Troubleshooting Guide
imagePRESS C10000VPSeries

January, 2019
Canon U.S.A., Inc.

New Arrival Information

[Regarding Troubleshooting Guide]

Please be advised of the release of Troubleshooting Guide for imagePRESS C10000VP series.
Troubleshooting Guide is a booklet compiled from FAQs issued by Canon Inc.

[Additional case(s)]

- White spot in the center of the leading edge on feed direction, and streaks on imagesdue to deformation of black patch sensor unit
- 1014/1086/10B5/10E9/17B5/17E9 Jam codes due to softened spacer (Paper Folding Unit/Document Insertion / Folding Unit)
- 2828 jam code due to misdetection of the double feed sensor assembly(Paper Deck Double Feeding Detection Kit -A1)
- E007-00x1/0101 due to an arm going onto the head of a stepped screw of fixing belt unit.
- Notice of periodical replacement of the trimming blade and the heater (Glue vat unit)
- Cannot staple for multiple worksheets in Excel (Print Server)
- Points to note when attaching the pressure roller heater in the secondary fixing assembly
- Unexpected result of booklet job with External Finisher. (imagePRESS Server B5100/B4100)
- 1014/1086/10B5/10E9/17B5/17E9 Jam codes due to softened spacer (Paper Folding Unit/Document Insertion / Folding Unit)
- Notice of periodical replacement of the trimming blade and the heater (Glue vat unit)
- Streaks and stains on image in feeding direction due to breakage of the tension spring
- Points to note when installing a lower entrance guide
- Measure against failure after system version upgrade (Multi Function Professional Puncher_A1)
- Notification about the changes in the upper cover and cover sheet for the 1st fixing assembly and second fixing assembly and about their proper uses
- Stain on back of papers attributed to secondary transfer cleaning failure due to breakage of cleaner front side plate
- 110F jam code due to meshing failure on timing belt of operation feed motor (M26) (Staple/Saddle/Booklet/Finisher)
- E5A3-808x/E5B5-8016 and 1FA9 jam code due to sliding failure of dust buffer (Perfect Binder-A1/B1/C1/D1/E1)
- Points to note when attaching the inner cover 2 on the secondary transfer drive unit

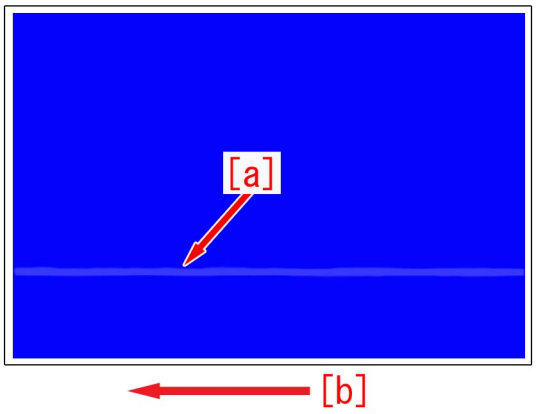
Contents

Image Faults

Faint white line on a second side image due to the stain on the Connection Lower Guide Roller for the Primary Fixing Assembly

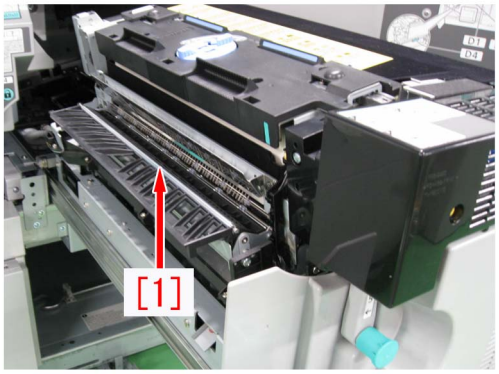
[Symptom]

A faint white line [a] might appear on a second side image, if the machine is used a lot under the high temperature and high humidity environment.
The arrow [b] indicates the direction of feeding.
The symptom is easily found on a high density image such as halftone or solid image.



[Cause]

IF the paper having a lot of paper lint is used under high temperature and high humidity environment, the paper lint and wax component of toner combine and adhere to the Connection Lower Guide Roller [1] located at the outlet for the Primary Fixing Assembly.
When the paper lint and the wax component of toner which adhere to the roller are transferred to a paper, the above symptom occurs.



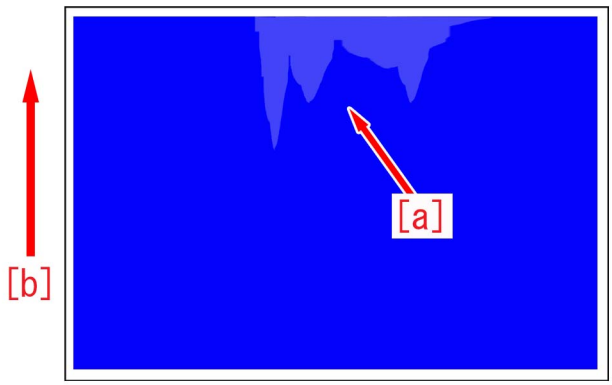
[Service work]

1) Open the Sub Station Front Right Cover to pull out the Primary Fixing Assembly.
2) Clean the whole surface of the Connection Lower Guide Roller with lint-free paper moistened with alcohol rotating the roller by hand.
3) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Uneven gloss (Rain drop mark) in the high-density area in usage of OHT

[Symptom]

Uneven gloss (Rain drop mark) [a] may occur in the high-density area in usage of OHT.
The arrow [b] indicates the direction of feeding.

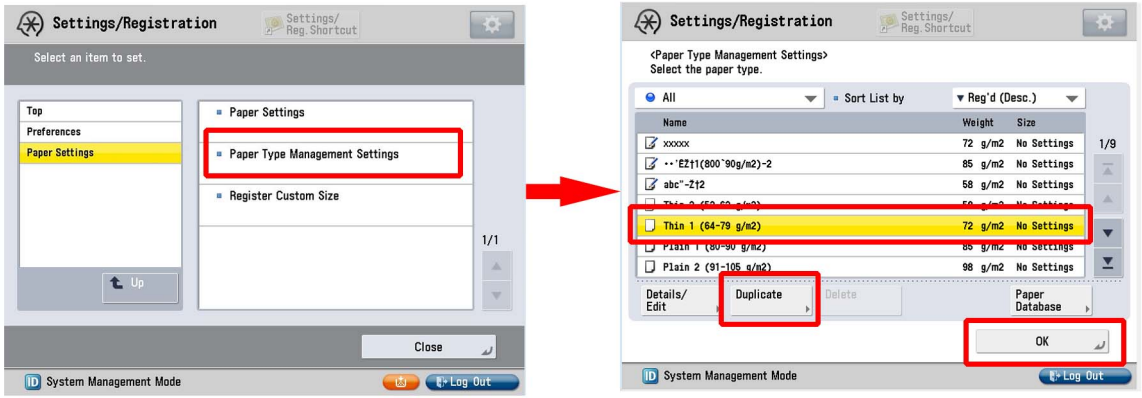


[Cause]

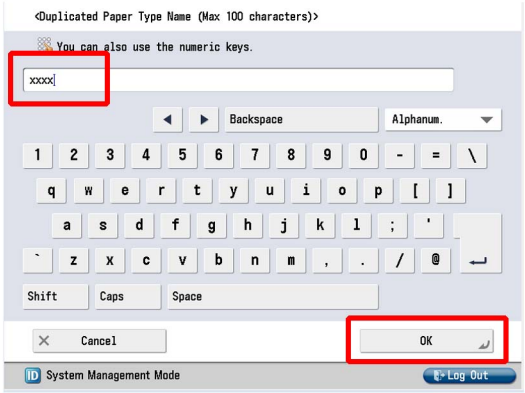
Since the thickness and components of OHT vary depending on the kind, quantity of heat required for toner to fix on the film also varies.
In case an excessive temperature is added on OHT, toner tends to melt beyond necessity.
The difference in glossiness made between the area where toner melts beyond necessity and the other image area causes the above-mentioned symptom.

[Service work]

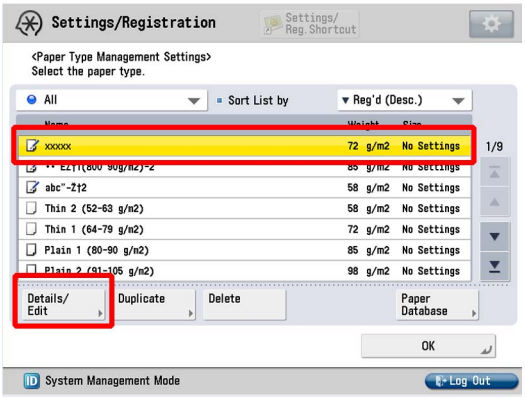
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



3) Enter any name as the duplicated paper type and press "OK" button.

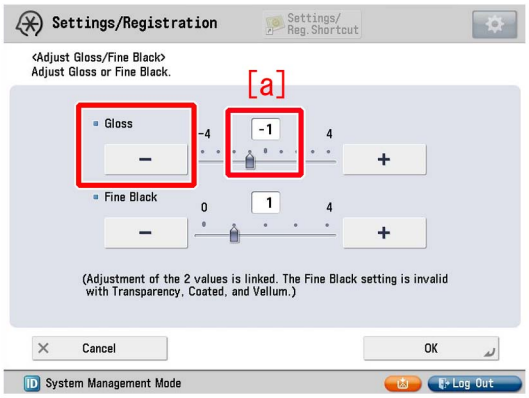


4) Select the paper type duplicated in the step 3) and press "Details/Edit".



5) Select "Adjust Gross/Fine Black" and press "Change".
[Reference] In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

6) Press "-" button for gloss, Make sure the setting value [a] is set to "-1" and press "OK".
The setting range is from "-4" to "+4" ("0" by default).
Change of the setting value changes the fixing temperature.

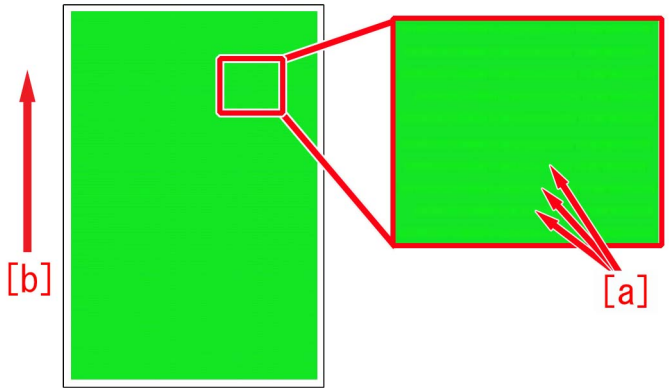


[Caution] Changing the value may cause glossiness of image may slightly decrease.
7) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom improvement is inadequate, decrease the setting value of step 6) down to "-3" by "1" value while observing the symptom.
In case the decreased setting value "-3" of step 6) does not improve the symptom, please check another factor.

Horizontal white streaks with 2mm intervals on a high density green image

[Symptom]

In a usage under a low humidity environment, horizontal white streaks [a] with 2mm intervals may occur on a high density green image
The arrow [b] indicates the direction of feeding.

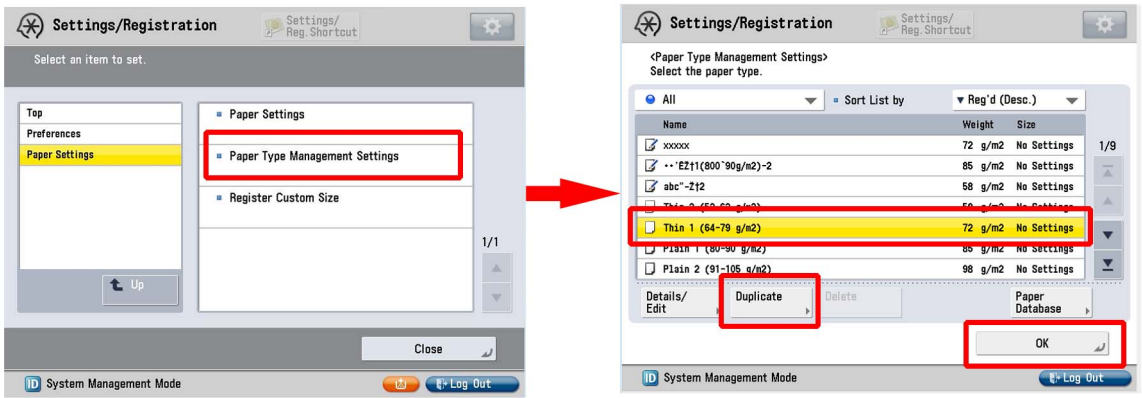


[Cause]

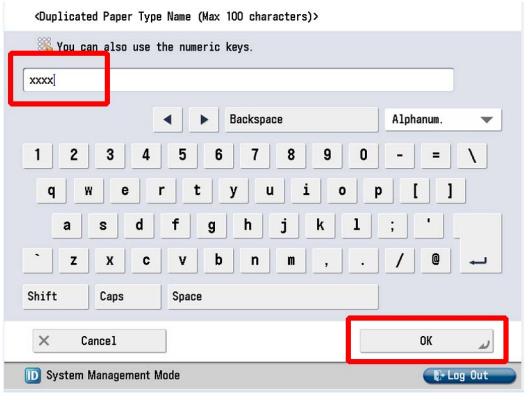
Being affected by the influence of toner or ITB, the electric current may become uneven even if a constant primary transfer voltage is applied.
If an electrical discharge phenomenon is generated on a part where has more current after the transfer, the electric charge amount varies among the toner on the paper.
When the electric charge amount varies, the amount of toner that was once transferred to paper and to be attracted to the drum (retransfer) at the next station changes, so that the toner amount on the paper becomes uneven and results in the above mentioned symptom.
A low humidity environment is likely to have this symptom as the primary transfer voltage is large.

[Service work]

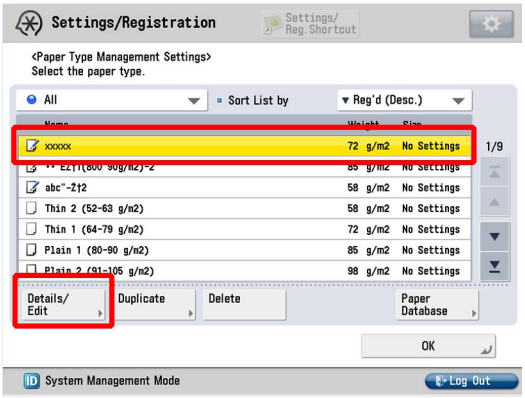
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



3) Enter any name as the duplicated paper type and press "OK" button.



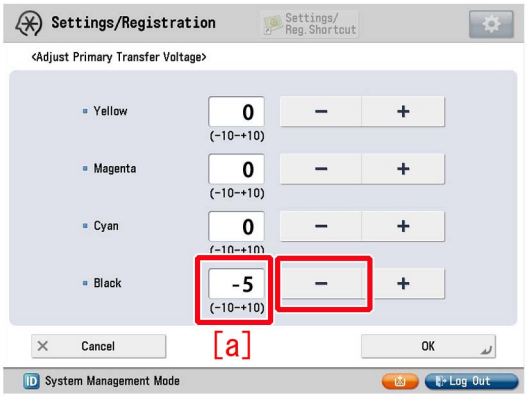
4) Select the paper type duplicated in the step 3) and press "Details/Edit".



5) Select "Adj. Primary Transfer Voltage" and press "Change".
[Reference] In case Adjust Primary Transfer Voltage will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

6) If the Adjust Primary Transfer Voltage screen is displayed, the presetting is completed.

7) Select black under primary transfer voltage, change the correction parameter [a] to "-5" by pressing "-" button and press "OK".
The setting range is from "-10" to "+10 ". ("0" by default)
Change of the setting value changes the primary transfer voltage.

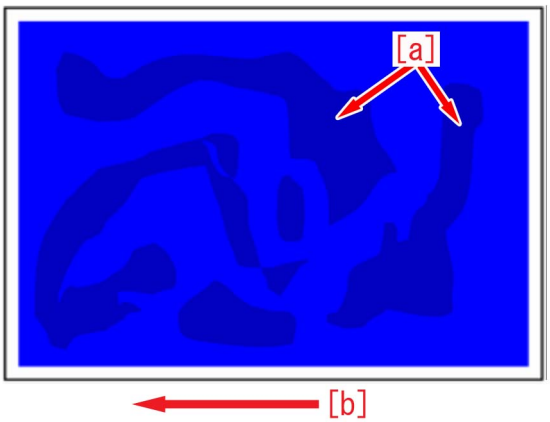


[Caution] Changing this setting may decrease the primary transfer voltage and bring poor image with black (lowering of density, mottling image, etc.).
8) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Uneven gloss on the entire high density image

[Symptom]

Uneven gloss [a] may occur on the entire high density image such as solid image.
The arrow [b] indicates the direction of feeding.

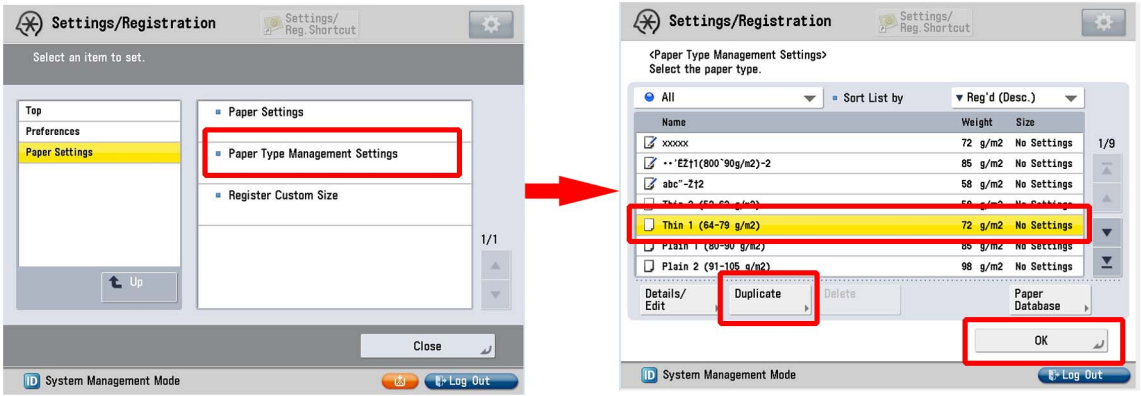


[Cause]

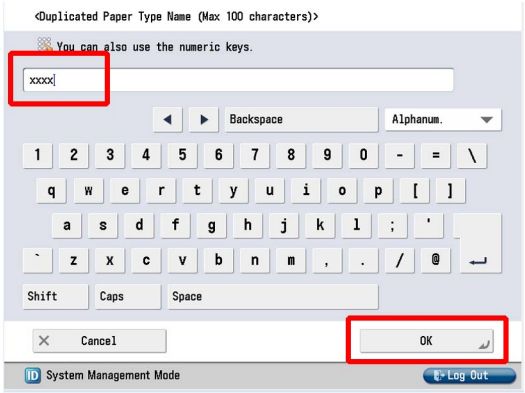
The influence of an uneven temperature and uneven cooling of the member (guide etc.) on the delivery path after fixing may cause the time difference in solidifying the wax components included in the toner.
When there is the time difference in solidifying the wax components, the difference in glossiness on the image surface tends to stand out, and the above-mentioned symptom occurs.
This symptom is likely to be seen on the high density image with high quantity of toner and heavy paper/coated paper that is fixed at a high temperature.

[Service work]

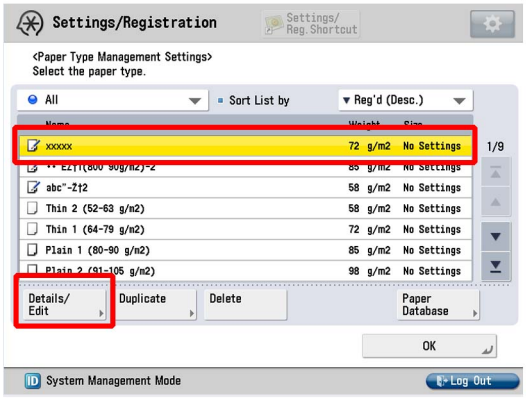
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



3) Enter any name as the duplicated paper type and press "OK" button.

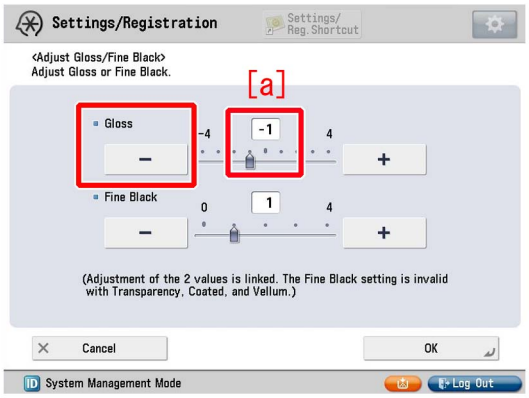


4) Select the paper type duplicated in the step 3) and press "Details/Edit".



5) Select "Adjust Gross/Fine Black" and press "Change".
[Reference] In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

6) Press "-" button for gloss, Make sure the setting value [a] is set to "-1" and press "OK".
The setting range is from "-4" to "+4" ("0" by default).
Change of the setting value changes the fixing temperature.



[Caution] Changing the value may cause glossiness of image may slightly decrease.

7) Output the image having shown the symptom, and check that the symptom does not occur.

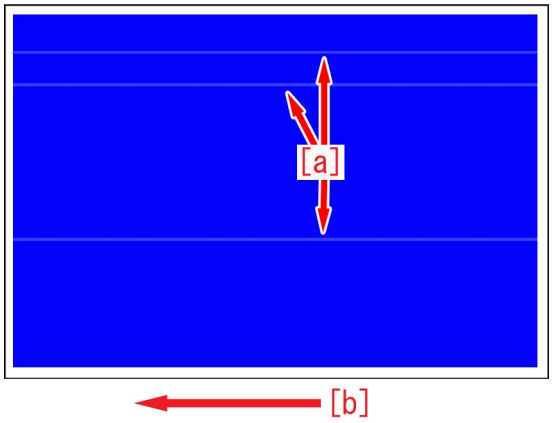
If the symptom improvement is inadequate, decrease the setting value of step 6) down to "-3" by "1" value while observing the symptom.

In case the decreased setting value "-3"of step 6) does not improve the symptom, please check another factor.

Glossy streaks on high density portion

[Symptom]

Glossy streaks [a] may appear on a high density portion.
The arrow [b] indicates the direction of feeding.
This symptom is more visible with heavy / coated paper.

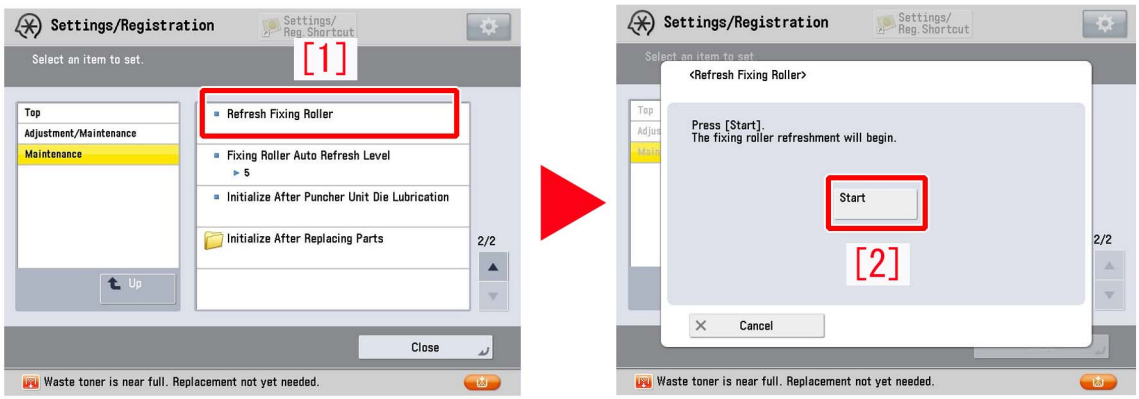


[Cause]

The surface of the fixing roller may have minute scratches on it due to foreign particles such as paper lint.
The thermal conductance of the scratched portion of the fixing roller is lower than that of surrounding portions and the glossiness of image of the same portion is reduced.
The difference of the glossiness of the image generates the aforementioned symptom.

[Service work]

1) Select Settings/Registration > Adjustment/Maintenance > Maintenance > Refresh Fixing Roller[1],and press "Start" button[2].

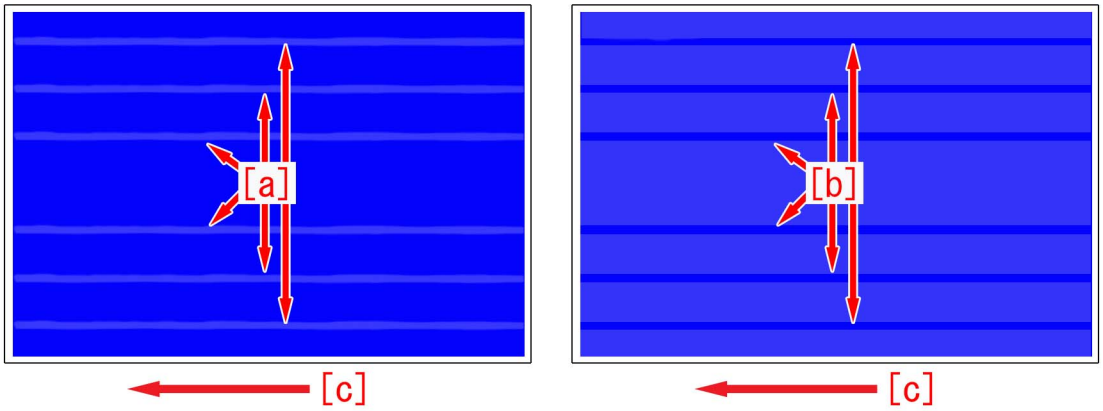


[Reference] The time required for adjustment is approximate 40 seconds.
2) Output the image having shown the symptom, and check that the symptom does not occur. If the symptom no longer occurs, the work is completed.
If the symptom will not improve, repeat the step 1) for thrice.
3) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, check other causes.

10mm wide glossy lines near 40/80/10mm from the center of the first side of duplex printing

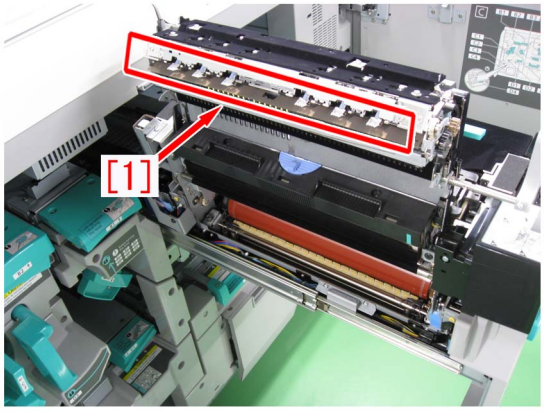
[Symptom]

10 mm wide semi-glossy lines [a] and highly glossy lines [b] may occur at one of near 40, 80, and 120 mm from the center on the first side of duplex printing.
The arrow [c] indicates the direction of feeding.



[Cause]

The secondary fixing assembly separates thin papers by engaging the fixing separation claw [1] to the pressure roller.
a. when the surface of the pressure roller is lightly scratched by the fixing separation claw, glossiness of the area where the fixing separation claw comes in contact with decreases and 10mm semai-glossy lines occur. The symptom tends to occur easily when the pressure roller is new.
b. The pressure roller in the secondary fixing assembly may be polluted in some cases due to paper and/or toner scattering inside the engine. The pollution is cleaned in the area where the fixing separation claw comes in contact with, so the glossiness is higher compared to the area where the claw does not come in contact with, causing the 10mm wide highly glossy lines to occur.



[Service work]

1) Depending on the issue, choose and perform one of a) or b) below.

a) When 10mm wide semi-glossy lines occur:
a-1) Select Service mode > Mode List > COPIER > Function > CLEANING > [FX-CLN], and then press the "OK".
[Reference] The time required for adjustment is approximate 1 minute.
[Caution]
- Do not perform more than two times consecutively. Scratches of the pressure roller may get worse.
- When performed too often, the pressure roller and the pressure refresh roller worn out early.
a-2) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

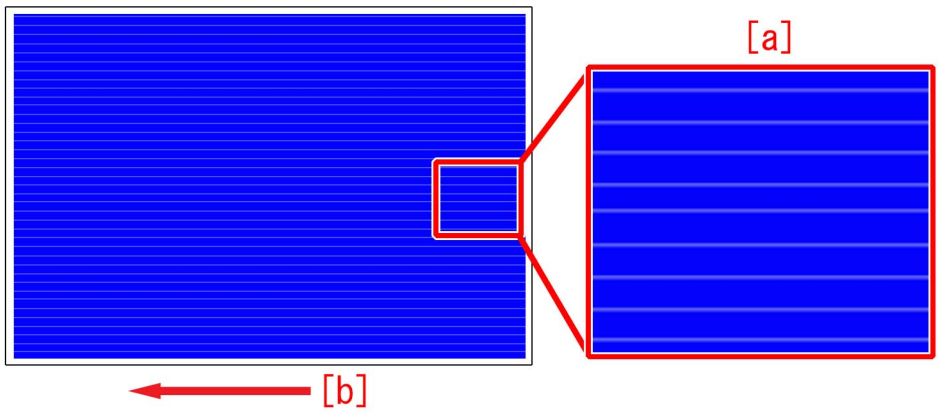
b) When 10mm wide highly glossy lines occur:
b-1) Select Service mode > Mode List > COPIER > Function > CLEANING > [FX2PR-CL], and then press the "OK".

[Reference] The time required for adjustment is approximate 2 minute.
[Caution] When performed too often, the pressure roller and the pressure refresh roller worn out early.
b-2) Use heavy paper over 151gsm or coated paper over A3/LDR and perform the following: Service mode > Mode List > COPIER > Test > Printabout10 sheets of duplex Yellow solid "PG ".
b-3) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

1 mm-wide glossy lines at intervals of 5 mm in the high-density area on the first side of duplex printing

[Symptom]

Several 1 mm-wide glossy lines [a] may occur at intervals of 5 mm in the high-density area on the first side of duplex printing.
The arrow [b] indicates the direction of feeding.

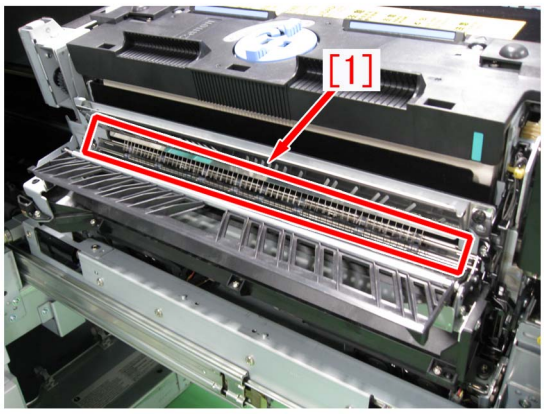


[Cause]

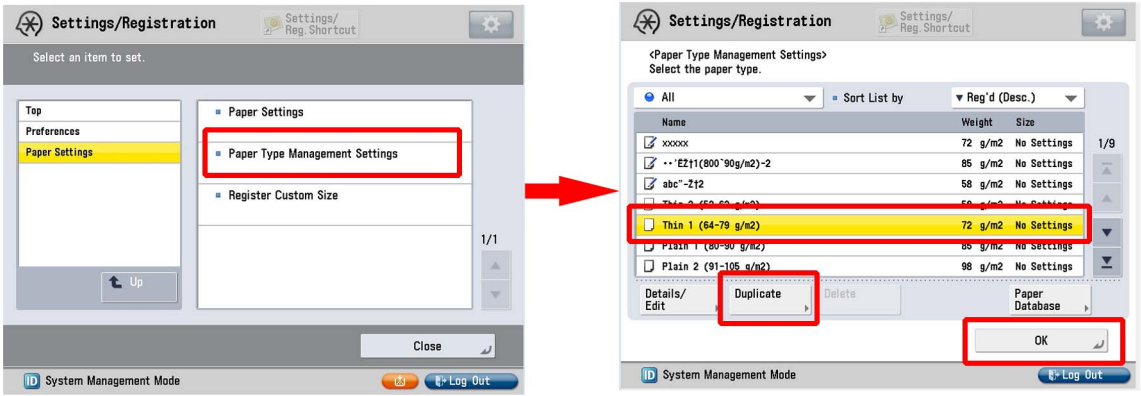
After heavy usage, toner may adhere to static eliminator located at the outlet of the first fixing assembly. If toner adheres to the static eliminator, the static eliminator becomes firm and it rubs the image surface, and the above-mentioned symptom occurs.
This symptom can be seen more clearly on the high-density image having larger quantity of toner.
This symptom cannot be seen clearly on the heavy paper / coated paper since the paper is fixed again in the secondary fixing assembly.

[Service work]

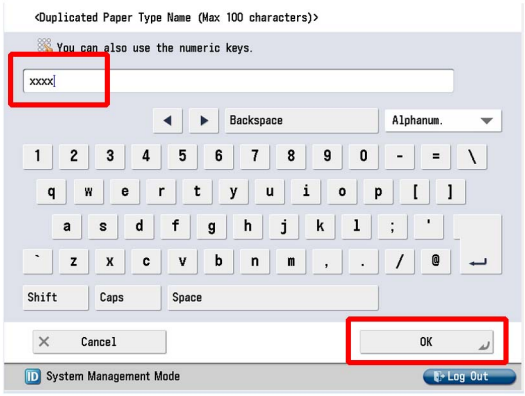
1) Open the sub station front right cover and take out the first fixing assembly.
2) Fold the five-ply lint-free paper in four, and clean the static eliminator [1] to become unraveled.



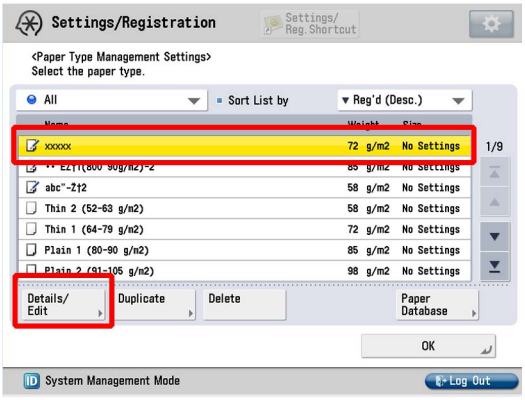
3) Insert the first fixing assembly and close the sub station front right cover.
4) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom no longer occurs, the work is completed.
If the improvement of the symptom is not enough, go to step 5).
5) Have the customer log in from System Management Mode in user mode.
6) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



7) Enter any name as the duplicated paper type and press "OK" button.

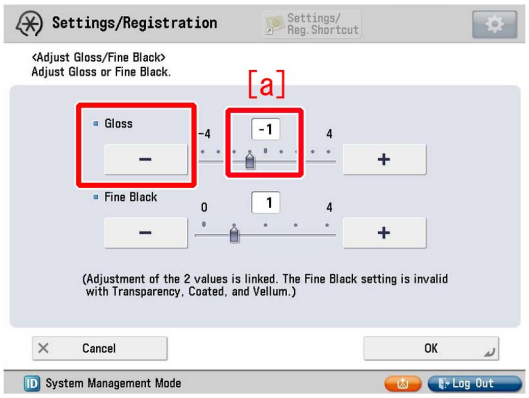


8) Select the paper type duplicated in the step 7) and press "Details/Edit".



9) Select "Adjust Gross/Fine Black" and press "Change".
[Reference] In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

10) Press "-" button for gloss, Make sure the setting value [a] is set to "-1" and press "OK".
The setting range is from "-4" to "+4" ("0" by default).
Change of the setting value changes the fixing temperature.

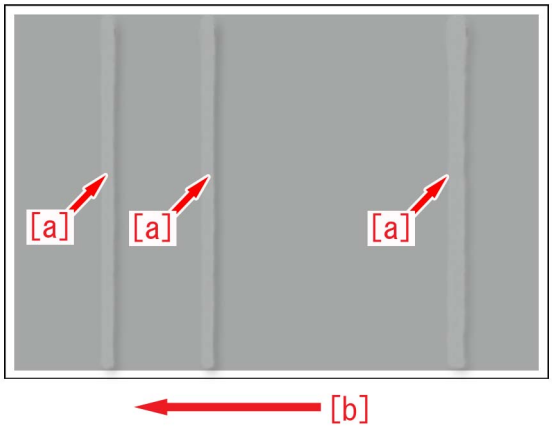


[Caution] Changing the value may cause glossiness of image may slightly decrease.
11) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom improvement is inadequate, decrease the setting value of step 10) down to "-3" by "1" value while observing the symptom.
In case the decreased setting value "-3"of step 10) does not improve the symptom, please check anotherfactor.

Prevention method for random horizontal lines on a halftone image due to curled ITB from being unused for a long time

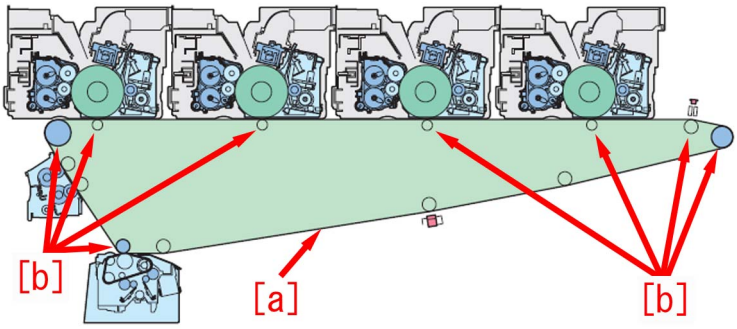
[Symptom]

Horizontal lines [a] may appear randomly on a halftone image after leaving the machine for a long time.
The symptom is especially visible in 250mm intervals attributable to a primary transfer roller.
The arrow [b] indicates the direction of feeding.



[Cause]

If a machine is left untouched for a long time, ITB[a] and 8 rollers[b] inside ITB are in contact each other for a long time, and this condition curls ITB.
The curled part makes tiny space between ITB and the secondary transfer outer roller, therefore discharge phenomenon may be generated.
If discharge phenomenon is generated, toner on ITB scatters, disarranges the image and this results in the above mentioned symptom.



[Service work]

The ITB that is curled from being unused for a long time cannot be fixed in a short time. If an ITB is left unused frequently, take one of the two following measures, a) or b), to prevent ITB from being curled.

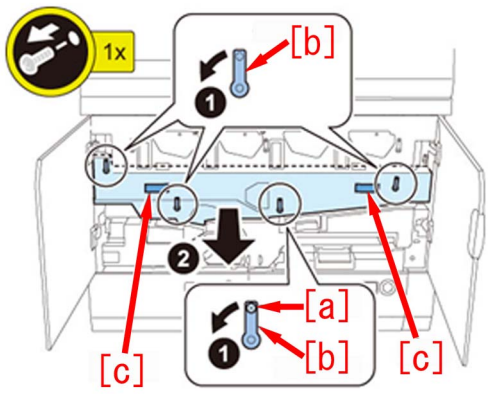
a) If ITB is left unused for a long time with the main power ON:
The ITB is rotated every certain period of time to prevent the symptom.
a-1) Go to Service mode (Lv2) > Mode List > COPIER > Option > IMG-TR > and change the setting value of "ITB-MOVE" to "3".
The setting range is from "0" to "10" ("0" by default).
rotated about 60mm every certain period of time.
[Reference] Explain to the customer that the operation noise can be heard even in Sleep (Deep sleep) mode because the service mode runs every certain period of time.

b) If ITB is left unused for a long time with the main power OFF:
The pressure of the primary transfer roller is released to prevent the symptom.
[Caution]

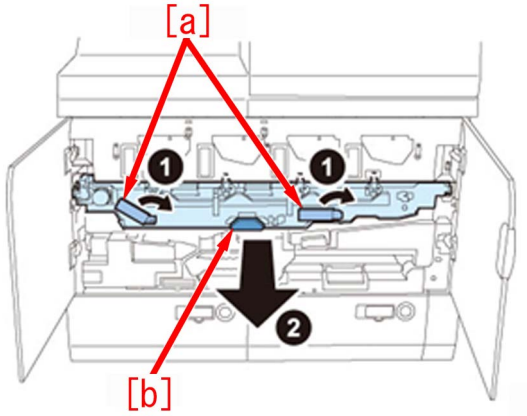
- When starting to use the machine, apply a pressure to the primary transfer roller first. If not, an image failure (poor transfer) would occur.
- There is no effect on the four locations other than the primary transfer roller.

b-1) Open the Main Station Front Right Cover and the Main Station Front Left Cover.

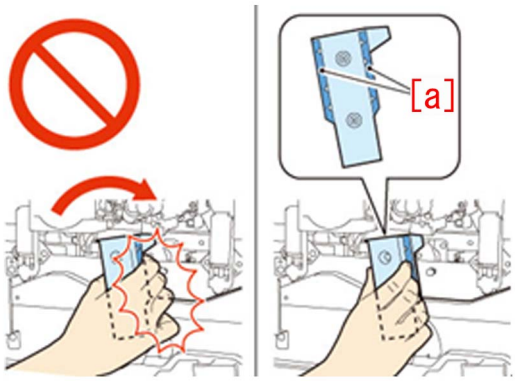
b-2) Remove the stepped screw (yellow)[a] and turn the 4 Release Levers [b] in the direction of the arrow, Holding the 2 grips[c], remove the Intermediate Transfer Unit Cover



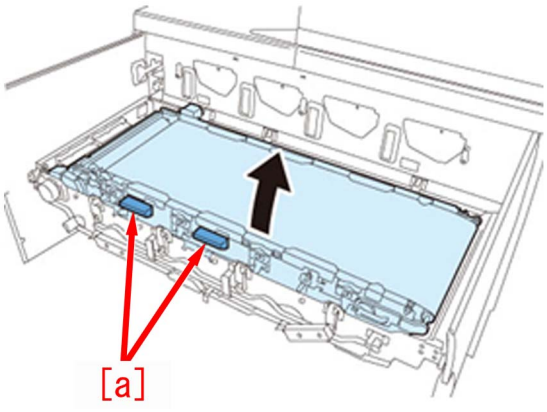
b-3) Turn the 2 Release Levers [a] of the Intermediate Transfer Unit in the direction of the arrow at the same time, and pull the Intermediate Transfer Unit out until it stops by holding the grips[b].



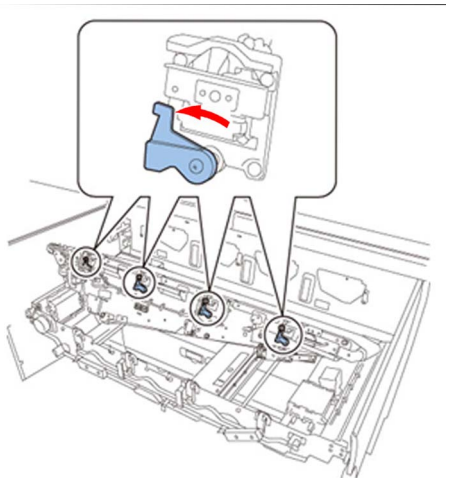
[Caution] Be sure to hold only the [a] part of the ITB Release Levers when turning the ITB Release Levers, or your hand may be pinched.



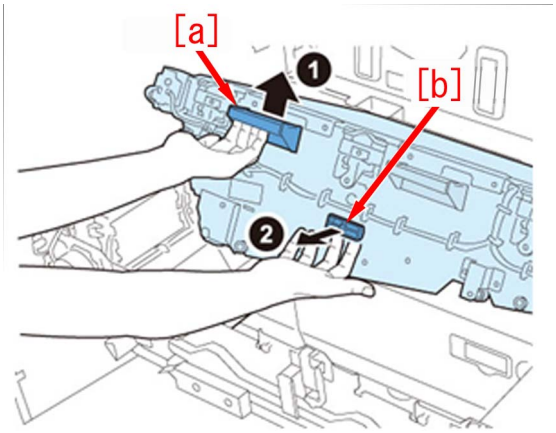
b-4) Holding the 2 grips [a] with both hands, lift the Intermediate Transfer Unit approx. 40 degrees and then lower it to the lock position (approx. 30 degrees).



b-5) Rotate the 4 Primary Transfer Roller Pressure Release Levers anticlockwise to disengage.

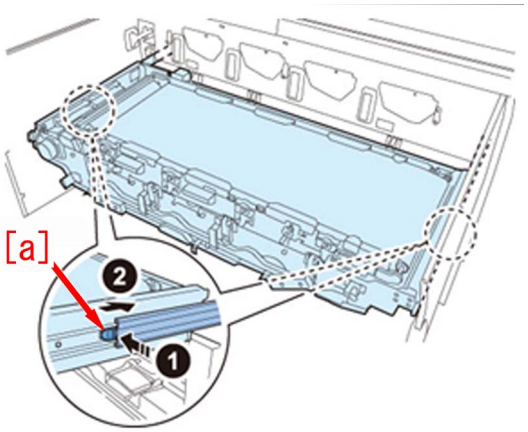


b-6) Holding the grip [a], pull the Release Lever [b] until it stops while lifting the Intermediate Transfer Unit. While pulling the Release Lever, lower the Intermediate Transfer Unit until it passes through the lock position (approx. 30 degrees), and release both hands (the Intermediate Transfer Unit will lower slowly).



[Caution] Do not insert your hands etc. into the Intermediate Transfer Unit or Intermediate Transfer Unit Frame when lowering the Intermediate Transfer Unit.

b-7) While pushing the 2 Lock Release Springs [a], slide the Intermediate Transfer Unit toward the rear side until the lock is released.



[Caution] Be careful not to get your fingers caught when sliding the Intermediate Transfer Unit toward the rear side.
b-8) Perform the work in the reverse order from the step b-3).

Ring marks on an image due to the foreign substance contamination in the developing assembly

[Symptom]

In the machines prior to the Countermeasure cut-in serial number in factory described below due to an inevitable mixing of foreign particles, a faulty image called a ring mark may be output on the print.



[Cause]

The metal powder mixed into the developing assembly attaches onto the surface of the developing sleeve and brings a leakage symptom to the drum. Toner attaches onto the leaked location and this leads to the aforementioned symptom.

[Service work]

When the above mentioned symptom has occurred, follow the steps below.

a) When the main unit is already installed.

1) Service mode (level 2) : COPIER>Option>IMG-DEV>ADJVPP-M/C/K, change the parameter from "-1" to "-4".
[Caution] As the ring mark has never been observed with yellow color, do not change the parameter of ADJVPP-Y from "-1".
2) Execute the auto gradation adjustment.

b) When the main unit is not installed yet.

Perform the following installation work to install the main unit.
1) Execute the service mode (level 1) : COPIER>FUNCTION>INSTALL>AINR-OFF.
2) Service mode (level 2) : COPIER>Option>IMG-DEV>ADJVPP-M/C/K, change the parameter from "-1" to "-4".
[Caution] As the ring mark has never been observed with yellow color, do not change the parameter of ADJVPP-Y from "-1".
3) Perform the works from the step 2) described in the installation procedure.

[Countermeasure cut-in serial numbers in factory]

iPR C10000VP Series US : WBC00532
iPR C10000VP Series EU/O : WEJ00530

Error in reading image position adjustment caused by paper fault

[Symptom]

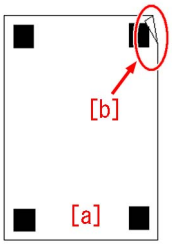
When executing the image position adjustment by using the scanner, "Correctly place the test page on the platen glass" may be displayed at the time of reading the test page.
[Reference] Image position adjustment mode
User Mode > Preferences > Paper Settings > Paper Type Management Settings > Image Position Adjustment > Select Method "Use Scanner"

[Cause]

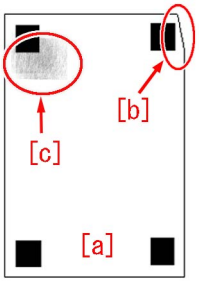
If the paper edge used for the test page is not at a right angle due to trimming failure or being folded or if transfer failure occurs on the test page image, it is regarded as faulty image at the time of reading the test page and the above-mentioned symptom occurs.

[Service work]

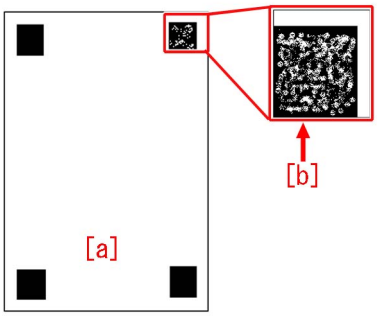
1) Check the condition and image of the test page paper used for adjustment.
2) If the test page paper is not at a right angle,
2-1) if the paper [a] edge is folded [b], correct the fold and perform reading again.



2-2) if the paper [a] edge is lost due to trimming failure or damage [b] or if the test page image gets dirty [c], cancel the image position adjustment, output test page using the new paper without trimming failure, and execute the image position adjustment again.



3) If there is transfer failure [b] on the test page [a] image, cancel the image position adjustment, execute auto adjust gradation and adjust the secondary transfer voltage, and then output the test page using the new paper to execute the image position adjustment again.
User Mode "Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation > Full Adjust"
User Mode "Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings > Adjust Secondary Transfer Voltage"

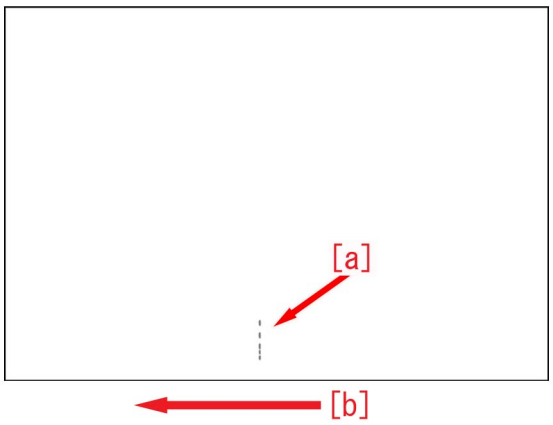


4) If the symptom does not improve, then check other factors.

Marks appear on the front side of the back face of one-sided print or of the first face of two-sided print

[Symptom]

Marks may appear on the front side [a] of the back face of one-sided print or of the first page of two-sided print.
The arrow [b] indicates the direction of feeding.

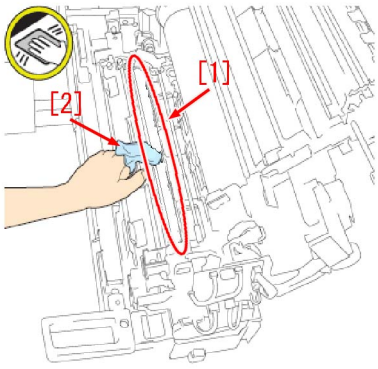


[Cause]

Paper dust or toner may attaches onto the pressure belt of the primary fixing assembly from the influence of the paper or toner scattering inside the machine.
At that time, if the pressure belt displacement control is executed, the fixing belt comes in contact with the belt pressure shaft, and paper dust and toner attach onto the belt pressure shaft.
When hundreds of thousands or more of sheets of paper has passed through the device, the paper dust or toner piled up on the belt pressure shaft increases and it may move to the pressure belt during the pressure belt displacement control.
Paper dust and toner moved to the pressure belt attaches onto the paper, and this brings on the aforementioned symptom.

[Service work]

1) Remove the primary fixing pressure belt unit referring to "Disassembly/Assembly > Fixing System > Replacing the Primary Fixing Pressure Belt Unit" in the service manual.
2) Clean the primary fixing belt pressure shaft and the adjacent shaft [1] with lint free paper moistened with alcohol [2].

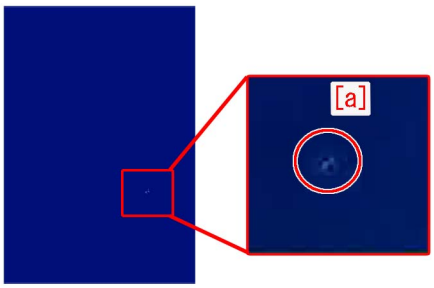


3) Reassemble the primary fixing pressure belt unit in reverse order from the step 1).
4) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, check other causes.

Strike mark on the fixing roller due to toner soiling

[Symptom]

Strike mark [a] may appear on the image. The symptom is easily found on a high density image such as halftone or solid image.

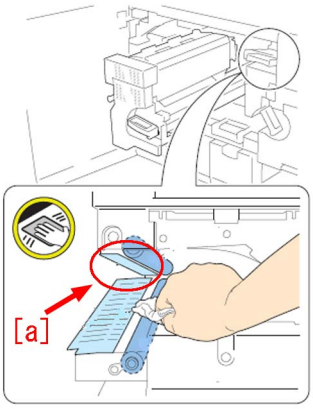


[Cause]

When printing, the upper tandem guide and paper interfere with each other. As a result, toner peels from the paper and accumulates on the upper tandem guide. The above symptom may occur when a toner lump accumulated on the upper tandem guide peels and falls, and then is transferred by paper and finally attaches to the secondary fixing roller.

[Service work]

1) Follow the steps in Service Manual "Disassembly / Assembly > Fixing System > Replacing the Secondary Fixing Roller, Replacing the Secondary Fixing External Heat Belt, Replacing the Secondary Fixing Refresh Roller" and replace the Fixing Roller (FL1-1152-000), the External Heat Belt, (FE3-1881-000) and the Refresh Roller Assembly (FM3-2876-000) in the Secondary Fixing Assembly.
2) Check the upper tandem guide [a] and if toner is attached, follow the steps in Service Manual "Disassembly / Assembly > Fixing System > Cleaning the Tandem Guide" and wipe the toner with lint-free paper soaked in alcohol.



3) Output the image having shown the symptom, and check that the symptom does not occur.
[Reference] At the time of regular replacement of the secondary fixing roller, check the upper tandem guide and wipe the toner if any is attached.

[Service part]
FL1-1152 ROLLER, FIXING
FE3-1881 BELT, FIXING EXTERNAL HEAT
FM3-2876 ROLLER, REFRESH ASSEMBLY

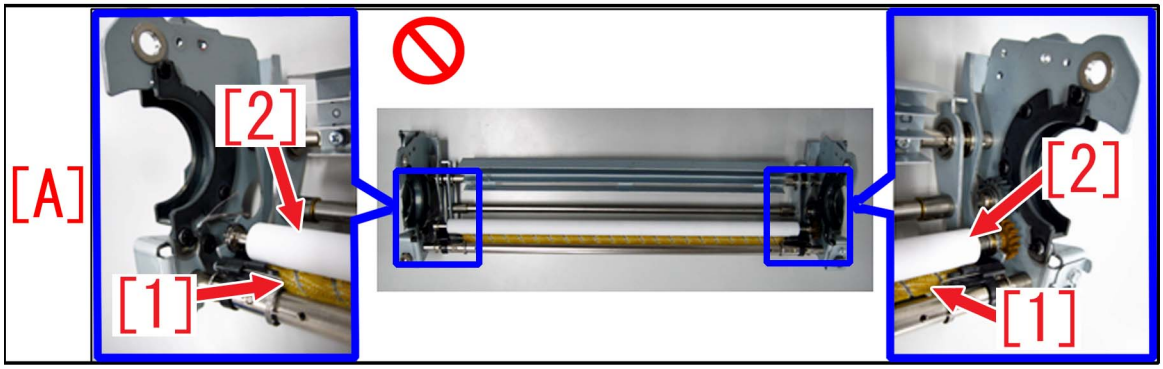
Streaks on image due to an erroneous assemblage of the pressure refresh roller

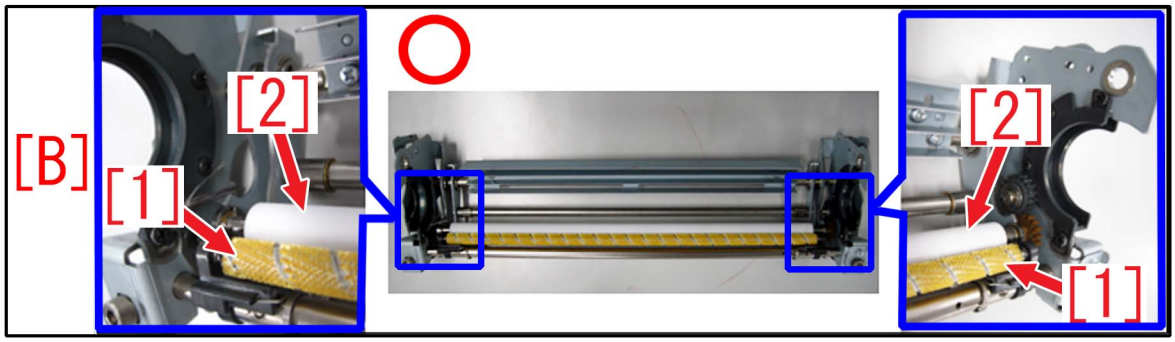
[Symptom]

The lines on an image may occur.

[Cause]

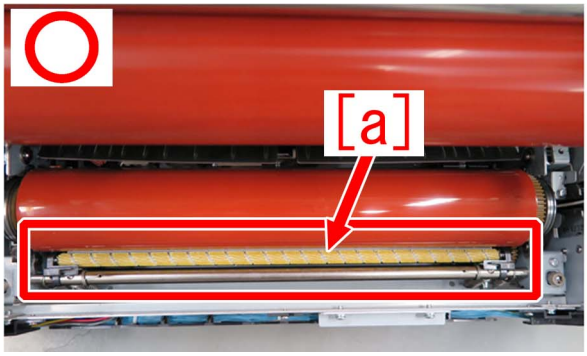
When the pressure refresh roller is replaced, the wrong order of its assembling leads poor rotation or too much contacting pressure of cleaning brush roller. Also the uneven abrasion of pressure refresh roller occurs and it causes fine scratches on the fixing roller causing the lines on an image.
The following photos [A] show the state of that the cleaning brush roller [1] getting under the pressure refresh roller [2]. The photos [B] show the proper state.

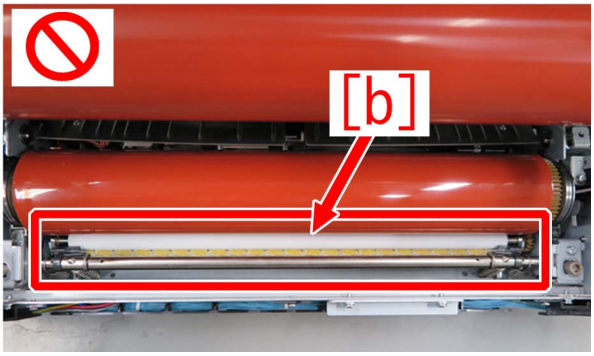




[Service work]

When the pressure refresh roller is replaced, assemble the parts in proper order referring Service Manual. After the assembling, make sure that the cleaning brush roller is placed at proper position [a]. If the pressure refresh roller [b] can be seen, it has been assembled in a wrong way. Please assemble them again.

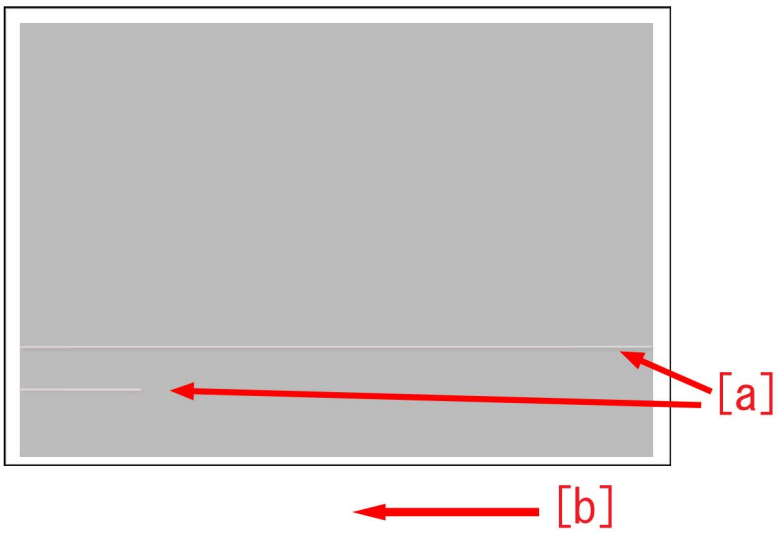




Vertical lines due to cross feed roller pressure

[Symptom]

When printing the second side of 2-sided print, vertical lines may appear on the first side at 21mm and 31mm [a] from the front edge.
The arrow [b] indicates the direction of feeding.



[Cause]

Fused toner on the first side is peeled by the cross feed roller when the second side is printed, resulting in the above symptom.
The symptom tends to occur with half tone images.

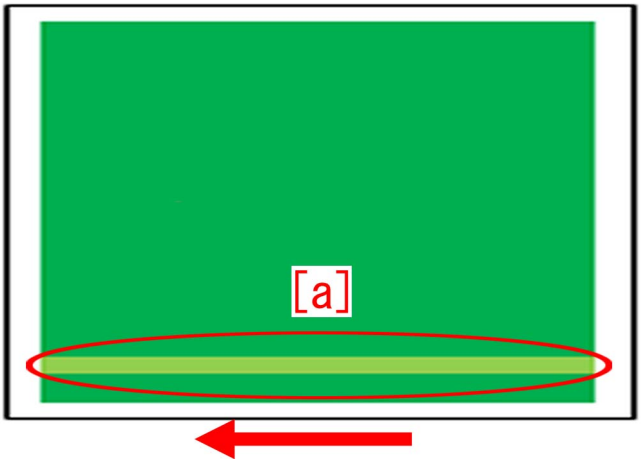
[Service work]

1) Have the customer log in from System Management Mode in user mode.
2) Go to Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings. Select the type of paper to edit from the list and press [Details/Edit].
[Note] Only duplicated paper type can be edited. If the applicable paper type cannot be found, make a duplicate copy.
3) Select "Adjust Image Position "and preferences "Change".
4) Select [Do Not Use Scanner] in <Adjust Image Position: Select Method>.
5) Press [Skew Correction Level Adjustment] in "Adjust Image Position" and set the value to -2 for "back side".
Press "OK". The configurable range is from -2 to +2. (Default 0)
6) Print the image which had the issue and ensure that the symptom does not occur. If no improvement is seen, proceed to the step 7).
7) Follow the steps up to the step 2). Select "Adjust Gross/Fine Black" and press "Change".
8) Set "Gross" to +4 and press "OK".
The configurable range is from -4 to +4. (Default 0)
9) Print the image which had the issue and ensure that the symptom does not occur. If the symptom does not improve, look into other causes.
[Note] If any abnormality is seen such as jam and skewed paper feed , return the value changed in the step5) back to original

Non-glossy lines with a width of 7 mm due to the life of fixing belt

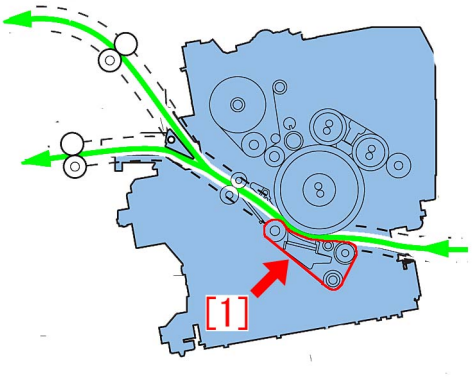
[Symptom]

When a high-density image is output, non-glossy lines with a width of 7 mm wide [a] may occur.
The arrow indicates the feeding direction of media.



[Cause]

Wrinkles appear on the well-worn fixing belt [1] and it results in the symptom.
The green arrows indicate the paper delivery paths.



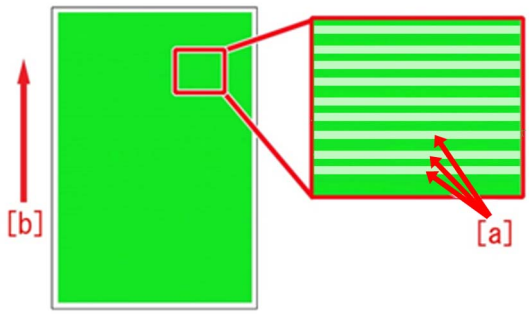
[Service work]

Prepare new fixing belt (FL0-0358-000) to replace with reference to Service Manual.

White horizontal lines at intervals of 2mm on green high-density image caused by uneven charge amount of the ITB

[Symptom]

If used in the environment of the low humidity, white horizontal lines [a] may occur at intervals of 2mm on green high-density image. The arrow [b] shows the feed direction.

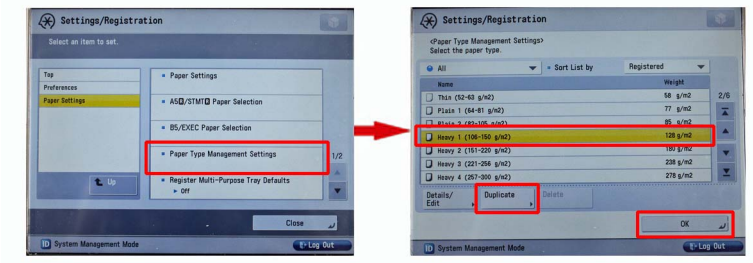


[Cause]

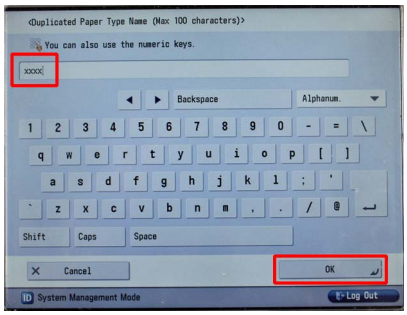
Even if the fixed amount of the primary transfer voltage is applied, uneven charge amount may occur caused by the toner or ITB. It gives a difference in the toner charging amount on the paper and the transferred toner is returned back to the drum (retransfer), which causes the above-mentioned symptom.
Especially, in the environment of the low humidity, the symptom is more likely to occur due to the high primary transfer voltage.

[Service work]

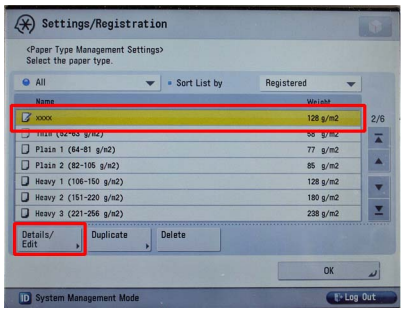
In order to lower the primary transfer voltage and avoid the above-mentioned symptom, implement the settings by following the steps below:
1) Press [Settings/Registration] and log in as an administrator, and go to Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings > select the paper type with which the symptom occurs from the list, and then press [Duplicate] button and [OK] button.



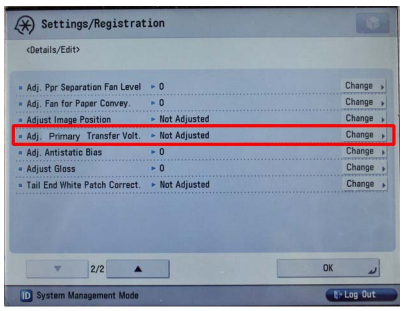
2) Enter arbitrary name into the duplicated paper type and press [OK] button.



3) Select the paper type duplicated in the step 2) and press [Details/Edit].

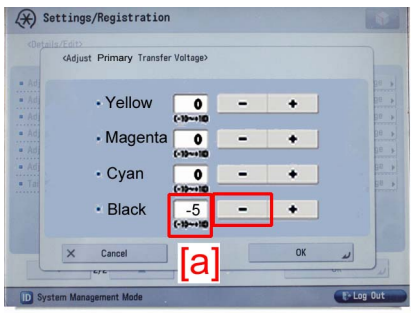


4) Select [Adjust Primary Transfer Voltage] and press [Change].
[Reference] In case [Adjust Primary Transfer Voltage] is not displayed on the control panel, go to Service Mode > Mode List > COPIER > Option > DSPLY-SW > change the setting value of IMGC-ADJ to [1]. The default value is [0].



5) Confirm that [Adjust Primary Transfer Voltage] screen is displayed.

6) Press [-] button of "black" of the primary transfer voltage to change the correction value [a] to [-5] and press [OK].
[Reference] The setting range is from [-10] to [+10] (default : 0). Changing the setting value will change the primary transfer voltage.

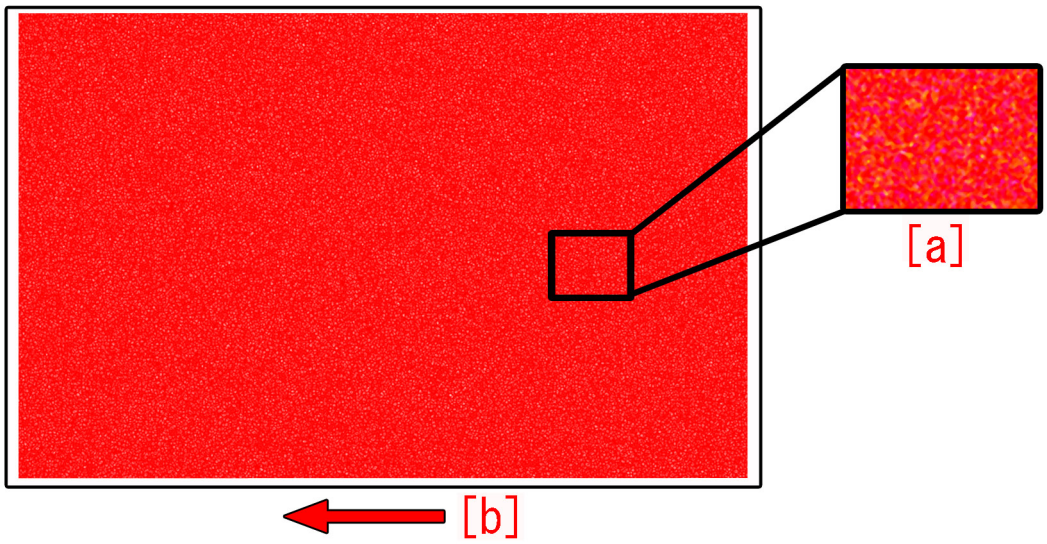


[Attention] Changing this setting value may cause the decreased primary transfer voltage and Bk image fault (decreased density, mottled blank on image, etc.).
7) Output the image that caused the symptom and confirm that the symptom does not occur.
If the symptom is not improved, please check other factors.

Uneven density in a grid pattern on a high density image due to the uneven resistance on ITB

[Symptom]

When printing a high density image on a device having high operation rate, uneven density [a] may occur in a grid pattern.
More visible on green and red high density images.
The arrow [b] indicates the direction of feeding.

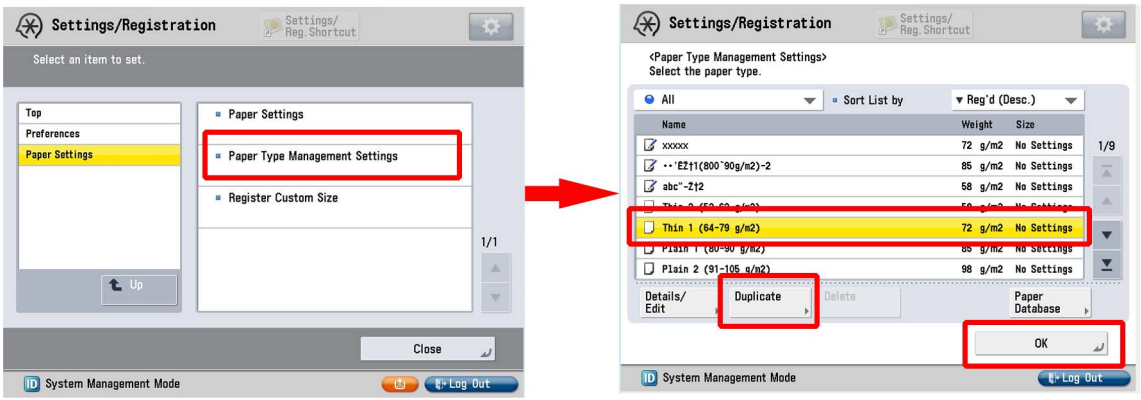


[Cause]

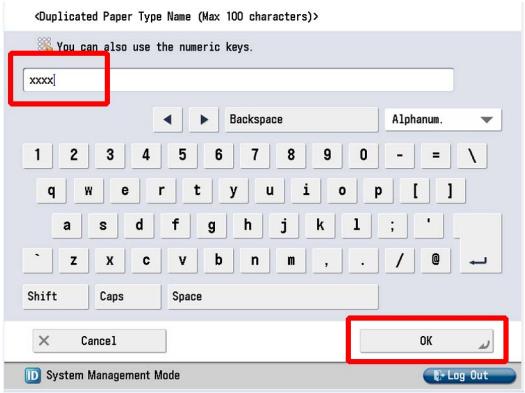
As the number of pages printed on the ITB grows, the electric resistance on the ITB becomes uneven causing the density of the transferred image to be uneven. As a result, the above symptom occurs.

[Service work]

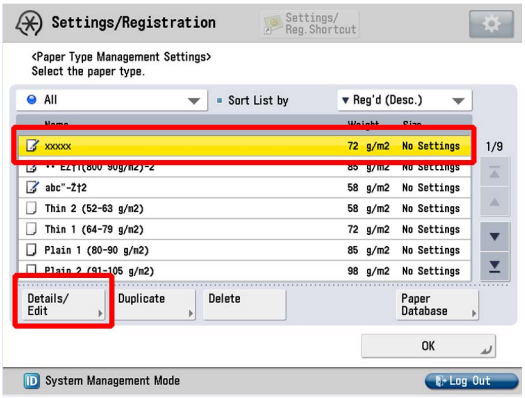
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



3) Enter any name as the duplicated paper type and press "OK" button.



4) Select the paper type duplicated in the step 3) and press "Details/Edit".



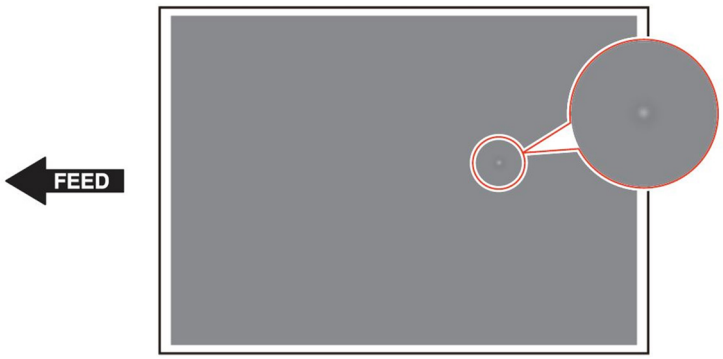
5) Select "Adj. Primary Transfer Voltage" and press "Change".
[Reference] In case Adjust Primary Transfer Voltage will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

6) In "Adj. Primary Transfer Voltage", set the value to "-10" for all colors.
The configurable range for the value is from "-10" to "+10". (Default: 0)
[Note] Image failures (decrease in density, etc.) may occur because the primary transfer voltage decreases.
7) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Soiling of spots at ITB intervals

[Symptom]

Soiling of spots at ITB intervals may occur.



[Cause]

Foreign matter is fixed on the ITB, causing soiling of spots at ITB intervals.
[Reference] How to check whether the spots appear at ITB intervals: Spots appear at intervals of approx. 5 A3-size sheets at continuous output. If it can be confirmed that the positions of the spots in the horizontal scanning direction are always the same, the spots can be judged to be attributed to the ITB. When it is highly possible that the ITB is the cause, check its surface.

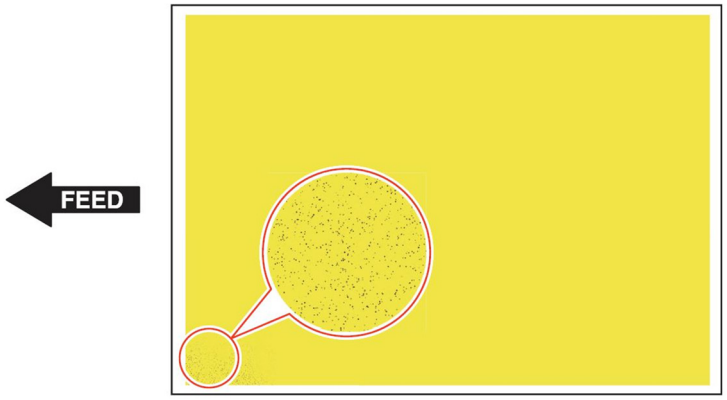
[Service work]

Dry wipe the foreign matter attached to the ITB surface.
[Caution] Do not use alcohol when wiping.

Soiled image on the 1st side of 2-sided print

[Symptom]

Soiling of many small black spots appears on the 1st side of 2-sided print.



[Cause]

When continuously feeding paper containing a high proportion of calcium carbonate (especially Mondi or UPM Fine, etc.), the PFA (material of belt surface) of the Pressure Belt Unit in the Primary Fixing Assembly is abraded when paper passes through the Primary Fixing Assembly and adhered to the back side of paper. This soiling is fed to the Secondary Fixing Assembly and transferred onto the Pressure Roller (which soils the Pressure Roller).
When 2-sided printing is performed in this state, the soiling of the Pressure Roller is adhered to the image on the 1st side on which toner is deposited at the time the 2nd side passes through the Secondary Fixing Assembly.

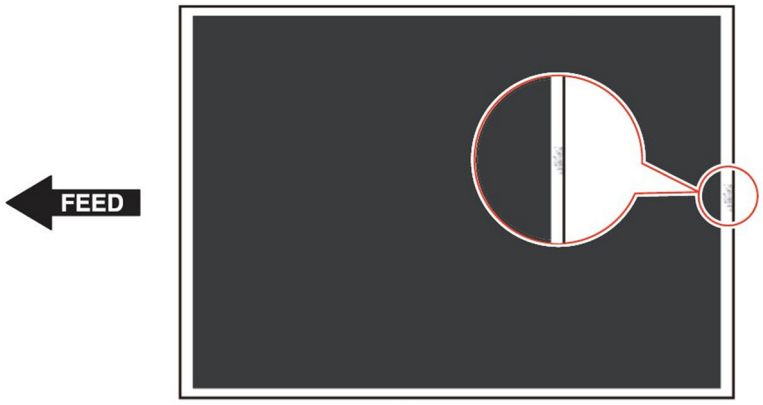
[Service work]

Execute the following service mode to perform forced Pressure Roller cleaning:
Service Mode > COPIER > FUNCTION > CLEANING > FX2PR-CL
After the execution of cleaning, feed 3 to 10 sheets of waste paper (2-sided solid Y-color, 13 x 19 / coated paper) in order to remove the soiling. (Until the black soiling disappears on the solid Y color)
[CAUTION]
The soiling is not completely removed even if the forced Pressure Roller cleaning is performed. However, if it does not affect images, replacement is not necessary.

Soiled trailing edge/soiled paper edge on both sides of 2-sided print

[Symptom]

Soiled trailing edge on 2-sided print or soiled paper edge may occur.



[Cause]

Ejection of Bk toner increases at continuous output of low duty image or in the high temperature environment, causing the Post-secondary Transfer Guide to be excessively soiled by toner. When 2-sided printing is performed in this state, this Bk toner is attached for 20 mm around the center of the paper leading (trailing) edge or of the paper edge on the 1st and 2nd sides of 2-sided print.

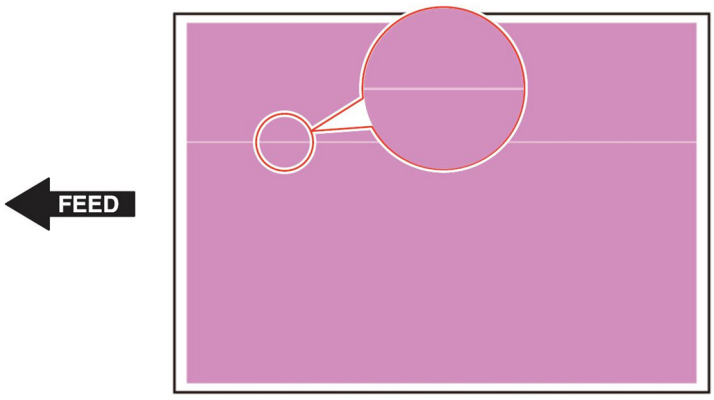
[Service work]

Clean the Post-secondary Transfer Guide.

Vertical white line on solid image of each color

[Symptom]

Vertical white line on solid image of each color may occur.



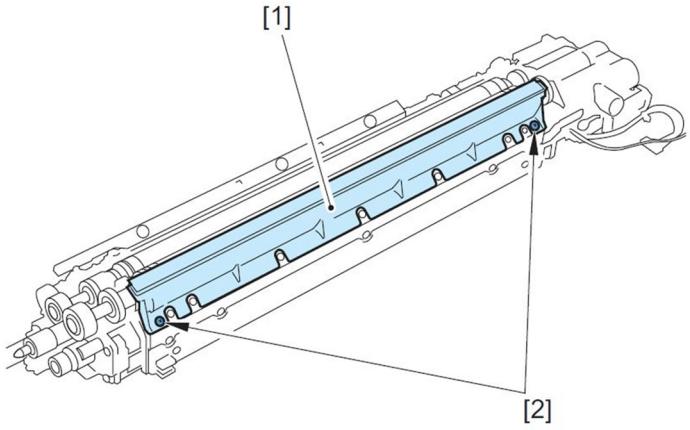
[Cause]

The above symptom occurs when a foreign matter gets stuck between the cylinder and the blade in the developing unit.

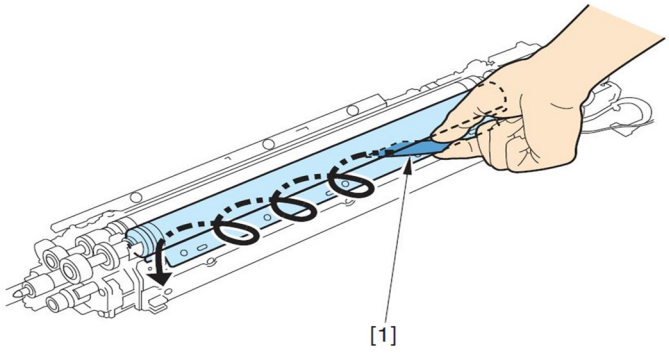
[Service work]

Remove foreign matter by the following procedure

1. Remove the Developing Cylinder Upper Cover [1]. (2 Screws [2])



2. After inserting the "Toner Congestion Removal Sheet [1]" packed with the host machine between the Developing Cylinder and the blade, remove foreign matter by moving the sheet like you draw circles.

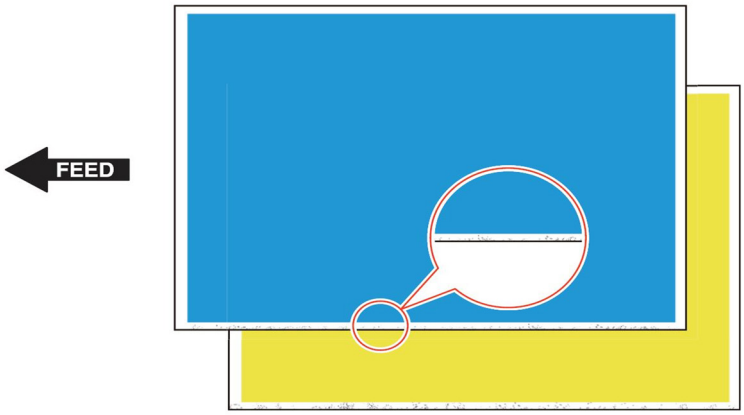


3. Output about 10 test prints to verify the effect .

Bk soiling at the front edge on the back side

[Symptom]

Bk soiling at the front edge on the back side may occur.



[Cause]

Toner always exists on the Secondary Transfer Outer Belt due to the scattering of ejected toner and waste toner; the toner is fixed onto the Secondary Transfer Outer Belt by the engagement pressure of Secondary Transfer Outer Belt against the ITB and the difference of peripheral speeds between the Secondary Transfer Outer Belt and the ITB. Toner may newly be attached onto the fixed toner, which has been accumulated as the life advances, causing toner to attach to the back side of the paper when it passes through the secondary transfer area.

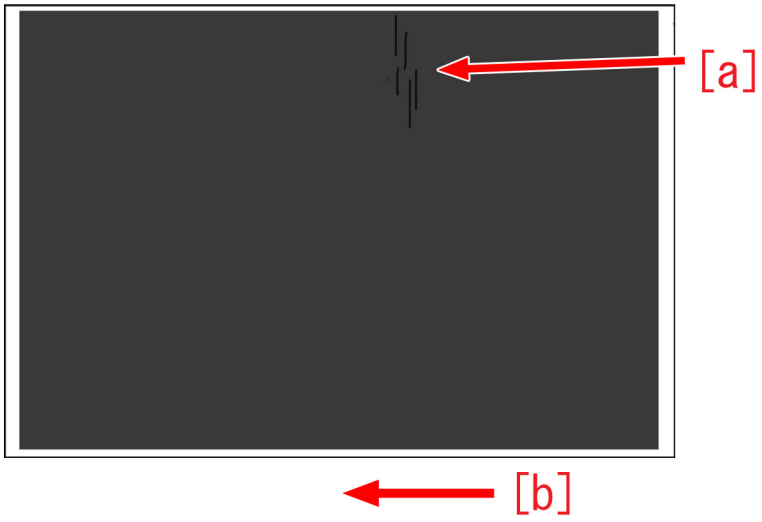
[Service work]

Remove the secondary transfer outer belt unit from the main body and wipe the surface of the belt that engages with the tension roller (metal roller) located inner side of the belt with lint-free paper and alcohol.
[Note] As it may lead to deformation/breakage of the belt, do not clean the opposite side of the secondary transfer outer roller (sponge roller).

Uneven density on a Bk solid image due to the uneven resistance of ITB

[Symptom]

Uneven density [a] may occur on the 2nd side of 2-sided page when a Bk high density image is output.
The arrow [b] indicates the feed direction.

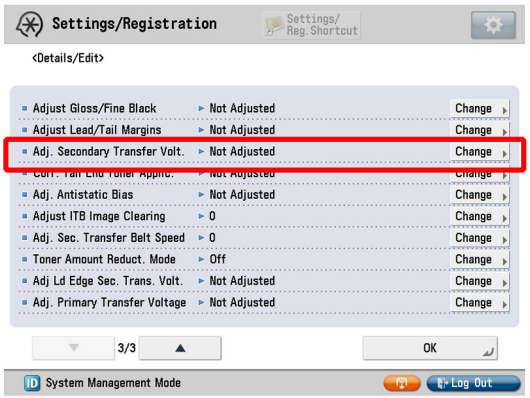


[Cause]

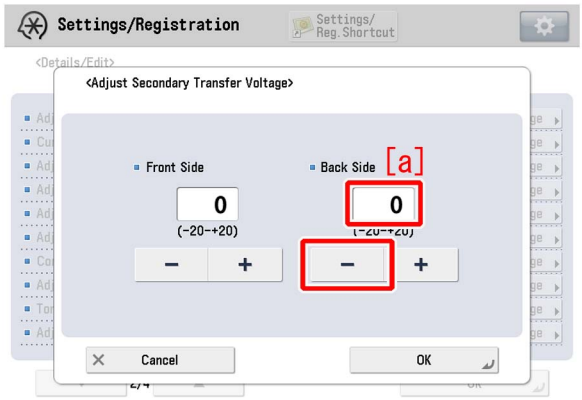
When the resistance of ITB gets greater precipitously, the primary transfer voltage of Bk will get lower than the supposed voltage. The above-mentioned symptom occurs when the secondary transfer voltage gets higher than the primary transfer voltage locally due to the uneven resistance of ITB.
The symptom is easy to check on the Bk high density image of the 2nd side.

[Service work]

1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.
3) Enter any name as the duplicated paper type and press "OK" button.
4) Select the paper type duplicated in the step 3) and press "Details/Edit".
5) Select "Adj. Secondary Transfer Volt." and press "Change".
[Note] In case Adj. Secondary Transfer Volt. will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1" and perform a power-cycle of main power (off/on). The value is "0" by default.



6) Select "back side" in Adjust Secondary Transfer Voltage to change the correction value [a] in increments of "-5" by clicking [-] button until the symptom does not occur.
When the symptom is over-improved, adjust the correction value by clicking [+] button.
The range of setting is from "-20" to "+20" ("0" by default). Changing this value changes the secondary transfer voltage.

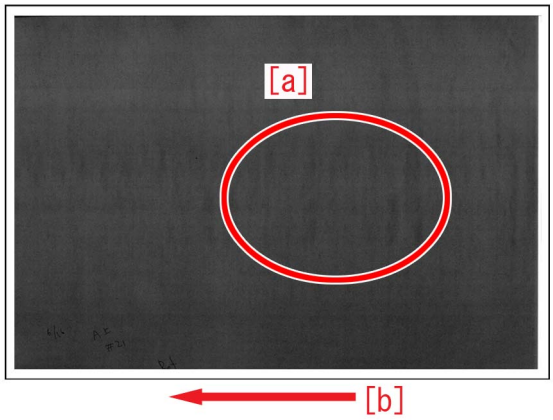


[Attention] The density on a high density image may be lower when the secondary transfer voltage gets lower by changing this setting.
If the symptom does not improve, then check other factors.

Uneven density on the second side of a black halftone image

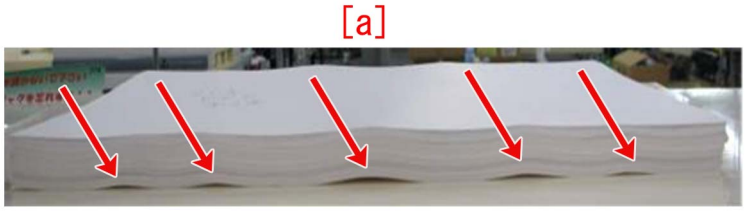
[Symptom]

Uneven density [a] may appear on the second side of a black halftone image.
The arrow [b] indicates the direction of feeding.



[Cause]

After the first side has passed through the fixing assembly, the paper may have wavy curls [a].
If printing in two-sided mode on the paper sheet with the wavy curls, it allows gaps between the ITB and the sheet during the secondary transfer, toner scatters in the gaps and results in the aforementioned symptom.



[Service work]

1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.
3) Enter any name as the duplicated paper type and press "OK" button.
4) Select the paper type duplicated in the step 3) and press "Details/Edit".
5) Select "Adj. Sec. Transfer Belt Speed" and press "Change".
[Note] In case Adj. Sec. Transfer Belt Speed will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1" and perform a power-cycle of main power (off/on). The value is "0" by default.

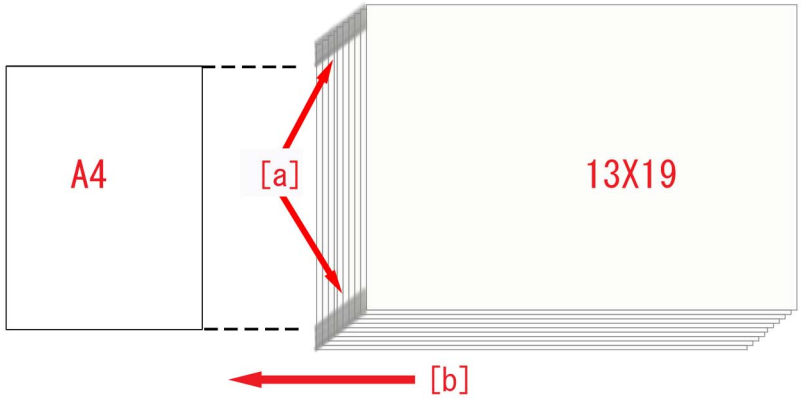
6) Change the setting parameter of " Adj. Sec. Transfer Belt Speed" to "+3".
The setting range is from "-3" to "+3" ("0" by default).

7) Output the image having shown the symptom, and check that the symptom does not occur.
If the improvement of the symptom is insufficient, follow the step 8).
8) Service Mode (level 2) > Mode List > COPIER > Option > IMG-TR > "2TRSPADJ" is changed to "3".
The setting range is from "-3" to "+3" ("0" by default).
Changing this setting will accelerate the speed of the secondary transfer belt.
[CAUTION] Vertical scanning magnification ratio slightly becomes larger.
If adjustment is required, refer to Service Manual > Adjustment > "Vertical Scanning Magnification Ratio Adjustment".
9) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Edge Soiling due to a soiled fixing inlet guide

[Symptom]

When feeding a wide media after reams of outputting of same size paper with high-density image, edge soiling [a] may occur on the edges of the media.
The arrow [b] indicates the direction of feeding.



[Cause]

Floating pre-fixing toner adheres to the fixing inlet guide when high-density images are fed.
The attached toner is released by feeding paper, however paper do not pass around the both ends of fixing inlet guide whose width is wider than the paper's and some toner will be accumulated there.
When a wider media is output after reams of outputting of same size paper with high-density image, the accumulated toner on the both ends of fixing inlet guide will adhere to the edges of the media. Therefore, the above-mentioned symptom occurs.

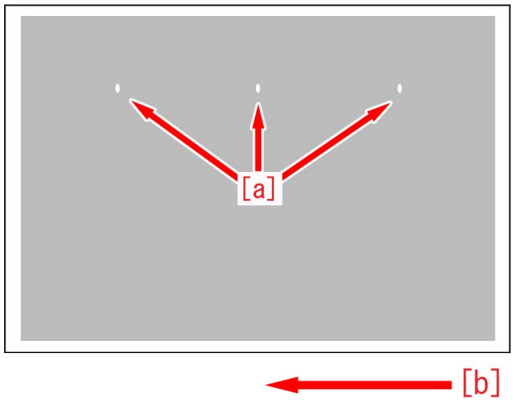
[Service work]

1) Clean the fixing inlet guide referring Service Manual [Disassembly/Assembly > Fixing System > Cleaning the Primary Fixing Inlet Guide] and [Cleaning the Secondary Fixing Inlet Guide].
[Note] The cleaning timing for the primary fixing inlet guide and the secondary fixing inlet guide is 5 hundred thousand-sheet feeding. However, when a lot of high-density image have been output, the cleaning for the primary fixing inlet guide and the secondary fixing inlet guide each time is recommended.
2) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Image failure occurring repeatedly at the same interval (xx pitch)

[Symptom]

Repeating image failure [a] whose intervals are same pitch may occur.
The arrow [b] indicates the direction of feeding.



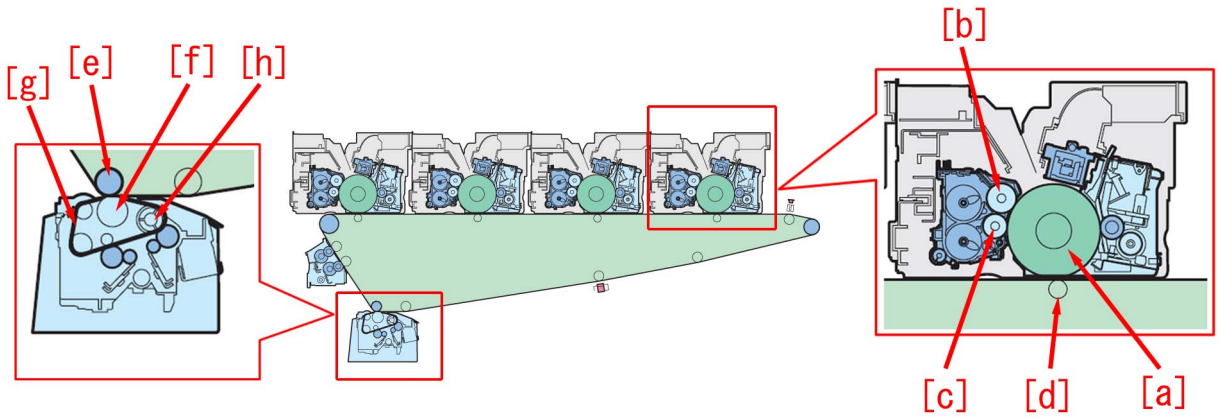
[Cause]

The image failure occurs when rollers have foreign matters or flaws.

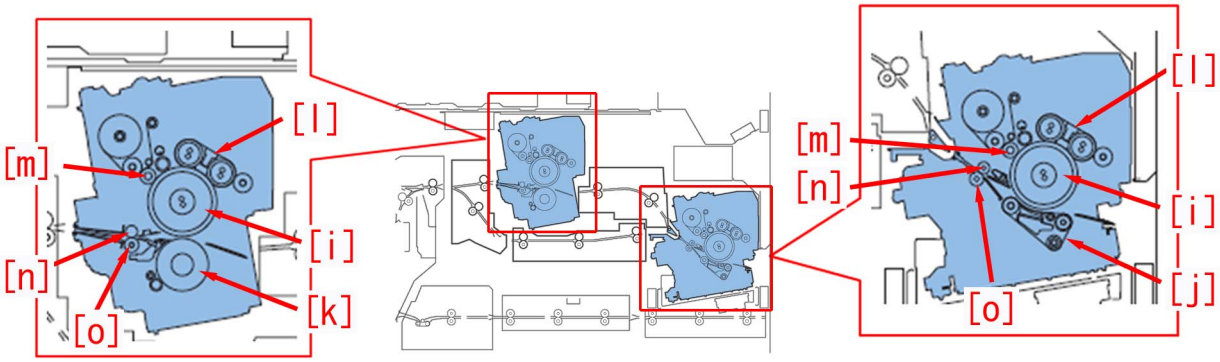
[Service work]

Check the rollers or Belts of a) to o) below.
[Note] The pitch of No.i (Fixing Roller), No.j (Pressure Belt), No.k (Pressure Roller), No.l (External Heat Belt) may become slightly wider due to thermal expansion.

No	Interval(xx pitch)	Parts	Parts No
a	264mm	DRUM	DRUM
b	55mm	Developing Upper Cylinder	FM1-A304 (Developing Assembly)
c	45mm	Developing Lower Cylinder	FM1-A304 (Developing Assembly)
d	50mm	Primary Transfer Roller	FC8-6852
e	66mm	Secondary Transfer Inner Roller	FM1-A359 (2ND TRNSFR. INNER ROLLER ASS'Y)
f	75mm	Secondary Transfer Outer Roller	FE4-6066
g	198mm	Secondary Transfer Outer Belt	FE3-1953
h	69mm	Secondary Transfer Outer Belt Drive Roller	FM1-M250 (BELT DRIVE ROLLER ASSEM-BLY)
i	252mm	Fixing Roller	FL1-1151 (Primary Fixing)
			FL1-1152 (Secondary Fixing)
j	220mm	Pressure Belt (Primary Fixing Assembly)	FL0-0358
k	190mm	Pressure Roller (Secondary Fixing Assembly)	FL0-0515
l	189mm	External Heat Belt(Primary/ Secondary Fixing Assembly)	FE3-1881
m	63mm	Collection roller (Primary/ Secondary Fixing Assembly)	FM1-D338
n	50mm	Fixing Inner Delivery Lower Roller (Primary/ Secondary Fixing Assembly)	FC5-9775
o	45mm	Fixing Inner Delivery Upper Roller	FC7-4644 (Primary Fixing)
			FM1-K630 (Secondary Fixing)



a) When the interval is 264 mm pitch, check Drum [a].
b) When the interval is 55 mm pitch, check Developing Upper Cylinder [b] of the DEVELOPING ASSEMBLY (FM1-A304).
c) When the interval is 45 mm pitch, check Developing Lower Cylinder [c] of the DEVELOPING ASSEMBLY (FM1-A304).
[Note] If the failure occurs in all the colors, check Fixing Inner Delivery Upper Roller [o].
d) When the interval is 50 mm pitch, check Primary Transfer Roller [f] (FC8-6852).
[Note] If the failure occurs in all the colors, check Fixing Inner Delivery Lower Roller [n].
e) When the interval is 66 mm pitch, check Secondary Transfer Inner Roller [e] of the 2ND TRNSFR. INNER ROLLER ASS'Y (FM1-A359).
f) When the interval is 75 mm pitch, check Secondary Transfer Outer Roller [f] (FE4-6066).
g) When the interval is 198 mm pitch, check Secondary Transfer Outer Belt [g] (FE3-1953).
h) When the interval is 69mm pitch, check Secondary Transfer Outer Belt Drive Roller [h] of the BELT DRIVE ROLLER ASSEMBLY (FM1-M250).

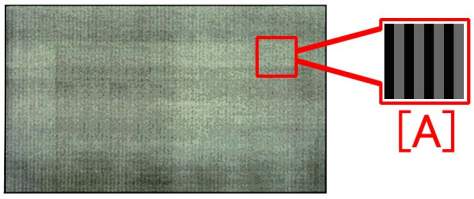


i) When the interval is 252mm pitch, check Fixing Roller [i] (FL1-1151) of the Primary Fixing Assembly or Secondary Fixing Assembly.
j) When the interval is 220 mm pitch, check Pressure Belt [j] (FL0-0358) of the Primary Fixing Assembly.
k) When the interval is 190 mm pitch, check Pressure Roller [k] (FL0-0515) of the Secondary Fixing Assembly.
l) When the interval is 189mm, check External Heat Belt [l] (FE3-1881) of the Primary Fixing Assembly or Secondary Fixing Assembly.
l) When the interval is 189mm, check External Heat Belt [l] (FE3-1881) of the Primary Fixing Assembly or Secondary Fixing Assembly.
n) When the interval is 50mm, check Fixing Inner Delivery Lower Roller [n] (FC5-9775) of the Primary Fixing Assembly or Secondary Fixing Assembly.
[Note] If the failure occurs only for any color of Y/M/C/B, check Primary Transfer Roller[d].
o) When the interval is 45mm, check Fixing Inner Delivery Upper Roller [o] (FC7-4644/ FM1-K630) of the Primary Fixing Assembly or Secondary Fixing Assembly.
[Note] If the failure occurs only for any color of Y/M/C/B, check Developing Lower Cylinder[c] of the Developing Assembly.

Stains on the back side of paper or uneven density at regular interval (5.0mm) due to the scraped drive shaft when outputting an image

[Symptom]

In the machines prior to the countermeasure cut-in serial number in factory described below stain on the back side of the paper or uneven density at regular interval (5.0 mm) [A] may occur when outputting the image.

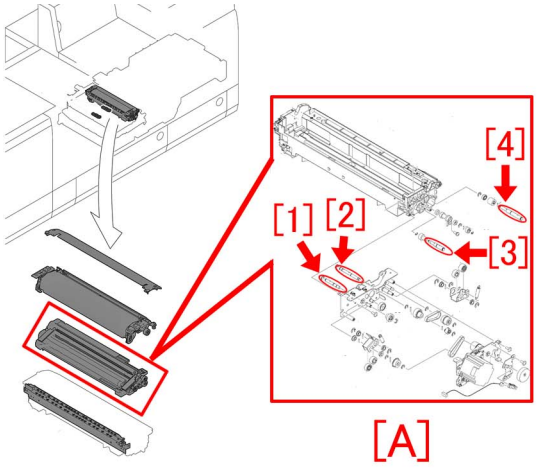


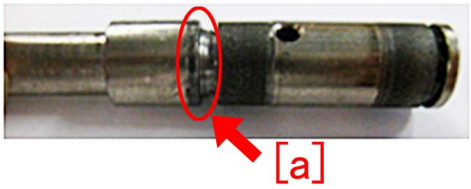
[Cause]

In the transfer cleaner drive unit of the 2nd transfer cleaner assembly, the shaft is scraped due to the abrasion of the drive shaft and the bearing [a]. This may cause operational failure of the fur brush of the 2nd transfer cleaner assembly and the 2nd transfer belt drive failure, resulting in the above-mentioned symptom.

[Reference]

- There is a possibility that the symptom occurs in all the 4 shafts shown in the Figure [A], however, the scrape occurs most on the shaft [1] for structural reasons.

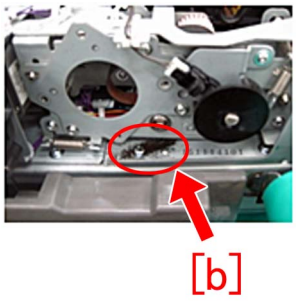




- If the shaft is replaced by itself, prepare the new-type shafts to replace.
- The scraped shaft cannot be limited to 1 location, but other shafts may be scraped, Therefore, replacing the 4 shafts at the same time is recommended.

Part Number	Description	Number
FE4-6162-010	SHAFT, 2	[2]
FE4-6163-010	SHAFT, 1	[1]
FE4-6164-010	SHAFT, 5	[3]
FE4-6165-010	SHAFT, 6	[4]

- If the shaft is replaced by itself, it will take about one hour longer than the unit replacing work of the drive assembly.
- When the symptom occurs, chips of the drive shaft may be found in the lower part of the 2nd transfer cleaner assembly [b].

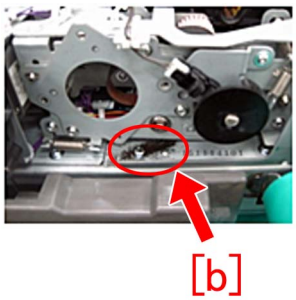


[Service work]

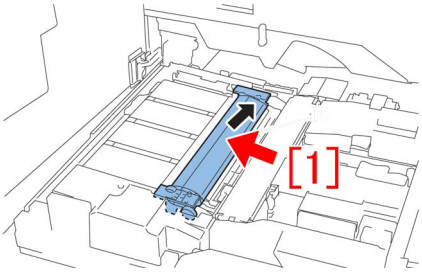
Prepare the transfer cleaner drive unit (FM1-H026-000) that is assigned as service part newly and the super lube grease (FY9-6005-000), and follow the steps below:
[Reference]
- The transfer cleaner drive unit (FM1-H026-000) is a high durable part (replaced after printing 9000K).
- If the shaft is replaced by itself, prepare the new-type shafts to replace.
- The scraped shaft cannot be limited to 1 location, but other shafts may be scraped, Therefore, replacing the 4 shafts at the same time is recommended.

Part Number	Description	Number
FE4-6162-010	SHAFT, 2	[2]
FE4-6163-010	SHAFT, 1	[1]
FE4-6164-010	SHAFT, 5	[3]
FE4-6165-010	SHAFT, 6	[4]

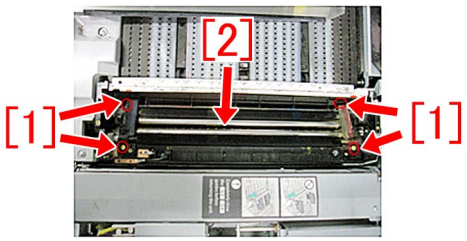
- If the shaft is replaced by itself, it will take about one hour longer than the unit replacing work of the drive assembly.
- When the symptom occurs, chips of the drive shaft may be found in the lower part of the 2nd transfer cleaner assembly [b].



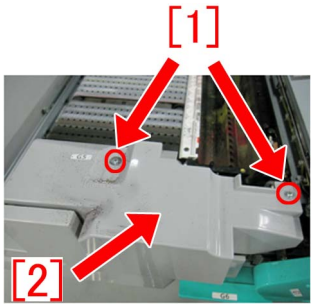
1) Referring to Service Manual, pull out the pre-registration/feed unit and remove the Secondary Transfer Belt Guide.
2) Remove the secondary transfer outer belt unit [1].



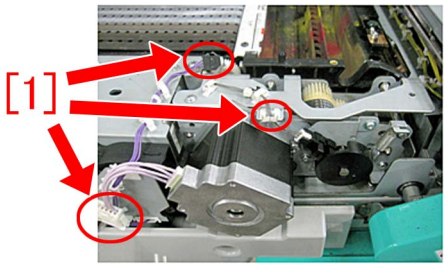
3) Remove the 4 screws [1], and remove the belt cleaner assembly [2].



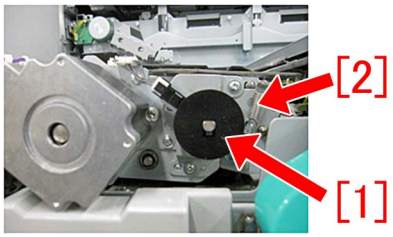
4) Remove the 2 screws [1], and remove the pre-fixing feed upper cover [2].



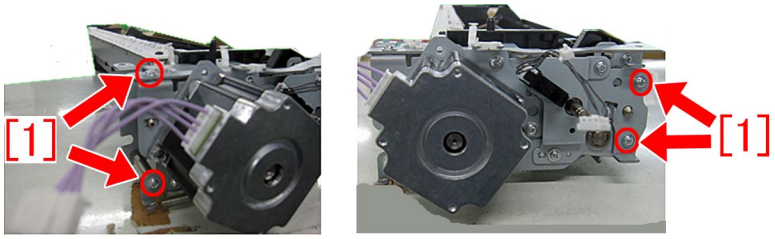
5) Disconnect the connectors [1] in the 3 sections, and remove the cable from the saddle.



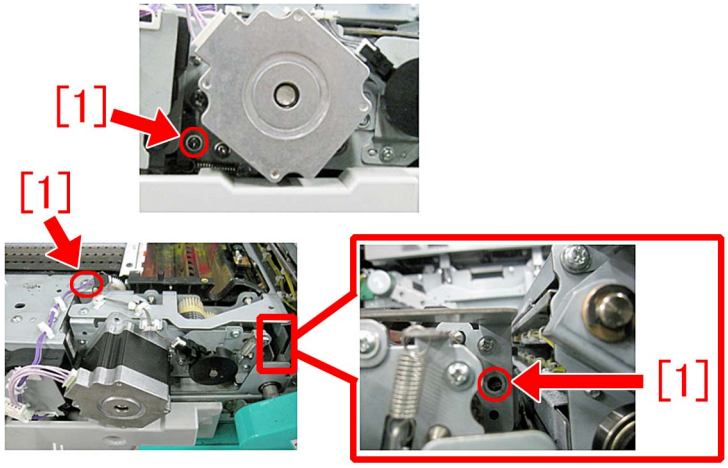
6) Remove the sensor flag [1] and the tension spring [2].



7) Remove the 4 screws [1].

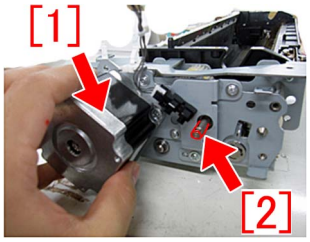


8) Remove the 3 screws [1].

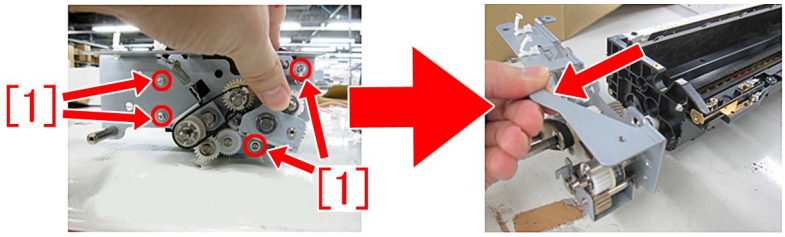


[Reference] If the cable on the rear side is removed in this state, the 2nd transfer cleaner assembly can be removed from the pre-registration/feed unit. However, all the steps from the following steps or later can be performed while the 2nd transfer cleaner assembly is remained on the pre-registration/feed unit.

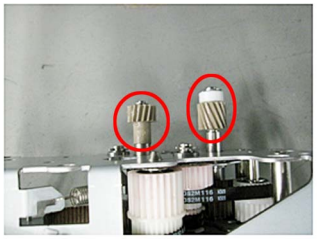
9) Remove the 2nd transfer drive motor assembly [1] together with the sheet metal while paying attention not to damage the sensor flag attaching shaft [2] with the sheet metal.



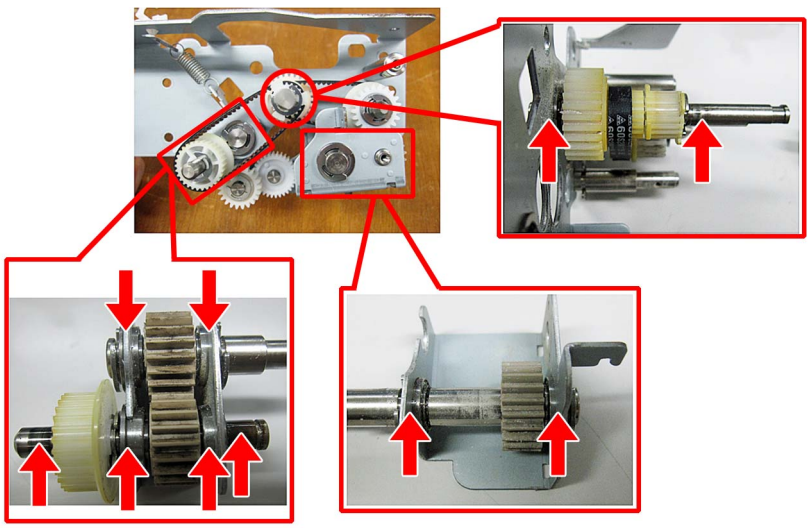
10) Remove the 4 screws [1], and remove the transfer cleaner drive unit in a way it is pulled forward.
In case chips of the shaft are scattered in the lower part of the 2nd transfer cleaner assembly, wipe out the chips with a cloth.



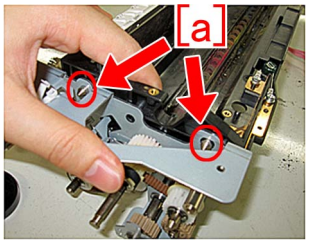
11) Apply the same amount of super lube grease as 3 grains of rice (60mg) respectively to the entire surface of the gear on the rear side and roller of the new transfer cleaner drive unit (FM1-H026-000).
[Reference]
- Clean the gear and apply the grease to it after every 1000K sheet.



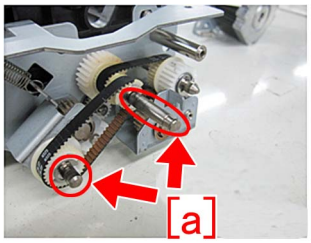
- If the shaft is replaced by itself, replace the shaft of the transfer cleaner drive unit here. Apply the same amount of super lube grease as 1 grain of rice (20mg) respectively to the shaft and the abrasion of the bearing indicated with arrows below. Note that the grease is applied to the entire surface of the shaft thinly and uniformly and that the grease shall not be applied to the rubber belt.



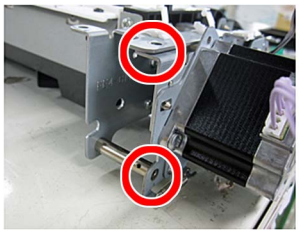
12) Attach the new transfer cleaner drive unit (FM1-H026-000). Check that the 2 pins [a] are thoroughly inserted, and secure it with the 4 screws removed in the step 10).

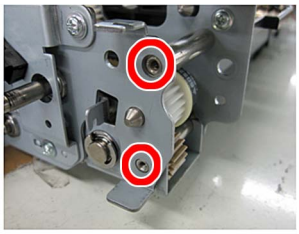


13) Apply the same amount of super lube grease as 1 grain of rice (20mg) respectively to the entire surface of the 2 shafts [a] of the transfer cleaner drive unit. In addition, check that the timing belt is not detached.

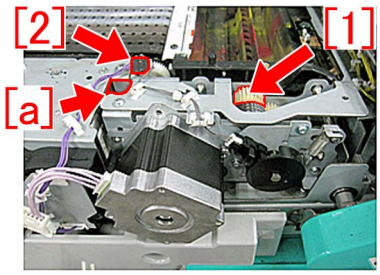


14) Attach the 2nd transfer drive motor assembly removed in the step 9) with the 4 screws.
[Reference] Check that the hole of the 2nd transfer drive motor sheet metal and the shaft match. If the shaft has a stepped section, check that it fits to the hole properly.

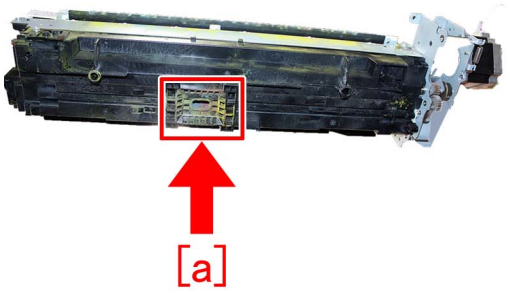


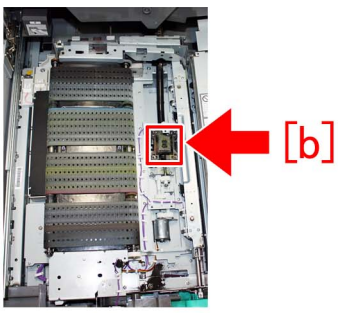


15) Assemble in the order of the steps 7), 6) and 5).
16) Turn the gear [1] clockwise seeing from the front to check that it, including the transfer cleaner drive unit, turns smoothly. And insert the connecting part [2] of the connector into the hole [a].

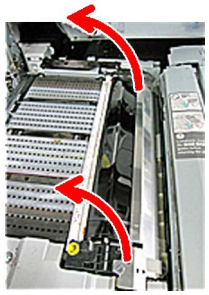


17) Assemble by reversing the steps from 4).
18) When assembling the 2nd transfer assembly, the position of the waste toner discharge outlet [a] of the 2nd transfer assembly facing downward and the position of the waste toner inlet [b] of the pre-registration/feed unit facing upward may be shifted.





In order to correct the shift of the position between the waste toner discharge outlet and inlet, hold the 2nd transfer assembly together with the pre-registration/feed unit, and move it up and down one time.



19) Return the pre-registration/feed unit back to the main unit, and close the door.

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-H026-000	TRANSFER CLEANER DRIVE UNIT	1->0	333
	New	FM1-H026-010	TRANSFER CLEANER DRIVE UNIT	0->1	
2	Old	FY9-6005-000	LUBE,SUPER LUBE GREASE,(85G)	0->1	
	New				
3	Old	FE4-6162-000	SHAFT, 2	1->0	333
	New	FE4-6162-010	SHAFT, 2	0->1	
4	Old	FE4-6163-000	SHAFT, 1	1->0	333
	New	FE4-6163-010	SHAFT, 1	0->1	
5	Old	FE4-6164-000	SHAFT, 5	1->0	333
	New	FE4-6164-010	SHAFT, 5	0->1	
6	Old	FE4-6165-000	SHAFT, 6	1->0	333
	New	FE4-6165-010	SHAFT, 6	0->1	

[Countermeasure cut-in serial number in factory]

Model	Serial number
imagePRESS C10000VP Series US	WBC11022
imagePRESS C10000VP Series CN	WBD00571
imagePRESS C10000VP Series EUO	WEJ10986

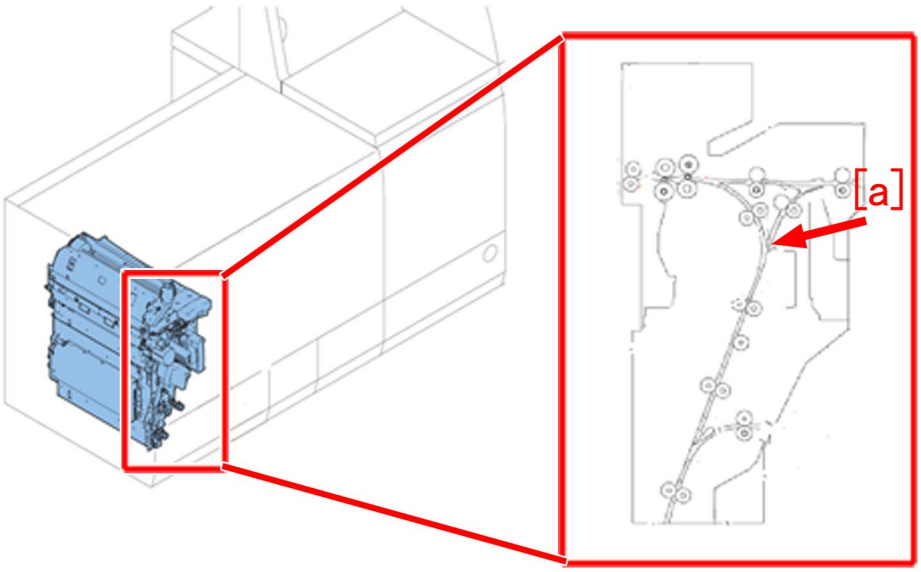
Soiled edge on the leading edge and the trailing edge of paper caused by rubbing against the flapper on the delivery reverse unit.

[Symptom]

A one-sided printing on the heavy paper with face-down delivery may cause soil, which is different from toner stain, on the leading edge and trailing edge of the back side (non-printed side) of the paper.

[Cause]

When printing on one-sided heavy paper with face-down delivery, the leading edge and trailing edge of the paper rub strongly against the flapper [a] in passing through the delivery reverse unit, which may result in the above-mentioned symptom.
One-sided and two-sided printing with face-up delivery does not cause the symptom.



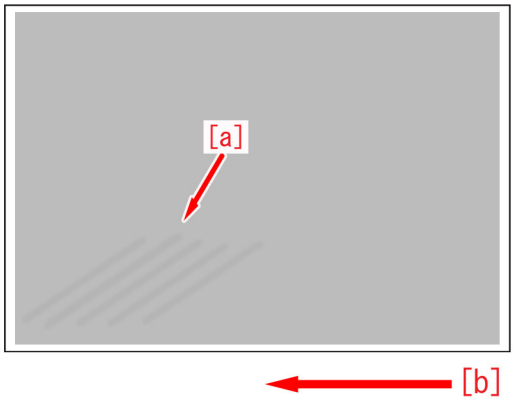
[Service work]

Set the delivery operation to face-up delivery to output the image.
If the symptom does not improve, then check other factors.

Uneven density on the second face of a halftone image due to uneven distribution of moisture on paper surface

[Symptom]

When outputting a halftone image in duplex mode, uneven density [a] might appear on the second face of paper.
The arrow [b] indicates the feed direction.



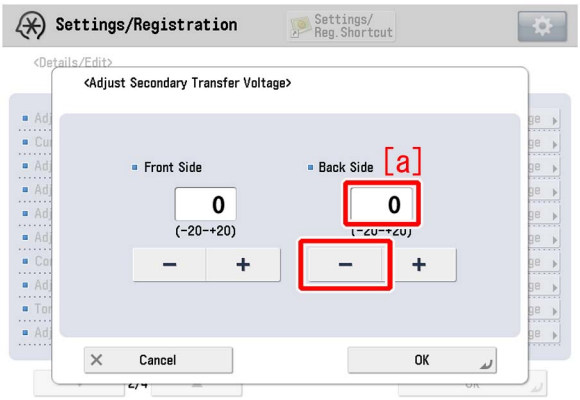
[Cause]

When outputting in duplex mode, the paper may wait at the duplex path assembly prior to the printing on the second face of the paper.
If the paper waits in the duplex feeding path assembly, the moisture would partially evaporate from the surface of paper and the distribution of moisture on the paper surface becomes uneven.
When distribution of moisture is uneven, the transfer performance of the paper surface would change, and this results in the aforementioned symptom.
This symptom is more likely to occur with a halftone image that is subject to the transfer performance that is changed due to the change of the distribution of moisture on paper.

[Service work]

1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.
3) Enter any name as the duplicated paper type and press "OK" button.
4) Select the paper type duplicated in the step 3) and press "Details/Edit".
5) Select "Adj. Secondary Transfer Volt." and press "Change".
[Note] In case Adj. Secondary Transfer Volt. will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1" and perform a power-cycle of main power (off/on). The value is "0" by default.

6) Select "back side" in Adjust Secondary Transfer Voltage to change the correction value [a] in increments of "-5" by clicking [-] button until the symptom does not occur.
When the symptom is over-improved, adjust the correction value by clicking [+] button.
The range of setting is from "-20" to "+20" ("0" by default). Changing this value changes the secondary transfer voltage.



[Attention] The density on a high density image may be lower when the secondary transfer voltage gets lower by changing this setting.
If the symptom does not improve enough, change the setting of the secondary transfer voltage back to the original one , and then go to the step 7).
7) Select "Adjust Gross/Fine Black" and press "Change".
[Reference] In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

8) Press "-" button for gloss, Make sure the setting value [a] is set to "-1" and press "OK".
The setting range is from "-4" to "+4" ("0" by default).
Change of the setting value changes the fixing temperature.

[Caution] Changing the value may cause glossiness of image may slightly decrease.
9) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Gloss lines on image due to the scratches on the surface of fixing roller which the refresh roller gives in its operation

[Symptom]

When installing the product or when feeding the coated paper during the initial period (feeding approx. 30,000 sheets) after the refresh roller replacement, thin gloss lines in the paper feed direction might occur on a main body whose serial number is earlier than the following countermeasure cut-in serial numbers in factory.
[Note] Gloss lines are remarkable especially with coated paper.

[Cause]

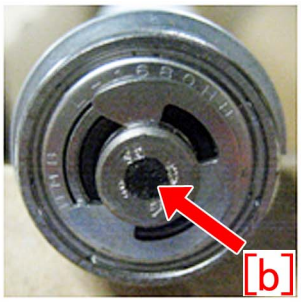
The refresh roller presses onto the fixing roller and scrapes the surface layer of the fixing roller under the specified conditions in order to remove the streaky scratches appears on the fixing roller in a large quantity of printout.
However, as the surface of a new refresh roller is somewhat rough, the refresh roller might give fine scratches to the fixing roller in its operation and this result in the above mentioned symptom.

[Service work]

When the aforementioned symptom has occurred, prepare and replace with the new type refresh roller (FM1-T299-000) referring to the service manual.
Photo [A] shows the old-type refresh roller shaft, photo [B] and [C] show the new type.
Change the engraving [a] on the roller shaft or mark [b] the center of the roller shaft with a black permanent marker.

[A]

[B]



[C]

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM3-1648-010	ROLLER UNIT, REFRESH	1 -> 0	815 855
	New	FM1-T299-000	ROLLER UNIT, REFRESH	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

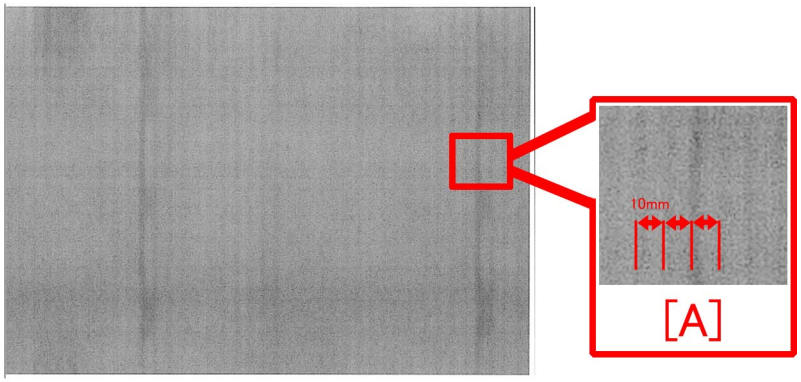
Model	Serial number
imagePRESS C10000VP Series FS US/J	WBE10515 WBE10521 or later
imagePRESS C10000VP Series FS EUO	WBF10519
imagePRESS C10000VP Series FS CN	WBG00522

- imagePRESS C6000/C6000VP/C7000VP/C7000VPE/C6010/C6010VP/C7010VP/C6011/C6011VP/C7011VP : No implemented due to production discontinuance.

Countermeasure against uneven density at 10mm intervals

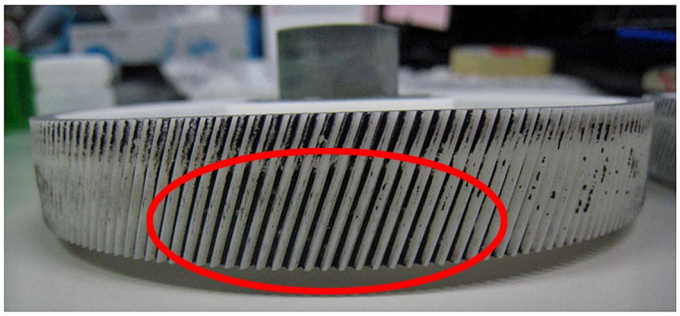
[Symptom]

Uneven density [A] at regular intervals of 10mm may appear during printing.



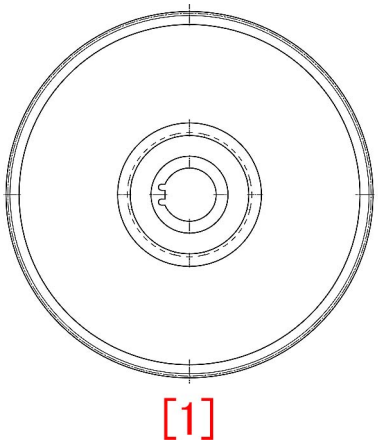
[Cause]

If a large amount of paper dust attaches onto the 192T gear connected to the drum drive assembly, this reduces the precision of meshing between the gears and leads to the above mentioned symptom.



[Service work]

Replace the 192T gear (FL3-0561-010) following the procedure below.



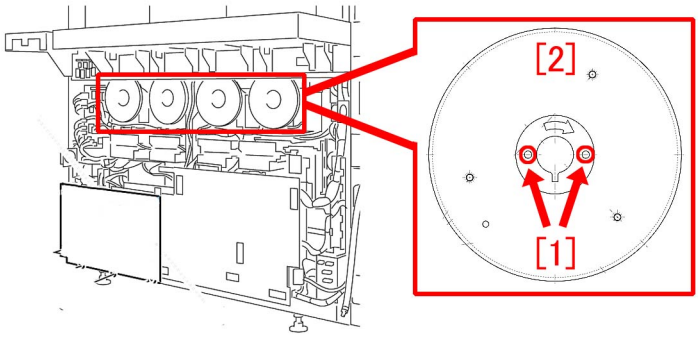
1) When the aforementioned symptom has occurred, identify which drum unit among Y/M/C/Bk causes the uneven density at regular intervals and prepare the brand-new 192T gears (FL3-0561-010) as needed.

[Note]

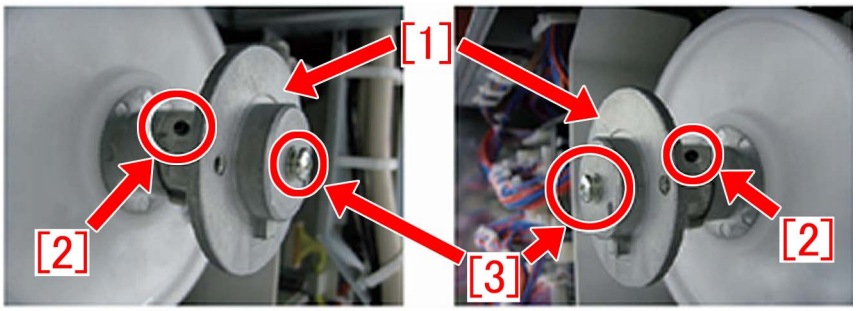
- For uneven density with Y, replacing the 192T gear (FL3-0561-010) connected to the Y drum drive assembly is recommended.
- For uneven density with M, replacing the 192T gears (FL3-0561-010) connected to the Y/M drum drive assemblies is recommended.
- For uneven density with C, replacing the 192T gears (FL3-0561-010) connected to the Y/M/C drum drive assemblies is recommended.

- For uneven density with Bk, replacing the 192T gears (FL3-0561-010) connected to the Y/M/C/Bk drum drive assemblies is recommended.

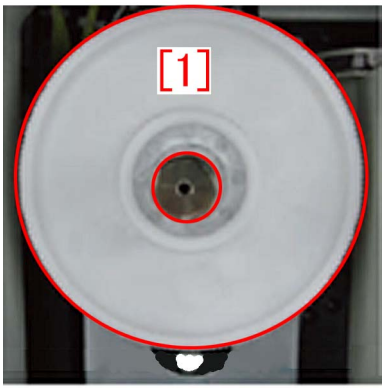
2) Refer to "Replacing the Main Station Rear Covers" in the service manual and remove the rear covers.
3) Remove the 2 screws [1] and the flywheel [2].



4) Loosen the 2 screws [2] fixed to the shaft, remove the screw [3] and then the flywheel mount [1].



5) Replace the 192T gear [1] with a brand-new one.



6) Repeat the works from the step 3) to 5) to the 192T gears to be replaced.
7) Reassemble the parts in reverse order from the step 4).

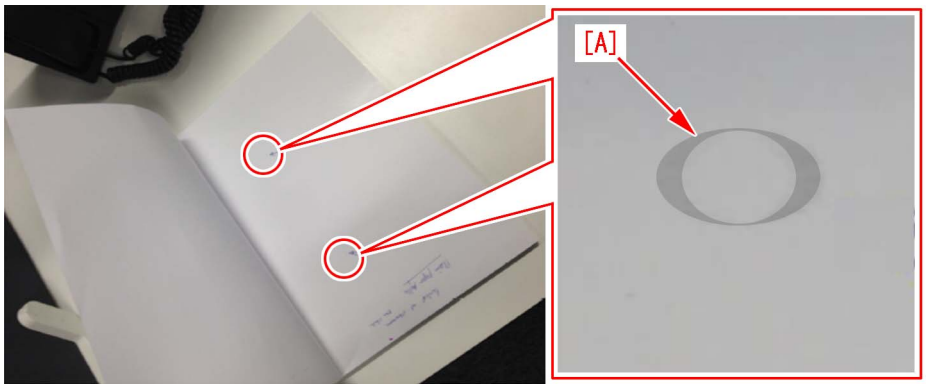
[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FL3-0561-010	GEAR, 192T	4->4	108
	New				

Marks on image caused by friction due to mini gripper edge (Perfect Binder- B1/D1/E1)

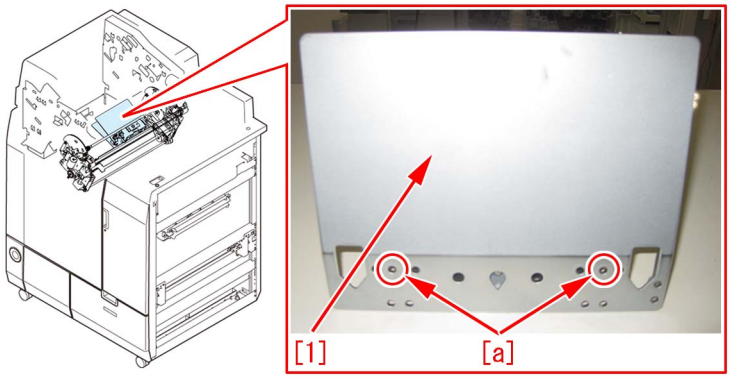
[Symptom]

The marks caused by friction [A] may appear on the first and last pages of glued stacked of sheets during printing.
[Reference] This symptom remarkably occurs on glossy paper such as coated paper.



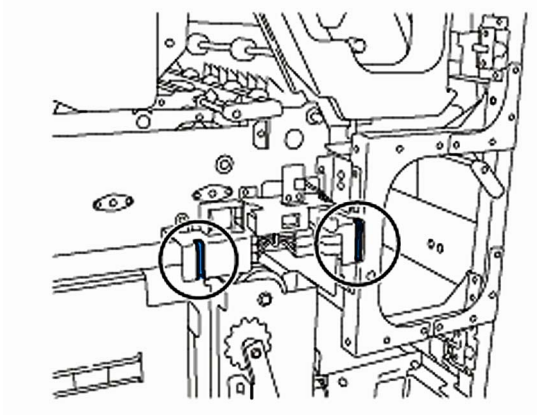
[Cause]

The stuck of sheets loaded on the height tray assembly is fed by sub gripper assembly and then transferred to the main gripper assembly. The marks caused by friction are put on the first and last pages of glued stacked of sheets due to the edges of round holes [a] of mini gripper [1] being located at the upper and lower sides of main gripper assembly when transferring.

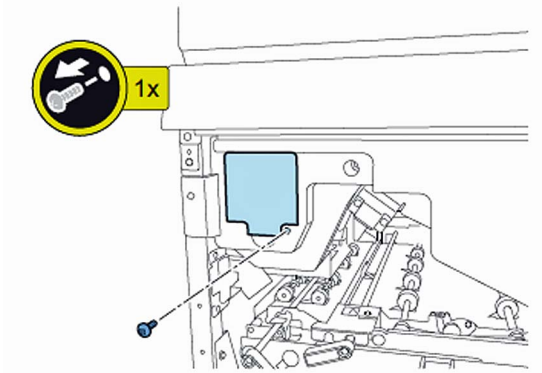


[Service work]

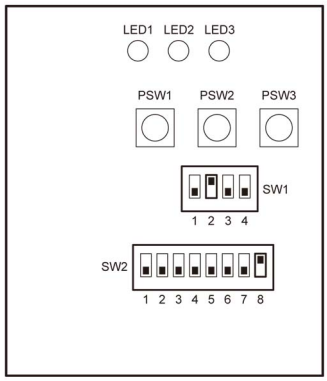
If the above-mentioned symptom occurs, prepare the sheet kit (4Y8-3138-000) to affix the sheet on the mini gripper being located on the upper and lower sides of main gripper assembly.
1) Turn off the main power of perfect binder and then unplug the power cord.
2) Remove the parts below referring Service Manual.
- Front Covers (Left/Right)
- Rear Cover
- Rear Upper Cover
- Inner Cover (Upper/Lower)
3) Turn on the right front cover switch and left front cover switch by inserting the service tool or the like.



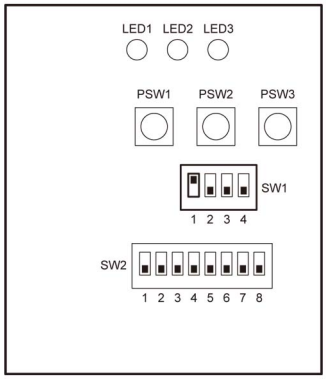
4) Remove the service PCB cover.
• 1 screw



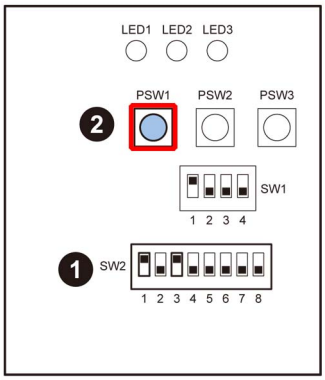
5) Turn on SW1-2 and SW2-8 on the service PCB and set the machine in service mode.
[CAUTION] To keep the machine running in service mode, be sure to do so with the trimming assembly stowed inside.



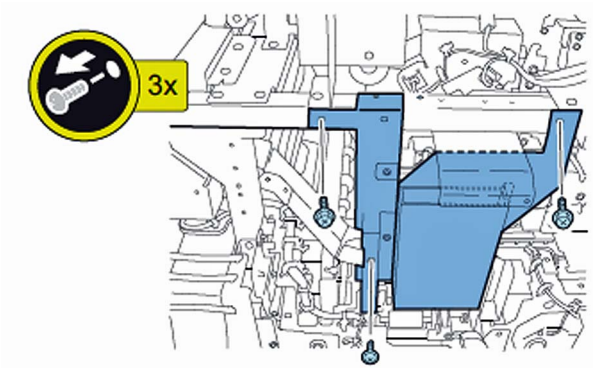
6) Plug the power cord in the wall outlet.
7) Turn on the power switch and then perform machine initialization operation.
8) Turn off the power switch.
9) Turn on SW1-1 on the service PCB and set the machine in service mode.



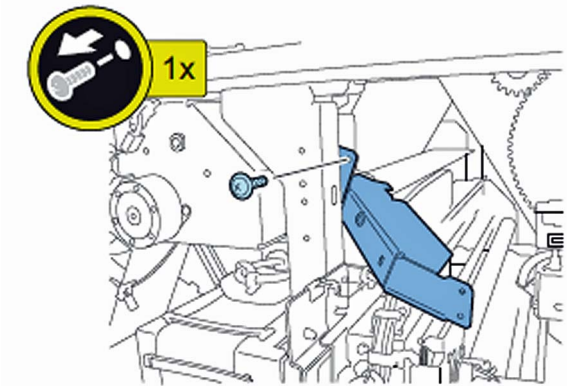
10) Turn on the power switch.
11) Turn on SW2-1 and -3 on the service PCB and then press the push switch PSW1 3 (three) times to stop the mini gripper at the vertical position.



12) Turn off the main switch and unplug the power cord from the wall outlet.
13) Remove the filter case unit.
• 3 screws

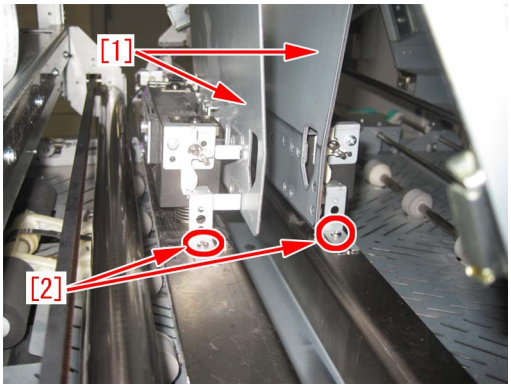


14) Remove the glue transport stay.
• 1 screw

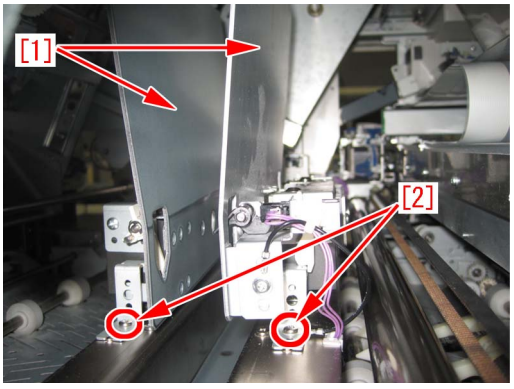


[CAUTION] When attaching the glue transport stay, hang the cut part of the stay to the projection of the glue supply entrance.

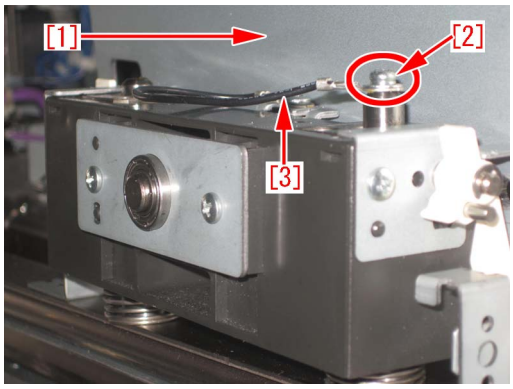
15) Stand behind the machine to face the back side and then remove screws [2] fixing the mini grippers [1].
• 2 screw
[Attention] Be careful not to drop the screws into the machine during the operation.



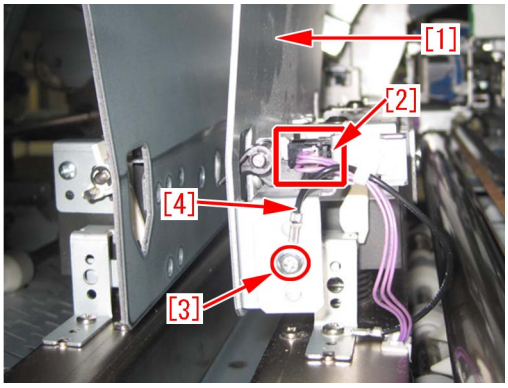
16) Stand in front of the machine to face the front side and then remove screws [2] fixing the mini gripper [1].
• 2 screw
[Attention] Be careful not to drop the screws into the machine during the operation.



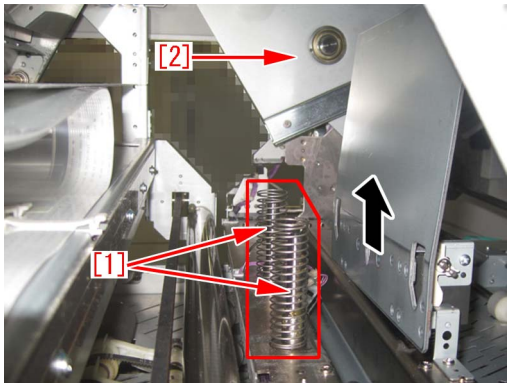
17) Remove the screw [2] being the left side of mini gripper [1] on your left and then disconnect the fixed ground wire [3].
• 1 screw



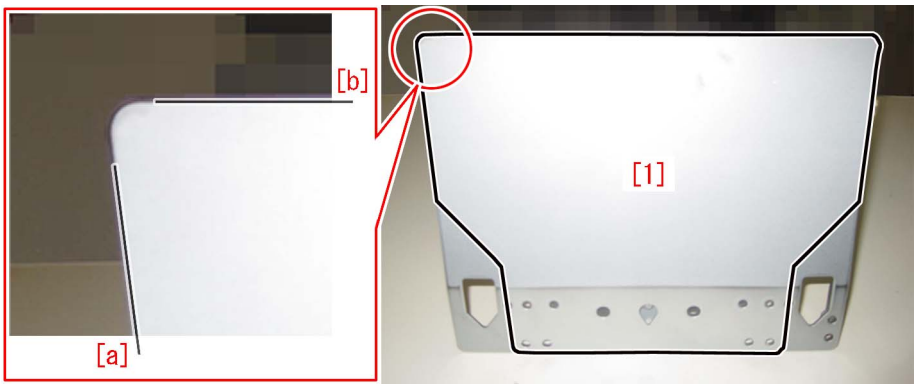
18) Remove the connector [2] being the right side of mini gripper [1] on your right and then remove the screw [3] to disconnect the ground wire [4].
• 1 screw



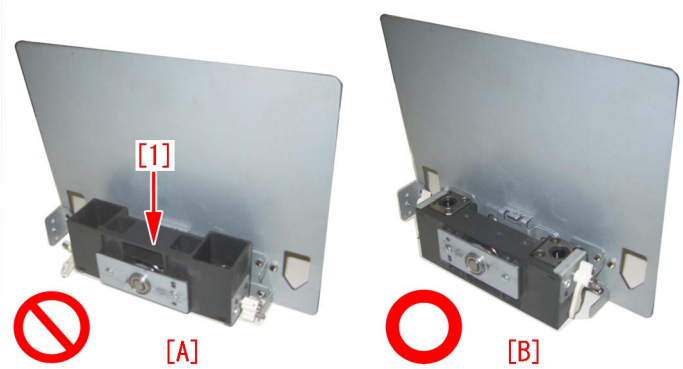
19) Lift up (in the direction of the black arrow) left and right mini grippers to remove the 2 (two) mini grippers from the pins [1]. The following photo shows the state that 1 (one) mini gripper [2] has been taken from the back side of machine.



20) Prepare the sheet kit (4Y8-3138-000) to affix the sheet on the mini gripper removed from the main gripper along the following reference lines.
- Affixing reference line [a]: Affix the left edge of sheet [1] at where it is within 1mm from the edge of mini gripper.
- Affixing reference line [b]: Affix the upper edge of sheet [1] at where it is within 1mm from the upper edge of mini gripper.
Affix the sheet not to protrude from the reference lines [a] and [b].



21) Reassemble the parts in the reverse order from Step 13).
[Attention] Make sure that the position of unit [1] being the side of mini gripper is correct and then put the mini gripper.
Photo [A] shows upside-down position of the unit on the side of mini gripper. Photo [B] shows the correct position.



[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				P51
	New	4Y8-3138-000	SHEET KIT	0 -> 1	

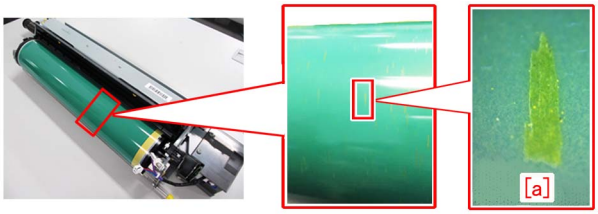
264mm drum pitch white band/ white spots and streaks on images due to scratches on cleaner blade

[Symptom/Question]

264mm drum pitch white band/white spots and streaks on images may occur

[Cause]

Due to fusing toners on drum surface, white band/white spots may occur. In addition, such fussing toners may damage cleaner blade, and scratches on blade or chipped blade may cause streaks on images.



[Remedy/Answer]

When the aforementioned symptom is seen, prepare the following parts to conduct cleaning and parts replacement.
- Alcohol
- Lint-free paper
- Cleaner blade:FC5-8829-000

1) Set the service mode to the followings, output PG5, and identify which drum is affected.
Service mode > COPIER > TEST > PG > TYPE > 5
Service mode > COPIER > TEST > PG > COLOR–Y / COLOR-M / COLOR-C / COLOR-K
Set the output color value to [1], and set other color values to [0].
Service mode > COPIER > TEST > PG > DENS-Y / DENS-M / DENS-C / DENS-K
[Reference] When a trouble is caused on multiple drums, perform procedure 2) and later for every unit to complete the work.

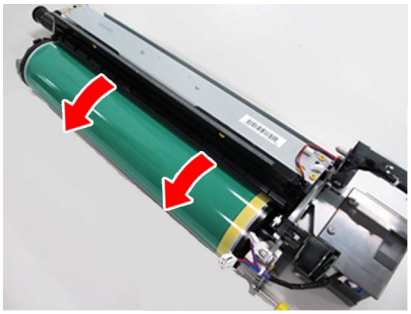
2) Refer to the service manual to remove a drum unit from the main body.

3) Moisten a lint-free paper with alcohol, wipe off the toners fused on the drum thoroughly, by wiping from left to right in the scanning direction, as shown in the photo (arrows).
[Note]
- Change the lint-free paper every time after use.
- Be sure to use lint-free papers. Other materials may attach lint on the drum.
- Excessive alcohol may cause uneven wipe markings. Use appropriate amount.
- Never use water when wiping. This may cause uneven images.
- Do not wipe in vertical direction. This may cause scratches or uneven wipe markings on the drum.

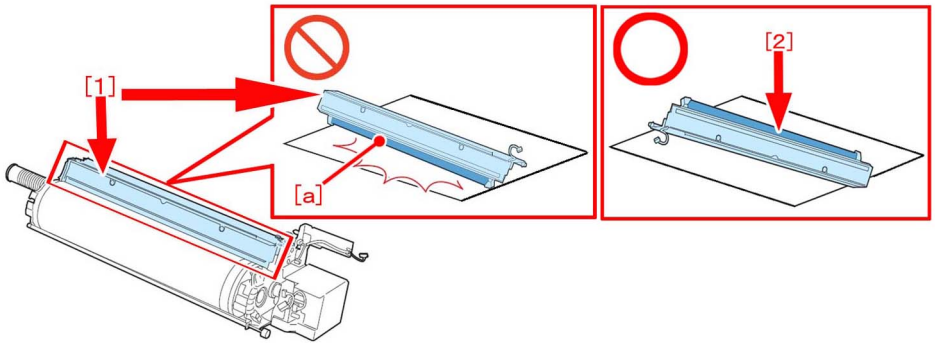
4) After confirming that the fusing toners are wiped off, wipe the drum with a new and dry lint-free paper, immediately.
[Note] Be sure to wipe the drum with a dry lint-free paper immediately after alcohol wiping. Any interval may cause uneven surface on the drum and lead to uneven images.

5) Check and confirm that the drum is thoroughly dried, no more fusing toners left by rotating the drum in the direction of arrows shown in the following photo.

[Note]Be sure to rotate the drum in the direction of arrows only shown in the following photo.



6) Remove the cleaning unit [1] from the drum unit, and replace the cleaner blade (FC5-8829-000) [2] with a new one.
[Note]
- Be sure not to damage the edge [a] of a cleaner blade.
- To prevent damage, place the cleaner blade [2] upward.



7) Install the cleaning unit on a drum unit, and install it in a main body.

8) If multiple drum units are to be replaced, conduct procedure 2) to 7) every time before proceeding to next step.

Perform auto gradation adjustment (Full-PASCAL)
Settings/Registration > Adjustment/Maintenance >Adjust Image Quality > Auto Adjust Gradation, then select [Full Adjustment]
Check the output images made out of Auto Adjust Gradation and confirm that the symptom is not occurring anymore.

[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FC5-8829-000	BLADE, CLEANER	1-> 1	710
	New				

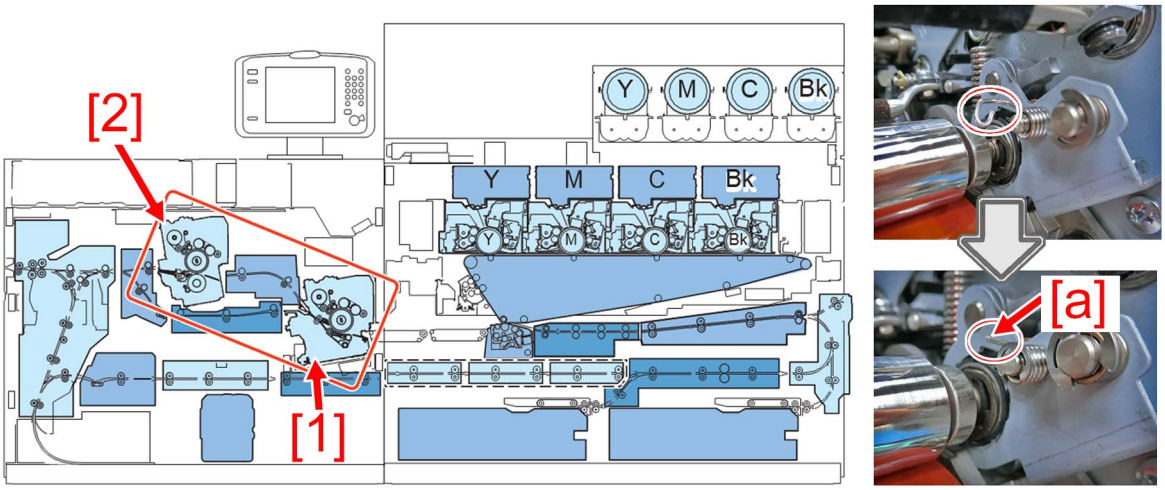
Stained image and uneven gloss due to breakage of torsion spring pressurizing the collection roller

[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, Stained image and uneven gloss may occur.

[Cause]

The torsion spring, which is used for the primary fixing assembly [1] and the secondary fixing assembly [2], to pressurize the collection roller may be damaged [a]. If the torsion spring is damaged, the pressure runs short and cleaning performance reduces, resulting in the above-mentioned symptom.

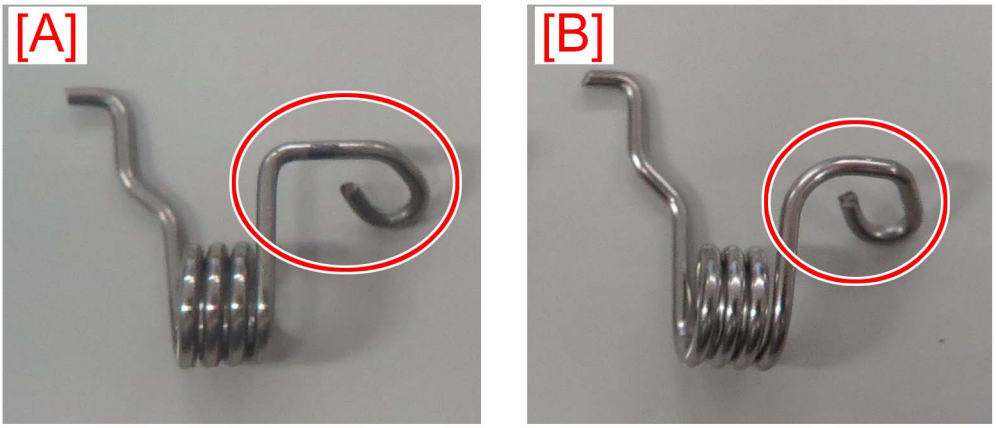


[Remedy/Answer]

When the above-mentioned symptom occurs, prepare and replace the following parts. Replace the torsion spring both on the front and rear sides at the same time even if only either of them is damaged.

- New-type torsion spring (front side) : FU2-0419-010
- New-type torsion spring (rear side) : FU2-0420-010
- Washer : XD1-1104-122 (2 pieces)
- Hanarl UD-321: FY9-6037-000
- New E-ring (2 pieces)

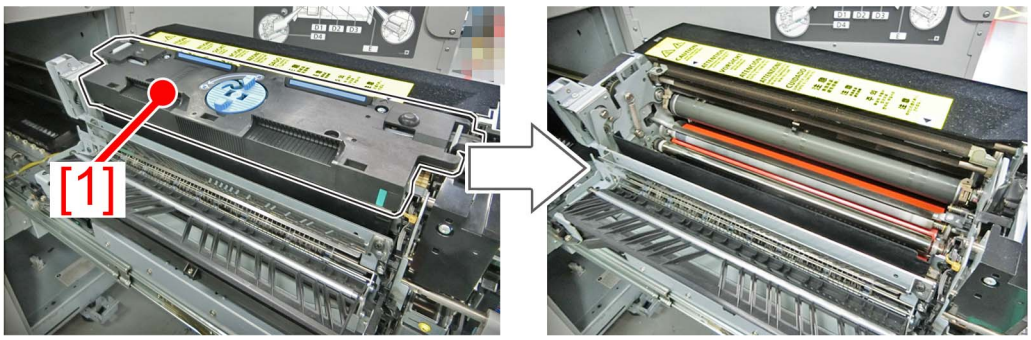
[Reference] Photo [A] shows the old-type torsion spring and Photo [B] shows the new-type.



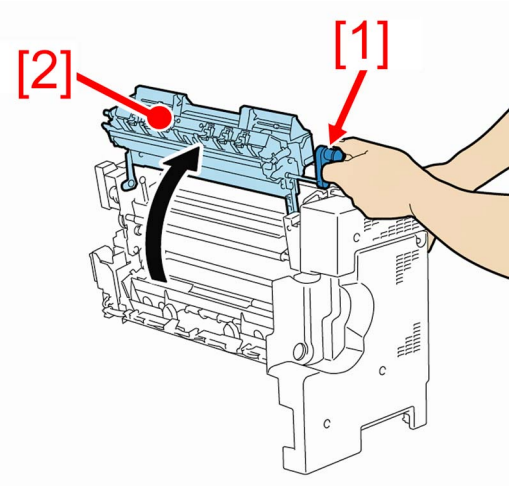
The following replacing procedure is an example when the torsion spring (front side) damage occurs at the primary fixing assembly. The procedure is the same when it occurs at the secondary fixing assembly

1) Pull out the fixing assembly up to the maximum position and take out the web unit [1] by referring to Service Manual.

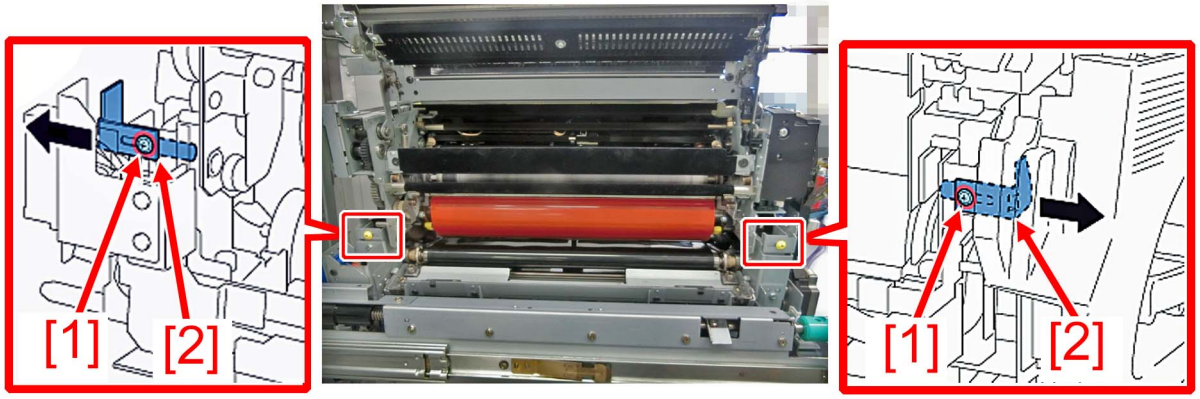
[Attention] Perform this work after the heat of the fixing assembly cools sufficiently.



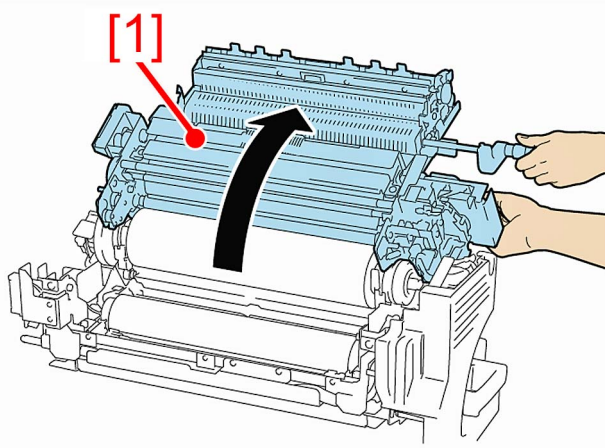
2) Lift the lever (C-A4) [1] and open the primary fixing inner delivery unit [2].



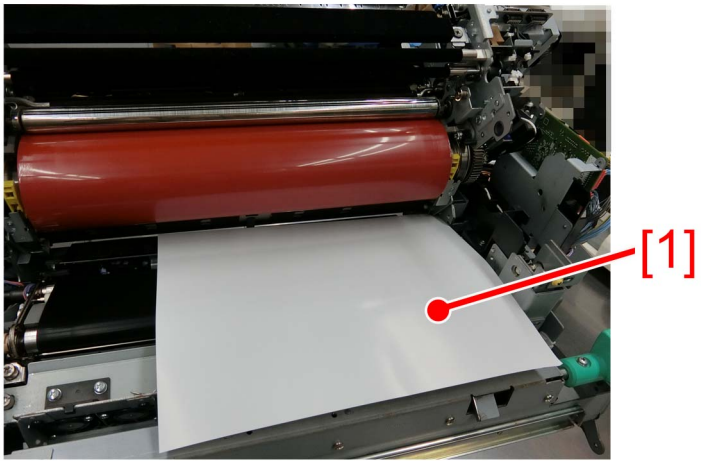
3) Loosen the 2 screws [1] and slide the fixation pins [2] in 2 locations in the arrow directions.



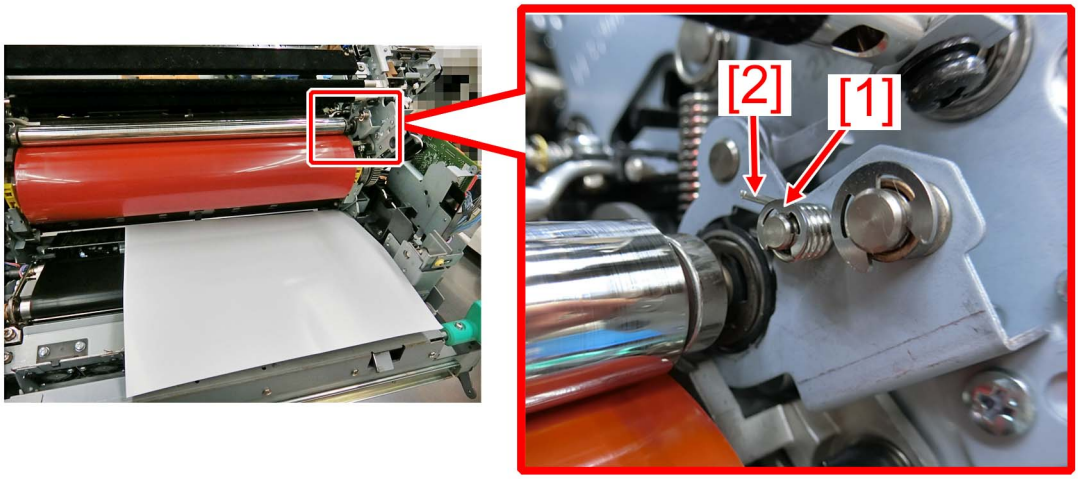
4) Open the upper unit [1] slowly.



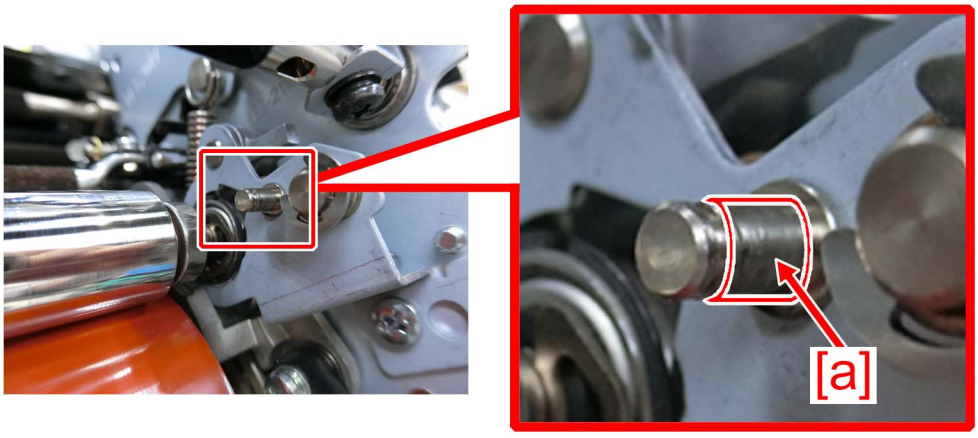
5) Place paper [1] on the fixing belt to prevent the parts from dropping as shown in the photo below.



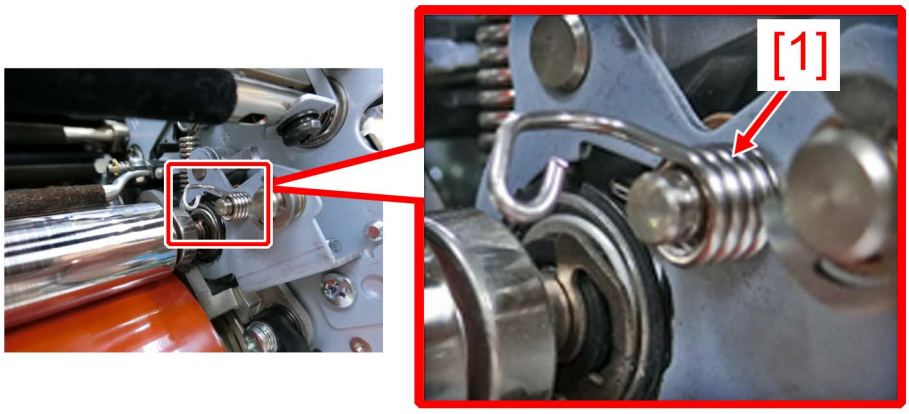
6) Remove the E-ring [1] and remove the damaged torsion spring (front side) [2].



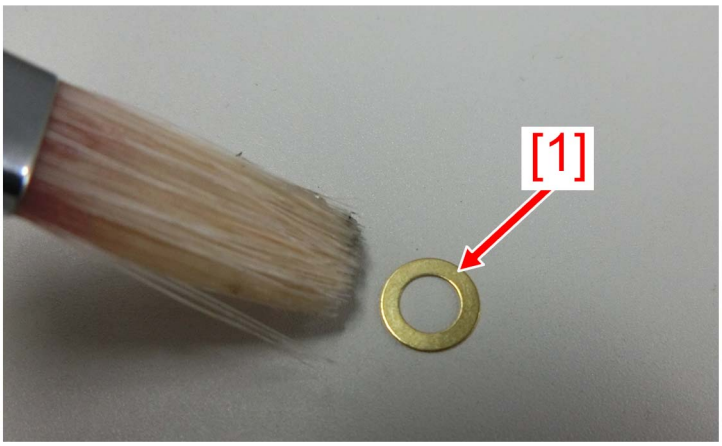
7) Apply the hanarl evenly to the entire circumference of the collection roller pressure shaft [a].



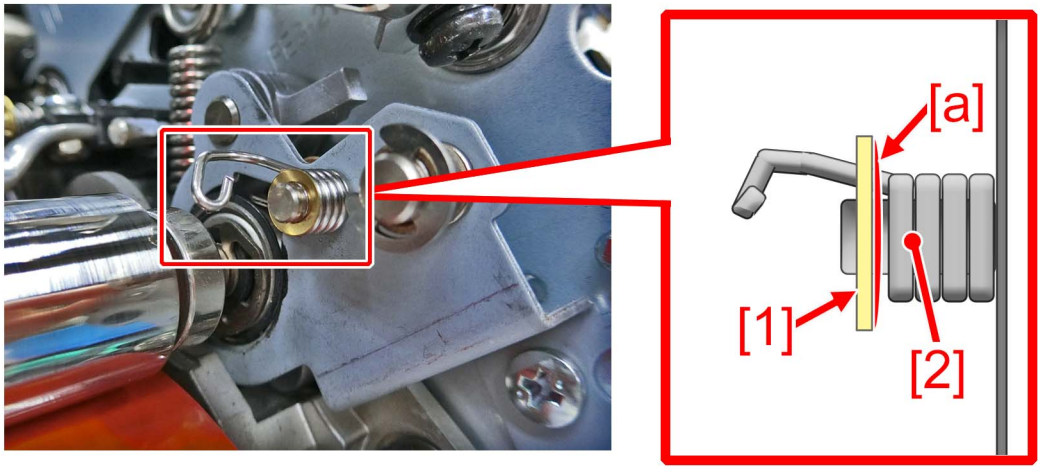
8) Attach the new-type torsion spring (front side) (FU2-0419-010) [1]



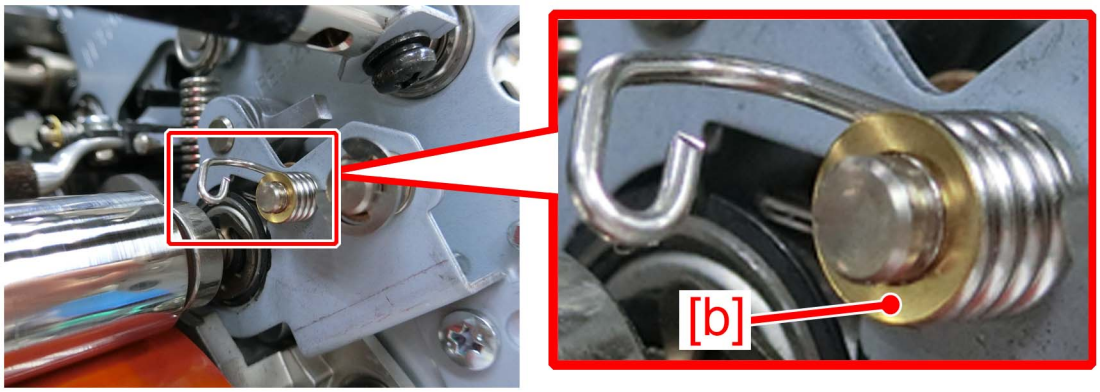
9) Apply the hanarl evenly to one side of the washer [1].



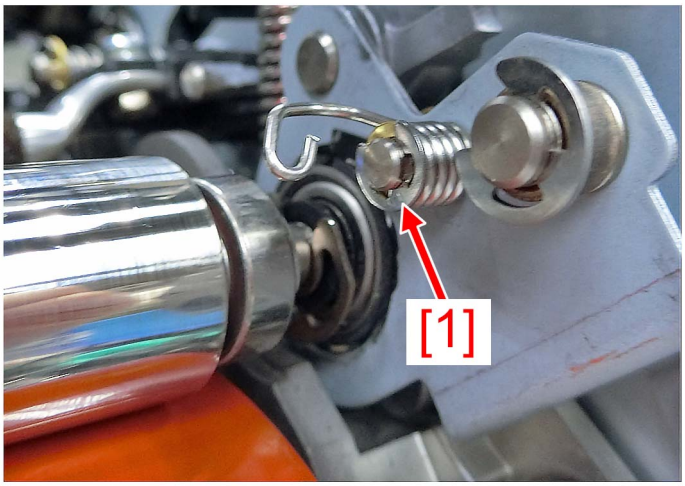
10) Place the washer [1] so that the hanarl-applied surface [a] faces the torsion spring (front side) [2].



11) Apply the hanarl evenly to the entire surface [b] of the washer where the hanarl was not applied in the step 10).



12) Attach the new E-ring [1] onto the washer



13) Move the paper placed in the step 5) to the opposite side (the torsion spring on the rear side) and replace it with the torsion spring (rear side) (FU2-0420-010) by following the steps in the order of 6) to 12).
14) Return the parts by reversing the procedure form the step 4).
[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FU2-0419-000	TORSION SPRING	2 -> 0	815 855
	New	FU2-0419-010	TORSION SPRING	0 -> 2	
2	Old	FU2-0420-000	TORSION SPRING	2 -> 0	815 855
	New	FU2-0420-010	TORSION SPRING	0 -> 2	
3	Old				815 855
	New	XD1-1104-122	WASHER	0 -> 4	
4	Old	FY9-6037-000	HANARL UD-321	1 -> 1	815 855
	New				

[Factory Measures]
Change the torsion spring into the new-type torsion spring (front side/rear side) and add the washer and application of the hanarl.

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
imagePRESS C10000VPSR FS US	WBE15324
imagePRESS C10000VPSR FS EUO	WBF15318
imagePRESS C10000VPSR FS CN	WBG15027

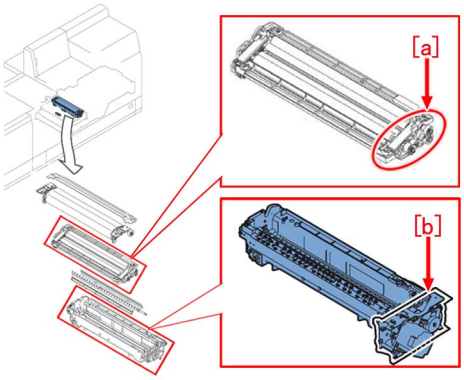
Stain on back of papers and abnormal noise at the secondary transferassembly due to worn out gears

[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, Stain on back of papers, and abnormal noise may occur, at the secondary transfer assembly .

[Cause]

In the secondary transfer assembly, the gears used at [a] in the belt cleaner assembly and at [b] in the transfer cleaner drive unit are worn out, it may cause drive failure, leading to the aforementioned symptom.



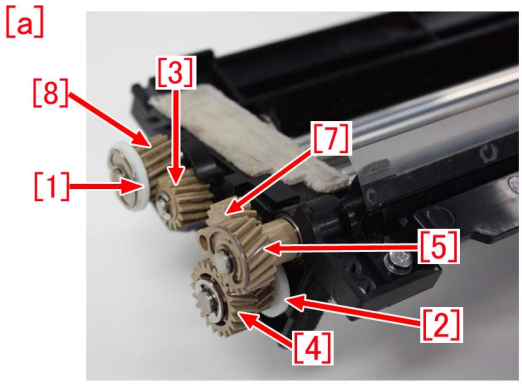
[Remedy/Answer]

When the aforementioned symptom has occurred, prepare a set of 2ND TRNSFR. CLEANER GEAR SET (FM1-U402-000), which is set up as a service part for exclusive use, and replace all with the set at the same time.
(NOTE: As for the machine with the new type gears installed, gears could be replaced in a single unit without a problem)
The parts set as a 2ND TRNSFR. CLEANER GEAR SET (FM1-U402-000) are listed below.
<Comparative table of parts to be replaced>

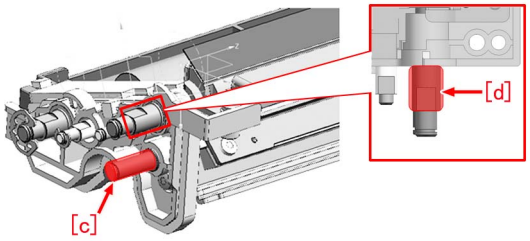
Fig No.	Key No	Parts to be replaced (Main body side)			2ND TRNSFR. CLEANER GEAR SET (FM1-U402-000)	
		PART NUMBER	DESCRIPTION		PART NUMBER	DESCRIPTION
335	[1]	FE4-6174	POSITIONING ROLLER	->	FE2-A988	POSITIONING ROLLER
	[2]	FE4-6174	POSITIONING ROLLER	->	FE4-6174	POSITIONING ROLLER
	[3]	FU2-1491	15T GEAR	->	FU2-2543	15T GEAR
	[4]	FU2-1492	21T/15T GEAR	->	FU2-2544	21T/15T GEAR
	[5]	FU2-1493	18T GEAR	->	FU2-2545	18T GEAR
	[6]			->	FE2-B033	SPACER
	[7]	FU2-1494	17T GEAR	->	FU2-2546	17T GEAR
	[8]	FU2-1495	18T GEAR	->	FU2-2547	18T GEAR
333	[9]	FE4-6175	POSITIONING ROLLER	->	FE4-6175	POSITIONINGROLLER
	[10]	FU2-1503	16T GEAR	->	FU2-2549	16T GEAR
	[11]	FU2-1501	20T GEAR	->	FU2-2548	20T GEAR

[Note] Below shows the new type gears, component of the 2ND TRNSFR. CLEANER GEAR SET (FM1-U402-000)

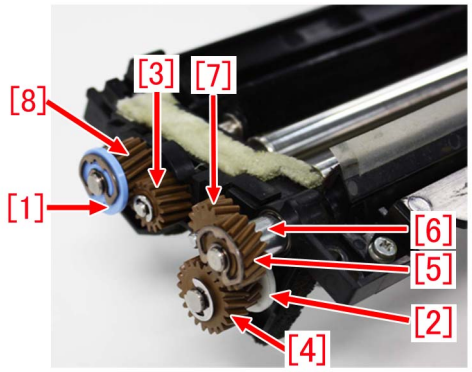
1) Remove the secondary transfer assembly from a main body, then remove [1] to [5] and [7] [8] from the belt cleaner assembly [a]. E-ring detached here should not be reused. Prepare and replace with a new one.



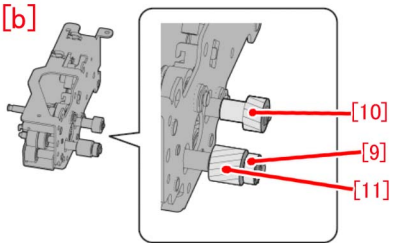
2) Apply the super lube grease in an amount of a grain of rice (approximately 20mg) to [c] and [d] of the belt cleaner assembly, evenly.
In addition, attach a spacer (FE2-B033) [6] to [d], and rotate the shaft so that the super lube grease may spread around the shaft evenly.



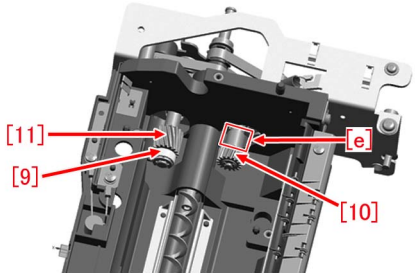
3) Replace [1] to [5] and [7][8] on the belt cleaner assembly with the parts bundled in the 2ND TRNSFR. CLEANER GEAR SET.



4) Apply the super lube grease in an amount of a grain of rice (approximately 20mg) on the tooth of the following gears, evenly.
-[3] --- FU2-2543 (15T GEAR)
-[4] --- FU2-2544 (21T/15T GEAR)
-[5] --- FU2-2545 (18T GEAR)
-[8] --- FU2-2547 (18T GEAR)
5) Remove [9] to [11] from the transfer cleaner drive unit [b], and replace with the parts of 2ND TRNSFR. CLEANER GEAR SET.



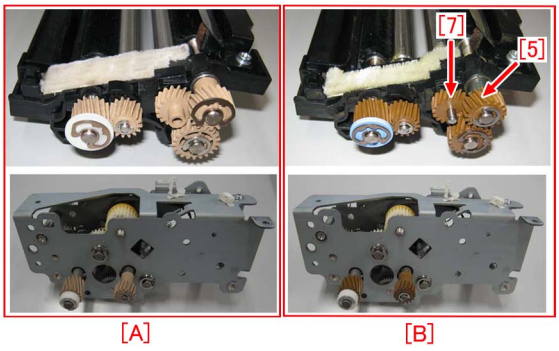
6) After installing the transfer cleaner drive unit on the belt cleaner assembly, apply the super lube grease in an amount of two grains of rice (approximately 40mg) at four locations, on the teeth of gears [10][11] and [9], and [e] part of [10], evenly.



[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old				333 335
	New	FM1-U402-000	2ND TRNSFR. CLEANER GEAR SET	0 -> 1	
2	Old	FU2-1491-000	15T GEAR	1 -> 0	335
	New	FU2-2543-000	15T GEAR	0 -> 1	
3	Old	FU2-1492-000	21T/15T GEAR	1 -> 0	335
	New	FU2-2544-000	21T/15T GEAR	0 -> 1	
4	Old	FU2-1493-000	18T GEAR	1 -> 0	335
	New	FU2-2545-000	18T GEAR	0 -> 1	
5	Old	FU2-1494-000	17T GEAR	1 -> 0	335
	New	FU2-2546-000	17T GEAR	0 -> 1	
6	Old	FU2-1495-000	18T GEAR	0 -> 1	335
	New	FU2-2547-000	18T GEAR	0 -> 1	
7	Old	FE4-6174-000	POSITIONING ROLLER	2 -> 1	333
	New	FE2-A988-000	POSITIONING ROLLER	0 -> 1	
8	Old				333
	New	FE2-B033-000	SPACER	0 -> 1	
9	Old	FU2-1501-000	20T GEAR	1 -> 0	333
	New	FU2-2548-000	20T GEAR	0 -> 1	
10	Old	FU2-1503-000	16T GEAR	1 -> 0	335
	New	FU2-2549-000	16T GEAR	0 -> 1	

[Factory measures]]
In order to increase strength, the materials of gears and positioning rollers are changed. [A] is the old type and [B] is the new type parts. In addition, as for [5] and [7], not only the materials but also the shape is changed at the same time.



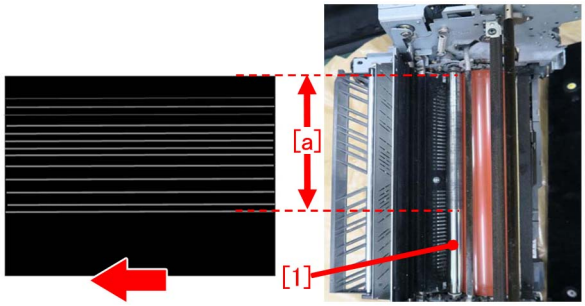
[Countermeasure cut-in serial numbers in factory]

Model	Serial No
imagePRESS C10000VP Series US	WBC11001
imagePRESS C10000VP Series EUO	WEJ10986
imagePRESS C10000VP Series CN	WBD00571

Streaks and stains on image in feeding direction due to breakage of the tension spring

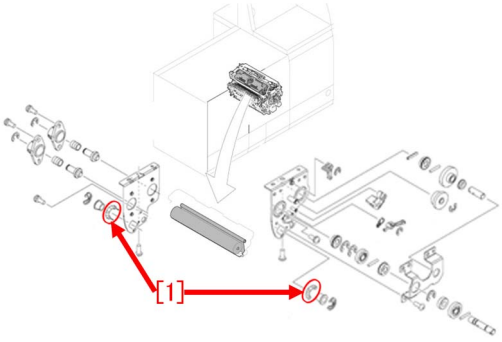
[Symptom/Question]

Streaks and stains on image in feeding direction may occur. When checking the collection roller upon the issue occurrence, the location of the soiled areas [a] is found to match between the streaks and stains on the image and the collection roller [1]. The arrow indicates the paper feeding direction.



[Cause]

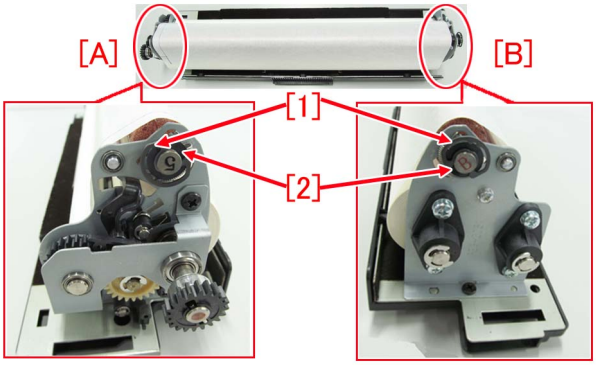
As the life of the tension spring [1] of the web roller in the fixing web unit advances, the tension spring may break. When the web roller is pressed against the collection roller with less force due to the tension spring breakage, cleaning capability decreases. As a result, the collection roller is soiled gradually and it results in the above symptom.



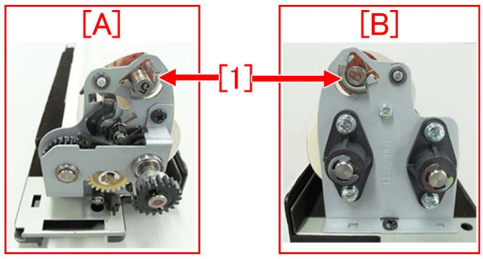
[Remedy/Answer]

When the above symptom occurs, prepare the new tension spring (FU2-1836-000) and replace it by following the steps below. For every web roller, there are 2 tension springs located, one each in the front [A] and the back [B]. Even when only one of them breaks, be sure to replace both at once.

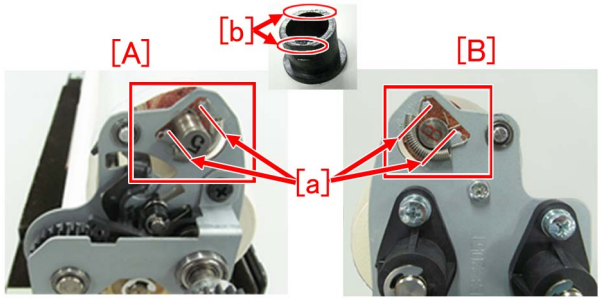
1) Refer to Service Manual > 4. Parts Replacement and Cleaning > Fixing System > "Replacing the Secondary Fixing Web Unit" and remove the fixing web unit.
2) Remove the 2 retaining rings [1] and the 2 bushings [2] with fingers from the [A] and [B] sides of the fixing web unit. After replacing the tension spring, the removed retaining rings and the bushings will be reused.



3) Remove the 2 tension springs [1] with fingers from the [A] and [B] sides.



4) Attach the 2 new tension springs to both sides. (One for each side)
5) Attach the 2 retaining rings and the 2 bushings, which were removed in the step 2), to both sides (one for each side).
[Note]
When attaching the bushing, position the cutout section [b] of the bushing to align with the section [a] of the front web side plate [A] and the rear web side plate [B].



6) Attach the fixing web unit to the machine.
[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FU2-1836-000	SPRING, TENSION	2 - > 2	830
	New				

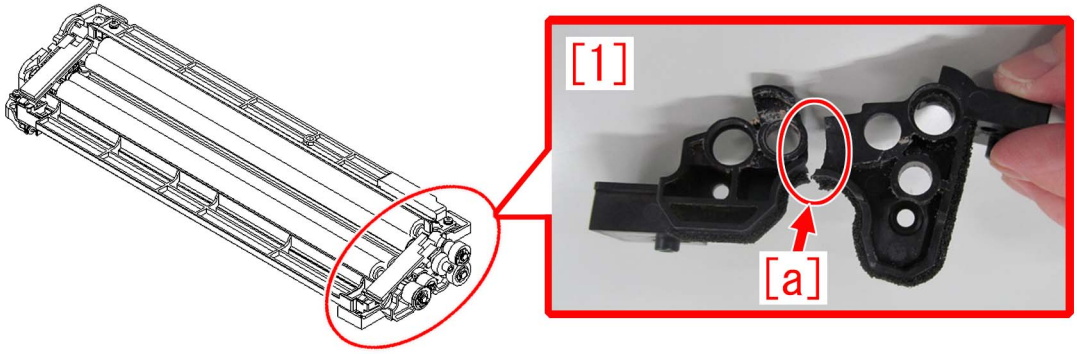
Stain on back of papers attributed to secondary transfer cleaning failure due to breakage of cleaner front side plate

[Symptom/Question]

Stain on back of papers due to secondary transfer cleaning failure may occur.

[Cause]

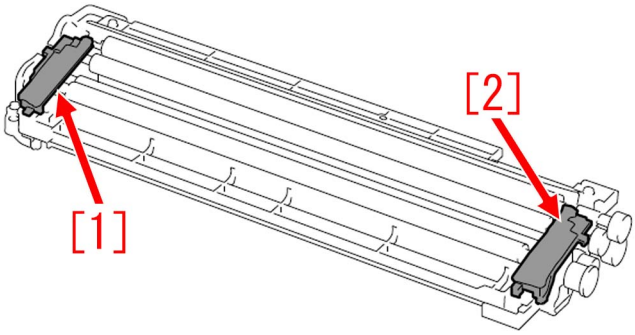
As the life of the machine advances, cleaner front side plate [1] of a belt cleaner assembly of a secondary transfer assembly may break [a]. Such breakage of a cleaner front side plate may cause cleaning failure, resulting in the above-mentioned symptom.



[Remedy/Answer]

When the above-mentioned failure occurs, prepare a newly assigned service part, the cleaner front side plate (FL0-5502-000), and replace it by following the steps below.

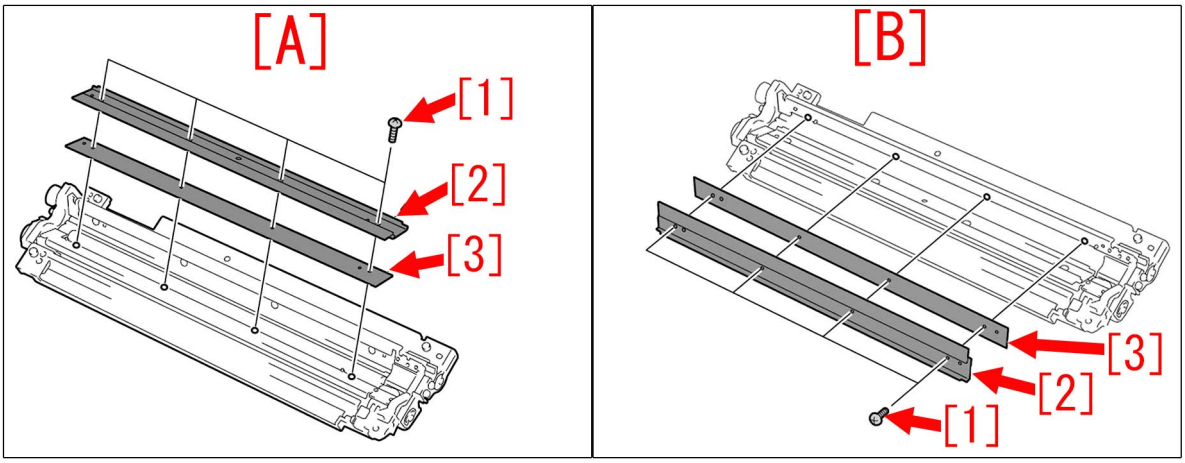
1) Refer to Service manual: "4 Parts Replacement and Cleaning" > "Image Formation System" > "Replacing the Secondary Transfer Cleaning Unit Edge Seal Bases (Rear and Front)" and remove the Edge Seal Base (Rear) [1] and the Edge Seal Base (Front) [2].



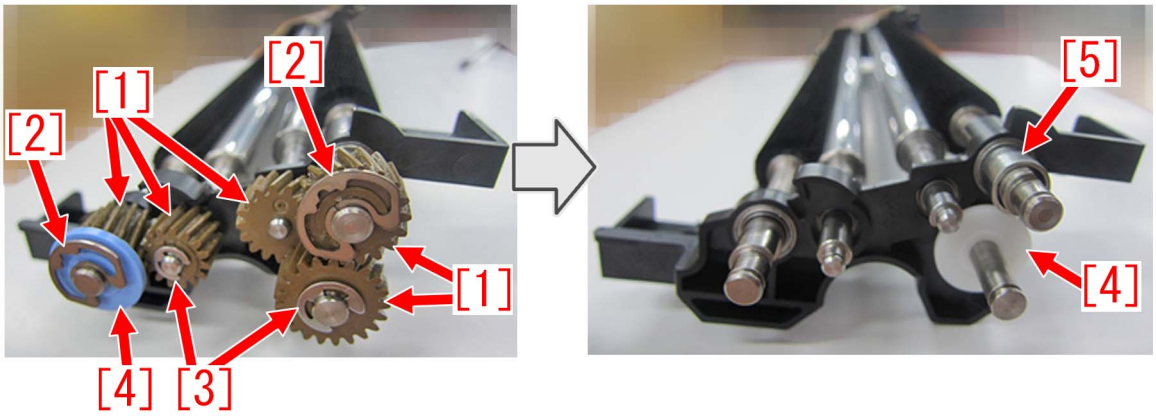
2) Remove the 4 screws shown below, and remove the lower fur cover [1] and upper fur cover [2].

[Note] Do not remove the screw [a].

3) Refer to Service manual: "4 Parts Replacement and Cleaning" > "Image Formation System" > "Replacing the Secondary Transfer Bias Roller Cleaning Blade" and remove the screws [1] x4pcs, blade [2] x1pc and blade adjuster plate [3] x1pc. There are blades in 2 locations, right/left so remove them both. Shown below, [A] is the right blade and [B] is the left. In addition, there may be multiple numbers of blade adjuster plates [3] attached. Remove them all in such case.

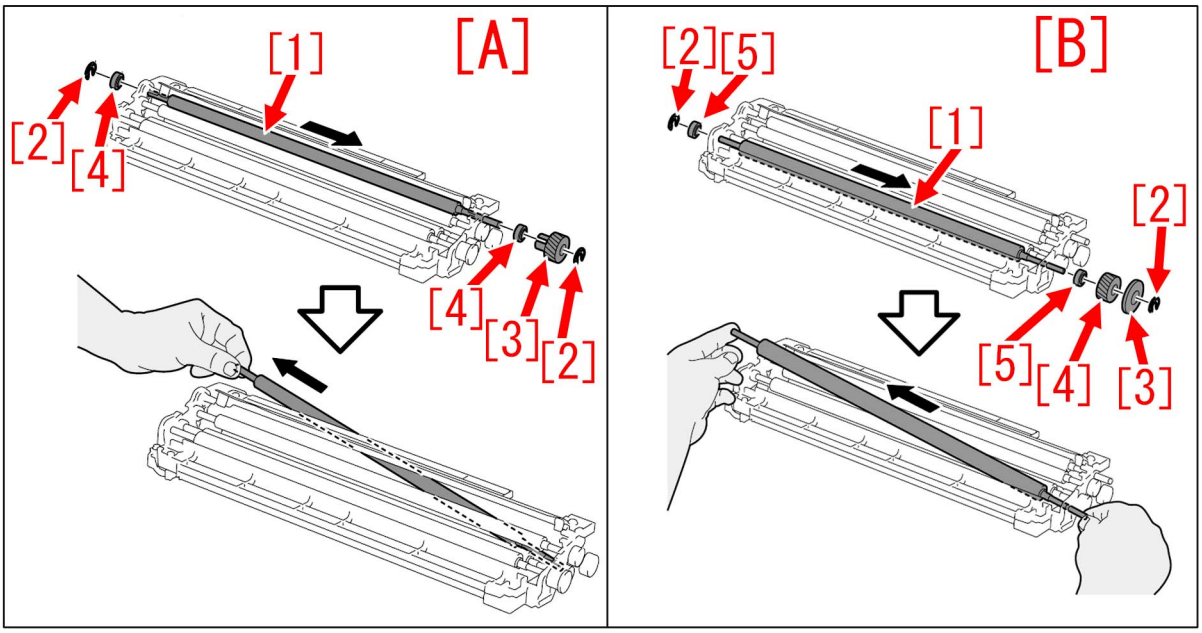


4) Remove 5pcs of gears [1], 2 pcs of N rings [2], 2pcs of E rings [3], 2pcs of spacers [4], 1pc of spacer [5]. Photo below shows that new type of gears are installed. In the case of old type gears, one spacer [5] is not attached.

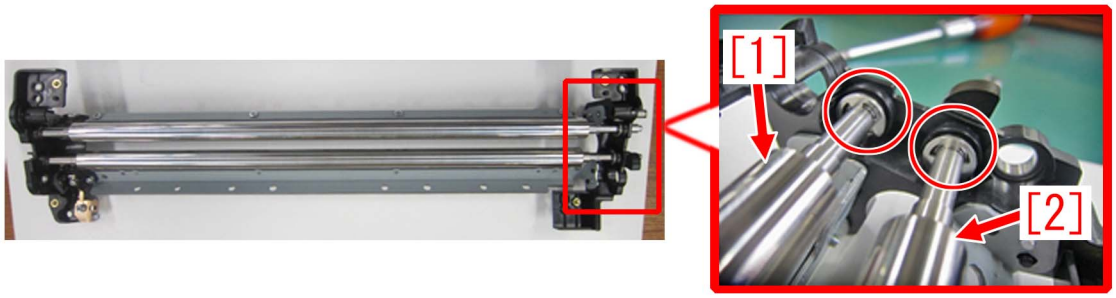


5) Refer to Service manual: "4 Parts Replacement and Cleaning" > "Image Formation System" > "Replacing the Secondary Transfer Cleaning Brush Roller (Right/Left)" and remove both right [A] and left [B] Cleaning Brush Rollers.

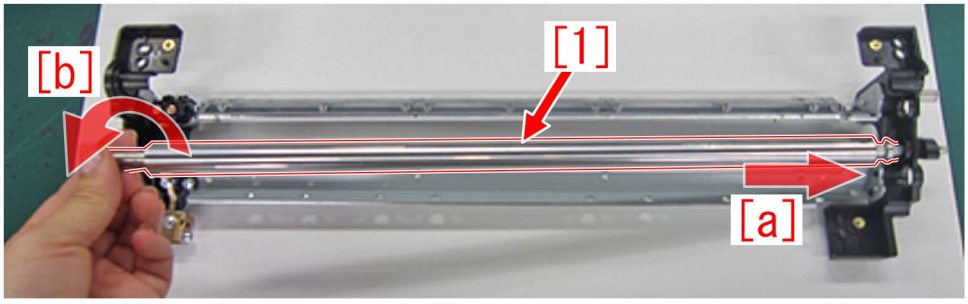
[A] Cleaning brush roller (Right)	[B] Cleaning brush roller (Left)
[1] Cleaning brush rolle	[1] Cleaning brush roller
[2] E-ring	[2] E-ring
[3] Gear	[3] Washer
[4] Bearing	[4] Gear
	[5] Bearing



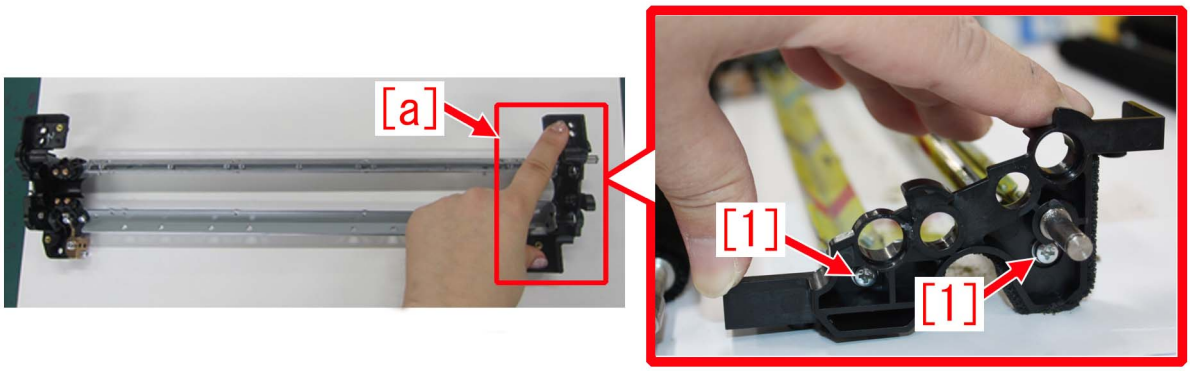
6) Remove the E rings and bearings of the bias roller [1] and bias roller 2 [2] respectively.



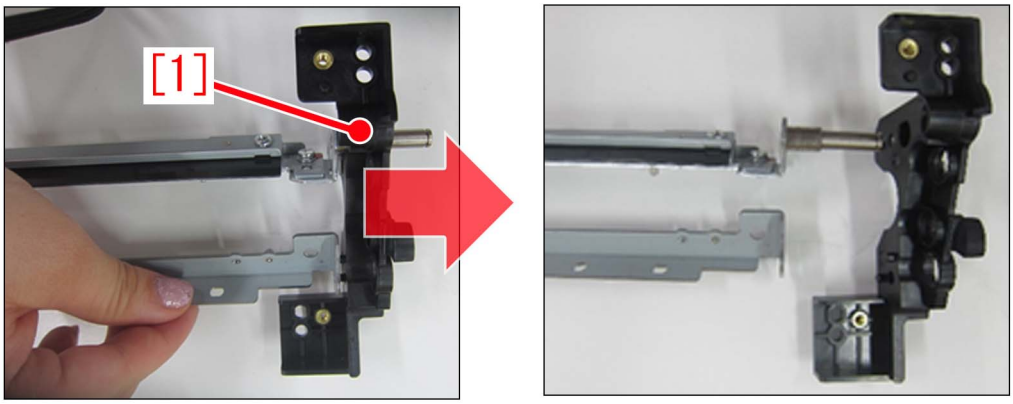
7) Bias roller [1] shall be removed, by sliding it to [a] direction, and detach from side [b]. Remove the bias roller 2 in the same manner.



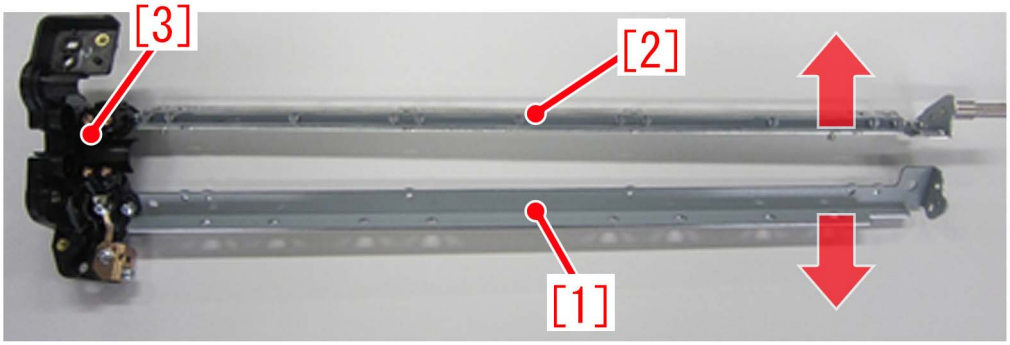
8) Remove 2pcs of screws[1], while holding the cleaner front side plate gently [a].



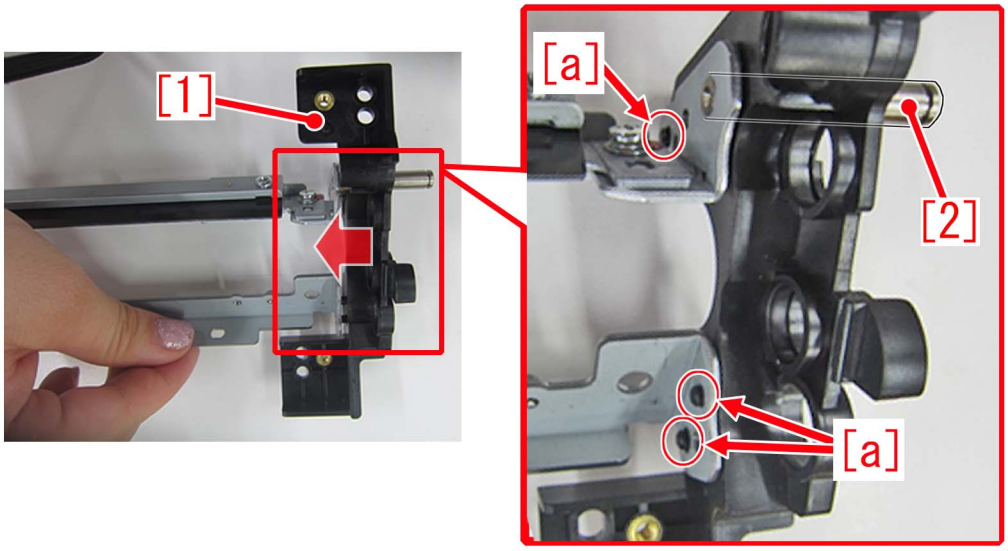
9) Pull out the cleaner front side plate [1] slowly in the arrow direction.



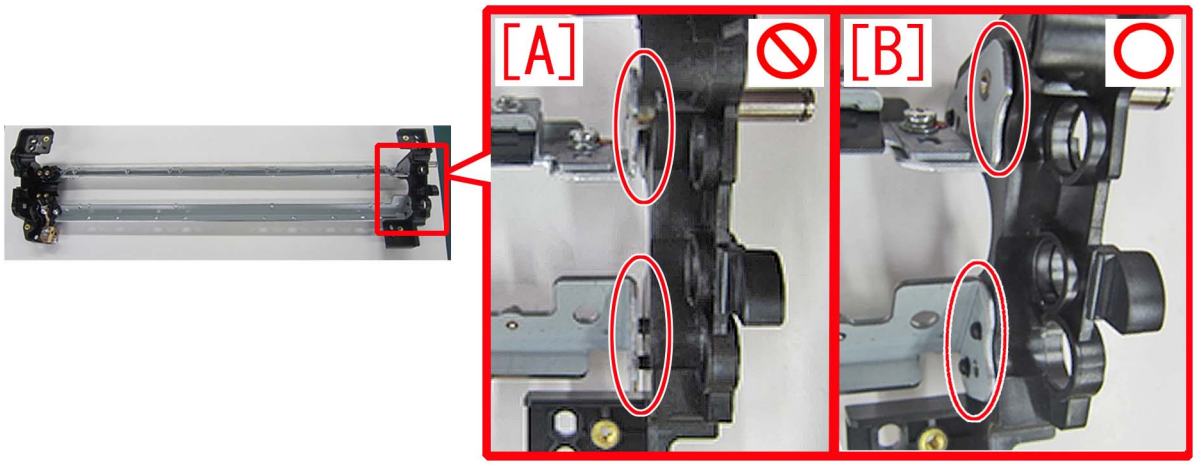
[Caution] At step 9), be careful not to expand the space between the upper blade support [1] and lower blade support [2] in the arrow direction. If it expand, cleaner rear side plate [3] may break.



10) Install the newly assigned service part, cleaner front side plate (FL0-5502-000) [1] by inserting in the direction shown in arrow slowly.
[Reference] When installing the cleaner front side plate, be sure to fit in the shaft [2] and the 3 bosses [a] as shown below.

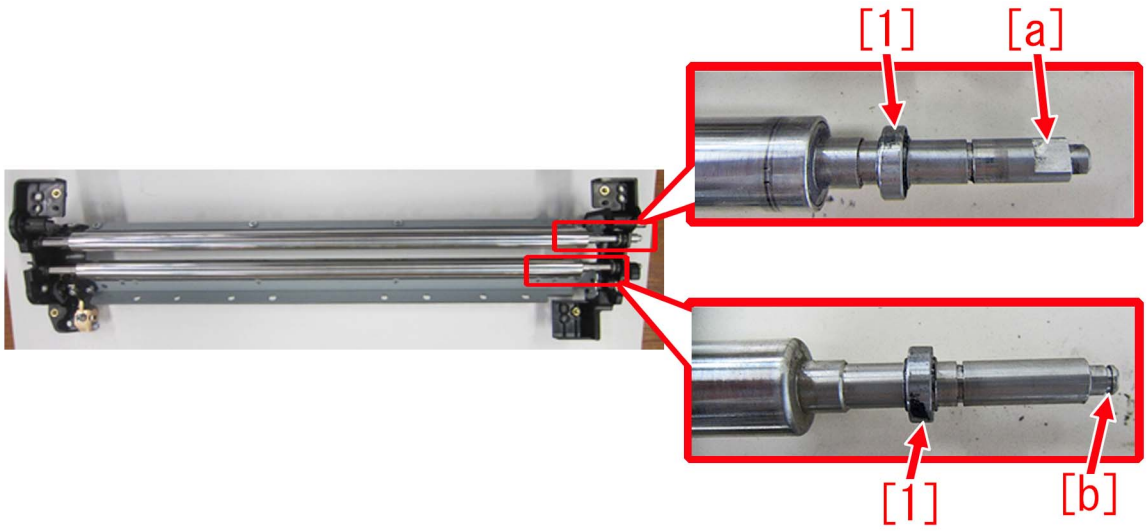


[Note] Make sure there is no gap between the upper/lower blade supports and the cleaner front side plate. Photo [A] is showing that the cleaner front side plate is not inserted correctly, thus the shaft is seen and the bosses are not fitted. Photo [B] is the correctly installed status without gap.

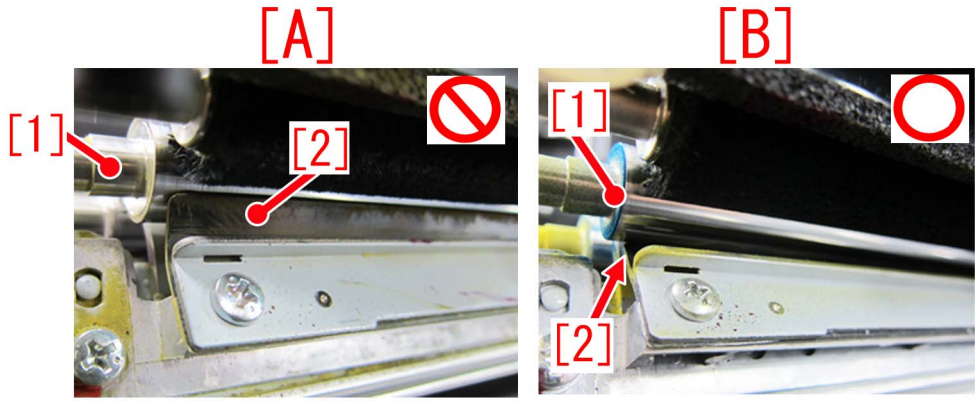


11) Assemble the parts by reversing the procedures from the step 8).

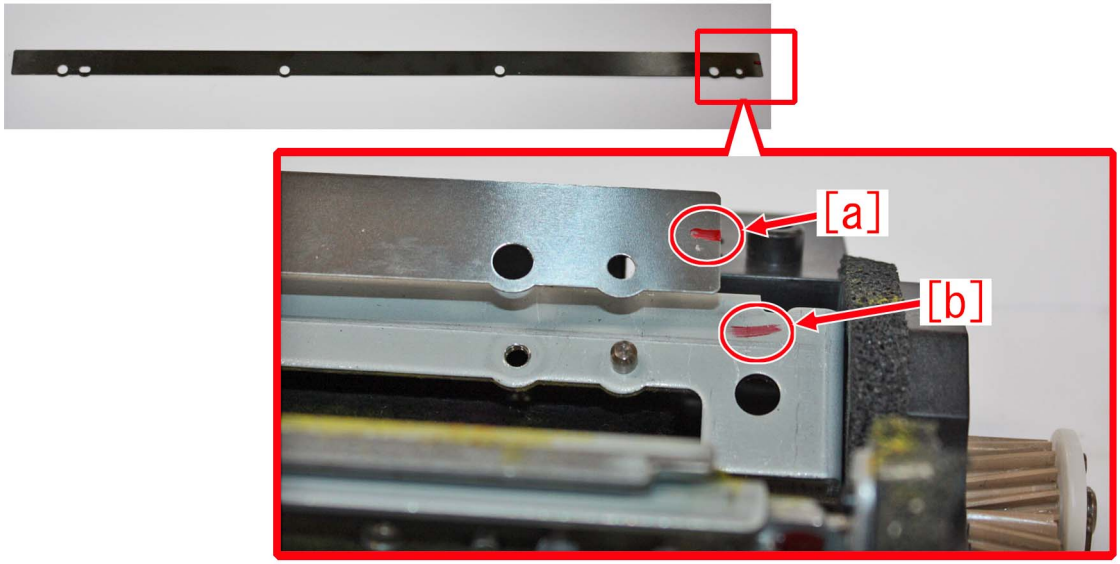
[Note] Note the followings when installing the parts.
- Be careful with its orientation when installing a bias roller/bias roller 2 in step 7). The shaft end of a bias roller at the cleaner front side plate side, has D cut [a]. The shaft end of a bias roller 2 at the cleaner front side plate side, has E ring groove [b]. Both needs to have a bearing [1] attached, before installation.



- After the installation of bias roller/bias roller 2 [1] in step7), check and confirm that the scraper sheet [2] is not turned up. [A] is showing turned up state of a scraper sheet [2], and [B] is a correct state of a bias roller, with the scraper sheet properly set.

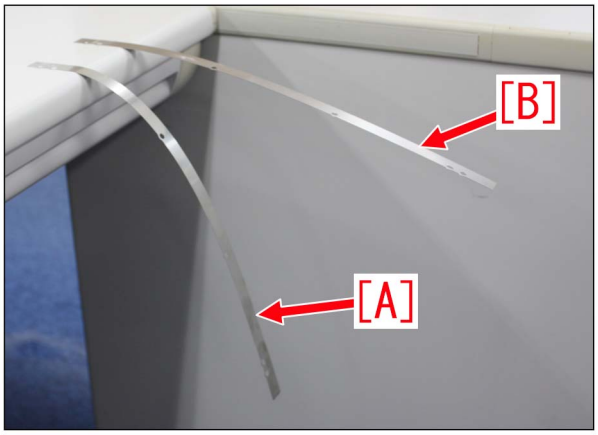


- When installing a left blade and a blade adjuster plate in step 3), make sure that a red marked line on the blade adjuster plate [a] align to the red marked line on the left blade [b]. Check and confirm the left/right sides of the blade adjuster plates are correct and fit them on.



12) After all the parts are set to their positions, turn ON the main power SW/
13) Execute Exe Sec Trns Cln Brsh Roll ini inst mode in service mode: Service Mode > COPIER > FUNCTION > INSTALL >INS-2TCL
14) Conduct blank printing in duplex mode for about 10pcs.
15) Check and confirm that the output media is clean.
15-a) If the media is clean, all works are done.
15-b) If any stain is seen, prepare the following parts and proceed to step 16) as needed.
- FC7-9749-000:blade adjuster plate(2) (0.1mm)
- FC7-9750-000:blade adjuster plate(3) (0.3mm)

[Reference] Figure of the blade adjuster plate (2)/(3) are the same, so be sure not to get confused with them and install them correctly. How to distinguish the plates is shown below. When holding a plate, the 0.1mm blade adjuster plate (2) shall droop down [A], whereas the 0.3mm blade adjuster plate (3) does not [B].



16) Remove the belt cleaner assembly of the secondary transfer assembly once more, remove the edge seal bases (rear/front) and fur covers (lower/upper). Refer to step 1) and 2).

17) Refer to step 3) and remove the right and left blades, and then adjust the thickness of each blade adjuster plates, 0.1mm thinner.

Example 1: In case there are 2pcs of 0.1mm spacers, remove one to make it 0.1mm thick.
Example 2: In case there is 1pc of 0.3mm spacer, remove this and attach 2pcs of 0.1mm spacers instead.

18) Assemble the parts by reversing the procedures from step 3), and then conduct steps 12) to 15) once more.

Service parts

No.		Part Number	Description	Q'ty	Fig. No.
1	Old				
	New	FL0-5502-000	SIDE PLATE, CLEANER FRONT	0 -> 1	335

Faulty Feeding

Dog-eared corner of the leading edge of paper due to the curl

[Symptom]

Dog-eared corner of the leading edge of paper due to the curl may occur when 2-sided printing is performed with media having high moisture.

[Cause]

Depending on the type of media, downward curl is increased at post-fixing of the 1st side, and the media will have upward curl when the 2nd side is fixed. Therefore the leading edge gets caught on the fixing upper cover (plate) and that leads to the above-mentioned symptom.

[Service work]

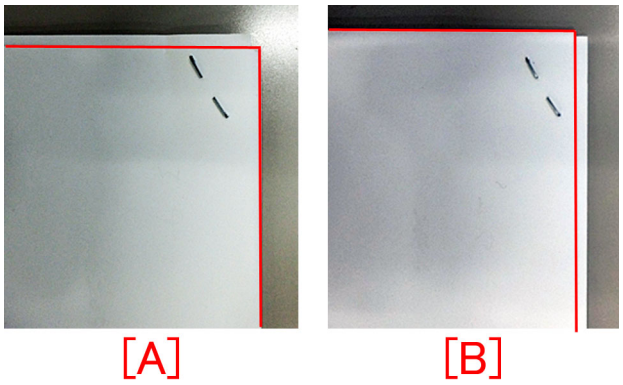
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.
3) Enter any name as the duplicated paper type and press "OK" button.
4) Select the paper type duplicated in the step 3) and press "Details/Edit".
5) Select " Adj Paper Convey. (2-Sided) " and press "Change".
6) Change the value of " Adj Paper Convey. (2-Sided) " to "1" and press "OK" button.
The range of setting is from "-3" to "+3" ("0" by default).
7) Print the image which had the issue and ensure that the symptom does not occur.
If no improvement is seen, proceed to the step 8).
8) Select "Adjust Gross/Fine Black" and press "Change".
[Attention]
In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

9) Set "Gross" to -2 and press "OK". The configurable range is from -4 to +4. (Default 0)
10) Print the image which had the issue and ensure that the symptom does not occur.
If the symptom does not improve, look into other causes.

Measures for staple alignment failure (Staple-Q1/Saddle-AF2/AJ2/AK2/AM2/AN2/Booklet-Q1/Finisher-AF1/AJ1/AK1/AM1/AN1)

[Symptom/Question]

When printing multiple stapled sets, the last sheet of each set may be misaligned by 2 mm or more and stapled with being misaligned.
There are reports from the field that alignment failure occurs in 6 to 9 sets when approx. 100 sets are stapled.
Misalignment of the last sheet occurs on the outer side of the set as shown in the photo [A] or on the inner side of the set as shown in the photo [B].
[Reference] The specification of staple misalignment is within 2 mm



[Cause]

The following are the three factors, which may cause staple misalignment. In addition, only the last sheet may be stapled with being misaligned, since there is no paper to be delivered after the last sheet, thus no lead-in operation and alignment operation for next feeding paper be performed.

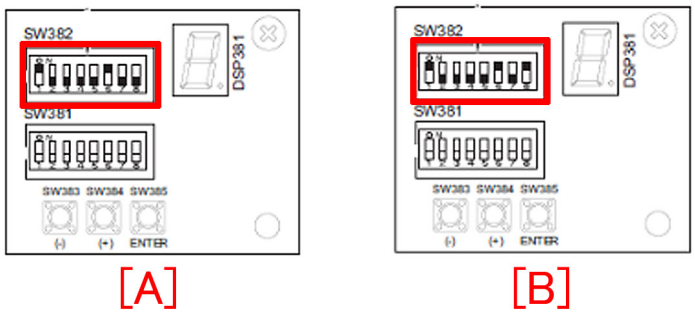
A). Insufficient gap between alignment plate and paper
When pulling the paper back to the process tray of finisher with paddle and feed belt, the paper does not feed smoothly to the trailing edge push-on plate of the process tray if the gap between the alignment plate and the paper is small. As a result, staple misalignment may occur.

B). Insufficient feeding force of paddle
C). Insufficient feeding force of feed belt
The paper may not be pulled back to the trailing edge push-on plate in some cases due to insufficient feeding force caused by the height of paddle and feed power. As a result, staple misalignment may occur.

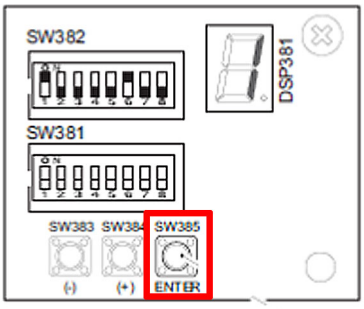
Mechanism of only the last sheet of paper being misaligned and stapled:
In addition to the cause mentioned above, below is information on why only the last sheet is misaligned.
When the sheets in middle (up to the second sheet to last sheet of each staple job) are misaligned, it will be aligned by being included in pull-back and alignment process of the next paper. Since there is no page available after the last paper, if the second-to-last sheet has misalignment, it does not go through pull-back and alignment process of next paper. Therefore, staple misalignment may occur only the last sheet.

[Remedy/Answer]

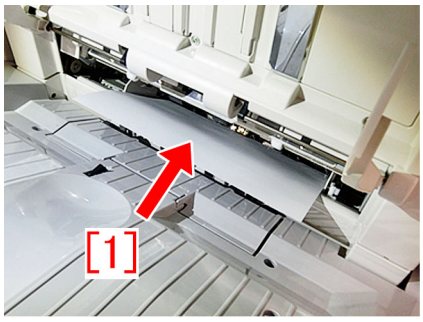
Follow the steps below and perform the service work in the field.
A). Adjusting Alignment Plate Position
The purpose of alignment plate position adjustment is to set the alignment plate in correct position because the paper does not feed smoothly to the trailing edge push-on plate if the gap between the alignment plate and the paper is small.
A-1) Turn ON the power of the host machine to be on standby.
A-2) Open the front cover and put the door switch tool into the door switch.
A-3) Remove the switch cover.
A-4) In the case of A-configuration size, set DIP SW382 on the switch PCB as shown in the figure [A], and in the case of L-configuration size, set it as shown in the figure [B].
[Reference] In the case of A-configuration size, switch on SW1 and SW6. In the case of L-configuration size, switch on SW1, SW6 and SW8.



A-5) Pressing push switch SW385 determines shifting amount of the front alignment plate.

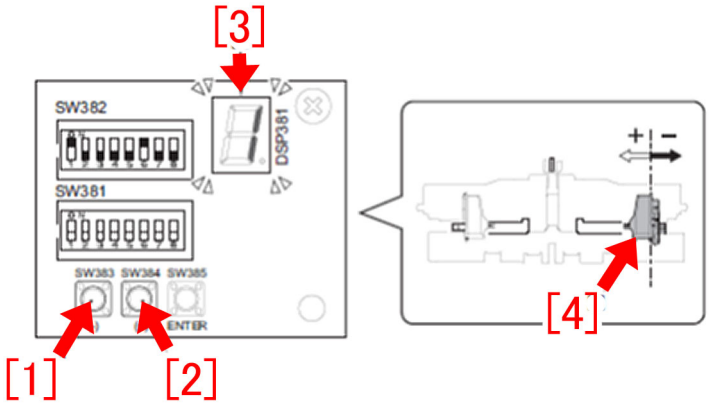


A-6) Place A4 paper [1] on the intermediate process tray. (Be sure to push in the paper to the rear side of the process tray)

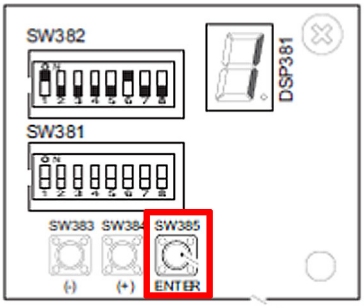


A-7) Pressing switch SW383 [1] or SW384 [2] determines adjustment level.
Adjust the position of the front alignment plate so that the A4 paper placed on the intermediate process tray does not warp when pushing the paper.
[Note]
- Perform adjustment by placing only 1 sheet of A4 paper.
- If pushing the paper too much with the front alignment plate, alignment will get worse.

[When the initial setting value is "0".]
By pressing SW383 once, the LED [3] indicates "-1" and the front alignment plate [4] shifts to the front by approx. 0.2mm. In the same way, by pressing SW384 once, the LED [3] indicates "+1" and the front alignment plate [4] shifts to the rear by approx. 0.2mm.
- Adjustment range: +20 to -20 (shifting amount per unit: 0.2mm)

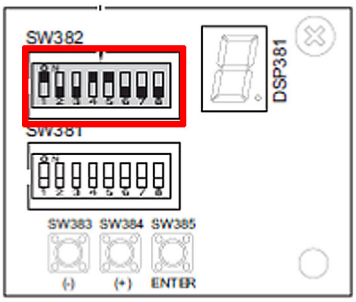


A-8) Pressing push switch SW385 determines shifting amount of the front alignment plate.

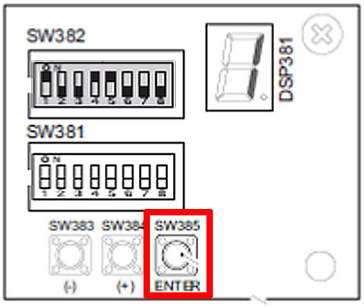


A-9) After the alignment plate position is adjusted to the position that is thought to be proper, be sure to check the result in the way shown in the attached video.
When the alignment plate is adjusted in proper position, the paper placed in the process tray would enter the process tray smoothly after being pulled towards the front once with a finger and let go.
When the alignment plate is adjusted in a position where the paper warps, the paper placed in the process tray would get stuck and not enter the process tray smoothly after being pulled towards the front once with a finger and let go.
A-10) After the alignment plate adjustment is complete, return all the bit switches in SW382 to OFF.
A-11) To check the state, print multiple stapled sets.
A-12) Check staple quality of the printed document. The specification of staple misalignment for finisher is within 2mm depending on installation environment of the machine and papers used. After having the alignment plate width adjusted, staple misalignment should improve to be within 2mm. If staple misalignment on all sets of the printed document is within 2mm, the work completes here.
If staple misalignment is more than 2mm, proceed to the step B). Adjusting Paddle Height.

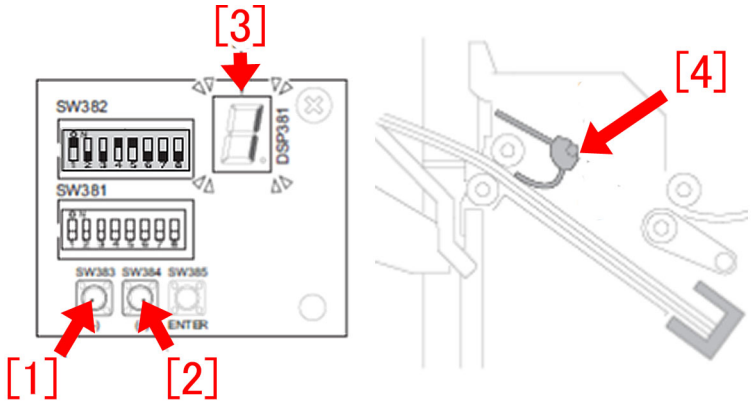
B). Adjusting Paddle Height
B-1) Set DIP SW382 on the switch PCB as shown in the figure below.
[Note] SW1, SW4 and SW5 are ON.



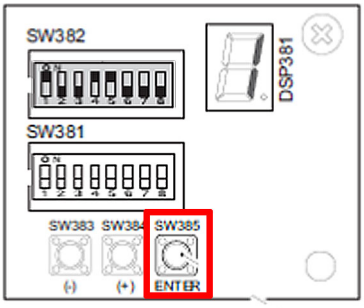
B-2) Press SW385 so that the height adjustment for the paddle is ready now.



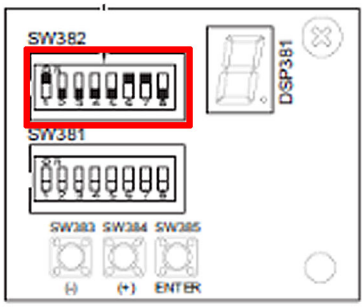
B-3) Press SW383[1] or SW384[2] a few times to have the LED [3] to indicate "-1".
[Reference] The default value is "0" and the paddle [4] height becomes lower when setting to "-1".



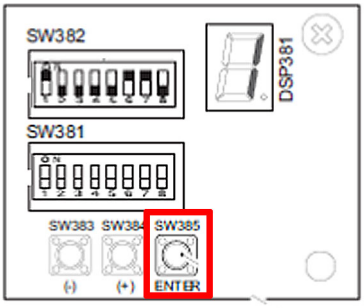
B-4) Press switch SW385 again to complete this adjustment. Next, proceed to C. Adjusting Position of Feed Belt.



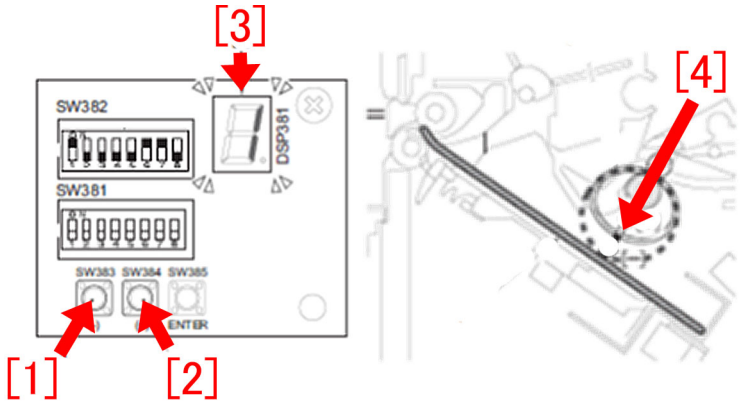
C. Adjusting Position of Feed Belt
C-1) Set DIP SW382 on the switch PCB as shown in the figure below.
[Note] SW1, SW6 and SW7 are ON.



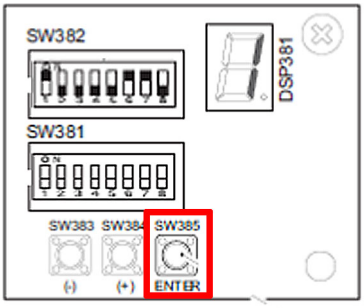
C-2) Press switch SW385 to start position adjustment of the feed belt.



C-3) Press SW383[1] or SW384[2] a few times to have the LED [3] to indicate "-2".
[Reference] The default value is "0". When setting it "-2", the distance between the belt [4] and the paper becomes smaller and feeding force increases.



C-4) Press switch SW385 again to complete the feed belt adjustment.



C-5) Return all the bit switches in SW382 to OFF. Next, proceed to Checking the adjustment.

Checking the adjustment
1) To check the state, print multiple stapled sets.
2) Check staple quality of the printed document. The specification of staple misalignment for finisher is within 2mm depending on installation environment of the machine and papers used. After having the alignment plate and the paddle height adjusted to "-1" and the feed belt position to "-2", staple misalignment should improve to be within 2mm. If staple misalignment on all sets of the printed document is within 2mm, the work completes here.
3) If staple misalignment is more than 2mm, refer to the step B. Adjusting Paddle Height and the step C. Adjusting Position of Feed Belt and change the paddle height adjustment value to "-2" and the feed belt position adjustment value to "-4"
[Caution] In the step B. Adjusting Paddle Height and the step C. Adjusting Position of Feed Belt, be sure to first change the paddle height adjustment value to "-1" and the feed belt position adjustment value to "-2". If no improvement is seen, then change the paddle height adjustment value to "-2" and the feed belt position adjustment value to "-4". When changing the paddle height adjustment value to "-2" and the feed belt position adjustment value to "-4" from the beginning, the feeding force may become too strong causing the paper to hit the trailing edge push-on plate and bounces back. This may result in misalignment. It is difficult to distinct misalignment caused by the paper not reaching the trailing edge push-on plate from the one caused by the paper bouncing back because both types of misalignment looks the same in stapled sets. For this reason, the feeding force is set and adjusted in steps.
4) Print multiple stapled sets again.

5) Check staple quality of the printed document. The specification of staple misalignment for finisher is within 2mm depending on installation environment of the machine and papers used. After having the alignment plate and the paddle height adjusted to "-2" and the feed belt position to "-4", staple misalignment should improve to be within 2mm. If staple misalignment on all 100 sets of the printed document is within 2mm, the work completes here.
If staple misalignment is more than 2mm, check for other factors.

Malfunction

The shaft support of the secondary transfer outer belt unit is not moved due to that the shaft support is tilted when the releasing claw is pushed in

[Symptom]

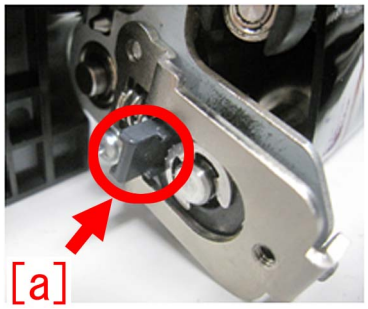
In releasing the tension of the belt by pushing the shaft support of the secondary transfer outer roller holder (front), the shaft support may not be moved.

[Cause]

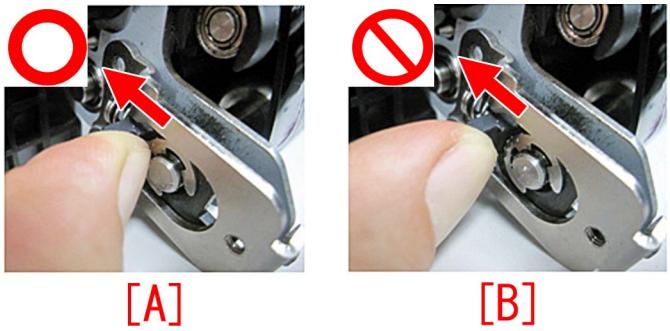
If the area of contact between the releasing claw of the shaft support and a finger is scanty to push the shaft support with the finger, the shaft support may be tilted and result in the above mentioned symptom.

[Service work]

To push the releasing claw [a] of the secondary transfer outer roller holder (front) shaft support, be sure to put a finger against the whole face of the releasing claw [a].



The figure A shows a state where the finger is put against the whole face of the releasing claw.
The figure B shows a state where the finger is put against only a part of the face of the releasing claw.
The arrows in the figures indicate the direction to push the releasing claw.



The secondary transfer outer belt and the outer belt tension roller holder breakage caused by applied load

[Symptom]

Each of the following symptoms may occur in the secondary transfer outer belt assembly of the machines earlier than the following countermeasure cut-in serial number in factory.

a) Secondary transfer outer belt breakage

Secondary transfer outer belt may be torn from the edge. [A]

b) The claw of secondary transfer outer belt tension roller holder breakage

When replacing the secondary transfer outer belt, the claw of secondary transfer outer belt tension roller holder may break [B].

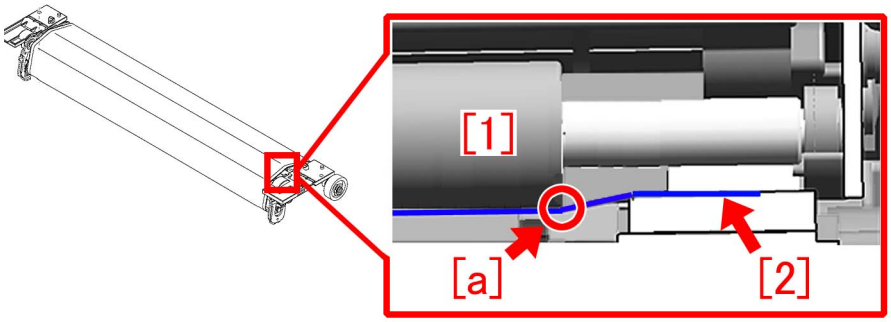
[Cause]

a) Secondary transfer outer belt breakage

a-1) The factor due to the vibration of the back-up roller

At the first time of the production start, the machine was transported with the secondary transfer outer belt [2] set. Therefore, the back-up roller [1] of the secondary transfer outer belt assembly repeatedly vibrated upward and downward and the force was focused on the bent portion [a] of the secondary transfer outer belt [2] where it came in contact with the back-up roller [1], resulting in the above symptom.

[Reference] The product manufactured on December 18, 2015 and later has been shipped without the secondary transfer outer belt set and packed in a different package.



a-2) The factor due to the wrong attachment of the side seal
If the side seal of the belt cleaner assembly is attached with unfixed edge, the base area (mold) of the side seal touches the secondary transfer outer belt and that applies a load. It may result in the secondary transfer outer belt breakage.
Photo [A] shows the state that the side seal (rear) is attached with unfixed edge [a], and photo [B] shows the state that the side seal is correctly attached [b].

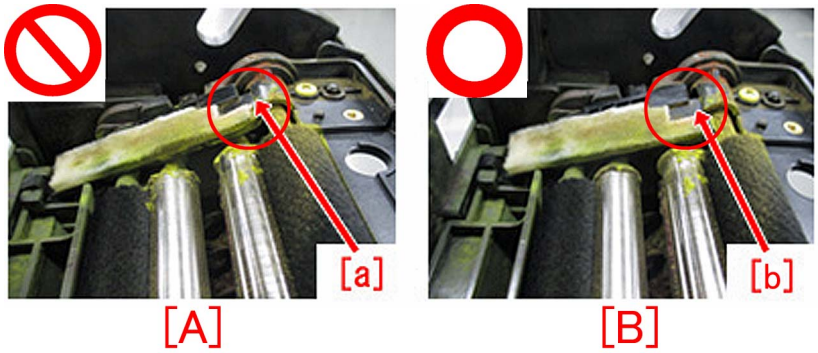
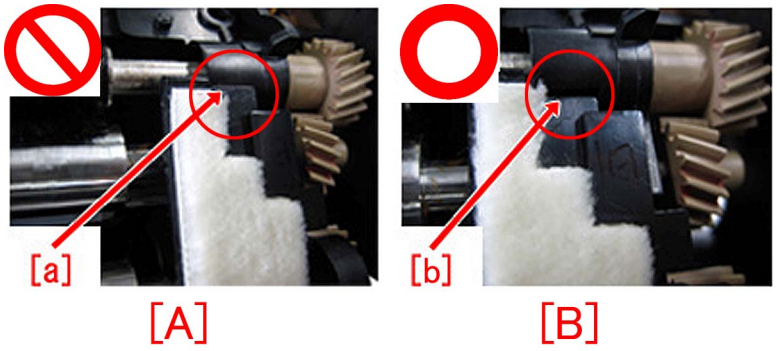
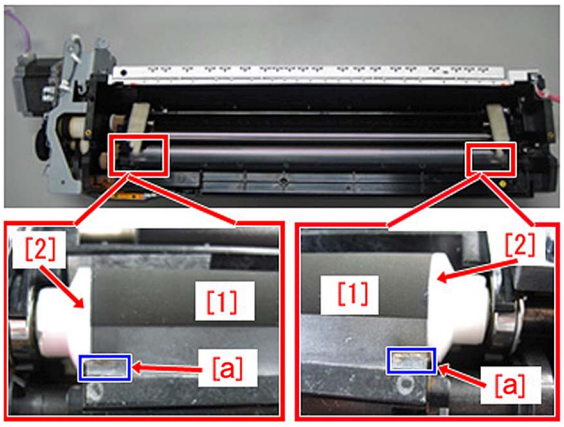


Photo [A] indicates the state that the side seal (front) is attached with unfixed edge [a], photo [B] indicates the state that the side seal is correctly attached [b].



a-3) The factor due to the wrong attachment position of belt edge seal for the belt cleaner lower cover.
The belt edge seal in the belt cleaner lower cover presses the secondary transfer outer belt assembly against the belt drive roller [1] and rollers [2] together at [a] positions. The size of outside diameters of belt drive roller and rollers are different, and the difference of diameter causes peripheral speed difference. It applies the load to the pressed secondary transfer outer belt and that may cause the breakage.

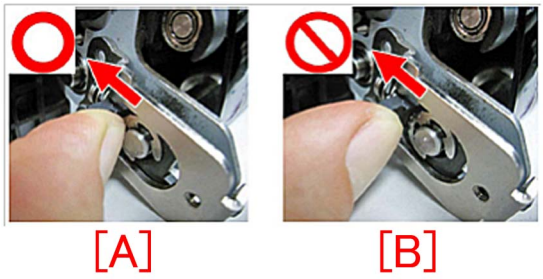


b) The claw of secondary transfer outer belt tension roller holder breakage

When pressing the claw of the tension roller during some work and if the claw is pressed with finger on its edge, a force larger than expected is applied to the curved area of the claw, resulting in the above symptom.

The figure [A] shows a correct state where the finger is put against the whole face of the claw.

The figure [B] shows an incorrect state where the finger is put against only a part of the edge of the claw.



[Service work]

Based on the issue mentioned below, follow the steps and replace the parts.

a) Secondary transfer outer belt breakage (2ND TRANSFER BELT ASSEMBLY)

Prepare the new type 2nd transfer belt assembly (FM1-A345-020). Refer to Service Manual and replace the assembly.

b) Secondary transfer outer belt breakage (BELT CLEANER ASSEMBLY)

Prepare new type side seal (front/rear) and the belt cleaner lower cover set as a new service part. Refer to Service Manual and replace them.

- FL0-5503-010 SEAL, SIDE, FRONT [1] 1pc.
- FL0-5504-010 SEAL, SIDE, REAR [1] 1pc.
- FL0-5505-000 COVER, BELT CLEANER, LOWER [3] 1pc.

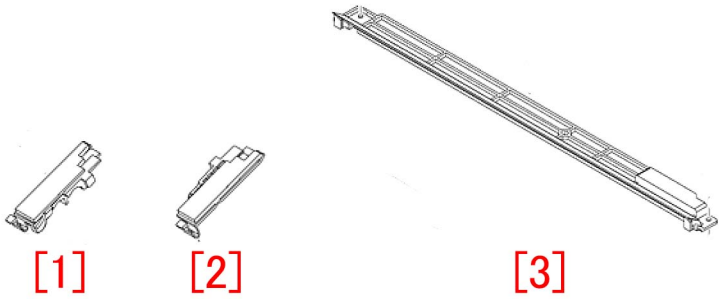
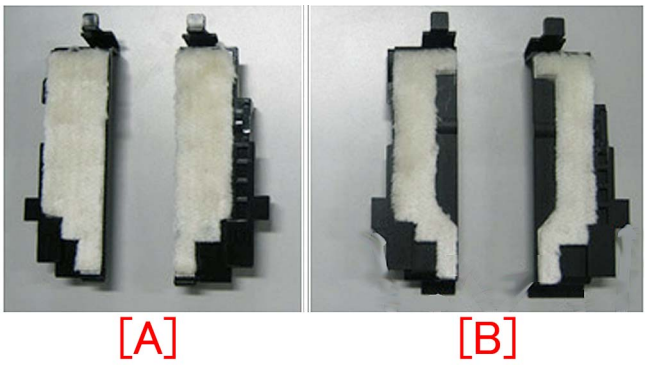


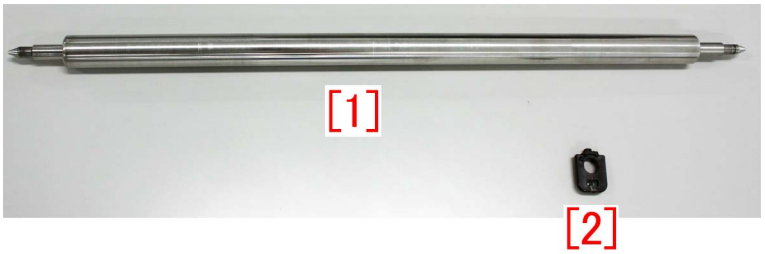
Photo [A] shows the old type side seal and [B] shows the new type one.



c) The claw of secondary transfer outer belt tension roller holder breakage

Same as a) above, replace with the new type 2nd transfer belt assembly (FM1-A345-020), or prepare the following new type service parts and replace the old ones by following the steps below.

- FE4-6069-010 Tension roller [1] 1pc.
- FE4-6074-010 Roller holder [2] 1pc.
- XD2-1100-502 E-ring 1pc.

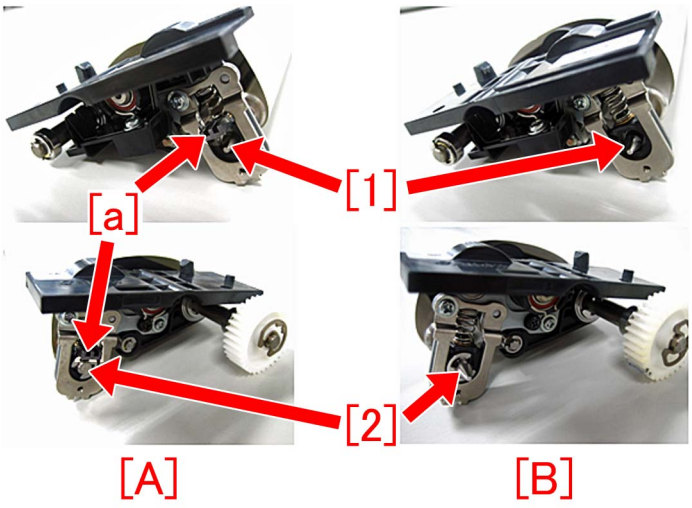


[Reference]
- Do not replace the rear roller holder in the field service as it is difficult to do the adjust work on the mount plate.
- For the tension roller and the front roller holder, the new and the old types can be used together, but it is recommended to replace the both parts to the new type.

The figure [A] is the old type outer roller holder and the figure [B] is the new type outer roller holder.

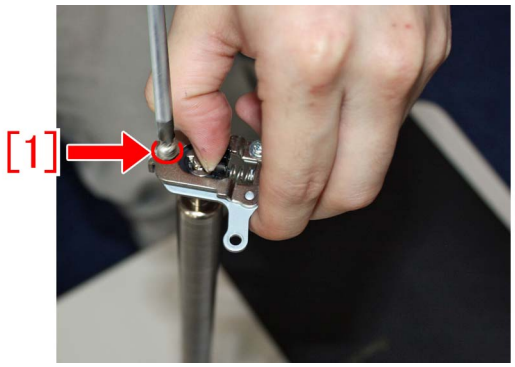
[Reference]

- The shape of the tension roller edges [1][2] is changed and the claw of the outer roller holder [a] is removed.
- The edge [1] is extended in length for 2.5mm. The edge [2] is extended in length for 7mm and the shape of the tip is changed.
- The design is changed so when replacing the secondary transfer outer belt the pressure is released by using the tension roller.

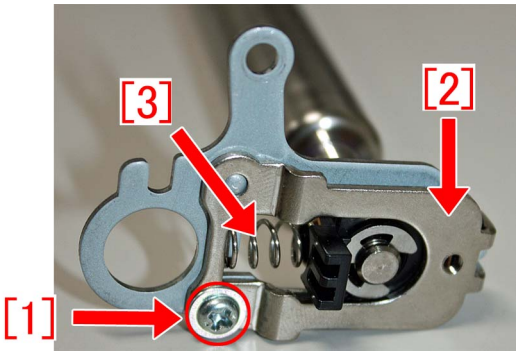


c-1) Refer to "Replacing the Secondary Transfer Outer Belt Tension Roller" in Service Manual and remove the tension roller.

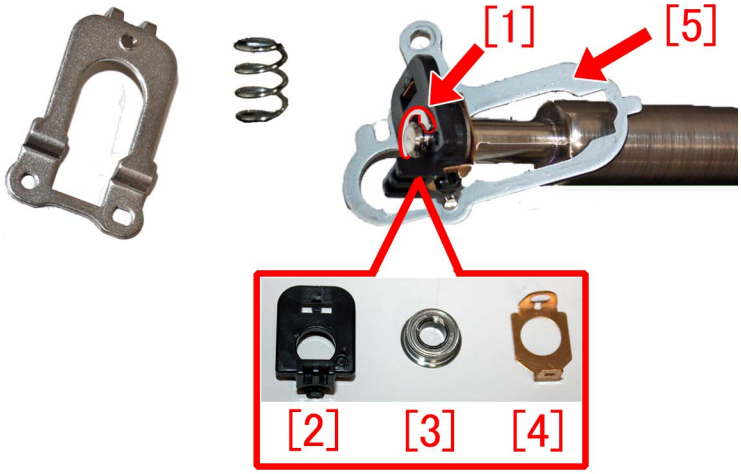
c-2) While pressing the roller holder to loosen the tension, remove the screw [1].



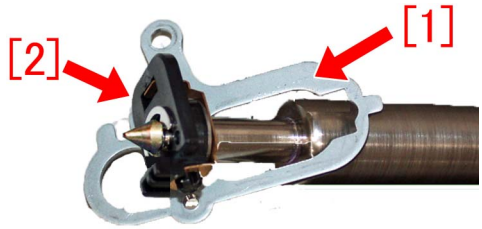
c-3) Remove the screw [1]. Then, remove the sheet metal [2] and the spring [3].



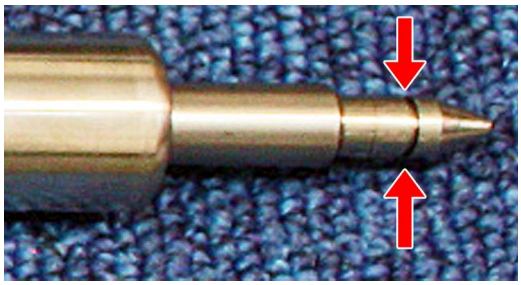
c-4) Remove the E-ring [1]. Then, remove the roller holder [2], the ball bearing [3], the stopper plate [4] and the sheet metal [5] from the shaft.



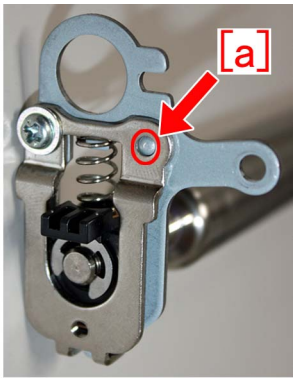
c-5) Attach the ball bearing and the stopper plate removed in the step c-4) to the new type roller holder (FE4-6074-010).
c-6) Insert the sheet metal [1] to the front shaft part of the new type tension roller (FE4-6069-010) and fix the roller holder [2] assembled in the step c-5) by the new type E-ring (XD2-1100-502).



[Reference]
- There is a groove on the front shaft part of the tension roller. Be sure to attach the roller holder to the shaft part with a groove.



- When attaching the sheet metal to the shaft part, be sure to have the protrusion [a] facing outward.



c-7) Assemble the parts in the reverse order from the step c-3).

[Reference] Combination of the new and the old type tension roller and roller holder are as below.

		Tension roller	
		Old type	New type
Roller holder	Old type	**A**	**B**
	New type	**C**	**D**

A : The combination of the old type parts. Continuously usable until the counter becomes 9000K (high durable parts), if there is no breakage of the second transfer outer belt or roller holder.
B : Push the shaft part of the tension roller to release tension.
C : It is difficult to release tension as the claw of the roller holder is short (2mm) in this case. Recommended to replace the tension roller to the new type.
D : The combination of the new type parts.

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-A345-010	2ND TRANSFER BELT ASSEMBLY	1->0	334
	New	FM1-A345-020	2ND TRANSFER BELT ASSEMBLY	0->1	
2	Old	FE4-6074-000	HOLDER, ROLLER	1->0	334
	New	FE4-6074-010	HOLDER, ROLLER	0->1	
3	Old	FE4-6069-000	ROLLER, TENSION	1->0	334
	New	FE4-6069-010	ROLLER, TENSION	0->1	
4	Old	XD2-1100-502	RING,E	1->1	
	New				
5	Old	FL0-5503-000	SEAL, SIDE, FRONT	1->0	335
	New	FL0-5503-010	SEAL, SIDE, FRONT	0->1	
6	Old	FL0-5504-000	SEAL, SIDE, REAR	1->0	335
	New	FL0-5504-010	SEAL, SIDE, REAR	0->1	
7	Old				335
	New	FL0-5505-000	COVER, BELT CLEANER, LOWER	0->1	
8	Old	FE4-6070-000 *1	ROLLER, BACK-UP	1->0	334
	New				

*1 The parts replacing work of a single part is difficult, so service parts assignment of the back-up roller is discontinued. If its replacement is required, prepare the new type secondary transfer belt assembly (FM1-A345-020) for the replacement.

[Countermeasure cut-in serial numbers in factory]

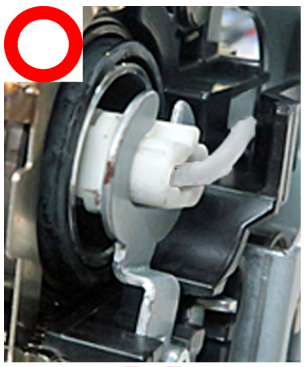
Model	Serial number	
	*a)	* b)
imagePRESS C10000VP Series ME US	WBC10408	WBC10459
imagePRESS C10000VP Series ME CN	WBD00521	WBD00522
imagePRESS C10000VP Series ME EUO	WEJ10447	WEJ10554

*a) Measure against the secondary transfer outer belt breakage
*b) Measure against the claw of secondary transfer outer belt tension roller holder breakage

Points to note when working on the surroundings of the halogen heater of fixing assembly

[Detail]

One side of the halogen heater of fixing assembly is secured with the sheet metal and the other side has a leaf spring structure. If the halogen heater is pushed from the fixing sheet metal side, the insulator on the end comes off from the securing section, and the cables of the halogen heater may come in contact with the sheet metal etc. Photo [A] shows the insulator that is properly secured and Photo [B] shows the insulator that is coming off.



[A]

[B]

If the operation continues with the insulator detached, the cables may be damaged, resulting in short-circuit.
Therefore, check that the insulator [1] of the halogen heater is secured in the correct position when visiting the user, replacing the halogen heater or when attaching/detaching the unit having the halogen heater.

[1]

[Reference] The voltage of the fixing assembly can be identified by the colors of the one cable side of the fixing external heat belt halogen heater.

Model	Voltage	Color of cable
imagePRESS C10000VP series	200/208	White
	400	Black
imagePRESS C7010 series	200/208	White
	240	Black
imagePRESS 1135 series	200/208	Red
	230	Blue

[Remedy/Answer]

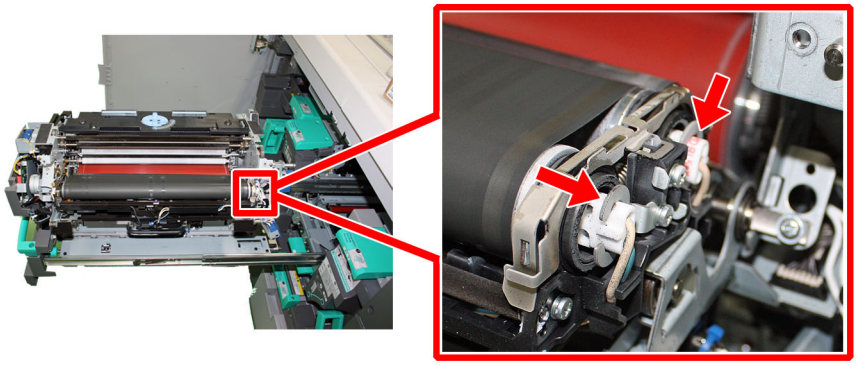
When visiting the user for periodical maintenance etc., check once that the insulator of the halogen heater is correctly secured. The following serial numbers requires this check when visiting the user.

Model	Serial number		
	US/J	EU O	CN
imagePRESS C10000VP series	WBE15128 or earlier	WBF15138 or earlier	WBG15004 or earlier
imagePRESS C7010 series	All the products		
imagePRESS 1135 series	All the products		

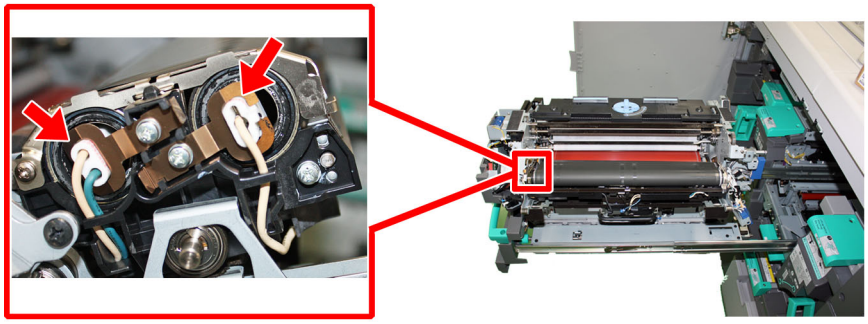
Check the securing state of both ends of the halogen heater of each product. The procedure begins with the work upon replacement of the halogen heater or upon installation of the unit having the halogen heater.
If the insulator of the halogen heater is detached, go to the step D) Checking damage of the halogen heater cables and replacing the halogen heater (All the models in common).
[Reference] All the photos of the procedures below show the correct securing state.

- imagePRESS C10000 Series

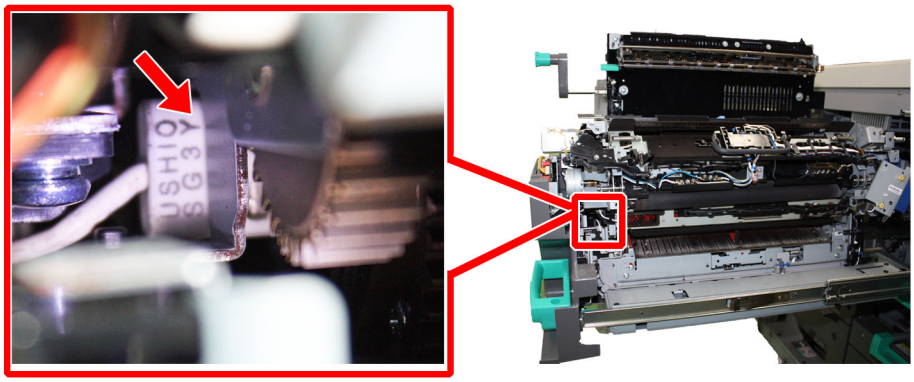
The structures of the primary fixing assembly and the secondary fixing assembly are different.
Perform the steps A) and B) for the primary fixing assembly, and perform the steps A), B) and C) for the secondary fixing assembly.
A) Checking the halogen heater of the external heat belt
A-1) Check that the heater mounting plate on the rear side and the insulator of the halogen heater end are correctly attached.



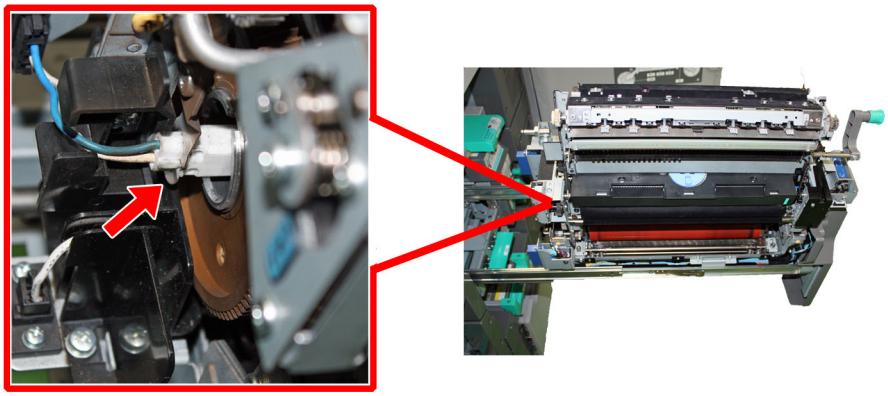
A-2) Check that the heater mounting spring on the front side and the insulator of the halogen heater end are correctly attached.



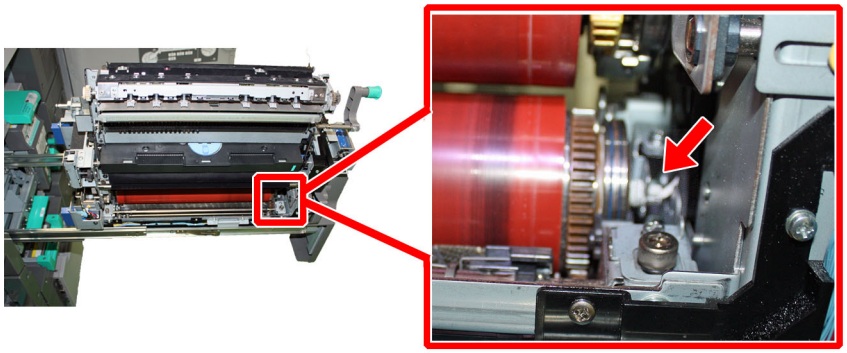
B) Checking the halogen heater of the fixing roller
B-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.



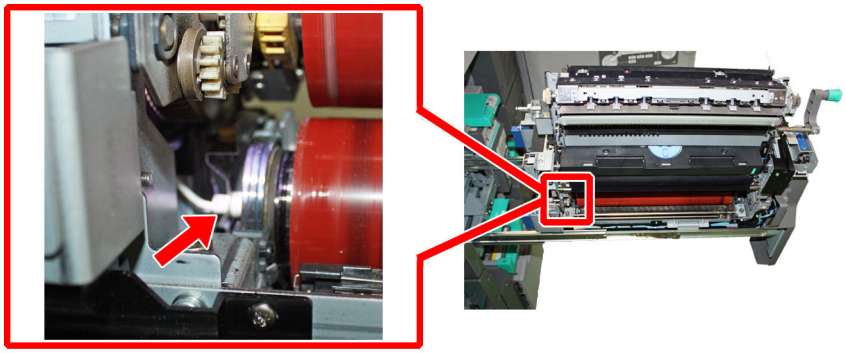
B-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.



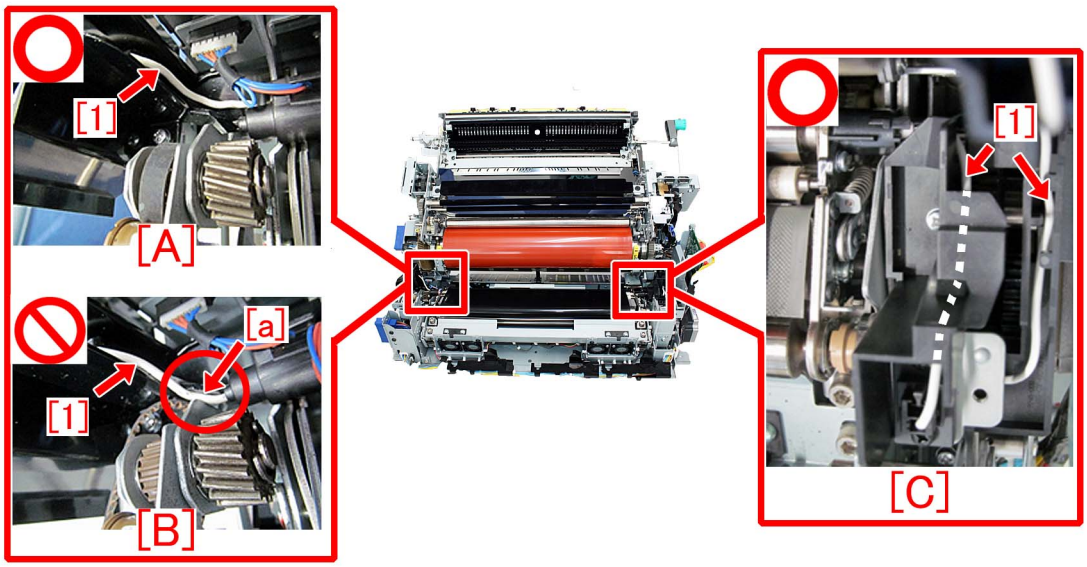
C) Checking the halogen heater of the pressure roller
C-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.



C-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.

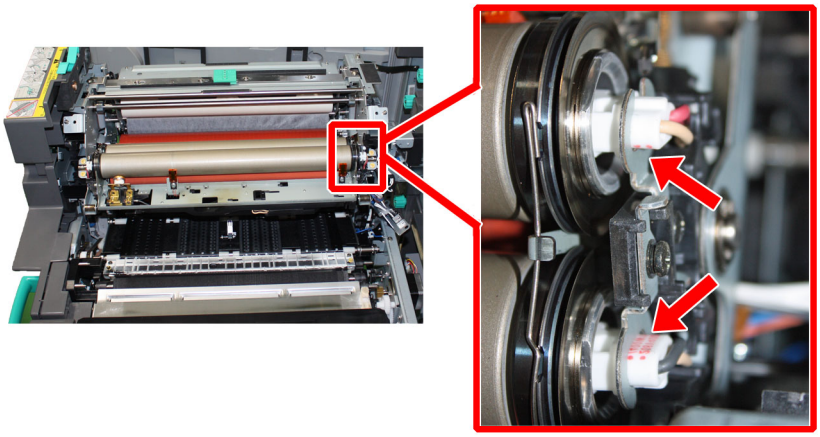


D) Checking the halogen heater cable of the fixing pressure belt assembly
D-1) Check if the halogen heater cable is appropriately wired.
The photo [A] shows a state where the halogen heater cable [1] on the rear side is adequately arranged along the guide.
The photo [B] shows a state where the halogen heater cable [1] on the rear side is pinched [a] between the guide and the separation drive mount. In this case, fix the wiring correctly.
The photo [C] shows a state where the halogen heater cable on the front side is properly arranged along the guide. The white dashed line indicates the correct route that the halogen heater cable inside of a guide plate is wired.

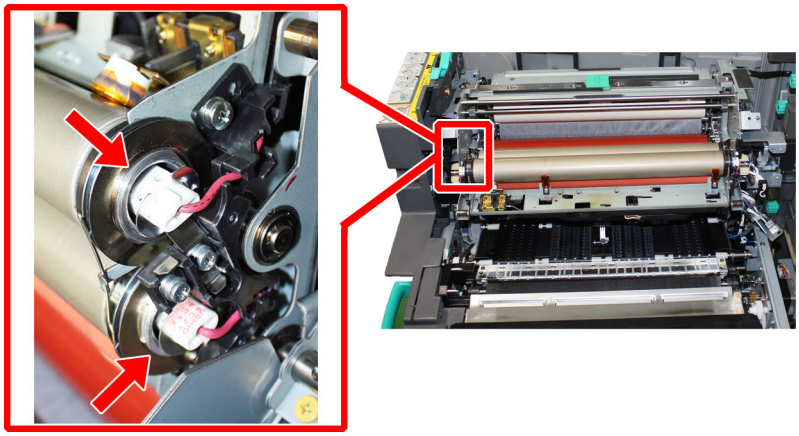


- imagePRESS C7010 Series

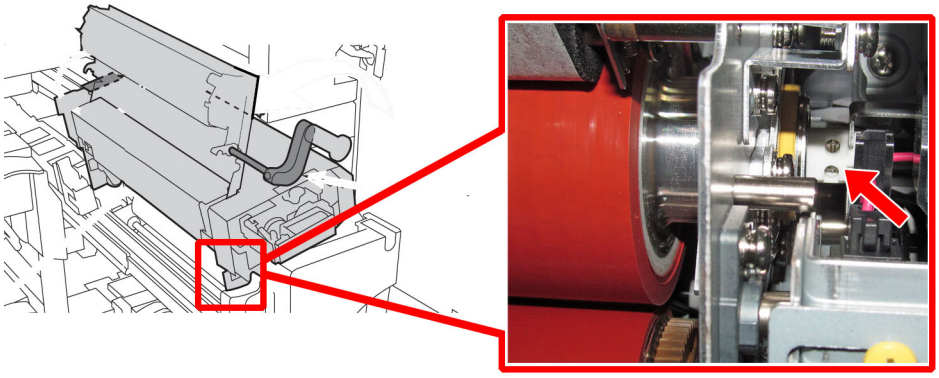
The structures of the primary fixing assembly and the secondary fixing assembly are different.
Perform the steps A) and B) for the primary fixing assembly, and perform the steps A), B) and C) for the secondary fixing assembly.
A) Checking the halogen heater of the external heat belt
A-1) Check that the heater mounting plate on the rear side and the insulator of the halogen heater end are correctly attached.



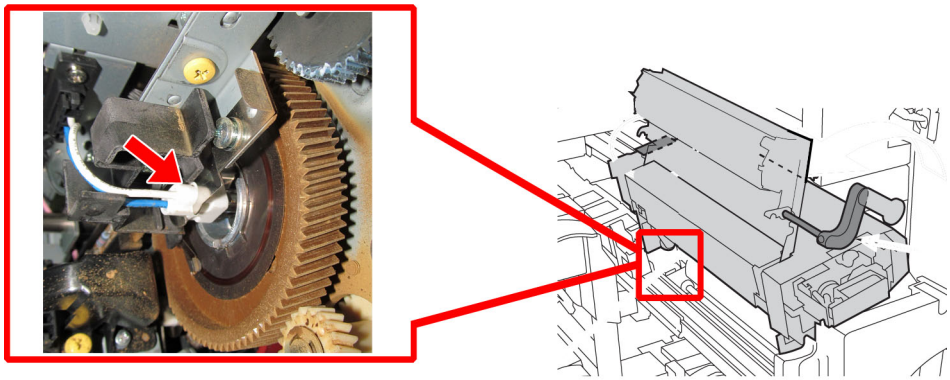
A-2) Check that the heater mounting spring on the front side and the insulator of the halogen heater end are correctly attached.



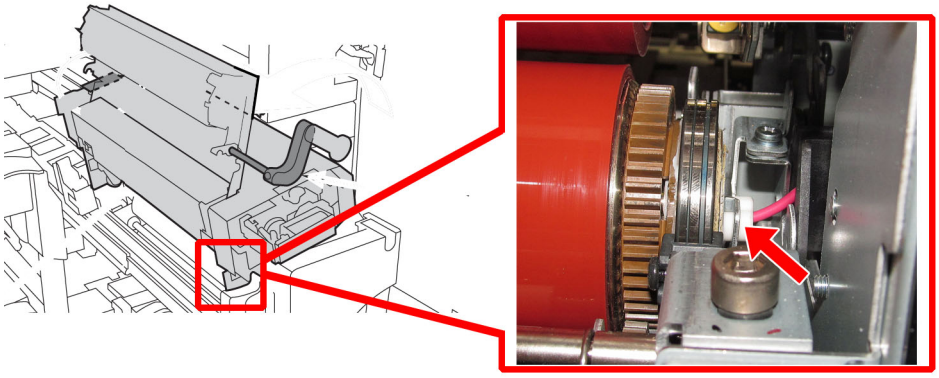
B) Checking the halogen heater of the fixing roller
B-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.



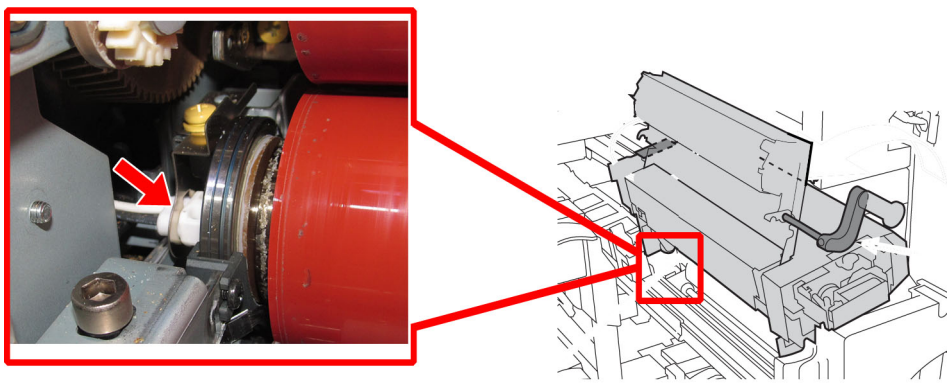
B-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.



C) Checking the halogen heater of the pressure roller
C-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.

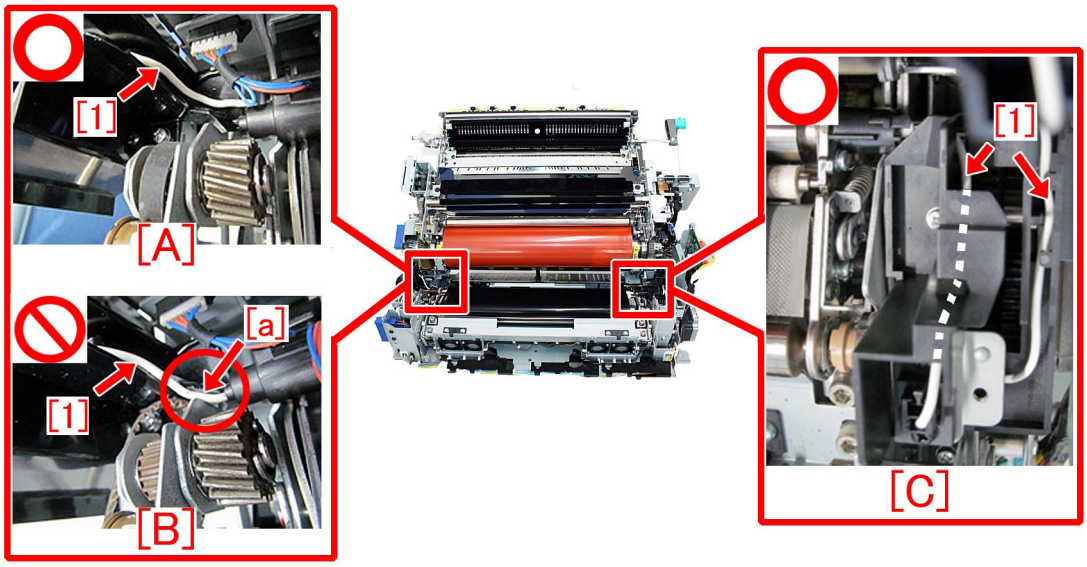


C-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.



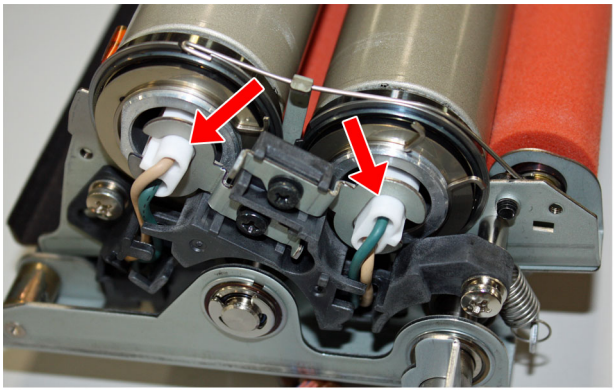
D) Checking the halogen heater cable of the fixing pressure belt assembly
D-1) Check if the halogen heater cable is appropriately wired.

The photo [A] shows a state where the halogen heater cable [1] on the rear side is adequately arranged along the guide.
The photo [B] shows a state where the halogen heater cable [1] on the rear side is pinched [a] between the guide and the separation drive mount. In this case, fix the wiring correctly.
The photo [C] shows a state where the halogen heater cable on the front side is properly arranged along the guide. The white dashed line indicates the correct route that the halogen heater cable inside of a guide plate is wired.

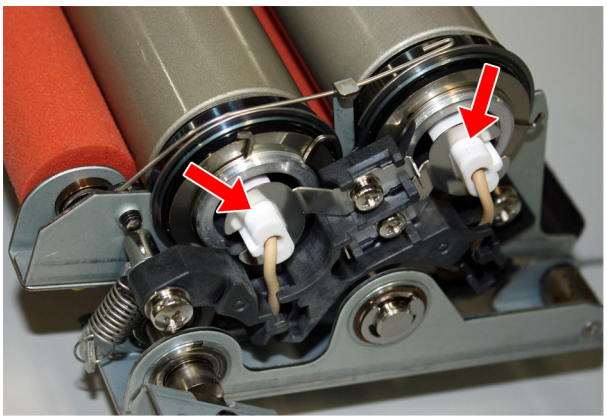


- imagePRESS 1135 Series

A) Checking the halogen heater of the external heat belt
Check the following just before attaching the fixing external heat assembly to the fixing assembly.
A-1) Check that the heater mounting plate on the rear side and the insulator of the halogen heater end are correctly attached.

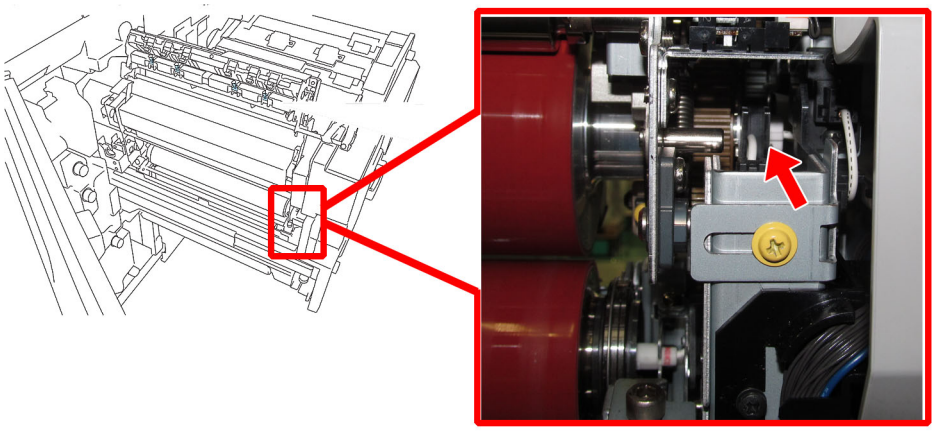


A-2) Check that the heater mounting spring on the front side and the insulator of the halogen heater end are correctly attached.

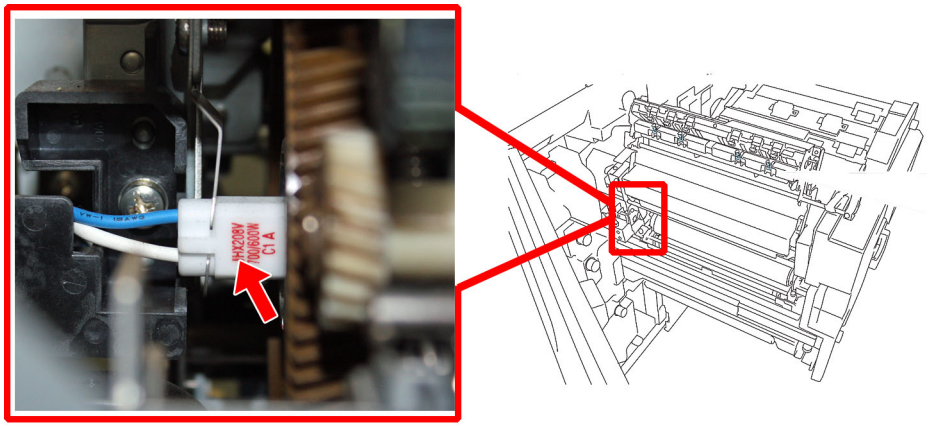


B) Checking the halogen heater of the fixing roller

B-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.

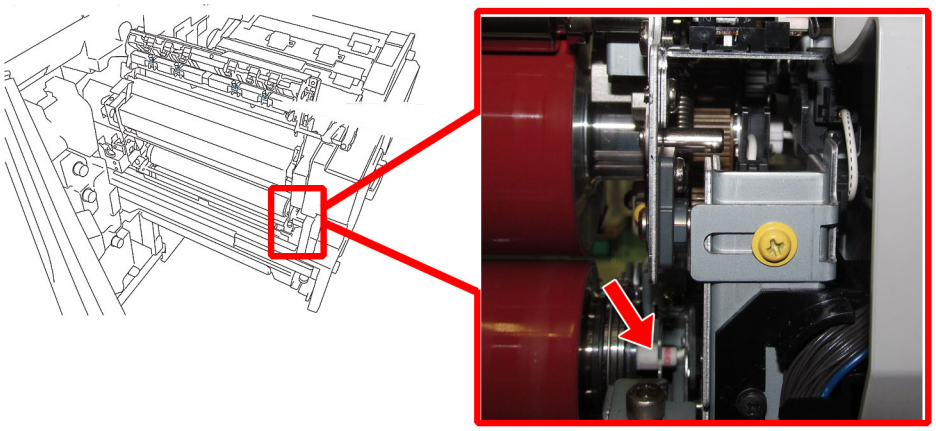


B-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.

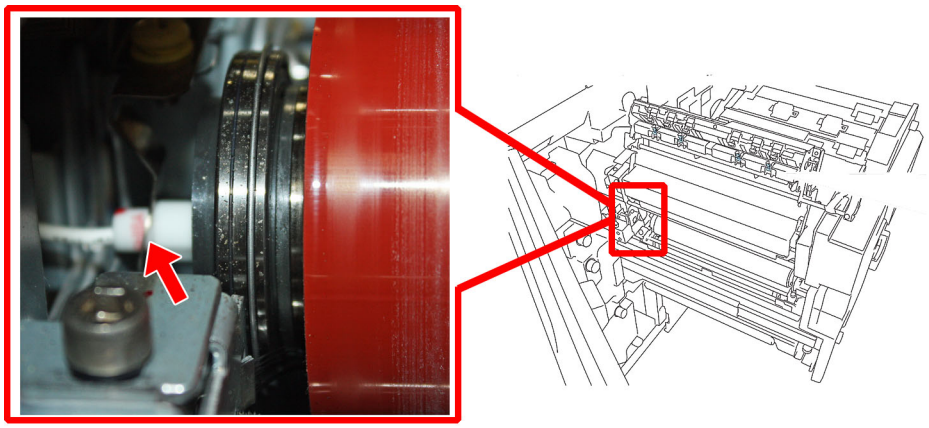


C) Checking the halogen heater of the pressure roller

C-1) Check that the heater mounting plate on the front side and the insulator of the halogen heater end are correctly attached.



C-2) Check that the heater mounting spring on the rear side and the insulator of the halogen heater end are correctly attached.

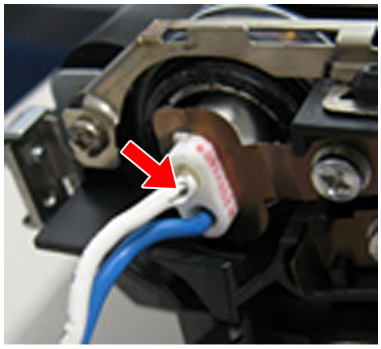


- All the models in common

Checking damage of the halogen heater cables and replacing the halogen heater

If the insulator of the halogen heater end is detached, secure the insulator in the correct position.

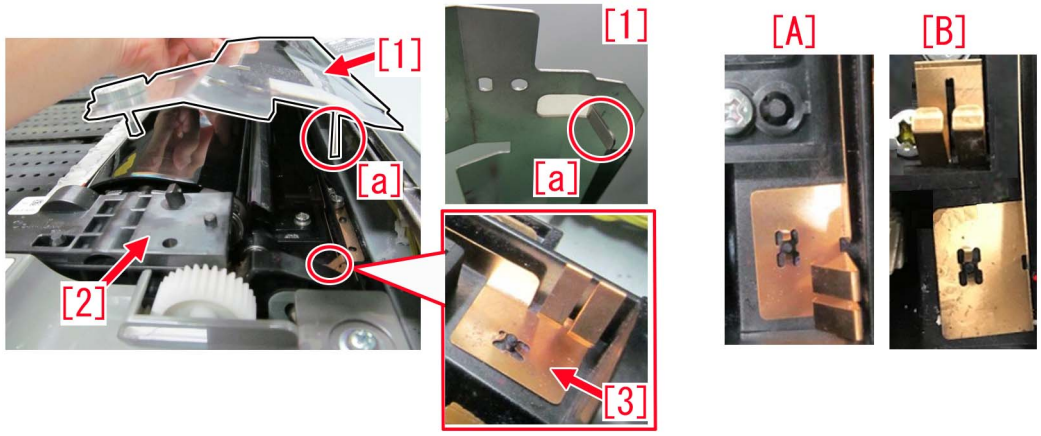
If the insulator of the halogen heater end of the working machine is detached, check whether the halogen heater cables are damaged. If they are damaged to the state where the conductor is visible as shown in the photo below, replace the halogen heater by referring to Service Manual.



Points to note when installing a lower entrance guide

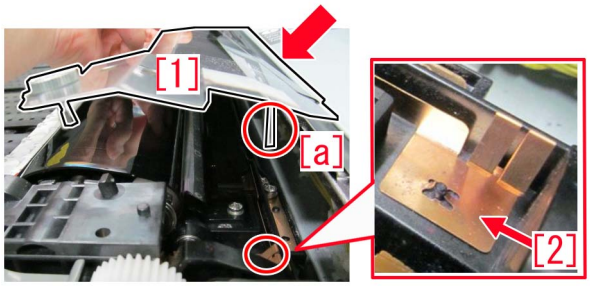
[Symptom/Question]

When installing a lower entrance guide [1] to the secondary transfer outer roller holder (front) [2], it could damage a varistor plate [3].
[A] is the normal state and [B] is showing the damaged varistor plate which was broken from the base.



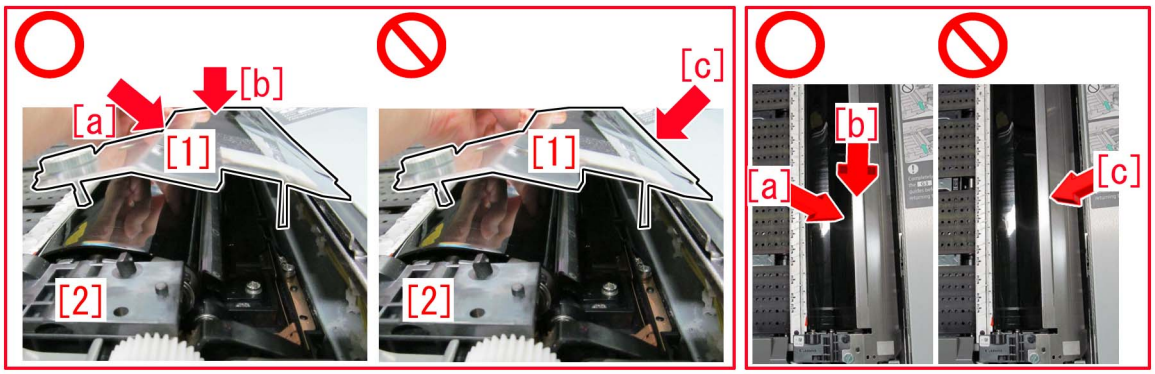
[Cause]

When installing a lower entrance guide [1] from the direction shown in arrow below, the bent part [a] of the lower entrance guide could hit the varistor plate [2], causing the above symptom.



[Remedy/Answer]

1) When installing a lower entrance guide [1] to the secondary transfer outer roller holder (front) [2], be careful with the direction to be installed.
[a] or [b] is the correct direction, while [c] is the wrong direction to be installed.



Jam (Main Unit)

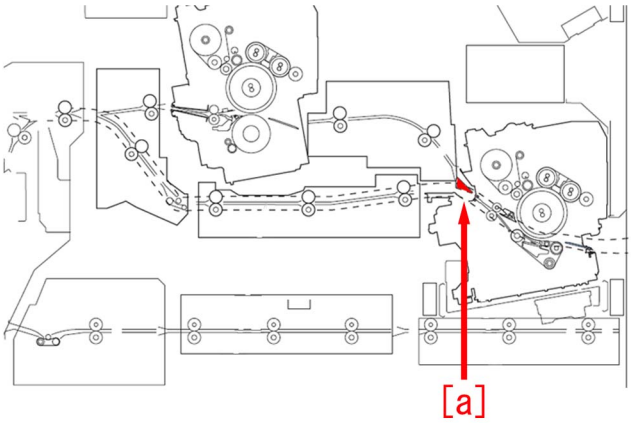
0128 jam code due to high density image output in a high temperature/humidity environment

[Symptom]

0128 jam may occur when an image of high density exceeding 200% is printed out on a sheet of paper that has been left in a high temperature/humidity environment.
0128: Bypass Sensor 1 Delay Jam (PS322)

[Cause]

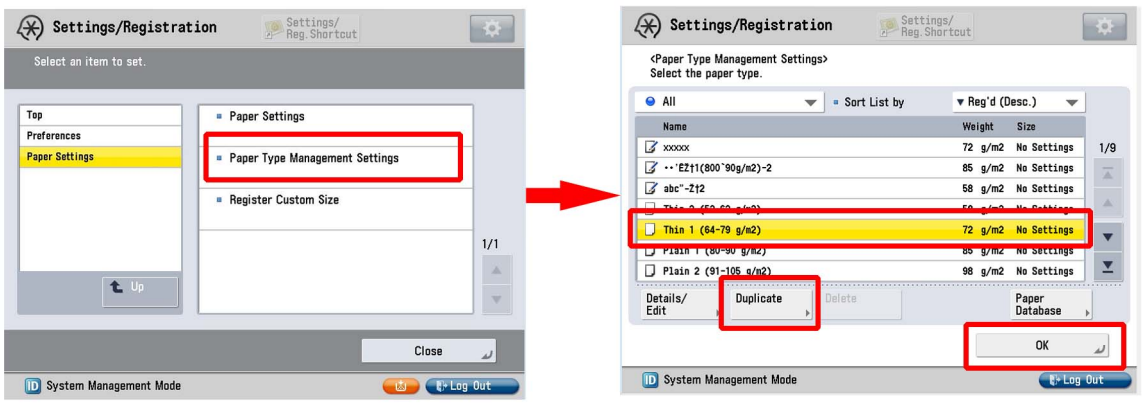
The output sheet of a high density image has a tendency to curl upward.
As the paper that has been left in a high temperature/humidity environment contains a plenty of moisture in it, the more the paper curls, the more its elasticity gets reduced and it would have a folded corner as a result.
If a sheet of paper that is curled upward has a folded corner at the flapper [a] that switches the single fixing path and the tandem fixing path, the above mentioned symptom may occur.



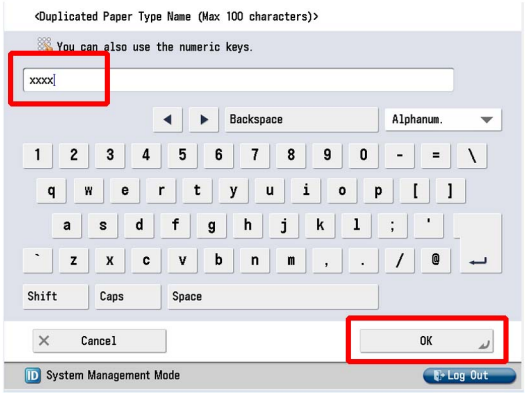
[Service work]

[Reference]
Improving a state of preservation of paper may be effective in resolving a trouble in some cases.
Explain to a customer that unused or remaining paper should be stored by being covered with wrapping paper in a place avoiding direct sunlight.

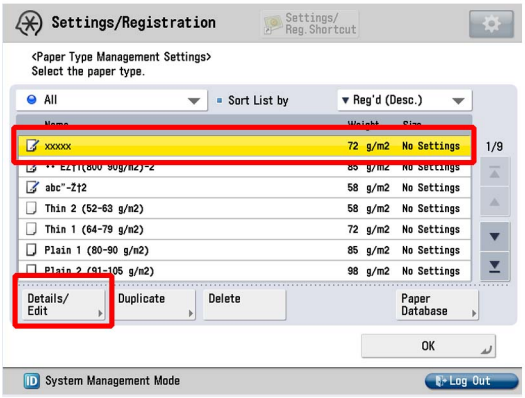
1) Have the customer log in from System Management Mode in user mode.
2) Go to Select Settings/Registration > Paper Settings > Paper Type Management Settings, select an appropriate paper type from among the list, press "Duplicate" button and then "OK" button.



3) Enter any name as the duplicated paper type and press "OK" button.

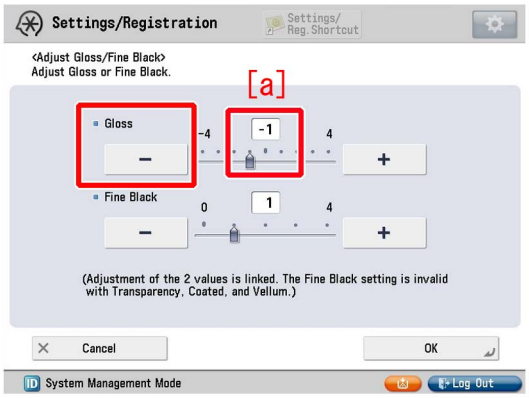


4) Select the paper type duplicated in the step 3) and press "Details/Edit".



5) Choose and perform between the below a) and b).
a) Reduce the fixing temperature to improve the symptom.
a-1) Select "Adjust Gross/Fine Black" and press "Change".
[Reference] In case Adjust Gross/Fine Black will not be displayed on the control panel, change the setting value of Service Mode > Mode List > COPIER > Option > DSPLY-SW > IMGC-ADJ to "1". The value is "0" by default.

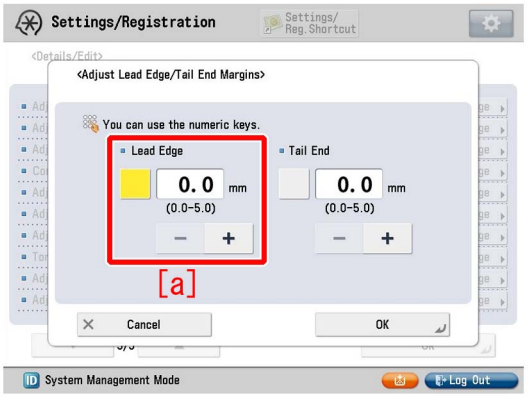
a-2) Press "-" button for gloss, Make sure the setting value [a] is set to "-1" and press "OK".
The setting range is from "-4" to "+4" ("0" by default).
Change of the setting value changes the fixing temperature.



[Caution] Changing the value may cause glossiness of image may slightly decrease.
a-3) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom improvement is inadequate, decrease the setting value of step a-3) down to "-3" by "1" value while observing the symptom.
a-4) If the symptom does not improve even after setting the parameter in the step a-2) to "-2", then perform the remedy b).
If the symptom does not improve even after performing the remedy a) and the remedy b), then check other causes.

b) Make the leading edge margin broader to improve the symptom.
b-1) Select "Adjust Lead/Tail Margins" and press "Change".

b-2) Press "+" button for Lead Edge, Make sure the setting value [a] is set to "2.0" and press "OK".
The setting range is from "0.0" to "5.0" ("0.0" by default).
Change of the setting value changes the leading edge.



[Caution] Changing this setting may generate trailing edge non-image area.
b-3) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom improvement is inadequate, decrease the setting value of step b-2) up to "5.0" by "1.0" value while observing the symptom.
b-4) If the symptom does not improve even after setting the parameter in the step b-2) to "5.0", perform the remedy a).
If the symptom does not improve even after performing the remedy a) and B), then check other causes.

Measure against 0300JAM(wrong detection of double feed)at feeding of Washi (JPN Paper)

[Symptom]

When feeding Washi(JPN Paper),0300JAM may occur.
0300JAM : Detected Double Feed

[Cause]

When Washi (JPN Paper) such as "Kiku (93 g/m2)" is fed, the output of the sensor may be reduced due to the principle of the Double Feed Sensor, resulting in the incorrect detection of double feed.

[Service work]

Turn OFF double feed detection. (Set the following service mode (Lv.2) to "1".)
Service Mode > COPIER > OPTION > FNC-SW > DUP-SNS

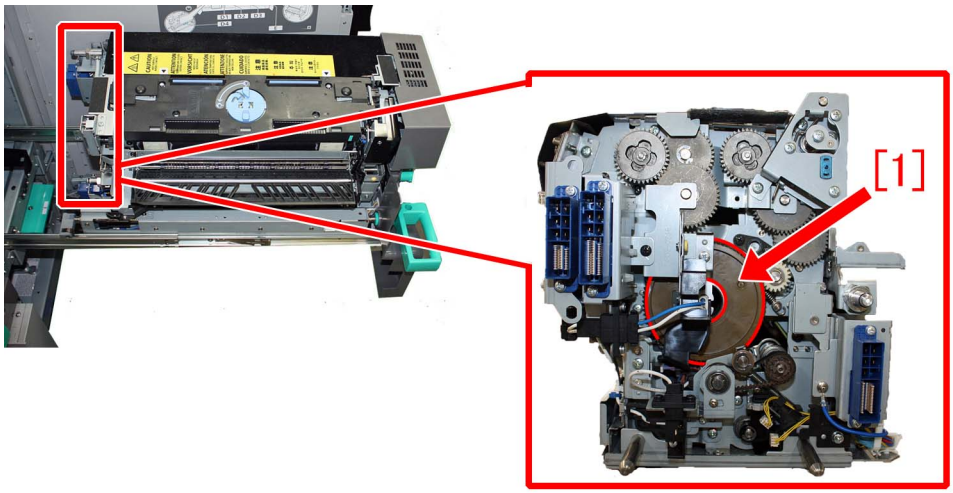
0114/0119 jam codes/abnormal sound due to the fixing assembly 86T gear with missing teeth

[Symptom]

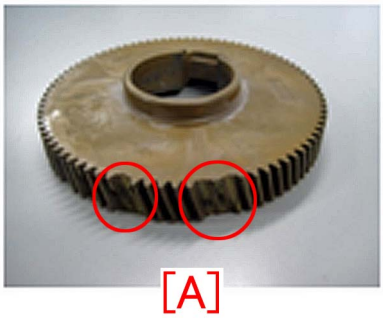
0114 jam, 0119 jam or abnormal sound from the fixing assembly may occur in the machine earlier than the following countermeasure cut-in serial numbers in factory.
- 0114 JAM : Primary Fixing Inner Delivery Sensor 1 (PS305) Delay jam
- 0119 JAM : Secondary Fixing Inner Delivery Sensor 1 (PS313) Delay jam

[Cause]

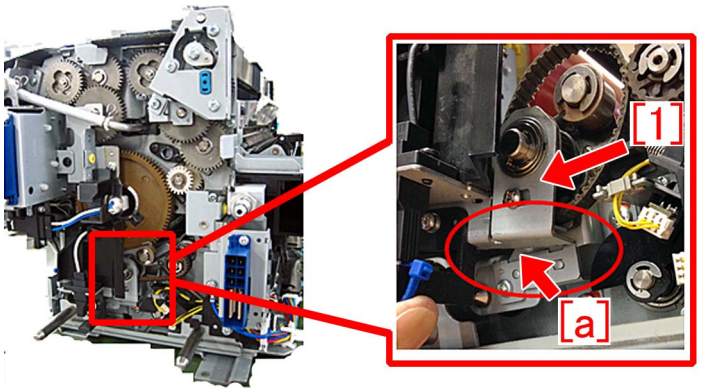
The 86T gear [1] on the rear side of fixing assembly has not enough strength due to short heat treating time when the gear is created. Therefore missing teeth occurs and that results in the foregoing symptom.



[Reference] Photo [A] shows the 86T with missing tooth.

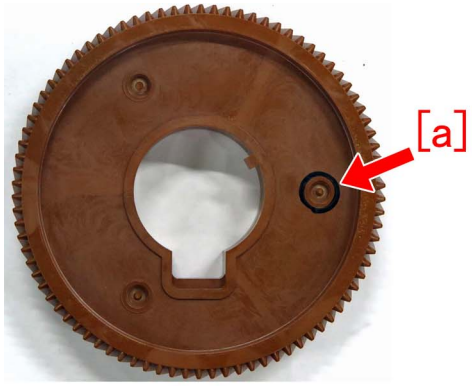


If debris from the teeth of the gear gets into meshing of the gear, a load is applied to and damages [a] the hemming of the separation drive mount 2 [1], and this may result in the above mentioned symptom.
Also, the separation drive mount 1 may break.
[Reference] The separation drive mount 2 [1] and the separation drive mount 1 are attached to the primary fixing assembly only. The separation drive mount 1 is the bond-locked sheet metal attached to the back of the separation drive mount 2.



[Service work]

When the above-mentioned symptom occurs, prepare new type 86T which is strengthened gear (FU6-0336- 020) [2] and then replace the gear referring "Replacing the primary fixing roller, bearings, and insulating bushes" or "Replacing the secondary fixing roller, bearings, and insulating bushes" for the service manual.
[Reference] The old type 86T gear (FU6-0336-010)[1] has a permanent pen marking [a] in the hollow of the surface. On the new type 86T gear (FU6-0336-020)[2], there are 4 hollows on the surface and there is no permanent pen marking.



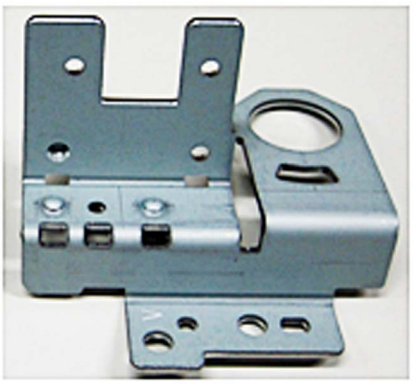
[1]

[2]

When the separation drive mount 2 is broken, prepare the model-specific separation drive mount 2[1] and an e-ring (XD2-1100-642).
When the separation drive mount 1 is broken, prepare the model-specific separation drive mount 1[2] and an e-ring (XD2-1100-642).

- imagePRESS C10000VP Series
  - SEPARATION DRIVE MOUNT 2 (FE3-7867-000) [1] 1pc
  - SEPARATION DRIVE MOUNT 1 (FE3-7866-000) [2] 1pc
  - E RING (XD2-1100-642) 1pc

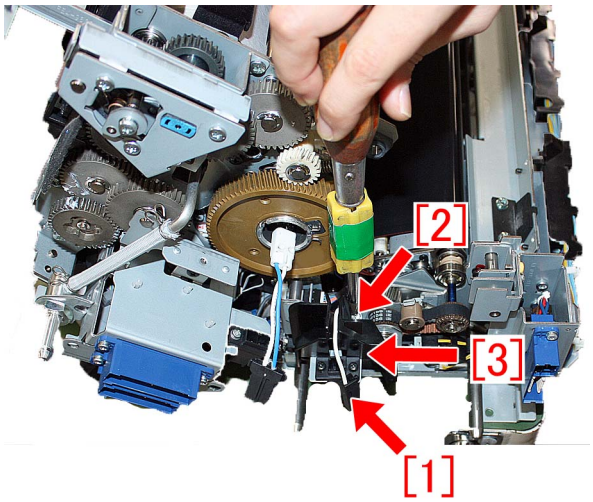
- imagePRESS C7000VP Series
  - SEPARATION DRIVE MOUNT 2 (FC6-0312-000) [1] 1pc
  - SEPARATION DRIVE MOUNT 1 (FC6-0315-000) [2] 1pc
  - E RING (XD2-1100-642) 1pc



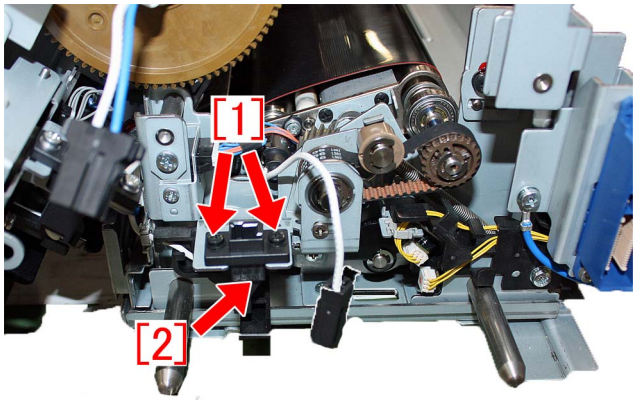
[1]

[2]

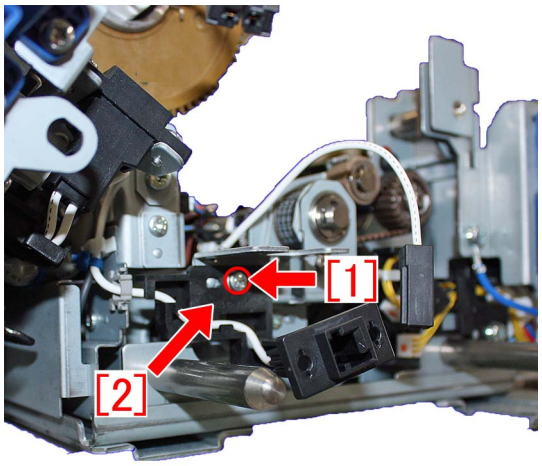
Below are the steps for replacing the separation drive mount 2 and the separation drive mount 1.
1) Remove the heater retainer plate referring to the "Replacing the Primary Fixing Roller, Bearings, and Insulating Bushes" in the service manual.
2) Disconnect the connector [1] and remove the 1 screw [2] to remove the cable guide [3].



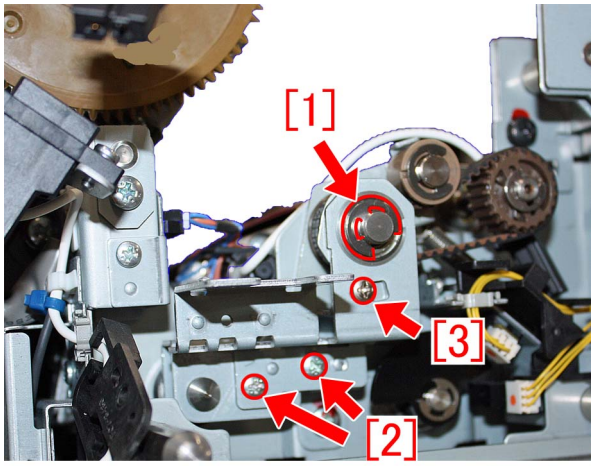
3) Remove the 2 screws [1] to remove the connector [2] from the separation drive mount 2.



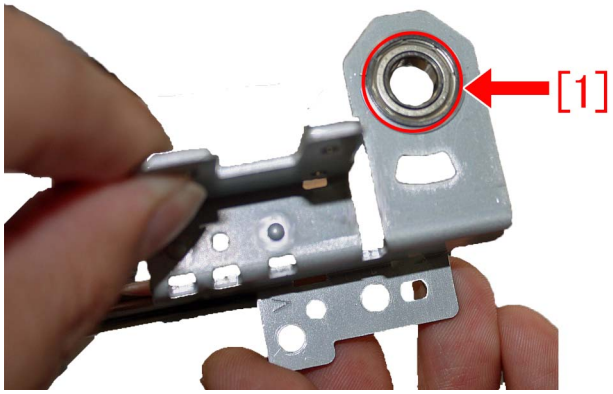
4) Remove the 1 screw [1] to remove the cable guide [2].



When replacing the separation drive mount 2 and an e-ring, proceed to the step 5).
When replacing the separation drive mount 2, the separation drive 1 and an e-ring, proceed to: A) Steps for replacing the separation drive mount 2 and the separation drive mount 1.
5) Remove the e-ring [1] and the screws [2][3] to remove the separation drive mount 2.
[Reference] Only a screw [3] is stepped screw. Do not mix up with other screws.

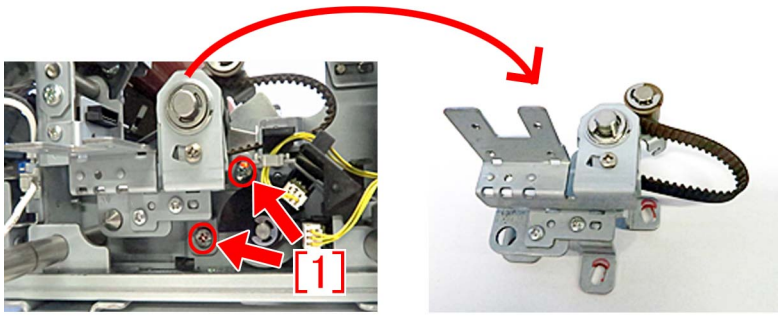


6) Replace the bearing [1] attached to the removed separation drive mount 2 with the new separation drive mount 2.
[Reference] Attach the bearing so that its flange comes to outer side.

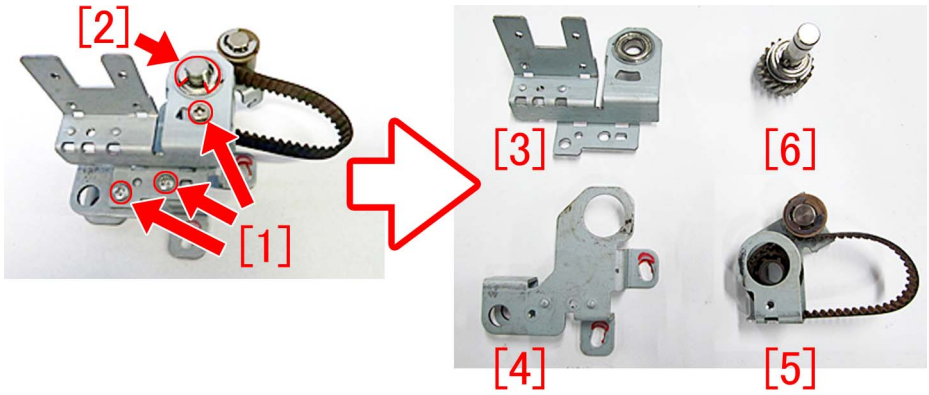


7) Reassemble the parts in reverse order from the step 5). To attach the e-ring, prepare and use a new e-ring (XD2-1100-642).

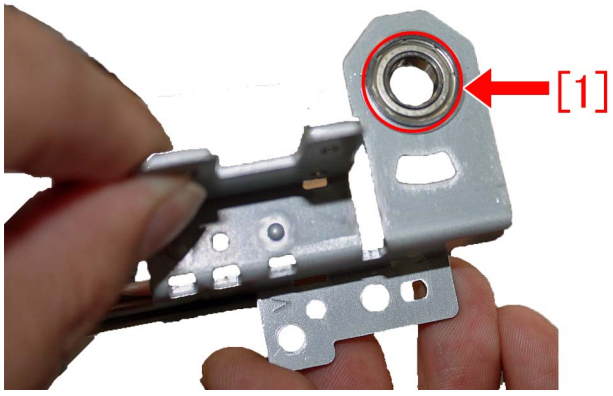
A) Steps for replacing the separation drive mount 2 and the separation drive mount 1.
A-1) Remove the 2 screws [1] and remove the entire units of the separation drive mount 2 and the separation drive mount 1.



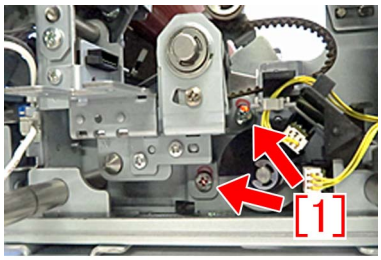
A-2) Remove the 3 screws [1] and the e-ring [2], and remove the separation drive mount 2 [3] from the separation drive mount 1 [4].
Then, remove the separation drive plate/gear/roller [5] and the separation drive shaft/bearing/19T gear [6] from the separation drive mount 1 [4].



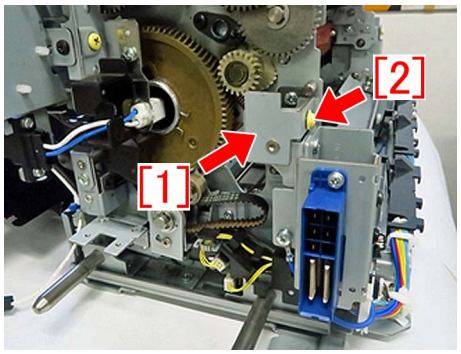
A-3) Replace the bearing [1] attached to the removed separation drive mount 2 with the new separation drive mount 2.
[Reference] Attach the bearing so that its flange comes to outer side.



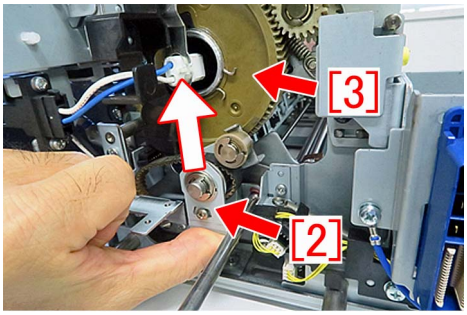
A-4) Using the new type separation drive mount 2 and the separation drive mount 1, assemble the parts in the reverse order of the step A-2). When attaching the e-ring, use the new one that is prepared.
A-5) Attach the separation drive mount 2 and the separation drive mount 1 to the fixing assembly. When doing so, bring the separation drive mount 2 and the separation drive mount 1 to the lowest position and temporarily secure them with the 2 screws.

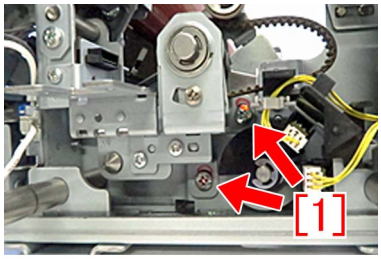


A-6) Close the upper fixing unit, insert the fixing positioning pin [1] and secure with the yellow screw [2].



A-7) Loosen the mounting screw [1] on the separation drive mount unit. Then, lift the separation drive mount unit [2] and have the 19T gear push up the fixing 86T gear [3] (including the fixing roller, the insulating bush and the bearing). While in this state, tighten the mounting screw [1] on the separation drive mount unit again and secure the unit.
[Reference] The 19T gear is located below the 86T gear.





A-8) Assemble the parts in the reverse order from the step A-4) to the step A-1).

[Service parts]

- Common service parts

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FU6-0336- 010	GEAR, 86T	1->0	814A 814B 854A 854B
	New	FU6-0336- 020	GEAR, 86T	0->1	
2	Old	XD2-1100-642	RING,E	1->1	
	New				

- imagePRESS C10000VP Series

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				816
	New	FE3-7866-000 *1	MOUNT, SEPARATION DRIVE, 1	0->1	
2	Old				816
	New	FE3-7867-000*1	MOUNT, SEPARATION DRIVE, 2	0->1	

*1 Newly set up as service part.

- imagePRESS C6000/ C7000VP/ C6010 /C7010VP /C6011 /C7011VP Series

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FC6-0315-000*2	MOUNT, SEPARATION DRIVE, 1	1->1	816
	New				
2	Old	FC6-0312-000*2	MOUNT, SEPARATION DRIVE, 2	1->1	816

No.		Part Number	Description	Q'ty	Fig.No.
2	New				816

*2 Previously set up as service part.

[Countermeasure cut-in serial numbers in factory]

Model	Serial number	
	a)	b)
imagePRESS C10000VP Series FS US/J	WBE15006	WBE10483
imagePRESS C10000VP Series FS EUO	WBF15012	WBF10530
imagePRESS C10000VP Series FS CN	WBG00540	WBG00522

* a) Change the old type gear to new type 86T gear (FU6-0336-020).
* b) On imagePRESS C10000VP series, the separation drive mount 2 is changed to the new type where the shape of the bended section is changed and has more strength.
- imagePRESS C6000/ C7000VP/ C6010 /C7010VP /C6011 /C6011VP /C7011VP Series : No implemented due to production discontinuance.

Measures when the display of jam 011B/0118/010F/021B/0218/020F/0A1B/0A18/0A0F cannot be canceled (POD Deck Lite-B1/C1/Paper Deck Unit-E1/F1)

[Symptom]

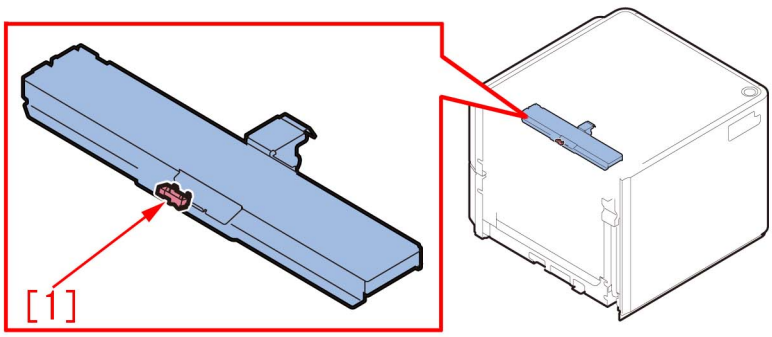
The display of jam may not be canceled even after removing the paper from jammed pickup unit. This may occur with the machines produced before the serial numbers mentioned in the list below.
POD DECK LITE-B1
- 011B : Deck pull-out sensor delay jam
- 021B : Deck pull-out sensor stationary jam
- 0A1B : Deck pull-out sensor power-on jam

POD DECK LITE-C1/ PAPER DECK UNIT-E1
- 0118 : Deck pull-out sensor delay jam
- 0218 : Deck pull-out sensor stationary jam
- 0A18 : Deck pull-out sensor power-on jam

PAPER DECK UNIT-F1
- 010F : Deck pull-out sensor delay jam
- 020F : Deck pull-out sensor stationary jam
- 0A0F: Deck pull-out sensor power-on jam

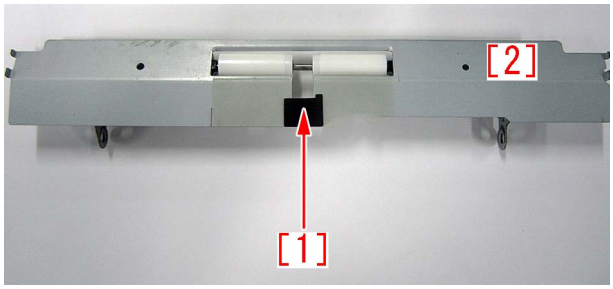
[Cause]

The deck pull-out sensor [1] of the pickup unit may incorrectly detect the reflected light of the adjacent deck pull-out roller feeder guide as paper, resulting in the above-mentioned symptom.

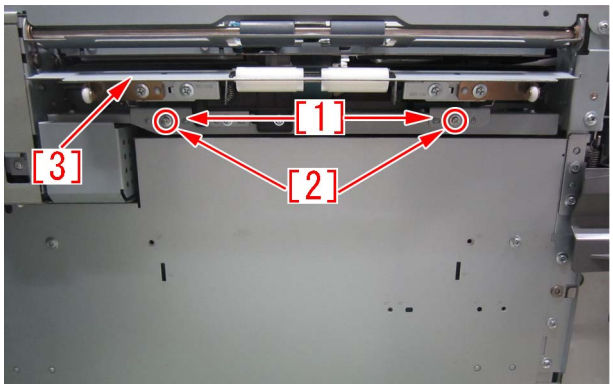


[Service work]

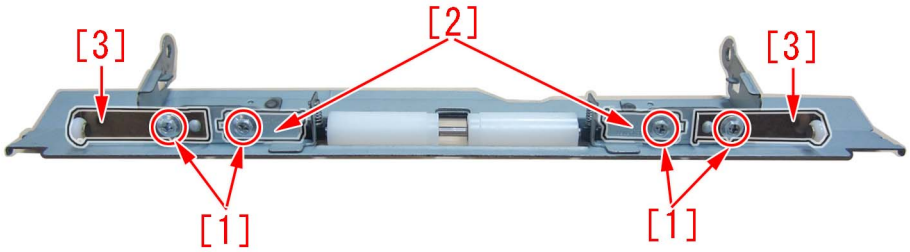
When the aforementioned symptom has occurred, prepare and replace with the lower feed guide [2] (FL0-2918-000) to which the black sheet [1] is affixed following the procedure below.



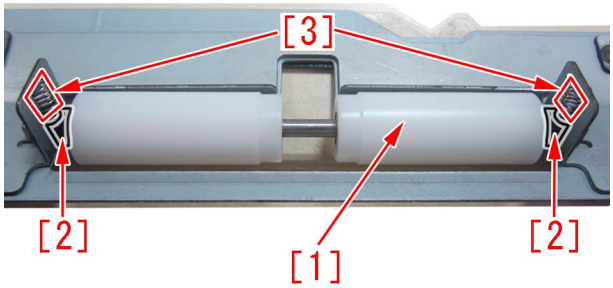
The step starts where the deck is removed from the main unit.
1) Referring to Service Manual, remove the upper left cover.
2) Remove the 2 screws [2] that secure the bracket [1] of the pickup unit from the left side of the deck, and then remove the deck pull-out roller feed guide [3]. When doing this, be careful not to drop any parts.



3) Remove the 4 screws [1], and then remove the 2 roller support plates [2] and the 2 brackets [3] from the deck pull-out roller feed guide.



4) Remove the roller [1], 2 bushings [2] and 2 compression springs [3] from the deck pull-out roller feed guide.



5) Replace the feed guide with the lower feed guide (FL0-2918-000).
6) Attach the pars by reversing the steps from 4) .

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				F40
	New	FL0-2918-000	FEED, LOWER	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial number
POD DECK LITE_B1 UL	UWD01058
POD DECK LITE_B1 EU/O	UWE02351
POD DECK LITE_B1 CN	UWF00049
POD DECK LITE_C1 US	SZK01717
POD DECK LITE_C1 EU/O	SZL01804
POD DECK LITE_C1 CN	SZM00508
PAPER DECK UNIT_E1 A4	SZB02606
PAPER DECK UNIT_E1 LTR	SZC04039
PAPER DECK UNIT_F1 LTR	WER03181

Model	Serial number
PAPER DECK UNIT_-F1 A4	WES05369

Measures against 012D jam occurrence

[Symptom/Question]

012D jam may occur with the machines earlier than the following countermeasure cut-in serial numbers in factory.
- 012D : Delivery sensor 3 delay jam.

[Cause]

The decurler drive shaft, the decurler drive shaft 1 or the swing shaft 1 being shaved in the delivery guide assembly causes the symptom. After some endurance time, the grease applied to the circumference of the shaft is depleted and the shaft is shaved, resulting in the above-mentioned symptom.

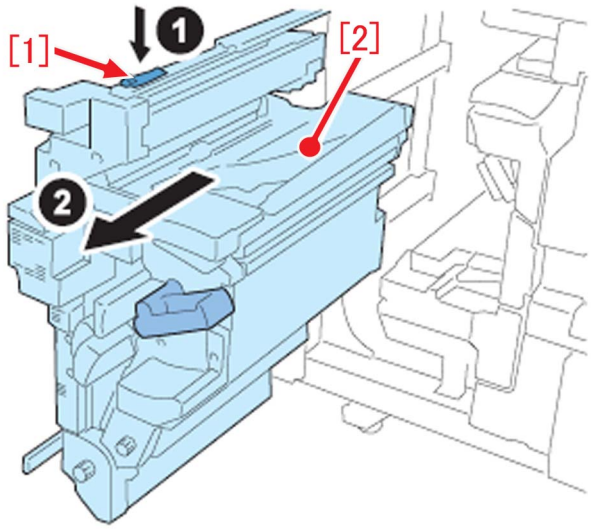
[Remedy/Answer]

When the above-mentioned symptom occurs, check the 3 shafts of part name listed below and identify the shaved shaft. Replace the shaved shaft with the new type, and apply super lube grease. When replacing the shaft, it is recommended to replace the ball bearings that are in contact with the shaved shaft, at the same time.

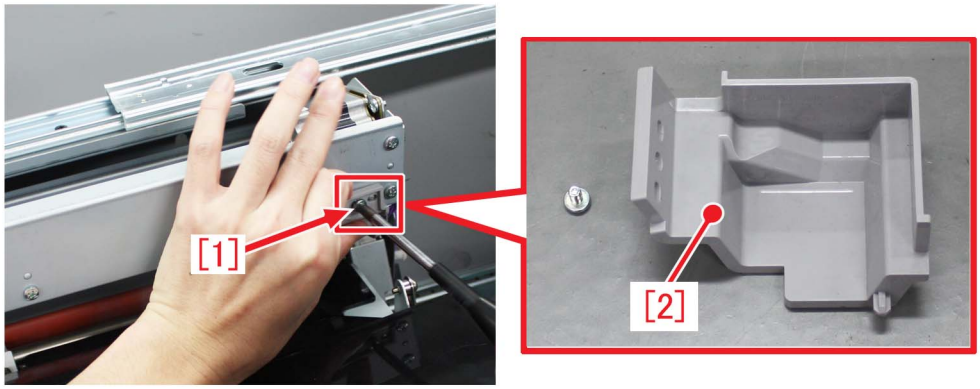
Unit name	Part name	New-type part number	Reference of replacing procedure
Delivery guide assembly, lower	Transmission shaft	FC6-2447-010	a) Step to replace the decurler drive shaft
	Transmission shaft 1	FC6-8472-010	b) Step to replace the decurler drive shaft 1
Delivery guide assembly, upper	Swing shaft 1	FC5-9920-010	c) Step to replace the swing shaft 1

[Reference]
-There is no need to replace the shafts in 3 locations at the same time. Replace only the shaved shaft with the new type.
-Do not reuse the E-ring removed in the procedure, and replace it with the new one.

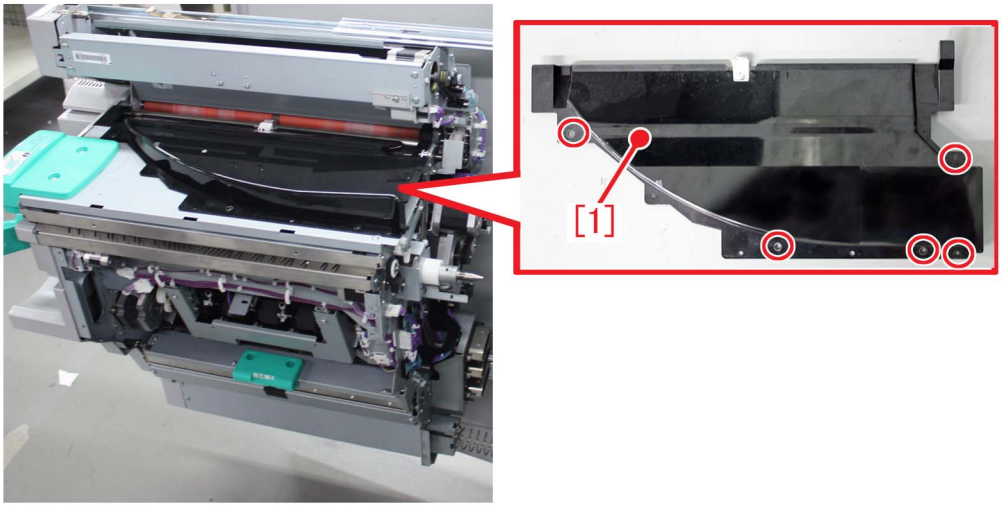
[Common step]
1) Referring to Service Manual, open the sub station front right cover and the sub station front left cover, release the lever (C-D3), and pull out the reverse/delivery unit.
2) Release the leaf spring [1] and pull out the reverse/delivery unit [2] until it stops.



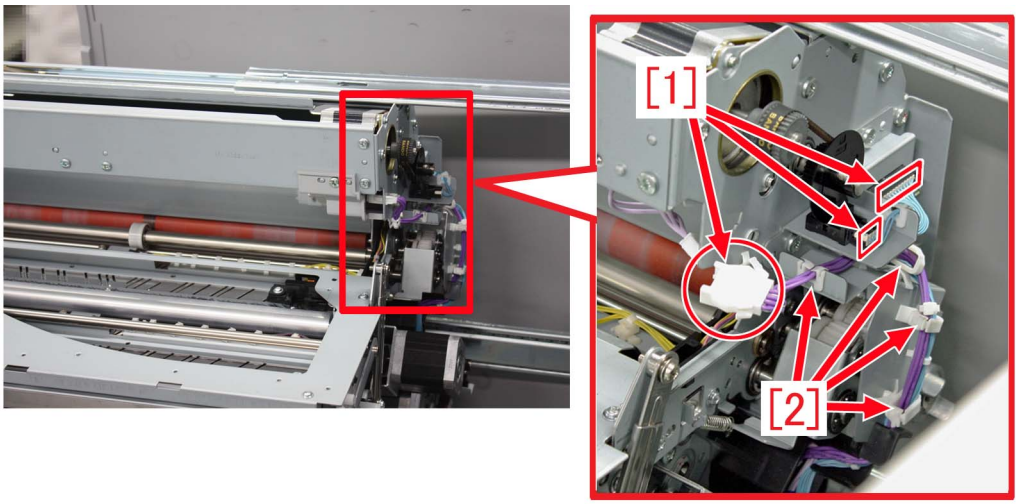
a) Step to replace the decurler drive shaft (FC6-2447-010)
a-1) Remove the 1 screw [1] and remove the motor cover [2].



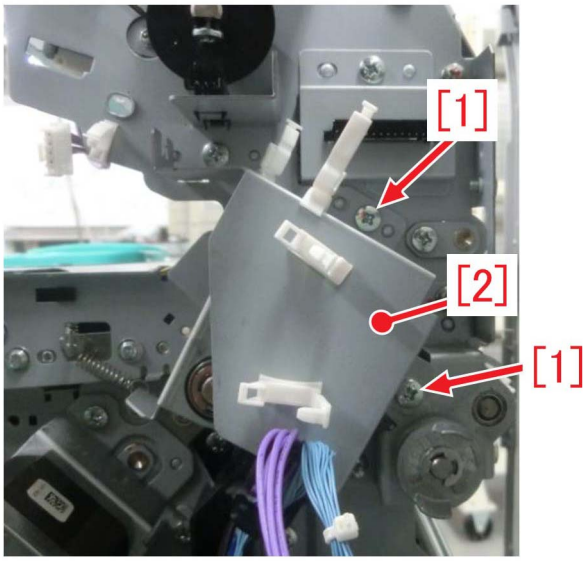
a-2) Remove the 5 screws that connect the delivery upper guide unit and the delivery duct [1], and remove the delivery duct [1].



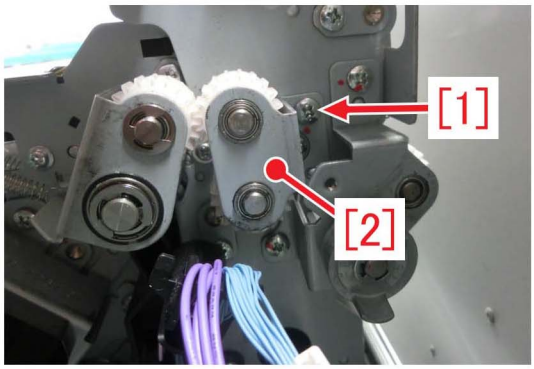
a-3) Remove the 3 connectors [1] on the rear side of the delivery upper guide unit (rear side of the machine), and remove the cables from the edge saddle/wire saddle [2] at 4 locations.

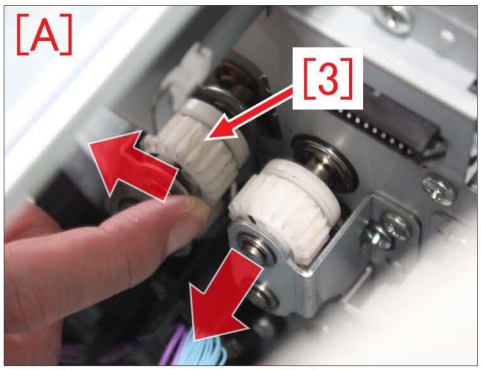


a-4) Avoiding the cables removed from the edge saddle/wire saddle in the step a-3), remove the 2 screws [1] and remove the harness guide [2].

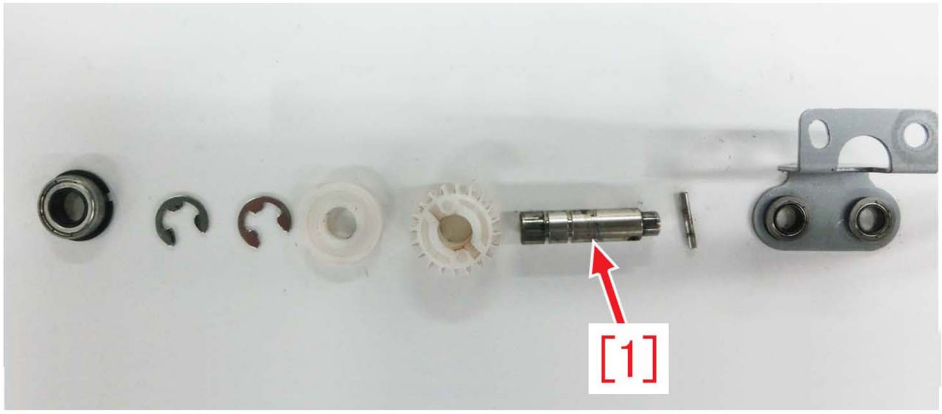


a-5) Remove the 1 screw [1] and remove the decurler drive swing plate 2 [2]. If it is not easy to remove the decurler drive swing plate 2, remove it by pressing and separating the abutting gear [3] with a finger as shown in the photo [A].

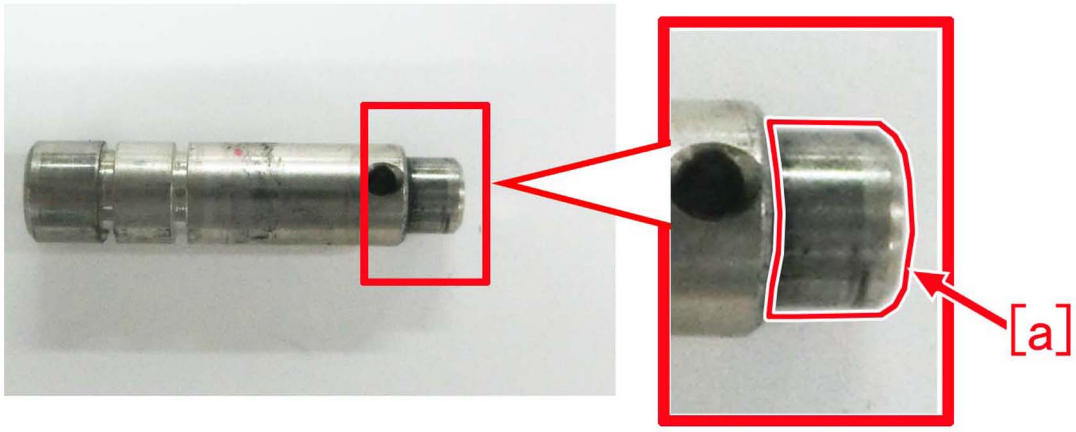




a-6) Disassemble the decurler drive swing plate 2 removed in the step a-5), into the E-ring, the gear, the parallel pin, the ball bearing and the decurler drive shaft [1], and replace it with the new-type decurler drive shaft (FC6-2447-010) [1] and the new ball bearing (XG9-0520-000).



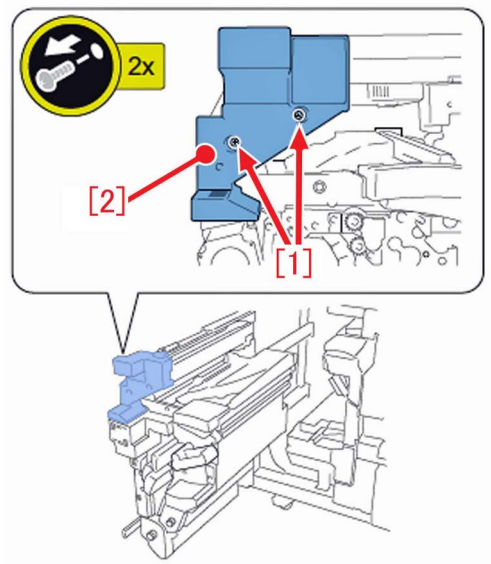
a-7) Apply the same amount of the super lube grease as a grain of rice (approx. 20mg) to the entire circumference of portion [a] of the new-type decurler drive shaft, and then assemble the decurler drive swing plate 2 disassembled in the step a-6).



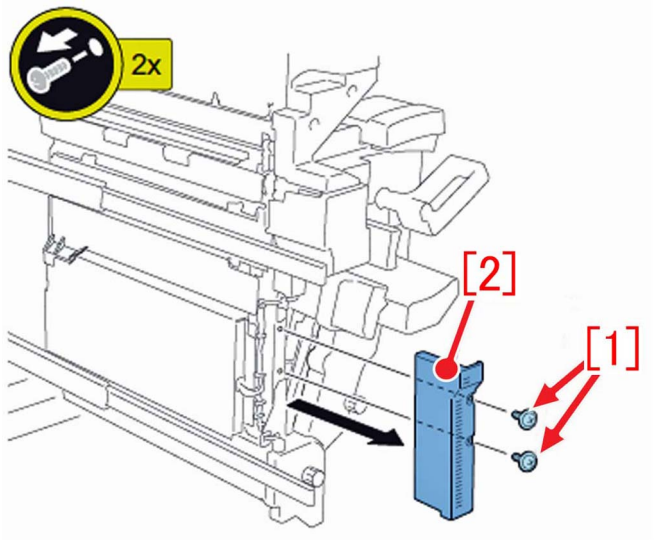
a-8) Assemble the decurler drive shaft by reversing the procedure from the stepa-5).

b) Step to replace the decurler drive shaft 1 (FC6-8472-010)

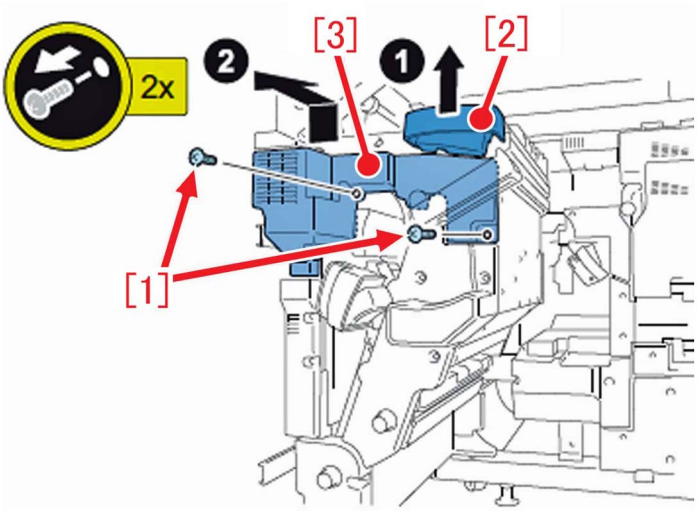
b-1) Remove the 2 screws [1] and remove the delivery reverse cover 1 [2].



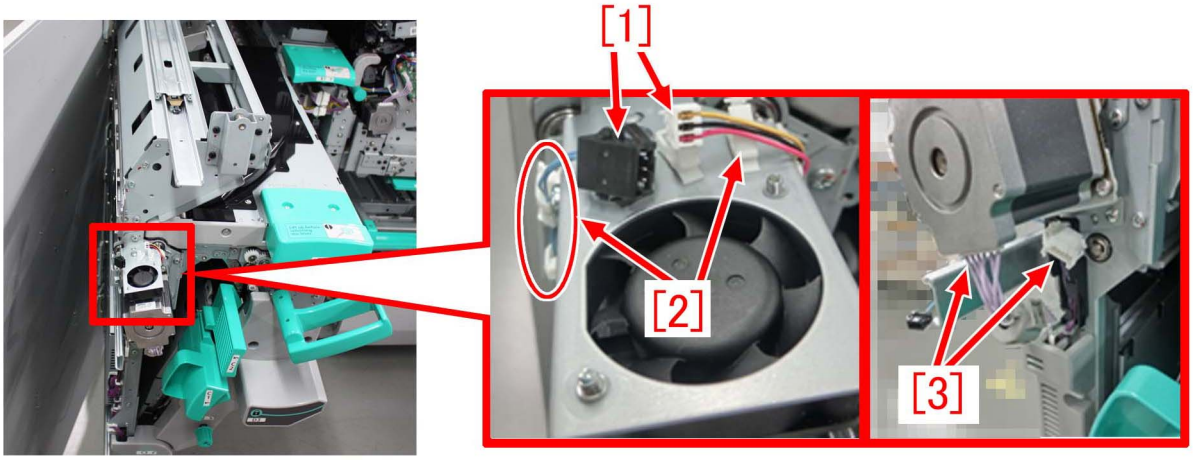
b-2) Remove the 2 screws [1] and remove the delivery reverse cover 4 [2].



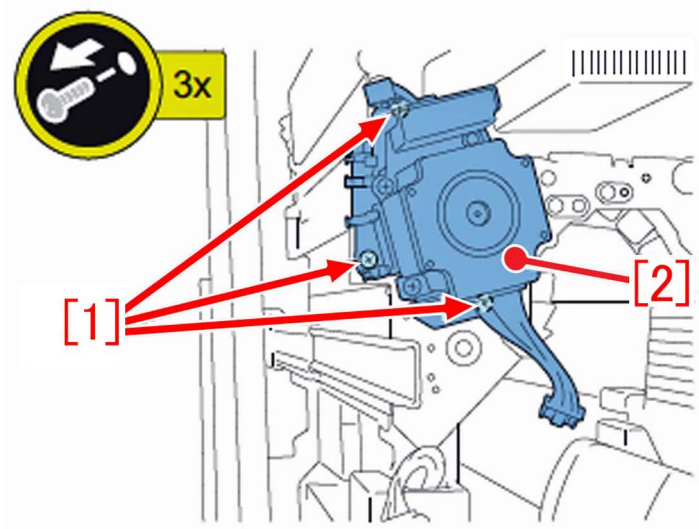
b-3) Remove the 2 screws [1], and remove the delivery reverse cover 2 [3] while lifting the lever (C-B2) [2].



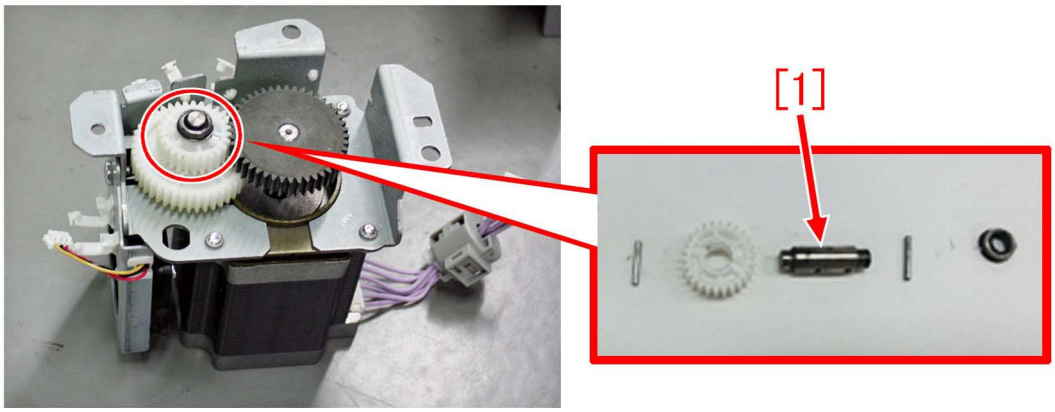
b-4) Remove the fan connector on the front side of the reverse/delivery unit from the relay connector [1], and remove the cables from the respective wire saddles [2]. After that, remove the 2 motor connectors [3] on the lower side of the motor.



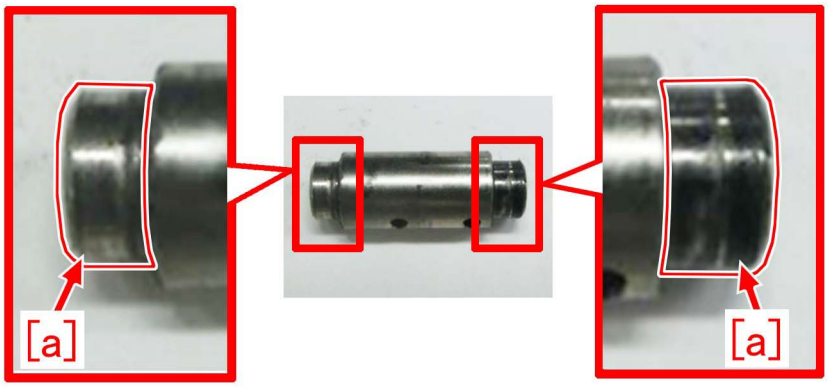
b-5) Remove the 3 screws [1] and remove the motor unit [2].



b-6) Disassemble the motor unit, into the gear, the decurler drive shaft 1 [1], 2 pins and the ball bearing, and then replace it with the new-type decurler drive shaft 1 (FC6-8472-010) [1] and the 2 new ball bearings (XG9-0520-000).



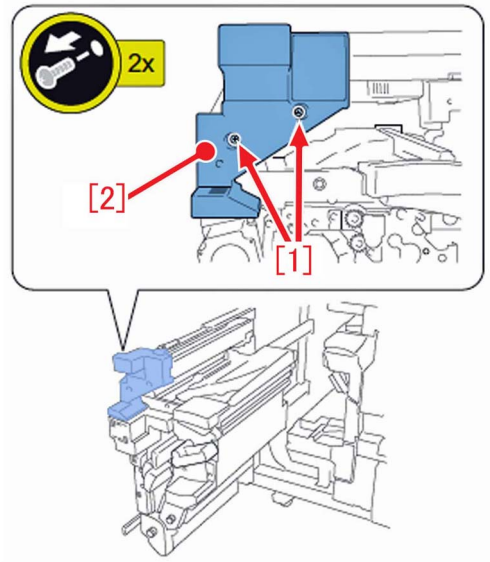
b-7) Apply the same amount of super lube grease as a grain of rice (approx. 20mg) to each entire circumference of both the ends [a] of the new-type decurler drive shaft 1, and then assemble the parts disassembled in the step b-6) into the motor unit.



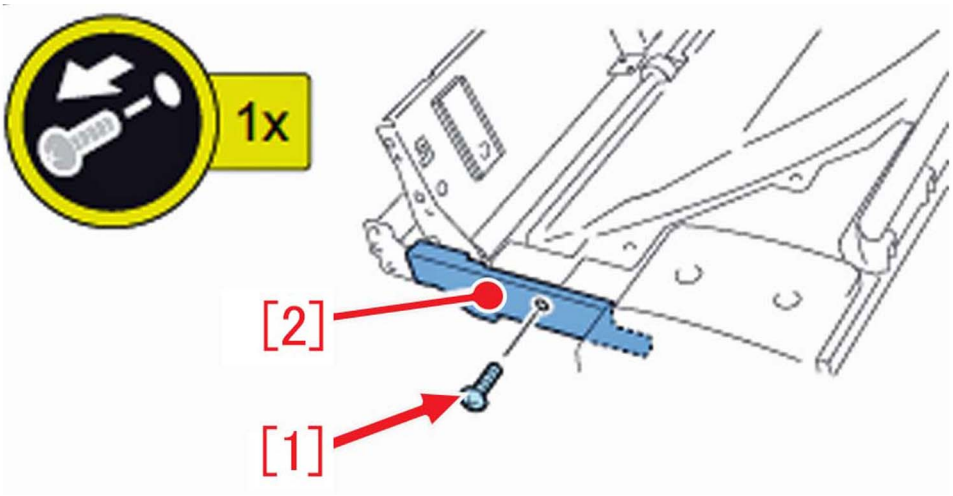
b-8) Assemble the decurler drive shaft by reversing the procedure from the step b-5).

c) Step to replace the swing shaft 1 (FC5-9920-010)

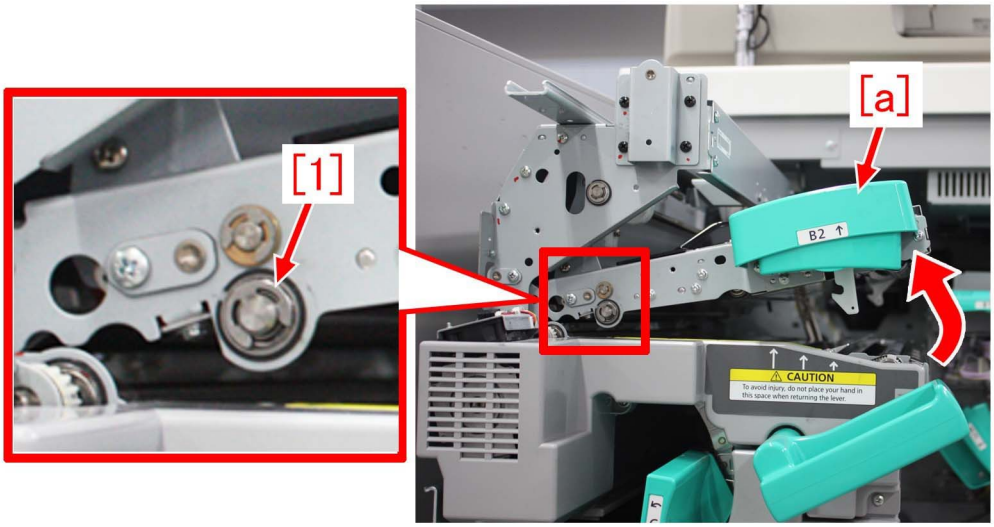
c- 1) Remove the 2 screws [1] and remove the delivery reverse cover 1 [2].



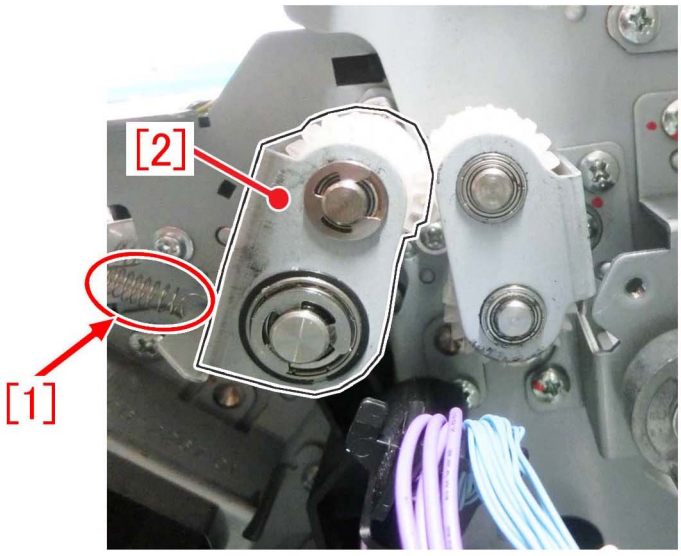
c-2) Remove the 1 screw [1] and remove the delivery upper guide cover [2].

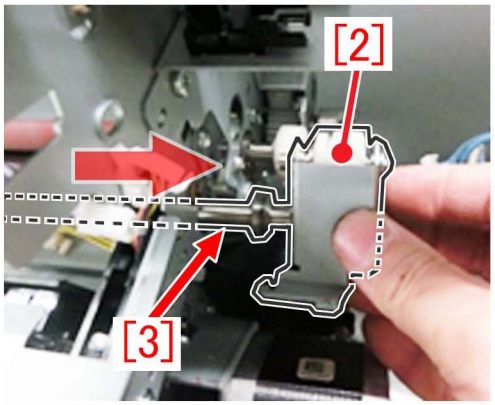


c-3) Referring to "a) Step to replace the decurler drive shaft", perform work from the step a-1) to a-4).
c-4) Lift the lever (C-B2) [a] of the delivery upper guide unit, and remove the E-ring [1] and the ball bearing.

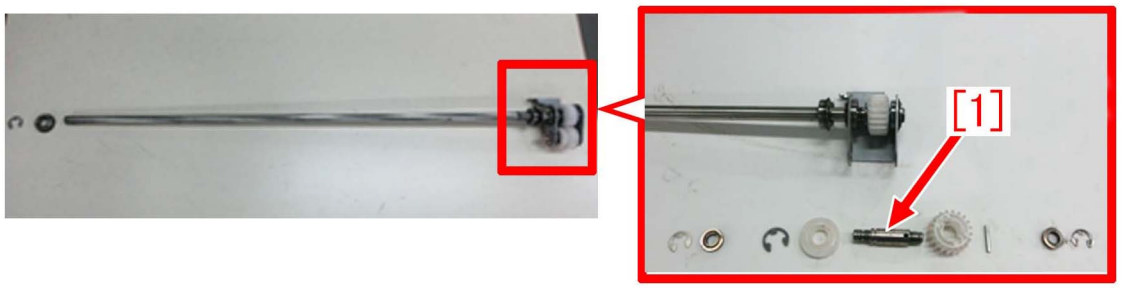


c-5) Remove the tension spring [1] of the drive swing plate on the rear side of the delivery upper guide unit (the rear side of the machine), and pull out the drive swing plate [2] together with the shaft [3].

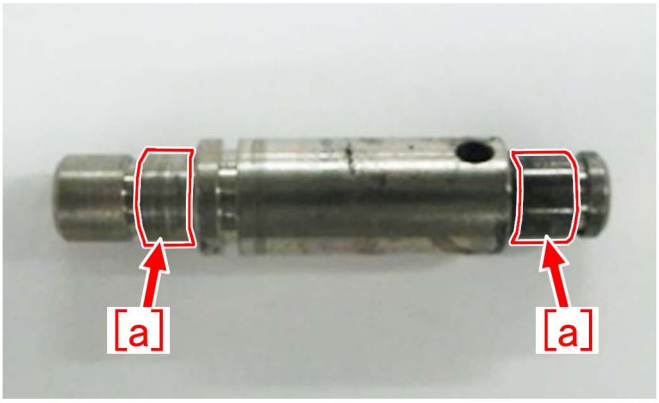




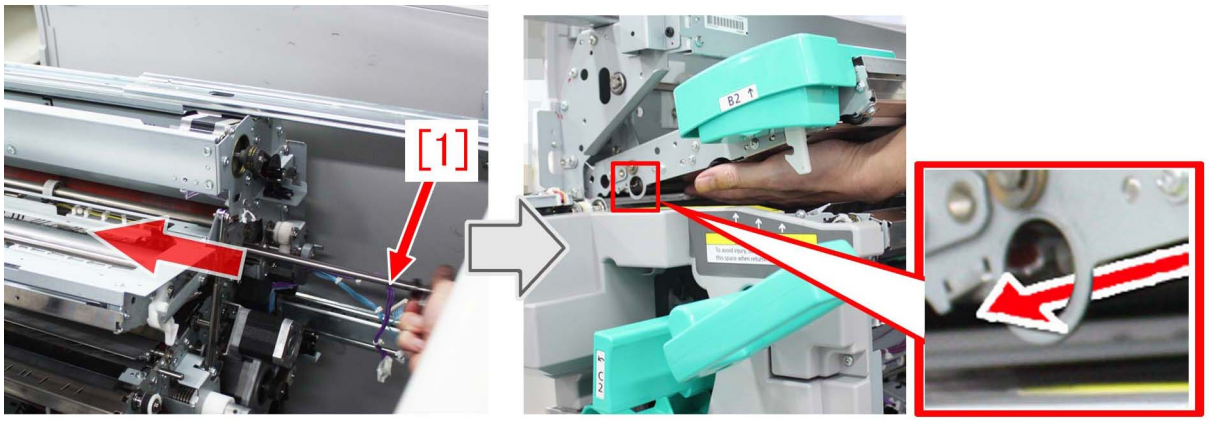
c-6) Disassemble the drive swing plate into the E-ring, the gear, the swing shaft 1 [1], the pin and the ball bearing etc., and replace the swing shaft 1 [1] and the ball bearing that fits the swing shaft with the new-type swing shaft 1 (FC5-9920-010) and the 2 new ball bearings (XG9-0520-000).



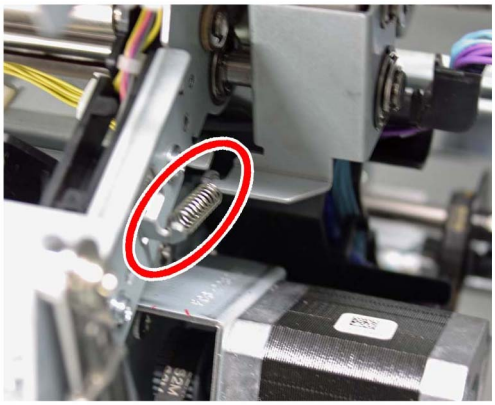
c-7) Apply the same amount of the super lube grease as a grain of rice (approx. 20mg) to each entire circumference of both the ends [a] of the new-type swing shaft 1, and then assemble the parts disassembled in the step c-6) into the drive swing plate.



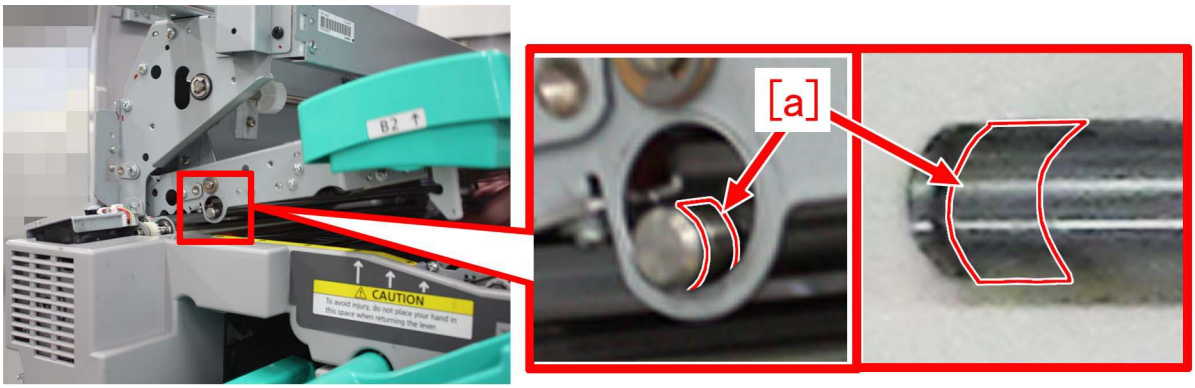
c-8) Insert the drive swing plate and the shaft [1] assembled in the step c-7) from the rear side of the delivery upper guide unit (rear side of the machine).



c-9) Attach the tension spring of the drive swing plate removed in the step c-5).



c-10) The end [a] of the shaft inserted in the step c-8) is where the ball bearing were in contact with. Apply the same amount of the super lube grease as 2 grains of rice (approx. 40mg) to the entire circumference of this portion [a], and then attach the new ball bearing (XG9-0779-000) and the E-ring.



c-12) Attach the parts by reversing the procedure from the step c-3).

[Service Parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FC6-2447-000	SHAFT, TRANSMISSION	1 -> 0	352
	New	FC6-2447-010	SHAFT, TRANSMISSION	0 -> 1	
2	Old	FC6-8472-000	SHAFT, TRANSMISSION 1	1 -> 0	352
	New	FC6-8472-010	SHAFT, TRANSMISSION 1	0 -> 1	
3	Old	FC5-9920-000	SHAFT, TRANSMISSION	1 -> 0	351
	New	FC5-9920-010	SHAFT, TRANSMISSION	0 -> 1	
4	Old	FY9-6005-000	SUPER LUBE GREASE	1 -> 1	
	New				
5	Old	XG9-0520-000	BEARING, BALL, MF106ZZS	5 -> 5	352
	New				
6	Old	XG9-0779-000	BEARING, BALL, 688ZZNR D41	1 -> 1	351
	New				

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
iPR C10000VP SR FS US	WBE15173
iPR C10000VP SR FS EUO	WBF15189
iPR C10000VP SR FS CN	WBG15010

*As the production of imagePRESS C6000/C7000 Series, imagePRESS C6010/C7010 Series, imagePRESS C6011/C7011 Series has ended, there is no countermeasure cut-in serial numbers.

Jam (Delivery options)

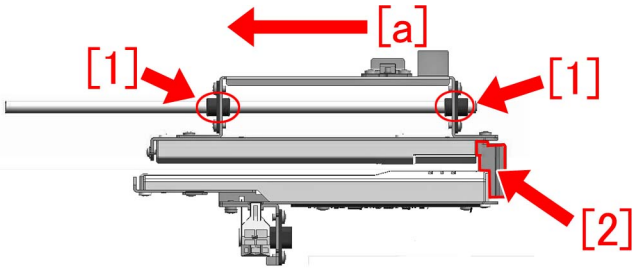
1004 Jam Code or folded corner on printed out paper due to positional displacement of support (Staple/Saddle/Booklet/ Finisher)

[Symptom]

1004 jam or folded corner of printed out paper may occur on machines with serial number earlier than the following countermeasure cut-in serial numbers in factory.
- 1004 : Shift Unit Trailing Edge Sensor Delay Jam

[Cause]

When the sliding load from the sliding part [1] inside the side registration sensor assembly is great, the side registration sensor assembly drive motor steps out and the position of the support [2] is displaced towards the front side of the product [a]. In the said condition, the paper contacts the support [2], would be skewed in delivery and may result in the aforementioned symptom.

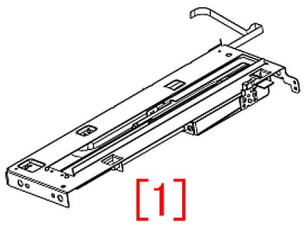


[Service work]

When the above mentioned symptom frequents, prepare and replace with the new type side registration sensor assembly for each product referring to the service manual.

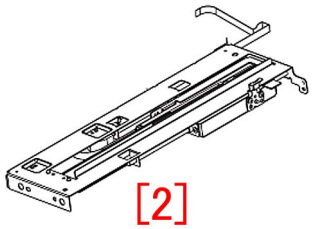
A) Finisher AK1, Saddle Finisher AK2, Staple Finisher Q1/W1, Booklet Finisher Q1/W1

- SIDE REGIST, SENSOR PCB ASS'Y [1] (FM3-5188-040)



B) Finisher AN1/AF1/AJ1, Saddle Finisher AN2/AF2/AJ2

- SIDE REGIST, SENSOR PCB ASS'Y [2] (FM4-7157-020)



[Service parts]

A) Finisher AK1, Saddle Finisher AK2, Staple Finisher Q1/W1, Booklet Finisher Q1/W1

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM3-5188-030	SIDE REGIST, SENSOR PCB ASS'Y	1->0	L36

No.		Part Number	Description	Q'ty	Fig.No.
1	New	FM3-5188-040	SIDE REGIST, SENSOR PCB ASS'Y	0->1	L36

B) Finisher AN1/AF1/AJ1, Saddle Finisher AN2/AF2/AJ2

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM4-7157-010	SIDE REGIST, SENSOR PCB ASS'Y	1->0	L36
	New	FM4-7157-020	SIDE REGIST, SENSOR PCB ASS'Y	0->1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial number
Finisher-AJ1 UL	HLT50005
Finisher-AJ1 EUR	HLU50000
Finisher-AJ1 CN	HLV50000
Saddle Finisher-AJ2 UL	HLX50000
Saddle Finisher-AJ2 EUR	HLY50000
Saddle Finisher-AJ2 CN	HLZ50000
Finisher-AK1 UL	NWB50000
Finisher-AK1 EUR	NWC50039
Finisher-AK1 CN	NWD50005
Saddle Finisher-AK2 UL	NWF50014
Saddle Finisher-AK2 EUR	NWG50005
Saddle Finisher-AK2 CN	NWH50000
Staple Finisher-Q1 UL	QXR50000
Staple Finisher-Q1 EUR	PMP50000
Booklet Finisher-Q1 UL	PMV50000
Booklet Finisher-Q1 EUR	PMW50000
Finisher-AM1 UL	QWG50019
Finisher-AM1 EU/O	QWH50000
Finisher-AM1 CN	QWJ50000
Saddle Finisher-AM2 UL	QWL50005
Saddle Finisher-AM2 EU/O	QWM50007
Saddle Finisher-AM2 CN	QWN50000
Staple Finisher-W1 UL	SWT50002
Staple Finisher-W1 EU/O	SWU50008
Staple Finisher-W1 CN	WJN50000
Booklet Finisher-W1 UL	SWW50051
Booklet Finisher-W1 EU/O	SWX50032
Booklet Finisher-W1 CN	WJP50000
Finisher-AN1 UL	WBP50000
Finisher-AN1 EU/O	WBQ50000
Finisher-AN1 CN	WBR50000
Saddle Finisher-AN2 UL	WBT50059
Saddle Finisher-AN2 EU/O	WBU50002
Saddle Finisher-AN2 CN	WBV50000

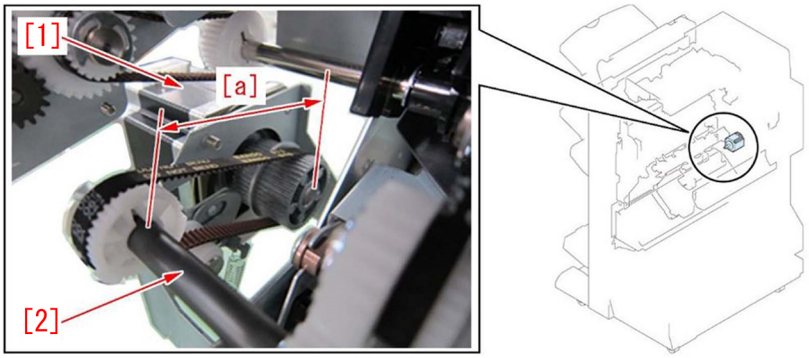
110F Jam code due to meshing failure of the timing belt (Staple-W1/Booklet-W1/Saddle-AN2/Finisher-AN1)

[Symptom]

110F Jam may occur during print using finisher.
-110F: Lower delivery sensor (PS6) Stationary jam

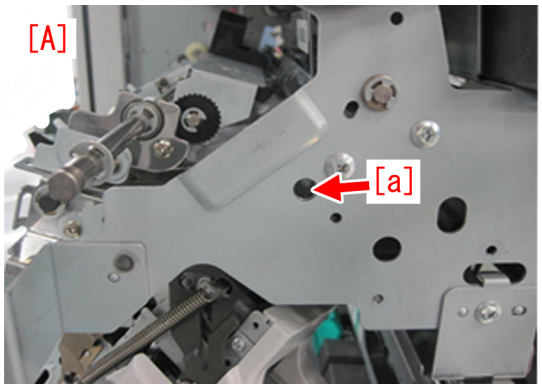
[Cause]

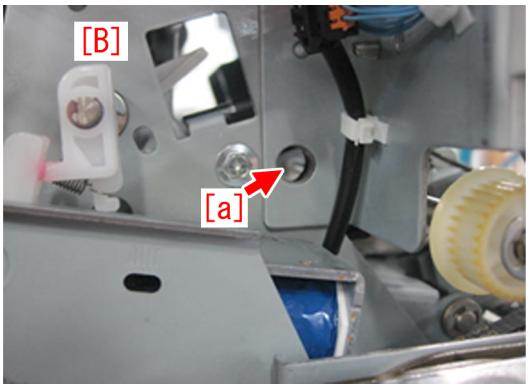
When the belt roller [2] of the process upper guide tilts to the processing feed motor (M26) [1] side, the distance between the shafts [a] becomes smaller and makes it easier for the timing belt to get loose. When the timing belt gets loose, a meshing failure occurs between the timing belt and the gears, resulting in the above symptom.



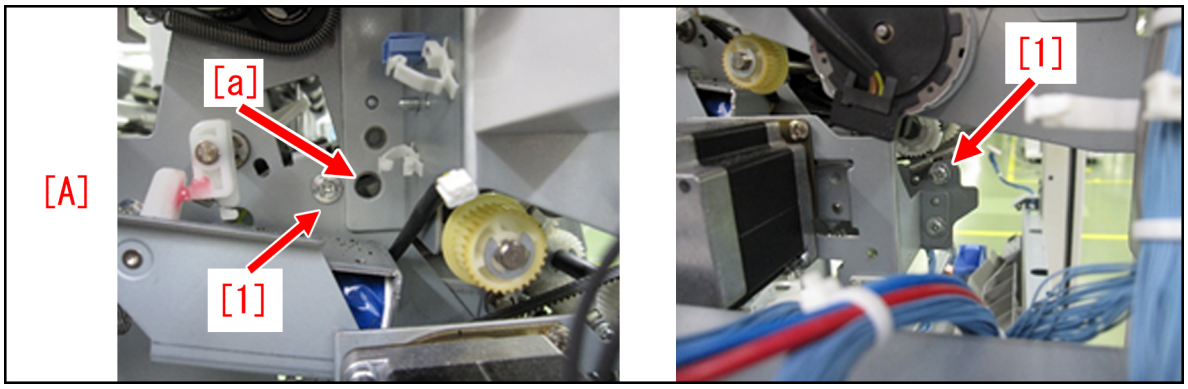
[Service work]

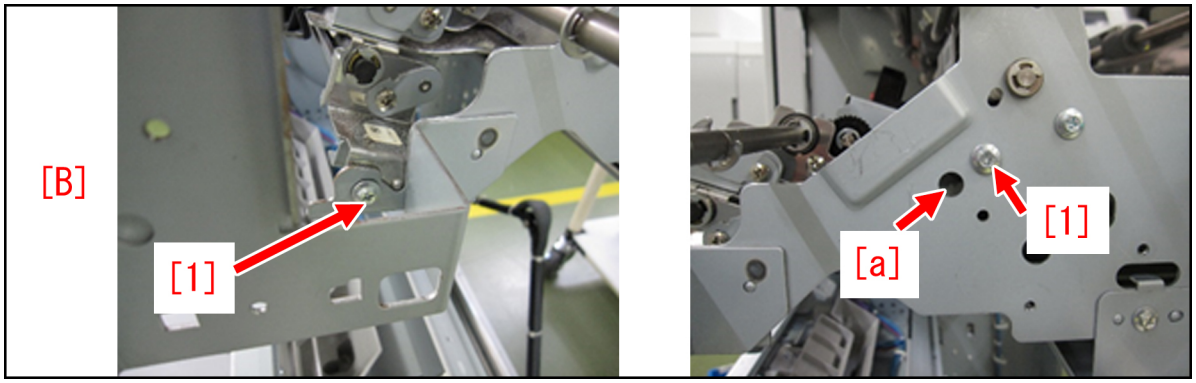
When the above symptom occurs, remove the paper delivery drive assembly (L) by following the procedure below. Then align the connecting holes of the upper dispose guide and the front plate/rear plate, and reattach the operation feed motor (M26) so that the distance between shafts of the belt roller in the upper dispose guide and the operation feed motor (M26) is appropriate.
The following procedure starts from after the finisher being removed from the engine.
1) Refer to "Removing the front cover" and "Removing the rear cover" in Service Manual and remove both covers.
2) Be sure that the connecting holes [a] of the upper dispose guide and the front plate/rear plate are aligned.
The photo [A] shows the front plate and the photo [B] shows the rear plate.
- If the connecting holes [a] of the upper dispose guide and the front plate/rear plate are aligned, the step 3) is not required, so proceed to the step 4).
- If the connecting holes [a] of the upper dispose guide and the front plate/rear plate are not aligned, proceed to the next step.



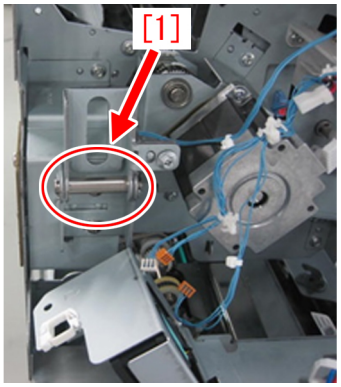


3) Adjustment method
3-1) Loosen the 2 screws [1] on the front plate and the 2 screws [1] on the rear plate. Insert a round stick with 8mm diameter into the positioning hole [a] that aligns with the upper dispose guide. The photo [A] shows the rear plate side and the photo [B] shows the front plate side.

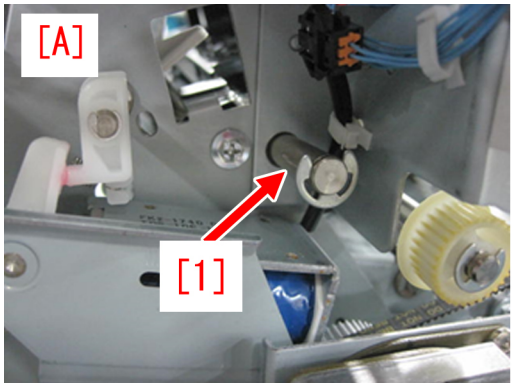


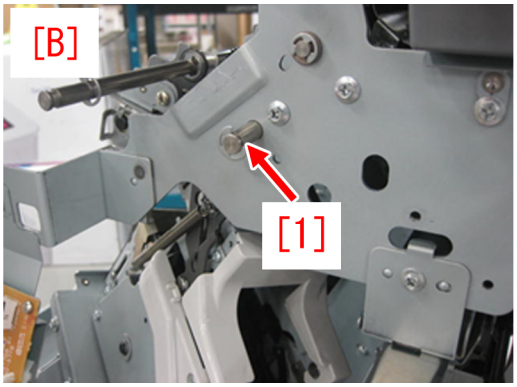


[Reference] When a round stick is not available to insert, remove the connecting shaft [1] from the engine and the finisher, and insert it into the positioning holes of the plate and the upper dispose guide.

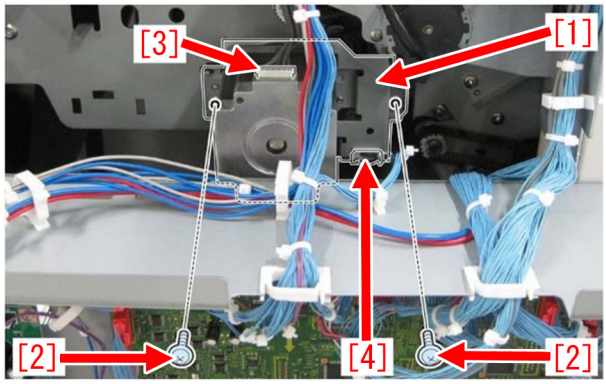


In the photo [A] below, the shaft [1] is aligned with the rear plate. In the photo [B], the shaft [1] is aligned with the front plate.

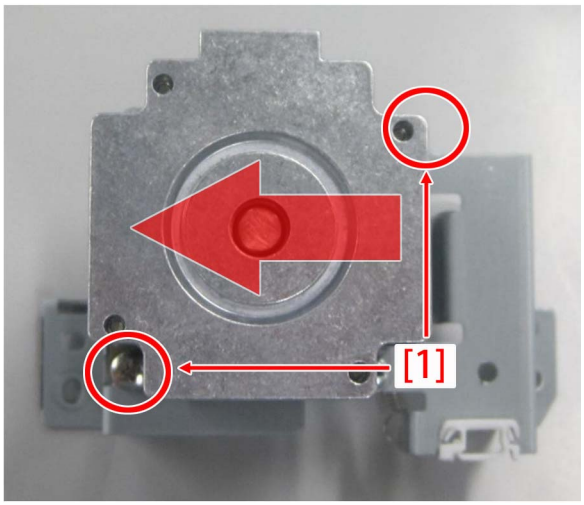




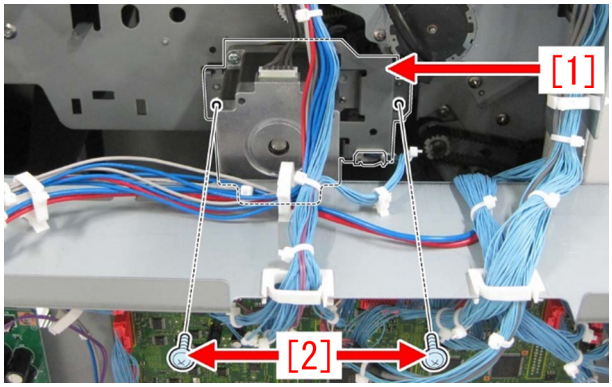
3-2) Tighten the 4 screws that were loosened in the step 3-1).
4) Reattaching the operation feed motor (M26).
4-1) Remove the 2 screws [2], the connectors [3] and the edge saddle [4] and then remove the paper delivery drive assembly (L).



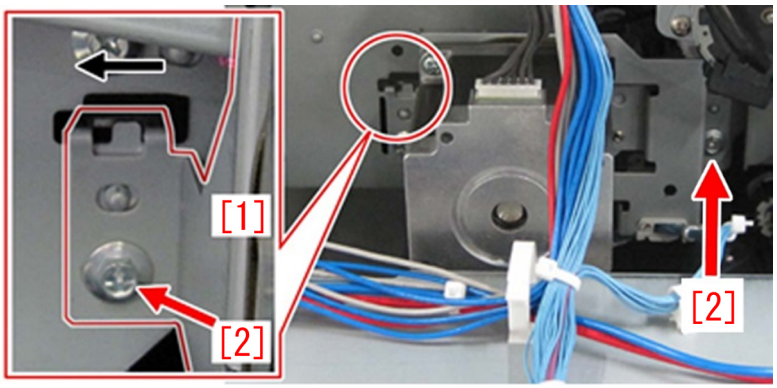
4-2) Loosen the 2 screws [1] on the operation feed motor (M26), move the motor in the direction of the arrow until it stops and fully tighten the screws.



4-3) With the 2 screws [2] that were removed in the step 4-1), temporarily secure the paper delivery drive assembly (L).



4-4) Move the paper delivery drive assembly (L) in the direction of the arrow until it stops and fully tighten the 2 screws [2].



4-5) Make some prints and check that the above issue does not occur.

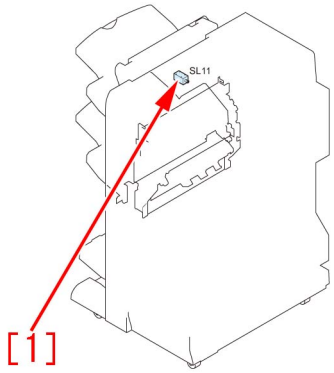
1008 Jam Code due to nip failure of post card feeding rollers (Finisher)

[Symptom]

In the machine earlier than the following countermeasure cut-in serial numbers in factory, when feeding a postcard or a paper with a length less than 182mm in feeding direction, were ejected, 1008 jam may occur in rare occasion.
-1008 Jam: Buffer path 2 sensor (UN14) Delay Jam

[Cause]

When pull in current value of the solenoid was insufficient and the installed position of estrangement solenoid unit (SL11) [1] was inappropriate, nip pressure of the postcard feeding rollers may be insufficient. This may lead to the above mentioned phenomenon.

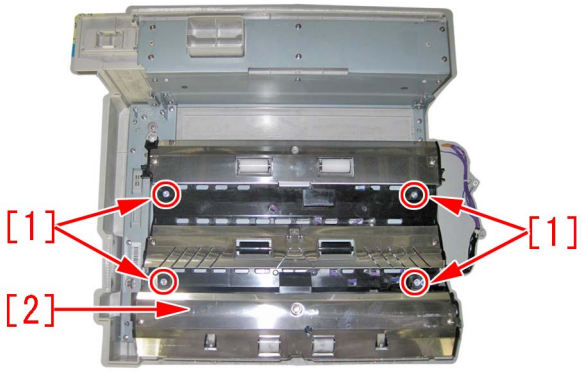


[Remedy/Answer]

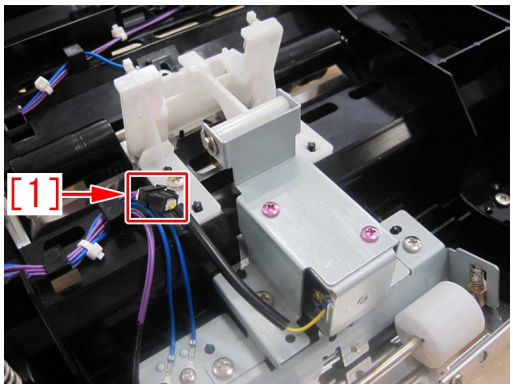
When the aforementioned symptom has occurred, conduct the following 2 steps.
a) Upgrade the firmware of SORTER, according to the list below.

Model	Firmware Version	Service Information(Software) Ref No
Staple Finisher-Q1/Booklet Finisher-Q1	SORTER Ver.11.01	F02396
Staple Finisher-W1/Booklet Finisher-W1	SORTER Ver.12.01	F02183/ F02185
Finisher-AK1/Saddle Finisher-AK2	SORTER Ver.11.01	F02189
Finisher-AM1/Saddle Finisher-AM2	SORTER Ver.10.01	F02187
Finisher-AN1/Saddle Finisher-AN2	SORTER Ver.06.01	F02191

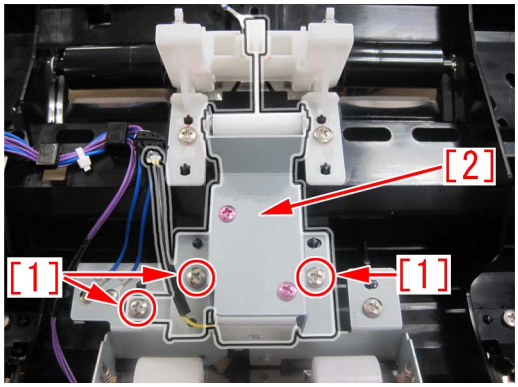
b) Prepare and replace with a new type of estrangement solenoid unit (FM1-A170-010), following the procedure below. Note that the following procedure starts from where the finisher was removed from main body of a copying machine.
b-1) Detach the upper feeder assembly, referring to the service manual.
b-2) Turn over the upper feeder assembly, remove stepped screws [1] x4pcs and remove a buffer guide [2].



b-3) Disconnect a connector [1] x1pc of the estrangement solenoid unit.

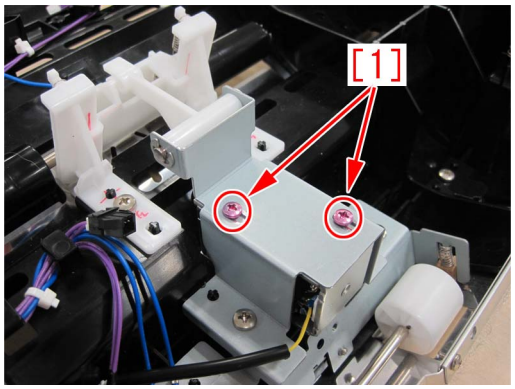


b-4) Remove screws [1] x3pcs, remove the estrangement solenoid unit [2].

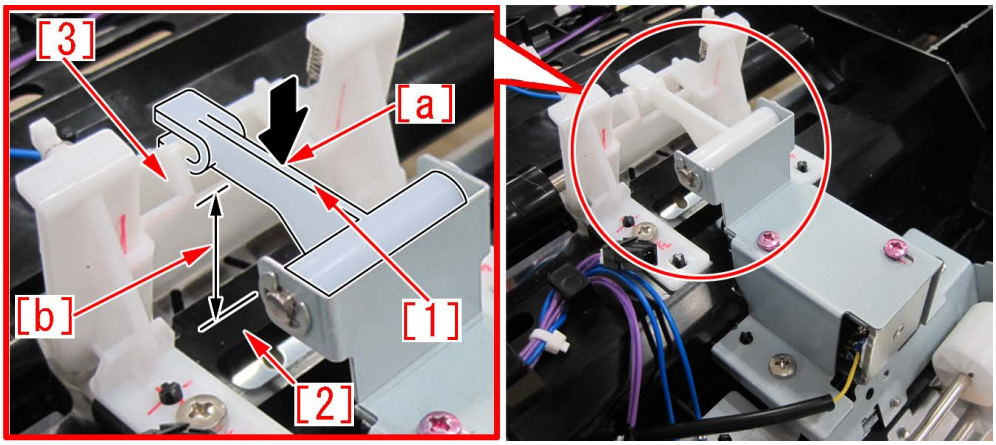


b-5) Replace with a new estrangement solenoid unit (FM1-A170-010) [1].

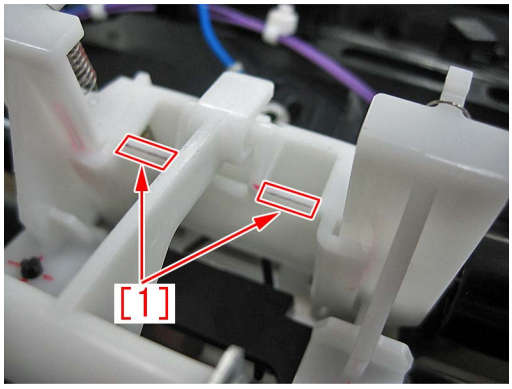
b-6) Loosen the screws [1] x2pcs, which are fixing the estrangement solenoid unit.



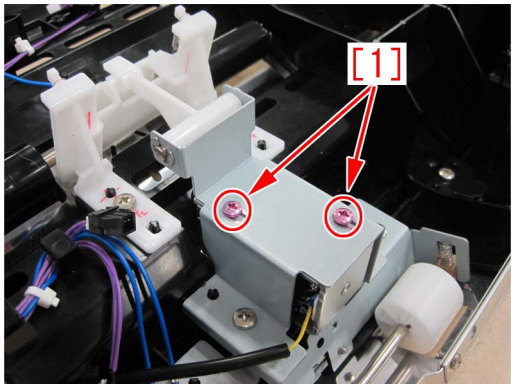
b-7) Push in the middle part [1] of the arm of estrangement solenoid unit, by a finger in a direction indicated by arrow. Measure the height[b] between the bottom of buffer guide [2] to the corner of an idler roller holder by a scale. Adjust the position of the solenoid, so that the height be in a range between 18.5 to 19.5mm.



[Reference] Marking the corner [1] of the idler roller holder by a permanent marker, may make the adjustment easier.



b-8) Fix the solenoid by screws [1] x2pcs.



b-9) Reassemble the parts in reverse order from the step b-3).

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-A170-000	ESTRANGEMENT SOLENOID UNIT	1 -> 0	L38
	New	FM1-A170-010	ESTRANGEMENT SOLENOID UNIT	0 -> 1	
2	Old	FM1-A168-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-A168-010	UPPER FEEDER ASSEMBLY	0 -> 1	
3	Old	FM1-C358-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-C358-010	UPPER FEEDER ASSEMBLY	0 -> 1	
4	Old	FM1-K156-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-K156-010	UPPER FEEDER ASSEMBLY	0 -> 1	
5	Old	FM1-K515-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-K515-010	UPPER FEEDER ASSEMBLY	0 -> 1	

[Countermeasure cut-in serial number in factory1]

Model	Serial No.
STAPLE FIN-Q1 UL	No implemented due to production discontinuance
STAPLE FIN-Q1 EU/O	No implemented due to production discontinuance
BOOKLET FIN-Q1 UL	No implemented due to production discontinuance
BOOKLET FIN-Q1 EU/O	No implemented due to production discontinuance
STAPLE FIN-W1 UL	SWT50501
STAPLE FIN-W1 EU/OT	SWU50384
STAPLE FIN-W1 CN	WJN50031
BOOKLET FIN-W1 UL	SWW51114
BOOKLET FIN-W1 EU/OT	SWX51014
BOOKLET FIN-W1 CN	WJP50002
FINISHER-AK1 CN	NWD50030
FINISHER-AK1 EU/O	NWC50314
FINISHER-AK1 UL	NWB50000
SADDLE FIN-AK2 CN	NWH50014
SADDLE FIN-AK2 EU/O	NWG50129
SADDLE FIN-AK2 UL	NWF50099
FINISHER-AM1 UL	QWG50023
FINISHER-AM1 EU/O	No implemented due to production discontinuance
SADDLE FIN-AM2 UL	QWL50005
SADDLE FIN-AM2 EU/O	QWM50050
SADDLE FIN-AM2 CN	QWN50014
FINISHER-AN1 US	WBP50000
FINISHER-AN1 EU/OT	WBQ50088
FINISHER-AN1 CN	WBR50014
SADDLE FIN-AN2 US	WBT50297
SADDLE FIN-AN2 EU/OT	WBU50154
SADDLE FIN-AN2 CN	WBV50004

[Countermeasure cut-in serial number in factory2]

Model	Serial No.
STAPLE FIN-Q1 UL	QXR50000
STAPLE FIN-Q1 EU/O	PMP50000
BOOKLET FIN-Q1 UL	PMV50000
BOOKLET FIN-Q1 EU/O	PMW50000
STAPLE FIN-W1 UL	SWT50707
STAPLE FIN-W1 EU/OT	SWU50550
STAPLE FIN-W1 CN	WJN50053
BOOKLET FIN-W1 UL	SWW51651
BOOKLET FIN-W1 EU/OT	SWX51329
BOOKLET FIN-W1 CN	WJP50021
FINISHER-AK1 CN	NWD50030
FINISHER-AK1 EU/O	NWC50323
FINISHER-AK1 UL	NWB50000
SADDLE FIN-AK2 CN	NWH50014
SADDLE FIN-AK2 EU/O	NWG50133
SADDLE FIN-AK2 UL	NWF50129
FINISHER-AM1 UL	QWG50023
FINISHER-AM1 EU/O	QWH50000
SADDLE FIN-AM2 UL	QWL50005
SADDLE FIN-AM2 EU/O	QWM50058
SADDLE FIN-AM2 CN	QWN50014
FINISHER-AN1 US	WBP50000

Model	Serial No.
FINISHER-AN1 EU/OT	WBQ50108
FINISHER-AN1 CN	WBR50025
SADDLE FIN-AN2 US	WBT50432
SADDLE FIN-AN2 EU/OT	WBU50201
SADDLE FIN-AN2 CN	WBV50006

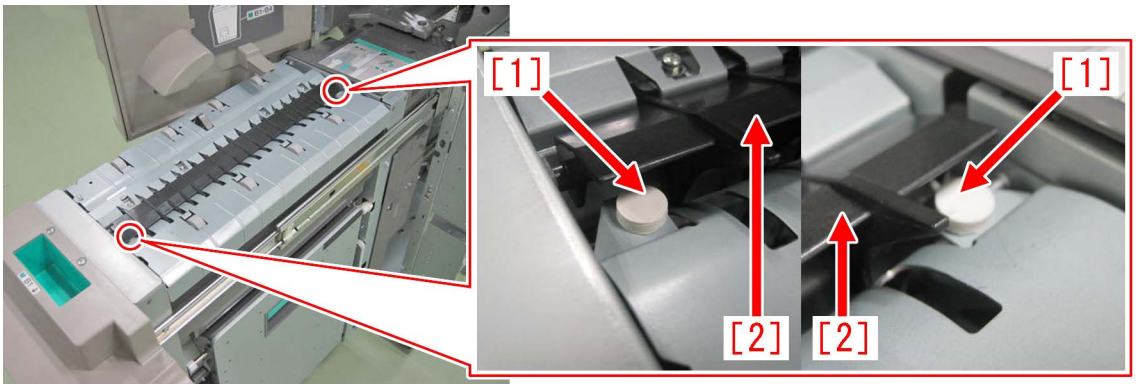
1014/1086/10B5/10E9/17B5/17E9 Jam codes due to softened spacer (Paper Folding Unit/Document Insertion / Folding Unit)

[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory,when making copies using the paper folding unit, 1014/1086/10B5/10E9/17B5/17E9 Jams may occur.
- 1014: Slowdown timing sensor (S24) Delay Jam
- 1086: Inlet sensor (S20), Slowdown timing sensor (S30) Delay Jam
- 10B5: Slowdown timing sensor (S24) Delay Jam
- 17B5: Slowdown timing sensor (S24) Delay Jam
- 10E9: Slowdown timing sensor (S30) Delay Jam
- 17E9: Slowdown timing sensor (S30) Delay Jam

[Cause]

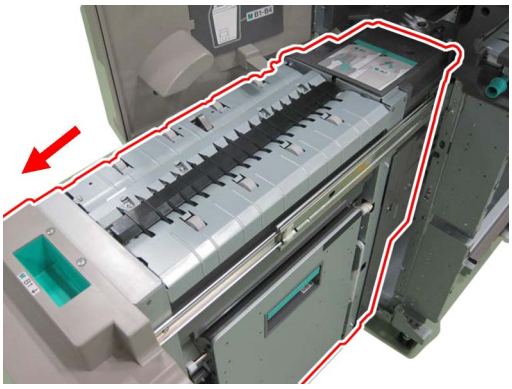
As the spacer [1] gets softened and its surface gets sticky, the folding/straight flapper [2] sticks to it, causing the above symptom to occur.



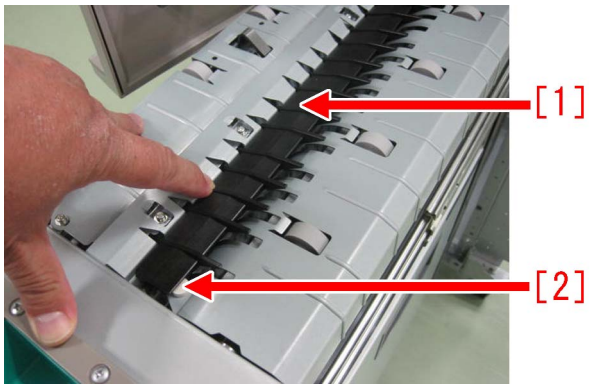
[Remedy/Answer]

Follow the steps below and check if the spacer [1] is stuck to the folding/straight flapper [2]. If it is stuck, prepare the 2 new type spacers (FL1-6535-000) and replace with them.

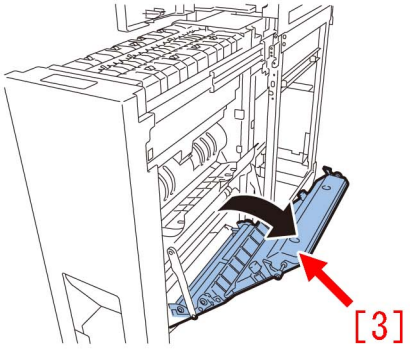
1) Refer to Service Manual and pull out the folding unit in the direction of the arrow.

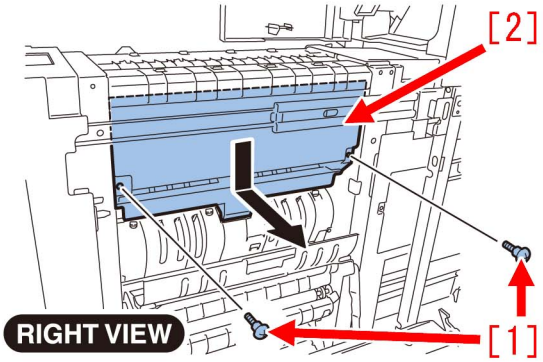


2) Press the folding/straight flapper [1] lightly with a finger and check if it is stuck to the spacer [2]. If the folding/straight flapper and the spacer are stuck together, proceed to the step 3). If not, look for another cause.

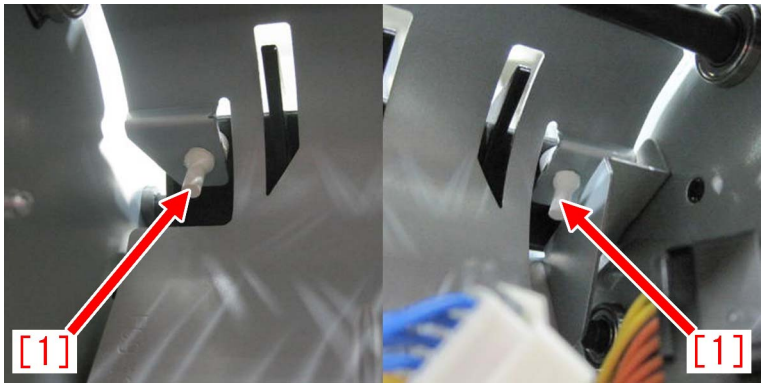


3) Fully open the right feeder guide unit [3], remove the 2 screws [1] and then remove the right inner cover [2].



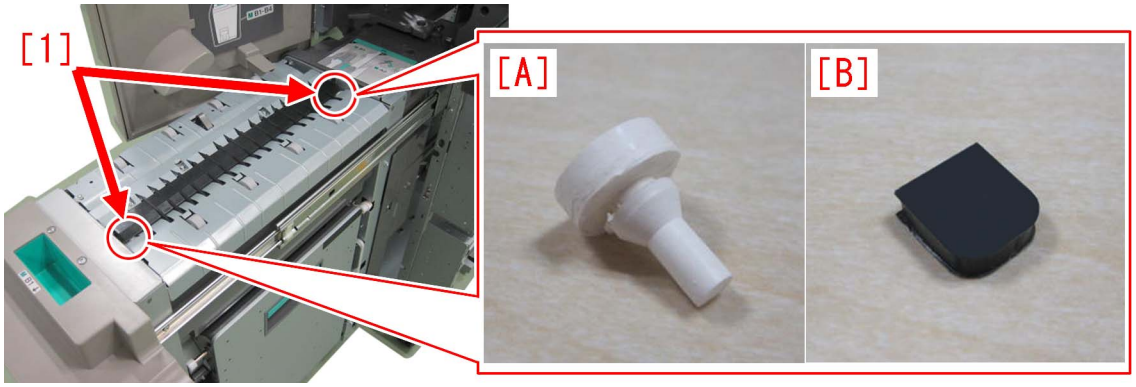


4) Look inside the unit from where the right inner cover was removed from and press the 2 spacers [1] from the bottom side using needlenose pliers, etc. and remove them.



[Note] When removing the spacers, be sure not to break it as when the spacer breaks and falls inside the machine, jam and error may occur.
The photo below shows the normal spacer [A] and the broken spacer [B].

5) Attach the new type spacers [B] to the areas in front and rear sides of the folding unit as marked with circles [1] in the photo below. [A] is the old type spacer.



6) Attach the spacers in the arrow side [c] of the reference lines [a] and [b]. A deviation up to +2mm in the arrow side [c] can be tolerated.
[Note] Be sure that the spacer does not go into the arrow side [d] beyond the reference line [b].

7) Attach the right inner cover in the reverse order of the step 3) and close the cover.

[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FC7-7584-000	SPACER	2 -> 0	Fig L37/N14/N37/O15
	New	FL1-6535-000	SPACER	0 -> 2	Fig L37/N14/N37/O15

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
Paper Folding Unit-E1	To be informed as soon as identified.
Paper Folding Unit-F1	DEP11065~
Paper Folding Unit-G1	FMU51186~
Paper Folding Unit-H1	No implemented due to production discontinuance
Paper Folding Unit-J1	SYL01726~
Document Insertion/ Folding Unit-F1 OT	No implemented due to production discontinuance
Document Insertion / Folding Unit-G1 US	No implemented due to production discontinuance
Document Insertion / Folding Unit-G1 EU	No implemented due to production discontinuance
Document Insertion / Folding Uni-H1 US	No implemented due to production discontinuance
Document Insertion / Folding UniT-H1 EU	No implemented due to production discontinuance
Document Insertion / Folding Uni-H1 CN	No implemented due to production discontinuance
Document Insertion / Folding Unit-J1 US	SZT00569~
Document Insertion / Folding Unit-J1 EU/O	SZU00551~.
Document Insertion / Folding Unit-J1 CN	SZV00503~
Document Insertion / Folding Unit-K1 US	WGJ00717~

Model	Serial No.
Document Insertion / Folding Unit-K1 EU/O	WGK00631~
Document Insertion / Folding Unit-K1 CN	WGL01726~

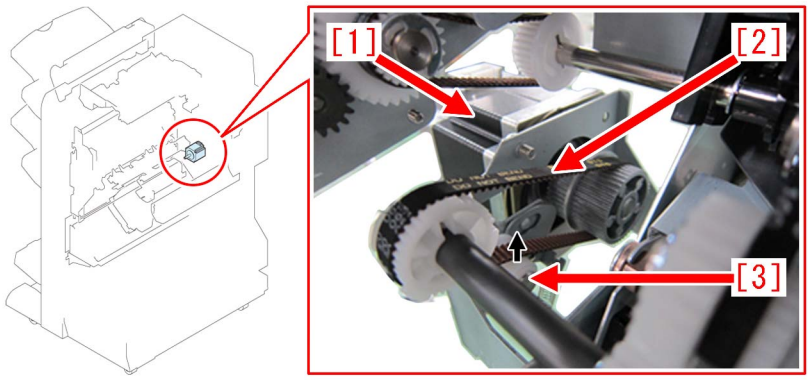
110F jam code due to meshing failure on timing belt of operation feed motor (M26) (Staple/Saddle/Booklet/Finisher)

[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, when printing using the finisher, 110F jam may occur.
- 110F: Lower Delivery Sensor (PS6) Stationary Jam

[Cause]

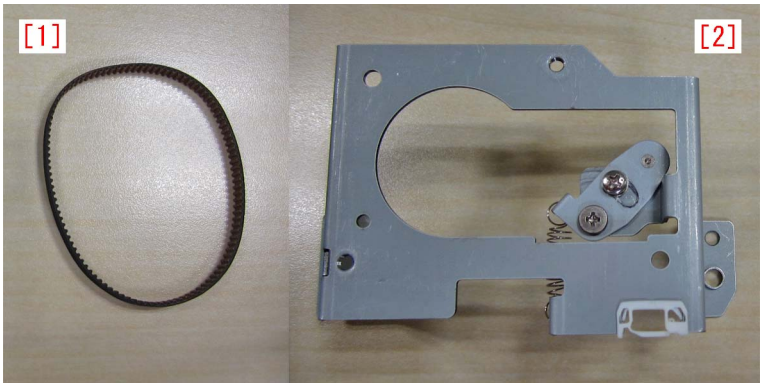
The timing belt [2] in the operation feed motor (M26) [1] is designed to keep its tension and prevent from being loose by having the tensioner [3] pressed in the direction of the arrow. This tensioning method is "unfixed type". However, the pressing power of the tensioner [3] in the unfixed type is insufficient in some cases and when the operation feed motor (M26) [1] drives rapidly a meshing failure occurs on the timing belt because of power, resulting in the above symptom.



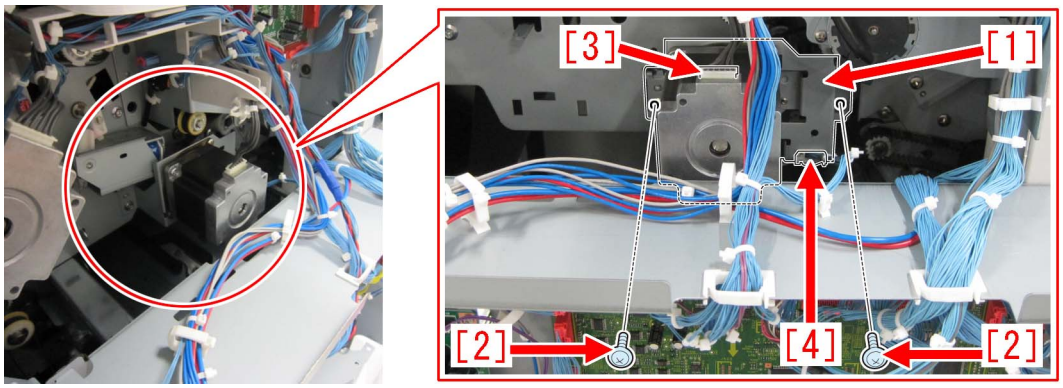
[Remedy/Answer]

When the above symptom occurs, prepare and replace the paper delivery drive set (L) (4Y8-3156-000).

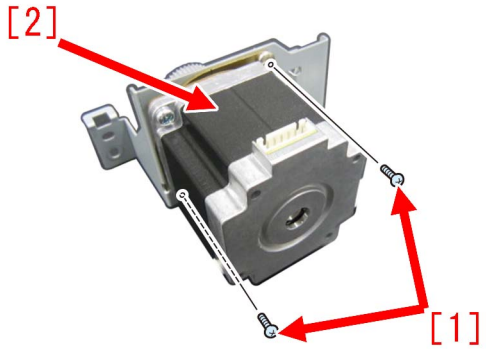
The paper delivery drive set (L) (4Y8-3156-000) contains the following 2 items.
- Timing belt [1]
- Paper delivery drive assembly (L) [2]



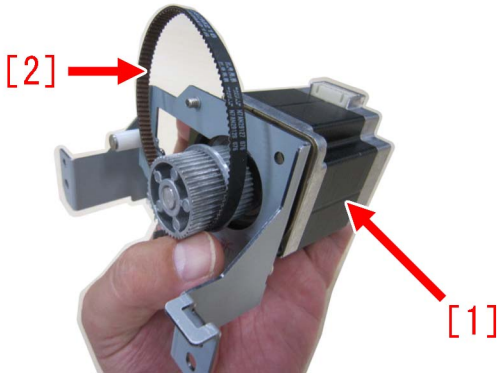
1) Refer to "Removing the Rear Cover" of Service Manual and remove the rear cover.
2) Remove the 2 screws [2], the connector [3] and the edge saddle [4], and then remove the paper delivery drive assembly (L) [1] including the motor.



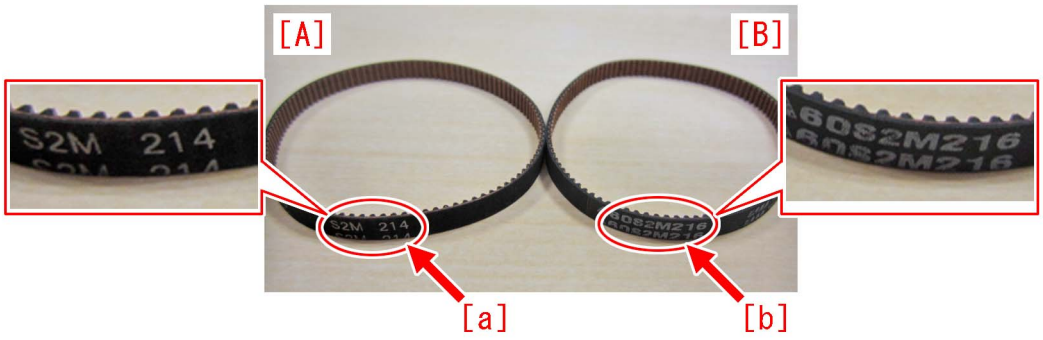
3) Remove the 2 screws [1] and then remove the motor [2]. Then, attach the motor to the paper delivery drive assembly (L) which is included in the set. To attach the motor, use the 2 screws that were previously removed [1].



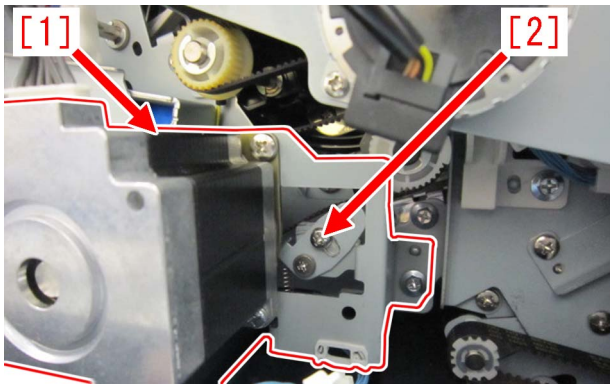
4) After attaching the timing belt [2] that is included in the set to the paper delivery drive assembly (L) [1] with the motor attached, attach the whole thing to the machine using the 2 screws removed in the step 2).



[Note] When replacing to the paper delivery drive assembly (L), be sure to also replace the timing belt [B] at the same time that is included in the set. 110F jam occurs when using the old type timing belt [A] as the number of teeth of the new type is different from the old type originally attached to the engine.
In the photo below, [A] is the old type and [B] is the new type.
The old type [A] has "S2M 214" [a] printed on it. The new type [B] has "60S2M216" [b] printed on it.



5) Loosen the screw [2] on the tensioner plate of the paper delivery drive assembly (L) [1]. (By loosening the screw, tension is applied to the timing belt.)



6) Tighten the screw which was loosened in the step 5) and attach the rear cover.
[Service parts]

No		Part Number	Description	Q'ty	Fig. No.
1	Old	XF2-3610-760	BELT, TIMING	1->0	L30
	New	4Y8-3156-000	PAPER DELIVERY DRIVE SET (L)	0->1	
2	Old	FM3-5848-000	* PAPER DELIVERY DRIVE ASS'Y (L)	1->0	L30
	New	4Y8-3156-000	PAPER DELIVERY DRIVE SET (L)	0->1	
3	Old	FS2-9394-020	* SCREW,STEPPED,M3X1.4	1->0	L30
	New				
4	Old	FK2-1704-000	* MOTOR, STEPPING, DC	3->4	L30
	New				

* PAPER DELIVERY DRIVE ASS'Y (L) (FM3-5848-000) is discontinued. The DC stepping motor "FK2-1704-000" used in this assembly is set up as a single part and the M3X1.4 stepped screw (FS2-9394-020) is discontinued.

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
FINISHER-AJ1 EU/OT	No implemented due to production discontinuance
FINISHER-AJ1 CN	No implemented due to production discontinuance
FINISHER-AK1 UL	No implemented due to production discontinuance
FINISHER-AK1 EU/O	NWC50349
FINISHER-AK1 CN	NWD50030
FINISHER-AM1 UL	No implemented due to production discontinuance
FINISHER-AM1 EU/O	No implemented due to production discontinuance
FINISHER-AM1 CN	No implemented due to production discontinuance
FINISHER-AN1 US	WBP50086
FINISHER-AN1 EU/O	WBQ50210
FINISHER-AN1 CN	WBR50060
SADDLE FINISHER-AF2 UL	No implemented due to production discontinuance

Model	Serial No.
SADDLE FINISHER-AF2 EU/O	No implemented due to production discontinuance
SADDLE FINISHER-AF2 CN	No implemented due to production discontinuance
SADDLE FINISHER-AJ2 UL	No implemented due to production discontinuance
SADDLE FINISHER-AJ2 EU/O	No implemented due to production discontinuance
SADDLE FINISHER-AJ2 CN	No implemented due to production discontinuance
SADDLE FINISHE-AK2 UL	NWF50146
SADDLE FINISHER-AK2 EU/O	NWG50144
SADDLE FINISHER-AK2 CN	NWH50014
SADDLE FINISHER-AM2 UL	No implemented due to production discontinuance
SADDLE FINISHER-AM2 EU/O	No implemented due to production discontinuance
SADDLE FINISHER-AM2 CN	No implemented due to production discontinuance
SADDLE FINISHER-AN2 US	WBT50743
SADDLE FINISHER-AN2 EU/O	WBU50381
SADDLE FINISHER-AN2 CN	WBV50006
STAPLE FINISHER-F1 UL	No implemented due to production discontinuance
STAPLE FINISHER-F1 EU/O	No implemented due to production discontinuance
STAPLE FINISHER-Q1 UL	No implemented due to production discontinuance
STAPLE FINISHER-Q1 EU/O	No implemented due to production discontinuance
STAPLE FINISHER-W1 UL	SWT51728
STAPLE FINISHER-W1 EU/O	SWU51291
STAPLE FINISHER-W1 CN	WJN50164
BOOKLET FINISHER-F1 UL	No implemented due to production discontinuance
BOOKLET FINISHER-F1 EU/O	No implemented due to production discontinuance
BOOKLET FINISHER-Q1 UL	No implemented due to production discontinuance
BOOKLET FINISHER-Q1 EU/O	No implemented due to production discontinuance
BOOKLET FINISHER-W1 UL	SWW53340
BOOKLET FINISHER-W1 EU/O	SWX52248
BOOKLET FINISHER-W1 CN	WJP50068

Error Code

Measure against power supply errors _ the harness routing list classified according to power supply systems of 12V/24V/38V

[Symptom]

-

[Cause]

-

[Service work]

When the power supply error (E260) occurs, take proper action referring appropriate the harness routing classified according to power supply systems of 12V/24V/38V

the harness routing list classified according to power supply systems

A) When the power supply error for 12V models occurs, take proper action referring following harness routing.

12VA	12VA-1	J101A	UN530	J201A	→	J6000	UN401	J6016	→	J1806	UN102	J1820	→	J1	UN103							
												J1849	→	J8706	Control Panel							
								J6010	→	J4725	FM416											
	12VA-2	J101A	UN530	J201A	→	J6000	UN401	J6013	→	J104	UN985											
	12VA-3	J101A	UN530	J201A	→	J6000	UN401	J6013	→	J104	UN985											
12VB	12VB-1	J101B	UN531	J201B	→	J6001	UN401	J6012	→	J4001	UN311	J4027	→	J7088M	Reader							
	12VB-2	J101B	UN531	J201B	→	J6001	UN401	J6016	→	J1806	UN102	J1820	→	J1051	UN198							
												J1825	→	J1452	UN159							
												J1829	→	J1715V	UN105							
												J1831	→	J1201	UN100							
												J1830	→	J1251	UN104							
												J1832	→	J1502	UN106							
												J1840	→	J1351Y	UN161	J1375Y	→	J5241	M136			
																J1374Y	→	J5261	M137			
																J1380Y	→	J7034Y	M203			
												J1841	→	J1351MA	UN162	J1375M	→	J5242	M130			
																J1374M	→	J5262	M131			
																J1380M	→	J7034M	M204			
												J1842	→	J1351CA	UN163	J1375C	→	J5243	M118			
																J1374C	→	J5263	M119			
																J1380C	→	J7034C	M205			
												J1843	→	J1351KA	UN164	J1375K	→	J5244	M124			
																J1374K	→	J5264	M125			
																J1380K	→	J7034K	M206			
												J1844	→	J1301	UN217	J1311	→	J5230	M110			
												J1845	→	J1321	UN219							
	12VB-3	J101B	UN531	J201B	→	J6001	UN401	J6011	→	J4000	UN311	J4022	→	J4101	UN310							
												J4080	→	J4360P	UN316	J4374	→	J7677	M338			
												J4085	→	J4360S	UN317	J4374S	→	J7677S	M339			
												J4007	→	J4741	FM414							
												J4007	→	J4740	FM415							
												J4008	→	J4742	FM423							
								J6015	→	J8702	FM419		→									
								J6010	→	J4726	FM410		→									
								J6010	→	J4727	FM411		→									
								J6010	→	J4728	FM412		→									
								J6010	→	J4724	FM422		→									
	12VB-4	J101B	UN531	J201B	→	J6001	UN401	J6017	→	J1807	UN102	J1848	→	J8743	UN950							

B) When the power supply error for 38V models occurs, take proper action referring following harness routing.

38VA		J102G	UN532	J202G	→	J6008	UN401	J6017	→	J1802	UN102	J1829	→	J1715V	UN105	J1704V	→	J5320	M176			
																J1704V	→	J7738	M177			
												J1844	→	J1300	UN217	J1310	→	J5227	M109			
												J1832	→	J1515	UN106	J1504	→	J7702	M183			
												J1831	→	J1200	UN100	J1223	→	J8767	M164			
38VB		J101D	UN533	J201D	→	J4005	UN311	J4022	→	J4100	UN310	J4124	→	J7743	M317							
												J4121	→	J7730	M320							
												J4122	→	J7731	M321							
												J4123	→	J7727	M323							
												J4123	→	J7728	M324							
								J4041	→	J7719	M312											
								J4041	→	J7735	M332											
38VC		J101E	UN534	J201C	→	J4006	UN311	J4025	→	J5310P	M300											
								J4026	→	J8735	M305											

C) When the power supply error for 24V models occur, take proper action referring following harness routing.
C-1) 24VA system

24VA	24VA-1	J102A	UN520	J202A	→	J6002	UN401	J6021	→	J1800	UN102	J1823	→	J1400K → J1400C → J1400M → J1400Y	UN168 →UN167 →UN166 →UN165	J1420C	→	J5251	M143											
																J1420K	→	J5252	M144											
																J1420M	→	J5250	M145											
																J1420Y	→	J5249	M146											
																J1420C	→	J5330	M190											
																J1420M	→	J5329	M191											
																J1420K	→	J5331	M192											
																J1420Y	→	J5328	M193											
												J1821	→	J1086	UN124	J1095	→	J4603Y	UN409	J6401Y	→	J6402Y	UN129							
																J1095	→	J4603M	UN410	J6401M	→	J6402M	UN130							
																J1095	→	J4603C	UN411	J6401C	→	J6402C	UN131							
																J1095	→	J4603K	UN412	J6401K	→	J6402K	UN132							
																J1061	→	J8204K	UN921											
												J1847	→	J7032	UN144															
												J1848	→	J1115	UN950	J8731	→	J7532C	M104											
																J8726	→	J7532K	M105											
																J8721	→	J7532M	M106											
																J8722	→	J7532Y	M107											
								J6010	→	J4726	FM410																			
								J6010	→	J4727	FM411																			
								J6010	→	J4728	FM412																			
								J6015	→	J8702	FM419																			
								J6010	→	J4724	FM422																			
								J6010	→	J4725	FM416																			
								J6030	→	J6031	UN915																			
	24VA-2	J102A	UN520	J202A	→	J6002	UN401	J6021	→	J1800	UN102	J1824	→	J5253PF	M195															
												J1824	→	J5256PF	M196															
												J1824	→	J5255PF	M197															
												J1824	→	J5254PF	M198															
	24VA-3	J102A	UN520	J202A	→	J6002	UN401	J6020	→	J1801	UN102	J1822	→	J2050R	UN603	J2053R	→	J5442R	FM601											
																J2056R	→	J5443R	FM604											
																J2055R	→	J5444R	FM605											
																J2052R	→	J5445R	FM608											
								J6015	→	J8700	FM417																			

C-2) 24VB system

24VB	24VB-1	J102B	UN521	J202B	→	J6003	UN401	J6020	→	J1801	UN102	J1822	→	J2050R	UN603	J2056R	→	J2102R	UN602	J2106R	→	J5517R	FM606							
																				J2106R	→	J5516R	FM607							
																				J2105R	→	J5277R	M603							
																				J2106R	→	J5571R	SL603							
																J2054R	→	J5276R	M601											
																J2054R	→	J5275R	M602											
																J2055R	→	J5494R	FM602											
																J2055R	→	J5493R	FM603											
																J2053R	→	J5572R	SL601											
	24VB-2	J102B	UN521	J202B	→	J6003	UN401	J6020	→	J1801	UN102	J1822	→	J2050L	UN703	J2053L	→	J5442L	FM701											
																J2055L	→	J5443L	FM704											
																J2055L	→	J5444L	FM705											
																J2052L	→	J5445L	FM708											
								J6015	→	J8701	FM418																			
	24VB-3	J102B	UN521	J202B	→	J6003	UN401	J6020	→	J1801	UN102	J1822	→	J2050L	UN703	J2056L	→	J2102L	UN702	J2106L	→	J5517L	FM706							
																				J2106L	→	J5516L	FM707							
																				J2105L	→	J5277L	M703							
																				J2106L	→	J5571L	SL703							
																J2054L	→	J5276L	M701											
																J2054L	→	J5275L	M702											
																J2055L	→	J5494L	FM702											
																J2055L	→	J5493L	FM703											
																J2053L	→	J5572L	SL701											

C-3) 24VC system

24VC	24VC-1	J102C	UN522	J202C	→	J6007	UN401	J6025	→	J1804	UN102	J1840	→	J1350Y	UN161	J1375Y	→	J5432	FM113											
																J1373Y	→	J5257	M138											
																J1391Y	→	J5245Y	SL400											
																J1390Y	→	J5034Y	TS129											
																J1375Y	→	J5600	LED100											
																J1375Y	→	J5604	LED110											
																J1372Y	→	J5237	M134											
												J1843	→	J1350KB	UN164	J1375K	→	J5439	FM109											
																J1373K	→	J5260	M126											
																J1391K	→	J5245K	SL403											
																J1390K	→	J5034K	TS125											
																J1375K	→	J5603	LED103											
																J1375K	→	J5607	LED113											
																J1372K	→	J5240	M122											
												J1828	→	J5288	M179															
	24VC-2	J102C	UN522	J202C	→	J6007	UN401	J6025	→	J1804	UN102	J1842	→	J1350CB	UN163	J1375C	→	J5437	FM107											
																J1373C	→	J5259	M120											
																J1391C	→	J5245C	SL402											
																J1390C	→	J5034C	TS126											
																J1375C	→	J5602	LED102											
																J1375C	→	J5606	LED112											
																J1372C	→	J5239	M116											
												J1841	→	J1350MB	UN162	J1375M	→	J5435	FM111											
																J1373M	→	J5258	M132											
																J1391M	→	J5245M	SL401											
																J1390M	→	J5034M	TS124											
																J1375M	→	J5601	LED101											
																J1375M	→	J5605	LED111											
																J1372M	→	J5238	M128											
												J1825	→	J1460	UN159	J1457L	→	–	M155											
												J1828	→	J5286P	M180															
	24VC-3	J102C	UN522	J202C	→	J6007	UN401	J6025	→	J1804	UN102	J1833	→	J1550	UN107	J1556	→	J5438	FM108											
																J1556	→	J5440	FM110											
																J1556	→	J5436	FM112											
																J1556	→	J5433	FM114											
																J1557	→	J5449	FM134											
																J1557	→	J5448	FM137											
																J1595	→	J5815	FM163											
																J1595	→	J5813	FM402											
																J1593	→	J7417	FM403											
																J1595	→	J5816	FM404											
																J1559	→	J7419	SL420											
																J1559	→	J7413	TS128											

C-4) 24VD system

24VD	24VD-1	J102D	UN523	J202D	→	J6005	UN401	J6018	→	J1803	UN102	J1833	→	J1550	UN107	J1558	→	J7707	M181											
																J1597	→	J5505	FM405											
																J1597	→	J5506	FM406											
																J1597	→	J5507	FM407											
												J1834	→	J1600Y	UN125 24V→38V	J1621Y	→	–	M142 (38V)											
												J1844	→	J1300	UN217	J1311	→	J5228	M111											
	24VD-2	J102D	UN523	J202D	→	J6005	UN401	J6018	→	J1803	UN102	J1834	→	J1600M	UN126 24V→38V	J1621M	→	–	M141 (38V)											
												J1846	→	J5234P	M127															
												J1846	→	J5233P	M133															
	24VD-3	J102D	UN523	J202D	→	J6005	UN401	J6018	→	J1803	UN102	J1836	→	J1600K	UN128 24V→38V	J1621K	→	–	M140 (38V)											
												J1846	→	J5235P	M115															
												J1846	→	J5236P	M121															

C-5) 24VE system

24VE	24VE-1	J102E	UN524	J202E	→	J6006	UN401	J6018	→	J1803	UN102	J1829	→	J1715V	UN105	J1709V	→	J5431V	FM140												
																J1709V	→	J5812	FM143												
																J1709V	→	J5430V	FM400												
																J1709V	→	J5502V	FM401												
																J1703V	→	J5267	M178												
																J1712V	→	J7706	M800												
												J1845	→	J5229P	M108																
												J1845	→	J3251P	UN148	J3251P	→	J3251S	UN149												
	24VE-2	J102E	UN524	J202E	→	J6006	UN401	J6019	→	J1802	UN102	J1829	→	J1715V	UN105	J1703V	→	J5268	M172												
																J1706V	→	J5269	M173												
																J1706V	→	J5270	M174												
																J1706V	→	J5271	M175												
																J1710V	→	J5579	SL800												
	24VE-3	J102E	UN524	J202E	→	J6006	UN401	J6019	→	J1802	UN102	J1832	→	J1515	UN106	J1503	→	J7700	M184												
																J1506	→	J7703	M185												
																J1506	→	J7704	M186												
																J1506	→	J7705	M187												
																J1504	→	J7701	M188												
																J1523	→	J7207	M210												
																J1509	→	J5431	FM120												
																J1509	→	J5430	FM121												
																J1509	→	J5504	FM135												
																J1520	→	J7203	FM428												

C-6) 24VF system

24VF	24VF-1	J102F	UN525	J202F	→	J6004	UN401	J6019	→	J1802	UN102	J1845	→	J1320	UN219	J1332	→	J5232	M114												
																J1334	→	J5461	FM115												
																J1320	→	J3301	UN150												
												J1838	→	J3051M	UN113	J3051M	→	J3051Y	UN112												
												J1838	→	J3051K	UN115	J3051K	→	J3051C	UN114												
												J1838	→	J3001Y	UN137																
												J1838	→	J3001M	UN138																
												J1838	→	J3001C	UN139																
												J1838	→	J3001K	UN140																
	24VF-2	J102F	UN525	J202F	→	J6004	UN401	J6019	→	J1802	UN102	J1830	→	J1250	UN104	J1270	→	J244	M156												
																J1270	→	J245	M157												
																J1271	→	J246	M158												
																J1271	→	J247	M159												
																J1272	→	J248	M160												
																J1272	→	J249	M161												
																J1272	→	J251	M162												
																J1273	→	J5215	M400												
																J1280	→	J5163	FM425												
																J1285	→	J5500	FM130												
																J1280	→	J5016	FM424												
																J1283	→	J7777	UN122												
												J1839	→	J9	UN972	J9	→	J6	UN971	J6	→	J3351	UN108								
												J1838	→	J3151	UN116																
												J1839	→	J3202C	UN135																
												J1839	→	J3202K	UN136																
	24VF-3	J102F	UN525	J202F	→	J6004	UN401	J6019	→	J1802	UN102	J1831	→	J1200	UN100	J1220	→	J253	M165												
																J1221	→	J254	M166												
																J1221	→	J255	M167												
																J1222	→	J256	M168												
																J1222	→	J5220	M169												
																J1222	→	J5221	M170												
																J1220	→	J5222	M171												
												J1836	→	J1600C	UN127 24V→38V	J1621C	→	-	M139 (38V)												
												J1839	→	J3202Y	UN133																
												J1839	→	J3202M	UN134																

C-7) 24VH system

24VH	24VH-1	J102Z	UN527	J202Z	→	J4002	UN311	J4027	→	J7088	Reader																				
								J4052	→	J8757	FM312																				
	24VH-2	J102Z	UN527	J202Z	→	J4002	UN311	J4062	→	J5456	FM314																				
								J4053	→	J5488	FM326																				
								J4053	→	J5489	FM327																				
								J4053	→	J5490	FM328																				
								J4062	→	J7420	FM381																				
								J4053	→	J5483	FM408																				
								J4053	→	J5484	FM409																				
								J4042	→	J5319P	M314																				
	24VH-3	J102Z	UN527	J202Z	→	J4002	UN311	J4036	→	J8204E	UN920																				
								J4062	→	J5453	FM318																				
								J4062	→	J5452	FM319																				
								J4062	→	J5454	FM320																				
								J4052	→	J5801	FM354																				
								J4052	→	J5802	FM355																				
								J4007	→	J4743	FM414																				
								J4007	→	J4740	FM415																				
								J4008	→	J4742	FM423																				
								J4032	→	J5555	TS300																				
								J4032	→	J5556	TS301																				

C-8) 24VI system

24VI	24VI-1	J102I	UN528	J202I	→	J4003	UN311	J4054	→	5803	FM357																				
								J4054	→	J5804	FM358																				
								J4054	→	J5805	FM359																				
								J4054	→	J5806	FM360																				
								J4062	→	J5809	FM362																				
								J4040	→	J7716	M309																				
								J4040	→	J7717	M310																				
								J4040	→	J7718	M311																				
								J4040	→	J7714	M327																				
								J4040	→	J7715	M329																				
								J4040	→	J7713	M330																				
	24VI-2	J102I	UN528	J202I	→	J4003	UN311	J4022	→	J4100	UN310	J4120	→	J7733	M315																
												J4120	→	J7734	M316																
												J4121	→	J7729	M319																
												J4122	→	J7732	M322																
												J4129	→	J7684	M337																
												J4130	→	J5497	FM350																
												J4128	→	J5513	FM336																
												J4140	→	J5532	FM427																
	24VI-3	J102I	UN528	J202I	→	J4003	UN311	J4041	→	J7790	M318																				
								J4041	→	J7711	M325																				
								J4040	→	J7709	M328																				
								J4041	→	J7712	M331																				
								J4041	→	J7736	M333																				
								J4041	→	J7737	M334																				

C-9) 24VJ system

24VJ	24VJ-1	J102J	UN529	J202J	→	J4004	UN311	J4023	→	J4350P	UN316	J4372	→	J5524	FM331																
												J4372	→	J5525	FM332																
												J4372	→	J5426	FM333																
												J4372	→	J5527	FM334																
												J4373P	→	J7673	FM421																
												J4370P	→	J7723	M303																
												J4371P	→	J7722	M304																
												J4384	→	–	M335																
												J4374	→	J5574	SL302																
								J4023	→	J4150P	UN304	J4163P	→	J7720	M301																
												J4164P	→	J7721	M302																
								J4024	→	J4350S	UN317	J4373S	→	J5528	FM420																
												J4370S	→	J7726	M308																
												J4384S	→	–	M336																
												J4374	→	J5575	SL303																
												J4374	→	J5137	SL412																
								J4024	→	J4150S	UN305	J4163S	→	J7724	M306																
												J4164S	→	J7725	M307																
	24VJ-2	J102J	UN529	J202J	→	J4004	UN311	J4050	→	J5450	FM313																				
								J4062	→	J5451	FM315																				
								J4051	→	J5625	SL410																				
								J4060	→	J5520	SL411																				
								J4050	→	J8771	UN916																				
								J4050	→	J8772	UN917																				
								J4060	→	J8773	UN918																				
	24VJ-3	J102J	UN529	J202J	→	J4004	UN311	J4060	→	J7659	FM337																				
								J4051	→	J5619	FM338																				

E025-0x51 due to the continuous paper passing of entire solid image whose size is A3 or larger.

[Symptom]

E025-0 x51 might occur if the size of media is A3 or larger (A3, 12X18, 13X19, SRA3 etc.) when continuous paper passing of entire solid image is performed.
- The Developing Toner Density Sensor (Y) consecutively detected a value that was DENS value -6% or less. (TD ratio: 3% or less)
(x=1:Y , 2:M , 3:C , 4:Bk)

[Cause]

Whole amount of toner in the Hopper will be consumed by the continuous paper passing of 600 entire solid images whose size is A3 or larger after that "Replace the toner container" is display on the status bar of UI screen.
If the continuous paper passing is kept on performing, "Replace the toner container" is display on the UI screen few seconds after the detection for that there is no toner in Sub Hopper. Then the feeding paper is forcibly stopped.
At the time, if the density of solid image is kept being higher than expected density, the toner in the Developing Assembly becomes too small in amount before the forced stopping of paper feeding. That results in the above error.

[Service work]

1) Remove the unfinished papers in the devices (main body+ pick-up/ delivery related options).
2) Insert new toner bottle.
3) Turn OFF/ON the main power supply and wait few minutes until the Hopper is replenished with toner.
[Reference] Since the Hopper was empty, so the toner bottle gets empty before the Hopper becomes full with tonner. Replacement for new tonner bottle is recommended.
4) Output around 10 sheets which are A3 size or larger than LDR size, and duplex white solid image.
This operation restores the tonner amount in the Developing Assembly.
[CAUTION] When the tonner amount in the Developing Assembly does not be restored and the same error occurs during the operation, turn OFF/ON the main power supply and repeat the step 4).
5) Output the image having shown the symptom, and check that the symptom does not occur.
If the symptom does not improve, then check other factors.

Remedy When E260-0Fxx (Power Supply Error in Multiple Locations) Occurs

[Symptom]

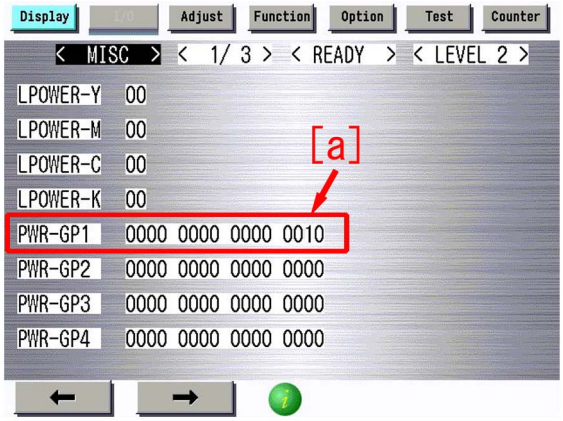
There is the case that E260-0Fxx (the power supply error of plural points) occurs.

[Cause]

-

[Service work]

1) Check the bit display of Service Mode (Level 2) > Mode List > COPIER > Display > MISC > [PWR-GP1] to [PWR- GP16]. The error point is the place displayed "1" in bit display.
Example) On E260-0002 (E260-0F02), the second bit from the right of [PWR-GP1] shows "1" [a].



[Reference] The following table shows that which display of [PWR- GP1] to [PWR- GP16] is compatible with which last 2 digits of error cord.

Display > MISC	bit															
	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
PWR-GP1	—	—	0E	0D	0C	0B	0A	09	08	07	06	05	04	03	02	01
PWR-GP2	1E	1D	1C	1B	1A	19	18	17	16	15	14	13	12	11	10	0F
PWR-GP3	—	—	—	—	—	—	—	—	26	25	24	23	22	21	20	1F
PWR-GP4	—	—	—	—	—	—	—	—	—	81	80	7F	7E	7D	7C	7B
PWR-GP5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	83	82
PWR-GP6	—	—	—	—	—	—	—	92	8D	89	61	59	4A	40	34	2B
PWR-GP7	—	—	—	—	—	—	—	30	2F	2E	2D	2C	2A	29	28	27
PWR-GP8	—	—	—	—	—	3C	3B	3A	39	38	37	36	35	33	32	31
PWR-GP9	—	—	—	—	—	—	—	46	45	44	43	42	41	3F	3E	3D
PWR-GP10	—	—	—	—	—	—	55	54	53	52	51	50	4F	49	48	47
PWR-GP11	—	—	—	—	—	—	—	5D	5C	5B	5A	58	57	56	4D	4C
PWR-GP12	—	6D	6C	6B	6A	69	68	67	66	65	64	63	62	60	5F	5E
PWR-GP13	—	—	—	—	—	—	75	74	73	72	71	70	6F	6E	4E	4B
PWR-GP14	96	95	94	93	91	90	8F	8E	8C	8B	8A	88	87	86	85	84
PWR-GP15	—	—	—	—	—	—	—	—	99	98	97	7A	79	78	77	76
PWR-GP16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2) If your bit display is indicated in the following corresponding table, perform a) to x) steps.
If your bit display is not indicated in the following corresponding table, take action for the error cord which is compatible with the bit indicated in Step 1).

No	Display > MISC	bit															
		16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
a	PWR-GP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
b	PWR-GP1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0
c	PWR-GP1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
d	PWR-GP2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
e	PWR-GP4	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
f	PWR-GP6	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
g	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
h	PWR-GP6	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
i	PWR-GP6	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0
j	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
k	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
l	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
m	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
n	PWR-GP6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
o	PWR-GP6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
p	PWR-GP6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
q	PWR-GP6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
r	PWR-GP6	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
s	PWR-GP7	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0
t	PWR-GP9	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0
u	PWR-GP10	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0
v	PWR-GP11	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
w	PWR-GP15	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
x	PWR-GP15	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0

a) For the case that bit1 of [PWR- GP1] shows "1". (All 12V errors of Sub Station are detected.)
a-1) Check if there is a disconnected connector or a cutoff harness between UN401/J6011 to UN311/J4000 and UN311/J4070 to UN124/J1072.
a-2) Check if there is a pinch of harness at the 15 points which are indicated the following table for 12VB-3 system and filled in blue.

	Parts -1	Check point	Parts -2	Check point	Parts -3	Check point	Parts -4	Check point	Parts -5
12V B-3	UN531	J201B ~ J6001	UN401	J6011 ~ J4000	UN311	J4080 ~ J4360P	UN316	J4374P ~ J7677	M338
						J4085 ~ J4360S	UN317	J4374S ~ 7677S	M339
						J4022 ~ J4101	UN310		
						J4007 ~ J4743	FM414		
						J4007 ~ J4740	FM415		
						J4008 ~ J4742	FM423		
				J6015 ~ J8702	FM419				
				J6010 ~ J4726	FM410				
				J6010 ~ J4727	FM411				
				J6010 ~ J4728	FM412				
				J6010 ~ J4724	FM422				

b) For the case that bit2 to bit14 of [PWR- GP1] show "1". (All 12V errors of Main Station are detected.)
b-1) Check if there is a disconnected connector or a cutoff harness between UN401/J6016 to UN102/J1806, UN401/J6024 to UN102/J1812 and UN102/J1810 to UN124/J1001.
b-2) Check if there is a pinch of harness at the 27 points which are indicated the following table for 12VB-2 system and filled in blue.

	Parts -1	Check point	Parts -2	Check point	Parts -3	Check point	Parts -4	Check point	Parts -5
12V B-2	UN531	J201B ~ J6001	UN401	J6016 ~ J1806	UN102	J1840 ~ J1351Y	UN161	J1375Y ~ J5241	M136
								J1374Y ~ J5261	M137
								J1380Y ~ J7034Y	M203
						J1841 ~ J1351M	UN162	J1375M ~ J5242	M130
								J1374M ~ J5262	M131
								J1380M ~ J7034M	M204
						J1842 ~ J1351C	UN163	J1375C ~ J5243	M118
								J1374C ~ J5263	M119
								J1380C ~ J7034C	M205
						J1843 ~ J1351K	UN164	J1375K ~ J5244	M124
								J1374K ~ J5264	M125
								J1380K ~ J7034K	M206
						J1844 ~ J1301	UN217	J1311 ~ J5230	M110
						J1845 ~ J1321	UN219		
						J1820 ~ J1051	UN198		
						J1825 ~ J1452	UN159		
						J1829 ~ J1715V	UN105		
						J1831 ~ J1201	UN100		
						J1830 ~ J1251	UN104		
						J1832 ~ J1502	UN106		

c) For the case that bit1 to bit14 of [PWR- GP1] show "1". (All 12 V errors of Main Station and Sub Station are detected.)
c-1) Check if there is a disconnected connector or a cutoff harness between UN531/J201B to UN401/J6001, UN401/J6024 to UN102/J1812 and UN102/J1810 to UN124/J1001.
c-2) Replace the UN531 (12V Power Supply PCB B).

d) For the case that bit2 to bit16 of [PWR- GP2] show "1". (All 5V errors of Main Station are detected.)
d-1) Check if there is a disconnected connector or a cutoff harness between UN102/J1810 to UN124/J1001.
d-2) Replace the UN102 (Main Station Power Supply Relay PCB).

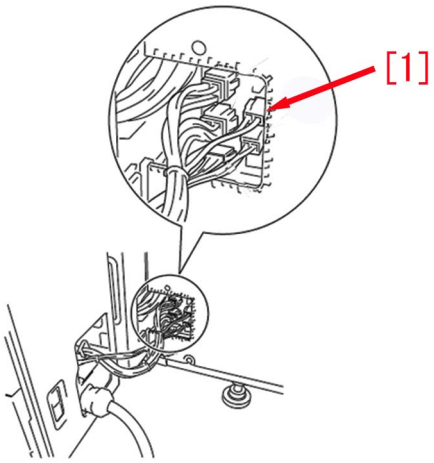
e) For the case that bit1 to bit7 of [PWR- GP4] show "1". (All 5V errors of Sub Station are detected.)
e-1) Replace the UN311 (Fixing Duplex Feed Driver PCB).

f) For the case that bit1 to bit6 of [PWR- GP6] show "1". (All 24V errors of Main Station are detected.)
f-1) Check if there is a disconnected connector or a cutoff harness between UN401/J6024 to UN102/J1812 and UN401/J6023 to UN124/J1005.
f-2) Check if there is a disconnected connector for UN400/J6104 and J6105.
f-3) Replace the UN400 (Power Unit Relay PCB).

g) For the case that bit1 to bit3 of [PWR- GP6] show "1". (All 24V errors of Main Station, other than Interlock, are detected.)
g-1) Check if there is a disconnected connector for UN400/J6104.
g-2) Replace the UN400 (Power Unit Relay PCB).

h) For the case that bit4 to bit6 of [PWR- GP6] show "1". (All 24V errors of Main Station, other than Interlock, are detected.)
h-1) Check if there is a disconnected connector for UN400/J6105.
h-2) Replace the UN400 (Power Unit Relay PCB).

i) For the case that bit7 to bit9 of [PWR- GP6] show "1". (All 24V errors of Sub Station are detected.)
i-1) Check if there is a disconnected connector or a cutoff harness between UN402/J4766(J6300) to panel mount of Sub Station / J7859 [1].



i-2) Check if there is a disconnected connector or a cutoff harness between UN311/J4013 to UN402/J6303.
i-3) Check if there is a disconnected connector for UN402/J6301 and J6302.
i-4) Replace the UN402 (Fixing Relay PCB).

j) For the case that bit1 of [PWR- GP6] shows "1". (All 24V errors of 24VA system are detected.)
j-1) Check if there is a disconnected connector or a cutoff harness between UN520/J202A to UN401/J6002.
j-2) Replace the UN520 (24V Power Supply PCB A).

k) For the case that bit2 of [PWR- GP6] shows "1". (All 24V errors of 24VB system are detected.)
k-1) Check if there is a disconnected connector or a cutoff harness between UN521/J202B toUN401/J6003.
k-2) Replace the UN521 (24V Power Supply PCB B).

l) For the case that bit3 of [PWR- GP6] shows "1". (All 24V errors of 24VC system are detected.)
l-1) Check if there is a disconnected connector or a cutoff harness between UN522/J202C to UN401/J6007.
l-2) Replace the UN522 (24V Power Supply PCB C).

m) For the case that bit4 of [PWR- GP6] shows "1". (All 24V errors of 24VD system are detected.)
m-1) Check if there is a disconnected connector or a cutoff harness between UN523/J202D to UN401/J6005.
m-2) Replace the UN523 (24V Power Supply PCB D).

n) For the case that bit5 of [PWR- GP6] shows "1". (All 24V errors of 24VE system are detected.)
n-1) Check if there is a disconnected connector or a cutoff harness between UN524/J202E to UN401/J6006.
n-2) Replace the UN524 (24V Power Supply PCB E).

o) For the case that bit6 of [PWR- GP6] shows "1". (All 24V errors of 24VF system are detected.)
o-1) Check if there is a disconnected connector or a cutoff harness between UN525/J202F to UN401/J6004.
o-2) Replace the UN525 (24V Power Supply PCB F).

p) For the case that bit7 of [PWR- GP6] shows "1". (All 24V errors of 24VH system are detected.)
p-1) Check if there is a disconnected connector or a cutoff harness between UN527/J202Z to UN311/J4002.
p-2) Replace the UN527 (24V Power Supply PCB H).

q) For the case that bit8 of [PWR- GP6] shows "1". (All 24V errors of 24VI system are detected.)
q-1) Check if there is a disconnected connector or a cutoff harness between UN528/J202I to UN311/J4003.
q-2) Replace the UN528 (24V Power Supply PCB I).

r) For the case that bit9 of [PWR- GP6] shows "1". (All 24V errors of 24VJ system are detected.)
r-1) Check if there is a disconnected connector or a cutoff harness between UN529/J202J to UN311/J4004.
r-2) Replace the UN529 (24V Power Supply PCB J).

s) For the case that bit5 to bit9 of [PWR- GP7] show "1". (Contact failure of 24VA system is detected.)
s-1) Check if there is a disconnected Relay connector (J7886) between UN401/J6020, J6021 to UN102/J1800,J1801.
s-2) Check if there is a disconnected connector for UN401/J6020,J6021,UN102/J1800 and J1801.

t) For the case that bit4 to bit9 of [PWR- GP9] show "1". (Contact failure of 24VC system is detected.)
t-1) Check if there is a disconnected Relay connector (J7887) between UN401/J6025 to UN102/J1804.

t-2) Check if there is a disconnected connector for UN401/J6025 and UN102/J1804.

u) For the case that bit4 to bit10 of [PWR- GP10] show "1". (Contact failure of 24VD system is detected.)
u-1) Check if there is a disconnected Relay connector (J7876) between UN401/J6018 to UN102/J1803.
u-2) Check if there is a disconnected connector for UN401/J6018 and UN102/J1803.

v) For the case that bit8 to bit9 of [PWR- GP11] show "1". (Contact failure of 24VE system is detected.)
v-1) Check if there is a disconnected Relay connector (J7875) between UN401/J6019 to UN102/J1802.
v-2) Check if there is a disconnected connector for UN401/J6019 and UN102/J1802.

w) For the case that bit1 to bit5 of [PWR- GP15] show "1". (All 38V errors of Main Station are detected.)
w-1) Check if there is a disconnected connector or a cutoff harness between UN532/J202G to UN401/J6008.
w-2) Replace the UN532 (38V Power Supply PCB A).

x) For the case that bit6 to bit8 of [PWR- GP15] show "1". (All 38V errors of Sub Station are detected.)
x-1) Check if there is a disconnected connector or a cutoff harness for UN402/J6305 to UN201C/J101E, UN201D/J101D.
x-2) Replace the UN533 (38V Power Supply PCB B) and UN534 (38V Power Supply PCB C).

3) Perform same operation which was done when the error occurred to check if the symptom does not occur.

E029-0x01 by the incorrect position of Shutter Solenoid or error of shutter slide lever

[Symptom]

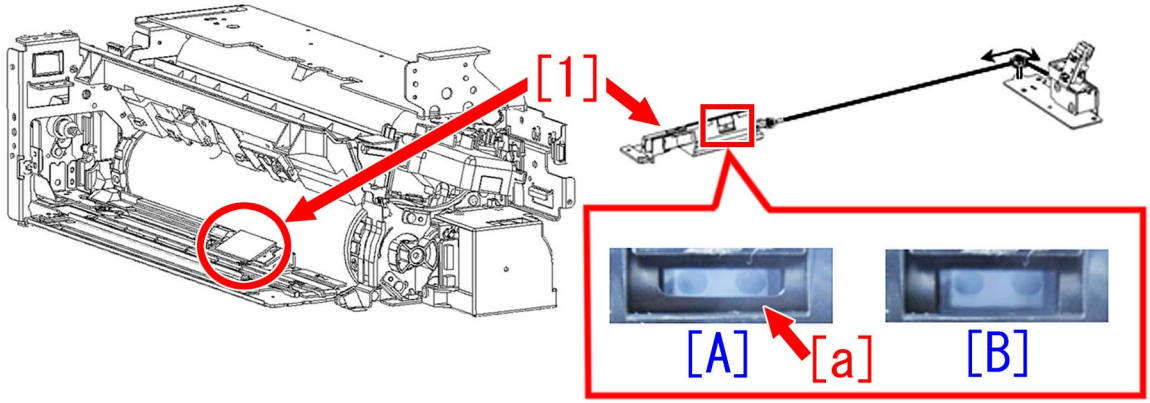
When installing or operating, E029-0x01 may occur on the following serial numbers affected.
- E029-0x01 : Home position error of the drum patch sensor shutter (x) was detected. (x:1/2/3/4=Y/M/C/ Bk)

[Cause]

The following three four causes results in the above-mentioned symptom.

a). Incorrect position of the shutter solenoid

When the shutter solenoid is attached in the process, the shutter [1] of patch sensor should have been attached in the state of fully opened [B]. However it has not been attached with proper adjustment. Photo [A] shows the state that the shutter [a] is not opened fully and Photo [B] shows the proper state.

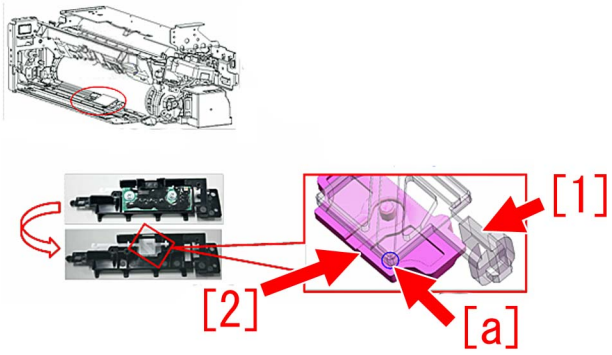


<Serial number affected>

iPR C10000VP series US : from WBC00500 to WBC00515
iPR C10000VP series EU / O : only WEJ00500

b). Error of the shutter slide lever

The slide lever and the shutter cover [2] interfere with each other [a], and the shutter may not be able to be opened or closed.

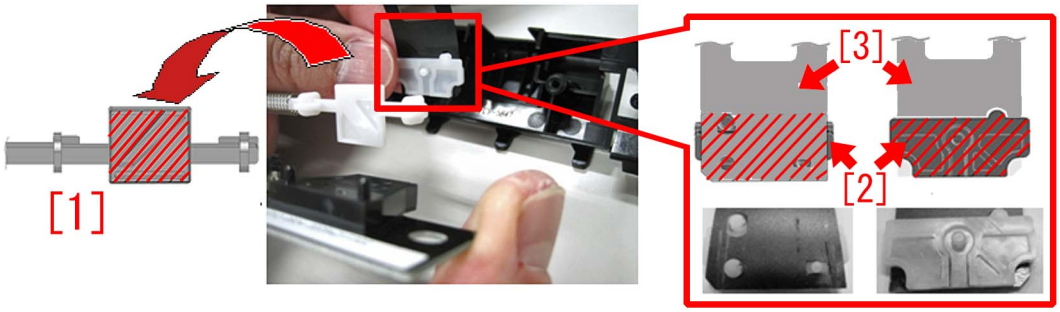


<Serial number affected>

iPR C10000VP series US : from WBC00500 to WBC00541, from WBC10001 to WBC10054,WBC10056, WBC10058 and WBC10059
iPR C10000VP series EU / O : from WEJ00500 to WEJ00533, from WEJ10001 to WEJ10018
iPR C10000VP series JP : from WEK10001 to WEK10013

c). Operational error of the shutter

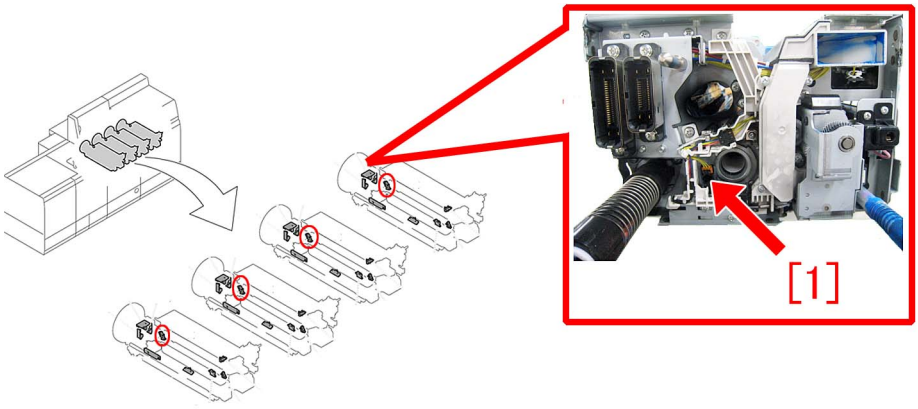
If Jam or error occurs during printing, the developing bias suddenly stops the output. At this time, the carrier absorbed to the drum surface floats and may enter inside the drum patch sensor. In particular, the machine in which jams and errors frequently occur during printing, the carrier enters more possibly, and the operational error may rarely occur.
Therefore, a measure is taken so that the shutter moves smoothly by applying Hanarl to the hatched areas of the slide lever [1], the shutter slider [2] and the shutter [3], even if the carrier enters inside the drum patch sensor.



d). Dirt of the detection surface of the patch sensor shutter solenoid sensor

After some endurance time, the detection surface of the patch sensor shutter solenoid sensor [1] gets dirty, and this may cause false detection.

[Reference] There is 1 patch sensor shutter solenoid sensor per process unit of each color. (Y : , M : PS402, C : PS403, Bk : PS404)



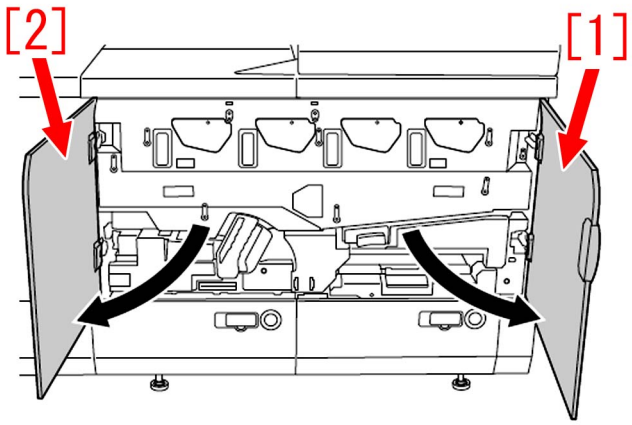
[Service work]

Take the following steps depending on the cause:

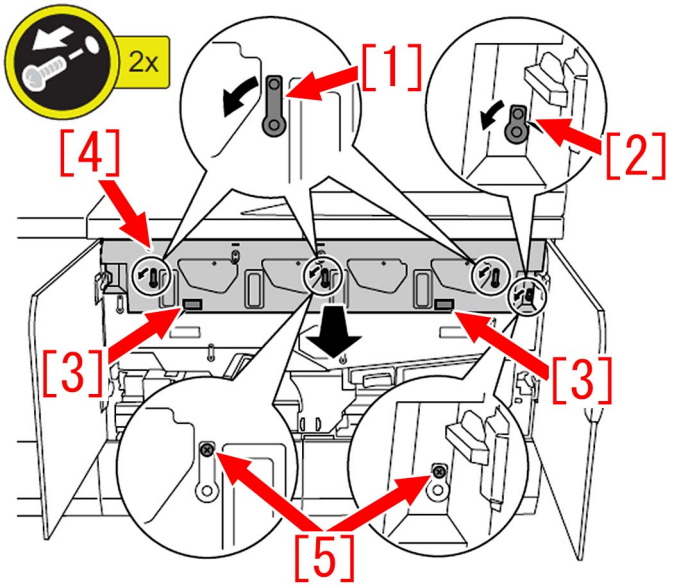
a). Incorrect position of the shutter solenoid

Identify the color in which the symptom occurs for the affected machine and work the operations below when installing or servicing the machine.

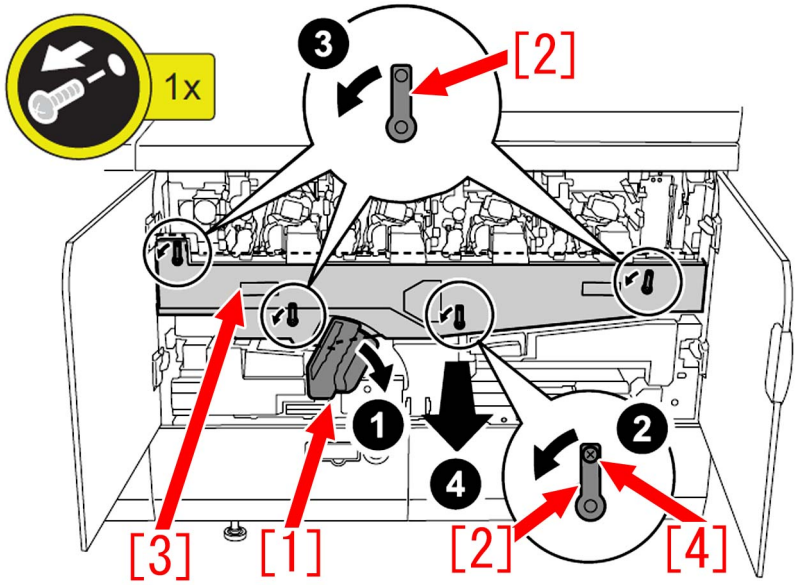
1) Open the main station front right cover [1] and the main station front left cover [2].



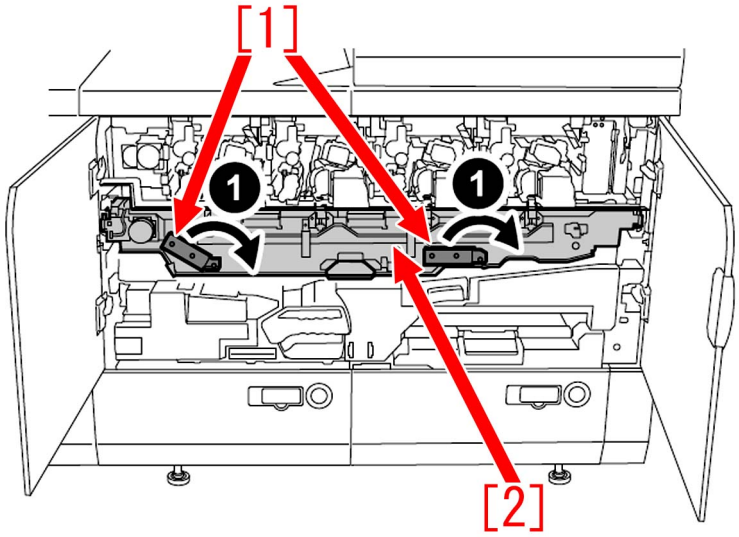
2) Remove 2 stepped screws [5] and unlock 3 process unit cover release levers [1] and 1 (one) process unit cover release lever 2 [2]. Then hold the handle [3] to detach the process unit cover [4].



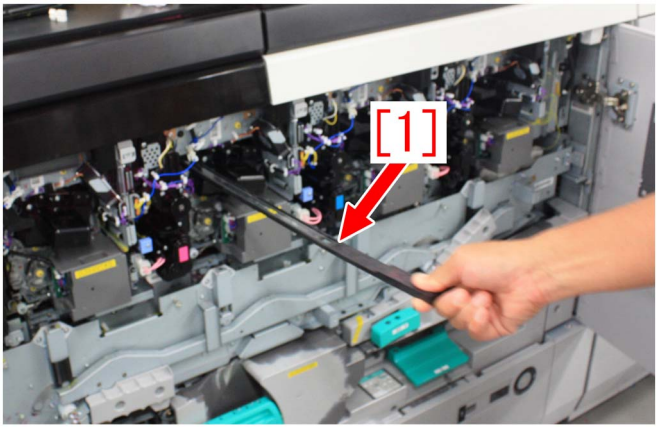
3) Turn the lever (B-E1) [1] to unlock and remove 1 (one) stepped screw [4]. After that unlock 4 release levers [2] and detach the ITB frame unit cover [3].



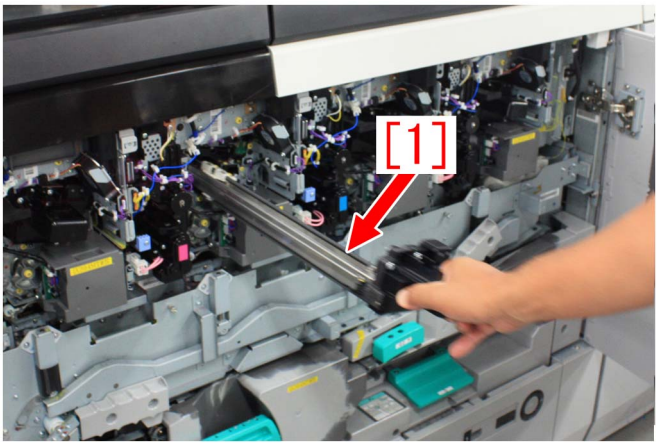
4) Turn 2 release levers [1] to release the application of pressure to the ITB frame unit [2].



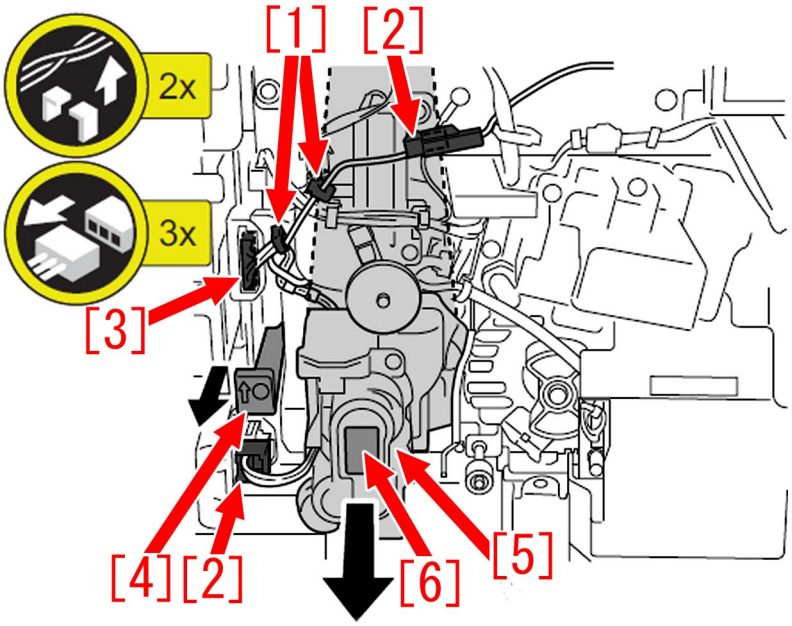
5) Pull out the dust-proof glass [1].



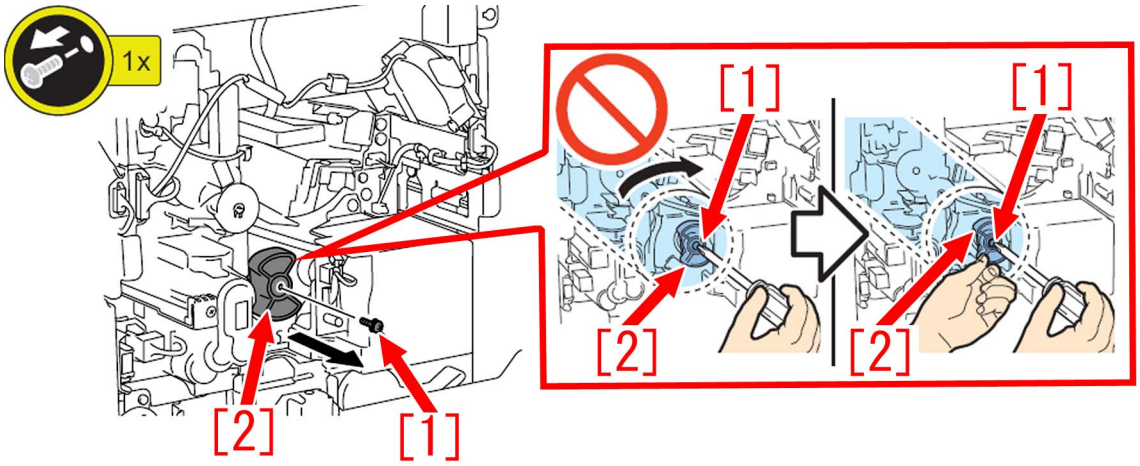
6) Pull out the primary charging assembly [1].



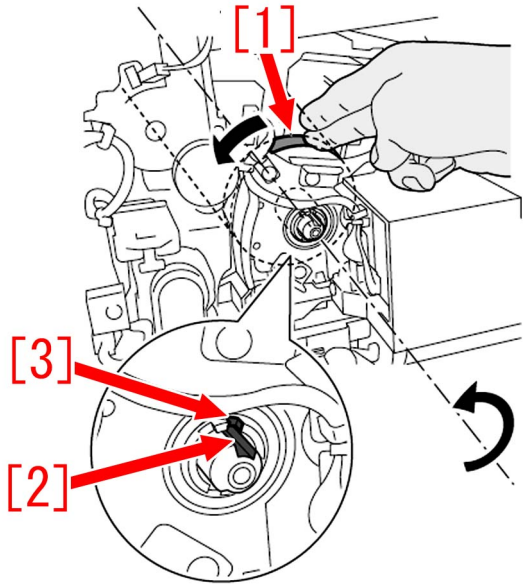
7) Lift up the developing assembly pressure release lever [4], pull it to the front until it is locked and then pull the developing assembly [5] toward to dismount it. [6] indicates the color label of developing assembly.



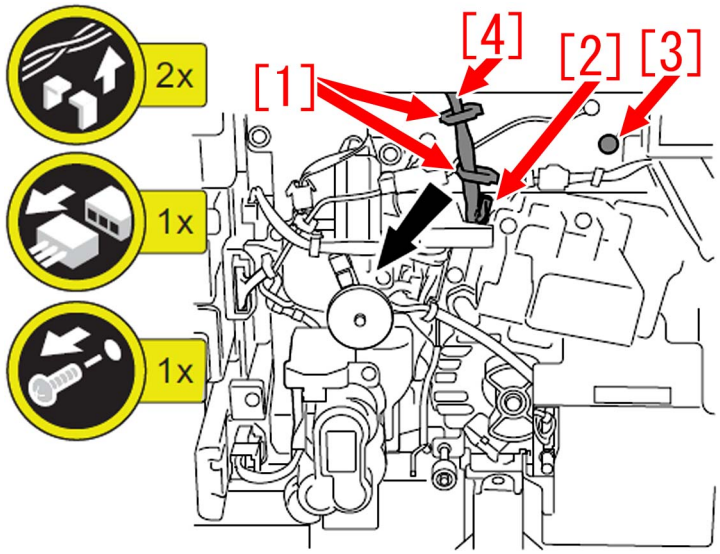
8) Remove 1 (one) screw [1] to detach the drum shaft knob [2]. Hold the drum shaft knob [2] by hand in order to prevent the photosensitive drum from rotating clockwise during attaching and detaching the screw [1].



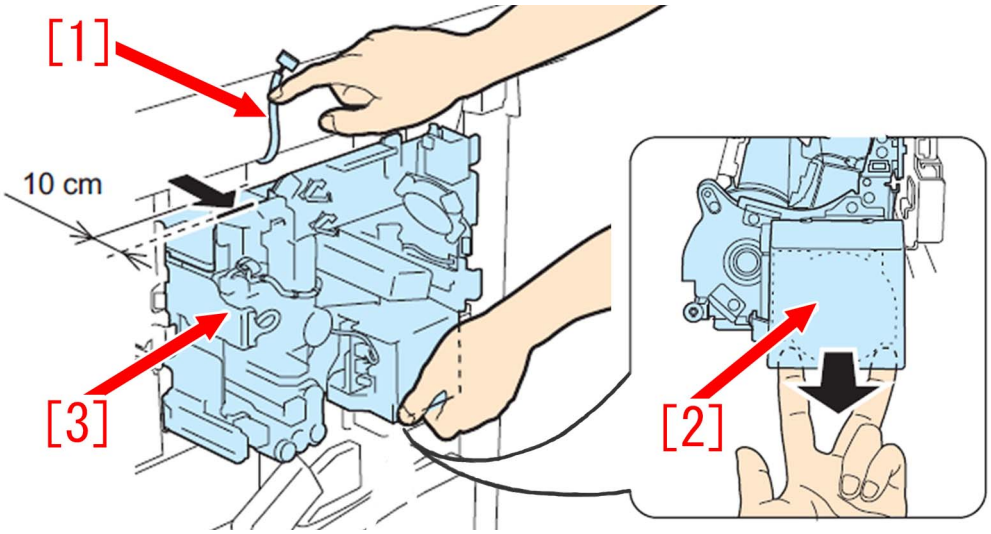
[Caution] When attaching the drum shaft, rotate the side face of the drum flange [1] counterclockwise by hand, and align the groove [2] of the drum shaft with the groove [3] of the drum flange. (Be sure to rotate the drum counterclockwise in order to prevent the scoop-up sheet from flipping.)



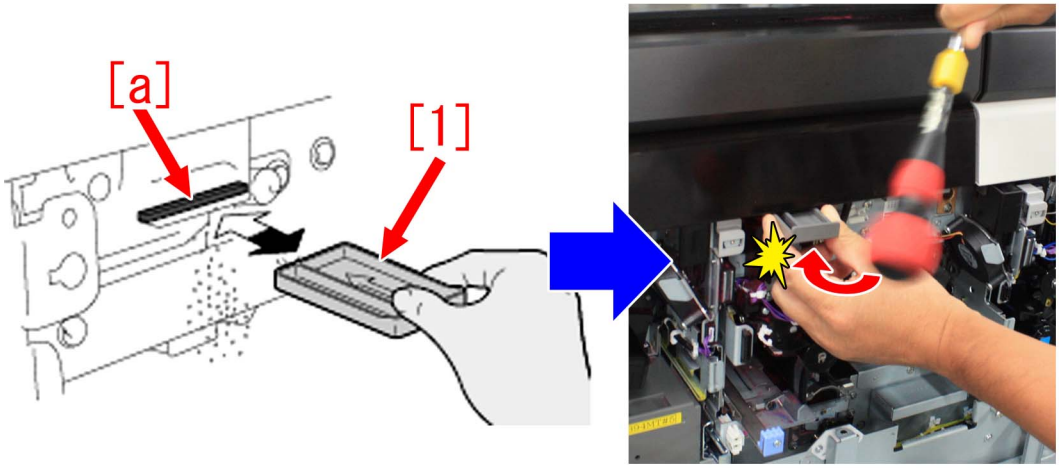
9) Remove 2 wire saddles [1], 1 (one) connector [2] and 1 (one) screw [3] to free the harness [4].



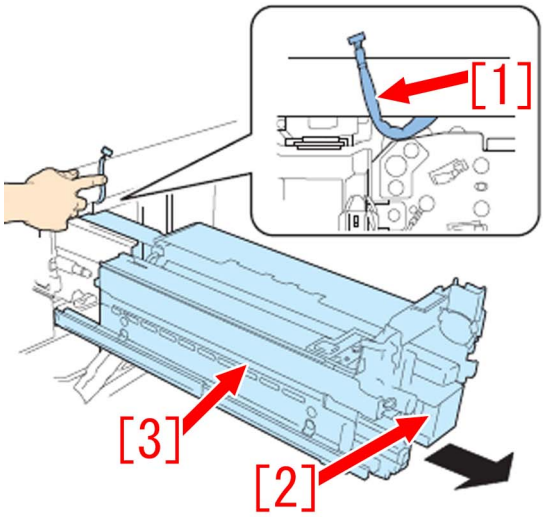
10) While holding the harness [1], hold the handle [2] to pull out the process unit [3] for approx. 10 cm.

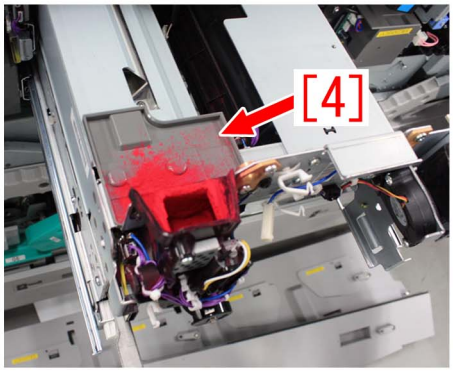


11) Insert the toner dust tool [1] into the toner shutter area [a] and tap it to drop the toner dust accumulated.

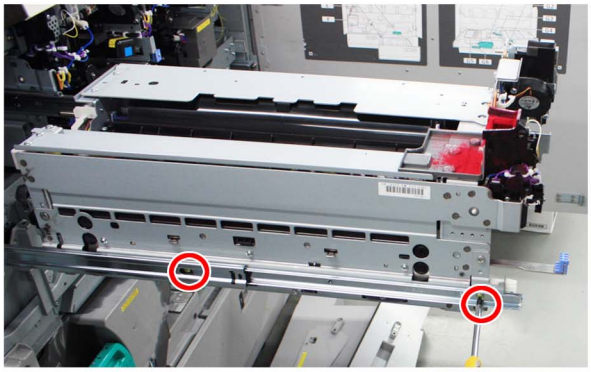


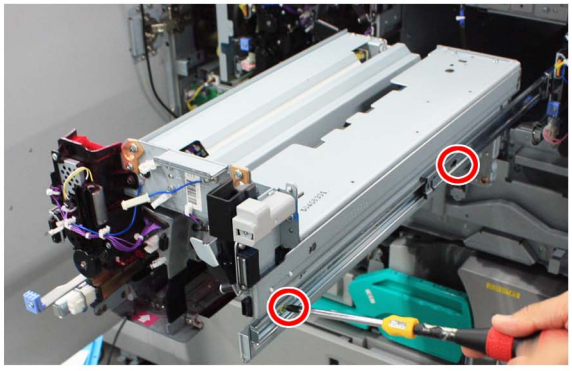
12) While holding the harness [1], hold the handle [2] to pull out the process unit [3]. Discard the toner accumulated in the waste toner holder [4].



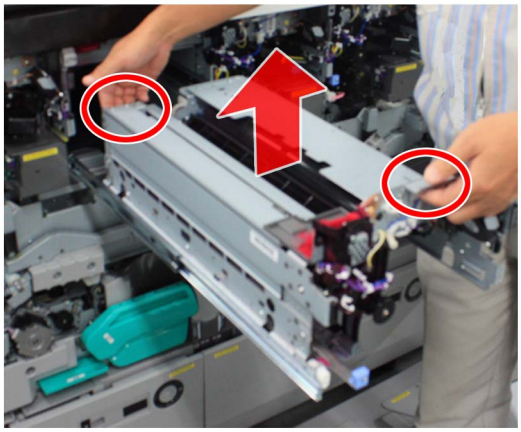


13) Remove 4 screws of the rails which are attached the left and the right sides of the process unit.

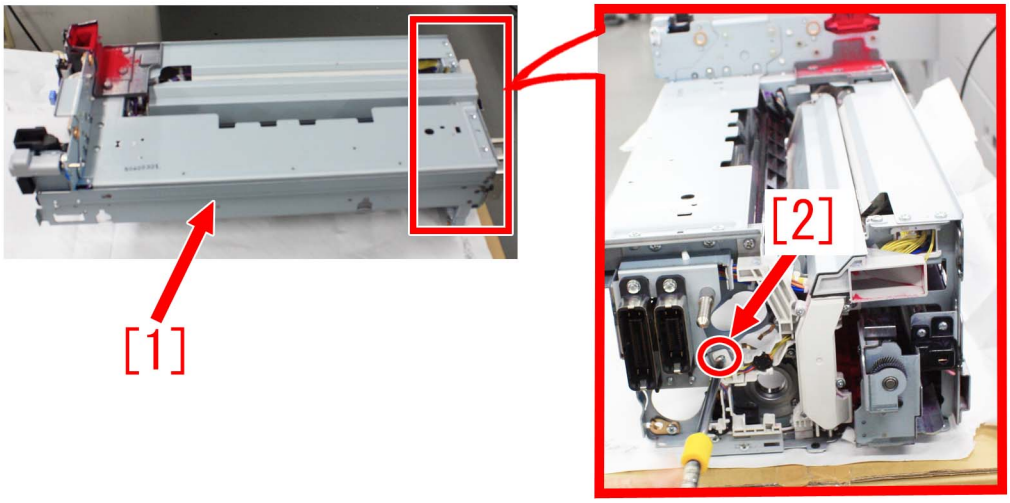




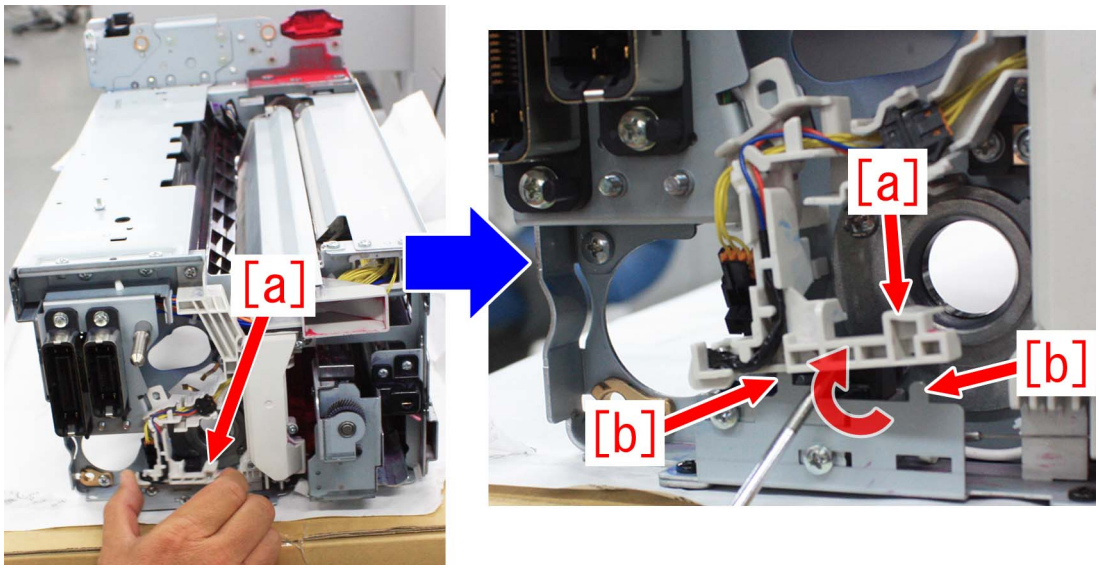
14) Lift up the process unit to demount from the rails while holding the red-circled area of the process unit.



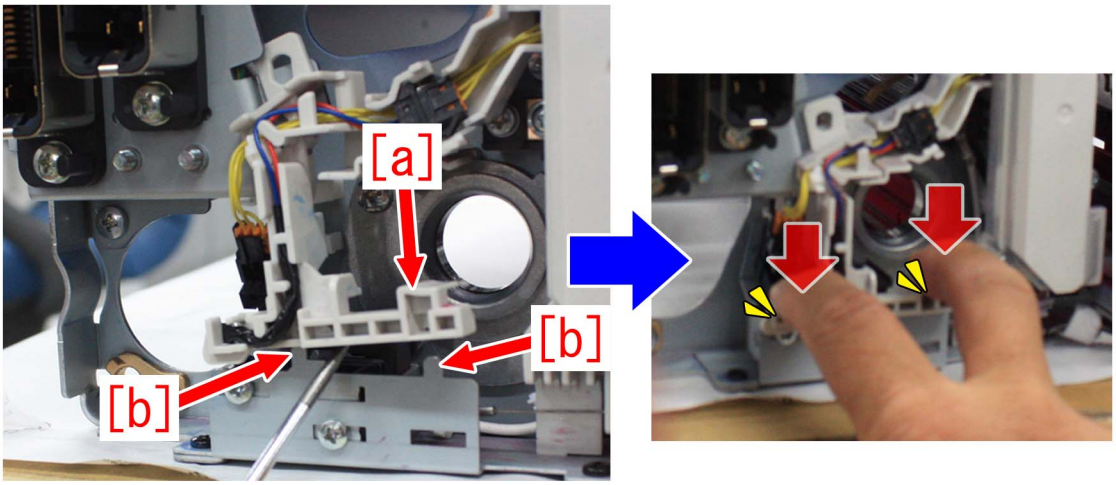
15) Place the process unit [1] in the stable place to remove 1 (one) screw [2].



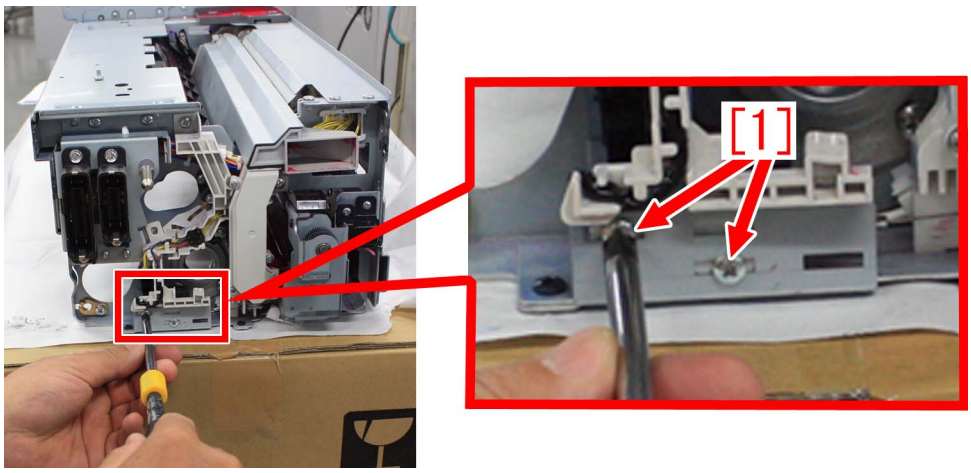
16) Hold the harness guide [a] like the photo below and release it from 2 claws [b] to be free.



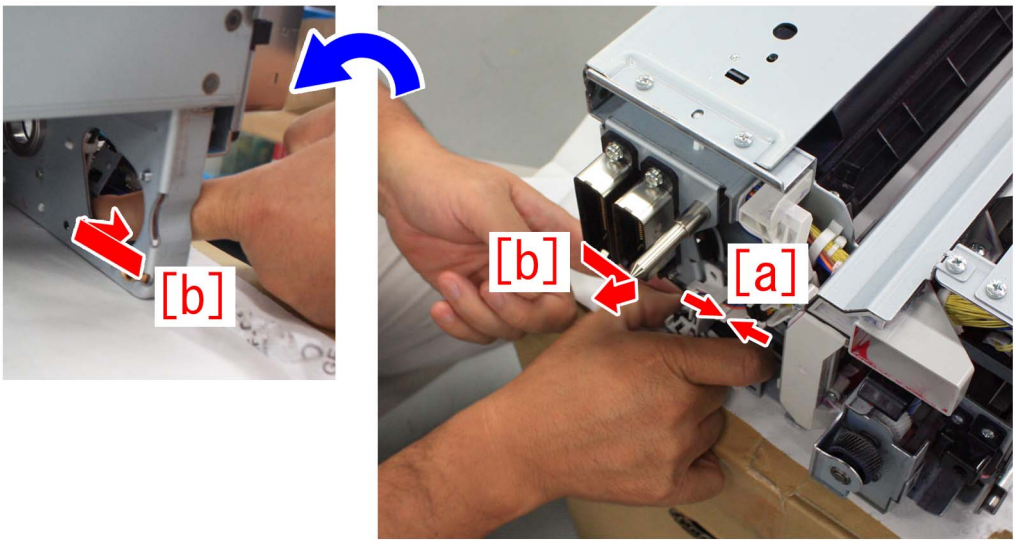
[Caution] When attaching the harness guide [a], engage it with the 2 claws [b] firmly and press down with fingers.



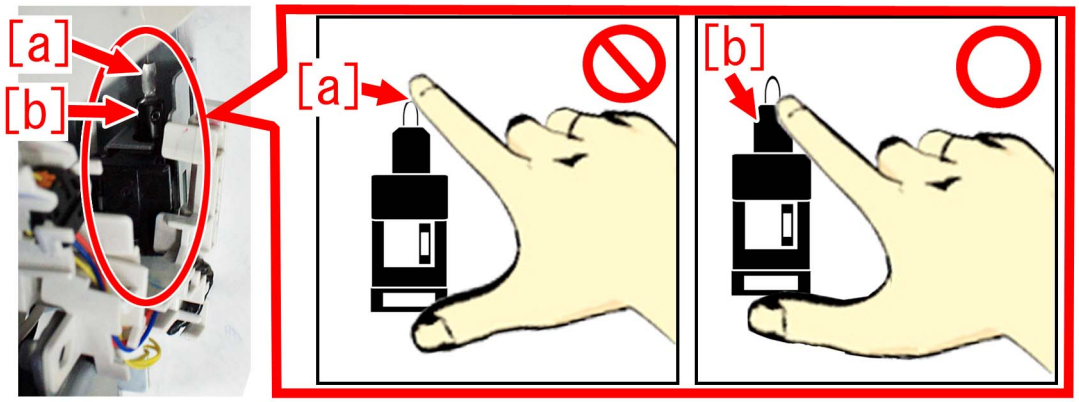
17) Make 2 screws [1] half turn to loosen them. The following photos show the mounting screws of patch sensor shutter solenoid for Y/M. The mounting positions of mounting screws of patch sensor shutter solenoid for C/ K are not same positions of screws for Y/M.



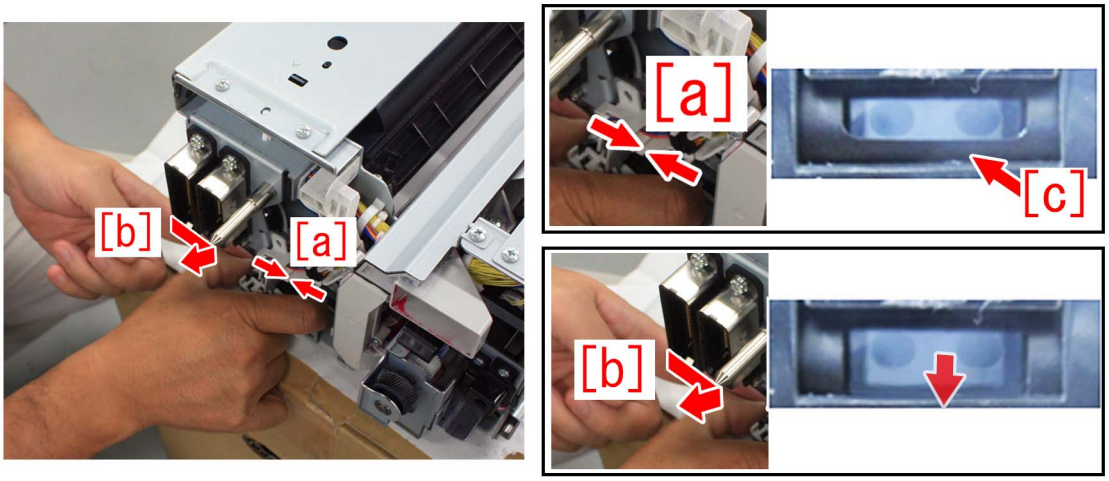
18) Hold the slide lever of patch sensor shutter solenoid in the right hand and press it hard with the thumb and the index finger of right hand like [a] to open the shutter. Insert the left index finger to the back side of patch sensor shutter solenoid and keep on pressing it to near side [b] while keeping [a] state.



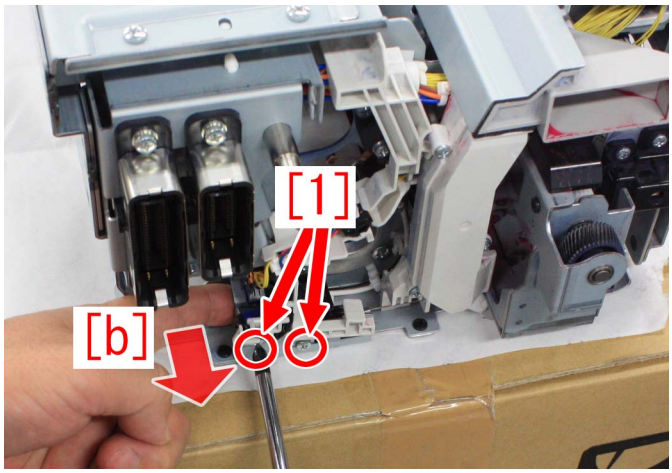
[Caution]
- When holding the patch sensor shutter solenoid, press and compress [b] area of the slide lever, not [a] area.



- Operate this step checking the opening state of patch sensor shutter. When the shutter is opened by only [a] action, the shutter cannot be opened completely as [c] shows. Keep on pressing the patch sensor shutter solenoid to near side [b] and keep [a] state to open the shutter fully.



19) Tighten 2 screws [1] which were loosened at step 17) keeping [b] state.

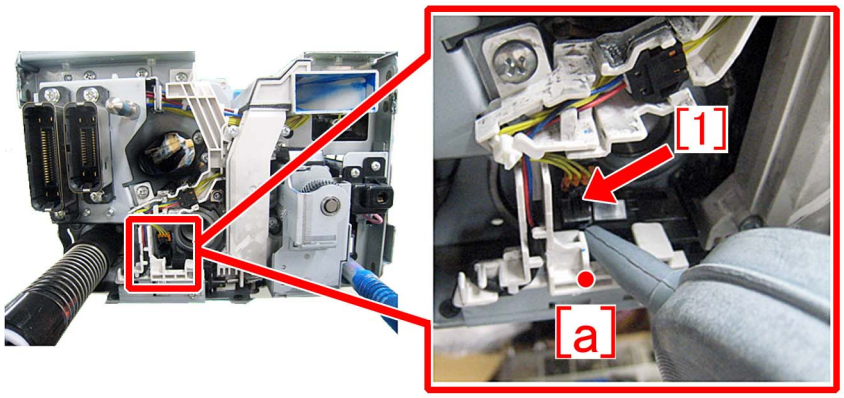


20) Check if the patch sensor shutter opens and closes smoothly and also the shutter is opened fully when it is opened.
21) Reassemble the parts in reverse order from Step 16).
22) Implement Service Mode > COPIER > Function > MISC-P >AT-IMG-X since the operations of releasing and applying pressure to the intermediate transfer unit had been executed.

b). Error of the shutter slide lever
When the symptom occurs, replace the patch sensing sensor unit with the new type by referring to Service Manual.

- patch sensing sensor unit (Y/M) : FM1-H019-030
- patch sensing sensor unit (C/K) : FM1-H020-030

d). Dirt of the detection surface of the patch sensor shutter solenoid sensor
Perform works by following the procedures below.
1) Perform the steps up to 12) of **a). Incorrect position of the shutter solenoid** of Service Work to pull out the process unit.
2) Put the edge of the blower brush to the corner of the dot [a] on the rear side of the process unit to clean the patch sensor shutter solenoid sensor [1].
[Reference] Clean it after every 2000K printing.



[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-H019-020	SENSOR UNIT, PATCH SENSING,Y/M	1 -> 0	600A
	New	FM1-H019-030	SENSOR UNIT, PATCH SENSING,Y/M	0 -> 1	
2	Old	FM1-H020-020	SENSOR UNIT, PATCH SENSING,C/K	1 -> 0	600B
	New	FM1-H020-030	SENSOR UNIT, PATCH SENSING,C/K	0 -> 1	

[Countermeasure cut-in serial number in factory]

Model	Serial number		
	Factory measure a)	Factory measure b)	Factory measure c)
iPR C10000VP series JP	WEK10001	WEK10014	WEK10026
iPR C10000VP series US	WBC00516	WBC10054, WBC10057, WBC10060 or later	WBC10100
iPR C10000VP series EU / O	WEJ00501	WEJ10019	WEJ10154
iPR C10000VP series CN	WBD00500	WBD00500	WBD00506

*a) Adjust again the position of shutter solenoid in the manufacturing process.
*b) Replace the patch sensing sensor unit with the new type that includes countermeasure shutter slide lever.
*c) Replace the patch sensing sensor unit with the new type to which Hanarl is applied.

E842-0051/0052 due to shift in position of the Secondary Fixing Delivery Lower Separation Claws

[Symptom]

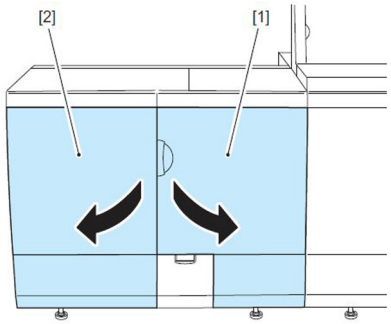
E842-0051 or E842-0052 may occur when turning on the main power of machine after being shipped without cushioning materials.
-E842-0051: An error in engagement operation of the Secondary Fixing Separation Claw was detected during initialization.
-E842-0052: An error in disengagement operation of the Secondary Fixing Separation Claw was detected during initialization.

[Cause]

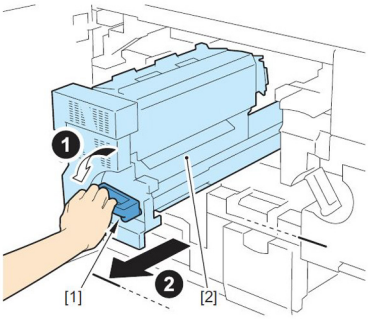
When shipping a machine without cushioning materials, the Secondary Fixing Delivery Lower Separation Claws may shift diagonally due to vibration from shipping. When turning on the main power of the machine, the Secondary Fixing Delivery Lower Separation Claws cannot perform the engage or disengage motion, resulting in the above symptom.

[Service Work]

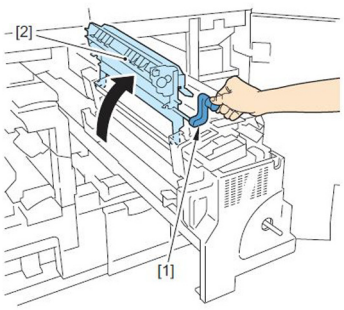
1) Open the Sub Station Front Right Cover[1]and the Sub Station Front Left Cover[2].



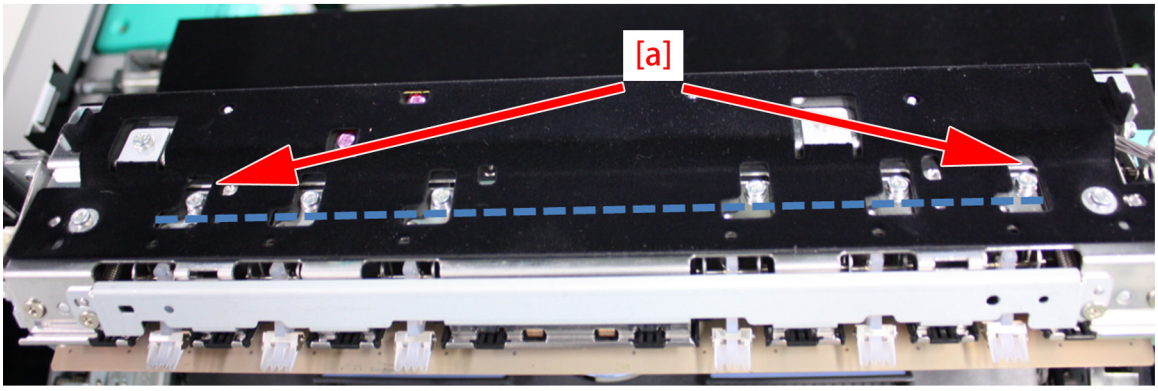
2) Unlock the lever(C-B4)[1], and pull out the Secondary Fixing Assembly [2].



3) Lift up the lever(C-B5) [1], and open the Secondary Fixing Inner Delivery Unit [2].



4) Reposition the separation claw of the inner delivery unit straight by moving the fixing claw mounting screw [a].



5) Install back the secondary fixing assembly in the reverse order from the step 3).
6) Start the machine and ensure that the error does not occur.
If the symptom does not improve, then check other factors.

Precautions against an erroneous assemblage of the external heat unit

[Symptom]

In the machines prior to the countermeasure cut-in serial number in factory described below a component part of the external heat unit in the primary/secondary fixing assembly, for instance when the external heat belt is replaced, if the parts are assembled erroneously, the following symptoms may occur.
When to replace a part of the external heat unit in the primary/secondary fixing assembly, refer to the servicing work to assemble the parts correctly.

1) E007-010x/E007-020x
- E007-010x : Fixing Belt full displacement error (Primary Fixing Pressure Belt)
- E007-020x : Fixing Belt full displacement error (Secondary Fixing Pressure Belt)

2) E004-011x/E004-021x
- E004-011x : Fixing temperature detection error (Primary Fixing Pressure Belt)
- E004-021x : Fixing temperature detection error (Secondary Fixing Pressure Belt)

3) Streaks on image

4) E004-017x/E004-027x
- E004-017x : Fixing Power Supply error (Primary Fixing Roller Heater)
- E004-027x : Fixing Power Supply error (Secondary Fixing Roller Heater)

5) Leakage breaker in engine is actuated

[Cause]

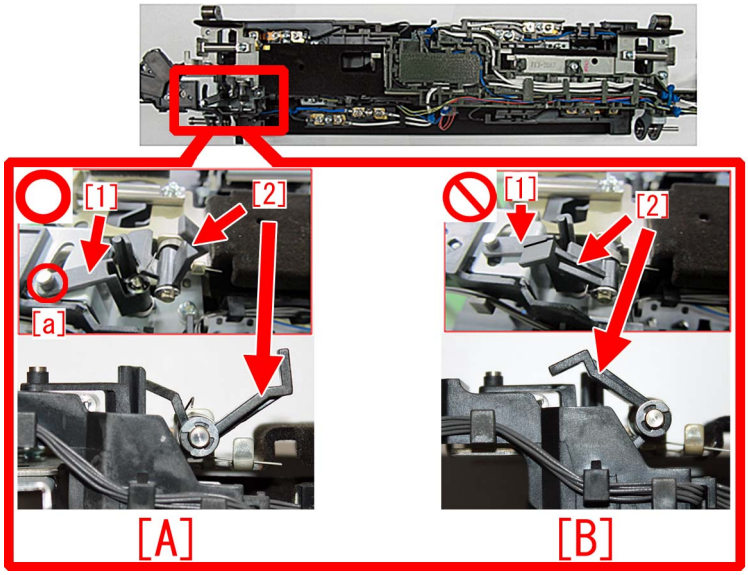
-

[Service work]

When to replace the external heat belt in the primary/secondary fixing assembly, pay attention to the following two points in assembling the external heat unit.

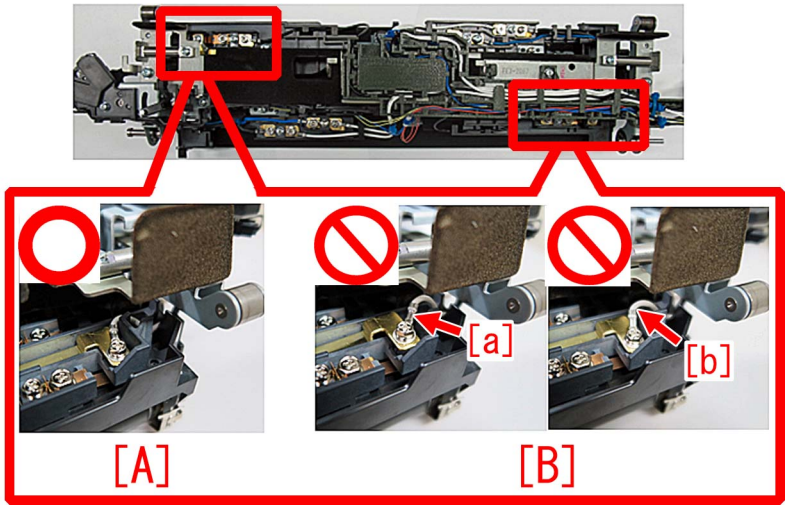
A) Checking the position of the sensor flag

Check to see if the sensor flag [1] is at the retractable position [a] and also if the sensor retractable arm [2] is at the appropriate position.
Figure A shows a proper state and B, an inappropriate position where the sensor retractable arm [2] comes underneath and hinders the sensor flag [1] from returning to the retractable position.



B) Checking the wiring of the heater cable

Check to see if the heater cable does not come on top of the rib of the cable guide at 2 locations.
Fig. [A] shows an appropriate wiring in which the heater cable is arranged properly along the side surface of the rib.
Fig. [B] shows an inappropriate wiring where the terminal [a] and the heater cable [b] come on top of the rib.
[Note] Heater cable color may be black depending on the country the machine is destined for.



[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-A379-000	THERMOSWITCH UNIT	2 -> 0	840A 840B
	New	FM1-A379-010	THERMOSWITCH UNIT	0 -> 2	
2	Old	FM1-A377-020	EXTERNAL HEATING ASSEMBLY (200V,208V)	1 -> 0	840A
	New	FM1-A377-030	EXTERNAL HEATING ASSEMBLY (200V,208V)	0 -> 1	
3	Old	FM1-A411-020	EXTERNAL HEATING ASSEMBLY (400V)	1 -> 0	840B
	New	FM1-A411-030	EXTERNAL HEATING ASSEMBLY (400V)	0 -> 1	

[Countermeasure cut-in serial number in factory]

Model	Serial number
imagePRESS C10000VP Series FS US/J	WBE10245
imagePRESS C10000VP Series FS EUO	WBF10296
imagePRESS C10000VP Series FS CN	WBG00511

Points to note when installing, removing and cleaning the primary corona assembly

[Symptom]

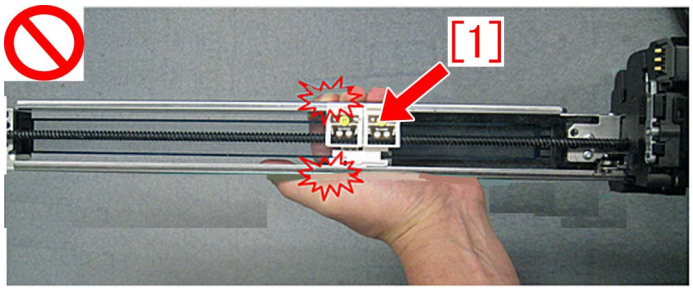
E060-0x01 or black lines on image may occur due to deformation of the parts in the primary corona assembly caused by installation, removal and cleaning of the primary corona assembly.
- E060-0x01 : Primary Charging Wire error (y = 1:Y, 2:M, 3:C, 4:Bk)

[Service work]

Be sure to pay attention to the points noted below when performing the following work.
A) When holding the primary corona assembly with hands
B) When placing the primary corona assembly on a working table
C) When loosening the yellow screws in the slider
D) When removing and installing the shutter
E) When opening and closing the shutter manually 1
F) When opening and closing the shutter manually 2

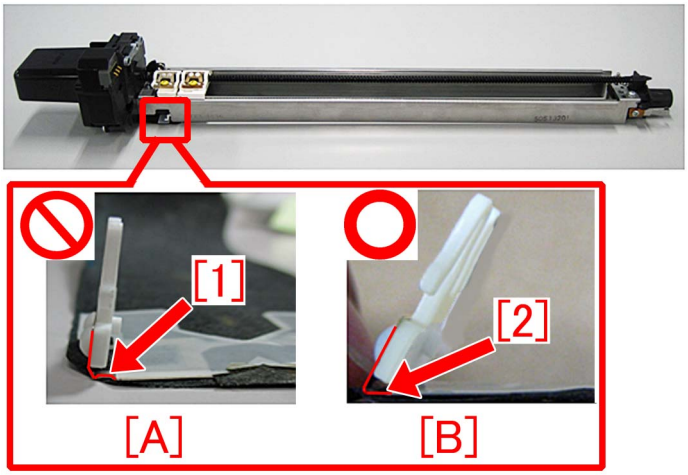
A) When holding the primary corona assembly with hands

When holding the primary corona assembly with hands, hold it by the handle. (black molded part) When holding the center of the shield plate as shown in the photo, the shield plate deforms. Using the unit in this state causes a load to the slider [1] around the center section when the slider [1] moves causing it to stop. As a result, E060-0x01 may occur.



B) When placing the primary corona assembly on a working table

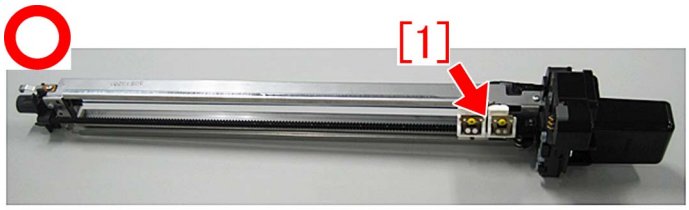
When placing the primary corona assembly on a working table, the leaf spring [1] of the shutter may deform as shown in the photo [A] if placing the unit with the etching grid plate facing down. The photo [B] is the leaf spring [2] in a normal state. When the leaf spring deforms, E060-0x01 may occur because it gets stuck to the etching grid plate when the shutter moves.



[Reference] When placing the unit with the etching grid plate [1] facing down, foreign material may attach to the etching grid plate. When placing the primary corona assembly on a working table, be sure to place it with the etching grid plate facing up.

C) When loosening the yellow screws in the slider

When loosening the yellow screws in the slider, place the primary corona assembly sideways as in the photo [A] and loosen the screws. The leaf spring of the shutter may deform when placing the unit as in the photo [B] and loosening the screws.

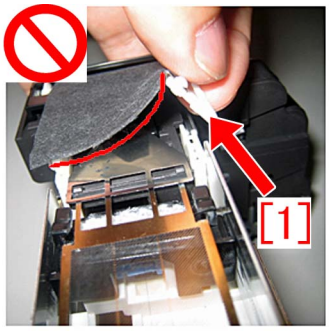


[A]

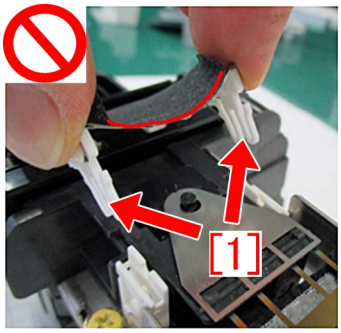
[B]

D) When removing and installing the shutter

When removing the shutter hook [1] one by one as shown in the photo [A] to remove the shutter, the leaf spring on back of the shutter sheet may deform when opening the shutter hook wide while the other shutter hook is intact. In addition, when installing the shutter, holding the shutter hook [1] with one hand as in the photo [B] trying to install the both ends at once may cause a deformation of the leaf spring on back of the shutter sheet.

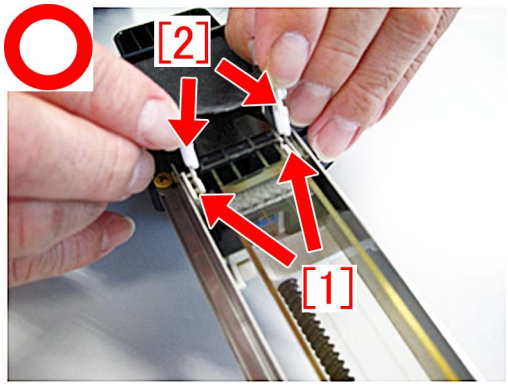


[A]

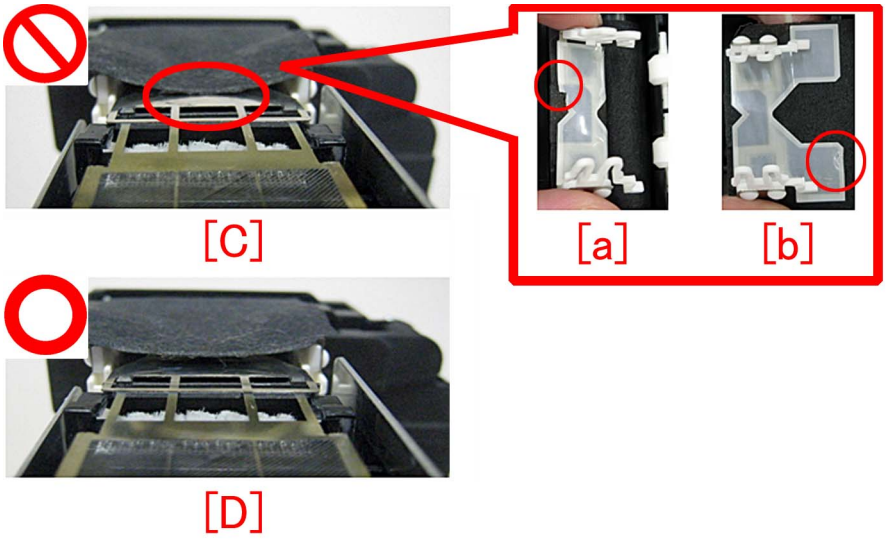


[B]

When removing the shutter from the shutter slider [1], remove it while pressing the hook claws [2] of the shutter with both hands. Also, when installing it, insert the hooks [2] to the shutter slider [1] while holding the hook claws [2] of the shutter with both hands.

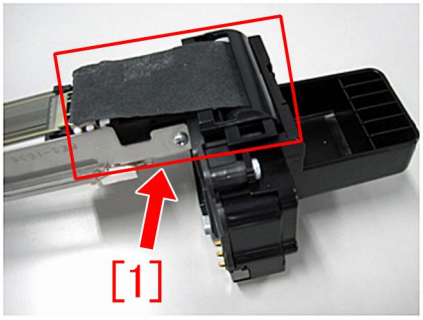


When the leaf spring is deformed severely as shown in the photo [C], the leaf spring of the shutter and the etching grid plate interfere causing the shutter sheet or the shutter to get stuck to the etching grid plate and get torn [a] or damaged [b]. If the torn section gets stuck, E060-0x01 may occur. The photo [D] is a normal state without the deformed leaf spring of the shutter.



- Measure for when the leaf spring of the shutter is deformed.

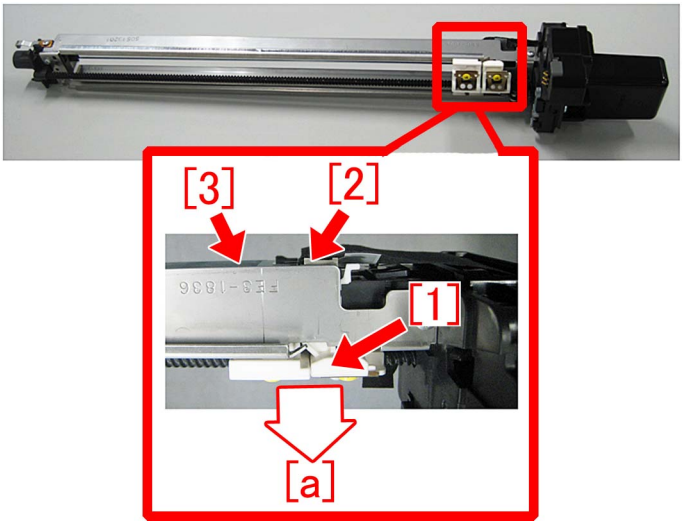
When the leaf spring of the shutter is deformed, fix the leaf spring. If the leaf spring is deformed or damaged severely causing it to get stuck to the etching grid plate, replace with a new shutter unit (FM1-A485-000)[1].



[Service parts]
FM1-A485-000 shutter unit

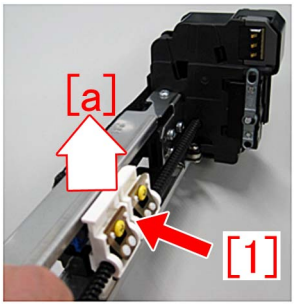
E) When opening and closing the shutter manually 1

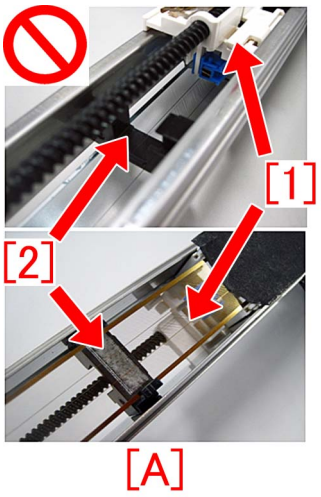
When opening and closing the shutter manually by holding and sliding the slider [1] by hand, the shutter and the leaf spring [2] gets stuck to the etching grid plate [3] if the slider [1] is pulled strongly in the direction of the arrow [a] and it may damage the shutter sheet or the shutter. When opening and closing the shutter manually, be sure not to pull the slider too strongly in the direction of the arrow [a].

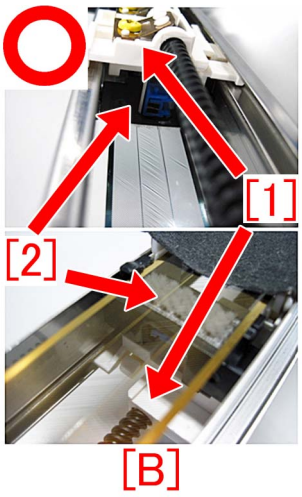


F) When opening and closing the shutter manually 2

When opening and closing the shutter manually by holding and sliding the slider [1] by hand, the grid cleaning unit [2] may come off the shutter slider if a force is applied in the direction of the arrow [a]. The photo [B] shows the unit in a normal state. When moving the slider, be sure not to apply a force in the direction of the arrow [a].







Countermeasure against E060-0x01 or white line image

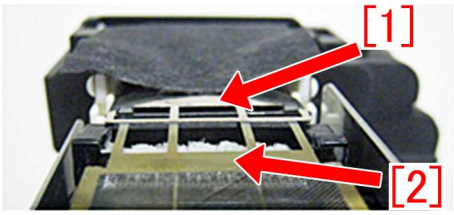
[Symptom]

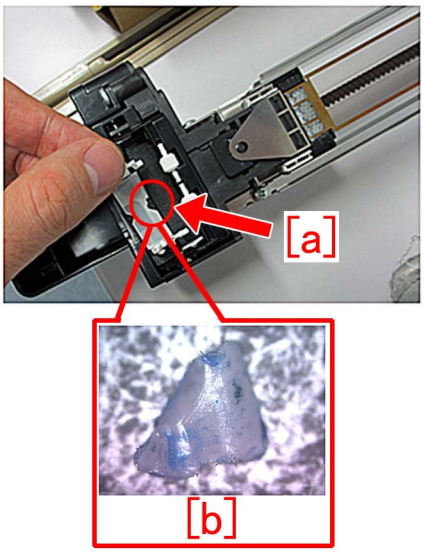
E060-0x01 or a white line image may occur in the main body earlier than the following countermeasure cut-in serial numbers in factory.

- E060-0x01 : Primary Charging Wire error (x:1=Y, 2=M, 3=C, 4=Bk)

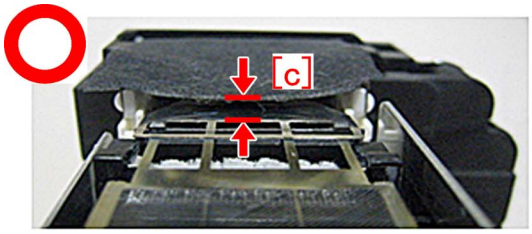
[Cause]

In the field service, as a step of cleaning the primary charger, the leaf spring may be deformed from opening/closing the shutter by holding the leaf spring or replacing the grid plate. From either of the operations the sheet [1] of the leaf spring catches the grid plate [2] and this condition leads to an E060-0x01. If the protective sheet is torn [a] and the fragment [b] mixes into the cylinder of the developing assembly, it results in a white line image.

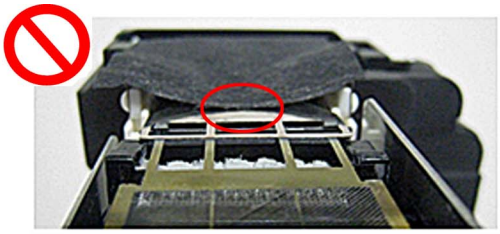




The photo [A] shows a normal state where the distance [c] between the grid and the leaf spring is maintained properly. Meanwhile the photo [B] shows a state where the leaf spring is deformed and the leaf spring has come in contact with the grid.



[A]



[B]

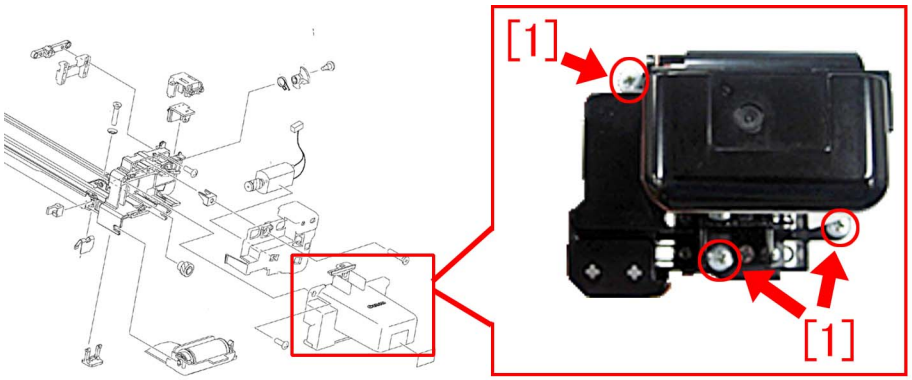
[Service work]

When the aforementioned symptom has occurred, prepare and replace with the new type shutter unit (FM1-A485-010) following the below procedure:

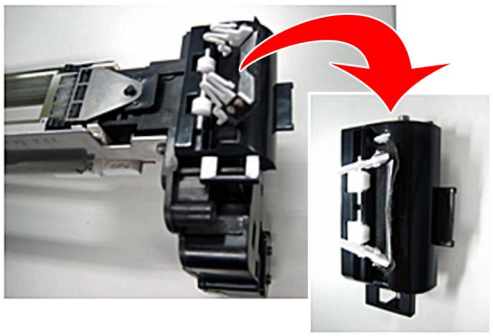
[Note]

- The primary charging assembly (FM1-K629-010) is operator maintenance part.
- Refer to the service information (F01537) that was already issued for notabilia in detaching/installing/cleaning the primary charger.

1) Referring to the service manual, remove the primary charger, and then remove the shutter sheet from the shutter slider.
2) Remove the 3 screws [1] to remove the primary handle from the primary charger.



3) Replace with the new type shutter unit and reassemble the parts in reverse order from the step 2).



[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-A485-000	SHUTTER UNIT	1->0	550
	New	FM1-A485-010	SHUTTER UNIT	0->1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial number
imagePRESS C10000VP Series ME US	WBC10404
imagePRESS C10000VP Series ME CN	WBD00521
imagePRESS C10000VP Series ME EUO	WEJ10440

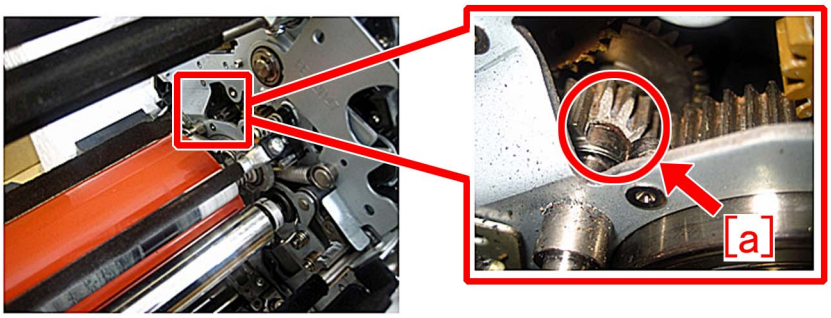
E842-011x or the refresh roller does not work due to broken pieces of 16T/31T gear going into the fixing pressure belt assembly

[Symptom]

E842-011x may occur or the refresh roller may not work on the products whose serial number is earlier than the following countermeasure cut-in serial number in factory. (x = 1,3)
- E842-0111 : An error in engagement/disengagement operation of the Primary Fixing Pressure Belt was detected.
- E842-0113 : An error in engagement operation of the Primary Fixing Pressure Belt was detected.

[Cause]

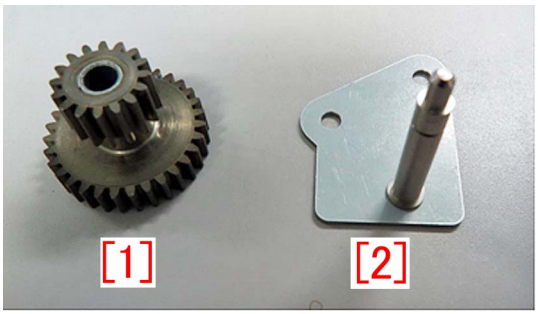
16T/31T gear in the fixing assembly may break [a] due to load applied when press fit a bearing into the gear and some endurance time. When broken pieces go into the fixing pressure belt assembly, one of the above symptoms occurs.



[Service work]

When the above symptom occurs, prepare the following service part and follow the steps below.
- imagePRESS C10000 Series : Idler gear unit (FM1-T019-000)
- imagePRESS C6000/C6000VP/C7000VP/C7000VPE/C6010/C6010VP/C7010VP/C6011/C6011VP/C7011VP : Idler gear unit (FM1-T026-000)

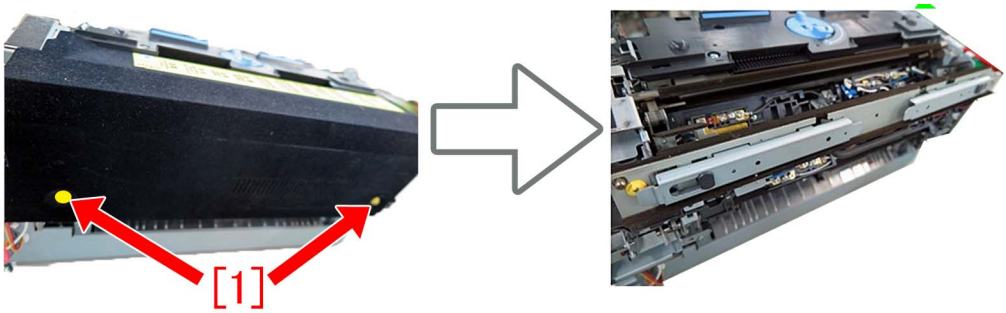
[Reference] The idler gear unit contains the new type 16T/31T gear [1], the small gear fixed plate [2], one washer and one E-ring.



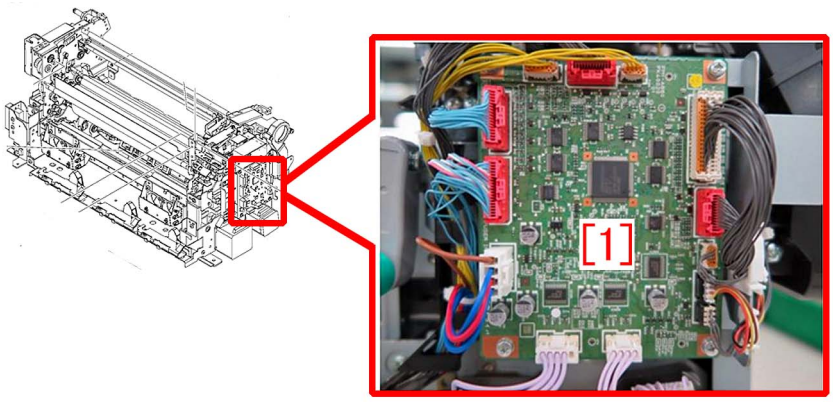
1) Refer to the service manual and remove the fixing assembly.

[Reference]
- Work procedures are same for both the primary fixing assembly and the secondary fixing assembly.
- Remove the broken pieces of the gear, if found.

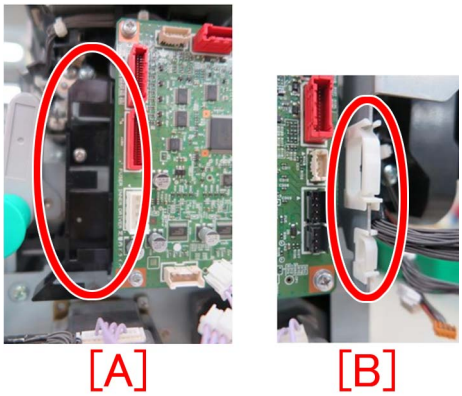
2) Remove the 2 yellow screws [1] and the upper cover.



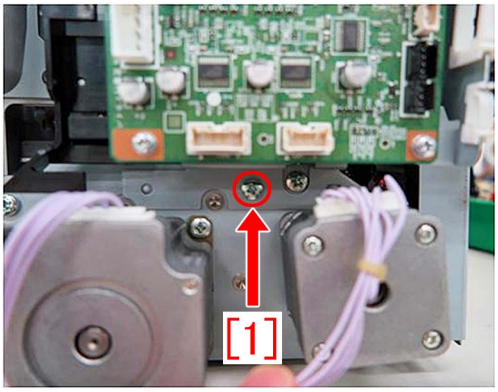
3) Refer to the service manual and remove the fixing web unit.
4) Remove all of the 13 connectors that are connected to the fixing inner driver PCB assembly [1] located in front side of the fixing assembly.



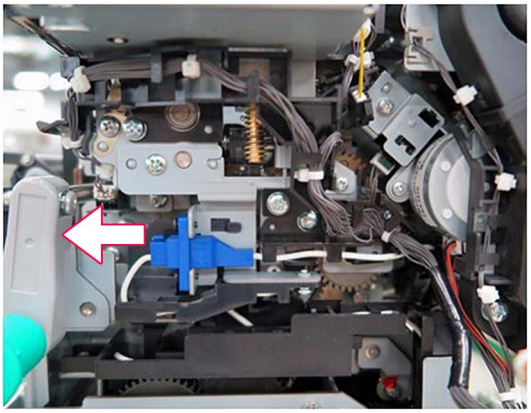
5) Remove the harness from the harness guide [A] and the harness guide [B] at both sides of the PCB.



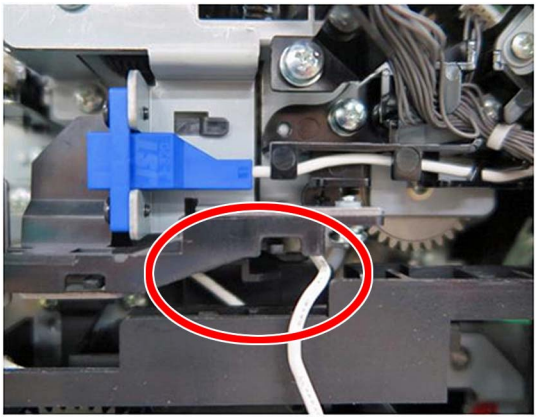
6) Remove the screw [1], and then remove the fixing inner driver PCB assembly.



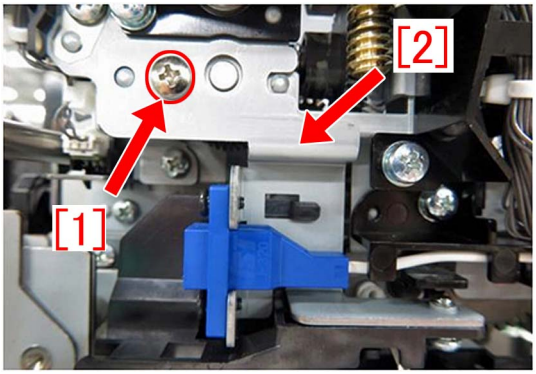
7) Remove the blue connector that is connected to the harness of the heater located on the back of the fixing inner driver PCB assembly.



8) Remove the harness of the heater from the harness guide.

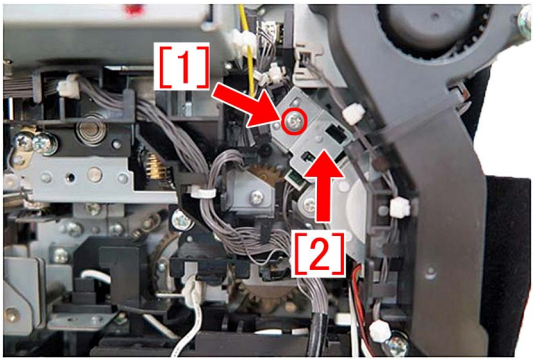


9) Remove the one screw [1] and then remove the connector support plate [2].

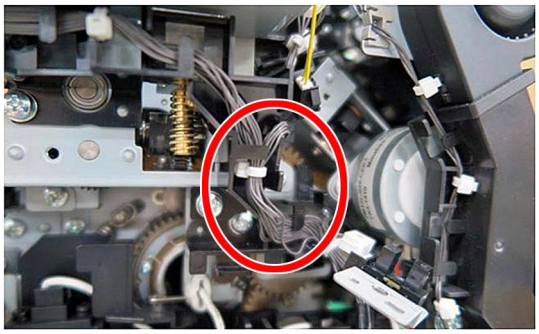


10) Remove the harness of the heater from the harness guide.

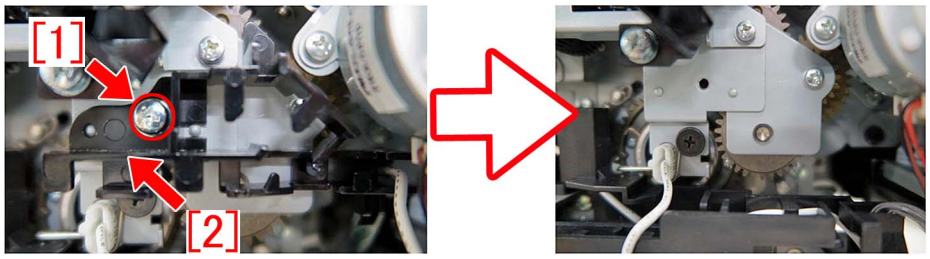
11) Remove the one screw [1], and then, remove the fixing pressure belt displacement HP sensor support plate [2].



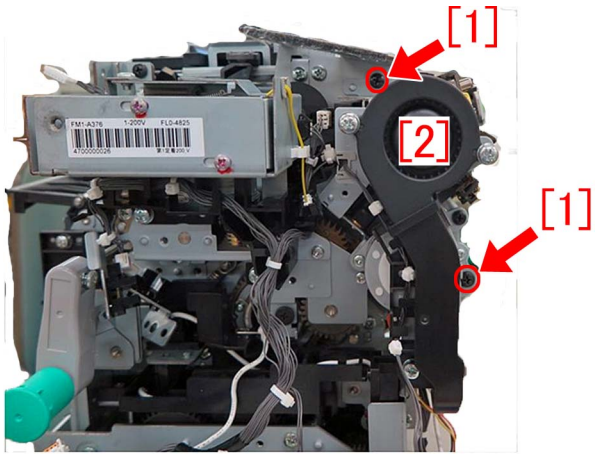
12) Remove the harness connected to the fixing pressure belt displacement HP sensor from the harness guide.



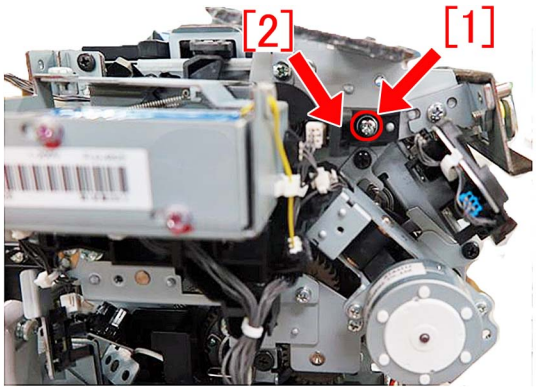
13) Remove the one screw [1], and then remove the main heater guide [2].



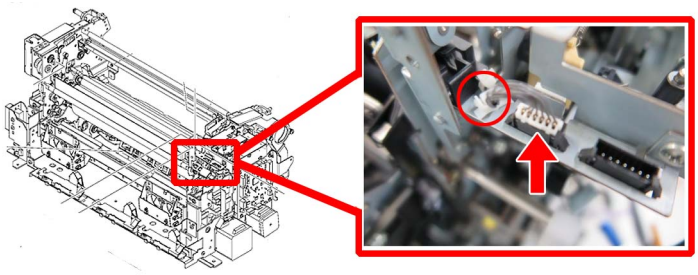
14) Remove the two screws [1] and then remove the NC cooling duct unit [2].



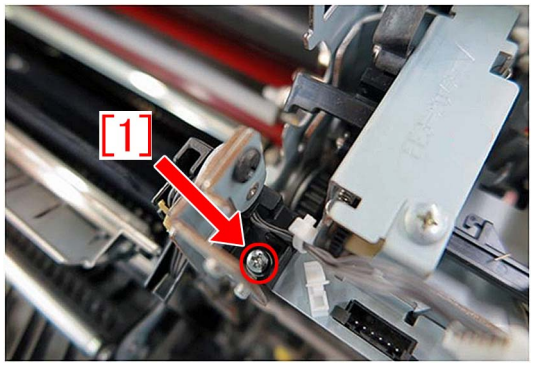
15) Remove the one screw [1], and then remove the fixing external heat belt HP sensor mount [2].



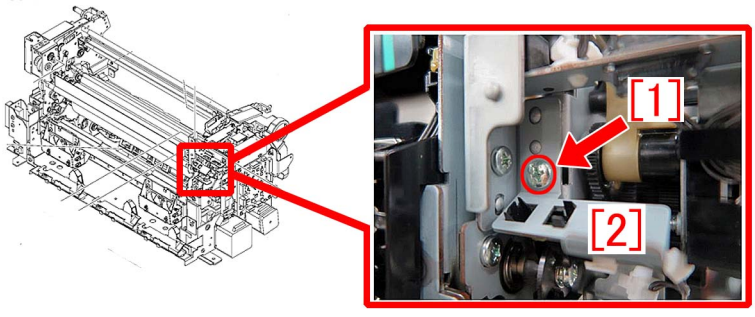
16) Remove the connector from the relay connector and then remove the harness from the harness holder.



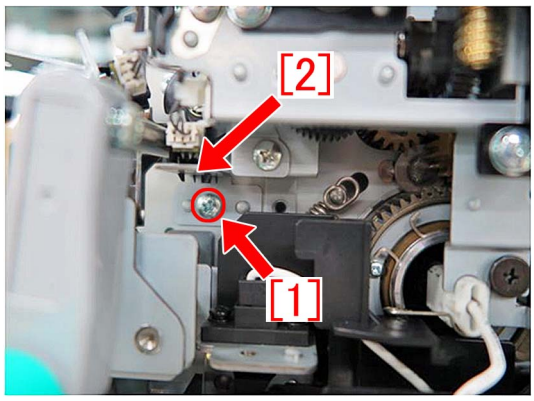
17) Remove the one screw [1] located at the side of the relay connector.



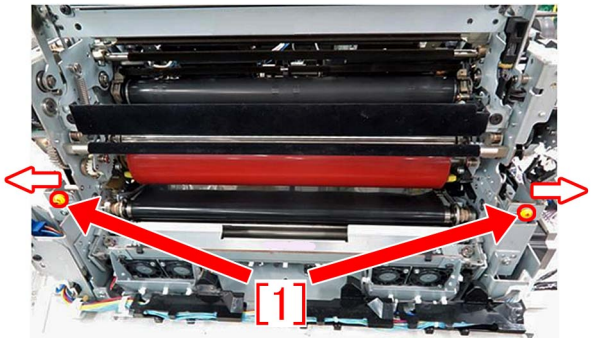
18) Remove the one screw [1], and then remove the fixing refresh roller HP sensor mount [2].



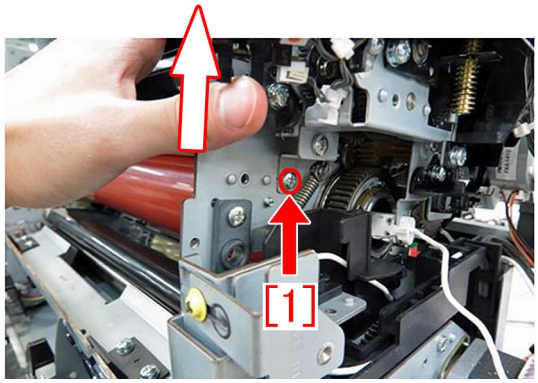
19) Remove the one screw [1], and then remove the fixing web HP sensor mount [2].



20) Loosen the two yellow screws [1] and move the slider pin outward.

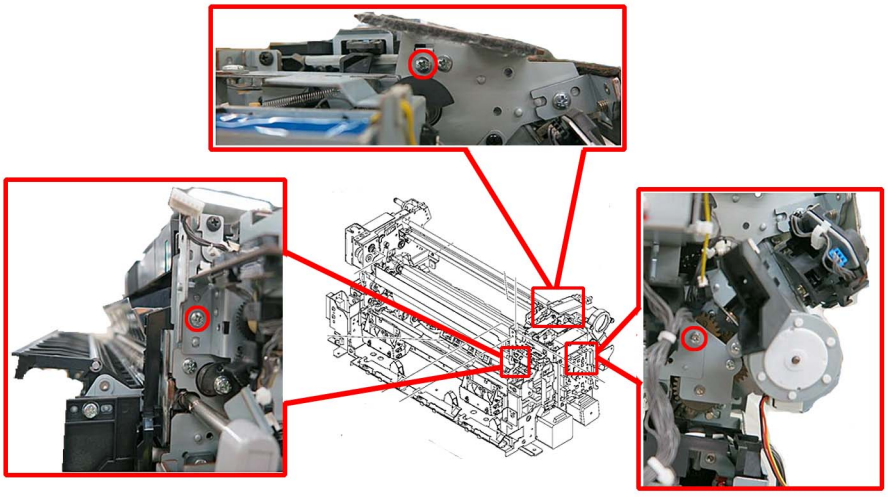


21) Slightly lift the upper unit and remove the screw [1].

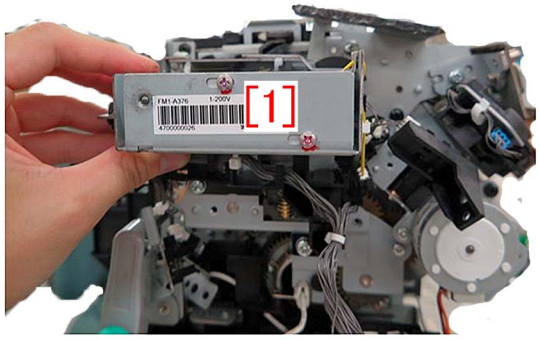


22) Slide the slider pin, moved outward in the step 20), back inward and tighten the two yellow screws.

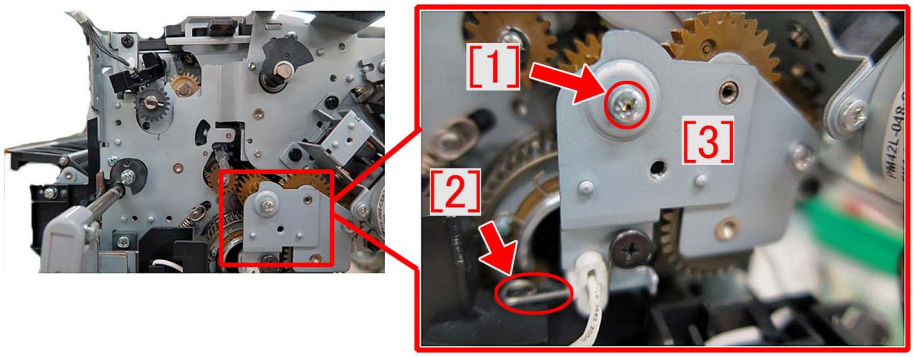
23) Remove the three screws located in front side of the fixing assembly.



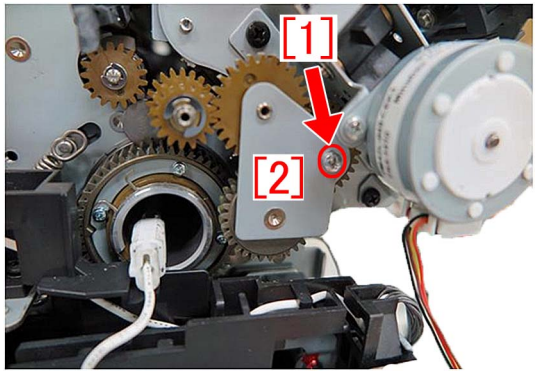
24) Remove the cleaner drive assembly [1]. Lift the cleaner drive assembly [1], unhook the metal sheet hook and remove the assembly by pulling to the front.



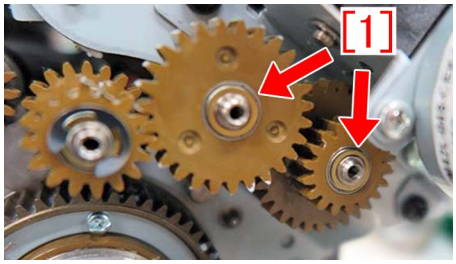
25) Remove the one screw [1], release the pressure of the fixing spring of the heater [2] and then remove the small gear fixed plate [3].



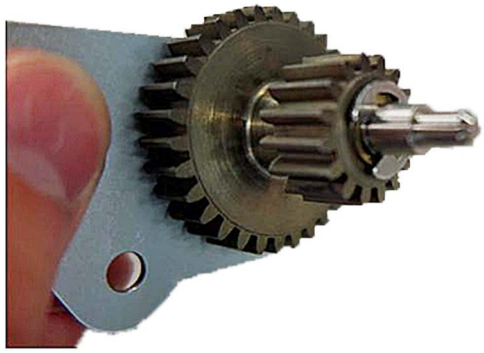
26) Remove the one screw [1], and then remove the small gear fixed plate [1].



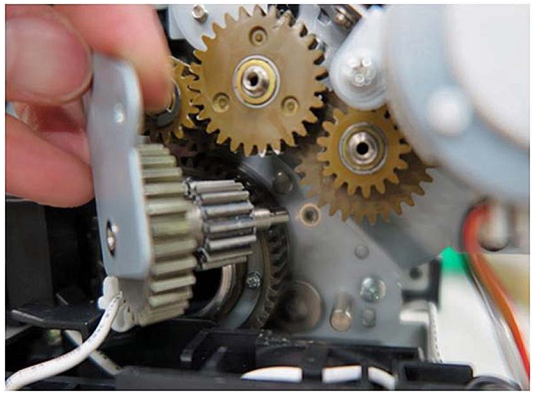
[Note] The washer [1] is attached to the gear. When removing the small gear fixed plate, be sure that the washer does not fall off.



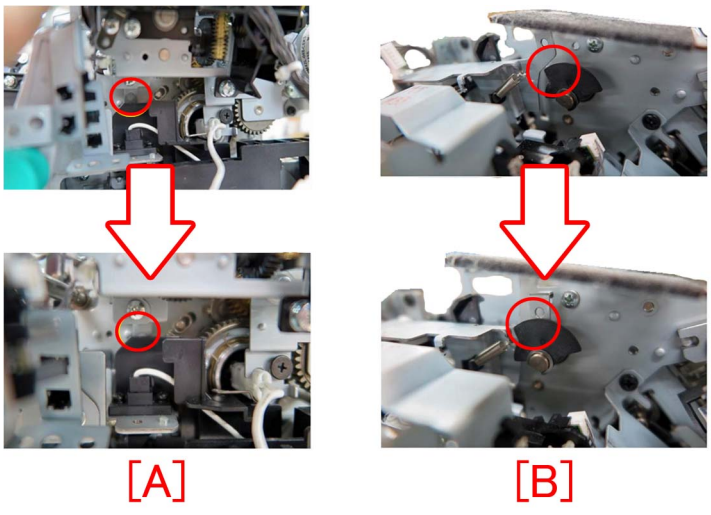
27) Assemble the idler gear unit prepared. Insert the new type 16T/31T gear into the shaft of the small gear fixed plate, attach the washer and fix with the E-ring. No applying grease to the gear mounting shaft.



28) Attach the idler gear unit, assembled in the step 27), to the fixing assembly with the one screw. Be sure that the gear shaft engages in the hole properly.



29) Reassemble the parts from the step 25) in the reverse order.
[Note] When attaching the cleaner drive assembly, insert it while avoiding the heater harness guide [A] and the flag plate [B].



[Service parts]

- imagePRESS C10000 Series

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FL1-1466-000	GEAR, 16T/31T	1 -> 0	815 855
	New	FM1-T019-000	IDLER GEAR UNIT	0 -> 1	

- imagePRESS C6000/C6000VP/C7000VP/C7000VPE/C6010/C6010VP/C7010VP/C6011/C6011VP/C7011VP

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FL1-1466-000	GEAR, 16T/31T	1 -> 0	815 855
	New	FM1-T026-000	IDLER GEAR UNIT	0 -> 1	
2	Old	FL3-0548-000	PLATE, GEAR FIXED, SMALL	1 -> 0	815 855
	New	FM1-T026-000	IDLER GEAR UNIT	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

- imagePRESS C10000VP series US/J : WBE10425
- imagePRESS C10000VP series except US/J : WBF10424
- imagePRESS C6000/C6000VP/C7000VP/C7000VPE/C6010/C6010VP/C7010VP/C6011/C6011VP/C7011VP : No implemented due to production discontinuance

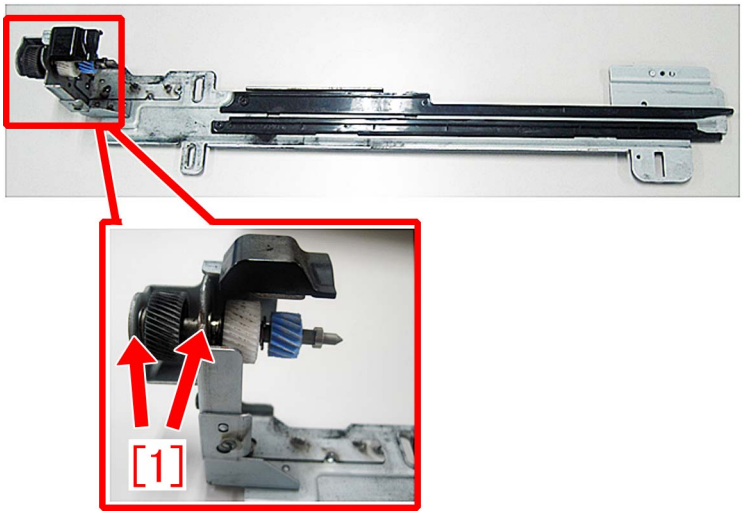
E023-0x00/E025-0x51/a white band due to damaged ball bearings in the developing drive rail assembly

[Symptom]

E023-0x00, E025-0x51 or a white band in the paper feed direction may occur on a main body whose serial number is earlier than the following countermeasure cut-in serial numbers in factory.
- E023-0x00 : Developing Motor error (x=1:Y, 2:M, 3:C, 4:Bk)
- E025-0x51 : Hopper Motor error (x=1:Y, 2:M, 3:C, 4:Bk)

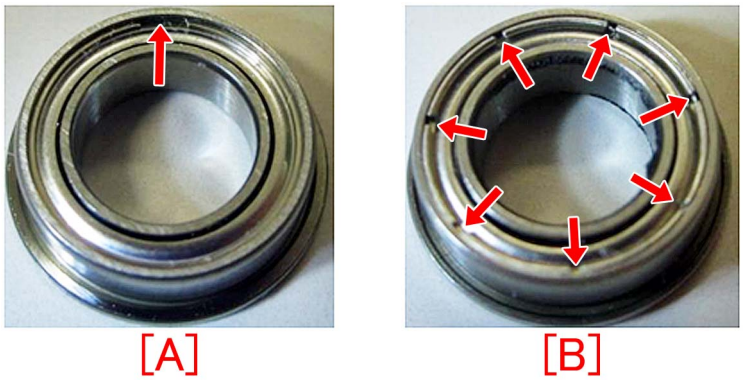
[Cause]

When the product has a job with great number of continuous prints and large printing volume, the exhaustion of grease for two ball bearings [1] in the developing drive rail assembly damages the bearings and that results in the above-mentioned symptom.

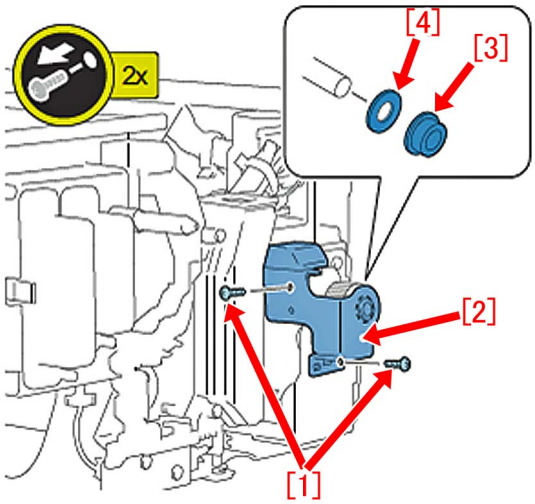


[Service work]

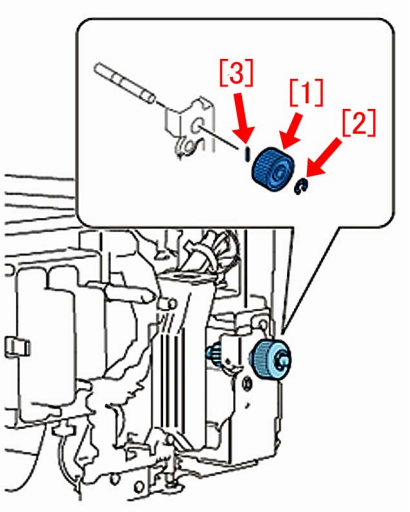
When the above-mentioned symptom occurs, prepare two new type ball bearings (XG9-0787-000) and four E-rings (XD2-1100-502) to replace them following the steps below.
Photo [A] indicates new type ball bearing having one slit and photo [B] indicates a conventional ball bearing having seven slits.



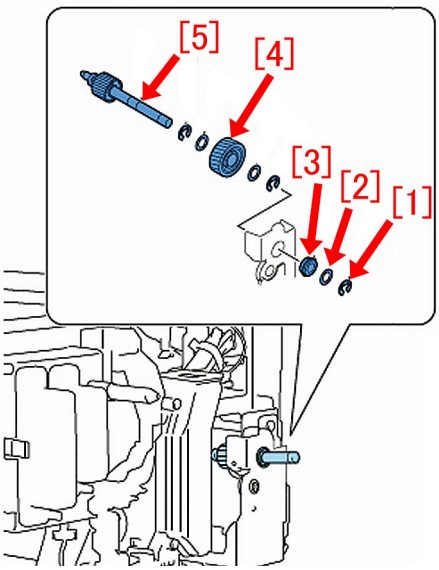
1) Pull out the specified colored process unit from the main body referring the Service Manual.
2) Remove two screws [1] from the rear side of process unit to detach the fixing member [2] for the motor unit and also remove the ball bearing [3] and the washer [4].



3) Remove the E-ring [2] to detach the 41T gear [1] and the dowel pin [3].
[Note]
- Take care in handling the dowel pin because it is small.
- Replace the E-ring with new one when putting it back.



4) Remove the E-ring [1] and the washer [2] to detach the developing drive shaft [5] with the 30T gear [4] and the ball bearing [3].
[Reference] The 30T gear [4] and the developing drive shaft [5] are high durable parts whose estimated timing for the replacement is 9000K printings. If the timing reaches the criteria at the time of work, replace them with new ones at this step together.
[Note] Replace the E-ring with new one when putting it back.



5) Reassemble the parts in the reverse order from Step 4). Replace the ball bearings removed at Step 4) and Step 2) with new type ball bearings (XG9-0787-000).

[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	XG9-0520-000	BEARING, BALL, MF106ZZS	2 -> 0	610
	New	XG9-0787-000	BEARING, BALL, LF1060ZZHP0P25L	0 -> 2	
2	Old	XD2-1100-502	RETAINING RING (E-TYPE)	4 -> 4	
	New				

[Countermeasure cut-in serial numbers in factory]

Model	Serial number
imagePRESS C10000VP Series ME US	WBC10445
imagePRESS C10000VP Series ME EUO	WEJ10547
imagePRESS C10000VP Series ME CN	WBD00522

E018-010x/E029-4001 due to overload to the sliding part of the leading edge registration patch sensor shutter

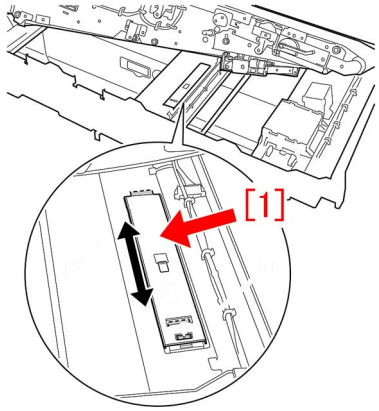
[Symptom]

Either E018-0101/0102/0103 or E029-4001 may occur in the machines earlier than the following countermeasure cut-in serial number in factory.
(imagePRESS C6000/ C6000VP/ C7000VP/ C7000VPE/ C7010VP/ C7011VP/ C7010VPS/ C7011VPS)
- E018-0101 : Color registration patch sensor shutter. When the shutter is open.
- E018-0102 : Color registration patch sensor shutter. When the shutter is close.
- E018-0103 : Color registration patch sensor shutter. When the shutter is initialized.

(imagePRESS C10000 Series)
- E029-4001 : Registration Patch Sensor error

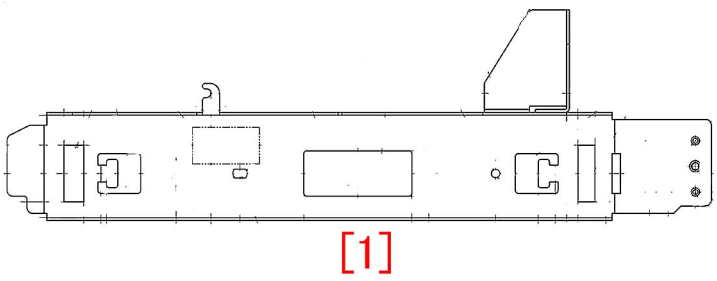
[Cause]

As the life of the ITB unit advances, the sliding part of the leading edge registration patch sensor shutter[1] becomes overloaded, resulting in the above symptom.

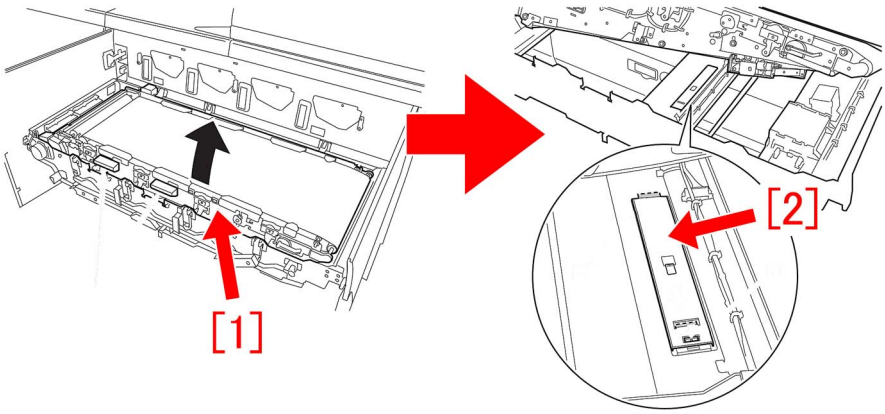


[Service work]

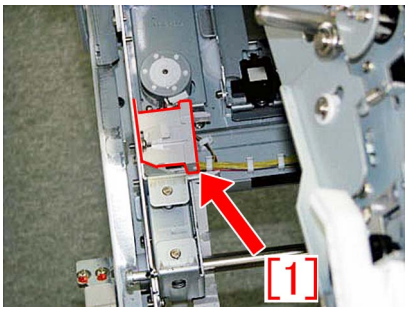
When the above symptom occurs frequently, prepare HANARL (FY9-6037) and the E-ring (XD2-1100-502) and follow the steps below.
When working on imagePRESS C6000/ C6000VP/ C7000VP/ C10000 Series, prepare 1 piece of the new type shutter stay (FC9-6076-000)[1], whose shape was changed to decrease the sliding load.



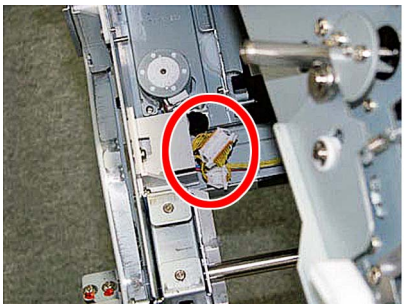
1) Refer to service manual and lift the intermediate transfer belt unit [1] so the intermediate transfer belt unit [2] at the lower frame can be accessed.



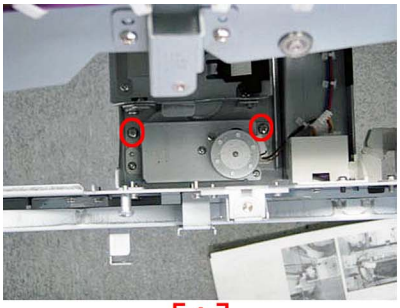
2) Remove the 3 claws and then remove the harness guide cover [1].

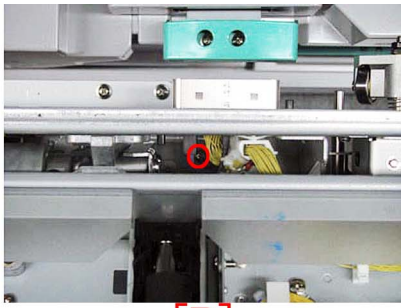


3) Remove the 11 saddles securing the harness and the 1 reusable band. Then, remove the 3 connectors (2 white connectors and 1 black connector).

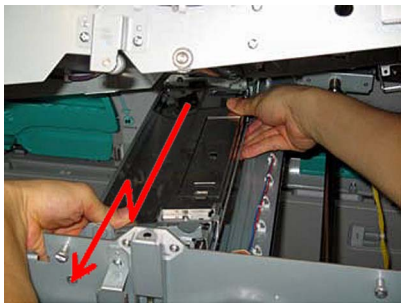


4) Remove the 3 screws securing the edge registration detect assembly. Two screws are located in front [A] and one screw is located in rear [B]. The photo [A] is the top view and the photo [B] is the front view.

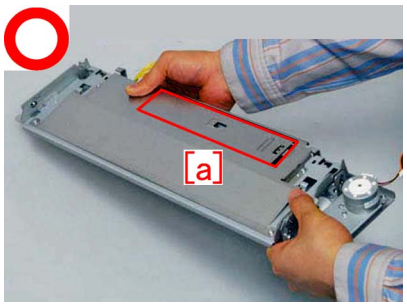




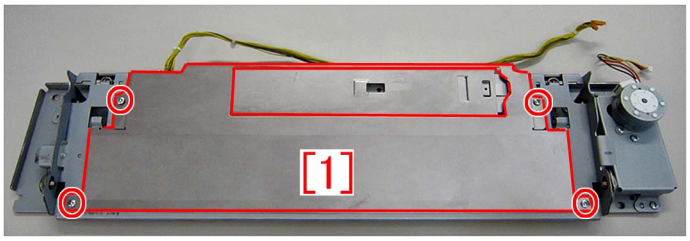
5) While pressing the rear right side of the edge registration detect assembly, lift the front side of the assembly and remove it from the machine by pulling it out.



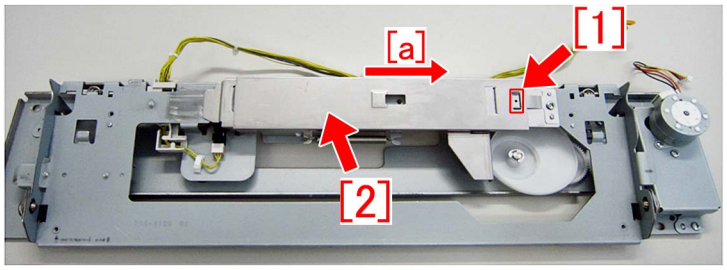
[Note] Do not hold the shutter area [a] when holding the edge registration detect assembly.



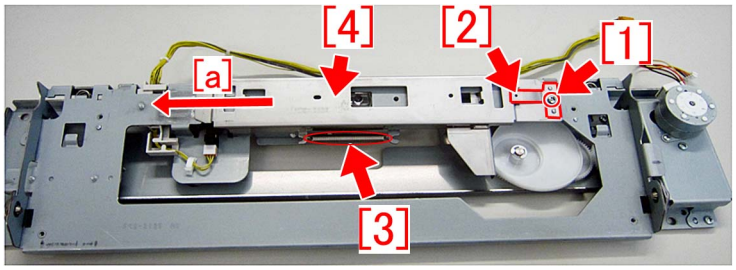
6) Remove the 4 screws and then remove the edge registration detect assembly cover [1].



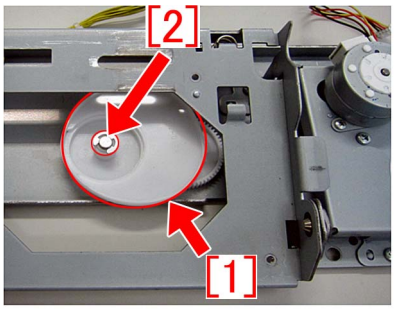
7) While pressing the shutter mounting spring [1], slide the leading edge registration patch sensor shutter [2] in the direction of the arrow[a] and remove it.



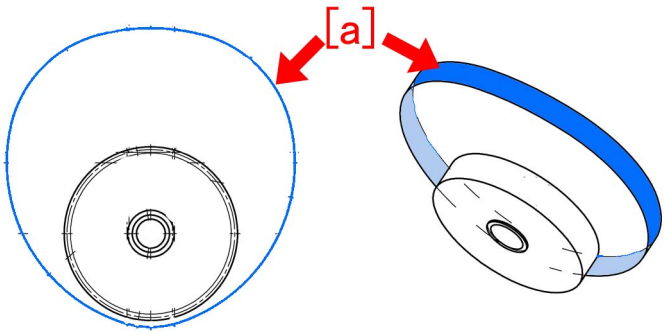
8) Remove the screw [1] and then the shutter mounting spring [2]. Then, remove the shutter spring [3] and slide the shutter stay [4] in the direction of the arrow [a] until it hits the end. Lift the edge and remove the shutter stay.
[Reference] For imagePRESS C6000/ C6000VP/ C7000VP/ C10000 Series, the removed shutter stay [4] will not be used.



9) Remove the E-ring [2] securing the 60T gear [1] and then remove the 60T gear [1].



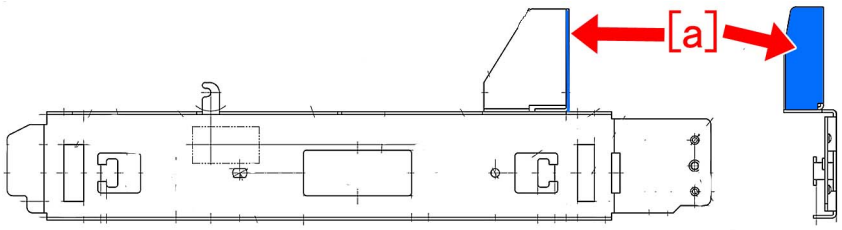
10) Wipe the entire circumference of the cam of the 60T gear [a] with lint-free paper with alcohol and then apply the Hanarl grease on the entire circumference of the cam [a].



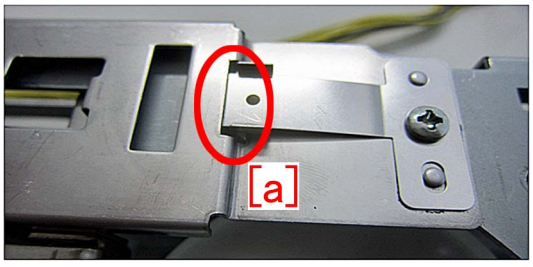
11) Secure the 60T gear to the edge registration detect assembly with the new E-ring (XD2-1100-502).
[Note]

- Do not touch the surface with finger where the Hanarl grease is applied.
- Make sure that the Hanarl grease is not dripping. If it is, wipe it off.

12) Wipe the surface [a] of the shutter stay, removed in the step 8), that engages with the cam with lint-free paper with alcohol.
On imagePRESS C6000/ C6000VP/ C7000VP/ C10000 Series, replace with the new type shutter stay (FC9-6076-000).
[Reference] Do not apply any Hanarl grease on the surface of the shutter stay that engages with the cam. Wipe only.



13) In the reverse order from the step 8), attach the shutter stay to the edge registration detect assembly.
[Reference] Make sure that the shutter mounting spring is inserted in the cutout of the shutter stay [a]. If the shutter mounting spring is not properly inserted in the cutout, the leading edge registration patch sensor shutter cannot be attached.



14) Assemble the parts in the reverse order from the step 7) to the step 1).

[Service parts]

(imagePRESS C7000VPE/ C7010VP/ C7011VP/ C7010VPS/ C7011VPS)

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM4-2608-000	EDGE REGISTRATION DETECT ASS'Y	1->0	536
	New	FM4-2608-010	EDGE REGISTRATION DETECT ASS'Y	0->1	

(imagePRESS C6000/ C6000VP/ C7000VP/ C10000 Series)

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				536
	New	FC9-6076-000	STAY, SHUTTER	0->1	
2	Old	FM2-2156-020	EDGE REGISTRATION DETECT ASS'Y	1->0	536
	New	FM2-2156-030	EDGE REGISTRATION DETECT ASS'Y	0->1	

(Common parts)

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				
	New	FY9-6037	HANARL UD-321	0->1	
2	Old				
	New	XD2-1100-502	RING, E	0->1	

[Countermeasure cut-in serial numbers in factory]

- imagePRESS C6000/ C6000VP/ C7000VP/ C7000VPE/ C7010VP/ C7011VP/ C7010VPS/ C7011VPS : No implemented due to production discontinuance.

Model	Serial number
imagePRESS C10000VP Series ME US	WBC10412
imagePRESS C10000VP Series ME EUO	WEJ10450
imagePRESS C10000VP Series ME CN	WBD00521

E077-0001 caused by incomplete locking of the registration feed assembly

[Symptom]

E077-0001 may occur during the initial rotation operation by closing the front cover after jam removal of the main station.
E077-0001: Secondary Transfer Roller engagement/disengagement error

[Cause]

If the arrow [a] of the lever is located on the right side of the key mark [b] after jam removal etc. by pulling out the registration feed assembly from the main station and putting it in, the registration feed assembly is not completely locked.
If closing the front cover with the registration feed assembly incompletely locked, the initial rotation operation starts, which causes unsuccessful completion of engagement/disengagement operation of the secondary transfer roller, resulting in the above-mentioned symptom.

[Service work]

Check the position of the lever of the registration feed assembly. If it is locked incompletely, turn the lever until the arrow of the lever comes onto the left side of the key mark and lock it completely.
Check that error does not occur by the initial rotation operation after closing the front cover.

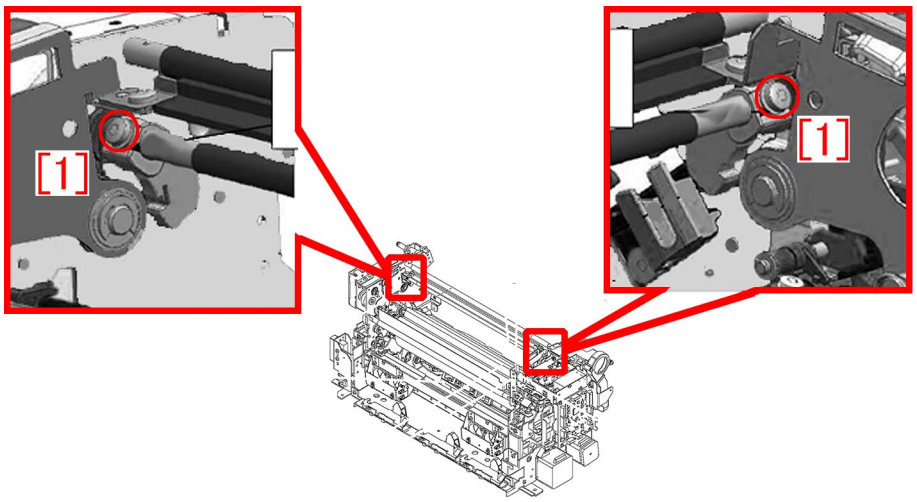
Information of proactive measure against E842-0x21

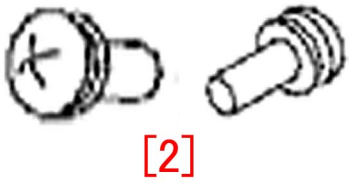
[Detail]

If the W sems screw that secures the engagement/disengagement cam to the shaft is loosened, in the main engines before the countermeasure in factory(S/N listed below), a large force might be applied to 20T/42T gear (FL3-7951-000) and 40T gear (FU7-0828-010), which may lead to gear teeth damage.
Here is the information of the measure to prevent this symptom from occurring.
- E842-0121 : An error in engagement/disengagement operation of the Primary Fixing External Heat Belt was detected.
- E842-0221 : An error in engagement/disengagement operation of the Secondary Fixing External Heat Roller was detected.

[Service work]

If the W sems screw [1] that secures the engagement/disengagement cam to the shaft is found loosened by the inspection, tighten up the W sems screw [1]. Or replace it with the w/washer screw (XA9-0961-000) [2] which has a locking member.





[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old				815 855
	New	XA9-0961-000	SCREW, W/WASHER, M4X10	0->4	

[Countermeasure cut-in serial numbers in factory]

Model	Serial number
imagePRESS C10000VP series FS US/J	WBE10498
imagePRESS C10000VP series FS EUO	WBF10547
imagePRESS C10000VP series FS CN	WBG00522

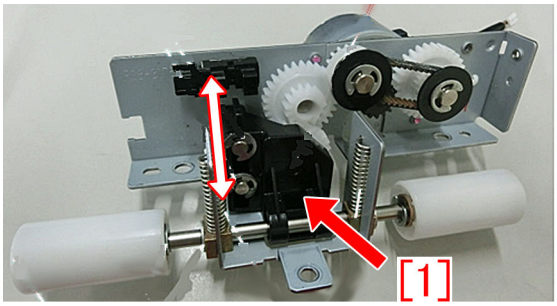
E568-8002/Shaved gear tooth due to overloading with friction from sliding while the estrangement rack is moving (Staple-Q1/W1/Booklet-Q1/W1/Saddle-AM2/AN2/Finisher-AM1/AN1)

[Symptom/Question]

E568-8002 and shaving on the gear tooth may occur in the machine earlier than the following countermeasure cut-in serial numbers in factory.
- E568-8002 : Feed Roller HP error

[Cause]

While the feed roller shaft is moving up and down to detect home position, if the estrangement rack [1] that holds the feed roller shaft inclines, the load from sliding increases and the feed roller shaft becomes unable to go back to home position, and this brings the aforementioned symptom.



[Remedy/Answer]

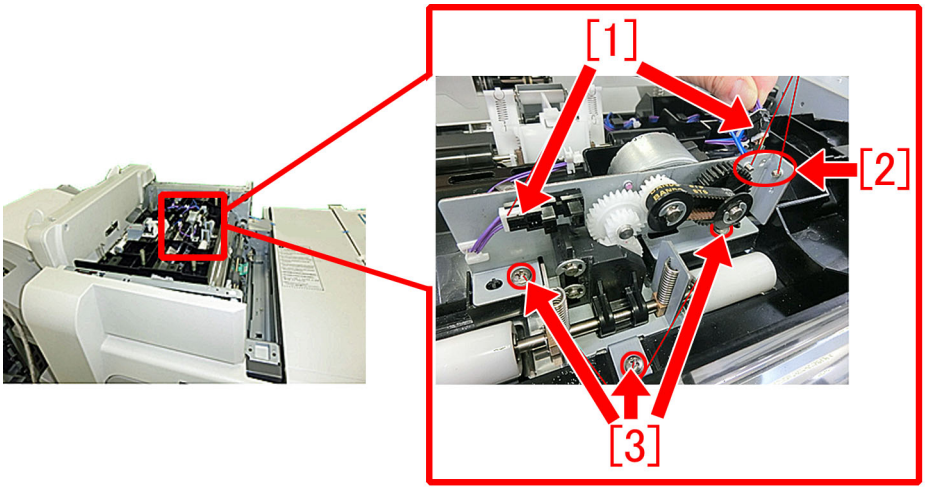
When the above-mentioned symptom occurs, perform the work either A) Replacing the upper feeder assembly with the new type or B) Applying the grease to the feed assembly.

A) Replacing the upper feeder assembly with the new type

Prepare the new-type upper feeder assembly for each machine and perform the work by following the steps below.
A-1) Refer to Service Manual (4. Parts Replacement and Cleaning > Feed Assembly) and remove the delivery static eliminator and the upper feeder assembly.
A-2) Replace the upper feeder assembly with the new type.

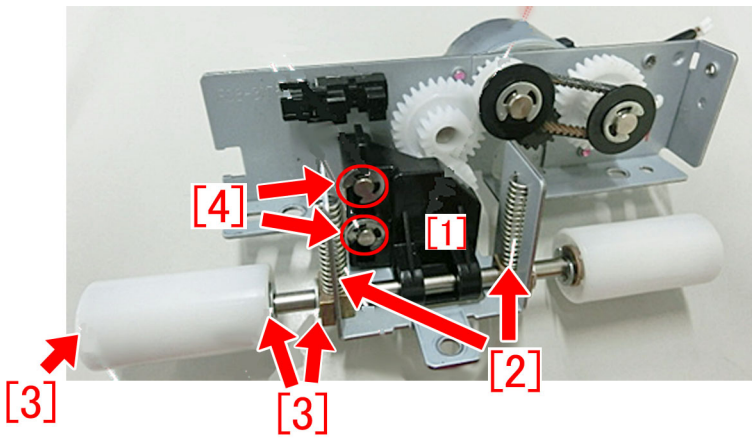
B) Applying the grease to the feed assembly

Prepare Molykote EM-50L (HY9-0007-000) and e-rings (XD9-0135-000, x5pcs) and perform the work following the steps below:
B-1) Refer to the service manual (4. Parts Replacement and Cleaning > Feed Assembly) and remove the delivery static eliminator and the upper cover of the upper feeder assembly.
B-2) Disconnect the connectors [1] (x2pcs) and remove the screws (x2pcs) for grounding [2] and the screws [3] (x3pcs) to detach the feed assembly.

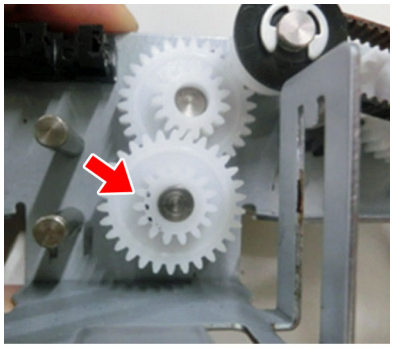


B-3) Remove the estrangement rack [1] in the following order:
B-3-1) Remove the compression springs [2] (x2pcs).

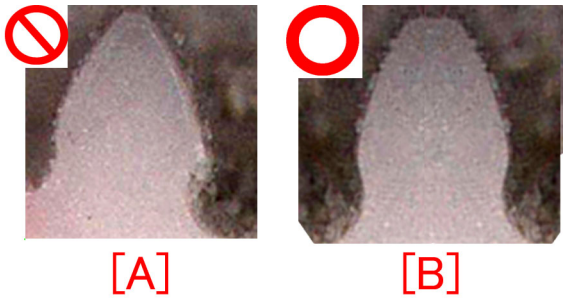
B-3-2) Remove the e-rings [3] (x3pcs) to remove the follower roller and then draw out the feed roller.
[Reference]
- Some models have only 2pcs of e-rings.
- Some models have a pin attached to the follower roller
B-3-3) Remove the e-rings [4] (x2pcs) to detach the estrangement rack [1].



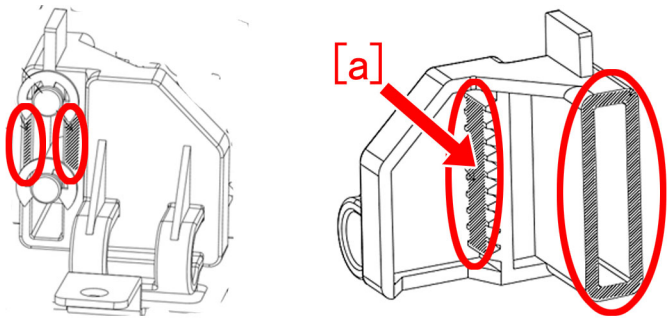
B-4) Put marks with a magic marker on the teeth of the gear meshing with the estrangement rack.



B-5) Visually, check the condition of the teeth marked in the step B-4).
If chipped/shaved teeth are observed, shift the phase of the gear position by rotating by 180 degrees at angle.
The picture [A] shows a shaved gear tooth in a triangle shape. The picture [B], a gear tooth in the normal shape.



B-6) Clean up the soiling and filings attached to the estrangement rack and the gear with lint-free paper moistened with alcohol.
B-7) Apply Molykote EM-50L (HY9-0007-000) to at 4 locations on the front/back sides of the estrangement rack shown in the following illustrations.
-Apply Molykote in an amount of a grain of rice (approximate 20mg) per a portion.
-Apply all over the teeth in the rack section [a] that meshes with the gear.



B-8) Reassemble the parts in reverse order from the step B-3). Use new e-rings (XD9-0135-000) when doing so.

[Service parts]
(Common to models)

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	XD9-0135-000	RING, E	5 -> 5	
	New				
2	Old				
	New	HY9-0007-000	LUBE, MOLYKOTE EM-50L, GREASE	0 -> 1	

(Staple Finisher-Q1 / Booklet Finisher-Q1)

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-A196-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-A196-010	UPPER FEEDER ASSEMBLY	0 -> 1	

(Finisher-AM1 / Saddle Finisher-AM2)

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-C358-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-C358-010	UPPER FEEDER ASSEMBLY	0 -> 1	

(Staple Finisher-W1 / Booklet Finisher-W1)

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-K156-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-K156-010	UPPER FEEDER ASSEMBLY	0 -> 1	

(Finisher-AN1 / Saddle Finisher-AN2)

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-K515-000	UPPER FEEDER ASSEMBLY	1 -> 0	L38
	New	FM1-K515-010	UPPER FEEDER ASSEMBLY	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
Staple Finisher-Q1 UL	To be informed as soon as identified.
Staple Finisher-Q1 EU/O	To be informed as soon as identified.
Booklet Finisher-Q1 UL	To be informed as soon as identified.
Booklet Finisher-Q1 EU/O	To be informed as soon as identified.
Staple Finisher-W1 UL	SWT50905
Staple Finisher-W1 EU/OT	SWU50686
Staple Finisher-W1 CN	WJN50058
Booklet Finisher-W1 UL	SWW51842
Booklet Finisher-W1 EU/OT	SWX51362
Booklet Finisher-W1 CN	WJP50035

Model	Serial No.
Finisher-AK1 CN	NWD50030
Finisher-AK1 EU/O	NWC50342
Finisher-AK1 UL	NWB50000
Finisher-AJ1 UL	No implemented due to production discontinuance.
Finisher-AJ1 EU/OT	No implemented due to production discontinuance.
Finisher-AJ1 CN	No implemented due to production discontinuance.
Saddle Finisher-AJ2 CN	No implemented due to production discontinuance.
Finisher-AM1 UL	No implemented due to production discontinuance.
Finisher-AM1 EU/O	No implemented due to production discontinuance.
Finisher-AM1 CN	No implemented due to production discontinuance.
Saddle Finisher-AM2 UL	QWL50005
Saddle Finisher-AM2 EU/O	QWM50058
Saddle Finisher-AM2 CN	QWN50014
Finisher-AN1 US	WBP50005
Finisher-AN1 EU/OT	WBQ50116
Finisher-AN1 CN	WBR50025
Saddle Finisher-AN2 US	WBT50445
Saddle Finisher-AN2 EU/OT	WBU50220
Saddle Finisher-AN2 CN	WBV50006

E012-1080 due to the instable rotation of ITB drive (iPC8000VP)

[Symptom/Question]

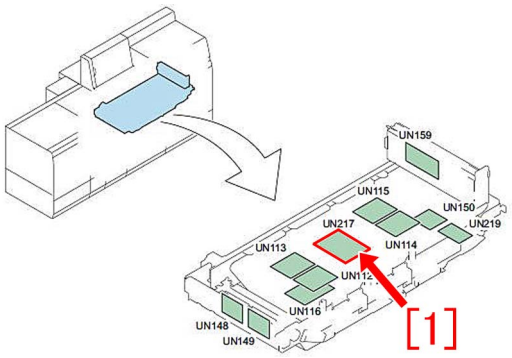
E012-1080 may occur with the machines older than the following countermeasure cut-in serial numbers in factory.
- E012-1080: Drum ITB drive error

[Cause]

After some endurance time of the ITB, the load of the ITB drive drops. If the load drops more than expected, the rotation of the ITB drive motor becomes unstable, resulting in the above-mentioned symptom.

[Remedy/Answer]

Referring to Service Manual (Error Code Details), perform the work stated.
If the above-mentioned symptom still occurs, replace the middle I.T.B. driver PCB assembly, with the new-type (FM1-A876-010) (UN217) [1]. Update the Dcon firmware to Ver.20.23 or later at the same time. (Service Information (Software) Ref No:F02366)
[Reference] Replacing the middle I.T.B. driver PCB assembly with the new-type will not be effective, if the Dcon firmware is Ver. 13.02 or earlier.



[Service parts]

No.		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-A876-000	I.T.B. DRIVER PCB ASS'Y, MD.	1 -> 0	532
	New	FM1-A876-010	I.T.B. DRIVER PCB ASS'Y, MD.	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.	
	Factory measure 1	Factory measure 2
imagePRESS C8000VP ME US	WBC10619	WBC10779
imagePRESS C8000VP ME CN	WBD00540	WBD00550
imagePRESS C8000VP ME EUO	WEJ10634	WEJ10825

[Factory measure 1]
Dcon firmware is updated to Ver.20.23 or later.
This will control switching the drive voltage of the ITB drive motor automatically for respective print speeds.
[Factory measure 2]
The middle I.T.B. driver PCB assembly is changed into the new-type (FM1-A876-010).
This will allow the drive voltage of the ITB drive motor to be changed for respective print speeds.

Points to note in replacing the fixing external heat belt or external heating assembly

[Symptom/Question]

After replacing the fixing external heat belt (FE3-1881) or external heating assembly (FM1-A377) in the primary/secondary fixing assembly, E007-0102/0202 may occur.
-E007-0102: Primary Fixing External Heat Belt full displacement error
-E007-0202: Secondary Fixing External Heat Belt full displacement error

[Cause]

Some fixing external heat belts have inner peripheries with rough surface and this condition makes the shifting speed of the belt unstable, and would eventually end in the above-mentioned symptom.

[Remedy/Answer]

Replace the fixing external heat belt or external heating assembly only after upgrading to System Software Ver29.03 and Dcon Ver23.02 or later (Service Information (Software) Ref No: F20278), and then execute the following service mode:
The above works are unnecessary when replacing the primary fixing assembly or secondary fixing assembly.
- Primary fixing : COPIER>FUNCTION>FIXING>F1EX-INT
- Secondary fixing : COPIER>FUNCTION>FIXING>F2EX-INT

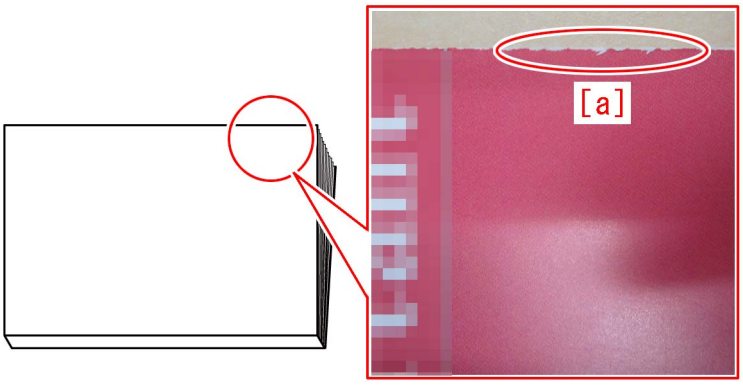
Notice of periodical replacement of the trimming blade and the heater (Glue vat unit)

[Details]

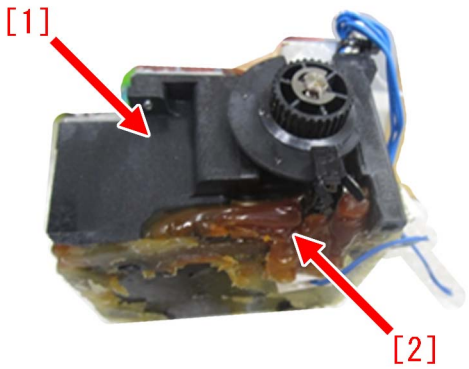
Check the work interval of the trimming blade and the heater (Glue vat unit) from the following Service Mode and besure that these parts are not used beyond the designated work interval.

Replaced Parts	Service Mode	Work Interval
Trimming blade	COPIER > COUNTER > DRBL-2 > BND-CUT	40,000 trimming
Glue vat unit	COPIER > COUNTER > DRBL-2 > HEATER	2,000 hours

When using the parts beyond the designated work interval, the following symptoms occur.
a) Trimming blade [Periodically Replaced Parts]
Trimming performance of the trimming blade goes down and trimming failure [a] occurs.



b) Glue vat unit [Consumable Parts]
When glue [2] overflows from the glue vat [1] and hardens on surrounding parts of the glue vat, the glue vat [1] may become unable to be detached. Also, errors (E5B0-8007/E5B2-8001/E5B7-0001/E5B7-0002/E5B8-8001) may be triggered.
-E5B0-8007: An error in the Thermostat (THSW) was detected
-E5B2-8001: Error in glue vat level detection of Perfect Binder
-E5B7-0001/-0002: Error in Glue Vat Shift Motor (M32) of Perfect Binde
-E5B8-8001: The Glue Vat Roller Rotation Sensor (S59) could not detect rotation of the Glue Vat Roller when it was driven.



[Remedy/Answer]

Replace the trimming blade and the heater (Glue vat unit) in accordance with the designated work interval described in Service Manual.

Measure against failure after system version upgrade (Multi Function Professional Puncher_A1)

[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, the following failures may occur on the Multi Function Professional Puncher-A1, when the system version upgrade is done for a
main body and an accessory.

- Only LCD light is on, but characters do not appear on an operation panel of Multi Function Professional Puncher-A1.
- E503-0055: Communication Error in the Multi Function Professional Puncher
- E711-0001: IPC communication error (time out error)

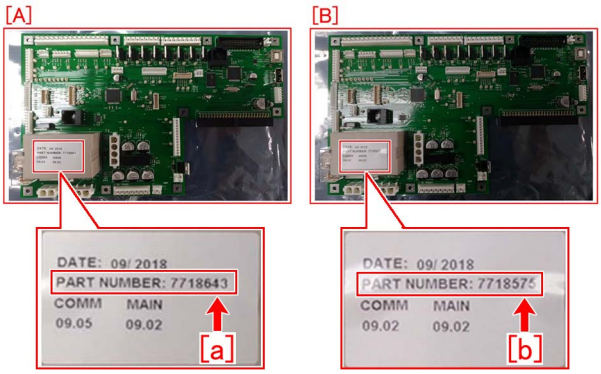
[Cause]

For some reason, when power drop or power OFF is caused during the version upgrade process of Multi Function Professional Puncher-A1, some part of the firmware fails to be written in, causing the above symptom.

[Remedy/Answer]

When the above mentioned failure is observed, replace with the new type MAIN CONTROLLER PCB ASS'Y(FC3-7449-000)[A], which has its Bootloader firmware modified.
In addition, the Bootloader firmware could not be upgraded by SST, thus the MAIN CONTROLLER PCB ASS'Y is needed tobe replaced. The new type PCB has Main Ver9.02 or later, and COMM Ver9.05 or later in it.

[NOTE]
The new/old type of MAIN CONTROLLER PCB ASS'Y could be identified by the PART NUMBER [a] [b] printed on a label on a PCB.
- New type [A]: 7718643[a]
- Old type [B]: 7718575[b]



[Service parts]

No		Part Number	Description	Q'ty	Fig. No.
1	Old	FC3-6944-000	MAIN CONTROLLER PCB ASS'Y	1 - > 0	Q40
	New	FC3-7449-000	MAIN CONTROLLER PCB ASS'Y	0 - > 1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
MFPP-A1 115V	SYM01422
MFPP-A1 230V	SYN00733

E5A3-808x/E5B5-8016 and 1FA9 jam code due to sliding failure of dust buffer (Perfect Binder-A1/B1/C1/D1/E1)

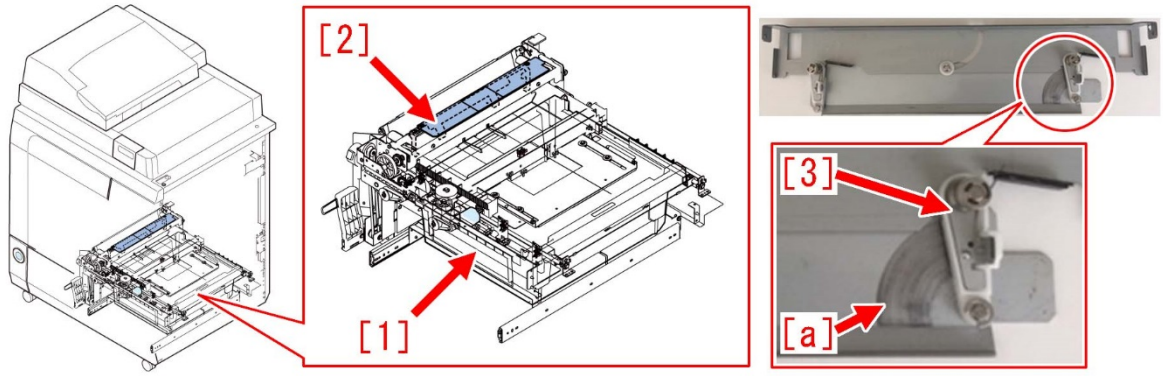
[Symptom/Question]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, when copying using perfect binder, E5A3-8081/E5A3-8082/E5B5-8016 or 1FA9 jam may occur.

- E5A3-8081: Error in the stack buffer tray motor (M39) of Perfect Binder (Stack buffer tray home position sensor (S78) is not turned OFF.
- E5A3-8082: Error in the stack buffer tray motor (M39) of Perfect Binder (Stack buffer tray home position sensor (S78) is not turned ON.)
- E5B5-8016: Error in waste paper detection of Perfect Binder
- 1FA9: Stationary jam of rotation home position sensor 1 (S95)

[Cause]

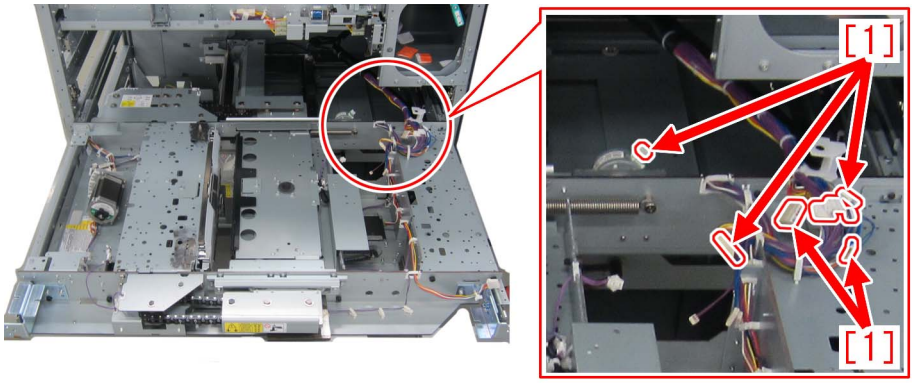
As the life of the dust buffer [2] in dust collecting area [1] advances, the surface [a] that comes in contact with the arm [3] gets shaved. This causes sliding failure of the dust buffer, resulting in the above symptom.



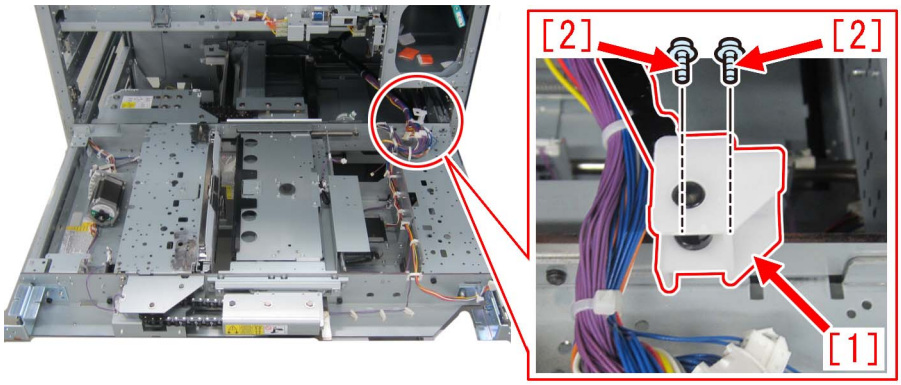
[Remedy/Answer]

When the above symptom occurs, prepare some lint-free paper and alcohol, and clean the dust buffer in the following procedure.
[Note] When bringing down the trimming assembly, be sure to do so with two people.

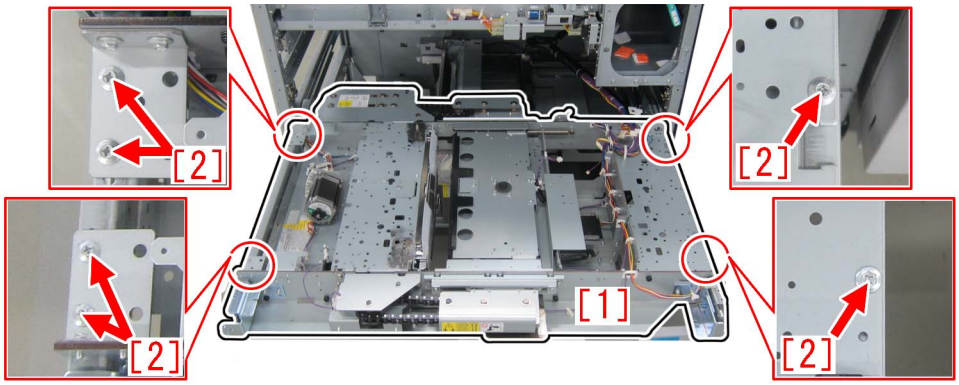
1) Refer to Service Manual and remove the rear cover.
2) Refer to Service Manual and remove the stack rotation assembly.
3) Remove all the connectors [1].



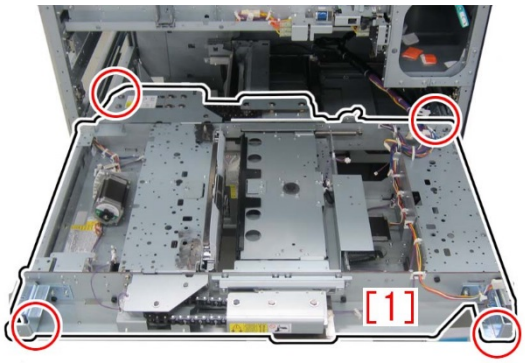
4) Remove the 2 screws [2], and then remove the cable arm [1] from the trimming assembly.



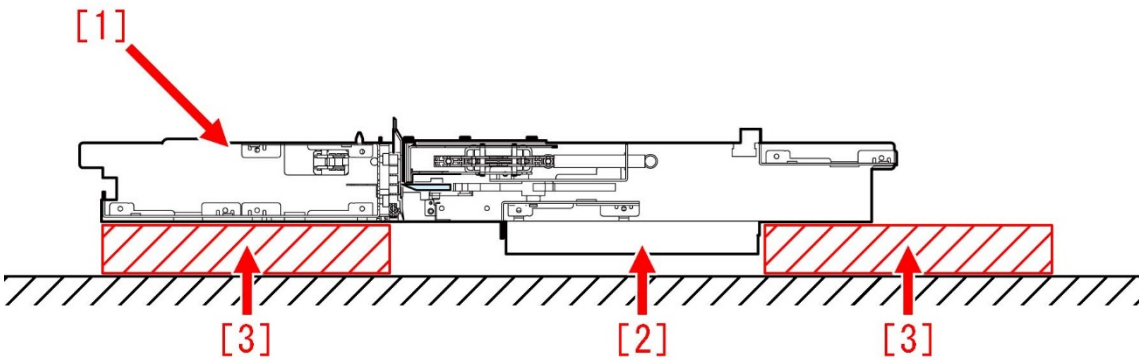
5) Remove the 6 screws [2].
[Reference] Marking the screw holes, with a permanent marker, which the trimming assembly was secured to may be helpful when installing back the trimming assembly.



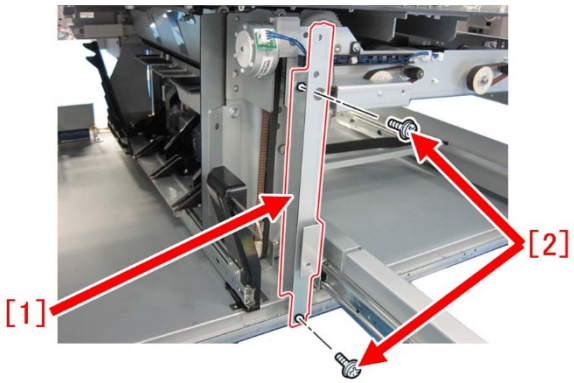
6) Hold the areas marked with red circles and remove the trimming assembly [1].



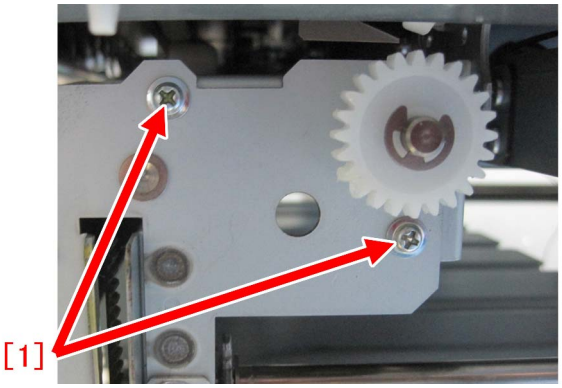
[Note] There is a protrusion [2] on the bottom side of the trimming assembly. As placing the removed trimming assembly directly on the floor may damage the trimming assembly, use 4 reams of LTR size copy paper [3] and place the assembly on top of them.



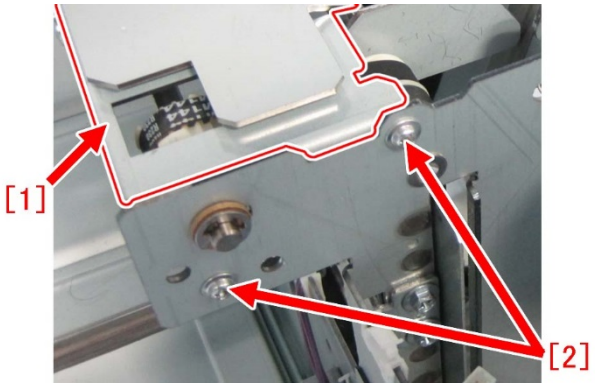
7) Remove the 2 screws [2] and then remove the bracket [1].



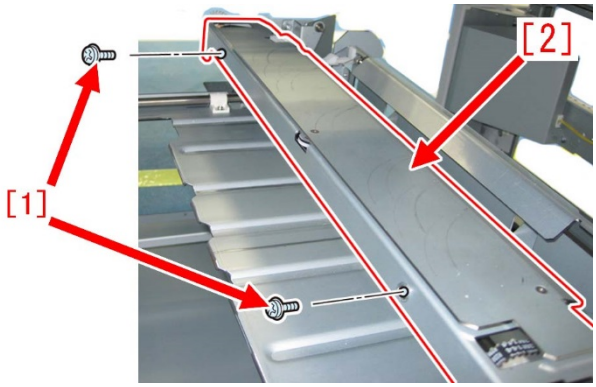
8) Refer to Service Manual and remove the dust buffer drive assembly.
9) Remove the 2 screws [1] in front securing the sub buffer unit.



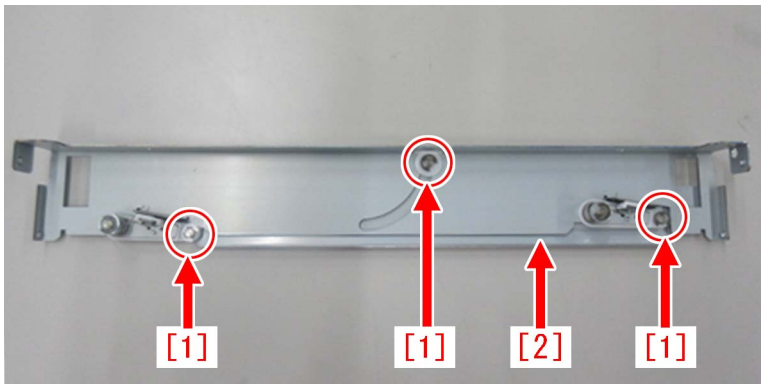
10) Go to the back of the machine. Refer to "Removing the dust buffer unit" in Service Manual and open the controller PCB mount.
11) Remove the 2 screws [2] in rear securing the sub buffer unit [1].



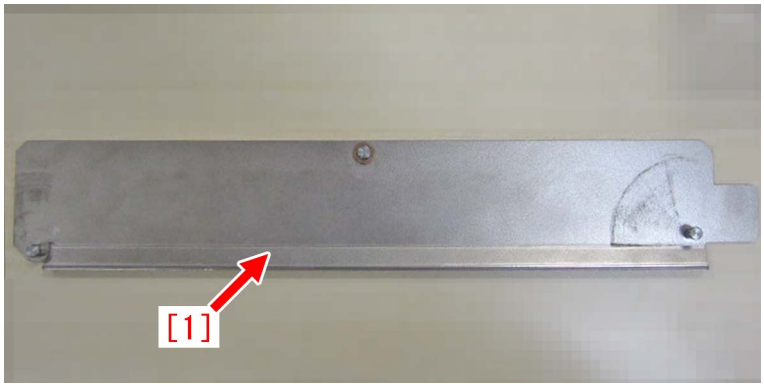
12) Remove the 2 screws [1] on the side of the sub buffer unit [2] and then remove the sub buffer unit.



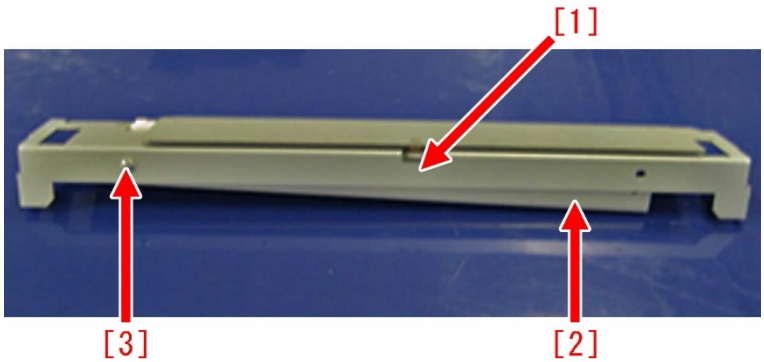
13) Flip the sub buffer unit. Remove the 3 E-rings [1] and then remove the sub buffer [2].
[Reference] Do not reuse the removed E-rings and prepare new ones.



14) Moisten the lint-free paper with alcohol and clean the front side and back side of the sub buffer [1].



15) Assemble the parts from the step 13) in the reverse order.
[Reference] Temporarily securing the sub buffer [1] and the bracket [2] with the screw [3] makes attaching the sub buffer unit easy.



[Service parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FL0-0656-000	PLATE	1->0	P82
	New	FL1-5817-000	PLATE	0->1	P82
2	Old	FM1-B017-000	DUST CATCH ASSEMBLY	1->0	P82
	New	FM1-U699-000	DUST CATCH ASSEMBLY	0->1	P82

* In this text, the plate is referred to as the sub buffer.
* In this text, the dust catch assembly is referred to as the sub buffer unit.

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
Perfect Binder-A1 US	No implemented due to production discontinuance
Perfect Binder-A1 EU/O	No implemented due to production discontinuance

Model	Serial No.
Perfect Binder-B1 US	No implemented due to production discontinuance
Perfect Binder-B1 EU/O	No implemented due to production discontinuance
Perfect Binder-C1 US	EGX20512
Perfect Binder-C1 EU/O	EGZ20535
Perfect Binder-D1 US	No implemented due to production discontinuance
Perfect Binder-D1 EU/O	No implemented due to production discontinuance
Perfect Binder-E1 US	WBX00556
Perfect Binder-E1 EU/ASIA	WBY00538

Specifications-Related

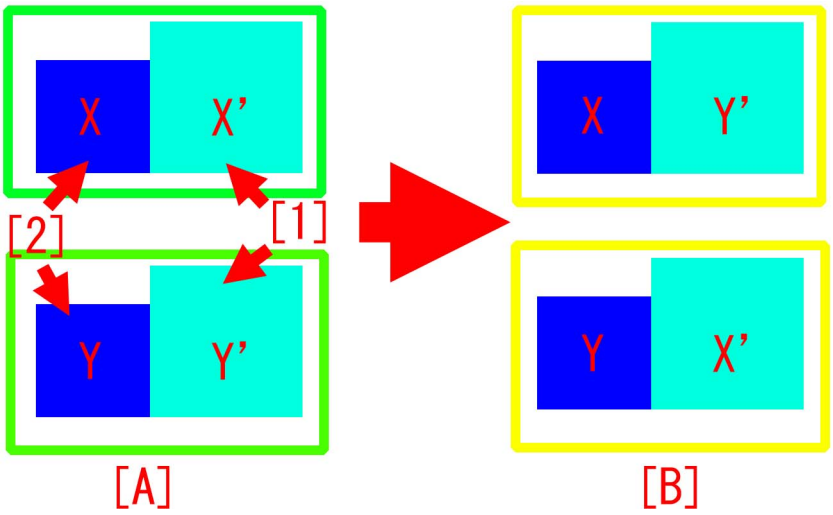
Announcement about checking the color sensor service label value on installation of the device

[Symptom]

The density may not be adjusted within specification even after auto gradation adjustment has been executed during installation.

[Cause]

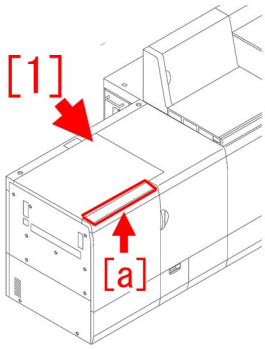
The color sensor detection sensitivity is adjusted on the combination of the main station [1] and the sub-station [2] at the factory. The calculated adjustment value is put down to the service label and the label is affixed to the sub-station [2]. At the same time, the adjustment value is entered to DCON of the main station [1], and both of them are shipped in sets [A].
Hence if a main station and a sub-station is installed in field in a combination that is different from that at the time of shipment from the factory [B] , the adjustment value of the color sensor detection sensitivity that was entered to the main station [1] may not be suitable for the auto gradation adjustment processing, and the aforementioned symptom may occur.



[Service work]

Perform the work following the installation procedure.
[Note] The installation procedure in the service manual has been revised with version 2.0 issued in February 2016 and the versions onward.
1) In the step "Supplying the Starter" of the installation procedure in the service manual, put down the value of the following 12 items in the service label which is put on the sub-station. Service label is located near [a].

- CS1MID-K
- CS2MID-Y
- CS3MID-M
- CS4MID-C
- CS1OFF-K
- CS2OFF-Y
- CS3OFF-M
- CS4OFF-C
- CS1OFW-K
- CS2OFW-Y
- CS3OFW-M
- CS4OFW-C

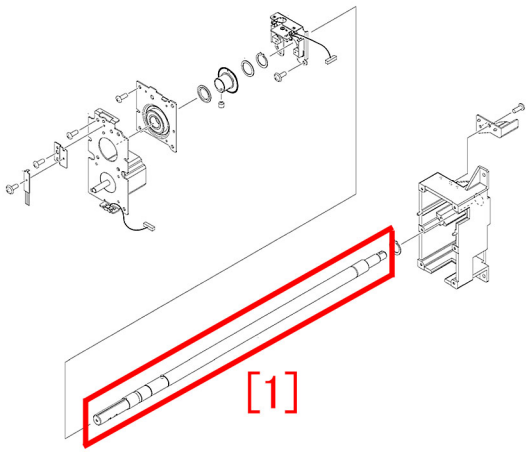


2) In the step of "Auto Gradation Adjustment (Full Adjust)" of the installation procedure in the service manual, go to Service Mode (Level2) > COPIER > ADJUST > P-PASCAL and enter the service label value that was put down in the step 1).
[Note] Be aware that the order of the items described in the service label is different from that of this service mode. Confirm the item names carefully.
3) Execute the auto gradation adjustment (full adjust) referring to "1. Place standard paper in the deck." and later in "Auto Gradation Adjustment (Full Adjust)" of the installation procedure in the service manual.

Notice of procedure to replace the transmission shaft inside the drum drive assembly

[Detail]

The transmission shaft (FC6-0118-000) [1] inside the drum drive assembly is newly set up as a service part.
When replacing it, follow the steps below.

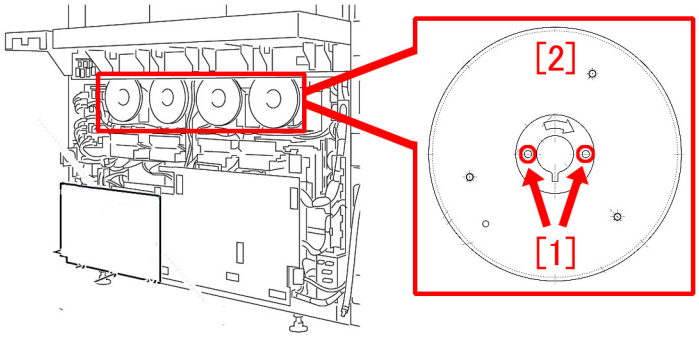


[Reference] When E012-0x40/0x80 occurs, and the symptom reoccurs even after replacing the drum drive driver PCB, the drum shaft encoder sensor A, the drum shaft encoder sensor B and the drum HP sensor, and the chips of transmission shaft inside the drum drive assembly [1]scatter, such symptom may be improved by replacing the transmission shaft.
- E012-0x40: Drum ITB drive error (x = 1: Y, 2: M, 3: C, 4: Bk)
- E012-0x80: Drum ITB drive error (x = 1: Y, 2: M, 3: C, 4: Bk)

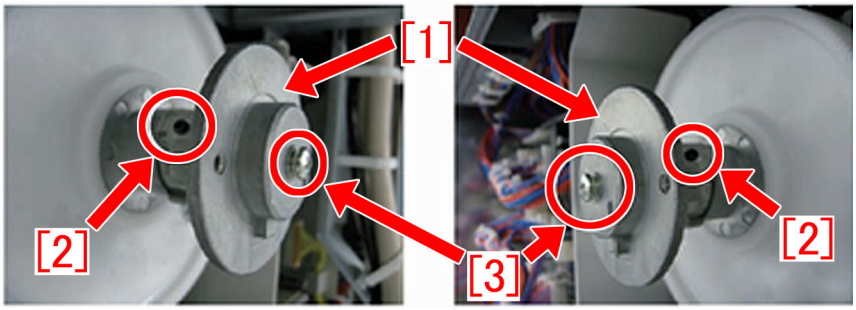
[Service work]

Prepare the required number of transmission shafts (FC6-0118-000), newly set up as a service parts, and C rings (XD2-3100-202), and follow the steps below for replacement.
[Reference]
- 2 C rings (XD2-3100-202) are required per transmission shaft (FC6-0118-000).
- Prepare the ring pliers to detach the C ring (XD2-3100-202).

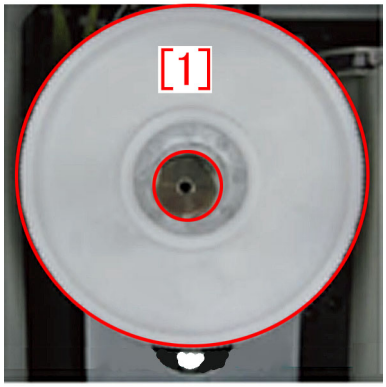
1) Refer to "Replacing the Main Station Rear Covers" in the service manual and remove the rear covers.
2) Remove the 2 screws [1] and the flywheel [2].



3) Loosen the 2 screws [2] fixed to the shaft, remove the screw [3] and then the flywheel mount [1].

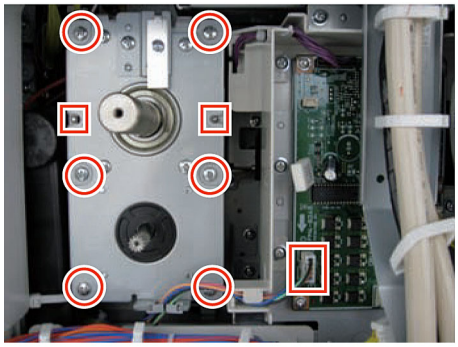


4) Remove the 192T gear [1].

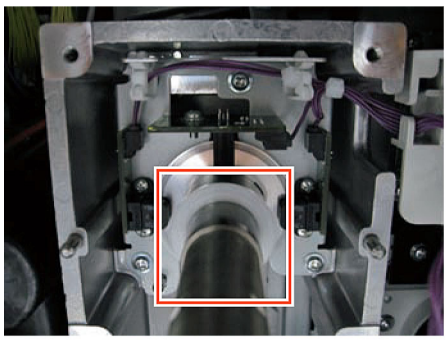


5) Remove the drum drive motor unit [1].
- 6 Screws
- 1 Connector
- 2 Bosses

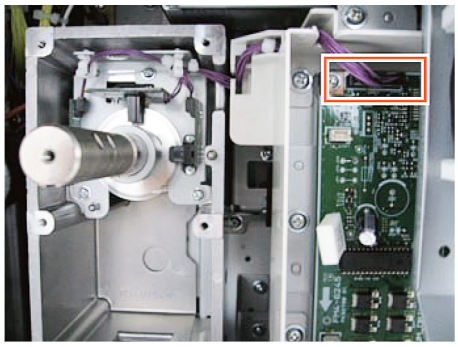
[Caution] Be careful not to trap the harness between the drum drive motor unit and the harness guide.



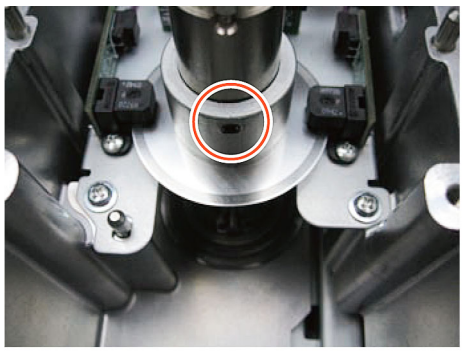
6) Remove the drum shaft holder (plastic).



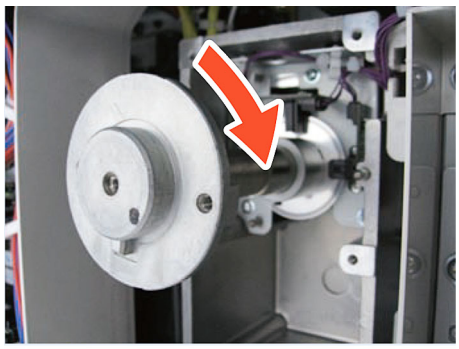
7) Disconnect the connector, and free the harness from the harness guide.



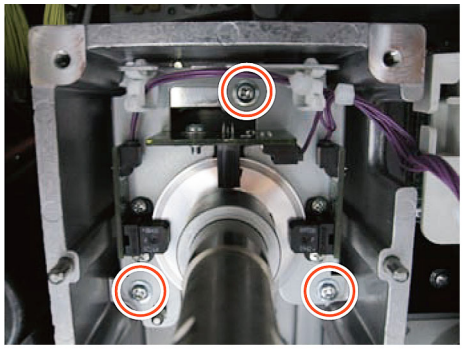
8) Loosen the step screw.



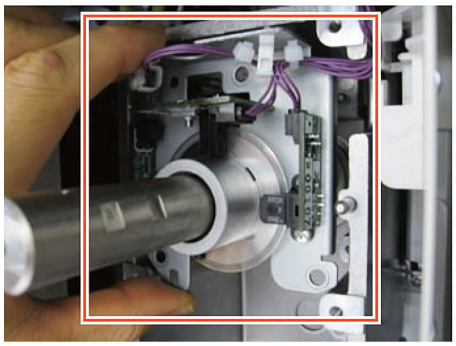
[Note] If the step screw is at a position inconvenient for the work, install the flywheel mount and move the step screw. In that case, be sure to rotate it clockwise.



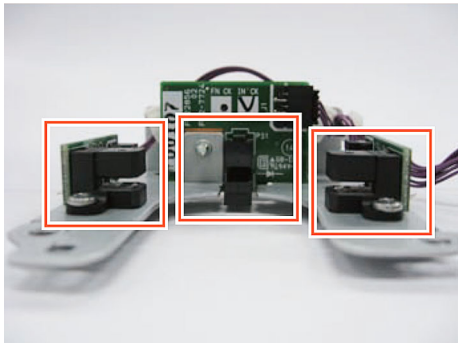
9) Remove the 3 TP screws (M3).



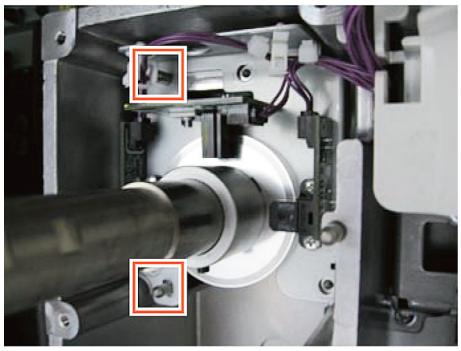
10) Remove the sensor unit and the encoding wheel (no longer used) together slowly with both hands.
- 2 Bosses



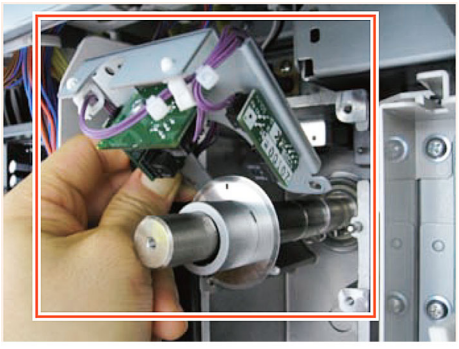
[Caution]
- Be careful not to push the thin plate of the encoding wheel in the recesses of the 3 sensors with the sensors.



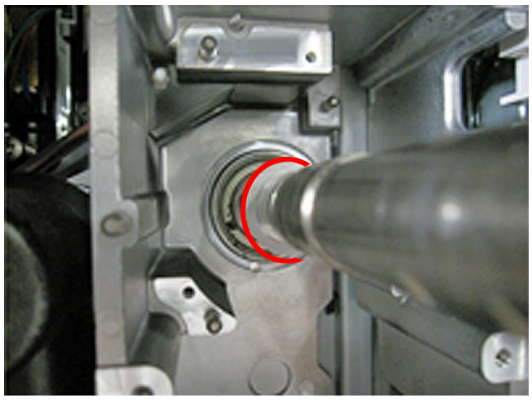
- Take a special care when removing them from the 2 bosses.



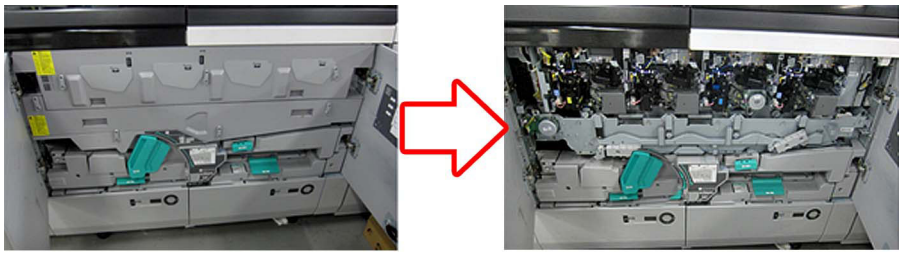
- When they have been pulled out to some extent, remove the sensor unit from above.



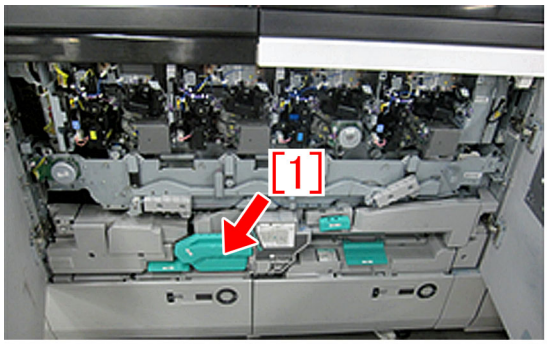
11) Remove the spacer (made of metal) from the transmission shaft.



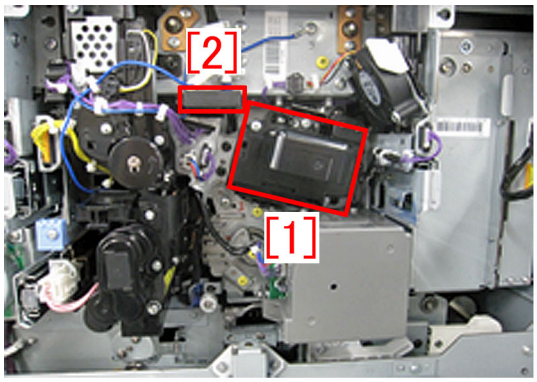
12) Open the front door of the machine and remove the inner cover of the process kit and the ITB.



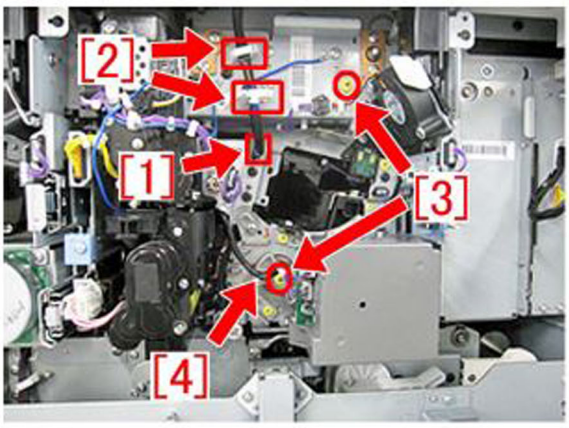
13) Turn the lever (B-G1) [1] to release the pressure.

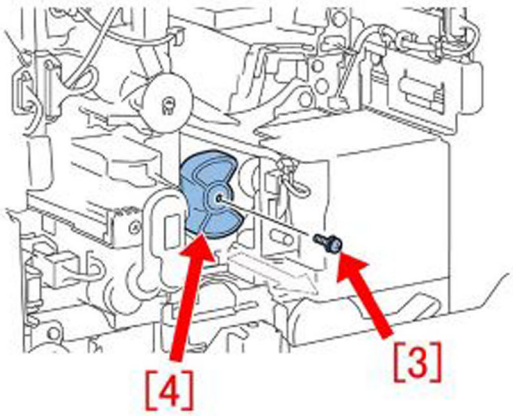


14) Take out the primary charging assembly [1] and the dust-proof glass [2]

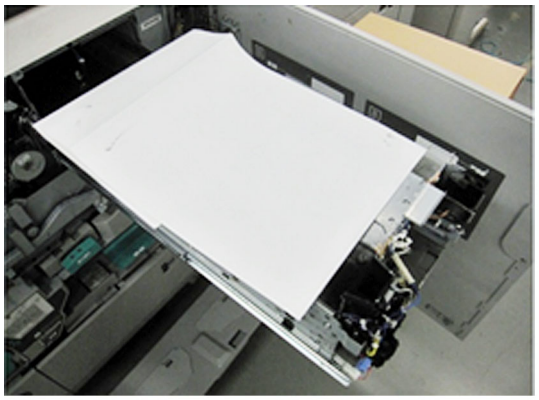


15) Remove the connector [1], 2 cable guides [2] and 2 screws [3] and take out the drum shaft knob [4].

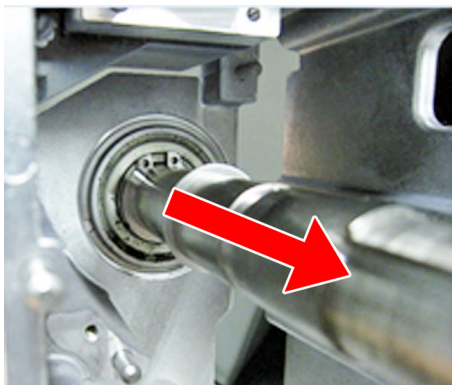




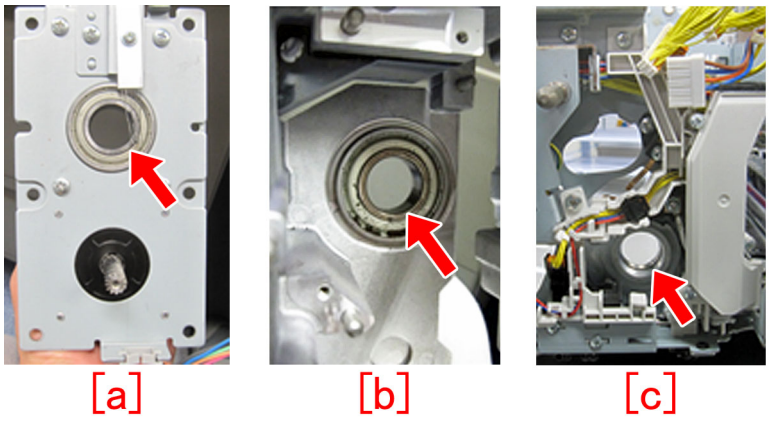
16) Pull out the process kit forward and cover the drum with paper to shade the light.



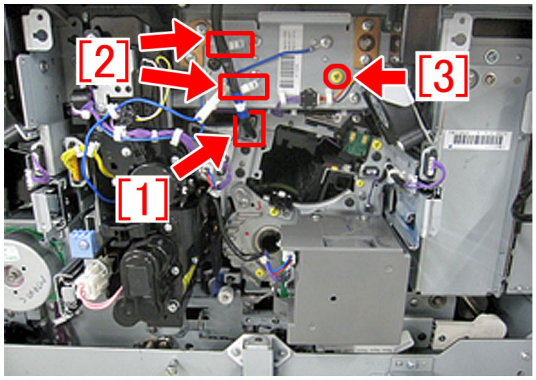
17) Pull out and remove the transmission shaft from the backside of the machine.



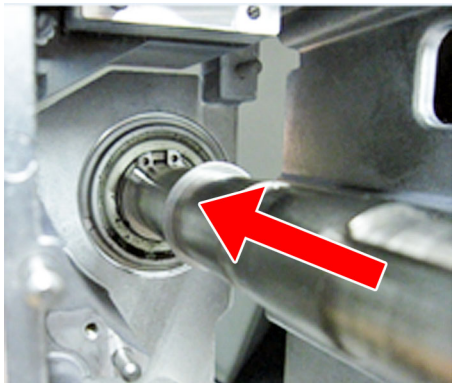
18) Clean the inner circumference of the bearing, which came into contact with the transmission shaft, with an alcohol-moistened cloth to remove chips and old grease. The bearings to be cleaned are located in 3 places: inside the drum drive assembly [a], the backside of the machine [b] and the front side of the machine [c].
After cleaning, apply super lube grease (approximately 20mg, as much as a grain of rice) to the entire surface of the inner circumference of each bearing.



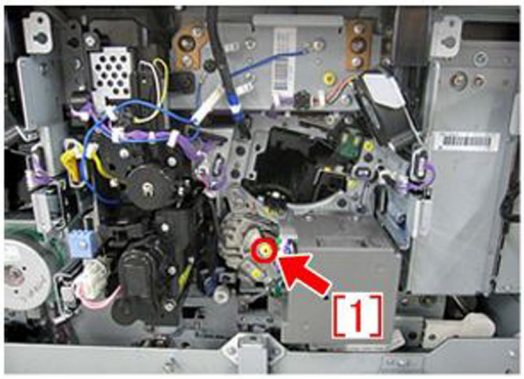
19) Return the process kit to the machine and attach the connector [1], 2 cable guides [2] and a screw [3].

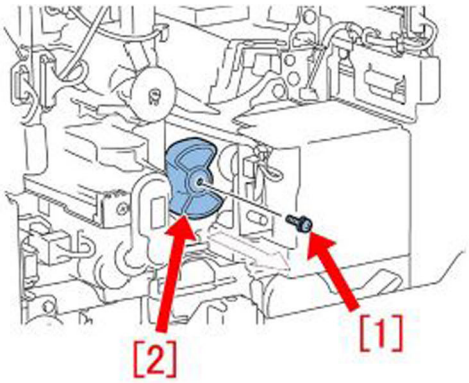


20) Attach the brand-new C ring (XD2-3100-202) to the brand-new transmission shaft (FC6-0118-000) and insert them from the back side of the machine. Push the transmission shaft, until the C ring comes into contact with the bearing.



21) Attach the drum shaft knob [2] with a screw [1].





22) Assemble the parts by reversing the procedure from the step 14).

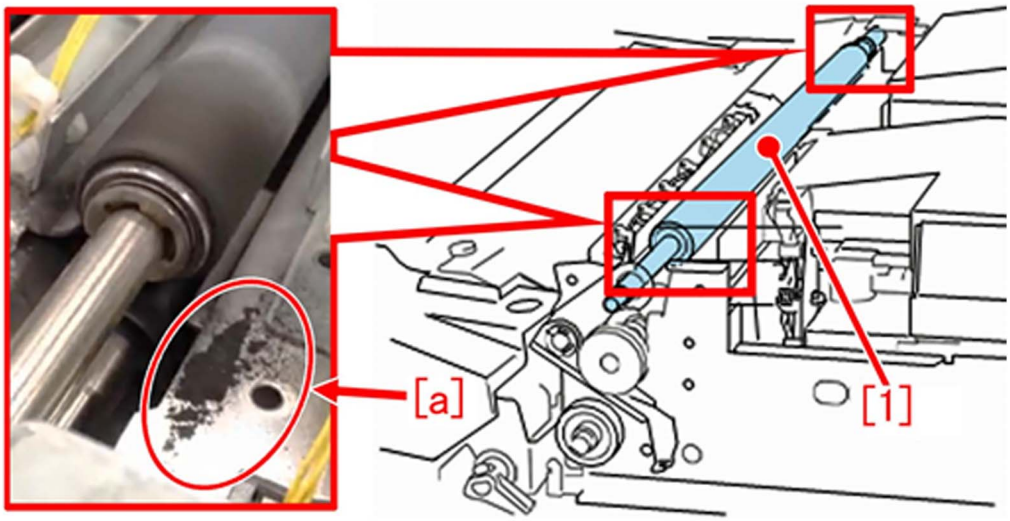
[Service parts]

No.		Part Number	Description	Q'ty.	Fig. No.
1	Old				271
	New	FC6-0118-000	SHAFT, TRANSMISSION	0->1	
2	Old	XD2-3100-202	C Ring	2->2	
	New				
3	Old	FY9-6005-000	LUBE, SUPER LUBE GREASE,(85G)	1->1	
	New				

Countermeasure against shaving on the shaft of the upper registration roller

[Symptom/Question]

Shavings [a] of the shaft may be attached around the both ends of the upper registration roller [1] in the machine earlier than the following countermeasure cut-in serial numbers in factory.



[Cause]

After some endurance time has elapsed, the outer periphery of the bearing of upper registration roller and the inner periphery of the roller scuff and shave each other, and this leads to the above mentioned symptom.

[Remedy/Answer]

When the aforementioned symptom has occurred, prepare and replace with the new type upper registration roller (FM1-F405-010) referring to the "Replacement Manual for Durability Enhancement Parts". When to replace, first wipe off the shavings before performing the work.

[Service Parts]

No.		Part Number	Description	Q'ty	Fig.No.
1	Old	FM1-F405-000	ROLLER, REGISTRATION, UPPER	1 -> 0	320
	New	FM1-F405-010	ROLLER, REGISTRATION, UPPER	0 -> 1	

[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
imagePRESS C10000VP Series ME US	WBC10777
imagePRESS C10000VP Series ME CN	WBD00550
imagePRESS C10000VP Series ME EUO	WEJ10827

Points to note when attaching the pressure roller heater in the secondary fixing assembly

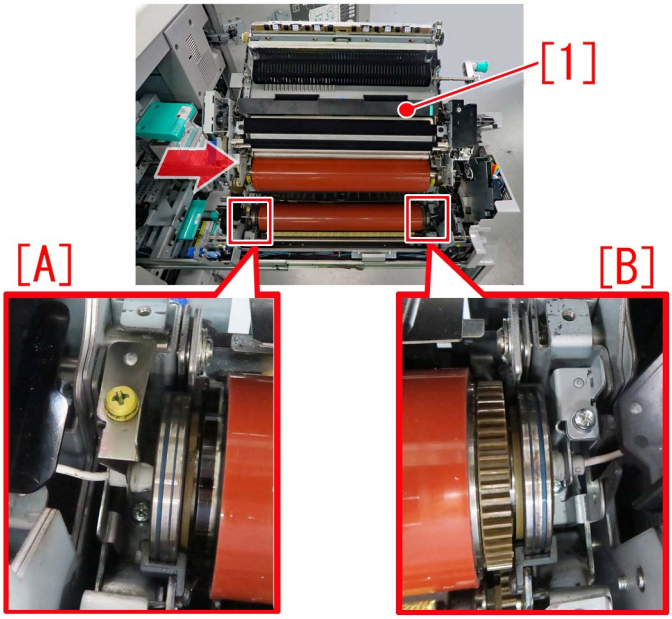
[Description]

When the pressure roller heater is incorrectly set in the secondary fixing assembly, the AC cable of the pressure roller heater may be damaged and the following symptoms may occur.
- Power shut-off from a leakage breaker on the machine being activated
- Power shut-off from a leakage breaker on the distribution board being activated that is located in the room where the machine is installed in.

The pressure roller heater is not shown in the figure in "Assembling the Secondary Fixing Roller Heater" of Service Manual, but the pressure roller should be attached with the pressure roller heater inserted inside. To attach the pressure roller to the secondary fixing assembly, follow the steps described in "Service Work".

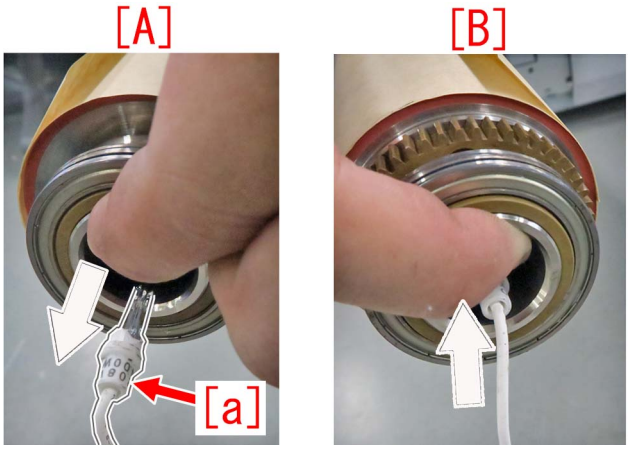
[Remedy/Answer]

This section describes the steps to insert the pressure roller heater into the pressure roller and then attach the pressure roller to the secondary fixing assembly.
The photo below shows the secondary fixing assembly [1] being pulled out from the machine with the upper and under units being opened. The photo showing the end of the pressure roller in the rear side of the machine is placed to the left below as [A] and the photo showing the end of the pressure roller in the front side of the machine is placed to the right below as [B]. Refer to these photos and compare the rear side [A] and the front side [B] as you perform the work described.



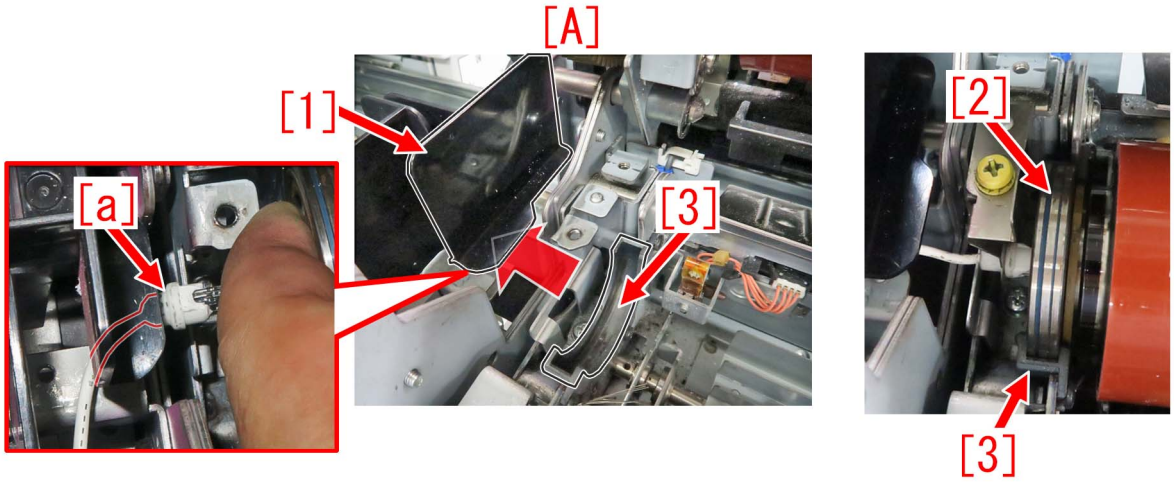
1) Refer to "Assembling the Secondary Fixing Roller Heater" of Service Manual and insert the pressure roller heater into the pressure roller.

2) Lift the pressure roller. When doing so, press the insulator of the pressure roller heater on the front side [B] so it does not stick out from the end of the pressure roller. On the rear side [A], the insulator [a] of the pressure roller heater sticks out from the end of the pressure roller.

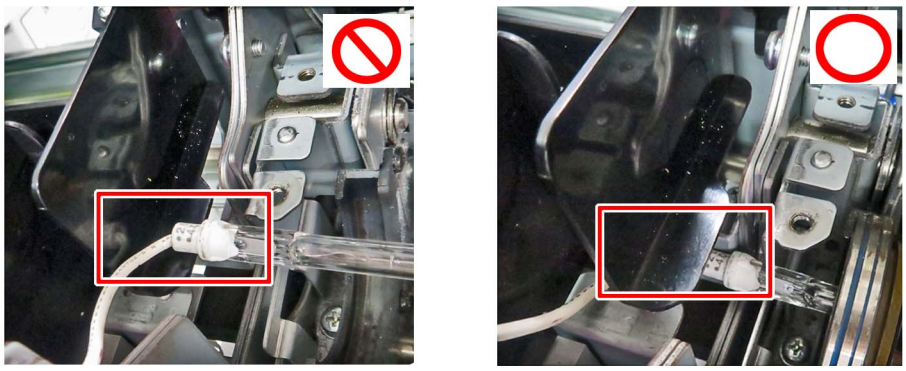


3) Be sure to have the insulator [a] of the pressure roller heater on the rear side [A] pass below the cable guide [1] of the secondary fixing assembly of the machine. After confirming that the insulator [a] of the pressure roller heater is not positioned over the cable guide [1], set the bearing [2] in the bearing holder [3].

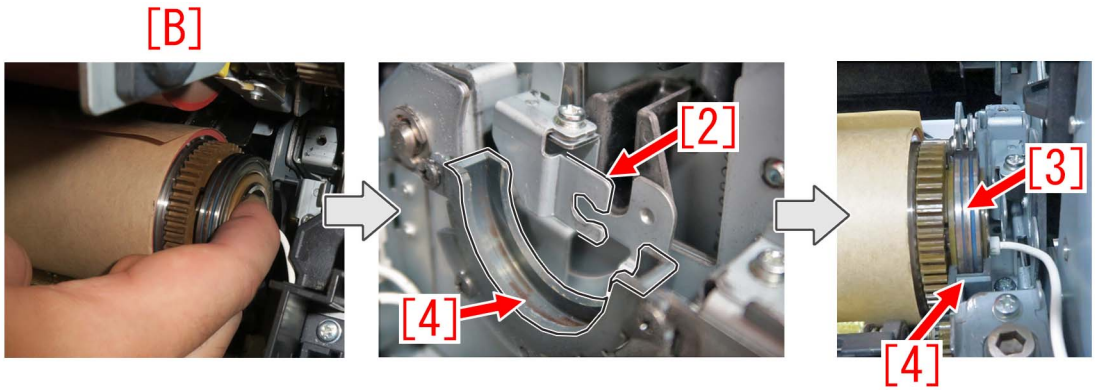
[Note] If the bearing is set in place with the insulator [a] of the pressure roller heater positioned over the cable guide [1], the heater may break from the weight of the pressure roller being applied to it.



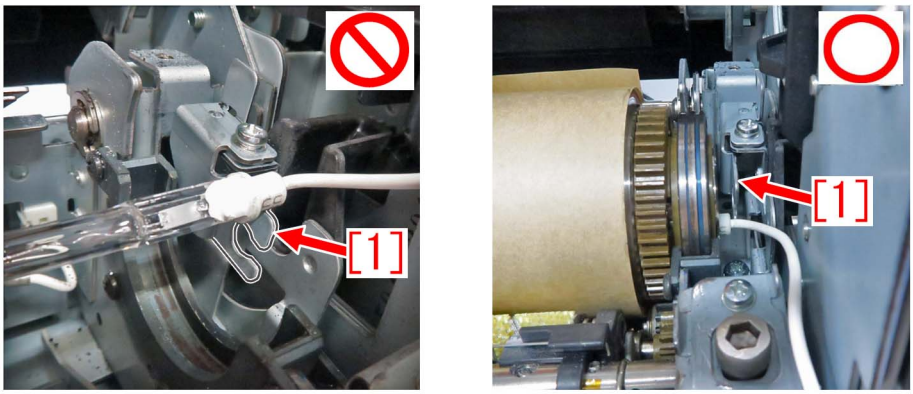
[Reference] The left photo is the image of the insulator of the pressure roller heater on the rear side positioned over the cable guide. The pressure roller is being removed for easier viewing. The right photo shows the correct state.



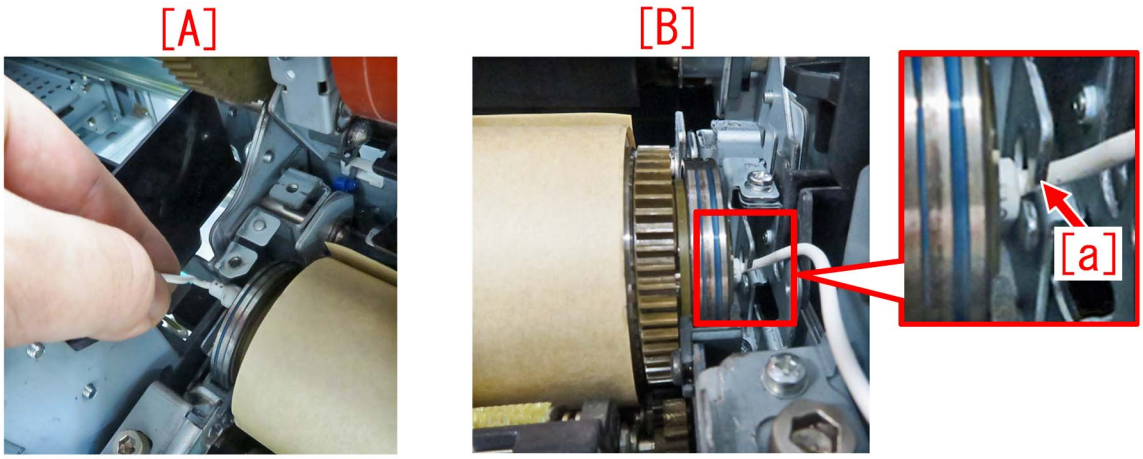
4) While keeping the insulator of the front end of the pressure roller heater inside the pressure roller [B], set the bearing [3] in the bearing holder [4] without going over the heater retainer (Front) [2] of the secondary fixing assembly of the machine.



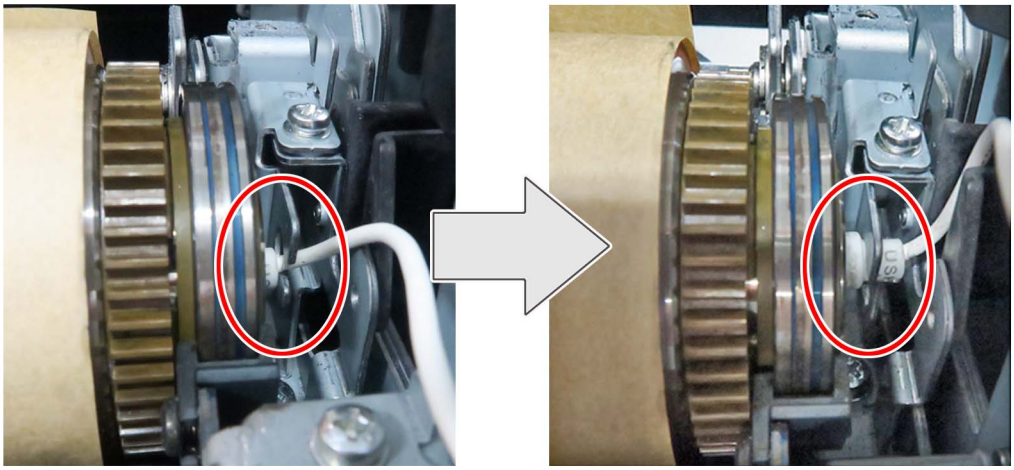
[Reference] The left photo is the image of the insulator of the pressure roller heater on the front side positioned over the heater retainer (Front) [1]. The pressure roller is being removed for easier viewing. The right photo shows the correct state.



5) Hold the AC cable at the rear side [A] and front side [B] of the pressure roller heater. Move the pressure roller heater and set the AC cable on the front side in the notch [a] of the heater retainer (Front).

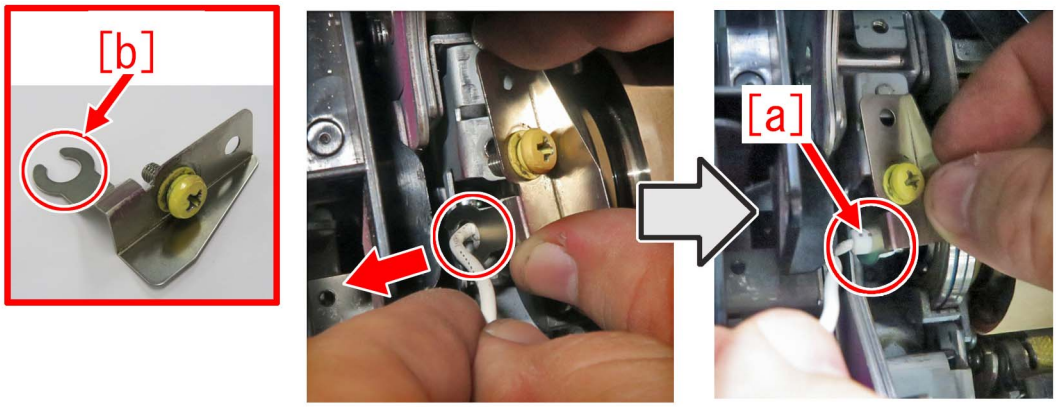


6) Push the pressure roller heater from the rear side toward the front side and set the insulator on the front side in the notch of the heater retainer (Front). Push the pressure roller heater until the stepped section of the insulator is pressed against the heater retainer (Front).

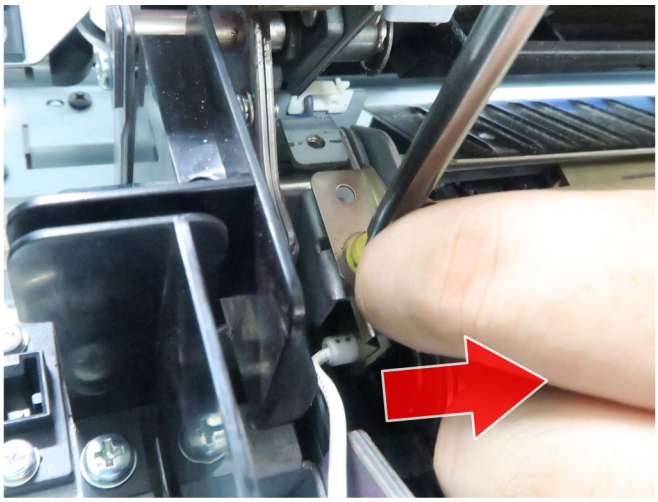


[Note] Do not pull the AC cable strongly or press it against the surrounding parts strongly as their covers may be damaged.

7) Set the insulator [a] on the rear side to the notch [b] of the heater mounting spring. As the insulator on the front side comes off the heater retainer (Front) if the pressure roller heater moves to the rear, be sure that the insulator does not come off.



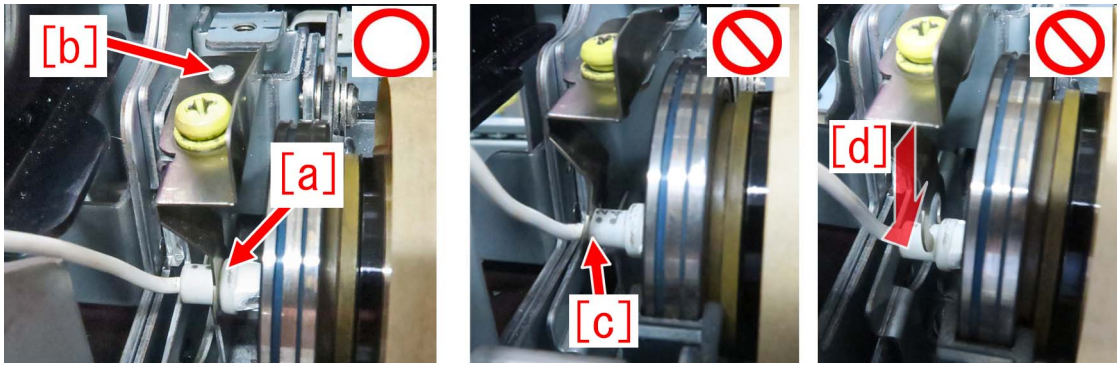
8) Position the heater mounting spring in the secondary fixing assembly mounting position. As the yellow screw of the heater mounting spring can be easily shifted, keep the pressure roller heater pressed to the front side (arrow direction) while tightening the screw.



9) To confirm the proper installation of the pressure roller heater, check the following points.

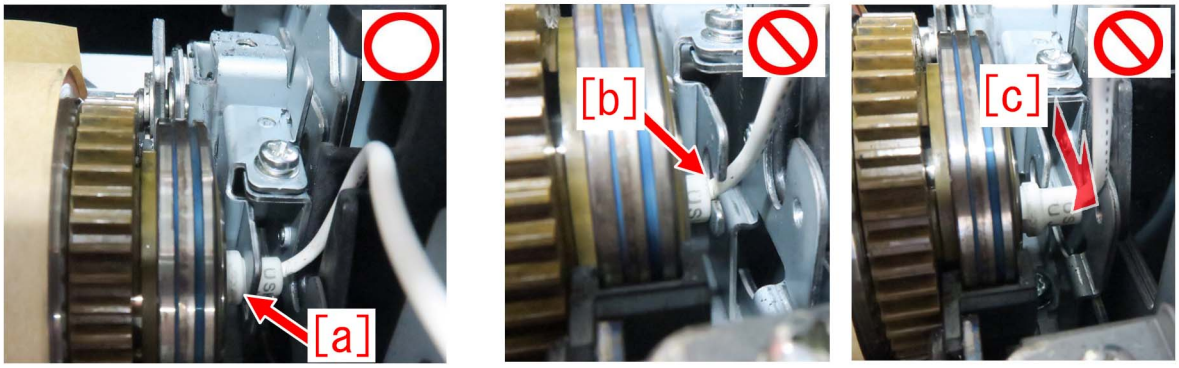
Rear side: The insulator of the pressure roller heater is inserted into the notch of the heater mounting spring up to its stepped section [a].
The heater mounting spring is engaged with the positioning emboss [b]. (It should not be on the emboss.)

[Reference] In the photo [c] below, the edge of the insulator is hitting the mounting component. In the photo [d], the insulator is not set in the mounting component. The insulator is not in the correct state in both cases.

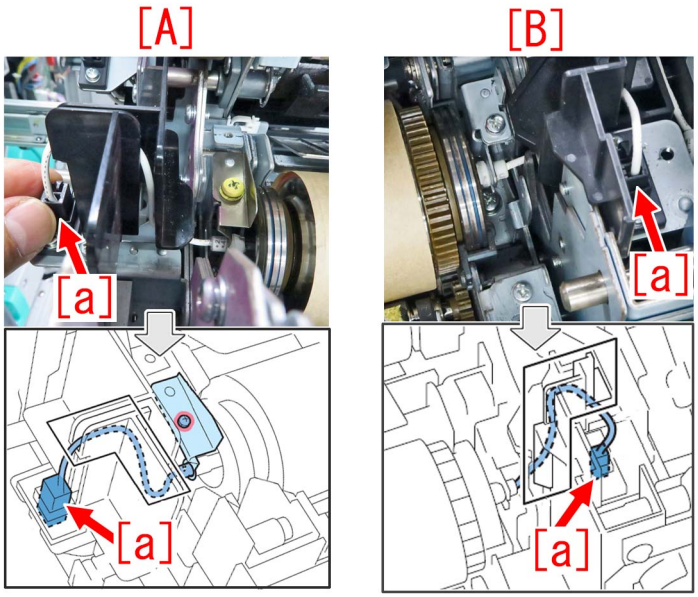


Front side: The insulator of the pressure roller heater is inserted into the notch of the heater retainer (front) up to its stepped section [a].

[Reference] In the photo [b] below, the edge of the insulator is hitting the notch of the heater retainer (front). In the photo [c], the insulator is not set in the notch of the heater retainer (front). The insulator is not in the correct state in both cases.



10) Wire the AC cable of the pressure roller heater in the cable guide and connect the connector [a]. The photo [A] shows the rear side and the photo [B] shows the front side.



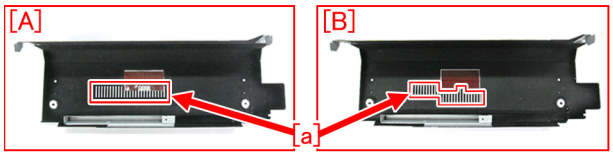
11) Close the upper and under units and put the secondary fixing assembly back to the machine.

Notification about the changes in the upper cover and cover sheet for the 1st fixing assembly and second fixing assembly and about their proper uses

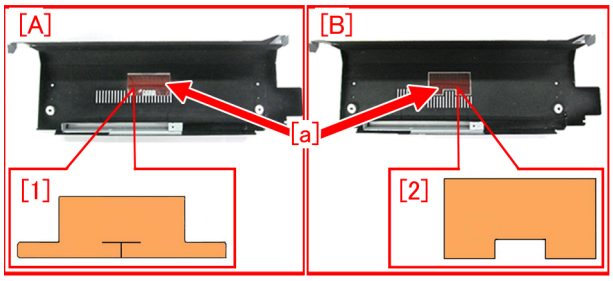
[Details]

In the machine earlier than the following countermeasure cut-inserial numbers in factory, the shapes of the upper cover for the 1st fixing assembly and second fixing assembly as well as the cover sheet attached to the upper cover of the fixing assembly are changed

[Changes made]
1) The shape of the louver [a] in the upper cover is changed.
[A] is an old type and [B] is a new type.



2) The shape of the cover sheet [a] is changed from the old type [1] to the new type [2]. Due to the changes in shapes of the upper cover and the cover sheet, how the cover sheet is attached to the upper cover is also changed. The old type cover sheet [A] is wrapped around the upper cover of the fixing assembly while the new type [B] is affixed on it.



[Remedy/Answer]

When replacing the cover sheet only, refer to the table below and use a proper cover sheet.

DESCRIPTION	PART NUMBER	COVER SHEET	
		FL1-5536-000 OLD TYPE	FL1-5548-000 NEW TYPE
PPER COVER (1ST FIXING ASSEMBLY)	FM1-A395-030 (Old type)	YES	NO
	FM1-A395-040 (New type)	NO	YES
UPPER COVER (SECOND FIXING ASSEMBLY)	FM1-H038-000 (Old type)	YES	NO
	FM1-H038-010 (New type)	NO	YES

[Service parts]

No		Part Number	Description	Q'ty	Fig. No.
1	Old	FM1-A395-030	COVER, UPPER	1 - > 0	810A 810B
	New	FM1-A395-040	COVER, UPPER	0 - > 1	
2	Old	FM1-H038-000	COVER, UPPER	1 - > 0	850A 850B
	New	FM1-H038-010	COVER, UPPER	0 - > 1	
3	Old	*FL1-5536-000	SHEET, COVER	1 - > 1	810A,810B 850A,850B
	New	FL1-5548-000	SHEET, COVER	0 - > 1	

*The old type cover sheet remains as available part.

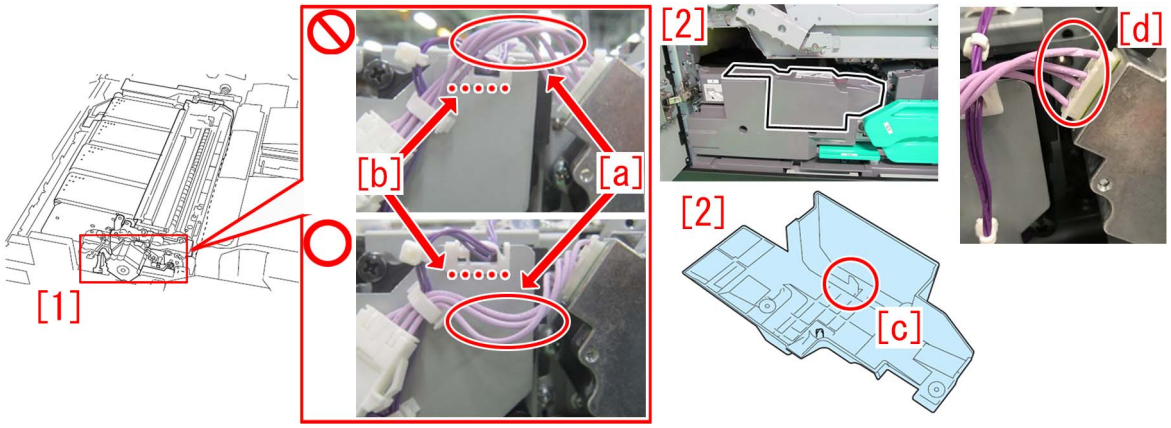
[Countermeasure cut-in serial numbers in factory]

Model	Serial No.
imagePRESS C10000VP series FS EUO	WBF15239
imagePRESS C10000VP series FS CN	WBG15014
imagePRESS C10000VP series FS US/JP	WBE15244

Points to note when attaching the inner cover 2 on the secondary transfer drive unit

[Details]

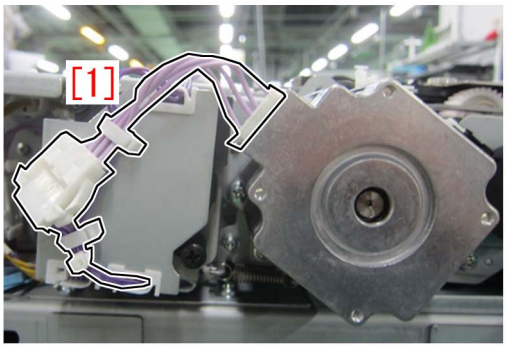
When installing the inner cover 2 [2] with the cables [a] of the secondary transfer drive unit [1] located higher than the edge of the edge saddle [b], the protrusion [c] on the back side of the inner cover 2 hits the cables and the coating of the cables may be damaged [d].



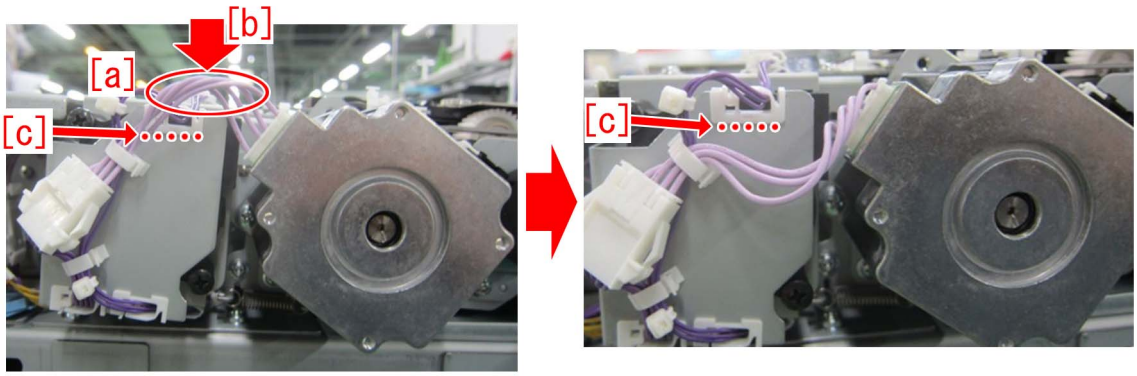
[Remedy/Answer]

When working with the secondary transfer drive unit or removing the inner cover 2, check the cables for any dents, damages and scratches.
If any dents, damages and scratches are found on the harness, prepare the new motor connecting cable (FM1-T808) and follow the steps below.
If no dents, damages and scratches are found on the harness, start from the step 2) below.

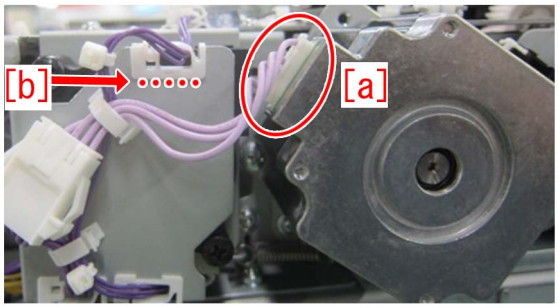
1) Replace the motor connecting cable [1] with a new one.



2) Press the [a] section of the motor connecting cable in the direction of the arrow [b] with a finger and set the cable below the edge of the edge saddle [c].



3) Press the connector [a] and after confirming that the cable pressed in the step 2) is located below the edge of the edge saddle [b], attach the inner cover 2.



[Service parts]
- CABLE, MOTOR CONNECTING(FM1-T808)

Controller Specification

After installing Fiery Color Profile Suite, spectrometers cannot be detected. (Print Server)

[Symptom/Question]

After installing Fiery Color Profile Suite (hereinafter called "CPS"), spectrometers cannot be detected, and therefore, calibration cannot be completed.

[Cause]

It is a known limitation of CPS.
The following direction is described in the CPS installation guide.

"Before installing Color Profiler Suite, you must disconnect any measurement instrument from the computer. Otherwise, the software might not recognize the instrument after installation."

*NOTE: Inline color sensor of imagePRESS C10000VP series is excluded from measurement instrument mentioned above.

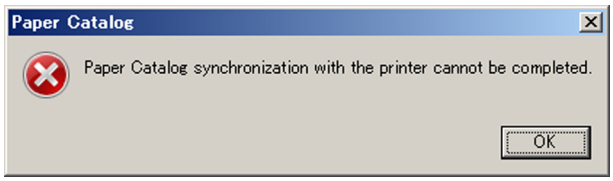
[Remedy/Answer]

Workaround:
Follow above direction when installing CPS.
If you install CPS with connecting spectrometer and encounter this problem, please uninstall CPS and re-install it after disconnecting spectrometer.

Synchronization fails when changing Paper size of existing paper catalog media. (Print Server)

[Symptom/Question]

When editing Paper size of existing paper catalog media, you may get an error dialog of "Paper Catalog synchronization with the printer cannot be completed" and the change is rejected.



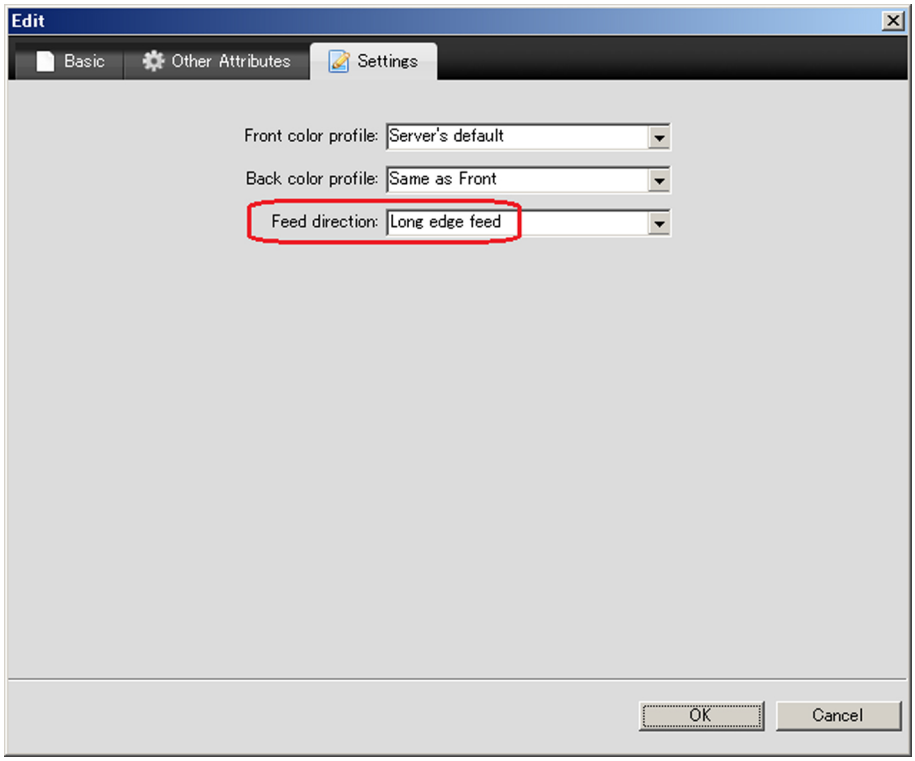
This problem can happen when "JDF based" is selected in Paper Catalog settings.

[Cause]

When creating a new paper catalog media with small size paper (e.g Letter), Feed direction is set to "Long edge feed" as a default. After that, if you change the paper size to large size (e.g 11x17), it becomes a combination of Large size paper and Long edge feed.
But, MFP does not support such combination, so the change is rejected and the error dialog appears on CWS.

[Remedy/Answer]

Workaround:
Change Feed direction from "Long edge feed" to "Short edge feed" first, then change the paper size.



Cannot staple for multiple worksheets in Excel (Print Server)

[Symptom/Question]

You can print whole book or selected worksheets in Excel.
However, when you print multiple worksheets in Excel, you cannot staple for multiple worksheets.
Only the selected worksheet is stapled, other worksheets are printed as another job without the staple setting.
All versions until Excel 2016 are reproducible. (At the moment of Feb 2018)

[Cause]

A limitation of Excel.
Excel has print settings per worksheet, so print settings are applied for the selected worksheet and other worksheets are printed without the print settings.

[Remedy/Answer]

No workaround. Cannot staple for multiple worksheets.
You need to use other applications that have the pages you want to print.

Unexpected result of booklet job with External Finisher. (imagePRESS Server B5100/B4100)

[Symptom/Question]

When printing a booklet job using cover page insertion, and print it to an External(3rd party) finisher, you will get unexpected output result, such as wrong page order and/or extra blank pages.

[Cause]

When printing a booket with External Finisher, both MFP and Fiery arrange page order and face up/down control for booklet imposition. Both processes are conflict each other, as a result, output becomes incorrect.

[Remedy/Answer]

[Workaround]

User can control the output result by selecting appropriate combination of the following settings in both MFP and Fiery job properties. Please refer to the attached document to find the settings for expected output.

MFP User mode > Function Settings > Common > Paper Output Settings >

- Normal/Rvrse. Order Output with Extrnl Fin.
- Face Up/Face Down Output with Extrnl Fin.

Fiery Job properties > Finishing >

- Output delivery

[Attached file]

Recommended settings for booklet job with External Finisher. (Sample)

[Caution]

- To change the settings for External finisher, you must login to MFP with System Manager account. Otherwise, the settings are grayed-out and can not be changed.
- If you need to change Service Mode > SORTER > Misc > PRESET, please do it before changing MFP user mode settings. If you change service mode setting later, please check user mode settings again.