imageRUNNER ADVANCE 4000 Series

Canon U.S.A., Inc.

Technical Workbook

Symptoms & Solutions

For the imageRUNNER ADVANCE 4051 Series

A description of the ***Top 10 Service Issues*** *experienced by iR ADV 4051 service techs with an explanation of the solutions that resolve each scenario!*

< Analyzed Model Series / Analyzed Term >

iR-ADV 4051Series / From Aug 1 to Aug 31 in 2013

< Analyzed Result of Field Visit >

We analyzed the Field visit data one by one, and then the following chart shows the worst 10 symptom.

Rank	Symptom
1	Feeder jamming
2	Foggy Image / Ghost Image / Solid Image
3	Line image (by Stream Read Glass)
4	Finisher jamming
5	Fixing Assembly Jam / Delivery Jam
6	Pick-up Jamming
7	E532
8	No Power / Boot up problem / Not Display LCD
9	Duplex jamming
10	Finisher malfunction

Contents

<Feeder Jamming> 5

0045 Jam Code due to software failure of RCON Ver.6.00 or before at the time of stream-reading originals (DADF-AG1) 5

0094 Jam in the DADF due to connector J509 connections on READER CONTROLLER was loose 5

<Foggy Image / Ghost Image / Solid Image> 6

Soiled image around an area of 4 cm from the trailing edge due to software failure of DCON Ver.15.00 or earlier 6

Paper back side soiling occurs at 50mm pitch 7

Paper back side soiling occurs at 94mm pitch 7

Foggy image occurred: Solved by changing DE-OFST setting in service mode 8

Smeared image occurred at center due to toner contaminating Static Eliminator of Pre-registration Guide 8

Image soiling occurs on leading/trailing edges due to contamination of toner to Transfer Front Guide/Fixing Inlet Guide 10

Smudge/Smear image, Lead To Trail caused by buildup of toner on rowel (spur) at drum area 11

< Line image (by Stream Read Glass)> 12

None Articles 12

< Finisher jam > 12

1001 Jam Code due to a scratch on the entrance intermediate guide (Inner Finisher-D1) 12

1101 jam code and paper misalignment caused by fallen retaining guide (Inner Finisher-D1) 17

1101/1104 jam codes due to malfunction of the swing guide assembly (Booklet/Staple Finisher-G1) 21

1C40 jam code: Inner Finisher D-1 tray goes all the way down 24

< Fixing Assembly Jam / Delivery Jam > 26

0107 jam code due to paper curl 26

Fixing jam of solid image with small leading edge margin when using paper left at high humidity environment 27

Thin paper jam when using paper with less than 64g/m2 27

0107 jam code/abnormal noise (improperly meshed teeth sound) occurs from around Fixing Unit: Solved by replacing 106T gear and reseating Fixing Motor 28

0108 Jam code due to No.1 delivery sensor flag being out of position 28

0111/0211/0212/1001 Jam Code /Finisher stacking failure occurs due to the static charge eliminator of the Buffer Pass Unit-H1 coming off. 31

<Pick-up Jamming> 38

0101/0102 Jam Codes 38

0103/0104 Jam Codes (Cassette Feeding Unit-AF1) 43

<E532> 48

E532-8001/E532-8002 due to not attaching the clinch guide (Booklet/Staple Finisher-G1) 48

<No Power / Boot up problem / Not Display LCD> 49

No display, no cycle, has green LED: solved by replacing POWER SUPPLY ASSEMBLY (UN1) 49

<Duplex jamming > 49

0107 jam code occurs on 2nd side of 2-sided print: Solved by changing setting of TMP-TBLC in service

mode 49
< Finisher Malfunction > 49
None Articles 49
＜Appendix> 50
<User warning message> .....**Error! Bookmark not defined.**
"Suspended" displayed due to packing material remaining in the drum unit 50

<Feeder Jamming>

Title

0045 Jam Code due to software failure of RCON Ver.6.00 or before at the time of stream-reading originals (DADF-AG1)

Symptom

0045 Jam may occur at the time of stream-reading originals from the feeder.
0045 jam: Registration sensor/Read sensor delay jam

Cause

When an original is fed, it will be delivered between the registration roller and the read roller. However, originals do not reach the area between the registration roller and the read roller due to software control failure, resulting in the symptom.

Service work

Upgrade the software (RCON) to Ver.6.01 or later.
[Caution]
When upgrading the software, be careful not to make a wrong combination with other software.

Title

0094 Jam in the DADF due to connector J509 connections on READER CONTROLLER was loose

Description

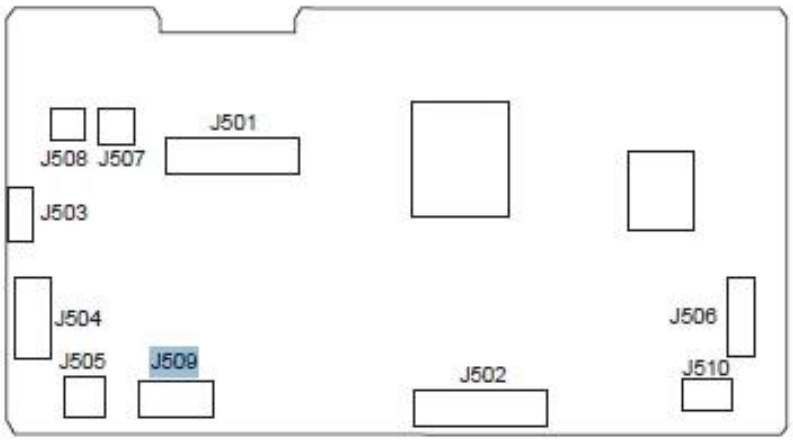
The imageRUNNER ADVANCE displays jam code 0094 which refers to a residual jam at the registration, read or delivery reversal sensors. SR1/SR2/SR3
The sensors were replaced, and the DF controller was replaced with no resolution.
All sensors and motors were checked with a voltage meter off the DF controller. All readings were in the correct value range.

Field Remedy

Reseated all connections on the READER CONTROLLER and found J509 loose. Jam code 0094 was resolved by reseating J509.
J509 is the communication harness to the DADF.

Reader Relay PCB

The function configuration of reader controller PCB is described below.



F-2-5

Jack No	Description
J501	Communication with CCD
J502	Communication with main controller PCB
J503	Connection to Scanner motor
J504	Receives power from the machine (printer unit)
J505	Power supply to DADF
J506	Connection to copyboard cover open/close sensor and CCD HP sensor
J507	Connection to original size sensor 2
J508	Connection to original size sensor 1
J509	Communication with DADF
J510	Not used

T-2-3

<Foggy Image / Ghost Image / Solid Image>

Title

Soiled image around an area of 4 cm from the trailing edge due to software failure of DCON Ver.15.00 or earlier

Symptom

Registration roller marks may appear around an area of 4cm from the trailing edge of paper when the paper in free size setting is fed from Manual feed pickup tray.

Cause

An error occurred at a time of completing the fixing arch control when paper in free size setting was fed from manual feed pickup tray.

Service work

Upgrade the software (DCON) to Ver.15.01 or later.

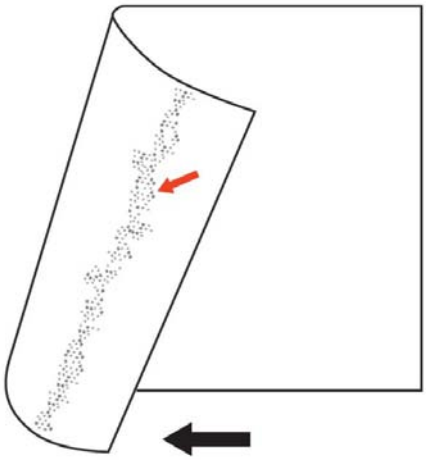
[Caution] When upgrading the software, be careful not to make a wrong combination with other software.

Title

Paper back side soiling occurs at 50mm pitch

Description

It is possible for the paper back side soiling to occur at 50mm (Transfer Roller) pitch.



Cause

The toner remaining on the drum which stopped when the jam occurred contaminates the Transfer Roller during the recovery operation after it. This is likely to occur when the jam occurs and when the Transfer Roller is close to the end of its life.

Field Remedy

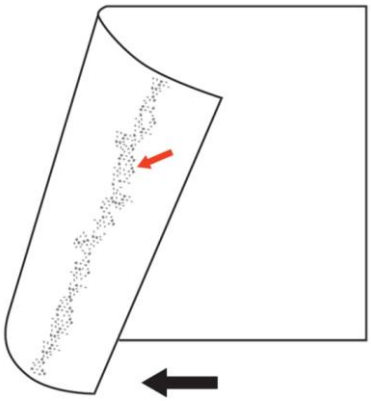
Implement from service mode > COPIER > Function > CLEANING > TR-CLN (Transfer Roller Cleaning). Approximately 35 seconds of time is required

Title

Paper back side soiling occurs at 94mm pitch

Description

It is possible for the paper back side soiling to occur at 94mm (Pressure Roller) pitch.



Cause

The toner peeling off from the paper contaminates the Pressure Roller and it contaminates the back side of paper.

This is likely to occur when under conditions where the fixing worsens such as the low temperature environment, when many halftone images pass and when the Fixing Assembly is close to the end of its life.

Field Remedy

Implement from service mode > COPIER > Function > CLEANING > FIX-CLN (Fixing Cleaning). Approximately 60 seconds of time is required.

Title

Foggy image occurred: Solved by changing DE-OFST setting in service mode

Description

Foggy images occur.

The problem was not solved by replacing the Drum Unit.

Field Remedy

In this case, the problem was solved by changing the setting of DE-OFST (Entering the offset value for the developing DC bias) to "6".

1) Select service mode > COPIER > ADJUST > DEVELOP > DE-OFST, enter the setting value and then press OK key.

This is used when the abnormal image (fogging and light density) occurs. When the value is increased, the image becomes lighter. The range of settings is from "-128" to "127" and the default value is "0".

2) Turn OFF and then ON the main power switch and check the image.

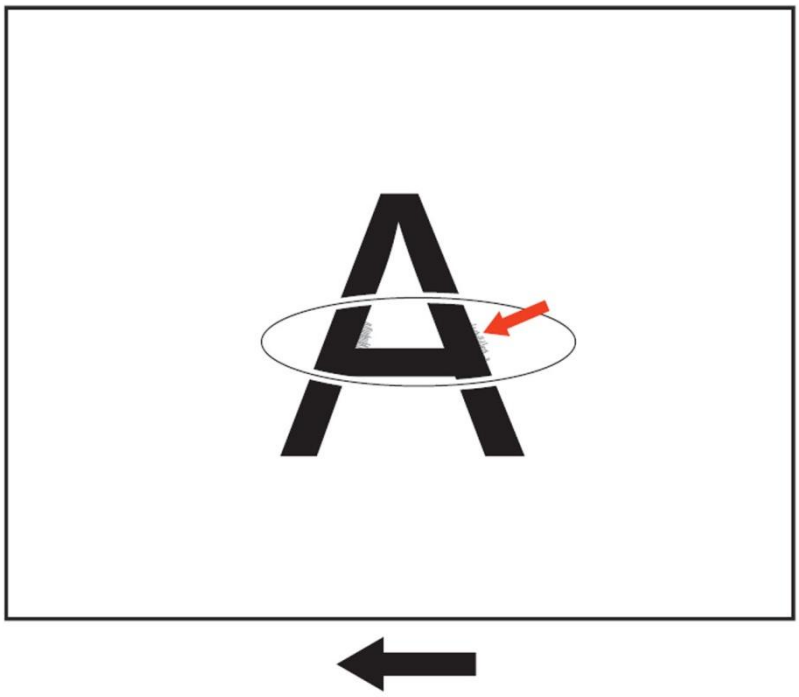
3) After changing the setting value, write the changed value in the service label.

Title

Smeared image occurred at center due to toner contaminating Static Eliminator of Pre-registration Guide

Description

It is possible for the smeared image to occur on the center of paper.



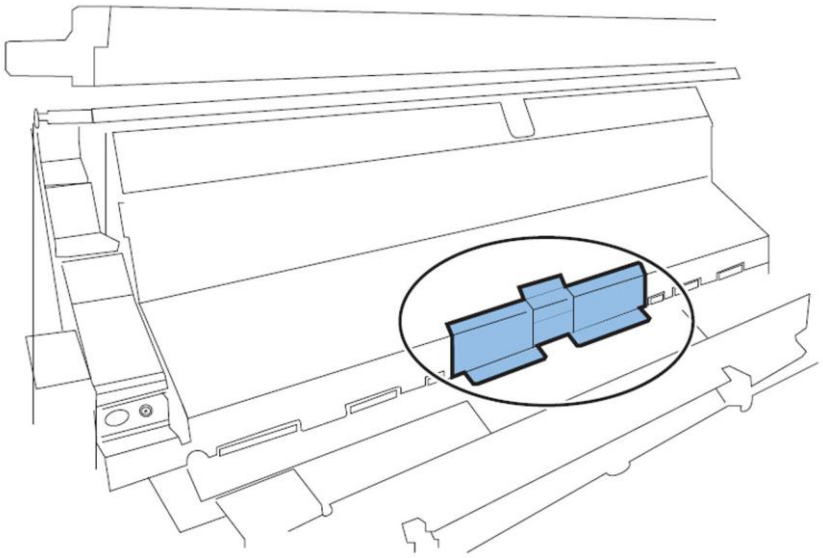
Cause

The toner contaminated the Static Eliminator of the Pre-registration Guide.

Field Remedy

1) Remove the Right Cover.

2) Lightly tap a contaminated part of the Static Eliminator to remove the toner.

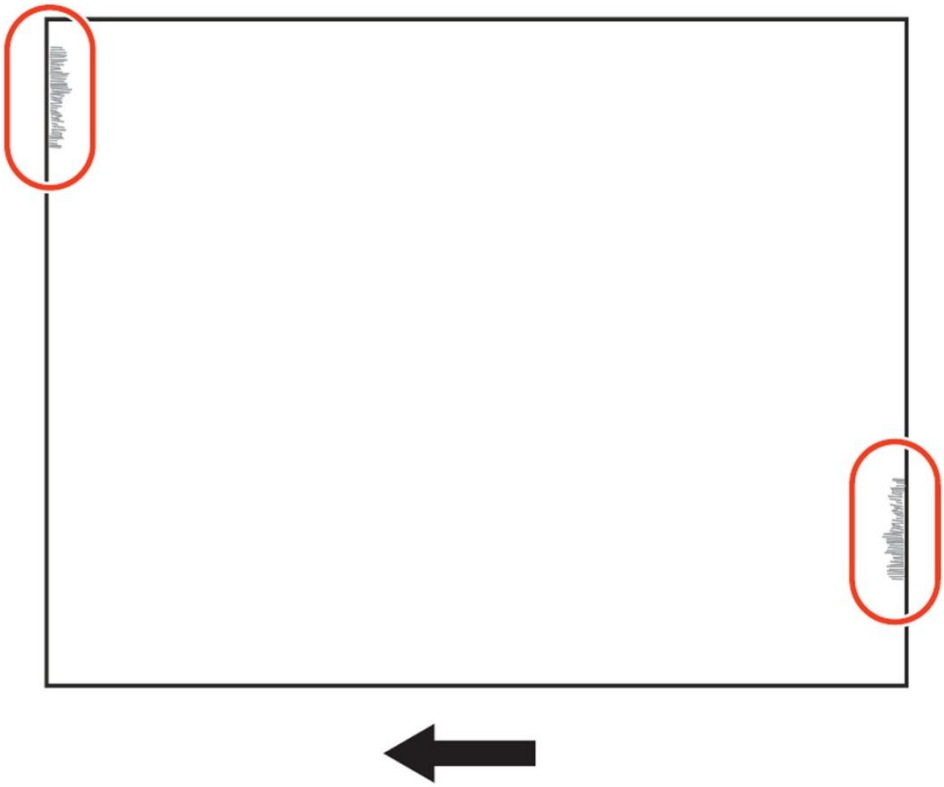


Title

Image soiling occurs on leading/trailing edges due to contamination of toner to Transfer Front Guide/Fixing Inlet Guide

Description

When printing the halftone image with the high image ratio and solid black image, it is possible for the image soiling to occur on the leading or trailing edges of the paper.



Cause

The toner contaminating the Transfer Front Guide or Fixing Inlet Guide is touched by the leading or trailing edge of paper.

Field Remedy

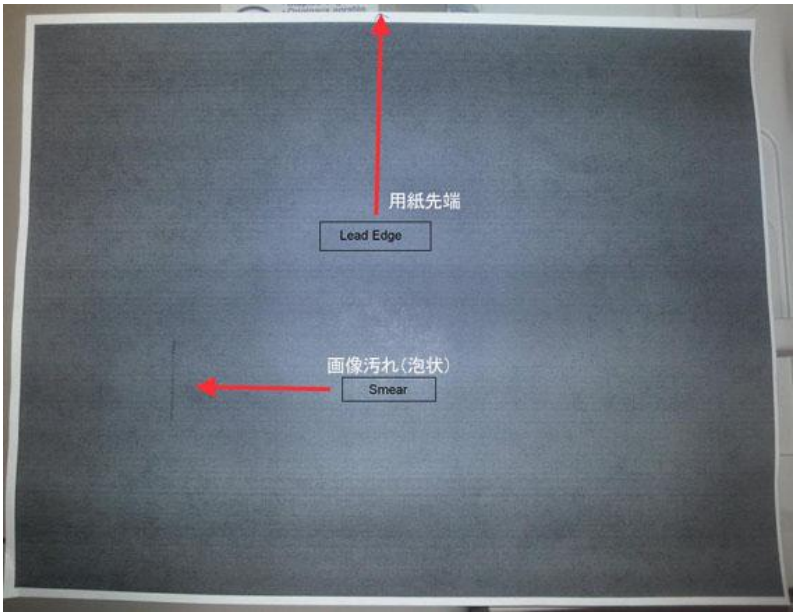
Check the Transfer Front Guide and Fixing Inlet Guide and when they are contaminated by the toner, clean with lint-free paper.

Title

Smudge/Smear image, Lead To Trail caused by buildup of toner on rowel (spur) at drum area

Description

There is a Smudge / Smear in the paper feed direction 60 millimeters from the non operator side that looks like a nail scratch. A sample is displayed below:



Field Remedy

It was found that there was a buildup of toner on the rowel (spur) at the drum area as shown below. The toner was cleaned from the rowel, to resolve this issue.

< Line image (by Stream Read Glass)>

Title

None Articles

< Finisher jam >

1001 Jam Code due to a scratch on the entrance intermediate guide (Inner Finisher-D1)

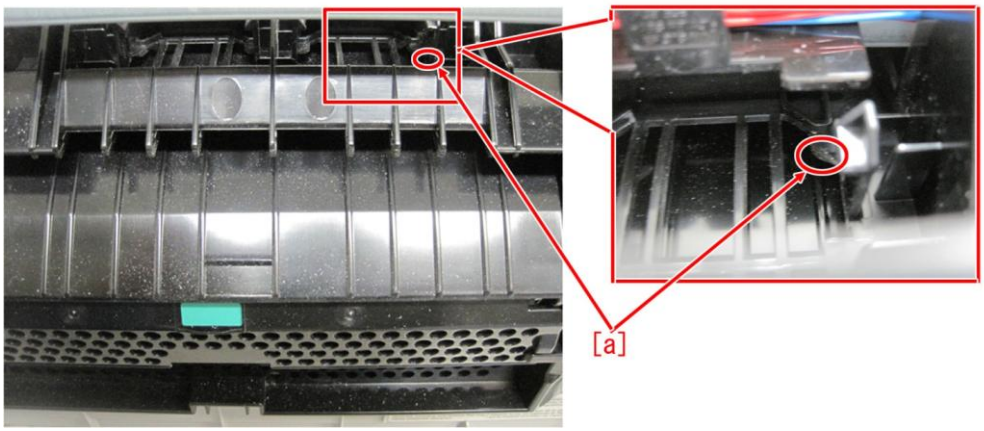
Description

1001 Jam occurred with the Inner Finisher - A1 on the machines having the serial numbers below.
- 1001: Entrance sensor delay jam

Product	Serial Numbers Affected
Inner Finisher-D1	HZC00595 - HZC14199
Inner Finisher-D1with 2/3 Hole Puncher-A1	HZR00146 - HZR02312

Cause

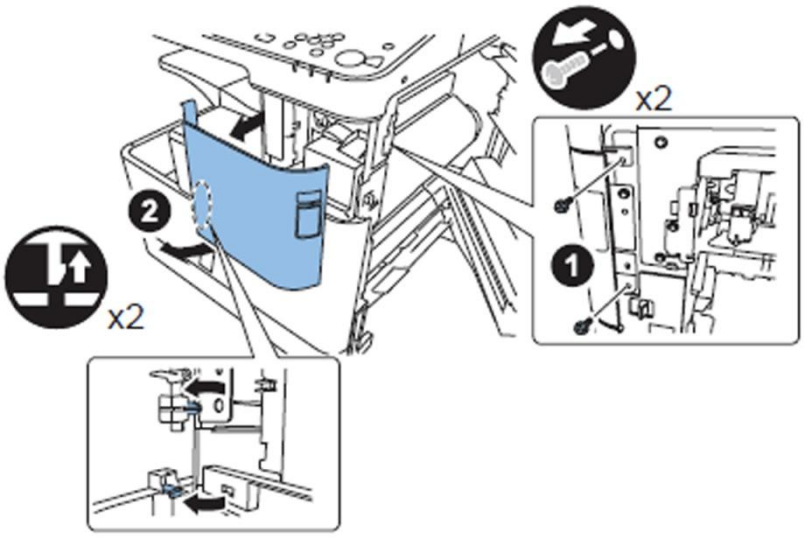
A scratch on the area [a] of the entrance intermediate guide caused paper to get caught, resulting in the symptom.



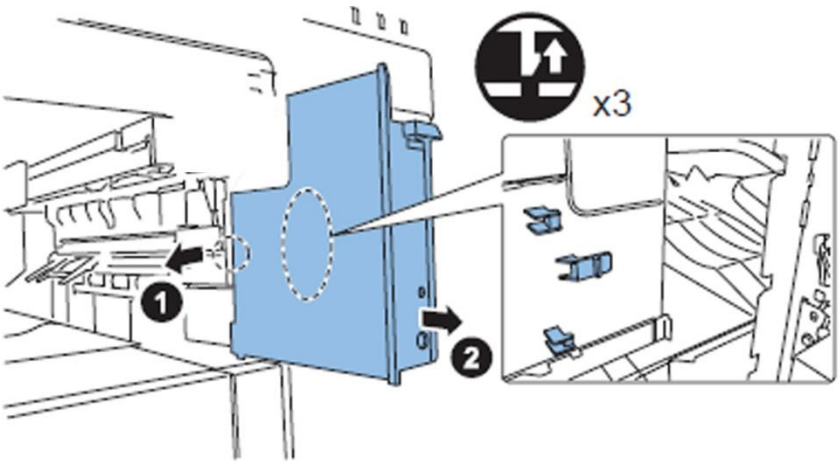
Field Remedy

If the symptom occurs on the machine having the serial number, prepare the sheet (4Y8-0014-000) for the entrance intermediate guide, and follow the steps below to attach it.

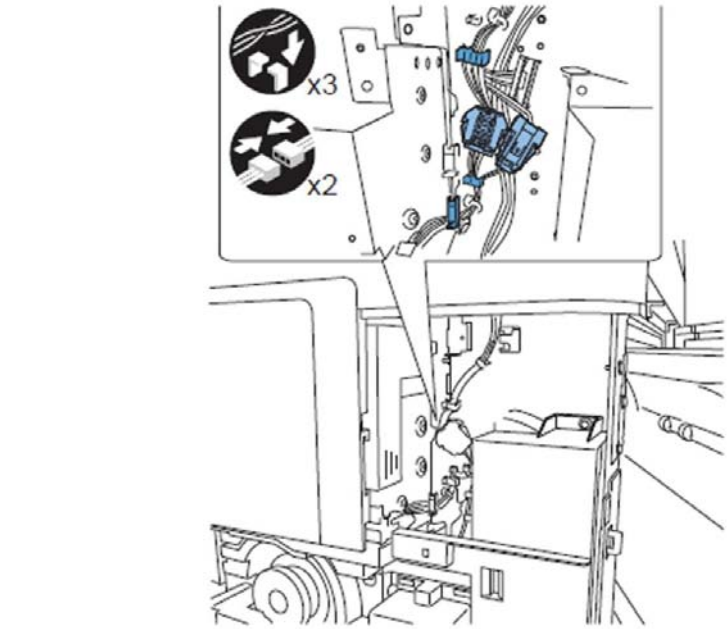
1) Open the front cover of the finisher to remove the staple cartridge.
2) Remove 2 screws and 2 hooks, and then remove the support cover.



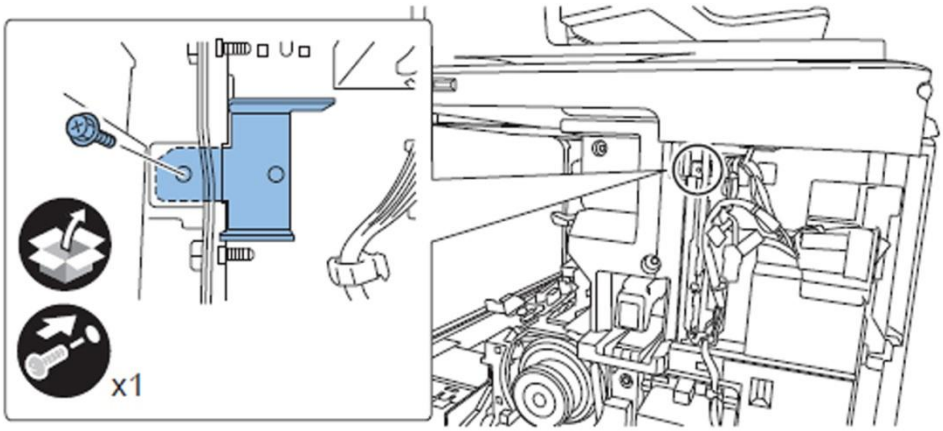
3) Remove 3 hooks, and then remove the support cover (Left).



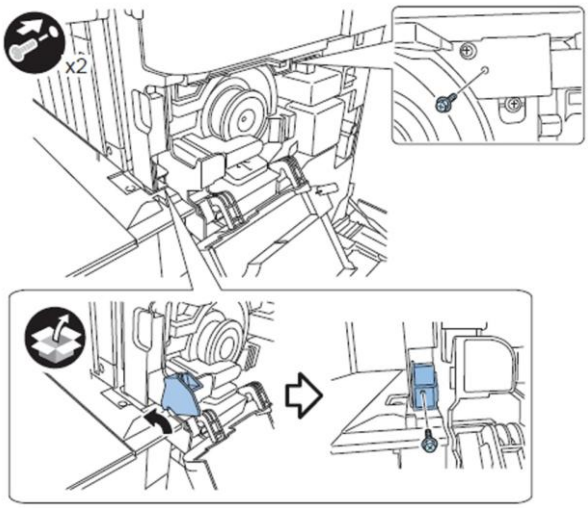
4) Remove 2 connectors of the harness, 2 wire saddles and 1 edge saddle.



5) Remove 1 screw to detach the fixing plate.



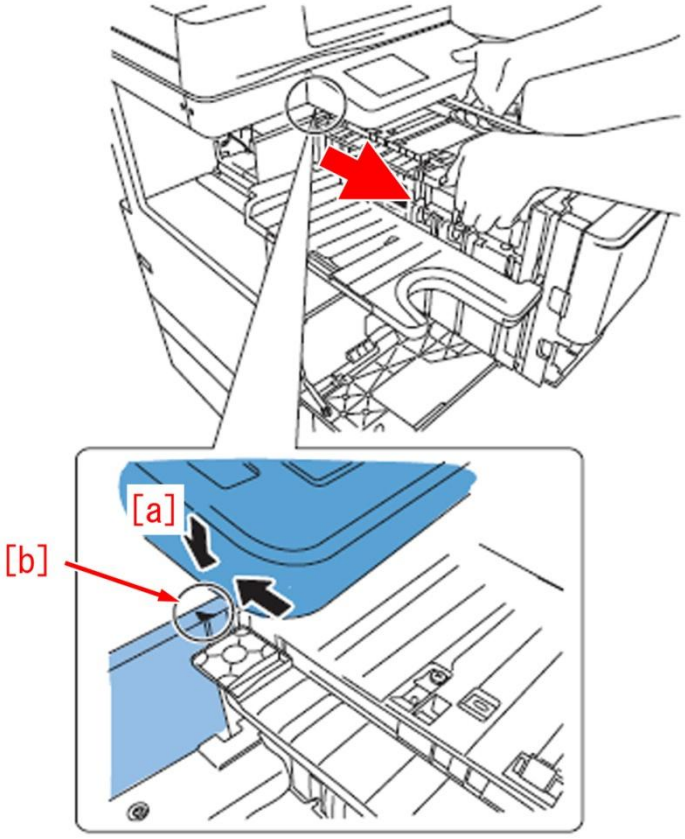
6) Remove 2 screws used to secure the finisher in place and the fixing holder.



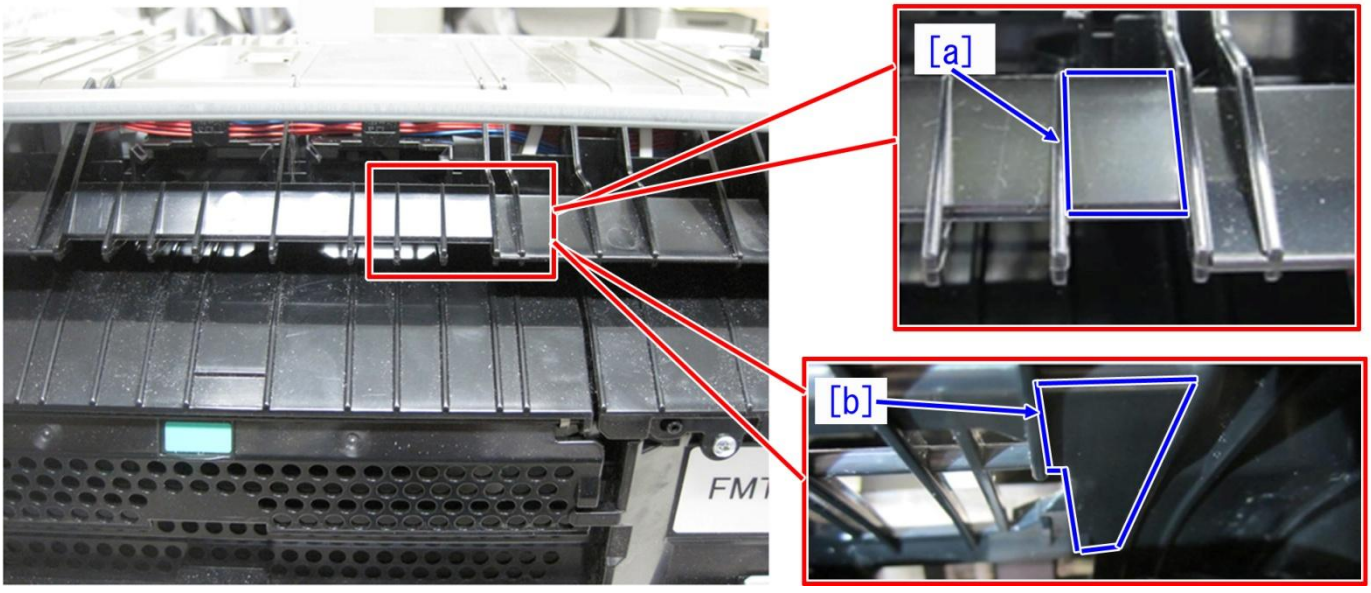
7) Hold the finisher shown in the figure and pull out the finisher from the main body.

[Caution]

When installing the finisher, slowly push in the finisher to the host machine till it stops so that the triangle mark [b] of the finisher aligns with the left edge [a] of the operation panel.



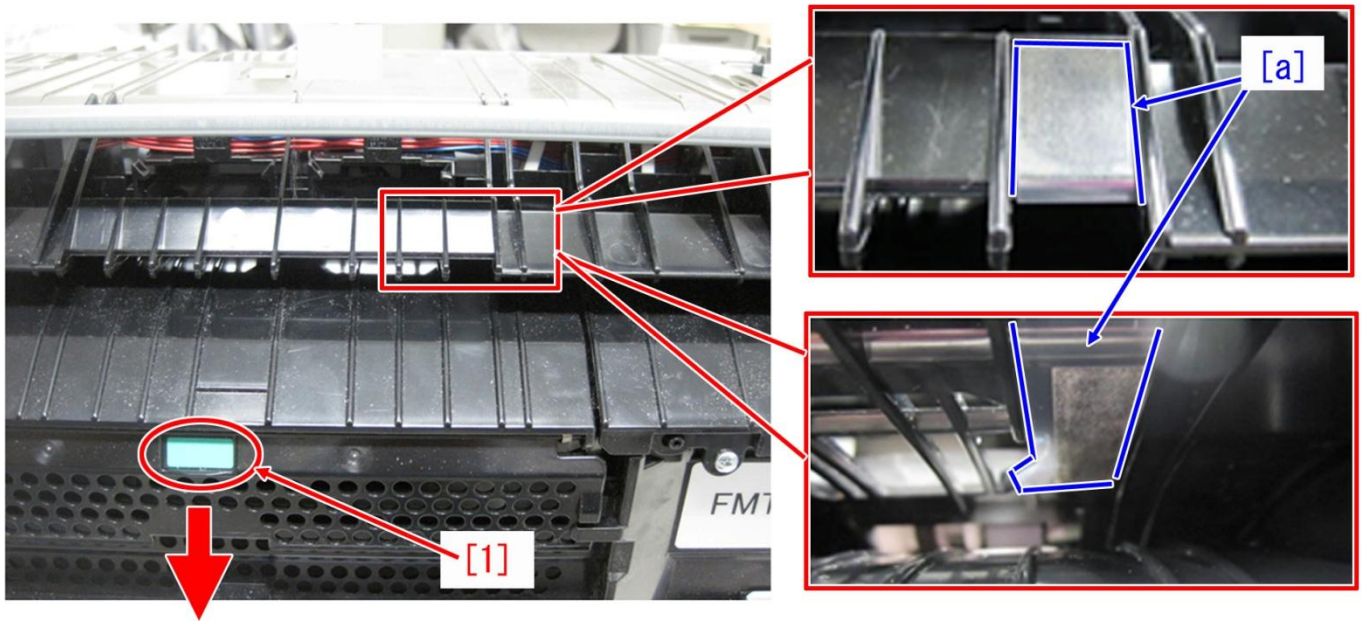
8) Clean with alcohol the sides (the front [a] and back [b]) to which the sheet for the entrance intermediate guide is attached. The photo of iR-ADV C5255 series (Inner Finisher-E1) is used.



9) Move the lower guide [1] down. Fit the folding line of the sheet in the edge of the entrance intermediate guide and attach the sheet. Be sure that the sheet does not ride over the rib.

[Caution]

Ensure that the alcohol has evaporated before doing the work.



10) Reassemble the parts in reverse order from Step 7).

[Additional Part]

4Y8-0014 SHEET

Title

1101 jam code and paper misalignment caused by fallen retaining guide (Inner Finisher-D1)

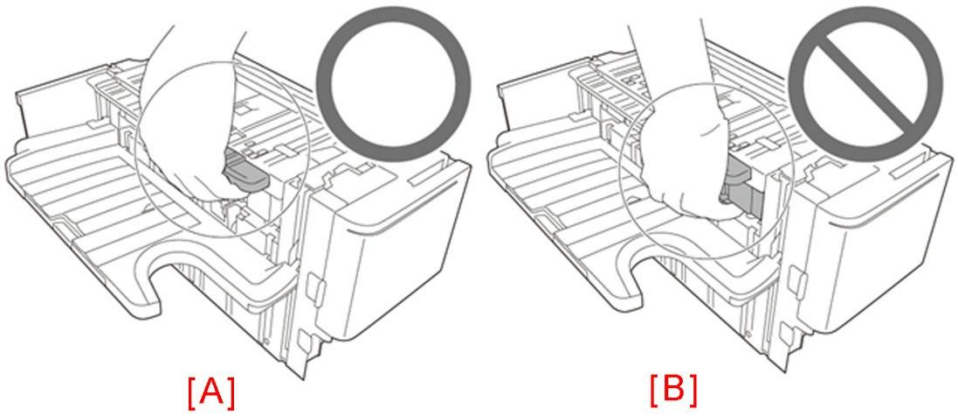
Symptom

1101 jam or delivery alignment failure may occur on the Inner Finisher-D1.

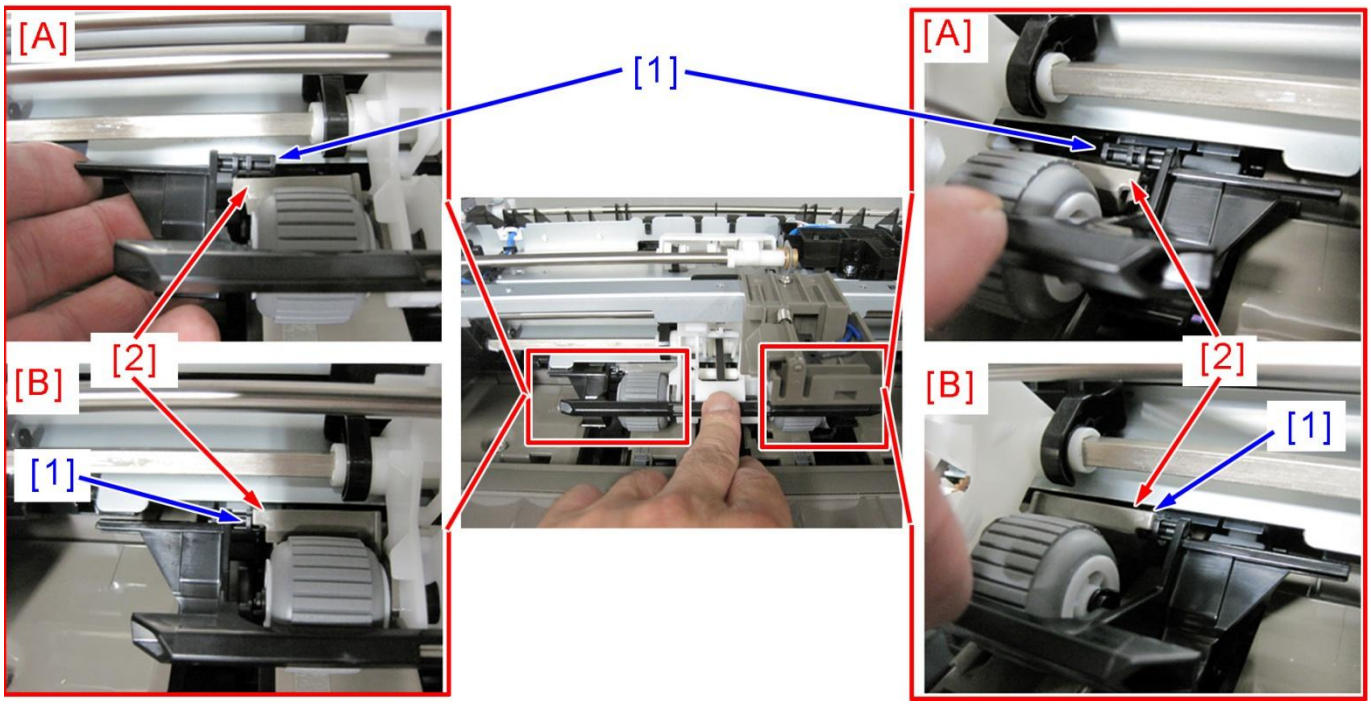
- 1101 jam: Entrance sensor stationary jam

Cause

At installation when the finisher is taken out from the package, it should be held as Photo [A] shows, but the retaining guide may be held incorrectly as Photo [B] shows.



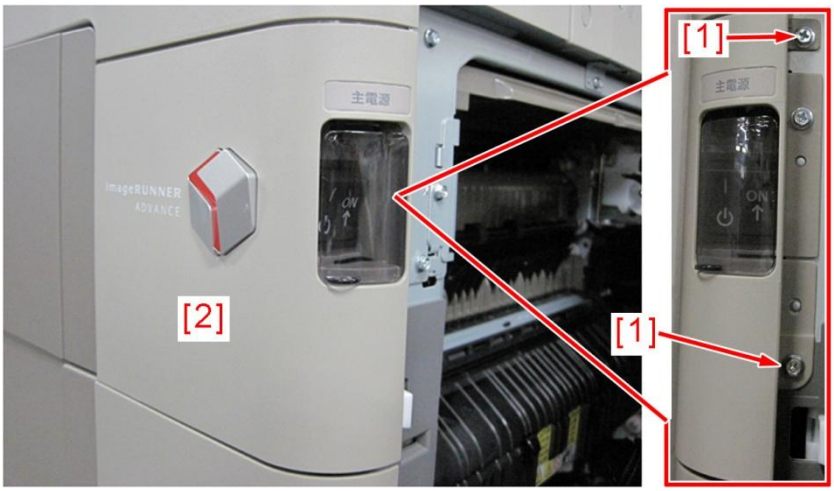
This incorrect handling may cause the retaining guide [1] to be detached or almost detached from the retaining guide holder [2], possibly resulting in the above symptom. Photo [A] shows the retaining guide [1] is detached from the retaining guide holder [2] whereas Photo [B] shows correctly attached.



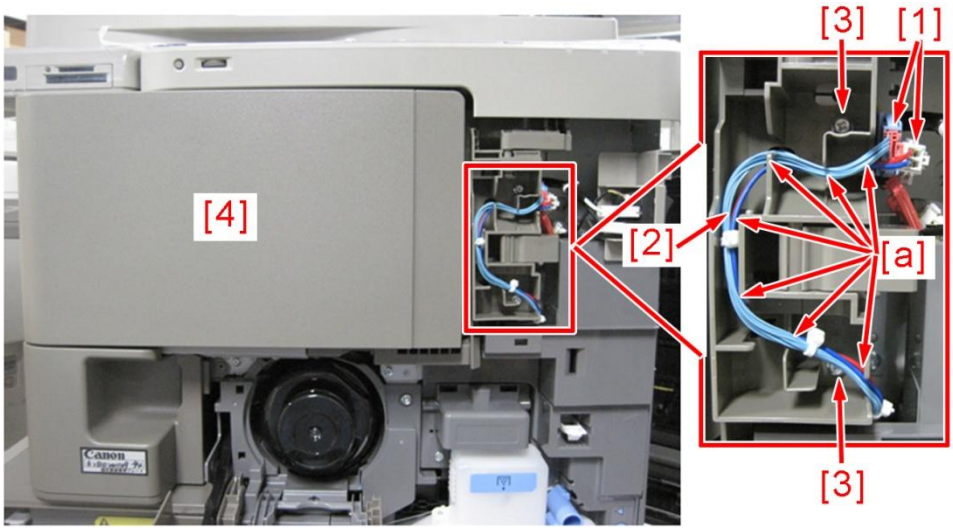
Service work

Follow the procedure below to reinstall the retaining guide to the retaining guide holder. This procedure is for cases in which the optional Inner Puncher-A1 has been installed.

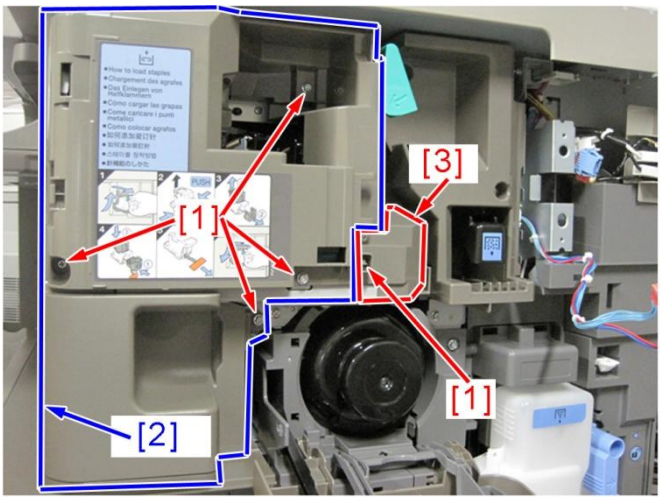
1) Remove 2 screws [1] to remove the support cover [2].



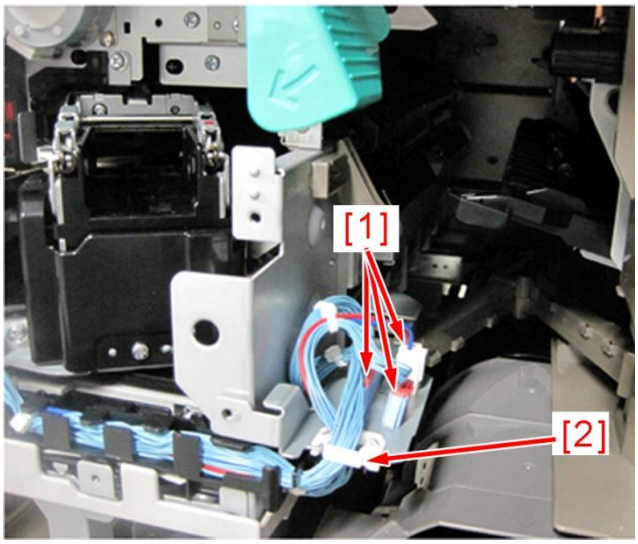
2) Remove 2 connectors [1], free the punch unit cable [2] from the guide [a], remove 2 screws [3], and detach the finisher front cover [4].



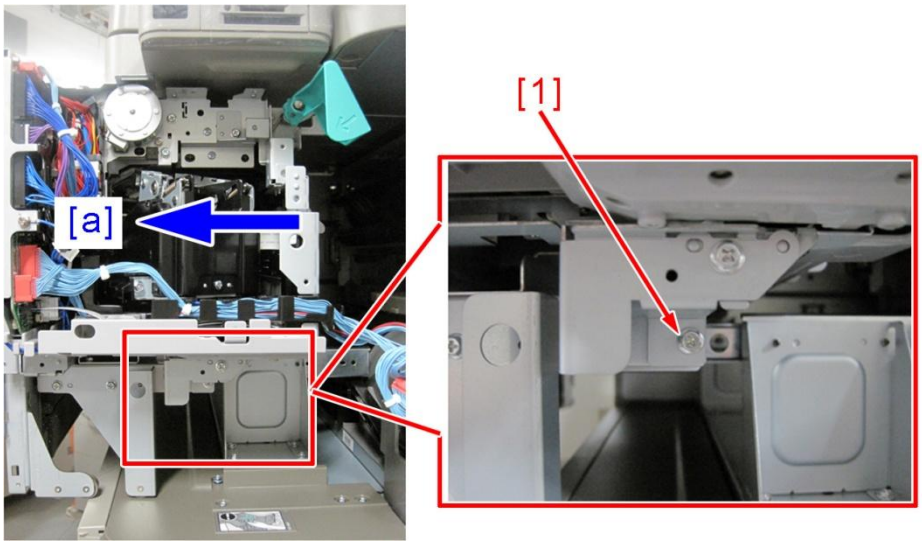
3) Remove 5 screws [1] to remove the finisher inner cover [2] and the cable cover [3].



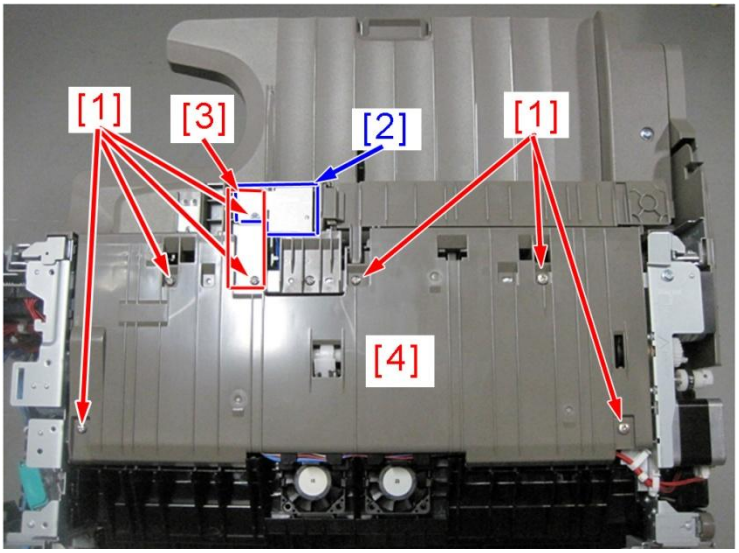
4) Remove 3 connectors [1], and then remove the punch relay cable from the wire saddle [2].



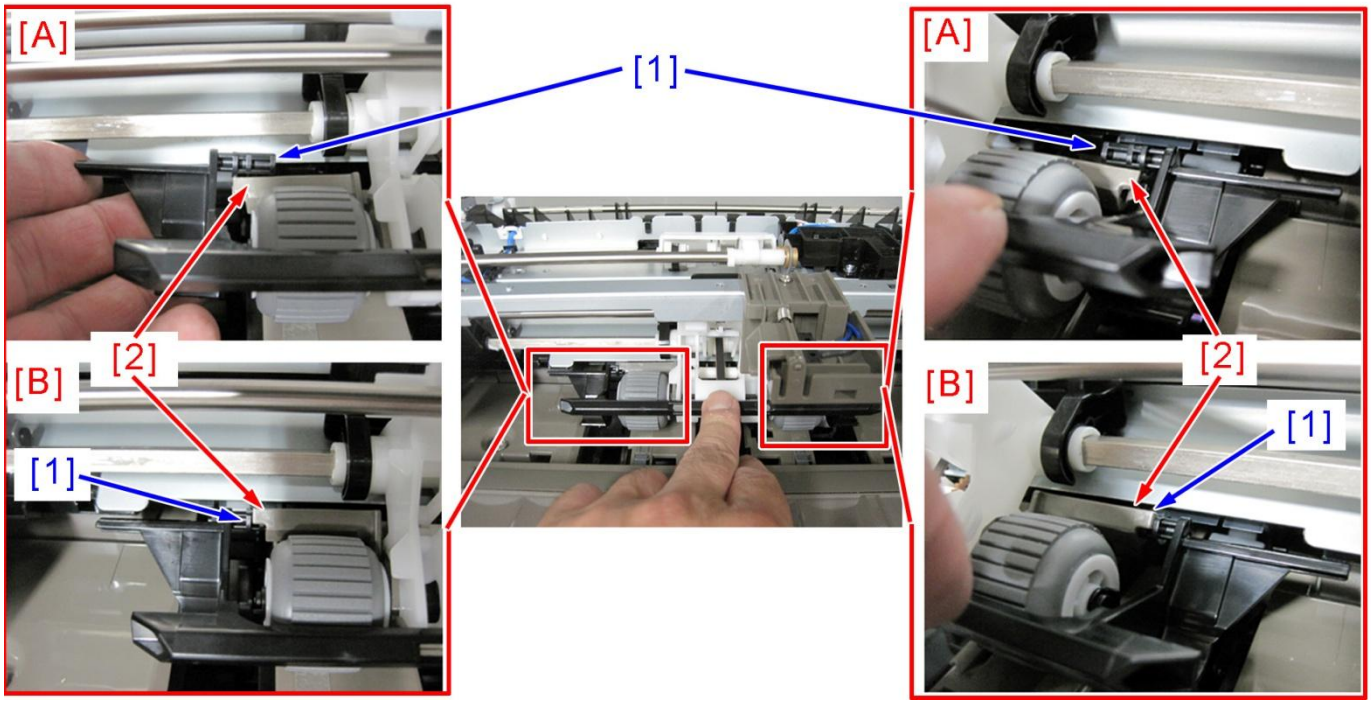
5) Remove 1 fixing screw [1]. After moving the finisher in [a] direction, detach the finisher by pulling it out.



6) Remove 7 screws [1] and then remove the metal plates [2] and [3], and the upper guide [4].



7) When the retaining guide [1] is detached from the retaining guide holder [2] as Photo [A] shows, insert the retaining guide [1] to the retaining guide holder [2] as Photo [B] shows.



8) Reassemble the parts in reverse order from Step 6).
9) Make test copies to ensure that neither paper misalignment nor jam occurs.

Title

1101/1104 jam codes due to malfunction of the swing guide assembly (Booklet/Staple Finisher-G1)

Symptom

1101 or 1104 jam occurred in Field cases on Booklet/Staple Finisher-G1 with the serial numbers before the countermeasure cut-in serial number in factory shown below.

- 1101 jam: Inlet sensor (PI103) stationary jam
- 1104 jam: Delivery sensor (PI104) stationary jam

Countermeasure cut-in serial numbers in factory

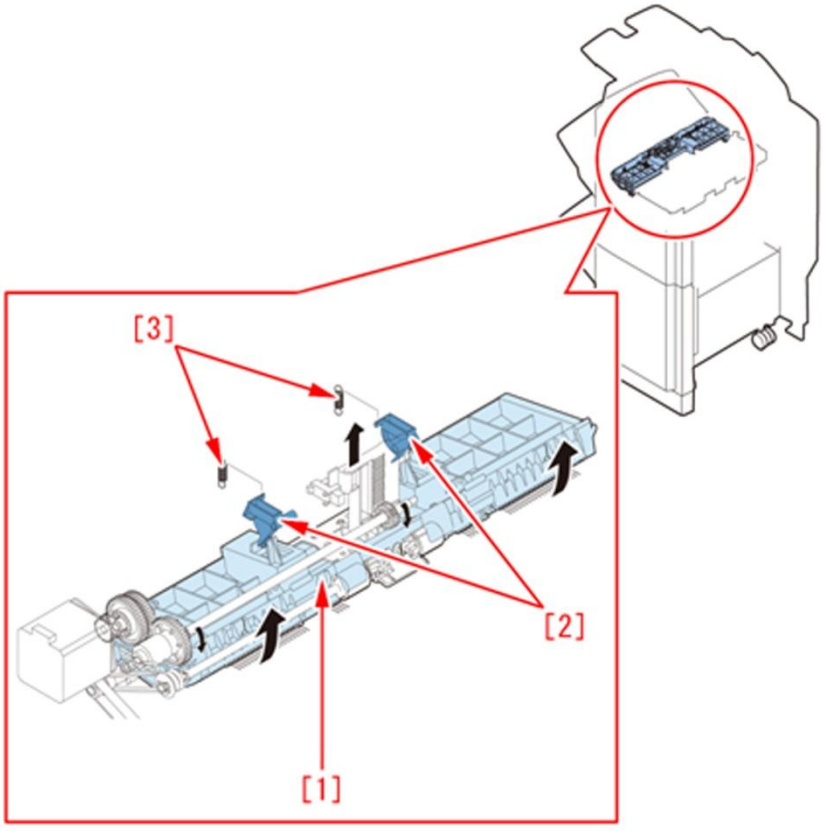
- Booklet Finisher-G1: HZB01185
- Staple Finisher-G1: HZA07076

Cause

When the swing guide assembly is opened during printing, the upper portion of the swing guide assembly [1] rarely but may come in contact with the switch lever (F)/(R) [2], so that the switch lever may be moved upward.

At this time, if the force of the tension spring [3] pulling the switch lever is too strong, the switch lever will be pulled back downward by the tension spring, this will make the swing guide assembly closed and generate the above mentioned symptom.

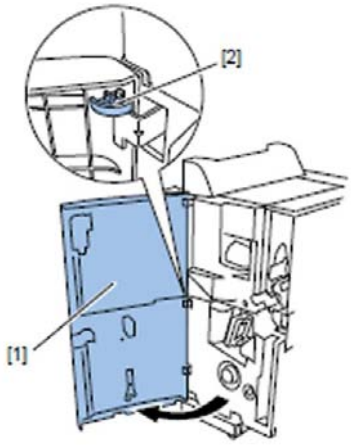
[Reference] With a normally working Finisher, the swing guide assembly will not come in contact with the switch lever even if the swing guide assembly is opened during printing.



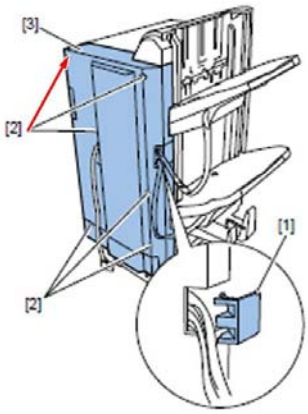
Service work

Prepare 2 new type tension springs (FU2-0947-000) to which the spring pressure is lowered, and replace with them following the procedure below:

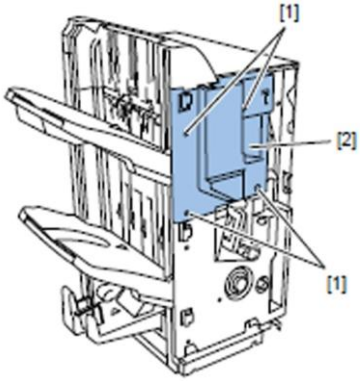
1) Open the front cover [1] and remove the clip [2], then lift the front cover [1] to remove.



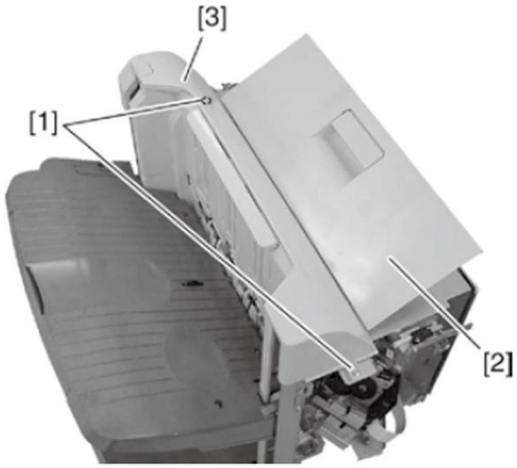
2) Shift the tray cable cover [1] toward the tray side to remove. For Booklet Finishers, remove 6 screws [2] and then remove the rear cover [3]. The screw indicated with the red arrow is not attached to Staple Finishers.



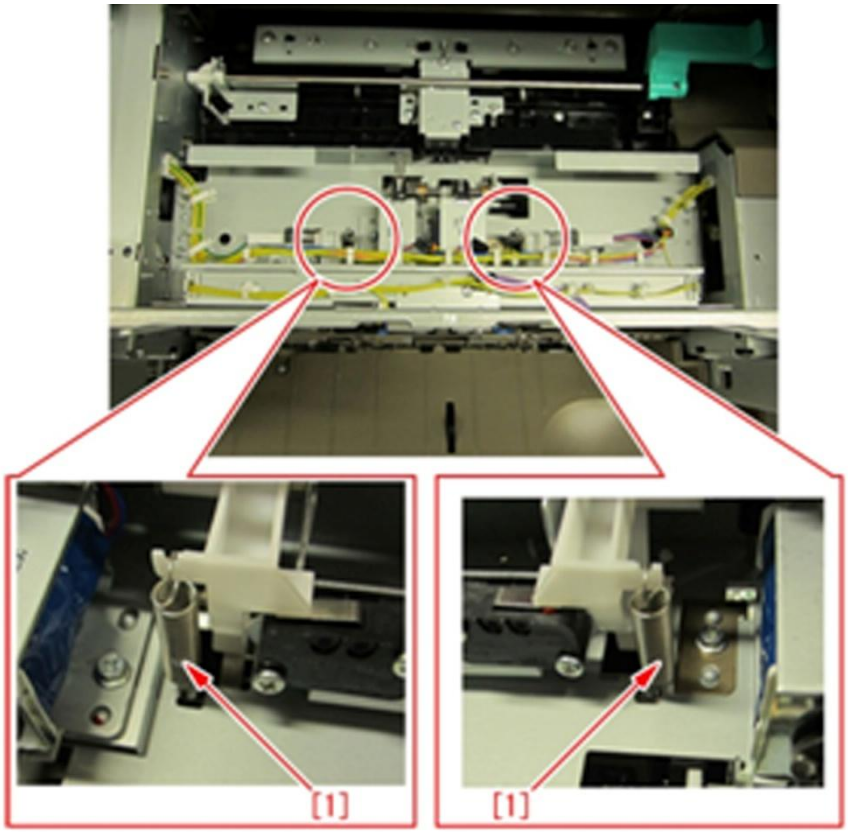
3) This step is only for Booklet Finisher-G1. Go to the step 4) for Staple Finisher-G1. Remove 4 screws []] and remove the front inner cover [2].



4) Remove 2 screws [1] and remove the solenoid cable cover [2].



5) Remove 2 tension springs [1] to replace with new springs.



6) Reassemble the parts in reverse order from step 4).
7) Make some testing copy to confirm if jam and the like will not occur any further.

[Replacement parts]
FU2-0947 SPRING, TENSION (2 pcs)

Title

1C40 jam code: Inner Finisher D-1 tray goes all the way down

Description

Inner Finisher D-1 tray goes all the way down. At times a 1C40 jam code may be displayed. The issue is mostly noticed because the finisher tray goes all the way down, papers being delivered to the tray will eventually start to fall and hit the floor. The tray will also be at the lower limit even after the machine has already booted and come to a ready state. Sometimes there might be a message of remove paper from output tray. There are no usual error codes when this occurs, just a slight chance that jam code of 1C40 shows itself.

- 1C40: Stack tray clock sensor (S14) at POWER ON

Field Remedy

This issue in most cases is sensor related. The sensor mostly involved is S11, paper surface sensor 1. The Stack Height Detection Lever checks the tray for a paper stack. It is also one of the first things the machine checks when the machine is powered up during initialization. The lever should extend and retract on boot up.

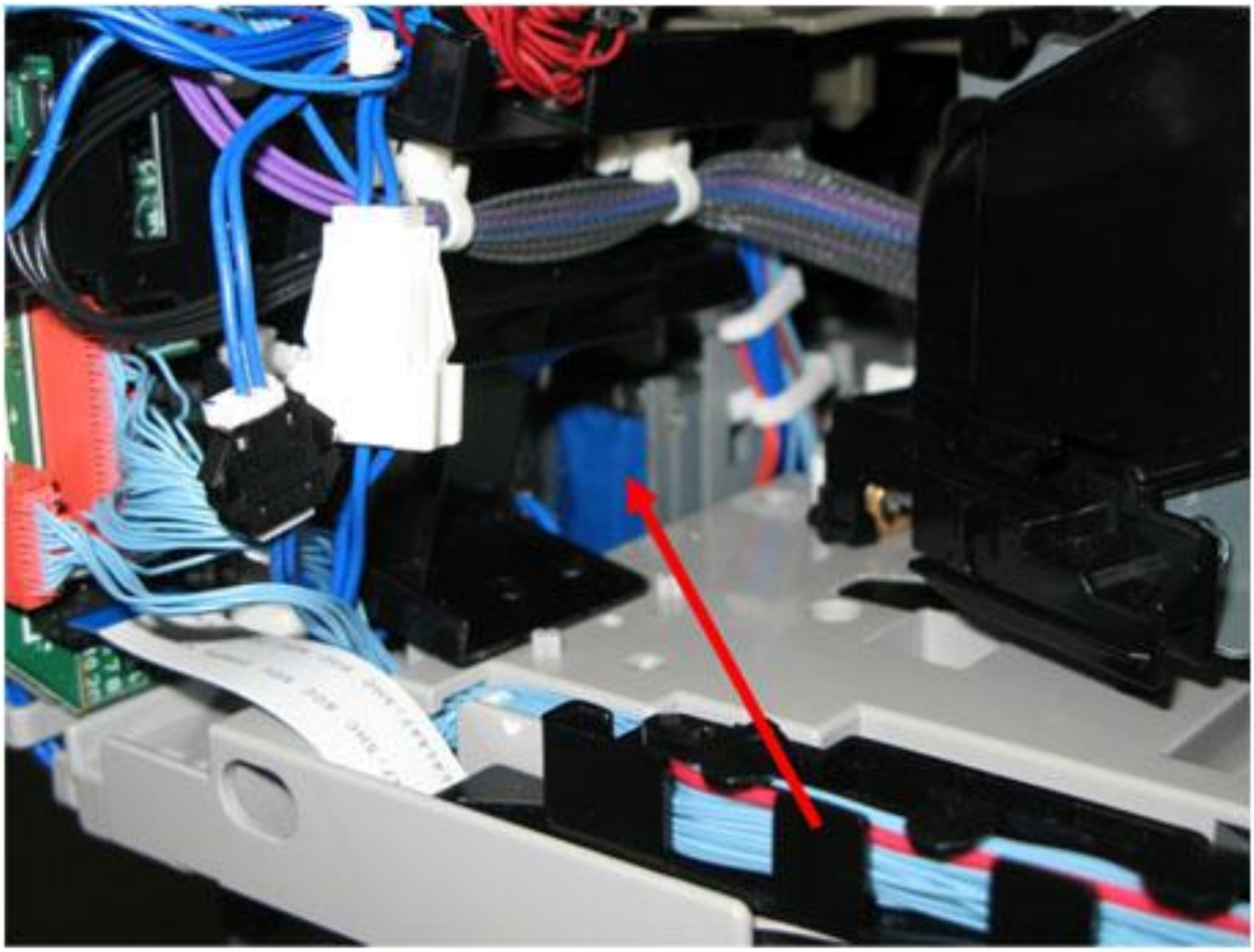
The Stack Height Detection Lever works with S11, paper surface sensor 1 and S12, paper surface sensor 2. The lever actuates both sensors depending on how high a stack of paper is. If S11 is actuated, the tray will naturally go down, usually with no codes. The finisher will tell the machine there is a full stack of paper. Below is a snapshot of the Stack Height Detection Lever in an extended state.

These sensors can be checked in I/O mode. Service Mode > Copier > I/O > IN-FIN > Sorter > P014 > bit 4 and 5. Extend the Stack Height Detection Lever slowly, and both bits should show a change of state. Basically a change of state is expected if the lever is extended slowly.

The sensors may check out fine in I/O mode. If they do, then suspect an issue with the solenoid that is supposed to fire to move the Stack Height Detection Lever. The lever is supposed to move out

and back in when the machine is booted. If it does not, there might also be an issue with the solenoid SOL1.

SOL1 is the solenoid responsible for actuating and moving the Stack Height Detection Lever. The lever blocks and unblocks S11 and S12. If there is an issue with SOL1, the lever will not move and the sensors will not show a change of state making the machine think there is a large stack of paper on the tray, making the tray go down. SOL1 can also be ohmed out with the machine off. The expected ohm reading is around 40ohms. It should not read a complete open or a complete short. Below is a snapshot of SOL1's rough location looking in from the front of the finisher with the front panel off.



WG8-5836 PHOTOINTERRUPTER

FL3-4299 SOLENOID UNIT

< Fixing Assembly Jam / Delivery Jam >

Title

0107 jam code due to paper curl

Symptom

When paper with high moisture content is printed, paper may be curled, possibly causing 0107 jam.
- 0107 jam: Fixing outlet sensor (S19) delay jam

Cause

Paper with high moisture content will be curled with the heat of the fixing unit. The jam detection sensor fails to detect the curled part, which leads to the above symptom.

Service work

If the symptom occurs, follow the steps below for service work.
1) Upgrade the software (DCON) to Ver.14.03 or later.
[Caution] When upgrading the software, be careful not to make a wrong combination with other software.
2) In Service Mode (Level 2) > Mode List > COPIER > Option > IMG-FIX, change the setting value of TMP-TBLC to "0" to enable automatic curl correction mode. (The default value is "1" and OFF.)
3) In Service Mode > Mode List > COPIER > Option > IMG-FIX, check that the setting value of thin paper curl correction mode of TMP-TBL5 is "0" (default setting value).
4) Make 3 test copies in double-sided mode using a paper source which has the paper curl problem and check that the jam does not occur. When the jam does not occur, the work is completed. If the jam occurs, go to step 5).
5) If the cassette heater is installed, turn on the cassette heater.
6) In Settings/Registration > Preferences > Paper Settings > Paper Settings, select a paper source which has the paper curl problem and change the setting to "Plain 1".
7) Make 3 test copies in double-sided mode using a paper source which has the paper curl problem and check that the jam does not occur. When the jam does not occur, the work is completed. If the jam occurs, go to step 8).
8) In Service Mode (Level 2) > COPIER > Mode List > Option > FEED-SW, set the setting value of separation priority mode for SP-SW to "2". (0: default setting value) This setting allows the transfer bias control which improves separation capability when 2nd side of Plain 1 is fed.
9) Make 3 test copies in double-sided mode using a paper source which has the paper curl problem and check that the jam does not occur. When the jam does not occur, the work is completed. If the jam occurs, go to step 10).
10) Exchange curled paper with new paper and make 3 test copies in double-sided mode and check that the jam does not occur. When the jam occurs even after this work has been performed, check other factors.

Title

Fixing jam of solid image with small leading edge margin when using paper left at high humidity environment

Description

When printing the solid image with small leading edge margin using paper left in the high humidity environment, it is likely for the fixing jam to occur.

Cause

When the margin is small, the paper separation performance worsens. Additionally, paper left in the high humidity environment is likely to curl making the separation performance even worse.

Field Remedy

Implement either of following service modes.
a) Service mode (Level 2) > COPIER > Option > FEED-SW > SP-SW (separation priority mode)
0: OFF (default)
1: Separation priority mode 1 (Separation effect improves.)
2: Separation priority mode 2 (Separation effect improves more.)
b) Service mode (Level 2) > COPIER > Option > IMG-FIX > TMP-TBLC (paper curling correction mode (when plain paper 1/2 mode))
0: Auto
1: OFF
2: N1 mode with plain paper 1/2 (Target temperature becomes low.)
3: N3 mode with plain paper 1/2 (Target temperature becomes moreover low.)
[Reference]
Default settings are as follows.
0: Other locations
1: China/Korea/Taiwan/Asia/Oceania

Title

Thin paper jam when using paper with less than 64g/m2

Description

When using thin paper (less than 64g/m2), it is likely to cause a jam.

Cause

Due to the rigidity of paper being weak, the separation error occurs at the Drum Unit or Fixing Assembly.

Field Remedy

Implement service mode (Level 2) > COPIER > Option > IMG-FIX > TMP-TBL5 (Fixing Assembly temperature control settings when in the Thin paper mode).
0: OFF

1: S-thin paper mode (-10 degrees Celsius compared with Thin paper mode table)
2: SS-thin paper mode (-15 degrees Celsius compared with Thin paper mode table)

Title

0107 jam code/abnormal noise (improperly meshed teeth sound) occurs from around Fixing Unit: Solved by replacing 106T gear and reseating Fixing Motor

Description

0107 jam occurs and an abnormal sound like an improperly meshed teeth sound occurs from around the Fixing Unit.
- 0107: Fixing outlet sensor (S19) Delay jam

Field Remedy

Due to the occurrence status, a failure of the Fixing Drive System is suspected.
Select service mode > COPIER > FUNCTION > PART-CHK > MTR > OK > "3" > MTR-ON, and check the operation of Fixing Motor (M2). After 20 seconds of operation, it automatically completes. During operation, "ACTIVE" is indicated, and "OK!" is indicated after the completion.
In this case, teeth of 106T gear (Figure 109, item 15) from the Fixing Drive were missing. Replaced the 106T gear and reseated the Fixing Motor solve this issue.
FU9-0324 106T gear

Title

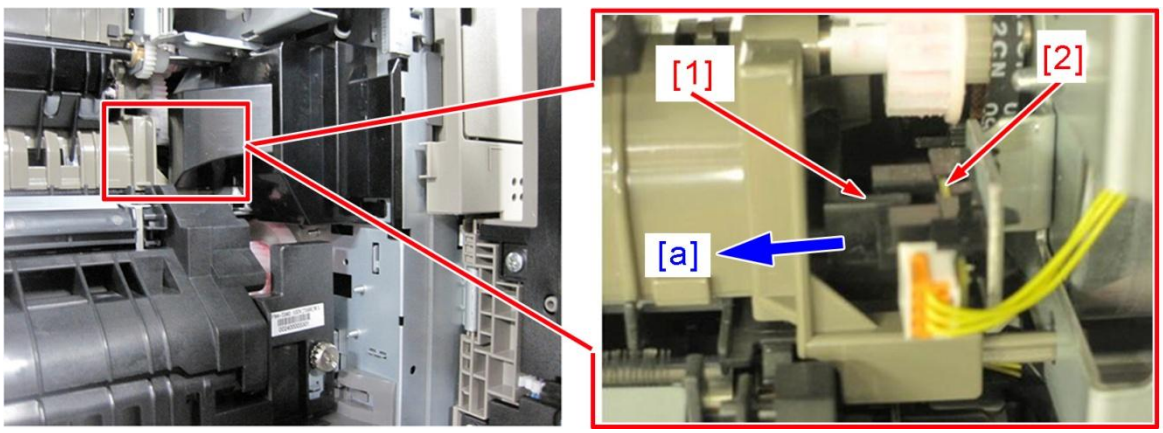
0108 Jam code due to No.1 delivery sensor flag being out of position

Symptom

In low temperature environment, 0108 jam may occur in rare cases.
- 0108 jam: No.1 delivery sensor (S21) delay jam

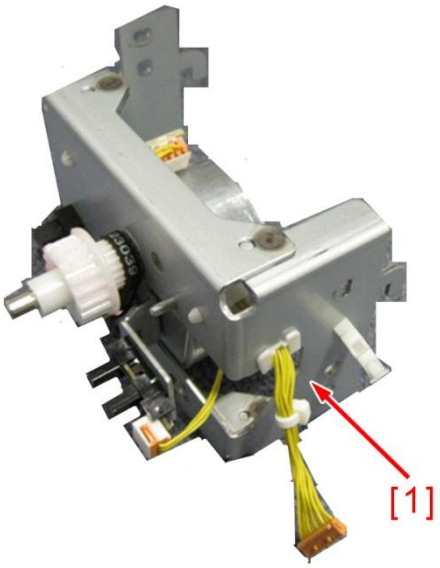
Cause

When the main power is turned ON in low temperature environment, No.1 delivery sensor flag [1] shrinks in the direction of the arrow [a] resulting in misdetection of jam in rare cases. However, when the temperature increases in the surrounding area of fixing assembly, No.1 delivery sensor flag [1] returns to normal state from the state of being shrunk. This enables No.1 delivery sensor [2] to detect No.1 delivery sensor flag [1] properly resulting in no occurrence of jam.



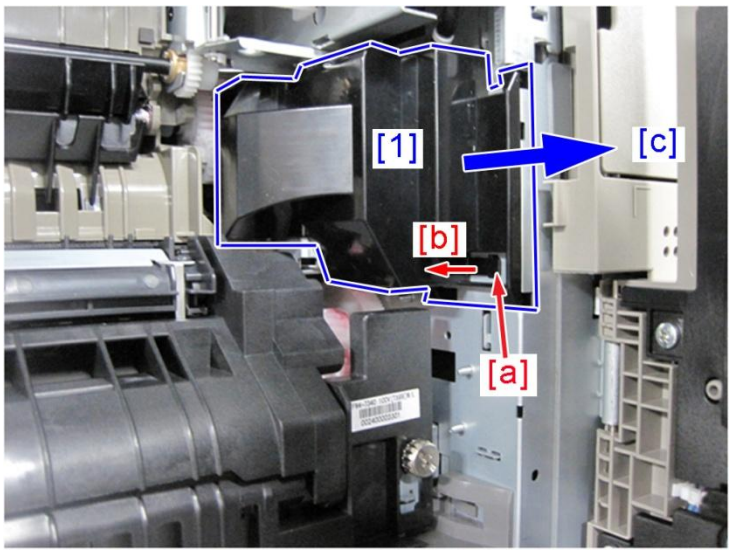
Service work

The shape of No.1 delivery sensor mounting plate was modified so No.1 delivery sensor can detect No.1 delivery sensor flag even when it is shrunk. The new type first delivery drive assembly has this modified mounting plate, and is marked [A] in the area [1] of the photo.



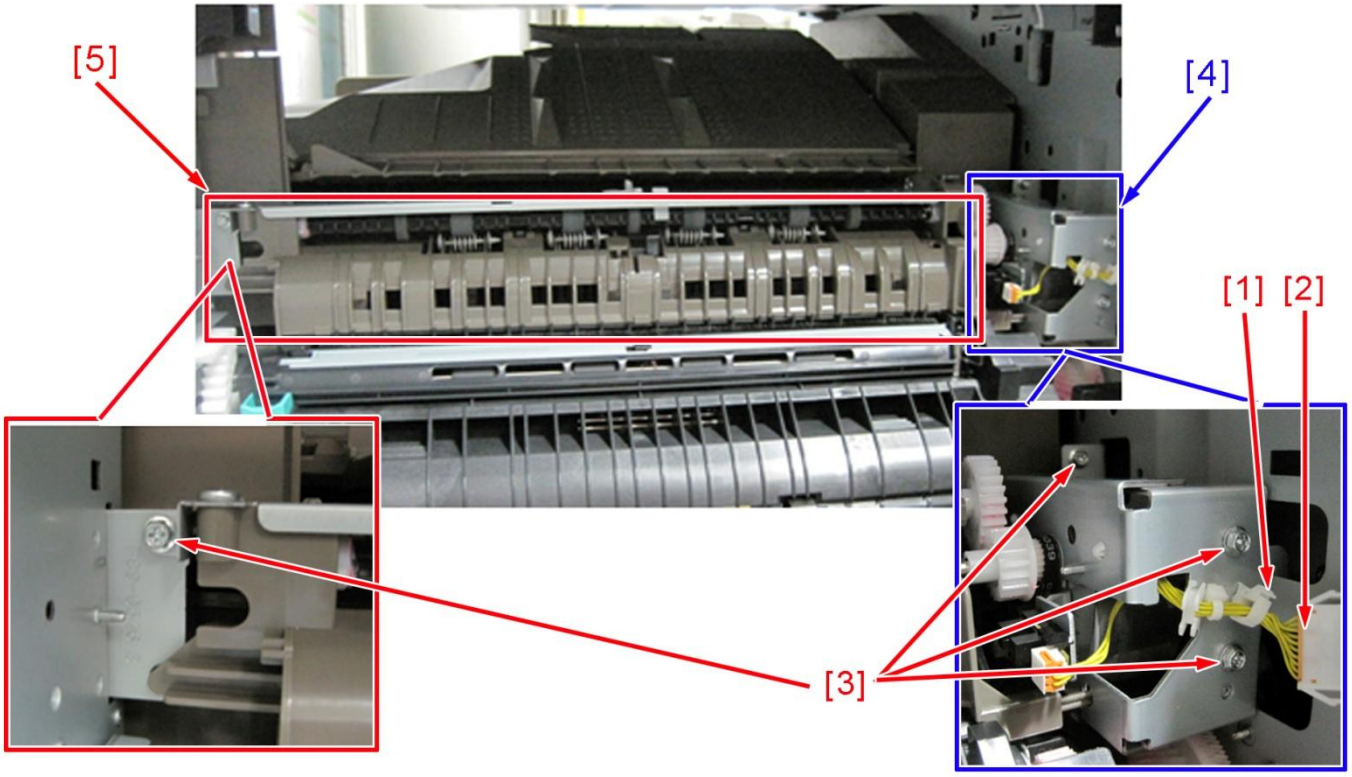
1) Open the right cover.

2) While slightly pulling 1 claw [a] in the direction of the arrow [b], pull the cover of the first delivery drive assembly [1] in the [c] direction and remove.



3) Remove 1 connector [1] and 2 screws [2] to remove the second delivery assembly [3].

4) Remove 1 wire saddle [1], 1 connector [2] and 4 screws [3], and then remove the first delivery drive assembly [4] and the first delivery assembly [5].



5) Attach the new type first delivery drive assembly and the first delivery assembly
6) Reassemble the parts from step 3) in reverse order.
7) Make some sample copies to make sure jam and other issues do not occur.

[Replacement Part]
FM4-7918-010 FIRST DELIVERY DRIVE ASSEMBLY

Title

0111/0211/0212/1001 Jam Code /Finisher stacking failure occurs due to the static charge eliminator of the Buffer Pass Unit-H1 coming off.

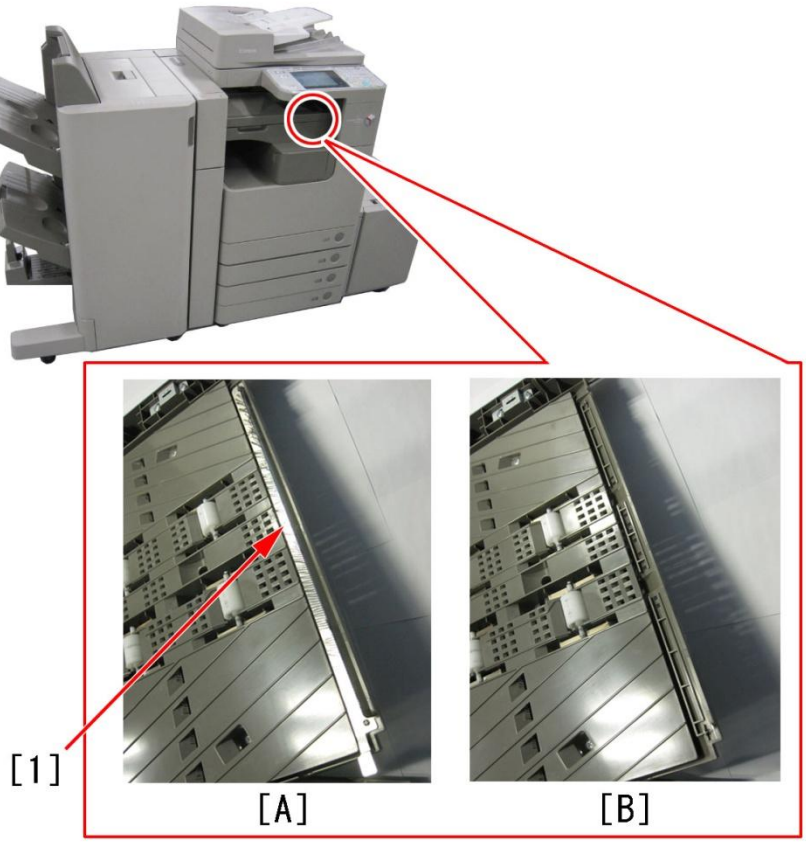
Description

On the machine with the Buffer Pass Unit-H1, one of the following jam codes/ or stacking failure of the output paper occurred at the finisher.

- 0111: Entrance sensor delay jam
- 0211: Entrance sensor stationary jam
- 0212: Exit sensor stationary jam
- 1001: Inlet sensor delay jam

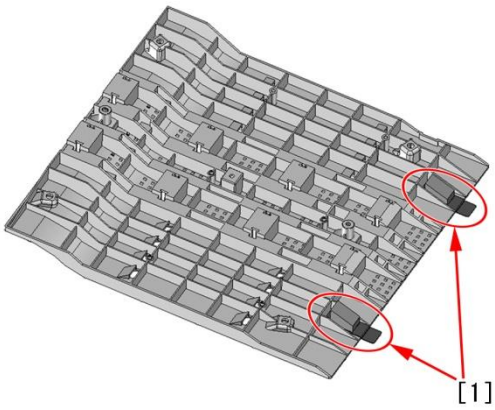
Cause

The static charge eliminator [1], attached to the upper feed guide of the Buffer Pass Unit-H1 by double sided tape, came off and fell on the paper path. This caused a jam or stacking failure of the output paper. The photo [A] is normal condition, and the photo [B] is after the static charge eliminator came off.

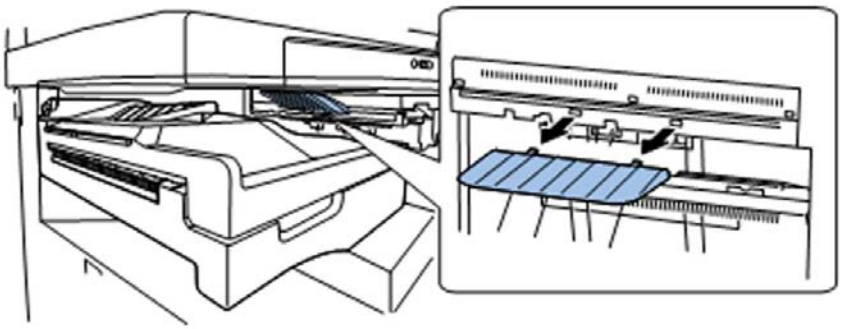


Field Remedy

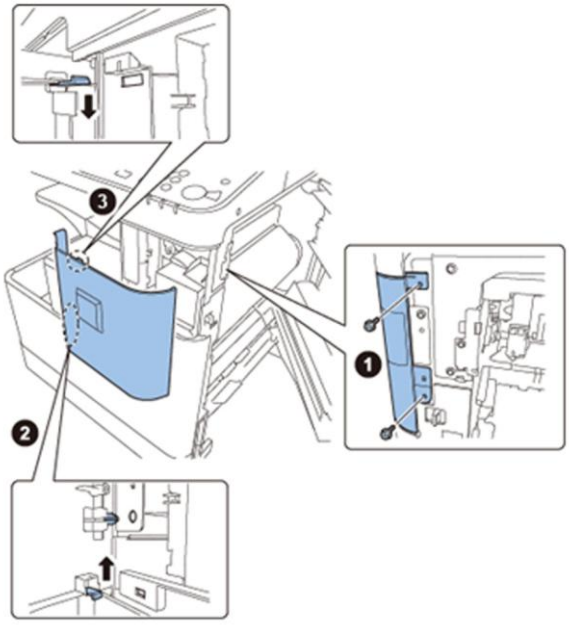
Prepare a set (2pcs.) of the grounding plate stopper (4Y8-3021-000) [1] which prevents the static charge eliminator from coming off, and follow the steps below to attach.



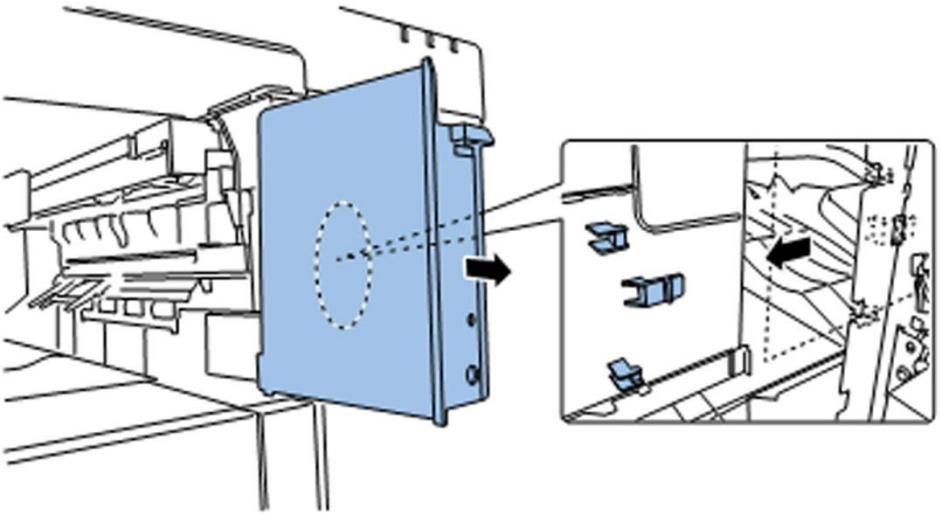
1) Turn off the main power SW, then open the right cover.
2) Remove the 2 hooks, then remove the reversal guide.



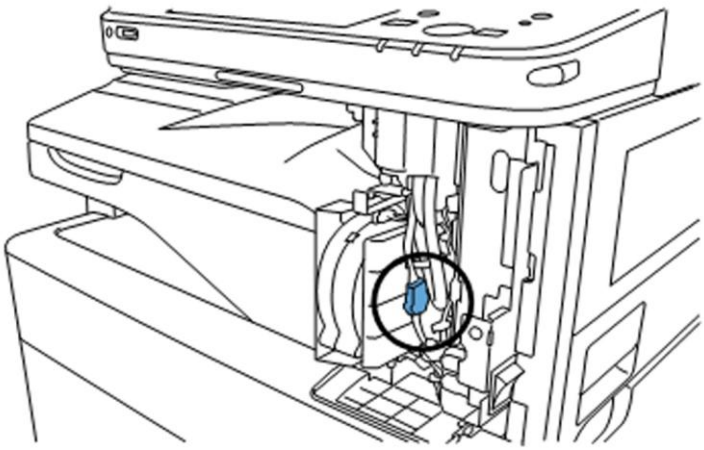
3) Remove the 2 screws and the 2 hooks, then remove the right front cover.



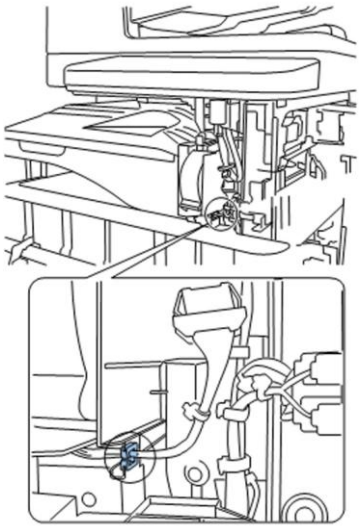
4) Remove the 3 hooks, then remove the support cover left.



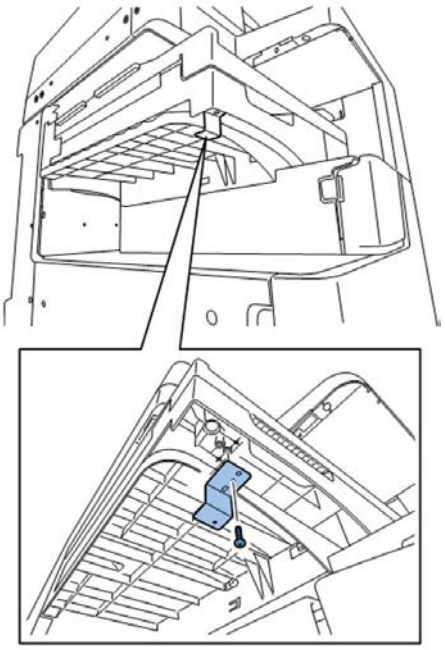
5) Remove the cable connector connected to the Buffer Pass Unit-H1.



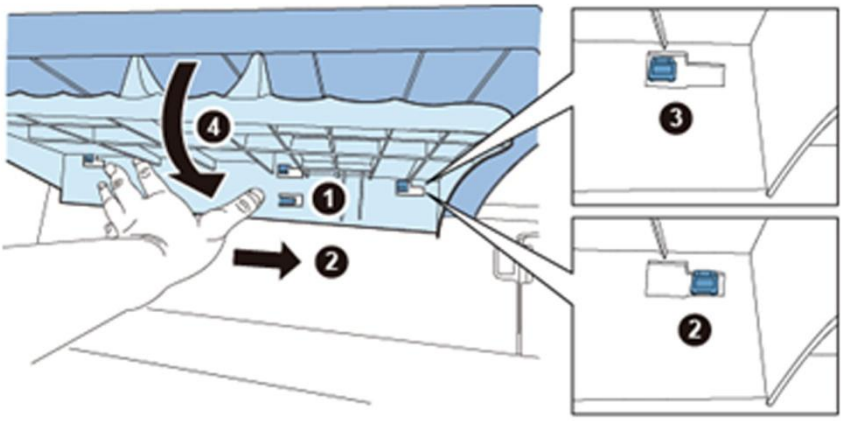
6) Remove the cable of the Buffer Pass Unit-H1 from the edge saddle.



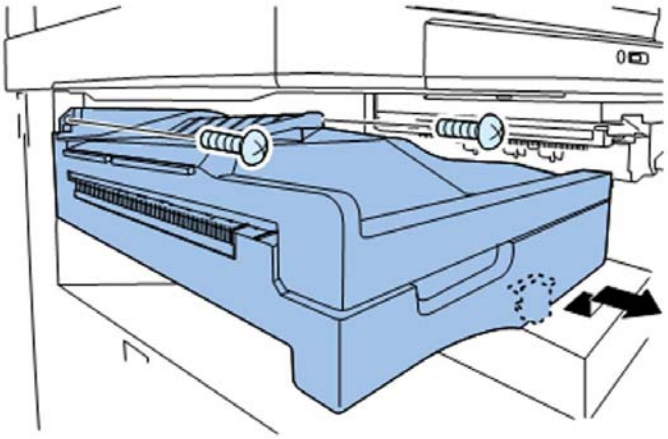
7) Remove the 1 screw and the metal board.



8) Remove the 4 hooks, then remove the sub-tray.

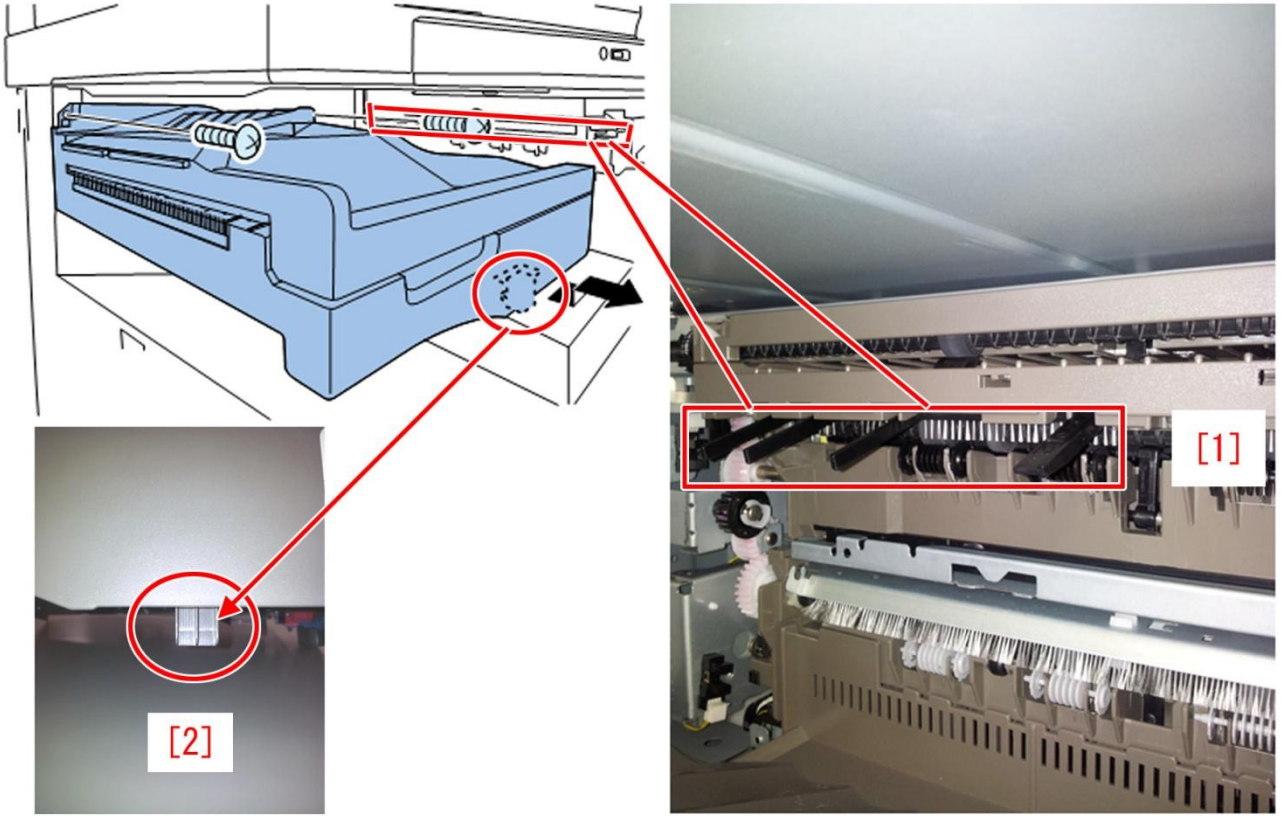


9) Remove the 2 screws, then remove the Buffer Pass Unit-H1. Place it on the flat surface.



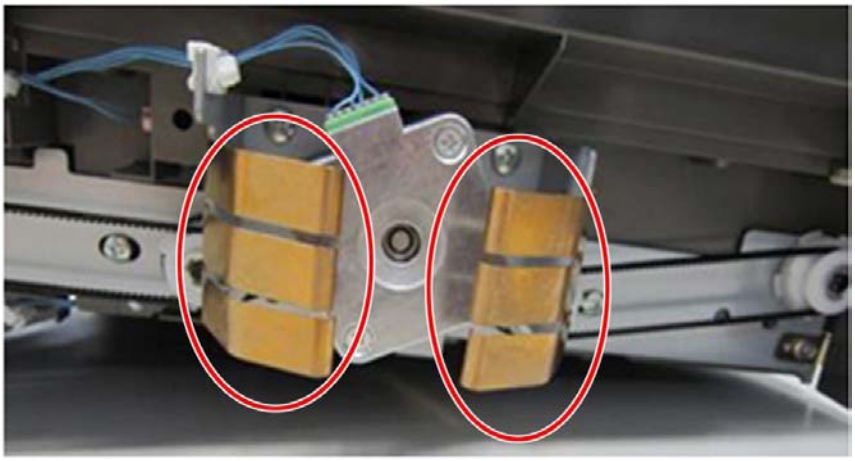
[Caution]

- When removing, be careful not to break the No.2 delivery sensor flag [1].
- Be careful with the claw of the Buffer Pass Unit (boss) [2].

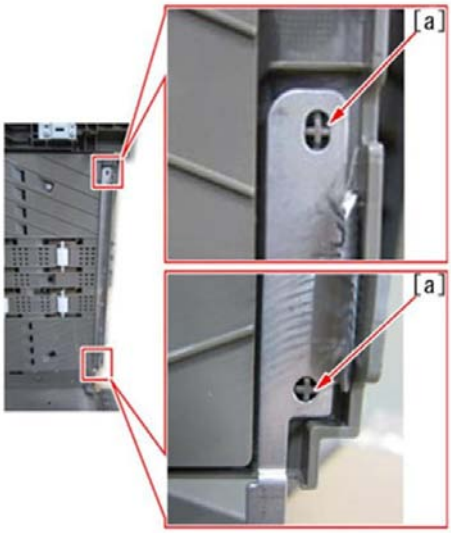


10) Open the upper feed guide unit.

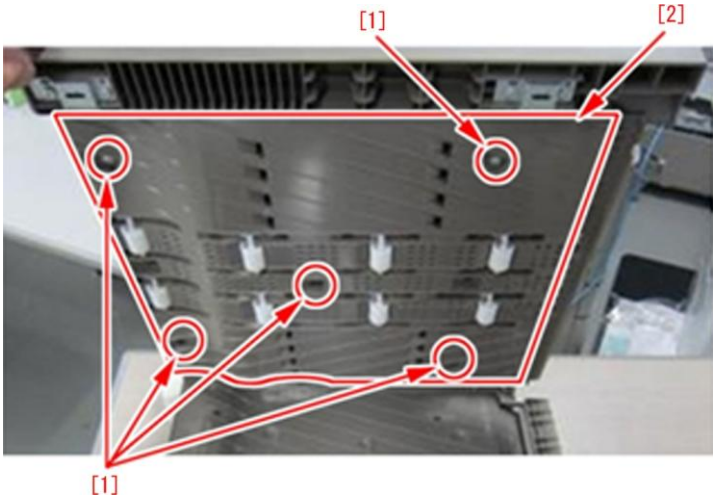
[Caution] During the steps from 11) to 13), be careful not to deform the grounding connecting plate.



11) Check the condition of the static charge eliminator. If the static charge eliminator has fallen off, attach the static charge eliminator by placing it on the protrusion [a] of the upper feed guide unit.

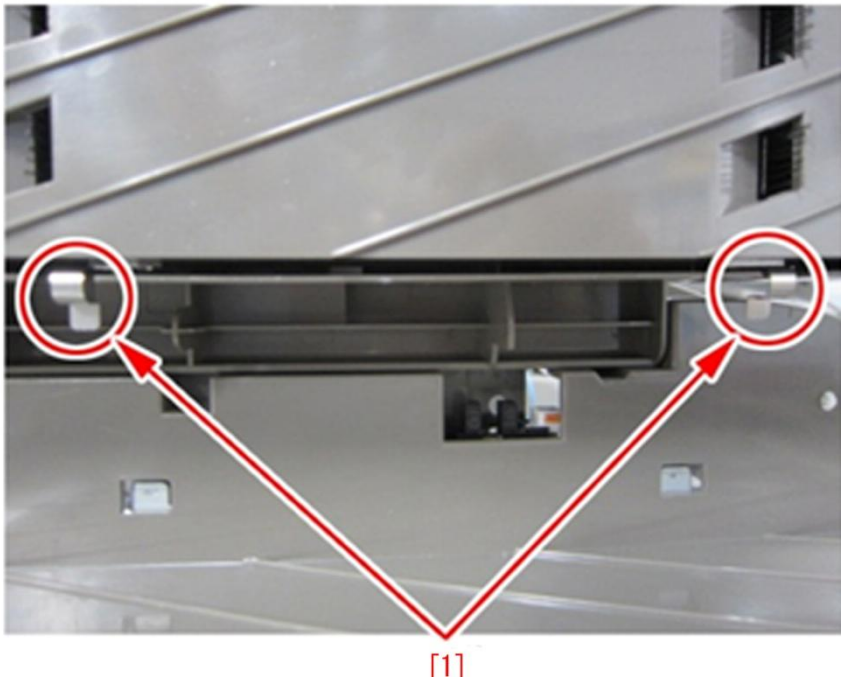


12) Remove the 5 screws [3], then remove the upper feed guide [4] from the upper feed guide unit.

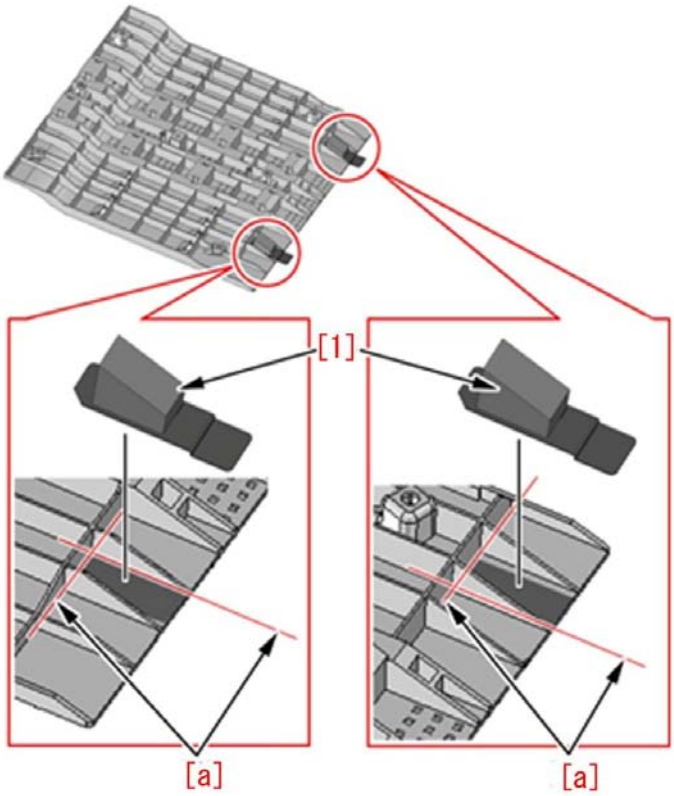


[Caution]

When removing the upper feed guide, be careful not to deform the grounding plate [5].



13) Attach the 2 grounding plate stoppers [6] in alignment with line [a].



[Caution]

Make sure the grounding plate stopper is securely attached.

14) Attach the parts in the reverse order from the step 12).
[Replacement Parts]
4Y8-3021 STOPPER, GROUNDING PLATE

<Pick-up Jamming>

Title

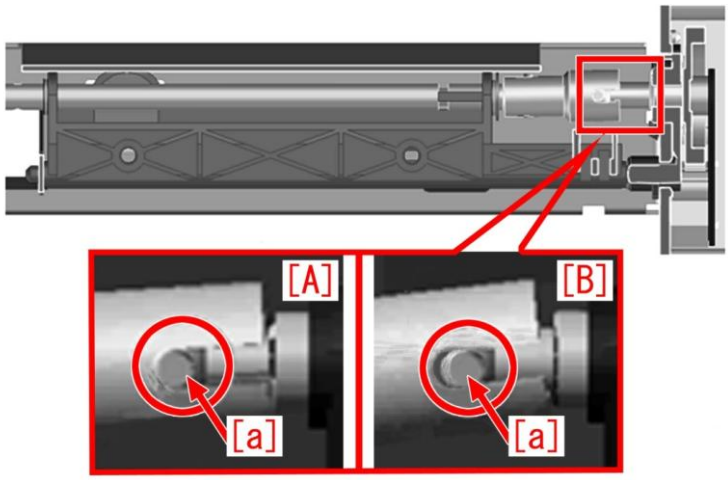
0101/0102 Jam Codes

Symptom

Either of 0101/0102 jam may occur.
- 0101 jam: The cassette 1 pickup sensor (S1) delay jam
- 0102 jam: The cassette 2 pickup sensor(S33) delay jam

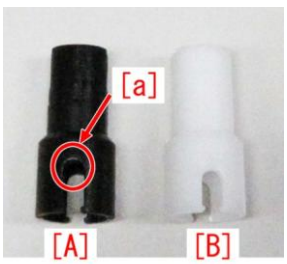
Cause

As dimension tolerance is given to each part, no play may be left between the retard joint and the pin attached to the shaft after the pickup unit is assembled.
The photo [A] shows the state of no play left, and [B], the good state with play. [a] is the pin.
If no play is left like the photo [A] indicates, the sliding performance of the separation roller holder becomes deteriorated and the retard pressure is lowered. This weakens the feeding power to feed paper to the vertical path roller nip and results in the delay jam.



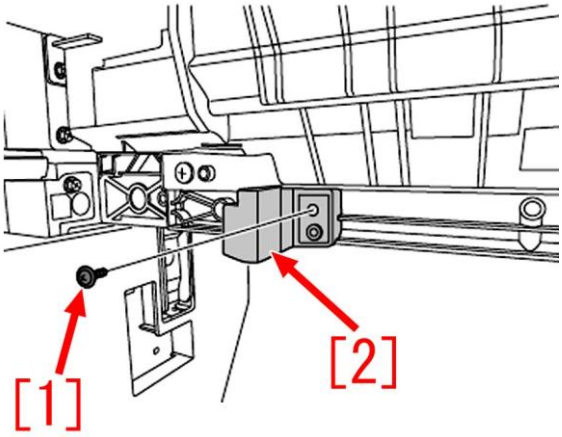
Service work

When the symptom has occurred, replace the retard joint attached to the pickup unit on the relevant cassette with the new type retard joint (FC9-4290-010) following the procedure below.The sliding performance of the new type retard joint is improved by the shape change[a] with a deeper horseshoe-shape. The photo[A] shows the new type and the [B] shows the old type.

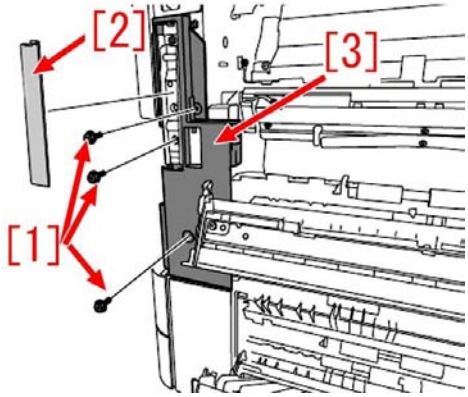


The description of this procedure is referring to the procedure for removing the cassette 1 pickup unit. In case the symptom has occurred in another cassette, refer to the procedure in service manual for removing the pickup unit for each cassette.

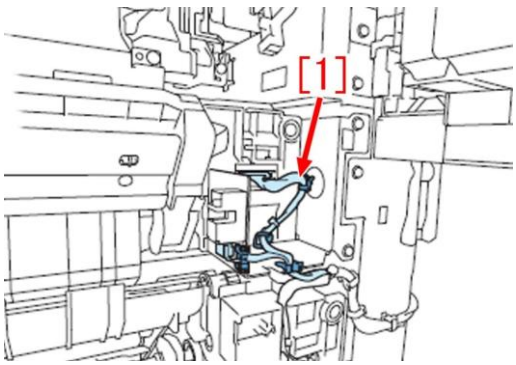
1) Pull out the cassette from the host machine.
2) Open the right cover.
3) Unscrew the 1 screw [1] to remove the stopper.



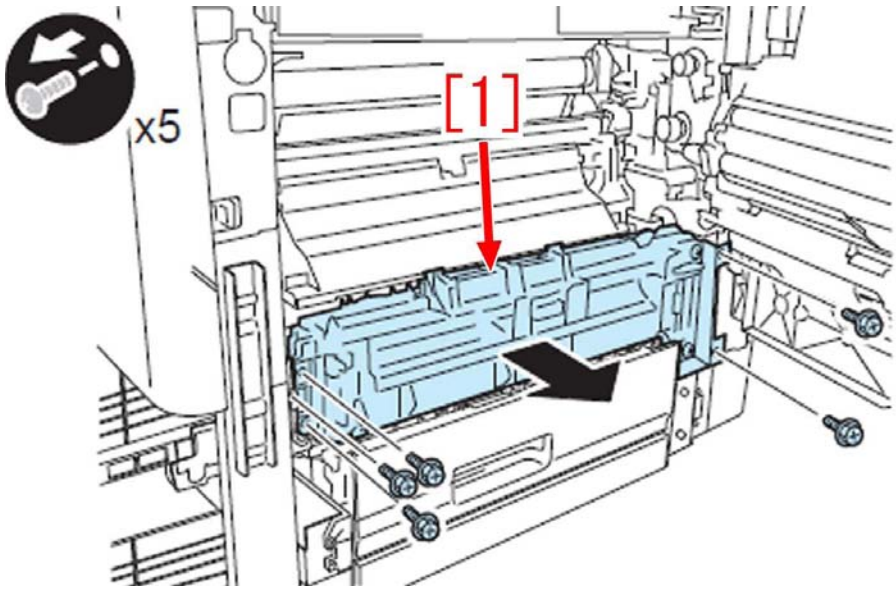
4) Remove the right cover (lower) (only when the cassette feeding unit is not installed).
5) Remove the rear right cover (lower).
6) Unscrew the 3 screws [1] and unhook the 2 claws to remove the handle cover[2] and the front right cover (lower)[3].



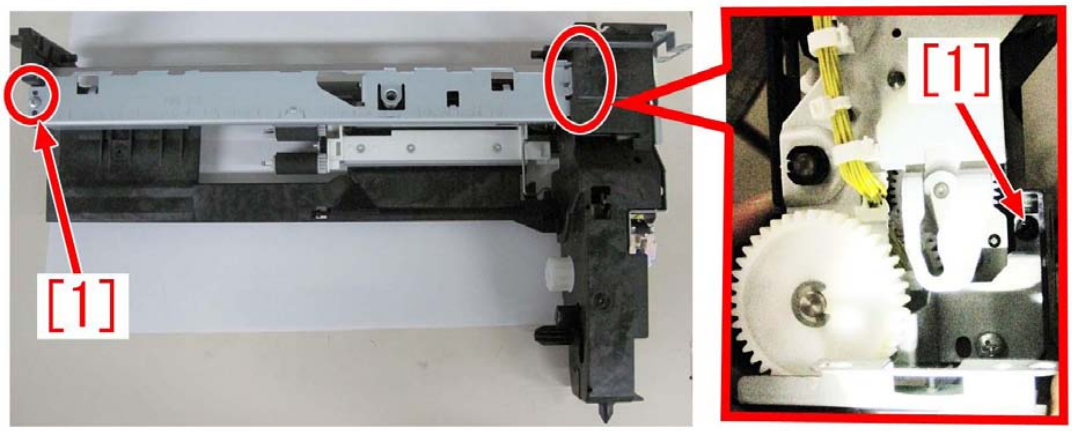
7) Disconnect the connection cable [1] from the 2 connectors and release from the 4 clamps.



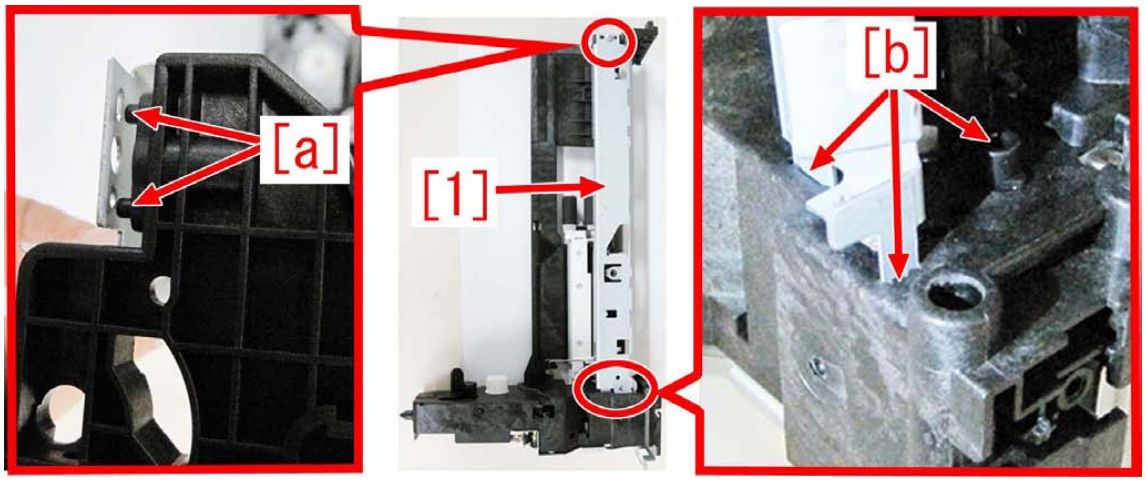
8) Remove the 5 screws (including the 1 grounding wire) and the cassette pickup unit 1[1].



9) Remove the vertical path guide (middle).
10) Unscrew the 2 screws [1].

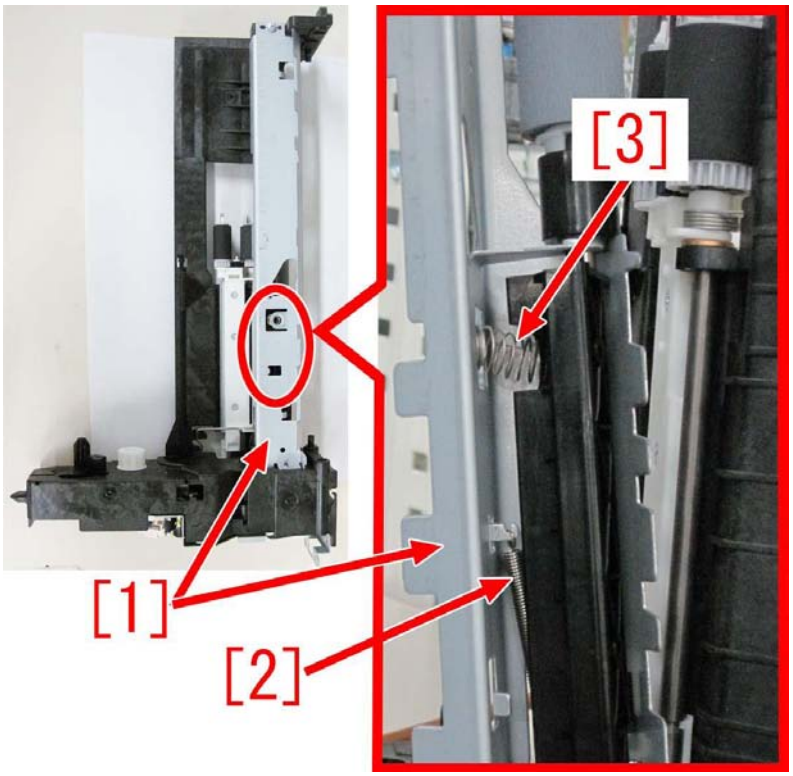


11) Release the retard guide[1] from the 2 bosses[a] and the 3 bosses[b] by pulling.

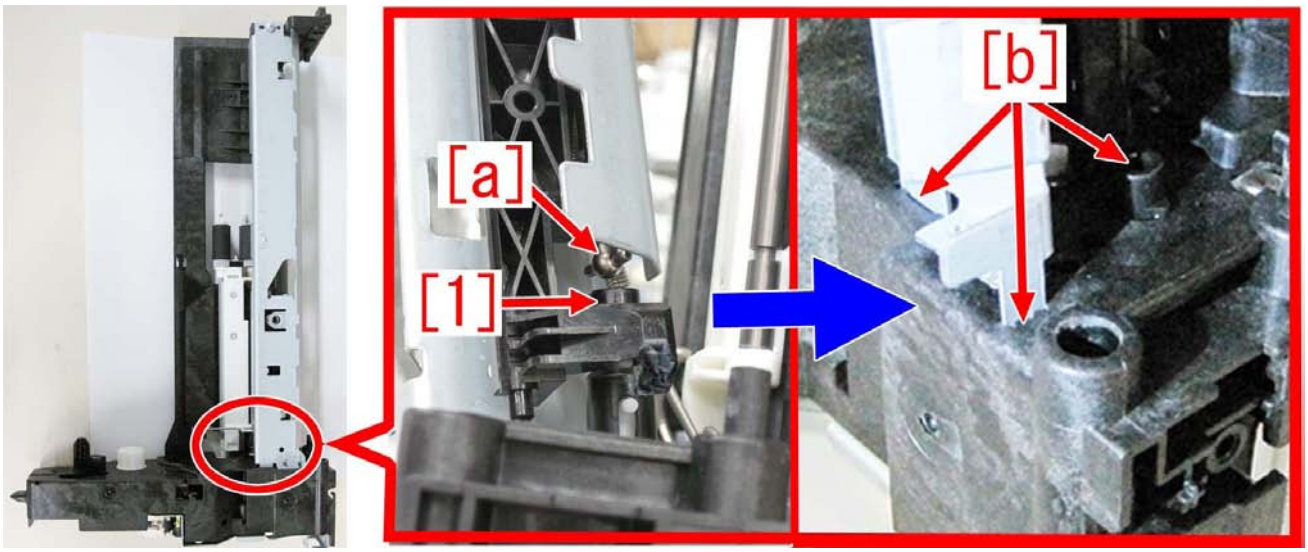


[Caution]

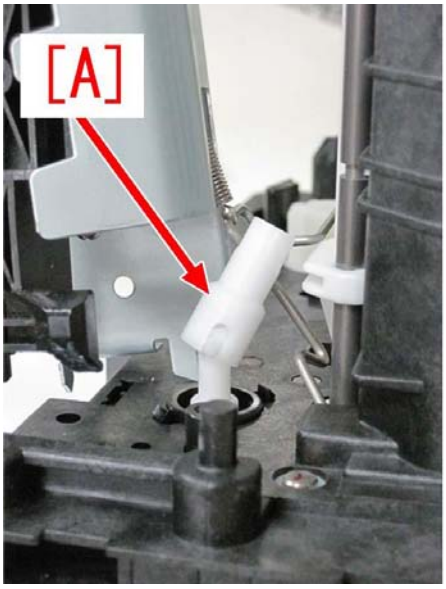
- When pulling the retard guide[1], pay attention not to pull the spring[2] too strongly. Too much pulling may break the spring[2]. Also be careful not to let the compression spring[3] to fly off while performing the work.



- When installing the retard guide, fit to the 3 bosses[b] of the retard guide at the same time as matching the phase of the T-shaped portion[a] of the 41T gear(FU3-0349-000) to that of the retard joint[1].



12) Replace the retard joint with the new type retard joint (s) (FC9-4290-010). The photo[A] shows the old type, the [B] shows the new type.



13) Reassemble the part in the reverse order from the step 11).
14) Make test copy to check if the symptom does not occur any more.
[Replacement Part]
FC9-4290-010 JOINT, RETARD

Title

0103/0104 Jam Codes (Cassette Feeding Unit-AF1)

Symptom

Either of 0103/0104 jam may occur.

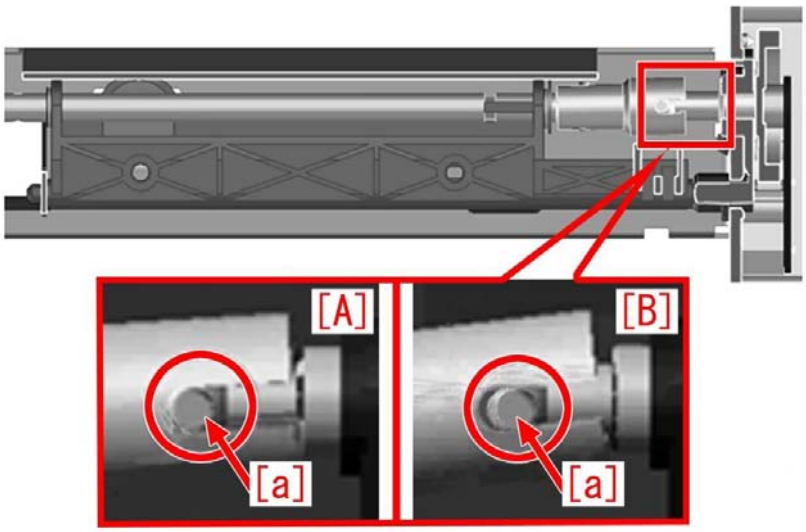
- 0103 jam: The cassette 3 pickup sensor delay jam
- 0104 jam: The cassette 4 pickup sensor delay jam

Cause

As dimension tolerance is given to each part, no play may be left between the retard joint and the pin attached to the shaft after the pickup unit is assembled.

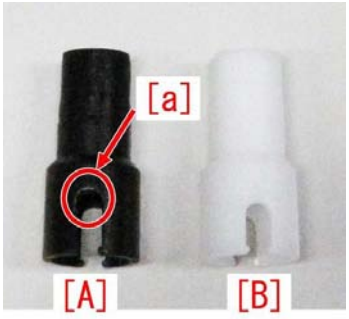
The photo [A] shows the state of no play left, and [B], the good state with play. [a] is the pin.

If no play is left like the photo [A] indicates, the sliding performance of the separation roller holder becomes deteriorated and the retard pressure is lowered. This weakens the feeding power to feed paper to the vertical path roller nip and results in the delay jam.



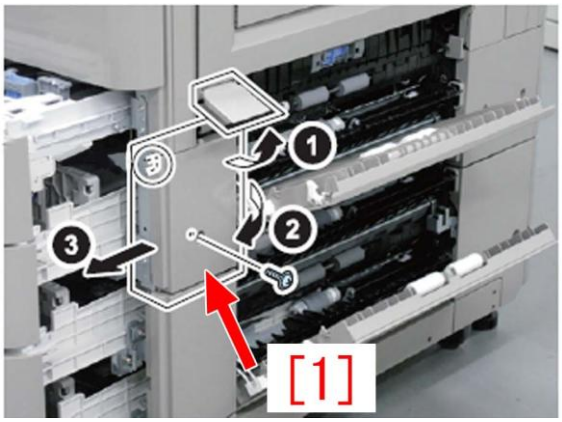
Service work

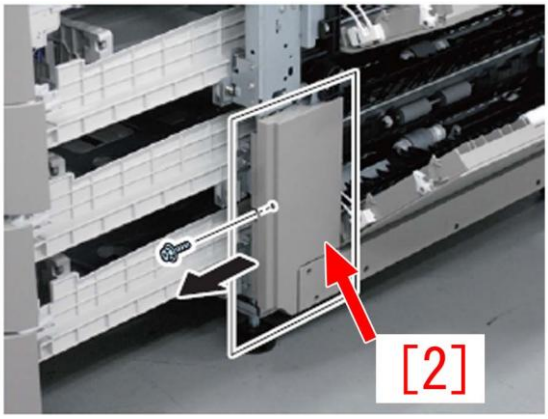
When the symptom has occurred, replace the retard joint attached to the pickup unit on the relevant cassette with the new type retard joint (FC9-4290-010) following the procedure below. The sliding performance of the new type retard joint is improved by the shape change[a] with a deeper horseshoe-shape. The photo [A] shows the new type and the [B] shows the old type.



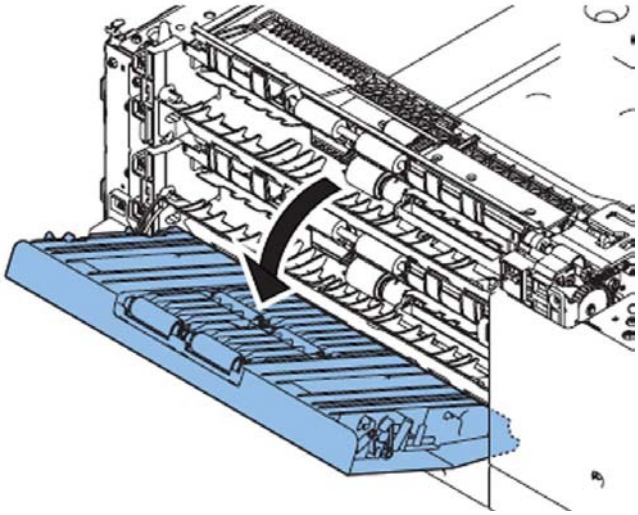
The description of this procedure is referring to the procedure for removing the cassette 3 pickup unit. In case the symptom has occurred in another cassette, refer to the procedure in service manual for removing the pickup unit for each cassette.

1) Pull out the cassette, unscrew the 2 screws, unhook the 1 claw and remove the right front cover of the host machine [1] and the right front cover of the cassette feeding unit [2]

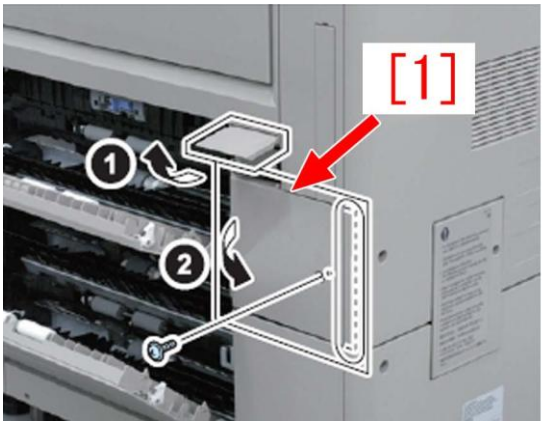


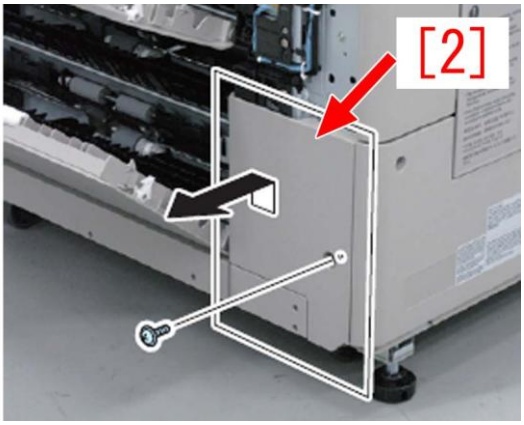


2) Open the cassette right cover.

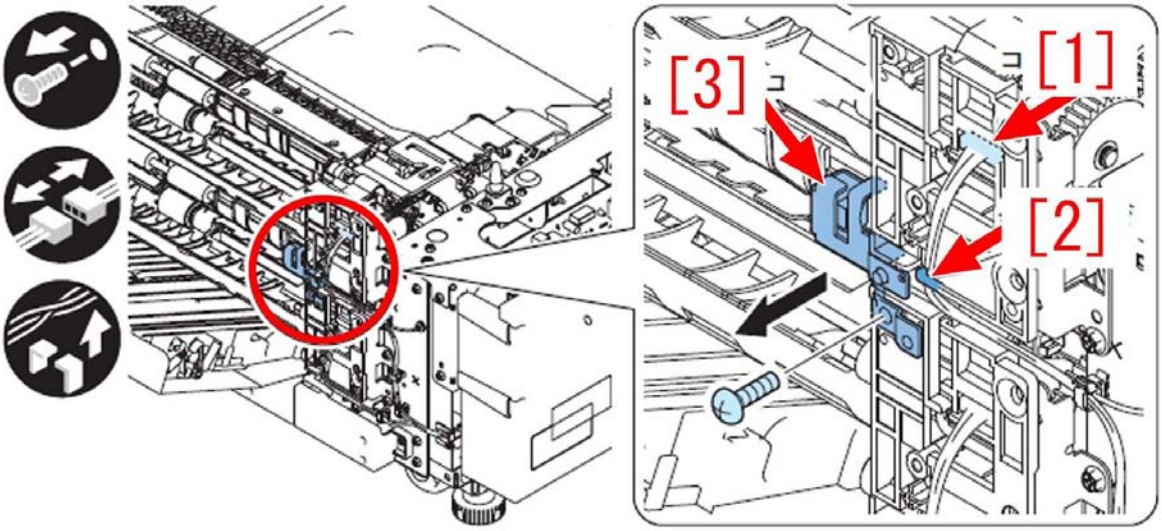


3) Unscrew the 2 screws and unhook the 1 claw to remove the right rear cover of the host machine[1] and the right rear cover of the cassette feeding unit[2]

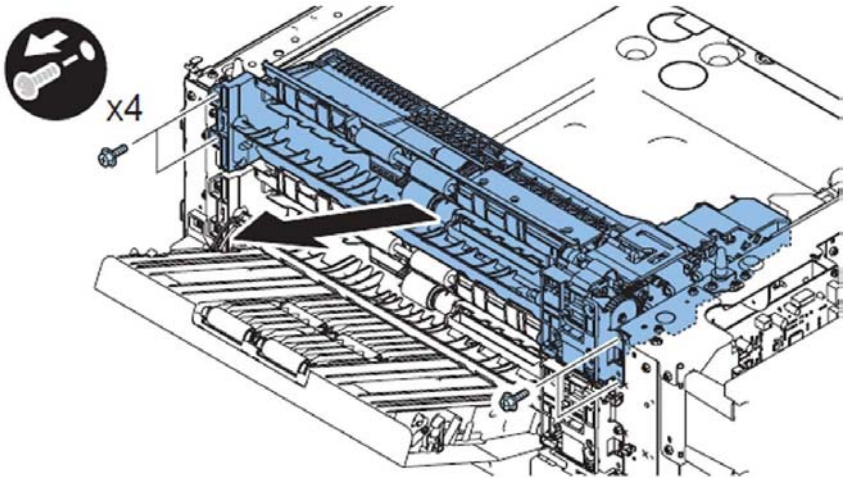




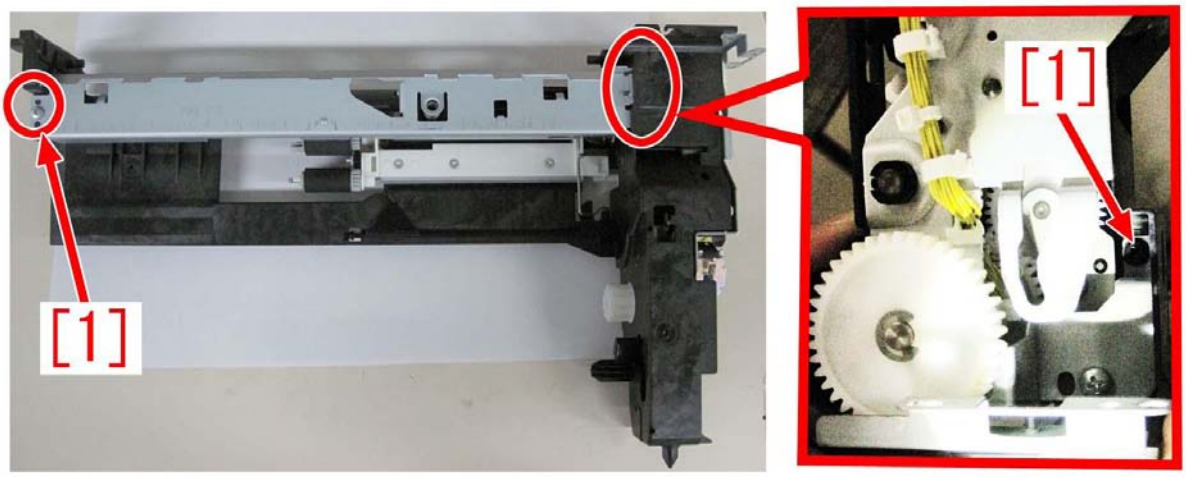
4) Unscrew the 1 screw, disconnect the 1connector [1] and release the 1 harness from the harness guide[2] to remove the sensor unit[3].



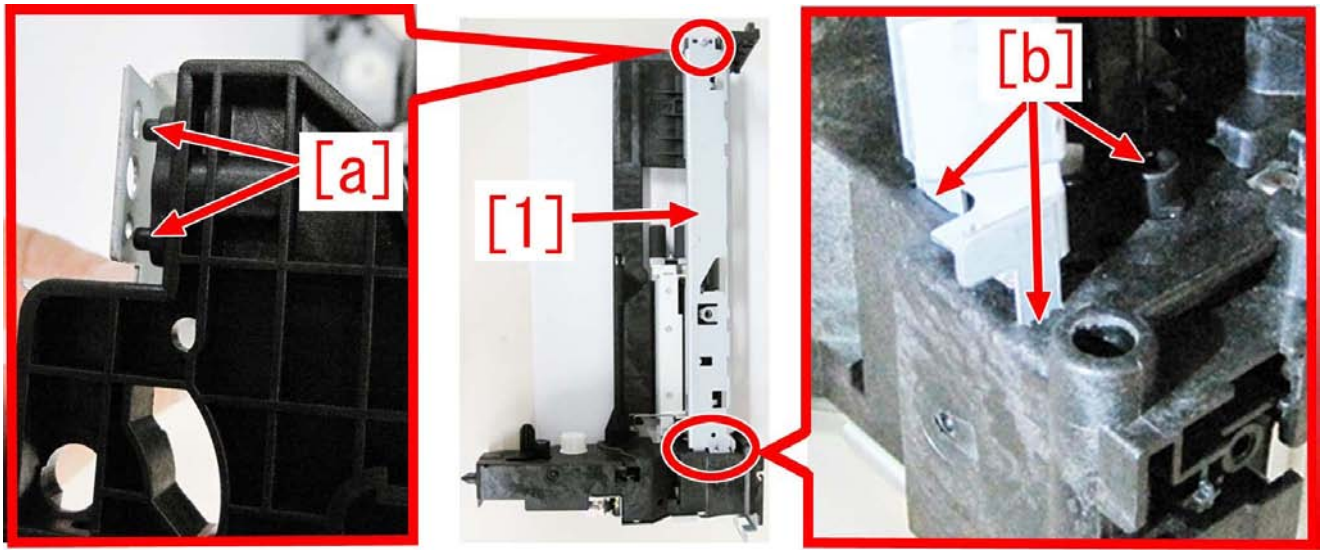
5) Unscrew the 4 screws to remove the cassette 3 pickup unit.



6) Remove the vertical path guide (middle).
7) Unscrew the 2 screws [1].

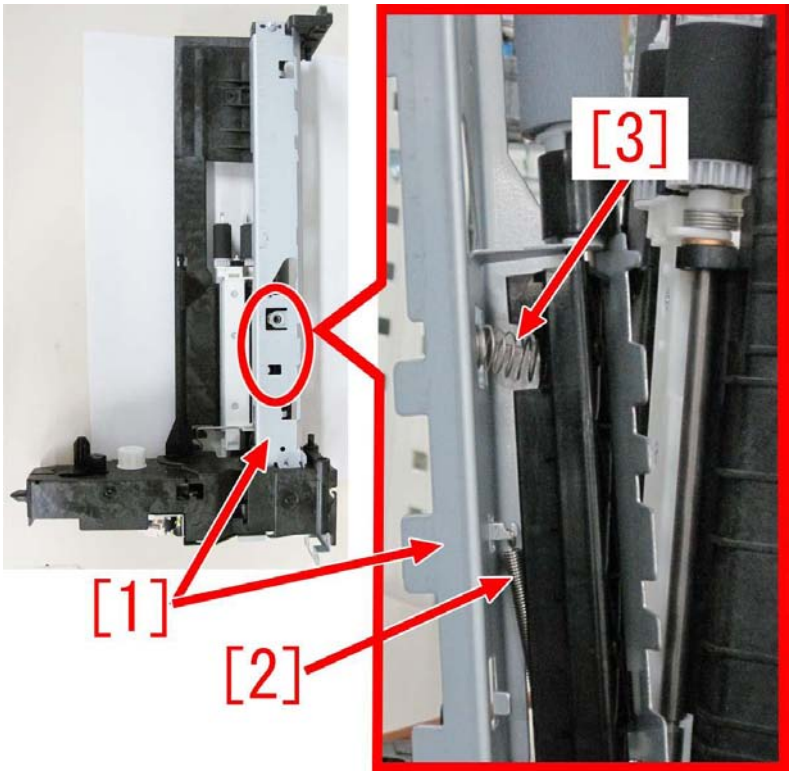


8) Release the retard guide[1] from the 2 bosses[a] and the 3 bosses[b] by pulling.

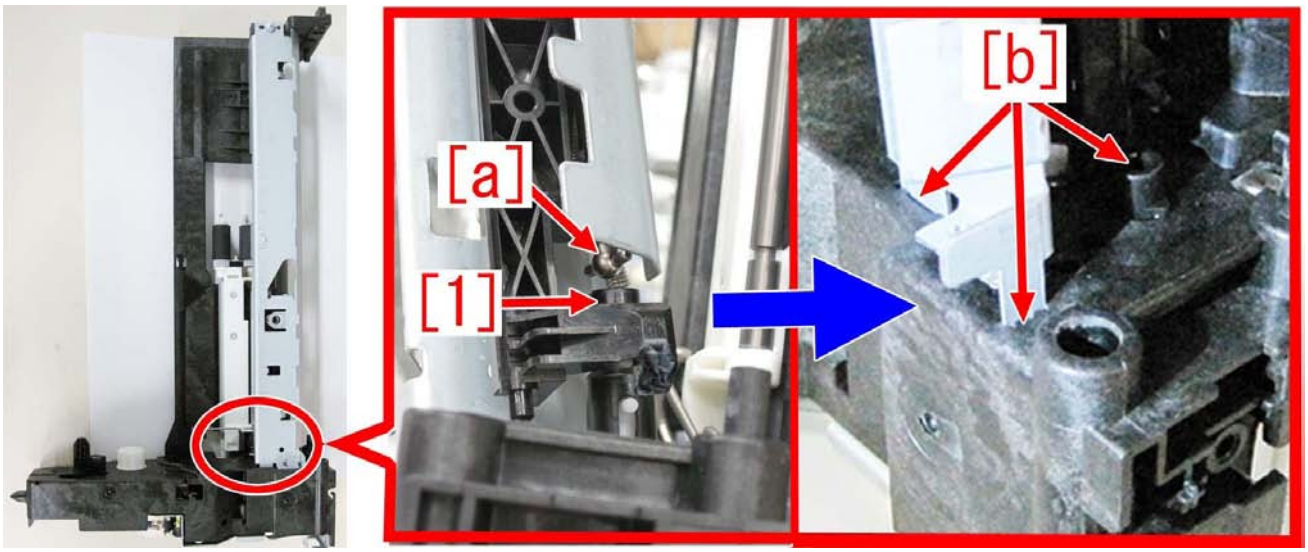


[Caution]

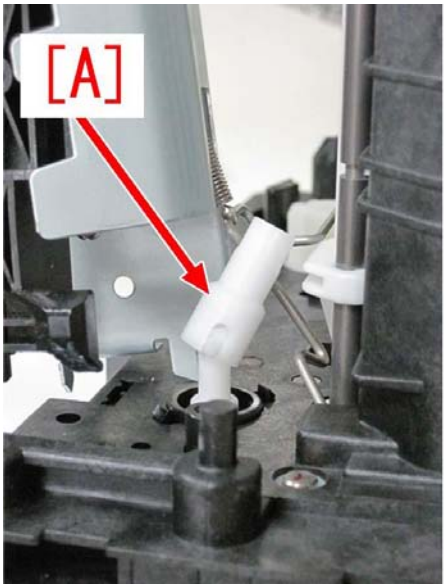
- When pulling the retard guide [1], pay attention not to pull the spring [2] too strongly. Too much pulling may break the spring [2]. Also be careful not to let the compression spring [3] to fly off while performing the work.



- When installing the retard guide, fit to the 3 bosses[b] of the retard guide at the same time as matching the phase of the T-shaped portion[a] of the 41T gear(FU3-0349-000) to that of the retard joint[1].



9) Replace the retard joint with the new type retard joint (FC9-4290-010). The photo[A] shows the old type, the [B] shows the new type.



10) Reassemble the part in the reverse order from the step 8).

11) Make test copy to check if the symptom does not occur any more.

[Replacement Part]
FC9-4290-010 JOINT, RETARD

<E532>

Title

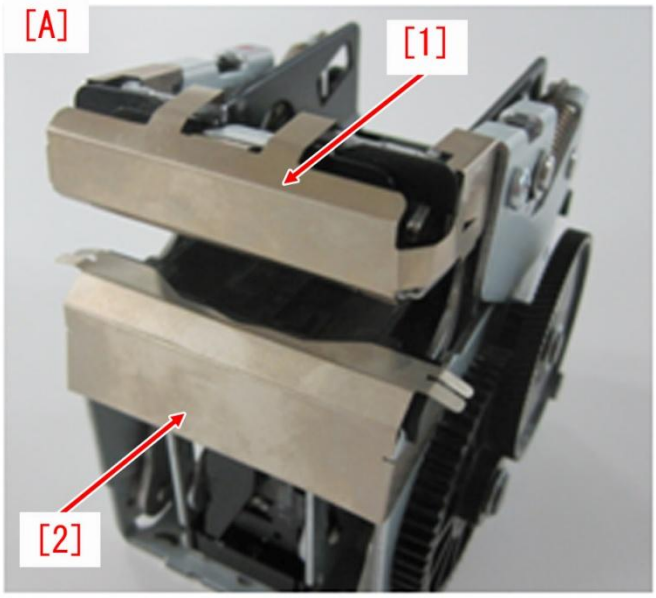
E532-8001/E532-8002 due to not attaching the clinch guide (Booklet/Staple Finisher-G1)

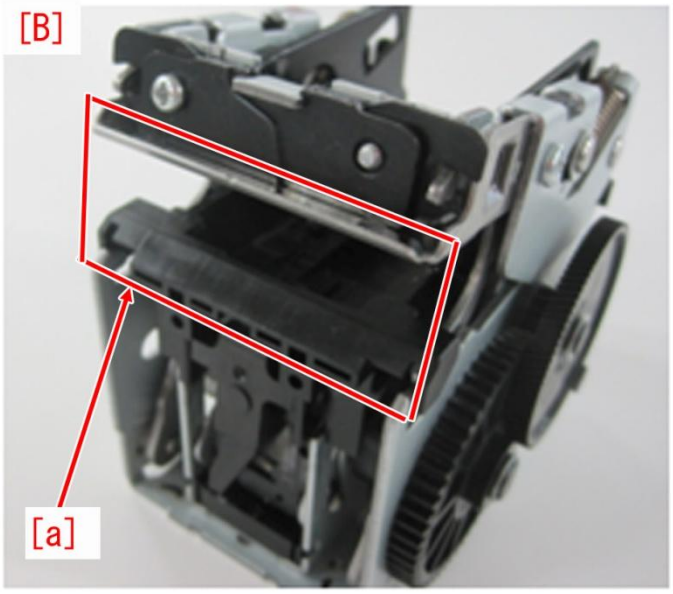
Description

E532-8001/E532-8002 occurred in Booklet/Staple Finisher-G1 after replacing the staple unit.
- E532-8001: The stapler does not leave the stapler shift home position when the stapler shift motor has been driven for 5 seconds.
- E532-8002: The stapler does not return to the stapler shift home position when the stapler shift motor has been driven for 20 seconds.

Cause

When replacing the staple unit, the clinch guide (upper) [1] and the clinch guide (lower) [2] must be removed from the staple unit before replacement and be attached to the new staple unit. However, because this procedure was not performed at the time of replacing the staple unit, when the staple unit shifts between the front side and the rear side, the end part [a] of the staple unit interferes with the metal plate of the operation tray assembly, and then the symptom occurs. The photo [A] shows the state that the clinch guides (upper/lower) are attached, while the photo [B] shows the state no guide is attached.





Field Remedy

Prepare the clinch guides (upper/lower), and then attach them to the staple unit.
[Additional Parts]
FC5-3358 GUIDE, CLINCH, UPPER
FC5-3359 GUIDE, CLINCH, LOWER

<No Power / Boot up problem / Not Display LCD>

Title

No display, no cycle, has green LED: solved by replacing POWER SUPPLY ASSEMBLY (UN1)

Description

When powered on, the imageRUNNER only has a green led on the control panel, no display and no cycling of the engine. J8130 on Main Controller 2 has only 3.3v on pin 1. J8132 on Main Controller 2 to J111 on the Power Supply had missing RMT voltages at multiple pins.

Field Remedy

This issue was resolved by replacing the Power Supply PCB (UN1).
FM4-7877 OWER SUPPLY ASSEMBLY (120v)
FM4-7878 OWER SUPPLY ASSEMBLY (230v)

<Duplex jamming >

Title

0107 jam code occurs on 2nd side of 2-sided print: Solved by changing setting of TMP-TBLC in service mode

Description

Paper crash into the drum when printing 2nd side of 2-sided print and 0107 jam code is displayed.
- 0107: Fixing Outlet Sensor (S19) Delay jam

Field Remedy

In this case, select service mode (Level 2) > COPIER > OPTION > IMG-FIX > TMP-TBLC (Set fixing control temperature table: curled paper), and change to "2" to solve the issue.
The range of settings is as follows. The default setting is "0" or "1" depending on the country.
0: Auto
1: OFF
2: N1 mode with plain paper 1/2 (Target temperature becomes low.)
3: N3 mode with plain paper 1/2 (Target temperature becomes moreover low.)

< Finisher Malfunction >

Title

None Articles

＜Appendix>

Title

"Suspended" displayed due to packing material remaining in the drum unit

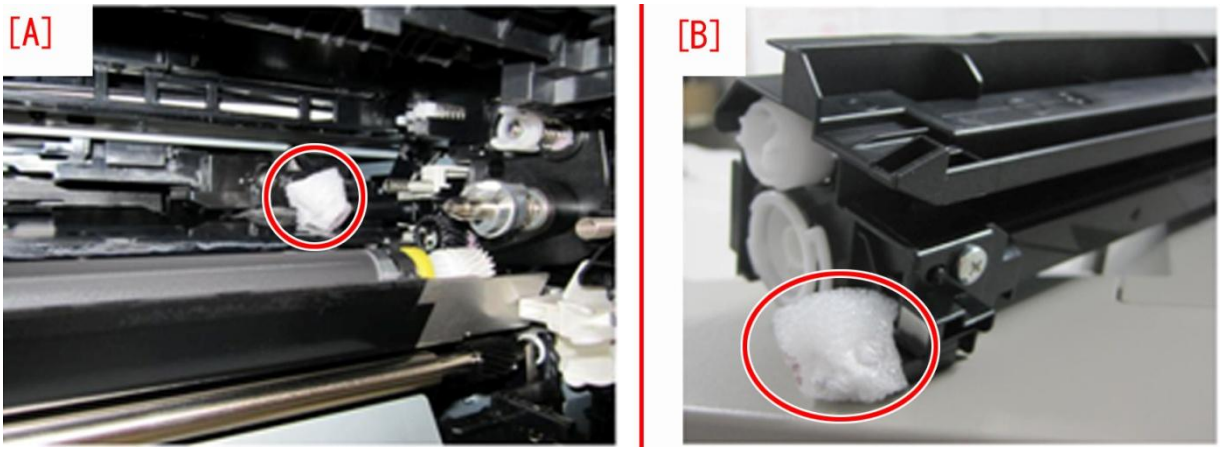
Symptom

"Suspended" message may be displayed after drum replacement.

Cause

When the drum unit is replaced, packing material remaining in the rear of the drum unit is left behind.

An example shown in Photo [A] is packing material remained inside of the main body. An example shown in Photo [B] is packing material caught in the rear of the drum unit.



Service work

Check the drum unit. If any packing material remains, remove it.

When replacing the drum unit, be sure to remove all the packing material.

Symptoms & Solutions Review & Preventative Maintenance Procedure

Today's Technical Workbook will focus on actual field activity, not textbook theory, based on data analysis and technician / product specialist experiences. The Symptoms & Solutions Guide highlights how you can resolve the top problems occurring in the field today. The Preventative Maintenance Procedure is a total call process that includes step by step maintenance procedure to be performed at the time of a service call. By addressing these issues on every call, you can prevent future calls thus increasing the Mean Copies Between Visits, lower your recalls, and increase your efficiency. Technical Publications are the mechanism Canon lets dealer service technicians know about updated technical information so they can efficiently service the Canon products supported by their dealership. As these documents are updated on a regular basis, you should be familiar where they are located on e-Support so you can make sure you have the latest information.