Model: **BR-C2**	Date: 10-Nov-16	No.: RD270004

Subject: Firmware Release Note: PowerSaving Sys			Prepared by: J.Ohno
From: 1st PP Tech Service Sect., PP Tech Service Dept.			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **PowerSaving Sys.**

Version	Program No.	Effective Date	Availability of RFU
1.17	D2705752	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.17	1st Mass production

Model: **BR-C2**	Date: 10-Nov-16	No.: RD270009

Subject: Firmware Release Note: PS3			Prepared by: J.Ohno
From: 1st PP Tech Service Sect., PP Tech Service Dept.			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **PS3.**

Version	Program No.	Effective Date	Availability of RFU
1.00	D3DV5770	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.00	1st Mass production

Model: BR-C2	Date: 8-Nov-16	No.: RD270011

Subject: Request for Firmware Update at new site install (Baron-C2)	Prepared by: J. Ohno
From: 1st PP Tech Service Sec., PP Tech Service Dept.,	

Classification:			
	☐ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☐ Tier2

REQUEST: When installing the Baron-C2 (Pro 8200EX/8200S/8210S/8220S), please update the firmware to the versions listed below or newer and make SP modifications as described on the following page.

Pro 8200EX (Basic)

Description	Current ver.	Update ver.
Engine	1.01	1.2
System/Copy	1.01	1.02
Network Support	12.76	12.77
OpePanel	1.02	1.03

Pro 8200S, Pro 8210S, Pro 8220S (MFP model)

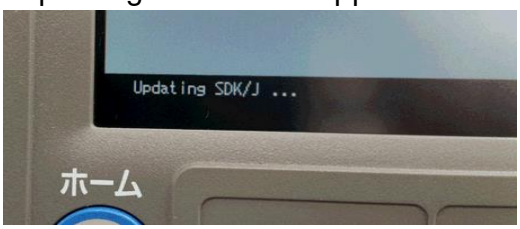
Description	Current ver.	Update ver.
Engine	1.01	1.2
System/Copy	1.01	1.02
Network Support	12.76	12.77
Printer	1.00	1.02
OpePanel	1.02	1.03
Java VM v11 for eDC	11.34.00	11.35.01

Note: Java firmware must be installed separately.

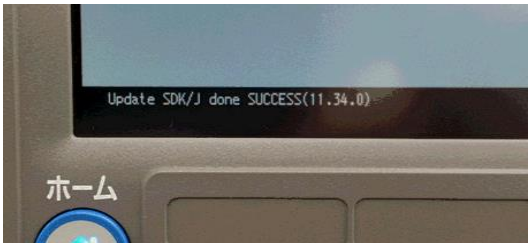
<u>Java firmware update procedure</u>

1. Download the Java firmware onto a separate SD card.
2. Insert the SD card into the lower slot and turn On the machine power.

   "Updating SDK/J" will appear after about 30 seconds.



   "SDK/J update done SUCCESS (new version number)" will appear after about 180 seconds.



SP modification
After updating the firmware, power cycle the machine OFF/ON and change these SP settings as follows:

- SP3-533-003: 0.50 → **1.00**
- SP3-534-003: 0.74 → **0.50**

REASON: The latest firmware could not be installed to the first lot of the mass production units due to the delay in development of the Baron-C2 firmware. To minimize the impact on product launch schedule, the machines were shipped without the latest firmware installed.

S/N of Affected Units by Product Code

NA model: 356 units in total / EU model: 43 units in total

Product Code	Serial No. from-to
D27057	C436C96001 - 08
	C436CA6001 - 12
D27017	C436C9001 - 61
	C436CA001 - 150
D27027	C436CA3001 - 20

Product Code	Serial No. from-to
D27117	C446C9001 - 30
	C446CA0001 - 47
D27127	C446CA3001 - 04
D27217	C456C9001 - 04
	C456CA0001 - 44
D27227	C456CA3001 - 19

Model: BR-C2/P2	Date: 15-Nov-16	No.: RD270012

Subject: Guide for Carbonless Copy Paper			Prepared by: J. Ohno
From: 1st Tech Service Sect., PP Tech Service Dept.			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☒ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2

GUIDE FOR PRINTING ON CARBONLESS COPY PAPER

While the Br-C2/P2 officially support carbonless copy paper, standard maintenance may not be enough to prevent image quality issues that may occur with machines that constantly print on carbonless copy paper.

It is recommended to take good account of the information provided in this guide, as it should be beneficial in preventing the following image quality issues that may occur with carbonless copy paper:

- **Toner offset on edge of Weight 0 paper**
- **Black streaks on back side of the page**
- **Offset via PTR**
- **Roller marks**

Note: The term “NCR (no carbon required) paper” is used on the operation panel and in the FSM, but this term will no longer be used, as it may infringe the trademark right.

Toner offset on edge of Weight 0 paper

SYMPTOM

If printed on “weight 0” carbonless copy paper, toner adhered to the ribs of the PTB unit offsets to the edge of the paper, which becomes visible when the printed sheets are stacked.

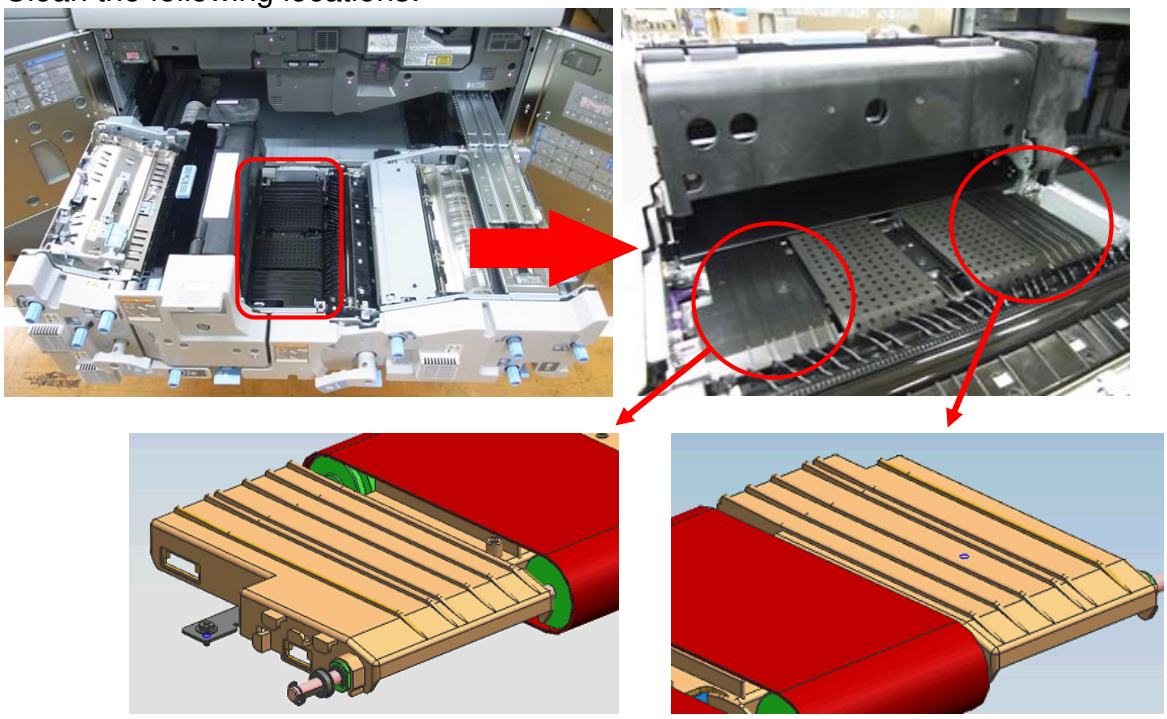
SOLUTION

When printing on weight 0 carbonless copy paper, clean the ribs of the PTB unit in advance.

Note:

- Ribs of the PTB unit can be cleaned by users.
- Wipe the ribs using a dry piece of cloth. No alcohol needed.

Clean the following locations:



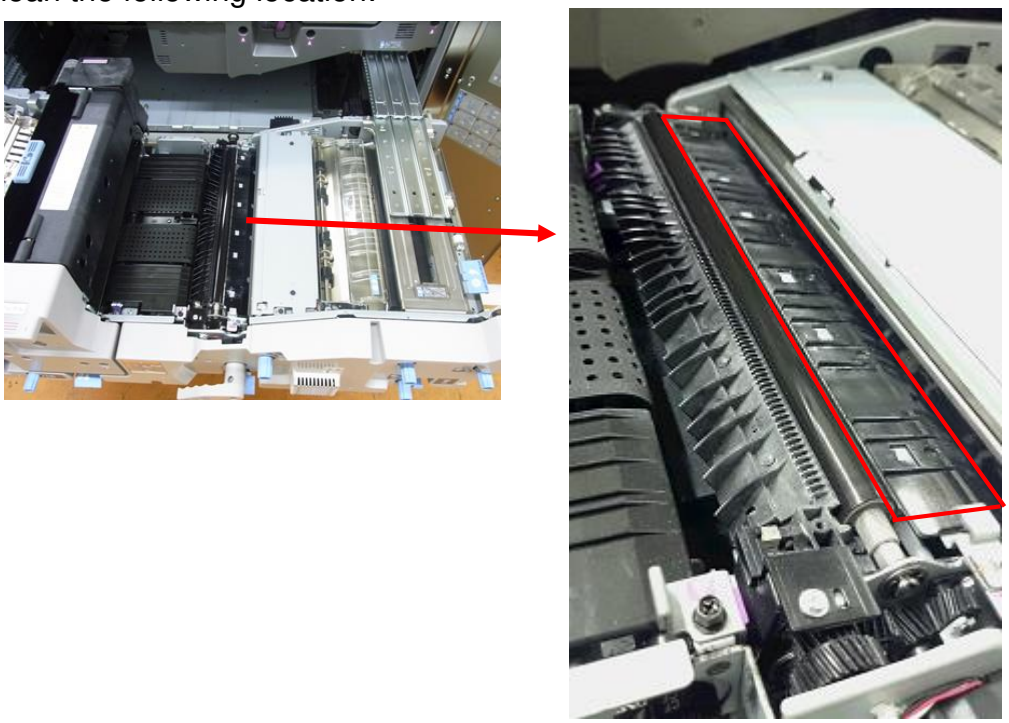
Black streaks on back side of the page

SYMPTOM
Toner adhered to the entrance guide plate of the PTR unit offsets to the back side of the page.

SOLUTION
Advise the operator to clean the ribs of the PTR unit every day before running the first job. (Cleaning is recommended every 20K pages.)

Note:
- The entrance guide plate of the PTR unit can be cleaned by users.
- Wipe the ribs using a dry piece of cloth. No alcohol needed.

Clean the following location:



Offset via PTR

SYMPTOM

Pressure applied by the paper feed/transport rollers causes the chemical substance contained in the carbonless copy paper to seep to the surface and adhere to the PTR, which offsets to the back side of the page and appear as black roller marks.

SOLUTION

If continuously printed only on carbonless copy paper, clean the PTR every 50K pages (LT/A4).

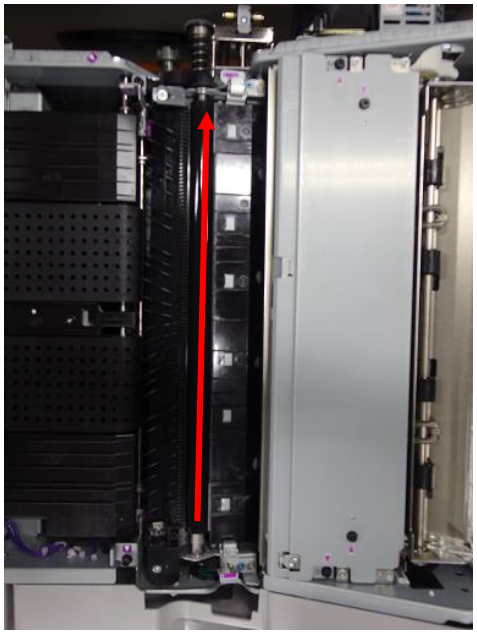
Note: Contamination on the PTR cannot be removed, if the user continuously printed 150K pages (LT/A4) without any cleaning maintenance. In such a case, replace the following parts as a set.

- Paper Transfer Roller
- Cleaning Blade in the PTR unit
- Lubricant Bar in the PTR unit
- Lubricant Roller in the PTR unit

How to clean the PTR

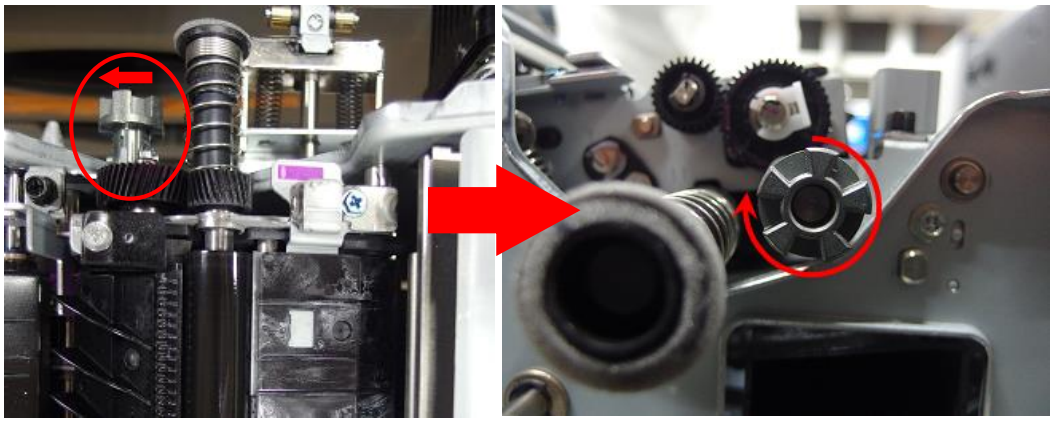
Note: TCRU/ORU contract operators can clean the PTR with the following procedure.

1. Open both front doors and pull out the drawer unit.
2. Clean the surface of the PTR in one-way direction as shown with the arrow, from the front side to the rear side of the machine. **DO NOT** wipe in the opposite direction.



Note:
- Wipe with a dry piece of cloth. No alcohol needed.
- DO NOT touch the anti-static brush that is under the sepearation plate.

3. At the rear side, turn the drive shaft of the PTR in the direction that feeds paper, to clear the entire surface of the roller.



Note:
- DO NOT turn the shaft in the oppostie direction (against the feed direction). Doing so may bend the cleaning blade and cause image quality problems and jams.

4. Verify that there are no foreign substances on the surface of the roller.

Roller marks

SYMPTOM

When printing on three-part form carbonless copy paper, paper dust from the top sheet adheres to the rollers and the color former contained in the paper dust reacts with the developer on the surface of the middle sheet, and roller marks appear on the middle sheet.

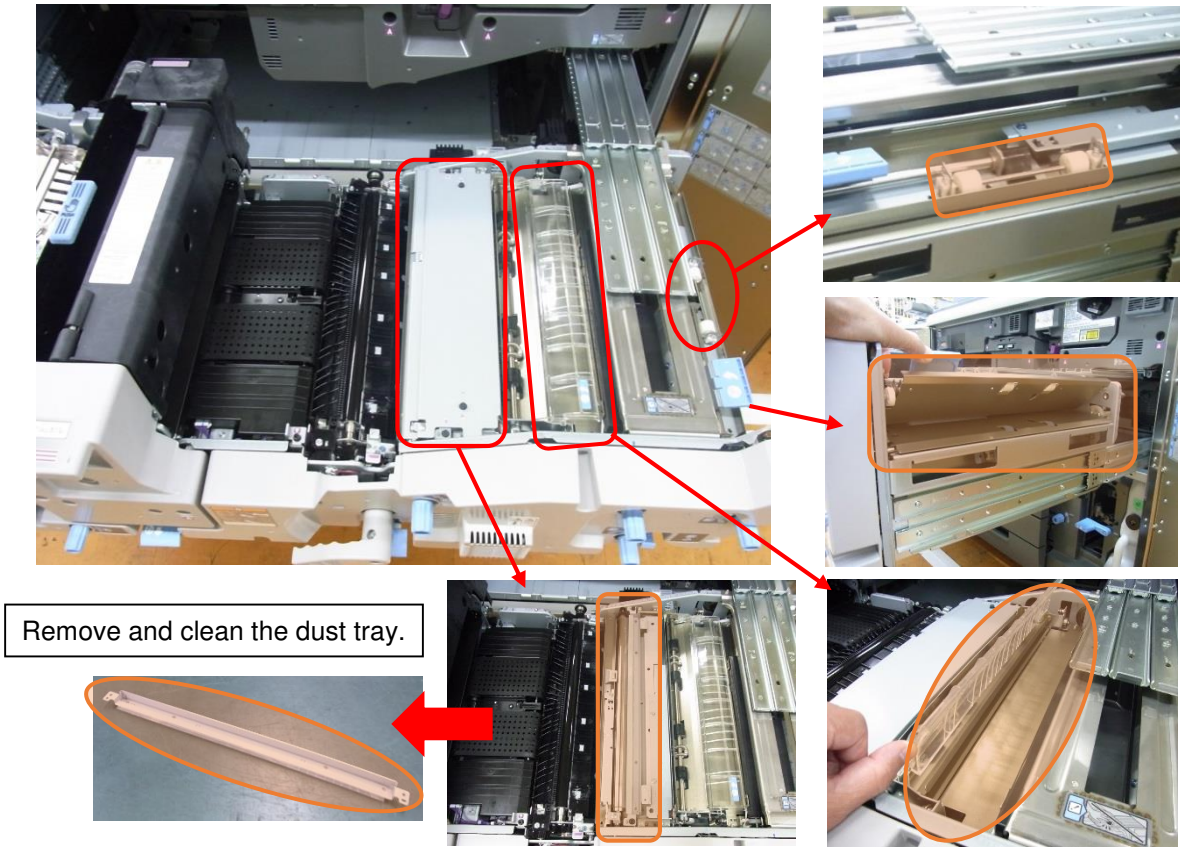
Note: The problem occurs only with carbonless copy paper and does not occur with plain/coated paper.

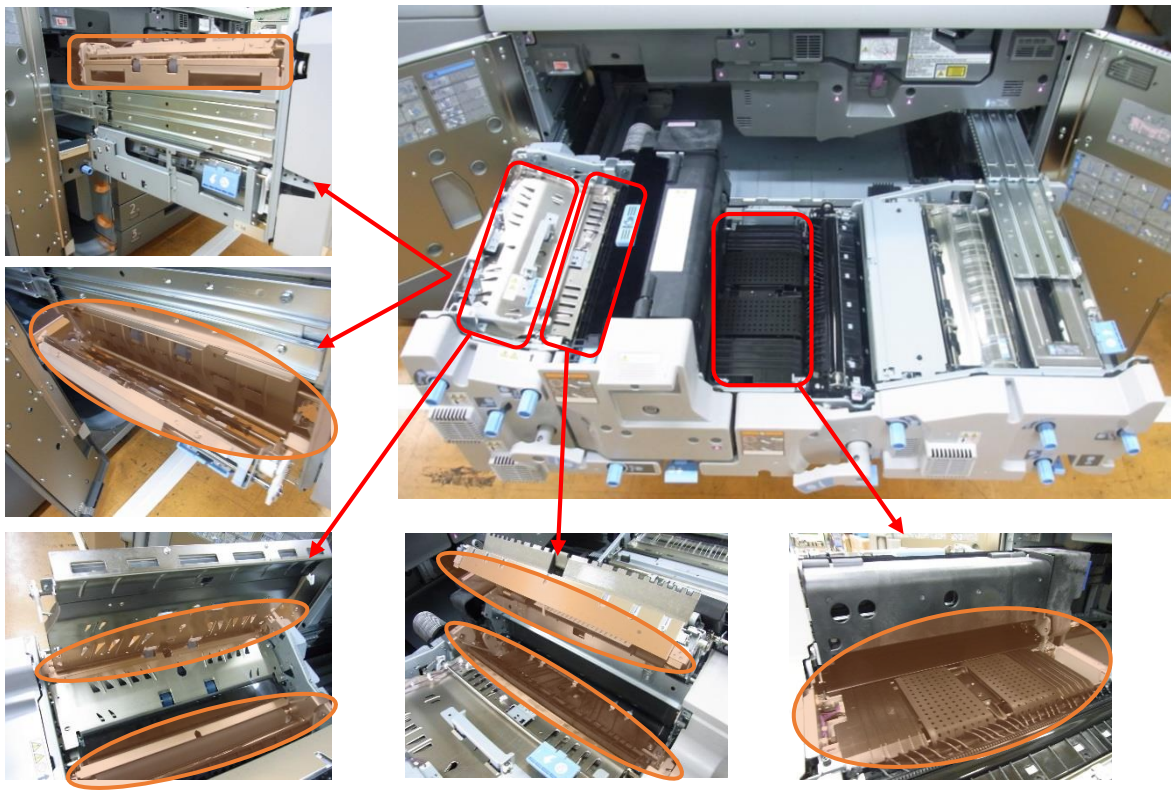
SOLUTION

To remove paper dust, clean all the rollers and the entire paper path from the LCIT to the finisher using a damp cloth and a vacuum cleaner. This will ease the symptom.

Note: As a standard procedure, use a vacuum cleaner to clean the paper paths. Use a piece of cloth, if a vacuum cleaner is not in hand.

1. Mainframe
   Clean the areas circled in orange.

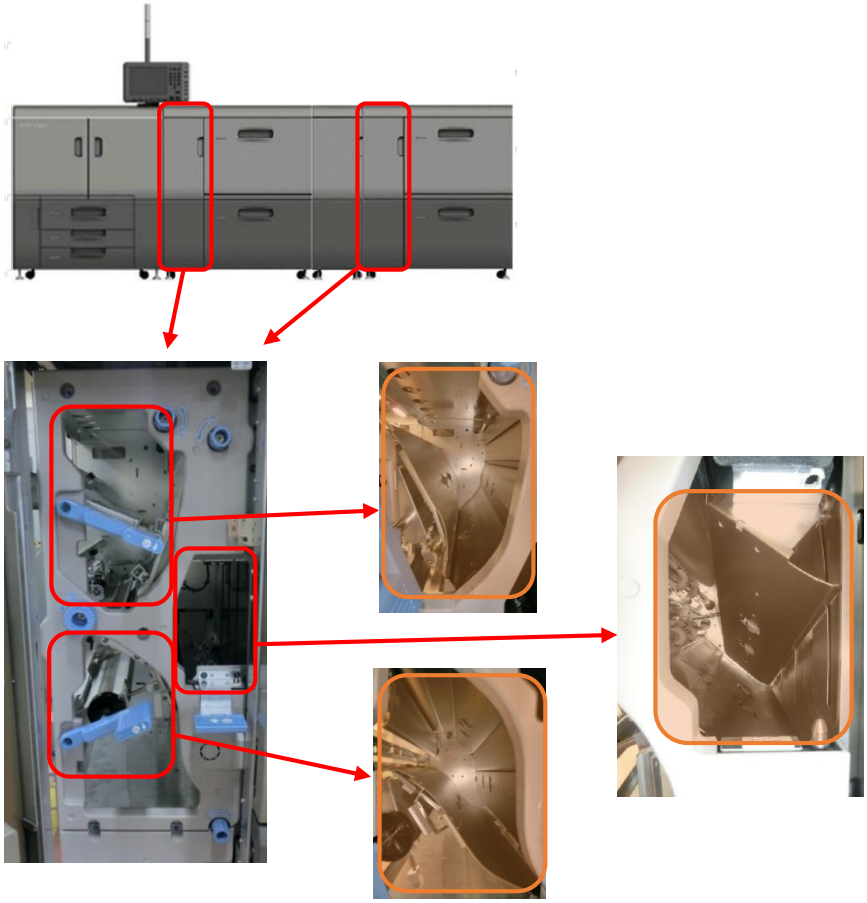


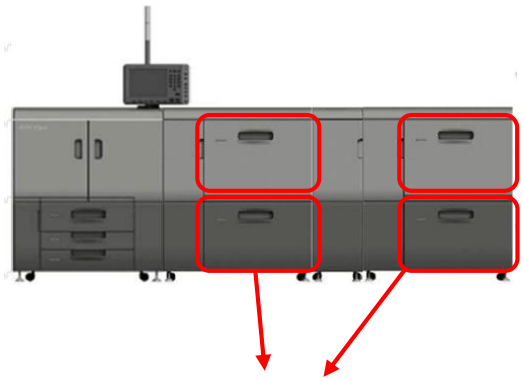


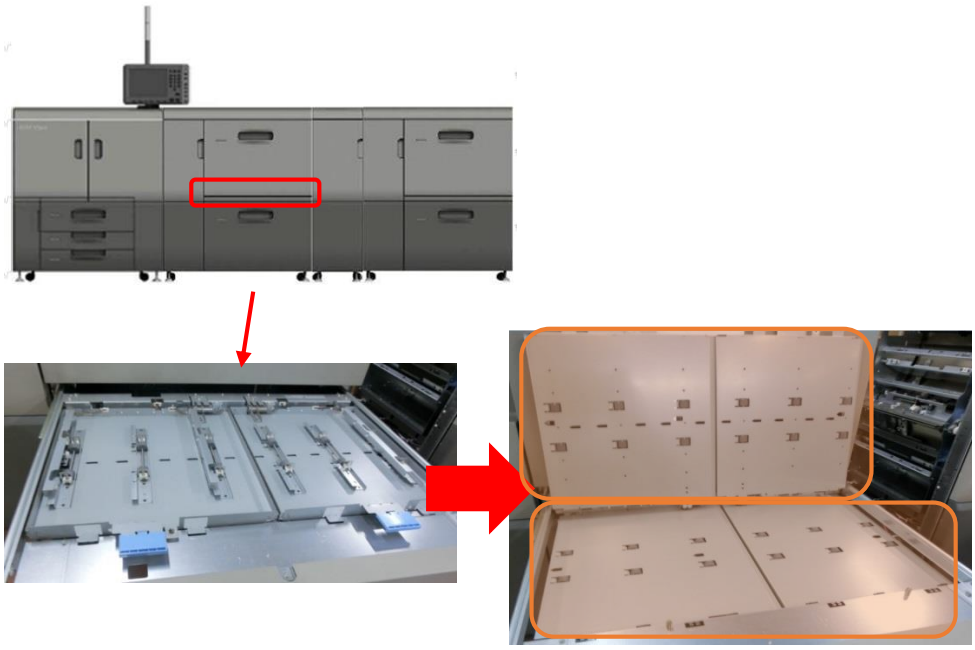
2. Vacuum Feed LCIT RT5100

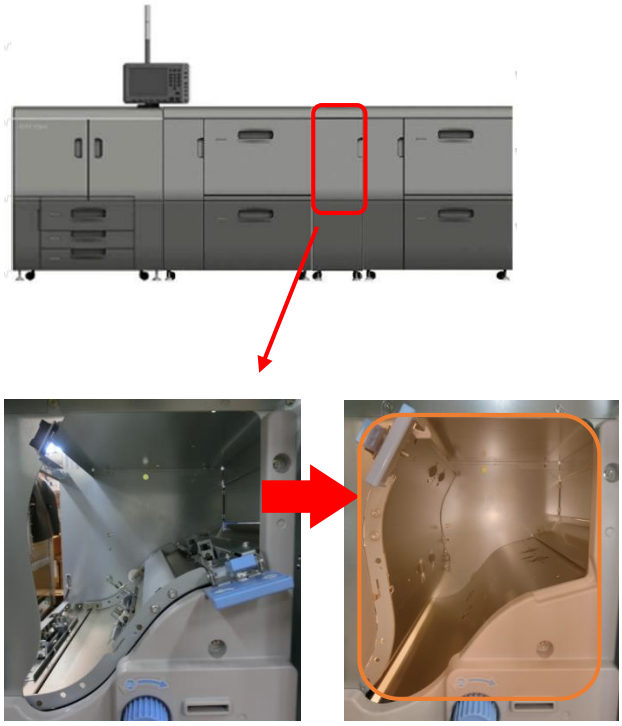
Note: The following shows a configuration consisting of two LCITs in tandem. Do the cleaning maintenance according to the configuration of your customer.

Clean the areas circled in orange.



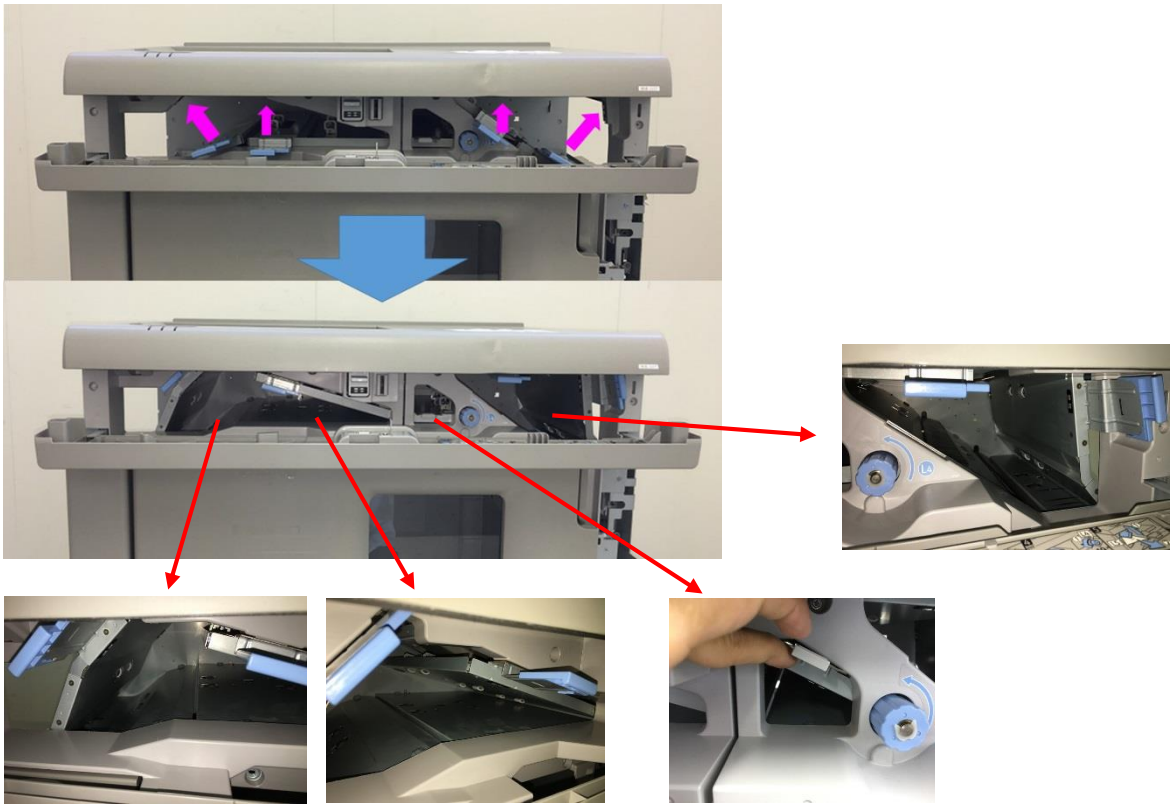




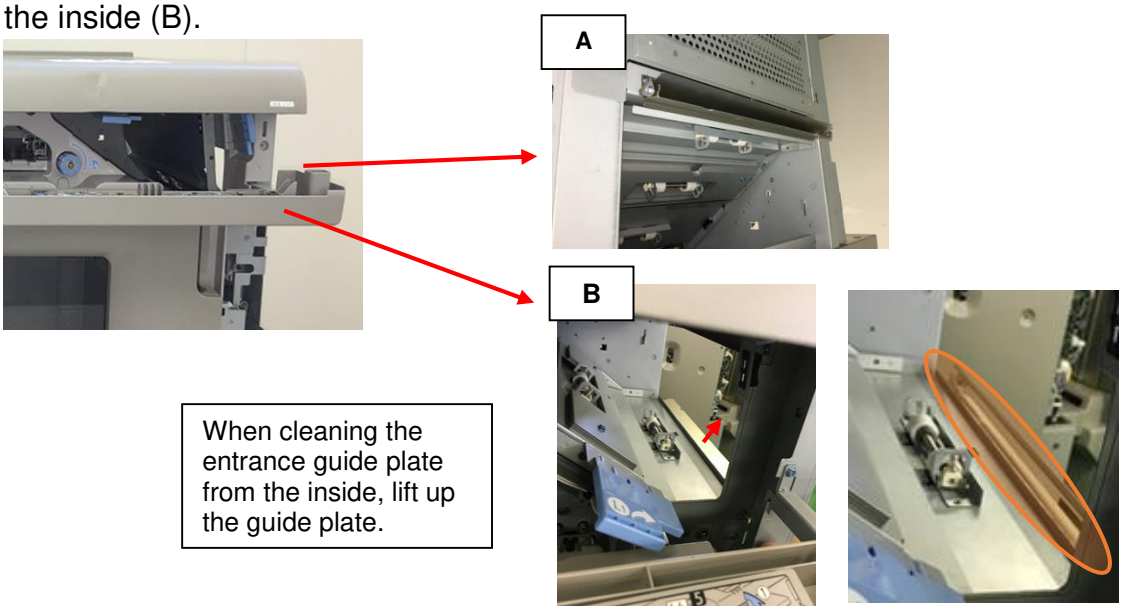


3. High Capacity Stacker SK5030

Clean the entrance guide plate.



If the stacker can be disconnected, clean the entrance guide plate from the outside (A). However, if the stacker cannot be disconnected, clean the entrance guide plate from the inside (B).



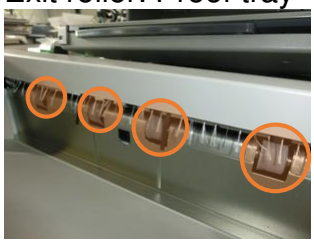
When cleaning the entrance guide plate from the inside, lift up the guide plate.

4. Finisher SR5050 / Booklet Finisher SR5060

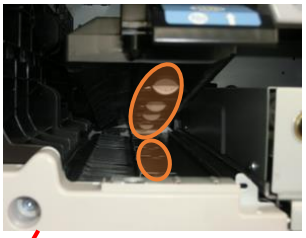
Clean the transport rollers and paper paths circled in orange.

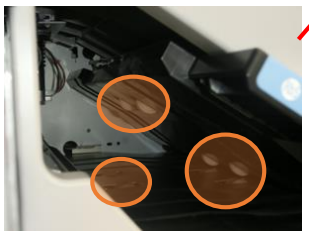
Exit roller: Shift tray

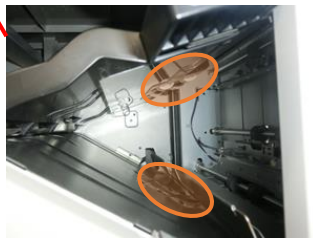
Exit roller: Proof tray



Transport rollers

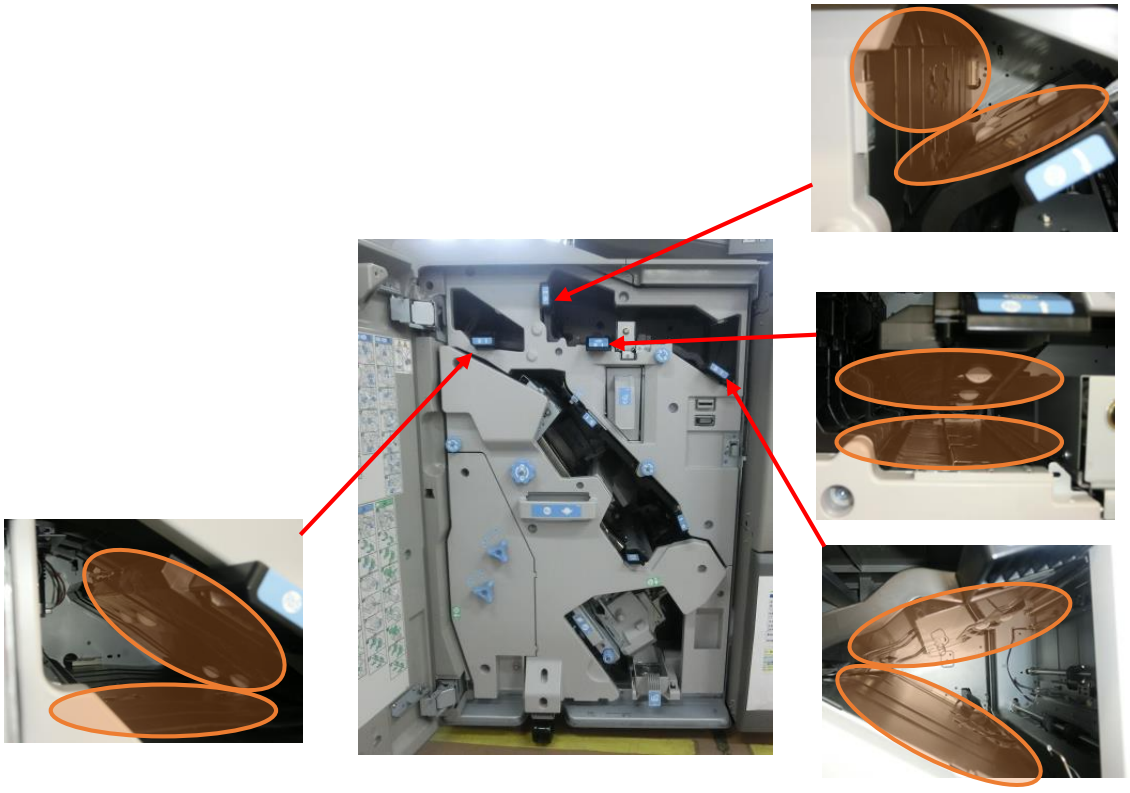






Exit guide plate: Shift tray

Guide plates



Model: BR-C2/P2	Date: 2-Dec-16	No.: RD270013

Subject: Incorrect relative humidity displayed in SP3-261-002	Prepared by: J. Ohno
From: 1st Tech Service Sect., PP Tech Service Dept.	

Classification:			
	☒ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM

The Relative Humidity displayed in SP3-261-002 is constantly 5% and does not reflect the actual relative humidity.

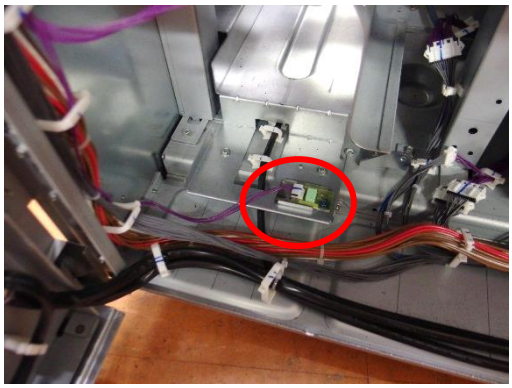
Also, the system controls are inappropriate, as the machine references this value. As a result, fans and drum do not operate as expected and optimum image transfer current is not applied, which may cause image quality problems such as blurred image, light density and uneven density.

CAUSE

The PCB that mounts the temperature/humidity detection sensor is touching the metal plate (near the waste toner bottle), causing a short circuit.

Note: The PCB is not damaged by the short circuit and does not have to be replaced.

Temperature/Humidity detection sensor
(View with the waste toner bottle removed)



PCB mounting the sensor
(View from bottom of the sensor)

Short circuit is caused by contact between the PCB and metal plate at this point.

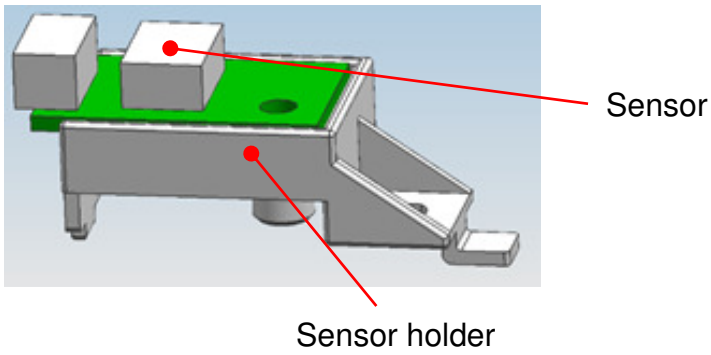
Affected Units

Model	Code	EDP	S/N	Destination	Shipping Date
Pro 8200S	D27017	404929	C436C900007	REI	20161012
Pro 8200S	D27017	404929	C436C900015	REI	20161012
Pro 8200S	D27017	404929	C436C900026	REI	20161012
Pro 8200S	D27017	404929	C436C900031	REI	20161012
Pro 8200S	D27017	404929	C436C900044	REI	20161012
Pro 8200S	D27017	404929	C436CA00042	REI	20161018
Pro 8210S	D27117	404930	C446C900011	REI	20161012
Pro 8220S	D27217	404931	C456CA00008	REI	20161026
Pro 8220	M0AB17	404940	Y676C900003	REI	20161018

SOLUTION

Production line:

A sensor holder will be added to prevent the PCB from contacting the metal plate.



Note: An announcement will follow in an RTB or PCIL when the sensor holder becomes available as a service part.

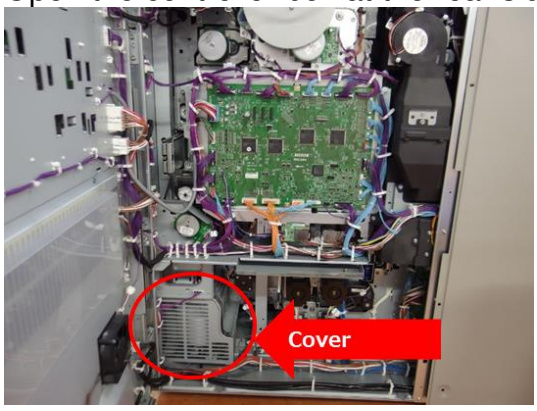
In the field:

Avoid the contact between the PCB and metal plate by reseating the PCB with the following procedure.

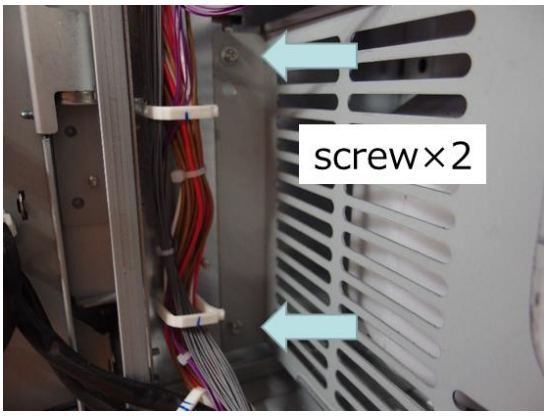
Procedure

1. Pull out the waste toner bottle.

2. Open the controller box at the rear side and locate the cover circled in red.



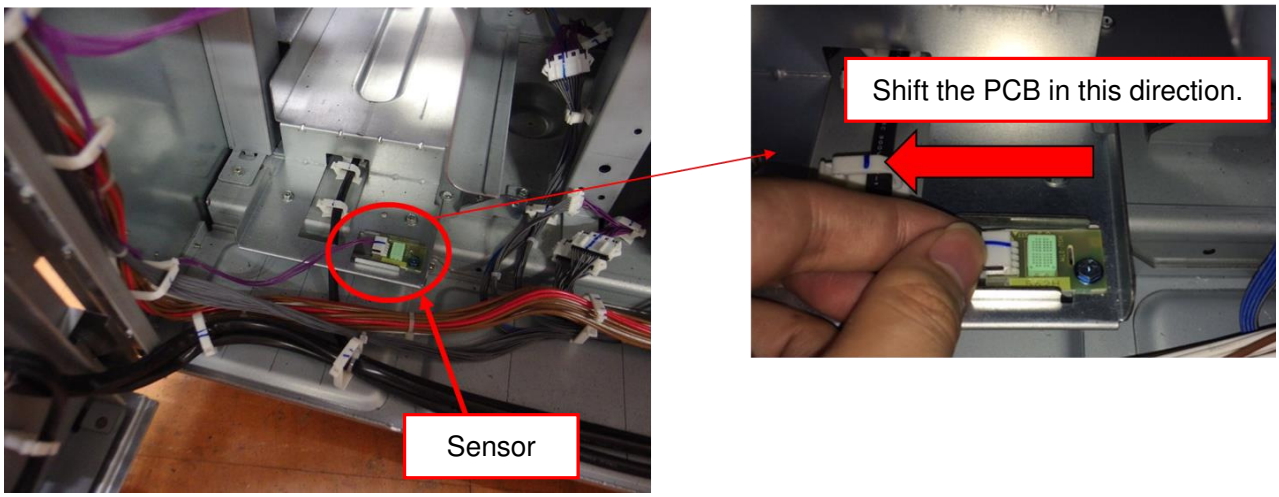
3. Remove the cover. (screw x 3)



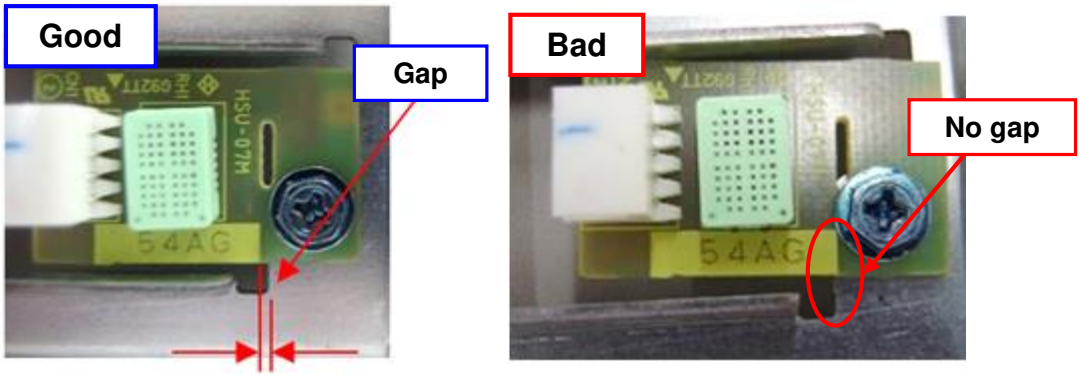
Note: Work carefully to avoid damage to the cables.

4. Loosen the screw fixing the sensor PCB and pull the white connector together with the cables toward the direction shown with the arrow.

   Note: The screw hole is large enough to fine adjust the position of the PCB.



5. Verify that there is a gap between the screw and the outline of the imprint “54AG” and refasten the screw. With this gap secured, the PCB should not touch the metal plate.



6. Enter SP3-261-002 and verify that it displays the correct relative humidity.
   If the value remains as “5%”, redo the above procedure.

Model: **BR-C2**	Date: 27-Dec-16	No.: RD270014

Subject: Firmware Release Note: Option IPDS			Prepared by: J.Ohno
From: 1st PP Tech Service Sect., PP Tech Service Dept.			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **Option IPDS.**

Version	Program No.	Effective Date	Availability of RFU
8.636	D3DV5771	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
8.636	1st Mass production Note: To ensure IPDS certification, Option IPDS (Ver.8.636) must be used in combination with the following module. Module: Printer Ver.1.02 or later (p/n: D2705770A) System/Copy Ver.1.02 or later (p/n: D2705750B) OpePanel Ver.1.03 or later (p/n: D2705790B) Network Support Ver.12.77 or later (p/n: D2705758A) Web Support Ver.1.01 or later (p/n: D2705754A)

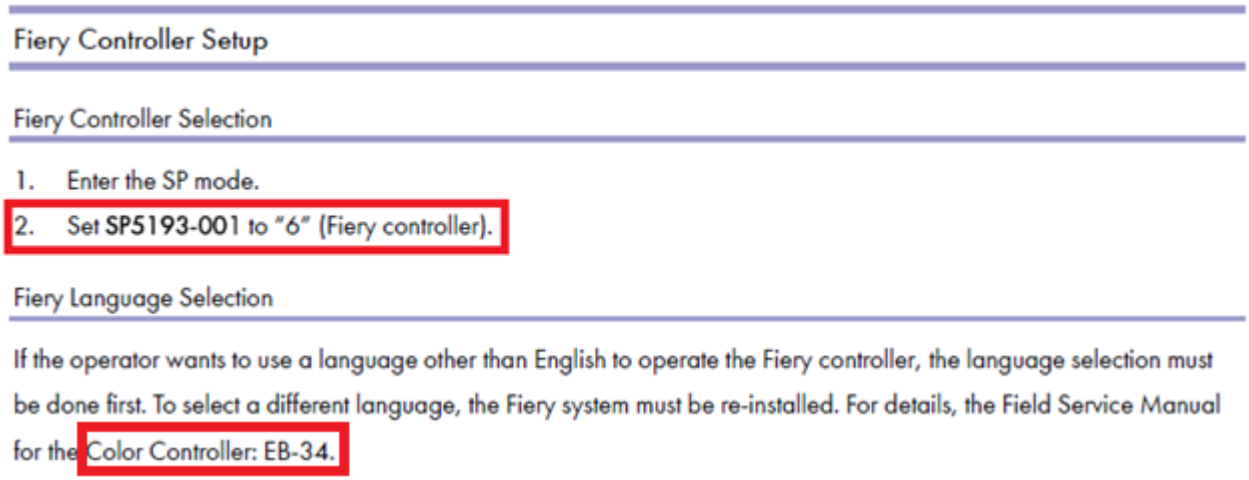
Model: BR-C2/P2	Date: 23-Jan-17	No.: RD270021

Subject: FSM Correction: Fiery Controller Setup SP Value	Prepared by: Y. Lim
From: 1st Tech Service Sect., PP Tech Service Dept.	

Classification:			
	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Please make the following corrections to your FSM in this section:

Installation → Fiery Controller Connection and Setup → Fiery Controller Setup



Fiery Controller Setup

Fiery Controller Selection

1. Enter the SP mode.
2. Set SP5193-001 to "6" (Fiery controller).

Fiery Language Selection

If the operator wants to use a language other than English to operate the Fiery controller, the language selection must be done first. To select a different language, the Fiery system must be re-installed. For details, the Field Service Manual for the Color Controller: EB-34.

SP Setting

Wrong:
Set SP5193-001 to "6" (Fiery controller).

Correct:
Set SP5193-001 to "1" (Fiery controller).
For more detail, refer to "Printer Controller EB-34 Installation and Service Guide."

Product Name

Wrong:
Color Controller: EB-34

Correct:
Printer Controller EB-34

Reissued: 02-Mar-17

Model: Brz-P1, Brz-MF1, BR-C2, BR-P2, CH-C1 Office/***Pro, Cor-C1.5, Gim-MF1.5dM, GR-C3,*** MT-C6, MET-C2ab, MET-C2cde, MET-C2yz, ***MET-P2, Midas-P3, Vesta-P1d_15S***	Date: 23-May-16	No.: RD255020b

RTB Reissue

The items in ***bold italics*** have been corrected or added.

Subject: Firmware Release Note: OptionSD FONT			Prepared by: T. Tachibana
From: 2nd Tech Service Sect., MFP/Printer Tech Service Dept.			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **OptionSD FONT.**

Version	Program No.	Effective Date	Availability of RFU
0.00	D3BC5277	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
0.00	1st Mass production

Model: BR-C2/P2	Date: 24-May-17	No.: RD270027

Subject: FSM Revision: Added description on SC682-**	Prepared by: J. Ohno
From: Sales Strategy Sect., 1st CP Business Dept.	

Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Please add the following description on SC682-** to your field service manual in section:

6. Troubleshooting → SC600

SC code	Level	Details (Symptom, Possible cause, Troubleshooting procedure)
SC682-01	D	PCU: ID chip communication error (Invalid Device ID)
SC682-06		PCU: ID chip communication error (Channel error)
SC682-11		PCU: ID chip communication error (Device error)
SC682-16		PCU: ID chip communication error (Communication aborted)
SC682-21		PCU: ID chip communication error (Timeout error)
SC682-26		PCU: ID chip communication error (Device shut-down)
SC682-31		PCU: ID chip communication error (Buffer full)
SC682-36		PCU: ID chip communication error (No error code)

Description:

I2C (Inter-Integrated Circuit) communication between the BCU and TD sensor is not established. If rebooting the system does not resolve the SC, check for the following parts and connection.

Possible causes:

* PCU poorly set
* TD sensor defective
* Poor harness connection between the BCU and TD sensor
* BCU defective
* IOB defective

Solution:

* Confirm PCU is set properly.
* Replace the development unit.
* Correct the harness connection between the BCU and TD sensor.
* Replace the BCU.
* Replace the IOB.

Model: BR-C2/P2	Date: 6-Jun-17	No.: RD270028

Subject: Troubleshooting: SC471-04 (ITB belt position error)	Prepared by: Y Tanimoto
From: QAC PPCSG	

Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2 ☐ Tier 0.5

SYMPTOM

SC471-0x (intermediate transfer belt position error x) occurs.

Note: In most cases, SC471-03 or -04 occurs. If SC471-03 occurs, machine operations are not stopped (the SC history is simply updated).

CAUSE

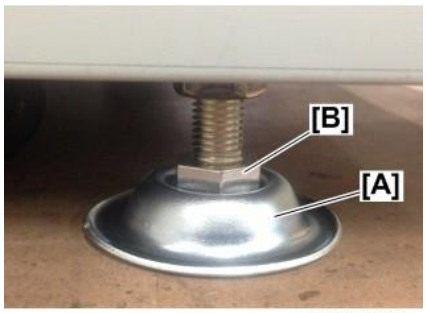
Machine deformation may make the ITB steering uncontrollable, because the ITB is always moving slightly from front to rear by back, and may not go back to a controllable range when it moves out of the control range because the machine is deformed.
SC 471-** may occur if there is a gap between the leveling shoe and the leveling bolt, even though the machine is leveled within the reference value (+/- 5mm per 1,000mm).

Solution

Procedure to check

Check the following, after leveling the entire system (Refer to “Height and Level Adjustment” of Common Adjustments in the Service Manual).

1. Slide one of the leveling shoes [A] by hand to check whether it can be moved.
2. If there is an air gap and the leveling shoe can be moved, adjust the leveling bolt [B] and make sure it stops against the leveling shoe [A] completely without an air gap.



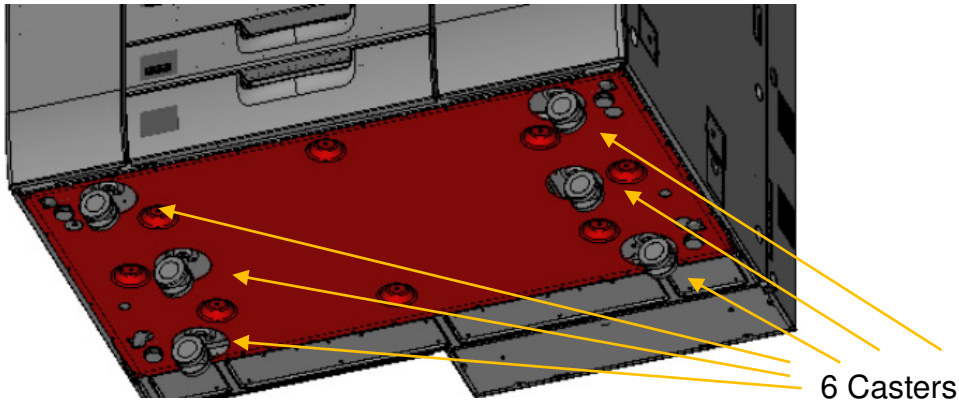
d194e9107a <- Check the gap between leveling bolt and shoe

Model: BR-C2/P2	Date: 6-Jun-17	No.: RD270028

More to check:

If the leveling bolts and leveling shoes are not used for installation, one of the six casters may not contact the floor, and this can lead to machine deformation.

Make sure leveling bolts and leveling shoes are used correctly at installation. Otherwise, SC471-** may occur due to machine frame deformation.



If SC 471- occurs**

If SC 471-** occurs, the control parameter must be reset with Lubricant Application Mode. Refer to “ITB Centering: SC471-03, -04, -05, -06 (ITB Position Errors)”, Other Problems in Troubleshooting Manual, and perform Lubricant Application Mode, after checking the causes and setting the ITB to the correct position.

Model: BR-C2/P2	Date: 23-Jun-17	No.: RD270029

Subject: FSM Correction: Installation Procedure of the Optional Counter Interface Unit Type M12	Prepared by: Youngsoo Lim
From: Sales Strategy Sect., 1st CP Business Dept.	

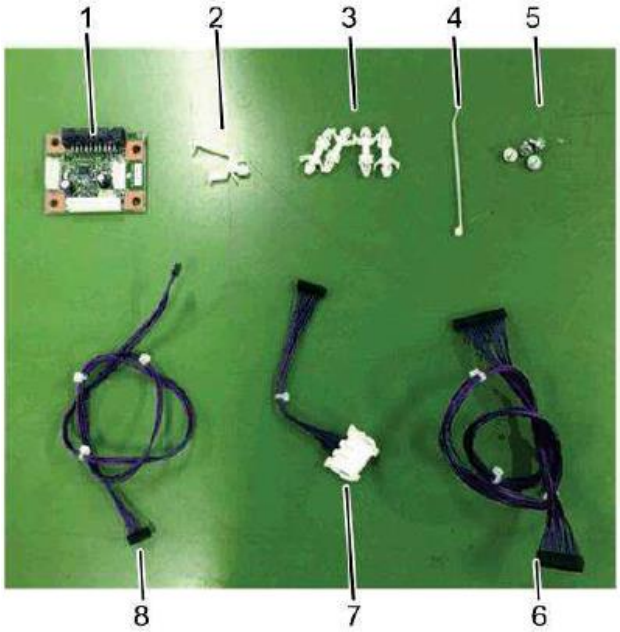
Classification:			
	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Please the make following correction to your field service manual in this section:

2. Installation → Key Counter, Optional Counter I/F Unit → Optional Counter I/F Unit Type A

Optional Counter Interface Unit Type M12

No.	Description	Q'ty	Remarks
1	PCB: MKB	1	-
2	Harness Clamp: LWS-0711	1	-
3	Stud	1	-
4	Harness Band 80mm	1	-
5	Screws M3x6 Standoffs	1	-
6	Harness (IOB to MKB)	1	-
7	Harness (Relay)	1	Not Used
8	Harness (MB to MKB)	1	Not Used



The harness that connects the IOB and MKB (callout #6) was changed to a type that is attached with the following connector.

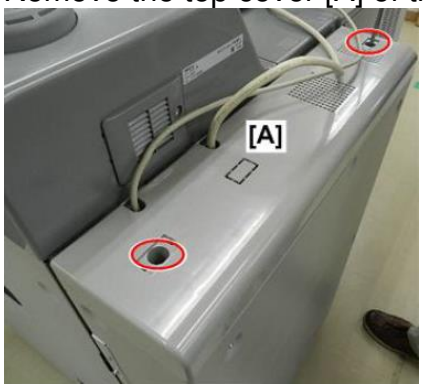
Connector

If the harness has to be replaced, procure the following, which comes with the connector.

Old P/N	New P/N	Description	Q'ty	Int	Note
D2705215	D2705216	HARNESS:MAIN:RIGHT SIDEWAYS	1	X/O	Change

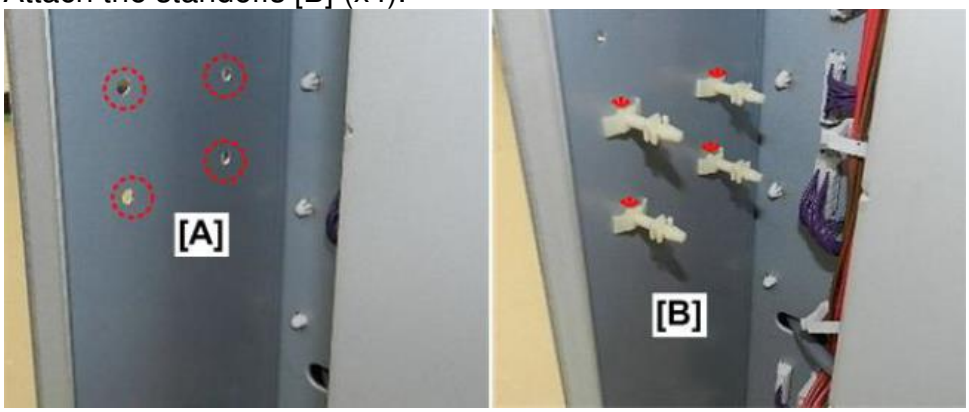
How to install Optional Counter Interface Unit Type M12

1. Remove the top cover [A] of the controller box. (cap x2, screw x2)

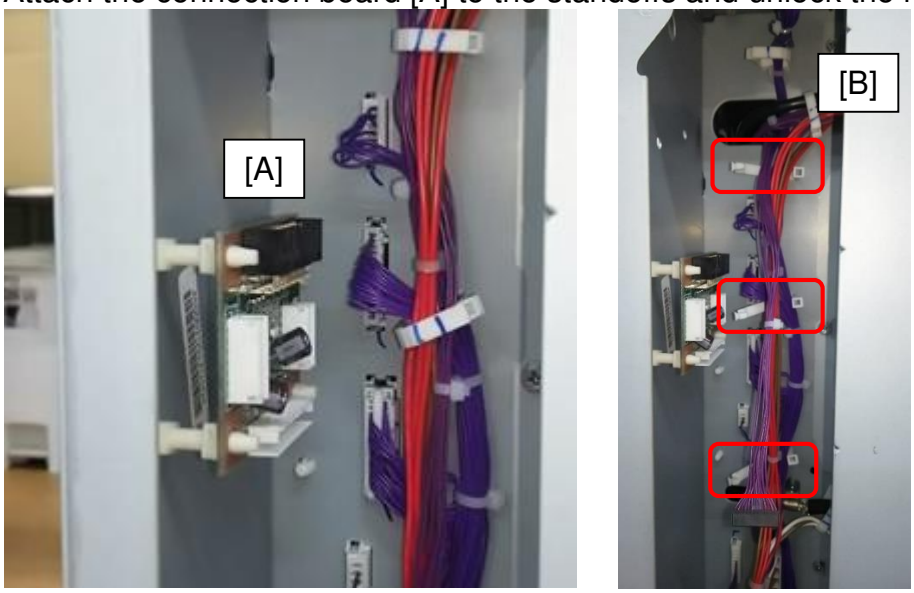


2. Remove the back cover of the controller box. (screw x11)

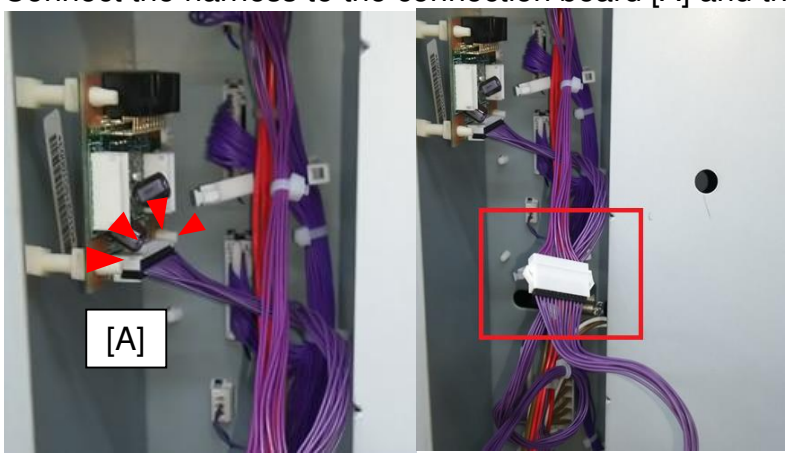
3. Locate the four holes [A] on the frame of the controller box.
4. Attach the standoffs [B] (x4).



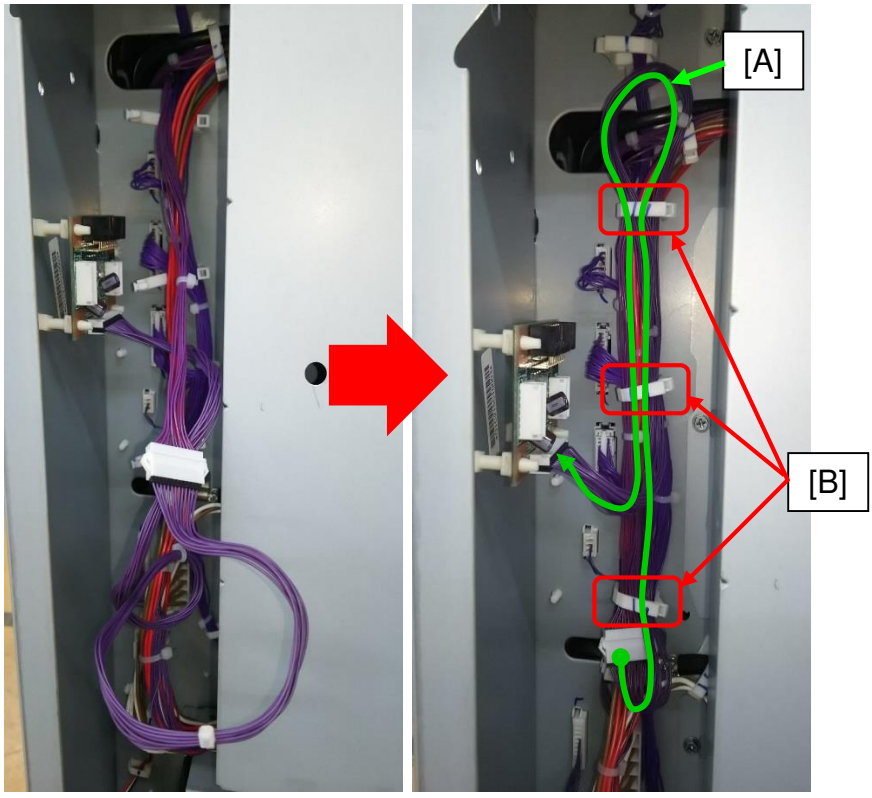
5. Attach the connection board [A] to the standoffs and unlock the harness clamps [B] (x3).



6. Connect the harness to the connection board [A] and the relay connector.



7. Route the harness [A] as shown in green and lock the harness clamps [B] (x3).



Model: BR-C2/P2	Date: 4-Jul-17	No.: RD270030

Subject: Modification Procedure for Paper Jam J082 with broken Fuser drive gear	Prepared by: J. Kobayashi
From: PPCS Section, CIP PQM Department, QAC	

Classification:			
	☒ Troubleshooting	☒ Part information	☒ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

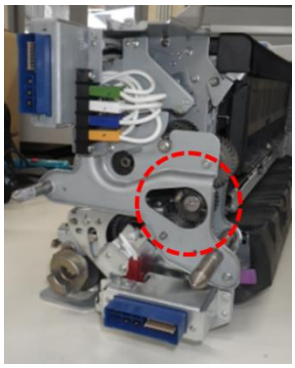
SYMPTOM

Paper Jam J082 (Paper transport sensor)

The drive gear in the Fuser Unit is broken and jams at the PTB Unit occur because the fuser rollers cannot rotate.

Damaged drive gear

Fuser unit and red circle indicates the position of the drive gear



CAUSE

Parts failure.
The 2 joints of the drive gear do not have enough mechanical strength and might be broken during printing.
The target parts were made from October to December in 2016.

SOLUTION

Replace the affected drive gear with a new one and apply the required grease to it.
Please see the following replacement procedure.

Part information

P/N	Description	Other
BB013037	GEAR:JOINT:PRESSURE:ASS'Y	Service Part
D2709901	GEAR:FUSING UNIT:ASS'Y	QA part (free of charge)

Note:
The above 2 parts are the same, please order one out of two.

Serial number
The following serial numbers below show the units that require part replacement.

Main Frame

Region	Type	Serial number	
NA	8200S	C436CA00107 - C436CA00160	C436CA60013 - C436CA60024
		C436CB00001 - C436CB00216	C436CB60001
		C436CC00001 - C436CC00029	
	8210S	C446CA00040 - C446CA00076	C446CB00001 - C446CB00067
		C446CC00001 - C446CC00004	
	8220S	C456CA00045 - C456CA00072	C456CB00001 - C456CB00028
	8210	Y666CA00005 - Y666CA00007	Y666CB00001 - Y666CB00018
	8220	Y676CB00001 - Y676CB00004	
RE	8200S	C436CA30011 - C436CA30056	C436CB30001 - C436CB30037
	8210S	C446CA30005 - C446CA30015	C446CB30001 - C446CB30009
		C446CB30011	C446CB30014 - C446CB30028
	8220S	C456CA30008 - C456CA30016	C456CA30019
		C456CA30020 - C456CA30021	C456CA30023 - C456CA30029
		C456CA30031, C456CA30033	C456CA30036 - C456CA30039
		C456CB30001	C456CB30007 - C456CB30013
		C456CB30015 - C456CB30018	
	8210	Y666CA30001 - Y666CA30005	
	8220	Y676CA30008	
RA	8200S	C436CA30023, C436CA30027	C436CA30033, C436CA30035
		C436CA30045, C436CA30046	C436CA30048, C436CA30049
		C436CA30051 - C436CA30054	
	8210S	C446CB30010, C446CB30012	C446CB30013, C446CB30019
	8220S	C456CA30017, C456CA30018	C456CA30022, C456CA30030
		C456CA30032, C456CA30034	C456CA30035, C456CA30040
		C456CA30041	C456CB30002 - C456CB30006
	8220	Y676CA30009	
RCN	8100S	E806CB20001 - E806CB20005	

Model: BR-C2/P2	Date: 4-Jul-17	No.: RD270030

TCRU unit

Region	Type	Serial Number
NA	Type8200	000B226A103 - 000B226A143 000B226B001 - 000B226B012 000B226C001 - 000B226C042
RE	Type8200	000B236B001 - 000B236B028
RA	Type8100	41611001 - 41611004

Service part unit

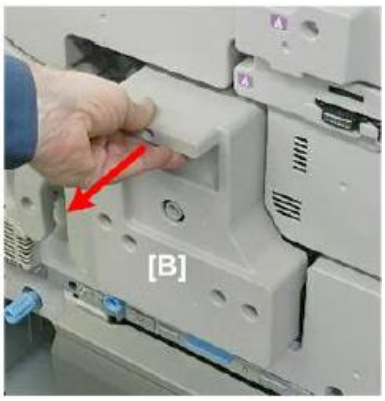
Region	Type	Serial number	
NA	C1/P1 D1794017	TK2S16100002	TK2S16110001 - TK2S16110007
		TK2S16110011, TK2S16110014	
	C2/P2 D2704017	TK5S16100001 - TK5S16100015	TK5S16100022
		TK5S16100026 - TK5S16100030	TK5S16110001 - TK5S16110003
		TK5S16110005, TK5S16110009	
RE	C2/P2 D2704018	TK6S16100001 - TK6S16100005	TK6S16100007, TK6S16100008
		TK6S16100010 - TK6S16100015	TK6S16100018
		TK6S16100020 - TK6S16100025	TK6S16110012

Procedure

Estimated Work time:
Main Frame: 10 min.
Note: The fusing unit could be very hot, so work carefully.

TCRU & Service parts: 13min.
Note: The unpacking and packing procedure takes 3 minutes more than for main frame.

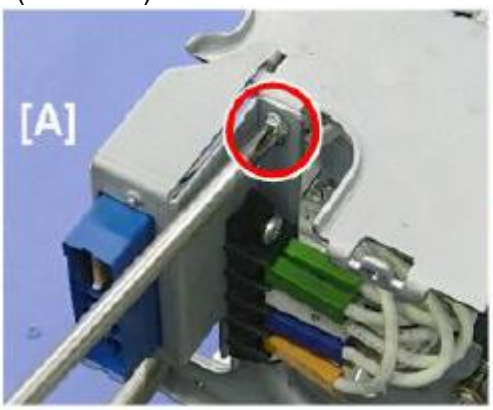
1. Remove the lock screws of the cover [A] (2 black screws)
2. Grip the unit by its handle [B], and then pull the unit out until it stops.

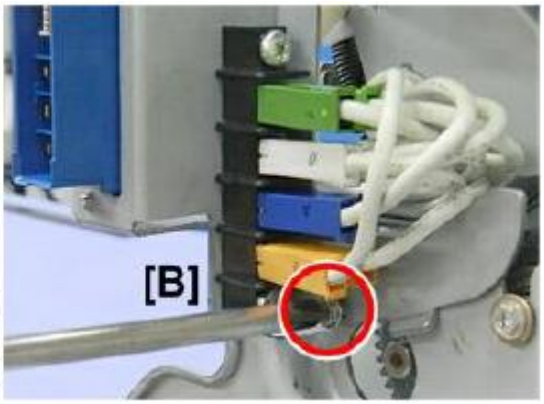


3. Grip the unit on the both ends, and then lift it off its tray.
Note: The unit weighs about 15kg. Lay the unit on a flat clean surface, strong enough to support its weight.

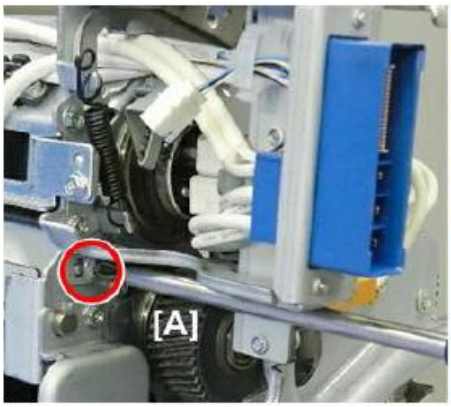
4. Remove the rear cover [A] （3screws）

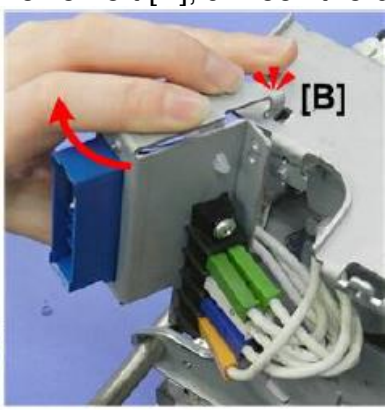
5. At the rear, disconnect the lamp connector bracket at the top [A] and bottom [B] (2screws)



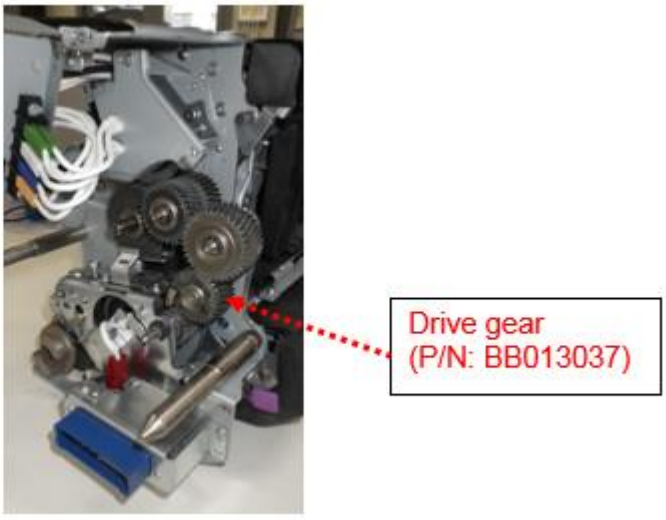


6. Disconnect the bracket at the lower left [A], unhook the bracket [B] (1screw)

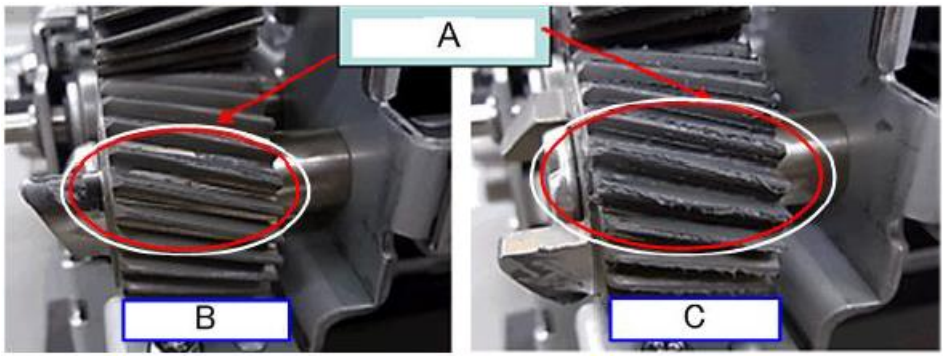




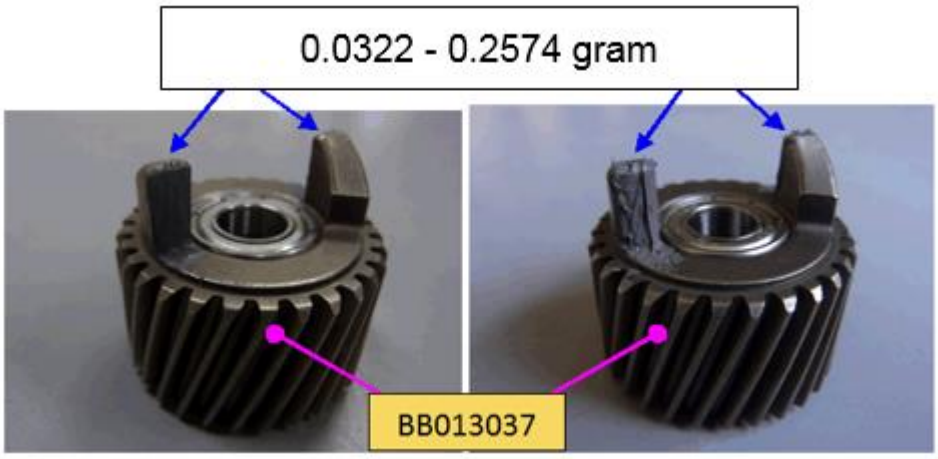
7. At the rear, remove the bracket. (4screws, 1bushing)
8. Remove the drive gear and replace with a new one. (1 screw)



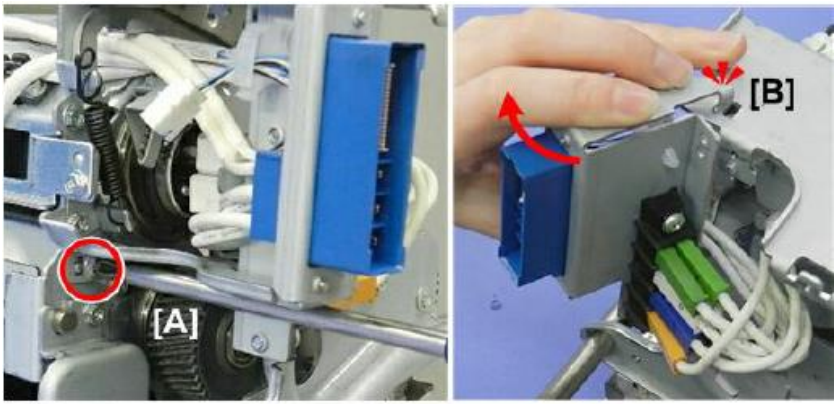
9. Apply Fluotribo MG Grease to the drive gear. Apply 4±0.8g to the drive gear.
The drive gear [A] is lubricated. [B] shows the minimum amount (3.2g) of grease and [C] the maximum amount (4.8g).



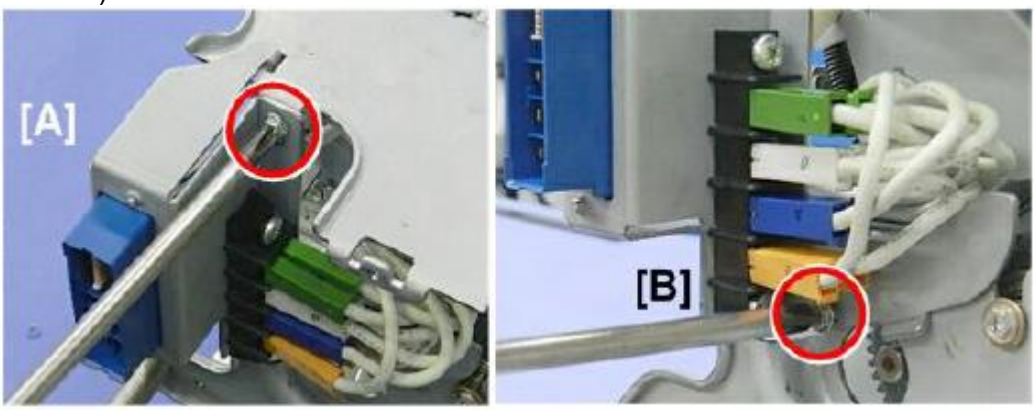
After that, apply Fluotribo MG Grease to the contact face of 2 joints



10. At the rear, attach the bracket. (3 screws, 1 bushing)
11. Hook the bracket [B], then connect the bracket at the lower left [A] (1 screw)

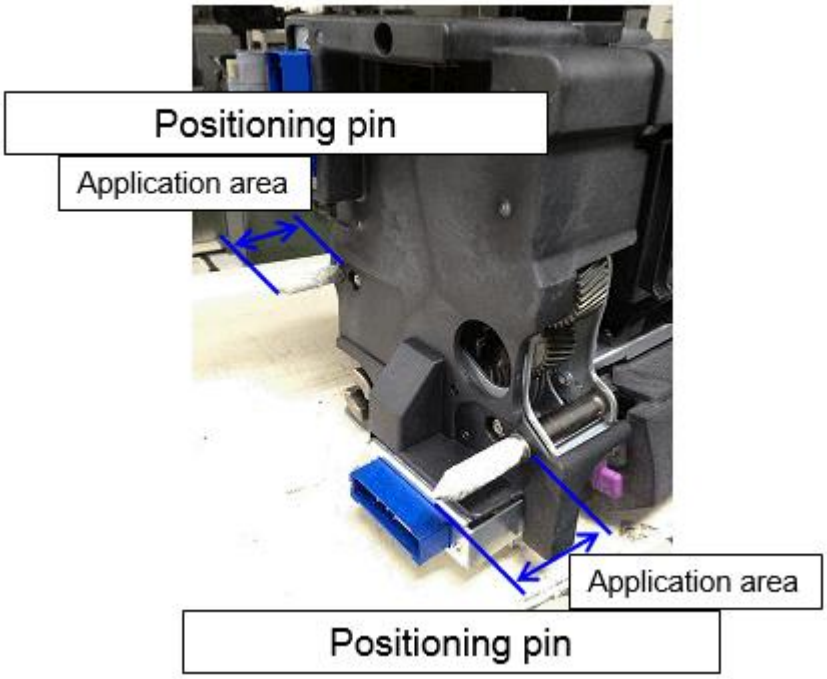


12. At the rear, connect the lamp connector bracket on the top [A] and bottom [B] (2 screws)



13. Attach the rear cover [A] (3 screws)

14. Apply Barrierta S552R Grease to the positioning pins.
    Apply 0.35±0.15g to the positioning pin.



Model: BR-C2/P2	Date: 23-Oct-17	No.: RD270032

Subject: Troubleshooting of Black streaks after long leave with unprinted	Prepared by: Youngsoo Lim
From: Sales Strategy Sect., 1st CP Business Dept.	

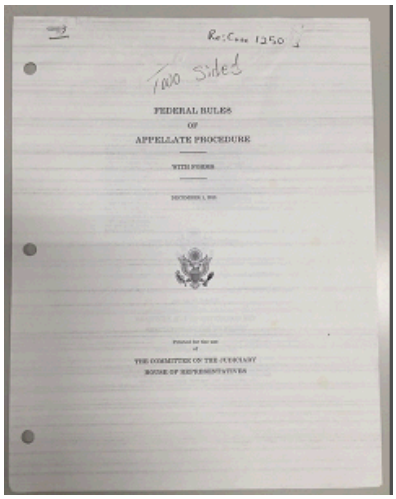
Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier2

SYMPTOM

Black streaks on paper feed direction.

Black streaks appears on a couple of pages when it resumes the jobs after long leave without printing.

Note 1: Black streaks disappear after a few sheets have been printed.

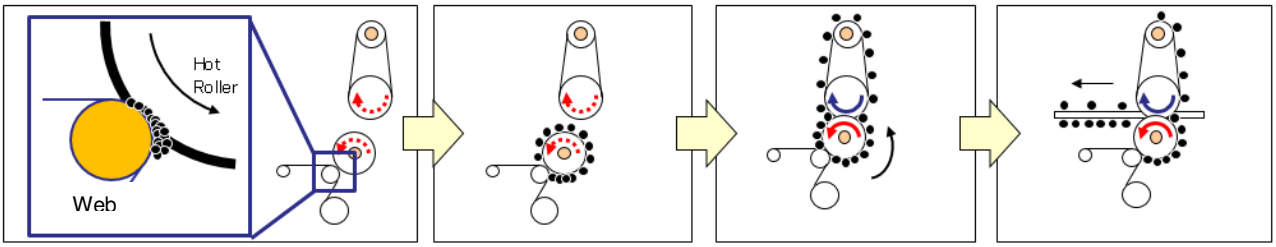


CAUSE

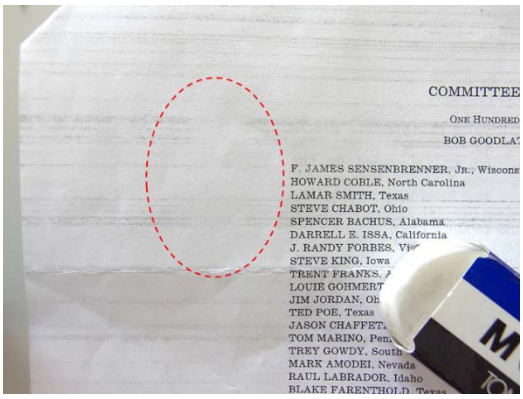
Under the conditions described below, the surface layer of the pressure roller rubs against the web and is scraped. And the abrasive powder passes through the web, accumulates on the pressure roller, and is transferred to the sheet.

- The machine is used for the first time in a long while, or first thing in the morning.
- The Low power Mode Timer is set to a value longer than 1 hour.
- The average monthly copy volume is less than 30,000 pages with A4/LT conversion.
- The pages per job ratio of in between “1 page per job” to “20 pages per job” are more than 75 percentage against all jobs.

Note 2: While the machine is in the Ready (stand-by) condition, the web roller is stationary while the pressure roller is rotated. A certain amount of shavings from the pressure roller are transferred to the web roller, but this is normally not visible.



Note 3: If the streaks can be wiped off easily with an eraser, they are caused by the CAUSE explained above (as the streaks are not toner). The roller shavings will also rub off easily onto your finger. If not, the cause is different.



SOLUTION

1. Set the Low Power Mode Timer to a value of less than 60 minutes.

   Default setting (= **15** minutes) is recommended.

2. Set the SP values as follows, if solution #1 does not resolve the Black streaks.

   1) SP1-902-031 (Standby: Web Operation Time) :99999 (Default) to **30** [sec]
   2) SP1-902-032 (Standby: Web Rotation times) : 1(Default) to **9** [times]

   Note 4: Due to the SP change, the web operates every 30 sec as the standby temperature maintenance rotation time.
   The number of times 9 is the times are taken up on the dirt surface of the web nip onto the new surface.

   Note 5: As the side-effects, the life of the web becomes shorter with the SP change, and it depends on how it is used. But, it may be about half of the life.

Note 6: “D0744330 WEB:SUB-ASS'Y” recommended as the solution in the RTB RD179124 for Baron-C1/P1 is not used for Baron-C2/P2.

[Clue of Extend the Web life]

Web life can be extended with changing the SP setting.

Case 1: Set SP1-902-031 to 60 from 30, if Black streaks are resolved with the Resolution instructed above. Web life may be extended to 75 %.

Make sure no Black streaks are observed with this setting.

Case2: Set the SP1-902-031 to 90 from 60 to extend the life further, if Black streaks are not observed with the setting above in Case 1. Web life may be extended to 85 %.

Make sure no Black streaks are observed with this condition.

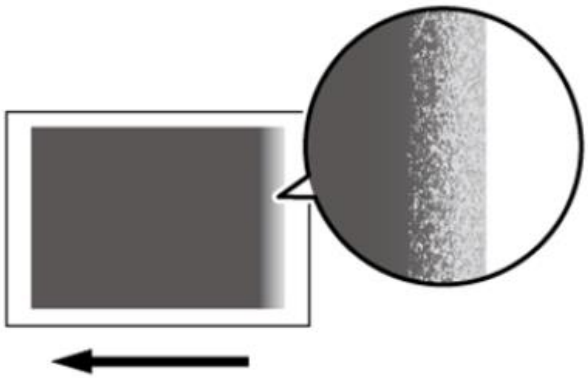
Note 7: Advice the customer not to leave the machine in a Paper End, output full, or error status for a long time. This is because under this condition, machine stays in the Ready condition and will not switch to Low Power Mode (it will switch only when the condition is cleared). This is especially important for machines that operate at night unattended.

Model: BR-C2/P2	Date: 29-Nov-17	No.: RD270033

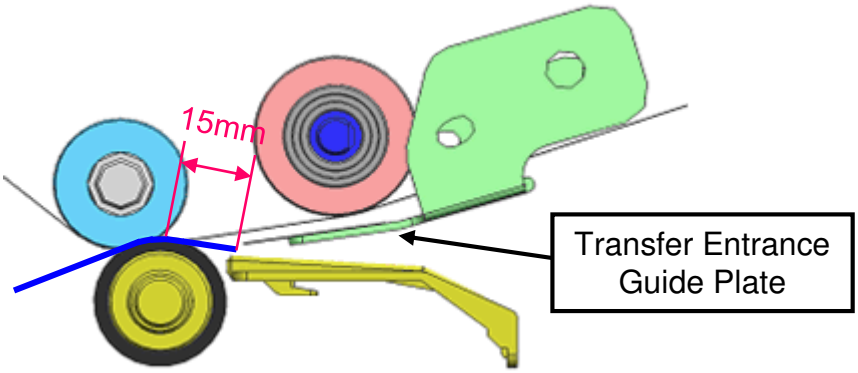
Subject: Troubleshooting: Fainter on the trailing edge (15mm)	Prepared by: J. Ohno
From: Sales Strategy Sect., 1st CP Business Dept.	

Classification:			
	☒ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM: The image printed within 15mm (approx. 5/8 inch) from the trailing edge is faint.



CAUSE: Toner on the ITB scatters when the trailing edge approaches the PTR. This happens because the trailing edge flicks the belt immediately after it passes the guide plate before entering the PTR nip.

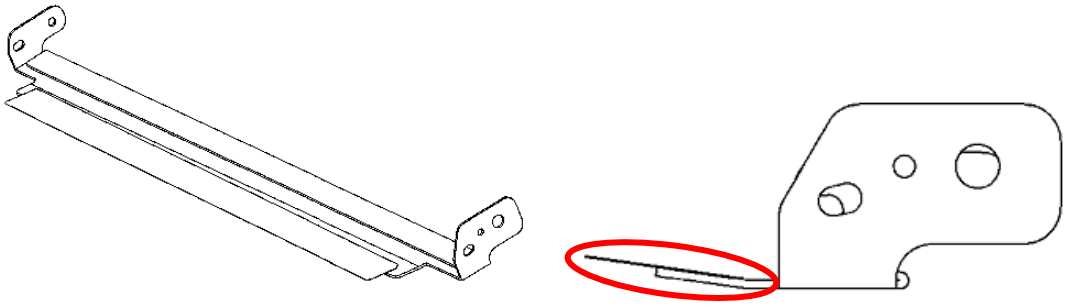


SOLUTION: Two new transfer entrance guide plates were registered as service parts.

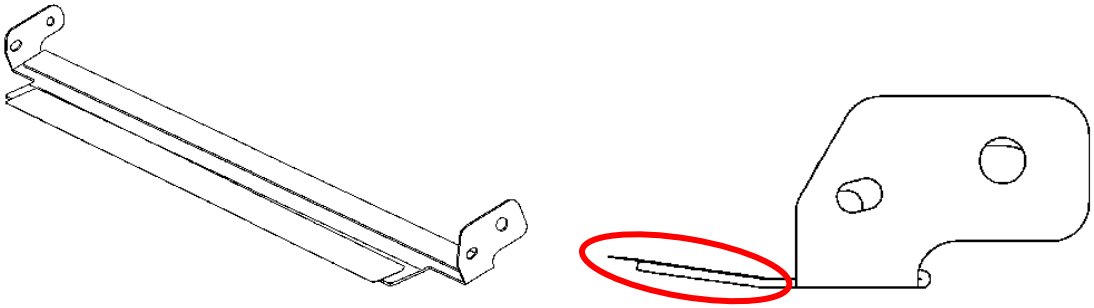
Old P/N	New P/N	Description	Q'ty	Int	Note
-	D2706128	GUIDE:TRANSPORT: INTERMEDIATE TRANSFER:10MM:ASS'Y	1	-	Add
-	D2706129	GUIDE:TRANSPORT: INTERMEDIATE TRANSFER:4MM:ASS'Y	1	-	Add

NOTE: Make sure to use these guide plates correctly according to the paper thickness.

- For thickness 4~7, use the guide plate registered with the p/n: D2706128.
  Compared to the default guide plate, this guide plate has a shorter guide, which is compensated with a lengthened Mylar, to reduce the flick when the trailing edge passes through the guide plate.



- For thickness 8, use the guide plate registered with the p/n: D2706129.
  Compared to the default guide plate, this guide plate has a shorter Mylar. (There is no change in the length of the guide.) This is because with thickness 8 media, the flick is strong enough to push up the Mylar against the belt.



NOTE: DO NOT use the new guide plates for thickness 3 or lighter media, to avoid the risk of streaks/bands.

Model: BR-C2	Date: 13-Feb-18	No.: RD270034

Subject: FSM Correction: TK5010 Installation	Prepared by: Rie Shohda
From: Sales Strategy Sect., 1st CP Business Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

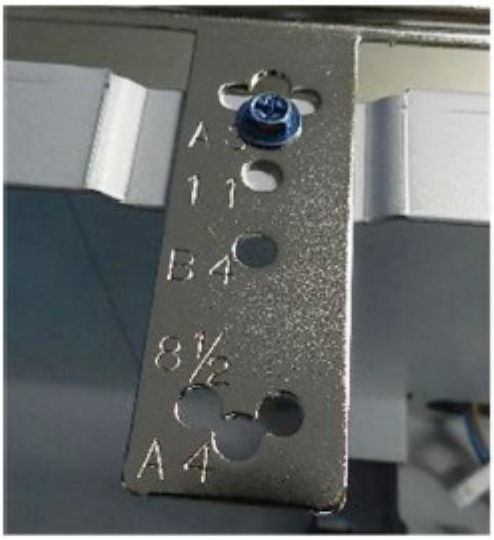
Please make the following correction to your field service manual.

The Tray Unit TK5010 does not support LG (8.5"x14"). Please delete this paper size from your field service manual, in section:

Installtion > A3/11"x17" Tray Unit > Installation > Check and Set the Paper Size

Check and Set the Paper Size

1. Look at the scales and check the positions of the front, back, and side fences to see what size the tray is set for.



b331b2039

2. The tray can be set for only the following sizes.
   - A4 SEF/LEF
   - A3 SEF
   - B4 SEF
   - LT (8.5"x11") SEF/LEF
   - DLT (11"x17") SEF only
   - ~~LG (8.5"x14")~~

Note

- Custom paper sizes cannot be used in this tray.

Model: BR-C2	Date: 26-Mar-18	No.: RD270035

Subject: PM parts replacement alert message spec	Prepared by: R. Shohda
From: 1st Tech Service Sect., PP Tech Service Dept.	

Classification:			
	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Notice Regarding PM Alert Banner Message

Specification of the PM parts replacement alert banner message that appears on the operation panel for the following parts is not explained in the FSM and has caused confusion in the field. This bulletin clarifies on this point.

- Coating Bar
- #Fuser Cleaning Unit
- Toner Corrector Bottle
- Trimming Unit

SP5062 provides the option to choose whether or not to display the PM parts replacement alert (0: Not display, 1: Display).

However, by spec, the alert message will appear for the above parts regardless of the SP5062 setting, because these are critical components to maintain machine operation.

Note that the machine will automatically stop if they are not replaced at the appropriate timing.

Model: BR-C2	Date: 26-Jul-17	No.: RD270031

Subject: CC-CERTIFIED IN 2016 Machine	Prepared by: T.Suzuki
From: Tech Support Sect.,Product Marketing Dept.	

Classification:			
	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

This RTB describes the requirements for installing models in the Pro 8200S/8210S/8220S series as a CC-CERTIFIED MACHINES compliant with IEEE Std 2600.2™-2009

Do the following eight steps if you want to install the Pro 8200S/8210S/8220S series models as a CC-CERTIFIED MACHINE compliant with IEEE Std 2600.2™-2009.

Note: Machines in production are CC-certified beginning in July 2017.

Important: If you perform with accessing SP mode, the machine become the different condition as when CC certification was attained.

1. Make sure the customer has received the English language Operating Instructions (O/I) shown in the page 5-7.

   Important:

   - For installations in the EU market, make sure this is the Ricoh-genuine O/I.
   - To ensure that the O/Is are Ricoh-genuine, make sure that the part numbers match those listed in the table on page 5. Also make sure that the contents are Ricoh-genuine and there is no suspicious point. (The P/N are normally printed on the back cover).
   - Confirm that the URLs written on " Manuals for This Machine" in "Read This First" are the same as the following URLs:
     https://support.ricoh.com/services/device/ccmanual/pro_8200_8210_8220/en/download_admin.html
     https://support.ricoh.com/services/device/ccmanual/pro_8200_8210_8220/en/download_user.html
   - Tell the customer that those manuals evaluated for CC certification are the manuals listed in The list of Operating Instructions (O/I).
   - Tell the customer to see the Online Document Set 1 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/Pro8200/en/booklist/int/index_book.htm
   - Tell the customer to see the Online Document Set 2 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/Pro8200/en/pdf/User.html
   - Tell the customer to see the Online Document Set 3 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/Pro8200/en/pdf/DriverInstall.html
   - Tell the customer to see the Online Document Set 4 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/ProC5200/en/pdf/GuideToPaper.html
   - Tell the customer to see the Online Document Set 5 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/ProC5200/en/pdf/Security.html
   - Tell the customer to see the Online Document Set 6 from the following URL:
     https://support.ricoh.com/services/device/ccmanual/Pro8200/en/pdf/Oss.html

- Tell the customer to download the Online Document Set 7 (the information about the authentication based on the CC certification system) from the URLs provided in "Manuals for This Machine" in "Read This First".

2. Tell the customer to read the “Notes for Administrators: Using This Machine in a Network Environment Compliant with IEEE Std 2600.2™-2009”.

See the following pages for Step 3 to Step 7.

3. Confirm that no suspicious parts or devices are attached to the peripheral.
By comparing the peripheral and the images in "2. Installation" and "Controller Options" in "Pro 8200S/8210S/8220S Pro 8210/8220 Machine Code: D270/D271/D272/M0AA/M0AB Field Service Manual", confirm that no suspicious parts or devices are attached to the USB, LAN, and SD Card Slot of the peripheral.

By comparing the ADF and the images in "4. Replacement and Adjustment" and "ADF (Copier)" in "Pro 8200S/8210S/8220S Pro 8210/8220 Machine Code: D270/D271/D272/M0AA/M0AB Field Service Manual", confirm that no suspicious parts or devices are attached to the ADF cable.

4. Hide Administrator Password Change Screen
If the “Program/Change Administrator” screen is displayed at startup, execute SP5-755-002 (Hide Administrator Password Change Scrn).

5. Enabling the Encryption Settings
Enable the encryption settings described in service manual, and execute [Format All Data].
Hand the customer the printout of the encryption key that is printed when enabling the encryption settings.

6. Prohibit a use of JavaTM Platform.
Disable the functions of "JavaTM Platform setting (SP5-730-001)".

7. Check firmware versions.
If the customer requests exactly the same condition as when CC certification was attained, install the versions shown in the table below. If not, make sure that firmware versions of the machine are the same as or later than the ones in the table.
- If the customer wants to install the machine in the same condition as when CC Certification was first attained, install the exact versions shown in the table below.
- If the customer wants to install the machine as an equivalent of the condition as when CC certification was first attained, install the versions shown in the table below or later.

If you are not sure which of these the customer prefers, confirm this with your Sales department.

Firmware versions with which the Pro 8200S/8210S/8220S models first achieved CC-CERTIFICATION:

Firmware Name:	Version:	Firmware Number:
System/Copy	1.04	D2705750D
Network Support	12.77	D2705758A
Scanner	01.00	D2705753
Web Support	1.03	D2705754C
Web Uapl	1.00	D2705755
animation	0.01	D2705757
NetworkDocBox	1.00	D2705756
Printer	1.03	D2705770B
RPCS	3.13.32	D2705771
Font EXP	1.00	D2415581
PCL	1.01	D2705772A
PCL Font	1.09	D2415586
PDF	1.00	D2705773
PS3 Font	1.17	D2415681
Java VM v11 std	11.37.00	D2705759D
Data Erase Onb *	1.01x	D3775934
PowerSaving Sys	1.17	D2705752
Engine	1.21:02	D2705404C
OpePanel	1.03	D2705790B
LANG0	1.03	D2705790B
LANG1	1.03	D2705790B
ADF	01.110:05	D7315550J

* If the Data Erase Onb version is not the same as shown in the table, contact your supervisor. (This version is never upgraded).

Ic Key and Ic Ctlr versions with which the Pro 8200S/8210S/8220S models first achieved CC-CERTIFICATION:

Hardware:	Version:
Ic Ctlr	02
Ic Key	0102081c

If the Ic Key and Ic Ctlr versions are not the same as shown in the table, contact your supervisor. (This version is never upgraded).
These versions can be confirmed from the operation panel.

The list of Operating Instructions (O/I)
<For North America>
Paper Documents

- D270-7433 Read This First
- D181-2587 Notes for Using This Machine Safely
- D181-2597 For Users of This Product
- D193-7656 SOFTWARE LICENSE AGREEMENT
- D193-7659 NOTICE TO USERS
- D143-7350A Notes for Security Guide
- D270-7447 Notes for Users

Online Document Set 1

- D270-7486 About This Machine
- D270-7487 Copy/ Document Server
- D270-7488 Print
- D270-7489 Scan
- D270-7490 Troubleshooting
- D270-7491 Connecting the Machine/ System Settings
- D270-7492 Paper Settings
- D270-7493 Extended Feature Settings
- D270-7494 PostScript 3

Online Document Set 2

- D270-7481 User Guide

Online Document Set 3

- D270-7482 Operating Instructions Driver Installation Guide

Online Document Set 4

- D270-7483 Operating Instructions Guide to Paper

Online Document Set 5

- D270-7484 Operating Instructions Security Guide

Online Document Set 6

- D270-7470 About Open Source Software License

Online Document Set 7

- D181-2583 Notes on Security Functions
- D270-7464 Notes for Administrators:
  Using This Machine in a Network Environment
  Compliant with IEEE Std 2600.2™-2009

<For Europe>
Paper Documents
- D270-7431 Read This First
- D181-2587 Notes for Using This Machine Safely
- D193-7656 SOFTWARE LICENSE AGREEMENT
- D193-7659 NOTICE TO USERS
- D143-7350A Notes for Security Guide

Online Document Set 1
- D270-7486 About This Machine
- D270-7487 Copy/ Document Server
- D270-7488 Print
- D270-7489 Scan
- D270-7490 Troubleshooting
- D270-7491 Connecting the Machine/ System Settings
- D270-7492 Paper Settings
- D270-7493 Extended Feature Settings
- D270-7494 PostScript 3

Online Document Set 2
- D270-7481 User Guide

Online Document Set 3
- D270-7482 Operating Instructions Driver Installation Guide

Online Document Set 4
- D270-7483 Operating Instructions Guide to Paper

Online Document Set 5
- D270-7484 Operating Instructions Security Guide

Online Document Set 6
- D270-7470 About Open Source Software License

Online Document Set 7
- D181-2583 Notes on Security Functions
- D270-7464 Notes for Administrators:
  Using This Machine in a Network Environment
  Compliant with IEEE Std 2600.2™-2009

<For Asia>
Paper Documents
- D181-2587 Notes for Using This Machine Safely
- D193-7656 SOFTWARE LICENSE AGREEMENT
- D193-7659 NOTICE TO USERS

・D143-7350A Notes for Security Guide

Online Document Set 1
・D270-7486 About This Machine
・D270-7487 Copy/ Document Server
・D270-7488 Print
・D270-7489 Scan
・D270-7490 Troubleshooting
・D270-7491 Connecting the Machine/ System Settings
・D270-7492 Paper Settings
・D270-7493 Extended Feature Settings
・D270-7494 PostScript 3

Online Document Set 2
・D270-7481 User Guide

Online Document Set 3
・D270-7482 Operating Instructions Driver Installation Guide

Online Document Set 4
・D270-7483 Operating Instructions Guide to Paper

Online Document Set 5
・D270-7484 Operating Instructions Security Guide

Online Document Set 6
・D270-7470 About Open Source Software License

Online Document Set 7
・D181-2583 Notes on Security Functions
・D270-7464 Notes for Administrators:
Using This Machine in a Network Environment
Compliant with IEEE Std 2600.2™-2009

Model: Baron-C2/P2	Date: 03-Apr-18	No.: RD270036

Subject: Modified 'Clear blurred image' operation			Prepared by: Y. Lim
From: Sales Strategy Section, 1st CP Business Dep.			
Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Change: The default temperature to trigger the 'Clear blurred image' operation in 'Strong' mode was modified as shown in the table below.

Reason: The default values originally set were too strict. Tests have proven that blurred images do not occur even with the revised values below.

SP	Old	New
SP2810-003 Temperature to trigger 'clear blurred image' in Strong mode after the machine was left unused for a **Short** period	**27**	**32**
SP2810-009 Temperature to trigger 'clear blurred image' in Strong mode after the machine was left unused for a **Long** period	**25**	**32**

Firmware information:

For the above modification to take effect, update the **Engine** firmware to **version 2.01 or newer**.

NOTE: Updating to the above firmware will automatically change the default value and the current setting for both of the above SPs '32 degrees C.'

See following page for explanation on the 'Clear blurred image' related SP settings.

Model: Baron-C2/P2	Date: 03-Apr-18	No.: RD270036

SP	Detail		Default	Range	Unit
2-810-001	Sets the time to trigger the toner refresh operation.	For clear blurred image operation after the machine was left unused for a **SHORT** period, for example, after lunch break	120	0~240	min
2-810-002	Sets the temperature around the PCU to trigger the toner refresh operation.		25	0~45	deg
2-810-003	Sets the temperature around the PCU to switch the toner refresh operation from 'Weak' mode to 'Strong' mode.		27 → 32	0~45	deg
2-810-004	Sets the absolute humidity around the PCU to trigger toner refresh operation.		16	0~45	g/m^3
2-810-005	Sets the absolute humidity around the PCU to switch the toner refresh operation from 'Weak' mode to 'Strong' mode.		20	0~45	g/m^3
2-810-006	Sets the duration of the toner refresh operation.		120	60~360	sec
2-810-007	Sets the time to trigger the toner refresh operation.	For clear blurred image operation after the machine was left unused for a **LONG** period, for example, before the first job of the day	6	0~24	hr
2-810-008	Sets the temperature around the PCU to trigger the toner refresh operation.		20	0~45	deg
2-810-009	Sets the temperature around the PCU to switch the toner refresh operation from 'Weak' mode to 'Strong' mode.		25 → 32	0~45	deg
2-810-010	Sets the absolute humidity around the PCU to trigger toner refresh operation.		10	0~45	g/m^3
2-810-011	Sets the absolute humidity around the PCU to switch the toner refresh operation from 'Weak' mode to 'Strong' mode.		14	0~45	g/m^3
2-810-012	Sets the duration of the toner refresh operation.		240	60~360	sec

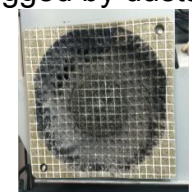
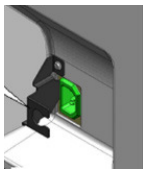
NOTE: The difference between the Strong and Weak modes is the amount of toner used for the 'Clear blurred image' operation. Strong uses more and Weak uses less.

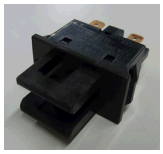
Model: BR-C2	Date: 10-Apr-18	No.: RD270037

Subject: Frequent SC check sheet	Prepared by: Lim Youngsoo
From: 1st Tech Service Sect., PP Tech Service Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Frequent SC check sheet

Code	Name	Cause, Solution & Prevention
204-00 670-00	Polygon Motor Error Engine Start Failure	**Cause:** The machine was force-shut by the main power switch. **Solution:** Advise the customer to use the operation power switch. Note: Forced shut down may damage the HDD units.
488-00	Used Toner Transport Blockage	**Cause:** The intake fan filters on the LCT side of the machine clogged by dusts.   **Solution:** Clean the filters periodically. Modification parts are available to make the filters more accessible for cleaning. See RTB # RD179135 for the details of modification.
621-00	Peripheral Communication Error	**Cause:** Finisher's power code disconnected. **Prevention:** Install the Power Code Bracket that prevents the power code accidentally disconnected. Part No. NA: D7345742 / EU and AP: D7345741 
720-25 720-26	Punch Motor Error Punch Junction Gate Motor Error	**Cause:** Finisher's firmware old or punch unit reaching its life **Solution:** Update Finisher firmware to Ver 02.650:10 or later.
720-35 720-39 720-40 720-41 720-44	Trailing Edge Press Motor Error Leading Edge Stopper Motor Error Base Fence Lift Motor Error Feed-out Belt Motor Error Booklet Stapler Motor Error	**Cause:** Stapler's movement interfered due to dusts and etc. **Solution:** Apply CRC Power Lub or CRC 556 to the shafts.

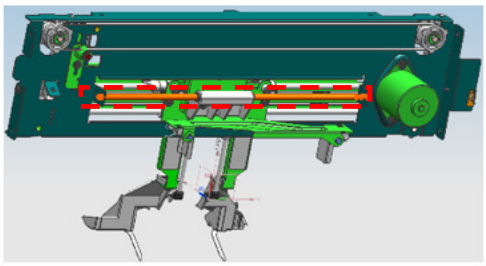
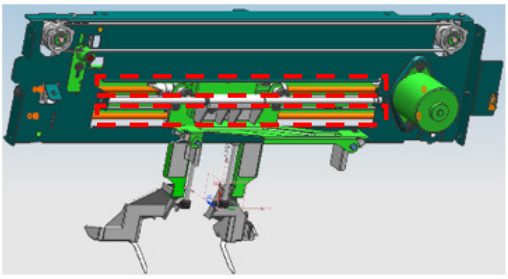
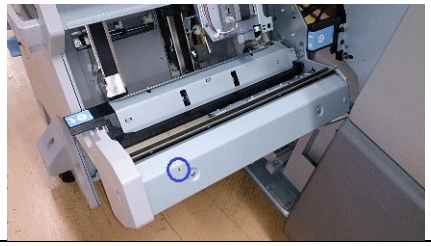
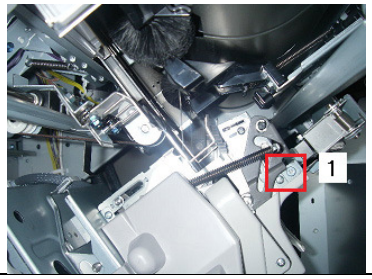
720-82	Base Fence Movement Motor Error	   See “Quick Reference for SC720-35 and related codes” in the latter half of this document.
720-70	Shift Tray Lift Motor Error	**Cause:** Finisher's firmware old or Paper Height Sensors not detecting paper. **Solution:** Update Finisher firmware to Ver.02.700:10 or later. Advise the customer to use the stop switch on the side of finisher before removing stacked sheets. Note: After pushing the switch again, the job resumes.
720-80	Interlock Power Error	**Cause:** Interlock switch failure. **Action:** Replace the interlock switch if the symptom persists.  Part No. 12042947

Quick Action Guide for SC720-35 and related codes

Note: Also, SC720-39, 720 -40, 720-41, 720-44, and 720-82 may be fixed by these actions, but be sure to check the original description in the service manual for these sub codes.

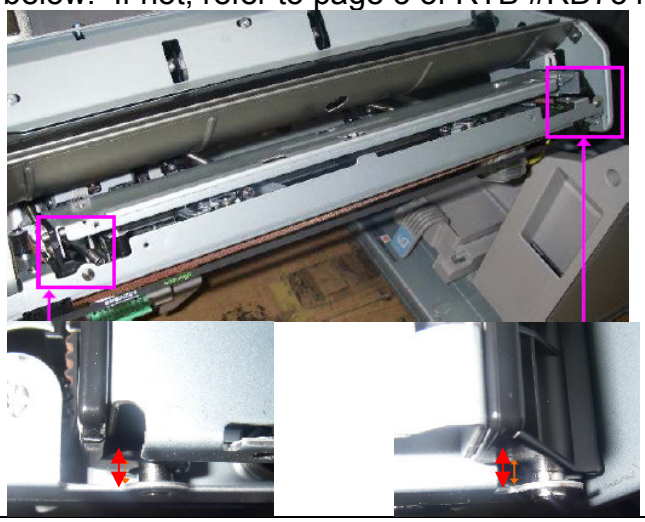
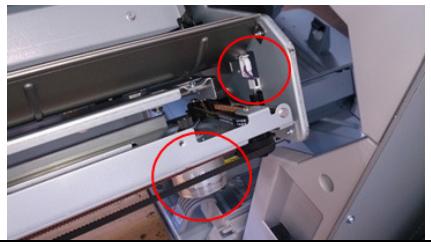
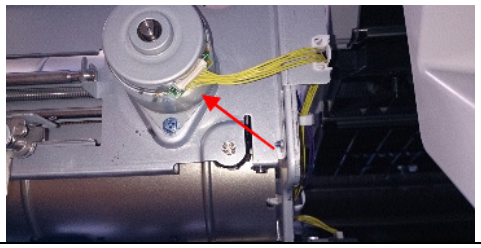
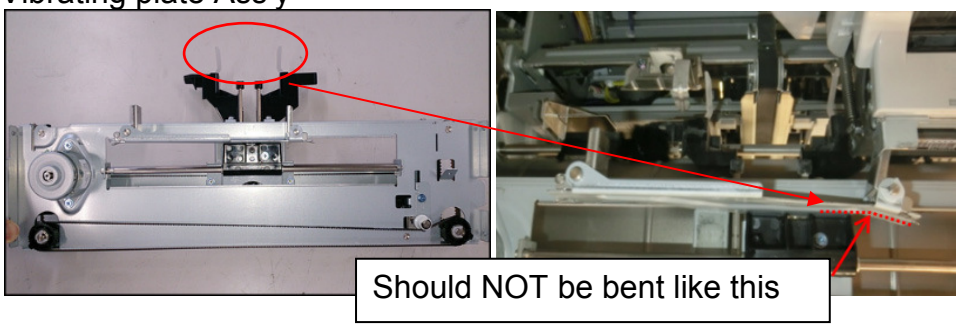
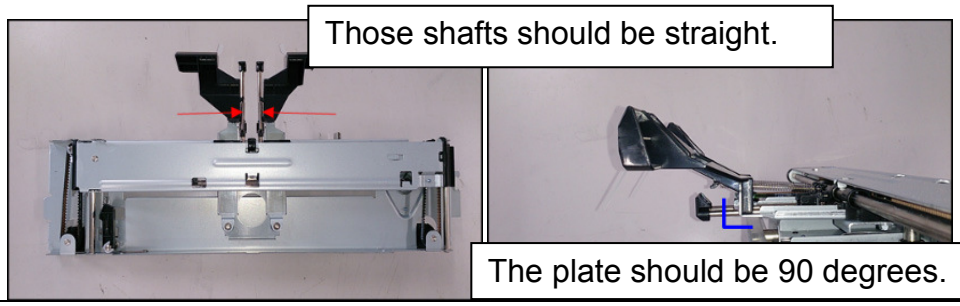
Item	Details
Firmware update	Update finisher firmware to Ver. 02.640:10 or later.
Lubrication	Apply either of the following lubricant to the shafts. - CRC Power Lub - CRC 556  Note: - Other types of lubricants may attract paper dusts causing the symptom even more frequent. - Remove all dusts on the shafts before applying lubricant. (Continued on the following page.)

Model: BR-C2	Date: 10-Apr-18	No.: RD270037

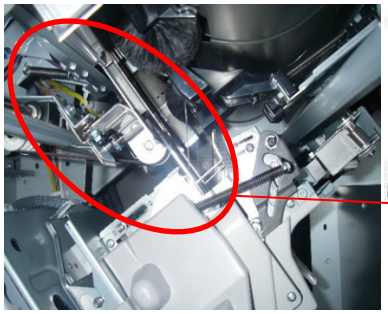
	Lubrication Location    
Screw check 1	Confirm **NO** screw is there. If there is a screw, remove it. 
Screw check 2	Confirm **a screw** is there. If there is no screw, fasten M3 x 6 screw.  

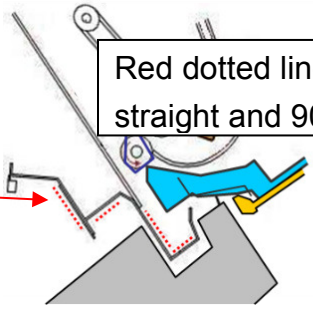
(Continued on the following page.)

Model: BR-C2	Date: 10-Apr-18	No.: RD270037

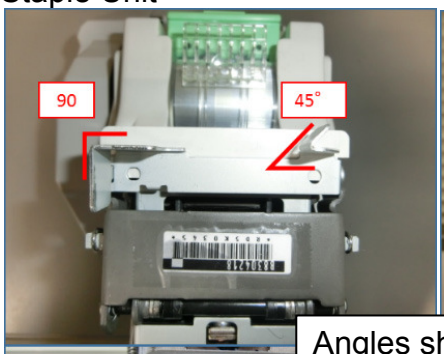
Corner stapler stack unit check	Measure the distances indicated with red arrows in the following pictures to confirm the difference between front and rear is 2.0mm or below. If not, refer to page 5 of RTB #RD734013. 
Harness check	Confirm proper connection of the corner stapler stack plate motor and sensor  
Bent Plate check	Check the following to ensure no plate is bent. Vibrating plate Ass'y  Should NOT be bent like this Those shafts should be straight.  The plate should be 90 degrees.

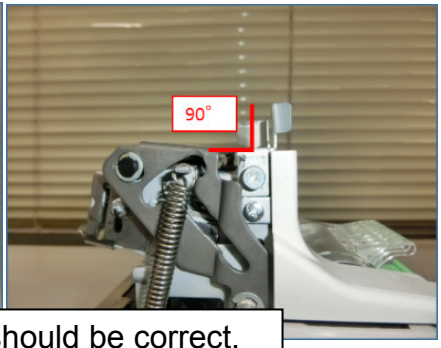
Bottom Fence



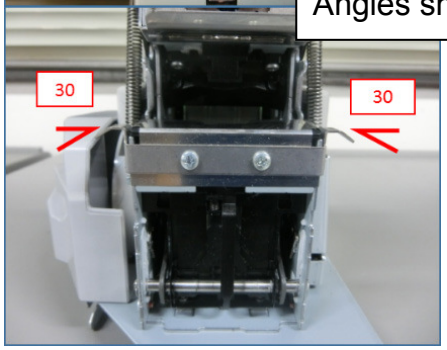


Staple Unit





Angles should be correct.



Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

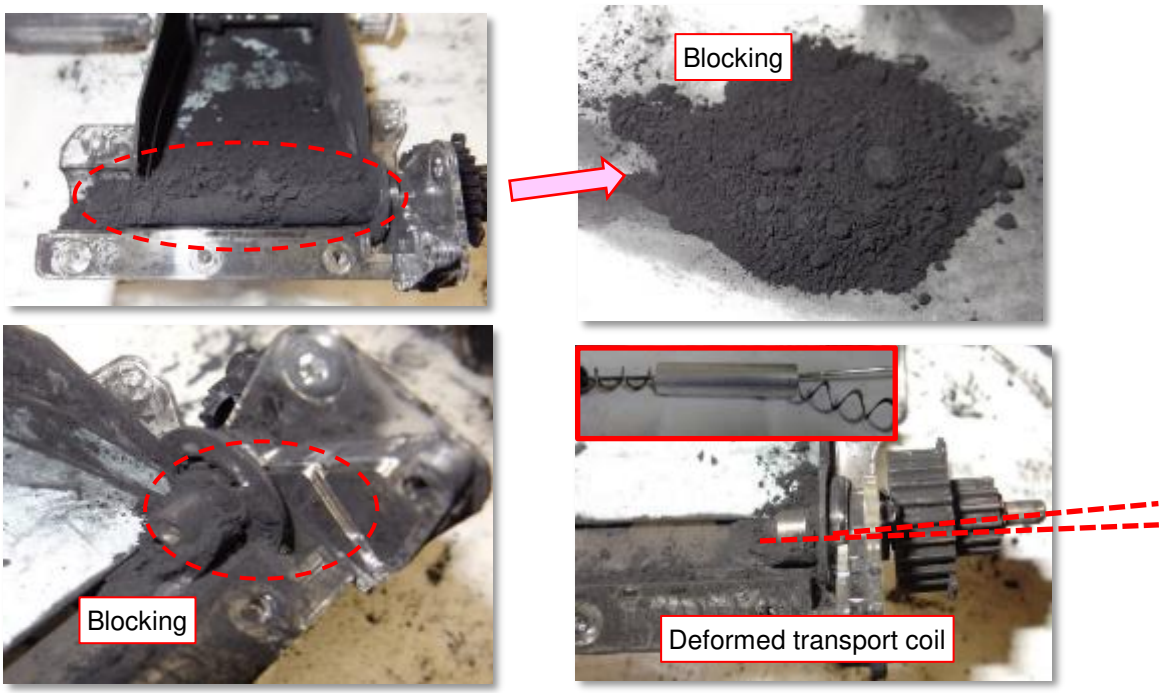
RTB Reissue

The items in ***bold italics*** were corrected or added.

Subject: Troubleshooting SC488			Prepared by: H.K.
From: Sales Strategy Section, 1st CP Business Department			
Classification:	☒ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM

SC488 (used toner transport blockage) and broken waste toner transport coil



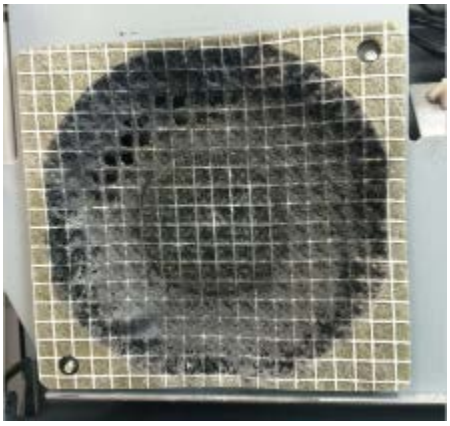
Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

CAUSE

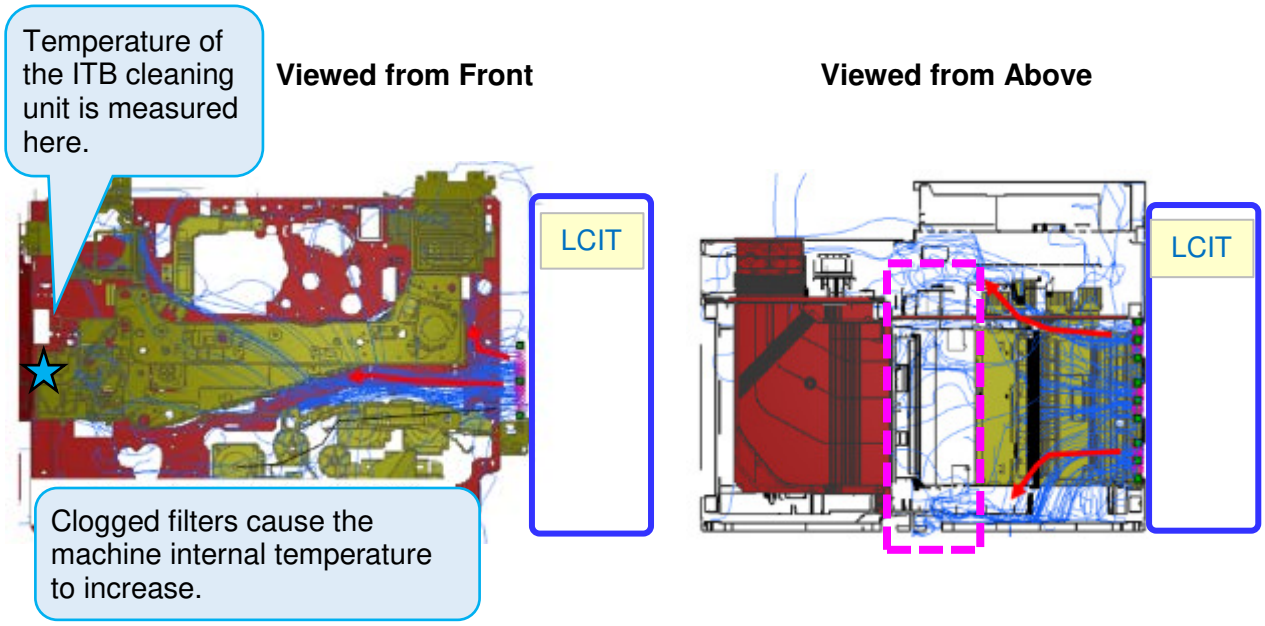
The right cover air intake filters of the main frame are clogged with dust / paper dust and increases the internal temperature of the ITB cleaning unit. This causes waste toner collected from the ITB to melt and eventually clog the waste toner path.

Clogged filter



* The risk of clogging is higher with systems consisted of the LCIT.

Airflow to cool the ITB cleaning unit



Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

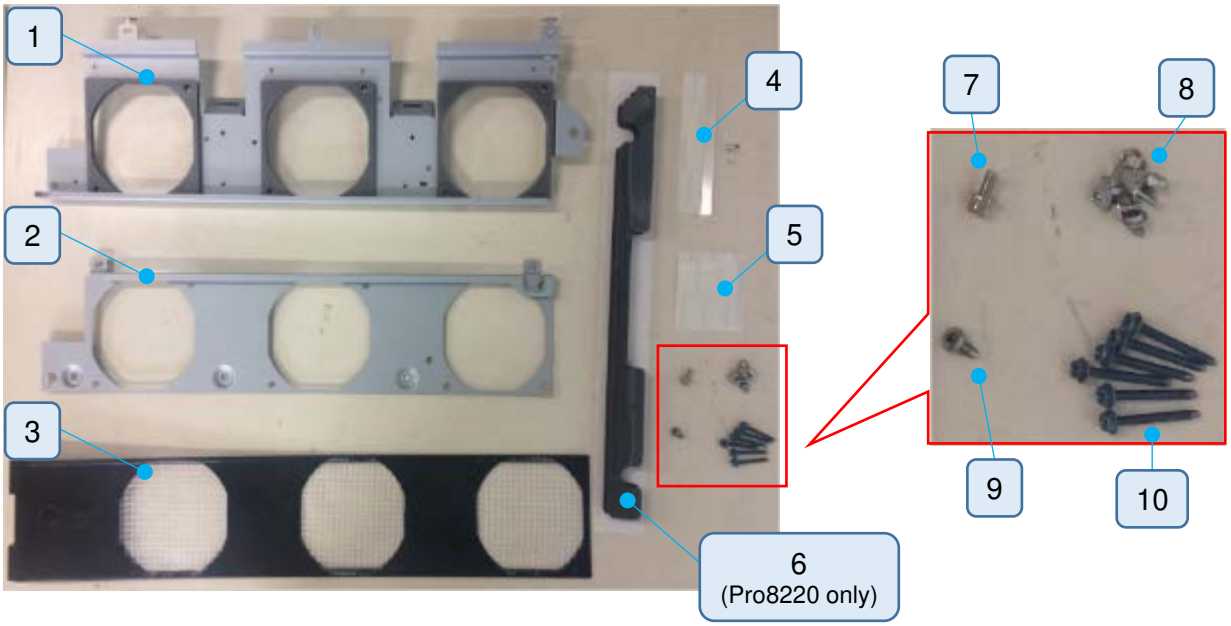
SOLUTION

- Clean the intake filters at ***600K*** interval to prevent clogging of the filters.

  NOTE: The cleaning interval should be shortened if the paper in use contains considerable amount of paper dust.

- Replace with the following fan bracket assembly, which allows cleaning without having to disconnect the LCIT and remove the right cover. With this assembly, the filters can be cleaned by just opening the LCIT jam removal cover and sliding out the fan bracket assembly. See the following pages for the bracket assembly installation procedure.

Callout	New P/N	Description	Q'ty	Remark
1	D2706942	BRACKET:FAN:SIDE:RIGHT:SUB-ASS'Y	1	
2	D2706944	BRACKET:GUIDE:BASE	1	
3	D2706945	FILTER:VACUUM:MAIN:RIGHT	1	
4	D2706948	SHEET:SCREW:FILTER	2	
5	D2706949	SHEET:COVER:MAIN:RIGHT	1	
6	D2721186	SEAL:MAIN:FRAME:RIGHT:UPPER	1	Used for Pro8220 (136ppm) only.
7	G0342986	FLANGED HEXAGONAL HEAD BOLT - M4X8	1	
8	03603006N	SCREW - M3X6	7	
9	04534008N	BINDING SELF TAPPING SCREW:4X8	1	
10	04543030Q	TAPPING SCREW:ROUND POINT:3X30	6	

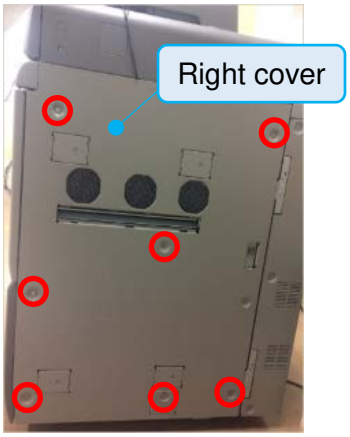


Reissued: 21-Sep-18

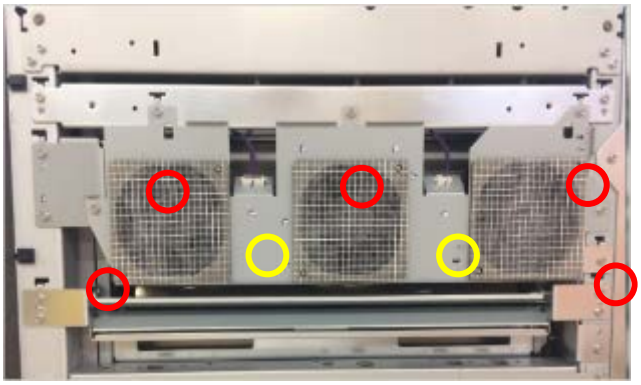
Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

Procedure

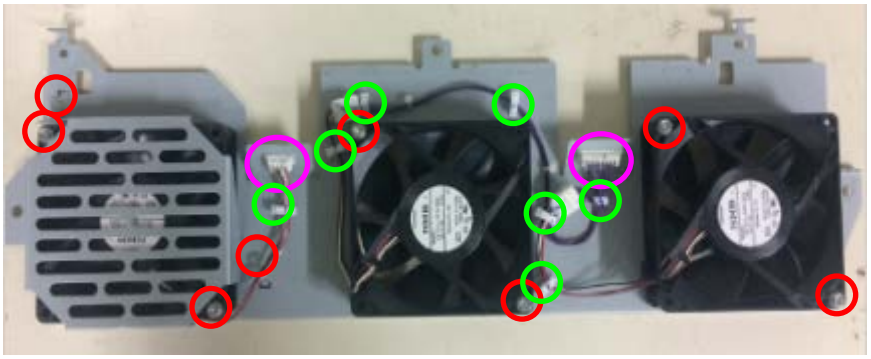
1. Remove the right cover. (Screw x8)



2. Remove the fan unit. (Screw x, Connector x2)



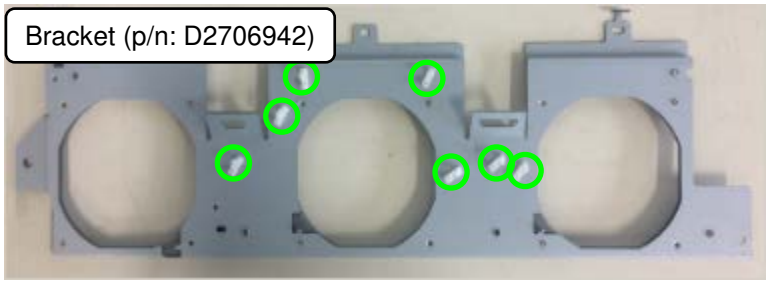
3. Remove the fan cover and fans from the bracket. (Screw x8, Harness clamp x7, Panel mounting adapter x2)

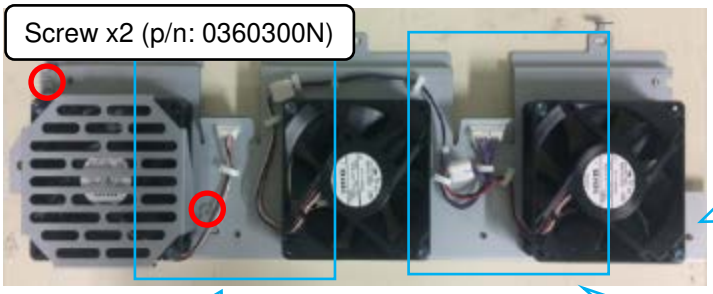


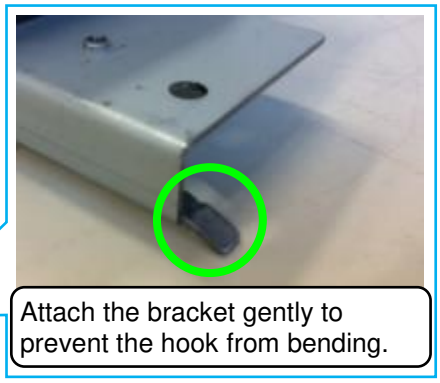
Reissued: 21-Sep-18

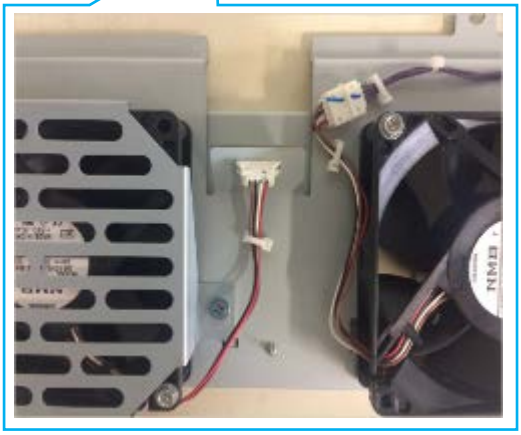
Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

4. Attach the components removed in Step 3 to the new bracket (p/n: D2706942).
   - Attach the fan with screws (p/n: 04543030Q). (Screw x6)
   - Attach the bracket with screw (p/n: 0360300N). (Screw x2)
   - Route the harness as shown below. (Harness clamp x7)







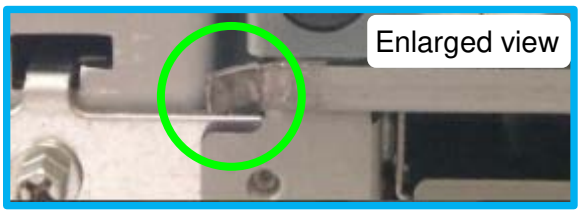


Route the harnesses like this.

Reissued: 21-Sep-18

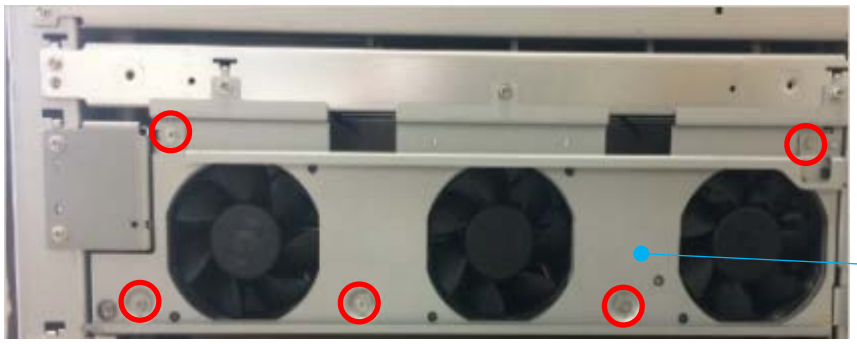
Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

5. Install the fan unit assembled in Step 4 to the mainframe. (Screw x4, Connector x2)

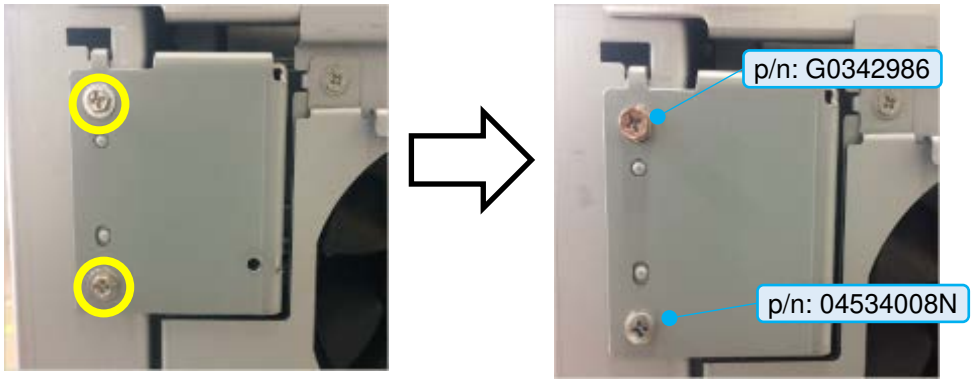


Work carefully to prevent your clothes from getting caught with this plate.

6. Attach the bracket (p/n: D2706944) with screws (p/n: 03603006N). (Screw x5)



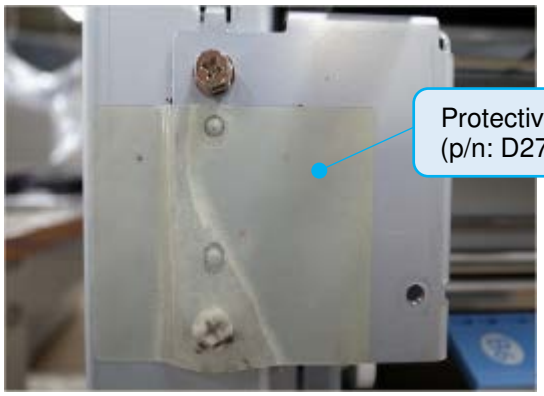
7. Remove the two screws (circled in yellow) and reattach the bracket by fixing the top with screw (p/n: G0342986) and bottom with screw (p/n: 04534008N).

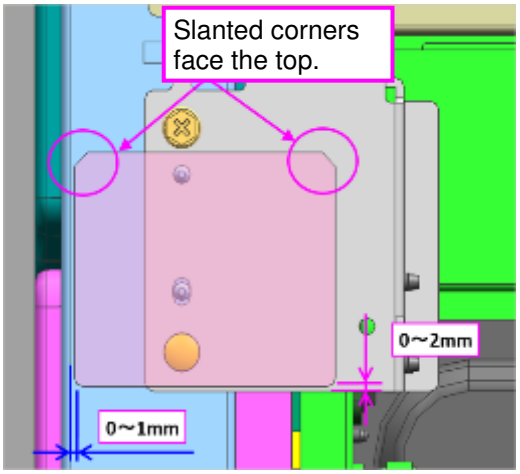


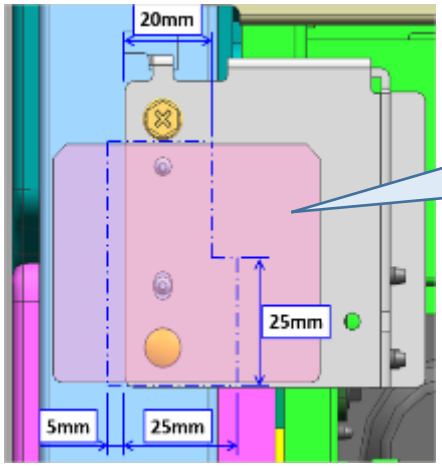
Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

8. Attach the protective sheet (p/n: D2706948) on the bracket as shown below.

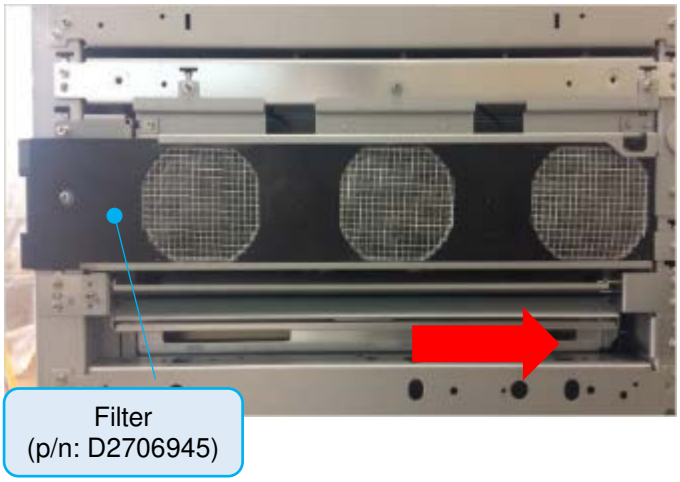






Due to the screw and emboss, a slight space between the sheet and bracket is unavoidable. Attach neatly as possible.

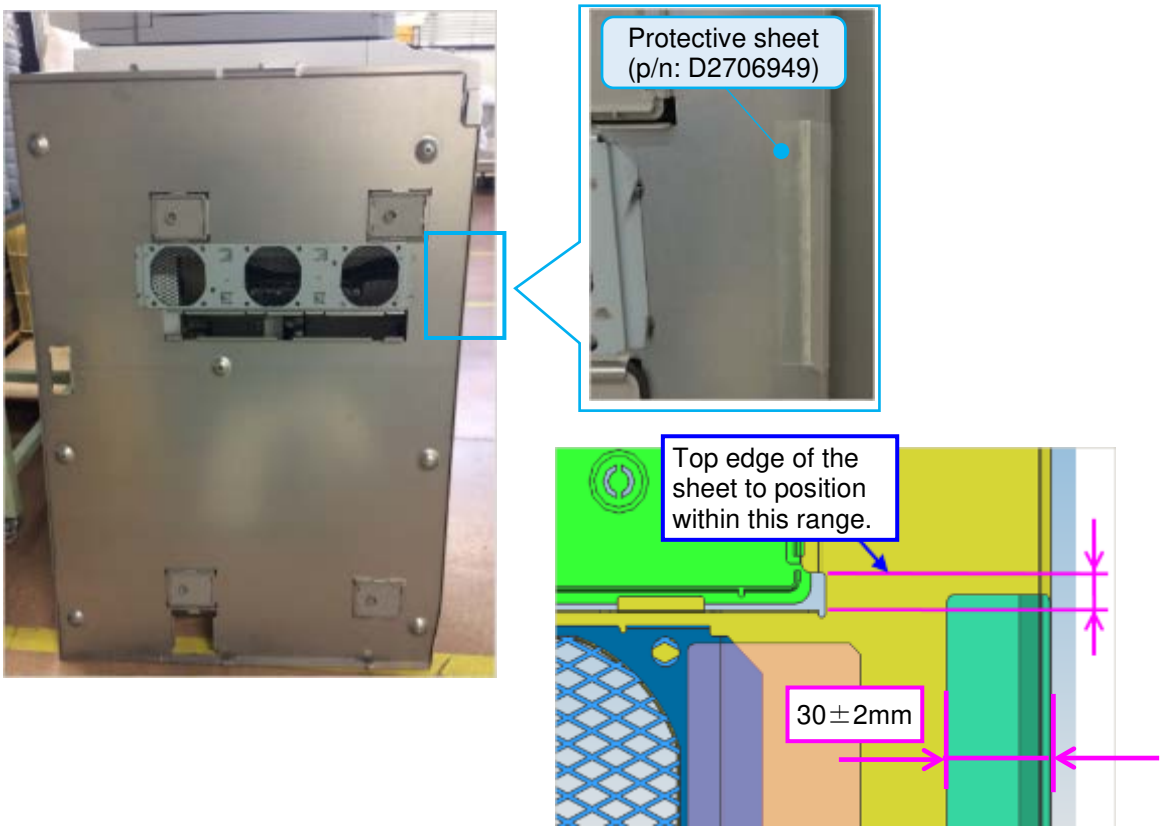
9. Slide in the filter (p/n: D2706945) from the front to rear.



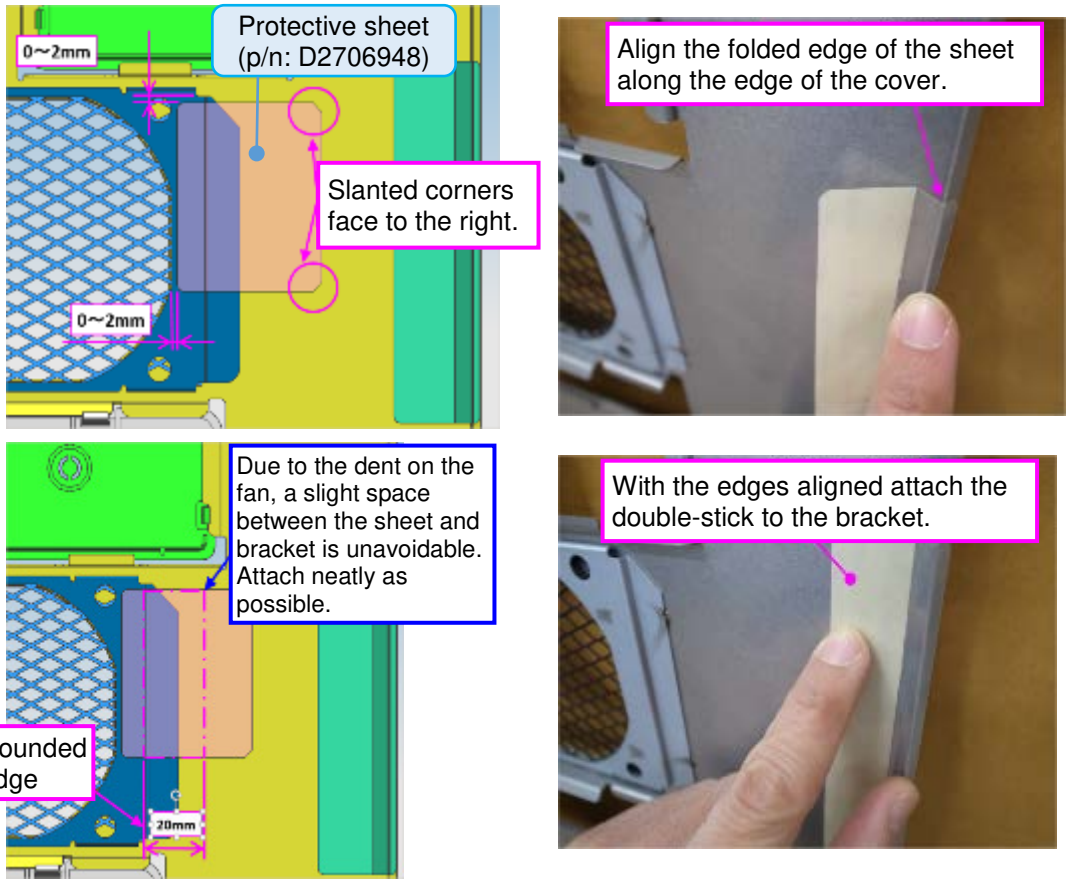
Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

10. Attach the protective sheet (p/n: D2706949) to the back side of the outer cover.



11. Attach the protective sheet (p/n: D2706948).

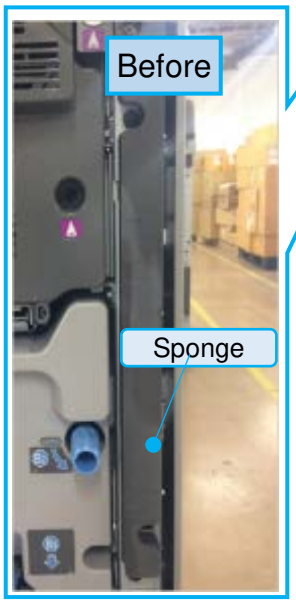


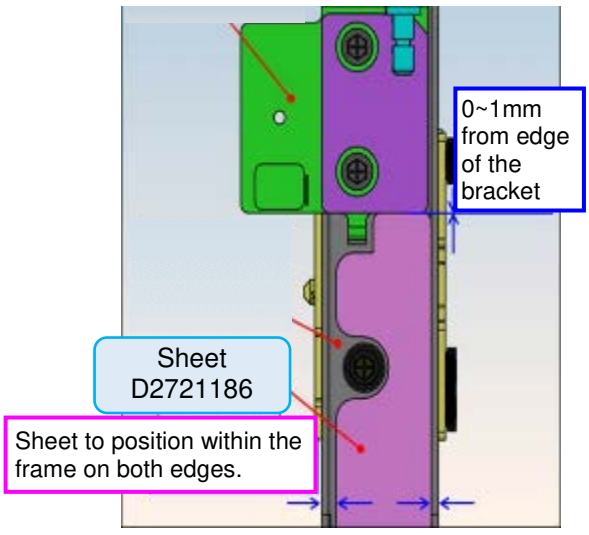
Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

12. Reattach the right cover. (Screw x8)

13. Remove the right front door, remove the sponge and attach the sheet (p/n: D2721186).





Reissued: 21-Sep-18

Model: BR-C2/P2	Date: 18-May-18	No.: RD270038a

Cut-in serial numbers:

P2

M0AA-17 Y667C400001

M0AA-27 Y667C430001

M0AB-17 Y677C500001

M0AB-27 Y677C430001

C2

D270-17 C437C400001

D270-21 C437C520001

D270-27 C437C430001

D270-57 C437C5XXXXX

D271-17 C447C400001

D271-21 C447C420001

D271-27 C447C430001

D272-17 C457C400001

D272-21 C457CB20001

D272-27 C457C430001

Model: BR-C2/P2	Date: 18-Sep-18	No.: RD270039

Subject: Spring for LCTs of Baron-C2	Prepared by: Y. Tanimoto
From: PPCS Sect., CIP Product Quality Management Dept.	

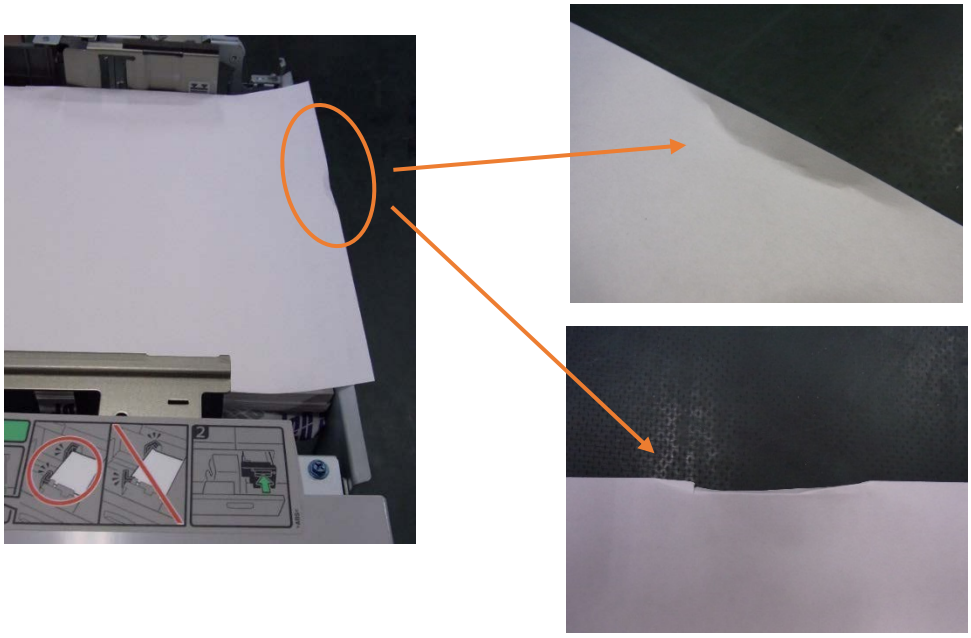
Classification:			
	☒ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

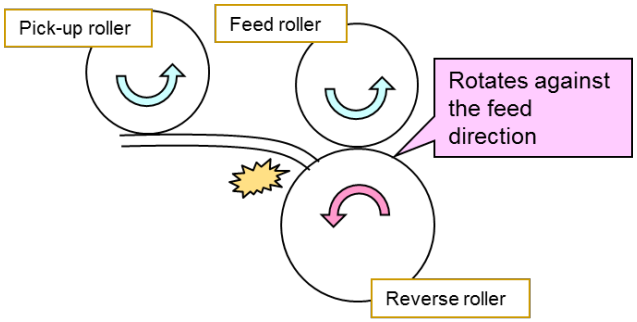
SYMPTOM

Using paper with high ash content (calcium carbonate) causes frequent no-feed jams, and the feed and reverse rollers need to be replaced before reaching life.

The following points are noticed for this symptom:

- No-feed jams start to occur at approximately 50K.
- The rollers are not abraded and have not reached life.
- Paper dust is powder-like, not grainy.
- Damages to the leading edge of paper as shown in photos below





Torque limiter in the reverse roller does not function because the rollers are slippery with paper dust. This causes the reverse roller to rotate against the feed direction and the leading edge of the paper to hit the reverse roller.

Model: BR-C2/P2	Date: 18-Sep-18	No.: RD270039

CAUSE

Paper dust adheres to the rollers and the rollers lose grip.

SOLUTION

If the paper in use by your customer is high in ash content and the machine is experiencing frequent no-feed jams, replace the existing spring in PFU of LCT with this service part below.

A4 LCT (LCIT RT5070) and A3 LCT (LCIT RT5080):

Part number	Description	Q'ty
AA060692	SPRING: RELEASE	1

(1 spring per feed unit)

Replacement procedure for A4 LCT: See page 3
Replacement procedure for A3 LCT: See page 7

(For reference)
Paper feed unit in mainframe:
Refer to the service manual and adjust a notch adjustment mechanism shown below.

IMPORTANT

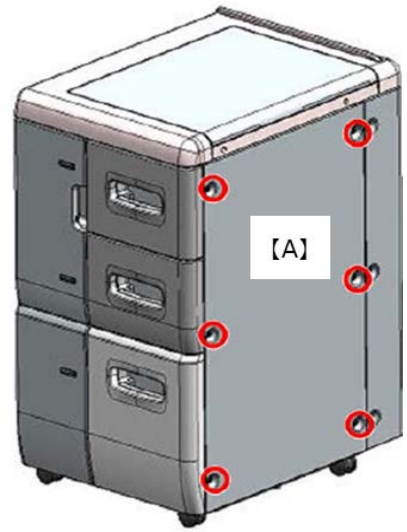
If customer uses normal paper and the spring is replaced, double feed jam may increase, and life of feed rollers may short.

Model: BR-C2/P2	Date: 18-Sep-18	No.: RD270039

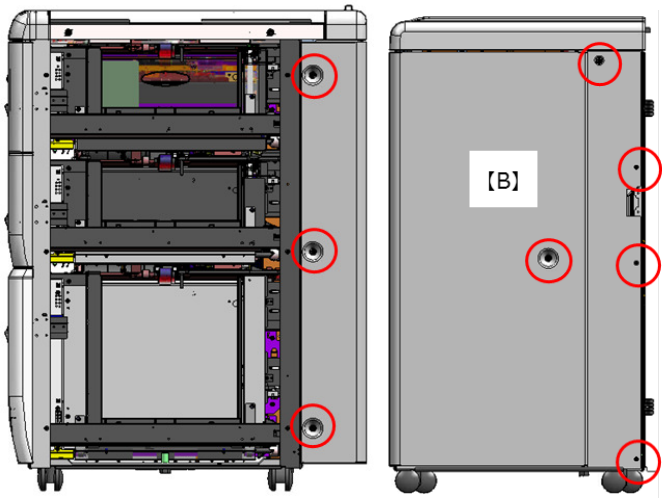
Replacement procedure

A4 LCT (LCIT RT5070)

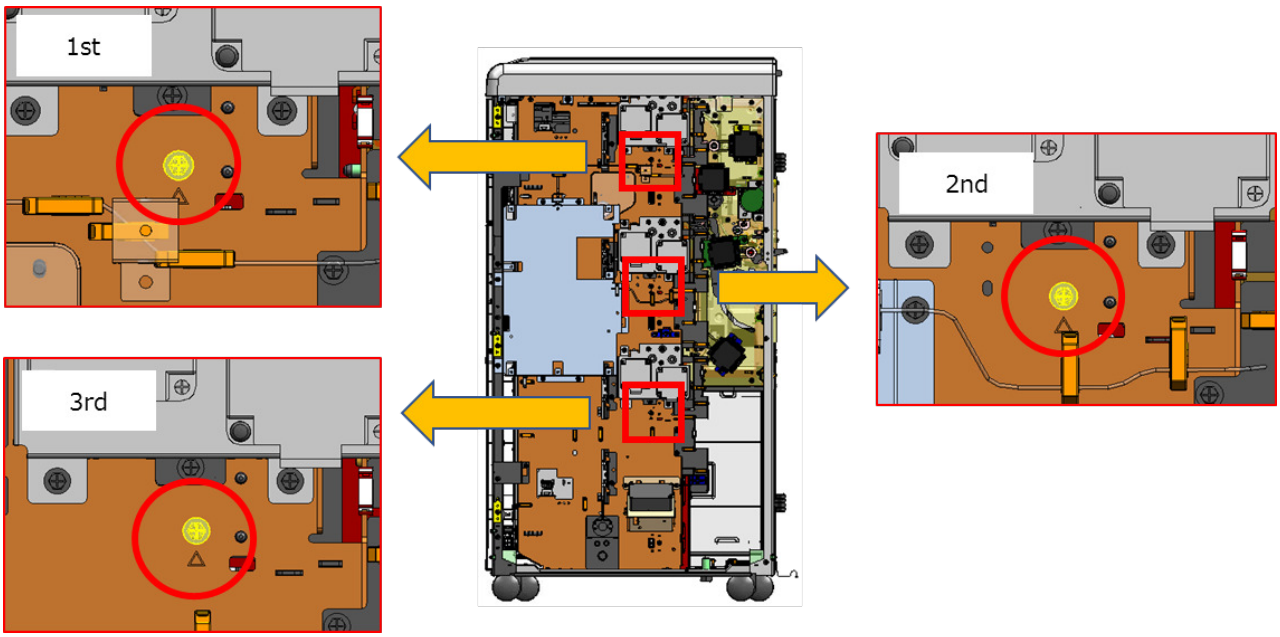
1. Remove the right cover [A] (Screw x6).



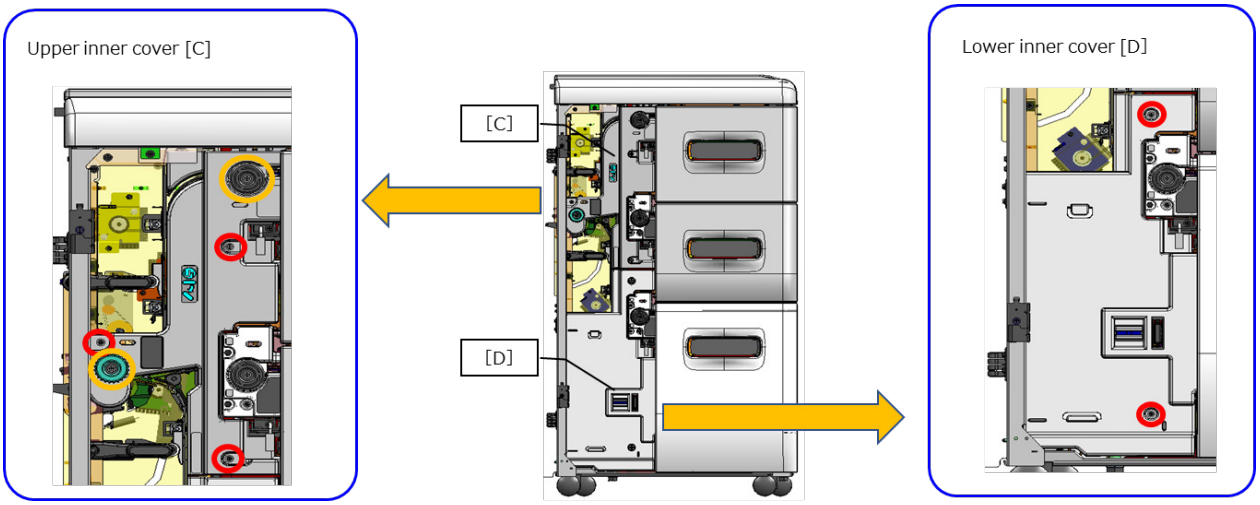
2. Remove the rear cover [B] (screw x8).



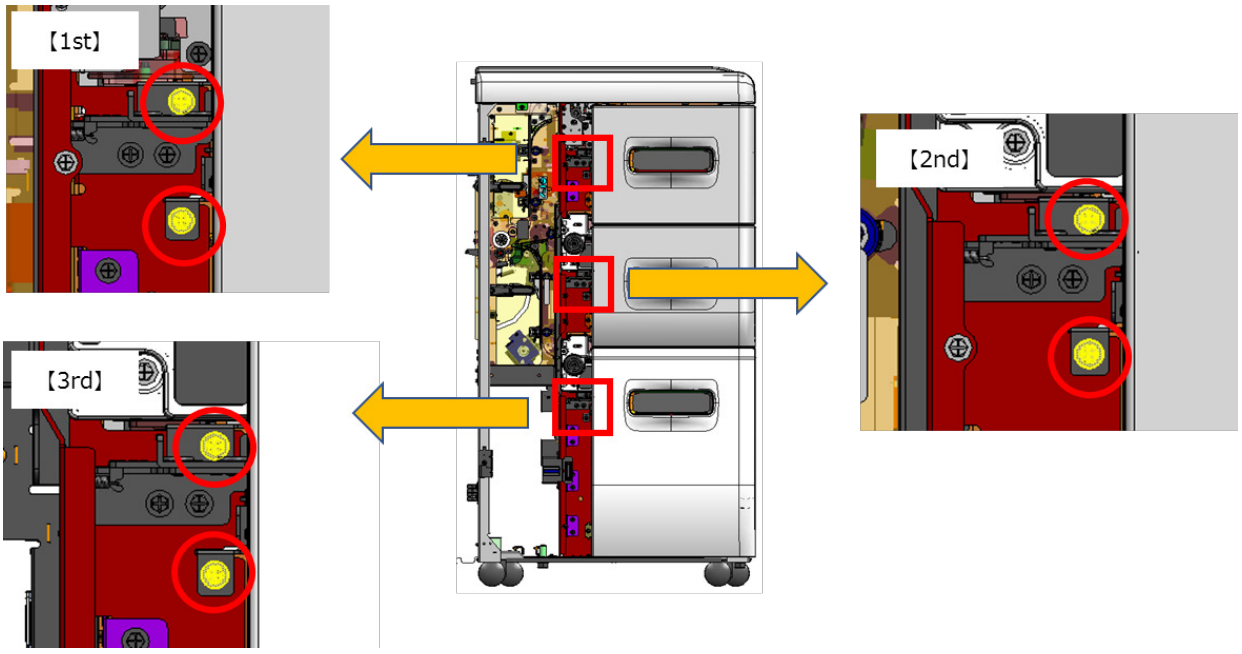
3. Remove 3 screws circled in red.



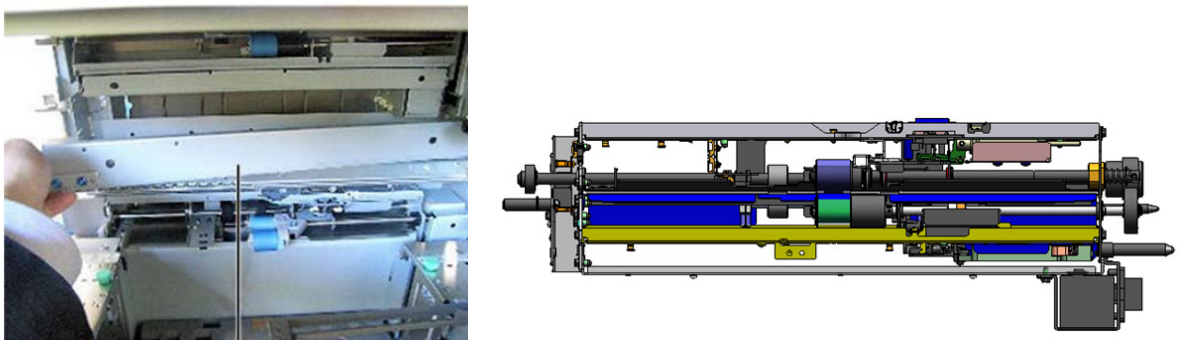
4. Remove the Inner cover [C] and [D].

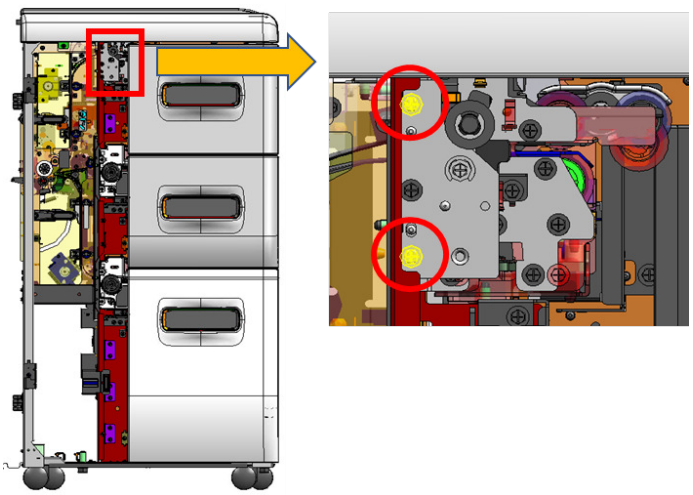


5. Pull out the paper tray.
6. Remove the screws for the bracket (screw x2).

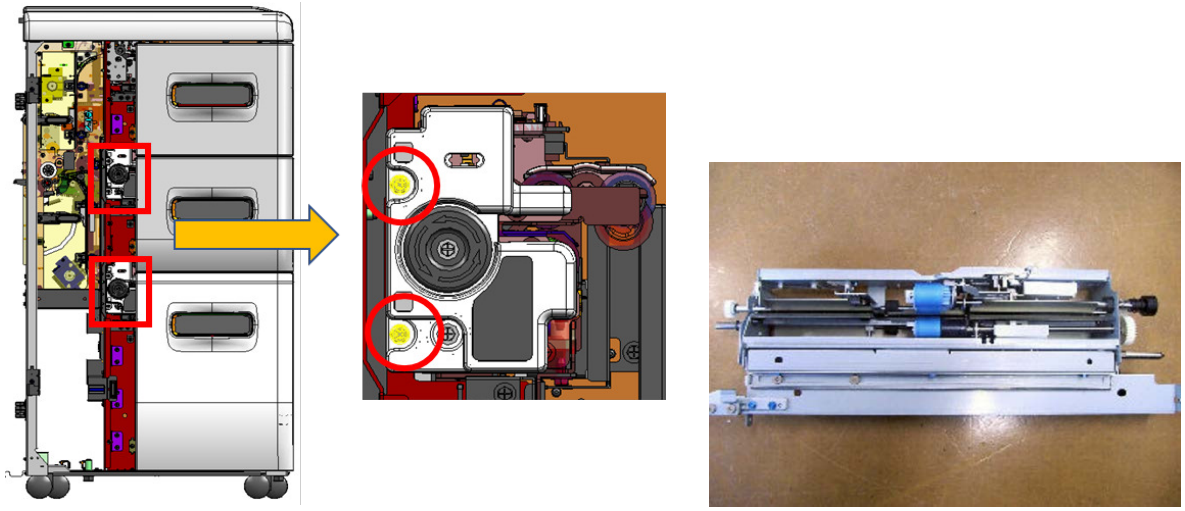


7. 1st Paper Feed Unit: After removing bracket [E], pull out the PFU (screw x2),

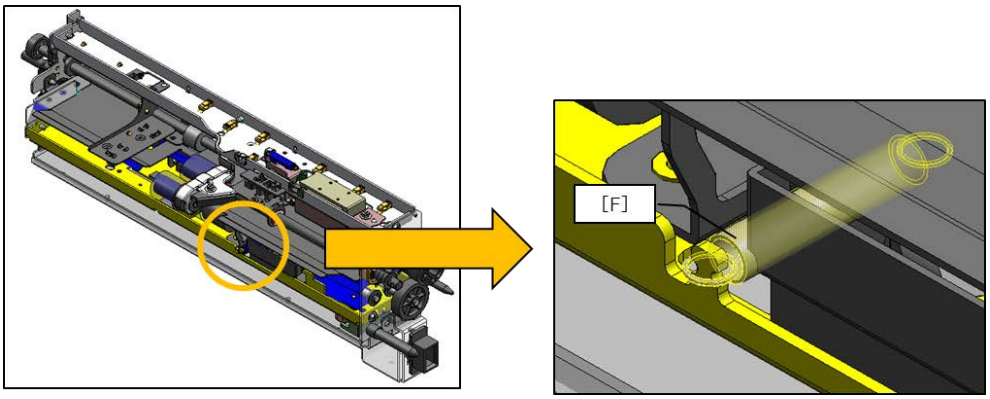




2nd and 3rd paper feed unit: Pull out the PFU along with the brackets (screw x2).



8. Change the existing spring [F] with the service part.

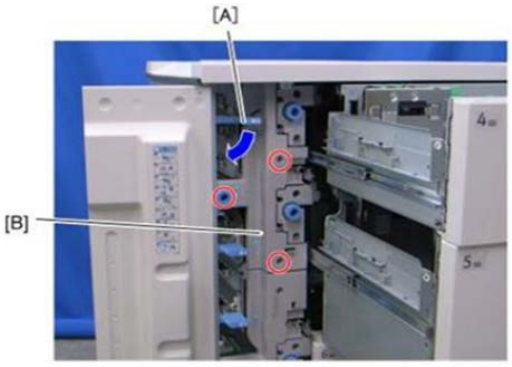


A3 LCT (LCIT RT5080)

1. Open the front door.
2. Remove the inner cover.

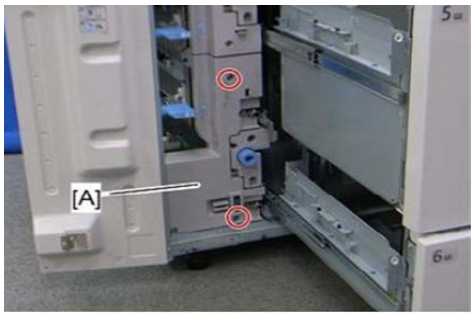
- Upper inner cover

Turn the lever [A] and remove the upper inner cover (screw x3, knob x1).

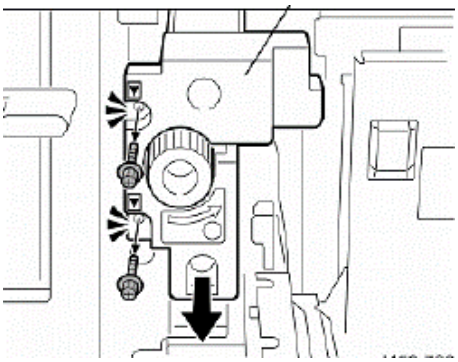


- Lower inner cover

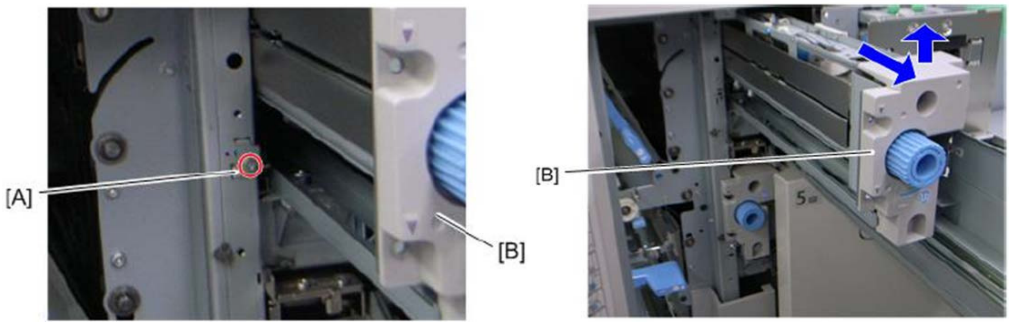
Remove the lower inner cover [A] (screw x2).



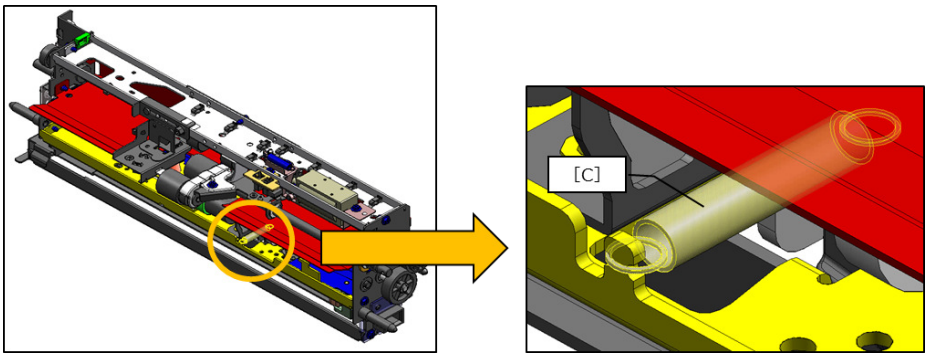
3. Pull out the paper tray.
4. Pull out the PFU (screw x2).



5. After removing the stopper bracket [A] (screw x1), pull out the PFU [B].



6. Change the existing spring [C] with the service part.



7. Repeat the same steps for the other PFUs.

Model: BR-C2	Date: 18-Sep-18	No.: RD270040

Subject: Jam J031 with worn drive gear	Prepared by: Y, Tanimoto
From: PPCS Section, CIP PQM Department, QAC	

Classification:			
	☒ Troubleshooting	☒ Part information	☒ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

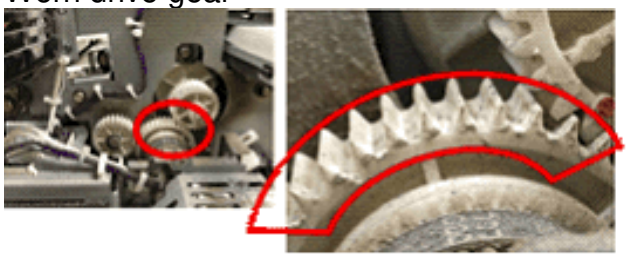
SYMPTOM

Paper Jam J031 (Transfer timing sensor)
(The information is the same as Baron C1 and C2.)

The drive gear of the Registration Gate Roller wears, and jam J031 occurs because of a backrush.

Note: This symptom only occurs in rare cases.

Worn drive gear



(Registration Gate Roller)

CAUSE

After printing over 15,000K pages, this drive gear might wear.

SOLUTION

- If J031 seems to occur twice a day, please check this gear.
- Replace 3 drive gears with new one.

See PROCEDURE below.

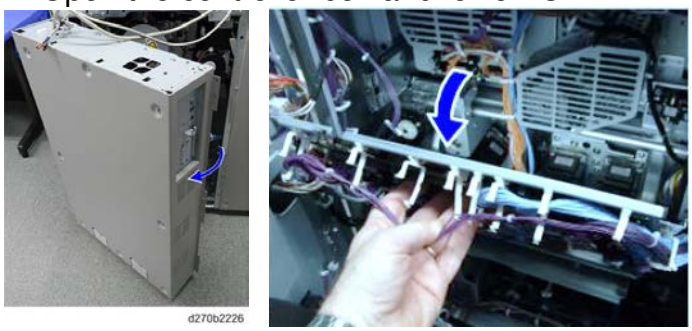
Part information

P/N	Description	Other
D1792758	GEAR:Z41:TIMING PULLEY:T41	Service Part
AB014243	GEAR:IDLER:Z30	Service Part
BB013040	GEAR:SHIFT:ROLLER:Z30	Service Part

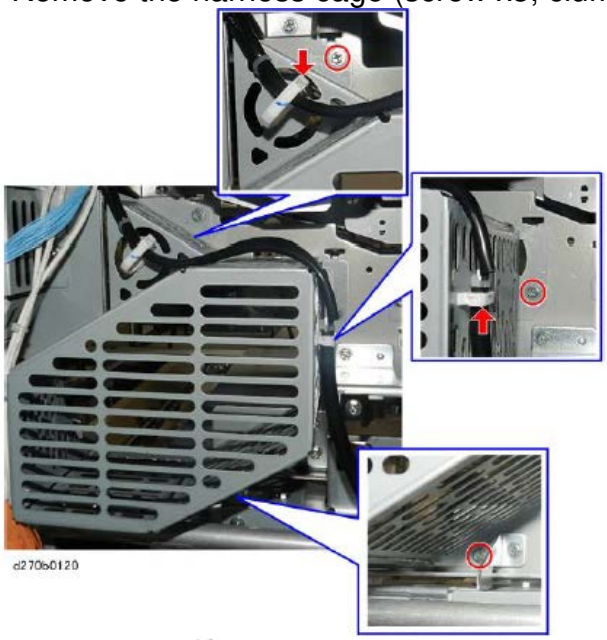
Model: BR-C2	Date: 18-Sep-18	No.: RD270040

PROCEDURE

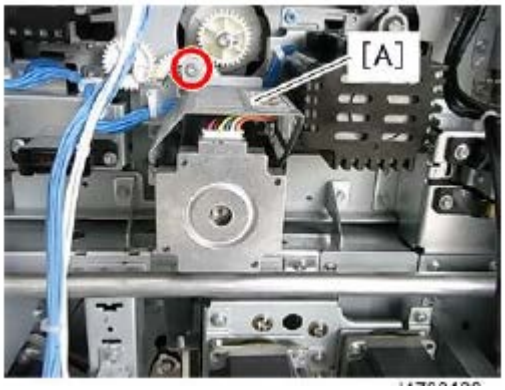
1. Open the controller box and lower IOB



2. Remove the harness cage (screw x3, clump x1).

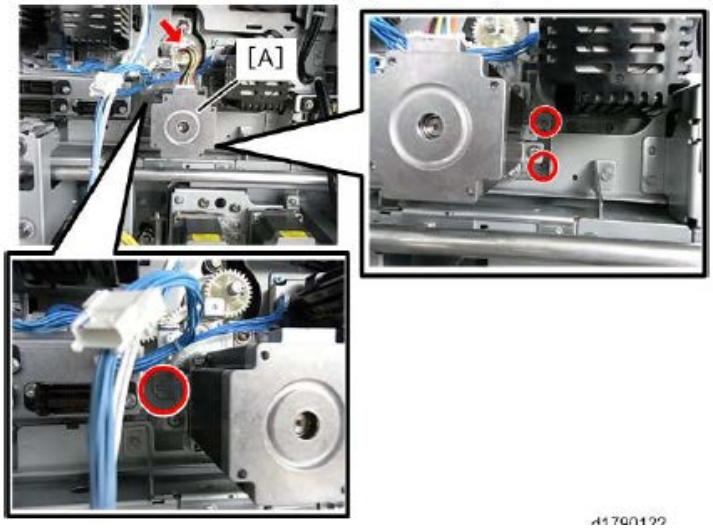


3.Remove the cover [A].

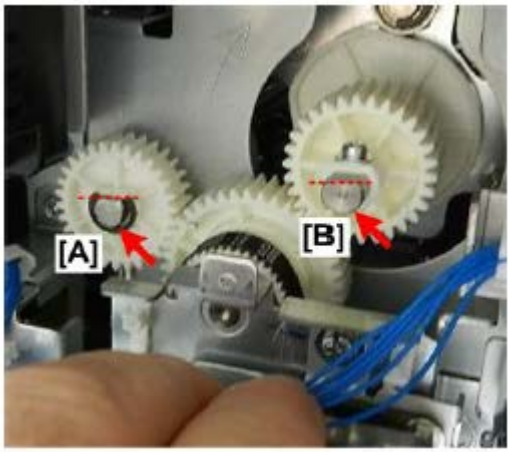


4. Disconnect the harness (connector x2).

5. Remove the bracket together with the motor (screw x3, connector x1).



6. Replace Gear [A] (AB014243) and Gear [B] (BB013040) with new ones (E ring x1 screw x1).



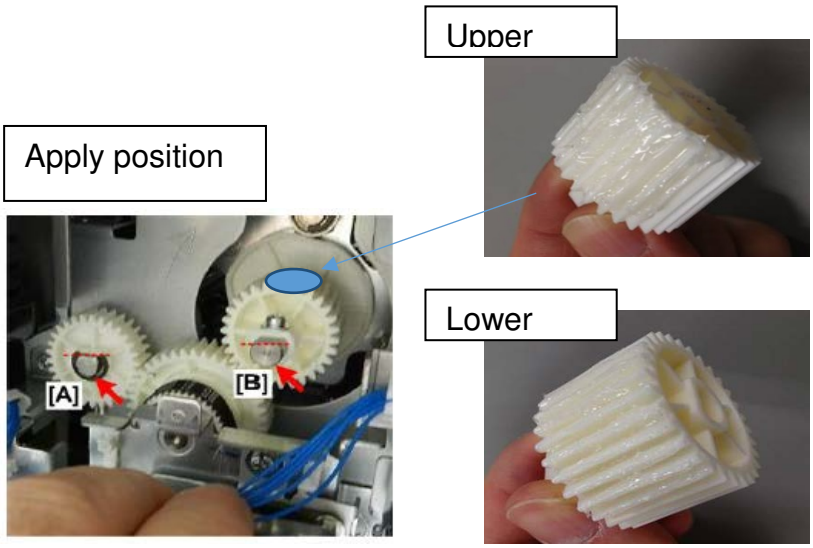
Note: The center gear with its bracket was removed in step 5.

7. Remove the gear (E-ring x1).

8. Replace with new gear (D1792758).

9. Reassemble the removed parts in the reverse order

Note:
When re-attaching the motor bracket to the mainframe, make sure that the both flat side [A] and [B] of two shafts are up and level with one other. Then, apply silicone grease G-501 (0.55g) to the gear [B] referencing the picture below.



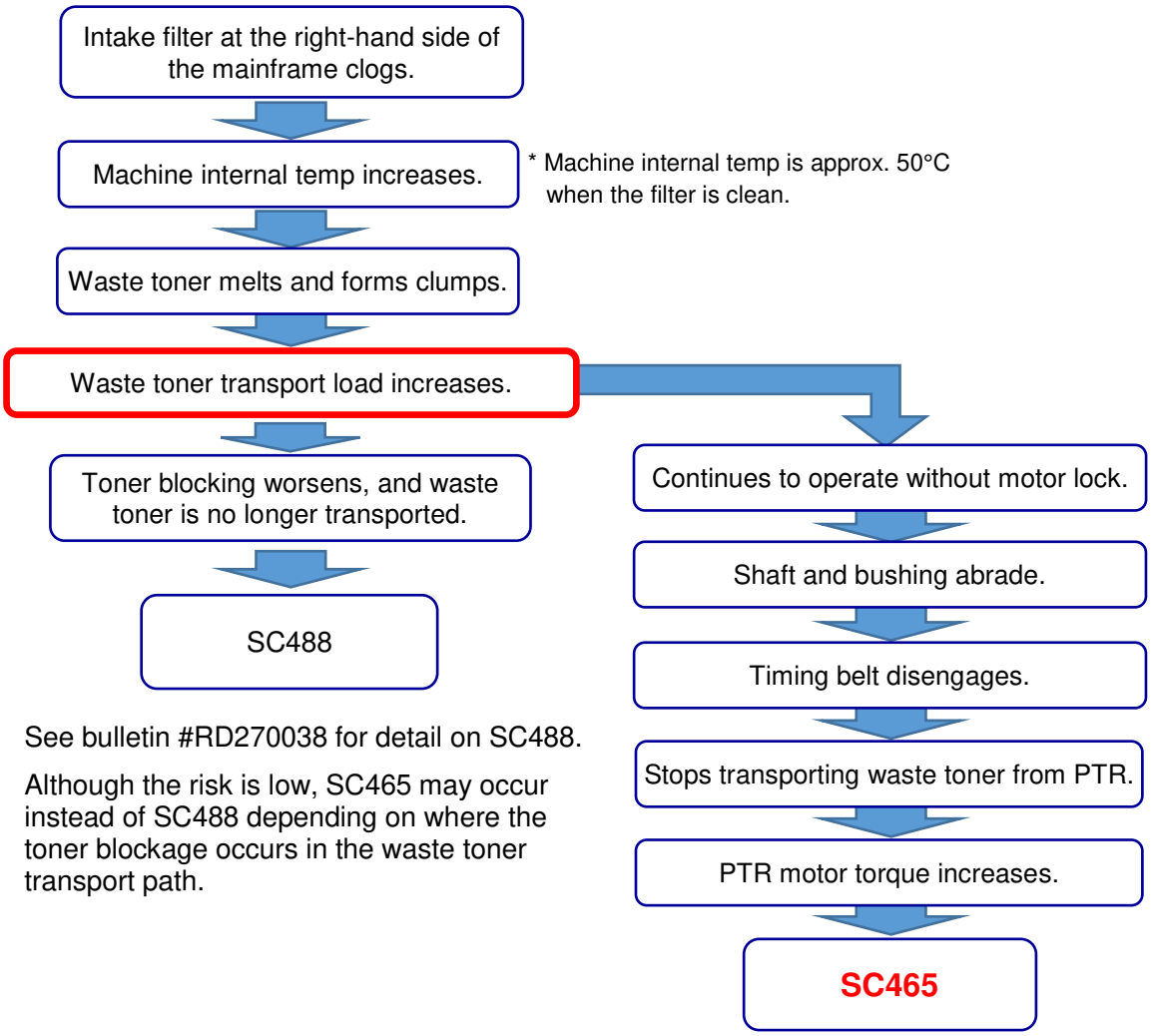
Model: BR-C2	Date: 9-Oct-18	No.: RD270041

Subject: Troubleshooting SC465			Prepared by: Youngsoo Lim
From: Sales Strategy Section, 1st CP Business Department			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☒ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2 ☐ Tier 0.5

SYMPTOM

SC465 (PTR motor error)

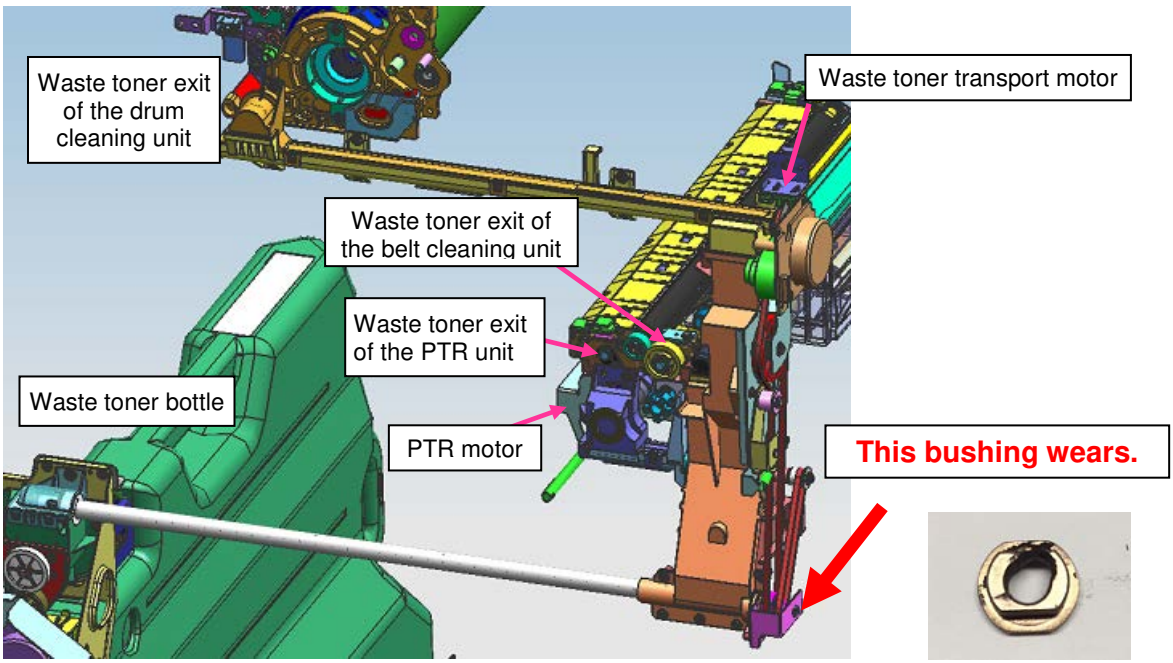
CAUSE



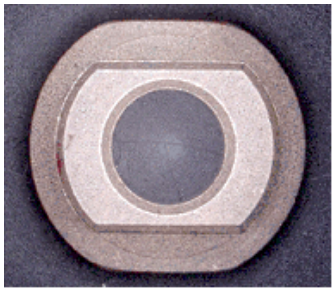
- See bulletin #RD270038 for detail on SC488.
- Although the risk is low, SC465 may occur instead of SC488 depending on where the toner blockage occurs in the waste toner transport path.

The following conditions increase the risk of the symptom:

- High room temperature
- The machine is installed close to the wall with hardly any or no space at all.
- The machine generates high print volume.
- Intake filter at the right-hand side of the mainframe is clogged.
- The machine experienced SC488 in the past. The waste toner transport unit and bushing were not replaced at that time.



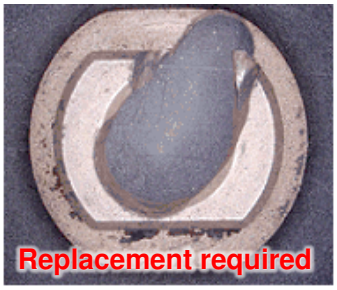
Reference: The photos below show bushings at various stages for reference.



Brand new

After approx. 20,000k (normal transport load)

After approx. 20,000k (high transport load)



After approx. 30,000k (SC465 confirmed)

SOLUTION

- Check the above bushing (p/n: B1202063). If it is abraded and requires replacement, replace it together with the waste toner unit (p/n: D1796528).

Request

- Please monitor all machines regardless of whether the bushing was found abraded or not, until you confirm that the machine does not generate the SC.

Affected units:

The above solution and request applies to all Baron-1 and Baron-2 units that have exceeded a total print volume of 20,000k.

Technical Bulletin

Model: BR-C2	Date: 11-Jan-19	No.: RD270042

Subject: Request to modify Toner Refresh SP setting			Prepared by: Y. Lim
From: Sales Strategy Section, 1st CP Business Dep.			
Classification:	☐ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Requested Action

At your next service visit, change the value of **SP3-820-001 from 3% to 2%**.

Background / Reason

To improve print quality, the 'Toner Refresh' threshold was changed in production for Pro 8200/8210/8220 from 2% to 3%. However, tests have proven that fair print quality is achievable even with the Toner Refresh threshold set at 2%. This helps save toner consumption.

As mentioned in bulletin #RD270036 regarding 'Clear blurred image' operation, make sure to update Engine firmware to version **2.01:02**. This firmware changes the default temperature to trigger the 'Clear blurred image' operation (SP2-810-003:27 to 32 and SP2-810-009: 25 to 32), which also saves toner consumption.

Model: Pro8100/8200	Date: 31-May-19	No. RD270043

Subject: Preventive measures for SC465/488 caused by toner clumps			Prepared by: M. Okamoto
From: Service Planning Sect., Global Engineering Support Dept.			
Classification:	☒ Troubleshooting	☐ Part information	☒ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Preventive Measures for SC465/488

SC465 (PTR motor error) and **SC488** (waste toner transport blockage) occur when the intake filters at the right-hand side of the mainframe clog and increases the machine internal temperature. High internal temperature melts the waste toner in the waste toner path, which creates toner clumps that degrade waste toner transportation and puts excess load on the PTR motor.

As preventive measures, it is requested to perform the actions described below.

NOTE: The actions are 'preventive' measures. If the machine has already experienced either of the above SCs, the waste toner unit (p/n: D1796528) must be replaced. See bulletin #RD270041 'Troubleshooting SC465' for the procedure and detail.

ACTION

- Update the **Engine** and **System/Copy** firmware <u>together as a set</u> to the versions described on the next page.

  With the modified firmware, waste toner transportation runs 30 seconds longer than the standard operation after each job when the system detects an internal temperature that is high enough to melt waste toner. With the extended operation, waste toner is transported thoroughly from the ITB cleaning unit to the waste toner bottle.

  NOTE: The only side effect of the modified firmware is the longer waste toner transportation time.

- Clean the intake filters. See bulletin #RD270038 'Troubleshooting SC488.'

<u>In addition:</u>

You may replace the waste toner unit (p/n: D1796528) even if the machine has not experienced the SC, if the machine is operated in an environment likely to result in the SC. Following are examples of such environmental conditions:

- A heater is installed close to the machine.
- The machine is run continuously and produces high PV.
- The machine is installed too close to the wall.

Modified firmware:

Pro 8100EX/ Pro8100S/ Pro8110S/ Pro8120S

Engine (D1795405) ver.4.12:08 or later

System/Copy (D1795760Z) ver.2.12 or later

Pro 8110/Pro8120

Engine (M2635404N) ver.1.12:00 or later

System (M2635752) ver.1.12 or later

Pro 8200EX/Pro 8200S/Pro8210S/Pro 8220

Engine (D2705404L) ver.2.02:02 or later

System/Copy (D2705750N) ver.1.13 or later

Pro 8210/Pro 8220

Engine (M0AA5404L) ver.2.02:02 or later

System (M0AA5780K) ver.1.10 or later

NOTE: Make sure to update the Engine and System/Copy firmware together as a set.

Model: Baron-C1/P1/C2/P2	Date: 5-Jun-19	No.: RD270044

Subject: Important note when replacing the Fusing Stripper Plate			Prepared by: M. Okamoto
From: Service Planning Sect., Global Engineering Support Dept.			
Classification:	☐ Troubleshooting	☒ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2 ☐ Tier 0.5

Changes:

- Fusing stripper plate
- Bushing

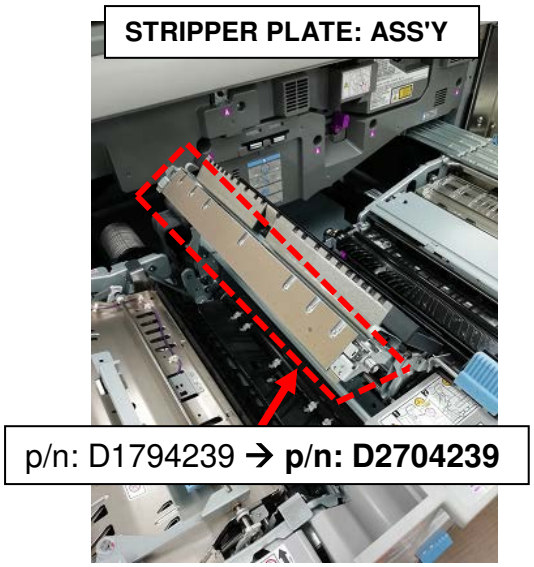
Reason: For parts standardization with Baron-3

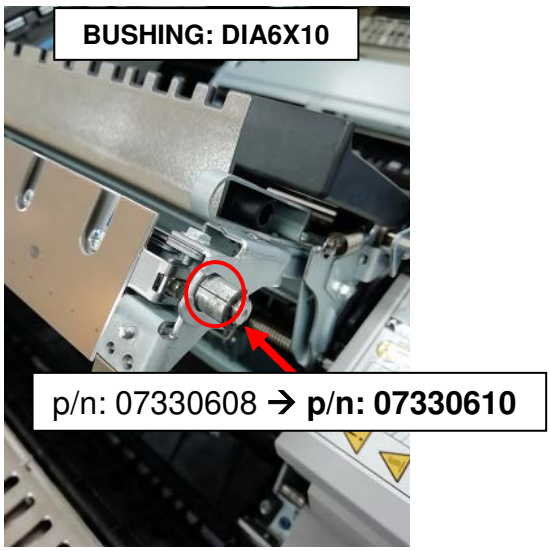
Old P/N	New P/N	Description	Q'ty	Int	Set Int	Note
D1794239	D2704239	STRIPPER PLATE: ASS'Y	1	X/O	O/O	Change
07330608	07330610	BUSHING: DIA6X10	2	X/O		Change

Note: The parts catalog is already corrected of the above information.

Important note when replacing the Fusing Stripper Plate

- When replacing with the new stripper plate, replace with the new bushing together as a set.
- Using the new stripper plate with the old bushing causes the plate to scratch the fusing belt.





Model: Baron-P2/C2	Date: 8-Jul-19	No.: RD270045

Subject: FSM Correction: ADF Feed Belt Replacement	Prepared by: J. Kobayashi
From: PPCS Section, CIP Product Quality Management Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Please add the following Notes as the correction to your FSM, in section:

4. Replacement and Adjustment >> ADF (Copier) >> Pickup Roller, Feed Belt >> Feed Belt

Notes: When replacing the Feed Belt, the Feed Belt may run on the flange under the following conditions and has a damaged belt edge as a result, so install it in the correct position.

1) The belt is raised to the driven roller flange.

2) The belt is running on the driven roller flange.

3) The belt position on the drive roller is misaligned. (the belt should not protrude from the drive roller).

Model: Baron-C2/P2	Date: 28-Nov-19	No.: RD270047

Subject: SC670 table	Prepared by: Y. Tanimoto
From: Service Planning Sec. GES Dep. DASC	

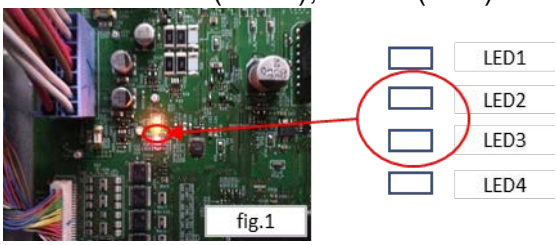
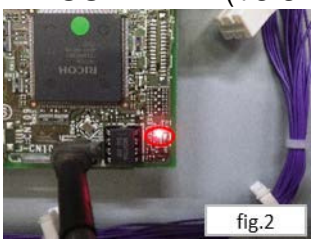
Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

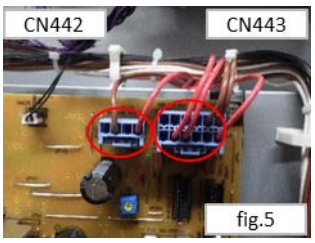
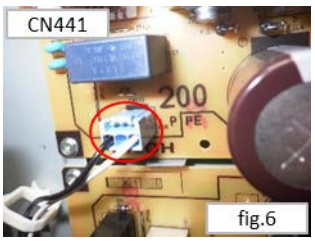
Please add the following SC670-00 table to your Field Service Manual.

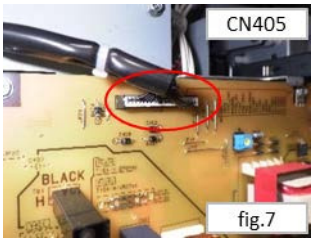
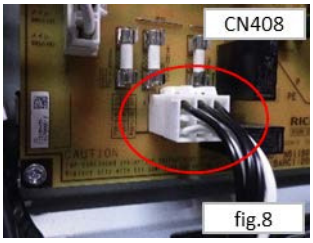
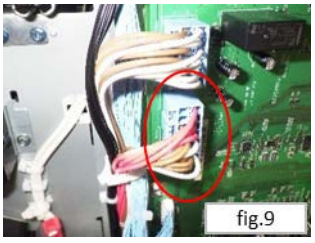
- Note that various factors can cause this SC.
- Troubleshoot by following the steps in the order described.
- See page 11 for board and harness location.

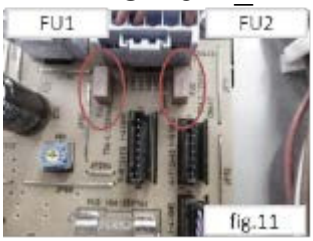
SC670-00

Error Name: **Engine Startup Failure**

Steps	Possible cause	Troubleshooting procedure
1	IOB, BCU and IPU do not activate because AC power is not supplied from PSU-B. • Poor harness connection between PSU-B and IOB/BCU/IPU • PSU-B board failure	Check the LED status of the three boards. ・IOB LED2 (+5VL), LED3 (+5V)  fig.1 ・BCU LED1 (+3.3V)  fig.2 ・IPU LED3 (+3.3V)  fig.3

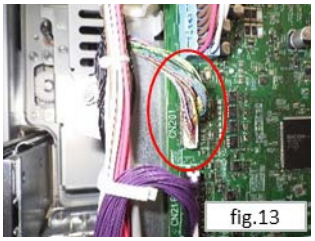
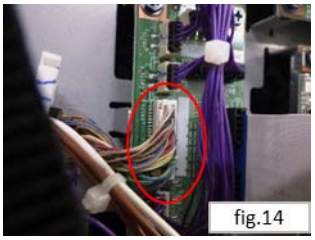
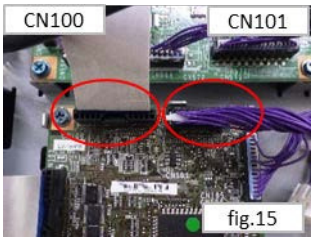
		Result: LED Off → Go to step 15. LED On → Go to step 2.
2	Connector contact failure on PSU-A [CN426_A] AC power is not supplied to PSU-B due to poor connection between PSU-A and AC control board. Relevant connectors and harnesses: CN426_A D2705234	Reseat CN426_A on PSU-A and turn ON the power. * Be careful not to bend the connector pins.  fig.4 Result: No SC → END SC occurs → Go to step 3.
3	Connector contact failure on PSU-B [CN443_B] 5V power is not supplied to RYB due to poor connection between PSU-B and RYB. [CN442_B] 5V power is not supplied to IPU due to poor connection between PSU-B and IPU. [CN441_B] The AC power is not supplied to PSU-B due to poor connection between PSU-B and AC control board. Relevant connectors and harnesses: CN443_B D2705234 CN442_B D2705234 CN441_B D2705253	Reseat the three connectors and turn ON the machine. * Be careful not to bend the connector pins.  fig.5  fig.6 Result: No SC → END SC occurs → Go to step 4.
4	Connector contact failure on AC control board	Reseat the two connectors on the AC control board and turn ON the power.

	[CN405] AC power is not supplied to PSU-B due to poor connection between AC control board and PSU-A. [CN408] AC power is not supplied to PSU-B due to poor connection between AC control board and PSU-B. Relevant connectors and harnesses: CN405 D1795290 CN408 D1795292	* Be careful not to bend the connector pins.  fig.7  fig.8 Result: No SC → END SC occurs → Go to step 5.
5	Connector contact failure on RYB [CN328] Power (5V) is not supplied to RYB due to poor connection between RYB and PSU-B. Relevant connectors and harnesses: CN328 D2705227	Reseat CN328 on RYB and turn ON the power. * Be careful not to bend the connector pins.  fig.9 Result: No SC → END SC occurs → Go to step 6.
6	Connector contact failure on IOB [CN215] AC power is not supplied from AC control board to PSU_B due to poor connection between IOB and AC control board. Relevant connectors and	Reseat CN215 on IOB and turn ON the power. * Be careful not to bend the connector pins.  fig.10

	harnesses: CN215 D2705223	Result: No SC → END SC occurs → Go to step 7.
7	AC power is not supplied from AC control board to PSU-B due to failure of PSU-A.	Replace PSU-A and turn ON the power. * Be careful not to bend the connector pins. Result: No SC → END SC occurs → Go to step 8.
8	5V power is not supplied to IOB due to blown fuse on PSU-B.	Check for blown fuses on PSU-B. • FU1: 5VL • FU2: 5VL_A  Note: • Use a multimeter. • Check both ends of the above fuses (backside of the board). Result: Not blown → Go to step 11. Blown → Verify the short circuit between CN443-1, -2, -3 (FU2) and Ground (chassis) and between CN443-4, -5, -6 (FU1) and Ground (chassis). ➢ If verified continuity, go to step 10. ➢ If no continuity, go to step 9. If you do not have a multimeter, check the solder balls and for any foreign objects on the PSU-B, then go to step 9.
9	Disconnection of harnesses. [CN426_A] AC power is not supplied to PSU-B due to poor connection	Replace the four harnesses below and turn ON the power: D2705234, D2705223, D2705227, D1795290

	between PSU-A and AC control board. Relevant connectors and harnesses: CN426_A (See fig.4) D2705234 [CN443_B] 5V power is not supplied to RYB due to poor connection between PSU-B and RYB. Relevant connectors and harnesses: CN443_B (See fig.5) D2705234, D2705223 [CN442_B] 5V power is not supplied to RYB due to poor connection between PSU-B and RYB. Relevant connectors and harnesses: CN442_B (See fig.5) D2705234 [CN405] AC power is not supplied to PSU-B due to poor connection between PSU-A and AC control board. Relevant connectors and harnesses: CN405 (See fig.7) D1795290 [CN328] 5V power is not supplied to RYB due to poor connection between PSU-B and RYB. Relevant connectors and harnesses:	* Be careful not to bend the connector pins. Result: ・ No SC → END ・ SC occurred → Go to step 10.

	CN328 (See fig.9) D2705227	
10	Board failed (PSU-B) 5V power is no suppled to IOB. 5V power is not supplied to IPU.	Replace PSU-B and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 11.
11	AC power is not supplied to PSU-B due to blown fuse on AC control board. Relevant connectors and harnesses CN443 (See fig.5)	Check FU403 (250V_5A) on AC control plate. Not blown → Go to step 14. Blown → Verify no short circuit between CN408-2 and Ground, between CN408-5 and Ground, then go to No.12.  fig.12
12	[CN441_B, CN408] AC power is not supplied from AC control panel to PSU_B due to poor connection or short circuit originating in the harness. Relevant connectors and harnesses: CN441-B (See fig.6) CN448 (See fig.8)	Replace the three harness below and turn ON the power: D2705253, D2705252, D1795292 * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 13.
13	Power is not supplied to PSU-B due to defective AC control board.	Replace AC control board and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 14.
14	Power (5V) is not supplied to IOB due to failure of RYB.	Replace RYB and turn ON the power. * Be careful not to bend the connector pins.

		Result: ・ No SC → End ・ SC occurred → Go to step 16.
15	[CN201] Communication error between IOB and BCU Relevant connectors and harnesses: CN201 D1795208	Reseat CN201 on IOB and turn ON the power. * Be careful not to bend the connector pins.  fig.13 Result: ・ No SC → End ・ SC occurred → Go to step 16.
16	Connector contact failure (CNB) [CN171] Communication error between IOB and BCU Relevant connectors and harnesses: CN171 D1795208	Reseat CN171 on CNB and turn ON the power. * Be careful not to bend the connector pins.  fig.14 Result: ・ No SC → End ・ SC occurred → Go to step 17.
17	Connector contact failure (BCU) [CN100, CN101] Communication error between IPU and BCU	Reseat CN100 and CN101 on BCU and turn ON the power. * Be careful not to bend the connector pins.  fig.15

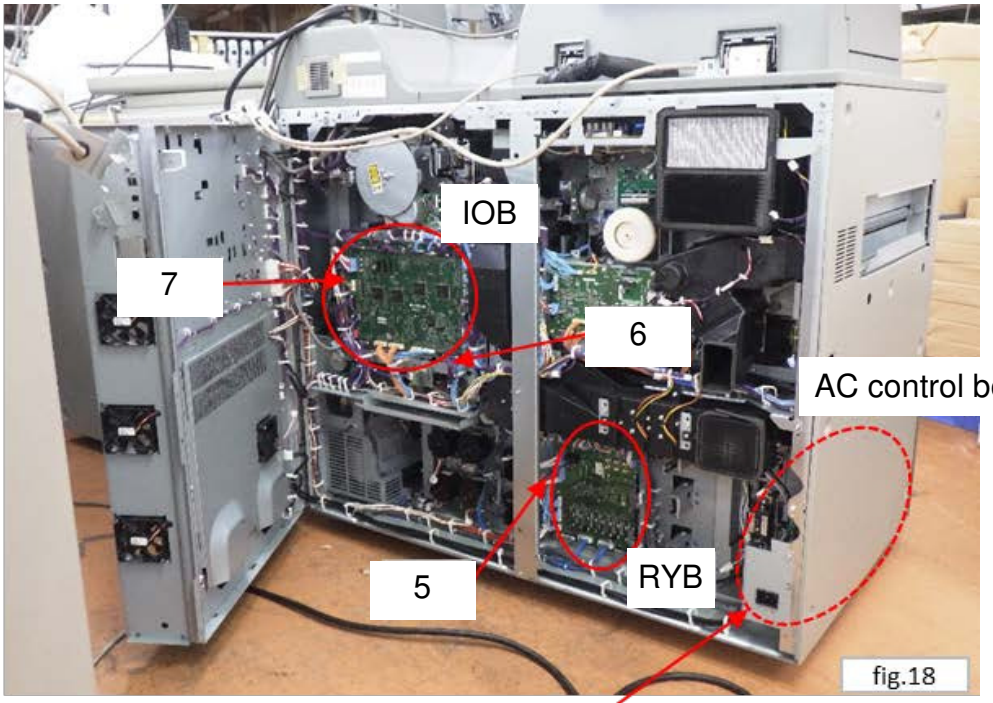
		Result: ・ No SC → End ・ SC occurred → Go to step 18.
18	Connector contact failure (IPU) [CN574, CN595] Communication error between IPU and BCU Relevant connectors and harnesses CN574 D1495387 CN595 D1795239	Reseat CN574 and CN595 on IPU and turn ON the power. * Be careful not to bend the connector pins.  fig.16  fig.17 Result: ・ No SC → END ・ SC occurs → Go to step 19.
19	[CN201, CN171] Communication error between IOB and BCU due to poor connection or short circuit originating in the harness	Replace harness (p/n: D1795208) and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 20.
20	[CN100, CN574] Communication error between BCU and IPU due to connection failure or short circuit related to the harness	Replace harness (p/n: D1495387) and turn ON the power. * Verify secure connection and make sure to insert the connectors straight, not in a slant. Result: ・ No SC → End ・ SC occurred → Go to step 22.
21	[CN101, CN595]	Replace harness (p/n: D1795239) and turn

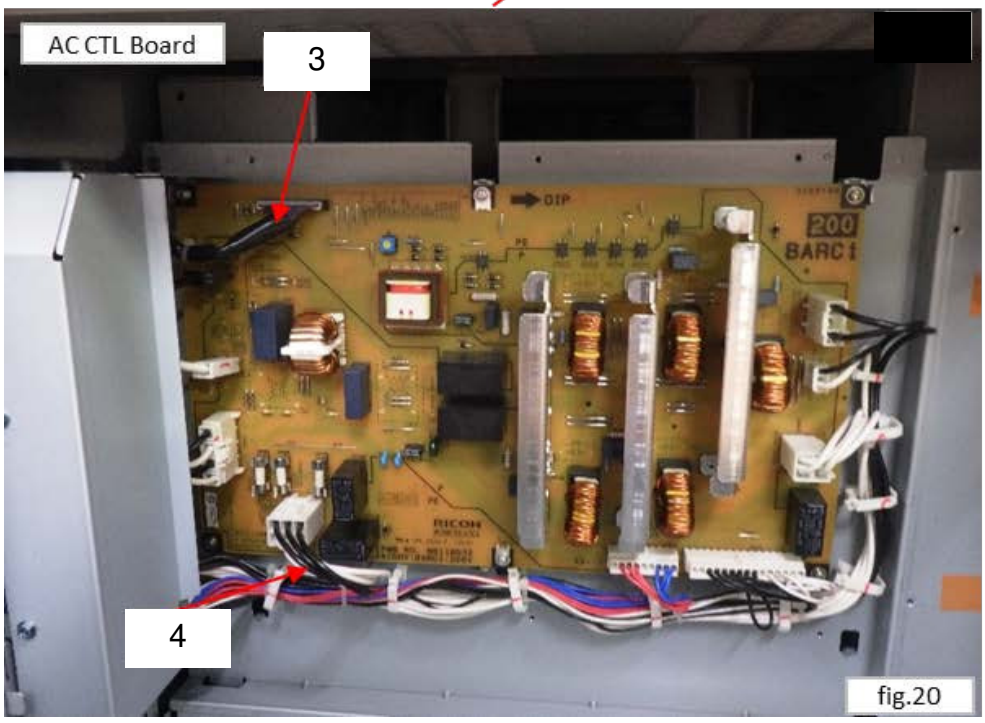
	Communication error between BCU and IPU due to connection failure or short circuit originating in the harness	ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 22.
22	Communication error between BCU and IPU due to defective BCU	Replace BCU and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 23.
23	Communication error between IPU and BCU due to defective IPU	Replace IPU and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 24.
24	Communication error between IOB and BCU due to defective IOB	Replace IOB and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End ・ SC occurred → Go to step 25.
25	Communication failure between BCU and IOB due to defective CNB.	Replace CNB and turn ON the power. * Be careful not to bend the connector pins. Result: ・ No SC → End

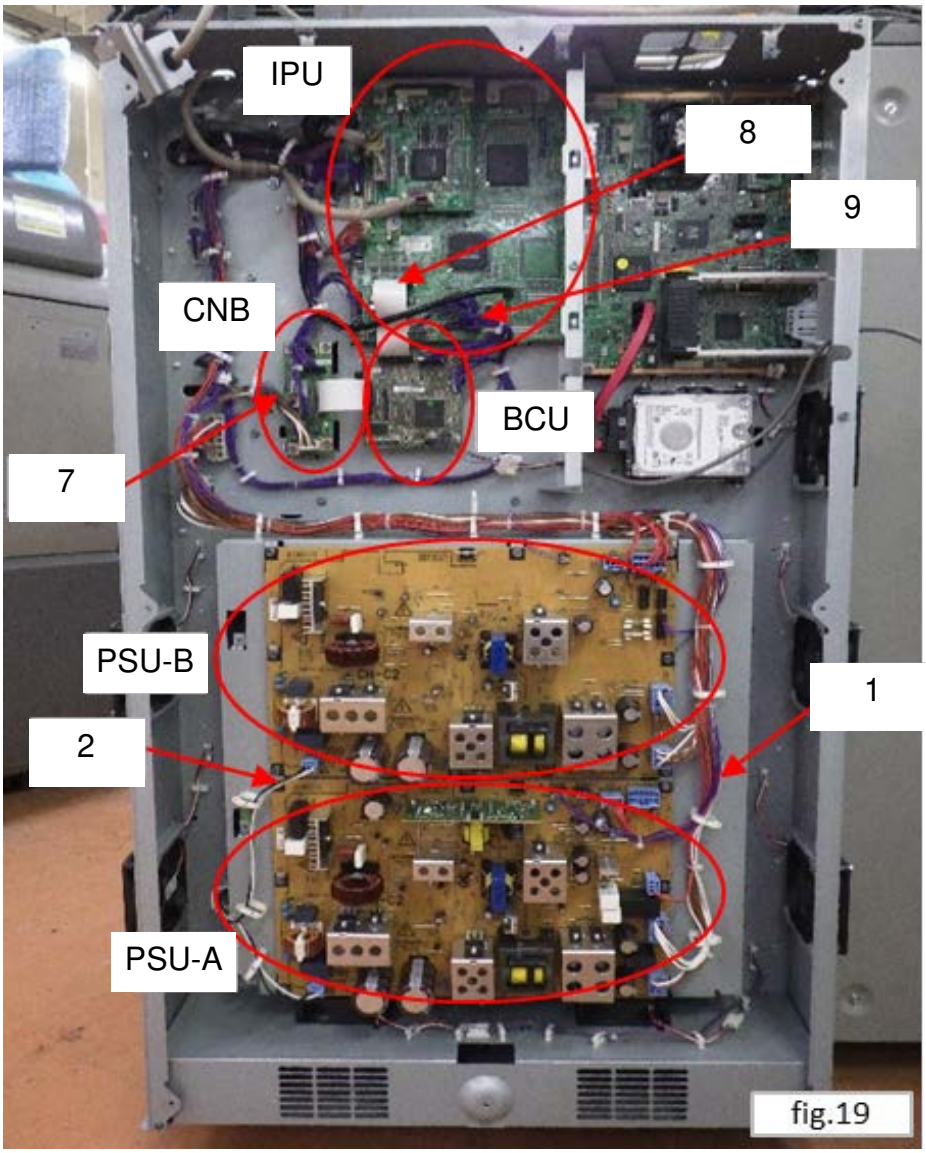
Board and harness location

< Board information>	
Board name	Part number
IOB	D2705406
RYB	D2705427
AC control board	D1795445
IPU	D1795725
CNB	D1795440
BCU	D2705400
PSU－B	AZ240356
PSU－A	AZ240355

< Harness information>	
Callout No.	Part number
1	D2705234
2	D2705253
3	D1795290
4	D1795292
5	D2705227
6	D2705223
7	D1795208
8	D1495387
9	D1795239


IOB
7
6
AC control board
5
RYB
fig.18


AC CTL Board
3
4
fig.20


IPU
8
9
CNB
BCU
7
PSU-B
1
2
PSU-A
fig.19