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)]
- E568-8002/Shaved gear tooth due to overloading with friction from sliding while the estrangement rack is moving (Staple-F1/Q1/W1/Booklet-F1/Q1/W1/Saddle-AF2/ AJ2/AK2/AM2/AN2/Finisher-AF1/AJ1/AK1/AN1).
- Notice of procedure to replace the transmission shaft inside the drum drive assembly.
- "Measures for staple alignment failure (Staple-Q1/Saddle-AF2/AJ2/AK2/AM2/AN2/ Booklet-Q1/Finisher-AF1/AJ1/AK1/AM1/ AN1)"
- Measures against 012D jam occurrence
- 1008 Jam Code due to nip failure of post card feeding rollers (Finisher)
- Countermeasure against shaving on the shaft of the upper registration roller
- Points to note in replacing the fixing external heat belt or external heating assembly

Trouble Shooting Guide will be issued in the future when we have a new issue/FAQ.
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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 decreases and 10mm semi-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.
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 another factor.
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.

![Diagram of Intermediate Transfer Unit]

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].

![Diagram of Intermediate Transfer Unit removal]

[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.

![Warning symbol and ITB Release Lever]

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.

![Diagram showing [a] and [b]]

[Cause]
Paper dust or toner may attach to 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 have 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".
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.
[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".
[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.

<table>
<thead>
<tr>
<th>No</th>
<th>Interval (xx pitch)</th>
<th>Parts</th>
<th>Parts No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>264mm</td>
<td>DRUM</td>
<td>DRUM</td>
</tr>
<tr>
<td>b</td>
<td>55mm</td>
<td>Developing Upper Cylinder</td>
<td>FM1-A304 (Developing Assembly)</td>
</tr>
<tr>
<td>c</td>
<td>45mm</td>
<td>Developing Lower Cylinder</td>
<td>FM1-A304 (Developing Assembly)</td>
</tr>
<tr>
<td>d</td>
<td>50mm</td>
<td>Primary Transfer Roller</td>
<td>FC8-6852</td>
</tr>
<tr>
<td>e</td>
<td>66mm</td>
<td>Secondary Transfer Inner Roller</td>
<td>FM1-A359 (2ND TRNSFR. INNER ROLLER ASS'Y)</td>
</tr>
<tr>
<td>f</td>
<td>75mm</td>
<td>Secondary Transfer Outer Roller</td>
<td>FE4-6066</td>
</tr>
<tr>
<td>g</td>
<td>198mm</td>
<td>Secondary Transfer Outer Belt</td>
<td>FE3-1953</td>
</tr>
<tr>
<td>h</td>
<td>69mm</td>
<td>Secondary Transfer Outer Belt Drive Roller</td>
<td>FM1-M250 (BELT DRIVE ROLLER ASSEMBLY)</td>
</tr>
<tr>
<td>i</td>
<td>252mm</td>
<td>Fixing Roller</td>
<td>FL1-1151 (Primary Fixing)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FL1-1152 (Secondary Fixing)</td>
</tr>
<tr>
<td>j</td>
<td>220mm</td>
<td>Pressure Belt (Primary Fixing Assembly)</td>
<td>FL0-0358</td>
</tr>
<tr>
<td>k</td>
<td>190mm</td>
<td>Pressure Roller (Secondary Fixing Assembly)</td>
<td>FL0-0515</td>
</tr>
<tr>
<td>l</td>
<td>189mm</td>
<td>External Heat Belt(Primary/ Secondary Fixing Assembly)</td>
<td>FE3-1881</td>
</tr>
<tr>
<td>m</td>
<td>63mm</td>
<td>Collection roller (Primary/ Secondary Fixing Assembly)</td>
<td>FM1-D338</td>
</tr>
<tr>
<td>n</td>
<td>50mm</td>
<td>Fixing Inner Delivery Lower Roller</td>
<td>FC5-9775</td>
</tr>
<tr>
<td>o</td>
<td>45mm</td>
<td>Fixing Inner Delivery Upper Roller</td>
<td>FC7-4644 (Primary Fixing)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FM1-K630 (Secondary Fixing)</td>
</tr>
</tbody>
</table>
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 69 mm pitch, check Secondary Transfer Outer Belt Drive Roller [h] of the BELT DRIVE ROLLER ASSEMBLY (FM1-M250).
i) When the interval is 252 mm 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 190 mm pitch, check External Heat Belt [l] (FE3-1881) of the Primary Fixing Assembly or Secondary Fixing Assembly.
m) When the interval is 189 mm, check External Heat Belt [l] (FE3-1881) of the Primary Fixing Assembly or Secondary Fixing Assembly.
n) When the interval is 50 mm, 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 45 mm, 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 shafts that have been newly set as service parts to replace.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE4-6162-000</td>
<td>SHAFT, 2</td>
<td>[2]</td>
</tr>
<tr>
<td>FE4-6163-000</td>
<td>SHAFT, 1</td>
<td>[1]</td>
</tr>
<tr>
<td>FE4-6164-000</td>
<td>SHAFT, 5</td>
<td>[3]</td>
</tr>
<tr>
<td>FE4-6165-000</td>
<td>SHAFT, 6</td>
<td>[4]</td>
</tr>
</tbody>
</table>

- 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).
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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
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</tr>
<tr>
<td></td>
<td>New FM1-H026-000</td>
<td>TRANSFER CLEANER DRIVE UNIT</td>
<td>0-&gt;1</td>
<td>333</td>
</tr>
<tr>
<td>2</td>
<td>Old FY9-6005-000</td>
<td>LUBE, SUPER LUBE GREASE,(85G)</td>
<td>0-&gt;1</td>
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</tr>
<tr>
<td></td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Old</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>New FE4-6162-000</td>
<td>SHAFT, 2</td>
<td>0-&gt;1</td>
<td>333</td>
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<tr>
<td>4</td>
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<td></td>
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<td>New FE4-6163-000</td>
<td>SHAFT, 1</td>
<td>0-&gt;1</td>
<td>333</td>
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<tr>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>New FE4-6164-000</td>
<td>SHAFT, 5</td>
<td>0-&gt;1</td>
<td>333</td>
</tr>
<tr>
<td>6</td>
<td>Old</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>New FE4-6165-000</td>
<td>SHAFT, 6</td>
<td>0-&gt;1</td>
<td>333</td>
</tr>
</tbody>
</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagePRESS C10000VP Series US</td>
<td>WBC10226</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series CN</td>
<td>WBD00511</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series EUO</td>
<td>WEJ10324</td>
</tr>
</tbody>
</table>
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".
   [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.

[Cautio] 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.

[Service parts]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FM3-1648-010</td>
<td>ROLLER UNIT, REFRESH</td>
<td>1 -&gt; 0</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td>FM1-T299-000</td>
<td>ROLLER UNIT, REFRESH</td>
<td>0 -&gt; 1</td>
</tr>
</tbody>
</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagePRESS C10000VP Series FS US/J</td>
<td>WBE10515</td>
</tr>
<tr>
<td></td>
<td>WBE10521 or later</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series FS EUO</td>
<td>WBF10519</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series FS CN</td>
<td>WBG00522</td>
</tr>
</tbody>
</table>

- 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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FL3-0561-010</td>
<td>GEAR, 192T</td>
<td>4-&gt;4</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td></td>
<td></td>
<td>P51</td>
</tr>
<tr>
<td></td>
<td>New 4Y8-3138-000</td>
<td>SHEET KIT</td>
<td>0 -&gt; 1</td>
<td></td>
</tr>
</tbody>
</table>
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]
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]
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)

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".

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.

![Figure A and B](image)

[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.

- FL0-5504-010 SEAL, SIDE, REAR [1] 1pc.

![Photo A and B](image)

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

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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.
- 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.

<table>
<thead>
<tr>
<th>Roller holder</th>
<th>Tension roller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old type</td>
<td>A, B</td>
</tr>
<tr>
<td>New type</td>
<td>C, D</td>
</tr>
</tbody>
</table>

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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-A345-010</td>
<td>2ND TRANSFER BELT ASSEMBLY</td>
<td>1-&gt;0</td>
<td>334</td>
</tr>
<tr>
<td></td>
<td>New FM1-A345-020</td>
<td>2ND TRANSFER BELT ASSEMBLY</td>
<td>0-&gt;1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Old FE4-6074-000</td>
<td>HOLDER, ROLLER</td>
<td>1-&gt;0</td>
<td>334</td>
</tr>
<tr>
<td></td>
<td>New FE4-6074-010</td>
<td>HOLDER, ROLLER</td>
<td>0-&gt;1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Old FE4-6069-000</td>
<td>ROLLER, TENSION</td>
<td>1-&gt;0</td>
<td>334</td>
</tr>
<tr>
<td></td>
<td>New FE4-6069-010</td>
<td>ROLLER, TENSION</td>
<td>0-&gt;1</td>
<td></td>
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<tr>
<td>4</td>
<td>Old XD2-1100-502</td>
<td>RING,E</td>
<td>1-&gt;1</td>
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<tr>
<td></td>
<td>New FX2-1100-512</td>
<td>RING,E</td>
<td>1-&gt;1</td>
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</tr>
<tr>
<td>5</td>
<td>Old FL0-5503-000</td>
<td>SEAL, SIDE, FRONT</td>
<td>1-&gt;0</td>
<td>335</td>
</tr>
<tr>
<td></td>
<td>New FL0-5503-010</td>
<td>SEAL, SIDE, FRONT</td>
<td>0-&gt;1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Old FL0-5504-000</td>
<td>SEAL, SIDE, REAR</td>
<td>1-&gt;0</td>
<td>335</td>
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<td></td>
<td>New FL0-5504-010</td>
<td>SEAL, SIDE, REAR</td>
<td>0-&gt;1</td>
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<tr>
<td>7</td>
<td>Old FL0-5505-000</td>
<td>COVER, BELT CLEANER, LOWER</td>
<td>0-&gt;1</td>
<td>335</td>
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<tr>
<td></td>
<td>New FL0-5505-010</td>
<td>COVER, BELT CLEANER, LOWER</td>
<td>0-&gt;1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Old FE4-6070-000</td>
<td>ROLLER, BACK-UP</td>
<td>1-&gt;0</td>
<td>334</td>
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<tr>
<td></td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
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<tbody>
<tr>
<td>imagePRESS C10000VP Series ME US</td>
<td>WBC10408</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME CN</td>
<td>WBD00521</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME EUO</td>
<td>WEJ10447</td>
</tr>
</tbody>
</table>

*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.

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.

[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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage</th>
<th>Color of cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagePRESS C10000VP series</td>
<td>200/208</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>Black</td>
</tr>
<tr>
<td>imagePRESS C7010 series</td>
<td>200/208</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td>240</td>
<td>Black</td>
</tr>
<tr>
<td>imagePRESS 1135 series</td>
<td>200/208</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>Blue</td>
</tr>
</tbody>
</table>

[Remedy]
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.

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US/J</td>
</tr>
<tr>
<td>imagePRESS C10000VP series</td>
<td>WBE15128 or earlier</td>
</tr>
<tr>
<td></td>
<td>EU O</td>
</tr>
<tr>
<td>imagePRESS C7010 series</td>
<td>WBF15138 or earlier</td>
</tr>
<tr>
<td></td>
<td>CN</td>
</tr>
<tr>
<td>imagePRESS 1135 series</td>
<td>WBG15004 or earlier</td>
</tr>
<tr>
<td></td>
<td>All the products</td>
</tr>
<tr>
<td></td>
<td>All the products</td>
</tr>
</tbody>
</table>
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.
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) 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) has a permanent pen marking [a] in the hollow of the surface. On the new type 86T gear (FU6-0336-020), there are 4 hollows on the surface and there is no permanent pen marking.

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
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].


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

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FU6-0336-010</td>
<td>GEAR, 86T</td>
<td>1-&gt;0</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td>FU6-0336-020</td>
<td>GEAR, 86T</td>
<td>0-&gt;1</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>854A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>854B</td>
</tr>
<tr>
<td>2</td>
<td>Old</td>
<td>XD2-1100-642</td>
<td>RING,E</td>
<td>1-&gt;1</td>
</tr>
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</table>

e-imagePRESS C10000VP Series

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td></td>
<td>New</td>
<td>FE3-7866-000</td>
<td>MOUNT, SEPARATION DRIVE, 1</td>
<td>0-&gt;1</td>
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<td>2</td>
<td>Old</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>New</td>
<td>FE3-7867-000</td>
<td>MOUNT, SEPARATION DRIVE, 2</td>
<td>0-&gt;1</td>
</tr>
</tbody>
</table>

* Newly set up as service part.

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FC6-0315-000</td>
<td>MOUNT, SEPARATION DRIVE, 1</td>
<td>1-&gt;1</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Old</td>
<td>FC6-0312-000</td>
<td>MOUNT, SEPARATION DRIVE, 2</td>
<td>1-&gt;1</td>
</tr>
<tr>
<td>No.</td>
<td>Part Number Description</td>
<td>Q'ty</td>
<td>Fig.No.</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------</td>
<td>------</td>
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<tr>
<td>2</td>
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</table>

2 Previously set up as service part.

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
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<th>Serial number</th>
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<tbody>
<tr>
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<td>WBE15006</td>
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<td>imagePRESS C10000VP Series FS EUO</td>
<td>WBF15012</td>
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<tr>
<td>imagePRESS C10000VP Series FS CN</td>
<td>WBG00540</td>
</tr>
</tbody>
</table>

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.

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.


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

[Service parts]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>New</td>
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<td>0 -&gt; 1</td>
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[Countermeasure cut-in serial numbers in factory]

<table>
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</thead>
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<tr>
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<td>POD DECK LITE_B1 CN</td>
<td>UWF00049</td>
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<td>POD DECK LITE_C1 US</td>
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<td>POD DECK LITE_C1 EU/O</td>
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<td>SZM00508</td>
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<tr>
<td>PAPER DECK UNIT_E1 A4</td>
<td>SZB02606</td>
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<td>PAPER DECK UNIT_F1 LTR</td>
<td>WER03181</td>
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<td>Model</td>
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<td>--------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>PAPER DECK UNIT_-F1 A4</td>
<td>WES05369</td>
</tr>
</tbody>
</table>
Measures against 012D jam occurrence

[Symptom]
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]
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.

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

[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.

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 step a-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).

![Disassembled drive swing plate components]

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.

![Applied super lube grease on the new-type swing shaft 1]

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).

![Inserting drive swing plate and shaft]

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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
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<tbody>
<tr>
<td>1</td>
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<td>0 -&gt; 1</td>
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<td>2</td>
<td>Old FC6-8472-000</td>
<td>SHAFT, TRANSMISSION 1</td>
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<td>New FC6-8472-010</td>
<td>SHAFT, TRANSMISSION 1</td>
<td>0 -&gt; 1</td>
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</tr>
<tr>
<td>3</td>
<td>Old FC5-9920-000</td>
<td>SHAFT, TRANSMISSION</td>
<td>1 -&gt; 0</td>
<td>351</td>
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<td>SHAFT, TRANSMISSION</td>
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<td>4</td>
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<td>SUPER LUBE GREASE</td>
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<tr>
<td>5</td>
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<td>BEARING, BALL, MF106ZZS</td>
<td>5 -&gt; 5</td>
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</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>iPR C10000VP SR FS US</td>
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<tr>
<td>iPR C10000VP SR FS EUO</td>
<td>WBF15189</td>
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<tr>
<td>iPR C10000VP SR FS CN</td>
<td>WBG15010</td>
</tr>
</tbody>
</table>

*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.
**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**

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>SIDE REGIST, SENSOR PCB ASS’Y</td>
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<td>L36</td>
</tr>
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</table>
### Table: Part List

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
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#### B) Finisher AN1/AF1/AJ1, Saddle Finisher AN2/AF2/AJ2

<table>
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<tr>
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<th>Description</th>
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<th>Fig.No.</th>
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<td>SIDE REGIST, SENSOR PCB ASS'Y</td>
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#### Countermeasure cut-in serial numbers in factory

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<th>Serial number</th>
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<td>Finisher-AJ1 UL</td>
<td>HLT50005</td>
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<tr>
<td>Finisher-AJ1 EUR</td>
<td>HLU50000</td>
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<td>Finisher-AJ1 CN</td>
<td>HLV50000</td>
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<tr>
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<td>HLX50000</td>
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<td>Saddle Finisher-AJ2 CN</td>
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<td>Saddle Finisher-AN2 CN</td>
<td>WBV50000</td>
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</table>
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 aforementioned symptom has occurred, remove the lower delivery drive assembly following the procedure below and reinstall the processing feed motor (M26) so that the distance between the shafts of the belt roller of the process upper guide and the processing feed motor (M26) is appropriate. Below are the steps after the finisher is removed from the engine.
1) Refer to "Removing the Rear Cover" in Service Manual and remove the rear cover.
2) Remove the lower delivery drive assembly [1].
   -2 Screws [2]
   -1 Connector [3]
   -1 Edge saddle [4]
3) Loosen the 2 screws [1] of the processing feed motor (M26) and push it all the way to the end in the direction of the arrow before retightening the screws.
4) Reassemble the parts in reverse order from the step 2).
5) Make some prints and be sure that the above symptom does not occur.
[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]
When the aforementioned symptom has occurred, conduct the following 2 steps.

a) Upgrade the firmware of SORTER, according to the list below.

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

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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>L38</td>
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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.

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

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

C-1) 24VA system
<table>
<thead>
<tr>
<th>C-6) 24VF system</th>
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<tr>
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| J0503 | -    | UN054 | J0519 | J0518 | 19829 |
| J0503 | -    | UN055 | J0519 | J0523 | 19821 |
| J0503 | -    | UN056 | J0520 | J0518 | 19840 |
| J0503 | -    | UN057 | J0520 | J0514 | 19841 |
| J0503 | -    | UN058 | J0521 | J0512 | 19842 |
| J0503 | -    | UN059 | J0521 | J0510 | 19843 |
| J0503 | -    | UN060 | J0522 | J0510 | 19844 |
| J0503 | -    | UN061 | J0522 | J0508 | 19845 |
| J0503 | -    | UN062 | J0523 | J0507 | 19846 |
| J0503 | -    | UN063 | J0523 | J0506 | 19847 |
| J0503 | -    | UN064 | J0524 | J0505 | 19848 |
| J0503 | -    | UN065 | J0524 | J0504 | 19849 |
| J0503 | -    | UN066 | J0525 | J0503 | 19850 |

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[Symptom]
E025-0x51 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.
4) Output around 10 sheets which are A3 size or larger than LDR size, and duplex white solid image.
   This operation restores the toner amount in the Developing Assembly.
   [CAUTION] When the toner 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 E260-0Fx (Power Supply Error in Multiple Locations) Occurs

[Symptom]
There is the case that E260-0Fx (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].

![Bit Display Example]

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

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<thead>
<tr>
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<th>bit</th>
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<td>0E 0D OC 0B 0A 09 08 07 06 05 04 03 02 01</td>
</tr>
<tr>
<td>PWR-GP2</td>
<td>1E 1D 1C 1B 1A 19 18 17 16 15 14 13 12 11 10 0F</td>
</tr>
<tr>
<td>PWR-GP3</td>
<td>26 25 24 23 22 21 20 1F</td>
</tr>
<tr>
<td>PWR-GP4</td>
<td>3A 39 38 37 36 35 34 33 32 31</td>
</tr>
<tr>
<td>PWR-GP5</td>
<td>4A 40 34 2B</td>
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<tr>
<td>PWR-GP6</td>
<td>5A 5B 5C 5D 5E 5F 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80</td>
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<td>PWR-GP7</td>
<td>81 80 7F 7E 7D 7C 7B</td>
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<tr>
<td>PWR-GP8</td>
<td>92 8D 89 61 59 4A 40 34 2B</td>
</tr>
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<td>PWR-GP9</td>
<td>9D 9E 9F 9G 9H 9I 9J 9K 9L 9M 9N 9O 9P 9Q 9R 9S 9T 9U 9V 9W 9X 9Y 9Z</td>
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<td>PWR-GP11</td>
<td>75 74 73 72 71 70 6F 6E 6D 6C 6B 6A 69 68 67 66 65 64 63 62 61 60 5F 5E</td>
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<td>PWR-GP12</td>
<td>6D 6C 6B 6A 69 68 67 66 65 64 63 62 61 60 5F 5E</td>
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<td>PWR-GP13</td>
<td>75 74 73 72 71 70 6F 6E 6D 6C 6B 6A 69 68 67 66 65 64 63 62 61 60 5F 5E</td>
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<td>PWR-GP15</td>
<td>99 98 97 7A 79 78 77 76</td>
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</table>

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).
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.

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<th>Display &gt; MISC</th>
<th>bit</th>
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<td>x</td>
<td>PWR-GP15</td>
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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.
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).

e) 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 to UN401/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 bit8 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 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 : PS402, M : PS403, C : PS404, 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.
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.

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
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### Countermeasure cut-in serial number in factory

<table>
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<tr>
<th>Model</th>
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<th>Factory measure a)</th>
<th>Factory measure b)</th>
<th>Factory measure c)</th>
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</table>

*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.
**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].

![Diagram 1](image1)

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

![Diagram 2](image2)

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

![Diagram 3](image3)

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

![Diagram 4](image4)
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

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<thead>
<tr>
<th>No.</th>
<th>Old Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>New Part Number</th>
<th>Description</th>
<th>Fig.No.</th>
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<td>FM1-A377-020</td>
<td>EXTERNAL HEATING ASSEMBLY (200V, 208V)</td>
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<td>FM1-A377-030</td>
<td>EXTERNAL HEATING ASSEMBLY (200V, 208V)</td>
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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.

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.

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

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.

![Diagram showing leaf spring and grid plate interactions](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.

![Normal state (A) and deformed state (B)](image)

[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]**

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-A485-000</td>
<td>SHUTTER UNIT</td>
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<td>550</td>
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<tr>
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<td>New FM1-A485-010</td>
<td>SHUTTER UNIT</td>
<td>0-&gt;1</td>
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**[Countermeasure cut-in serial numbers in factory]**

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagePRESS C10000VP Series ME US</td>
<td>WBC10404</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME CN</td>
<td>WBD00521</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME EUO</td>
<td>WEJ10440</td>
</tr>
</tbody>
</table>
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/C6011/C6011VP/C7010VP/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**

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FL1-1466-000 GEAR, 16T/31T</td>
<td>1 -&gt; 0</td>
<td>815</td>
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<tr>
<td></td>
<td>New</td>
<td>FM1-T019-000 IDLER GEAR UNIT</td>
<td>0 -&gt; 1</td>
<td>855</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FL1-1466-000 GEAR, 16T/31T</td>
<td>1 -&gt; 0</td>
<td>815</td>
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<tr>
<td></td>
<td>New</td>
<td>FM1-T026-000 IDLER GEAR UNIT</td>
<td>0 -&gt; 1</td>
<td>855</td>
</tr>
<tr>
<td>2</td>
<td>Old</td>
<td>FL3-0548-000 PLATE, GEAR FIXED, SMALL</td>
<td>1 -&gt; 0</td>
<td>815</td>
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<tr>
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<td>New</td>
<td>FM1-T026-000 IDLER GEAR UNIT</td>
<td>0 -&gt; 1</td>
<td>855</td>
</tr>
</tbody>
</table>

### 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**
[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.

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.


[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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old XG9-0520-000</td>
<td>BEARING, BALL, MF106ZZS</td>
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<td>610</td>
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<tr>
<td></td>
<td>New XG9-0787-000</td>
<td>BEARING, BALL, LF1060ZZHP0P25L</td>
<td>0 -&gt; 2</td>
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<tr>
<td>2</td>
<td>Old XD2-1100-502</td>
<td>RETAINING RING (E-TYPE)</td>
<td>4 -&gt; 4</td>
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</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagePRESS C10000VP Series ME US</td>
<td>WBC10445</td>
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<tr>
<td>imagePRESS C10000VP Series ME EUO</td>
<td>WEJ10547</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME CN</td>
<td>WBD00522</td>
</tr>
</tbody>
</table>
**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)
<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>Old</td>
<td>FM4-2608-000 EDGE REGISTRATION DETECT ASS'Y</td>
<td>1-&gt;0</td>
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<td>New</td>
<td>FM4-2608-010 EDGE REGISTRATION DETECT ASS'Y</td>
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(imagePRESS C6000/ C6000VP/ C7000VP/ C10000 Series)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FC9-6076-000 STAY, SHUTTER</td>
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<td>New</td>
<td>FM2-2156-020 EDGE REGISTRATION DETECT ASS'Y</td>
<td>1-&gt;0</td>
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<tr>
<td>2</td>
<td>Old</td>
<td>FM2-2156-030 EDGE REGISTRATION DETECT ASS'Y</td>
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(Common parts)

<table>
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<tr>
<th>No.</th>
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<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
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<td>New</td>
<td>XD2-1100-502 RING, E</td>
<td>0-&gt;1</td>
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</table>

[Countermeasure cut-in serial numbers in factory]
- imagePRESS C6000/ C6000VP/ C7000VP/ C7000VPE/ C7010VP/ C7011VP/ C7010VPS/ C7011VPS : No implemented due to production discontinuance.

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
<td>imagePRESS C10000VP Series ME US</td>
<td>WBC10412</td>
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<td>imagePRESS C10000VP Series ME EUO</td>
<td>WEJ10450</td>
</tr>
<tr>
<td>imagePRESS C10000VP Series ME CN</td>
<td>WBD00521</td>
</tr>
</tbody>
</table>
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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
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</thead>
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<td></td>
<td></td>
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<tr>
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<td>New XA9-0961-000</td>
<td>SCREW, W/WASHER, M4X10</td>
<td>0-&gt;4</td>
<td>815</td>
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[Countermeasure cut-in serial numbers in factory]

<table>
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<th>Serial number</th>
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<tbody>
<tr>
<td>imagePRESS C10000VP series FS US/J</td>
<td>WBE10498</td>
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<tr>
<td>imagePRESS C10000VP series FS EUO</td>
<td>WBF10547</td>
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<tr>
<td>imagePRESS C10000VP series FS CN</td>
<td>WBG00522</td>
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</tbody>
</table>
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]
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]
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)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old XD9-0135-000</td>
<td>RING, E</td>
<td>5 -&gt; 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Old HY9-0007-000</td>
<td>LUBE, MOLYKOTE EM-50L, GREASE</td>
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<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
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</table>

(Staple Finisher-Q1 / Booklet Finisher-Q1)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-A196-000</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>1 -&gt; 0</td>
<td>L38</td>
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<tr>
<td></td>
<td>New FM1-A196-010</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>0 -&gt; 1</td>
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(Finisher-AM1 / Saddle Finisher-AM2)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-C358-000</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>1 -&gt; 0</td>
<td>L38</td>
</tr>
<tr>
<td></td>
<td>New FM1-C358-010</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>0 -&gt; 1</td>
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(Staple Finisher-W1 / Booklet Finisher-W1)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-K156-000</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>1 -&gt; 0</td>
<td>L38</td>
</tr>
<tr>
<td></td>
<td>New FM1-K156-010</td>
<td>UPPER FEEDER ASSEMBLY</td>
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(Finisher-AN1 / Saddle Finisher-AN2)

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>UPPER FEEDER ASSEMBLY</td>
<td>1 -&gt; 0</td>
<td>L38</td>
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<tr>
<td></td>
<td>New FM1-K515-010</td>
<td>UPPER FEEDER ASSEMBLY</td>
<td>0 -&gt; 1</td>
<td></td>
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</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staple Finisher-Q1 UL</td>
<td>SWT50905</td>
</tr>
<tr>
<td>Staple Finisher-W1 UL</td>
<td>SWU50683</td>
</tr>
<tr>
<td>Booklet Finisher-Q1 UL</td>
<td>WJN50058</td>
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<tr>
<td>Booklet Finisher-W1 UL</td>
<td>SWW51842</td>
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<tr>
<td>Booklet Finisher-W1 EU/OT</td>
<td>SWX51382</td>
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<tr>
<td>Booklet Finisher-W1 CN</td>
<td>WJP50035</td>
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</table>

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<table>
<thead>
<tr>
<th>Model</th>
<th>Serial No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finisher-AK1 CN</td>
<td>NWD50030</td>
</tr>
<tr>
<td>Finisher-AK1 EU/O</td>
<td>NWC50342</td>
</tr>
<tr>
<td>Finisher-AK1 UL</td>
<td>NWB50000</td>
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<tr>
<td>Finisher-AJ1 UL</td>
<td>No implemented due to production discontinuance.</td>
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<tr>
<td>Finisher-AJ1 EU/OT</td>
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</tr>
<tr>
<td>Finisher-AJ1 CN</td>
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</tr>
<tr>
<td>Saddle Finisher-AJ2 CN</td>
<td>No implemented due to production discontinuance.</td>
</tr>
<tr>
<td>Finisher-AM1 UL</td>
<td>No implemented due to production discontinuance.</td>
</tr>
<tr>
<td>Finisher-AM1 EU/O</td>
<td>No implemented due to production discontinuance.</td>
</tr>
<tr>
<td>Finisher-AM1 CN</td>
<td>No implemented due to production discontinuance.</td>
</tr>
<tr>
<td>Saddle Finisher-AM2 UL</td>
<td>QWL50005</td>
</tr>
<tr>
<td>Saddle Finisher-AM2 EU/O</td>
<td>QWM50058</td>
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<tr>
<td>Saddle Finisher-AM2 CN</td>
<td>QWN50014</td>
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<tr>
<td>Finisher-AN1 US</td>
<td>WBP50005</td>
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<td>Finisher-AN1 EU/OT</td>
<td>WBQ50116</td>
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<td>Finisher-AN1 CN</td>
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<td>Saddle Finisher-AN2 US</td>
<td>WBT50445</td>
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<tr>
<td>Saddle Finisher-AN2 EU/OT</td>
<td>WBU50220</td>
</tr>
<tr>
<td>Saddle Finisher-AN2 CN</td>
<td>WBV50006</td>
</tr>
</tbody>
</table>
E012-1080 due to the instable rotation of ITB drive (iPC8000VP)

[Symptom]
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]
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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old FM1-A876-000</td>
<td>I.T.B. DRIVER PCB ASS’Y, MD.</td>
<td>1 -&gt; 0</td>
<td>532</td>
</tr>
<tr>
<td></td>
<td>New FM1-A876-010</td>
<td>I.T.B. DRIVER PCB ASS’Y, MD.</td>
<td>0 -&gt; 1</td>
<td></td>
</tr>
</tbody>
</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial No.</th>
<th>Factory measure 1</th>
<th>Factory measure 2</th>
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</thead>
<tbody>
<tr>
<td>imagePRESS C8000VP ME US</td>
<td>WBC10619</td>
<td>WBC10779</td>
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<tr>
<td>imagePRESS C8000VP ME CN</td>
<td>WBD00540</td>
<td></td>
<td>WBD00550</td>
</tr>
<tr>
<td>imagePRESS C8000VP ME EURO</td>
<td>WEJ10634</td>
<td></td>
<td>WEJ10825</td>
</tr>
</tbody>
</table>

[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]
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]
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
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).
<table>
<thead>
<tr>
<th>No.</th>
<th>Old</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty.</th>
<th>Fig. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FC6-0118-000</td>
<td>SHAFT, TRANSMISSION</td>
<td>0-&gt;1</td>
<td>271</td>
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<tr>
<td>2</td>
<td>Old</td>
<td>XD2-3100-202</td>
<td>C Ring</td>
<td>2-&gt;2</td>
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<td></td>
<td>New</td>
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</tr>
<tr>
<td>3</td>
<td>Old</td>
<td>FY9-6005-000</td>
<td>LUBE, SUPER LUBE GREASE,(85G)</td>
<td>1-&gt;1</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Countermeasure against shaving on the shaft of the upper registration roller

[Symptom]
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]
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]

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Number</th>
<th>Description</th>
<th>Q'ty</th>
<th>Fig.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old</td>
<td>FM1-F405-000 ROLLER, REGISTRATION, UPPER</td>
<td>1 -&gt; 0</td>
<td></td>
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<tr>
<td></td>
<td>New</td>
<td>FM1-F405-010 ROLLER, REGISTRATION, UPPER</td>
<td>0 -&gt; 1</td>
<td></td>
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</tbody>
</table>

[Countermeasure cut-in serial numbers in factory]

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial No.</th>
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<tbody>
<tr>
<td>imagePRESS C10000VP Series ME US</td>
<td>WBC10777</td>
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<tr>
<td>imagePRESS C10000VP Series ME CN</td>
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<tr>
<td>imagePRESS C10000VP Series ME EUO</td>
<td>WEJ10827</td>
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