutively, it is judged that an error has occurred and SC is issued. It is not possible to differentiate between Toner Bottle Cap Motor and Toner Bottle Motor errors.
		175 degrees (typical) or higherSpecified current is 4us (typical) or higher
		When an error is detected at 175 degrees (typical) or higher: automatic restart at 150 degrees (typical) or lower
		When an error is detected at specified current of 4us (typical) or higher: restart by switching 24V or 5V OFF/ON

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC590-00	D	Exit Motor Error
		1000ms after starting the motor, "Lock Signal: Low" was not detected 10 times consecutively during the time until the motor stop signal is received.
		Motor connector disconnected
		Abnormal increase in the Exit Roller torque (overload due to the bearing lock, etc.)
		Motor driver malfunctioning
		Exit Motor malfunctioning
		Reconnect the motor connector
		Eliminate the cause of overload in the exit unit.
		Replace the motor driver.
		Replace the Exit Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC591-00	С	Double-feed Sensor Error
		The senor output voltage was not within the appropriate range despite trying 3 times or more during LED light correction for the Double-feed Sensor.
		 Double-feed Sensor harness broken, connector disconnected Paper or other foreign object is caught between the light emitter and receiver of the Double-feed Sensor.
		Double-feed Sensor dirty due to paper dust or other foreign objects
		Removal processing is not necessary.
		After SC detection, although the double-feed detection function cannot be used, the machine can be operated normally.
		• For details about SC-951-00, Refer to page 785 "Recovering SC591-00"

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC593-00	D	Decurler Over Limit
		Decurler Limit Sensor is detected as on.
		HP misdetection
		Decurler HP Sensor loose/damaged
		Decurler Limit Sensor loose/damaged
		Cycle the machine off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC594-00	D	Decurler HP Sensor Error
		During decurler HP detection, even after 6 sec passes, Decurler HP Sensor on/off is not detected.
		Decurler HP Sensor defective or disconnected
		Cycle the machine off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC595-32	D	TDCU Hardware Error
		STM driver IC error has been detected. Always monitored except when a cover is open.
		Connector disconnected
		Harness disconnection or shorted.
		Belt Centering Motor defective(motor coil broken or shorted)
		PCB defective
		Reconnect the connectors between the Belt Centering Motor and TDRB (including relay connectors).
		For connectors on the motor side, the SC is issued only when a connector is half-connected (1 phase open).
		Replace a connector between the Belt Centering Motor and TDRB (including relay connectors).
		Replace the Belt Centering Motor
		Replace the TDRB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC597		Motor Error
SC597-10	D	Tray 1 Lift Motor Error
SC597-11	D	Tray 2 Lift Motor Error
SC597-12	D	Rear Fence Drive Motor Error
SC597-50	D	Toner Pump Motor YM Error
SC597-51	D	Toner Pump Motor CK Error
SC597-52	D	Toner Pump Motor S Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Detection period: 1 00 ms
		SC is issued if error is detected 2 times consecutively.
		Driver overheat protection operation
		Driver excessive voltage protection operation
		Motor shorted/layer shorted
		Check that the connector is connected.
		Replace the motor where SC occurred.
		Replace the harnesses.
		Replace the board.
		Replace the following boards.
		• -10 to -12: PFB
		• -50 to -52: IOB

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC598-00	D	Development Unit Coolant Pump Error
		Time overflow detected.
		Pump defective
		Connector disconnected
		Pump rotation slowed because of high viscosity
		Reconnect (In case of a disconnected connector).
		Replace the Development Unit Coolant Pump.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC599-00	D	Coolant Remaining Switch Error
		The Coolant Remaining Switch detected the voltage more than the upper threshold or less than the lower threshold.
		When errors are detected 10 times consecutively during 1 second periods, it is judged that an error has occurred and SC is issued.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Proper amount of liquid does not exist.Connecter disconnected or broken.
		IOB board defective.Harness shorted.
		Liquid remaining quantity decreased (leak exists)
		If it is possible to repair the leakage location, perform repairs and then refill the liquid.
		If it is not possible to repair the leakage location, replace the main unit.
		 Liquid remaining quantity decreased (no leak)
		Refill the liquid.
		Coolant Remaining Switch connector disconnected/ harness broken
		Reconnect the connector.
		Coolant Remaining Switch defective
		Replace the Coolant Remaining Switch.
		IOB board defective
		Replace the IOB.
		Harness shorted
		Replace the harness.

Service Call 600-672 (Controller)

SC632 to SC653, SC670 to SC672

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC632-00	В	Counter device error 1
		After 3 attempts to send a data frame to the optional counter device via the serial communication line, no ACK signal was received within 100 ms.
		Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged.
		Turn the main power off/on.Check the serial communication line.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC633-00	В	Counter device error 2
		After communication was established, the controller received the brake signal from the accounting device.
		Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged.
		Turn the main power off/on.Check the serial communication line.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC634-00	В	Counter device error 3
		A backup RAM error was returned by the counter device.
		Counter device control board or the backup battery of counter device defective
		 Replace the counter device control board. Replace the backup battery.

1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC635-00	В	Counter device error 4
		A backup battery error was returned by the counter device.
		Counter device control board or the backup battery of counter device defective
		 Replace the counter device control board. Replace the backup battery.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IC Card Error (Expanded authentication module error)
		Issued when expanded authentication management is set to "ON" but either of the following occur.
		There is no expanded authentication module in the machine.
	D	The SD card or the file of the expanded authentication module is broken.
		There is no DESS module in the machine.
SC636-01		There is no DESS module in the machine (models on which the function is optional).
		There is no expanded authentication module in the machine.
		The SD card or the file of the expanded authentication module is broken.
		Set a working SD card/expanded authentication module file.
		Install the DESS module.
		• In the SSP mode set SP5-401-160 to 0.
		• In the SSP mode, set SP5-401-161 to 0.
		Replace the NVRAM.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC636-02	D	IC Card Error (Version error)
		The version of the expanded authentication module is not correct.
		Incorrect module version
		Install the correct file of the expanded authentication module.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IC Card Error (OSM user code file error)
		The correct "usercode" file could not be found in the root folder of the SD card.
		The "usercode" file on the SD card could not be read.
		The "usercode" file does not exist on the SD card.
SC636-11	D	The "usercode" file on the SD card is an invalid file.
		Data in the "usercode" file on the SD card is invalid.
		"usercode" file was not moved when moving the application to another SD card
		Use the user code configuration tool for OSM users (Idissuer.exe) to create the "usercode" and store it in the root folder of the SD card containing the IC card module (eccm.mod).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Tracking Information Notification Error (Tracking application error)
		Tracking information was lost.
SC637-01	D	Tracking SDK application error
		Internal notification error
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Tracking Information Notification Error (Management server error)
		Tracking information was lost.
		Communication with tracking management server failed.
SC637-02	D	Network error
		tracking management server error
		Tracking SDK application error
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC641-00	D	Communication error between BCU and Controller board.
		Controller board does not respond after BCU tries to communicate three times.
		 Controller board software error Connect error between BCU and Controller board Engine board software error
		Check connections between Controller board and BCU. Turn the main switch off and on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-01	В	Remote Service Modem Communication Error (Dialup authentication failure)
		An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on.
		Displayed only when an error is detected while RC Gate is operating.
		SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Dialup authentication failure
		Check the following SPs.
		• SP5-816-156
		• SP5-816-1 <i>57</i>

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-04	В	Remote Service Modem Communication Error (dialup failing because of incorrect modem configuration)
		An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on.
		Displayed only when an error is detected while RC Gate is operating.
		 SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Dialup failing because of incorrect modem configuration
		Check if the setting of SP5-816-160 is correct.
		If it is correct, then there is a software bug.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-05	В	Remote Service Modem Communication Error (insufficient current or connection fault)
		An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on.
		 Displayed only when an error is detected while RC Gate is operating.
		 SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Insufficient current or connection fault
		The line is not supported and nothing can be done.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-13	В	Remote Service Modem Communication Error (RC Gate Type M was installed but modem is not present (detected during operation))
		An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on.
		 Displayed only when an error is detected while RC Gate is operating.
		SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		RC Gate Type M was installed but modem is not present (detected during operation)
		If a modem board is not installed, install it.
		Check again if the modem driver configurations (SP5-816-160, SP5-816-165 to 171, SP5-816-165 to 171) are correct.
		If the problem is not solved, replace the modem.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-14	В	Remote Service Modem Communication Error (RC Gate Type N was installed but modem is present or wired/wireless LAN is not working correctly)
		 An error related to communication (dialup connection, modem board etc.) using the RC Gate was detected or an error that prevents RC Gate operation was detected at power on.
		 Displayed only when an error is detected while RC Gate is operating.
		 SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		RC Gate Type N was installed but modem is present or wired/wireless LAN is not working correctly
		If a modem board is attached, remove it. - Classification of the standard stan
		Check if wired/wireless LAN works.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC651-01	С	Illegal Remote Service Dial-up (Chat program parameter error)
		An unexpected error occurred when RC Gate Type M dialed up the NRS Center.
		Software bug
		Logging only.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC651-02	С	Illegal Remote Service Dial-up (Chat program execution error)
		An unexpected error occurred when RC Gate dialed up the NRS Center.
		Software bug
		Logging only.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC652-00	D	Remote service ID2 mismatching
		There was an authentication mismatch between ID2 for @Remote, the controller board, and NVRAM.
		Used controller board installed
		Used NVRAM installed (such action is not allowed.)
		If this occurs during RC Gate installation:
		Check the validity of the certificate and the NVRAM, check the machine serial number, write the common certificate, and then begin installation again.
		If this occurs after RC Gate installation:
		Clear the RC Gate install status, check the validity of the certificate and the NVRAM, check the machine serial number, write the common certificate, and then begin installation again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC653-00	D	Incorrect remote service ID2
		ID2 stored in the NVRAM has either of the following problems.
		Number of characters is not 17.
		Includes a character that cannot be printed.
		All spaces
		• NULL
		Replace the NVRAM.
		Clear the RC Gate installs status, write the common certificate, and then begin installation again.

1

SC670 RTB 102 RTB 157

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC670-00	D	Engine start up error Case 1 /ENGRDY signal was not asserted when the machine was
		 turned on or returned from energy saver mode. /IPURDY signal was not asserted when the machine was turned on or returned from energy saver mode.
		 EC response was not received within specified time from power on. PC response was not received within specified time from power on.
		 SC response was not received within specified time from power on.
		 Writing to Rapi driver failed (the other party not found through PCI).
		 Case 2 Unexpected down status was detected after /ENGRDY assertion.
		• Case 1
		Engine board does not start up.Case 2
		Engine board reset unexpectedly.
		Check the connection between the engine board and the controller board.
		 If it is always reproduced, replace the engine board. If the problem persists, consider replacing the controller board or other boards between them.
		 If reproducibility is low, multiple causes are to be considered, such as software, engine board, controller board, and PSU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Controller start up error
		After the machine was powered on, communication between the controller and the operation panel was not established.
		Controller stalled
	D	Board installed incorrectly
SC672-10		Controller board defective
300/2-10		Operation panel connector loose, broken, or defective
		Controller late
		Turn the main power off/on.
		Check the connection of the controller board.
		Replace the controller board.
		Check the control panel harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Controller start up error
		After the machine was powered on, communication between the controller and the operation panel was not established, or communication with controller was interrupted after a normal startup.
		Controller stalled
		Board installed incorrectly
SC672-11	D	Controller board defective
		Operation panel connector loose, broken, or defective
		Controller late
		Turn the main power off/on.
		Check the connection of the controller board.
		Replace the controller board.
		Check the control panel harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Controller start up error
		Communication with controller was interrupted after a normal startup.
		Controller stalled
		Board installed incorrectly
		Controller board defective
SC672-12	D	Operation panel connector loose, broken, or defective
		Controller late
		Turn the main power off/on.
		Check the connection of the controller board.
		Replace the controller board.
		Check the control panel harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Controller start up error
		The operation panel detected that the controller is down.
		Controller stalled
		Board installed incorrectly
		Controller board defective
SC672-13	D	Operation panel connector loose, broken, or defective
		Controller late
		Turn the main power off/on.
		Check the connection of the controller board.
		Replace the controller board.
		Check the control panel harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Controller start up error
		The operation panel software ended abnormally.
		Controller stalled
		Board installed incorrectly
		Controller board defective
SC672-99	D	Operation panel connector loose, broken, or defective
		Controller late
		Turn the main power off/on.
		Check the connection of the controller board.
		Replace the controller board.
		Check the control panel harness.

Service Call 620-689 (Engine)

SC600 (Engine: Communication and Others)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Buffer Pass Unit: CTB_+24V_Power Supply Error
		Detected that the +24V power supply is off for the PCB: CTB of the Buffer Pass Unit.
		Error for PSU of Buffer Pass Unit
	D	Connector disconnected
		Harness grounding fault/disconnected
SC618-01		24V load (motor/fan) layer shorted
00010 01		Error for Controller Board of Buffer Pass Unit
		Fuse tripped (PSU, board)
		Replace the PSU of Buffer Pass Unit
		Reconnect the connectors.
		Replace the harnesses.
		Replace the motor/fan.
		Replace the Controller Board of Buffer Pass Unit

1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Buffer Pass Unit : CTB_+24VINT_Power Supply Error
		Detected that the +24VINT power supply is off for the PCB: CTB of the Buffer Pass Unit.
		Error for PSU of Buffer Pass Unit
		Connector disconnected
		Harness grounding fault/disconnected
		24V load (motor/fan) layer shorted
SC618-02	D	Error for Controller Board of Buffer Pass Unit
		Fuse tripped (PSU board)
		Board relay malfunction
		Replace the PSU of Buffer Pass Unit
		Reconnect the connectors.
		Replace the harnesses.
		Replace the motor/fan.
		Replace the Controller Board of Buffer Pass Unit

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Downstream Device Communication Error (Buffer Pass Unit)
SC619-00		When communication has been established with downstream devices and there is no response to the transmission command, not even after repeating the command 3 times.
		When communication has been established with upstream devices and the transmission port level for the downstream devices does not turn to H level (break release) within the time limit.
		I/F cable (downstream device side) connector loose/disconnected Board malfunction (Buffer Pass Unit or downstream device)
		Replace I/F cable between Buffer Pass Unit and downstream device. Reset connector.
		Replace board (Buffer Pass Unit or downstream device)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC620-01	D	ADF Communication Error
SC620-02	D	ADF Communication Error
		Communication error between the main machine and ADF connected with ASAP.
		SC620-01: A BREAK was detected after a successful connection.
		SC620-02: Communication timeout after a successful connection.
		Details:
		SC is issued when an error is detected after ADF connection was recognized at power-on.
		There will be no response either, if the ADF was not connected at power- on. In this case, however, SC is not issued and functions that do not use the ADF (copying from the exposure glass) are available.
		ADF connection fault.
		ADF defective
		IPU board defective
		Electrical noise on the line
		Check ADF cable connection.
		Replace the ADF.
		Replace the IPU board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Finisher/mail box communication error
SC621-00		Detected an error when connecting the communication line. Received a communication error notification from the URAT.
		 Finisher Main Board defective. BCU or IOB defective Harness between finisher and main unit defective/disconnected/ shorted
		 Reset or replace the connector harness for the finisher Replace the BCU Replace the finisher Main Board Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC622-01	D	Vacuum Feed LCIT 1 Communication Error
SC622-02	D	Vacuum Feed LCIT 2 Communication Error (2 nd connection)
SC622-03	D	Vacuum Feed LCIT 3 Communication Error (3 rd connection)
		 When an error occurs during circuit connection. When a communication error notice is received from UART.
		 Defective Main Board for Vacuum Feed LCIT BCU defective Connection between Vacuum Feed LCIT and main unit defective/disconnected/shorted
		 Turn the main power off/on. Reset or replace the connector harness for the LCIT where the SC was issued Replace the BCU Replace the Main Board for the LCIT where the SC was issued

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC625-00		TDCU Master Communication Error
SC626-00		TDCU Slave Communication Error
		ASAP communication protocol error The ASAP interface between engines has two systems: Master and Slave.
		The error detection process is the same for both systems, but the SC number is different.
	D	Harness disconnected/loose
		TDCU board error
		BCU board error
		Reset the connector between the BCU board and the TDCU board.
		Replace the harness.
		Replace the TDCU.
		Replace the BCU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IPU does not start.
		Occurs when the IPU_Wake signal is not issued for the Wake side.
		IPU board broken
	D	BCU board broken
		BCU board defective
SC665-01		BCU-IPU harness grounding fault
		PSU 5V not output
		Replace the FFC harness
		Replace the connector between BCU and IPU.
		Replace the BCU.
		Replace the IPU.
		Replace the PSU 2

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		IOB does not start (Master)
		The IOB_WAKE signal (Master) of the IOB and the PFB is not "WAKE".
		• IOB damaged
		BCU damaged
		Connector defective between BCU and IOB
		BCU defective
SC665-04	D	PSU5V not output
		Harness between BCU and IOB: Grounding fault
		Replace the IOB.
		Replace the BCU.
		Reconnect the BCU, IOB
		Replace the PSU.
		Replace the harness between BCU and IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC665-05	D	IOB does not start (Slave)
		The IOB_WAKE signal (Slave) of the IOB and the PFB is not "WAKE".
		IOB damaged
		BCU damaged
		Connector defective between BCU and IOB
		BCU defective
		PSU5V not output
		Harness between BCU and IOB: Grounding fault
		Replace the IOB.
		Replace the BCU board.
		Reconnect the BCU and IOB.
		Replace the PSU 3
		Replace the harness between BCU and IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC669		BCU_EEPROM Communication Error
SC669-01	D	BCU_EEPROM OPEN: ID error
SC669-02	D	BCU_EEPROM OPEN: Channel error
SC669-03	D	BCU_EEPROM OPEN: Device error
SC669-04	D	BCU_EEPROM OPEN: Communication abort error
SC669-05	D	BCU_EEPROM OPEN: Communication timeout error
SC669-06	D	BCU_EEPROM OPEN: Operation stopped error
SC669-07	D	BCU_EEPROM OPEN: Buffer full
SC669-08	D	BCU_EEPROM OPEN: No error code
SC669-09	D	BCU_EEPROM CLOSE: ID error
SC669-10	D	BCU_EEPROM CLOSE: No error code
SC669-11	D	BCU_EEPROM Data write: ID error
SC669-12	D	BCU_EEPROM Data write: Channel error
SC669-13	D	BCU_EEPROM Data write: Device error
SC669-14	D	BCU_EEPROM Data write: Communication abort error
SC669-15	D	BCU_EEPROM Data write: Communication timeout error
SC669-16	D	BCU_EEPROM Data write: Operation stopped error
SC669-17	D	BCU_EEPROM Data write: Buffer full
SC669-18	D	BCU_EEPROM Data write: No error code
SC669-19	D	BCU_EEPROM Data read: ID error
SC669-20	D	BCU_EEPROM Data read: Channel error
SC669-21	D	BCU_EEPROM Data read: Device error
SC669-22	D	BCU_EEPROM Data read: Communication abort error
SC669-23	D	BCU_EEPROM Data read: Communication timeout error
SC669-24	D	BCU_EEPROM Data read: Operation stopped error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC669-25	D	BCU_EEPROM Data read: Buffer full
SC669-26	D	BCU_EEPROM Data read: No error code
SC669-27	D	BCU_EEPROM Device detection: ID error
SC669-28	D	BCU_EEPROM Device detection: Channel error
SC669-29	D	BCU_EEPROM Device detection: Device error
SC669-30	D	BCU_EEPROM Device detection: Communication abort error
SC669-31	D	BCU_EEPROM Device detection: Communication timeout error
SC669-32	D	BCU_EEPROM Device detection: Operation stopped error
SC669-33	D	BCU_EEPROM Device detection: Buffer full
SC669-34	D	BCU_EEPROM Device detection: No error code
		When the I2C communication is not established between BCU and EEPROM.
		EEPROM not connected fully
		EEPROM not installed
		EEPROM damaged
		BCU damaged
		Reconnect the EEPROM.
		Replace the EEPROM.
		Replace the BCU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC681		Toner Bottle: RFID Unit Check Error
SC681-01	D	No response
SC681-02	D	Remote signal down
SC681-03	D	Communication error
SC681-04	D	Internal error
SC681-05	D	Receipt buffer full

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC681-06	D	No tag response (S)
SC681-11	D	AFE error (S) : During reading/writing
SC681-16	D	CRC error (S)
SC681-21	D	Writing error (S)
SC681-26	D	Erase error (S)
SC681-31	D	Under voltage (S)
SC681-36	D	Compare (CRC) error (S)
SC681-41	D	Header check error (S)
SC681-46	D	Compare and header check error (S)
SC681-51	D	Command error (S)
SC681-56	D	Specification block error (S)
SC681-63	D	AFE error: During AFE reset: SC display
		When an error occurs during circuit connection
		When an error notice is received during communication with the tag and recovery is not possible even after trying 3 times.
		Reader/writer malfunction
		ASAP I/F not connected
		Electrical noise
		No tag (ID chip)
		Tag internal error
		Cycle the machine off/on.
		Replace the toner bottle
		Replace the RFID (Antenna).
		Replace the RFID (CPU).

SC No	Level	Error Name/Error Condition/Major Cause/Solution
SC682		PCU: ID Chip Communication Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC682-01	D	PCU: ID Chip Communication Error(K_Invalid Device ID)
SC682-02	D	PCU: ID Chip Communication Error(M_Invalid Device ID)
SC682-03	D	PCU: ID Chip Communication Error(C_Invalid Device ID)
SC682-04	D	PCU: ID Chip Communication Error(Y_Invalid Device ID)
SC682-05	D	PCU: ID Chip Communication Error(S_Invalid Device ID)
SC682-06	D	PCU: ID Chip Communication Error(K_Channel error (e.g. bus disconnection))
SC682-07	D	PCU: ID Chip Communication Error(M_Channel error (e.g. bus disconnection))
SC682-08	D	PCU: ID Chip Communication Error(C_Channel error (e.g. bus disconnection))
SC682-09	D	PCU: ID Chip Communication Error(Y_Channel error (e.g. bus disconnection))
SC682-10	D	PCU: ID Chip Communication Error(S_Channel error (e.g. bus disconnection))
SC682-11	D	PCU: ID Chip Communication Error(K_Device Error (No ID chip))
SC682-12	D	PCU: ID Chip Communication Error(M_Device Error (No ID chip))
SC682-13	D	PCU: ID Chip Communication Error(C_Device Error (No ID chip))
SC682-14	D	PCU: ID Chip Communication Error(Y_Device Error (No ID chip))
SC682-15	D	PCU: ID Chip Communication Error(S_Device Error (No ID chip))
SC682-16	D	PCU: ID Chip Communication Error(K_Communication aborted (error during communication))
SC682-17	D	PCU: ID Chip Communication Error(M_Communication aborted (error during communication))
SC682-18	D	PCU: ID Chip Communication Error(C_Communication aborted (error during communication))
SC682-19	D	PCU: ID Chip Communication Error(Y_Communication aborted (error during communication))

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC682-20	D	PCU: ID Chip Communication Error(S_Communication aborted (error during communication))
SC682-21	D	PCU: ID Chip Communication Error(K_Communication timeout)
SC682-22	D	PCU: ID Chip Communication Error(M_Communication timeout)
SC682-23	D	PCU: ID Chip Communication Error(C_Communication timeout)
SC682-24	D	PCU: ID Chip Communication Error(Y_Communication timeout)
SC682-25	D	PCU: ID Chip Communication Error(S_Communication timeout)
SC682-26	D	PCU: ID Chip Communication Error(K_Device stopped (logically stopped))
SC682-27	D	PCU: ID Chip Communication Error(M_Device stopped (logically stopped))
SC682-28	D	PCU: ID Chip Communication Error(C_Device stopped (logically stopped))
SC682-29	D	PCU: ID Chip Communication Error(Y_Device stopped (logically stopped))
SC682-30	D	PCU: ID Chip Communication Error(S_Device stopped (logically stopped))
SC682-31	D	PCU: ID Chip Communication Error(K_Requested buffer full)
SC682-32	D	PCU: ID Chip Communication Error(M_Requested buffer full)
SC682-33	D	PCU: ID Chip Communication Error(C_Requested buffer full)
SC682-34	D	PCU: ID Chip Communication Error(Y_Requested buffer full)
SC682-35	D	PCU: ID Chip Communication Error(S_Requested buffer full)
SC682-36	D	PCU: ID Chip Communication Error(K_No error code)
SC682-37	D	PCU: ID Chip Communication Error(M_No error code)
SC682-38	D	PCU: ID Chip Communication Error(C_No error code)
SC682-39	D	PCU: ID Chip Communication Error(Y_No error code)
SC682-40	D	PCU: ID Chip Communication Error(S_No error code)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When error notification was received during communication with the tag and operation is not resumed after 3 retries.
		There was an error during (wired) communication with the ID chip on the toner bottle.
		PCU set error
		Harness broken
		BCU damaged
		IOB damaged
		Unintended noise
		Cycle the machine off/on
		Replace the PCU.
		Reconnect the BCU, IOB connector
		Replace the BCU, IOB.
		Replace the harness between BCU and IOB, BCU and PCU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC684		Fusing: ID Chip Communication Error
SC684-01	D	I2C BUS OPEN: (Invalid Device ID)
SC684-02	D	I2C BUS OPEN: (Channel error (e.g. bus disconnection))
SC684-03	D	I2C BUS OPEN: (Device Error (No ID chip))
SC684-04	D	I2C BUS OPEN: (Communication aborted (error during communication))
SC684-05	D	I2C BUS OPEN: (Communication timeout)
SC684-06	D	I2C BUS OPEN: (Device stopped (logically stopped))
SC684-07	D	I2C BUS OPEN: (Requested buffer full)
SC684-08	D	I2C BUS OPEN: (No error code)
SC684-09	D	I2C BUS CLOSE: (Invalid Device ID)
SC684-10	D	I2C BUS CLOSE: (No error code)
SC684-11	D	I2C BUS Data read: (Invalid Device ID)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC684-12	D	I2C BUS Data read: (Channel error (e.g. bus disconnection))
SC684-13	D	I2C BUS Data read: (Device Error (No ID chip))
SC684-14	D	I2C BUS Data read: (Communication aborted (error during communication))
SC684-15	D	I2C BUS Data read: (Communication timeout)
SC684-16	D	I2C BUS Data read: (Device stopped (logically stopped))
SC684-17	D	I2C BUS Data read: (Requested buffer full)
SC684-18	D	I2C BUS Data read: (No error code)
SC684-19	D	I2C BUS Data read: (Invalid Device ID)
SC684-20	D	I2C BUS Data write: (Channel error (e.g. bus disconnection))
SC684-21	D	I2C BUS Data write: (Device Error (No ID chip))
SC684-22	D	I2C BUS Data write: (Communication aborted (error during communication))
SC684-23	D	I2C BUS Data write: (Communication timeout)
SC684-24	D	I2C BUS Data write: (Device stopped (logically stopped))
SC684-25	D	I2C BUS Data write: (Requested buffer full)
SC684-26	D	I2C BUS Data write: (No error code)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When an error notice is received during communication with the fixed ID chip and recovery is not possible even after trying 3 times.
		Fusing unit set error
		ID chip defective
		Harness broken
		BCU and IOB damaged
		Unintended noise
		Set the fusing unit again.
		Replace the ID chip.
		Fix the harness.
		Replace the BCU and IOB.
		Cycle the machine off/on
		Reconnect the IOB connector.
		Replace the IOB
		Replace the harness between IOB and Fuser Unit
		Set the fuser unit again
		Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-00	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		 PSU overcurrent detected (grounding fault caused by harness or motor) PSU4 defective
		Connecter disconnected
		PFB malfunctioning
		IOB malfunctioning
		Harness broken or grounding fault

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace the part where grounding fault occurred.
		Replace the PSU4.
		Set the connector again.
		Replace the PFB.
		Replace the IOB.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-01	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		Replace the part where grounding fault occurred.
		2. PSU1 defective.
		3. Connecter disconnected
		4. TDCU malfunctioning
		5. PFB malfunctioning
		6. IOB malfunctioning
		7. Harness broken
		Replace the part where grounding fault occurred.
		2. Replace the PSU1.
		3. Set the connector again.
		4. Replace TDCU.
		5. Replace PFB.
		6. Replace IOB.
		7. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-02	D	DC Power Supply Voltage Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When an error is detected for the 5V power supply to the Right Drawer Unit.
		PSU overcurrent detected (grounding fault caused by harness or motor)
		2. PSU2 defective
		3. FU3 / FU5 on PSU2 melted
		4. Connecter disconnected
		5. IOB malfunction
		6. Harness broken
		Replace the part where grounding fault occurred.
		2. Replace the PSU2.
		3. Replace the FU3 /FU5 on PSU2.
		4. Set the connector again.
		5. Replace IOB.
		6. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-03	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		PSU overcurrent detected (grounding fault caused by harness or motor)
		2. PSU3 defective
		3. FU3/FU5 on PSU3 melted
		4. Connector disconnected
		5. PFB malfunction
		6. BCU malfunction
		7. IOB malfunction
		8. Harness broken

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		1. Replace the part where grounding fault occurred.
		2. Replace the PSU3.
		3. Replace the FU3 / FU5 on PSU3.
		4. Set the connector again.
		5. Replace the PFB.
		6. Replace the BCU
		7. Replace IOB.
		8. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-04	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		PSU overcurrent detected (grounding fault caused by harness or motor)
		2. PSU4 defective
		3. FU3/FU5 on PSU4 melted
		4. Connecter disconnected
		5. PFB malfunction
		6. BCU malfunction
		7. IOB malfunction
		8. Harness broken
		1. Replace the part where grounding fault occurred.
		2. Replace the PSU4.
		3. Replace the FU3 / FU5 on PSU4.
		4. Set the connector again.
		5. Replace the PFB.
		6. Replace the BCU
		7. Replace IOB.
		8. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-05	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		IOB load harness grounding fault or part malfunction IOB malfunction
		Replace the part with grounding fault or malfunction Replace IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-06	D	DC Power Supply Voltage Error
		When an error is detected for the 5V power supply to the Right Drawer Unit
		PSU overcurrent detected (grounding fault caused by harness or motor)
		2. PSU5 defective
		3. FU3 on PSU5 melted
		4. Connecter disconnected
		5. IOB malfunction
		6. Harness broken
		Replace the part where grounding fault occurred.
		2. Replace the PSU5
		3. Replace the FU3 on PSU5
		4. Set the connector again.
		5. Replace IOB
		6. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC687-00	D	PER Not Received Error
		Unable to receive the PER command from the controller.
		Communication error
		Cycle the machine off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC688-01	D	Communication error during TSB power activation
SC688-02	D	Communication error during TSB normal status
SC688-03	D	Break detection during TSB normal status
		At the time of an ASAP communication protocol error, When a break signal is detected during power activation. When a non-response (100ms) is detected 3 times consecutively during normal operation. When NAK is detected 3 times before ACK response during normal
		operation. When a break signal is detected during normal operation.
		 TSB error IOB error Harness disconnected between TSB and IOB Connector disconnected between TSB and IOB Unintended noise
		 Replace the TSB. Replace the IOB. Replace the harness between TSB and IOB. Set the connector between TSB and IOB again.

ſ

Service Call 700-740

SC700 (Engine: Peripherals)

ADF

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-01	D	Bottom plate lift motor error (1-pass ADF)
		The bottom plate HP sensor does not detect the home position of the bottom plate after the bottom plate lift motor switches on and lowers the bottom plate. Or, the bottom plate position sensor does not detect the position of the plate after the lift motor switches on and raises the bottom plate.
		Details:
		The ADF notifies the main machine of the error. The first two occurrences are displayed as jams.
		 Bottom plate position sensor output error Bottom plate HP sensor output error Bottom plate lift motor error (does not rotate) ADF Control Board defective
		 Check the connections of the sensor harnesses and motor harnesses. Replace the sensor harnesses and motor harnesses. Replace the Bottom Plate HP Sensor, Bottom Plate Lift Motor. Replace the ADF Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Original pick up error (1-pass ADF)
		ADF Feed Motor is turned on but the Pickup Roller HP Sensor is not detecting it.
SC700-02	D	 Pickup Roller HP Sensor output error ADF Feed Motor error (does not rotate) ADF Control Board defective
		 Check the connections of the sensor harnesses and motor harnesses. Replace the sensor harnesses and motor harnesses. Replace the ADF Feed Motor, Pickup Roller HP Sensor. Replace the ADF Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Entrance Motor error (1-pass ADF)
		Error signal detected while the motor is driven.
		Motor defective
		Connecter disconnected
		Harness broken
SC700-04	D	Overload
		1. Check the harness connection.
		2. Replace the encoder harness.
		3. Replace the Entrance Motor.
		4. Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-05	D	Pickup Roller Motor error (1-pass ADF)
		Error signal detected while the motor is driven.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Motor defective Connecter disconnected Harness broken
		 Overload Check the harness connection. Replace the encoder harness. Replace the Pickup Roller Motor. Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-06	D	Transport Motor error (1-pass ADF)
		Error signal detected while the motor is driven.
		Motor defective
		Connecter disconnected
		Harness broken
		Overload
		1. Check the harness connection.
		2. Replace the encoder harness.
		3. Replace the Transport Motor.
		 Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level D	Error Name/Error Condition/Major Cause/Solution Scan Motor error (1-pass ADF) Error signal detected while the motor is driven. • Motor defective • Connecter disconnected • Harness broken • Overload 1. Check the harness connection.
		2. Replace the encoder harness.
		 Replace the Scan Motor. Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket
		deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level D	Error Name/Error Condition/Major Cause/Solution Exit Motor error (1-pass ADF) Error signal detected while the motor is driven. • Motor defective • Connecter disconnected • Harness broken • Overload 1. Check the harness connection. 2. Replace the encoder harness. 3. Replace the Exit Motor. 4. Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Original pick-up motor driver error (1-pass ADF)
		Motor driver IC error flag was asserted when a jam occurred.
		Motor driver IC detected an error.
SC701-02		Check the motor harness connection.
		Check for torn paper on the paper path or foreign objects in the drive area.
		Replace the motor harness.
		Replace the motor.
		Replace the ADF Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Protection device break error 4 (1-pass ADF)
		The non-interlock power supply system protection device broke the circuit with the 24V power supply on.
SC702-04	D	Motor defect in non-interlock power supply system.Harness broken
		Replace the shorted parts.
		Replace the ADF Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC702-05	D	Protection device break error 5 (1-pass ADF)
		The non-interlock power supply system protection device broke the circuit with the 24V power supply on.
		Motor defect in non-interlock power supply system.Harness broken
		Replace the shorted parts. Replace the ADF Control Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-01	D	Downstream device communication error
		 Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times.
		After the recognition command was sent to the upstream unit, the TX port level did not go HIGH within the prescribed time.
		Interface cable (downstream device side) connector disconnected or broken
		PCB of downstream device defective
		Controller PCB defective
		 Replace the finisher and interface cable (downstream device side). Reconnect the connector.
		Replace the Main Board (finisher or downstream device option).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Protection device break 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
SC720-03	0-03 B	Harness short-circuit
		Replace the motor
		Reconnect the connector.
		Replace the harness.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	0-04 B	Protection device break error 2
		There was an error in the voltage level of the 24V_INT_2 power supply (this SC issues immediately at 1st occurrence).
SC720-04		Motor defective Harness short-circuit
		 Replace the motor/ Reconnect the connector. Replace the harness.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-05	D	PSU Cooling Fan Error
		There was no LOCK detection signal issued from the fan motor (this SC issues immediately at 1st occurrence).
		PSU Cooling Fan Motor defective. Connector disconnected Drive circuit defective
		 Replace the PSU Cooling Fan Motor Reconnect the connector. Replace the harness.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-10	D	Transport Motor Error 1 (Entrance, Straight-through)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Replace the Entrance Motor, reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-11	D	Transport Motor Error 2 (Junction Gate Feed)
		Same as SC720-10
		Same as SC720-10
		Replace the Junction Gate Transport Motor
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-12	D	Transport Motor Error 3 (Downstream From Punch Unit)
		Same as SC720-10
		Same as SC720-10
		Replace the Junction Gate Transport Motor.
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-13	D	Transport Motor Error 4 (registration)
		Same as SC720-10
		Same as SC720-10
		Replace the Registration Motor.
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-15	В	Transport Motor Error 6 (Pre-stack)
		DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Replace the Pre-stack Motor
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-16	В	Exit Motor Error 1 (Proof Tray Exit)
		Same as SC720-15
		Same as SC720-15
		Replace the Proof Tray Exit Motor
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-17	В	Exit Motor Error 2 (Shift Exit)
		Same as SC720-15
		Same as SC720-15
		Replace the Shift Exit Motor.
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-18	В	Exit Motor Error 3 (Staple Exit)
		Same as SC720-15
		Same as SC720-15
		Replace the Staple Exit Motor
		Reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-20	В	Junction Gate Motor Error 1 (Proof Tray)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC) When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC) 	
		 Motor defective Connecter disconnected Overload Home position sensor defective
		Replace the Junction Gate Motor (proof/shift tray), reconnect the connectors.
		Replace the JG HP Sensor (proof/shift), reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the junction gate mechanism (proof).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-21	В	Junction Gate Motor Error 2 (Staple JG)
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		 Motor defective Connecter disconnected Overload Home position sensor defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace the Junction Gate Motor (shift/staple), reconnect the connectors.
		Replace the JG HP Sensor (shift/staple), reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		 Resolve the mechanical failure for the junction gate mechanism (staple).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-23	В	Pre-stack Release Motor Error (Pressure/JG release)
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Pre-stack Release Motor, reconnect the connectors.
		Replace the Pre-stack Release Sensor, reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the Pre-stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-24	В	Exit Guide Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Same as SC720-23
		• Same as SC720-23
		Replace the Exit Guide Motor, reconnect the connectors.
		Replace the Exit Guide HP Sensor, reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the exit guide mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-25	D	Punch Motor Error
		After the punch motor started to operate, the punch was not detected at its home position within specified number of pulses. (The first time: jam display, the second time: SC)
		 After the punch motor started to operate, the punch did not leave its home position within specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Punch Motor, reconnect the connectors.
		Replace the Punch Unit HP Sensor, reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the punch mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Punch Junction Gate Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
SC720-26		Motor defective
		Connecter disconnected
		Overload
		Replace the Punch Junction Gate Motor.
		Reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the punch mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-27	D	Punch Movement Motor Error
		After the Punch Movement Motor started to operate, the punch did not return to its home position within specified number of pulses. (The first time: jam display, the second time: SC)
		When the Punch Movement Motor started to operate, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defectiveConnecter disconnectedOverload

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace the Punch Movement Motor.
		Reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the punch mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Punch Horizontal Registration Detection Error (Motor /CIS)
		Punch Horizontal Registration CIS Error
		Motor defective
	В	Connecter disconnected
SC720-28		Overload
		Replace the Punch Horizontal Registration Sensor.
		Reconnect the connectors.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the punch mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-31	В	Jogger Motor (Front) Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC) When the position for the home position, home position was not detected within specified number of pulses.
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Jogger Motor (Front), reconnect the connector.
		 Replace the Jogger Fence HP Sensor (Front), reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-32	В	Jogger Motor (Rear) Error
		Same as SC720-31
		Same as SC720-31
		Replace the Jogger Motor (Rear), reconnect the connector.
		Replace the Jogger Fence HP sensor (Rear), reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-33	В	Positioning Roller Lift Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Same as SC720-31
		Same as SC720-31
		Replace the Positioning Roller Lift Motor, reconnect the connector.
		Replace the Positioning Roller HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Positioning Roller Rotation Motor Error
		A discharge or short circuit was detected on the motor drive board (this SC issues immediately at first error).
SC720-34		Motor defective Connector loose, broken, defective
		Replace the Positioning Roller Rotation Motor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the Stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-35	В	Trailing Edge Press Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 The stack plate drive unit in the staple unit did not return to the home position within specified number of pulses. (The first time: jam display, the second time: SC)
		 When the stack plate drive unit in the staple unit moved from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		DC motor drive software detected an error.
		During the initial operation, after performing retry, the first time is jam supply and the second time is SC.
		At all times other than during initial operation, the first time is SC.
		Motor defective
		Connecter disconnected
		 Overload
		Encoder defective
		Home position sensor defective
		Replace Trailing Edge Press Motor, reconnect the connector.
		 Replace Trailing Edge Press Plate HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the Stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-39	В	Leading Edge Stopper Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		DC motor drive software detected an error.
		During the initial operation, after performing retry, the first time is jam supply and the second time is SC.
		At all times other than during initial operation, the first time is SC.
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Home position sensor defective
		Replace the Leading Edge Stopper Motor, reconnect the connector.
		Replace the Leading Edge Stopper HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the Stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-40	В	Base Fence Lift Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		DC motor drive software detected an error. (This SC issues immediately at 1st occurrence).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Home position sensor defective
		Replace the Base Fence Lift Motor, reconnect the connector.
		Replace the Base Fence up-down HP Sensor, reconnect the connector.
		Replace the harnesses.
		,
		Replace the Main Board.
		Resolve the mechanical failure for the Stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-41	В	Feed-out Belt Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		DC motor drive software detected an error.
		During the initial operation, after performing retry, the first time is jam supply and the second time is SC.
		At all times other than during initial operation, the first time is SC.
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Home position sensor defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace the Feed-out Belt Motor, reconnect the connector.
		Replace the Top Fence HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the Stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-42	В	Corner Stapler Movement Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		DC motor drive software detected an error. (This SC issues immediately at 1st occurrence).
		Motor defective
		Connecter disconnected
		Overload
		Encoder defective
		Home position sensor defective
		Replace the Corner Stapler Movement Motor, reconnect the connector.
		Replace the Corner stapler HP sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.
		Resolve the mechanical failure for the stapler unit mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-43	В	Corner Stapler Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		 Motor defective Connecter disconnected Overload
		Home position sensor defective
		Replace the Corner Stapler Motor, reconnect the connector.
		 Replace the Stapler Rotation HP Sensors (front, rear), reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.
		Resolve the mechanical failure for the stapler unit mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Booklet Stapler Motor Error
		 The corner stapler did not operate within specified time When moving to the home position, home position was not detected within specified time. (The first time: jam display, the second time: SC)
SC720-44	В	Staple jam Overload (too many sheets for stapling)
		 Remove the pieces of staples. Replace the cartridge. Replace the Booklet Stapler Motor
		Replace the harness. Replace the Main Board.
		Resolve the mechanical failure for the stapler unit mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-50	В	Booklet Stapler Side Fence Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Booklet Stapler Side Fence Motor, reconnect the connector.
		 Replace the Booklet Stapler Side Fence HP Sensors (front, rear), reconnect the connectors.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-51	В	Booklet Bottom Fence Motor Error
		Same as SC720-50
		Same as SC720-50
		Replace the Booklet Bottom Fence Motor, reconnect the connector.
		Replace the Booklet Stapler Bottom Fence HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-52	В	Fold Plate Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Same as SC720-50
		Same as SC720-50
		Replace the Fold Plate Motor Error, reconnect the connector.
		Replace the Fold Plate HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-53	В	Booklet Stapler Bottom Fence Motor Error
		Same as SC720-50
		Same as SC720-50
		Replace the Booklet Stapler Bottom Fence Motor, reconnect the connector.
		Replace the Booklet Stapler Bottom Fence HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-54	В	Stack Transport Unit Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Same as SC720-50
		Same as SC720-50
		Replace the Stack Transport Unit Motor, reconnect the connector.
		Replace the Stack Transport Unit HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.
		Resolve the mechanical failure for the staple tray mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-55	В	Booklet Stapler Clamp Roller Motor Error
		Same as SC720-50
		Same as SC720-50
		Replace the Booklet Stapler Clamp Roller Motor, reconnect the connector.
		Replace the Booklet Stapler Clamp Roller HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-56	В	Turn Guide Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Same as SC720-50
		Same as SC720-50
		Replace the Turn Guide Motor Error, reconnect the connector.
		Replace the Stack JG HP sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.
		Resolve the mechanical failure for the staple tray mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Booklet Stapler Motor Error
		The booklet stapler did not operate within specified time. (The first time: jam display, the second time: SC)
		When moving to the home position, home position was not detected within specified time. (The first time: jam display, the second time: SC)
		Staple jam
		Overload (too many sheets for stapling)
SC720-60	В	Motor defective
		Connecter disconnected
		Home position sensor defective
		Remove the pieces of staples.
		Replace the cartridge.
		Replace the Booklet Stapler Motor, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler unit mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Shift Tray Lift Motor Error
		When descending, Paper Height Sensors are still detecting paper after specified time. (The first time: jam display, the second time: SC)
		 When ascending, Paper Height Sensors did not detect top side of paper within specified time. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
SC720-70	В	 Overload
		Home position sensor defective
		Replace the Shift Tray Lift Motor, reconnect the connector.
		 Replace the Paper Height Sensors (TE, shift), reconnect the connector.
		Replace the Shift Tray Limit Switch, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the shift tray mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Shift Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
SC720-71	В	Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Shift Motor, reconnect the connector.
		Replace the Shift Tray HP Sensors (Front, Rear), reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the shift tray mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Shift Jogger Motor Error
		When the jogger fence moved to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When the jogger fence moved to the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
SC720-72		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Shift Jogger Motor, reconnect the connector.
		Replace the Shift Tray Jogger HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the shift jogger mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Shift Jogger Fence Retract Motor Error
		When the output jogger retraction unit moved to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When the output jogger retraction unit moved from home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
SC720-74	В	 Motor defective Connecter disconnected Overload Home position sensor defective
		Replace the Shift Jogger Fence Retract Motor, reconnect the connector.
		Replace the Shift Jogger Retract HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the shift jogger mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-75	В	Drag Roller Movement Motor Error
		 When drag roller unit moved to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When the drag roller unit moved from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		 Motor defective Connecter disconnected Overload Home position sensor defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Replace the Drag Roller Movement Motor, reconnect the connector. Replace the Drag Roller HP Sensor, reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.Resolve the mechanical failure for the shift jogger mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-76	В	Drag Roller 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 specified number of pulses. (The first time: jam display, the second time: SC)
		 At ccw rotation (press operation), the component had not moved from the home position within the specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Replace the Drag Roller Motor, reconnect the connector.
		Replace the Drag Roller HP Sensor, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the shift jogger mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-77	В	Exit Fan Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		No lock signal is received for 10 times consecutively.
		Motor defective
		Connecter disconnected
		Drive circuit defective
		Replace the Exit Fan Motor (Front, Rear), reconnect the connector.
		Replace the harnesses.
		Replace the Main Board.
		Resolve the mechanical failure for the shift jogger mechanism.

SC720-80 Br-C1 RTB 113

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-80	В	Interlock Power Error
		There was an error in the voltage level of the 24V_INT power supply (this SC issues immediately at 1st occurrence).
		Main Board power circuit defective
		Replace the main board.
		Replace the harnesses.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-81	D	Protection Device Break Error 3
		There was an error in the voltage level of the 24V_POW power supply (this SC issues immediately at 1st occurrence).
		Motor defective Harness short-circuit
		Replace the motor/ Reconnect the connector.
		Replace the harness.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Base Fence Movement Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		 DC motor drive software detected an error (this SC issues immediately at 1st occurrence).
		Motor defective
SC720-82		Connector disconnected
		Overload
		Encoder defective
		Home position sensor defective
		Replace the Base Fence Movement Motor, reconnect the connector.
		 Replace the Base Fence Front-back HP Sensor, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the stapler mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Stack Transport Motor Error
		DC motor drive software detected an error. (This SC issues immediately at 1st occurrence).
		Motor defective
		Connector disconnected
SC720-83		Overload
3C/20-03		Encoder defective
		Replace the Stack Transport Motor, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.
		Resolve the mechanical failure for the staple tray mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-84	В	Fold Roller Motor Error
		A discharge or short circuit was detected on the motor drive board (this SC issues immediately at first error).
		Motor defectiveConnector disconnectedOverload
		 Replace the Fold Roller Motor, reconnect the connector. Replace the harness. Replace the Main Board. Resolve the mechanical failure for the booklet stack mechanism.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-85	В	Booklet Stack Tray Motor Error
		DC motor drive software detected an error. (This SC issues immediately at 1st occurrence).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connector disconnected
		Overload
		Encoder defective
		Replace the Booklet Stack Tray Motor, reconnect the connector.
		Replace the harness.
		Replace the Main Board.
		Resolve the mechanical failure for the booklet stack mechanism.
		Resolve the mechanical failure for the booklet stack tray mechanism.

Multi-Folding Unit

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Downstream device communication error
		 Downstream device break continued even after 10 sec passes. Partner terminal does not break even 200 msec after the downstream device starts to wait.
		ATN without break is received in advance from the downstream device.
SC725-01		ST2 is received from the downstream device during receipt of ST1 frame, or vice versa.
		 When the response (ACKn) to the frame sent to the downstream device is not notified within the time limit (100 msec), frame sending is retried a maximum of 3 times but there is still no responses acquired.
		After connection with the downstream device, the downstream device breaks again.
		Interface cable (downstream device side) connector disconnected or broken
		PCB of downstream device defective
		Controller PCB defective Papelage the interface cable
		 Replace the interface cable. Replace the PCB of downstream device.
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-03	D	Multi-Folding Unit: Protection device break error 1
		A fuse has blown on the 24V1 line.
		24V2 line fuse blown
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-04	D	Multi-Folding Unit: Protection device break error 2
		A fuse has blown on the 24V2 line.
		24V2 line fuse blown
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-12	В	Registration Roller Transport Motor Error
		Motor driver detected an error. (SC from the first time)
		Overcurrent to the motor.
		Motor drive overheat
		Replace the Main Board.
		Replace the Registration Roller Transport Motor.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-13	В	Dynamic Roller Transport Motor Error
		Motor driver detected an error. (SC from the first time) Overcurrent to the motor.
		Motor drive overheat
		Replace the Main Board.
		Replace the Dynamic Roller Transport Motor
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Top Tray Exit Motor Error
SC725-14		Motor driver detected an error. (SC from the first time)
		Overcurrent to the motor.
		Motor drive overheat
		Replace the Main Board.
		Replace the Top Tray Exit Motor.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Stopper 1 Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-30		Overcurrent to the motor.
		Motor drive overheat
		Connector disconnected
		Replace the Main Board.
		Replace the Stopper 1 Motor.
		Replace the harness.
		Reconnect the connector.
		Replace the Stopper 1 HP Sensor

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Stopper 2 Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		 Motor driver detected an error. (SC from the first time)
SC725-31		 Overcurrent to the motor. Motor drive overheat Connector disconnected
		Replace the Main Board.
		Replace the Stopper 2 Motor.
		Replace the harness
		Reconnect the connector. But the connector of the c
		Replace the Stopper 2 HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Stopper 3 Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-32	В	Overcurrent to the motor.
		Motor drive overheat
		Connector disconnected
		Replace the Main Board.
		Replace the Stopper 3 Motor.
		Replace the harness.
		Reconnect the connector.
		Replace the Stopper 3 HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Jogger Fence Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-33 B		 Overcurrent to the motor. Motor drive overheat Connector disconnected
		Replace the Main Board.
		Replace the Jogger Fence Motor.
		Replace the harness.
		Reconnect the connector
		Replace the Jogger Fence HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Dynamic Roller Lift Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-34		Overcurrent to the motor.
		Motor drive overheat
		Connector disconnected
		Replace the Main Board.
		Replace the Dynamic Roller Lift Motor
		Replace the harness.
		Reconnect the connector.
		Replace the Dynamic Roller HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Registration Roller Release Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-35	В	Overcurrent to the motor.Motor drive overheatConnector disconnected
		Replace the Main Board. Replace the Registration Roller Release Motor.
		Replace the harness.
		Reconnect the connector.
		Replace the Jogger Fence HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Direct-Send JG Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-36	В	Overcurrent to the motor.
		Motor drive overheat
		Connector disconnected
		Replace the Main Board.
		Replace the Direct-Send JG Motor.
		Replace the harness.
		Reconnect the connector.
		Replace the Direct Send JG HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		FM6 Pawl Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
	7 B	Motor driver detected an error. (SC from the first time)
SC725-37		 Overcurrent to the motor. Motor drive overheat Connector disconnected
		Replace the Main Board.
		Replace the FM6 Pawl Motor.
		Replace the harness
		Reconnect the connector.
		Replace the Bypass Exit Paper Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Fold Plate Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
SC725-38		Overcurrent to the motor.
		Motor drive overheat
		Connector disconnected
		Replace the Main Board.
		Replace the Fold Plate Motor.
		Replace the harness.
		Re-connect the connector.
		Replace the Fold Plate HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	1 st Fold Motor Error
		Motor driver detected an error. (SC from the first time)
		Overcurrent to the motor.
SC725-39		Motor drive overheat
		Replace the Main Board.
		Replace the 1st Fold Motor.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		2nd Fold Motor Error
		Motor driver detected an error. (SC from the first time)
	Overcurrent to the motor. Motor drive overheat Replace the Main Board. Replace the 2nd Fold Motor Replace the harness.	Overcurrent to the motor.
SC725-40		Motor drive overheat
		Replace the Main Board.
		Replace the 2nd Fold Motor
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Crease Motor Error
		Motor driver detected an error. (SC from the first time)
		Overcurrent to the motor.
SC725-41	В	Motor drive overheat
		Replace the Main Board.
		Replace the Crease Motor.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Horizontal Transport Motor Error
		Motor driver detected an error. (SC from the first time)
	D	Overcurrent to the motor.
SC725-71		Motor drive overheat
		Replace the Main Board.
		Replace the Horizontal Transport Motor
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Horizontal Exit Motor Error
		Motor driver detected an error. (SC from the first time)
	2 D	Overcurrent to the motor.
SC725-72		Motor drive overheat
		Replace the Main Board.
		Replace the Horizontal Exit Motor.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Top Tray Transport Motor Error
		Motor driver detected an error. (SC from the first time)
	D	Overcurrent to the motor.
SC725-73		Motor drive overheat
		Replace the Main Board.
		Replace the Top Tray Transport Motor
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Entrance JG Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
	D	Motor driver detected an error. (SC from the first time)
SC725-74		 Overcurrent to the motor. Motor drive overheat Connector disconnected
		Replace the Main Board.
		Replace the Entrance JG Motor
		Replace the harness.
		Re-connect the connector.
		Replace the Entrance JG HP Sensor.

High Capacity Stacker

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-01	D	Stacker 1 (Upstream): Downstream device communication
SC731-01	D	Stacker 2 (Downstream): Downstream device communication

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Downstream device break continued even after 10 sec passes. Partner terminal does not break even 200 msec after the downstream device starts to wait. ATN without break is received in advance from the downstream device. ST2 is received from the downstream device during receipt of ST1
		frame, or vice versa. • When the response (ACKn) to the frame sent to the downstream device is not notified within the time limit (100 msec), frame sending is retried a maximum of 3 times but there is still no responses acquired. • After connection with the downstream device, the downstream device breaks again.
		 Interface cable (downstream device side) connector disconnected or broken. Downstream device board defective, control board defective
		 Replace the control board. Replace the downstream device board. Replace the interface cable.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-10	D	Stacker 1 (Upstream): Entrance Motor Error
SC731-10	D	Stacker 2 (Downstream): Entrance Motor Error
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Entrance Motor connection.
		Replace the Entrance Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-11	D	Stacker 1 (Upstream): Proof Tray Exit Motor Error
SC731-11	D	Stacker 2 (Downstream): Proof Tray Exit Motor Error
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Proof Tray Exit Motor connection.
		Replace the Proof Tray Exit Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-12	D	Stacker 1 (Upstream): Transport Motor Error
SC731-12	D	Stacker 2 (Downstream): Transport Motor Error
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Transport Motor connection.
		Replace the Transport Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-13	В	Stacker 1 (Upstream): Shift Exit Motor Error
SC731-13	В	Stacker 2 (Downstream): Shift Exit Motor Error
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Shift Exit Motor connection.
		Replace the Shift Exit Motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-20	D	Stacker 1 (Upstream): Proof Tray JG Motor Error
SC731-20	D	Stacker 2 (Downstream): Proof Tray JG Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Proof Tray JG Motor/Proof Tray JG HP Sensor connection.
		Replace the Proof Tray JG Motor/Proof Tray JG HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-21	D	Stacker 1 (Upstream): Shift Tray JG Motor Error
SC731-21	D	Stacker 2 (Downstream): Shift Tray JG Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Shift Tray JG Motor/Shift Tray JG HP Sensor connection.
		Replace the Shift Tray JG Motor/Shift Tray JG HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-30	В	Stacker 1 (Upstream): Shift Motor Error
SC731-30	В	Stacker 2 (Downstream): Shift Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Shift Motor/Shift HP Sensor connection.
		Replace the Shift Motor/Shift HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-31	В	Stacker 1 (Upstream): Main Jogger Front Fence Motor Error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC731-31	В	Stacker 2 (Downstream): Main Jogger Front Fence Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Main Jogger Front Fence Motor/Front Fence HP Sensor connection.
		Replace the Main Jogger Front Fence Motor/Front Fence HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-32	В	Stacker 1 (Upstream): Main Jogger Rear Fence Motor Error
SC731-32	В	Stacker 2 (Downstream): Main Jogger Rear Fence Motor Error
		 When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Main Jogger Rear Fence Motor/Rear Fence HP Sensor connection.
		Replace the Main Jogger Rear Fence Motor/Rear Fence HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-33	В	Stacker 1 (Upstream): Main Jogger Fence Retraction Motor Error
SC731-33	В	Stacker 2 (Downstream): Main Jogger Fence Retraction Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		Check the Main Jogger Fence Retraction Motor/Jogger Fence Retraction HP Sensor connection.
		Replace the Main Jogger Fence Retraction Motor/Jogger Fence Retraction HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-34	В	Stacker 1 (Upstream): Sub Jogger Motor Error
SC731-34	В	Stacker 2 (Downstream): Sub Jogger Motor Error
		When moving to the home position, home position was not detected within specified number of pulses. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified number of pulses. (The first time: jam display, the second time: SC)
		Motor driver detected an error. (SC from the first time)
		Motor defective
		Connecter disconnected
		Overload
		Home position sensor defective
		Motor driver overcurrent
		Motor driver overheat detected
		 Check the Sub Jogger Motor/Sub Jogger HP Sensor connection. Replace the Sub Jogger Motor/Sub Jogger HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-35	В	Stacker 1 (Upstream): LE Stopper Motor Error
SC731-35	В	Stacker 2 (Downstream): LE Stopper Motor Error
		When lowering, the paper height sensor continues to detect paper even after the time limit passes.(The first time: jam display, the second time: SC)
		When rising, the paper height sensor does not detect the upper surface of paper even after the time limit passes.(The first time: jam display, the second time: SC)
		The tray high limit SW, tray low limit SW and door safety SW is detected. (This SC issues immediately at 1st occurrence).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Motor defective
		Connecter disconnected
		Overload
		Paper Height Sensor defective
		Check the LE Stopper Motor/LE Stopper HP Sensor connection.
		 Replace the LE Stopper Motor/LE Stopper HP Sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC730-40	В	Stacker 1 (Upstream): Tray Lift Motor Error
SC731-40	В	Stacker 2 (Downstream): Tray Lift Motor Error
		When lowering, the paper height sensor continues to detect paper even after the time limit passes. (The first time: jam display, the second time: SC)
		When rising, the paper height sensor does not detect the upper surface of paper even after the time limit passes. (The first time: jam display, the second time: SC)
		The tray high limit SW, tray low limit SW and door safety SW is detected. (This SC issues immediately at 1st occurrence)
		Motor defective
		Connecter disconnected
		Overload
		Paper Height Sensor defective
		 Check the Tray Lift Motor/Paper Height Sensor connection. Replace the Tray Lift Motor/Paper Height Sensor.

1

Trimmer Unit

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Trimming Blade Motor Error
		After start of trimming operation, the home position is not detected within the time limit. (The first time: SC)
		 Also, when a JAM signal is sent due to overload during the trimming operation, the home position is not detected within the time limit after reverse rotation operation starts. (Regardless of whether or not recovery is successful, the first time: SC)
		Trimming Blade Motor defective
SC735-10		Connecter disconnected
		Overload
		Trimming Blade HP Sensor defective
		Main Board defective
		Reconnect the connector.
		Replace the connector.
		Replace the Trimming Blade HP Sensor.
		Replace the Trimming Blade Motor.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Press Roller Motor Error
		 When moving to the home position, home position was not detected within specified time. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified time. (The first time: jam display, the second time: SC)
		Press Roller Motor defective
SC735-11		Connecter disconnected
		Press Roller HP Sensor defective
		Main Board defective
		Reconnect the connector.
		Replace the connector.
		Replace the Press Roller HP Sensor.
		Replace the Press Roller Motor.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Cut Position Motor Error
		When moving to the home position, home position was not detected within specified time. (The first time: jam display, the second time: SC)
		When moving from the home position, home position was still detected after specified time. (The first time: jam display, the second time: SC)
		Cut Position Motor defective
SC735-12		Connecter disconnected
		Stopper Assembly HP Sensor defective
		Main Board defective
		Reconnect the connector.
		Replace the connector.
		Replace the Stopper Assembly HP Sensor
		Replace the Cut Position Motor.
		Replace the Main Board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Press Stopper Motor Error
		When moving to the home position, home position was not detected within specified time. (The first time: jam display, the second time: SC)
		 When moving from the home position, home position was still detected after specified time. (The first time: jam display, the second time: SC)
		Press Stopper Motor defective
SC735-13		Connecter disconnected
		Press Stopper HP Sensor defective
		Main Board defective
		Reconnect the connector.
		Replace the connector.
		Replace the Press Stopper HP Sensor
		Replace the Press Stopper Motor.
		Replace the Main Board.

1

Cover Interposer Tray

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Downstream device communication error
		Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times.
		The port level of the downstream device does not become H level (break cancel) within specified time.
SC740-01		 Interface cable (between inserter and downstream device) connector disconnected or broken PCB (of inserter or downstream device) defective
		 Reconnect or replace the interface cable (between inserter and downstream device) connector disconnected or broken Replace the PCB (inserter or downstream device).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	1 st Lift Motor Error
		 The lift motor rotates in the ascending direction but the upper limit sensor does not detect within specified time (tOsec). (The first time: jam display, the second time: SC)
		 The lift motor rotates in the descending direction but the lower limit sensor does not detect within specified time (tOsec). (The first time: jam display, the second time: SC)
		Lift motor defective/Connecter disconnected
		Upper limit sensor defective/Connecter disconnected
SC740-10		Lower limit sensor defective/Connecter disconnected
		Harness broken
		PCB defective
		Mechanical defect of the tray lift mechanism
		Replace or reconnect the lift motor.
		Replace or reconnect the upper limit sensor.
		Replace or reconnect the lower limit sensor.
		Replace the harness.
		Replace the PCB.
		Repair the tray lift mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		1 st Pick-Up Motor Error
		 Home position is not detected within a specified number of pulses after the pick-up motor is driven. (The first time: jam display, the second time: SC)
		 Home position is still detected after the pick-up motor has been driven for a specified number of pulses. (The first time: jam display, the second time: SC)
		Motor defective
SC740-11	В	Connecter disconnected
		Overload
		Home position sensor defective
		Replace or reconnect the pick-up motor.
		Replace or reconnect the home position sensor.
		Replace the harness.
		Replace the PCB.
		Repair the pick-up mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		2nd Lift Motor Error
		 The lift motor rotates in the ascending direction but the upper limit sensor does not detect within specified time (tOsec). (The first time: jam display, the second time: SC) The lift motor rotates in the descending direction but the lower limit sensor does not detect within specified time (tOsec). (The first time:
		jam display, the second time: SC)
		Motor defective
	В	Connecter disconnected
SC740-20		Overload
		Upper limit sensor defective
		Lower limit sensor defective
		Replace or reconnect the lift motor.
		Replace or reconnect the upper limit sensor.
		Replace or reconnect the lower limit sensor.
		Replace the harness.
		Replace the PCB.
		Repair the tray lift mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Ond Pick-Up Motor Error Home position is not detected within a specified number of pulses after the pick-up motor is driven. (The first time: jam display, the
SC740-21		second time: SC) Home position is still detected after the pick-up motor has been driven for a specified number of pulses. (The first time: jam display, the second time: SC)
	В	 Motor defective Connecter disconnected Overload Home position sensor defective
		 Replace or reconnect the pick-up motor. Replace or reconnect the home position sensor. Replace the harness. Replace the PCB. Repair the pick-up mechanism

Service Call 750-790

SC700 (Engine: Peripherals)

Perfect Binder

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Communication error with downstream peripheral
		Break continued for 10 seconds or longer.
		Anther STN was received during frame receipt.
SC750-01		No response even after resending 3 times.
		Relay board defective, connector loose, broke, defective
		Reconnect the connector.
		Replace the relay board.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
		Master control board defective.
SC750-10	D	Slave Control Board defective
30/30-10		Connector loose, broken, defective
		Reconnect the connector.
		Replace the master control board.
		Replace the slave control board.
		Replace the harness.

1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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.
		 Master control board defective. Slave Control Board defective Connector loose, broken, defective
		 Reconnect the connector. Replace the master control board. Replace the slave control board. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Master-to-relay board communication error
		IPU not "READY"
		IPU occupancy not obtained
		IPU detected an error
SC750-12	D	Master control board defective.
36730-12		Connector loose, broken, defective
		Reconnect the connector.
		Replace the relay board.
		Replace the master control board.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Slave-to-cutter control board communication error 1
SC750-13		Slave control board could not communicate with the cutter control board (it detected the communication alarm for over 5 sec.).
		 Slave Control Board defective Cutter control board defective Connector loose, broken, defective
		 Reconnect the connector. Replace the slave control board. Replace the cutter control board. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 Control Board defective Cutter control board defective Connector loose, broken, defective
		 Reconnect the connector. Replace the slave control board. Replace the cutter control board.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Master EEPROM Read Error
		Data written to the EEPROM does not match data read from the EEPROM
SC750-15	D	EEPROM defective
		Replace the master control board EEPROM
		Replace the master control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Install the master control board EEPROM
		 Replace the master control board EEPROM Replace the master control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective Connector loose, broken, defective
		Reconnect the connector.
		Replace the master control board.
		Replace the inserter board.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.)
SC750-18	D	Communication error at inserterConnector loose, broken, defective
		Reconnect the connector.
		Replace the master control board.
		Replace the inserter board.
		Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Download the software.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 control board defective.
		Reconnect the connector.
		Replace the front door L/R SW.
		Replace the master control board.
		Replace the sensor harness

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: 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
SC750-21	D	Top cover sensor defective
		Master board defective
		Reconnect the connector.
		Replace the front door L/RSW.
		Replace the top cover switch
		Replace the top cover sensor.
		Replace the master control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: 24V Check Signal Error 3
		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
SC750-22	D	Master board defective
		Reconnect the connector.
		Replace the front door L/RSW.
		Replace the Top cover switch
		Replace the topcover sensor.
		Replace the slave board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: 24V Check Signal Error 4
		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).
SC750-23	D	Front door L/RSW defective Slave Control Board defective
		Reconnect the connector.
		Replace the front door L/RSW
		Replace the slave board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-24	D	 Right power supply fan overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the right power supply fan
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Power supply fan (center) lock error
		See SC750-24
SC750-25		 Center power supply fan overloaded, defective Slave Control Board defective
		Reconnect the connector. Replace the center power supply fan
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Left power supply fan lock error detected
		See SC750-24
SC750-26		 Left power supply fan overloaded, defective Master control board defective
		Reconnect the connector.
		Replace the left power supply fan
		Replace the master control board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 Control Board defective
		Reconnect the connector.
		Replace the front spine plate fan.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC750-28	D	Perfect Binder: Spine plate lower fan (right) lock error
		See SC750-27
		 Right lower spine plate fan overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the right lower spin plate fan.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC750-29	D	Perfect Binder: Spine plate upper fan (front) lock error See SC750-27
		Front upper spine plate fan overloaded, defective Slave Control Board defective
		 Reconnect the connector. Replace the front upper spine plate fan. Replace the slave board. Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC750-30	D	Perfect Binder: Spine plate upper fan (right) lock error
		See SC750-27
		 Upper right spine plate fan overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the upper right spine plate fan.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-31	D	 Front signature fan 2 overloaded, defective Slave Control Board defective
		 Reconnect the connector. Replace the front signature fan 2. Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Signature fan 2 (rear) lock error
		See SC750-31
SC750-32		 Rear signature fan 2 overloaded, defective Slave Control Board defective
		Reconnect the connector. Replace the rear signature fan 2.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Signature fan 1 (front) lock error
		See SC750-31
SC750-33		Front signature fan 1 overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the front signature fan 1.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Signature fan 1 (rear) lock error
		See SC750-31
SC750-34		Rear signature fan 1 overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the rear signature fan 1.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-35	D	Glue supply fan (high) overloaded, defectiveSlave Control Board defective
		Reconnect the connector.
		Replace the glue supply fan (high).
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-36	D	Glue supply fan L overloaded, defective Slave Control Board defective
		Reconnect the connector.
		Replace the glue supply fan L.
		Replace the slave board.
		Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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 defective, grip HP sensor defective, overload, sensor flag defective, connector broken defective
SC750-37		Reconnect the connector.
		Replace the grip motor.
		Replace the grip HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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 defective, Grip end sensor defective , overload, Sensor flag defective, connector broken defective
SC750-38		Reconnect the connector.
		Replace the grip motor.
		Replace the grip HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Grip end sensor defective, overload Sensor flag defective, connector broken defective
		Reconnect the connector.
		Replace the grip motor.
		Replace the grip end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-40		Grip motor defective, Grip end sensor defective, overload, Sensor flag defective, connector broken defective
		Reconnect the connector.
		Replace the grip motor.
		Replace the grip end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Left trimmings buffer HP sensor defective, overload, connector broken defective, Buffer full of trimmings
SC750-41	D	Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the left trimming buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Trimming buffer HP sensor late error
		The left trimmings buffer HP sensor did not go OFF within 5 sec. after the trimmings buffer moved toward the sensor.
		Trimmings buffer motor defective, Left trimmings buffer HP sensor defective, overload, connector broken defective, Buffer full of trimmings
SC750-42		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the left trimming buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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, Right trimmings buffer HP sensor defective, overload, connector broken defective, Buffer full of trimmings
SC750-43		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the right trimming buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Right trimming buffer HP sensor late error
		The right trimmings buffer HP sensor did not go OFF within 5 sec. after the trimmings buffer moved toward the sensor.
		Trimmings buffer motor defective, Right trimmings buffer HP sensor defective, overload, connector broken defective, Buffer full of trimmings
SC750-44		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the right trimming buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Trimmings buffer motor rotation error
		No encoder lock input received within 50 ms during operation.
		Trimmings buffer motor defective
		Trimming buffer encoder sensor defective, overload, connector broken defective, buffer full of trimmings
SC750-45		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the trimming buffer encoder sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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, Thrust plate sensor defective, overload, connector broken defective, buffer full of trimmings
SC750-46		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the thrust plate sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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, Thrust plate sensor defective, overload, connector broken defective, buffer full of trimmings.
SC750-47		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the thrust plate sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-48	D	Book buffer tray motor defective, Book collection buffer tray HP sensor defective, overload, connector broken defective, blocked by
		paper scraps
		Reconnect the connector.
		Replace the book buffer tray motor. Part of the book buffer tray motor.
		Replace the book collection buffer tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective, Book collection buffer tray HP sensor defective, overload, connector broken defective, blocked by
		paper scraps
SC750-49	D	Reconnect the connector.
		Replace the book buffer tray motor.
		Replace the book collection buffer tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Press HP sensor defective, overload, connector broken defective
		Reconnect the connector. Replace the edge press plate motor.
		Replace the press HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Press HP sensor defective, overload, disconnected Edge press plate motor defective, Press end sensor defective, overload
		 Reconnect the connector. Replace the edge press plate motor. Replace the press HP sensor. Replace the cutter control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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 defective, Press end sensor defective, overload, disconnected
SC750-52		 Reconnect the connector. Replace the edge press plate motor.
		Replace the press end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Press end sensor defective, overload, disconnected, no data about book thickness received
		Reconnect the connector.
		Replace the edge press plate motor.
		Replace the press end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Press limit sensor error
		Press limit sensor signaled ON.
		Press limit sensor signaled ON.
SC750-54	D	Reconnect the connector.
		Replace the press limit sensor.
		Replace the press HP sensor.
		Replace the cutter control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, slide HP sensor defective, overload, disconnected, book jam
		Reconnect the connector. Replace the slide motor.
		Replace the slide HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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 defective, slide HP sensor defective, overload, disconnected, book jam
SC750-56		Reconnect the connector.
		Replace the slide motor.
		Replace the slide HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
	5	Book rotation motor 1 (right) defective, Book rotation HP sensor (right) defective, overload, disconnected, book jam
SC750-57	D	Reconnect the connector.
		Replace the book rotation motor 1 (right)
		Replace the book rotation HP sensor (right)
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-58	D	Book rotation motor 1 (right) defective, Book rotation HP sensor (right) defective, overload, disconnected, book jam
		Reconnect the connector.
		Replace the book rotation motor 1 (right)
		Replace the book rotation HP sensor (right)
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-59		Book rotation motor 2 (left)defective, Book rotation HP sensor 2(left) defective, overload, disconnected, book jam
3C/30-39		Reconnect the connector.
		Replace the book rotation motor 2 (left).
		Replace the book rotation HP sensor 2(left).
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 360 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.
SC750-60	D	Book rotation motor 2 (left)defective, book rotation HP 2 (left) sensor defective, overload, disconnected, book jam
		Reconnect the connector.
		Replace the book rotation HP 2 (left) sensor.
		Replace the book rotation HP sensor 2 (left).
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Cutter front HP sensor lag error
SC750-61 D		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 defective, Blade sensors 1, 2 defective, disconnected, overload
		Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensors 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective, Blade sensors 1, 2 defective, disconnected, overload
SC750-62	D	Reconnect the connector.Replace the cutter motor.
		Replace the blade sensors 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Cutter rear HP sensor lag error
SC750-63		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 defective, Blade sensors 1, 2 defective, disconnected, overload
		Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensors 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-64		Cutter motor defective, Blade sensors 1, 2 defective, disconnect, overload
		Reconnect the connector.Replace the cutter motor.
		Replace the blade sensors 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Blade sensors 1 defective, disconnected, overload. Blade is dull, not cutting efficiently.
		Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensors 1.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Replace the blade.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Blade sensors 1 defective, disconnected, overload. Blade is dull, not cutting efficiently.
		Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensors 1.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Replace the blade.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Trimmer limit sensor error
		Trimmer limit sensor signaled ON.
		Trimmer limit sensor defective Blade sensors 1, 2 defective , disconnect
SC750-67		 Reconnect the connector. Replace the Trimmer limit sensor. Replace the blade sensors 1, 2. Replace the cutter control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-68	D	Book lift tray motor defective, Book lift tray HP sensor defective, disconnect, overload
		Reconnect the connector.
		Replace the book lift tray motor.
		Replace the book lift tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-69		Book lift tray motor defective, Book lift tray HP sensor defective, disconnect, overload, Book jam, bundle drop
		 Reconnect the connector. Replace the book lift tray motor. Replace the book lift tray HP sensor. Replace the cutter control board.
		Replace the motor harness. Replace the sensor harness.
		Clear the signature jam.

Perfect Binder: Book lift tray motor rotation error No encoder lock input received within 50 ms during operation. Book lift tray motor defective, Book lift tray encoder sensor defective, disconnect Reconnect the connector.	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
 Replace the book lift tray motor. Replace the Book lift tray encoder sensor Replace the cutter control board. Replace the motor harness. Replace the sensor harness. 			Perfect Binder: Book lift tray motor rotation error No encoder lock input received within 50 ms during operation. Book lift tray motor defective, Book lift tray encoder sensor defective, disconnect Reconnect the connector. Replace the book lift tray motor. Replace the Book lift tray encoder sensor Replace the cutter control board. Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-71		Book output belt motor defective, Book output tray HP sensor defected, disconnect, overload
		Reconnect the connector.
		Replace the book output belt motor.
		Replace the book output tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective, Book output tray HP sensor defected, disconnect, overload
SC750-72	D	Reconnect the connector.
		 Replace the book output belt motor. Replace the book output tray HP sensor.
		Replace the cutter control board.
		'
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC750-73		Blade cradle motor defective, Blade cradle sensor defective, disconnect, overload
		Reconnect the connector.
		Replace the blade cradle motor.
		Replace the blade cradle HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective, the blade cradle HP sensor defective, disconnect, overload, blade cradle or cutter physically jammed by obstacle
SC750-74	D	Reconnect the connector.
		Replace the blade cradle motor.
		Replace the blade cradle HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Remove the blade and the edge press plate.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Book door lock error
		The book door sensor was detected OFF with the book door locked.
		Book door lock solenoid defective, Book door sensor defective, disconnect
SC750-75	D	 Reconnect the connector. Replace the book door lock solenoid. Replace the book door sensor. Replace the cutter control board. Replace the SOL harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Glue heater error
		The glue heater thermistor registered more that 200 degrees for more than 1 sec.
		Glue temperature thermistor defective
SC750-76	D	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	7 D	Perfect Binder: Electrical short in the gluing unit
SC750-77		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
		 Reconnect the connector. Replace the gluing unit. Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC750-78	D	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC750-79	D	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: High temperature error
		Thermistor detected abnormal high temperature.
		Glue abnormal temperature thermistor defective
SC750-80	D	Glue heater defective
00,0000		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Thermostat error Abnormal thermostat detection.
SC750-81		Thermostat defective Glue heater defective Slave board defective
		 Reconnect the connector. Replace the gluing unit. Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 than 10 sec.
		Glue level thermistor defective
SC750-82	D	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 than 10 sec.
		Glue level thermistor defective
SC750-83	D	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-84	D	 Glue abnormal temperature thermistor defective Glue heater defective Slave board defective
		 Reconnect the connector. Replace the gluing unit. Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC750-85	D	Glue level thermistor defective
3C/30-63	ט	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Internal temperature thermostat error
SC750-86		The A/D value of the internal temperature thermostat was detected above 80 degrees for 1 sec.
		Internal temperature thermistor defective, Slave board defective
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the thermistor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Slave board defective
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the thermistor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defective, Slave board defective
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the thermistor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Glue heater startup error 2
		The warm-up temperature was above the +-5C target for the glue vat temperature. (Not detected within 100 sec. after machine warm-up.)
		Internal temperature thermistor defective
		Glue heater defective
SC750-89	D	Slave board defective
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the gluing unit.
		Replace the slave board.
		Replace the thermistor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	C751-10 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
SC751-10		Slave board defective
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the gluing unit.
		Replace the slave board.
		Replace the theristor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
30/31-11		Heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-12	D	Slave board defective
		Reconnect the connector.
		Check the room temperature (0°C or higher).
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the theristor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 • Reconnect the connector. • Replace the gluing unit. • Replace the slave board. • Check the remaining amount of glue pellets. • Remove the clogged glue. • Check the gluing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	D	Glue level thermistor connector loose, broken, defective
SC751-14		Slave board defective
		Reconnect the connector.
		Replace the gluing unit.
		Replace the slave board.
		Check the remaining amount of glue pellets.
		Remove the clogged glue.
		Check the gluing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-15		Thermistor defective
3C/31-13		Slave board defective
		Glue application defective
		Reconnect the connector.
		 Adjust the amount of glue application.
		Replace the gluing unit.
		Replace the slave board.
		Check the gluing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
	C751-16	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.
SC751-16		Master control board EEPROM defective
		Glue level thermistor connector loose, broken, defective
		Thermistor defective
		Slave board disconnected, defective
		Reconnect the connector.
		Re-set the value for glue level thermistor.
		Replace the gluing unit.
		Replace the master control board EEPROM
		Replace the slave board.
		Replace the master control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-17		Sensor defective
		Master control board disconnected, defective
		Reconnect the connector.
		Clean the sensor.
		Replace the timing sensor.
		Replace the master control board
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC751-18		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.
	D	 Cover registration sensor connector loose, broken, defective Sensor defective Master control board disconnected, defective
		 Reconnect the connector. Clean the sensor. Replace the cover registration sensor. Replace the master control board Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
30/31-19		Sensor defective
		Slave control board defective
		Reconnect the connector.
		Clean the sensor.
		Replace the cover horizontal registration sensor (S).
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-20		Sensor defective
		Slave control board defective
		Reconnect the connector.
		Clean the sensor.
		Replace the Cover horizontal registration sensor (L)
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-21	D	Sensor defective
		Slave control board disconnected, defective
		Reconnect the connector.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC751-22		LE detect sensor connector loose, broken, defective
00/31/22		Sensor defective Slave control board disconnected, defective
		Reconnect the connector.
		Replace the LE detect sensor.
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the entrance path sensor. Replace the cutter control board.
		Replace the cutter control board.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the book registration sensor.
		Replace the cutter control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-25	D	Sensor defective
		Master control board disconnected, defective
		Reconnect the connector.
		Replace the timing sensor.
		Replace the cutter control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector. Replace the cover registration sensor.
		 Replace the master control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the Cover horizontal registration sensor (S).
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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 defectiveSlave control board defective
		Reconnect the connector. Replace the cover horizontal registration sensor (L).
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-29	D	Sensor defectiveSlave control board disconnected, defective
		Reconnect the connector.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the LE detect sensor. Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the entrance path sensor.
		 Replace the cutter control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the book registration sensor. Replace the cutter control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the LE detect sensor.
		Replace the slave control board.
		Replace the cutter control board
		Replace the motor harness.
		Replace the sensor harness.
		Replace the harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the entrance path sensor.
		Replace the slave control board.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.Replace the book registration sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the signature exit sensor.
		Replace the LE detect sensor.
		 Replace the slave control board. Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the entrance path sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-38		Reconnect the connector.
		Replace the signature movement motor.
		Replace the main grip signature sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Trim unit entrance sensor lag error
SC751-39		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
		Reconnect the connector.
		Replace the entrance path sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
	D	Detected ON at the end of book binding and automatic exit.
		Could detect no stack at fore edge cutting.
SC751-40		Detected ON at end of grip operation during book binding.
00/01 40		Book registration sensor connector loose, broken, defective
		Sensor defective at the lift tray
		Reconnect the connector.
		Replace the book registration sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Book arrival sensor lag error
SC751-41	D	Book arrival sensor connector loose, broken, defective Sensor defective Book failed to reach output tray Fore edge trim scraps fell into output area Not detected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-42	D	 Edge press plate HP sensor connector loose, broken, defective Sensor defective
		Reconnect the connector.
		Replace the trimming buffer motor.
		Replace the edge press plate HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-43	D	Reconnect the connector.
		Replace the SG motor.
		Replace the sub grip paper sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-44	D	 Reconnect the connector. Replace the main grip signature sensor. Replace the slave control board.
		Replace the sensor harness.
		Clear the signature jam.
		 Replace the signature exit roller motor. Replace the motor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Signature thickness sensor minimum value error
SC751-45	D	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
		Reconnect the connector. Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the master control board EEPROM
		Replace the slave control board.
		Replace the master control board.
		Replace the VR harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
		Reconnect the connector.
SC751-46		Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the master control board EEPROM
		Replace the slave control board.
		Replace the master control board.
		Replace the VR harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-47	D	Reconnect the connector.
		Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the master control board EEPROM
		Replace the slave control board.
		Replace the master control board.
		Replace the VR harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	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 • Reconnect the connector. • Replace the glue vat roller motor.
		 Replace the glue vat roller motor. Replace the glue vat HP sensor.
		 Replace the slave control board. Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC751-49	D	 Glue vat roller motor connector loose, broken, defective Motor defective Glue vat HP sensor connector loose, broken, defective Sensor defective
		 Reconnect the connector. Replace the glue vat roller motor. Replace the glue vat HP sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-50	D	Sensor defective
		Reconnect the connector.
		Replace the glue vat roller motor.
		Replace the glue vat roller rotation sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-51	D	Sensor defective
		Reconnect the connector.
		Replace the glue supply motor.
		Replace the glue roller HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Remove the cause of jam (glue pellets).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-52	D	Sensor defective
		Reconnect the connector.
		Replace the glue supply motor.
		Replace the glue roller HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Remove the cause of jam (glue pellets).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Spine fold HP sensor (L) late error
	D	 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
SC751-53		Motor defective Spine fold HP sensor (L) connector loose, broken, defective
		Sensor defective
		Reconnect the connector.
		Replace the spine fold motor (L).
		Replace the spine fold HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-54		Spine fold HP sensor (L) connector loose, broken, defective
		Sensor defective
		Reconnect the connector.
		Replace the spine fold motor (L).
		Replace the spine fold HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	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.
	D	 Spine fold motor (L) connector loose, broken, defective Motor defective Spine close sensor (L) connector loose, broken, defective Sensor defective
		 Reconnect the connector. Replace the spine fold motor (L). Replace the spine close sensor (L). Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-56		Motor defective
30/31-30		Spine close sensor (L) connector loose, broken, defective
		Reconnect the connector.
		Replace the spine fold motor (L).
		Replace the spine close sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC751-57	D	 Spine fold HP sensor (L) connector loose, broken, defective Sensor defective Spine close sensor (L) connector loose, broken, defective Sensor defective Reconnect the connector. Replace the spine fold HP sensor (L). Replace the slave control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Spine fold HP sensor (R) error
	D	 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
SC751-58		Motor defective
		Spine fold HP sensor (R) connector loose, broken, defective
		Sensor defective
		Reconnect the connector.
		Replace the spine fold motor (R).
		Replace the Spine fold HP sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-59	D	Motor defective
		Spine fold HP sensor (R) connector loose, broken, defective.
		Reconnect the connector.
		Replace the spine fold motor (R).
		Replace the spine fold HP sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC751-60		 Spine fold motor (R) connector loose, broken, defective Motor defective Spine fold press sensor (R) connector loose, broken, defective Sensor defective
		 Reconnect the connector. Replace the spine fold motor (R). Replace the spine fold press sensor (R). Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	D	Motor defective
SC751-61		Spine fold press sensor (R) connector loose, broken, defective
		Sensor defective
		Reconnect the connector.
		Replace the spine fold motor (R).
		Replace the spine fold press sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Spine fold HP sensor (R) error
SC751-62		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
		 Reconnect the connector. Replace the spine fold HP sensor (R). Replace the spine fold press sensor (R). Replace the slave control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-63		Spine open sensor connector loose, broken, defective
3C/31-03		Sensor defective
		Reconnect the connector.
		Replace the spine plate motor.
		Replace the spine open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
66751 / /		Spine open sensor connector loose, broken, defective
SC751-64		Sensor defective
		Reconnect the connector.
		Replace the spine plate motor.
		Replace the spine open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	D	Spine close sensor connector loose, broken, defective
SC751-65		Sensor defective
		Reconnect the connector.
		Replace the spine plate motor.
		Replace the spine close sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		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	
	5 D	D	Spine close sensor connector loose, broken, defective
SC751-66			Sensor defective
		Reconnect the connector.	
		Replace the spine plate motor.	
		Replace the spine close sensor.	
		Replace the slave control board.	
		Replace the motor harness.	
		Replace the sensor harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the front door lock solenoid.
		Replace the front door lock release sensor.
		Replace the master control board.
		Replace the SOL harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-68		Connector loose, broken, defective
		Reconnect the connector.
		Replace the front door lock solenoid.
		Replace the front door lock release sensor.
		Replace the master control board.
		Replace the SOL harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-69		Reconnect the connector.
		Replace the front door lock solenoid.
		Replace the front door switch.
		Replace the master control board.
		Replace the SOL harness.
		Replace the SW harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Replace the switchback flapper motor. Replace the switchback flapper HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Replace the switchback flapper motor. Replace the switchback flapper HP sensor. Replace the master control board.
		Replace the motor harness. Replace the sensor harness.
		Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-72	D	Connector loose, broken, defective
		Reconnect the connector.
		Replace the TE press lever motor.
		Replace the TE press lever HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-73		TE press lever motor defective
		Reconnect the connector.
		Replace the TE press lever motor.
		Replace the TE press lever HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-74		Jog fence front motor defective
3C/31-/4		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front HP sensor
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-75	D	Connector loose, broken, defective
		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front HP sensor
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Jog fence large HP sensor late error
SC751-76		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
		 Reconnect the connector. Replace the jog fence front motor. Replace the Jog fence front large HP sensor. Replace the master control board.
		Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-77	D	Connector loose, broken, defective
		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the Jog fence front large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-78		Jog fence right motor defective
36/31/0		Reconnect the connector.
		Replace the jog fence right motor.
		Replace the jog fence right HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-79	D	Connector loose, broken, defective
		Reconnect the connector.
		Replace the jog fence right motor.
		Replace the jog fence right HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Jog fence right large HP sensor late error
SC751-80		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
		 Reconnect the connector. Replace the jog fence right motor. Replace the jog fence right large HP sensor.
		Replace the master control board. Penlace the mater barross.
		Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-81	D	Connector loose, broken, defective
		Reconnect the connector.
		Replace the jog fence right motor.
		Replace the jog fence right large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-82		Switchback lift motor defective
00/01/02		Reconnect the connector.
		Replace the switchback lift motor.
		Replace the switchback roller HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		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	
SC751-83	D	D	Connector loose, broken, defective
		Reconnect the connector.	
		Replace the switchback lift motor.	
		Replace the switchback roller HP sensor.	
		Replace the master control board.	
		Replace the motor harness.	
		Replace the sensor harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC751-84		Stacking tray lift motor defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the tray lower limit sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-85	D	Harness connector loose, broken, defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the tray lower limit sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the stacking tray lift motor. Replace the paper detect sensor (front). Replace the master control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-87	D	Harness connector loose, broken, defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the paper detect sensor (front).
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
SC751-88		 Paper detect sensor (rear) defective Stacking tray lift motor defective
3C/31-00		 Reconnect the connector. Replace the stacking tray lift motor.
		Replace the paper detect sensor (rear). Replace the master control board.
		Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC751-89	D	Stacking tray lift motor defective Harness connector loose, broken, defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the paper detect sensor (rear).
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-10		Stacking tray lift motor defective
00/02/10		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-11	D	Harness connector loose, broken, defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC752-12	D	 Stack overflow sensor defective Stacking tray lift motor defective Harness connector loose, broken, defective
	-	 Reconnect the connector. Replace the stacking tray lift motor. Replace the stack overflow sensor. Replace the master control board.
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	D	Paper detect sensors (front, rear, or both) defective
		Stack overflow sensor defective
SC752-13		Tray lift motor defective
3C/3Z-13		Harness connector loose, broken, defective
		Reconnect the connector.
		Replace the tray empty sensor.
		Replace the paper detect sensors (front).
		Replace the paper detect sensors (rear).
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-14		 Reconnect the connector. Replace the stacking tray lift motor. Replace the stack tray HP sensor.
		Replace the master control board.
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-15	D	Reconnect the connector. Replace the stacking tray lift motor.
		Replace the stack tray HP sensor.
		Replace the master control board.
		Replace the motor harness. Penlace the sensor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Stack weight move HP sensor late error
SC752-16		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
		Reconnect the connector. Replace the stack weight motor.
		Replace the stack weight HP sensor defective.
		Replace the master control board.
		Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-17	D	Reconnect the connector. Replace the stack weight motor.
		Replace the stack weight HP sensor defective.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
\$6752.10		Cover guide (left) HP sensor defective Cover guide motor (left) defective
SC752-18		Reconnect the connector. Replace the cover guide motor (left).
		Replace the cover guide (left) HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the cover guide HP sensor (L).
		Replace the cover guide open sensor (left).
		Replace the master control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the cover guide motor (left).
		Replace the Cover guide (left) open sensor.Replace the master control board.
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the cover guide motor (right).
		Replace the cover guide (right) HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the cover guide (right) HP sensor.
		Replace the cover guide open sensor (right).
		Replace the master control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector. Replace the cover guide motor (right).
		 Replace the cover guide open sensor (right). Replace the master control board.
		 Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector. Replace the cover horizontal registration motor.
		Replace the cover registration HP sensor
		Replace the slave control board.
		 Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		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 Pagistration HP conser defective	
SC752-25	5 D	D	 Registration HP sensor defective Harness connector loose, broken, defective
		Reconnect the connector.	
		Replace the cover horizontal registration motor.	
		Replace the registration HP sensor.	
		Replace the slave control board.	
		Replace the motor harness.	
		Replace the sensor harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-26		Reconnect the connector.
		Replace the sub grip lift motor.
		Replace the sub grip upper HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the sub grip lift motor.
		Replace the sub grip upper HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
0.0750.00		Sub grip size motor defective
SC752-28		Sub grip size HP sensor defective
		Reconnect the connector.
		Replace the sub grip size motor.
		Replace the sub grip size HP sensor defective.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-29	D	Sub grip size HP sensor defective
		Harness connector, loose, broken, defective
		Reconnect the connector.
		Replace the sub grip size motor.
		Replace the sub grip size HP sensor defective.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-30		Replace the SG motor.
		Replace the SG open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Replace the SG motor.
		Replace the SG open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.Replace the SG motor.
		 Replace the SG close sensor. Replace the slave control board.
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the SG motor.
		Replace the SG close sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the SG open sensor. Replace the SG close sensor. Replace the slave control board. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-35	D	Reconnect the connector. Replace the signature movement motor.
		 Replace the signature movement HP sensor. Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-36		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the signature movement motor.
		Replace the signature movement HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC752-37	D	 Signature movement motor defective Signature MG position sensor defective
		 Reconnect the connector. Replace the signature movement motor. Replace the signature MG position sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-38	D	Signature MG position HP sensor defective
		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the signature move motor.
		Replace the signature MG position HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector. Replace the signature move motor.
		Replace the MG rotate enable sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-40		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the signature move motor.
		Replace the MG rotate enable sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		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	
SC752-41	C752-41 D	D	Connector harness loose, broken, defective
		Reconnect the connector.	
		Replace the signature move HP sensor.	
		Replace the signature MG position HP sensor.	
		Replace the slave control board.	
		Replace the sensor harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-42		D
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Main grip HP sensor lag error
SC752-43		 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.
	D	 MG lift motor defective MG HP sensor defective Connector harness loose, broken, defective
		 Reconnect the connector. Replace the MG lift motor. Replace the MG HP sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-44		Reconnect the connector. Replace the MG lift motor.
		Replace the MG press sensor(S).
		Replace the slave control board
		'
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		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	
SC752-45	D	D	Connector harness loose, broken, defective
		Reconnect the connector.	
		Replace the MG lift motor.	
		Replace the MG press sensor (S).	
		Replace the slave control board.	
		Replace the motor harness.	
		Replace the sensor harness.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-46		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-47		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-48		Signature out of position, snagged on main grip
30732-40		Reconnect the connector.
		Replace the MG lift motor.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Main grip HP sensor (L) late error
SC752-49		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
		Reconnect the connector. Replace the MG lift motor.
		Replace the MG HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-50		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-51		MG rotate HP sensor defective
		Reconnect the connector.
		Replace the MG rotate motor.
		Replace the MG rotate HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-52	D	MG rotate HP sensor defective
		Connector harness loose, broken, defective
		Reconnect the connector.
		Replace the MG rotate motor.
		Replace the MG rotate HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-53		MG rotate-to-binding position sensor defective
36/32-33		Reconnect the connector.
		Replace the MG rotate motor.
		Replace the MG rotate-to-binding position sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Main grip rotate-to-binding position lag error
SC752-54		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
		Reconnect the connector.
		Replace the MG rotate motor.
		Replace the MG rotate-to-binding position sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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.
		 MG rotate HP sensor defective MG rotate-to-binding position sensor defective Connector harness loose, broken, defective
		 Reconnect the connector. Replace the MG rotate-to-binding position sensor. Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Main grip open sensor (R) late error
SC752-56		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
		 Reconnect the connector. Replace the main grip motor (R). Replace the MG open sensor (R).
		Replace the slave control board.
		Replace the motor harness.Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Main grip open sensor (R) lag error
	D	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
SC752-57		Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the MG open sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Main grip close sensor (R) late error
SC752-58		At the start of the main grip close operation, the MG close 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
		 Reconnect the connector. Replace the main grip motor (R). Replace the MG close sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
		Main grip motor (R) defective
		Main grip close sensor (R) defective
SC752-59		Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the MG close sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-60	D	Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip encoder sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC752-61		Perfect Binder: Main grip (R) sensor error
		The MG open sensor (R) and MG close sensor (R) went ON at the same time.
		Main open sensor (R) defective
	D	Main grip close sensor (R) defective
		Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the MG open sensor (R).
		Replace the main grip encoder sensor (R).
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Main grip open sensor (F) late error
SC752-62		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
		 Reconnect the connector. Replace the main grip motor (F). Replace the MG open sensor (F).
		 Replace the slave control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
		MG motor (F) defective
SC752-63		MG open sensor (F) defective
		Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the main grip motor (F).
		Replace the MG open sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC752-64	D	Perfect Binder: Main grip close sensor (F) late error
		At the start of the main grip open operation, the MG close 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
		Reconnect the connector. Replace the MG motor (F).
		 Replace the MG close sensor (F). Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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.
		MG motor (F) defective
		MG close sensor (F) defective
SC752-65		Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG close sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-66	D	Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG encoder sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-67	D	Connector or harness loose, broken, defective
		Reconnect the connector.
		Replace the MG open sensor (F).
		Replace the MG encoder sensor (F).
		Replace the slave control board.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-68		 Reconnect the connector. Replace the signature path exit motor. Replace the signature path exit HP sensor. Replace the slave control board. Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-69		Connector loose, broken, defective
00,020,		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-70		Signature path exit press sensor defective
00/02/0		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit press sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit press sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-72		Signature jam
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the leading edge sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Replace the EEPROM on the inserter control board. Replace the inserter control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Replace the EEPROM on the inserter control board. Replace the inserter control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-75		Connector loose, broken, defective
		Reconnect the connector.
		Replace the drive switch motor.
		Replace the drive switch sensor.
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		Reconnect the connector.
		Replace the drive switch motor.
		Replace the drive switch sensor.
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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
		 Reconnect the connector. Replace the upper tray lift motor. Replace the upper tray low limit sensor.
		 Replace the inserter control board. Replace the motor harness. Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-78		Connector loose, broken, defective
		Reconnect the connector.
		Replace the upper tray lift motor.
		Replace the upper tray PICK sensor.
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	52-79 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
		Lower tray low limit sensor defective
SC752-79		Connector loose, broken, defective
00/02//		Reconnect the connector.
		Replace the lower tray lift motor.
		Replace the lower tray low limit sensor.
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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
SC752-80		Connector loose, broken, defective
		Reconnect the connector.
		Replace the lower tray lift motor.
		Replace the lower tray PICK sensor.
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Perfect Binder: Low performance error (or service mode)
SC752-81		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
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Grip HP sensor defective
		Sensor flag defective
		Connector loose, broken defective
SC752-82		Reconnect the connector.
		Replace the grip motor.
		Replace the grip HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC752-83	В	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
		Reconnect the connector.
		Replace the grip motor.
		Replace the grip HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Grip end sensor lag error
SC752-84	В	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
		Reconnect the connector.
		Replace the grip motor.
		Replace the grip end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

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 Reconnect the connector. Replace the grip motor.	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
 Replace the cutter control board. Replace the motor harness. Replace the sensor harness. 			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 Reconnect the connector. Replace the grip motor. Replace the grip end sensor. Replace the cutter control board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC752-86	В	Trimmings buffer motor defective
		Motor connector loose, broken, defective
		Left trimmings buffer HP sensor defective
		Buffer full of trimmings
		Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the left trimmings buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Perfect Binder: Trimming buffer HP sensor late error The left trimmings buffer HP sensor did not go ON within 5 sec. after the
SC752-87		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
		Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the left trimmings buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Right trimming buffer HP sensor lag error
	В	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
SC752-88		Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the right trimmings buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC752-89	В	Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the right trimmings buffer HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Left trimmings buffer end sensor defective
		Buffer full of trimmings
SC753-10		Reconnect the connector.
30/33-10		Replace the trimmings buffer motor.
		Replace the trimming buffer encoder sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-11	В	Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the thrust plate sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-12	В	Reconnect the connector.
		Replace the trimmings buffer motor.
		Replace the thrust plate sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-13	В	Reconnect the connector.
		Replace the book buffer tray motor.
		Replace the book collection buffer tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-14	В	Book collection buffer tray HP sensor loose, broken, defective, Blocked by paper scraps
		 Reconnect the connector. Replace the book buffer tray motor. Replace the book collection buffer tray HP sensor.
		 Replace the cutter control board. Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-15		Reconnect the connector.
		Replace the edge press plate motor.
		Replace the edge press plate HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-16		Edge press plate HP sensor connection loose, broken, defective
06/30 10		Sensor defective
		Reconnect the connector.
		Replace the edge press plate motor.
		Replace the edge press plate HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Press end sensor connector loose, broken, defective
		Sensor defective
SC753-17		Reconnect the connector.
		Replace the edge press plate motor.
		Replace the press end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Motor overloaded, defective
		Press end sensor connector loose, broken, defective
SC753-18		Sensor defective
3C/33-16		No data about book thickness received
		Reconnect the connector.
		Replace the edge press plate motor.
		Replace the press end sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-19	В	Reconnect the connector.
		Replace the slide motor.
		Replace the slide HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-20	В	Reconnect the connector.
		Replace the slide motor.
		Replace the slide HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	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 • Reconnect the connector. • Replace the Book rotation motor 1 (right). • Replace the book rotation HP sensor (right).
		 Replace the book rotation HP sensor (right). Replace the cutter control board.
		Clear the signature jam. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-22		Book rotation HP sensor (right) connector loose, broken, defective
		Reconnect the connector.
		Replace the Book rotation motor 1 (right).
		Replace the book rotation HP sensor (right).
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 2 (left) connector loose, broken, defective
SC753-23	В	Reconnect the connector.
		Replace the book rotation motor 2 (left).
		Replace the book rotation HP sensor 2 (left).
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Book rotation HP sensor (left) late error
SC753-24		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.
	В	 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 2 (left) connector loose, broken, defective
		Reconnect the connector.
		Replace the book rotation motor 2 (left).
		Replace the book rotation HP sensor 2 (left).
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

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 Reconnect the connector. Replace the cutter motor. Replace the blade sensor 1, 2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-26	В	Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensor 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

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 Reconnect the connector. Replace the cutter motor. Replace the blade sensor 1, 2. Replace the cutter control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
			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 • Reconnect the connector. • Replace the cutter motor. • Replace the blade sensor 1, 2. • Replace the cutter control board. • Replace the motor harness.
			Replace the sensor harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-28	В	Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensor 1, 2.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level 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 Reconnect the connector. Replace the cutter motor. Replace the blade sensor 1. Replace the cutter control board. Replace the motor harness. Replace the sensor harness. Replace the blade. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC753-30	В	Cutter motor connector loose, broken, defective
		Motor overloaded, defective
		Blade sensor 1 connector loose, broken defective
		Sensor defective
	В	Blade is dull, not cutting efficiently
		Reconnect the connector.
		Replace the cutter motor.
		Replace the blade sensor 1.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Replace the blade.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-31	В	Sensor defective
		Reconnect the connector.
		Replace book lift tray motor.
		Replace book lift tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Motor overloaded, defective
		Book lift tray HP sensor connector loose, broken, defective
		Sensor defective
		Book jam
SC753-32		Reconnect the connector.
		Replace book lift tray motor.
		Replace book lift tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	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 Reconnect the connector. Replace book lift tray motor. Replace the book lift tray encoder sensor. Replace the cutter control board. Replace the motor harness.
SC753 33	R	Edge press plate, or mechanism jammed by a book
30/33-33	Б	
		Replace the book lift tray encoder sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the edge press plate, or mechanism jammed by a book
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-34	В	Sensor defective
		Reconnect the connector.
		Replace the book output belt motor.
		Replace the book output tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Book output tray HP sensor connector loose, broken, defective
		Sensor defective
SC753-35		Reconnect the connector.
		Replace the book output belt motor.
		Replace the book output tray HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Motor overloaded, defective
		Blade cradle HP sensor connector loose, broken, defective
SC753-36		Sensor defective
		Reconnect the connector.
		Replace the blade cradle motor.
		Remove the blade cradle HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 HP sensor connector loose, broken, defective
		Sensor defective
		Blade cradle or cutter physically jammed
SC753-37	В	Reconnect the connector.
		Replace the blade cradle motor.
		Replace the blade cradle HP sensor.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the Blade cradle or cutter physically jammed
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Reconnect the connector.
SC753-38	В	Replace the book door lock solenoid.
		Replace the book door open sensor.
		Replace the cutter control board.
		Replace the SOL harness.
	Replace the sensor harness.	
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-39	В	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
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-40	В	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-41	В	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-42	В	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
		 Reconnect the connector. Replace the gluing unit Replace the slave board. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Perfect Binder: High temperature detected in unit
		Thermistor detected abnormal high temperature.
SC753-43		 Glue abnormal temperature thermistor defective Glue heater defective Slave board defective
		 Reconnect the connector. Replace the gluing unit. Replace the slave board. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	В	Perfect Binder: Thermostat error Abnormal thermostat detection. Thermostat defective Glue heater defective Slave board defective Reconnect the connector.
		 Replace the gluing unit Replace the slave board. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-45	В	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 than 10 sec.
		 Glue level thermistor defective Glue heater defective Slave board defective
		 Reconnect the connector. Replace the gluing unit Replace the slave board. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 than 10 sec.
		Glue level thermistor defective
		Glue heater defective
SC753-46	В	Slave board defective
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-47	В	Glue heater defective
		Slave board defective
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-48	В	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
		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-49	В	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
		 Reconnect the connector. Replace the internal temperature thermistor. Replace the slave board. Replace the thermistor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-50	В	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
		 Reconnect the connector. Replace the internal temperature thermistor. Replace the slave board. Replace the thermistor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-51	В	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
		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the thermistor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-52		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the gluing unit
		Replace the slave board.
		Replace the thermistor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-53		Reconnect the connector.
		Replace the internal temperature thermistor.
		Replace the gluing unit
		Replace the slave board.
		Replace the thermistor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-54	В	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
		 Reconnect the connector. Replace the gluing unit Replace the slave board.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-55		Reconnect the connector.
		Check the room temperature (0°C or higher).
		Replace the internal temperature thermistor.
		Replace the slave board.
		Replace the thermistor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-56		Reconnect the connector.
30/33-30		Replace the gluing unit
		Replace the slave board.
		Check the remaining amount of glue pellets.
		Remove the clogged glue.
		Check the gluing unit.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-57		Reconnect the connector.
		Replace the gluing unit
		Replace the slave board.
		Check the remaining amount of glue pellets.
		Remove the clogged glue.
		Check the gluing unit.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Glue level thermistor connector loose, broken, defective
		Thermistor defective
SC753-58		Slave board defective
		Glue application defective
		Reconnect the connector.
		Adjust the amount of glue application.
		Replace the gluing unit
		Replace the slave board.
		Check the gluing unit.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-59	В	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

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Reconnect the connector. Re-set the value for glue level thermistor. Replace the gluing unit Replace the master control board EEPROM. Replace the slave board. Replace the master control board. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-60	В	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
		 Reconnect the connector. Clean the sensor. Replace the timing sensor. Replace the master control board. Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-61		Master control board disconnected, defective
		Reconnect the connector.
		Clean the sensor.
		Replace the cover registration sensor.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-62		Sensor defective
00,000		Slave control board defective
		Reconnect the connector.
		Clean the sensor.
		Replace the cover horizontal registration sensor (S).
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-63		Sensor defective
		Slave control board defective
		Reconnect the connector.
		Clean the sensor.
		Replace the cover horizontal registration sensor (L)
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Perfect Binder: Signature exit sensor adjustment high value error
SC753-64		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
		Reconnect the connector.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC753-65		Sensor defective
		Slave control board disconnected, defective
		Reconnect the connector.
		Replace the LE detect sensor.
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-66	В	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
		Reconnect the connector.
		 Replace the entrance path sensor. Replace the cutter control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-67	В	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
		 Reconnect the connector. Replace the book registration sensor. Replace the cutter control board. Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-68	В	Sensor defective
		Master control board disconnected, defective
		Reconnect the connector.
		Replace the timing sensor.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-69	В	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
		Reconnect the connector.
		Replace the cover registration sensor.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-70	В	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
		 Reconnect the connector. Replace the cver horizontal registration sensor (S). Replace the slave control board. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-71	В	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
		Reconnect the connector.
		Replace the cover horizontal registration sensor (L).
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Perfect Binder: Signature exit sensor adjustment low value error
SC753-72		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
		Reconnect the connector.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC753-73	В	Sensor defective
		Slave control board disconnected, defective
		Reconnect the connector.
		Replace the LE detect sensor.
		Replace the slave control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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 OV.
		Entrance path sensor connector loose, broken, defective
SC753-74		Sensor defective
		Cutter control board disconnected, defective
		Reconnect the connector.
		Replace the entrance path sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-75	В	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 OV.
		 Book registration sensor connector loose, broken, defective Cutter control board disconnected, defective
		 Reconnect the connector. Replace the book registration sensor. Replace the cutter control board.
		Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Reconnect the connector.
00750 77		Replace the signature exit roller motor.
SC753-76	В	Replace the LE detect sensor.
		Replace the slave control board.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Replace the harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-77	В	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.
		Signature jam occurred between the cover transport unit and signature rotation unit.
		Trim unit entrance sensor defective
		Signature exit roller motor defective
		Slave control board defective
		Cutter control board defective
		Connector loose, broken, defective
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the trim unit entrance sensor.
		Replace the slave control board.
		Replace the cutter control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	- 78 B	Perfect Binder: Book registration sensor late error
		At the start of cutter registration, the book registration did not go ON.
		Signature jam occurred in the signature rotation unit.
		Book registration sensor defective
		Connector loose, broken, defective
00750 70		Cutter control board defective
SC753-78		Reconnect the connector.
		Replace the book registration sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Signature jam occurred in the cover transport unit when the power was turned on.
		Connector loose, broken, defective
SC753-79	В	Slave control board defective
		Reconnect the connector.
		Replace the signature exit sensor.
		Replace the leading edge sensor.
		Replace the slave control board.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-80	В	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.
		Signature jam occurred between the cover transport unit and signature rotation unit during the automatic exit operation.
		Trim unit entrance sensor defective
		Stack transport roller defective
		Connector loose, broken, defective
		Slave control board defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the trim unit entrance sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	Error Name/Error Condition/Major Cause/Solution Perfect Binder: Main grip late error There was no stack received from the sub grip unit; the main grip signature sensor detected no stack. • Signature jam occurred in the sub grip unit. • Signature move motor defective • Main grip signature sensor defective • Connector loose, broken, defective • Slave control board defective
SC753-81	В	 Slave control board defective Reconnect the connector. Replace the signature move motor. Replace the main grip signature sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness. Clear the signature jam. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Trim unit entrance sensor lag error
		At the end of initialization at power on, the entrance path sensor went ON.
		Signature jam occurred in the trim unit.
		Trim unit entrance sensor defective
	В	Connector loose, broken, defective
66750.00		Cutter control board defective
SC753-82		Reconnect the connector.
		Replace the trim unit entrance sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC753-83	В	Signature jam occurred in the book lift tray
		Book registration sensor defective
		Connector loose, broken, defective
		Cutter control board defective
		Reconnect the connector.
		Replace the book registration sensor.
		Replace the cutter control board.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC753-84	В	Perfect Binder: Book arrival sensor lag error
		Not detected
		Sensor defective
		Book failed to reach output tray
		Fore edge trim scraps fell into output area
		Not detected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	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 defective
SC753-85	В	Trimmings buffer motor defective Connector loose, broken, defective Cutter control board defective Reconnect the connector.
		 Replace the trimmings buffer motor. Replace the edge press plate HP sensor. Replace the cutter control board. Replace the motor harness. Replace the sensor harness. Clear the trimming jam. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 signature sensor defective
		Sub gripper motor defective
	В	Connector loose, broken, defective
		Slave control board defective
SC753-86		Reconnect the connector.
		Replace the sub gripper motor.
		Replace the sub grip signature sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Connector loose, broken, defective
		Slave control board defective
		Signature exit roller motor defective
SC753-87	В	Reconnect the connector.
		Replace the main grip signature sensor.
		Replace the slave control board.
		Replace the sensor harness.
		Clear the signature jam.
		Replace the signature exit roller motor.
		Replace the motor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Connector loose, broken, defective
		Slave control board defective
		Master control board defective
	В	EEPROM on the master board defective
SC753-88		Reconnect the connector.
		Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the EEPROM on the master board.
		Replace the slave control board.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Connector loose, broken, defective
		Slave control board defective
		Master control board defective
	В	EEPROM on the master board defective
SC753-89		Reconnect the connector.
		Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the EEPROM on the master board.
		Replace the slave control board.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Connector loose, broken, defective
		Slave control board defective
		Master control board defective
	В	EEPROM on the master board defective
SC754-10		Reconnect the connector.
		Specify the signature thickness again.
		Replace the signature thickness sensor.
		Replace the EEPROM on the master board.
		Replace the slave control board.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 defective
		Glue vat roller rotation sensor connector defective
	В	Connector loose, broken, defective
		Slave control board defective
SC754-11		Reconnect the connector.
		Replace the vat roller motor.
		Replace the vat roller rotation sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 pellets jammed
		Glue supply motor defective
	В	Glue roller HP sensor defective
		Connector loose, broken, defective
SC754-12		Slave control board defective
		Reconnect the connector.
		Replace the glue supply motor.
		Replace the glue roller HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-13	В	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 pellets jammed Glue supply motor defective Glue roller HP sensor defective Connector loose, broken, defective
		 Slave control board defective Reconnect the connector. Replace the glue supply motor. Replace the glue roller HP sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Front door lock error
		Front door lock release sensor did not go off, even though the door was locked.
		Front door solenoid defective
		Front door lock release sensor defective
	В	Connector loose, broken, defective
		Master control board defective
SC754-14		Reconnect the connector.
		Replace the front door solenoid.
		Replace the front door lock release sensor.
		Replace the master control board.
		Replace the solenoid harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 solenoid defective
		Front door lock release sensor defective
		Connector loose, broken, defective
	В	Master control board defective
SC754-15		Reconnect the connector.
		Replace the front door solenoid.
		Replace the front door lock release sensor.
		Replace the master control board.
		Replace the solenoid harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Front door force open error
		The front door open was detected open, even though it was locked.
		Front door switch defective
		Front door solenoid defective
		Connector loose, broken, defective
		Master control board defective
SC754-16	В	Reconnect the connector.
		Replace the front door solenoid.
		Replace the front door switch.
		Replace the master control board.
		Replace the solenoid harness.
		Replace the switch harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Switchback flapper motor defective
		Connector loose, broken, defective
SC754-17		Master control board defective
		Reconnect the connector.
		Replace the switchback flapper motor.
		Replace the switchback flapper HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	Error Name/Error Condition/Major Cause/Solution 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 • Master control board defective
		 Master control board defective Reconnect the connector. Replace the switchback flapper motor. Replace the switchback flapper HP sensor. Replace the master control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-19	В	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 HP sensor defective
		TE press lever motor defective
		Connector loose, broken, defective
		Master control board defective
		Reconnect the connector.
		Replace the TE press lever motor.
		Replace the TE press lever HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-20	В	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 HP sensor defective
		TE press lever motor defective
		Connector loose, broken, defective
		Master control board defective
		Reconnect the connector.
		Replace the TE press lever motor.
		Replace the TE press lever HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector loose, broken, defective
		Master control board defective
SC754-21		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Jog fence front motor defective
		Connector loose, broken, defective
SC754-22		Master control board defective
		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Jog fence front motor defective
		Connector loose, broken, defective
SC754-23		Master control board defective
		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Jog fence front motor defective
		Connector loose, broken, defective
SC754-24		Master control board defective
		Reconnect the connector.
		Replace the jog fence front motor.
		Replace the jog fence front large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Connector loose, broken, defective
SC754-25		Master control board defective
		Reconnect the connector.
		Replace the jog fence rear motor.
		Replace the jog fence rear HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC754-26	В	 Jog fence rear HP sensor defective Jog fence rear motor defective Connector loose, broken, defective Master control board defective Reconnect the connector. Replace the jog fence rear motor. Replace the jog fence rear HP sensor. Replace the master control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Connector loose, broken, defective
SC754-27	В	Master control board defective
		Reconnect the connector.
		Replace the jog fence rear motor.
		Replace the jog fence rear large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Jog fence rear motor defective
		Connector loose, broken, defective
SC754-28		Master control board defective
		Reconnect the connector.
		Replace the jog fence rear motor.
		Replace the jog fence rear large HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Switchback roller lift motor defective
		Connector loose, broken, defective
SC754-29		Master control board defective
		Reconnect the connector.
		Replace the switchback roller lift motor.
		Replace the switchback roller HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Switchback roller lift motor defective
		Connector loose, broken, defective
SC754-30		Master control board defective
		Reconnect the connector.
		Replace the switchback roller lift motor.
		Replace the switchback roller HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Harness connector loose, broken, defective
SC754-31		Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the tray lower limit sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Stacking tray lift motor defective
		Harness connector loose, broken, defective
SC754-32		Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the tray lower limit sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Harness connector loose, broken, defective
SC754-33		Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the paper detect sensor (front).
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Stacking tray lift motor defective
		Harness connector loose, broken, defective
SC754-34		Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the paper detect sensor (front).
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Harness connector loose, broken, defective
SC754-35		Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the paper detect sensor (rear).
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level	Error Name/Error Condition/Major Cause/Solution 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 • Master control board defective
		 Reconnect the connector. Replace the stacking tray lift motor. Replace the paper detect sensor (rear). Replace the master control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Harness connector loose, broken, defective
SC754-37	В	Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC754-38		Master control board defective
		Reconnect the connector.
		Replace the tray lower limit sensor.
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC754-39	В	Master control board defective
		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Harness connector loose, broken, defective
SC754-40	В	Master control board defective
		Reconnect the connector.
		Replace the tray empty sensor. Replace the tray empty sensor.
		Replace the paper detect sensor (front).
		Replace the paper detect sensor (rear).
		Replace the stack overflow sensor.
		Replace the master control board.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Stacking tray lift motor defective
		Harness connector loose, broken, defective
		Master control board defective
SC754-41		Reconnect the connector.
		Replace the stacking tray lift motor.
		Replace the stack tray HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Harness connector loose, broken, defective
		Master control board defective
SC754-42		Reconnect the connector.
		Replace the stacking tray motor.
		Replace the stack tray HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Stack weight motor defective
		Harness connector loose, broken, defective
SC754-43		Master control board defective
		Reconnect the connector.
		Replace the stack weight motor.
		Replace the stack weight HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Harness connector loose, broken, defective
		Master control board defective
SC754-44		Reconnect the connector.
		Replace the stack weight motor.
		Replace the stack weight HP sensor.
		Replace the master control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Harness connector loose, broken, defective
		Slave control board defective
SC754-45	В	Reconnect the connector.
		Replace the sub grip lift motor.
		Replace the Sub grip upper HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 upper HP sensor defective
		Harness connector loose, broken, defective
	В	Slave control board defective
SC754-46		Reconnect the connector.
		Replace the sub grip lift motor.
		Replace the Sub grip upper HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC No.	Level 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 Harness connector, loose, broken, defective Reconnect the connector. Replace the sub grip size motor. Replace the sub grip size HP sensor. Replace the slave control board.
		power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-48	В	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 Slave control board defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Reconnect the connector. Replace the sub grip size motor. Replace the sub grip size HP sensor. Replace the slave control board. Replace the motor harness.
		Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Harness connector loose, broken, defective
	В	Slave control board defective
SC754-49		Reconnect the connector.
		Replace the SG motor.
		Replace the SG open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Sub grip open position lag error
		At the start of the sub grip close operation, the SG open sensor did not go OFF, even after the SG motor had operated for 500 ms.
		SG motor defective
		SG open sensor defective
		Harness connector loose, broken, defective
		Slave control board defective
SC754-50	В	Reconnect the connector.
		Replace the SG motor.
		Replace the SG open sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Harness connector loose, broken, defective
	В	Slave control board defective
SC754-51		Reconnect the connector.
		Replace the SG motor.
		Replace the SG close sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Slave control board defective
SC754-52		Reconnect the connector.
		Replace the SG motor.
		Replace the SG close sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
		Connector harness loose, broken, defective
SC754-53	В	Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-54	В	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 Slave control board defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		 Reconnect the connector. Replace the MG lift motor. Replace the MG HP sensor. Replace the slave control board. Replace the motor harness. Replace the sensor harness. After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Connector harness loose, broken, defective
SC754-55		Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (S).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-56	В	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
		Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (S).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-57	В	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
		Connector harness loose, broken, defective
		Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC754-58	В	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
		Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG press sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector harness loose, broken, defective
SC754-59		Slave control board defective
		Reconnect the connector.
		Replace the MG lift motor.
		Replace the signature exit sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector harness loose, broken, defective
		Slave control board defective
SC754-60		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Slave control board defective
SC754-61		Reconnect the connector.
		Replace the MG lift motor.
		Replace the MG HP sensor (L).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	MG open sensor (R) defective
		Connector or harness loose, broken, defective
		Slave control board defective
SC754-62		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip open sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector or harness loose, broken, defective
		Slave control board defective
SC754-63		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip open sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Main grip close sensor (R) late error
		At the start of the main grip close operation, the MG close sensor (R) did not go ON, even after the MG motor (R) had operated for 3000 ms.
		Main grip motor (R) defective
		Main grip close sensor (R) defective
	В	Connector or harness loose, broken, defective
		Slave control board defective
SC754-64		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip close sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector or harness loose, broken, defective
		Slave control board defective
SC754-65		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip close sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Main grip encoder sensor (R) defective
		Connector or harness loose, broken, defective
SC754-66		Slave control board defective
		Reconnect the connector.
		Replace the main grip motor (R).
		Replace the main grip encoder sensor (R).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Connector or harness loose, broken, defective
		Slave control board defective
SC754-67		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG open sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector or harness loose, broken, defective
		Slave control board defective
SC754-68		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG open sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Perfect Binder: Main grip close sensor (F) late error
		At the start of the main grip open operation, the MG close sensor (F) did not go ON, even after the MG motor (F) had operated for 3000 ms.
		MG motor (F) defective
	В	MG close sensor (F) defective
		Connector or harness loose, broken, defective
		Slave control board defective
SC754-69		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG close sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	MG close sensor (F) defective
		Connector or harness loose, broken, defective
		Slave control board defective
SC754-70		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG close sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	MG encoder sensor (F) defective
		Connector or harness loose, broken, defective
SC754-71		Slave control board defective
		Reconnect the connector.
		Replace the MG motor (F).
		Replace the MG encoder sensor (F).
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Connector loose, broken, defective
		Slave control board defective
SC754-72		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Signature path exit HP sensor defective
		Connector loose, broken, defective
SC754-73		Slave control board defective
		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit HP sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Signature path exit press sensor defective
		Connector loose, broken, defective
SC754-74		Slave control board defective
		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit press sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC754-75		Slave control board defective
		Reconnect the connector.
		Replace the signature path exit motor.
		Replace the signature path exit press sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Signature jam
		Connector loose, broken, defective
SC754-76		Slave control board defective
		Reconnect the connector.
		Replace the signature exit roller motor.
		Replace the leading edge sensor.
		Replace the slave control board.
		Replace the motor harness.
		Replace the sensor harness.
		Clear the signature jam
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Inserter control board defective
SC754-77		Reconnect the connector.
		Replace the drive switch motor.
		Replace the drive switch sensor
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Drive switch sensor defective
		Connector loose, broken, defective
		Inserter control board defective
SC754-78		Reconnect the connector.
		Replace the drive switch motor.
		Replace the drive switch sensor
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Upper tray low limit sensor defective
		Connector loose, broken, defective
		Inserter control board defective
SC754-79		Reconnect the connector.
		Replace the upper tray lift motor.
		Replace the upper tray low limit sensor
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
		Inserter control board defective
SC754-80		Reconnect the connector.
		Replace the upper tray lift motor.
		Replace the upper tray PICK sensor
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
	В	Upper tray low limit sensor defective
		Connector loose, broken, defective
		Inserter control board defective
SC754-81		Reconnect the connector.
		Replace the lower tray lift motor.
		Replace the upper tray low limit sensor
		Replace the inserter control board.
		Replace the motor harness.
		Replace the sensor harness.
		After the repairs, cancel the low performance mode, and then turn the power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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.
SC754-82	В	The lower tray did not arrive at 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
		Inserter control board defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Ring Binder: Downstream device communication error
		-
		The interface cable connector disconnected/broken
SC756-01	D	Board on the ring binder or a downstream device defective
		Replace the interface cable
		Reconnect the connector
		Replace the board on the ring binder or a downstream device

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC756-02	D	Ring Binder: Device connection order error
		The ring binder did not detect the fixed device connection information command at the initial communication.
		 The interface cable connector disconnected/broken Board on the ring binder or a downstream device defective
		Replace the interface cable
		Reconnect the connector
		Replace the board on the ring binder or a downstream device

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	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) defective
SC756-10		Motor overloaded
		Connector loose, broken, defective
		JG HP sensor (S203) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Ring Binder: Pre-punch side fence HP error
		 Thee sensor failed to detect that the 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) defective
SC756-20	В	Motor overloaded
		Connector loose, broken, defective
		Pre-punch jogger HP sensor (S302) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC756-21		Motor overloaded
		Connector loose, broken, defective
		Jog roller lift HP sensor defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-22	В	Connector loose, broken, defective
		Motor overload
		Punch HP sensor (S302) defective
		Punch encoder sensor defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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.
SC756-30		Paddle roller lift motor (M603) defective
30-30		Motor overloaded Connector loose, broken, defective
		Paddle roller HP sensor defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC756-31		Connector loose, broken, defective
		Motor overload
		Side fence 1 HP sensor (S601) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Ring Binder: Jogger fence 2 error
SC756-32		 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
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC756-33		Motor overloaded
		Connector loose, broken, defective
		Stack tamper HP sensor (S612) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Ring Binder: Pre-bind jogger clamp HP error
	В	 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) defective
SC756-34		Motor overloaded
		Connector loose, broken, defective
		HP sensor (S603) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 ms). 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
SC756-40	В	Motor overloaded
		Connector loose, broken, defective
		Run-out roller HP sensor (S614) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC756-41	В	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
		Replace the connector Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC756-42	В	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 ms). 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) defective
		Motor overloaded
		Connector loose, broken, defective
		Alignment pin HP sensor (S604) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC756-43	В	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 ms). 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) defective
		Motor overloaded
		Connector loose, broken, defective
		Shutter HP sensor 1 (S605) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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 ms). 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
SC756-44	В	Connector loose, broken, defective
		Motor overload
		Ring switch HP sensor (S706) defective
		Ring switch timing sensor (S707) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-45	В	Motor overload
		Bind timing sensor (S702) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-46	В	Connector loose, broken, defective
		Motor overload
		Clamp unit HP sensor (S701) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-47		Alignment pin HP sensor (S604) defective
	В	Alignment pin up sensor (S610) defective
		Jog mechanism defective
		Punch defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No. Level Error Name/Error Condition/Major Cause/Solution	
Ring Binder: Binder unit not detected Binder unit was not detected at initialization before operation. Connector loose, broken, defective Drawer connector defective Replace the connector Reconnect the connector Replace the board For details about SC756-48, refer to page 773 "Ring Binder Recognition: SC756-48".	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	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
SC756-50		Connector loose, broken, defective
		Motor overload
		Output belt rotation HP sensor (S403) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-51	В	Connector loose, broken, defective
		Motor overload
		Output belt 1 HP sensor (S401) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Ring Binder: Output belt 2 HP error
SC756-52		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
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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).
		Stacker motor (M501) defective
		Connector loose, broken, defective
SC756-60	В	Motor overload
		Stack height sensor 1 (S502) defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		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
SC756-61	В	Stack height sensor 1 (S502) defective
		Stacker document sensor (S504) defective
		Connector, loose, broken, defective
		Replace the motor
		Replace the sensor
		Replace the connector
		Reconnect the connector
		Replace the board

1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: Protection device break error
		The fuse blown signal "H (error)" of the fuse on the PSU/PCB in the LCT1 is detected.
		Connector on the harness between PSU and PCB on LCT1 disconnected
		Harness broken
		PSU defective
SC780-03	В	PCB defective
		Poor grounding of the 24V line
		Reconnect the connector on the harness between PSU and PCB on LCT1.
		Replace the harness
		Replace the PSU.
		Replace the PCB.
		Replace the harness/actuator.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: PSU Cooling Fan 1 error
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 1 on the LCT1 is ON.
		PSU Cooling Fan 1 on the LCT1 defective
		Connector disconnected
		Harness broken
SC780-05	В	PSU defective
		PCB defective
		Reconnect the connector.
		Replace the PSU Cooling Fan 1 on the LCT1.
		Replace the harness
		Replace the PSU.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: PSU Cooling Fan 2 error
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 2 on the LCT1 is ON.
		PSU Cooling Fan 2 on the LCT1 defective
		Connector disconnected
	6 B	Harness broken
SC780-06		PSU defective
		PCB defective
		Reconnect the connector.
		Replace the PSU Cooling Fan 2 on the LCT1.
		Replace the harness
		Replace the PSU.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: Bridge Unit Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the cooling fan on the bridge unit of LCT1 is ON.
		Cooling fan defective
		Connector disconnected
SC780-07	В	Harness broken
		PCB on the LCT1 defective
		Reconnect the connector.
		Replace the cooling fan.
		Replace the harness
		Replace the PCB on the LCT1.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: Transport Motor Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT1 is ON.
		Transport Motor Cooling Fan on the LCT1 defective
		Connector disconnected
SC780-08	В	Harness broken
		PCB defective
		Reconnect the connector.
		Replace the Transport Motor Cooling Fan on the LCT1.
		Replace the harness
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: Transport Motor Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT1 is ON.
		Transport Motor Cooling Fan on the LCT1 defective
	В	Connector disconnected
SC780-09		Harness broken
		PCB defective
		Reconnect the connector.
		Replace the Transport Motor Cooling Fan on the LCT1.
		Replace the harness
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-50	D	LCT1: Connection configuration error (LCT not connected)
		LCT2 or LCT3 is detected while LCT1 is not installed.
		The interface harness on the LCT1 broken PCB on the LCT1 defective
		Replace the interface harness on the LCT1
		Replace the PCB on the LCT1

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT1: Connection configuration error (Bridge unit connection error)
		Without LCT2, the bridge unit is connected to LCT1.
	D	The bridge unit is connected to LCT1 in single LCT configuration.
		The interface harness on the LCT2 disconnected
SC780-51		Power cord of the LCT2 disconnected
00,000		PSU on the LCT2 defective
		Remove the bridge unit from the LCT1.
		Reconnect the interface harness connector on the LCT2.
		Plug the power cord of the LCT2.
		Replace the PSU on the LCT2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	LCT2: Protection device break error
		The fuse blown signal "H (error)" of the fuse on the PSU/PCB in the LCT2 is detected.
		Connector on the harness between PSU and PCB on LCT2 disconnected
		Harness broken
		PSU defective
SC781-03		PCB defective
		Poor grounding of the 24V line
		Reconnect the connector on the harness between PSU and PCB on LCT2.
		Replace the harness
		Replace the PSU.
		Replace the PCB.
		Replace the harness/actuator.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT2: PSU Cooling Fan 1 error
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 1 on the LCT2 is ON.
		PSU Cooling Fan 1 on the LCT2 defective
		Connector disconnected
	В	Harness broken
SC781-05		PSU defective
		PCB defective
		Reconnect the connector.
		Replace the PSU Cooling Fan 1 on the LCT2.
		Replace the harness
		Replace the PSU.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT2: PSU Cooling Fan 2 error
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 2 on the LCT2 is ON.
		PSU Cooling Fan 2 on the LCT2 defective
		Connector disconnected
		Harness broken
SC781-06	В	PSU defective
		PCB defective
		Reconnect the connector.
		Replace the PSU Cooling Fan 1 on the LCT2.
		Replace the harness
		Replace the PSU.
		Replace the PCB

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT2: Bridge Unit Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the cooling fan on the bridge unit of LCT2 is ON.
		Cooling fan defective
		Connector disconnected
SC781-07	В	Harness broken
		PCB on the LCT2 defective
		Reconnect the connector.
		Replace the cooling fan.
		Replace the harness
		Replace the PCB on the LCT2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT2: Transport Motor Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT2 is ON.
		Transport Motor Cooling Fan on the LCT2 defective
		Connector disconnected
SC781-08	В	Harness broken
		PCB defective
		Reconnect the connector.
		Replace the Transport Motor Cooling Fan on the LCT2.
		Replace the harness
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		LCT2: Transport Motor Cooling Fan error
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT2 is ON.
		Transport Motor Cooling Fan on the LCT2 defective
	В	Connector disconnected
SC781-09		Harness broken
		PCB defective
		Reconnect the connector.
		Replace the Transport Motor Cooling Fan on the LCT2.
		Replace the harness
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		LCT2: Connection configuration error (LCT not connected)	
		LCT3 is detected while LCT2 is not installed.	
		The interface harness on the LCT1 broken	
		The interface harness on the LCT2 broken	
SC781-50	D	PCB on the LCT1 defective	
367 01-30		PCB on the LCT2 defective	
		Replace the interface harness on the LCT1	
		Replace the interface harness on the LCT2	
		Replace the PCB on the LCT1	
		Replace the PCB on the LCT2	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
	D	LCT2: Connection configuration error (Bridge unit connection error)	
		Without LCT3, the bridge unit is connected to LCT2.	
		The bridge unit is connected to LCT2 in double LCT configuration.	
		The interface harness on the LCT3 disconnected	
SC781-51		Power cord of the LCT3 disconnected	
00,0101		PSU on the LCT3 defective	
		Remove the bridge unit from the LCT2.	
		Reconnect the interface harness connector on the LCT3.	
		Plug the power cord of the LCT3.	
		Replace the PSU on the LCT3.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC781-52	D	LCT2: Connection configuration error (Multi bypass tray connection error)
		The multi bypass tray is connected to LCT2.
		The multi bypass tray is connected to LCT2.
		Remove the multi bypass tray from the LCT2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	LCT3: Protection device break error
		The fuse blown signal "H (error)" of the fuse on the PSU/PCB in the LCT3 is detected.
		Connector on the harness between PSU and PCB on LCT3 disconnected
		Harness broken
		PSU defective
SC782-03		PCB defective
		Poor grounding of the 24V line
		Reconnect the connector on the harness between PSU and PCB on LCT3.
		Replace the harness
		Replace the PSU.
		Replace the PCB
		Replace the harness/actuator

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		LCT3: PSU Cooling Fan 1 error	
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 1 on the LCT3 is ON.	
		PSU Cooling Fan 1 on the LCT3 defective	
		Connector disconnected	
		Harness broken	
SC782-05	В	PCB defective	
		PSU1 defective	
		Reconnect the connector.	
		Replace the PSU Cooling Fan 1 on the LCT3.	
		Replace the harness	
		Replace the PCB	
		Replace the PSU2	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		LCT3: PSU Cooling Fan 2 error	
		Cooling fan alarm "H (error)" is detected while the PSU Cooling Fan 2 on the LCT3 is ON.	
		PSU Cooling Fan 2 on the LCT3 defective	
		Connector disconnected	
	В	Harness broken	
SC782-06		PCB defective	
		PSU2 defective	
		Reconnect the connector.	
		Replace the PSU Cooling Fan 2 on the LCT3.	
		Replace the harness	
		Replace the PCB.	
		Replace the PSU2.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		LCT3: Transport Motor Cooling Fan error	
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT3 is ON.	
		Transport Motor Cooling Fan on the LCT3 defective	
0.0700.00		Connector disconnected	
SC782-08	В	Harness broken	
		PCB defective	
		Reconnect the connector.	
		Replace the Transport Motor Cooling Fan on the LCT3.	
		Replace the harness	
		Replace the PCB.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
	В	LCT3: Transport Motor Cooling Fan error	
		Cooling fan alarm "H (error)" is detected while the Transport Motor Cooling Fan on the LCT3 is ON.	
			Transport Motor Cooling Fan on the LCT3 defective
		Connector disconnected	
SC782-09		Harness broken	
		PCB defective	
		Reconnect the connector.	
		Replace the Transport Motor Cooling Fan on the LCT3.	
		Replace the harness	
		Replace the PCB.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC782-51	D	LCT3: Connection configuration error (Bridge unit connection error)
		The bridge unit is connected to LCT3.
		The bridge unit is connected to LCT3 in triple LCT configuration.
		Remove the bridge unit from the LCT3.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC782-52	D	LCT3: Connection configuration error (Multi bypass tray connection error)
		The multi bypass tray is connected to LCT3.
		The multi bypass tray is connected to LCT3.
		Remove the multi bypass tray from the LCT3.

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
	D	EEPROM download error	
		CRC error occurred 4 times when downloading data from EEPROM.	
		Last parameter writing was failed.	
SC790-10		Board on the RPIP Interface Box defective	
		1. Turn power off/on.	
		If the problem was not solved in Step 1, execute parameter writing again.	
		3. If the problem was not solved in Step 2, replace the board on the RPIP Interface Box.	

ſ

Service Call 816-899

SC816 to SC899

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC816-00	[0x0000]	Energy save I/O subsystem error
SC816-01	D	Subsystem error
SC816-02	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-03	D	Transition to STR was denied.
SC816-04	D	Interrupt in kernel communication driver
SC816-05, 06	D	Preparation for transition to STR failed.
SC816-07	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-08	D	Sysarch (LPUX_ENGINE_TIMERCTRL) error
SC816-09	D	Sysarch (LPUX_RETURN_FACTOR_STR) error
SC816-10 to 12	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-13	D	open() error
SC816-14	D	Memory address error
SC816-15 to 18	D	open() error
SC816-19	D	Double open() error
SC816-20	D	open() error
SC816-22	D	Parameter error
SC816-23, 24	D	read() error
SC816-25	D	write () error
SC816-26 to 28	D	write() communication retry error
SC816-29, 30	D	read() communication retry error
SC816-35	D	read() error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC816-36 to 94	D	Subsystem error
		Energy save I/O subsystem detected some abnormality.
		Energy save I/O subsystem defective
		 Energy save I/O subsystem detected a controller board error (non-response).
		Error was detected during preparation for transition to STR.
		Turn the main power off/on.
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC817-00	В	Monitor error: File detection/ Electronic signature check error
		The Boot Loader could not read either files of a diagnosis module, kernel, or route file system.
		Electronic signature check for either file of a diagnosis module, kernel, or route file system on Boot Loader SD card was failed.
		Either file of a diagnosis module, kernel or route file system on OS FlashROM/SD card was broken or does not exist.
	Either file of a diagnosis module, kernel or route file system on OS FlashROM/SD card was tampered with illegally.	
		 Update the ROM of controller system. Use the Boot SD card including proper electronic signature.

Level	Error Name/Error Condition/Major Cause/Solution
	Watchdog timer error
	The system program fell into a bus-hold state or an endless loop of the program interruption occurred, causing other process to stop.
D	System program defective
	Controller board defectiveOptional board defective
	Turn the main power off/on.Replace the controller board.
	Level D

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC819-00	D	Kernel halt error
		[xxxx]: Detailed error code
		Due to a control error, a RAM overflow occurred during system processing. One of the following messages was displayed on the operation panel.
	[0x5032]	HAIC-P2 error
		HAIC-P2 decompression error (An error occurred in the ASIC compression/decompression module.)
		The code data saved in HDD was broken by some kind of unexpected reason. (HDD device defective)
		 The code data saved on memory was broken by some kind of unexpected reason. (memory device defective)
		ASIC defective
		 The data other than code data was unzipped by software malfunction.
		Turn the main power off/on.
		Replace the HDD.
		Replace the memory
		Replace the controller board.
		Fix the software

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	[0x5245]	Link up error
		Link up transaction between Engine ASIC and Veena was not completed within 100 ms.
		Either one of following message appears on console if Link up error occurs.
		RESUME:PCI-Express bus ROOT_DL status error
		RESUME:PCI-Express bus DETUP status error
		"0x53554D45" -> Link up error
		Also, error code "0x5245" and detail code ""0x53554D45" -> Link up error" appears on operation panel.
		Turn the main power off/on.
		Replace the controller board or the engine board (IPU, BICU)
	[0x5355]	L2 status time out
		L2 status register between Engine ASIC and Veena was not reached the target value within 1 sec.
		Engine ASIC during operation was rebooted or shifted to energy saving mode.
		Machine reboots when SC23x, SC30x occurs.
		If Engine ASIC is working when rebooting (or shifting to the energy saving mode), L2 status value is not on target.
		The following message appears on console.
		SUSPEND:PCI-Express L2 Status Check Error
		SUSPEND:PCI-Express L2 Status Check Error
		Also, error code "0x5355" and detail code ""0x5350454E44" -> L2 status time out" appears on operation panel.
		Turn the main power off/on.
		Replace the controller board or the engine board (IPU, BICU)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	[0x6261]	HDD defective
		Received file system data was broken even if the initialization succeeds and there was no error replay from the HDD.
		Power supply disconnection during data writing to the HDD.
		Replace the HDD. This SC may occur when turning on the machine for the first time with new HDD. In this case, turn the main power off/on.
	[0x696e]	gwinit processing end
		If the SCS process is ended for some reason
		If an unexpected error occurs at SCS processing end, gwint processing also halts (this result is judged a kernel stop error, by gwinit specification) "0x69742064" -> "init died"
		Turn the main power off/on.
	[0x766d]	VM full error
		Occurs when too much RAM is used during system processing
		"vm_pageout: VM is full"
		Turn the main power off/on.
	Console string	Other error (characters on operation panel)
		System detected internal mismatch error
		Software defective
		Insufficient memory Hardware driver defective (RAM, FLASH memory)
		Turn the main power off/on.Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC821-00	D	Self-diagnostics error: ASIC
		[xxxx]: Detailed error code

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	[OBOO]	ASIC register check error
		The write-&-verify check has occurred in the ASIC.
		Defective ASIC device
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC822-00	В	Self-diagnostic error: HDD [xxxx]: Detailed error code
	[3013]	HDD timeout (1st unit)
		 BSY bit (busy signal) of HDD device was not cleared within 31 sec. BSY bit (busy signal) of HDD device was not cleared within 6 sec after setting diagnostic command.
		 Defective HDD device. Defective HDD connector. Defective ASIC device.
		 Replace the HDD device. Replace the HDD connector. Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC840-00	D	EEPROM access error
		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
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC841-00	D	EEPROM read data error
		Mirrored data of the EEPROM is different from the original data in EEPROM.
		Data in the EEPROM is overwritten for some reason.
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC842-00	С	Nand-Flash updating verification error
		SCS write error (verify error) occurred at the Nand-Flash module when remote ROM or main ROM was updated.
		Nand-Flash defective
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Insufficient Nand-Flash blocks (threshold exceeded)
SC842-01	В	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
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC842-02	В	Number of Nand-Flash block deletions exceeded
		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
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC853-00	В	Bluetooth device connection error
		The Bluetooth hardware (USB type) was connected after the machine was turned on.
		The Bluetooth hardware (USB type) was connected after the machine was turned on.
		Always connect the Bluetooth device (USB type) before the machine is turned on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC854-00	В	Bluetooth device disconnected
		The Bluetooth hardware (USB type) was disconnected after the machine was turned on.
		The Bluetooth hardware (USB type) was disconnected after the machine was turned on.
		Never remove Bluetooth (USB type) after machine starts

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC855-01	В	Wireless LAN board error (driver attachment failure)
		Wireless LAN board error (wireless LAN card: 802.11 is covered)
		Defective wireless LAN board
		Loose connection
		Turn the main power off/on.
		Replace wireless LAN board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Wireless LAN board error (driver initialization failure)
SC855-02		Wireless LAN board error (wireless LAN card: 802.11 is covered)
		Defective wireless LAN board
		Loose connection
		Turn the main power off/on.
		Replace wireless LAN board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	.00 B	USB I/F Error
		The USB interface is unusable because of a driver error.
SC857-00		USB driver error (There are three causes of USB error: RX error/CRC error/STALL. SC is issued only in the case of STALL.)
		Check USB connection.
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	A	Data encryption conversion error (Key Setting Error)
		A serious error occurred during an attempt to update the encryption key.
SC858-00		USB Flash, other data, corrupted
		Communication error caused by electrostatic noise
		Controller board defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-01	A	Data encryption conversion error (HDD Key Setting Error)
		A serious error occurred during an attempt to update the encryption key.
		USB Flash, other data, corrupted
		Communication error caused by electrostatic noise
		Controller board defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-02	A	Data encryption conversion error (NVRAM Read/Write Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		NVRAM defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-30	A	Data encryption conversion error (NVRAM Before Replace Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		Software error such as conversion parameters being invalid.
		Turn the main power off/on.Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-31	A	Data encryption conversion error (Other Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		Controller board defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Data encryption conversion HDD conversion error
	00 B	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.
50050.00		HDD conversion was set with the data encryption key update function, but the HDD was removed.
SC859-00		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.
		Check HDD connection.
		Format the HDD.
		If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Data encryption conversion HDD conversion error (HDD check error)
		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.
SC859-01		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.
		Check HDD connection.
		Format the HDD.
		If there is a problem with the HDD, it has to be replaced.

Level	Error Name/Error Condition/Major Cause/Solution
	Data encryption conversion HDD conversion error (Power failure during conversion)
	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.
В	Details: NVRAM/HDD conversion is incomplete.
	Power failure occurred during encryption key update.
	None The display after restart instructs the user to format the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	Data encryption conversion HDD conversion error (Data read/write command error)
SC859-10		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. Details: Abnormal DMAC return value has been received two or more times
		(DMAC timeout, serial communication error etc.)
		HDD was not successfully converted during encryption key update due to HDD errors or cable noises.
		Check HDD connection.Format the HDD.
		If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC860-00	В	HDD startup error at main power on (HDD error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The HDD is connected but the driver detected the following errors.
		 SS_NOT_READY:/* (-2)HDD does not become READY*/
		 SS_BAD_LABEL:/* (-4)Wrong partition type*/
		 SS_READ_ERROR:/* (-5)Error occurred while reading or checking the label*/
		 SS_WRITE_ERROR:/* (-6)Error occurred while writing or checking the label*/
		 SS_FS_ERROR:/* (-7)Failed to repair the filesystem*/
		 SS_MOUNT_ERROR:/* (-8)Failed to mount the filesystem*/
		 SS_COMMAND_ERROR:/* (-9)Drive not responding to command*/
		 SS_KERNEL_ERROR:/* (-10)Internal kernel error*/
		 SS_SIZE_ERROR:/* (-11)Drive size too small*/
		 SS_NO_PARTITION:/* (-12)The specified partition does not exist*/
		 SS_NO_FILE:/* (-13)Device file does not exist*/
		 Attempted to acquire HDD status through the driver but there has been no response for 30 seconds or more.
		Unformatted HDD
		Label data corrupted
		HDD defective
		Format the HDD through SP mode.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC863-01	D	HDD data read failure
		The data written to the HDD cannot be read normally.
		Bad sectors were generated during operation.
		(An error occurred in an area that does not belong to a partition, such as the disk label area.)
		Guide for when to replace the HDD
		1. When SC863 has occurred ten times or more
		The interval is short.
		Repeatedly occurs in the same situation (At power-on, etc.).
		Startup takes a long time when the main power is turned on.
		It takes a long time after main power on for the operation panel to become ready.
		HDD access may be consuming time. Normal HDD access time after main power on is about 5 seconds. If the machine is not waiting for the engine to be ready and it still takes 20 to 30 seconds or more, the HDD may be the cause. If there is a problem with the HDD, HDD-related SCs such as SC860 and SC863 will occur frequently. Print the SC log data and check them.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC863-02 to 23	D	HDD data read failure
		The data written to the HDD cannot be read normally.
		Bad sectors were generated during operation.
		(An error occurred in partition "a" (SC863-02) to partition "v" (SC863-23)).
		Guide for when to replace the HDD
		1. When SC863 has occurred ten times or more
		The interval is short.
		 Repeatedly occurs in the same situation (At power-on, etc.).
		 Startup takes a long time when the main power is turned on.
		It takes a long time after main power on for the operation panel to become ready.
		HDD access may be consuming time. Normal HDD access time after main power on is about 5 seconds. If the machine is not waiting for the engine to be ready and it still takes 20 to 30 seconds or more, the HDD may be the cause. If there is a problem with the HDD, HDD-related SCs such as SC860 and SC863 will occur frequently. Print the SC log data and check them.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864-00	D	HD data CRC error
		During HD operation, the HD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HD.
		HD defective

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864-01	D	HDD data CRC error
		During HDD operation, the HDD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HDD.
		Bad sectors were generated during operation. (An error occurred in an area that does not belong to a partition, such as the disk label area.)
		Format the HDD. Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864-02 to 23	D	HDD data CRC error
		During HDD operation, the HDD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HDD.
		Bad sectors were generated during operation. (An error occurred in partition "a" (SC864-02) to partition "v" (SC864-23)).
		Format the HDD. Replace the HDD.

SC865 RTB 121

	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	SC865-00	D	HD access error
			During HDD operation, the HDD returned an error.
			The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error).
			Replace the HDD.

SC865 RTB 121

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		HDD access error
		During HDD operation, the HDD returned an error.
SC865-01	D	The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error).
		(An error occurred in an area that does not belong to a partition, such as the disk label area.)
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-02 to 23	D	HDD access error
		During HDD operation, the HDD returned an error.
		The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error).
		(An error occurred in partition "a" (SC865-02) to partition "v" (SC865-23)).
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-50 to 73	D	HDD time-out error
		The machine does not detect a reply from the HDD during the HDD operation.
		The HDD does not respond to the read/ write command from the machine.
		Check the harness connections between the controller board and HDD.
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC866-00	В	SD card authentication error
		A license error of an application that is started from the SD card was detected.
		Invalid program data is stored on the SD card.
		Store a valid program data on the SD card.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-00	D	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of /mnt/sd0).
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-01	D	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of /mnt/sd1).
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-02	D	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of /mnt/sd2).
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC868-00	D	SD card access error
		The SD controller returned an error during operation.
		(An error occurred at the mount point of /mnt/sd0)
		SD card defective
		SD controller defective
		Reformat the SD card (using the "SD Formatter" made by Panasonic).*
		Check the SD card insertion status.
		Replace the SD card.
		Replace the controller board.

^{*} Do not format an SD card supplied with the main machine or sold as an option. You may only format SD cards used for Firmware Update by a Customer Engineer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SD card access error
		The SD controller returned an error during operation.
		(An error occurred at the mount point of /mnt/sd1)
		SD card defective
	D	SD controller defective
		SD card that starts an application
		Turn the main power off and check the SD card insertion status.
		 If no problem is found, insert the SD card and turn the main power on.
SC868-01		If an error occurs, replace the SD card.
		SD card for users
		 In case of a file system error, reformat the SD card (using the "SD Formatter" made by Panasonic).*
		 In case of a device access error, turn the main power off and check the SD card insertion status.
		 If no problem is found, insert the SD card and turn the main power on.
		If an error occurs, use another SD card.
		If the error persists even after replacing the SD card, replace the controller board.

^{*} Do not format an SD card supplied with the main machine or sold as an option. You may only format SD cards used for Firmware Update by a Customer Engineer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SD card access error
		The SD controller returned an error during operation.
		(An error occurred at the mount point of /mnt/sd1)
		SD card defective
		SD controller defective
		SD card that starts an application
	D	Turn the main power off and check the SD card insertion status.
		 If no problem is found, insert the SD card and turn the main power on.
SC868-02		If an error occurs, replace the SD card.
		SD card for users
		 In case of a file system error, reformat the SD card (using the "SD Formatter" made by Panasonic).*
		 In case of a device access error, turn the main power off and check the SD card insertion status.
		 If no problem is found, insert the SD card and turn the main power on.
		If an error occurs, use another SD card.
		If the error persists even after replacing the SD card, replace the controller board.

* Do not format an SD card supplied with the main machine or sold as an option. You may only format SD cards used for Firmware Update by a Customer Engineer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC870-00	В	Address Book data error (Anytime: Address Book Error.)
SC870-01	В	Address Book data error (On startup: Media required for storing the Address Book is missing.)
SC870-02	В	Address Book data error (On startup: encryption is configured but the module required for encryption (DESS) is missing.)
SC870-03	В	Address Book data error (Initialization: Failed to generate a file to store internal Address Book.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC870-04	В	Address Book data error (Initialization: Failed to generate a file to store delivery sender.)
SC870-05	В	Address Book data error (Initialization: Failed to generate a file to store delivery destination.)
SC870-06	В	Address Book data error (Initialization: Failed to generate a file to store information required for LDAP search.)
SC870-07	В	Address Book data error (Initialization: Failed to initialize entries required for machine operation.)
SC870-08	В	Address Book data error (Machine configuration: HDD is present but the space for storing the Address Book is unusable.)
SC870-09	В	Address Book data error (Machine configuration: Inconsistency in the NVRAM area used for storing settings required for Address Book configuration.)
SC870-10	В	Address Book data error (Machine configuration: Cannot make a directory for storing the Address Book in the SD/USB FlashROM.)
SC870-11	В	Address Book data error (On startup: Inconsistency in Address Book entry number.)
SC870-20	В	Address Book data error (File I/O: Failed to initialize file.)
SC870-21	В	Address Book data error (File I/O: Failed to generate file.)
SC870-22	В	Address Book data error (File I/O: Failed to open file.)
SC870-23	В	Address Book data error (File I/O: Failed to write to file.)
SC870-24	В	Address Book data error (File I/O: Failed to read file.)
SC870-25	В	Address Book data error (File I/O: Failed to check file size.)
SC870-26	В	Address Book data error (File I/O: Failed to delete data.)
SC870-27	В	Address Book data error (File I/O: Failed to add data.)
SC870-30	В	Address Book data error (Search: Failed to obtain data from cache when searching in the machine Address Book. delivery destination/sender.)
SC870-31	В	Address Book data error (Search: Failed to obtain data from cache during LDAP search.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC870-32	В	Address Book data error (Search: Failed to obtain data from cache while searching the WS-Scanner Address Book.)
SC870-41	В	Address Book data error (Cache: failed to obtain data from cache.)
SC870-50	В	Address Book data error (On startup: Detected abnormality of the Address Book encryption status.)
SC870-51	В	Address Book data error (Encryption settings: Failed to create directory required for conversion between plaintext and encrypted text.)
SC870-52	В	Address Book data error (Encryption settings: Failed to convert from plaintext to encrypted text.)
SC870-53	В	Address Book data error (Encryption settings: Failed to convert from encrypted text to plaintext.)
SC870-54	В	Address Book data error (Encryption settings: Detected data inconsistency when reading the encrypted Address Book.)
SC870-55	В	Address Book data error (Encryption settings: Failed to delete file when changing encryption setting.)
SC870-56	В	Address Book data error (Encryption settings: Failed to erase the file that records the encryption key during an attempt to change the encryption setting.)
SC870-57	В	Address Book data error (Encryption settings: Failed to move a file during an attempt to change the encryption setting.)
SC870-58	В	Address Book data error (Encryption settings: Failed to delete a directory during an attempt to change the encryption setting.)
SC870-59	В	Address Book data error (Encryption settings: Detected a resource shortage during an attempt to change the encryption setting.)
SC870-60	В	Address Book data error (Unable to obtain the on/off setting for administrator authentication (06A and later).)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When an error related to the Address Book is detected during startup or operation.
		 Software bug Inconsistency of Address Book source location (machine/delivery server/LDAP server)
		Inconsistency of Address Book encryption setting or encryption key (NVRAM or HDD was replaced individually without formatting the Address Book)
		Address Book storage device (SD/HDD) was temporarily removed or hardware configuration does not match the application configuration.
		Address Book data corruption was detected.
		Check the HDD connection.
		 Initialize all UCS settings and address/authentication information (SP5-846-046).
		Initialize the Address Book partition (SP5-832-006).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	В	HDD mail reception error
		An error was detected on the HDD immediately after the machine was turned on.
		HDD defective
		Power was turned of while the machine used the HDD.
SC872-00		• Format the HDD (SP5-832-007).
		Replace the HDD.
		When you do the above, the following information will be initialized.
		Partly received partial mail messages.
		 Already-read statuses of POP3-received messages (All messages on the mail server are handled as new messages).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC873-00	В	HDD mail reception error
		An error was detected on the HDD immediately after the machine was turned on.
		HDD defective
		Power was turned of while the machine used the HDD.
		• Format the HDD (SP5-832-007).
		Replace the HDD.
		When you do the above, the following information will be initialized.
		Default sender name/password (SMB/FTP/NCP)
		Administrator mail address
		Scanner delivery history

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC875-01	D	Delete all error (HDD erasure) (hddchack –i error)
SC875-02	D	Delete all error (HDD erasure) (Data deletion failure)
		An error was detected before HDD/data erasure starts. (Failed to erase data/failed to logically format HDD)
		HDD logical formatting failed. The modules failed to erase data.
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Log Data Error
		An error was detected in the handling of the log data at power on or during machine operation.
		Damaged log data file.
		Log encryption is enabled but encryption module is not installed.
		 Inconsistency of encryption key between NV-RAM and HDD.
		Software bug.
		Try the SC876-01 to -99 solutions listed below. If it is not solved, do the following steps (for when only an HDD is replaced):
SC876-00	D	1. Disconnect the HDD and turn on the main power.
		2. Execute SP5-801-019.
		3. Turn off the main power.
		4. Connect the HDD and turn on the main power.
		5. Execute SP5-832-004.
		6. Turn off the main power.
		* The following step is to configure the logging/encryption setting again.
		7. Turn of the main power.
		8. Set SP9-730-002 through -004 to 1.
		9. Turn off/on the main power.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-01	D	Log Data Error 1
		An error was detected in the handling of the log data at power on or during machine operation.
		Damaged log data file
		Initialize the HDD (SP5-832-004).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-02	D	Log Data Error 2
		An error was detected in the handling of the log data at power on or during machine operation.
		Log encryption is enabled but encryption module is not installed.
		Replace or set again the encryption module.
		Disable the log encryption setting.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Log Data Error 3
		An error was detected in the handling of the log data at power on or during machine operation.
SC876-03	D	Inconsistency of encryption key between NV-RAM and HDD.
		Disable the log encryption setting.
		Initialize LCS memory (SP5801-019).
		Initialize the HDD (SP5-832-004).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-04	D	Log Data Error 4
		An error was detected in the handling of the log data at power on or during machine operation.
		 Log encryption key is disabled but the log data file is encrypted. (NVRAM data corruption)
		 Log encryption key is enabled but the log data file is not encrypted. (NVRAM data corruption)
		Initialize the HDD (SP5-832-004).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-05	D	Log Data Error 5
		An error was detected in the handling of the log data at power on or during machine operation.
		Only the NV-RAM has been replaced with one previously used in another machine.
		Only the HDD has been replaced with one previously used in another machine.
		Attach the original NV-RAM.
		Attach the original HDD.
		 With the configuration that caused the SC, initialize the HDD (SP5-832-004).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-99	D	Log Data Error 99
		An error was detected in the handling of the log data at power on or during machine operation.
		Other causes
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC877-00	В	Data Overwrite Security card error
		The "Auto Erase Memory" function of the Data Overwrite Security is set to on but it cannot be done.
		 Data Overwrite Security option SD card is broken. Data Overwrite Security option SD card has been removed.
		If the SD card is broken, prepare a new Data Overwrite Security option SD card and replace the NVRAM.
		If the SD card has been removed, turn the main power off and reinstall a working Data Overwrite Security option SD card.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-00	D	TPM authentication error
		TPM electronic recognition failure
		At startup, hash value registered in TPM was different from the value on USB flash memory.
		 Update of system module attempted without correct update path USB flash memory not operating correctly
		Replace the controller board.

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).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-01	D	USB flash error
		There is a problem in the file system of the USB flash memory.
		USB Flash system files corrupted
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-02	D	TPM error
		An error occurred in either TPM or the TPM driver
		TPM not operating correctly
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-03	D	TCSD dffof
		An error occurred in the TPM software stack.
		TPM, TPM software cannot start
		A file required by TPM is missing
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC880-00	D	MLB error
		Reply to MLB access was not returned within a specified time.
		MLB defective
		Replace the MLB.
		Remove the MLB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC881-01	D	Management area error
		 A problem was detected in the software This error may even occur is an IC card option is not installed.
		This is caused by accumulation of abnormal authentication information in the software. (User operation will not directly cause it.)
		At login
		Example: When a job is sent to the printer/when logged on from the operation panel/when logged on from a Web browser
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	D	Software performance error (signal reception end)
		Unknown software error occurred.
SC899-00		Occurs when an internal program behaves abnormally.
		In case of a hardware defect
		Replace the hardware.
		In case of a software error
		Turn the main power off/on.
		Try updating the firmware.

SC900 to SC998

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC900-00	D	Electrical total counter error 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. Replace the NVRAM.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC910-00	В	External controller error 1
SC911-00	В	External controller error 2
SC912-00	В	External controller error 3
SC913-00	В	External controller error 4
SC914-00	В	External controller error 5
		The external controller alerted the machine about an error.
		Refer to the instructions for the external controller
		Turn the main power off/on.

Ш

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC919-00	D	External controller down
		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 Turn the main power off/on.

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

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

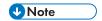
- 1. If the machine does not show one of the five HDD errors (SC860 to SC865), turn the machine power off and on.
- 2. If this is not the solution for the problem, then initialize the NetFile partition on the HDD with SP5-832-11 (HDD Formatting Ridoc I/F).

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).
- 3. Before you initialize the Netfile partition with SP5-832-11, do these steps:
- 4. In the User Tools mode, do Document Management> Batch Delete Transfer Documents.
- 5. Do SP5-832-11, and turn the machine off and on.

Procedure 3

- 1. If "Procedure 2" is not the solution for the problem, do SP5-832-1 (HDD Formatting All)
- 2. Cycle the machine off/on.



 SP5-832-001 erases all document and address book data on the hard disks. Consult with the customer before you do this SP code.

Procedure 4

1. If "Procedure 3" does not solve the problem, replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC990-00	D	Software operation error	
		Software attempted an unexpected operation.	
		Abnormal variable	
		Internal parameter error	
		Insufficient work memory	
		Hardware error not detected by SC	
		Turn the main power off/on.	
		Reinstall the software of the controller and BICU board.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC991-00 C		Recoverable software operation error	
		The software performed an unexpected function and the program cannot continue. Recovery processing allows the program to continue.	
		Abnormal variable	
		Internal parameter error	
	C	Insufficient work memory	
		Hardware error not detected by SC	
		Logging only	
		In order to get more details about SC991:	
		Execute SP5-990 (SP Print Mode) or SP7-403 (SC History) to read the history of the 10 most recent logged errors.	

SC992 RTB 114

	SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		Undefined Error (No SC Code)		
	SC992-00	D	An error not controlled by the system occurred (the error does not come under any other SC code).	
			Software defectiveIncorrect SC code from previous machine	
			Turn the main power off/on.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC994-00	С	Application Item Error	
		The numbers of executed application items on the operation panel reach the maximum limit for the operation panel structure.	
		Too many executed application items	
		Logging only	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
	SC997-00 D	Application function selection error	
		The application selected by the operation panel key operated abnormally (No response, abnormal ending).	
SC997-00		Software bug (mainly the application)	
		Check the optional RAM, DIMM, boards required by the application program.	
		Check if the combination of downloaded programs are correct.	

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
		Application start error	
		No application was registered to system within a specified time after the main power was turned on.	
	(No application starts/All applications have been terminated abnormally)		
		Application started but cannot be drawn now for some reason.	
SC998-00	D	Software bug (mainly the application)	
		 The optional RAM, DIMM, boards required by the application program. Are not installed correctly. 	
		Turn the main power off/on.	
		Check the optional RAM, DIMM, boards	
		Check the combination of programs	
		Replace the controller board.	

1

Service Call 995 (Engine)

SC995 (Engine: Others)

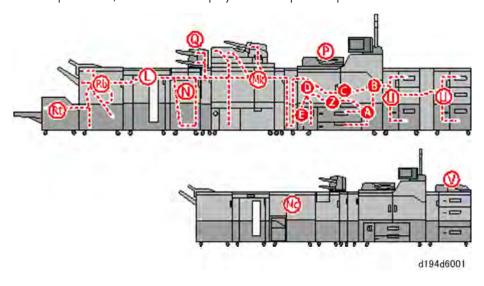
SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC995-01	D	CPM setting error 1	
SC995-02	D	CPM setting error 2	
SC995-03	D	CPM setting error 3	
SC995-04	D	CPM setting error 4	
		Comparison of machine serial number (11 digits) and machine identification code.	
		Machine serial number (11 digits) or machine identification code does not match.	
		SC995-01	
		 Contact your supervisor for details on how to enter the serial number and destination code. 	
		Attach the NV-RAM that was installed previously.	
		SC995-02	
		 Attach the NV-RAM that was installed previously. 	
		 Download data on the NV-RAM using SP5-825, and then turn the power on/off. 	
		SC995-03	
		Replace it with a specified controller.	
		SC995-04	
		Return the parts to the original configuration, and then replace them according to the manual.	

2. JAM Codes

Jam Detection

Jam Displays

When a jam occurs, the location is displayed on the operation panel.



Jam Removal

ACAUTION

 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.

UNote

- 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.

2

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 door of the main machine, and also provided on peripheral units.

Printer Engine Jam History

How to check

Plotter Jam History can be displayed using SP7-507.

- 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

Display

CODE : 011 SIZE : 005 TOTAL : 0000334

DATE : Mon Jan 21 11:44:50 2013

d1795482

- CODE: Displays the jam code.
- SIZE: Displays the paper size code.
- TOTAL: Displays the total number of printer jams (SP7-502-001).
- DATE: Displays the date and time the jam occurred.



- The 10 latest printer jams are displayed.
- Initial jams are not recorded.

Jam Code Descriptions

These are lists of jam codes for the main machine and peripheral devices. Please note:

- Late jam. The paper has failed to arrive within the prescribed time due to a jam that has occurred upstream of the referenced sensor.
- Lag jam. The paper has failed to leave the location of the referenced sensor within the prescribed time due to a jam downstream of the referenced sensor.

ADF

Code	Meaning	Display Code
1	At power on	Р
1	Stack jam error (overflow)	Р
13	Separation sensor late error	Р
14	Skew correction sensor late error	Р
15	Scanner entrance sensor late error	Р
16	Registration sensor late error	Р
17	Exit sensor late error	Р
63	Separation sensor lag error	Р
64	Skew correction sensor lag error	Р
65	Scanner entrance sensor lag error	Р
66	Registration sensor lag error	Р
67	Exit sensor lag error	Р
239	Original grip error	Р

Main Machine+A3 LCIT

Code	Meaning	Display Code
1	Standby jam (initial)	-
3	1 st Paper Feed sensor late jam	A

Code	Meaning	Display Code
4	2nd Paper Feed sensor late jam	А
5	1 st Paper Feed Sensor (A3 LCIT) late jam	U2
6	2nd Paper Feed Sensor (A3 LCIT) late jam	U4
7	3rd Paper Feed Sensor (A3 LCIT) late jam	U6
8	Bypass: Paper Feed Sensor late jam	٧
9	1 st Transport Sensor late jam	А
10	2nd Transport Sensor late jam	А
11	1 st Transport Sensor (A3 LCIT)late jam	U
12	2nd Transport Sensor (A3 LCIT)late jam	U
13	3rd Transport Sensor (A3 LCIT)late jam	U
14	Bypass: Relay Sensor late jam	U, V, U8
15	Vertical Transport Sensor late jam	А
16	Bank Exit Sensor (Simplex) late jam	А
17	Bank Exit Sensor (Duplex) late jam	A
18	Main Relay Sensor 1 late jam	А
19	Main Relay Sensor 2 late jam	B1
20	Main Relay Sensor 3 late jam	В
21	1 st Relay Sensor: Lower (A3 LCIT) late jam	U
22	2nd Relay Sensor: Lower (A3 LCIT) late jam	U
23	2nd Transport Sensor (A3 LCIT)late jam	U
24	3rd Transport Sensor (A3 LCIT) late jam	U
25	Exit Sensor (A3 LCIT) late jam	U
26	Relay Sensor 1 (A3 LCIT) late jam	В
27	Relay Sensor 2 (A3 LCIT) late jam	В
28	Registration Sensor (Main) late jam	В

Code	Meaning	Display Code
29	Registration Sensor (A3 LCIT) late jam	В
30	Paper Late Jam	-
31	Transfer Timing Sensor late jam	В6
32	Transport Thermistor late jam	С
33	Fusing Exit Sensor late jam	D2, D3
34	Feed-out Entrance Sensor late jam	D2, D3
35	Exit JG Sensor late jam	D4
36	Exit Sensor late jam	D4
37	-	D5
38	Exit Relay Sensor (2nd Pass) late jam	-
39	Exit Relay Sensor (Duplex) late jam	-
40	Duplex Invert Sensor (1 st Pass) late jam	D5,E
41	Duplex Invert Sensor (2nd Pass) late jam	-
42	Duplex Transport Sensor 1 late jam	Z3
43	Duplex Transport Sensor 2 late jam	Z3
44	Duplex Transport Sensor 3 late jam	Z3
45	Duplex Transport Sensor 6 late jam	Z4
46	Duplex Transport Sensor late jam	Z4
53	1 st Paper Feed Sensor lag jam	А
54	2nd Paper Feed Sensor lag jam	A
55	1 st Paper Feed Sensor (A3 LCIT) lag jam	U2
56	2nd Paper Feed Sensor(A3 LCIT) lag jam	U4
57	3rd Paper Feed Sensor lag jam RTB 112	U6
58	Bypass: Paper Feed Sensor lag jam	V

Code	Meaning	Display Code
59	1 st Transport Sensor lag jam	А
60	2nd Transport Sensor lag jam	А
61	1 st Transport Sensor (A3 LCIT) lag jam	U
62	2nd Transport Sensor (A3 LCIT) lag jam	U
63	3rd Transport Sensor(A3 LCIT) lag jam	U
64	4th Transport Sensor(A3 LCIT) lag jam	U, V, U8
65	Vertical Transport Sensor lag jam	А
66	Bank Exit Sensor lag jam	А
67	-	А
68	Main Relay Sensor 1 lag jam	А
69	Main Relay Sensor 2 lag jam	B1
70	Main Relay Sensor 3 lag jam	В
71	1 st Relay Sensor: Lower (A3 LCIT) lag jam	U
72	1 st Relay Sensor: Upper (A3 LCIT) lag jam	U
73	2nd Transport Sensor (A3 LCIT) lag jam	U
74	3rd Transport Sensor (A3 LCIT) lag jam	U
75	Exit Sensor (A3 LCIT) lag jam	U
76	Relay Sensor 1 lag jam	В
77	Relay Sensor 2 (A3 LCIT) lag jam	В
78	Registration Sensor lag jam	В
79	-	-
80	Sub Scan Registration Correction	-
81	Transfer Timing Sensor lag jam	В6
82	Transport Thermistor lag jam	С
83	Fusing Exit Sensor lag jam	D2, D3

Code	Meaning	Display Code
84	Feed-out Entrance Sensor lag jam	D2, D3
85	Exit JG Sensor lag jam	D4
86	Exit Sensor lag jam	D4
87	Exit Relay Sensor (1st Pass) lag jam	D5
88	-	-
89	Exit Relay Sensor (Duplex) lag jam	-
90	Duplex Invert Sensor (1 st Pass) lag jam	D5,E
91	Duplex Invert Sensor (2nd Pass) lag jam	-
92	Duplex Transport Sensor 1 lag jam	Z3
93	Duplex Transport Sensor 2 lag jam	Z3
94	Duplex Transport Sensor 3 lag jam	Z3
95	Duplex Transport Sensor 6 lag jam	Z4
96	Duplex Transport Sensor 7 lag jam	Z4
97	Over skew	-
98	Over shift	-
99	Double Feed	-

Vacuum Feed LCIT

Code	Meaning	Display Code
430	1 st Paper Feed Sensor late jam	U,U2
431	2nd Paper Feed Sensor late jam	U,U5
432	1 st Transport Sensor late jam	U
433	2nd Transport Sensor late jam	U
434	1 st Vertical Transport Sensor late jam	U

435	2nd Vertical Transport Sensor late jam	U
436	Bypass Vertical Transport Sensor 2 late jam	U8,V
437	LCIT Exit Sensor late jam	U
438	LCT Connect Entrance Sensor late jam	U11,U
439	LCT Connect Exit Sensor late jam	Ull
440	Horizontal Transport Entrance Sensor late jam	UU11,U10
441	Horizontal Transport Middle Sensor late jam	U,U10
442	Horizontal Transport Exit Sensor late jam	U,U10
470	1 st Paper Feed Sensor lag jam	U,U2
471	2nd Paper Feed Sensor lag jam	U,U5
472	1 st Transport Sensor lag jam	U
473	2nd Transport Sensor lag jam	U
474	1 st Vertical Transport Sensor lag jam	U
475	2nd Vertical Transport Sensor lag jam	U
476	Bypass Vertical Transport Sensor 2 lag jam	U8,V
477	LCIT Exit Sensor lag jam	U
478	LCT Connect Entrance Sensor lag jam	U11,U
479	LCT Connect Exit Sensor lag jam	Ull
480	Horizontal Transport Entrance Sensor lag jam	UU11,U10
481	Horizontal Transport Middle Sensor lag jam	U,U10
482	Horizontal Transport Exit Sensor lag jam	U,U10

Vacuum Feed LCIT (2nd)

Code	Meaning	Display Code
445	1st Paper Feed Sensor late jam	U,U2

446	2nd Paper Feed Sensor late jam	U,U5
447	1 st Transport Sensor late jam	U
448	2nd Transport Sensor late jam	U
449	1 st Vertical Transport Sensor late jam	U
450	2nd Vertical Transport Sensor late jam	U
451	-	-
452	LCIT Exit Sensor late jam late error	U
453	LCT Connect Entrance Sensor late error	U11,U
454	LCT Connect Exit Sensor late error	U,U11
455	Horizontal Transport Entrance Sensor late jam	U,U11,U10
456	Horizontal Transport Middle Sensor late jam	UU10
457	Horizontal Transport Exit Sensor late jam	U,U10
485	1 st Paper Feed Sensor lag jam	U,U2
486	2nd Paper Feed Sensor lag jam	U,U5
487	1 st Transport Sensor lag jam	U
488	2nd Transport Sensor lag jam	U
489	1 st Vertical Transport Sensor lag jam	U
490	2nd Vertical Transport Sensor lag jam	U
491	-	-
492	LCIT Exit Sensor lag jam lag error	U
493	LCT Connect Entrance Sensor lag error	U11,U
494	LCT Connect Exit Sensor lag error	U, U11
495	Horizontal Transport Entrance Sensor lag jam	U,U11,U10
496	Horizontal Transport Middle Sensor lag jam	U,U10
497	Horizontal Transport Exit Sensor lag jam	U,U10

Vacuum Feed LCIT (3rd)

Code	Meaning	Display Code
460	1 st Paper Feed Sensor late jam	U2 / U
461	2nd Paper Feed Sensor late jam	U,U5
462	1 st Transport Sensor late jam	U
463	2nd Transport Sensor late jam	U
464	1 st Vertical Transport Sensor late jam	U
465	2nd Vertical Transport Sensor late jam	U
466	-	-
467	LCIT Exit Sensor late jam	U
500	1 st Paper Feed Sensor lag jam	U2 / U
501	2nd Paper Feed Sensor lag jam	U,U5
502	1 st Transport Sensor lag jam	U
503	2nd Transport Sensor lag jam	U
504	1 st Vertical Transport Sensor lag jam	U
505	2nd Vertical Transport Sensor lag jam	U
506	-	-
507	LCIT Exit Sensor late jam	U

Cover Interposer

Code	Meaning	Display Code
150	Door open jam	Q3-4
151	Display non-performing jam	Q3-4
152	Disable paper stop jam	Q3-4
153	Software internal error	Q3-4

Code	Meaning	Display Code
154	1 st Feed sensor late jam	Q1
155	1 st Feed sensor lag jam	Q1
156	2nd Feed sensor late jam	Q2
157	2nd Feed sensor lag jam	Q2
158	1 st Transport sensor late jam	Q3-4
159	1 st Transport sensor lag jam	Q3-4
160	2nd Transport sensor late jam	Q3-4
161	2nd Transport sensor lag jam	Q3-4
162	1 st Vertical transport sensor late jam	Q3-4
163	1 st Vertical transport sensor lag jam	Q3-4
164	2nd Vertical transport sensor late jam	Q3-4
165	2nd Vertical transport sensor lag jam	Q3-4
166	Exit sensor late jam	Q3-4
167	Exit sensor lag jam	Q3-4
168	Entrance sensor late jam	Q3-4
169	Entrance sensor lag jam	Q3-4
170	Exit sensor late jam	Q3-4
171	Exit sensor lag jam	Q3-4
172	Insert timing late jam	Q3-4
173	1 st Lift motor jam	Q1
174	2nd Lift motor jam	Q2
175	1 st Pickup motor jam	Q1
176	2nd Pickup motor jam	Q2

Finisher/Booklet Finisher

Code	Meaning	Display Code
100	Door open jam	Rb1-5
101	Display non-performing jam	Rb1-5
102	Disable paper stop jam	Rb1-5
103	Software internal error	Rb1-5
104	Paper transport late at exit	Rb1-5
105	Paper transport lag at exit	Rb1-5
106	Paper transport late at proof tray exit	Rb1-5
107	Proof tray exit lag jam	Rb1-5
108	Shift tray exit late jam	Rb1-5
109	Shift tray exit lag jam	Rb1-5
110	Staple exit transport late jam	Rb6-9
111	Staple exit paper transport lag jam	Rb10-17
112	Pre-stacker late jam	Rb6-9
113	Pre stacker lag jam	Rb6-9
114	Stack output error	Rb10-17
115	Booklet stapler late jam	Rb10-17
116	Booklet stapler lag jam	Rb10-17
117	Booklet stapler late jam	Rb10-17
118	Booklet stapler exit lag jam	Rb10-17
119	Transport system error	Rb1-5
120	Shift tray lift drive error	Rb1-5
121	Jogger drive error	Rb10-17
122	Shift drive error	Rb1-5

Code	Meaning	Display Code
123	Stapler drive error	Rb10-17
124	Stack output drive error	Rb10-17
125	Punch drive error	Rb1-5
126	Stack jogger error	Rb10-17
127	Pre-stack drive error	Rb6-9
128	Stack transport error	Rb10-17
129	Center staple error	Rb10-17
130	Center fold error	Rb10-17

Multi-Folding Unit

Code	Meaning	Display Code
250	Door open jam	See jam display table below
251	Display non-performing jam	See jam display table below
252	Disable paper stop jam	See jam display table below
253	Software internal error	See jam display table below
254	Entrance late jam	See jam display table below
255	Entrance lag jam	See jam display table below
256	Fold paper tray exit late jam	See jam display table below
257	Fold paper tray exit lag jam	See jam display table below
258	Straight-through exit late jam	See jam display table below
259	Straight-through exit lag jam	See jam display table below
260	Stopper 1 late jam	See jam display table below
261	Stopper 1 lag jam	See jam display table below
262	Stopper 2 late jam	See jam display table below

Code	Meaning	Display Code
263	Stopper 2 lag jam	See jam display table below
264	Stopper 3 late jam	See jam display table below
265	Stopper 3 lag jam	See jam display table below
266	Registration correction jam	See jam display table below
267	Fold paper tray transport jam	See jam display table below
268	Entrance JG motor jam	See jam display table below
269	Stopper 1 motor jam	See jam display table below
270	Stopper 2 motor jam	See jam display table below
271	Stopper 3 motor jam	See jam display table below
272	Dynamic roller lift motor jam	See jam display table below
273	Registration roller release motor jam	See jam display table below
274	Fold plate motor jam	See jam display table below
275	Jogger fence motor jam	See jam display table below
276	Direct-send JG motor jam	See jam display table below
277	FM6 Pawl Motor error jam	See jam display table below

Jam Display Table

The multi-folding unit does not display the display code via a link from the code. It displays the display code on the operation panel directly from the following sensors.

Sensors	Display Code
Entrance Sensor	N1-N5
Horizontal Path Exit Sensor	N1-N5
Top Tray Exit Sensor	N1-N5
Top Tray Paper Path Sensor	N1-N5
Registration Sensor	N6-N22
1 st Stopper Paper Sensor	N6-N22

Sensors	Display Code
2nd Stopper Paper Sensor	N6-N22
3rd Stopper Paper Sensor	N6-N22
Horizontal Path Paper Sensor	N1-N5
Vertical Path Paper Sensor	N1-N5
Bypass Entrance Paper Sensor	N6-N22
Bypass Exit Paper Sensor	N6-N22

High Capacity Stacker 1 (Upstream)

Code	Meaning	Display Code
300	Entrance path late jam	L1-5
301	Entrance path lag jam	L1-5
302	Proof tray exit late jam	L1-5
303	Proof tray exit lag jam	L1-5
304	Stacker tray exit late jam	L1-5, L
305	Stacker tray exit lag jam	L1-5, L
306	Paper relay path late jam	L1-5
307	Paper relay path lag jam	L1-5
308	Straight exit path late jam	L1-5
309	Straight exit path lag jam	L1-5
310	Shift Tray JG Motor	L1-5
311	Proof Tray JG Motor	L1-5
312	Shift Motor	L1-5, L
313	Main Jogger Front Fence Motor	L1-5, L
314	Main Jogger Rear Fence Motor	L1-5, L

Code	Meaning	Display Code
315	Main Jogger Fence Retraction Motor	L1-5, L
316	Sub Jogger Motor	L1-5, L
317	LE Stopper Motor	L1-5, L
318	Tray Lift Motor	L1-5, L
319	Door open jam	L1-5
320	Main Machine Data Corrupt	L1-5
321	Non recognized paper stop jam	L1-5
322	Software internal error	L1-5

High Capacity Stacker 2 (Downstream)

Code	Meaning	Display Code
325	Entrance path late jam	L1-5
326	Entrance path lag jam	L1-5
327	Proof tray exit late jam	L1-5
328	Proof tray exit lag jam	L1-5
329	Stacker tray exit late jam	L1-5, L
330	Stacker tray exit lag jam	L1-5, L
331	Paper relay path late jam	L1-5
332	Paper relay path lag jam	L1-5
333	Straight exit path late jam	L1-5
334	Straight exit path lag jam	L1-5
335	Shift Tray JG Motor	L1-5
336	Proof Tray JG Motor	L1-5
337	Shift Motor	L1-5, L

Code	Meaning	Display Code
338	Main Jogger Front Fence Motor	L1-5, L
339	Main Jogger Rear Fence Motor	L1-5, L
340	Main Jogger Fence Retraction Motor	L1-5, L
341	Sub Jogger Motor	L1-5, L
342	LE Stopper Motor	L1-5, L
343	Tray Lift Motor	L1-5, L
344	Door open jam	L1-5
345	Main Machine Data Corrupt	L1-5
346	Non recognized paper stop jam	L1-5
347	Software internal error	L1-5

Trimmer Unit

Code	Meaning	Display Code
200	Door open jam	Rt1-2
201	Display non-performing jam	Rt1-2
202	Disable paper stop jam	Rt1-2
203	Software internal error	Rt1-2
204	Entrance late jam	Rt1-2
205	Entrance lag jam	Rt1-2
206	Skew sensor late jam	Rt1-2
207	Skew sensor lag jam	Rt1-2
208	Exit sensor late jam	Rt1-2
209	Exit lag jam	Rt1-2
210	Cutter motor lock	Rt1-2

Code	Meaning	Display Code
211	Cut position motor	Rt1-2
212	Pressure roller	Rt1-2
213	Stopper/pressure roller	Rt1-2
214	Tray motor	Rt1-2

Ring Binder

Code	Meaning	Display Code
350	Transport unit entrance late jam	Mc1-2
351	Transport unit entrance lag jam	Mc1-2
352	Transport unit relay late jam	Mc3-4
353	Transport unit relay lag jam	Mc3-4
354	Transport unit exit late jam	Mc3-4
355	Transport unit exit lag jam	Mc3-4
356	Pre-punch jam	Mc5
357	Post-punch jam	Mc6
358	Binder paper trailing edge jam	Mc5-6
359	Binder paper leading edge jam	Mc7-8
360	Poor ring separation jam	Mc7-8
361	Binder unit not detected jam	Mc7-8
362	Output belt 1 jam	-
363	Output belt 2 jam	-
364	Stacker unit jam	Mc10
365	Punch motor jam	Mc5
366	Shutter motor jam	Mc7-8

Code	Meaning	Display Code
367	Alignment pin motor jam	Mc7-8
368	Pre-punch jogger jam	Mc7-8
369	Alignment unit jam	Mc7-8
370	Punch motor jam	Mc7-8
371	50/100 Clamp adjust motor jam	Mc7-8
372	Exit rotation motor jam	-
373	Door open jam	Mc1-2
374	Main Machine Data Corrupt	Mc1-2
375	Non recognized paper stop jam	Mc1-2
376	Software internal error	Mc1-2

Perfect Binder

Code	Meaning	Display Code
380	Straight-through exit sensor late jam	Mk7-8
381	Straight-through exit sensor lag jam	Mk7-8
382	Cover registration sensor (switchback) late jam	Mk9-10
383	Cover registration sensor (switchback) lag jam	Mk9-10
384	Cover horizontal registration sensor (small) late jam	Mk9-10
385	Cover horizontal registration sensor (small) lag jam	Mk9-10
386	Cover horizontal registration sensor (large) late jam	Mk9-10
387	Cover horizontal registration sensor (large) lag jam	Mk9-10
388	Entrance sensor late jam	Mk11-14
389	Entrance sensor lag jam	Mk11-14
390	Signature path sensor 1 late jam	Mk11-14

Code	Meaning	Display Code
391	Signature path sensor 1 lag jam	Mk11-14
392	Signature path sensor 2 late jam	Mk3-5
393	Signature path sensor 2 lag jam	Mk3-5
394	Timing sensor late jam	Mk3-5
395	Timing sensor lag jam	Mk3-5
396	Stacking tray paper late jam	Mk3-5
397	Stacking tray paper lag jam	Mk3-5
398	Sub grip paper late jam	Mk3-5
399	Cover path 1 sensor late jam	Mk9-10
400	Cover path 1 sensor lag jam	Mk9-10
401	Cover path 2 sensor late jam	Mk7-8
402	Cover path 2 sensor lag jam	Mk7-8
403	Cover registration sensor late jam	Mk9-10
404	Cover registration sensor lag jam	Mk9-10
405	Paper size mismatch jam (length in paper feed direction)	Mk6
406	Cover size short jam	Mk6
407	Trimming width over jam	Mk6
408	Finishing height over jam	Mk6
409	Insert cover size mismatch jam	Mk6
410	Pre-junction sensor late jam	Mk11-14
411	Pre-junction sensor lag jam	Mk11-14
412	Upper tray separation sensor late jam	Mk1
413	Upper tray separation sensor lag jam	Mk1
414	Lower tray separation sensor late jam	Mk1

Code	Meaning	Display Code
415	Lower tray separation sensor lag jam	-
416	Transport path sensor 1 late jam	Mk1
417	Transport path sensor 1 lag jam	Mk1
418	Transport path sensor 2 late jam	Mk2
419	Transport path sensor 2 lag jam	Mk2
420	Transport sensor late jam	Mk6
421	Transport sensor lag jam	Mk6
422	Door open jam	Mk6
423	Main Machine Data Corrupt	Mk6
424	Non recognized paper stop jam	Mk6
425	Software internal error	Mk6

Buffer Pass Unit

Code	Meaning	Display Code	
280	Transport Sensor 1: Late Jam	Kc1-9	
281	Transport Sensor 1: Lag Jam	Kc1-9	
282	Transport Sensor 2: Late Jam	Kc1-9	
283	Transport Sensor 2: Lag Jam	Kc1-9	
284	Transport Sensor 3: Late Jam	Kc1-9	
285	Transport Sensor 3: Lag Jam\	Kc1-9	
286	286 Transport Sensor 4: Late Jam Kc1-9 287 Transport Sensor 4: Lag Jam Kc1-9		
287			
288	288 Transport Sensor 5: Late Jam Ko		
289 Transport Sensor 5: Lag Jam K		Kc1-9	

Code	Meaning	Display Code	
290	Transport Sensor 6: Late Jam	Kc1-9	
291	Transport Sensor 6: Lag Jam	Kc1-9	
292	Transport Sensor 7: Late Jam	Kc1-9	
293	293 Transport Sensor 7: Lag Jam Ko		
294	Transport Sensor 8: Late Jam	Kc1-9	
295	Transport Sensor 8: Lag Jam	Kc1-9	
296	Door open jam	Kc1-9	
297	297 Main Machine Data Corrupt Kc1-9 298 Non recognized paper stop jam Kc1-9		
298			
299 Software internal error Kc1-9		Kc1-9	

RPIP Interface Box

Code	Meaning	Display Code	
220	Main Machine Data Corrupt		
221	Non recognized paper stop jam	Displayed by 3 rd party Peripheral	
222	Software internal error		
223	DFD jam		
224	Emergency stop jam		
225	DFD communication error		

Others

Code	Meaning	Display Code	
194 Plockmatic bookletmaker jam		Displayed by Plockmatic	
199 GBC punch unit jam		Displayed by GBC	

Code	Meaning	Display Code	
510	Finisher: No paper exit response	-	

3. Troubleshooting: Paper Delivery Problems

Main Machine Paper Transport Problems

J032 Appears

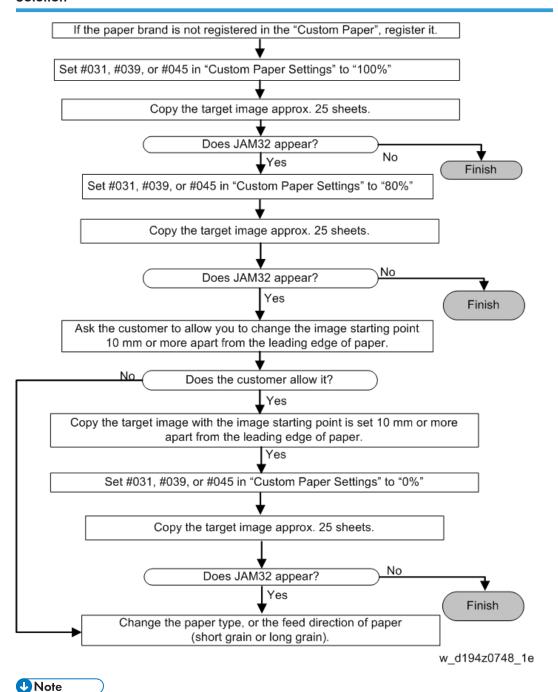
Cause

Limp paper (low paper rigidity) is hard to separate from Intermediate Transfer Belt or Paper Transfer Roller.

This is likely to occur if:

- The machine runs in high humidity + high temperature, or Low humidity + Low temperature.
- Uncoated paper (64 g/m 2 or less) or coated paper (100 g/m 2 or less) is used.
- Short grain paper is used.

Solution



After taking the above measures, we recommend performing color calibration again for the
external controller.

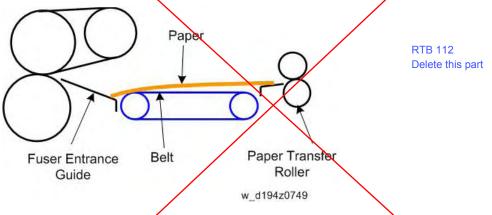


The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

J033 Appears (Paper Weight 7)

Cause

Poor paper transporting due to less adhesion between belt and paper: It occurs particularly in a paper that its leading edge reaches at the Fuser Entrance Guide when its trailing edge goes through the Paper Transfer Roller.



This is likely to occur if:

- Using paper with Paper Weight 7 or equivalent.
- Using LT/A4 LEF (particularly in back-curled paper).

Solution

Turn the paper surface in the feed tray upside down.

J033/J082 Appears (Small size paper, Metallic Paper, and Paper Weight 7 or larger)

Cause

Paper deforms like a bridge on the Paper Transport Belt, which lead to a possible paper jam. (J033: Fuser Exit, J082: Paper Transport Belt)



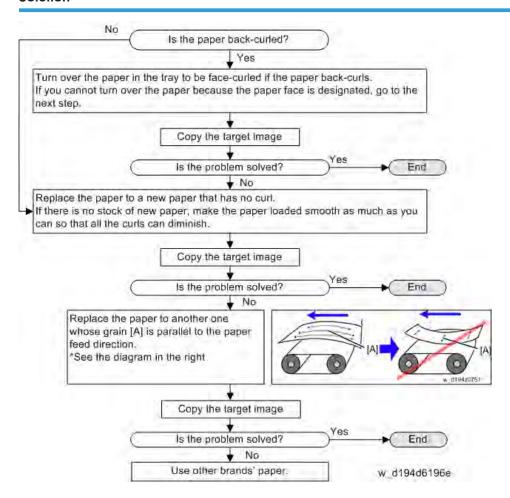
w_d194z0750

[A]: Metallic Paper

This is likely to occur if:

- Using Metallic Paper with a thickness equivalent to Paper Weight 7.
- Using small paper The smaller the paper size is, the greater the frequency is.
- Using LT/A4 LEF (particularly in back-curled paper).

Solution



Frequent Paper Misfeeds

Depending on the cause of the problem, do one of the following:

Have you ruffled the paper sufficiently?

Double feeding may result if the paper is not ruffled properly.

Remove the paper, ruffle it, and reload it.

For details about ruffling the paper, see "Fanning the Paper", About This Machine.

Coated or another type of unsupported paper is loaded in the machine's tray.

Load paper not supported by the machine's paper tray (Trays 1-2) 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 "Recommended Paper Sizes and Types", About This Machine.

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.

For details about loading paper, see "Loading Paper", About This Machine.

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.

For details about loading paper, see "Loading Paper", About This Machine.

The paper size/orientation/type is not specified correctly.

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings.

Too many sheets of paper are loaded in the paper tray.

When loading paper, do not exceed the limit.

For details about how many sheets can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

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 heater inside the paper tray starts operating when the main power is off to prevent sheets from absorbing moisture.

The temperature and humidity of the paper tray is checked in the following SP.

RTB 112 Delete this part

- SP1-910-001 (Paper Bank Temp/Hemidity: Temperature Reading)
- SP1-910-002 (Paper Bank Temp/Humidity: Humidity Reading)

3

When using thick paper or slippery paper.

Enable the Pickup Assist setting.

<If custom paper is used>

In Custom Paper Settings, set 110: [Pickup Assist Setting] to [On].

<If custom paper is not used>

[Adjustment Settings for Skilled Operators] menu, set 0303: [Pickup Assist Setting] to [On].

The paper feed sensor is stained with paper dust.

Clean the part of the paper feed sensor where the paper misfeed is detected.

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. Refer to "roller rib map" for the roller position.

The transfer timing motor is not operating correctly (also applies to when paper is fed from LCIT).

A paper jam related to the transfer timing sensor (JAM31, JAM80) occurs frequently.

- →A paper jam related to the registration timing sensor (JAM28, JAM29, JAM80) occurs frequently.
 - Check for any loose/disconnected harnesses.
 - Check that the encoder is correctly attached to the transfer timing roller.
 - Check for anything which is exerting load on the transfer timing roller.
 - If none of the above problems exists, there is a malfunction of the transfer timing motor or transfer timing motor driver. Replace the malfunctioning unit.

J080 Appears (Paper Delay in Specific Papers)

Cause

Sub-scan registration position is calibrated by accelerating/decelerating the line speed of transfer timing roller. The J080 occurs when the paper position goes over the calibration threshold (±3.0 mm).

This is likely to occur if:

- Using a slippery paper with a low paper-to-paper friction coefficient cause a paper delay.
- Paper hardly reaches at the position earlier than specified timing. Thus jams related to paper feeding speed are caused by paper delay.

Set "122: [Regist Jam Detection with Feed Dir] (SP1-958-001 to -100)" in "Custom Paper Settings" to [Off]. Note that the leading edge in the image may shift it this switch is off.

J099 Appears (Main Machine Tray)

Depending on the cause of the problem, do one of the following:

Coated or another type of unsupported paper is loaded in the machine's tray

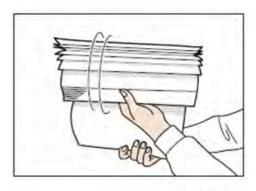
Load paper not supported by the machine's paper tray (Trays 1-2) in the wide LCT or another paper tray that supports the paper.

For details about the size and type of paper that can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

Sheets are stuck to each other

Fan the paper before loading it to loosen the sheets.

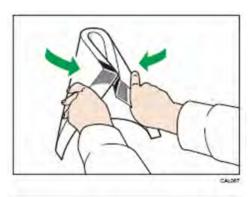
1. Fan the loaded paper.

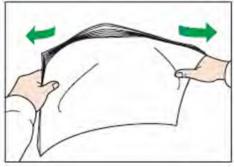


d194d6102

2. Hold the paper by the ends and slowly bend it several times.

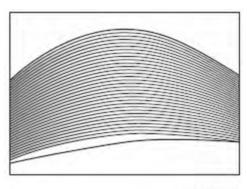
3





d194d6103

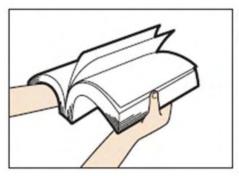
3. Make sure plenty of air gets in between the sheets.



d194d6104

If the above method is difficult, fan the paper in the following way.

- Hold the paper by the edge and fan it by flipping through the sheets. Repeat this fanning for all 4 sides.
- Place the paper on a desk/table and hold down the edge. Fan it by flipping through the sheets. Repeat this fanning for all 4 sides.





w d194z0752

The edges of the sheets are rough.

Turn the sheets the other way up or smooth the edges before loading the paper.

Double feeding has occurred.

The machine may have detected a double feed.

Wrong detection of double feeding

The machine may have wrongly detected a double feed.

Wrong Detection of Double Feeding 1

Depending on the cause of the problem, do one of the following:

When using printed paper;

Set [Double Feed Detection] to OFF.

When using envelopes;

Set [Double Feed Detection] to OFF.

When using thick paper such as paper thickness 8 (300.1 to 360.0g/m2);

Set [Double Feed Detection] to OFF.

When using black paper or dark-colored paper;

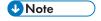
Set [Double Feed Detection] to OFF.

When using thin paper such as paper thickness 1 (52.3 to 63.0g/m2);

Set [Double Feed Detection] to OFF.

When using textured paper;

Set [Double Feed Detection] to OFF.



• Double feeding cannot be detected when [**Double Feed Detection**] is set to OFF. This may lead to decreased image quality or mixing of blank white paper.

3

The Double-Feed Sensor is dirty with paper powder;

Use a blower brush to clean the double-feed sensor 1 (LED) and double-feed sensor 2 (receptor).

Setting [Double Feed Detection] to OFF:

- Through "Adjustment Settings for Skilled Operators";
 Select 0309: [Double Feed Detection] and change [tray paper settings] from "On" to "Off."
- Through "Custom Paper Settings";
 Select 119: [Double Feed Detection] and change setting from "On" to "Off."
- Through SP;
 Set SP1-302-001 to 012 to "Off."

 Disabling the Double Feed Detection may cause a poor image quality or a blank sheet in copied sheets.

Cleaning the Double-Feed Sensor 1 (LED) and Double-Feed Sensor 2 (Receptor)

 Pull out the right drawer and remove the bracket of the double-feed sensor 2 (receptor) (\$\mathbb{O}^2 \times 1\$).



3

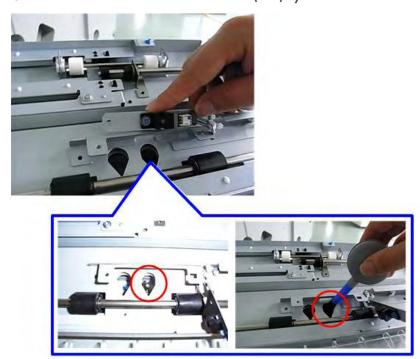
2. Clean the lens of the double-feed sensor 2 (receptor) by a blower brush.





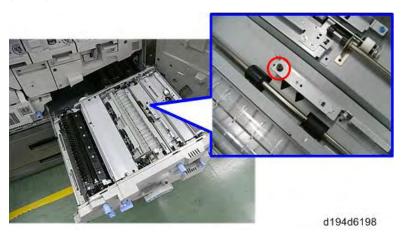
d194d6199

3. Clean the lens of the double-feed sensor 1 (LED) by a blower brush.



d194d6200

4. Re-attach the bracket of the double-feed sensor 2 (receptor) and close the right drawer (\$\mathbb{O}^* \times 1\$).



ACAUTION

• Be careful not to pinch the harness when attaching the bracket.



d194d6201

Wrong Detection of Double Feeding 2

Cause

It occurs when using paper with large deviation in transparency.

Solution

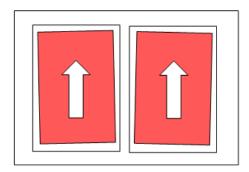
Paper with large deviation in transparency is sometimes mistakenly detected as double feeding. To prevent this problem, specify appropriate values in the following SP. The threshold value can be set for the plain paper, translucent paper, and transparent film.



• Changing the threshold value also changes the accuracy of double feeding detection for other types of paper. Therefore, be sure to check all types of paper which customers use.

SP	Name	Initial Value	Max.	Min.	Step
1-304-001	Dbl-Feed Detect Threshold Adj: Plain	30	100	0	1%
1-304-002	Dbl-Feed Detect Threshold Adj: Translucent	30	100	0	1%
1-304-003	Dbl-Feed Detect Threshold Adj: Transparent Film	5	100	0	1%

Paper Skew



d194d6202

Cause

- Incorrect side fence setting
- Foreign materials (such as paper scraps) exist in the paper feed path
- Incorrect paper arching degree (Inappropriate registration buckle)
- Incorrect parallelism

Solution

[Number] indicates the item in [Adjustment Settings for Skilled Operators]. Does side fence properly fit with the width No of paper loaded in the tray? Yes Fit the side fence correctly along with the paper width. No Yes Is the problem solved? End Yes Are there any foreign materials in the paper transporting path? No Remove all the foreign materials in the path. Yes No Is the problem solved? Paper Thick 5 - 8 What is the paper thick? End Paper Thick 1 - 4 Increase the value of [0307] (SP1-004) Increase the value of [0308] (SP1-005) *Adjust it towards positive (+) *Adjust it towards positive (+) Yes Is the problem solved? Νo End Decrease the value against the initial. * Adjust it towards negative (-) No Is the problem solved? Yes End Adjust [Registration Gate Position]

Skew Detection Setting

If the skew level of output is not permissible, lowering the 0105 (Skew Detection Level: SP1-116-001 through -013) in [Adjustment Settings for Skilled Operators] makes the skew detection level stricter.

w d194z0753e

Also note that the skew detection level setting is valid when 0104 (Skew Detection: SP1-021-001 through -013) in [Adjustment Settings for Skilled Operators], or 014 (Skew Detection) in [Custom Paper Settings] is [On].

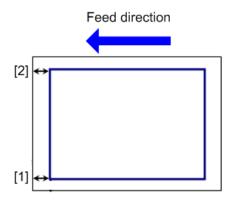
Adjusting the Registration Gate Position

Overview of adjustment

- Using "T6000 70W" "A3" or "DLT", print a trim image from Tray 2 with setting to "Plain paper, Paper Thick 2".
- Adjust the gate position using a measurement with the trim image, so that appropriate skew is obtained.
- Do not use any custom papers.
- 1. Set A3 or DLT plain paper (63.1-80.0 gsm) on Tray 2.
- Select [14: Trimming Area] in SP 2-109-003 (Test Pattern Pattern Selection) to print 5 copies of the test pattern Trimming Area in b/w and simplex.
- Calculate the skew amount "[1] [2]" on all five copies, and calculate the average value
 of all the five copies. If the average value is not within the recommended range +/- 0.2
 mm, go to the next step.



• It is a good idea to use a loupe.



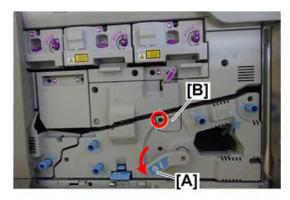
w m194e2997a

4. Open the right front door.

3

3

5. Lower the handle B5 [A] and then remove the small cover [B] (\$\mathbb{O}^2 x 1).



d194d2157

6. Loosen the two screws on the adjustor plate (\$\mathbb{O}^{\text{x}} \text{x2}\$).

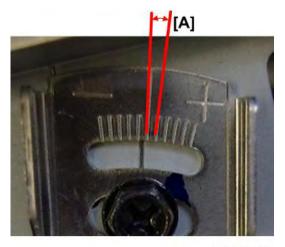


d194d2158

Move the adjustor plate left or right to adjust the skew so that the skew amount "[1] –
 [2]" on all 5 copies is within the recommended range +/- 0.2mm.

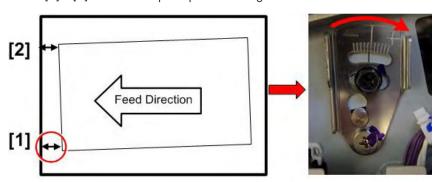


• 1 notch [A] on the scale is equivalent to a skew adjustment of approximately 0.2mm. * This value may vary with variations in parts.



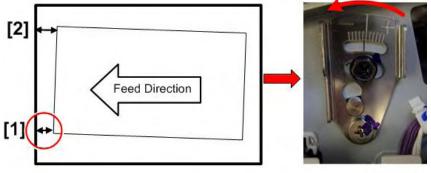
d194d2159

• If [1] > [2]: move the adjustor plate to the right.



w_d194e2160a

• If [1] < [2]: move the adjustor plate to the left.



w_d194e2161a

- 8. Tighten the two screws loosened in step 5.
- 9. Re-attach the small cover and then raise the handle B5 ($\Im x1$).
- 10. Close the right front cover.

- 11. Set SP2-109-003 (Test Pattern: Pattern Selection) to "14 (Trimming Area)" and copy five sheets of simplex print again.
- 12. Calculate the skew amount "[1] [2]" on the output images to make sure the skew amount is improved.



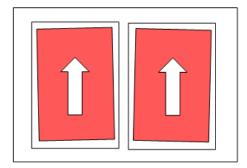
• Calculation Formula:

A3 Skew = ([1] - [2]) / 293 x 200 DLT Skew = ([1] - [2]) / 275.4 x 200

Criteria:

If the skew of all the five copies are within 0.0±0.2 (Recommend Threshold), it is considered skew has been improved.

J097 Appears (Skew Detection)



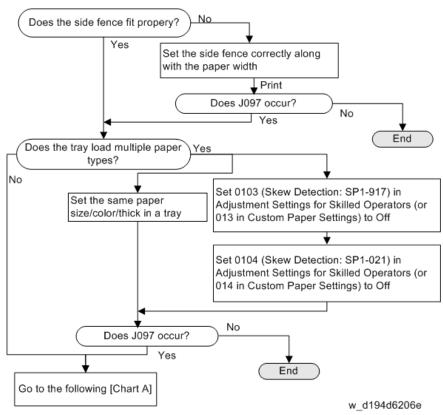
d194d6202

Cause

- Incorrect side fence setting
- Incorrect paper thick setting
- Color paper and/or envelops are fed.
- Multiple paper types, paper thick and/or color papers are mixed in a tray.

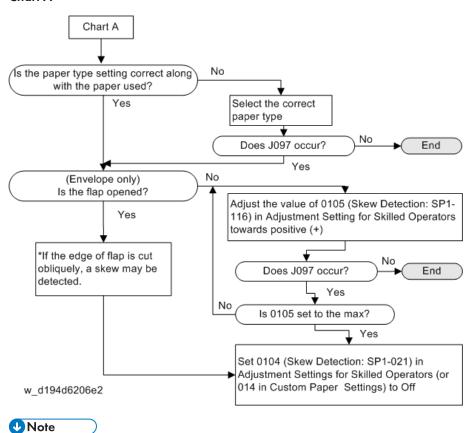
Solution

RTB 161 Text added



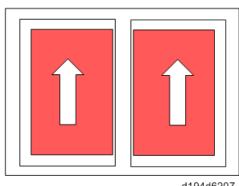
3

Chart A



· Skew may occur in output paper because the skew detection level is mitigated or skew detection is disabled. Adjust the registration gate position if the skew level is poor. See page 636 "Adjusting the Registration Gate Position".

J098 Appears (Shift Over)



d194d6207

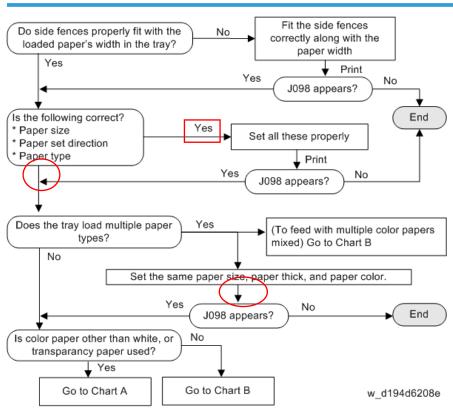
Cause

- Incorrect side fence setting
- Incorrect paper size, paper thick, and/or paper setting direction
- Envelops, transparency sheets and/or papers with a color other than white are used.
- Multiple paper types, paper thick and/or color papers are mixed in a tray.



• The "Papers with a color other than white" include color papers or a white paper colored in slightly creamy white.

RTB 112 **Solution** Flow chart modified in 3 places



3

Chart A

RTB 112

Modified

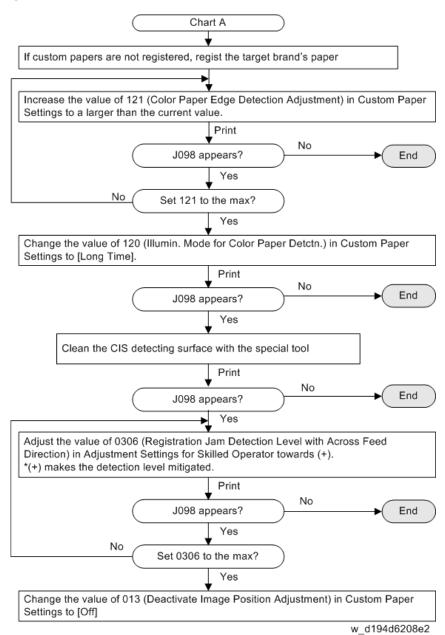
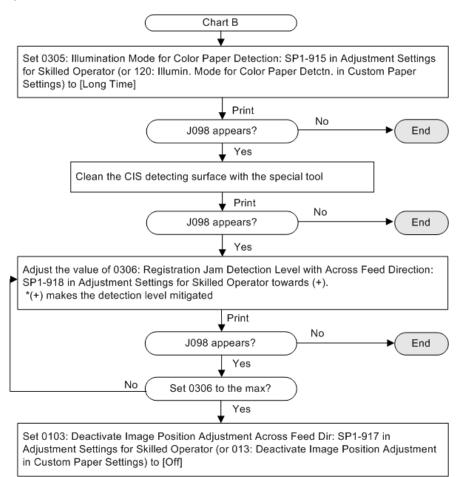


Chart B



w d194d6208e3

U Note

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

↓ Note

- Incorrect image position in perpendicular and/or skew in output may occur because the jam detection level for main-scan direction, skew detection level, and 0103 are disabled.
- If the skew level of output is not permissible, lowering the 0105 (Skew Detection Level: SP1-116-001 through -013) in [Adjustment Settings for Skilled Operators] makes the skew detection level stricter. Note that, however, a skew that exceeds permissible levels will likely to heighten the frequency of paper jam.

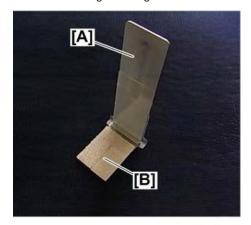
3

Also note that the skew detection level setting is valid when 0104 (Skew Detection: SP1-021-001 through -013) in [Adjustment Settings for Skilled Operators], or 014 (Skew Detection) in [Custom Paper Settings] is [On].

Cleaning the CIS



• Use the following cleaning tool for the CIS cleaning

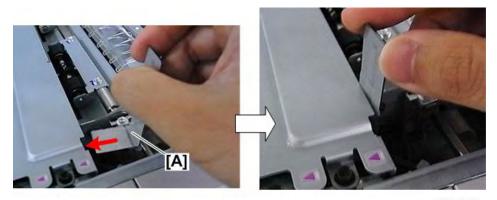


d194d3115

- [A]: Grip
- [B]: Cleaning part
- 1. Pull out the transfer unit.
- 2. Slide the cleaning tool into the space shown below.



• Slide the cleaning part [A] of the CIS cleaning tool into the paper transporting path.



d194d3116

3. Clean the sensor part of CIS by sliding the tool toward the main scan direction.





d194d3117

4. Pull out the cleaning tool, and reassemble the unit.

Efficient SP for Paper Jam Analyzing

This machine has the paper jam purge system to purge jammed paper in the paper path if possible. However, this may disturb the paper jam analyzing correctly because you are not sure where jammed paper is stuck.

If you want to know where jammed paper is stuck, change the setting of SP1-909-001 from "1" to "0" (no paper purge).

Fan on Optional Buffer Pass Unit Generates Noise

Solution

Set 0203: Buffer Pass Unit Fan Activation Setting in Adjustment Settings for Adjustment Settings for Skilled Operator (or SP1-932-002) according to the paper type currently used.



• Depending on the setting, blocking (heat and pressure causing toner particles on stacked copies to form clumps which then detach) may occur. When a blocking occurs, activate the fan.

White Spots Due to Paper Dusts

Cause

Paper dusts on paper surface can generate white spots.

3

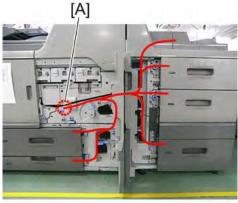
Solution

Clean the Dust tray, transfer timing roller, and guide plates in the paper transporting paths (Main machine, A3LCT, Bypass Tray).

Clean the transfer guide plates from a feed tray, which stores the paper generating white spots, to the Paper transfer roller [A]. Normally, doing so resolves the problem.



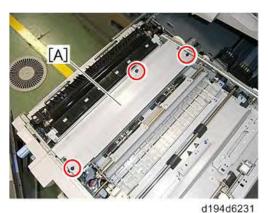
• The following picture shows the paper transporting path from the main machine (Tray 1 and 2), RT5090 (Tray 3 through 5), and bypass tray to the Paper transfer roller [A].



d194d6211

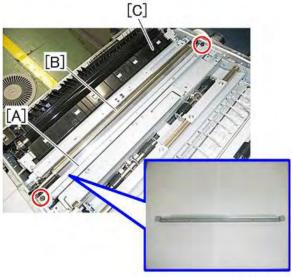
Cleaning the Transfer Unit

1. Pull out the PTR unit, and remove the bracket [A] (@x3).



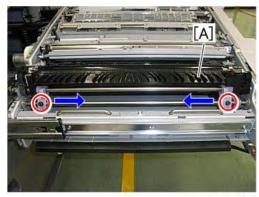
- 2. Remove the Dust tray (@x2).
- 3. Remove paper dust with a dry cloth.

4. Clean the Dust tray [A], transfer timing roller [B], and entrance guide plate [C].



d194d6232

5. Remove the paper transfer unit (@x2).



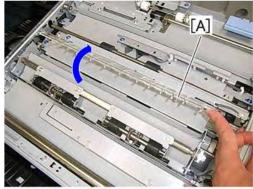
d194d6233

6. Clean the paper transfer roller with a dry cloth.



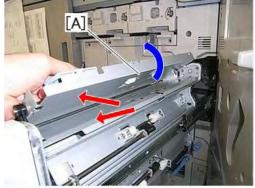
d194d6234

7. Open and clean the transparent cover [A].

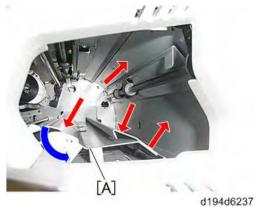


d194d6235

8. Open and clean the entrance guide plate [A].



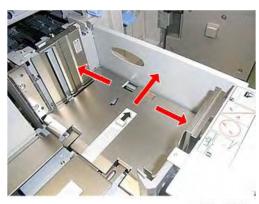
d194d6236



10. Reassemble the unit.

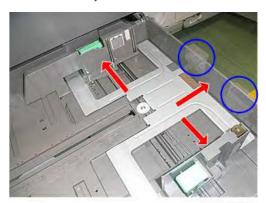
Cleaning the Paper Tray Unit of Main Machine

1. Pull out the Tray 1, and clean the side fence and the end fence.



d 194 d 6216

2. Pull out the Tray 2, and clean the side fence and the end fence.



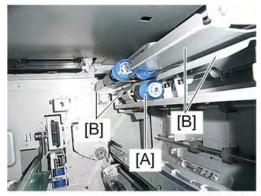
d194d6217

3. Remove the screw on Tray 1, and remove the tandem tray (right) with raising it. (@x2)



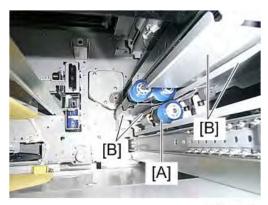
d194d6218

4. Clean the Pick-up roller [A] and guide plate [B] on Tray 1.



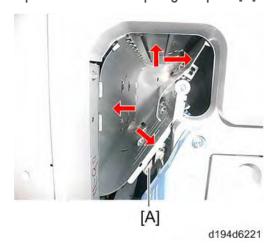
d194d6219

5. Remove Tray 2 with raising it, and clean the pick-up roller [A] and guide plate [B].



d194d6220

6. Open the vertical transport guide plate [A] and clean up all the guide plates on it.

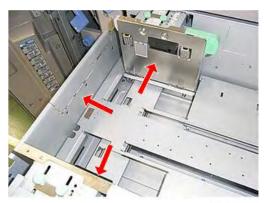


7. Reassemble the unit.

Cleaning the LCIT (RT5090) Paper Tray

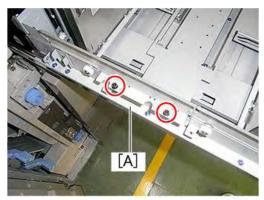
This section describes how to clean the tray 1 as an example.

1. Clean the side fence and end fence in the Tray 3.



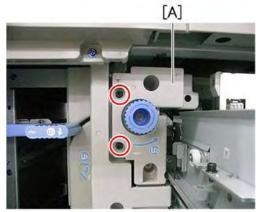
d194d6222

2. Pull out the paper feed tray and remove the tray face plate [A] (@x2).



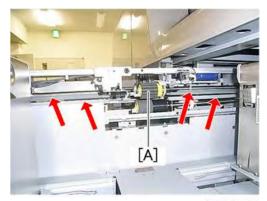
d194d6223

3. Pull out the paper feed unit [A] (\$\mathbb{O}^{\pi} x2).



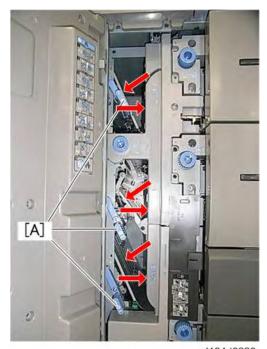
d194d6224

4. Clean the paper feed rollers [A] and guide plate.



d194d6225

- 5. If tray 2 and tray 3 are applicable, do the step 1-4 in this procedure for them.
- 6. Open and clean the vertical transport guide plate [A].



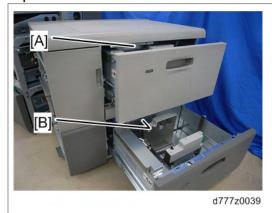
d194d6226

7. Reassemble the unit.

3

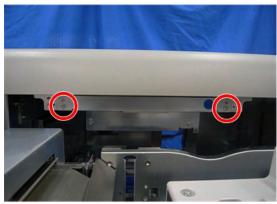
Cleaning the Paper Feed Unit of Vacuum Feed LCIT (RT5100)

Paper Feed Belt Unit

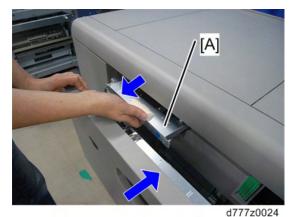


[A]: Tray 1 Paper Feed Belt Unit[B]: Tray 2 Paper Feed Belt Unit

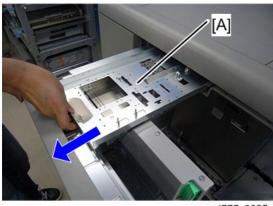
- 1. Open the paper tray.
- 2. Unlock the paper feed belt unit (©x2).



d777z0023



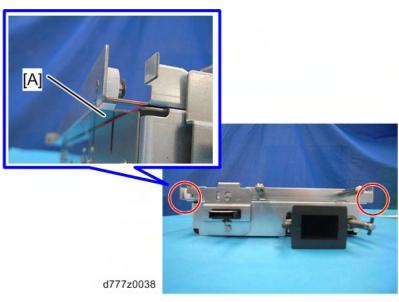
4. Pull out the paper feed belt unit [A] and the paper tray together.

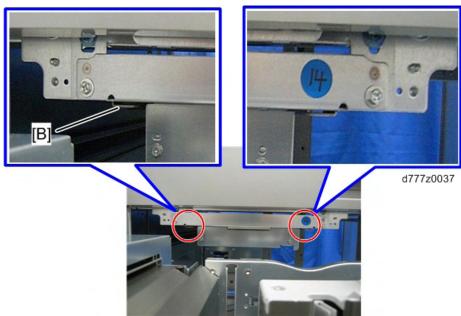


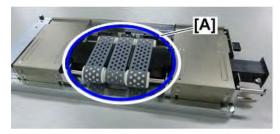
d777z0025



- The paper feed belt unit must be pulled out horizontally relative to the paper tray, to ensure that the paper feed belt is not damaged by getting caught in the side fences or other parts.
- To prevent damaging the paper feed belt when you return the paper feed belt unit to its original position, align the right and left guides [A] with the rail [B] on the paper tray side and raise them slightly before replacing the unit.

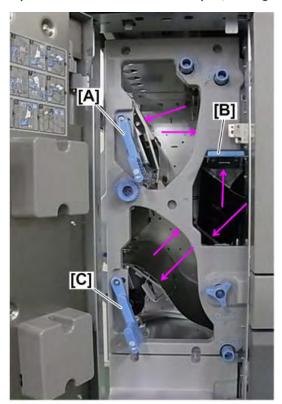






d194d6705

6. Open and clean the front door, Open/close guide plates [A], [B].

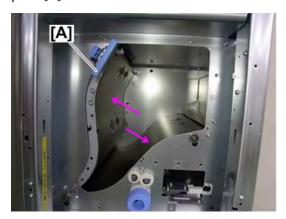


d194d6277

7. Close the guide plates and front door.

Cleaning the Bridge Unit

 Open the front door of the relay unit, and then open and clean the open/close guide plate [A].



d194d6278

- 2. Close the guide plate and front door of the relay unit.
- 3. Pull out the horizontal feed unit, and open the guide plate [A] to clean it.



d194d6279

4. Close the guide plate and put the horizontal feed unit back in place.

3

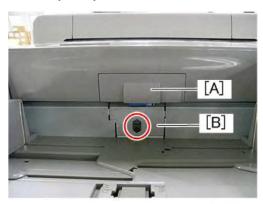
Cleaning the Paper Feed Unit of the Multi Bypass Tray (BY5010)

1. Clean the side fence and the end fence in the paper feed Tray.



d194d6227

2. Remove pick-up roller cover [A] and reverse roller cover [B] (@x1).



d194d6228

3. Clean the paper feed roller.



d194d6229

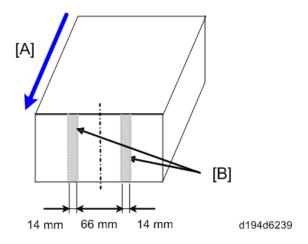
4. Slide the Tray to the right side, and clean the entrance guide plate.



d194d6230

5. Reassemble the unit.

Roller Marks on Paper Edges (Merge)



[A]: Paper exit direction

[B]: Dirt adheres in the transfer roller's routes

Cause

Aging generates dirt that contains paper dusts, toner, and other foreign materials. This dirt accumulates on drive(n) rollers and guide plates, and consequently adheres to paper edges.

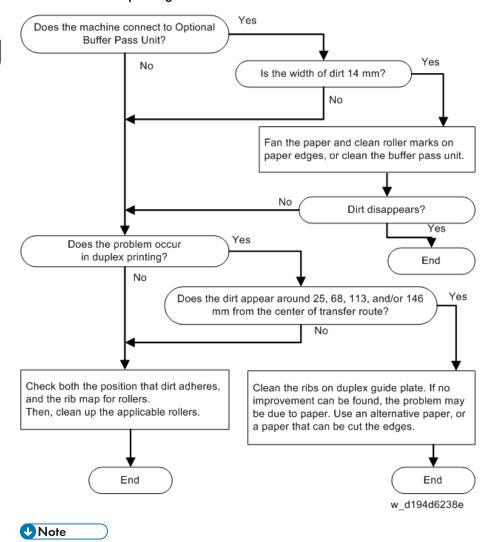
This is likely to occur if:

- Long size paper
- High coverage printing

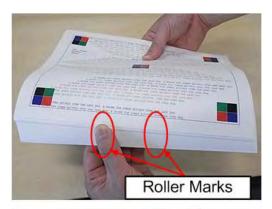
- FC mode
- The number of pages per 1 job is large

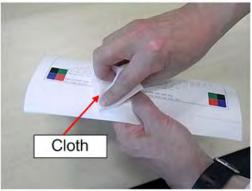
Solution

Roller Marks on Paper Edges due to the dirt on transfer roller



- · Fanning the paper, and Cleaning the roller marks
- Put your finger on the roller marks, and fan the paper. Then remove the dirt with a dry cloth.





w d194d6240e

Solution for roller mark on paper trailing edge due to decurl unit

- 1. Register the problem paper brand in Custom Paper Settings.
- 2. Check the value of 0304 (Adjust Paper Curl) in Adjustment setting for Skilled Operator.
- 3. According to correction strength, lower the value in custom paper settings shown in the table below by 0.5% step.

0304 Result	Lower the following value
Off	105: [Decurler Feed Speed Adj: Curl Adj Off]
Weak	106: [Decurler Feed Speed Adj: Curl Adj Weak]
Strong	107: [Decurler Feed Speed Adj: Curl Adj Strg]

4. Does the roller mark on the paper trailing edge disappear?

Yes: Finished

No: Repeat the step 3 until the value reaches at the minimum. If there is no improvement even though the value reaches at the minimum, no further improvement can be expected in the field.

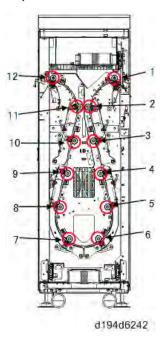
• A too low line speed may cause a paper jam.

Solution for roller mark due to dirt on anti-static brush

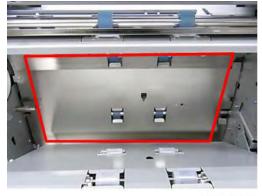
1. Clean the anti-static brush on the left drawer, and, if installed, Optional Buffer Pass Unit.

Cleaning the Optional Buffer Pass Unit

- 1. Pull out the optional buffer pass unit and open the guide plate.
- 2. Wipe the transfer roller with a damp cloth.

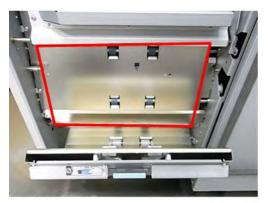


3. Clean the right (entrance side) upper guide plate.



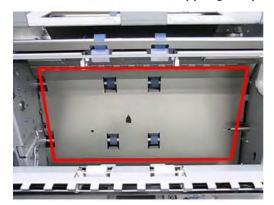
d194d6243

4. Clean the right (entrance side) lower guide plate.



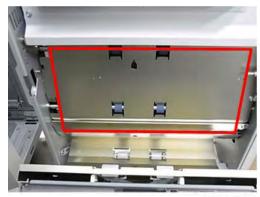
d194d6244

5. Clean the left (entrance side) upper guide plate.



d194d6245

6. Clean the left (entrance side) lower guide plate.

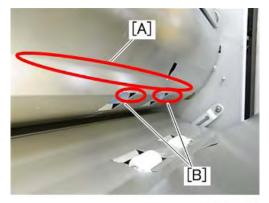


d194d6246

U Note

• Wipe the guide plate with an alcohol dampened cloth.

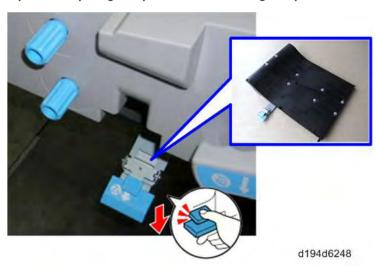




d194d6247

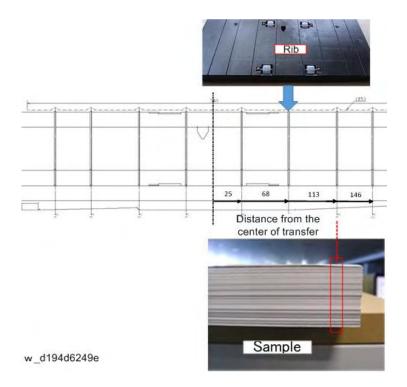
Cleaning the Duplex Guide Plate

- 1. Pull out the left drawer.
- 2. Open the duplex guide plate, and clean the guide plate.



UNote

• Guide Plate Rib Location



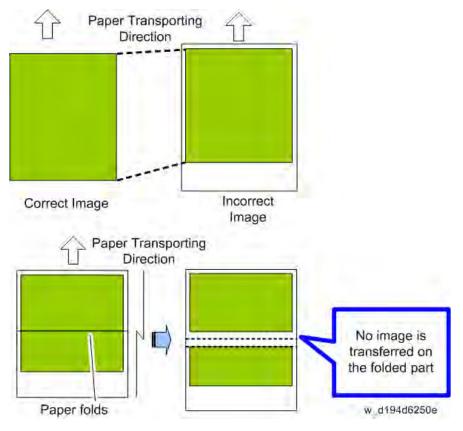
Disturbed Images, Scratches, Streaks, Waves and Creases (Line Speed Finetuning)

Cause

• Line speed of Transfer roller may be too fast:

RTB 112 Incorrect The margin of the leading edge is narrow, and the whole image shrinks.

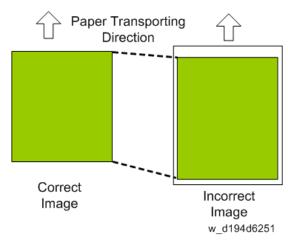
Paper folds unexpectedly, and/or no image is transferred in the folded part.



• Line speed of Transfer roller may be too slow:

RTB 112 Incorrect

The margin of the leading edge is too large, and the whole image stretches.



- Exit roller is dirty.
- Exit motor line speed, inverter entry speed, or inverter exit speed are Incorrect.

Solution (1)

If Transfer roller rotates too fast;

- Take a note of the initial value of 015 (Transfer Timing Roller Feed Speed Adj) in Custom Paper Settings.
- 2. Adjust the value of 015 by -0.1% step against the value currently applied.
- 3. Does the shrink/stretch disappear?

Yes: Finished.

No: Repeat the step 2 and step 3. If some improvements are found with adjusting the value until -1.0%, then keep adjusting it. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 1, and then, see other troubleshooting.

If Transfer roller rotates too slow:

- Take a note of the initial value of 015 (Transfer Timing Roller Feed Speed Adj) in Custom Paper Settings.
- 2. Adjust the value of 015 by +0.1% step against the value currently applied.
- 3. Does the shrink/stretch disappear?

Yes: Finished.

No: Repeat the step 2 and step 3. If some improvements are found with adjusting the value until 1.0%, then keep adjusting it. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 1, and then, see other troubleshooting.

If Exit roller is dirty;

- 1. Clean the rollers and guide plates in left drawer.
 - Clean the Exit Unit Entrance Roller. (page 672 "Cleaning the Exit Unit Entrance Roller")
 - Clean the Cooling belt. (page 673 "Cleaning the Cooling Belt")
 - Clean the Paper Exit Relay Roller. (page 674 "Cleaning the Paper Exit Relay Roller")
 - Clean the Paper Exit Roller. (page 675 "Cleaning the Paper Exit Roller")
 - Clean the Paper Exit Inverter Roller.(page 675 "Cleaning the Paper Exit Inverter Roller")



· Clean other guide plates if there are paper dusts.

Solution (2: Custom Paper Settings)

If there is no improvement even though cleaning up the exit roller, then adjust the exit motor line speed, inverter entry speed, and inverter exit speed to the appropriate speeds.

The first we must do is specifying the roller that causes this issue.

Check	Adjustment Item If the Check is YES
Does the issue occur in a normal paper exit?	123 [Exit Motor Feed Speed Adjustment] in Custom Paper Settings
Does the issue occur in both inverting (face-down) and duplex printing?	124 [Switchback Entrance Feed Speed Adj] in Custom Paper Settings
Does the issue occur in only inverting (face-down)?	125 [Switchback Exit Feed Speed Adj] in Custom Paper Settings
None of the above is applicable.	See page 670 "Solution (3: Service Only)".

Adjustment through Custom Paper Settings (Scratches/Streaks on Side 2)

- 1. Register the target paper brand in Custom Paper Settings if it is not registered.
- 2. Take a note of the initial value of No. 123, 124, or 125 in Custom Paper Settings.
- 3. Adjust the value of the items applicable by -0.1% step.
- 4. Print the target paper.
- 5. Does the scratch/streak disappear?

Yes: Finished.

No: Repeat the step 3 through step 5. If some improvements are found with adjusting the value until -1.0%, then keep adjusting it. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 2, and then, see other troubleshooting.

Adjustment through Custom Paper Settings (Scratches/Streaks or Creases appear on Side 1)

- 1. Register the target paper brand in Custom Paper Settings if it is not registered.
- 2. Take a note of the initial value of No. 123, 124, or 125 in Custom Paper Settings.
- 3. Adjust the value of the items applicable by +0.1% step.
- 4. Print the target paper.
- 5. Does the scratch/streak disappear?

Yes: Finished.

No: Repeat the step 3 through step 5. If some improvements are found with adjusting the value until +1.0%, then keep adjusting it. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 2, and then, see other troubleshooting.

Solution (3: Service Only)

This solution is performed if some SP modifications are needed in page 669 "Solution (2: Custom Paper Settings)".

First we must do is specifying the roller that causes this issue.

Check	To do when the check is YES
Does the issue occur in face-up paper exit (normal paper exit)?	SP1-013-001 through -041
	Adjust all the SPs below as a set.
Does the issue occur in both inverting (face-down)	SP1-007-001 through -041
and duplex printing?	SP1-008-001 through -041
	SP1-009-001 through -041
Does the issue occur in only duplex printing?	SP1-009-001 through -041
None of the above is applicable.	See page 669 "Solution (2: Custom Paper Settings)".

Adjustment through SP (Scratches/Streaks on Side 2)

- 1. Take a note of the initial value of SPs that adjustment is needed.
- 2. Adjust the value of SPs applicable by -0.1% step.

If the issue occurs in both inverting (face-down) and duplex printing, adjust all the items in SP1-007/008/009 by -0.1% step.

- 3. Print the target paper.
- 4. Does the scratch/streak disappear?

Yes: Finished.

No: Repeat the step 2 through step 4. If some improvements are found with adjusting the values until -1.0%, then keep adjusting them. If no improvement can be found, there may be other causes. Restore the values to the value you took a note in step 1, and then, see other troubleshooting.

If the issue is found in both inverting (face-down) and duplex printing, restore the value to the value you took a note in step 1, and then go to the next step.

- 5. Adjust value of SP1-008, and SP1-009 by -0.1% (Do not change SP1-007s).
- 6. Print the target paper.
- 7. Is the problem solved?

Yes: Finished.

No: Repeat the step 5 through step 7. If some improvements are found with adjusting the values until -1.0%, then keep adjusting them. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 1, and then, see other troubleshooting.

Adjustment through SP (Scratches/Streaks or Creases appear on Side 1)

- 1. Take a note of the initial value of SPs that adjustment is needed.
- 2. Adjust the value of SPs applicable by +0.1% step.

If the issue occurs in both inverting (face-down) and duplex printing, increase all the items in SP1-007/008/009 by +0.1% step.

- 3. Print the target paper.
- 4. Is the problem solved?

Yes: Finished.

No: Repeat the step 2 through step 4. If some improvements are found with adjusting the values until +1.0%, then keep adjusting them. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 1, and then, see other troubleshooting.

If the issue is found in both inverting (face-down) and duplex printing, restore the value to the value you took a note in step2, and then go to the next step.

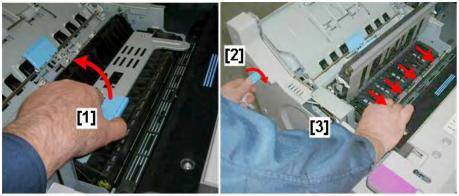
- 5. Adjust values of SP1-008, and SP1-009 by 0.1% (Do not change SP1-007s).
- 6. Print the target paper.
- 7. Is the problem solved?

Yes: Finished.

No: Repeat the step 5 through step 7. If some improvements are found with adjusting the values until +1.0%, then keep adjusting them. If no improvement can be found, there may be other causes. Restore the value to the value you took a note in step 1, and then, see other troubleshooting.

Cleaning the Exit Unit Entrance Roller

- 1. Pull out the left drawer.
- 2. Turn the (D3) [1] and knob [2].
- 3. Wipe the Exit Unit Entrance Roller [3] with a dry cloth.



d074t544

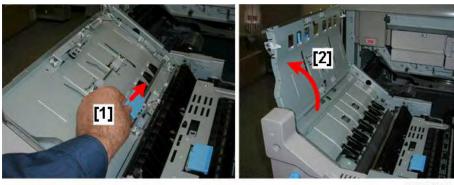




• Wipe the roller surface while rotating the knob with pressing the cloth to the roller.

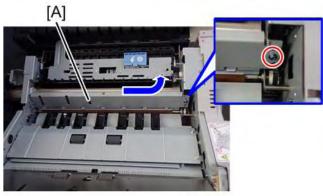
Cleaning the Cooling Belt

- 1. Pull out the left drawer.
- 2. Turn the knob (D4) [1] and open the cover.



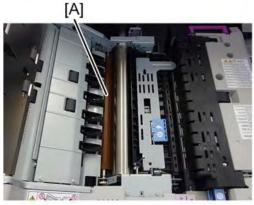
d074t546

3. Remove the guide plate [A] (\$\mathbb{O}^2 \times 1).



d194d6268

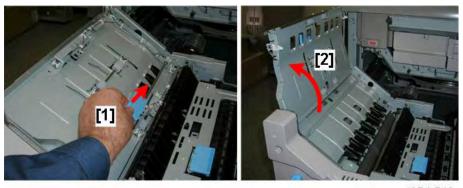
4. Wipe the Cooling belt [A] with a dry cloth, while rotating it.



d194d6269

Cleaning the Paper Exit Relay Roller

- 1. Pull out the left drawer.
- 2. Turn the knob (D4) [1] and open the cover.

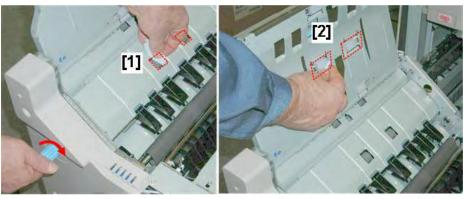


d074t546

3. Wipe the Paper Exit Relay Drive Roller [1] and Paper Exit Relay Idel Roller with a dry cloth.



• Wipe the roller surface, while rotating the knob with pressing the cloth to the roller.



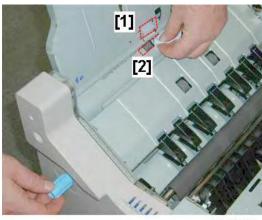
d074t548

Cleaning the Paper Exit Roller

- 1. Pull out the left drawer.
- 2. Turn the knob (D4).
- 3. Wipe the Paper Exit Idle Roller and [1] and Drive Roller [2] with a dry cloth.



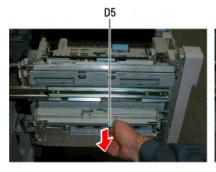
• Wipe the roller surface, while rotating the knob with pressing the cloth to the roller.



d074t549

Cleaning the Paper Exit Inverter Roller

1. Pull out the left drawer.

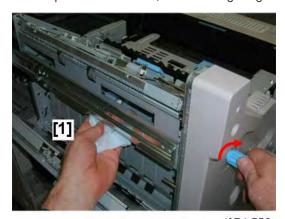




3. Wipe the Paper Exit Inverter Drive Roller [1] with a dry cloth.



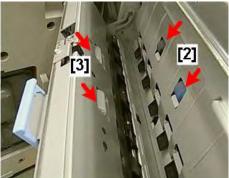
• Wipe the roller surface, while rotating the gear at rear with pressing the cloth to the roller



d074t552

4. Wipe the Paper Exit Inverter Idle Roller [3] with a dry cloth.





d074t553

3

Scratches, Streaks, Waves or Creases (Decurl Unit Line Speed Adjustment)

In a machine with decurl unit, the following problem occurs:

- Copied paper has scratches or streaks
- Noise during transferring
- Copied paper has waves or creases in the vertical against paper transfer direction
- Curl does not disappear even though a decurl unit is installed.

Cause

- Incorrect paper transporting speed of decurl unit.
- · Incorrect correcting direction/strength of decurl unit.

Solution

If Scratch/Streak on Side 2, or chattering noise occurs;

- 1. Register the target paper brand to Custom Paper Settings if it is not registered.
- 2. Check the value of 0304 (Adjust Paper Curl) in Adjusting Settings for Skilled Operator. Take a note of the current value.
- According to the correction strength, adjust the value in Custom Paper Settings shown in the table below by -0.5%.

0304 Result	Lower the following value
Off	105: [Decurler Feed Speed Adj: Curl Adj Off]
Weak	106: [Decurler Feed Speed Adj: Curl Adj Weak]
Strong	107: [Decurler Feed Speed Adj: Curl Adj Strg]

4. Do the scratches/streaks/creases disappear?

Yes: Finished.

No: Repeat the step 3 and step 4 until the value reaches at the minimum. If there is no improvement even though the value reaches at the minimum, no further improvement can be expected in the field. Restore the value to the value that you took a note in step 2.

If Scratch/Streak on Side 1, or copied paper has creases;

- 1. Register the target paper brand to Custom Paper Settings if it is not registered.
- Check the value of 0304 (Adjust Paper Curl) in Adjusting Settings for Skilled Operator.Take a note of the current value.

0304 Result	Lower the following value
Off	105: [Decurler Feed Speed Adj: Curl Adj Off]
Weak	106: [Decurler Feed Speed Adj: Curl Adj Weak]
Strong	107: [Decurler Feed Speed Adj: Curl Adj Strg]

4. Do the scratches/streaks/creases disappear?

Yes: Finished.

No: Repeat the step 3 and step 4 until the value reaches at the minimum. If there is no improvement even though the value reaches at the minimum, no further improvement can be expected in the field. Restore the value to the value that you took in step 2.

Curl does not disappear even though a decurl unit is installed:

- 1. Make sure the installation procedure for the decurler unit, and install the unit again.
- 2. Does the curl disappear?

Yes: Finished.

No: Go to the next step.

- Check the value of 0304 (Adjust Paper Curl) in Adjusting Settings for Skilled Operator.Take a note of the current value.
- 4. Is the value of 0304 "Strong"?

Yes: Go to the next step.

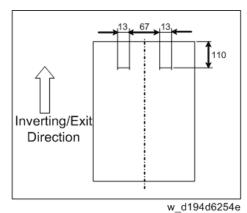
No: Change 0304 to "Strong" and go to the step 2.

5. Is the paper feed direction changed?

Yes: no further improvement can be expected in the field. Restore the value to the value that you took in step 3.

No: Turn the paper surface upside down, and go to the step 1.

Roller Marks by Paper Exit Inverter Roller



Cause

Various factors cause this problem.

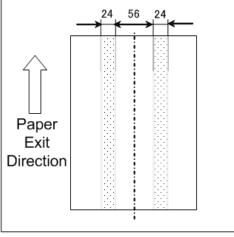
This is likely to occur if:

• Images with half-tone.

Solution

Clean up the Paper Exit Inverter Roller.

See page 675 "Cleaning the Paper Exit Inverter Roller".



w d194d6255e

Cause

When toner-based granular dirt adheres to the Paper Exit Roller on the Paper Exit/Inverter Unit during feeding, the dirt can adhere to copied image.

This is likely to occur if:

• Coated paper with equivalent to Paper Weight 2.

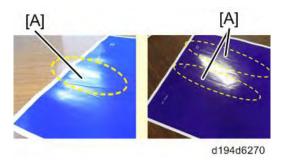
Solution

- Clean the Paper Exit Relay Roller.
 See page 674 "Cleaning the Paper Exit Relay Roller"
- Clean the Paper Exit Roller.
 See page 675 "Cleaning the Paper Exit Roller"

Waves on Short-Grained Paper

Cause

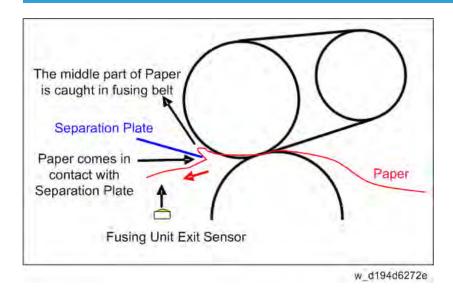
In coated papers with equivalent to the Paper Weight 2, waves [A] along with its grain direction are found after the side 1 going through the fusing unit.



Solution

Change the paper feeding direction to long-gain

Fusing Jam When Printing with High Coverage (J033/J034/J083)



Cause

In printing solid image, paper is delivered with slightly sticking to the fusing belt in separating the paper at the paper separating part of the fusing nip outlet.

Therefore, the paper comes in firm contact with the tip of the separation plate.

It produces a load in transporting paper, and consequently, a jam which the middle of the paper is caught in the fusing belt occurs.



• JAM codes vary depending on locations where the paper leading edge is delivered.

This is likely to occur if:

- A solid image that consumes a lot of toner is printed (Such as high coverage with white color)
- High temperature (a humidity condition that paper rigidity becomes lower)

Solution

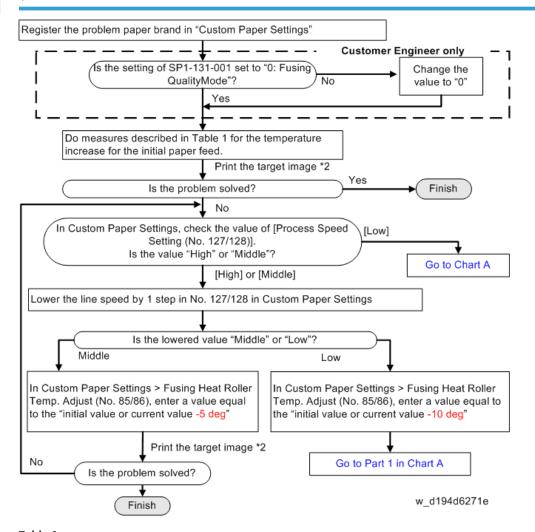
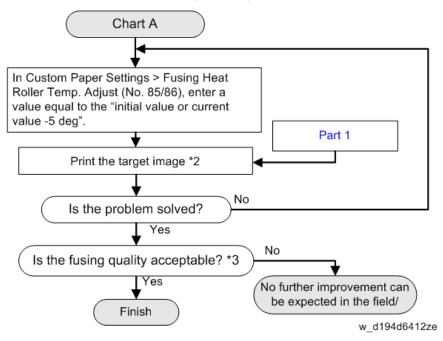


Table 1
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1".
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0".
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15", if "Process Speed Setting" is [High] or [Middle]. Change the setting to "5", if "Process Speed Setting" is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3".
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3".

^{*2} A4/LT LEF more than 50 sheets.

Chart A: Flowchart for Decreasing Set Temperature



3

- *2: A4/LT LEF more than 50 sheets.
- *3: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.

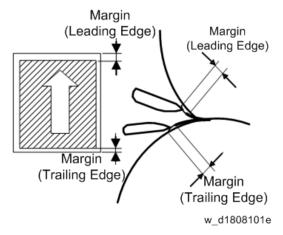


• After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Jams Related to insufficient Separation on Thin Paper



Cause

A lack of margin on the paper leading edge allows the separation plate on fusing roller to catch the paper, which produces an accordion-like jam.

A lack of margin on the trailing edge of paper also allows the separation plate on pressurizing side to catch the paper in duplex printing.

This is likely to occur if:

- · Using thin paper
- · Using coated paper
- A lot of toner adheres to the paper leading edge due to a solid image

- · Printing with a narrow margin on the leading edge
- A lot of toner adheres to the paper trailing edge due to a solid image
- Printing with a narrow margin on the trailing edge having a high magnification rate)

Solution

If the mask width of paper leading edge can be widened, or the erase margin of trailing edge can be widened:

- Set 0106 [Adjust Erase Margin WithFeed Direction] in Adjustment Settings for Skilled
 Operator to +0.5 mm against the current value. In Custom Paper Settings, set 011 [Adj.
 Erase Margin of Trailg. Edge: Prod.], and 012: [Adj. Erase Marg. of Trailg. Edge: Qual.] to
 +0.5 mm against the current value.
- 2. Print the target image.
- 3. Is the problem solved?

Yes: Finished.

No: Repeat the step 1 through 3. If the problem is not solved by the maximum value, no further improvement can be expected in the field. Ask customer for using other paper.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper
Setting" about which number you need to adjust.

Print Mode	Items Applied	
B/W, FC, FCS, S only	011: [Adj. Erase Margin of Trailg. Edge: Prod.]	
FCS Quality	012: [Adj. Erase Marg. of Trailg. Edge: Qual.]	

If the mask width of paper leading edge cannot be widened, or the erase margin of trailing edge cannot be widened;

1. Is it possible to change the image position?

Yes: Go to step 2

No: No further improvement can be expected. Ask customer for using other paper.

 Set 0102 [Adjust Image Position WithFeed Direction] in Adjustment Settings for Skilled Operator to +0.5 mm against the current value.

In Custom Paper Settings, set 033 [Paper Transfer Current; Trail Edge: B&W] to +0.5 mm against the current value.

3. Adjust the image position of Side 2 along with Side 1. In Custom Paper Settings, adjust it with 004 [Adj Image Position of Side2 With Feed].

5. Is the problem solved?

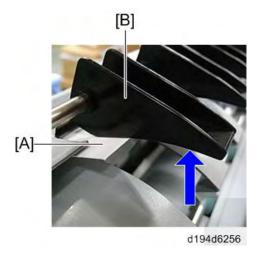
Yes: Finished.

No: Repeat step 2 through 5. If the problem is not solved by the maximum value, no further improvement can be expected in the field. Ask customer for using other paper.

Jams Related to Duplex/Invert in Short Grain and Thickest Paper

Cause

- 1. An insufficient force of transferring thick papers causes a high frequency of jams (particularly J080, J085, and J086).
- 2. Paper with 215.9 mm or less in length locks the paper exit junction gate [B] during waiting [A] for duplex after printing Side 1, and the subsequent sheets produce J036 and J085.



This is likely to occur if:

- Transfer roller is dirty.
- Using paper having high rigidity for bending/folding, regardless of paper weight.
- Transferring the paper with long grain.

Solution

Carry out the following solutions.

- Clean the transfer rollers around the locations where jam occurs.
- Use a paper with short grain.

3

- For duplex printing, print one side at a time (set the sheet that printed side 1 to the same tray again to print the other side).
- Switch the paper exit mode to the face-up (normal paper output).
- If the problem is not solved with the above, change paper to other that has less paper weight.

Solution for Cause 1

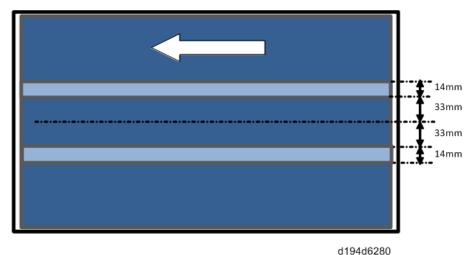
- 1. Register the problem paper brand in Custom Paper Settings.
- 2. Set 126 [Ppr Fd Sttg for 2 Sd Sml Siz Thckst Ppr] to "1 (Active)".



This setting lowers the jam frequency by changing the waiting position of preceding sheets.
 Activating this setting may decrease the productivity by about 20%

Roller Marks on Buffer Pass Unit

RTB 112 Modified In printing a solid image with high coverage, two 14mm-width bands are generated at 33 mm away from the center of transfer on the 2nd side in duplex printing or on the side where image transferred in simplex face-down.



Cause

Temperature on the surface of toner differs between the contact area of Paper transport roller and the image, and other non-contact area. Pressure force of rollers also changes the surface property of toner, leading to produce a difference of glossiness.

This is likely to occur if:

· Using thick paper with Paper Weight 8 or equivalent.

- Using paper with high surface smoothness
- · Printing a solid image with high coverage

Solution

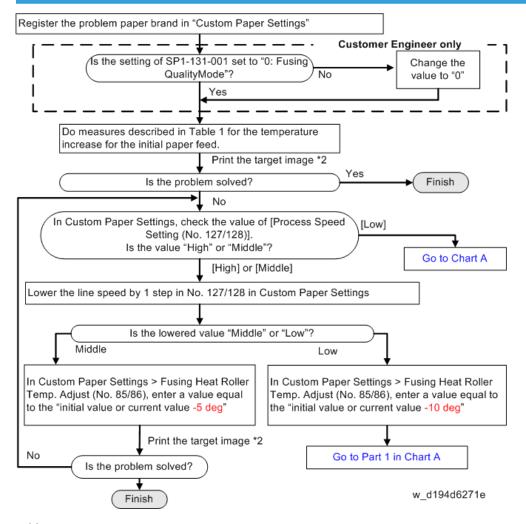


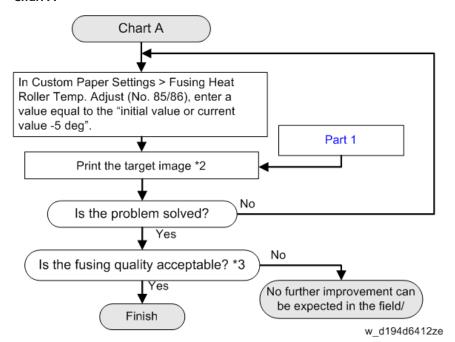
Table 1
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1"

No.	Custom Paper Settings	Details of Change
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0"
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Adding Fusing Tempratre 2: Special]	Change the setting to "15", if Process Speed Setting is [High] or [Middle]. Change the setting to "5", if Process Speed Setting is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3"
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3"

^{*2} A4 LEF/LT more than 10 sheets

Chart A



- *2: A4/LT LEF more than 10 sheets.
- *3: Guidelines for Fusing Quality
 - No image peeling.

- No toner peeling even when rubbing the image gently with fingernails.
- No toner peeling even when rubbing the image with the optical cloth.



• After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

3

Paper Feed Problems (Input Tray)

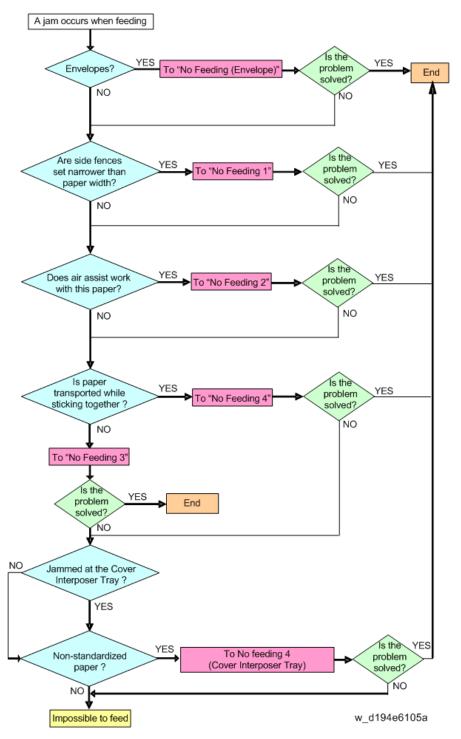
A3LCIT / Bypass Tray / Cover Interposer Tray

No Feeding (Common)

Cause

See the causes that correspond to each procedure.

Solution



3



- page 691 "No Feeding (Common)"
- page 693 "No Feeding (Envelope)"
- page 694 "No Feeding 1"
- page 697 "No Feeding 2"
- page 706 "No Feeding 3"
- page 712 "No Feeding 4"
- page 718 "No Feeding 4 (Cover Interposer Tray)"

No Feeding (Envelope)

Cause

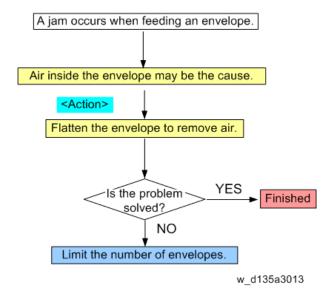
The envelopes have a layer of air in them, as it reduces the pressure between the pickup roller and the envelope.

This is likely to occur if:

- Many envelopes are loaded.
- Envelopes are puffed up and not pressed down enough.

Solution

Follow the flowchart below.



3

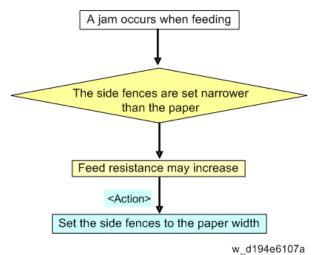
No Feeding 1

Cause

The side fences are set narrower than the paper.

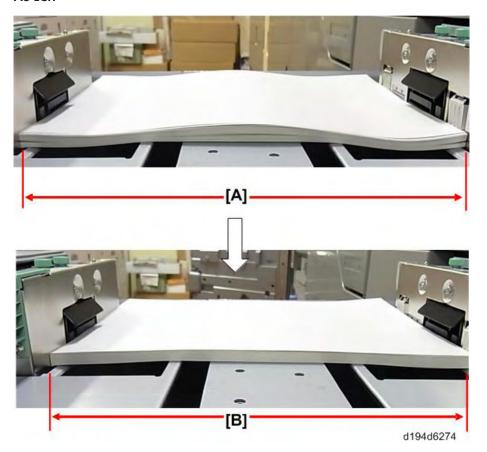
Solution

Follow the flowchart below.



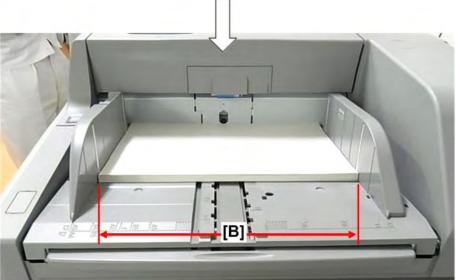
3

A3 LCIT



Bypass Feed Tray

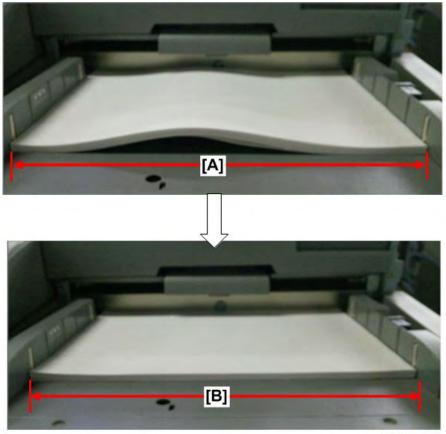




d194d6275

3

Cover Interposer Tray



d194d6276

No Feeding 2

Cause

Paper may fail to feed due to paper sticking together.

This is likely to occur if:

- When using paper that readily sticks together, such as special or coated papers.
- When using thick papers that lessen the effect of preparing paper via air assist.

Solution

- Remove the loaded paper from the paper tray and fan it.
 If paper fails to feed again, go to step 2.
- 2. Use SP1-920-001 to 003(LCIT Tray Fan Duty Adjustment) to adjust the feed level blower duty and attach the tab sheet holder (A3LCIT only).

If paper fails to feed again, go to step 3.

 Clean the feed rollers (pickup roller, paper feed roller, separation roller). (Same for A3LCIT / Bypass Tray /Cover Interposer Tray)



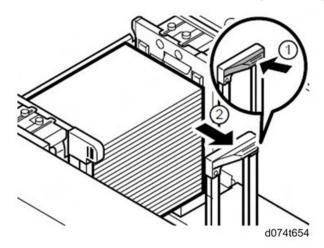
 Measures 1 to 3 can be done at the same time (Guideline-confirm printing with 1 pack of paper)

Attaching the Tab Sheet Holder (A3 LCIT)

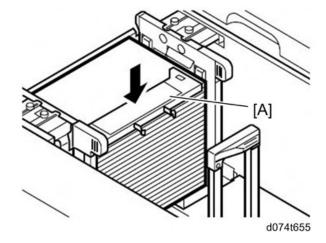
By attaching the tab sheet holder, you can prevent air from escaping at the trailing edge of the paper and so improve separation.

This will prevent double feeding and misfeeding of special or coated paper loaded in A3 LCIT (Trays 3–5).

1. Unlock the end fence, and then slide it away from the paper.

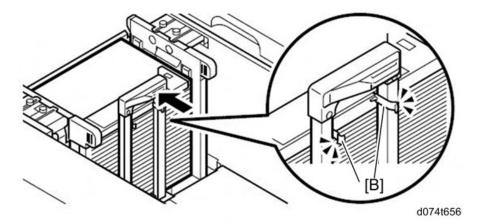


2. Place the tab sheet holder [A] on the paper.



3

3. Slide the end fence against the paper so that the tab sheet holder's clips [B] pass through the fence and click into place.





- You can use the tab sheet holder for paper of the following sizes:
- Paper with a width of 288.0–330.2 mm (11.34–13.00 inches) and a length of 182.0–487.7 mm (7.17–19.20 inches).
- Paper with a width of 139.7–287.9 mm (5.50–11.33 inches) and a length of 335.5–487.7 mm (13.21–19.20 inches).

Cleaning the Paper Feed Path

Clean the paper feed path if white spots appear because of paper dust sticking to the paper, or if paper misfeeding or double feeding occurs.

Guide Board

Wipe the guide board with a well-wrung-out damp cloth. To reach the inmost recesses, the cloth should be the size of your palm.

Paper Feed Roller



Wipe the entire surface of the paper feed roller lengthwise with a well-wrung-out damp cloth, and then with a dry, unused, lint-free cloth until no moisture remains.

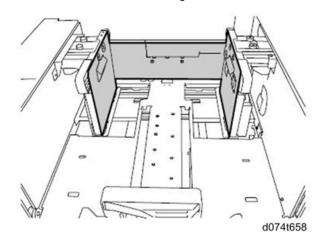
Cleaning the Paper Feed Path in the A3 LCIT (Trays 3-5)

Clean the guide board and paper feed rollers in the A3 LCIT.

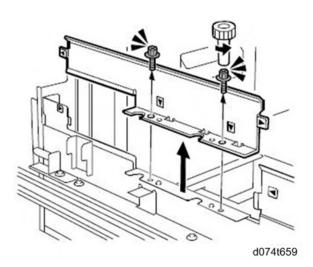
The procedure is explained using Tray 3 as an example.

The procedure is the same for Trays 4 and 5.

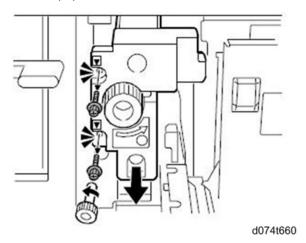
- 1. Open the A3 LCIT front cover.
- 2. Pull open the top tray (Tray 3) until it stops. If there is any paper in the tray, remove it.
- 3. Clean the side fences and front guide.



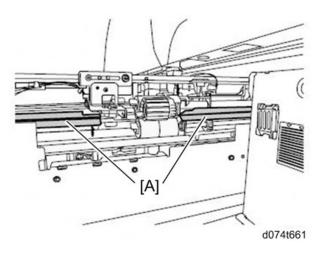
4. Remove the two black screws on the side plate, and then remove the plate.



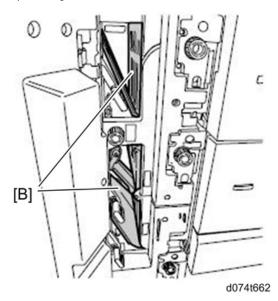
- 5. Remove the two black screws on the paper feed unit U2, and then pull out the paper feed unit U2 until it stops.
- 6. Clean the paper feed rollers.



7. Clean the guide board [A] of the paper feed unit.



8. Open the guide board (U1), (U3), and (U5), and then clean the guide board interior [B].



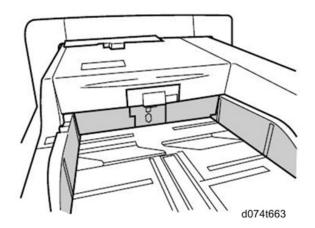
9. After cleaning, restore the machine to its operational state.

Cleaning the Paper Feed Path in the Multi Bypass Tray (Tray 6)

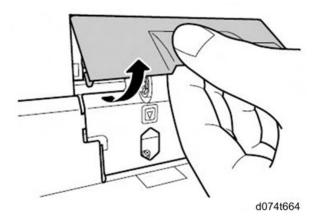
Clean the guide board and paper feed rollers in the multi bypass tray (Tray 6).

Wipe the guide board with a well-wrung-out damp cloth. To reach the inmost recesses, the cloth should be the size of your palm.

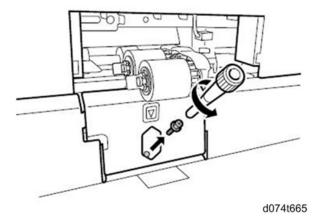
- 1. Remove the loaded paper.
- 2. Clean the side fences and front guide.



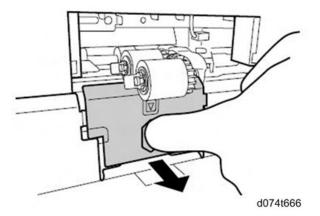
3. Pull off the snap-off cover.



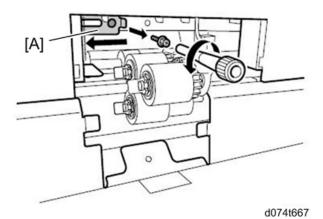
4. Remove black screw.



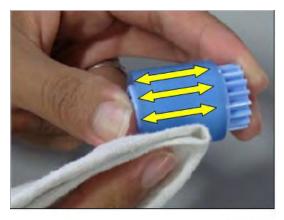
5. Remove the plate.



- 6. Remove the black screw on the sensor positioning plate [A].
- 7. Push the sensor positioning plate [A] to the left.
 If this plate is not pushed to the left, you will not be able to remove the feed roller.

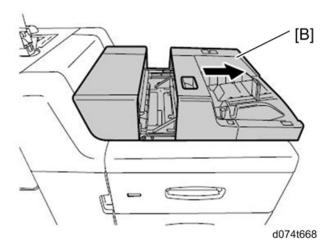


8. Clean the paper feed rollers.

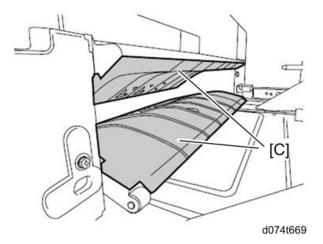


d194d6128

9. Slide the paper tray [B] to the right.



10. Clean the guide board [C].



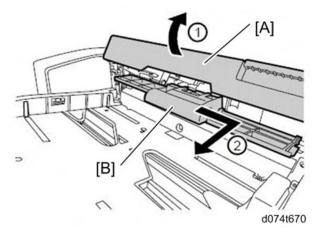
11. After cleaning, restore the machine to its operational state.

Cleaning the Paper Feed Rollers and Paper Feed Belt in the Cover Interposer

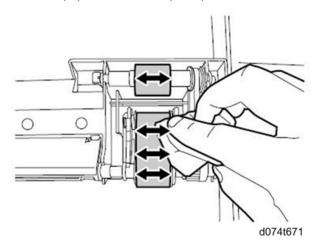
Clean the paper feed belt and paper feed rollers in the interposer.

The procedure is explained using the interposer upper tray. The procedure is the same for the lower tray.

- 1. Remove the loaded paper.
- Open the upper cover [A], and then detach the paper feed unit [B].
 Pull out the paper feed unit slightly, release the metal shaft, and then detach it.



3. Clean the paper feed belt and pick-up roller in the detached paper feed unit.



4. After cleaning, restore the machine to its operational state.

No Feeding 3

Cause

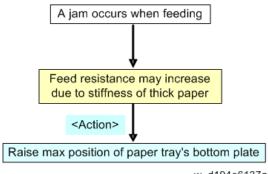
Paper may fail to feed due to paper being too stiff.

This is likely to occur if:

The paper is thick.

Solution

Follow the flowchart below.



w d194e6137a

Adjusting the Upper Limit Position (A3 LCIT)

Effect of Adjusting the Upper Limit Position

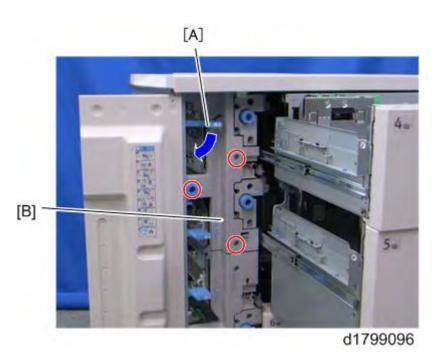
- Adjusting the upper limit position lowers the upper limit position. (for dealing with repeated
 feeding problems due to double feeding or double feeding as a bundle)
 During paper feeding, this achieves the effect of fanning the paper by abutting it against the
 paper tray plate for pre-separation (bank).
- Adjusting the upper limit position raises the upper limit position. (for dealing with repeated failure to feed)
 During paper feeding, this achieves the effect of reducing transport resistance by reducing paper abutting against the paper tray plate for pre-separation (bank).



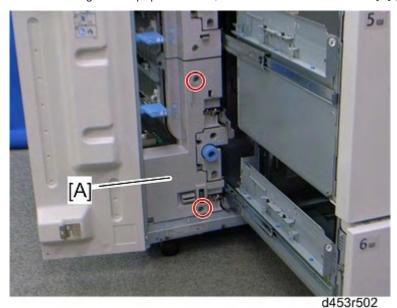
- Be careful as raising the upper limit position tends to make the unit prone to multi-feeding.
- 1. Open the front cover.
- 2. Remove the inner covers.



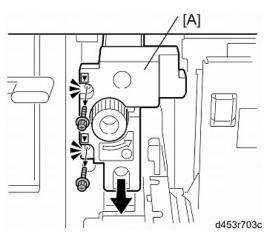
When removing the 1st or 2nd paper feed unit, lower the lever [A] and remove the inner
upper cover [B] (\$\widethat{\text{\$\pi}}\$x3, knob x1).



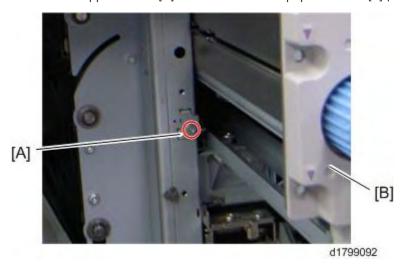
• When removing the 3rd paper feed unit, remove the inner lower cover [A] (@x2).

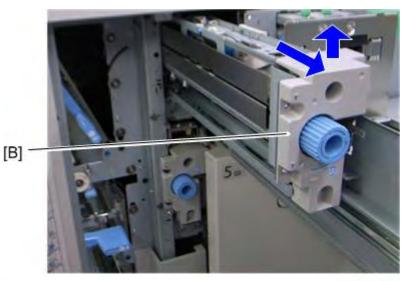


- 3. Pull out the relevant paper tray.
- 4. Pull out the paper feed unit [A] ($\Im x2$).



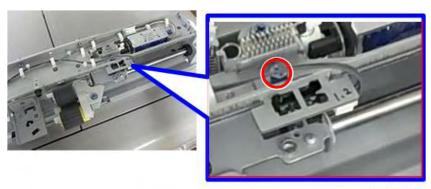
5. Remove the stopper bracket [A] and then remove the paper feed unit [B] ($\mathfrak{G}^{*}x1$).





d1799093

6. Adjust with the screw that holds the paper lift sensor bracket.



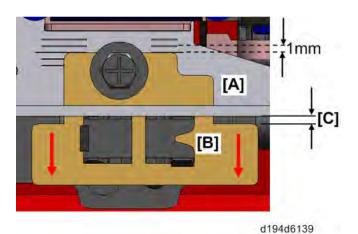
d194d6138

[For repeated feeding problems due to double feeding or double feeding as a bundle]

Position the paper lift sensor bracket so it increases the gap [C] between the stay [A] and the paper lift sensor bracket [B] while keeping an eye on the scale on the upper part of the stay (1mm between lines).



• Positioning it at a point at a distance of 0.5mm from the position before adjustment lowers the upper limit position about 0.8mm below the current state.

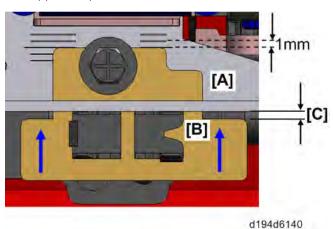


[When repeatedly fails to feed]

Position the paper lift sensor bracket [B] so it reduces the gap [C] on the stay [A] while keeping an eye on the scale on the upper part of the stay (1 mm between lines).

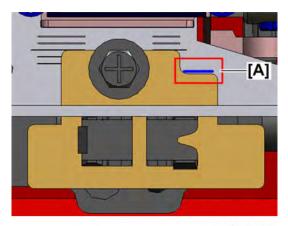


 Positioning it at a point at a distance of 0.5mm from the position before adjustment raises the upper limit position about 0.8mm above the current state.



♦ Note

• If there is no improvement by adjusting the stay position, this adjustment is not effective. Put back the stay to the original position along with the marking [A].



d194d6260

No Feeding 4

Cause

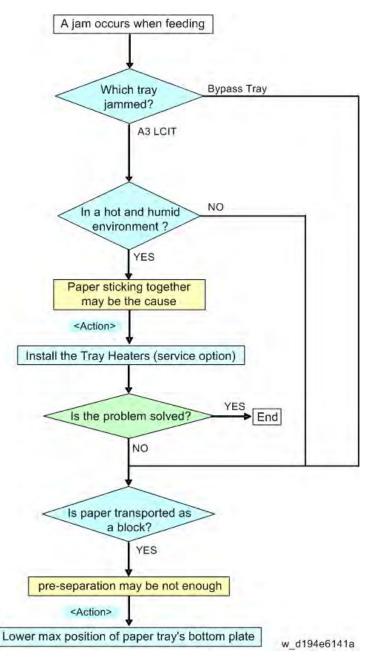
Paper may fail to feed due to paper sticking together.

This is likely to occur if:

- When using a very smooth paper, such as coated paper, in a hot and humid environment
- If double feeding of the paper as a bundle occurs due to the paper sticking together

Solution

Follow the flowchart below.



Reference

- For details about Tray Heaters (service option) Installation Procedure, refer to Main Chapters>
 Chapter 2. LCIT RT 5090 (D732) > Tray Heaters (service option) for installation procedure
- page 707 "Adjusting the Upper Limit Position (A3 LCIT)"

Adjusting the Upper Limit Position (Bypass Tray)

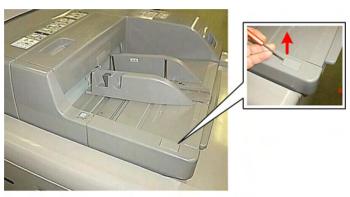
Effect of Adjusting the Upper Limit Position

Adjusting the upper limit position lowers the upper limit position. (For dealing with repeated feeding problems due to double feeding or double feeding as a bundle)

During paper feeding, this achieves the effect of fanning the paper by abutting it against the paper tray plate for pre-separation (bank).



- Be careful because when there is enough pre-separation, lowering the upper limit position makes the unit prone to failure to feed.
- 1. Remove the cap cover.



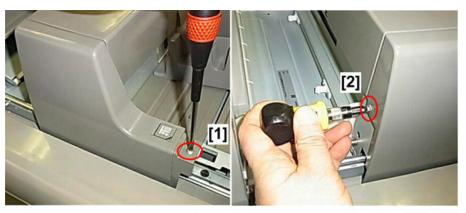
d517r802

2. Remove the right front cover ($\Im x1$).



d517r803

3. Disconnect the right [1] and left side [2]



d517r804

4. Remove the left front cover (@x2).



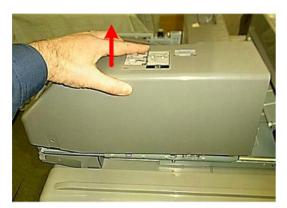
d517r805

- 5. Remove the screws.
 - [1] Covered screw (@x1)
 - [2] Rear screw (©x1)
 - [3] Well screw (@x1)



d517r806

6. Disconnect the cover.

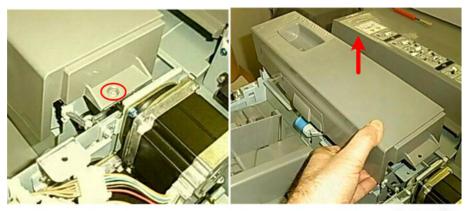


d517r807

7. Remove the top cover ($\Im x3$).



d517r808



d517r809

8. Adjust with the screw that holds the lift sensor bracket.



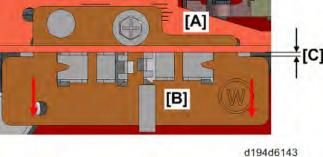
d194d6142

[For repeated feeding problems due to double feeding or double feeding as a bundle]

Position the paper lift sensor bracket so it increases the gap [C] between the stay [A] and the lift sensor bracket [B] while keeping an eye on the scale on the upper part of the stay (1mm between lines).



Positioning it at a point at a distance of 0.5mm from the position before adjustment lowers the
upper limit position about 0.8mm below the current state.



015400140

No Feeding 4 (Cover Interposer Tray)

Cause

When the wrong size of paper is fed, if failure to feed occurs due to paper slipping, it may be possible to improve the problem feeding by individually increasing the pressure.

This is likely to occur if:

• When paper with a low coefficient of friction is fed

3

Solution

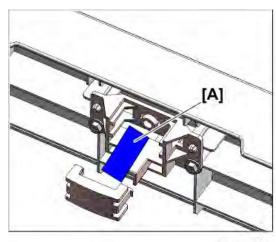
Add a compression spring and friction pad.

1. Open the tray cover and remove the plastic part [A] on the inside of the cover.



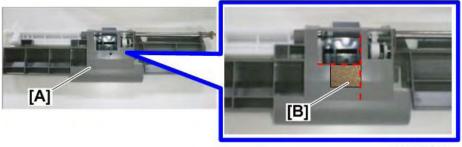
d194d6144

2. Insert the spring [A] on the inside of the plastic part you removed and re-install the plastic part.



d194d6145

3. Remove the feed belt unit [A] and stick a friction pad [B] to the upper surface of the cover.



d194d6146

4. Put the feed belt unit back as it was and load paper in the paper tray.

5. Visually check to make sure there is no gap between the plastic part and the friction pad after the tray finishes lifting up.



d194d6147

Double Feeding 1

Cause

Paper sticking together or reduced ability to separate due to paper powder on the feed roller

This is likely to occur if:

- When using paper that readily sticks together, such as special or coated papers
- · When using paper that easily generates paper powder
- When using thick papers that lessen the effect of fanning paper via air assist

Solution

- Remove the loaded paper from the paper tray and fan it.
 If paper fails to feed again, go to step 2.
- 2. Use SP1-920-001 to 003(LCIT Tray Fan Duty Adjustment) to increase the feed level blower duty and attach the tab sheet holder (A3LCIT only).
 - If paper fails to feed again, go to step 3.
- Set the feed level pick-up assist setting to OFF (2) via SP1-923-001 to 004(LCT Pickup Assist ON/OFF) (A3LCIT only).
 - If paper fails to feed again, go to step 4.
- 4. Clean the feed rollers (pickup roller, paper feed roller, separation roller). (Same for A3LCIT / Bypass Tray / Cover Interposer Tray)

Reference

- For details about fanning paper, see page 628 "J099 Appears (Main Machine Tray)"".
- page 698 "Attaching the Tab Sheet Holder (A3 LCIT)"

- page 700 "Cleaning the Paper Feed Path in the A3 LCIT (Trays 3-5)"
- page 702 "Cleaning the Paper Feed Path in the Multi Bypass Tray (Tray 6)"
- page 705 "Cleaning the Paper Feed Rollers and Paper Feed Belt in the Cover Interposer"

Double Feeding 2

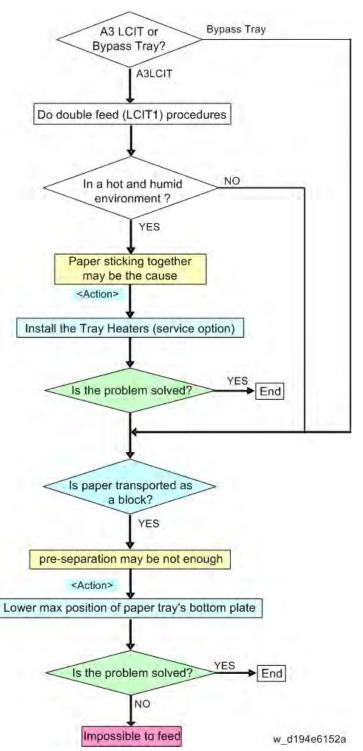
Cause

Paper sticking together or block feeding of added paper (paper feeding as a bundle)

This is likely to occur if:

- When using a very smooth paper, such as coated paper, in a hot and humid environment
- If double feeding occurs due to added paper being transported as a bundle

Solution



■ Reference

- Tray Heaters (service option) Installation Procedure
 Refer to Main Chapters> Chapter 2. LCIT RT 5090 (D732) > Tray Heaters (service option) for installation procedure
- page 707 "Adjusting the Upper Limit Position (A3 LCIT)"
- page 714 "Adjusting the Upper Limit Position (Bypass Tray)"

J099 Appears (Vacuum Feed LCIT)

RTB 112 Modified

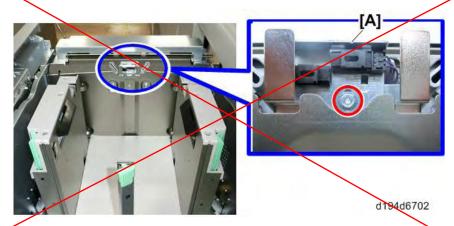
This problem is caused by a variety of factors. Implement the following measures.

- 1. In Custom Paper Settings, set 112: [Blower Fan] to "initial value +10%."
 - → If the problem occurs again, proceed to the next step.
- 2. In Custom Paper Settings, set 112: [Blower Fan] to "initial value +20%."
 - → If the problem occurs again, proceed to the next step.
- 3. In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [High] (12mm) to [Low] (18mm).
 - → If the problem occurs again, proceed to the next step.
- 4. Manually adjust the paper load upper limit (+1 mm).
 - → If the problem occurs again, proceed to the next step.
- 5. Manually adjust the paper load upper limit (+2mm).
 - → If the problem occurs again, proceed to the next step.
- 6. Manually adjust the paper load upper limit (+3mm).

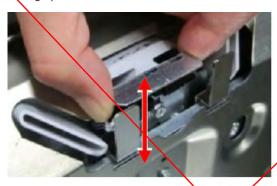
Manually Adjusting the Paper Load Upper Limit (Corresponding to the Double Feed)

1. Loosen the screw on the sensor bracket [A].





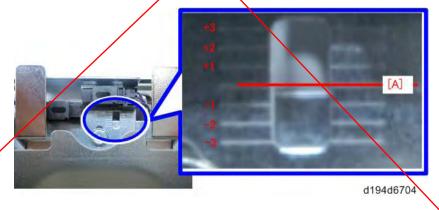
RTB 112 Deleted Use the scale shown in the diagram below as a guideline to adjust the sensor bracket by bliding up and down.



d194d6703

U Note

Adjust by sliding in increments of 1 mm from the reference position [A].



3. Tighten the screw on the sensor bracket.



RTB 112 Modified When tightening the screw, use your hand to firmly hold the sensor bracket in the proper position and prevent it from sliding.

Double Feeding

This problem is caused by a variety of factors. Implement the following measures.

- 1. Remove the paper from the paper tray and fan the paper.
 - \rightarrow If the problem occurs again, proceed to the next step.
- 2. Clean the feed unit.
 - \rightarrow If the problem occurs again, proceed to the next step.

- 3. In Custom Paper Settings, set 118: [Paper Feed Mode (Adjust Fan Level)] to "Dble Fd Reduc. (Lowest)".
 - → If the problem occurs again, proceed to the next step.
- 4. In Custom Paper Settings, set 118: [Paper Feed Mode (Adjust Fan Level)] to "Modrate Dble Fd Red. (Lower)".
 - → If the problem occurs again, proceed to the next step.
- 5. In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [High] (12mm) to [Low] (18mm).
 - → If the problem occurs again, proceed to the next step.
- 6. Manually adjust the paper load upper limit. See page 723 "J099 Appears (Vacuum Feed LCIT)".

J430, 431,445, 446, 460, or 461 Appears

RTB 112: Modified

This problem is caused by a variety of factors. Implement the following measures.



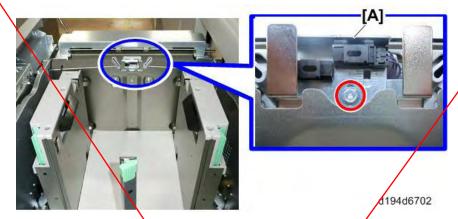
- If no feeding occurs when feeding remaining uncoated paper in tray, try feeding again through paper tray of main machine, instead of the vacuum feed LCIT
- 1. In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [Low] (18mm) to [High] (12mm).
 - → If the problem occurs again, proceed to the next step.
- 2. Manually adjust the paper load upper limit (-1 mm).
 - → If the problem occurs again, proceed to the next step.
- 3. Manually adjust the paper load upper limit (-2mm).
 - → If the problem occurs again, proceed to the next step.
- 4. Manually adjust the paper load upper limit (-3mm).
 - → If the problem occurs again, proceed to the next step.
- 5. Clean the paper feed belt.

Manually Adjusting the Paper Load Upper Limit (Corresponding to the No Feeding)

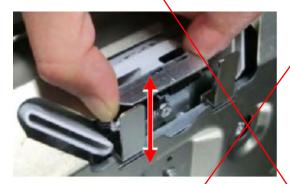
RTB 112 Deleted

1. Loosen the screw on the sensor bracket [A].

RTB 112 Deleted



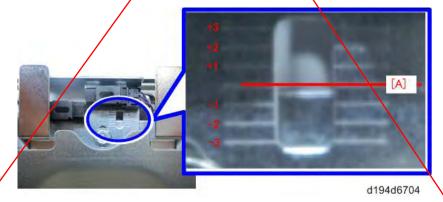
2. Use the scale shown in the diagram below as a guideline to adjust the sensor bracket by sliding up and down.



d194d6703

U Note

• Adjust by sliding in degrements of 1mm.



Tighten the screw on the sensor bracket.



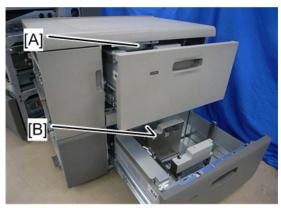
RTB 112 Modified

• When tightening the screw, use your hand to firmly hold the sensor bracket in the proper position and prevent it from sliding.

Cleaning the paper feed belt

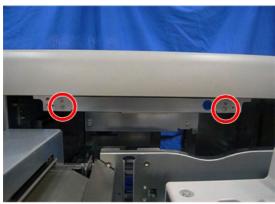
[A]: Tray 1 Paper Feed Belt Unit

[B]: Tray 2 Paper Feed Belt Unit



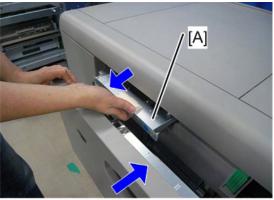
d777z0039

- 1. Open the paper tray.
- 2. Unlock the paper feed belt unit (@x2).



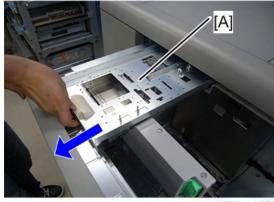
d777z0023

3. Grab the handle of the paper feed belt unit [A] and close the paper tray halfway.



d777z0024

4. Pull out the paper feed belt unit [A] together with the paper tray.

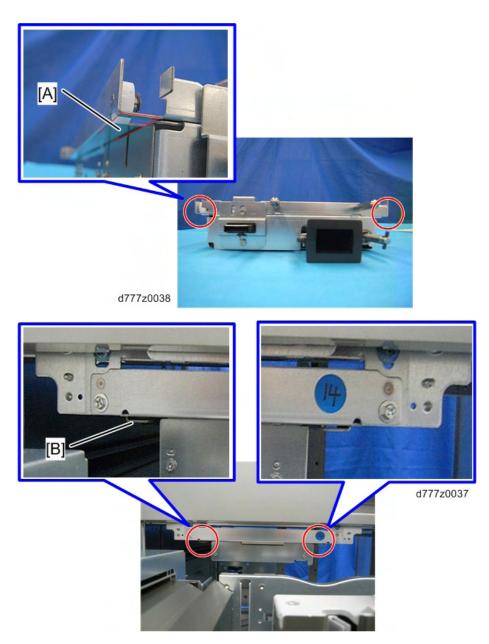


d777z0025

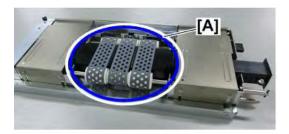


- The paper feed belt may be damaged if it becomes caught on the side fence or other parts.

 Therefore, be sure to pull the paper feed belt unit out horizontally relative to the paper tray.
- In order to avoid damaging the paper feed belt when returning the paper feed belt unit to its original position, align the right/left guides [A] with the rails [B] of the paper tray and lift up it slightly when setting.



. Turn the paper feed belt unit over and wipe the paper feed belt [A] with a damp cloth.



d194d6705

No Feeding

This problem is caused by a variety of factors. Implement the following measures.



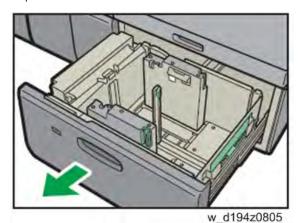
- If no feeding occurs when feeding remaining uncoated paper in tray, try feeding again through paper tray of main machine, instead of the vacuum feed LCIT
- 1. Remove the paper from the paper tray and fan the paper.
 - → If the problem occurs again, proceed to the next step.
- Attach the Tab Sheet Holder. See page 731 "Attaching the Tab Sheet Holder (Vacuum Feed A3 LCIT)".
 - → If the problem occurs again, proceed to the next step.
- 3. Clean the feed unit.
 - → If the problem occurs again, proceed to the next step.
- 4. In Custom Paper Settings, set 118: [Paper Feed Mode (Adjust Fan Level)] to "Moderate Nonfdg Red. (Higher)".
 - → If the problem occurs again, proceed to the next step.
- 5. In Custom Paper Settings, set 118: [Paper Feed Mode (Adjust Fan Level)] to "Max Nonfdng Reduc. (Highest)".
 - → If the problem occurs again, proceed to the next step.
- 6. In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [Low] (18mm) to [High] (12mm).
 - → If the problem occurs again, proceed to the next step.
- 7. Manually adjust the paper load upper limit. See page 725 "J430, 431,445, 446, 460, or 461 Appears".
 - → If the problem occurs again, proceed to the next step.
- 8. Clean the paper feed belt. See page 725 "J430, 431,445, 446, 460, or 461 Appears".

3

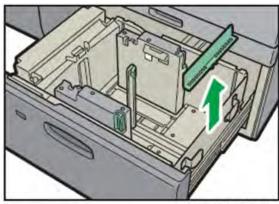
Attaching the Tab Sheet Holder (Vacuum Feed A3 LCIT)

By attaching the tab sheet holder, you can prevent air from escaping at the trailing edge of the paper and so improve separation.

1. Check that paper in the paper tray is not being used, and then pull the tray carefully out until it stops.

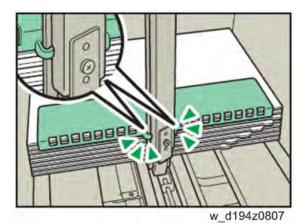


2. Take out the tab fence from the pocket on the right-hand side of the paper tray.



w d194z0806

- 3. Set the side fences to the size of the tab stock to be loaded, and then load it.
- 4. Attach the tab fence, and then align the end fence gently against the paper you loaded while pressing the release button of the end fence.



5. Carefully slide the paper tray fully in.

4. Troubleshooting: Post-Processing Option

Finishing Problems

Finisher/Booklet Finisher

Large Paper Not Stacked Properly

Cause:

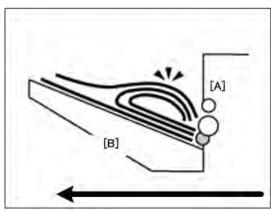
When using large-size or coated and paper-to-paper friction is very high, a sheet may push against another or paper deflection may occur.

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

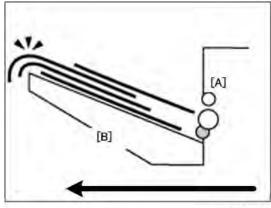
The leading edge of the delivered sheet bends upward and backward.



d1798112

[A]	Paper Exit
[B]	Output Tray

One sheet pushing out another

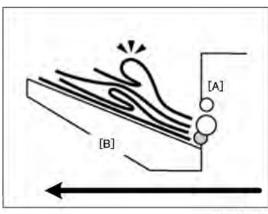


d1798113

[A]	Paper Exit
[B]	Output Tray

Paper deflection

Because of high paper friction, the delivered sheet may arch up and become crimped.



d1798114

[A]	Paper Exit
[B]	Output Tray

Solution

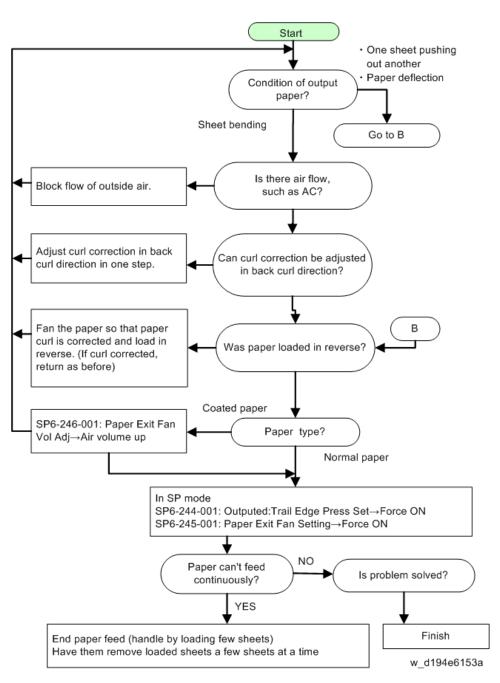
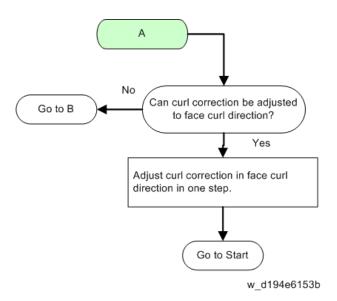


Chart A

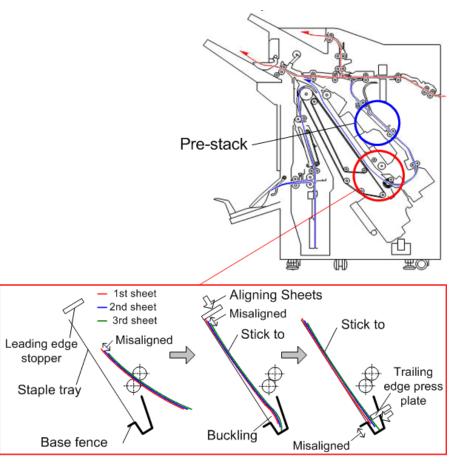


SPs

- SP6-244-001: Outputed:Trail Edge Press Set
- SP6-245-001: Paper Exit Fan Setting
- SP6-246-001: Paper Exit Fan Vol Adj
- SP1-906-001 to 12: De-curler Setting

When bundle to be bound is poorly aligned

If there is a lot of friction between sheets of paper, as happens with coated paper, during pre-stacking, the alignment of leading edge stopper fails to correct the misalignment of paper, so it is not stapled neatly.



w d194e6170a

Cause

When binding with staples, to save time in adjusting the bundle of paper in the staple tray, the paper is held temporarily (pre-stack) prior to release to the staple tray.

For that reason, paper is stacked on top of each other at the paper exit to the staple tray, and due to the structure of the pre-stack, the leading edge of paper is misaligned from the sheet transported before it by about 5mm when it is discharged to the staple tray.

The paper is discharged to the staple tray and its leading edge is pressed against the leading edge stopper, the paper is then aligned by the base fence pressing against the trailing edge; however, when there is a great deal of friction between sheets, as happens with coated paper, the aligning effect of the leading edge stopper fails to correct the misalignment.

Furthermore, when the paper is thin and weak-bodied, even the aligning effect of the leading edge stopper may cause the paper to buckle and prevent correction.

This is likely to occur if:

When stapling paper with a great deal of friction between sheets, such as coated paper.

• When stapling paper weak-bodied paper, such as thin paper.

Solution

Select "Adjustment Settings for Skilled Operators" of 0606: [Number of Sheet Align for Stapling] (SP6-225-001 to 014), and set the value lower than current value.



• Productivity may suffer from reducing the number of sheets in the pre-stack.

Trailing Edge of Stapled Sheets Close to the Paper Exit

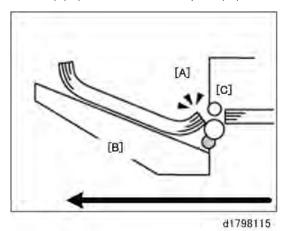
Cause

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

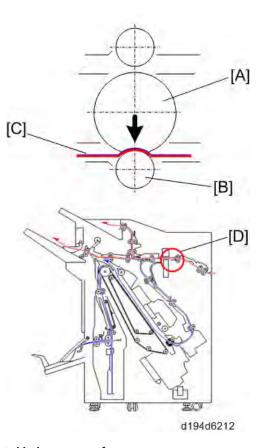
- Adjustment Settings for Skilled Operators > Paper Feed/ Output > Adjust Paper Curl > Set to "Adjust Concave Curl". (SP 1-906-001 to 012: De-curler Setting Tray <number> :Paper Path Selection)
- 2. Select "Strong" or "Weak" to control the amount of curl correction as required.
- 3. Reduce the amount of curl by changing the direction of curl, such as by loading the paper into the tray the opposite way.

Leading edge 4mm pitch edges getting dirty

Cause

When the back curl correction (straightening paper which is curled face down) is enabled, nip the paper with sponge roller (upper) [A] and metal roller (lower) [B]. Pressing deflection of sponge roller corrects the curl.

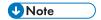
If printed side faces up [C], toner becomes easy to come off from paper because the printed side is pressed by the sponge roller to correct the curl. When this paper is transported to the finisher, the anti-static brush [D] on the upstream of the punch unit catches the toner, and then toner is transferred to the leading edges of paper.



This is likely to occur if:

This symptom could occur if these following conditions are true.

- Decurler unit is mounted.
- The back curl correction is required in decurler unit to prevent defective stacking.
- · Printed side faces up in the downstream peripherals



• If you removed the anti-static brush, the alignment accuracy for stapling might worsen. In this case, reduce the number of sheets of pre-stacking but the reducing productivity can not be avoided.

Solution

1. Check that "Adjustment Settings for Skilled Operators" of 0304: [De-curler Setting] (SP1-906-001 to 012) is set to 3 – 5 (back curl correction).

Yes: go to the next step

No: This might be a different cause. Refer to the other troubleshooting.

2. Check if the back curl correction can be cancelled.

Cancel the back curl correction if paper does not require back curl correction and does not effect stacking is loaded.

Make a test copy and go to next step if the problem is still occur.

3. Check if the output orientation can be set as face down.

If the output orientation is facing up, set the output orientation facing down. (do the reverse setting)

Make a test copy and go to next step if the problem is still occur.

4. Remove the anti-static brush.

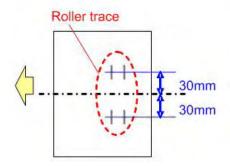
If you have to set the back curl correction, and then use duplex printing (print facing up), remove the anti-static brush.



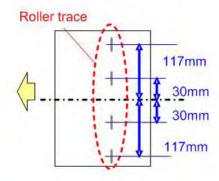
- If you removed the anti-static brush, the alignment accuracy for stapling might worsen. In this case, reduce the number of sheets of pre-stacking if you use stapling.
- "Adjustment Settings for Skilled Operators" of 0606: [Adj Pre Stack Number] (SP6-225-001 to 014)

Location Occurs

Entrance Rollers

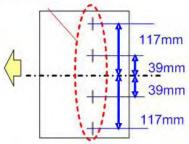


Post Punch Rollers, Straight Transport Rollers, Proof Path Rollers

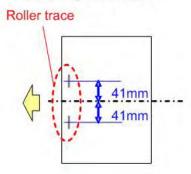


Paper Registration Rollers

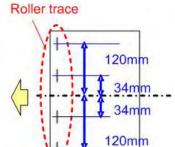
Roller trace



Shift Tray Exit Rollers



Proof Tray Exit Rollers



w_d194z0754

Cause

When high coverage images are printing, the paper transfer roller gets dirt and this dirt adheres on the paper surface or paper edges.

4

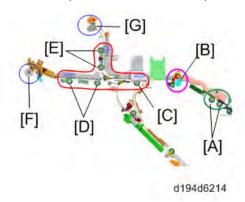
This is likely to occur if:

This may occur while or after high coverage printing.

Solution

Clean the rollers with alcohol below:

- Entrance Rollers [A]
- Paper Registration Rollers [B]
- Post Punch Rollers [C], Straight Transport Rollers [D], Proof Path Rollers [E]
- Shift Tray Exit Rollers [F], Proof Tray Exit Rollers [G]

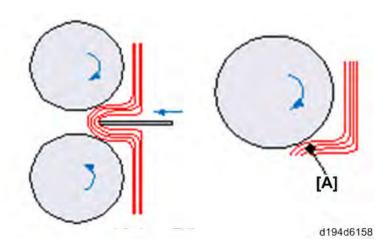


Only the Cover Is Discharged During Saddle Stitching (JAM129)

In the folding process of saddle stitching, the bundle of paper is folded in the middle by pinching it between paper folding rollers on the crease from top to bottom, and while folded in the middle by the paper folding rollers, it is transported.

During the folding process, the front cover is folded and transported due to the friction between the paper folding rollers and the paper; paper other than the cover is folded and transported due to the friction between sheets of paper.

However, if the print density of an image is high, such as with a solid image, it lowers the friction coefficient between sheets of paper [A], which can result in slipping during the folding process of paper other than the cover as the transport pressure drops; in such case, only the cover is discharged and other paper is left behind in the saddle stitch process tray, resulting in a paper remaining jam error (JAM129).

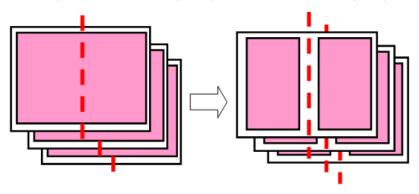


This is likely to occur if:

- A high density image is printed in the fold line.
- 15 or more sheets are bound.
- In a low humidity/temperature environment

Solution:

Select "Magazine" for the booklet printing method and set the binding margin to 5mm or greater.



d194d6159

Setting by Operation Panel

- 1. Press [Dup./ Combine/ Series] on Copier screen.
- 2. Select [Booklet] under "Magazine".
- 3. [Edit/Color] > [Margin Adj.], set as follows.

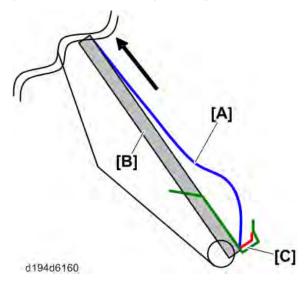
Front Side: Left 5mm

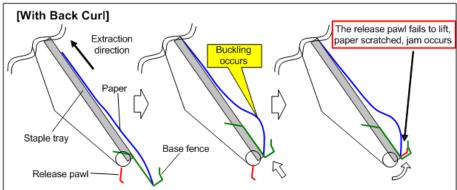
Back Side: Right 5mm

Also can be set with SP6-200-001 to 18: Adj Booklet Staple Position.

Thin, Coated Paper Eject Error (Stapled Sheets)

In the binding process, when thin, coated paper [A] is discharged from the staple tray [B], as the staple tray that pushes and lifts up the trailing edge of the paper is at a steep angle (55°) , it results in a difference in linear speed between the leading edge and trailing edge, making it buckle; the release pawl [C] is unable to lift it up, resulting in scratches on the paper and/or jams.





w_d194e6161a

Cause:

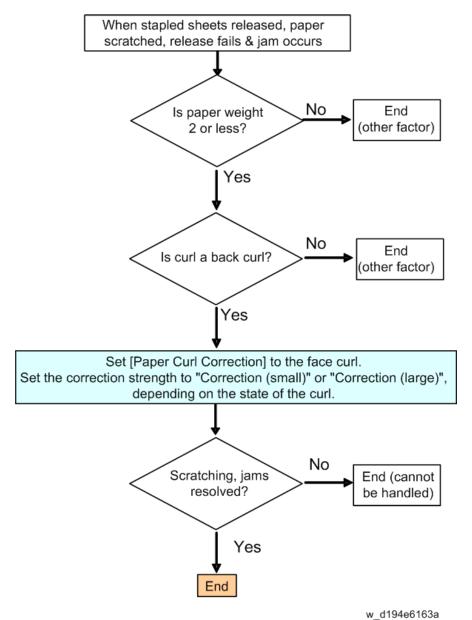
During binding processes (edge stapling, saddle stitching), paper is transported to and assembled in a staple tray and then it is discharged by a release claw.

When discharging thin, coated paper, if the paper is weak-bodied, short-grained paper, as the mechanism tries to push and lift up the trailing edge of the paper, it makes it buckle, resulting in scratches on the paper and/or jams due to failure to release.

This is likely to occur if:

- Environment: The higher the humidity, the weaker the body of the paper becomes and the more prone to buckling.
- Paper body: If the paper is weak-bodied (short-grained), during discharge the efficiency
 drops in transmitting the transfer force to the leading edge of the paper, which is a factor in
 producing buckling.
- Paper length: The discharge distance increases in proportion to the paper length and the
 resistance due to friction between the paper and the tray has a strong influence as a factor in
 buckling occurring.
- Number of sheets: the fewer the sheets of paper, the weaker the body of the bundle of paper, and the more prone to buckling.

Solution:



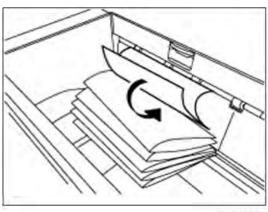
w_d194e6162a

Multi-Folding Unit

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. Especially it tends to occur when printing low speed.

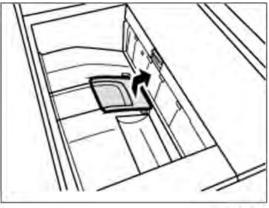


d1798134

As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

Solution

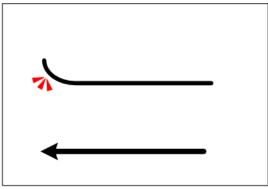
Use the Z-fold support tray for multi-folding unit. This will reduce the angle of stacked bundles and prevent bundles flipping over as they are delivered.



d1798135

Z-Folding Is Not Performed Correctly

The delivered paper has an upward curl with a arc of 4 cm (1.6") or less at leading edge.



d1798133

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 012: Decurler Setting Tray <number>:Paper Path Selection)
- 3. Print the image. Is the problem resolved?

No	Go to the next step.	
----	----------------------	--

- 4. Load the paper the other way up.
- 5. Print the image. Is the problem resolved?

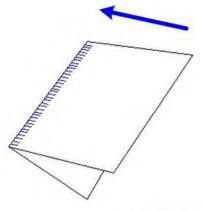
Yes	Finished!
No	Consult key operators.



• This folding error will not occur if uncurled paper is used or sheets that curl downward.

Matte Paper Scratched During Folding

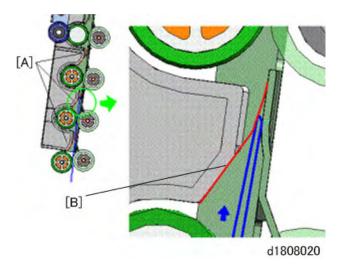
The surface of matte finish paper shows scratches after folding.



w_d194z0747

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 [B], 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.

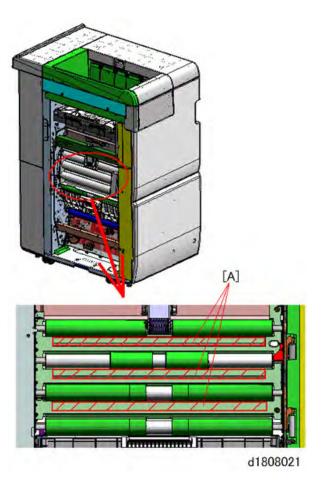




- The surface of the guide plate is rough and can cause marks on the surface of the paper. The surface of the plate becomes smoother after about 2,000 sheets have feed through the folding unit and these marks disappear.
- The surface of gloss coated paper is much smoother, so these marks do not appear 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.



- 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.

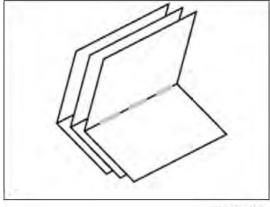


 After buffing the with paper, always clean the surface of the plate with a clean cloth dampened with alcohol to remove tiny bits of paper that could adhere to the plate after buffing.

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.



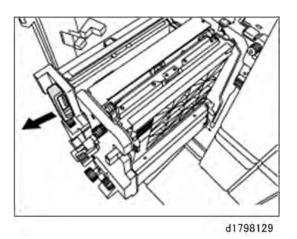
d1798128

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.

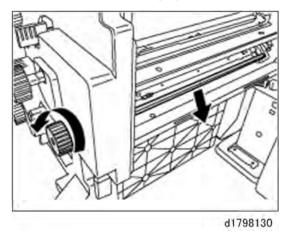
Solution:

Clean the blade.

- 1. Open the front cover of the multi-folding unit.
- 2. Pull the multi-folding unit out.



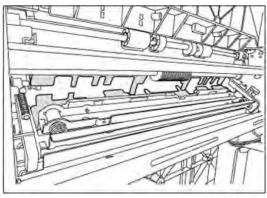
Turn the N11 dial counterclockwise until the blade appears.
 The blade is located in the right part of the multi-folding unit.



4. Wipe the tip and top of the blade with a soft dry cloth.



• Be careful not to damage the blade.

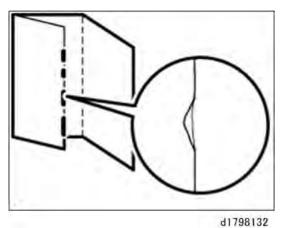


d1798131

- 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.

4. Print the image. Is the problem resolved?

Ye	s	Finished!
No)	Consult key operators.

When letter folding is applied to a single sheet



- 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.

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)

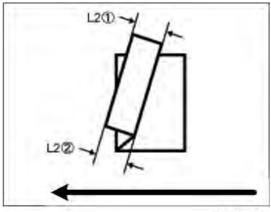
Folding Deviation

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>

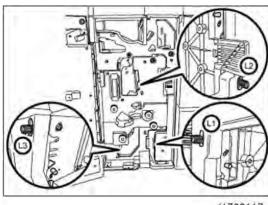


d1798116

Solution:

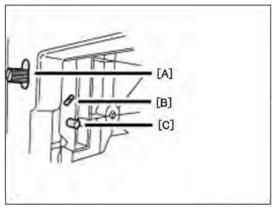
Adjust the deviation.

The multi-folding unit has three adjusting screws (L1, L2, and L3) to adjust deviation.



d1798117

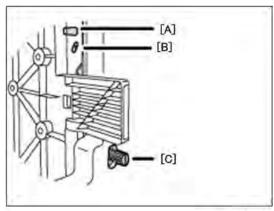
L1



d1798118

	[A]	Adjusting Screw
	[B]	Adjusting Screw Hole
	[C]	Mounting Screw/

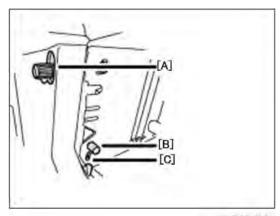
L2



d1798119

[A]	Mounting Screw
[B]	Adjusting Screw Hole
[C]	Adjusting Screw

L3

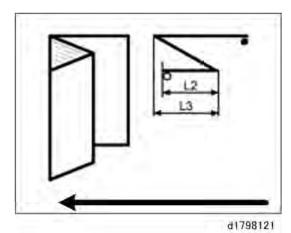


d1798120

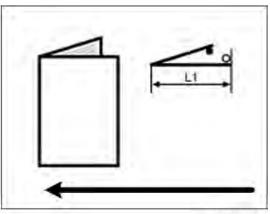
[A]	Adjusting Screw
[B]	Mounting Screw
[C]	Adjusting Screw Hole

The screws can be used to do adjustments for the following fold methods:

• Z-fold

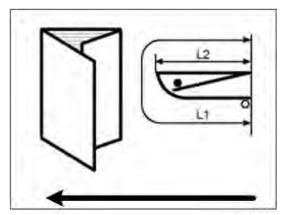


• Half Fold



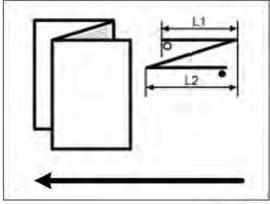
d1798122

• Letter Fold-in



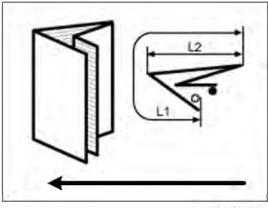
d1798123

• Letter Fold-out



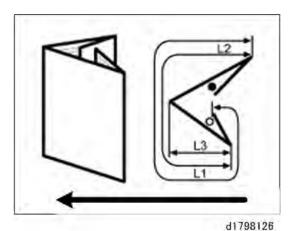
d1798124

• Double Parallel



d1798125

Gate Fold



The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

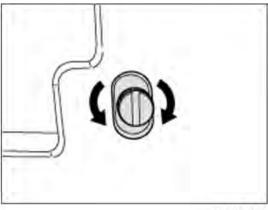
How to adjust the folding deviation

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.



d1798127

- 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.



- 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 946
 "Skew".

High Capacity Stacker

Delivered Sheets Are Severely Curled

Cause:

Sheets with downward curls cause strong friction at their leading edges. This may result in paper misfeeds. Sheets will not be ejected completely and the trailing edges will be left inside the paper exit.

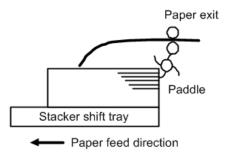
If this happens, other sheets may slip under the delivered sheets, so that the delivered sheets may be curled when loaded.

This is likely to occur if:

A4 or larger coated paper weighing up to 135 g/m2 (50 lb. Cover) is used.

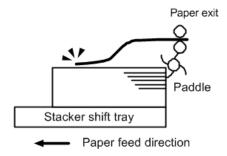
How the problem occurs

1. An uncurled sheet is delivered to the stacker shift tray.



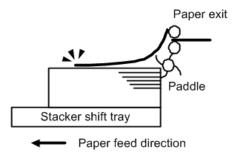
w_m205a4123

2. Strong friction occurs at the trailing edge so that the paddle cannot pull the sheet back and align the edges of the sheet with those of the stack.



w m205a4124

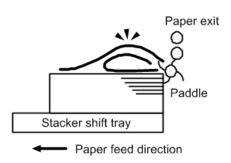
3. The paper edge stopper fails to push back the protruding leading edge and align the sheet as required.



w_m205a4125

4. Stacked sheets are not aligned properly.





w m205a4126

Solution:

1. Load the sheets the other way up.

2. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

- 3. Separate the stacker for the main unit and correct the registration by adjusting the positioning of the bracket where they come together.
- 4. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

- 5. In the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust Curl: Weak].
- 6. Set [Adjust Paper Curl] to [Adjust Curl: Weak]
- 7. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

- 8. Set [Adjust Paper Curl] to [Adjust Curl: Strong].
- 9. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

10. Is the face curled?

Yes: Contact your supervisor.

No: Load the sheets the other way up again and go to step 8.

Delivered Sheets Are Not Aligned

Cause:

When sheets are delivered to the stacker tray, because of paper-to-paper friction, the paddle fails to pull the trailing edge back into the front guide, resulting in misalignment.

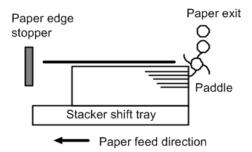
The paper edge stopper also fails to push back the protruding leading edge.

This is likely to occur if:

• Thick (280 g/m² [105 lb. Cover] or heavier), uncurled A3 or larger paper is used.

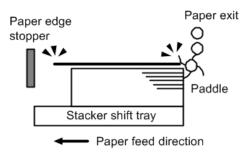
How the problem occurs

1. An uncurled sheet is delivered to the stacker shift tray.



w m205a4127

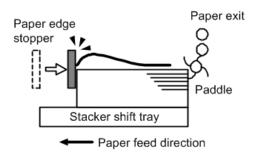
2. Strong friction occurs at the trailing edge so that the paddle cannot pull the sheet back and align the edges of the sheet with those of the stack.



w_m205a4128

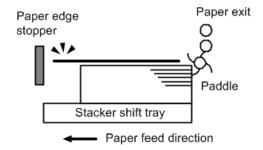
3. The paper edge stopper fails to push back the protruding leading edge and align the sheet as required.





w_m205a4129

4. Stacked sheets are not aligned properly.



w_m205a4130

Solution:

- 1. Load the sheets the other way up.
- 2. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

- In the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust Curl: Weak].
- 2. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

- 3. Set [Adjust Paper Curl] to [Adjust Curl: Strong].
- 4. Print the image. Was the problem resolved?

Yes: Finish

No: Go to next step.

5. Is just the first sheet misaligned?

Yes: Finish

No: Go to next step.

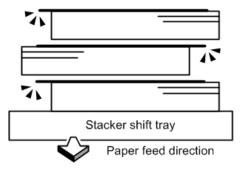
6. Is it just some of the last sheets?

Yes: Finish

No: Contact your supervisor.



 The top sheet of each offset bundle of delivered sheets may protrude above the rest of the bundle by about 7 mm.



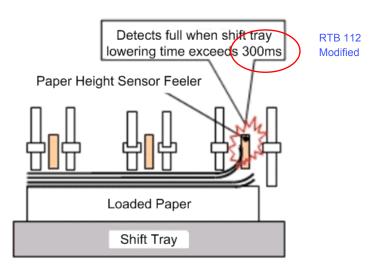
w_m205a4122

Premature Detection of Full When Paper Discharged to Shift Tray

Cause:

When paper that is about as wide as the paper height sensor feeler is discharged to the shift tray, if it has side face curl, the edge of the paper may fail to go under the paper height sensor feeler and ride up on the feeler; alternatively, by coming in contact with the paper height sensor feeler, it may ride up and press against the feeler and the load from this may hinder the movement of the feeler. In this case, even if the shift tray lowers down, the paper height sensor feeler fails to turn OFF, and the lowering time of the shift tray ends up exceeding 300ms, and the unit ends up sensing it is full.

RTB 112 Modified

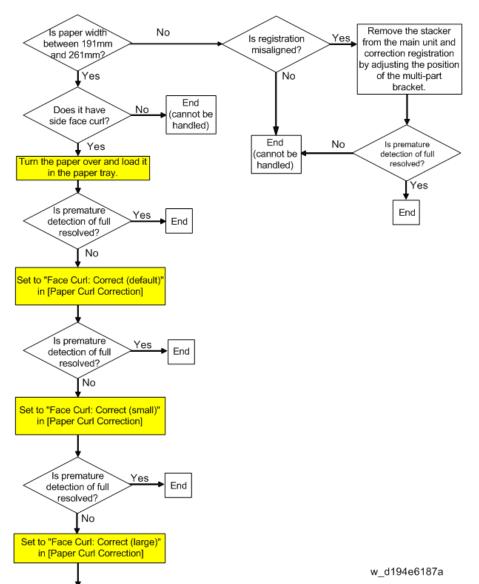


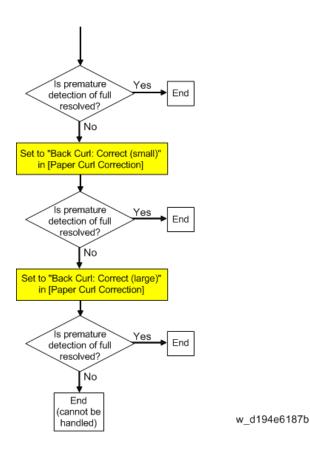
w_d194e6186a

This is likely to occur if:

When paper of a certain width is discharged to the shift tray, the unit may detect being full prematurely.

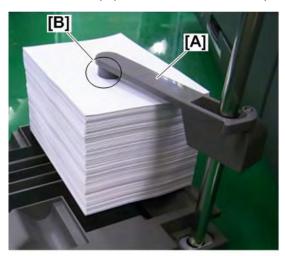
(Paper between roughly 191 mm to 261 mm wide)





Marks Left by the Paper Holder

Pressure from the paper holder [A] on the cart may leave marks where the holder pressed down [B].

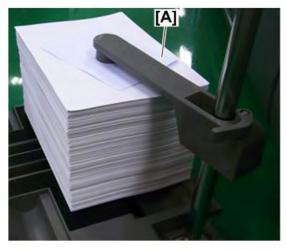


d194d6188

The paper holder exerts more pressure than the previous model of cart, which creates the potential for leaving marks on the stack of paper when it is holding it. The top pages of the stack are prone to having marks left.

Solution:

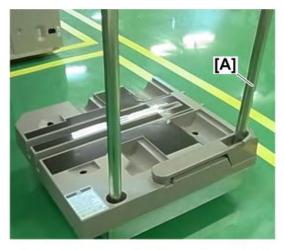
Marks can be prevented by putting scrap paper in between [A].



d194d6189

Prevent Loosening of Screws to the Cart's Handle

There have been cases of screws [A] to the handle of the cart loosening.



d194d6190

Cause:

The torque on the mounting bolt of the handle on the bottom of the cart is too low, so when the cart is loaded with paper and it is pushed/pulled repeatedly, the mounting bolt may get loose.

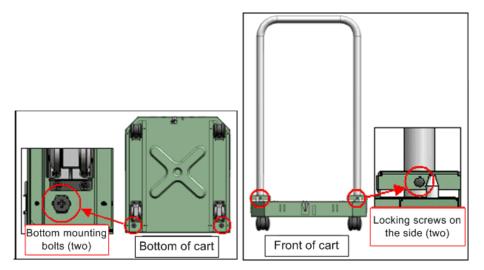
This is likely to occur if:

This is prone to happening if the torque on the mounting bolt of the handle is less than 18Nm.

Solution:

If the cart's handle starts to rattle, or if the paper holder fails to be effective because of loosening, re-tighten the mounting bolt on the bottom of the handle.

Also, if the locking screws on the side of the handle get loose, re-tighten them.



w d194e6191a

Ring Binder

Ring Binder Recognition: SC756-48

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.

If you are not using ring binding function, the machine can still be running; however, if you are using the function, SC756-48 pops up on the operation panel when selecting ring binding function.

Cause:

If the system is powered on with the ring binder unit pulled out, the ring binding system may not start up normally.

Solution:



- Be sure not to exit from Energy Saver mode or to switch the machine on when the ring binder door is open and the binding unit is disconnected. Doing so will affect initialization, causing the ring binder function to become unavailable (although other functions will be unaffected).
- If you inadvertently do this, connect the ring binder's binding unit again, close the door, and then turn the power off and back on to restore normal operation.
- 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
- 5. -48 pops up on the operation panel.
- 6. Wait for the current copy or print job to end, and then cycle the main machine off/on.
- 7. 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!	

For more detail, refer to SC700 (page 268 "Service Call 750-790")

Others

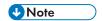
Curling

By lowering the fusing heat roller temperature, paper curl can be corrected without using the decurler unit.

Side Effects

- · Deterioration of fusing capability
- Deterioration of glossiness
- Half-tone image gets dirt on the non-coated paper.





 To execute the decurl correction, modify "Adjustment Settings for Skilled Operators" of 0304: [De-curler Setting] (SP1-906-001 to 012)

Solution

- 1. If paper is not specified as a custom paper, set as a custom paper.
- 2. Decrease the temperature of [Fusing Heat Roller Temperature Adjustment] for custom paper settings (No.085/086) 5°C.
- 3. Print the solid print and check if the problem is fixed.
- 4. Keep decreasing the temperature (5°C / step) until the problem is fixed.

While changing the temperature, check the fusing capability at the same time.

<Checking the fusing capability>

- There is no toner coming off.
- Toner does not come off when gently scratching the image with your nail
- Toner does not come off when rubbing the image with the optical cloth.



- The applicable numbers for the items in the "Custom Paper Settings" vary depending on the printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting" about which number you need to adjust.
- After taking the measures, we recommend performing color calibration again for the external controller.

5. Improving Throughput

Improving Throughput

Improving Metallic Paper Productivity

Cause

According to the smoothness of the metallic paper surface is high and hard to fuse paper, usually process line speed is set to low and temperature setting is 200°C (SP max). Because of fusing condition is maximum temperature, gloss afterimage might occur.

Solution

- 1. Set and load the metallic paper.
- 2. If CPM is capable of setting higher, set the Paper Feed Interval Setting (No.129/130) to "100".



- If CPM is not capable to set higher or gloss after image is not acceptable, this measure cannot be applied.
- 3. Print the target image. (2 sheets as A4 count)
- 4. Check if the gloss after image is acceptable.

<Checking the fusing capability>

RTB 112 Delete

- There is no toner coming off.
- Toner does not come off when gently scratching the image with your nail
- Toner does not come off when rubbing the image with the optical cloth.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

U Note

 After taking the above measures, we recommend performing color calibration again for the external controller.



See page 782 "Improving Productivity when Loading the Different Types/Thicknesses of paper".

• After this measure, the gloss afterimage might become worse.

Reducing the Waiting Time

After the job data is sent to the printer, wait time might occur to reach the target fusing temperature to start printing.

Cause

- It takes time to cool down the fusing unit if you use paper that is set lower fusing temperature. By changing standby target fusing temperature might reduce the waiting time.
- Changing the settings of "Fusing temperature to allow paper transfer after warming up" (Adjust fusing temperature to transfer paper) might reduce the waiting time.

Solution

- Check the temperature of [Fusing Heat Roller Temperature Adjustment] for custom paper settings (No. 085/086).
- If the target fusing temperature of paper using frequently is less 160°C, modify "Adjustment Setting for Skilled Operators" of 0207: [Standby Target Temp. Setting] as follow:

Change all values to the default minus 10°C:

- Standby: Center (SP1-107-001)
- Preheat: Center (SP1-107-003)
- Print Ready: Center (SP1-107-007)
- 3. Register paper as custom paper setting.
- Set [Setting custom paper settings: Adjust fusing temperature to transfer paper] (089, 090, 091, 092) to "1".



- The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
 printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
 about which number you need to adjust.
- After taking the above measures, we recommend performing color calibration again for the external controller.

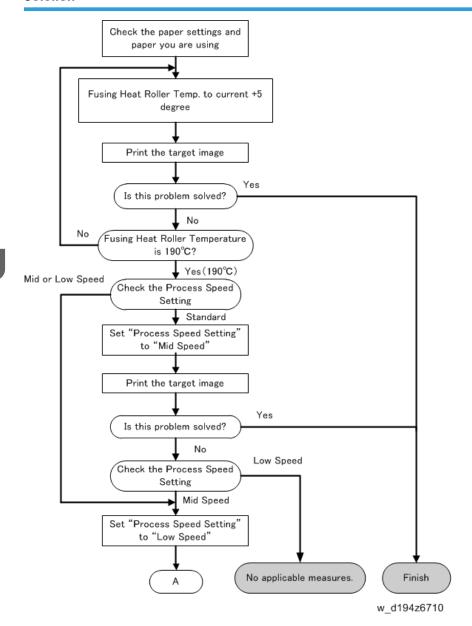


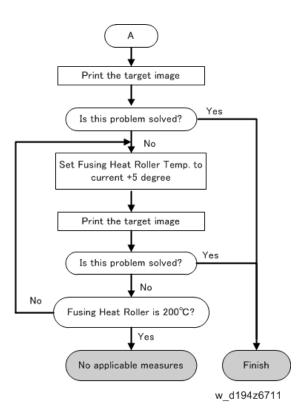
• After changing [Adjust fusing temperature to transfer paper], there might be some differences in gloss level or fusing intensity.

Improving Fusing Capability

Cause

- Paper settings are incorrect, such as paper type, paper weight, and paper coating type.
- Using paper with different settings of paper brands or paper weight.
- Difference of the lot (paper).





- * 1 Checking the fusing capability
 - There is no toner coming off.
 - Toner does not come off when gently scratching the image with your nail
 - Toner does not come off when rubbing the image with the optical cloth.

UNote

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

U Note

- It takes time to start printing after changing the temperature setting.
- After taking the above measures, we recommend performing color calibration again for the external controller.

After changing "Process Speed Setting" to "Mid" or "Low", productivity decreases as below:

- Standard: (max. speed)
- Mid speed: 85% of standard speed
- Low speed: 42.5% of standard speed

Changing the fusing temperature or changing the process speed may produce one or more of the following side effects:

- · Paper curling
- Uneven gloss waves
- · High glossy images
- · Low glossy images
- Uneven surface texture

Improving Productivity when Loading the Different Types/Thicknesses of paper

This solution is only for CE.

Cause

Cause 1

When the paper type/thickness differs, wait time occurs because the fusing nip unit is depressurized and adjustment is performed to the specified fusing temperature. This wait time results in decreased productivity. (In this case, the wait time is the time until entering the permissible temperature range for paper feeding.)

Cause 2

The amount of toner deposit is controlled for each type/thickness of paper. Wait time occurs because it is necessary to reduce/increase imaging via changeover of imaging electric potential. This wait time results in decreased productivity. (In this case, the wait time is always about 3 seconds, which is the time required to reduce/increase imaging.)

Solution

This solution is only for CE.

Solution for Cause 1

- 1. Check the PM counter of the parts around the drum (photoconductor unit) and then replace the parts for which the counter has been exceeded.
- Set SP1-131-001 (Continues Print Mode Switch: Feed Permit Condition) to 1 (Productivity Mode).



• Setting SP1-131-001 to "1 (Productivity Mode)" stops temperature adjustment even when the type/thickness of paper changes, thus completely eliminating wait time.

However, this also results in fusing temperature which does not match the paper.
 Therefore, uneven surface texture, offset, blisters (white spots), uneven gloss waves, residual gloss (gloss ghost), and fusing belt jam might occur.

Solution for Cause 2

- 1. Check the PM counter of the parts around the drum (photoconductor unit) and then replace the parts for which the counter has been exceeded.
- 2. Set SP3-600-070(Select ProCon: IMSSe Select) to 0 (OFF).



- Setting SP3-600-070 to "0 (OFF)" stops changing the deposit amount even when the type/thickness of paper changes, thus completely eliminating wait time.
- However, this also results in deposit amount which does not match the paper. Therefore, there is the possibility of slight changes in image density.



• After taking the above measures, we recommend performing color calibration again for the external controller.

6. Detailed Procedures of SC Occur

Detailed Procedures of SC Occur

Recovering SC591-00

Cause

Double feed detection function is disabled when light adjustment returns failed due to the dirt of the double-feed sensor 1 (LED) and double-feed sensor 2 (Receptor); however it does not display and not notify to the users. (Logging SC591-00)

Solution

Set SP1-310-001(Dbl-Feed Detect Function: Disabled Display (0:Off 1:On)) to "1:On".

If you set SP1-310-001 to "1:On", the double feed detection disabled and contacting the supervisor message would display.



 Even if the light adjustment is succeeded under "in use" condition, the message remains on the screen. Rebooting the machine clears the message.

Recovering SC499-03, Preventive Maintenance of Intermediate Transfer Scale

Cause

- Belt scale dirty
- Transfer Belt Speed Feedback Sensor dirty
- Transfer Belt Speed Feedback Sensor defective
- Connector disconnected or harness broken

TDCU defective

RTB 112: Modified

Solution

- Clean the belt scale
- Clean the Transfer Belt Speed Feedback Sensor
- Reconnect or replace the harness

• Replace the TDCU

RTB 112: Modified

RTB 112: ITB Feedback Sensor Light Adjustment

Intermediate Transfer Belt: How to Clean the ITB Speed Feedback Sensor

While SC499 (Intermediate transfer control error: Logging SC) is logging to SC499 SC History, ITB Speed Feedback Sensor Control is turned off if SC499 is issued three times.

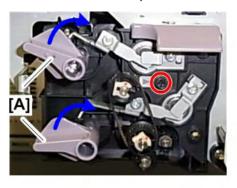
Check SP2-915-001 (Encoder Sn Ctrl Condition - Scale FB Control Enable) for the ITB Speed Feedback Sensor condition. Clean the ITB Speed Feedback Sensor if the value is set to "0: disabled".

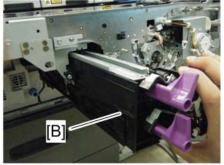


• If ITB feedback control is disabled, shifted images or small pitch banding (streaks) might occur.



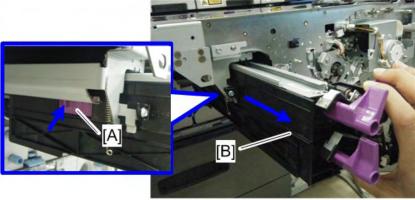
- When maintaining the machine, check the SP2-915-002: Encoder Sn Ctrl Condition SC499
 Occurrences. If the value is not set to "0", clean the ITB Speed Feedback Sensor.
- 1. Pull the ITB unit out to the 2nd stop position.
- 2. Raise the two levers [A] of the ITB cleaning unit.
- Remove the screw and pull the ITB cleaning unit [B] out slowly unit it stops (@x1)





m194e2407

4. Press the release lever [A] and Pull the ITB cleaning unit [B] out.

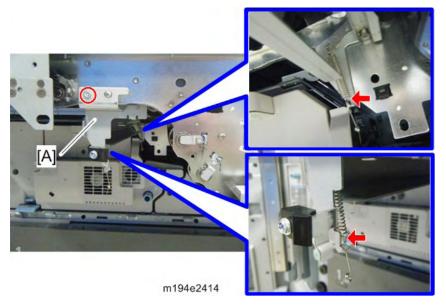


m194e2408

5. Disconnect the front spring and rear spring.



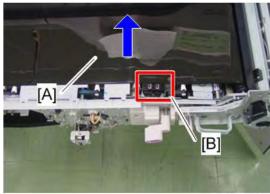
- Do not remove these springs. Let them hang free. They will not fall off.
- 6. Remove the screw of the belt tension roller assembly [A] (\$\mathbb{O}^{\text{x}} \mathbb{1}\$)



- 7. Slowly lower the belt tension roller assembly [A], while you support the other end of the roller with your other hand [B] under the ITB unit.
- 8. Remove the tension roller assembly [C] and tension roller.



d074r168

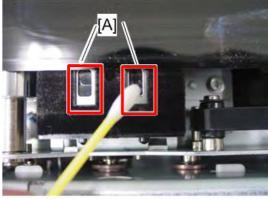


d194e3992

ACAUTION

- It is recommended to wear gloves when moving the ITB.
- Do not move the belt any more after the sensor is uncovered. Doing so could damage the belt.

10. Clean the transfer belt speed feedback sensor [A].



d194e3993



- Use a vacuum cleaner or an air blower to remove dust.
- Wipe the sensor with a wet cotton swab. If a cotton swap is not at hand, wipe the sensor with a wet cloth. Use water if necessary, but do not use any solvent (ethanol, etc).

ACAUTION

• Do not attempt to wipe off the "black prints" on the sensors. These black prints are not dust/dirt but are components of the sensor.

After cleaning the ITB Speed Feedback Sensor

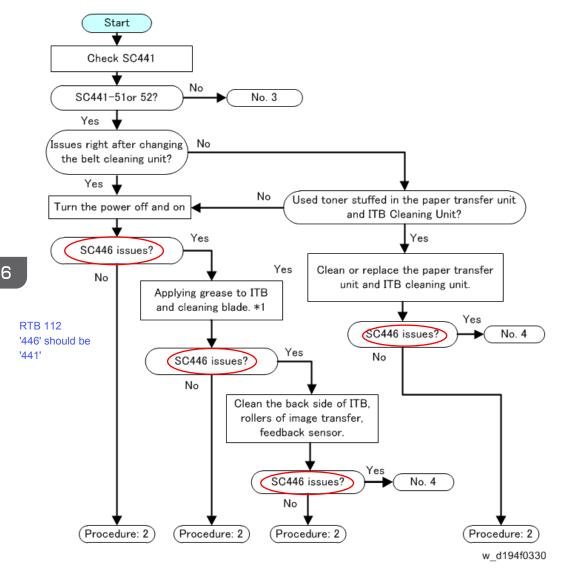
- 1. Reassemble the ITB Unit.
- 2. Turn the main power switch ON.
- 3. Execute the following SP
 - Remove the front cover of the ITB cleaning unit, and rotate both levers of the ITB cleaning unit clockwise to retract the cleaning blades from the ITB.
 - Keep opening the font doors and enter the SP mode, and then execute SP2-920-001 (Steering Control Roller- Initialize Belt Position).
 - After pressing the "Execute" button, close both front doors to run the above SP.
 - Rotate both levers of the ITB cleaning unit counter-clockwise and re-install the front cover of the ITB cleaning unit.
- 4. Execute SP2-912-001 (Encoder Sn:Adj Light Adj Light Amt).
- 5. Exit the SP mode and then turn the main power switch OFF.
- 6. Turn the main power switch ON and then enter the SP mode.
- 7. Execute SP2-914-1 (Encoder Sn:Get 1stPhase Get Phases:Execut All). This SP code resets the ITB speed feedback sensor.
- 8. Exit the SP mode and then turn the main power switch OFF.
- 9. Turn the main power switch ON and then enter the SP mode.
- Select SP2-915-001 (Encoder Sn Ctrl Condition Scale FB Control Enable) and confirm that it is set to default "1".



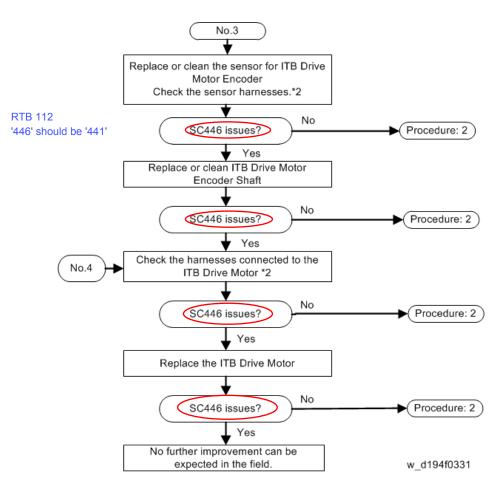
- If SP2-915-001 is set to "O", clean the ITB Speed Feedback Sensor again.
- 11. Exit the SP mode and then turn the main power switch OFF.
- 12. Turn the main power switch ON and then enter the SP mode.
- 13. Execute SP3-011-004 (Manual ProCon :Exe Full MUSIC)
- 14. Exit the SP mode.

SC441: ITB Drive Motor Error Measure Flow

Procedure: 1

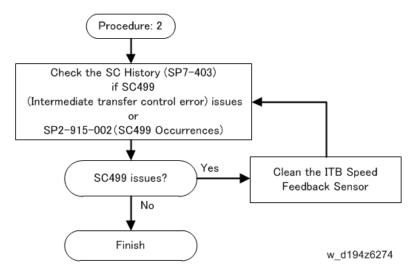


^{*1} For applying grease, refer to the main chapter (Chapter 4: Replacement and Adjustment).



- *2 how to check the harness:
- a) Check the connectors are completely connected.
- b) See around if there is no damage or broken harnesses.

Procedure: 2



Recovering from SC756-48

Refer to page 773 "Ring Binder Recognition: SC756-48"

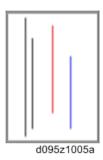
7

7. Troubleshooting: Image Quality Problems

Image Index

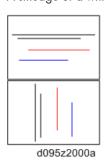
Large classification: Lines/Streaks

Line/streaks thinner than 1 mm in width that appear either as a result of contamination or incomplete toner transfer.



Middle classification: Streaks

A smudge or a white area inside an image, in a linear shape with 1 mm or smaller width.

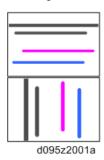


Small classification	Sample image	Symptom/ Reference
Vertical black (color) streaks Black (color) streaks appearing in the paper feed direction.	d1352874	page 815 "Vertical Black Streaks" page 817 "Vertical Black (color) Streaks (1)" page 821 "Vertical Black (color) Streaks (2)" page 822 "Vertical Black (color) Streaks (3)" page 842 "Vertical Streaks when Feeding Thick (360 g/m²) Paper: Vacuum Feed LCIT"
Vertical white streaks Image missing in the shape of streaks in the paper feed direction.	d1352875	page 823 "Vertical White Streaks (1)" page 831 "Vertical White Streaks (2)"
Horizontal black (color) streaks Black (color) streaks appearing in the direction perpendicular to the paper feed direction.	d1352876	page 809 "Horizontal Black Streaks (Image Edge) "
Horizontal white streaks Image missing in the shape of streaks in the direction perpendicular to the paper feed direction.	d1352877	page 811 "Horizontal White Streaks" page 887 "Horizontal White Streaks: Around Black Text"
Vertical glossy streaks Glossy streaks appearing in the paper feed direction.	d1352878	page 836 "Vertical Gloss Streaks" page 835 "Glossy Lines at the Edge of the Paper"

Small classification	Sample image	Symptom/ Reference
Horizontal white streaks Glossy streaks appearing in the direction perpendicular to the paper feed direction.	d1352879	page 813 "Whiter at the Trailing Edge"
Image scratches Stains in the shape of vertical streaks which seem to result from being scratched by the guide plate ribs or other parts.	d1352880	

Middle classification: Bands

A smudge or a white area inside an image, in a linear shape with $1\,\mathrm{mm}$ or larger width.



Small classification	Sample image	Symptom/ Reference
Jitter Blurred area visible as bands in the direction perpendicular to the paper feed direction.	d1352881	
Banding Banding at regular intervals in the direction perpendicular to the paper feed direction. (Gear eyes: Color unevenness in the same interval as the pitch of the gear.)	d1352882	

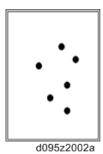
Small classification	Sample image	Symptom/ Reference
Vertical white bands White bands in the paper feed direction.	d1352883	page 845 "Banding (General)" page 844 "Vertical White Bands"
Horizontal white bands White bands in the direction perpendicular to the paper feed direction.	d1352884	page 846 "Banding (63 mm intervals)" page 848 "Banding (189 mm intervals)"
Vertical black (color) bands Black (color) bands in the paper feed direction.	d1352885	
Horizontal black (color) bands Black (color) bands in the direction perpendicular to the paper feed direction.	d1352886	
Fuzzy lines Blurred images in the shape of slightly winding bands in the paper feed direction.	d1352887	
Roller tracks Stains on the transport rollers transferred to paper.	d1352888	

7

Large classification: Spots

An image quality problem either exhibiting white spots on solid areas, or black spots on the background.

White spots and Fireflies are considered different issues as the former does not consist a core in the center of the unprinted spot.



Middle classification: Spots

White spots seen in solid image areas or black/color spots seen where there should be nothing printed. The description "white spots" excludes those with toner cores.



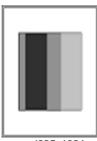
d095z2002a

Small classification	Sample image	Symptom/ Reference
Black (color) spots Stains are visible as crisp black (color) spots.	d1352869	page 851 "Black (color) Spots (1)" page 855 "Black (color) Spots (2)"

Small classification	Sample image	Symptom/ Reference
White spots White spots are visible inside solid image or halftone image area because of missing toner.	d1352870	page 857 "White Spots/Toner Blasting" page 860 "Blister-like White Spots" page 864 "Patchy Image at the Leading Edge" page 867 "Fainter Leading Edge"
Spots with toner Toner aggregated inside the machine has been transferred to paper.	d1352871	
White spots with toner cores White spots with pieces of aggregated toner in the center visible in solid color area. Pieces of aggregated toner may be irremovable.	d1352872	
Fish-shape stains Stains in the shape of small fish which appear to be swimming in the paper feed direction.	d1352873	page 862 "Medaka (White Spots)"

Large classification: Full page

Images and text missing from the whole sheet.



d095z1034a

Middle classification: Full page

Image/text does not appear on the printout.



d1352889

Small classification	Sample image	Symptom/ Reference
All black		
Copied paper is all black.		
	d1352889	
Blank		
No image is reproduced.		
	d1352890	

Middle classification: Unprinted

Parts of the developed images and letters are not reproduced.

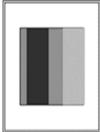


	<u> </u>	
Small classification	Sample image	Symptom/ Reference
White zone Part of a solid image or halftone is missing.	d1352891	page 871 "Fainter Trailing Edge" page 875 "Unprinted: When Using a Transparent Film" page 876 "Unprinted: Around Clear- toner Images"
Wormholes The outline of a letter (or a line) is reproduced but the inside of it is missing.	d1352892	page 877 "Worm Holes: Text or Edge of an Image" page 881 "Worm Holes: When Using the Clear Toner"
Halo There is a white line around a solid object.	d1352893	
Negative residual image Previously copied image is reproduced with its black and white reversed on the same page or the next page.	A A d1352894	page 912 "Residual Image: Negative Ghost" page 915 "Residual Gloss (Gloss Ghost)" page 920 "Residual Gloss (Gloss Ghost): Multiple "
Positive residual image Previously copied image is reproduced on the same page or the next page.	A A d1352895	
Offset The same image is repeatedly transferred in the same interval.	A A A d1352896	

Small classification	Sample image	Symptom/ Reference
Missing image Developed image slided in the subscan direction or missing.	A d1352897	

Middle classification: Unevenness

The density of the developed image is uneven.



d095z2005a

Small classification	Sample image	Symptom/ Reference
High density Image density higher than configured.	d1352898	
Low density Image density lower than configured.	d1352899	page 886 "Low Image Density of Black Area" page 887 "Horizontal White Streaks: Around Black Text"

Small classification	Sample image	Symptom/ Reference
Uneven density Image density is uneven within the same page.	d1352900	page 890 "Uneven Density between Left and Right of an Image: 40 mm Interval" page 845 "Banding (General)" page 891 "Uneven density: 63 mm Interval" page 891 "Uneven Density: 189 mm Interval (1)" page 892 "Uneven Density: 189 mm Interval (2)" page 894 "Uneven Density within 90 mm of the Trailing Edge" page 895 "Uneven Density (Textured Paper)"
Unevenness in indefinite shape Image density unevenness in indefinite shapes.	d1352901	
Uneven glossiness The glossiness is uneven inside a dark solid image. Check it by looking at the paper from different angles.	d1352902	page 923 "Uneven Gloss: Partly" page 924 "Uneven Gloss: Wavy" page 926 "Uneven Gloss: Side 2" page 932 "Uneven Gloss: Thick Paper"
Color changing During repeated printing, the color or the density changes from sheet to sheet.	3 d1352903	

Small classification	Sample image	Symptom/ Reference
Color difference The colors differ between the original and the output.	Original Conv	
Rough image Color is uneven and small white spots are visible inside a solid image. With color copiers, white spots may not appear when two colors are overlapped.	d1352905	page 898 "Mottling"
Earthworm shape White area in a shape similar to an earthworm.	d1352906	page 905 "Worm Track" page 909 "Envelopes: Creases, Wavy Streaks"
Moire When superimposed regular pattern, it is a pattern of striped periodic possible by pixel to interfere with each other. Halftones may become mosaics.	d1352907	
Blur Image seemingly blurred in all directions.	d1352908	page 911 "Blurred Image: Around a Clear Image"

Middle classification: Dirtied printouts

Non-image area is dirtied.

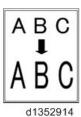


d095z2006a

Small classification	Sample image	Symptom/ Reference
Background stains Granular stains are visible in unprinted areas of the paper.	A d1352909	
Backside stains Granular stains are visible on the backside of the paper.	d1352910	page 936 "Dirty Background"
Toner scattered Toner scattered around a letter.	d1352911	page 857 "White Spots/Toner Blasting" page 938 "Toner Scattering: Lines"page 940 "Toner Scattering: Trailing Edge"page 943 "Toner Scattering: Around a Solid Fill Image"
Edge stains The side edges of paper are stained.	d1352912	page 944 "Stained Paper Edges"

Middle classification: Disturbed image

Image/text are disturbed and do not replicate the original.



Small classification	Sample image	Symptom/ Reference
Irregularity Image becoming irregular in comparison with the original.	d1352913	
Image expansion Image expanded abnormally in comparison with the original.	A B C A B C A B C	
Image contraction Image contracted abnormally in comparison with the original.	A B C ■ A B C d1352915	
Skew The corners of an image copied from a rectangle original are not square.	d1352916	page 946 "Skew"

Middle classification: Scratches

Stains in the shape of vertical streaks which seem to result from being scratched by the guide plate ribs or other parts.

Middle classification: Shifted image

Registration shift causes the images to appear longer or wider than the original.



d1352919

Small classification	Sample image	Symptom/ Reference
Vertical image shift Images and lines shifted in the paper feed direction.	C C C	
Horizontal image shift Images and lines shifted in the direction perpendicular to the paper feed direction.	C C C C d1352919	
Vertical color shift Color shifted in the paper feed direction where colors should be overlaid.	d1352920	

_/

Small classification	Sample image	Symptom/ Reference
Horizontal color shift Color shifted in the direction perpedicular to the paper feed direction where colors should be overlaid.	d1352921	

Others

page 949 "Insufficient Gloss: Clear Image"

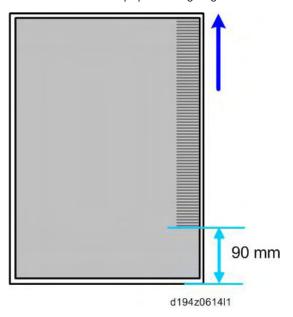
page 950 "Milky Transparency"

8. Image Quality Problem: Lines

Streaks

Horizontal Black Streaks (Image Edge)

Uneven density occurs at 11mm interval on the right edge in the paper feed direction. It does not occur within 90mm from the paper trailing edge.



Cause

If the rotation speed of the paper transfer roller is faster than the rotation speed of the transfer timing roller, paper is pulled between the both rollers. This causes uneven density because a sheet of paper is in contact and non-contact with the intermediate transfer belt at the nip of the paper transfer rollers.

This is likely to occur if:

- Printing in the low temperature and low humidity condition.
- Printing a halftone image

Solution

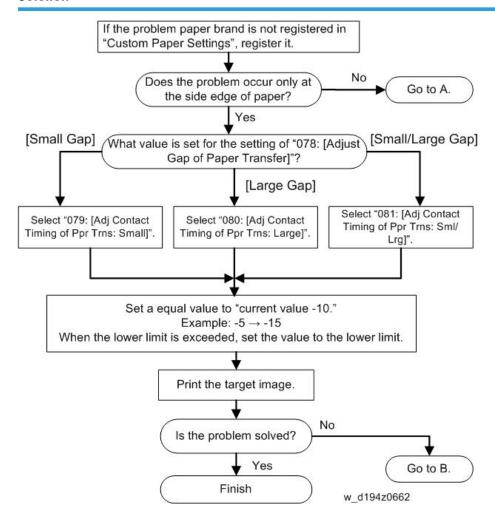
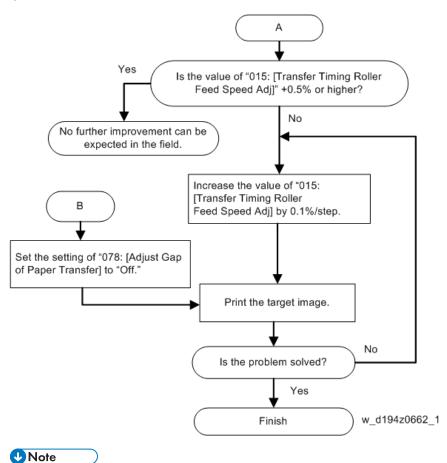


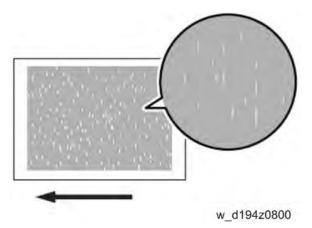
Chart A



• When increasing the speed of the transfer timing roller, there may be a change in toner density within 90 mm from the paper trailing edge.

Horizontal White Streaks

Fine horizontal white streaks of about 1mm to 8mm appear on the outputs.



Cause

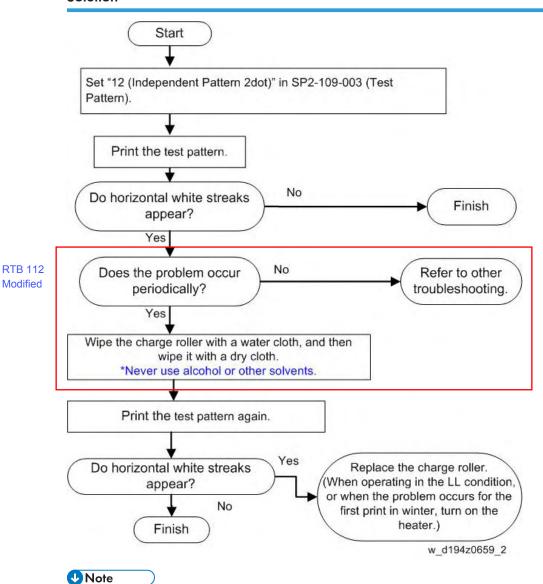
Foreign objects adhered to the surface of the charge roller cause the abnormal electric discharge in the low temperature and low humidity condition.

This is likely to occur if:

- Printing in the low temperature and low humidity condition
- Printing a dots image in a winter condition

Я

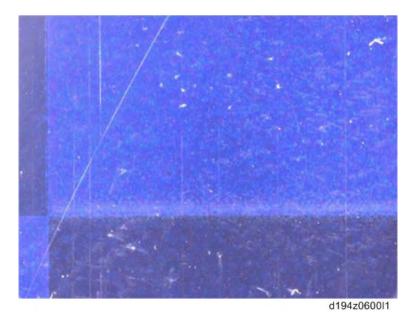
Solution



• After taking the above measures, do the color calibration adjustment of the external controller.

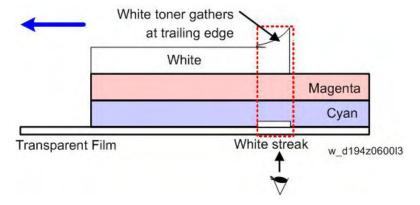
Whiter at the Trailing Edge

When looking through the transparent film, horizontal white streaks of about 1mm appear at the trailing edge of the white toner layer on the image in which white toner and CMYK toner overlap.



Cause

White toner tends to gather at the 1 mm width from the trailing edge of the white toner layer. As a result, 1 mm width from the trailing edge of the white toner layer appears as a white streak due to the insufficient fusing.



This is likely to occur if:

- Printing an image in which white toner and CMYK toner overlap
- Using a transparent film
- Looking through the output transparent film
- The image has dark density CMYK toner overlapped with white toner.
- Trailing edge of a white toner layer overlaps CMYK toner.

ಶ

Solution

- Check the counter of PM parts around the drum (photoconductor unit). Replace PM parts whose counter has exceeded its PM life.
- 2. Register the problem paper brand in the "Custom Paper Settings" if it is not registered.
- 3. Subtract "1" from the current setting of "Custom Paper Settings 21: Adjust Toner Adhesion (Special)" (Minimum value: -5).
- 4. Print the problem image.
- 5. Is the printed image acceptable?

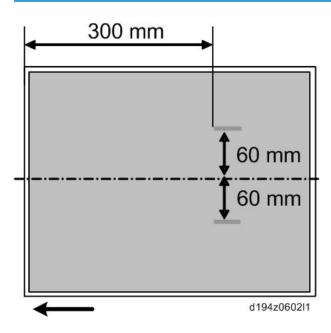
Yes: Finish.

No: Go to step 3. (Repeat until the setting value becomes "-5".)



• After taking the above measures, do the color calibration adjustment of the external controller.

Vertical Black Streaks



Cause

The line speed of the feed belt is faster than the line speed of the fuser unit. This results in bending of paper at the fusing entrance and then cause the toner scattering in an unfixed image on a paper surface due to the frictional charging between the PTB unit and a sheet of paper.

This is likely to occur if:

- · Printing in the low temperature and low humidity condition
- Printing a halftone image

Solution

- 1. Register the problem paper brand in the "Custom Paper Settings" if it is not registered.
- Check the current value of 104: [Fusing Feed Speed Adjustment] in the "Custom Paper Settings".
- 3. Is the value +2.5 or higher?

Yes: No applicable measures

No: Go to next step.

- 4. Gradually increase the value of 104: [Fusing Feed Speed Adjustment] by 0.5%, and then try printing the target image again.
- 5. Is the problem solved?

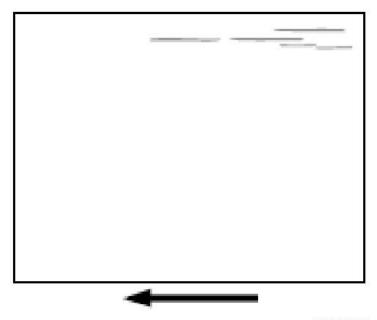
Yes: Finish

No: Repeat step 4. (Upper limit is +2.5%. There is no additional effect when increasing the value above +2.5%.)



 Increasing the value of 104: [Fusing Feed Speed Adjustment] may cause the black streaks, glossy streaks, or condensation image worse.

Vertical Black (color) Streaks (1)



d194z0601l1

Cause

RTB 112 Modified

A sheet of paper picks up toner residues on the roller, rib or pawl in the paper path.

This problem occurs frequently when the inside of the machine is contaminated with toner.

Solution

Chart 1

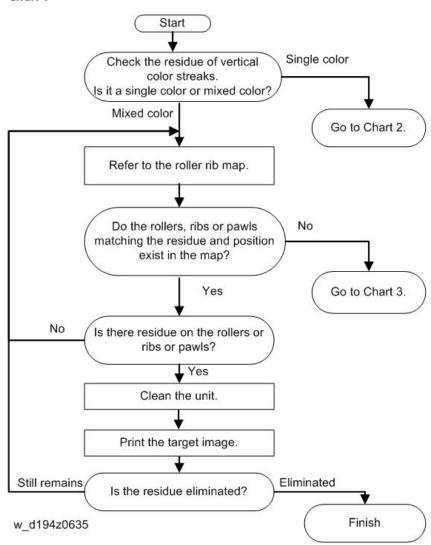


Chart 2

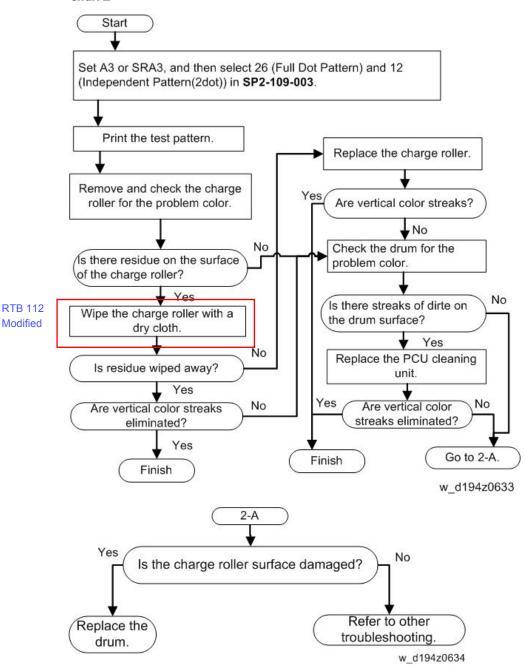
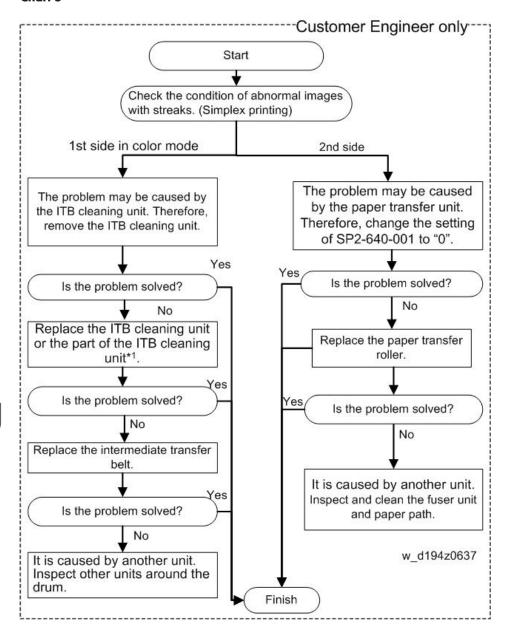


Chart 3



* 1 Cleaning Blade, Lubrication Blade, Lubricant



 The occurrence of vertical color streaks can be reduced by turning on the anti-condensation heater inside the ITB unit.

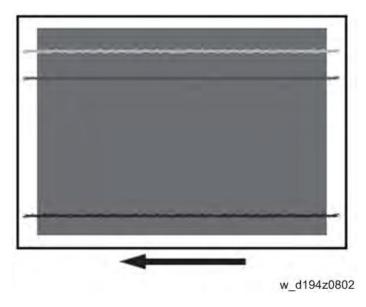


After taking the above measures, do the color calibration adjustment of the external controller.

8

Vertical Black (color) Streaks (2)

Extended, blurred colored streaks parallel to the paper feed direction appear. The streaks also appear randomly in the margins.



Cause

If the temperature or humidity is low, remaining toner might be missed by the cleaning blade of the ITB cleaning unit or paper transfer unit, causing streaks to appear sporadically.

Solution

- 1. To identify the affected color, print three full-page, solid-fill A3 or DLT sheets for each of cyan, yellow, magenta, and black.
- 2. Check whether the problem occurs at the front or back of the paper.
 - <If the problem affects single color at the front of the paper>

Proceed to the solutions in "Horizontal Black (color) Streaks (1)".

<If the problem affects multiple colors at the front of the paper>

Replace the ITB cleaning unit.

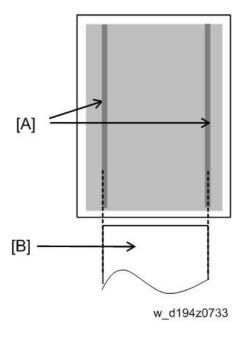
If the problem occurs at the back of the paper>

Replace the paper transfer unit.



• After taking the above measures, do the color calibration adjustment of the external controller.

Vertical Black (color) Streaks (3)



[A]: Density Difference

[B]: A sheet of paper which is previously fed through and causes scratching on the fuser belt

Cause

In some cases, burrs on the sheet edge of paper cause the fuser belt surface to become scratched horizontally in the paper feed direction. These scratching areas cause the glossy streaks for solid images or density difference for halftone images.

This is likely to occur if:

· Using coated paper of middle thickness or thicker

Solution

 Execute "0506: [Smooth Fusing Belt] – [For Belt Scratches] (SP1-133-110)" in the "Adjustment Settings for Skilled Operators".

When executing once, fusing belt smoothing is performed for 90 seconds.

- 2. Print the target image (1 sheet).
- 3. Is the printed image acceptable?

Yes: Finish

ರ

No: Go to step 1.

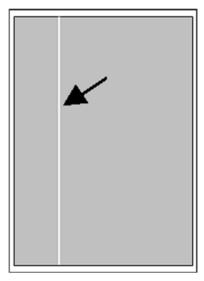
4. If the problem is not solved with measures above, replace the fuser belt.



• After taking the above measures, do the color calibration adjustment of the external controller.

Vertical White Streaks (1)

A part of an image like a shape of a vertical streak in the paper feed direction is missing.



m205a6012

- A constant straight line appears from the leading edge to the trailing edge of the page.
- A line appears at the same position on all pages.
- A line appears on a specific color page.

Cause

1. The toner shield glass is dirty.

White streaks appear because the toner shield glass is dirty, which causes the radiated light to be uneven.

2. The charge unit is dirty or has reached the end of PM life.

White streaks appear because the charge unit is dirty or has reached the end of PM life, which causes the charging to be uneven.

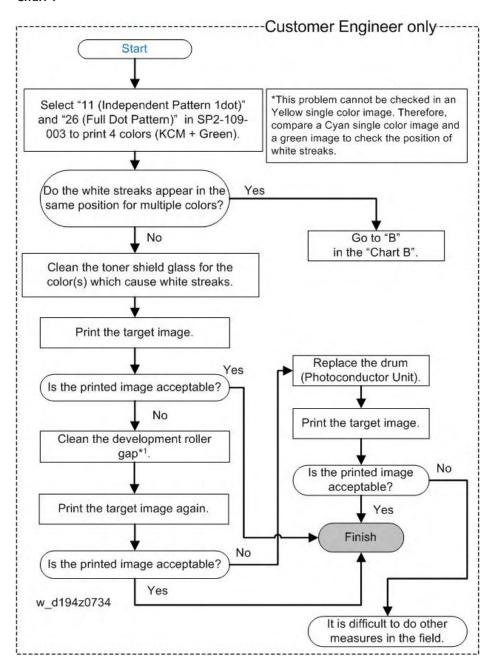
g

3. Foreign object stuck in the development unit gap

White streaks appear because there is a foreign object stuck in the development unit gap, which causes the absence of toner on the development roller.

Solution

Chart 1

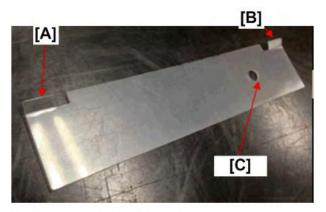


*1 How to Clean the Development Roller Gap



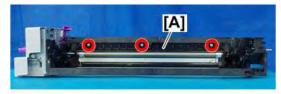
• Clean the doctor blade with a special jig.

DG CLEANER 5PCS/SET



d194d4383

- [A]: Bent part for cleaning to the right
- [B]: Bent part for cleaning to the left
- [C]: Guide hole
- 1. Remove PCDU.
- 2. Remove the Entrance seal [A] (@x3)



d194d4313

3. Watch the drive gear [A] from the back of the unit and turn it counterclockwise until the developer on top of the development roller runs out.



• When there is developer inside, keep the development unit level while working.



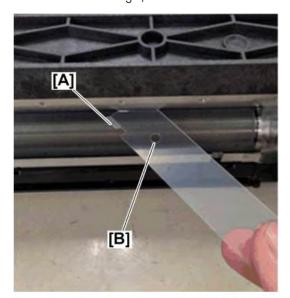
d194d4384

4. Insert the flat side of the special jig into the doctor with the bent part [A] facing up as shown below.

If the bent part gets caught, guide it with your finger and insert it all the way in.



• To clean to the left, use the bent part that has the guide hole [B]. To clean to the right, use the other one.



d194d4385

- 5. Gently draw the jig towards you and with the bent part caught on the back side of the doctor [A], slide it toward the left side [B] and clean it out.
 - Change how it is facing and slide it back and forth several times.

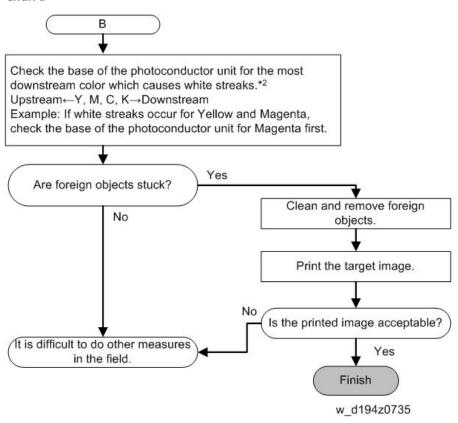
d194d4386

- 6. Tilt the jig at an angle and withdraw it from where the part is not bent.
- 7. To clean to the right, use the jig that faces the opposite way and follow the same steps.



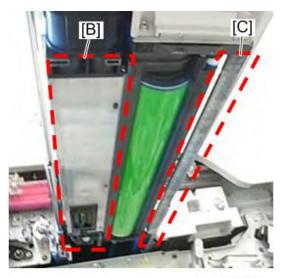
• Only move the jigs left/right except when attaching or removing them; do not apply excessive force on them up/down (front/back). (To prevent breaking or damage to the bent part and from scratching the surface of the development sleeve.) Also, take care not to rub hard on the surface of the sleeve.

Chart B



*2 How to Check the Base of the Photoconductor Unit

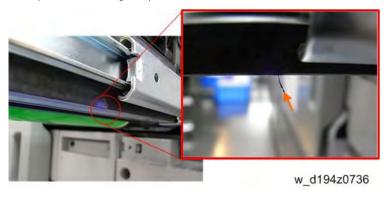
- 1. Pull out the PCDU.
- 2. Apply alcohol to an anti-dust cloth, and then use it to clean the development case [B] and quenching lamp [C].



d194e3103a

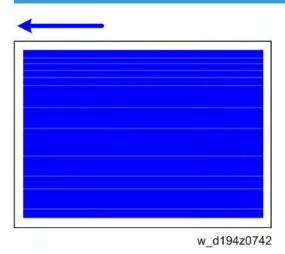
UNote

• Example of dirt/foreign objects



8

Vertical White Streaks (2)



Cause

Smoothing streaks remain on the fuser belt as a result of the fusing belt smoothing operation. These streaks on the fuser belt cause the vertical streaks on paper especially when using thick paper.

This is likely to occur if:

• When using thick paper which is the paper weight 7 or 8.

Solution

Chart 1

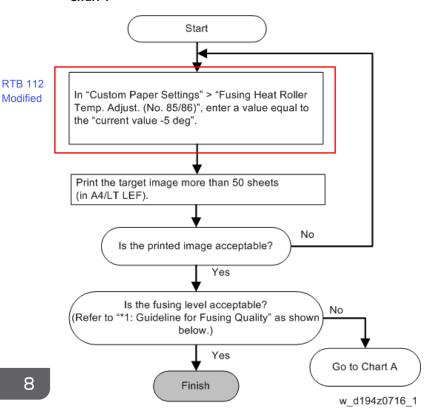
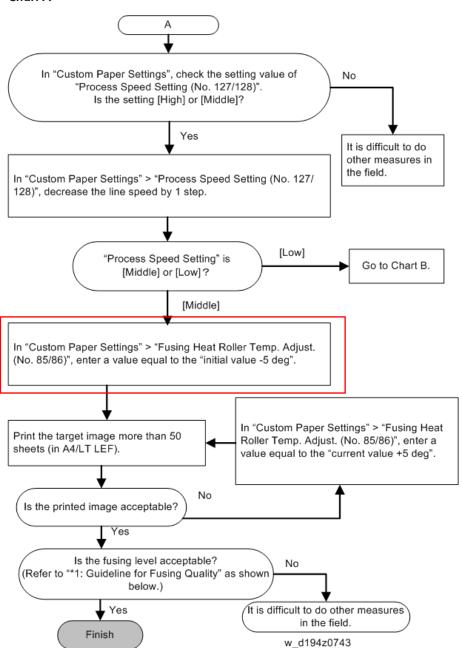
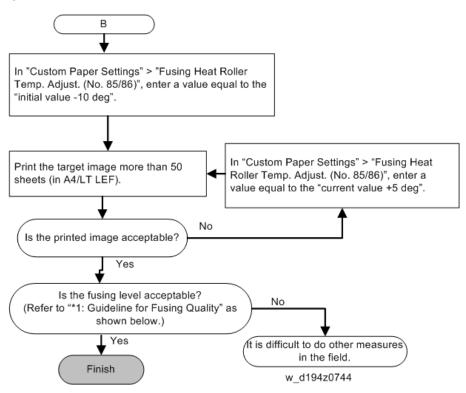


Chart A

RTB 112 Modified



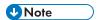


* 1: Guidelines for Fusing Quality

- No image peeling.
- RTB 112 Modified
- No toner peeling even when rubbing the image gently with fingernails.
- No toner peeling even when rubbing the image with the optical cloth.

UNote

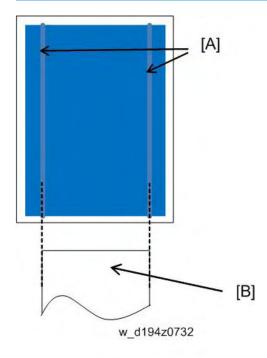
- If the problem is not solved with measures above, replace the fuser belt.
- After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

8

Glossy Lines at the Edge of the Paper



[A]: Glossy Streaks

[B]: A sheet of paper which is previously fed through and causes scratching on the fuser belt

Cause

In some cases, burrs on the sheet edge of paper cause the fuser belt surface to become scratched horizontally in the paper feed direction. These scratching areas cause the glossy streaks for solid images or density difference for halftone images.

This is likely to occur if:

• Using coated paper of middle thickness or thicker

Solution

 Execute "0506: [Smooth Fusing Belt] – [For Belt Scratches] (SP1-133-110)" in the "Adjustment Settings for Skilled Operators".

When executing once, fusing belt smoothing is performed for 90 seconds. RTB 112: Modified

2. Print the target image (1 sheet).

3. Is the printed image acceptable?

Yes: Finish

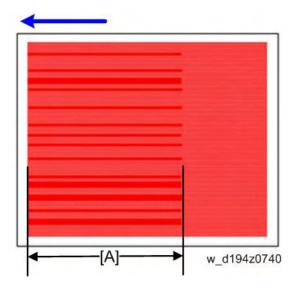
No: Go to step 1.

4. If the problem is not solved with measures above, replace the fuser belt.



• After taking the above measures, do the color calibration adjustment of the external controller.

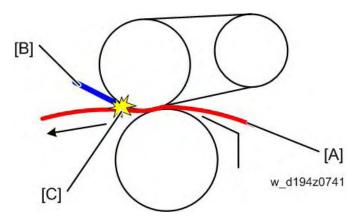
Vertical Gloss Streaks



[A]: 260mm

Cause

When a sheet of paper is transported, it sometimes contacts the leading edge of the separation plate at the fusing nip exit. This causes the vertical gloss streaks for solid images due to the paper rubbing against the separation plate.



[A]: A sheet of paper

[B]: Separation plate

[C]: Paper rubbing against the separation plate

This is likely to occur if:

• When using the coated paper which is the paper weight 2, 3 or 4

Solution

Chart 1

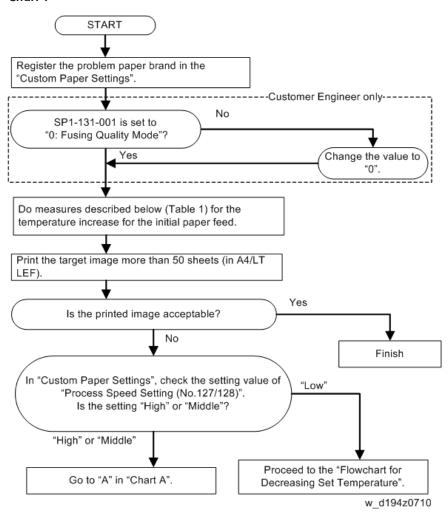
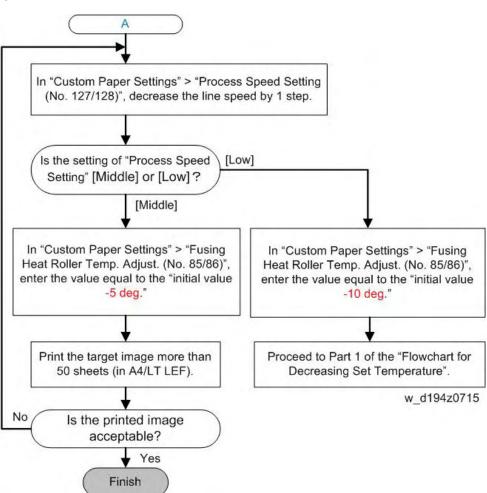


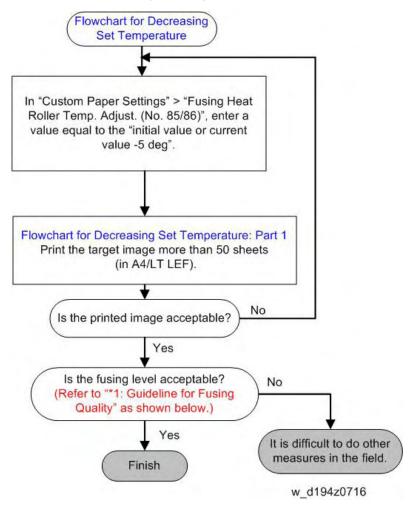
Table 1
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1".
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Addng Fusing Tempratre 1: Special]	Change the setting to "0".

No.	Custom Paper Settings	Details of Change
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15" if "Process Speed Setting (127/128)" is [High] or [Middle]. Change the setting to "5" if "Process Speed Setting (127/128)" is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3".
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3".



Flowchart for Decreasing Set Temperature



* 1: Guidelines for Fusing Quality

- · No image peeling.
- No toner peeling even when rubbing the image gently with fingernails.
- No toner peeling even when rubbing the image with the optical cloth.

U Note

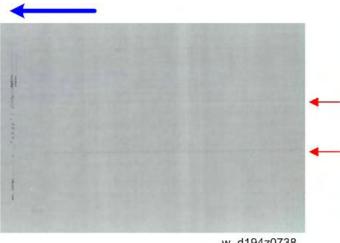
After taking the above measures, do the color calibration adjustment of the external controller.

U Note

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Vertical Streaks when Feeding Thick (360 g/m²) Paper: Vacuum Feed LCIT

When feeding thick (360 g/m²) paper from the Vacuum Feed LCIT, vertical streaks may appear at 30 mm to the left and right of the paper's center in the halftone image printing.



w d194z0738

Cause

Glossy streaks appear due to rubbing between 360 gsm paper and the paper feed belts of the Vacuum Feed LCIT. When printing a halftone image on the glossy streaks, the vertical streaks may appear higher density.

This is likely to occur if:

- · Printing in the high temperature and high humidity condition
- Printing halftone images

Solution (Customer Engineer only)

1. Increase the toner mass amount.

Increase the value in SP3-620-202 and SP3-620-203 by one step at a time until vertical streaks are eliminated. (Do not increase too high.)

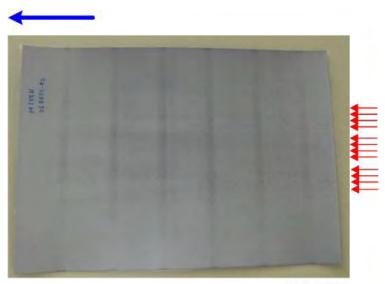
- 2. Execute SP3-011-002 (Manual ProCon: Exe: Density Adjustment).
- 3. Execute the toner refresh with the following SP modes.
 - SP3-062-001 (Manual Tnr Ref:Exe: KCMY)
 - SP3-062-002 (Manual Tnr Ref:Exe : CMY)
 - SP3-062-003 (Manual Tnr Ref:Exe: K)

- SP3-062-004 (Manual Tnr Ref:Exe : C)
- SP3-062-005 (Manual Tnr Ref:Exe: M)
- SP3-062-006 (Manual Tnr Ref:Exe : Y)
- SP3-062-007 (Manual Tnr Ref:Exe : S)

Bands

Vertical White Bands

When feeding 188 gsm transparent film from the Vacuum Feed LCIT, vertical streaks may occur for solid images.



w_d194z0739

Cause

The transparent film is charged with static electricity when it is pulled from the LCIT paper feed belt. Toner does not adhere to the charged area and vertical streaks appear at the suction holes on the paper feed belts.

This is likely to occur if:

• The 2nd side of paper is a halftone or solid image.

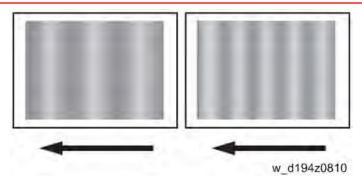
Solution (Customer Engineer only) RTB 112: Modified

1. Increase the paper transfer current value by 20 uA in SP2-651-055 (PTR Bias:FC: Transpar:Weight 5:Side1) and SP2-652-055 (PTR Bias:FC: Transpar:Weight 5:Side2).

Banding (General)

RTB 112 Modified

Uneven density occurs due to different pitch phases of the charge roller, development roller, paper transfer roller, and drum.



Solution

- Check the counter of PM parts around the drum (photoconductor unit), and then replace parts for which the counter has been exceeded.
- 2. In "Adjustment Settings for Skilled Operators", execute "0502: [Execute Process Initial Setting]" (SP3-020-001).
- 3. Print the target image.
- 4. Is the printed image acceptable?

Yes: Finish

No: Go to next step

- Execute [All Colors] in "0515: [Execute Developer Refreshing]" (SP3-062-001).
- 6. Print the target image.
- 7. Is the printed image acceptable?

Yes: Finish

No: Go to next step

- 8. Check the interval (pitch) of the uneven density.
- 9. Prepare a monochrome halftone image, and then print it for each color.
 - Use the NICE to find a problem unit.
 - Take measures according to the table below.

Pitch (Problem Unit)	Measures	
40 mm (Charge Roller)	 Clean the charge roller. (Wipe the charge roller with a damped cloth, and then wipe it with a dry cloth) Never use alcohol to clean. Execute "0502 [Execute Process InitialSetting]" (SP3-020-001). Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check the output image. 	
50 mm, 25 mm (Development Roller)	Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check the output image.	
63 mm (Paper Transfer Roller)	page 846 "Banding (63 mm intervals)" Also, Refer to page 891 "Uneven density: 63 mm Interval"	
189 mm (Drum)	page 848 "Banding (189 mm intervals)" Also, Refer to page 891 "Uneven Density: 189 mm Interval (1)", page 892 "Uneven Density: 189 mm Interval (2)".	

RTB 112 Modified

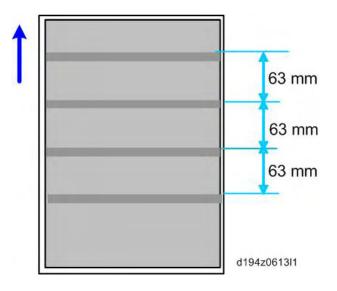
8



• After taking the above measures, do the color calibration adjustment of the external controller.

Banding (63 mm intervals)

Uneven density occurs at 63 mm interval.



Cause

If the rotation speed of the paper transfer roller is faster than the rotation speed of the transfer timing roller, paper is pulled between the both rollers. This causes uneven density because a sheet of paper is in contact and non-contact with the intermediate transfer belt at the nip of the paper transfer rollers.

This is likely to occur if:

- Printing in the low temperature and low humidity condition
- Printing a halftone image

Solution

- 1. If the problem paper brand is not registered in "Custom Paper Settings", register it in "Custom Paper Settings".
- Check the value of "016: [Paper Transfer Feed Speed Adjustment]" in "Custom Paper Settings".
- 3. Is the value -0.5% or lower?

Yes: No further improvement can be expected in the field.

No: Go to next step.

- Change the value of "016: [Paper Transfer Feed Speed Adjustment]" to "initial value -0.1%" in "Custom Paper Settings".
- 5. Print the target image.
- 6. Is the problem solved?

Yes: Finish

No: Continue to check the image while lowering the value of "016: [Paper Transfer Feed Speed Adjustment]" by 0.1%/step. The lower limit value is -0.5%. No further improvement can be expected in the field even if the setting value is lower than -0.5%.

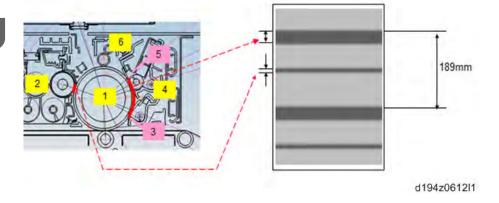


Lowering the value of "016: [Paper Transfer Feed Speed Adjustment]" causes a speed difference
between the paper transfer roller and transfer timing roller. This may cause horizontal black streaks
within 90 mm of the paper trailing edge, or changes in toner density around 90 mm from the paper
trailing edge. If such side effects occur, return the setting of the transfer roller speed until any side
effects do not occur.

Banding (189 mm intervals)

[1]: Drum	[4]: Drum Cleaning Unit
[2]: Development Unit	[5]: Lubrication Blade
[3]: Drum Cleaning Entrance Seal	[6]:Charge Unit

Uneven density occurs at the contact area where the opening of the development unit contacts the drum, and at the closed area where the drum cleaning unit contacts the drum.



Cause

When drastic environmental changes or prolonged disuse occurs after stopping the machine, moisture is absorbed only to areas contacting the development unit and drum cleaning unit on drum. This makes uniform charging of the drum impossible and causes uneven density.

This is likely to occur if:

· Printing a halftone image

9

- Drastic environmental change from the HH condition (high temperature and high humidity) to the LL condition (low temperature and low humidity)
- The machine is not used for 30 minutes or more after the machine operation in the low temperature and low humidity condition.

Solution

- 1. Execute "0502: [Execute Process Initial Setting]" (SP3-020-001) in "Adjustment Settings for Skilled Operators" three times.
- 2. Print the target image.
 - Print a monochrome halftone image (approx. 15% to 30%), and then check the development.
 - Or print "12(Independent Pattern 2dot)" in SP2-109-003(Test Pattern) on A3 paper.
- 3. Is the problem solved?

Yes: Finish

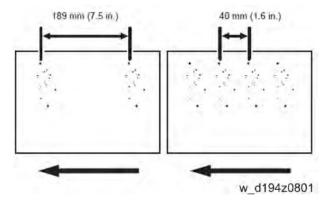
No: Go to step 1.

9. Image Quality Problem: Spots

Spots

Black (color) Spots (1)

Black spots occur at 189mm or 40mm interval.



Cause

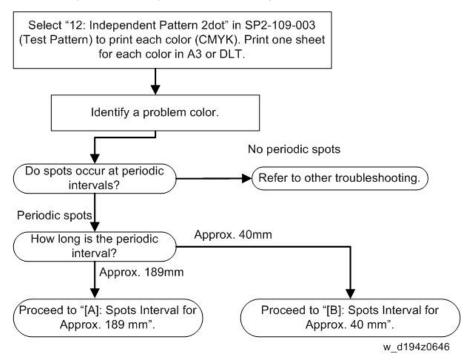
RTB 112 Modified

- If black spots occur at 189mm interval, this problem is caused by a damaged or dirty drum.
- If black spots occur at 40mm interval, this problem is caused by a damaged or dirty charge roller.

Solution

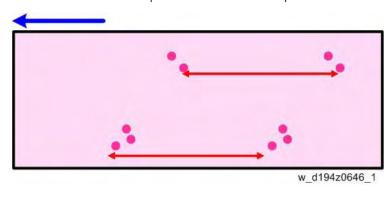
Do test printing and check the interval of color spots. There are two measures for the interval of color spots.

Test Printing and Checking Interval of Color Spots

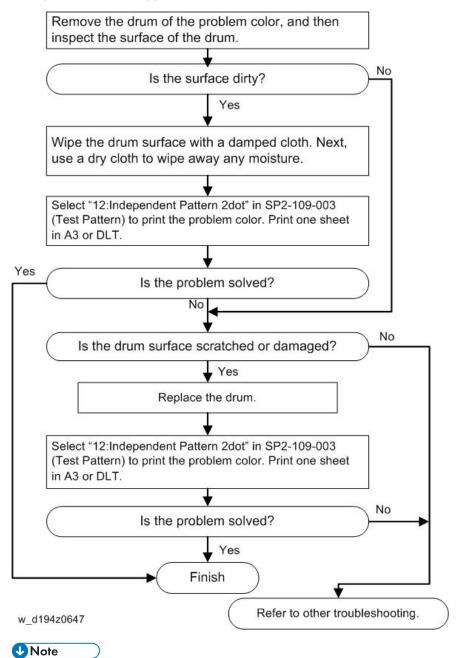


How to Measure the Periodic Interval of Color Spots

Use a ruler to measure the periodic interval of color spots on the same line in the paper feed direction.

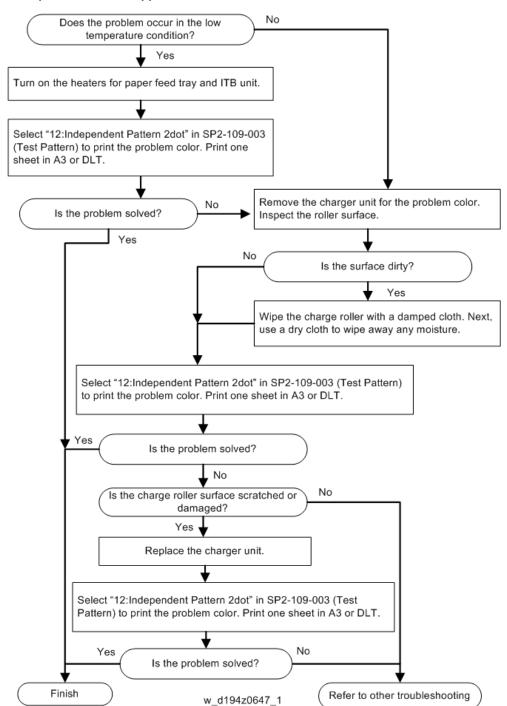


[A]: Spots Interval for Approx. 189mm



- Do not use ethanol or other organic solvents when wiping the drum. Using such solvents may damage the drum.
- Follow the specified procedures when attaching the drum to the machine after cleaning or replacement. Refer to the procedures in Chapter 4 "Replacement and Adjustment" of the field service manual.

[B]: Spots Interval for Approx. 40mm



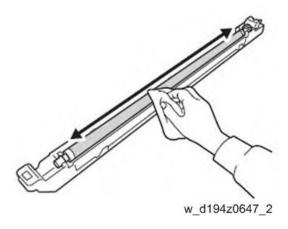




• After taking the above measures, do the color calibration adjustment of the external controller.

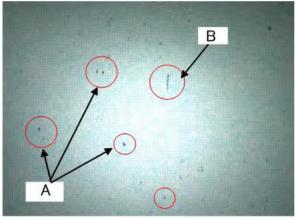


- For the replacement procedures of the charge roller or charger unit, refer to Chapter 4 "Replacement and Adjustment" in the field service manual.
- Do not use ethanol or other organic solvents when wiping the charge roller. Using such solvents may damage the roller.



Black (color) Spots (2)

There is toner dirt in the small speck form of $0.5\ mm$ to $1\ mm$.



w_d194z0746

[A]: Toner specks (about 0.5mm to 1mm)

[B]: Toner trails

Cause

This problem is caused when toner which slips through the cleaning web for the pressure roller is transferred to paper again.

This is likely to occur if:

- Printing on non-coated paper (particularly paper with low smoothness)
- Printing halftone images, or printing after halftone image printing
- Printing after a multiple printing job on small-sized paper

Solution

- 1. Register the problem paper brand in the "Custom Paper Settings".
- 2. In "Fusing Heat Roller Temp. Adjust. (No.085/086)", increase the initial value by "5°C".
- 3. Check if the problem is solved by increasing the temperature by "5°C". If the problem is not solved or the image is unacceptable, increase the temperature to +10°C and check again. If increasing the temperature of the heating roller causes noticeable glossy streaks or if paper becomes jammed in the fuser unit, return the temperature setting to the initial value, and then proceed to step 6.
- 4. Print the target image. (After printing 20 sheets, print another 10 sheets)
- 5. Is the problem solved?

Yes: Finish

No: Go to next step.

- 6. In "Adjust Cleang. Web Mtr. Intrvl.(No.099/100)", change the setting value to "-30%".
- 7. Check if the problem is solved by changing to "-30%". If the problem is not solved or the image is unacceptable, change the setting value to "-60%" or "-75%", and then check again.
- 8. Print the target image. (After printing 20 sheets, print another 10 sheets)
- 9. Is the problem solved?

Yes: Finish

No: Refer to other troubleshooting measures



- After taking the above measures, do the color calibration adjustment of the external controller.
- Lowering the value for "Adjust Cleang. Web Mtr. Intrvl.(No.099/100)" can shorten the replacement cycle for the cleaning web.





The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

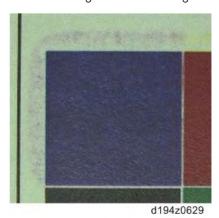
White Spots/Toner Blasting

White spots of about 0.2mm to 0.3mm appear throughout the entire image.



d194z0605

Toner scattering around solid images



Cause

Electric discharge at the PTR unit

This is likely to occur if:

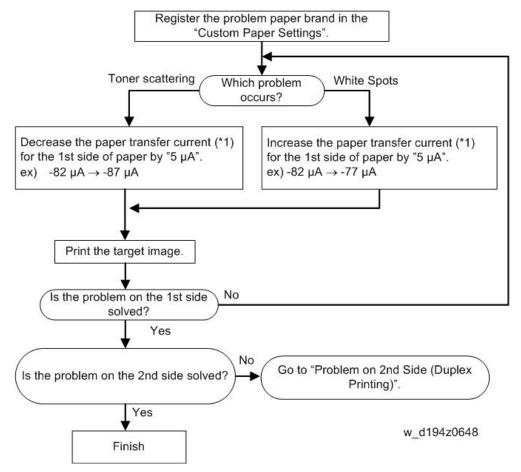
• Printing in the low humidity condition

- Using paper which has high resistance
- Printing on the 2nd side in the duplex printing (Paper resistance is increased after paper has been passed through the fuser unit because paper looses its moisture in the fuser unit.)
- · Printing a image which has a large mass amount of toner

Solution

If paper dust adheres to the paper, clean the paper dust case, guide plates, feed rollers, and transfer timing rollers.

Problem on 1st Side (Duplex Printing)

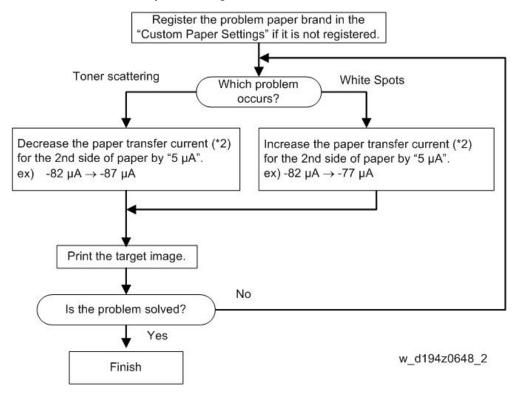


* 1: Change the following adjustment items.

Print Mode	ltems
B/W	029: [Paper Transfer Current: B&W: Side 1]

Print Mode	Items
FC, FCS, FCS Quality	035: [Paper Transfer Current: FC: Side 1]
10,100,100 addiny	037: [Paper Trnsfr. Current: FC: Side 1: Qual.]
S only	043: [Paper Transfer Current: Special: Side 1]

Problem on 2nd Side (Duplex Printing)



*2: Change the following adjustment items.

Print Mode	ltems
B/W	030: [Paper Transfer Current: B&W: Side 2]
FC, FCS, FCS Quality	036: [Paper Transfer Current: FC: Side 2] 038: [Paper Trnsfr. Current: FC: Side 2: Qual.]
Sonly	044: [Paper Transfer Current: Special: Side 2]



• After taking the above measures, do the color calibration adjustment of the external controller.

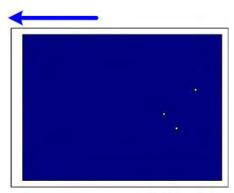


 There is a trade-off relationship between white spots and toner scattering. Think of the balance between two problems, and then decide the final adjustments after you have got a customer's agreement.

RTB 112 Modified Toner scattering gets worse when paper transfer current is lowered and improves when it is raised. White Spots improve when paper transfer current is lowered and get worse when it is raised.

Blister-like White Spots

Blisters (white spots) of about 0.3 mm to 0.5 mm occur and the circumferences of blisters are high density.



w_d194z0745

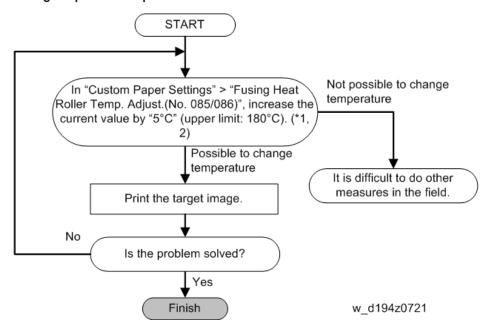
Cause

- Printing solid images on coated paper
- Duplex printing of solid images
- Printing in the low temperature condition

9

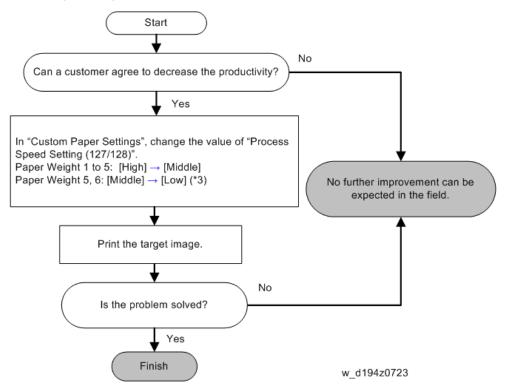
Solution

Fusing temperature adjustment



- *1: Increasing the fusing temperature may cause the following side effects.
- Paper curling (including paper jams)
- Glossy streaks
- Less glossiness
- *2: If the side effects described above occur, set the fusing temperature to a value at which the problem does not occur (between the initial value and 180°C).

Process Speed Adjustment



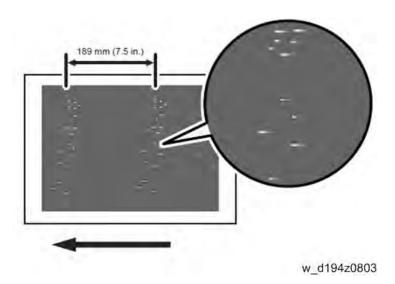
- *3: Productivity of the machine is reduced after the setting of "Process Speed Setting" has been changed.
- [High] (75 ppm) => [Middle] (52.5 ppm), RTB 112
- [Middle] (52.5 ppm) => [Low] (37.5 ppm) Corrected
- **U**Note
 - After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Medaka (White Spots)

White sports or short streaks occur at 189 mm interval in the paper feed direction.



Cause

Dirty drum (photoconductor unit)

Solution

- 1. Select "26: Full Dot Pattern" in SP2-109-003 (Test Pattern Pattern Selection), and then print three pages in A3 paper for each color (cyan, magenta, black and green*).
 - *: It is difficult to see white spots on the yellow image. Therefore, green is used instead of yellow.
- 2. Check the outputs and identify a problem color.
- 3. Remove the drum (photoconductor unit) for the problem color, and then check the drum surface.
- 4. Is the surface dirty?

Yes: Use a dry cloth to wipe away dirt from the drum surface, and then execute "0501 [Execute Cleaning Initial Setting for PCU]" in "Adjustment Settings for Skilled Operators". Then go to next step.

No: Replace the drum (photoconductor unit), then go to next step.

- 5. Print the target image.
- 6. Is the problem solved?

Yes: Finish

No: Replace the drum (photoconductor unit) if it is not replaced or PCU cleaning unit.

Patchy Image at the Leading Edge

Unprinted areas like worm holes appear in the leading edge of the image.



Cause

When the shock jitter canceller widens the gap between the paper transfer roller and the ITB, discharge occurs at the paper leading edge.

This is likely to occur if:

- When printing in a low temperature, low humidity environment.
- When using thick paper (Paper Weight 7 or higher).
- There is a large amount of toner deposit.
- The leading edge margin is narrow.

C

9

Solution

Chart 1

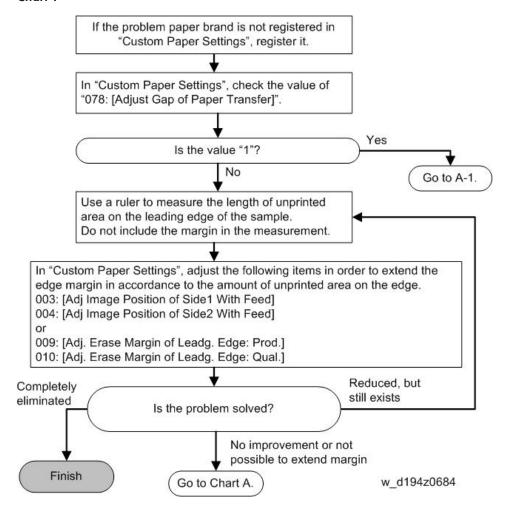
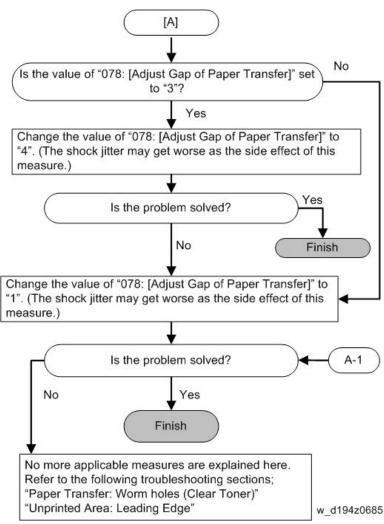


Chart A



U Note

After taking the above measures, do the color calibration adjustment of the external controller.

UNote

- When values of "003: [Adj Image Position of Side 1 With Feed]" and "004: [Adj Image Position of Side 2 With Feed]" are adjusted in the positive direction, the image moves to the right (trailing edge) and the leading edge margin widens. The trailing edge margin narrows.
- When values of "009: [Adj. Erase Margin of Leadg. Edge: Prod.]" and "010: [Adj. Erase Margin of Leadg. Edge: Qual.]" are adjusted in the positive direction, the selected side of the image is masked (not printed) and the leading edge margin widens. The trailing edge margin is not changed.

ın

10. Image Quality Problem: Full Page

Unprinted

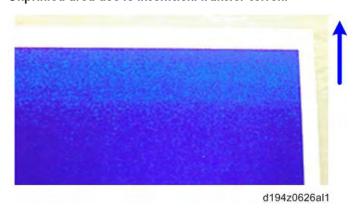
Fainter Leading Edge

The leading edge is fainter.

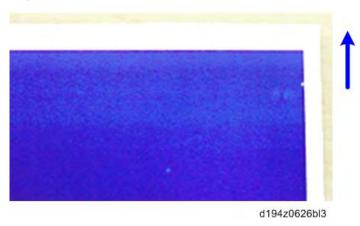
Unprinted area on leading edge due to insufficient transfer pressure



Unprinted area due to insufficient transfer current



Unprinted area due to excessive transfer



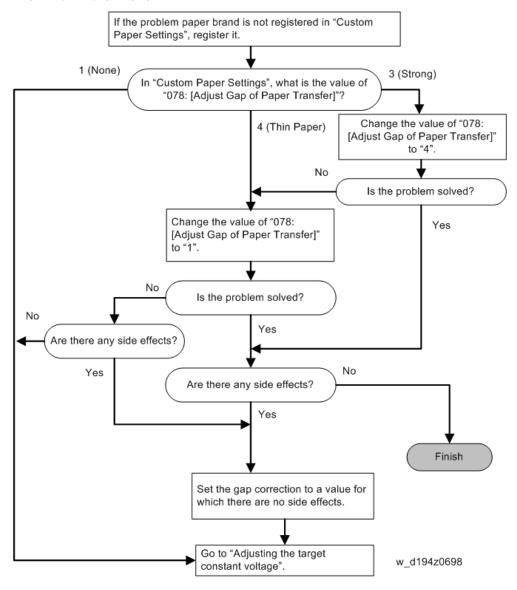
This is likely to occur if:

- When printing in a low temperature environment (unprinted area on leading edge due to insufficient transfer).
- When printing in a high temperature environment (unprinted area on leading edge due to excessive transfer).
- When using thin paper (unprinted area on leading edge due to transfer current).
- When using thick paper (unprinted area on leading edge due to insufficient transfer pressure).

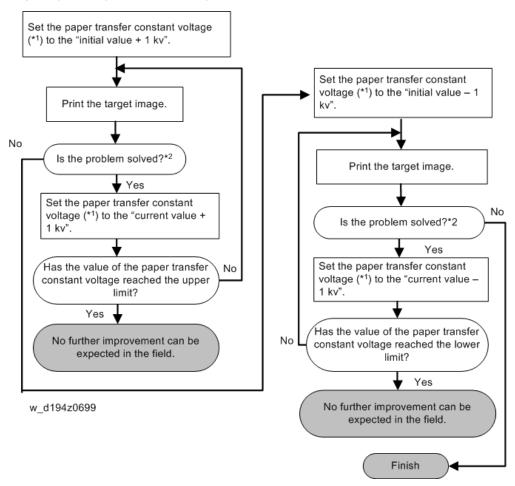
Solution

- This measure only works when the thickness of the paper is equivalent to paper weight 4 or higher.
 Do not try this as a measure when using paper with a thickness equivalent to paper weight 3 or lower, as it may cause paper misfeeding.
- Execute commands in the following order: "Adjusting the gap of paper transfer" → "Adjusting the target constant voltage".

Adjusting the gap of paper transfer



Adjusting the target constant voltage



* 1 Settings to adjust for the paper transfer constant voltage

Printing mode	Custom Paper Settings
B/W	064: [Ppr Trnsf Cnstnt Voltage: B&W: Side 1] 065: [Ppr Trnsf Cnstnt Voltage: B&W: Side 2]
FC, FCS, FCS Quality	070: [Ppr Trnsf Constant Voltage: FC: Side 1] 071: [Ppr Trnsf Constant Voltage: FC: Side 2]
Sonly	076: [Ppr Trnsf Constant Voltage: S: Side 1] 077: [Ppr Trnsf Constant Voltage: S: Side 2]

*2 Excessive increase or decrease of the paper transfer constant voltage may increase the unprinted area on the leading edge. In such cases, gradually return toward the original value by steps of 0.5kV and adjust to a value which does not cause increased unprinted area.



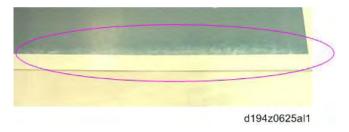
• After taking the above measures, do the color calibration adjustment of the external controller.

Fainter Trailing Edge

Color is pale on the paper trailing edge.



d194z0625l1



Cause

When using thick paper of approximately 160 g/m² or higher in a low temperature, low humidity environment, this problem may occur due to insufficient transfer current or excessive transfer.

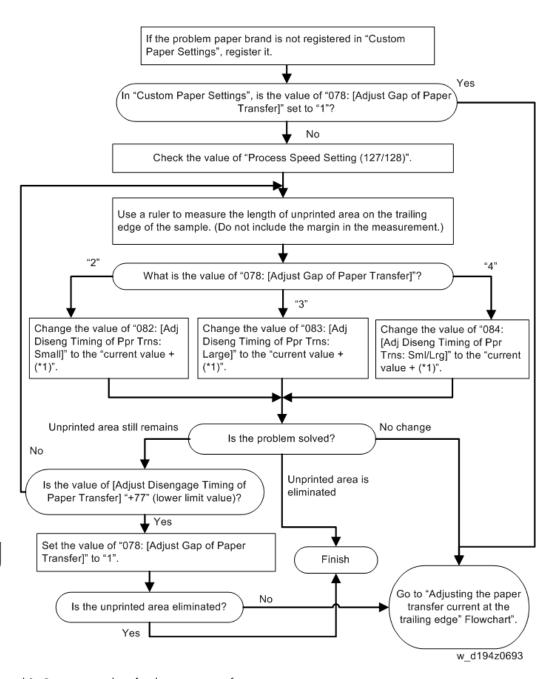
Solution

Execute commands in the following order: "Adjusting the disengage timing of paper transfer"

Adjusting the paper transfer current at the trailing edge".

Adjusting the disengage timing of paper transfer

As a side effect, shock jitter may increase when the paper is disengaged.

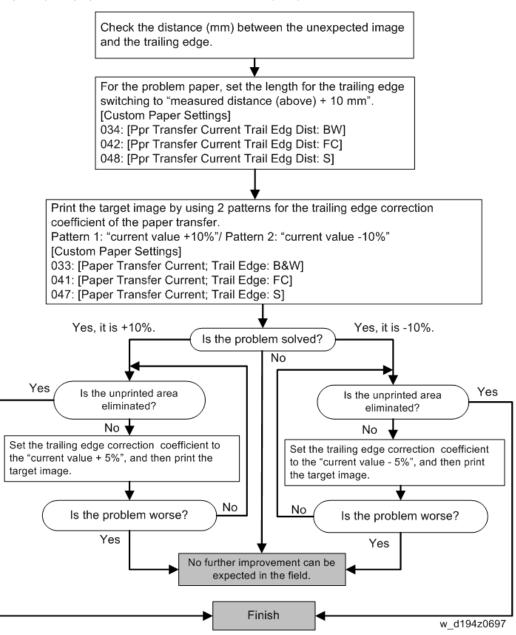


* 1: Correction values for the paper transfer

Length of unprinted area on trailing edge	Pr	ocess Speed Setting:	
(mm)	[High]	[Middle]	[Low]
1	-3	-3	-6

2	-6	-6	-12
3	-9	-9	-18
4	-12	-12	-24
5	-15	-15	-30
6	-18	-18	-36
7	-21	-21	-42
8	-24	-24	-48

Set the setting of Adjust Disengage Timing of Paper Transfer (No.83/ No.84/ No.85)" to the lower limit if the setting value of these is below the lower limit (+77) after this calculation (current value + each correction value shown above).



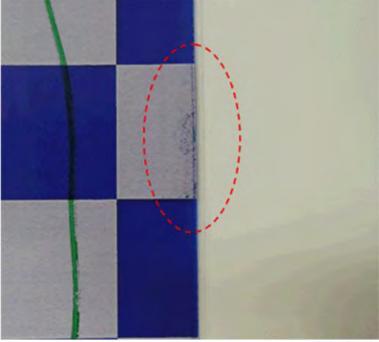
The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

10

U Note

Unprinted: When Using a Transparent Film

White spots appear at the trailing edge when printing on a transparent film.



d194z0630I1

Cause

During paper transfer, toner is compressed at the high-pressure area of paper trailing edges and becomes an aggregate.

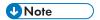
This is likely to occur if:

- When using transparent film.
- When printing solid images in FCS or FCS Quality mode.

Solution

Method of separating the image from paper edges by 5mm or more. (Perform one of steps 1 to 3.)

- In Custom Paper Settings, adjust [003: Adj Image Position of Side1 With Feed] and [004: Adj Image Position of Side2 With Feed].
- 2. Adjust the image position.
- 3. Use paper with extra margin space.



• After taking the above measures, do the color calibration adjustment of the external controller.

Unprinted: Around Clear-toner Images

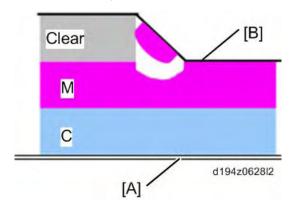
CMYK toner around clear toner images is not fixed and appears white.



Cause

This problem is caused by toner unevenness created when clear toner images are superposed for part of CMYK toner images.

When paper [A] is transferred from the Intermediate transfer belt [B], some toner is not transferred due to toner unevenness. This results in unprinted areas around clear toner images. This problem only occurs in FCS or FCS Quality mode.



This is likely to occur if:

- CMYK toner images exist around clear toner images.
- When using smooth paper.

10

There is a high density KCMY image for which large amounts of toner are not transferred.
 (This problem often occurs for Blue (Cyan + Magenta), a color for which unprinted areas are particularly obvious.)

Solution

- Check the counter of PM parts around the drum. Replace parts for which the counter has been exceeded.
- 2. In 0510: [Temperature / Humidity outside the Machine] (SP3-260-003), check the temperature and humidity around the machine.
- 3. Is temperature 10°C or higher and humidity 15% or higher?

Yes: Go to next step.

No: Go to step 10.

4. Does the paper have a paper weight 4 or higher (163.1gsm ~)?

Yes: Go to next step.

No: Go to step 10.

- 5. Register the applicable paper brand as "Custom Paper."
- 6. In Custom Paper Settings, set 049 [Textured Paper Mode] to "On".7. In Adjustment Settings for Skilled Operators, execute 0502: [Execute Process Initial
 - 8. Print the image.

RTB 122

9. Is the printed image acceptable?

Setting](SP3-020-001).

Yes: Finish

No: Go to next step.

- In Adjustment Settings for Skilled Operators > 0515: [Execute Developer Refreshing], execute [All Colors].
- 11. Is the printed image acceptable?

Yes: Finish

No: No further improvement can be expected in the field.



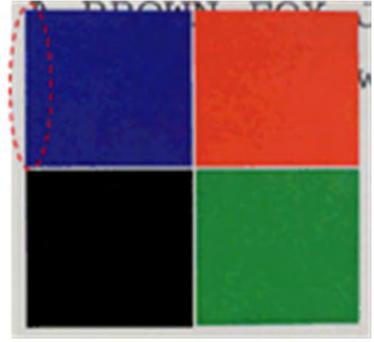
After taking the above measures, do the color calibration adjustment of the external controller.

Worm Holes: Text or Edge of an Image

Dropouts (character voids) occur when characters or lines are printed in color mode.



d194z0622l1



d194z0622al1

Cause

This problem occurs when pressure during transfer causes toner to contract at color texts where toner deposits partially increase, or at the edge of solid images.

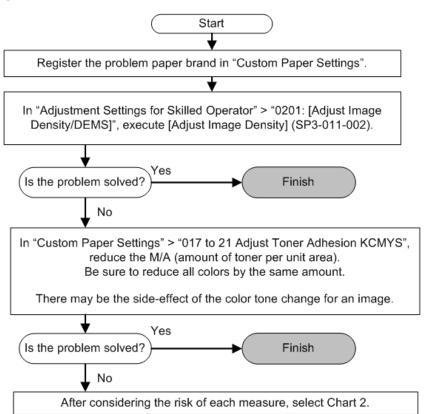
This is likely to occur if:

- There is a large amount of toner deposit.
- When using in a high temperature or high humidity environment.
- When using paper with a high degree of smoothness such as glossy coat paper.
- When using small size paper (the smaller the paper size, the more likely the problem is to occur).

Solution

Also see RTB 112

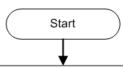
Chart 1



w_d194z0676

Chart 2 (Adjusting the paper transfer feed speed)

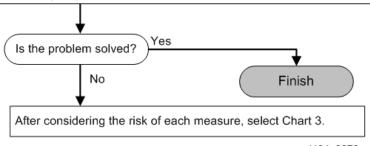
Worm holes can be eliminated by adjusting the paper transfer feed speed.



In "Custom Paper Settings", reduce the value of "016 [Paper Transfer Feed Speed Adjustment]" by 0.1%/step, and then print the target image. (Lower limit value is -0.5%.) Check the image quality.

[Note]

If the lower limit is exceeded during adjustment, SC441-01 to -52 (ITB Drive Motor Error) may occur. In that case, increase the set value.



w_d194z0678

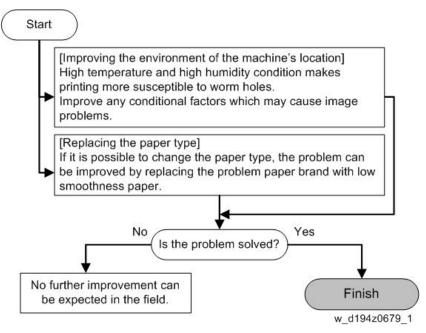
The following side-effects may occur.

- Expansion and contraction of the image in the sub scan direction.
- Horizontal streaks 90mm within the rear edge of halftone images.
- Uneven density for halftone images.

Expansion and contraction of the image in the sub scan direction can be eliminated by adjusting the following items in the plus direction.

- 005 [Adj Magnification of Side 1 Across Feed]
- 006 [Adj Magnification of Side2 Across Feed]

Chart 3 (Improving usage environment)



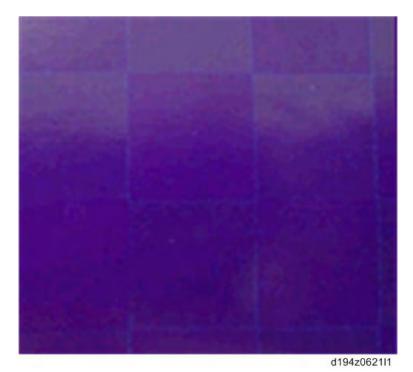
- **U**Note
 - Worm holes can be reduced by using the blur tool of Adobe Illustrator.
 - 1. Select the clear image area in Adobe Illustrator.
 - 2. Select [Effect] > [Blur] > [Gaussian Blur].
 - 3. Specify the blur radius (pixel).
 - As a side-effect, clear images may appear blurry.

UNote

After taking the above measures, do the color calibration adjustment of the external controller.

Worm Holes: When Using the Clear Toner

When printing using the clear toner, patchy images appear where the clear toner overlaps.



Cause

When superposing toner, the pressure during transfer causes toner to contract, thus causing worm holes.

This is likely to occur if:

- There is a large amount of toner deposit.
- When using in a high temperature or high humidity environment.
- When using paper with a high degree of smoothness.
- Clear toner is fed with a high image area ratio.
- When using small size paper (the smaller the paper size, the more likely the problem is to occur).

Also see RTB 112

Chart 1

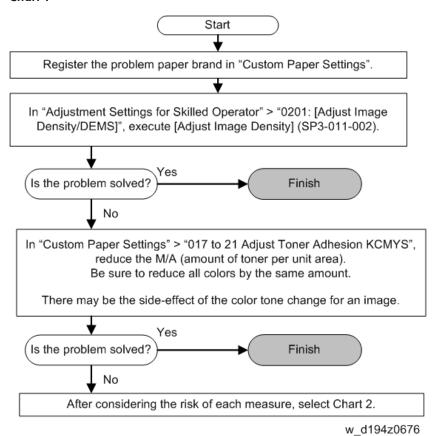
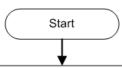


Chart 2 (Adjusting the paper transfer feed speed)

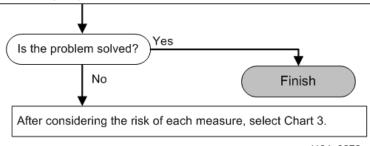
Worm holes can be eliminated by adjusting the paper transfer feed speed.



In "Custom Paper Settings", reduce the value of "016 [Paper Transfer Feed Speed Adjustment]" by 0.1%/step, and then print the target image. (Lower limit value is -0.5%.) Check the image quality.

[Note]

If the lower limit is exceeded during adjustment, SC441-01 to -52 (ITB Drive Motor Error) may occur. In that case, increase the set value.



w_d194z0678

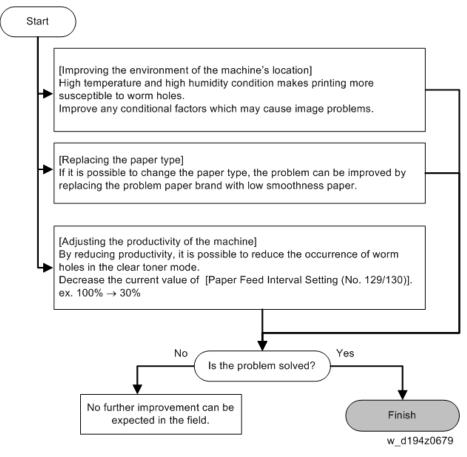
The following side-effects may occur.

- Expansion and contraction of the image in the sub scan direction.
- Horizontal streaks 90mm within the rear edge of halftone images.
- Uneven density for halftone images.

Expansion and contraction of the image in the sub scan direction can be eliminated by adjusting the following items in the plus direction.

- 005 [Adj Magnification of Side 1 Across Feed]
- 006 [Adj Magnification of Side2 Across Feed]

Chart 3 (Improving usage environment)



- **U** Note
 - Worm holes can be reduced by using the blur tool of Adobe Illustrator.
 - 1. Select the clear image area in Adobe Illustrator.
 - 2. Select [Effect] > [Blur] > [Gaussian Blur].
 - 3. Specify the blur radius (pixel).
 - As a side-effect, clear images may appear blurry.



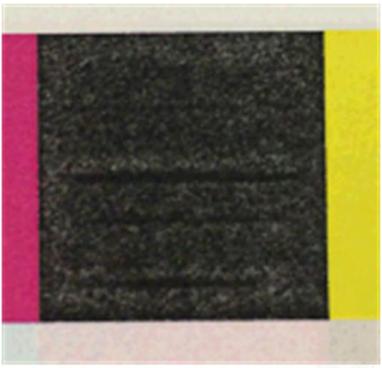
After taking the above measures, do the color calibration adjustment of the external controller.

UNote

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Uneven Density

Low Image Density of Black Area



d194z0610l1

Cause

Compared to color toner, Bk toner has a lower transfer charge. Therefore, low image density is caused by excessive transfer at the PTR unit.

This is likely to occur if:

- Printing in the high temperature and high humidity condition
- Printing in FC mode or FCS mode (These modes have a higher paper transfer current than B/W mode.)

Solution

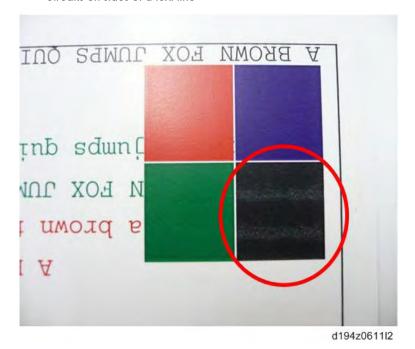
See the troubleshooting for page 887 "Horizontal White Streaks: Around Black Text"

Horizontal White Streaks: Around Black Text

RTB 112: Replace this section

The following unexpected images occur when printing a Bk image area in the FC mode.

- Low image density on a entire page
- · Low density on sides of a text line
- Streaks on sides of a text line



RTB 112 Replace this section

RTB 112 Replace this section



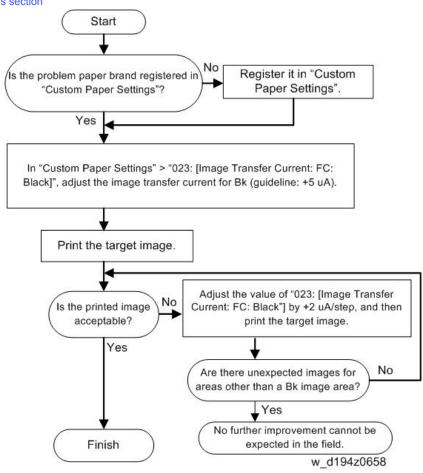
Cause

The paper transfer rate of low-charged Bk toner is often decreased due to excessive paper transfer bias in FC mode because the paper transfer bias in the FC mode is higher than the paper transfer bias in the BW mode. In particular, if a text line in the main scanning direction is located close to the edge of Bk solid images, the density of a Bk solid image area often becomes lower along the text.

Solution 1

Increase the Bk image transfer current in the FC mode.

RTB 112
Replace this section



Solution 2

Print a Bk image in the four-colors (YMCK) printing from the command workstation.

- 1. Select [Job Properties].
- 2. Select [Color] tab.
- 3. Select [Expert Settings] in color mode.
- 4. Select [Gray & Black Processing Options].
- 5. Select [Normal] in [Black text and graphics] to print the black text and graphics as a four-colors black using C, M, Y, and K toner.
 - If you select [Pure Black On] in [Black text and graphics], the machine prints black text and graphics as a one-color black, using black toner only.



After taking the above measures, do the color calibration adjustment of the external controller.

Uneven Density between Left and Right of an Image: 40 mm Interval

Uneven density between the left and right side of an image occurs at 40 mm interval due to the different charge between the front and rear side of the drum.

This is likely to occur if:

· Printing a first print in the early winter morning

Solution

- 1. Set the setting of SP2-109-003 (Test Pattern) to "12 (Independent Pattern 2 dot)".
- 2. Print the test pattern.
- 3. Is there uneven density between the left and right of the image?

Yes: Go to next step.

No: Finish

4. Does the problem occur periodically at 40 mm interval?

Yes: Go to next step.

No: Refer to other troubleshooting.

- 5. Execute "Process Control (SP3-011-001)".
 - Normally, Process Control is executed at a first print just after turning on the machine.
 However, the adjustment of the AC charge bias may not be completed at once if the machine is located in the low temperature and low humidity condition. Therefore, execute the process control again manually.
- 6. Print the target image.
- 7. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

- 8. Increase the room temperature (guideline: 20°C or higher) and wait for 30 minutes at least.
 - Increasing the room temperature can restrain the increase of the charge roller resistance, and then solve the insufficient charge for the drum.
- 9. Print the target image.
- 10. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

- 11. Turn on the anti-condensation heater.
 - Turning on the anti-condensation heater can maintain adequate temperature inside the machine even if the main power of the machine is turned off.
- 12. Print the target image.
- 13. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

RTB 112 Modified

14. Replace the charger unit.

• If the problem cannot be solved by steps 5 to 7 above and if immediate response is necessary, replace the charger unit.

Uneven density: 63 mm Interval

Uneven density occurs due to different pitch phases of the Paper Transfer Roller.

Solution

- 1. Register the problem paper brand in "Custom Paper Settings".
- 2. Decrease "016 [Paper Transfer Feed Speed Adjustment]" by 0.1%/step.



• After taking the above measures, do the color calibration adjustment of the external controller.

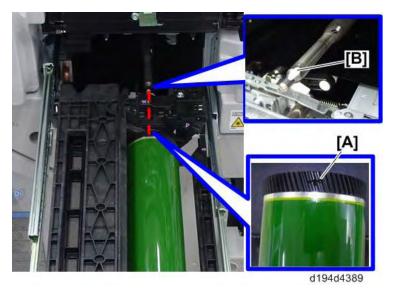
Uneven Density: 189 mm Interval (1)

RTB 112 Modified

Uneven density occurs due to different pitch phases of the Drum.

Solution

- Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check
 the output image.
- 2. Align the drum shaft * 1.
- 3. Execute [DEMS] again, and then check the output image.
 - * 1: Align the direction of the white marking position [B] on the drum shaft with the notch mark [A] on the top of the drum gear.

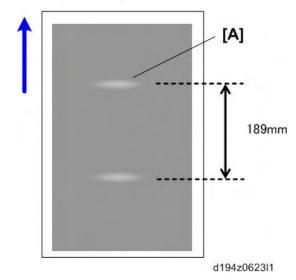


UNote

• After taking the above measures, do the color calibration adjustment of the external controller.

Uneven Density: 189 mm Interval (2)

Lens-shaped blurring [A] occurs at 189 mm interval.



10

Cause

When printing with a machine which has been left non-use in the high temperature and high humidity condition for a long time, corona effluence adhering to the drum causes a charge removal malfunction in the drum.

Solution 1

- In "Adjustment Settings for Skilled Operators", execute "0502: [Execute Process Initial Setting]" (SP3-020-001).
- 2. Print the target image.
- 3. Is the problem solved?

Yes: Finish

No: Execute "0502: [Execute Process Initial Setting]", and then go to next step.

4. If there is no improvement even after repeating fifth times or more, proceed to Solution 2.

Solution 2 (Customer Engineer only)

- Set the settings of SP3-539-010 (Dev Agitating Time :Set; ON/OFF(by AbsHum)) and SP3-539-030 (Dev Agitating Time :Set; ON/OFF(by Non-use Time)) to "0 (ON)".
- 2. When setting above SP modes to "ON," the following SP setting values become effective. For the following SP modes, it is possible to adjust the absolute humidity threshold and developing agitation time for each threshold.

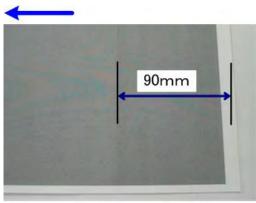
SP	Initial Value
SP3-539-021 (Dev Agitating Time :Set : AbsHum Threshold:1)	3.0 g/m^3
SP3-539-022 (Dev Agitating Time :Set : AbsHum Threshold:2)	3.0 to 7.0 g/m ³
SP3-539-023 (Dev Agitating Time :Set : AbsHum Threshold:3)	7 to 12.0 g/m ³
SP3-539-024 (Dev Agitating Time :Set : AbsHum Threshold:4)	12.0 to 24.0 g/m ³
SP3-539-025 (Dev Agitating Time :Set : AbsHum Threshold:5)	24.0 g/m ³
SP3-539-011 (Dev Agitating Time: by AbsHum:1)	0 sec
SP3-539-012 (Dev Agitating Time: by AbsHum:2)	5 sec
SP3-539-013 (Dev Agitating Time: by AbsHum:3)	10 sec
SP3-539-014 (Dev Agitating Time: by AbsHum:4)	15 sec



- Changing the settings of SP modes above may cause the following side effects.
- The warm-up time or recovery time from the energy saver mode is always longer than before.
- The machine may take additional time to warm up or recovery even when the no adjustment time is required.
- Increasing agitation time may cause the part's life time of the cleaning unit shorten, scraping of the drum, or mottled effects due to deterioration of developer.

Uneven Density within 90 mm of the Trailing Edge

Uneven image density (lower or higher) occurs within 90 mm of the trailing edge.



d194z0615l1

This is likely to occur if:

• Printing in the low humidity and low temperature condition.

Solution

The measure for uneven image density varies depending on whether the area within 90 mm of the trailing edge is lower or higher.

- If the area within 90 mm of the trailing edge is lower;
 - Check the value of "015: [Transfer Timing Roller Feed Speed Adj]" in "Custom Paper Settings". Is the value higher than +0.5%?

Yes	No further improvement can be expected in the field.
No	Increase the value by 0.1%/step.

2. Print the target image. Is the problem solved?

Yes	Finish
No	Repeat steps 1 and 2. If the problem is not solved by increasing the value to +0.5%, no further improvement can be expected in the field.

- If the area within 90 mm of the trailing edge is higher;
 - 1. Check the value of "015: [Transfer Timing Roller Feed Speed Adj]" in "Custom Paper Settings". Is the value lower than -0.5%?

Yes	No further improvement can be expected in the field.
No	Decrease the value by 0.1%/step.

2. Print the target image. Is the problem solved?

Yes	Finish	
No	Repeat steps 1 and 2. If the problem is not solved by decreasing the value to -0.5%, no further improvement can be expected in the field.	



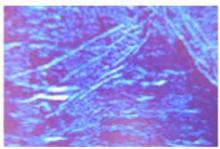
• After taking the above measures, do the color calibration adjustment of the external controller.

Uneven Density (Textured Paper)

Toner is not transferred to the caved spots on rough surfaced paper, resulting in poor image transfer.

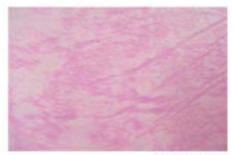
Cause

Unprinted area on rough surface paper occurs when the value set for paper transfer voltage is too low.



d194z0624l1

High image density (halftone area) on rough surface paper occurs when the value set for paper transfer voltage is too high.



D194z0624l1 2

This is likely to occur if:

- When using paper with a deep, rough surface.
- When using thick paper.
- When printing continuously with a low image area.

Solution RTB 112: Modified

• When unprinted areas occur:

- 1. Set 049: [Textured Paper Mode] to "On" in Custom Paper Settings.
- 2. Adjust the paper transfer voltage for textured paper*1 in Custom Paper Settings.
- 3. Increase the set value by 0.2kV.
- 4. Print the image.
- 5. Is the problem solved?

Yes: Finish

No: Increase the value again by another 0.2kV.

6. Repeat step 4. If the image density becomes high, refer to measures for "When image density is high" (below).

7. When a J032 paper jam occurs, refer to page 898 "Mottling".

• When image density is high:

- 1. Set 049: [Textured Paper Mode] to "On" in Custom Paper Settings.
- 2. Adjust the paper transfer voltage for textured paper* 1 in Custom Paper Settings.
- 3. Decrease the set value by 0.2kV.
- 4. Print the image.
- 5. Is the problem solved?

Yes: Finish

No: Decrease the value again by another 0.2kV.

- 6. Repeat step 3. If unprinted areas occur, refer to measures for "When unprinted areas occur" (above).
- 7. When a J032 paper jam occurs, refer to page 898 "Mottling".

• When using paper with paper weight 3 or less

- 1. ISet 049: [Textured Paper Mode] to "On" in Custom Paper Settings.
- 2. Print the image.
- 3. Is the problem solved?

Yes: Finish

No: Decrease the value again by another 0.2kV.

4. When a J032 paper jam occurs, refer to page 898 "Mottling".

^{* 1} Adjustment items for paper transfer voltage for textured paper

Printing mode	Custom Paper Settings
B/W	050: [Txt Ppr: Ppr Trns Voltage: B&W: Side 1] 051: [Txt Ppr: Ppr Trns Voltage: B&W: Side 2]
FC, FCS	052: [Txt Ppr: Paper Trnsf Voltage: FC: Side 1] 053: [Txt Ppr: Paper Trnsf Voltage: FC: Side 2]
FCS Quality	054: [Txt. Pp.: Pp. Trn. Vl.: FC: Sd. 1: Qul.] 055: [Txt. Pp.: Pp. Trn. Vl.: FC: Sd. 2: Qul.]
S only	056: [Txt Ppr: Paper Trnsf Voltage: S: Side 1] 057: [Txt Ppr: Paper Trnsf Voltage: S: Side 2]



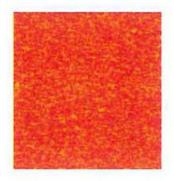
• If there is no improvement when adjusting the paper transfer voltage, execute 0515: [Execute Developer Refreshing].

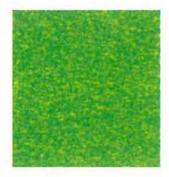


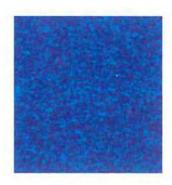
• After taking the above measures, do the color calibration adjustment of the external controller.

Mottling

Mottling occurs in solid-filled areas.







d194z0607l



- For FC mode, if Bk is pale and there is a mottled effect, refer to page 886 "Low Image Density of Black Area"
- If there are round unprinted white spots, refer to page 857 "White Spots/Toner Blasting".

Cause

Mottled effect is caused by the following possible causes:

- Low image transferring due to toner deterioration
- Too high or too low of toner charge
- End of unit life (ITB unit, PTR unit or developer).
- Malfunction of image transfer roller or PTR unit

This is likely to occur if:

- Using paper with low smoothness
- · Printing an image with low coverage continuously
- · Printing in the low humidity condition

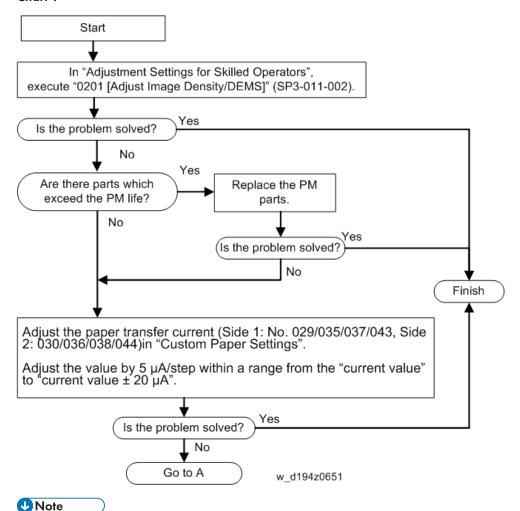
Printing in the high humidity condition

Solution



When using clear toner, the mottled effect can be improved by applying another layer of clear
toner to the mottled area. However, a larger M/A (mass per unit area) of clear toner results in
more glossiness, and then causes color tone changing.

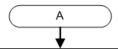
Chart 1



Adjustments of Paper Transfer Current may cause the following side effects.
 Decreasing the paper transfer current (ex: -82ua → -92uA): White spots is getting worse in the low temperature and low humidity condition or Bk image in the full color mode is getting lighter in the high temperature and high humidity condition.

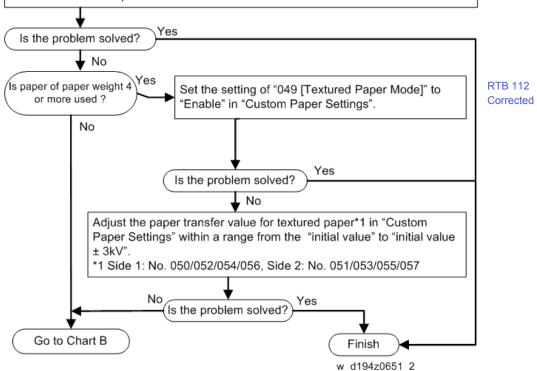
Increasing the paper transfer current (ex: $-82ua \rightarrow -72uA$): Mottled effect is getting worse in the low temperature and low humidity condition.

Chart A



Adjust the image transfer current (No.022/023, 024, 025,026, 027/028) in "Custom Paper Settings".

Adjust the value by 5 μ A/step within a range from the "current value" to "current value \pm 10 μ A".





Adjustments of Image Transfer Current may cause the following side effects.
 Decreasing the image transfer current (ex: 40uA → 45uA): Residual image is getting worse.
 Increasing the image transfer current (ex: 40uA → 35uA): Bk image in the full color mode is getting lighter in the high temperature and high humidity condition.

UNote

 AC transfer adjustment may cause toner scattering worse for a halftone or text image. The line speed of the machine is also reduced by this adjustment. As a result of this, the productivity of the machine is lowered.

10

Chart B



Printing in the high temperature and high humidity condition results in poor image transferring and mottled effect. Furthermore, printing in the low temperature and low humidity condition increases the resistance of the transfer roller and causes mottled effect.

If there is the specific condition for the image problem (ex: image problem at the first print in the winter morning, etc.), change the printing condition.

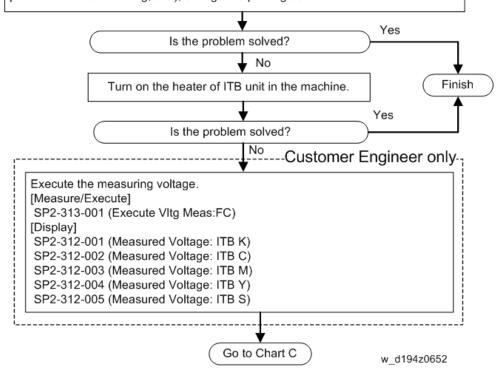


Chart C

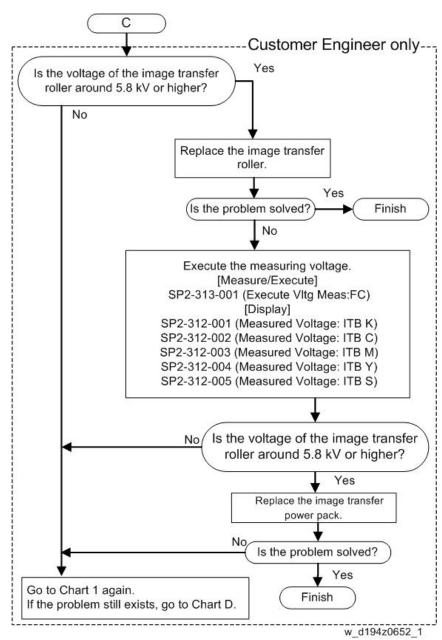


Chart D

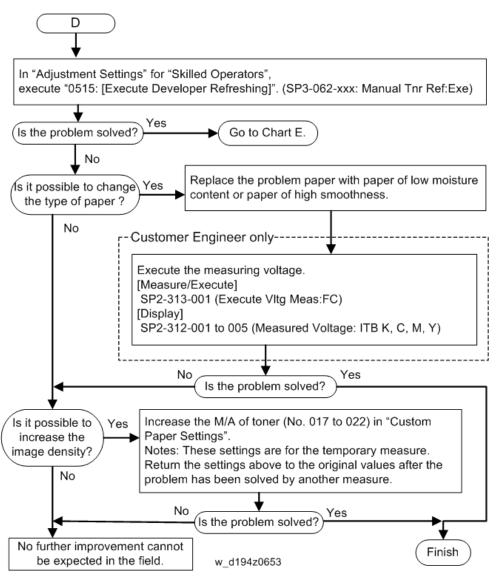
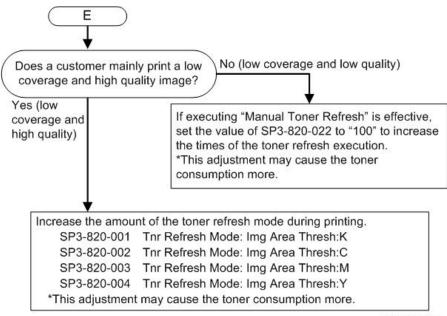
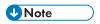


Chart E



w_d194z0653_1



- After taking the above measures, do the color calibration adjustment of the external controller.
- The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
 printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
 about which number you need to adjust.

Worm Track



d194z0609l1

Cause

River marks are caused when an image on paper touches the fuser belt due to waves of the transparent film at the entrance or exit of the fusing nip.

This is likely to occur if:

- Using synthetic paper or transparent film (particularly for thin paper with no stiffness).
- Printing a solid image on a full page

Solution

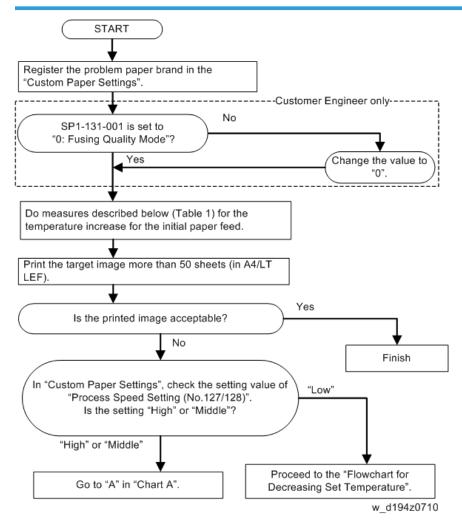


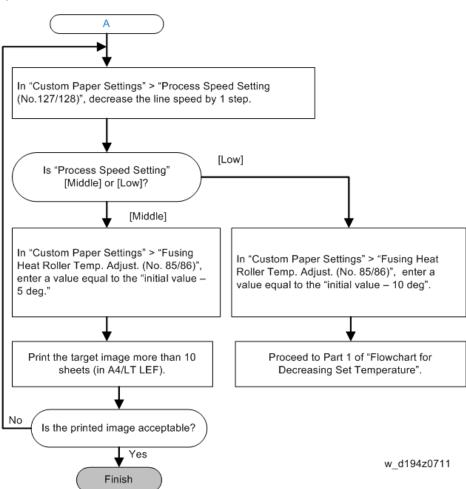
Table 1

Change all of the 5 setting items shown below.

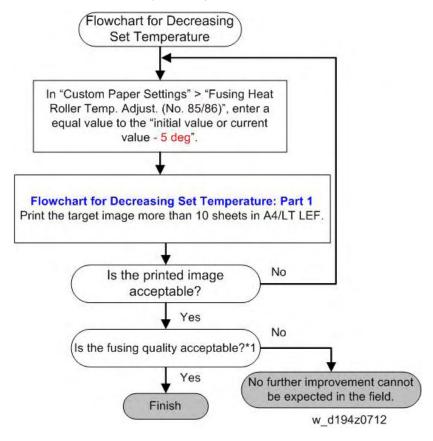
No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1".
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0".

No.	Custom Paper Settings	Details of Change
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15", if "Process Speed Setting" is [High] or [Middle]. Change the setting to "5", if "Process Speed Setting" is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3".
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3".

Chart A



Flowchart for Decreasing Set Temperature



- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.



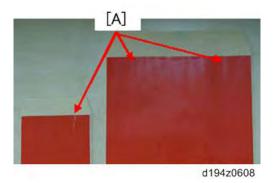
After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Envelopes: Creases, Wavy Streaks

Creases occur when printing on an envelope.

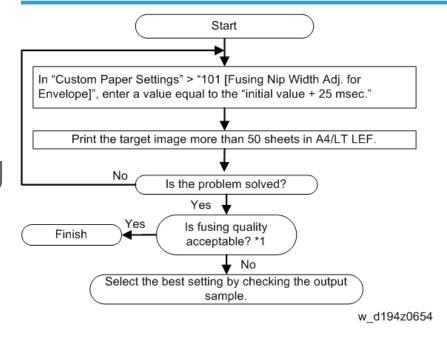


[A]: Envelope creases

Cause

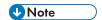
- Low paper stiffness due to a high moisture content of paper
- Inappropriate setting of the fusing nip for the target envelope

Solution



- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.

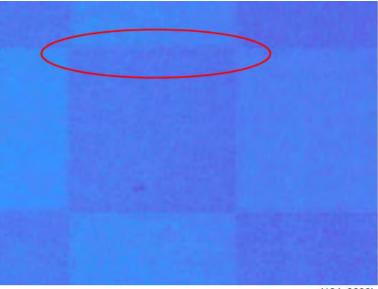




After taking the above measures, do the color calibration adjustment of the external controller.

Blurred Image: Around a Clear Image

Blurring occurs around a clear image.



d194z0606l

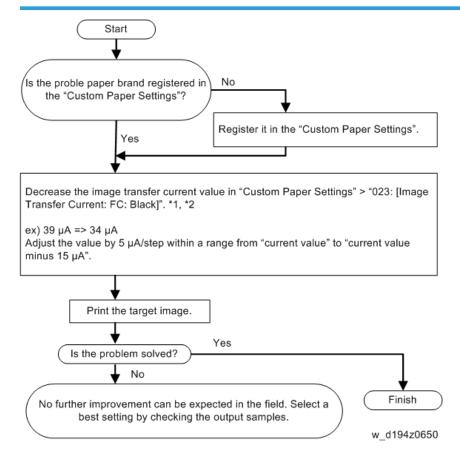
Cause

When a clear image exists during image transfer, very small apertures are generated around the clear image step. These apertures prevent reverse transfer of the color image. This results in the color image being somewhat dark around the clear image.

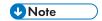
This is likely to occur if:

- When using in the high temperature and high humidity condition
- There is a high image area ratio in the main scan direction of the downstream station.

Solution



- * 1: Although the problem appears in the clear toner area, this measure is required to adjust the image transfer current for Bk image.
- *2: The lower toner density may occur for the black toner as a side effect of this adjustment.

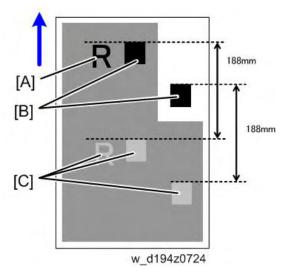


After taking the above measures, do the color calibration adjustment of the external controller.

Residual Image: Negative Ghost

A ghost image of an image to be printed appears at a distance of 189 mm to the side of the intended image.





[A]: Bold text

[B]: Solid image

[C]: Negative residual 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 is likely to occur if:

- When printing solid images or bold characters in black on a halftone background.
- When printing in low temperature, low humidity environment.

Solution

- Check the counter of PM parts around the drum (photoconductor unit). Replace parts for which the counter has been exceeded.
- In [Adjustment Settings for Skilled Operators], select [0201: Adjust Image Density/ DEMS] and then execute [Image Density Adjustment: Manual Execute] (SP3-011-002).
- 3. Print the image.
- 4. Is the printed image acceptable?

Yes: Finish

No: Go to next step

5. Register the applicable paper brand as "Custom Paper."

- 6. In Custom Paper Settings, adjust the image transfer current.
 - If you want to eliminate a residual image or lower the image density, decrease the value by 5
 µA.
 - If you want to heighten the image density, increase the value by 5µA.

No. 022: [Image Transfer Current: B&W]

No. 023: [Image Transfer Current: FC: Black]

No. 024: [Image Transfer Current: FC: Cyan]

No. 025: [Image Transfer Current: FC: Magenta]

No. 026: [Image Transfer Current: FC: Yellow]

No. 027: [Image Transfer Current: FC: Special]

No. 028: [Image Transfer Current: Special]

- 7. Print the image.
- 8. Is the printed image acceptable?

Yes: Go to next step.

No: Go to step 6.

- 9. Adjust the quenching lump power.
 - Decrease the value of SP2-224-001/002 by 20.
 - Decrease the value of SP2-224-003/004 by 20.
 - Decrease the value of SP2-224-005/006 by 10.
- 10. Print the image.
- 11. Is the printed image acceptable?

Yes: Go to next step.

No: Go to step 9

12. Is it possible to decrease the screen ruling?

Yes: Go to next step.

No: No applicable measures.

13. For halftone mode of the printer, change the screen ruling to a value lower than the current setting. The image may become rougher as a side effect.

If there is no improvement after following the above Solution.

The problem can be avoided by adjusting the paper feed interval. (However, this will decrease productivity.)

- In Custom Paper Settings > Paper Feed Interval Setting: (No.129/130), decrease the paper feed interval by 25%.
- 2. Print the image.

IU

3. Is the printed image acceptable?

Yes: Finish

No: Go to step 1.



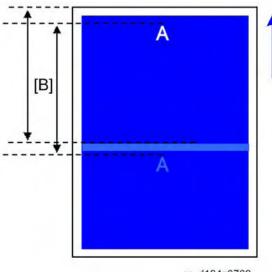
• After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper
Setting" about which number you need to adjust.

Residual Gloss (Gloss Ghost)

Glossy lines perpendicular to the paper feed direction appear.



w_d194z0709

[A]: Feed direction

[B]: Fusing belt circumference = approximately 251 mm

Cause

When toner which is used for a previous job remains on the fuser belt, a wax substance from the toner adheres to the fuser belt surface, and then applies more glossiness to an image. This causes different glossiness between an area with much glossiness and an area with less glossiness (interleaf, top/bottom margins, no image area, etc.).

This is likely to occur if:

- Using paper which is the paper weight 7 or 8.
- · Using paper with high surface smoothness
- Using transparent film
- Using cast coated paper
- · Printing a solid image with high coverage

Solution

Chart 1

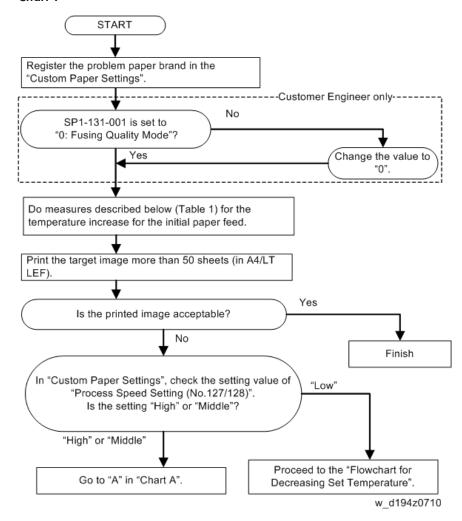
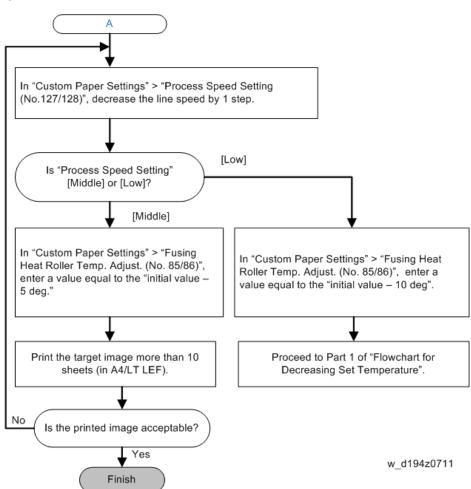


Table 1

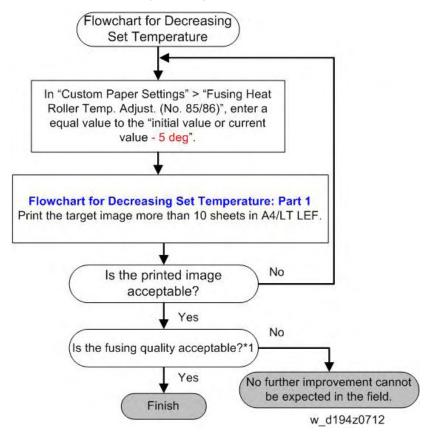
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1"
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0"
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15", if Process Speed Setting is [High] or [Middle]. Change the setting to "5", if Process Speed Setting is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3"
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3"

Chart A



Flowchart for Decreasing Set Temperature



- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.

UNote

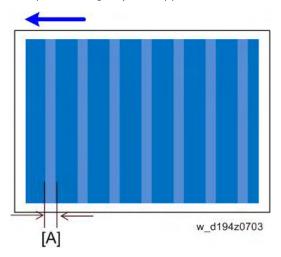
- Refer to other troubleshooting if problems cannot be solved using the above measures.
- After taking the above measures, do the color calibration adjustment of the external controller.

UNote

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Residual Gloss (Gloss Ghost): Multiple

Multiple vertical glossy lines appear.



[A]: Multiple horizontal glossy streaks which have been made at the leading and trailing edge margins of a previous job image.

Cause

When a solid image is printed continuously, toner wax may adhere and solidify on the fuser belt. On the other hand, a margin area (leading and tailing edges) is applied less toner wax. As a result of this, different glossiness is added to the fuser belt, and then causes streaks on outputs.

Solution

10

"Chart B" is greater effective for the improvement and it is also the permanent measure. However, productivity is decreased. Use either "Chart A" or "Chart B" depending on a customer's demand.

Chart A

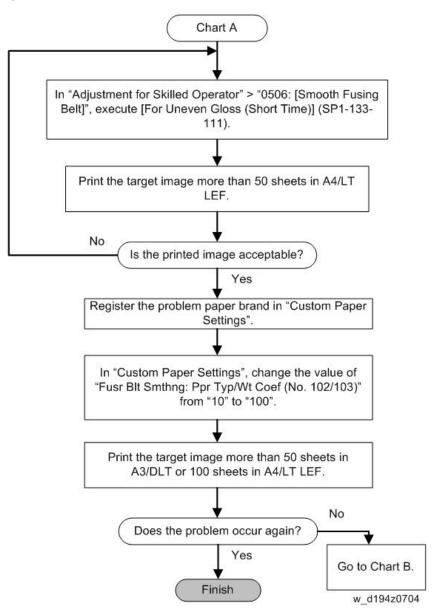
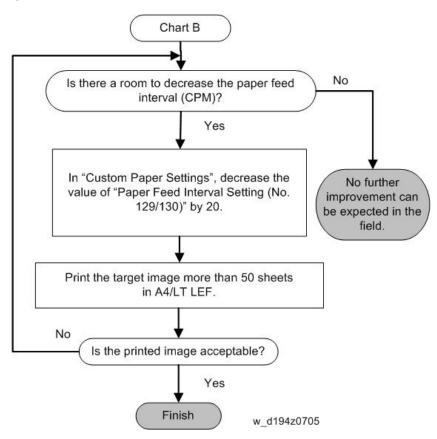


Chart B



If [Fusr Blt Smthng: Ppr Typ/Wt Coef] (No.102/103) is set to "100", the belt smoothing interval function becomes shorter (See table below as A4/LT LEF.)

Interval	Value	Interval	Value
10000 sheets	1	333 sheets	30
5000 sheets	2	250 sheets	40
3333 sheets	3	200 sheets	50
2500 sheets	4	167 sheets	60
2000 sheets	5	143 sheets	70
1667 sheets	6	125 sheets	80
1429 sheets	7	111 sheets	90
1250 sheets	8	100 sheets	100

Interval	Value	Interval	Value
1111 sheets	9	67 sheets	150
1000 sheets	10 (default value)	50 sheets	200
500 sheets	20	40 sheets	255



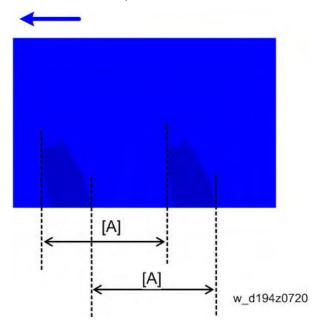
• After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Uneven Gloss: Partly

Wax or other substance adhering to certain spots of the fuser belt causes an increase in the rotation amount of wax at the point of adherence. This results in localized uneven gloss.



[A]: One round of the fuser belt (approx. 251mm)

This is likely to occur if:

- Using coated paper of middle thick
- Printing a high coverage image

Solution

- In the "Adjustment Settings for Skilled Operators" menu, select "0506: [Smooth Fusing Belt]".
- 2. Execute "02: [For Uneven Gloss (Short Time)]" (SP1-133-111).
- 3. Print the target image (1 sheet).
- 4. Is the printed image acceptable?

Yes: Finish

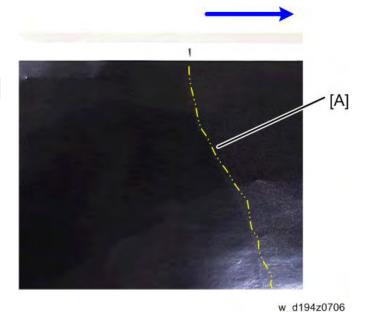
No: Repeat executing "02: [For Uneven Gloss (Short Time)]".



• After taking the above measures, do the color calibration adjustment of the external controller.

Uneven Gloss: Wavy

Uneven gloss waves sometimes occur on the 1st side of paper when printing on thin coated paper in the duplex mode.



[A]: Uneven gloss occurs from the line shown above.

10

Cause

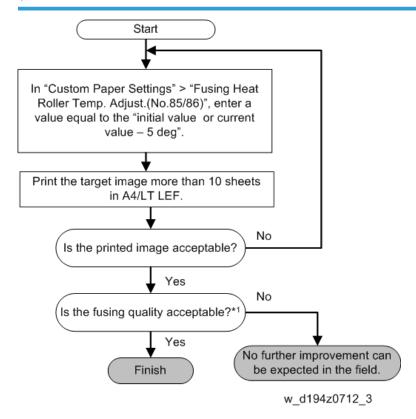
RTB 112 Modified

When toner which is used for a previous job remains on the fuser belt, a wax substance from the toner adheres to the fuser belt surface, and then applies more glossiness to an image. This causes different glossiness between an area with much glossiness and an area with less glossiness (interleaf, top/bottom margins, no image area, etc.).

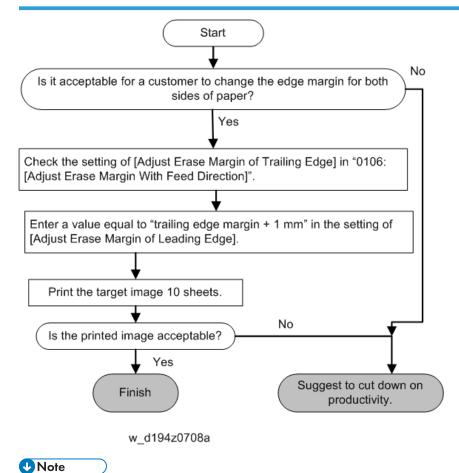
This is likely to occur if:

- Using thin coated paper which is the paper weight 2, 3 and 4
- Printing a solid image with high coverage

Solution 1



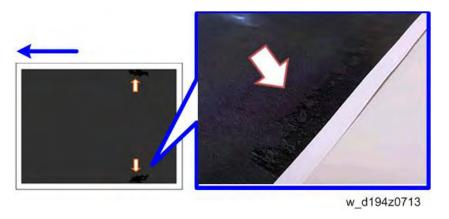
Solution 2



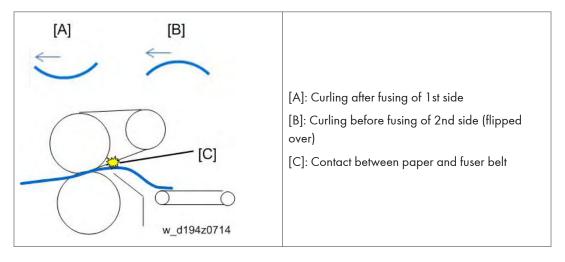
After taking the above measures, do the color calibration adjustment of the external controller.

Uneven Gloss: Side 2

During fusing of the 2nd side for duplex printing, when paper enters the fusing nip, the paper rises up slightly due to curling *1 which occurred during feeding of the 1st side. This causes the paper trailing edge to contact the fuser belt and results in uneven gloss.



*1 In the case of paper for which face curling occurred during fusing of the 1st side, a back curl occurs when the backside of the paper is flipped over for duplex printing. The paper enters the fuser unit with this back curl.



This is likely to occur if:

- When using thin coated paper.
- When printing in a high temperature, high humidity environment and using stabilized paper.

Solution

Chart 1

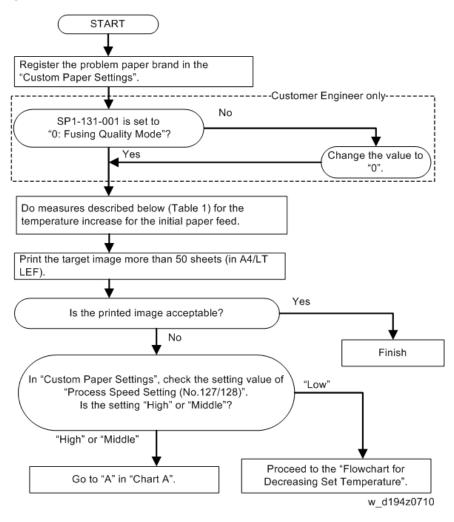


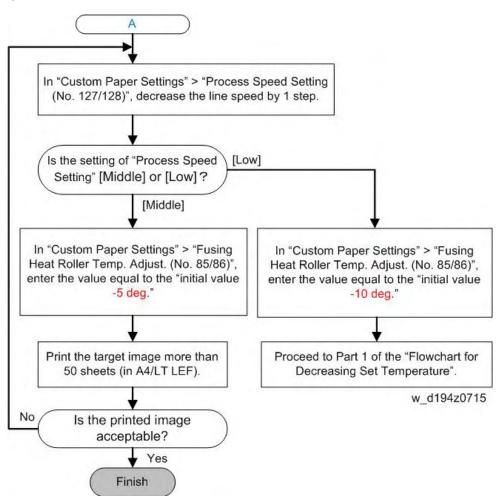
Table 1

Change all of the 5 setting items shown below.

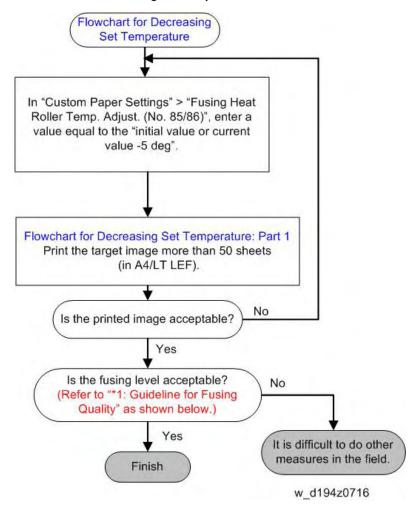
No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1"

No.	Custom Paper Settings	Details of Change
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0"
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Adding Fusing Tempratre 2: Special]	Change the setting to "15", if Process Speed Setting is [High] or [Middle]. Change the setting to "5", if Process Speed Setting is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3"
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3"

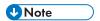
Chart A



Flowchart for Decreasing Set Temperature



- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.



After taking the above measures, do the color calibration adjustment of the external controller.

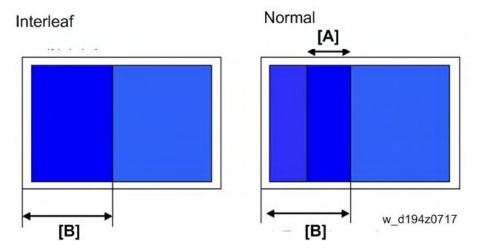
U Note

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Uneven Gloss: Thick Paper

The re-melt temperature of toner for the 1st side of the image is differs at one round (204mm) of the pressure roller and at subsequent areas. Therefore, uneven gloss occurs at 204mm within the image leading edge and at other areas of the image.

1st side of image during duplex printing



[A]: Pressure roller for interleaf (high temperatures result in a particularly high level of glossiness)

[B]: High level of glossiness at one round (204mm) of the pressure roller

This is likely to occur if:

- Printing a high coverage image in the duplex mode
- Using thick paper

10

Solution

Chart 1

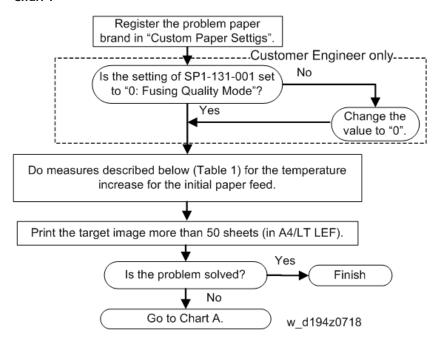
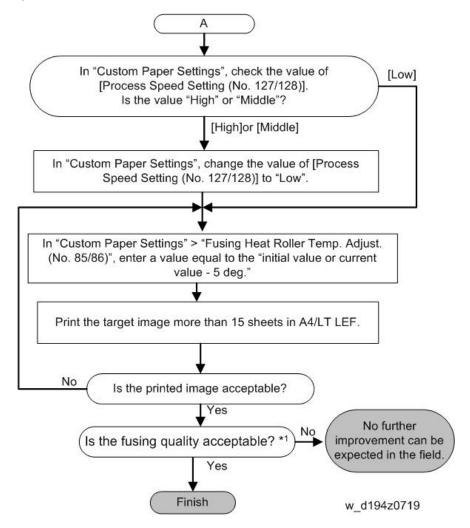


Table 1
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1"
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0"
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15", if Process Speed Setting is [High] or [Middle]. Change the setting to "5", if Process Speed Setting is [Low].

Chart A



* 1: Guidelines for Fusing Quality

- No image peeling.
- No toner peeling even when rubbing the image gently with fingernails.
- No toner peeling even when rubbing the image with the optical cloth.



• After taking the above measures, do the color calibration adjustment of the external controller.

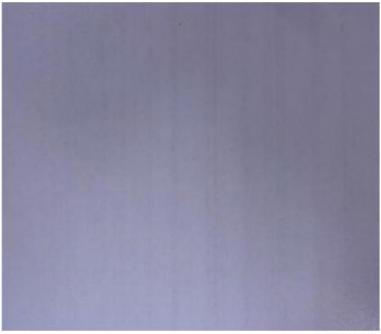


The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Dirtied Printouts

Dirty Background

The charging of developer decreases, thus causing toner residue like streaks or scattered dots on the background.



d194z0619I1

This is likely to occur if:

10

- When using in a high temperature, high humidity environment.
- When using paper with highly smooth coating.

• After continuous printing of jobs with low image area.

• There are a small number of pages per set and post-processing machines are continuously operated.

Solution 1

- 1. Check the counter of PM parts around the drum and then replace parts for which the counter has been exceeded.
- 2. In Adjustment Settings for Skilled Operators > 0201: [Adjust Image Density/ DEMS], execute [Image Density Adjustment: Manual Execute] (SP3-011-002).

RTB 112 Modified

RTB 112

Information added

10

- 3. Print the image.
- 4. Is the printed image acceptable?

Yes: Finish

No: Go to next step

- 5. In 0515: [Execute Developer Refreshing], execute [Cyan, Magenta, Yellow], [Black] (SP3-062-001).
- 6. Print the image.
- 7. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

RTB 112 Modified

- 8. In 0510: [Temperature / Humidity outside the Machine] (SP3-260-003), check the temperature and humidity around the machine.
- 9. Does the value of 0510 show a high temperature, high humidity environment of 27°C and 80% (guidelines) humidity or higher?

RTB 112 Modified

*For SP3-260-003, is the value 17 or higher?

Yes: Go to next step.

No: No further improvement can be expected in the field.

- 10. Increase the current value of 0209: [Adjust PCU Potential] by +1.
- 11. Print the image.
- 12. Is the printed image acceptable?

Yes: Finish

No: Go to step 13. (Continue increasing by +1 until the maximum value is reached.)

Solution 2

RTB 112

This procedure was completely remade



- Perform if the problem is not solved by "Solution 1."
- 1. Check the required refresh amount in SP3-820-011 to 015 (Tnr Refresh Mode).
- 2. Do any colors exceed 10,000mm?

Yes: Go to next step.

No: Go to step 4.

- 3. Select "26: Full Dot Pattern" in SP2-109-003 (Test Pattern Pattern Selection) to print a solid image.
- 4. In Adjustment Settings for Skilled Operators, execute 0502: [Execute Process Initial Setting] (SP3-020-001).

- 5. Print the image.
- 6. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

- 7. Check the condition of developer in SP3-930-051 to 055(Life Prediction: Dis.).
- 8. Is "1" displayed for any colors?

Yes: Replace the developer for the applicable color and then print the image and check quality.

No: No further improvement can be expected in the field.



• If the problem is not solved by "Solution 2," check the required data (SMC data, paper brand, etc.) and contact your supervisor.

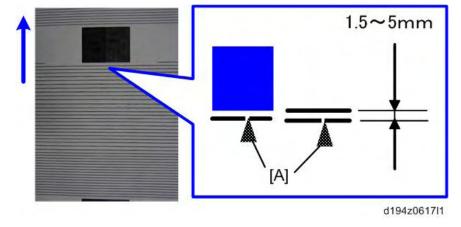


• After taking the above measures, do the color calibration adjustment of the external controller.

Toner Scattering: Lines

Toner scattering occurs for a portion of lines.

This may occur in a line that is 5 mm or less from the leading edge, or in a line that is 1.5 to 5 mm from the trailing edge of an image.

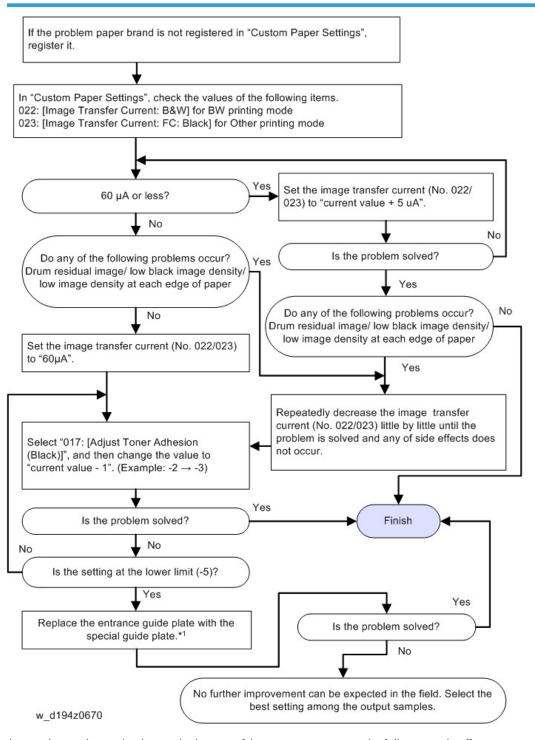


[A]: Toner Scattering

This is likely to occur if:

Printing lines on coated or smoothness paper

Solution

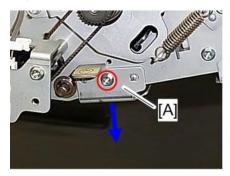


^{* 1:} Replacing the guide plate at the bottom of the ITB unit may cause the following side effects.

- High image density within approx. 10mm of the paper trailing edge
- Scattering for a portion of lines or letters (See page 940 "Toner Scattering: Trailing Edge")



 For details about replacing the guide plate [A], refer to the Field Service Manual ("Transfer Belt Removal" under "Intermediate Transfer Belt Replacement" in the chapter "Replacement and Adjustment").





m194e2412

Trade-off of the ITB guide plate

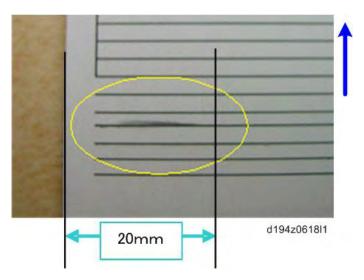
There are 3 choices: Default Guide Plate, Special Guide Plate or no guide plate. Each has its trade off.

RTB 133 Table modified

Types of guide plate	Toner Scatter Between Lines	Toner Scatter on Trailing edge on Front side
Default Guide Plate	Worse	Fair
Special Guide Plate	Fair	Fair to Worse
No Guide Plate	Worse	Better

Toner Scattering: Trailing Edge

Toner scattering occurs for a portion of lines or letters. This may occur in a line or letters that is 8 to 13 mm (0.3" to 0.5") from the trailing edge, and 20 mm (0.8") or less from the left edge in the paper feed direction.



Cause

A shock occurs when the trailing edge of the paper leaves the paper transport guide during the paper transfer, and then causes toner scattering.

This is likely to occur if:

• Using thick paper (paper weight 4 or heavier)

Solution

B/W mode

- 1. In "Custom Paper Settings", select "022: [Image Transfer Current: B&W]".
- 2. Check the current value. Is it 60 µA or less?

		Carry out all of the following measures;	
Ye		• Increase the current value by 5 A in "022: [Image Transfer Current:B&W]".	
ı e	35	Set "033: [Paper Transfer Current; Trail Edge: B&W]" to "200%".	
		Set "034: [Ppr Transfer Current Trail Edg Dist: BW]" to "30 mm".	
No	0	No further improvement can be expected in the field.	

3. Print the target image. Is the problem solved?

	Yes	Finish
No '		Increase the image transfer current by 5 μ A, and check the image unit up to 60 μ A. If the problem persists, remove the guide plate.

FC, FCS mode

- 1. In "Custom Paper Settings", select "023: [Image Transfer Current: FC: Black]".
- 2. Check the current value. Is it "60 µA" or less?

	Carry out all of the following measures;
Yes	• Increase the current value by 5 µA in "023: [Image Transfer Current: FC: Black]".
	Set "041: [Paper Transfer Current; Trail Edge: FC]" to "200%".
	Set "042: "Ppr Transfer Current Trail Edg Dist: FC]" to "30 mm".
No	No further improvement can be expected in the field.

3. Print the target image. Is the problem solved?

Yes	Finish
No	Increase the image transfer current by 5 µA, and check the image unit up to 60µA. If the problem persists, remove the guide plate.

S only mode

- 1. In Custom Paper Settings, select [028: Image Transfer Current: Special].
- 2. Check the current value. Is it 60µA or less?

	Carry out all of the following:	
V	• Increase the current value by 5 ^µ A in [028: Image Transfer Current: Special].	
Yes	Set [047: Paper Transfer Current; Trail Edge: S] to "200%".	
	Set [048: Ppr Transfer Current Trail Edg Dist: S] to "30 mm".	
No	No applicable measures.	

3. Print the image. Is the problem solved?

Yes	Finish
No	Increase the image transfer current by 5 µA, and check the image unit up to 60µA. If the problem persists, remove the guide plate.

Changing the transfer current may cause the following side effects.

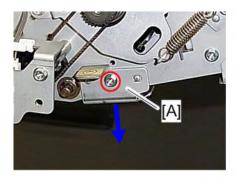
- Uneven density becomes easy to be outstanding.
- If the guide plate is removed, toner scatter between lines may occur. (page 938 "Toner Scattering: Lines")



• After taking the above measures, do the color calibration adjustment of the external controller.

Removing the Guide Plate

For details about replacing the guide plate [A], refer to the Field Service Manual ("Transfer Belt Removal" under "Intermediate Transfer Belt Replacement" in the chapter "Replacement and Adjustment").





m194e2412

Trade-off of the ITB guide plate

There are 3 choices: Default Guide Plate, Special Guide Plate or no guide plate. Each has its trade off.

RTB ·	133
Table	
modif	ied

Types of guide plate	Toner Scatter Between Lines	Toner Scatter on Trailing edge on Front side
Default Guide Plate	Worse	Fair
Special Guide Plate	Fair	Fair to Worse
No Guide Plate	Worse	Better

Toner Scattering: Around a Solid Fill Image

Toner scattering around solid images

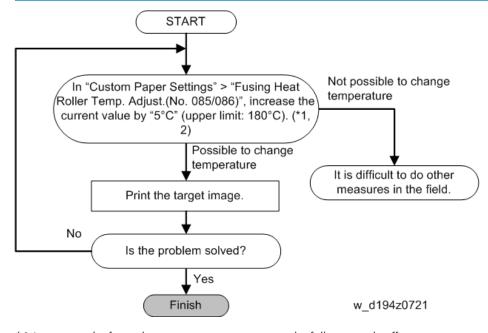


See page 857 "White Spots/Toner Blasting"

Stained Paper Edges

Roller marks on paper edges occur for a variety of reasons.

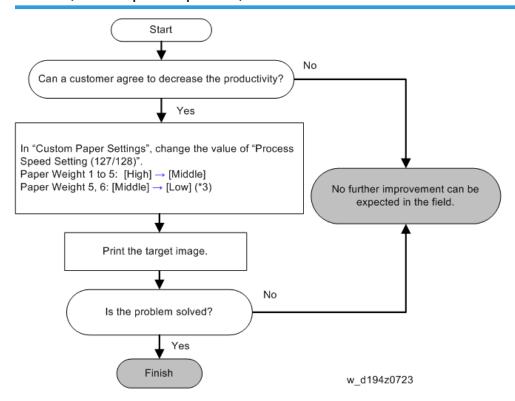
Solution (Adjusting the fusing temperature)



- * 1 Increasing the fusing heat temperature may cause the following side effects.
 - Increased curling (causes jamming).
 - Increased glossy streaks.

- Bubble-shaped white spots on coated paper.
- Decreased glossiness.
- *2 If side effects occur, set the temperature to a level (initial value to 180 deg) where side effects do not occur.

Solution (Process Speed Adjustment)



- *3: The productivity of the machine is decreased.
 - [High] (75 ppm) → [Middle] (52.5 ppm)
 - [Middle] (52.5 ppm) → [Low] (37.5 ppm)



• After taking the above measures, do the color calibration adjustment of the external controller.



The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Disturbed Image

Skew



w_d194z0804

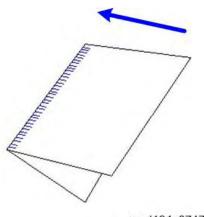
See page 634 "Paper Skew", page 639 "J097 Appears (Skew Detection)"

IC

Scratches, Others

Matte Paper Scratched During Folding

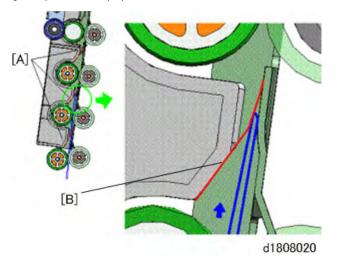
The surface of matte finish paper shows scratches after folding.



w_d194z0747

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 [B], 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.

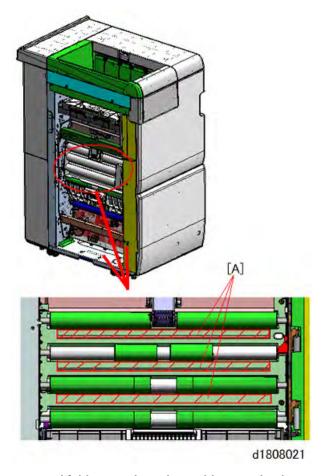




- The surface of the guide plate is rough and can cause marks on the surface of the paper. The surface of the plate becomes smoother after about 2,000 sheets have feed through the folding unit and these marks disappear.
- The surface of gloss coated paper is much smoother, so these marks do not appear 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.

IU

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, refer to other troubleshooting.



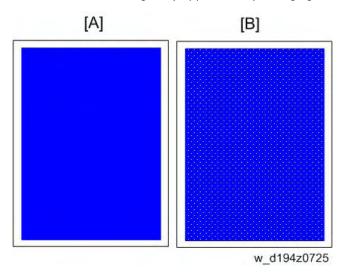
- Cleaning the surface of the metal guide plate and buffing it with a piece of paper reduces the
 occurrence of marks on the paper.
- The present condition of the guide plate at the affected area depends on the amount of usage of
 the folding unit, but buffing the surface of the plate with paper 20 to 50 times should reduce friction
 during paper feed.



 After buffing 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.

Insufficient Gloss: Clear Image

Unlike FC mode, the image may appear cloudy if image gloss is low in FCS (clear) mode.



[A]: Normal image

[B]: Cloudy image

Cause

Insufficient fusing temperature results in insufficient gloss for clear area.

This is likely to occur if:

• When using paper with paper weight 7 or 8 in FCS (clear) mode.

Solution

- 1. Register the applicable paper brand as "Custom Paper".
- 2. In Custom Paper Settings > Fusing Heat Roller Temp. Adjust. (No.85/86), enter a value equal to the "current value +5 deg".
- 3. Print the image. (more than 50 sheets in A4 LEF paper feed conversion)
- 4. Is the printed image acceptable?

Yes: Go to next step.

No: Go to step 2 (upper limit of 185°C).

5. Is the fusing level acceptable? *1

Yes: Finish

No: No further improvement can be expected in the field.

- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.



• After taking the above measures, do the color calibration adjustment of the external controller.

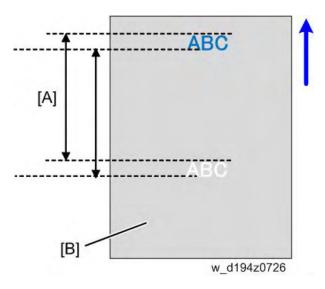


The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

Milky Transparency

When the transparent film is exposed to a large amount of heat by the fixing nip, the transparent film surface is reformed and a very small amount of unevenness is transferred to the fuser belt surface. This creates a cloudy appearance.

Furthermore, when drag wax of the toner image for the fuser belt used 1 lap ago adheres to the cloudy area, this area is smoothed and becomes a transparent residual image.



[A]: A residual image occurs after the fuser belt circumference (approximately 251mm).

[B]: Clouding occurs for the entire blank surface.

This is likely to occur if:

• Using transparent film

Solution

Chart 1

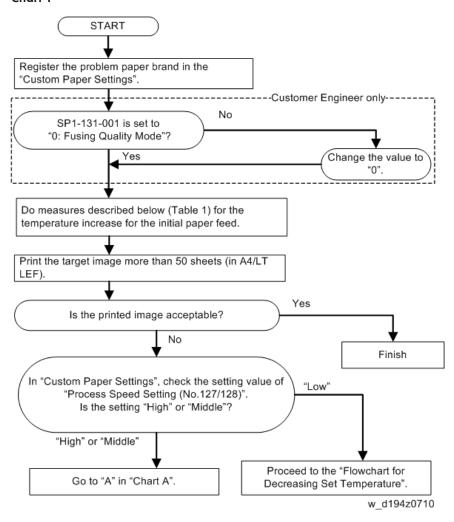
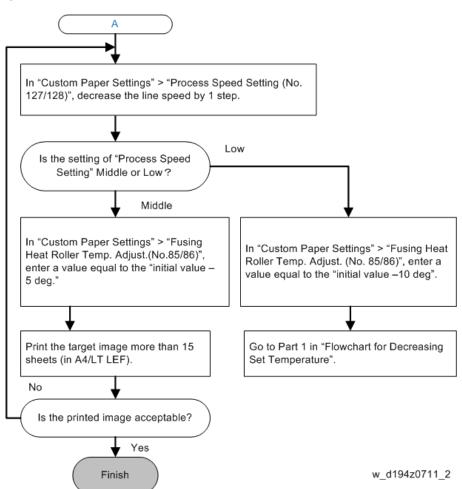


Table 1
Change all of the 5 setting items shown below.

No.	Custom Paper Settings	Details of Change
1	090 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual] 092 [Adj Fsng Tmp to Trnsf Ppr:Ppr: Qual: S]	Change the setting to "1"
2	093 [Adjust Adding Fusing Temperature 1] 094 [Adjst Adding Fusing Tempratre 1: Special]	Change the setting to "0"

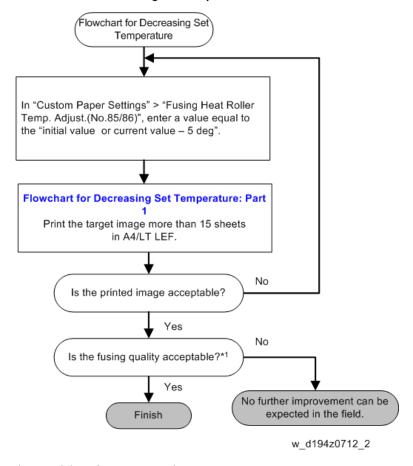
No.	Custom Paper Settings	Details of Change
3	095 [Adjust Adding Fusing Temperature 2] 096 [Adjst Addng Fusng Tempratre 2: Special]	Change the setting to "15", if Process Speed Setting is [High] or [Middle]. Change the setting to "5", if Process Speed Setting is [Low].
4	131 [Rdc. Init. CPM: Low Tmp. Envir.: Prod]. 132 [Rdc. Init. CPM: Low Tmp. Envir.: Qual.]	Change the setting to "Level 3"
5	133 [Rdc. In. CPM: N./H. Temp. Envr.: Prod.] 134 [Rdc. In. CPM: N./H. Temp. Envr.: Qual.]	Change the setting to "Level 3"

Chart A



10

Flowchart for Decreasing Set Temperature



- * 1: Guidelines for Fusing Quality
 - No image peeling.
 - No toner peeling even when rubbing the image gently with fingernails.
 - No toner peeling even when rubbing the image with the optical cloth.

U Note

After taking the above measures, do the color calibration adjustment of the external controller.

UNote

The applicable numbers for the items in the "Custom Paper Settings" vary depending on the
printing mode of the machine. Refer to page 18 "Applied Setting Items for Custom Paper Setting"
about which number you need to adjust.

11. Advanced Instructions

Operating Procedure for Color Calibration

To improve color reproduction and achieve color output with consistent quality, follow this procedure. You can improve CMYK image reproduction by adjusting image density and performing calibration. Also, you can improve mixed color reproduction by adjusting image density and color registration and performing calibration. An optional EFI Spectrometer ES-2000 is required to perform calibration.

- In the [Adjustment Settings for Skilled Operators] menu, execute [Adjust Image Density/ DEMS].
- 2. When the color density adjustment is completed, press [Exit].
- 3. Press [Exit].
- 4. Press the [User Tools] key.
- 5. Press [Maintenance].
- 6. Press [Color Registration]
- 7. When the color registration is completed, press [Exit].
- 8. Start Fiery Command WorkStation 5.
- 9. Click [Calibrate] in the [Job Center] tab.
- 10. Click [Expert] in the upper right corner of the "Calibrator" dialog box.
- 11. Specify the following settings in the [Calibrator] dialog box.
 - In the [1. Select Measurement Method] menu, select [ES-2000].
 - In the [2. Check Print Settings] menu, select the paper type you are using from the [NAME] pull-down menu.
 - In the [3. Generate Measurement Page] menu, click [Print].
- 12. Specify the following settings in the Print Option dialog box.5.
 - In the [Page Type] menu, select [21 Sorted Patches] or [34 Sorted Patches].
 - In the [Paper Size] menu, select the paper size you want to use to print a test page. The paper size you select must conform to the patches you select in the [Page Type] menu.
 - [21 Sorted Patches]: A4 or LTR [34 Sorted Patches]: A3, 11x17, 12x18, 13x19
 - In the [Input Tray] menu, select the paper tray loaded with the paper for patch printing.
 - Click [Print].
- 13. When patch printing is completed, click [Measure] in the [4. Get Measurements] menu.
- 14. Check that the page type and size are correct, and then click [Measure].
- 15. Check the printed patches using ES-2000.

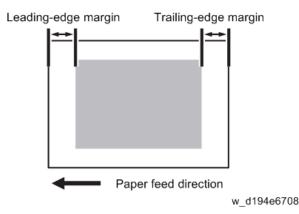
- 16. After checking all the patches, select [Measurement vs. Target] in the "[6. View Measurements (optional)]" menu, and then click [View].
- 17. Using the "Measurement vs. Target" screen, calculate the difference between each color's D-Max value in the measurement column and that in the target column.
 - If the difference is equal to +0.3 or lower and -0.3 or higher for cyan, magenta, and black, or if the difference is equal to +0.1 or lower and -0.1 or higher for yellow, go to the next step.
 - If the difference is equal to +0.31 or higher and -0.31 or lower for cyan, magenta, and black, or if the difference is equal to +0.11 or higher and -0.11 or lower for yellow, return to Step 1.
- 18. Click [Done] two times to close "Calibrator" dialog box.



- The color reproducibility may be improved after executing [Execute Developer Refreshing] in the [Adjustment Settings for Skilled Operators] menu.
- After this procedure is repeated three times, the difference between each color's [D-Max] value in
 the measurement column and that in the target column may not be equal to +0.3 or lower and -0.3
 or higher for cyan, magenta, and black, or +0.1 or lower and -0.1 or higher for yellow. If this is the
 case, print solid images on both sides of 100 sheets of A4 or LTR paper continuously. Desired
 results may be obtained.
- If the difference between each color's [D-Max] value in the measurement column and that in the
 target column may not be equal to +0.3 or lower and -0.3 or higher for cyan, magenta, and black,
 or +0.1 or lower and -0.1 or higher for yellow, color reproducibility may be improved after
 printing solid images on both sides of 100 sheets of A4 or LTR paper continuously.

Shortening the Leading/Trailing Edge Margins

Depending on the paper being used, the margins on the copy vary. You can shorten the leading/trailing edge margins.





• To adjust the following settings, pre-register the type of paper in use as a custom paper.

In [Advanced Settings] for the custom paper you are using, adjust the leading/trailing edge margins.

Printing in full color/Printing in full color including the clear toner while the special color is not set to high quality

Reduce the value by 0.5 mm in [Adj. Erase Margin of Leadg. Edge: Prod.] or [Adj. Erase Marg. Of Trailg. Edge: Prod.].

Printing in full color including the clear toner and the special color is set to high quality/ printing in full color including the white toner

Reduce the value by 0.5 mm in [Adj. Erase Margin of Leadg. Edge: Qual.] or [Adj. Erase Marg. Of Trailg. Edge: Qual.].



- 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.

Adjusting the Image Position

Adjusting the Image Position on Side 1

Perform the solution described in "(a) Adjust the image skew" and then "(b) Adjust the image position".

(a) Adjust the image skew

- 1. Print the image in black and white.
- 2. Check the direction of the skew.
- In the [Adjustment Settings for Skilled Operators] menu, adjust the value of [0107: Perpendicularity Adjustment].

Press [+] to skew the image counterclockwise or [-] to skew it clockwise.



- It is not possible to adjust image skew separately for the side 1 and side 2.
- 4. Print the image in black and white.

Gradually increase the value and check the printed image.

- If the problem is resolved, go to the next step.
- If the problem persists even though the setting has reached its maximum value, contact your supervisor.
- 5. Execute color registration.

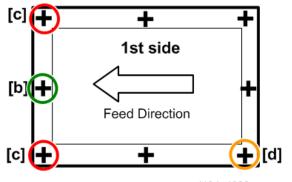
In executing color registration, the black adjustment will also be applied to cyan, magenta, yellow and special color.



- Special color mode is available for 5 station models.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for the custom paper customer is using, select [Registration to Align Front and Back Images Using Template] and then perform simplex printing for the template. Use the printed template.
- The paper skew can not be adjusted with [Perpendicularity Adjustment]. For details about adjusting paper skew, see page 946 "Skew" in Troubleshooting.

(b) Adjust the image position (Center of paper leading edge)

Move the image up/down and left/right to adjust the center position [b] of the paper leading edge.



w_d194e4822

- Adjust the image position in [Advanced Settings] for the custom paper.
 [Adj Image Position of Side 1 Across Feed]
 [Adj Image Position of Side 1 With Feed]
- If custom paper is not used, adjust the image position in the following [Adjustment Settings for Skilled Operators] menu.
 - [0101: Adjust Image Position Across Feed Direction]
 - [0102: Adjust Image Position With Feed Direction]



For this adjustment item, it is not possible to adjust [c] and [d]. Therefore we recommend
pre-registering the type of paper in use as a custom paper and then performing
adjustment.

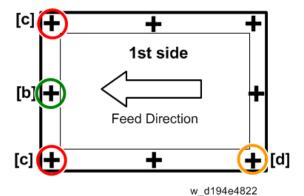
If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your supervisor.



When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for
the custom paper customer is using, select [Registration to Align Front and Back Images Using
Template] and then perform simplex printing for the template. Use the printed template.

(c) Adjust the image position (Corners of paper leading edge)

Shrink/expand the image in the vertical direction and then adjust the image width (distance between [c] - [c]).



1. In [Advanced Settings] for the custom paper customer is using, adjust the vertical scaling.

Change the value in [Adj Magnification of Side 1 With Feed].

Press [+] to increase the scaling and [-] to decrease it.

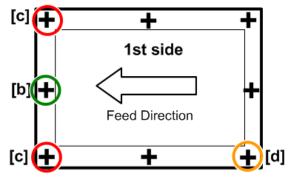
2. Print the image and check the image position.



- To adjust the following settings, pre-register the type of paper in use as a custom paper.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for
 the custom paper customer is using, select [Registration to Align Front and Back Images Using
 Template] and then perform simplex printing for the template. Use the printed template.

(d) Adjust the image position (front corner of paper trailing edge)

Shrink/expand the image in the cross direction and then adjust the image length ([d] position).



w_d194e4822

 In [Advanced Settings] for the custom paper customer is using, adjust the horizontal scaling.

Change the value in [Adj Magnification of Side 1 Across Feed].

Press [+] to increase the scaling and [-] to decrease it.

2. Print the image and check the image position.



- To adjust the following settings, pre-register the type of paper in use as a custom paper.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for
 the custom paper customer is using, select [Registration to Align Front and Back Images Using
 Template] and then perform simplex printing for the template. Use the printed template.

Adjusting the Image Position on Side 2 in Alignment with Side 1 (Registration to Align Front and Back Images Using Template)

TCRU Procedures

Adjust the image position so it is the same on either side of the paper.

First, print a template and measure the length of the specified area. Next, enter the length on the machine to adjust the position of the image.

Specify the size of each piece of paper you use. Specified settings are saved as custom paper settings, so that you can use the registered settings next time.

You need administrator privileges to adjust the image position.

Service Technician Procedures

In addition to adjustment using the template, service technicians also perform adjustment using NICE.

TCRU Procedures: Preparations

Before adjusting image positions, perform the following:

Prepare the template file.
 The templates for each paper size are included as PDF file on the CD-ROM provided with this machine.

Paper size of PDF file templates

A3 SEF, A4 SEF/LEF, A5 SEF, A5 LEF, A6 SEF, B4 SEF, B5 SEF/LEF, B6 SEF, DLT SEF, Legal SEF, Foolscap SEF, Letter SEF/LEF, Government LG SEF, 8Kai SEF, 16 Kai SEF/LEF, 12x18, 11x15, 11x14, 10x15, 10x14, 13x19.2, 13x19, 12.6x19.2, 12.6x18.5, 13x18, SRA3, SRA4 SEF/LEF, 226x310 SEF/LEF, 310x432, 318x469 SEF, A3Plus SEF

Unsupported paper types

- Automatic duplex printing not possible: index paper, tracing paper, labels, envelops, magnetic paper, clear file folders
- Paper which is fed by canceling the detection sensor for the paper trailing edge: Holepunched paper, preprinted paper, letterhead
- No restrictions for paper thickness
- 2. A stainless-steel ruler of at least 500mm (graduations of 0.5mm) and a magnifying glass are required to measure the template.
- 3. Pre-register the type of paper in use as a custom paper.
- 4. Adjust the image position on 1st side (refer to previous section).
- 5. Confirm that the following setting values are "0" in [Advanced Settings] for the custom paper. If other values are set, change them to "0".
 - [Adj Image Position of Side 2 With Feed]
 - [Adj Image Position of Side 2 Across Feed]
 - [Adj Magnification of Side 2 With Feed]
 - [Adj Magnification of Side 2 Across Feed]

TCRU Procedures: Printing and Measuring the Template

 Print a template included on the supplied CD-ROM. Select a template whose size is the same with the paper that includes an image whose position you want to adjust on the machine.

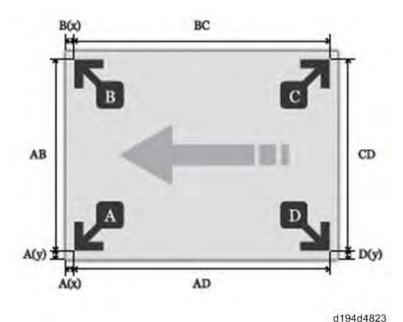


- Be sure to perform continuous duplex printing for 10 copies (10 sheets).
- 2. Measure dimensions of the 6th sheet of paper from the beginning of the template.

When you print the template, arrows are printed in the corners. Use the ruler and magnifying glass to measure the length from the corners of the paper to the peaks of the arrows and from the peaks to the peaks of the arrows. Take measurements in 0.1 mm units. Next, write the length in the box on the template.

11

Use the same method to measure 16 points on side 1 and side 2 of the paper. Write the measured dimensions in the template.



AB: The length from the peak of one arrow to the peak of another arrow A(y/x): The length from the corner of the paper to the peak of the arrow



Depending on the paper size, the paper transport interval for the first 3-4 sheets and the last 3-4 sheets may differ from the middle sheets when performing continuous duplex printing.
 This causes discrepancy in the extent of thermal contraction for paper. Therefore, we recommend measuring the middle sheets when adjusting front/back register for which continuous printing may be performed.

(When printing 10 sheets, the 6th sheet is considered as the final middle sheet.)

TCRU Procedures: Entering the Value

When you specify the lengths of the template after measuring them, the values to adjust the image position are automatically calculated and applied.

- In [Advanced Settings] for the custom paper you are using, select [Registration to Align Front and Back Images Using Template].
- 2. Enter the value you wrote on the printed template.

Select the item you want to enter and use the numeric keypad to enter the value. You can enter values from 0.1 to 999.9 mm in 0.1-mm increments.



m194e2970

- 3. Press [OK].
- 4. Press [Exit].
- 5. Press [OK].
- 6. Press [Overwrite].
- 7. Press [Yes].
- 8. Press [Exit].

TCRU Procedures: Checking the Adjustment Results

- 1. Perform continuous duplex printing for 10 copies (10 sheets) of the template.
- Measure dimensions of the 6th sheet of paper from the beginning of the printed template.
 Check for off-registration on Side 1 and Side 2.

How to Check for Off-Registration

- Thin paper: Hold up to the light and check.
- Thick paper/paper which is not see-through: Use an eyeleteer or other tool to open holes and then check.

TCRU Procedures: Further Reducing the Off-Registration for Side 1 and Side 2

Adjustment Method

- Adjust the Side 2 image position/magnification so that it is aligned with Side 1. Do not adjust Side 1.
- Perform continuous printing for 10 sheets of the template. Use the 6th sheet to perform the following adjustment.

• Perform a visual check of the 4th, 5th and 6th sheets to confirm that there is about the same amount of off-registration. If there is discrepancy in the amount, perform adjustment using a template which averages the discrepancy.

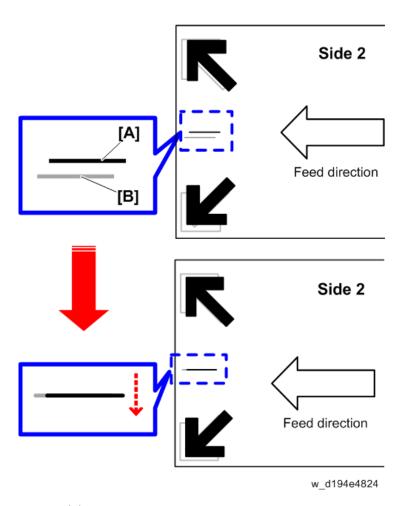
Adjustment Items

- [Adj Image Position of Side 2 With Feed]
- [Adj Image Position of Side 2 Across Feed]
- [Adj Magnification of Side 1 With Feed]
- [Adj Magnification of Side 1 Across Feed]

Adjustment Procedures

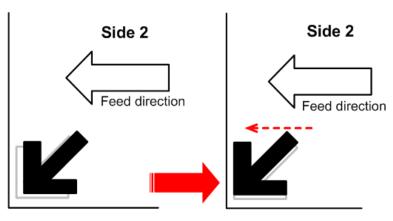
- 1. Follow the steps below to adjust the image position in the perpendicular direction and feed direction.
 - Perpendicular direction

Adjust [Adj Image Position of Side 2 With Feed] so that the Side 2 center line [A] is aligned with the Side 1 center line [B].



• Feed direction

Adjust [Adj Image Position of Side 2 Across Feed] so that the image on the side 2 leading edge is aligned with the side 1 image.



- w_d194e4825
- 2. Follow the steps below to adjust the image magnification in the perpendicular direction and feed direction.
 - Perpendicular direction

Adjust magnification for [Adj Magnification of Side1 With Feed] so that the gap between arrows on the side 2 leading edge is aligned with the gap between arrows on side 1.

*Magnification adjustment reference: A3 short direction (297mm)

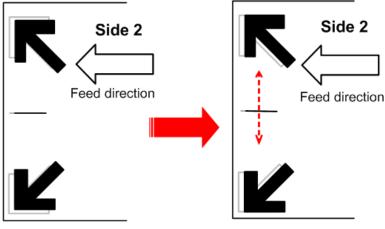
0.025%: near equal 0.1mm, 0.1%: near equal 0.4mm



RTB 112

Modified

• The adjusted value is updated uniformly in the up/down direction.



w d194e4826

Feed direction

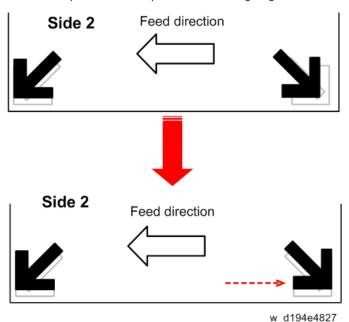
Adjust magnification for [Adj Magnification of Side 1 Across Feed] so that the image on the side 2 trailing edge is aligned with the side 1 image.

RTB 112 Modified *Magnification adjustment reference: A3 long direction (420mm)

0.025%: near equal 0.07mm, 0.1%: near equal 0.3mm



• The adjusted value is update to the trailing edge.



TCRU Procedures: Cases for which it is Necessary to Reconfirm Front/Back Register (Recommended)

- When the paper lot, procurement channel or storage condition differ.
- When detailed settings for toner deposit have been changed.
- When the temperature of the installation environment has changed greatly (example: when using results measured/adjusted in summer during winter).
- When the paper size has been changed in Custom Paper Settings, when other Custom Paper Settings have been used to register new settings.

Service Technician Procedures: Front and Back Registration Adjustment by Using NICE (Copier Model Only)

Objective: For faster and easier adjustments compared to adjustments using the [Adjustment Settings for Skilled Operators] menu.

Method

Adjustments	s Method	
Registration	Adjust the leading edge of the front side to match with the back side.	
Magnification	Adjust the image size of the back side to match with the front side.	

Requirements (and Limitations)

- Papers applied with Custom Paper Settings
- Papers of the following sizes: SRA3, A3, 13" x 19", 12" x 18", 11" x 17", 315mm x 450mm, 318mm x 469mm
- Reference side: front side
- Image skew must be corrected in advance.

Procedure

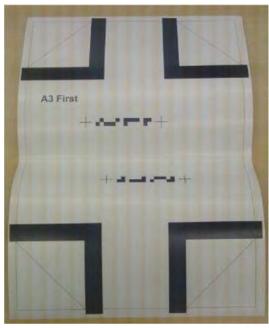
- 1. Press 'Registration adjustment' on the main menu screen.
- 2. Press 'Select' to print out the test charts.



m194e2283

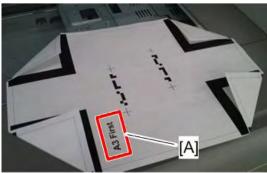
3 sheets of the following chart will be printed in duplex along with a few blank sheets.

п



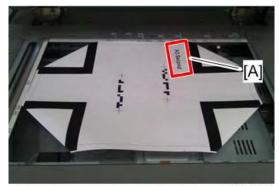
m194e2284

3. Place the chart on a table so that the side indicated 'First' [A] faces up and fold the 4 corners along the dotted lines as shown below. Do the same for the remaining 2 charts.



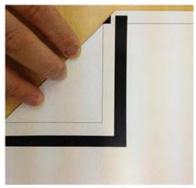
m194e2285

4. Place the chart on the contact glass so that the side indicated 'Second' [A] faces up.



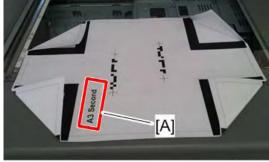
m194e2286

5. Scan the first side of all 3 charts. The software application contained in the NICE SD card reads the distance between the trim lines and folded on all 4 corners from the scanned data.



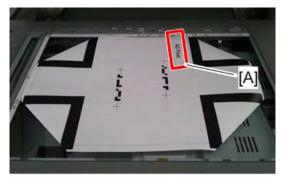
m194e2287

6. On the table, fold the 4 corners in the opposite direction so that the corners appear on the side indicated 'Second' [A] faces up. Do the same for all 3 charts.



m194e2288

7. Place the chart on the contact glass so that the side indicated 'First' [A] faces up.



m194e2289

- 8. Scan the second side of all 3 charts. With the measurements obtained in steps 6 and 7, SP values for front and back registration are corrected.
- 9. Print out the trimming chart to check the results.

Adjusting the Image Position on Side 2

When the side 1 image position has already been adjusted and it is necessary to align the side 2 image position with side 1, refer to previous section "Adjusting the Image Position on Side 2 in Alignment with Side 1".

Perform the solution described in "(a) Adjust the image skew" and then "(b) Adjust the image position".

(a) Adjust the image skew

- 1. Print the image in black and white.
- 2. Check the direction of the skew.
- 3. In the [Adjustment Settings for Skilled Operators] menu, adjust the value of [0107: Perpendicularity Adjustment].

Press [+] to skew the image counterclockwise or [-] to skew it clockwise.



- It is not possible to adjust image skew separately for the side 1 and side 2.
- 4. Print the image in black and white.

Gradually increase the value and check the printed image.

- If the problem is resolved, go to the next step.
- If the problem persists even though the setting has reached its maximum value, contact your supervisor.

11

5. Execute color registration.

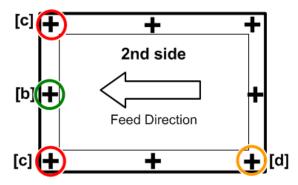
In executing color registration, the black adjustment will also be applied to cyan, magenta, yellow and special color.



- Special color mode is available for 5 station models.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for the custom paper customer is using, select [Registration to Align Front and Back Images Using Template] and then perform simplex printing for the template. Use the printed template.
- The paper skew can not be adjusted with [Perpendicularity Adjustment]. For details about adjusting paper skew, see page 946 "Skew" in Troubleshooting.

(b) Adjust the image position (Center of paper leading edge)

Move the image up/down and left/right to adjust the center position [b] of the paper leading edge.



w_d194e4822

- Adjust the image position in [Advanced Settings] for the custom paper.
 [Adj Image Position of Side 2 Across Feed]
 [Adj Image Position of Side 2 With Feed]
- If custom paper is not used, adjust the image position in the following [Adjustment Settings for Skilled Operators] menu.

[0101: Adjust Image Position Across Feed Direction] [0102: Adjust Image Position With Feed Direction]



For this adjustment item, it is not possible to adjust [c] and [d]. Therefore we recommend
pre-registering the type of paper in use as a custom paper and then performing
adjustment.

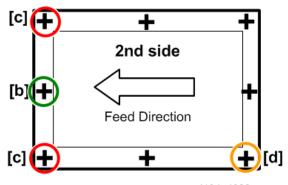
If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your supervisor.



When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for
the custom paper customer is using, select [Registration to Align Front and Back Images Using
Template] and then perform simplex printing for the template. Use the printed template.

(c) Adjust the image position (Corners of paper leading edge)

Shrink/expand the image in the vertical direction and then adjust the image width (distance between [c] - [c]).



w_d194e4822

 In [Advanced Settings] for the custom paper customer is using, adjust the vertical scaling.

Change the value in [Adj Magnification of Side 2 With Feed].

Press [+] to increase the scaling and [-] to decrease it.

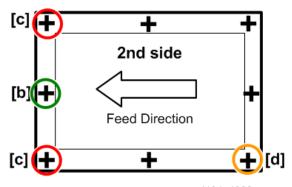
2. Print the image and check the image position.



- To adjust the following settings, pre-register the type of paper in use as a custom paper.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for
 the custom paper customer is using, select [Registration to Align Front and Back Images Using
 Template] and then perform simplex printing for the template. Use the printed template.

(d) Adjust the image position (front corner of paper trailing edge)

Shrink/expand the image in the cross direction and then adjust the image length ([d] position).



w_d194e4822

1. In [Advanced Settings] for the custom paper customer is using, adjust the horizontal scaling.

Change the value in [Adj Magnification of Side2 Across Feed].

Press [+] to increase the scaling and [-] to decrease it.

2. Print the image and check the image position.



- To adjust the following settings, pre-register the type of paper in use as a custom paper.
- When it is difficult to adjust image skew on actual print documents: in [Advanced Settings] for the custom paper customer is using, select [Registration to Align Front and Back Images Using Template] and then perform simplex printing for the template. Use the printed template.

Life Prediction of Developer

Developer's life depends on how the customer use the machine. Therefore, the service technician needs the method to predict the developer's life according to customers usage.

To support the service technician, this machine calculates the value from retention time of the toner/toner carrier in development unit (if the retention time keep longer, toner surface is shaved more), distance of development, and toner coverage of image.

"1" appears in SP3-930-51 to 55 if the calculated value exceeds the threshold.

Capturing the Engine Debug Log

Overview

It may be necessary to capture the engine debug log in order to conduct analysis for problems with the machine or peripherals. There are 3 methods for capturing the engine debug log at the machine. Features of each method are described below.

1. Capturing Log Function

Save Timing	Maximum Capture Period	Use
When an engine SC occursWhen paper feeding/output stop by jams		
When the machine doors are opened during normal operation At the timing described above, a log from	HDD (Up to 300 times)	Capturing an after-the-fact log for SC and jams
about 10 previous pages is automatically saved to the HDD.		



Saving is automatically performed when SC or jams occur. Therefore, no advance preparation is
required and an after-the-fact log can be acquired. However, the log does not provide information
on errors other than SC and jams, nor does it provide information on SC/jams which occurred
more than 10 pages previously. In such cases, it is necessary to acquire a log using the Service Slot
Board (Service Option) method.

2. Service Slot Board (Service Option)

Save Timing	Maximum Capture Period	Use
A log is continuously saved when an SD card is inserted.	Approx.10 days for an 8GB SD card (assuming about 8 hours of use per day)	Capturing a log for all errors



It is necessary to install a Service Slot Board in the machine in advance and to insert an SD card.
 When a Service Slot Board is installed, the log is continuously acquired for a long capture period.
 Therefore, the log provides information on errors other than SC and jams, as well as information on SC/jams for a longer time period.

П

3. Debug Cable

Save Timing	Maximum Capture Period	Use
A log is continuously saved when executing log capture at "Teraterm".	Depends on HDD space at PC	Capturing a log when time is needed to obtain the Service Slot Board. Generally, we recommend using the Service Slot Board to capture a log.



• Capturing a log in special cases. Through the Debug Cable only, it is possible to capture special logs (fixing temperature log, etc.) by entering commands.

Procedures for Capturing the Engine Debug Log via the Capturing Log Function

See the "Capturing the Debug Logs", Chapter 5 of Field Service Manual.

Procedures for Capturing the Engine Debug Log via the Service Slot Board

1. Turn the main power switch [A] OFF.



- 2. Insert the SD card into the Service Slot Board.
- 3. Turn the main power switch ON.
- 4. Log capture starts automatically.

Ш

- 5. Execute the job or operation for which the error occurred.
- 6. Turn the main power switch OFF.
- 7. Remove the SD card.
- 8. Send all files saved to the SD card to your supervisor.



- Information equivalent to when entering the "log" command to capture the engine log via the Debug Cable (described below) is automatically saved to the SD card.
- For the Service Slot Board installation method, refer to "(Service Option)" in Chapter 2 of Field Service Manual.

Procedures for Capturing the Engine Debug Log via the Debug Cable

Due to a change in connector shape, a conversion connector is necessary to connect the Debug Cable to the machine.

Additionally, when connecting a USB to the serial cable (cross) and PC, the RC232C-USB conversion cable is required.

- 1. Confirm that the main power switch is OFF and the power cord is disconnected.
- 2. Open the controller box [A]. (@x2).



3. Connect the Debug Cable to the relay connector (on top of IOB) for capturing the Engine Debug Log.



- There are 2 relay connectors. One cable is marked with an "M" decal to denote the master. The other cable is marked with an "S" decal to denote the slave. Connect the Debug Cable to the M connector when capturing the master log, and connect the Debug Cable to the S connector for the slave log. If you want to capture both logs, prepare 2 Debug Cables and connect them to both the M connector and S connector.
- Connect the other end of the Debug Cable to the PC via the serial cable or RC232C-USB conversion cable.
- 5. Start "Teraterm".
- 6. At [Setup] > [Terminal], open the Terminal Setup screen and specify the following settings.



w_d194z0727

Terminal Size: under (80x25)

New Line: Transmit CR+LF

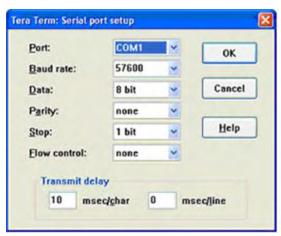
Local echo: Check box on

Kanji (receive): SJIS

Kanji (receive): SJIS

7. At [Setup] > [Serial Port], open the Serial port setup screen and specify the following settings.





w d194z0728

Port: COM x Stop: 1 bit (x: check COM number with Device Manager of PC) Parity: none Baud rate: 57600 Flow control: none Date: 8 bit Transmit delay: 10 msec/char

- 8. At [File] > [Log], enter the file name and click "Open."
- 9. Turn on the machine power switch. Enter "ver" in the "Teraterm" window and check for any connection problems (Is a value returned? Is there a mistake for either master or slave?).
- 10. Start the job. If log capture has started correctly, the number for "Bytes transferred" increases.



w d194z0729

11. When the error you want to analyze occurs, immediately enter "log" at the "Teraterm" window to capture the detailed log. This procedure downloads the detailed log which is temporarily saved at SRAM.



• SRAM can only save a small amount of the detailed log. Therefore, if the "log" command is not entered immediately after the error occurs and another operation (opening/closing the door or running the job again) is performed, there is the possibility that the detailed log from the time of error occurrence will be overwritten.

- 12. Click "Close" to close "Teraterm".
- 13. Send the saved log file to your supervisor.

Capturing the TDCU Log

It may be necessary to capture the TDCU log in the case of image transfer motor errors for around the drum, ITB unit, PTR unit and ITB/ PTR contact mechanism. Use the Debug Cable to capture the log.

Save Timing	Maximum Capture Period	Use
A log is continuously saved when executing log capture at "Teraterm".	Depends on HDD space at PC	 Capturing log at the time of SC related to the image transfer motor. Capturing log at the time of jams related to the sub scan registration correction

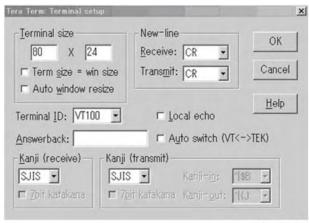
Procedures for Capturing TDCU Log

- 1. Confirm that the main power switch is OFF and the power cord is disconnected.
- 2. Open the controller box [A]. (\$\mathbb{O}^c x2).



- 3. Connect the Debug Cable to the CN383 on the TDCU.
- 4. Connect the other end of the Debug Cable to the PC via the serial cable or RC232C-USB conversion cable.

- 5. Start "Teraterm".
- 6. At [Setup] > [Terminal], open the Terminal Setup screen and specify the following settings.



w_d194z0730

7. At [Setup] > [Serial Port], open the Serial port setup screen and specify the following settings.

Port:	COM1 -	ОК
Baud rate:	115200 -	
<u>D</u> ata:	8 bit	Cancel
Parity:	none 💌	
Stop:	1 bit 💌	<u>H</u> elp
	none 💌	

w_d194z0731

8. After specifying the above settings, capture the log using the same procedures as for the engine log.

However, it is not necessary to enter the "log" command for the TDCU log.

П

Capturing Other Logs

The Capturing Log Function can be used to capture the Controller debug log (GW debug log) and the Operation panel debug log. For details, See the "Capturing the Debug Logs", Chapter 5 of Field Service Manual.

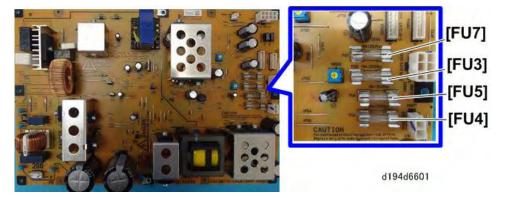
12. Fuses

Fuses

PSU2



- PSU2 to PSU5 use the same type of fuse.
- PSU1 fuses cannot be replaced.



RTB 112 Modified

Fuse	Power To	Rating	If Fuse Blows at Power On
FU3	TDCU	250Vac 10A	SC202-01
FU4	IOB	250Vac 10A	SC685-02
FU5	None	250Vac 10A	-
FU7	None	250Vac 10A	-

PSU3

Fuse	Power To	Rating	If Fuse Blows at Power On
FU3	PFB	250Vac 10A	SC685-03
FU4	None	250Vac 10A	-
FU5	PFB	250Vac 10A	SC685-03

ХХ

Fuse	Power To	Rating	If Fuse Blows at Power On
FU7	None	250Vac 10A	-

PSU4

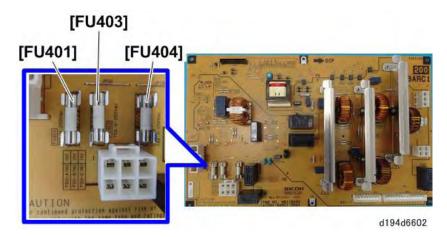
Fuse	Power To	Rating	If Fuse Blows at Power On
FU3	PFB	250Vac 10A	SC685-04
FU4	None	250Vac 10A	-
FU5	PFB	250Vac 10A	SC685-04
FU7	None	250Vac 10A	-

PSU5

Fuse	Power To	Rating	If Fuse Blows at Power On
FU3	IOB	250Vac 10A	SC583-01
FU4	None	250Vac 10A	-
FU5	None	250Vac 10A	-
FU7	None	250Vac 10A	-

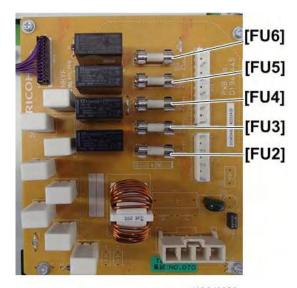
ХХ

AC Drive



Fuse	Power To	Rating	If Fuse Blows at Power On
FU401	None	250Vac 5A	-
FU403	None	250Vac 5A	-
FU404	None	250Vac 8A	-

NRYF



d194d6603

ХХ

Fuse	Power To	Rating	If Fuse Blows at Power On
FU2	PSU1	250Vac 5A	Machine does not start.
FU3	PSU2	250Vac 5A	After waiting several minutes, SC670-00 occurs.
FU4	PSU3	250Vac 5A	After waiting several minutes, SC670-00 occurs.
FU5	PSU4	250Vac 5A	"Cover Open"displayed on control panel.
FU6	PSU5	250Vac 5A	SC583-01

MEMO

MEMO

