



Pro 8200s/8210s/8220s Pro 8210/8220

Operating Instructions Troubleshooting: TCRU/ORU

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Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[]

Indicates the names of keys on the machine's display or control panels.

Disclaimer

Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Notes

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

For good output quality, the manufacturer recommends that you use genuine toner from the manufacturer.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Two kinds of size notation are employed in this manual.

1. Before You Begin

About This Manual

1

If the machine will not print, does not print as expected, or exhibits any other problem, find the problem in this manual and troubleshoot accordingly.

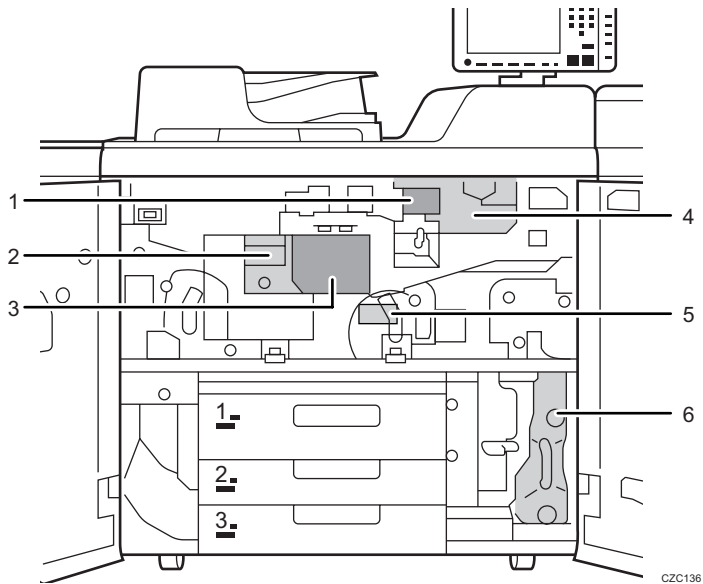
CAUTION

- Before you replace any unit:
 - To prevent electrical shock, turn off the printer controller on the machine control panel, switch off the main power switch then the AC power switch, and then disconnect the machine from the power supply.
 - Allow the machine to cool for at least 30 minutes before replacing a part.

Guide to Components

WARNING

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.



1. Developer Outlet/Inlet
2. Fusing Unit
3. Cleaning Unit for Intermediate Transfer Belt
4. Development Unit
5. Transfer Unit
6. Waste Toner Bottle

About the Display for Options

This machine displays all of the adjustment items in the Adjustment Settings for Skilled Operators menu and advanced settings for custom paper regardless of whether or not the items are for options. Note that any modifications to the option settings do not take effect unless the applicable options are installed on this machine.

Note

- For details about the options available for this machine, see "Guide to Functions of the Machine's Options", About This Machine.

Before you change a setting

★ Important

- When changing the current settings, make a note of their present values before changing them.
- If the problem persists even though the setting has been changed, restore the value noted.
- Operating the machine with the changed setting may cause problems, such as inferior printed images.

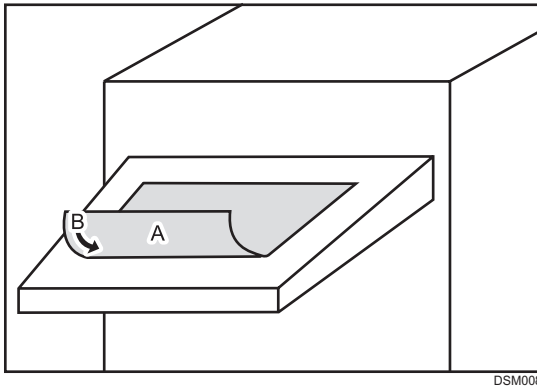
About Printing Surfaces

Depending on the setting, printed copies are fed as follows:

Side 1 is the surface of the paper printed during one-sided printing, or the surface of the first print during duplex printing.

Side 2 is the surface of the paper printed on the back side of Side 1 during duplex printing.

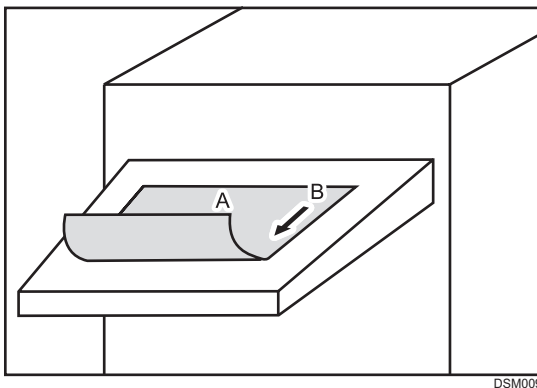
Single-sided printing: Printed side face down



A. Side 1

B. Paper feed direction of Side 1

Single-sided printing: Printed side face up

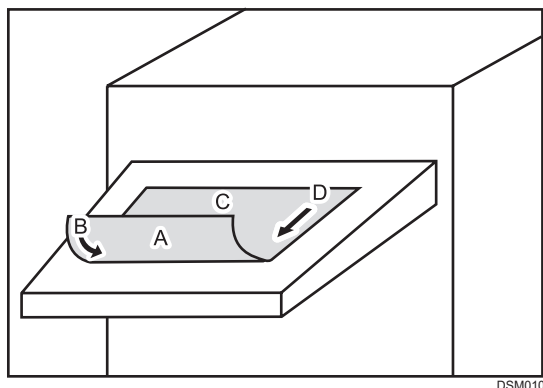


A. Side 1

B. Paper feed direction of Side 1

Duplex printing

1



- A. Side 1
- B. Paper feed direction of Side 1
- C. Side 2
- D. Paper feed direction of Side 2

2. Troubleshooting Service Call Problems (SC Codes)

What Are SC Codes?

If an error occurs during operation, the machine displays an SC code ("SCnnn", where "nnn" is a three-digit number). The machine stops and cannot be used when an SC code is displayed.

If an SC code appears:

1. Write down the SC number.
2. Turn off the main power switch.
3. Wait a few moments, then turn the machine on again.

In most cases, cycling the machine off and on will restore it to full operation.

4. If the SC code reappears, check it against the SC code table. For details, see page 14 "SC Code List".

Check for the SC code in the table.

If the SC code is listed in the table, carry out the recommended procedure.

If the SC code is not listed in the table, contact your service representative.

SC Code List

This table contains a list of selected SC codes. If the SC code that is displayed on the control panel is listed in this table, carry out the recommended procedure. If the SC Code is not listed in this table, contact your service representative.

 **Important**

- If the error persists after replacing the unit, contact your service representative.

Code	Error	Procedure
332-01	Toner supply motor 1 error (left bottle)	Check that toner supply motor 1 operates properly.
332-05	Toner supply motor 2 error (right bottle)	Check that toner supply motor 2 operates properly.
336-01	Developer imperfect setting (K)	Check the developer.
410-01	Remaining potential: Vr detection error (K)	Replace the photoconductor unit.
411-01	Charge potential: Vd adjustment error (K)	Replace the charge unit.
412-01	Exposure potential: Vpl adjustment error (K)	Replace the charge unit.

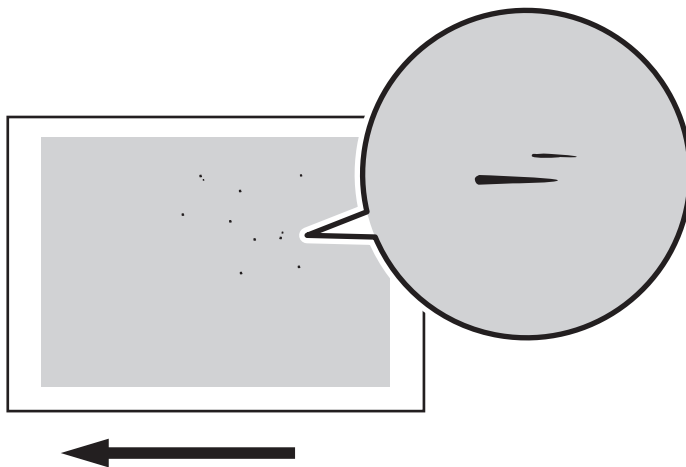
3. Troubleshooting Image Quality Problems

Toner Spotting/Staining

Paper Is Spotted with Toner

3

Paper is soiled with toner spots of 0.5–1 mm (0.02–0.04 inches) in diameter.



CEZ538

Cause:

Toner fragments have slipped through the cleaning web, which cleans the pressure roller, and re-adhered to paper.

This may occur if:

- Printing on both sides of paper
- Printing on uncoated (especially rough-textured) paper
- Printing a single-dot halftone image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

Increasing the temperature when using thin paper with a thickness equivalent to Paper Weight 0 or 1 may cause paper curling, resulting in paper jams at the fusing unit. Carry out steps from Step 6 when using thin paper with a thickness equivalent to Paper Weight 0 or 1.

1. Increase the temperature by 5 degrees in [Fusing Heat Roller Temperature Adj] in [Advanced Settings] for the custom paper in use.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Increase the temperature an additional 5 degrees in [Fusing Heat Roller Temperature Adj].
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

5. Have changes to the settings resulted in glossy lines or paper misfeed?

Yes	Decrease the temperature by 10 degrees, and then go to the next step.
No	Go to the next step.

6. Set [Adjust Cleaning Web Motor Interval] to 0.01 in [Advanced Settings] for the custom paper in use.
7. Print the image. Is the problem resolved?

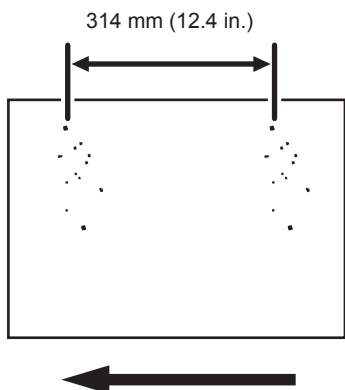
Yes	Finished!
No	No further improvement is likely. Contact your service representative.

Note

- Decreasing the value in [Adjust Cleaning Web Motor Interval] will shorten the replacement cycle of the cleaning web.

Black Spots

Black spots appear at 314 mm (12.4 inches) intervals.



CZC307

3

Cause:

The drum is scratched or stained.

Solution:

1. Detach the photoconductor unit and check the drum surface. Is the surface scratched?

Yes	Replace the photoconductor unit.
No	Contact your service representative.

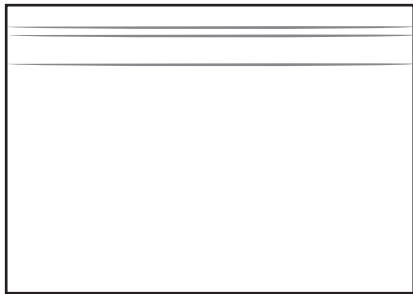
2. If the problem persists, contact your service representative.

Note

- For details about replacing the photoconductor unit, see Replacement Guide.

Streaks (1)

Streaks parallel to the paper feed direction appear.



CZC346

3

Cause:

- The charger is stained.
- The cleaning unit for PCU has worn out.
- The drum surface is scratched.

Solution:

1. In the [Machine: Maintenance] group on the [Adjustment Settings for Skill Operators] menu, execute [Execute Charger Cleaning].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Detach the charge unit and check its surface. Is the surface stained?

Yes	Contact your service representative.
No	Go to the next step.

4. Detach the photoconductor unit and check the drum surface. Is the surface stained or scratched?

Stained:	Replace the cleaning unit for PCU.
Scratched:	Replace the photoconductor unit.
Neither:	Contact your service representative.

5. If the problem persists even though you have replaced the cleaning unit for PCU or photoconductor unit, contact your service representative.

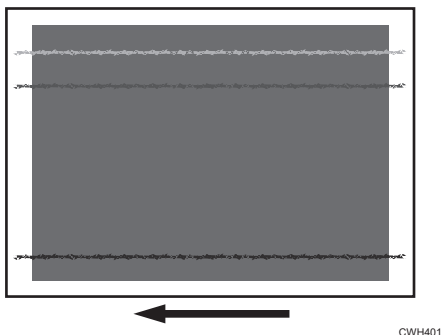


Note

- For details about replacing the charge unit, cleaning unit for PCU and photoconductor unit, see Replacement Guide.

Streaks (2)

Extended, blurred streaks parallel to the paper feed direction appear. The streaks also appear randomly in the margins.



CWH401

3

Cause:

If the temperature or humidity is low, remaining toner might be missed by the cleaning blade of the cleaning unit for intermediate transfer belt or transfer unit, causing streaks to appear sporadically.

Solution:

1. Is the printed side affected by the problem?

Yes	Go to the next step.
No	Contact your service representative.

2. Replace the cleaning unit for intermediate transfer belt.

3. If the problem persists even though you have replaced the cleaning unit for intermediate transfer belt, contact your service representative.



Note

- For details about replacing the cleaning unit for intermediate transfer belt, see Replacement Guide.

Streaks (3)

Streaks appear in solid-filled areas.



CEZ542

Cause:

If the toner contains small clumps, they disintegrate in the development unit, producing streaks. This problem may occur if the machine is left unattended for a long period or the toner bottle is kept out of its moisture-proof bag for a long period.

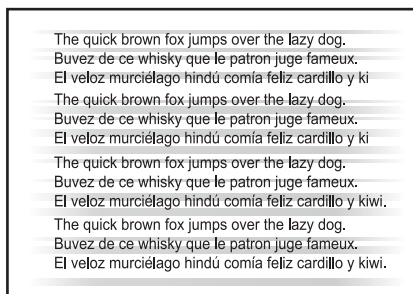
Solution:

- 1. Print 350 full-page, solid-fill A3 or DLT sheets.
- 2. Print the image. Is the problem resolved?
- 3. Print 350 full-page, solid-fill A3 or DLT sheets.
- 4. If the problem persists, contact your service representative.

Yes	Finished!
No	Replace the toner bottle.

Streaks (4)

Irregular black streaks appear, running parallel to the feed direction. This occurs on both sides regardless of whether printing one-sided or duplex.



DTH009

3

These are not toner streaks. You can remove them by rubbing them with an eraser or similar.

Cause:

If the machine remains in standby mode without paper or toner in it for a long time, friction between the pressure roller and the cleaning web may cause dust to accumulate, resulting in streaks.

This may occur when either of the following conditions is met:

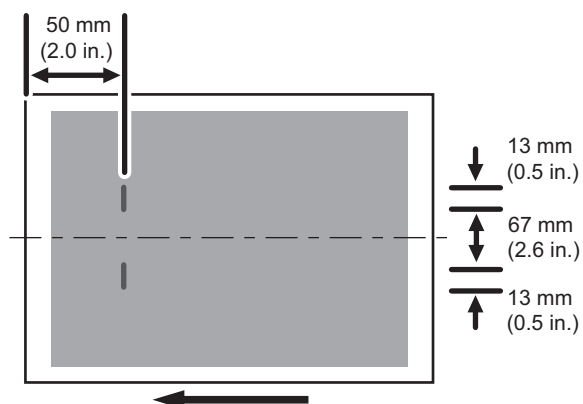
- The Low Power Mode Timer function in System Settings, which specifies the length of time before switching to low-power mode, is set to a long time.
- Paper with excessive dust is used.
- The printing amount each month is small (less than approx. 30,000 pages).

Solution:

1. Set the Low Power Mode Timer function in System Settings to the initial value of 15 minutes.
2. If the problem persists, contact your service representative.

Two 13-mm Long Vertical Streaks

Two 13-mm long vertical streaks appear within 50 mm (2.0 inches) from the leading edge.



CZC313

Cause:

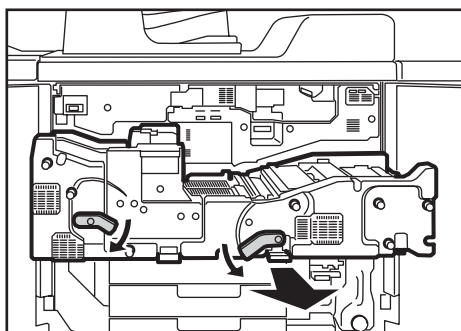
The invert exit drive rollers or invert exit idle rollers in the drawer are soiled.

This may occur if sheets are delivered face down after one-sided printing.

Solution:

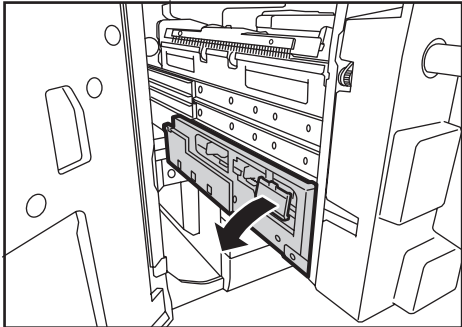
Clean the rollers, sensors, and guide boards in the drawer.

1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
2. Open the front covers.
3. Lower the levers C1 and C2, and then pull the drawer out completely until it stops.



CZC300

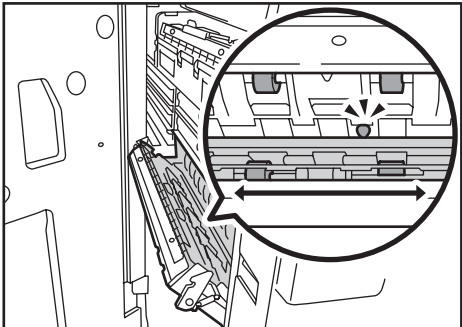
4. Pull down and open the cover D4.



CZC301

5. Clean the rollers, sensors, and guide boards.

For details about cleaning the parts, see page 94 "Cleaning the Paper Feed Path".

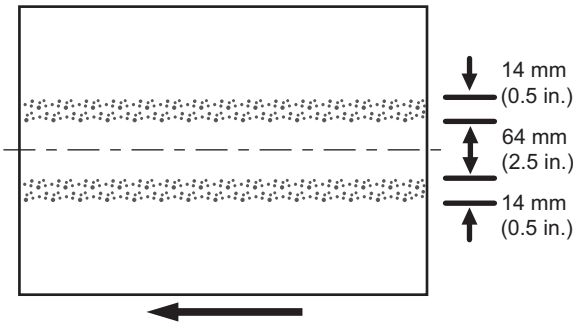


CZC302

6. After cleaning, restore the machine so that it resumes operation.

Two 14-mm Wide Streaks

Two 14-mm wide streaks parallel to the paper feed direction appear.



CZC314

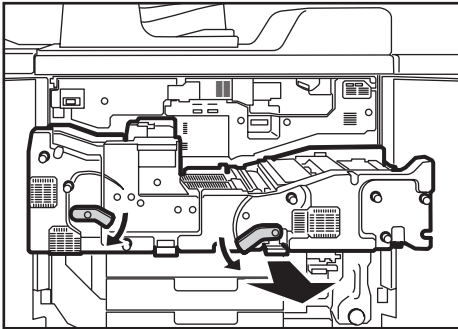
Cause:

The exit drive rollers, exit idle rollers, exit relay drive rollers, or exit relay idle rollers in the drawer are soiled.

Solution:

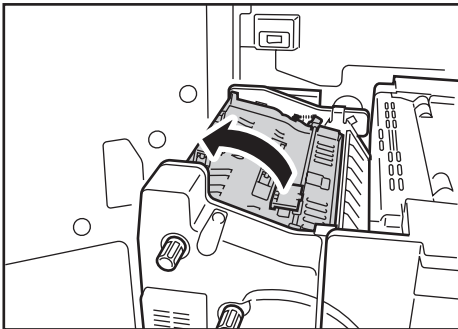
Clean the rollers, sensors, and guide boards in the drawer.

1. **Make sure that the system is turned off and the machine power cord is disconnected from the power source.**
2. **Open the front covers.**
3. **Lower the levers C1 and C2, and then pull the drawer out completely until it stops.**



CZC300

4. **Pull up and open the cover D3.**



CZC341

5. **Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.**

For details about cleaning the parts, see page 94 "Cleaning the Paper Feed Path".



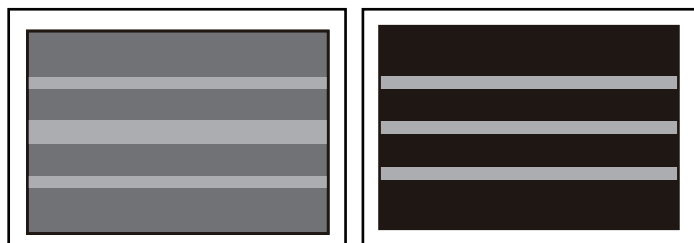
CZC342

6. After cleaning, restore the machine so that it resumes operation.

3

Horizontal White Bands

White bands parallel to the paper feed direction appear.



DFP322

Cause:

When the paper is fed from the two-tray wide LCT (Vacuum Feed LCIT RT5100), the static electricity produced by friction between the conveyer belt and paper may hamper toner adhesion on the paper, resulting in a horizontal band appearing at the vacuum port position.

This may occur if:

- Synthetic paper is used
- Transparent film is used

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solutions:

In [Advanced Settings] for the custom paper in use, increase the value in [Paper Transfer Current Setting: Side 1] or [Paper Transfer Current Setting: Side 2] by -20 μ A.

Example: -100 μ A to -120 μ A

Stained Paper Edges

3

Solution:

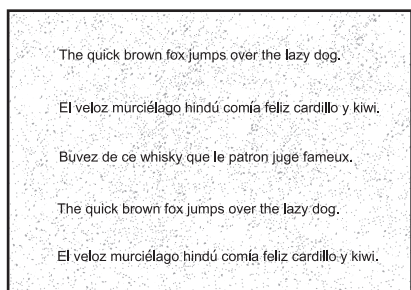
1. If the paper edges are stained, carry out the procedure in page 62 "Insufficient Toner Fusing".

Stained Background

Random "powdered" dots appear, creating a dirty background.

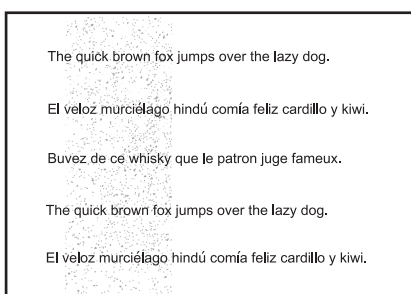
The background may be partially or completely stained.

Completely stained background



CEZ543

Partially stained background



CEZ544

Cause:

This may occur because of wearing of the developer, drum unit, or charger.

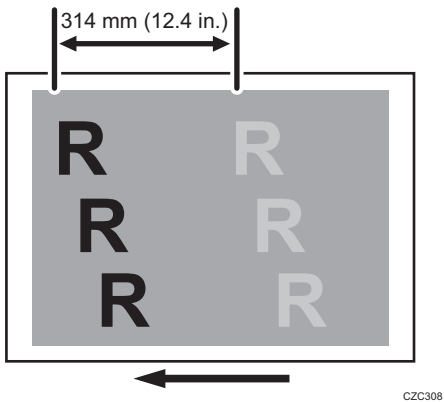
Solution:

1. If a message prompting replacement of a unit has appeared, replace the unit.
2. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Ghosting

A ghost image of an image to be printed appears at a distance of 314 mm (12.4 in.) to the side of the intended image.



Cause:

The image transfer current is transmitted to the drum, where a potential difference occurs between a developed area and non-developed area and causes the intended image to be reproduced.

This may occur if:

- Solid filled images or bold characters are printed in black on a halftone background
- Printing is done at low temperature or humidity

- Many screening lines are used

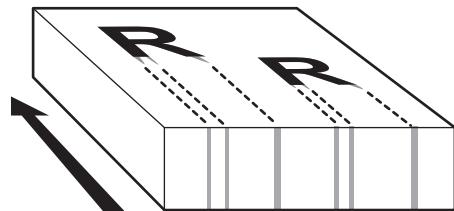
Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Scratched Images and Stained Paper Edges

Scratched images or soiled paper edges appear.



CNT008

Cause:

When a relatively stiff, thick paper is delivered, the entrance guide board for the transfer unit is warped toward the intermediate transfer belt due to the stiffness of the paper. The edge of the entrance guide board comes into contact with the toner on the belt to cause images to be scratched and paper edges to be soiled.

This may occur if:

- Paper with a thickness equivalent to Paper Weight 7 is used
- Paper with its grain parallel to the paper feed direction is used. For example, A3/DLT long grain paper is delivered, A4/LT short grain paper is delivered from its long edge, or A4/LT long grain paper is delivered from its short edge.
- Paper is stored at low temperature or humidity

Solution:

Change the direction of paper grain for paper delivery.

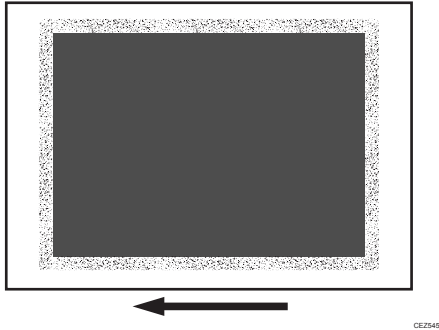
↓ Note

- When storing paper at low humidity, wrap the paper in coated paper or a plastic sheet.

Toner Scatter

Toner Scatter (1)

Toner is scattered around a solid-fill print.



Cause:

This may occur if printed at low temperature or humidity.

↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

The solution depends on which side of the paper the problem occurs on.

- If the problem occurs on side 1 of the paper, perform the solution described in (a).
- If the problem occurs on side 2 of the paper, perform the solution described in (b).
- If the problem occurs on both sides, perform the solutions described in (a), and then (b).

(a) If the problem occurs on side 1

1. **Adjust the setting for the side 1 of the paper.** In [Advanced Settings] for the custom paper in use, increase the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 1].

Example: If the present current is $-40\ \mu\text{A}$, change it to $-42\ \mu\text{A}$.

2. Print the image. Is the problem resolved?

Yes	Finished! If the problem also occurs on side 2 of the paper, perform the solution described in "(b) If the problem occurs on side 2".
No	Increase the absolute value of the negative current by another 5%.

3. Repeat Step 2. If the problem persists, contact your service representative.

(b) If the problem occurs on side 2

1. Adjust the setting for the side 2 of the paper. In [Advanced Settings] for the custom paper in use, increase the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 2].

Example: If the present current is $-40\text{ }\mu\text{A}$, change it to $-42\text{ }\mu\text{A}$.

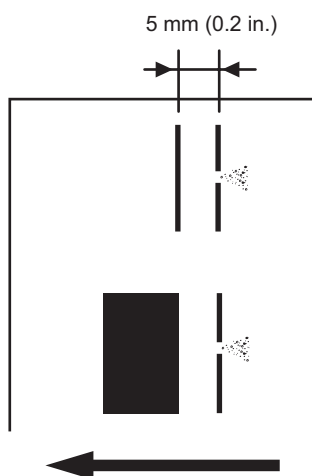
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the absolute value of the negative current by another 5%.

3. Repeat Step 2. If the problem persists, contact your service representative.

Toner Scatter (2)

Parts of a line that is 5 mm (0.2 inches) or less from an image exhibit splatter.



CZC309

Cause:

Air contained between images is compressed and blows off parts of a line.

This may occur if:

- Printing is done at high temperature or humidity
- Using coated or other slippery paper
- Printing line images at less than 5 mm (0.2 inches) intervals

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

The solution depends on the area in which the line splatter occurs. If the splatter occurs 15 mm (0.6 inches) or less from the leading edge, follow Procedure (a) on the following page; otherwise, follow Procedure (b) on the following page.

a) Line splatter that is 15 mm (0.6 inches) or less from the leading edge

Increase the leading edge margin to more than 15 mm (0.6 inches) using one of the following procedures:

1. Adjusting the shift image
In [Advanced Settings] for the custom paper in use, specify [Adj Image Position of Side1 With Feed] for the side 1 of the paper and [Adj Image Position of Side2 With Feed] for the side 2.
2. Adjusting the mask width at the leading edge
In [Advanced Settings] for the custom paper in use, specify [Adjust Erase Margin of Leading Edge].
3. Adjusting the file's leading edge margin

Increase the leading edge margin in the print settings for the image to be printed.

For details about adjusting the shift image and adjusting the mask width at the leading edge, see Adjustment Item Menu Guide.

If you cannot increase the leading edge margin to more than 15 mm (0.6 inches), contact your service representative.

b) Line splatter that is in an area more than 15 mm (0.6 inches) from the leading edge

1. In [Advanced Settings] for the custom paper in use, select [Image Transfer Current Setting].
2. Check the present value. Is it the upper limit?

Yes	Go to Step 5.
------------	---------------

No	Go to the next step.
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3. Increase the absolute value of the current by 5 μ A in [Image Transfer Current Setting].
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the value by 5 μ A. If the problem persists even though you have increased the value to the upper limit (150 μ A), go to the next step.

5. Do you mind if image density is low?

Yes	Contact your service representative.
No	Go to the next step.

6. In [Advanced Settings] for the custom paper in use, select [Adjust Toner Adhesion].
7. Check the present value. Is it the lower limit?

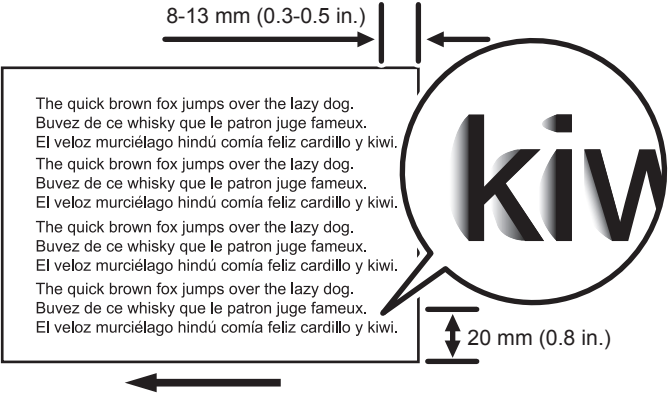
Yes	Contact your service representative.
No	Decrease the value by 1 in [Adjust Toner Adhesion].

8. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 5 to 7. If the problem persists even though you have decreased the value to the lower limit, contact your service representative.

Toner Scatter (3)

Parts of a line or character exhibit splatter. This may occur in a line or character that is 8 to 13 mm (0.3 to 0.5 inches) from the trailing edge and 20 mm (0.8 inches) or less from the left edge facing the paper feed direction.



CNT009

Cause:

A shock jitter occurs when the trailing edge of the paper leaves the paper guide during paper transfer and causes toner scattering.

This may occur if paper with a thickness equivalent to Paper Weight 4 or higher is used.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.
- Changing the transfer current may produce either or both of the following side effects:
 - Reduction in toner yields
 - Occurrence of banding (streaks)

Solution:

1. In [Advanced Settings] for the custom paper in use, select [Image Transfer Current Setting].
2. Check the present value. Is it lower than 100 μ A?

Yes	Carry out all of the following: (1) Increase the value by 5 μ A in [Image Transfer Current Setting]. (2) Set [Paper Transfer Current; Trail Edge] to "200%". (3) Set [Paper Transfer Current; Trail Edge Dist] to "30 mm".
No	No further improvement is likely. Contact your service representative.

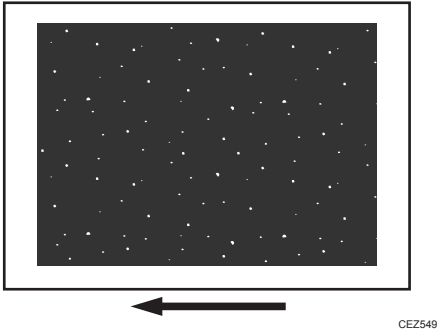
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 1 to 3. If the problem persists even though you have increased the value to 100 μ A, contact your service representative.

Color Loss

White Spots

White spots of 0.2–0.3 mm (0.008–0.01 inches) in diameter appear.



Cause:

This may occur if printed at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.
- If you reduce the paper transfer current to eliminate white spots, copies may become too faint.

Solution:

The solution depends on which side of the paper the problem occurs on.

- If the problem occurs on side 1 of the paper, perform the solution described in (a).
- If the problem occurs on side 2 of the paper, perform the solution described in (b).
- If the problem occurs on both sides, perform the solutions described in (a), and then (b).

(a) If the problem occurs on side 1

1. **Adjust the setting for the side 1 of the paper.** In [Advanced Settings] for the custom paper in use, decrease the absolute value of the negative current by 5 μA in [Paper Transfer Current Setting: Side 1].

Example: If the present current is $-100 \mu\text{A}$, change it to $-95 \mu\text{A}$.

2. Print the image. Is the problem resolved?

Yes	Finished! If the problem also occurs on side 2 of the paper, perform the solution described in "(b) If the problem occurs on side 2".
No	Decrease the absolute value of the negative current by another 5 μA .

3. Repeat Step 2. If the image is lighter in density but the problem persists, reset the current to the original value and go to Step 4.**4. In [Advanced Settings] for the custom paper in use, decrease the absolute value of the negative current by 5 μA in [Image Transfer Current Setting].**

Example: If the present current is 80 μA , change it to 75 μA .

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Decrease the absolute value of the negative current by another 5 μA .

6. Repeat Step 5. If the image is lighter in density but the problem persists, contact your service representative.**(b) If the problem occurs on side 2****1. Adjust the setting for the side 2 of the paper. In [Advanced Settings] for the custom paper in use, decrease the absolute value of the negative current by 5 μA in [Paper Transfer Current Setting: Side 2].**

Example: If the present current is $-100 \mu\text{A}$, change it to $-95 \mu\text{A}$.

2. Print the image. Is the problem resolved?

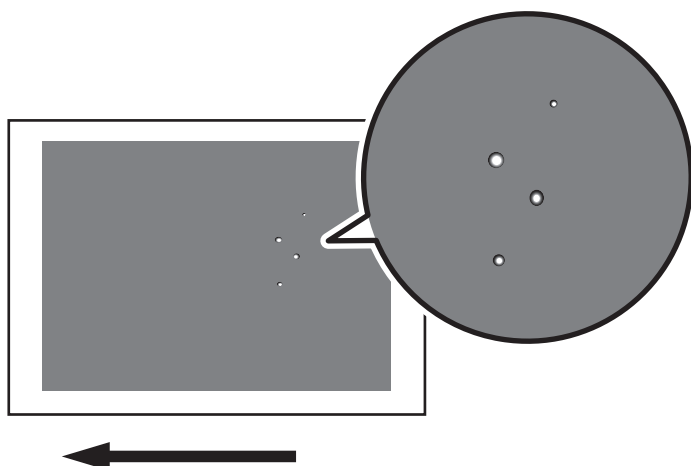
Yes	Finished!
No	Decrease the absolute value of the negative current by another 5 μA .

3. Repeat Step 2. If the image is lighter in density but the problem persists, contact your service representative.

Blister-like White Spots

White spots 0.3–0.5 mm (0.01–0.02 inches) in diameter surrounded by denser spots (blister-like white spots) appear.

3



CEZ602

Cause:

This may occur if a solid image is printed on coated paper, if a solid image is printed during duplex printing, or if printing is done at low temperature.

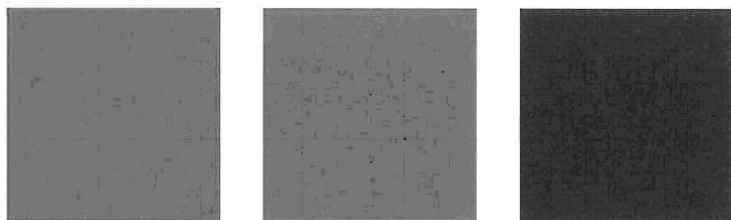
Solution:

If blister-like white spots appear, carry out the procedure in page 62 "Insufficient Toner Fusing".

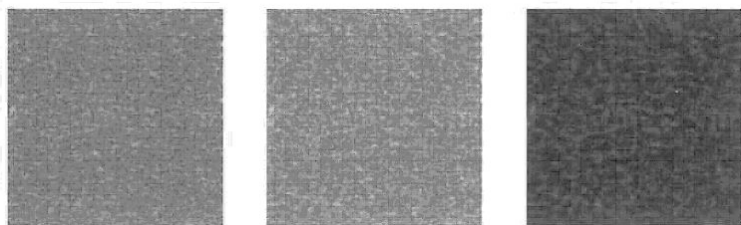
Mottling

Mottling occurs in solid-filled areas.

Normal



Mottled



3

Cause:

The transfer electric field on the concave portion of paper is weakened to cause a decrease in transcription.

This may occur if:

- Using paper with a rough surface
- Continuously printing an image that consumes little toner
- Printing is done at high temperature or humidity

Solution:

Before you perform the solution procedure, make sure that replacement parts have not reached their expiration dates. For this, check that each part's [Estimated Life Already Used] counter has not exceeded 100%.

For details about checking the counter, see Adjustment Item Menu Guide.

If the [Estimated Life Already Used] counter has exceeded 100%, replace the corresponding part.

For details about replacing the parts, see Replacement Guide.

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Print 100 full-page, solid-fill A4 or LT sheets. Is the problem resolved?

Yes	Finished!
No	Reload with new paper.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the paper with smoother paper.

5. If the problem persists, contact your service representative.

Density Problems

Uneven Image Density

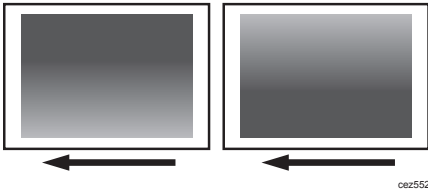
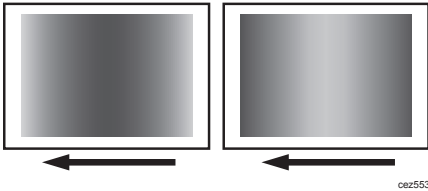
The density is uneven.

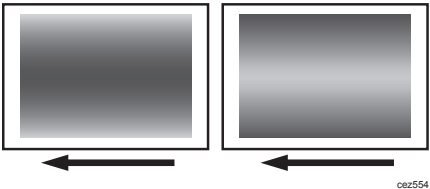
Solution:

The solution depends on the type of unevenness.
Carry out the appropriate procedure from those in the following table:


3


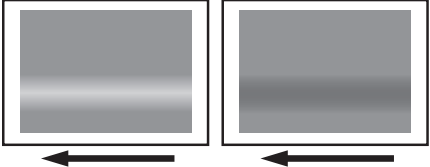

(A) The density is uneven across the entire image.

Affected area	Solution
<div>The density from top to bottom is uneven.</div> <div></div>	<div>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</div> <div>2. If the problem persists, see page 44 "Uneven Density from Top to Bottom".</div>
<div>The sides are fainter or denser.</div> <div></div>	<div>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</div> <div>2. If the problem persists, contact your service representative.</div>

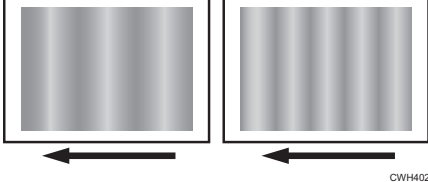
Affected area		Solution
The top and bottom are fainter or denser.	 cbs554	<ol style="list-style-type: none">1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].2. If the problem persists, contact your service representative.

(B) The density is uneven in a part of the image.

Affected area		Solution
The leading edge is fainter.	 cbs555	<ol style="list-style-type: none">1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].2. If the problem persists, see page 45 "Fainter Leading Edge".

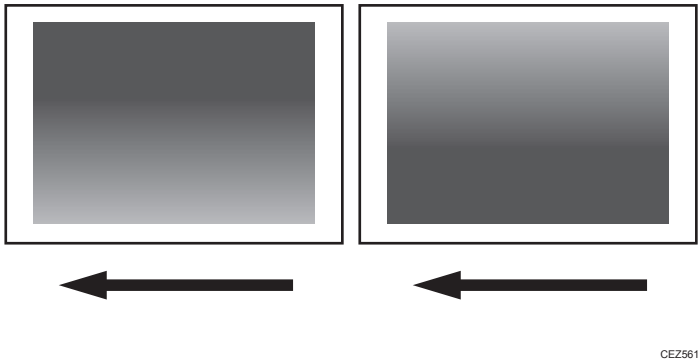
Affected area	Solution
<p>The trailing edge is fainter.</p>  <p>ceb556</p>	<ol style="list-style-type: none"> 1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute]. 2. If the problem persists, see page 47 "Fainter Trailing Edge".
<p>The center is fainter or denser</p>  <p>ceb558</p>	<ol style="list-style-type: none"> 1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute]. 2. If the problem persists, contact your service representative.
<p>Wavy unevenness</p>  <p>ceb559</p>	<ol style="list-style-type: none"> 1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute]. 2. If the problem persists, contact your service representative.

(C) The density is uneven in the direction perpendicular to the paper feed direction at regular intervals.

Affected area		Solution
Periodic vertical density fluctuation		<ol style="list-style-type: none">1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].2. If the problem persists, see page 50 "Periodic Density Fluctuation".

Uneven Density from Top to Bottom

The density is uneven from top to bottom.



★ Important

- You can adjust the density of halftone images, but not that of solid fills.

Cause:

This may occur at high temperature or humidity.

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Density Difference Across Feed Direction].

Decreasing the value makes the area above the center denser and that below fainter.

Increasing the value makes the area above the center fainter and that below denser.

2. Turn off the power and the main power switch, and then turn the main power switch back on.

The setting specified in step 1 will be in effect.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the charge unit and photoconductor unit.

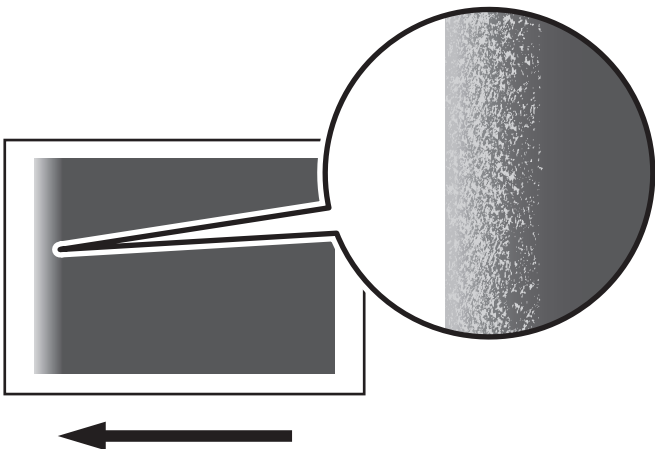
4. If unit replacement does not resolve the problem, contact your service representative.

Note

- For details about replacing the charge unit and photoconductor unit, see Replacement Guide.

Fainter Leading Edge

The leading edge is fainter.



CEZ562

Cause:

At low temperature or when using thin coated paper, this may occur if the paper transfer current is insufficient.

At high temperature, this may occur if the paper transfer current is excessive.

★ Important

- This solution only works when the thickness of the paper is equivalent to Paper Weight 4 or higher. Do not try this as a solution when using paper with a thickness equivalent to Paper Weight 3 or lower, as it may cause paper misfeeding.

↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

Be sure to perform Step "(a) Increase the current value" first, and then Step "(b) Decrease the current value".

(a) Increase the current value

1. In [Advanced Settings] for the custom paper you are using, take a note of the values set for [Paper Transfer Current; Lead Edge] and [Paper Transfer Current; Lead Edge Dist].
2. For [Paper Transfer Current; Lead Edge Dist], is the set value the upper limit?

Yes	Go to Step 7.
No	Increase the set value by 5 percentage points.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. For [Paper Transfer Current; Lead Edge], is the set value lower than 200?

Yes	Increase the set value by 10 percentage points.
No	Reset [Paper Transfer Current; Lead Edge] to the initial value and repeat the steps from Step 2.

5. Print the image. Is the problem resolved?

Yes	Finished!
-----	-----------

No	Repeat the steps from Step 4.
----	-------------------------------

6. If the problem is not resolved by repeating the steps from Step 4 to increase the value of [Paper Transfer Current; Lead Edge] to "200", reset it to the value noted in Step 1 and go to Step "(b) Decrease the current value".
7. For [Paper Transfer Current; Lead Edge], is the set value lower than 200?

Yes	Increase the set value by 10 percentage points.
No	Switch to a different paper type.

8. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat the steps from Step 7.

9. If the problem is not resolved by repeating the steps from Step 7 to increase the value of [Paper Transfer Current; Lead Edge] to "200", reset it to the value noted in Step 1 and go to Step "(b) Decrease the current value".

(b) Decrease the current value

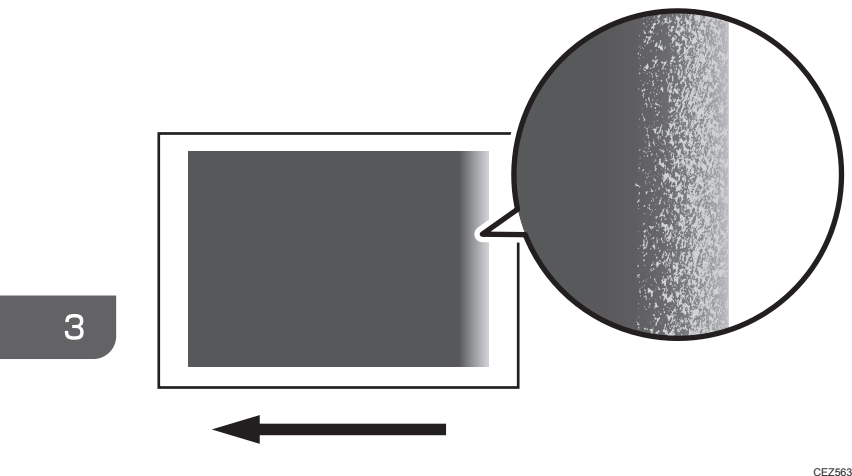
1. In [Advanced Settings] for the custom paper you are using, decrease the value of [Paper Transfer Current; Lead Edge] by 10 percentage points.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Decrease the value by a further 10 percentage points.

3. Repeat Step 2. If the problem is not resolved by decreasing the value by a total of 50 percentage points, reset it to the value noted in Step "(a) Increase the current value" and contact your service representative.

Fainter Trailing Edge

The trailing edge is fainter.



CEZ563

Cause:

This may occur because of insufficient or excessive paper transfer current when using paper weighing approximately 160 g/m² (60 lb. Cover) or heavier at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

1. Measure in millimeters how far the fainter area extends from the trailing edge.
2. Configure the following settings in [Advanced Settings] for the custom paper in use.
In [Paper Transfer Current; Trail Edge Dist], enter the value you measured in Step 1 plus an additional 10 mm.
3. In [Advanced Settings] for the custom paper in use, make a note of the present value in [Paper Transfer Current; Trail Edge].
4. Increase the scaling factor in the above setting by 10 percentage points.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the scaling factor by 5 percentage points.

6. Repeat Step 5. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 3 and go to the next step.

- 7. Decrease the scaling factor in the above setting by 10 percentage points.
- 8. Print the image. Is the problem resolved?

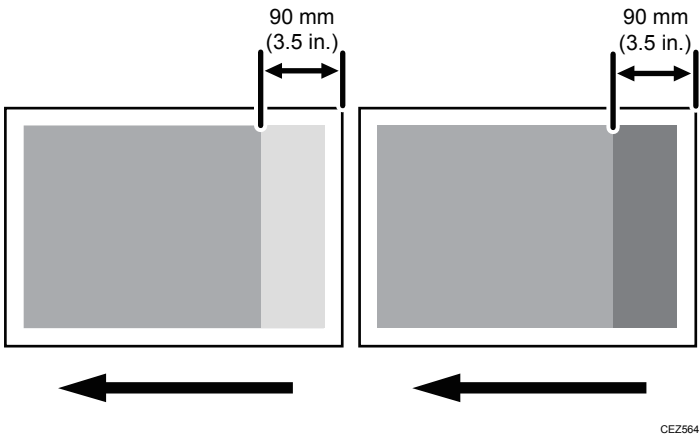
Yes	Finished!
No	Decrease the scaling factor by 5 percentage points.

- 9. Repeat Step 8. If the problem persists even though you have decreased the scaling factor by 50 percentage points, restore the value noted in Step 3 and contact your service representative.

3

Uneven Density within 90 mm (3.5 in.) of the Trailing Edge

Printing in the area extending approximately 90 mm (3.5 inches) from the trailing edge is fainter or denser.



Cause:

This may occur if:

- Printing is done at low temperature or humidity
- Printing a single-dot halftone image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

The solution depends on whether the area within 90 mm (3.5 inches) of the trailing edge is denser or fainter.

<If the area within 90 mm (3.5 inches) of the trailing edge is fainter>

1. In [Advanced Settings] for the custom paper in use, check the present value in [Transfer Timing Roller Feed Speed Adj]. Is it the upper limit?

Yes	Contact your service representative.
No	Go to the next step.

2. Increase the value in [Transfer Timing Roller Feed Speed Adj] by 0.1 percentage point.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2 and 3. If the problem persists even though you have increased the value to +1.0%, contact your service representative.

<If the area within 90 mm (3.5 inches) of the trailing edge is denser>

1. In [Advanced Settings] for the custom paper in use, check the present value in [Transfer Timing Roller Feed Speed Adj]. Is it the lower limit?

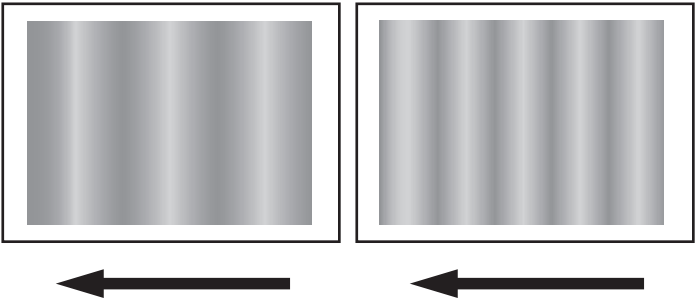
Yes	Contact your service representative.
No	Go to the next step.

2. Decrease the value in [Transfer Timing Roller Feed Speed Adj] by 0.1 percentage point.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 2 and 3. If the problem persists even though you have decreased the value to -1.0%, contact your service representative.

Periodic Density Fluctuation

The vertical density fluctuates periodically.



CWH407

Solution:

Before you perform the solution procedure, make sure that the environmental conditions where you are using the machine meet those recommended for use. For details on the environmental conditions for use, see "Where to Put Your Machine", About This Machine.

The solution depends on the interval.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

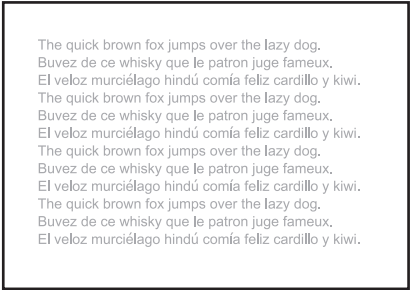
Interval	Solution
Approximately 12-18 mm (0.5-0.7 inches)	Contact your service representative.
Approximately 60 mm (2.4 inches)	In [Advanced Settings] for the custom paper in use, adjust the value in [Transfer Timing Roller Feed Speed Adj] according to the type and thickness of paper in use. If the problem persists, contact your service representative.
Approximately 95 mm (3.7 inches)	Contact your service representative.
Approximately 314 mm (12.4 inches)	Replace the photoconductor unit. If the problem persists, contact your service representative.

Note

- For details about replacing the photoconductor unit, see Replacement Guide.

Entire Image Faint

The entire image is fainter than normal.



CEZ585

Cause:

This may occur if:

- Continuously printing an image that consumes little toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

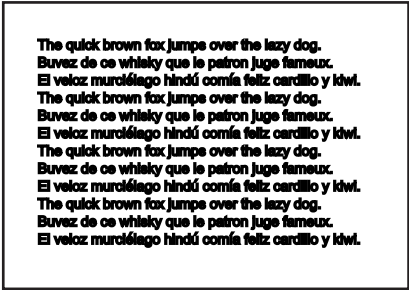
Yes	Finished!
No	Go to the next step.

3. Increase the value by 1 in [Adjust Maximum Image Density].
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, contact your service representative.

Color Is Too Dense

The entire image is denser than normal.



3

Cause:

This may occur if:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

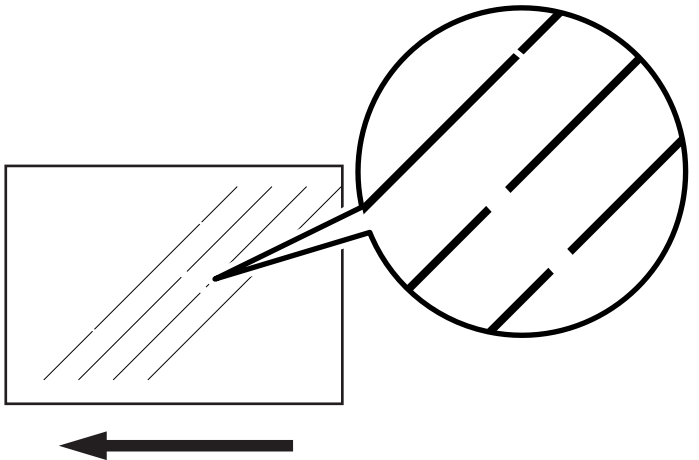
Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in [Adjust Maximum Image Density].
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, contact your service representative.

Broken Thin Lines

Thin lines (1 dot lines in 1200 dpi images) break.



CEZ569

Cause:

Oblique (approximately 45°) thin lines or thin lines printed in faint colors are likely to contain breaks.

Solution:

- 1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
- 2. Print the image. Is the problem resolved?

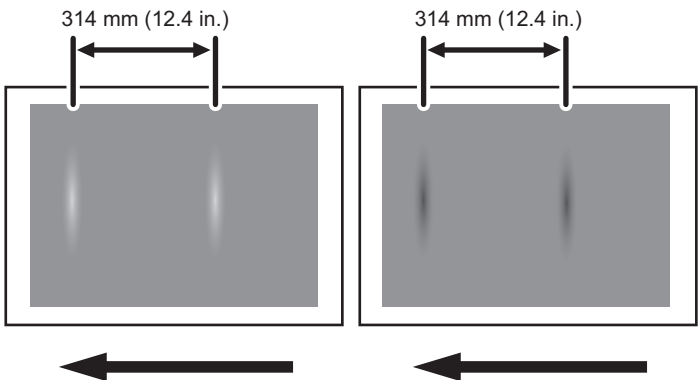
Yes	Finished!
No	Go to the next step.

- 3. Increase the value by 1 in [Adjust Line Width].
- 4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
- 5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, contact your service representative.

Blurred Images

Lens-shaped blurred images appear at 314 mm (12.4 inches) intervals.



CZC310

3

Cause:

If the machine is left unattended for a long period in an environment where temperature and humidity are high, corona products on the drum absorb moisture to prevent a buildup or removal of static electricity on the drum.

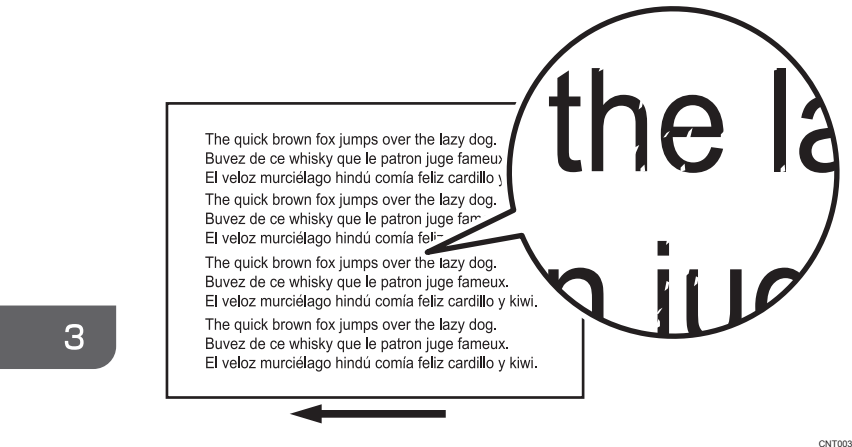
Solution:

1. In the [Machine: Maintenance] group on the [Adjustment Settings for Skilled Operators] menu, execute [Execute Photoconductor Refreshing].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Dropouts (Character Voids)

Dropouts (character voids) occur when characters or lines are printed.



Cause:

This may occur if:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

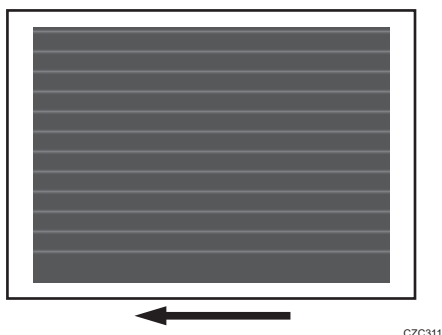
Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in [Adjust Maximum Image Density].
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, contact your service representative.

Afterimages

An afterimage of the image printed just before the intended image appears.



3

Cause:

This may occur when the image record on the intermediate transfer belt has largely changed. For example, this may occur when a solid-fill image is printed after horizontal lines are printed continuously. A potential difference occurs between an image portion and non-image portion on the intermediate transfer belt as a result of continuous printing of horizontal lines, causing the horizontal lines to become obvious on the next solid-fill image.

This may occur if:

- Printing is done at high temperature or humidity
- Printing on thin coated paper (Paper Weight 3 or lower) or on transparent film
- Printing an extremely different type of image

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. In [Advanced Settings] for the custom paper in use, decrease the absolute value by $-10\ \mu\text{A}$ in [Paper Transfer Current Setting: Side 1] or [Paper Transfer Current Setting: Side 2].

Example: $-200\ \mu\text{A}$ to $-190\ \mu\text{A}$

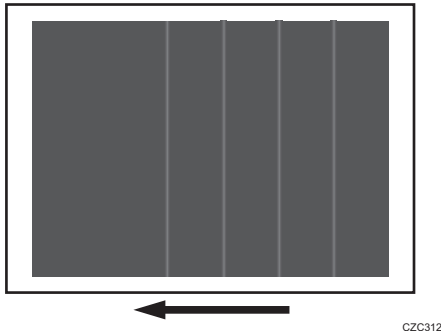
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 and 4. If the problem persists even though you have decreased the value to $-100\ \mu\text{A}$, contact your service representative.

3

White Streaks

White streaks perpendicular to the paper feed direction appear.



Cause:

A separating discharge occurs between the intermediate transfer belt and paper edge during paper transfer, which causes a streak-like electric charge on the intermediate transfer belt. This residual electric charge may cause white streaks during image transfer.

This may occur at low temperature or humidity.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

1. In [Advanced Settings] for the custom paper in use, select [Paper Transfer Current; Trail Edge Dist].

2. Check the present value. Is it the upper limit?

Yes	Go to Step 5.
No	Go to the next step.

3. Increase the value by 5 mm in [Paper Transfer Current; Trail Edge Dist].**4. Print the image. Is the problem resolved?**

Yes	Finished!
No	Go to the next step.

5. In [Advanced Settings] for the custom paper in use, select [Paper Transfer Current; Trail Edge].**6. Check the present value. Is it the lower limit?**

Yes	Reset the value back to the factory-default settings and perform steps from Step 1 again.
No	Decrease the value by 20% in [Paper Transfer Current; Trail Edge].

7. Print the image. Is the problem resolved?

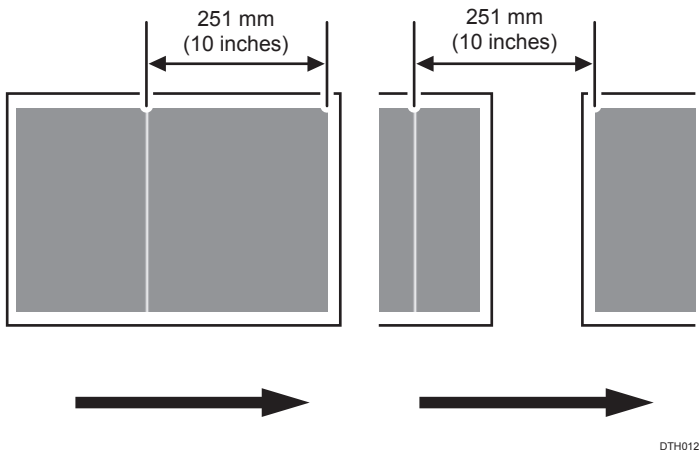
Yes	Finished!
No	Repeat Steps 5 to 7. If the problem persists even though you have decreased the value to the lower limit, contact your service representative.

Gloss Problems

Vertical Glossy Lines

Glossy lines perpendicular to the paper feed direction appear.

3



Cause:

Glossy lines perpendicular to the paper feed direction may appear 251 mm (10 inches) from the boundary of the margin and the solid image (in the paper feed direction).

Solution:

1. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?

Yes	Go to the next step.
No	You cannot resolve the problem with this procedure. Contact your service representative.

2. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and decrease the value by 5 degrees.

3. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?

Yes	Repeat Step 2 and 3. If the problem persists even though the setting has reached its minimum value, contact your service representative. If the problem is resolved, go to the next step.
No	Go to the next step.

4. Check the toner fusion. Is it satisfactory?

Yes	Finished!
No	Restore the previous setting and contact your service representative.

3

Insufficient Gloss

The image is not glossy enough.

Solution:

If the gloss of the image is not glossy enough, carry out the procedures in Procedure 1, "Changing the fusing temperature" and Procedure 2, "Changing the process speed" of page 62 "Insufficient Toner Fusing".

Fusing Problems

Insufficient Toner Fusing

This section explains how to resolve the problem of insufficient toner fusing on printed copies.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.
- Changing the fusing temperature or changing the process speed may produce one or more of the following side effects:
 - Paper curling
 - Paper misfeeding
 - Blisters
 - Glossy lines
 - Change of gloss
- If one or more of the above side effects occurs, adjust the fusing temperature and process speed by decreasing the fusing temperature and increasing the process speed.
- Check the toner fusibility as follows:
 - The printed image does not come off.
 - The toner does not come off even if it is lightly rubbed by a nail.
 - The toner does not come off even if it is rubbed by the cloth for cleaning the exposure glass.

Solution:

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

Procedure 1: Changing the fusing temperature

1. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and increase the temperature by 5 degrees.
2. Print the image and check toner fusion. Is the problem resolved?

Yes	Finished!
No	Increase the temperature an additional 5 degrees.

3. Repeat Step 2 until the temperature reaches 185 degrees. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Check the type of your machine. Is it Pro 8200EX?

Yes	No further improvement is likely. Contact your service representative.
No	Perform Procedure 2, "Changing the process speed".

Procedure 2: Changing the process speed

This procedure is available only for Pro 8220S, Pro 8210S, Pro 8220 and Pro 8210.

This will slow down the printing to give the toner more time to fuse. However, because of this, throughput will be reduced.

Example when printing on A4/LT paper:

<Pro 8220S/ Pro 8220>

If the process speed is changed from [High] to [Middle]: 136 → 111 (cpm/ ppm)

If the process speed is changed from [Middle] to [Low]: 111 → 96 (cpm/ ppm)

<Pro 8210S/ Pro 8210>

If the process speed is changed from [High] to [Low]: 111 → 96 (cpm/ ppm)

Pro 8210S and Pro 8210 do not have the [Middle] setting.

1. In [Advanced Settings] for the custom paper in use, select [Process Speed Setting].**2. Decrease the value by one level.**

If the present value is [High], select [Middle]. If it is [Middle], select [Low].

3. Print the image and check toner fusion. Is the problem resolved?

Yes	Finished!
No	If the problem persists, the machine may be faulty or the paper unsupported. Contact your service representative.

Improving Image Quality When Using Different Types of Paper

Because different types of paper vary in terms of quality, thickness and other factors, various sets of fusing conditions are configured to ensure better print quality. However, using certain types of paper may result in glossy streaks or poor fusing, depending on the combination of the paper type and the image being printed.

The following procedure will reduce productivity, but will help if image quality is important.

Conditions where image quality may be improved

- The paper types to be used vary significantly in terms of set temperature.
- The paper types to be used vary significantly in terms of paper width.
- The number of pages to be printed is small, but many copies need to be printed.

3

Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skill Operators] menu, select [Productivity Priority Mode], and then change Productivity Priority Setting from [Normal] to [Productivity Priority].



Note

- In [Normal] Productivity Priority Setting, fusing may be poor when switching from thinner paper to thicker paper due to the fusing temperature being too low for the thicker paper. Conversely, when switching from thicker paper to thinner paper, glossy streaks or other issues may result due to the fusing temperature being too high for the thinner paper.
- If Productivity Priority Setting is set to [Fusing Ability Priority], a longer waiting time will be required because it takes longer to adjust the fusing temperature when switching between different paper brands, thicknesses, sizes, and other properties. This will reduce productivity.

4. Troubleshooting Paper Delivery Problems

Frequent Paper Misfeeds

Depending on the cause of the problem, do one of the following:

Coated or another type of unsupported paper is loaded in the machine's tray.

Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray that supports the paper.

For details about the size and type of paper that can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

The side fences in the paper tray are too close together.

If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

The side fences in the paper tray are too far apart.

If the side fences are too far apart, paper misfeeds may occur due to wrong paper size detection.

Adjust the side fences to match the paper width.

For details about loading paper, see "Loading Paper ", About This Machine.

The paper size/orientation/type is not specified correctly.

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings.

Too many sheets of paper are loaded in the paper tray.

When loading paper, do not exceed the limit.

For details about how many sheets can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

The edges of the sheets are rough.

Turn the sheets the other way up or smooth the edges before loading.

Sheets are curled or wavy.

- Flatten curls and waviness before loading paper.
- Turn the sheets the other way up or smooth the edges before loading.
- Stacking too many sheets may cause the sheets on top to curl greatly. If this happens, reduce the number of stacked sheets.

Sheets absorbed moisture and became limp.

Sheets that will not be used for a long time should be protected from moisture by, for example, storing them in a sealed bag.

If the machine is plugged in, the heater inside the paper tray starts operating when the main power is off to prevent sheets from absorbing moisture.

The paper feed sensor is stained with paper dust.

Clean the paper feed sensor. For details about cleaning the paper feed sensor, see page 94 "Cleaning the Paper Feed Path".

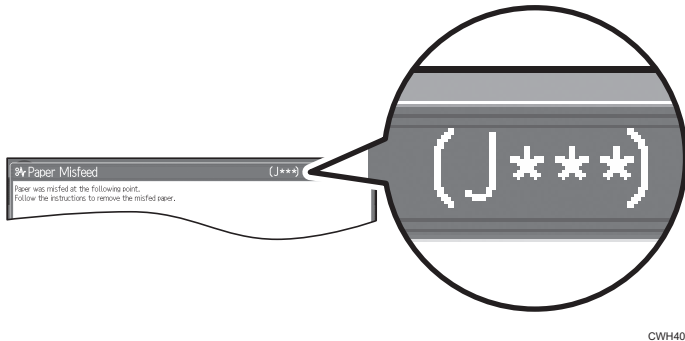
The paper feed performance is less sufficient because the paper transport roller is soiled with toner.

Clean the paper transport roller. For details about cleaning the paper transport roller, see page 94 "Cleaning the Paper Feed Path".

Messages Reporting Paper Misfeeds

Paper misfeeds are reported by messages and jam codes.

Resolve the problem according to the jam code.



4

If (J049) Appears

Cause:

Paper is skewed.

Solution:

Depending on the cause of the problem, do one the following:

The side fences in the paper tray are too far apart.

If the side fences are too far apart, the paper may be skewed.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper.

To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

The paper size/orientation/type is not specified correctly.

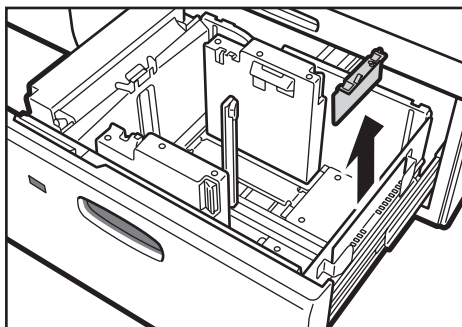
In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings.

This problem occurs when the two-tray wide LCT is used.

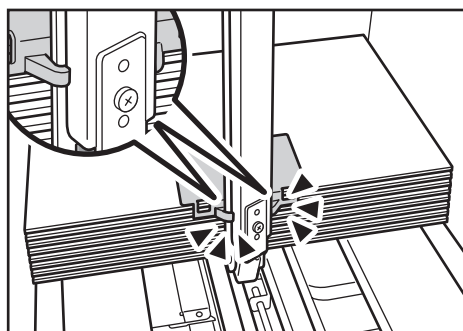
For paper of thickness of zero and smaller than A5 size, take the following steps:

1. Remove the tab fence (small) from the pocket on the right side of the paper tray, and set the tab fence.



DTH010

2. Align the side fence with the paper size, and place the paper.
3. Attach the tab fence (small), and then align the end fence gently against the paper you loaded while pressing the release button of the end fence.



DTH011

Note

- Replace the tab fence (small) after use.

Colored paper or transparencies are loaded in the paper tray.

Paper edges may not have been detected correctly.

Adjust the color paper edge detection.

1. In [Advanced Settings] for the custom paper in use, select [Color Paper Edge Detection Adjustment] and make a note of the present value.
2. Increase the value in [Color Paper Edge Detection Adjustment].
3. Print the image. Is the problem resolved?

Yes

Finished!

No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.
-----------	---

4. Decrease the value in [Color Paper Edge Detection Adjustment].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].
7. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

An envelope is used.

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable the skew detection function.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

The skew detection level is too high.

The skew detection level may be too high.

Decrease the skew detection level.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Skew Detection Level].

Increase the value to reduce the detection level.
2. Print the image. Is the problem resolved?

Yes	Finished!
------------	-----------

No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, go to the next step.
----	---

3. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

Note

- If the skew detection level is reduced or the skew detection function is disabled, no misfeed report will be displayed. However, this may result in paper skew feeding. If you do not want this result, contact your service representative.
- If the machine wrongly detects skew, see page 76 "Wrong Detection of Skew".

If (J050) Appears

Cause:

Sheets cannot be positioned properly by image position adjustment.

Solution:

Depending on the cause of the problem, do one of the following:

The side fences in the paper tray are too far apart.

If the side fences are too far apart, the paper may shift.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper.

To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

The paper size/orientation/type is not specified correctly.

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings.

Colored paper or transparencies are loaded in the paper tray.

Paper edges may not have been detected correctly.

Adjust the color paper edge detection.

1. In [Advanced Settings] for the custom paper in use, select [Color Paper Edge Detection Adjustment] and make a note of the present value.

2. Increase the value in [Color Paper Edge Detection Adjustment].
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.

4. Decrease the value in [Color Paper Edge Detection Adjustment].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In [Advanced Settings] for the custom paper in use, set [Deactivate Image Position Adjustment] to [Deactivate Only Jam Detection].
7. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Note

- When you set [Deactivate Image Position Adjustment] to [Deactivate Only Jam Detection], the printed image may become misaligned.

Sheets of mixed type, thickness, or color are loaded in the paper tray.

Load identical sheets in the paper tray.

To disable the function for detecting paper misalignment

<If using customer paper>

In [Advanced Settings] for the custom paper being used, set [Deactivate Image Position Adjustment Across Feed Dir] to [Deactivate] or [Deactivate Only Jam Detection].

<If not using custom paper>

Under [Adjustment Settings for Skilled Operators] menu, in the [Machine: Image Position] group, set [Deactivate Image Position Adjustment Across Feed Dir] to [Deactivate] or [Deactivate Only Jam Detection].

Note

- Setting [Deactivate Image Position Adjustment Across Feed Dir] to [Deactivate] or [Deactivate Only Jam Detection] may cause the printed image to be misaligned.

If (J080) Appears

Cause:

The paper feed is delayed.

This may occur if slippery paper with a low paper-to-paper friction coefficient is used.

Solution:

1. In [Advanced Settings] for the custom paper in use, set [Regist Jam Detection with Feed Dir] to [Off].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Note

- When you set [Regist Jam Detection with Feed Dir] to [Off], the printed image may become misaligned at the leading edge.

If (J099) Appears

Cause:

Double feeding has occurred.

Solution:

Depending on the cause of the problem, do one of the following:

Coated or another type of unsupported paper is loaded in the machine's tray.

Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray that supports the paper.

For details about the size and type of paper that can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

Sheets are stuck to each other.

Fan the paper before loading it to loosen the sheets.

For details about fanning the paper, see "Fanning the paper", About This Machine.

The edges of the sheets are rough.

Turn the sheets the other way up or smooth the edges before loading the paper.

If (J430/J431/J445/J446/J460/J461) Appears

This indicates a paper misfeed when using the two-tray wide LCT (Vacuum Feed LCIT RT5100).

Paper misfeeding may be resolved by printing an original repeatedly.

If the jam code (J430/J431/J445/J446/J460/J461) appears more than 3 times, follow the procedure below:

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.

Solution:

The factory-set airflow of the wide LCT may not be strong enough to separate the sheets.

Increase the airflow.

1. Set [Paper Feed Mode (Adjust Fan Level)] to [Moderate Nonfdg Red. (Higher)] in [Advanced Settings] for the custom paper you are using.
2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Repeat Step 2. If the jam code appears more than 3 times, set [Paper Feed Mode (Adjust Fan Level)] to [Max Nonfdg Reduc. (Highest)].

3. If the problem persists, contact your service representative.

If (J085/J086/J087) Appears When Using Coated Paper

Cause:

If custom paper with a paper size of A4 or larger and a paper thickness of 4 (105.1 to 163.0 g/m²) or less is ejected with the printed side facing down in single-sided printing, the paper may jam due to two sheets becoming stuck together at the time of sheet inversion.

Solution:

4

1. In [Advanced Settings] for the custom paper being used, decrease the [Paper Feed Interval Setting].
2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Contact your service representative.

↓ Note

- This procedure increases the paper feed interval. The value indicates productivity. A smaller value means lower productivity.
- The paper deliver interval should be set to a value around 75%.

Paper Skew

Depending on the cause of the problem, do one of the following:

The side fences in the paper tray are too far apart.

If the side fences are too far apart, the paper may be skewed.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

A scrap of paper or some other small fragment is jammed in the paper feed path.

Remove the fragment.

For details about cleaning the paper feed path, see page 94 "Cleaning the Paper Feed Path".

The correct degree of paper arching has not been specified.

Adjust the degree of paper arching at the registration gate.

<If using paper of Paper Weight 1 to 4>

1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, change the value in [Adjust Registration Paper Buckle].

<If using paper of Paper Weight 5 to 7>

1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, change the value in [Adjust Registration Paper Buckle (Thick Paper)].

The skew detection level is too low.

Increase the skew detection level.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Skew Detection Level] and reduce the value.

Reduce the value to increase the detection level.

This will allow the machine to report a paper misfeed and stop printing even for a slight skew.

Wrong Detection of Skew

Depending on the cause of the problem, follow the procedure below:

An envelope is used.

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable skew detection function.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

Note

- Disabling the skew detection function will allow skewed printing. If this is not acceptable, contact your service representative.

Double Feeding

Depending on the cause of the problem, do one of the following:

Is the paper feed roller covered with paper dust?

Paper dust may decrease the traction of the paper feed roller and result in double feeding due to paper slippage or insufficient separation.

Cleaning the paper feed roller will restore traction and so prevent double feeding.

For details about cleaning the paper feed roller, see page 94 "Cleaning the Paper Feed Path".

For details about removing the paper feed roller, see Replacement Guide.

The two-tray wide LCT (Vacuum Feed LCIT RT5100) does not have paper feed rollers.

Have you ruffled the paper sufficiently?

Double feeding may result if the paper is not ruffled properly.

Remove the paper, ruffle it, and reload it.

For details about ruffling the paper, see "Fanning the paper", About This Machine.

If the separation pressure level has been adjusted

For any of trays 1 to 3, if the separation pressure adjuster has been changed to a non-default separation pressure, double feeding may occur, depending on the paper type used.

Double feeding can be prevented by changing the separation pressure level back to the default position.

Is the Pickup Assist setting enabled?

If the Pickup Assist function operates too much, it may cause double feeding with coated paper.

By disabling the Pickup Assist setting, you can prevent double feeding.

The two-tray wide LCT (Vacuum Feed LCIT RT5100) does not have the Pickup Assist function.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Pickup Assist Setting] to [Off].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Pickup Assist Setting] to [Off].

Special or coated paper is used.

- Is the airflow strong enough?

The factory-set airflow of the three-tray wide LCT (LCIT RT5080) may not be strong enough to separate the sheets. Increase the airflow.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, increase the value in [Adjust Wide LCT Fan Level].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Adjust Wide LCT Fan Level].
- Is the tab fence attached?
By attaching the tab fence, you can prevent air from leaking at the trailing edge of the paper and improve separation.
For details about attaching the tab fence, see "About This Machine" supplied with the machine.

4

Two-tray wide LCT (Vacuum Feed LCIT RT5100) is used.

The factory-set airflow of the wide LCT may not be strong enough to separate the sheets.

Increase the airflow.

1. In [Advanced Settings] for the custom paper you are using, set [Paper Feed Mode (Adjust Fan Level)] to [Moderate Dble Fd Red. (Lower)].
2. If the problem persists, set [Paper Feed Mode (Adjust Fan Level)] to [Max Dble Fd Reduc. (Lowest)].
3. If the problem persists, increase the value in [Blower Fan] by 10%.
4. If the problem persists, increase the value an additional 10% in [Blower Fan].

Wrong Detection of Double Feeding

Depending on the cause of the problem, do one the following:

Paper with high paper-to-paper adhesion is used.

Paper with high paper-to-paper adhesion may be wrongly detected as double feeding.

Ruffle the paper well before use.

For details about ruffling paper, see "Fanning the paper", About This Machine.

An envelope is being used.

The seams of envelopes may cause double feeds to be erroneously detected.

Disable the double feed detection.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Double Feed Detection] to [Off].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Double Feed Detection] to [Off].

Note

- In cases other than those described above, the double feed detection sensor may be soiled with paper dust or other fragments and erroneously detecting double feeding. Contact your service representative.
- Disabling double feed detection may reduce print image quality or cause blank sheets to be delivered.

Paper Misfeeding

Depending on the cause of the problem, do one of the following:

Have you ruffled the paper properly?

Not ruffling the paper properly may cause paper misfeeding.

Remove the paper, ruffle it, and reload it.

For details about ruffling paper, see "Fanning the paper", About This Machine.

The side fences in the paper tray are too close together.

If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.

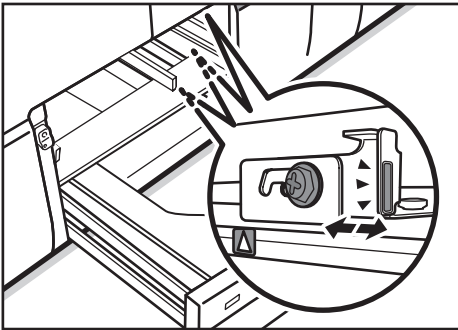
Adjust the paper guides to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

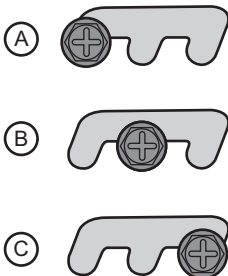
For details about loading paper, see "Loading Paper", About This Machine.

Adjust the separation pressure level.

Each of trays 1 to 3 is provided with a separation pressure adjuster, which can be set to one of three separation pressure levels.



DTH015



DTH016

- A: Default position
- B: Level 2
- C: Level 3

Set the separation pressure level according to how often paper misfeeds occur (J003 to J005, J010 to J012).

<If two or more misfeeds occur in a day for the same tray>

1. Set the separation pressure level for the tray to level 2 by moving the adjuster one level from the default position toward you.

<If two or more misfeeds occur in a day for the same tray with separation pressure level 2 set>

1. Set the separation pressure level for the tray to level 3 by moving the adjuster one level from the default position toward you.

<If two or more misfeeds occur in a day for the same tray with separation pressure level 3 set>

1. Replace the paper feed roller in the tray.

Note

- If the separation pressure level is high, multi-feed may occur. Set an appropriate separation pressure level according to the status of each tray so that no misfeed or multi-feed occur.

Special or coated paper is used.

- Is the airflow powerful enough?

The factory-set airflow of the three-tray wide LCT (LCIT RT5080) may not be strong enough to separate the sheets. Increase the airflow.

<If custom paper is used>

1. In the [Advanced Settings] for the custom paper in use, increase the value in [Adjust Wide LCT Fan Level].

<If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Adjust Wide LCT Fan Level].

- Is the tab fence attached?

By attaching the tab fence, you can prevent air from leaking at the trailing edge of the paper and improve separation.

For details about attaching the tab fence, see "About This Machine" supplied with the machine.

- Is the paper feed roller covered with paper dust?

Paper dust on the surface of coated paper may reduce the traction of the paper feed roller and cause paper misfeeding due to paper slippage or insufficient separation.

By cleaning the paper feed roller, the frictional force can be restored so that paper misfeeding will not occur.

For details about cleaning the paper feed roller of the wide LCT, see page 94 "Cleaning the Paper Feed Path". Two-tray wide LCT (Vacuum Feed LCIT RT5100) does not have paper feed rollers.

An envelope is used.

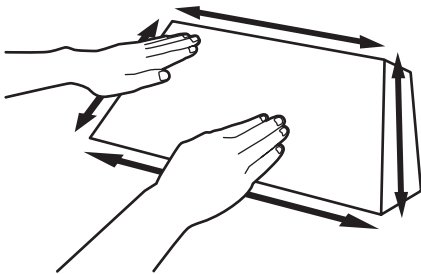
Depending on the type of envelope, air trapped inside may be squeezed out when the paper feed roller picks up the envelope and cause slippage leading to a misfeed.

- Is the three-tray wide LCT (LCIT RT5080) fan disabled?

In [Advanced Settings] for the custom paper in use, set [Wide LCT Fan Setting] to [Off].

- Have you flattened the envelope?

Flatten the envelope and all its edges to eliminate air before loading. If the envelope is curled, decurl it before loading.



CEZ500

Two-tray wide LCT (Vacuum Feed LCIT RT5100) is used.

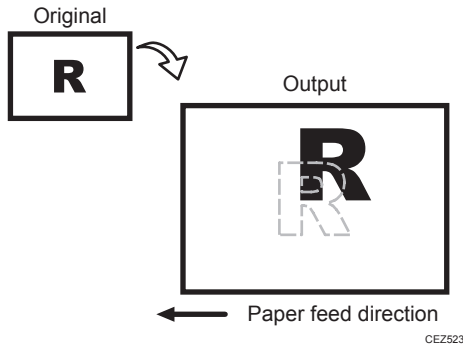
The factory-set airflow of the wide LCT may not be strong enough to separate the sheets.

Increase the airflow.

For details, see page 73 "If (J430/J431/J445/J446/J460/J461) Appears".

Paper Feed Problems Affecting Image Quality

The Image Is Positioned Incorrectly



4

Cause:

Depending on the paper thickness, floppiness, edge roughness, and curl, the image may become mispositioned.

Solution:

Adjust the image position.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, adjust the image position.

- Side 1
 - To adjust the position horizontally, change the value in [Adj Image Position of Side1 With Feed].
 - To adjust the position vertically, change the value in [Adj Image Position of Side1 Across Feed].
- Side 2
 - To adjust the position horizontally, change the value in [Adj Image Position of Side2 With Feed].
 - To adjust the position vertically, change the value in [Adj Image Position of Side2 Across Feed].

<If custom paper is not used>

1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, adjust the image position.

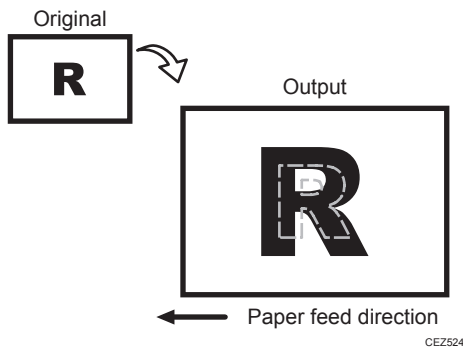
- To adjust the position horizontally, change the value in [Adjust Image Position With Feed Direction].
- To adjust the position vertically, change the value in [Adjust Image Position Across Feed Direction].

If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your service representative.

Note

- For details about specifying settings in the [Adjustment Settings for Skilled Operators] menu and [Advanced Settings] menu, see Adjustment Item Menu Guide.

4

Image Scaling Error on the Side 1 of Paper**Cause:**

An image scaling error may occur because of expansion or contraction of the paper.

Solution:

Adjust the image scaling.

1. In [Advanced Settings] for the custom paper in use, adjust the image scaling.

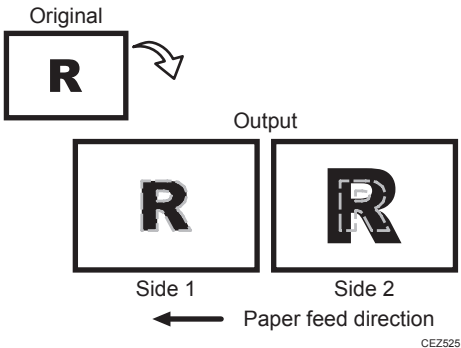
- To adjust the horizontal scaling, change the value in [Adj Magnification of Side1 With Feed].
- To adjust the vertical scaling, change the value in [Adj Magnification of Side1 Across Feed].

Press [+] to increase the scaling and [-] to decrease it.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your service representative.

Image Scaling Error on the Side 2 of Paper



4

Cause:

An image scaling error on the side 2 of the paper may occur because the paper expands or contracts after the image on the side 1 of the paper has been fused.

Solution:

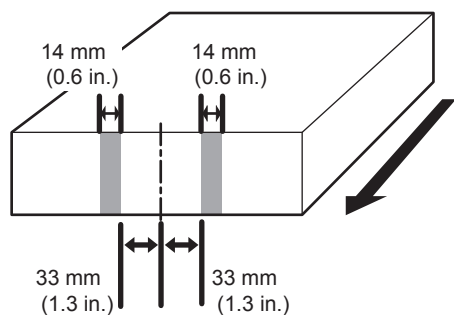
Adjust the scaling for the side 2 of the paper and minimize the difference in print size between the side 1 and the side 2.

1. In [Advanced Settings] for the custom paper in use, adjust the image scaling.
 - To adjust the horizontal scaling, change the value in [Adj Magnification of Side2 With Feed].
 - To adjust the vertical scaling, change the value in [Adj Magnification of Side2 Across Feed].Press [+] to increase and [-] to decrease the scaling.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Paper Edges Are Soiled (1)



4

Cause:

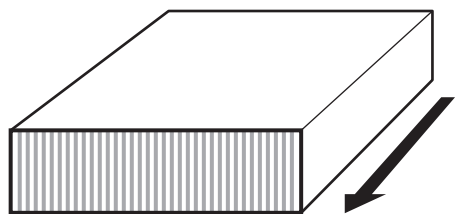
The exit rollers in the drawer are soiled.

Solution:

Clean the exit rollers in the drawer.

For details about cleaning the exit rollers, see page 23 "Two 14-mm Wide Streaks".

Paper Edges Are Soiled (2)



Cause:

The antistatic brushes in the exit transport and invert transport of the drawer are soiled or the anti-static brushes in Finisher SR5050/SR5060 are soiled.

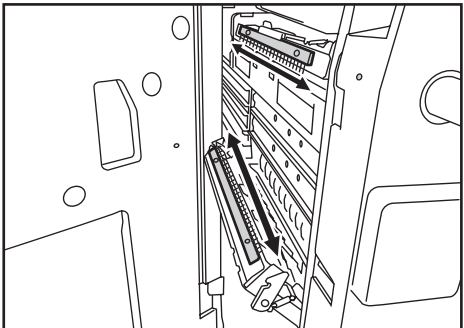
Solution:

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

Procedure 1: Cleaning the antistatic brushes in the exit transport and inverter transport of the drawer

Clean the antistatic brushes in the exit transport and inverter transport of the drawer with a blower brush.

- Antistatic brushes in the exit transport and inverter transport



CZC306

Procedure 2: Disabling the decurl setting and delivering sheets with their printed side facing down

Note

- Apply this procedure only when all of the following conditions are met.
 - A back-curl is required to flatten curls with the decurler unit.
 - Sheets are delivered with their printed side facing up in the post-processing machine.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Paper Curl] and check the present degree of decurling (Off, Weak, or Strong).

2. Is it "Adjust ∩ Curl: Weak" or "Adjust ∩ Curl: Strong"?

Yes	Go to the next step.
No	Contact your service representative.

3. Is this setting essential?

Yes	Go to the next step.
No	Set [Adjust Paper Curl] to "Adjust ∩ Curl: Off" (set it back to the default value).

4. Are the sheets delivered with their printed side facing up?

Yes	Go to the next step.
No	Contact your service representative.

5. Is this setting essential?

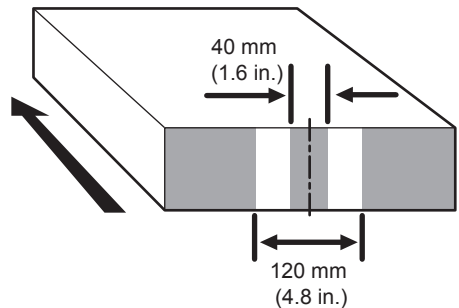
Yes	Contact your service representative.
No	Change the setting so that the sheets are delivered with their printed side facing down.

6. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

4

Paper Edges Are Soiled (3)



Cause:

The paper feed speed of the decurler unit is too high.

Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.
- Decreasing the paper feed speed of the decurler unit may result in creases, scratches, or paper jams if thin paper is used.

Solution:

You can lessen the problem by decreasing the paper feed speed of the decurler unit.

- 1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].
- 2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
 - If the degree of decurling is set to "Off", reduce the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
 - If the degree of decurling is set to "Weak", reduce the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
 - If the degree of decurling is set to "Strong", reduce the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
- 3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, contact your service representative.

Scratches, Streaks, or Vertical Creases Appear on the Image

Cause:

The paper feed speed of the exit motor, switchback entrance, or switchback exit is too high or too low.

Solution:

<If scratches or streaks appear on the side 2 of the paper>

You can lessen the problem by decreasing the paper feed speed.

- 1. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed for delivery.
Depending on the type of printing, specify one of the following:
 - For one-sided printing, reduce the value in [Exit Motor Feed Speed Adjustment] by 0.1%.
 - For duplex printing, reduce the value in [Switchback Entrance Feed Speed Adj] by 0.1%.
 - For one-sided printing (delivery of inverted paper), reduce the value in [Switchback Exit Feed Speed Adj] by 0.1%.
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value by 0.1% until the problem is resolved. If the problem persists even though you have decreased the value by 1.0%, contact your service representative.

<If scratches or streaks appear on the side 1 of the paper>

You can lessen the problem by increasing the paper feed speed.

1. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed for delivery.

Depending on the type of printing, specify one of the following:

- For one-sided printing, increase the value in [Exit Motor Feed Speed Adjustment] by 0.1%.
- For duplex printing, increase the value in [Switchback Entrance Feed Speed Adj] by 0.1%.
- For one-sided printing (delivery of inverted paper), increase the value in [Switchback Exit Feed Speed Adj] by 0.1%.

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value by 0.1% until the problem is resolved. If the problem persists even though you have increased the value by 1.0%, contact your service representative.

Decurling Results in Scratches, Streaks, or Creases

Cause:

The paper feed speed of the decurler unit is too high or too low.

Solution:

<If scratches or streaks appear on the side 2 of the paper or continuous noise results>

You can lessen the problem by decreasing the paper feed speed of the decurler unit.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].

2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
 - If the degree of decurling is set to "Off", reduce the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
 - If the degree of decurling is set to "Weak", reduce the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
 - If the degree of decurling is set to "Strong", reduce the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, contact your service representative.

4

<If scratches, streaks, or creases appear on the side 1 of the paper>

You can lessen the problem by increasing the paper feed speed of the decurler unit.

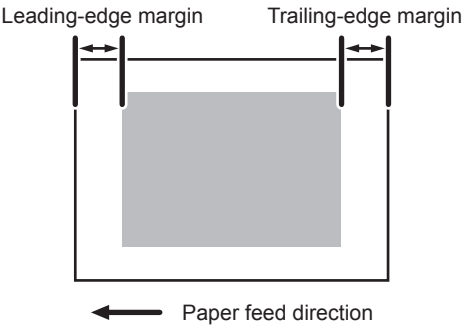
1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].
2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
 - If the degree of decurling is set to "Off", increase the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
 - If the degree of decurling is set to "Weak", increase the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
 - If the degree of decurling is set to "Strong", increase the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Keep increasing the value by 0.5% until the problem is resolved. If the problem persists even though the value has reached its maximum value, contact your service representative.

The Leading/Trailing Edge Margin Is Long

Cause:

In some custom paper presets, the leading/trailing edge margins are wide enough to prevent paper jams.



Solution:

Adjust the leading/trailing edge margins.

1. In [Advanced Settings] for the custom paper in use, reduce the value by 0.5 mm in [Adjust Erase Margin of Leading Edge].
2. Reduce the value by 0.5 mm in [Adjust Erase Margin of Trailing Edge].
3. Print the image. Is the problem resolved?

Yes	Finished!
No	If this results in a paper jam during duplex printing, restore the previous setting.

Note

- The adjusted margin cannot be applied to masked images that are solid-filled or contain ruled lines at the leading/trailing edges.
- Reducing the leading/trailing edge margin may result in a paper jam on the fusing belt stripper plate.

Curling

To eliminate curling without using the decurler unit, lower the heat roller temperature.

Lowering the temperature may result in:

- Unsatisfactory fusing
- Reduced glossiness
- Smeared for halftone images on uncoated paper

Solution:

1. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and reduce the value by 5 degrees.
2. Print a full-page solid-fill image. Is the problem resolved?

Yes	Finished!
No	Further reduce the value by 5 degrees until the problem is resolved. If the problem persists, contact your service representative.

Note

- To use the decurler unit, specify [Adjust Paper Curl] in the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu.

Cleaning the Paper Feed Path

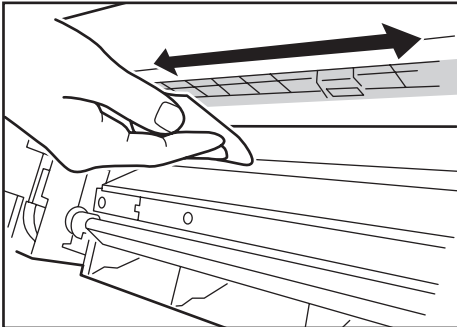
Paper dust sticking to the paper transfer guide board, roller, paper feed roller, or sensor may cause white spots, paper jam, or double feeding. Clean the paper feed path from the paper tray to the paper exit in the drawer.

★ Important

- Turn off the main power before performing the operations described in this manual. See "Turning Off/On the Power", Replacement Guide.

Guide Board

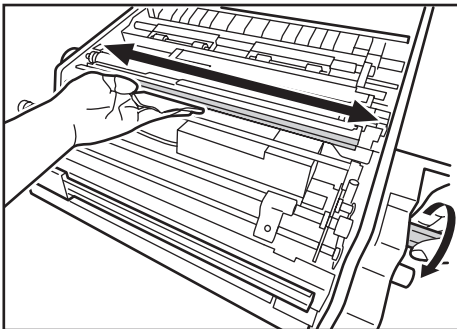
Wipe the guide board with a well-wrung-out damp cloth. To clean the innermost recesses, use a cloth that is as large as your palm.



CZC348

Roller

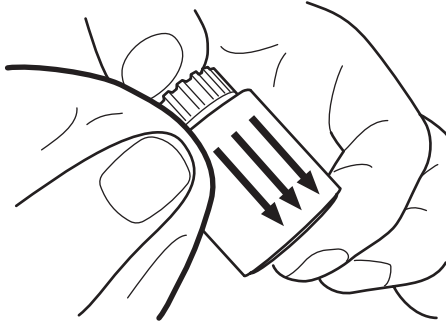
Wipe the roller with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



CZC349

Paper Feed Roller

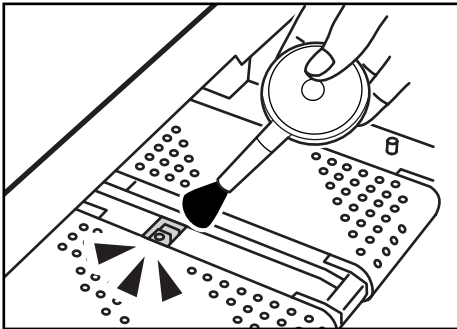
Wipe the entire surface of the paper feed roller lengthwise with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



CEZ306

Sensor

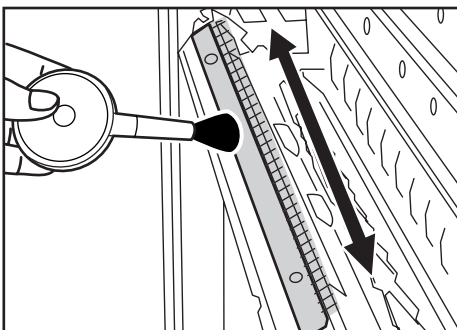
Remove dust with a blower brush.



CZC347

Antistatic Brush

Remove dust with a blower brush.

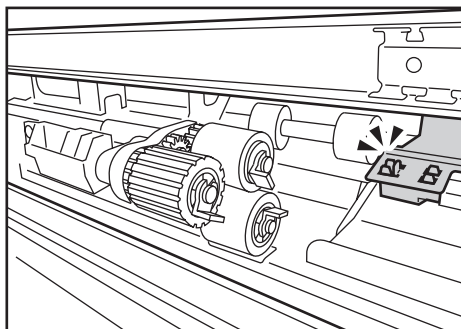


CZC351

Cleaning Paper Trays 1-3

1. Remove the paper tray.

2. Clean the sensor.



CZC316

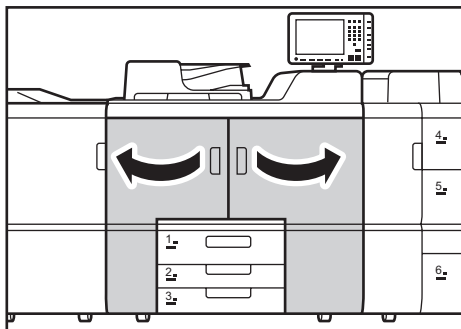
4

Note

- For details about detaching and reattaching the parts, see Replacement Guide.

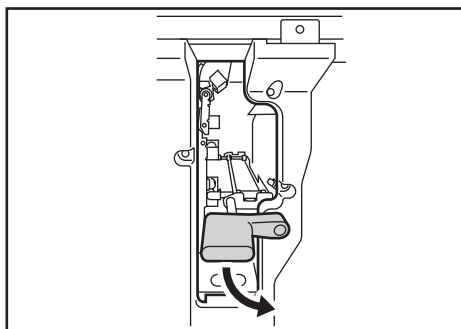
Cleaning the Paper Feed Path for Paper Trays 1-3

1. Open the front covers.



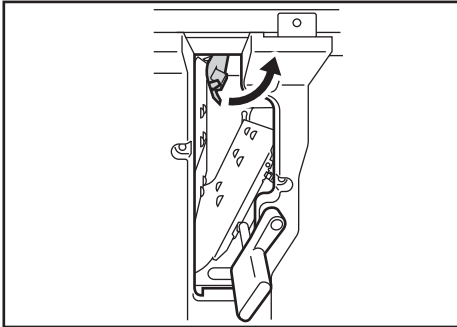
CZC001

2. Pull down the lever A1.



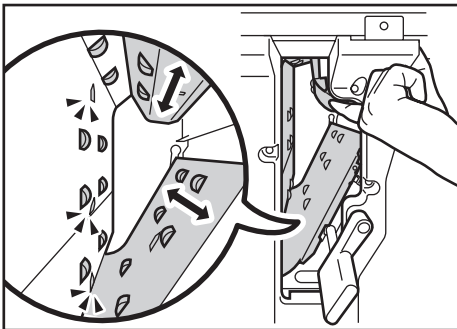
CZC317

3. Pull up the plate.



CZC318

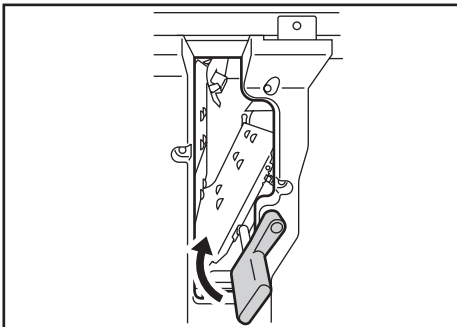
4. Clean the rollers, sensors, and guide boards.



CZC319

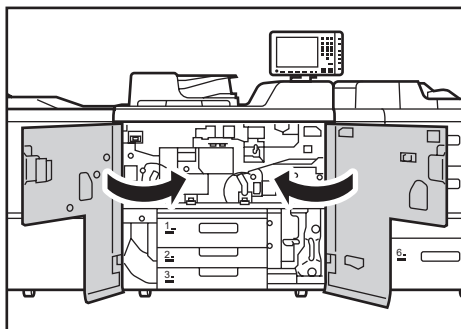
5. Pull down the plate.

6. Pull up the lever A1.



CZC320

7. Close the front covers.

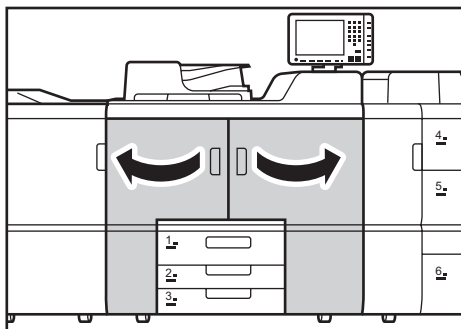


CZC006

4

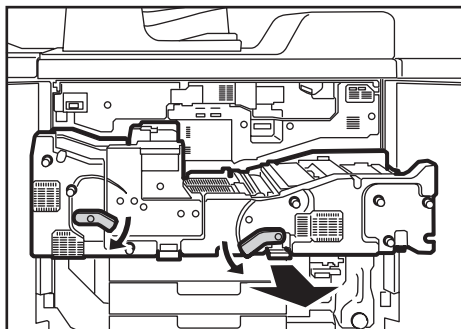
Cleaning the Paper Feed Path in the Drawer

1. Open the front covers.



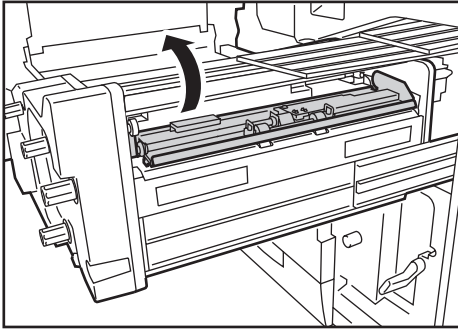
CZC001

2. Pull down the levers C1 and C2, and then pull the drawer out completely until it stops.



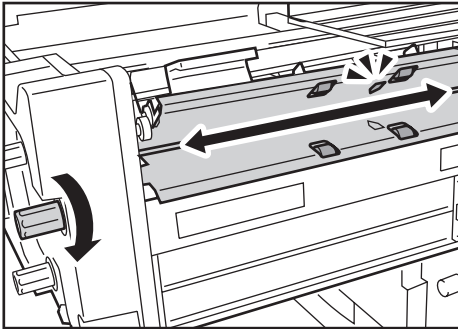
CZC300

3. Pull up and open the cover B6.



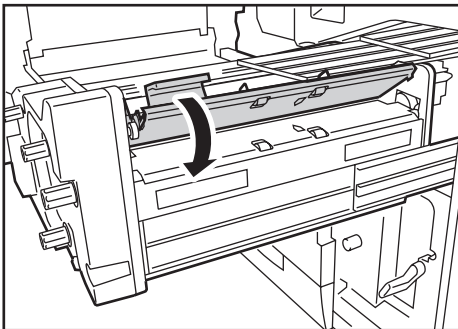
DTH017

4. Clean the rollers while turning the knob B2. Clean the sensors and guide boards also.



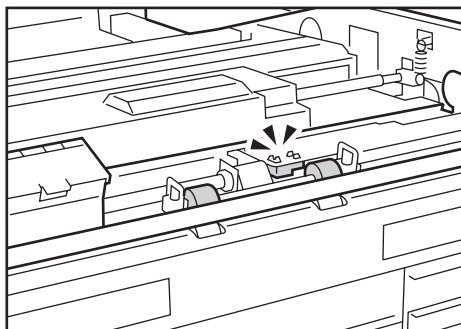
DTH018

5. Close the cover B6.



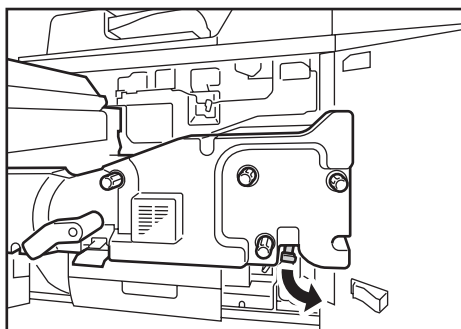
DTH019

6. Clean the rollers and sensors.



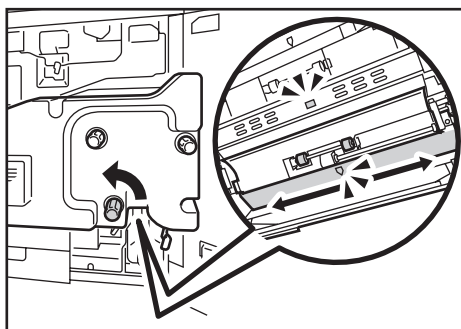
CZC324

7. Pull down and open the cover B3.



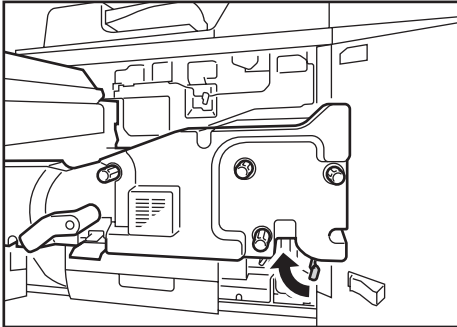
CZC325

8. Clean the rollers while turning the knob B1. Clean the sensors and guide boards also.



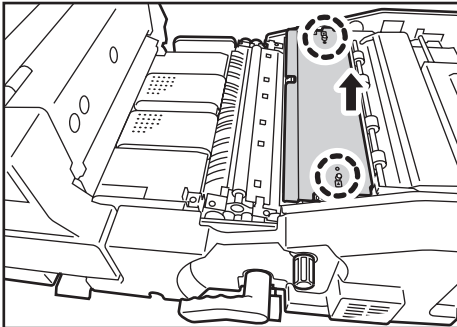
CZC326

9. Close the cover B3.



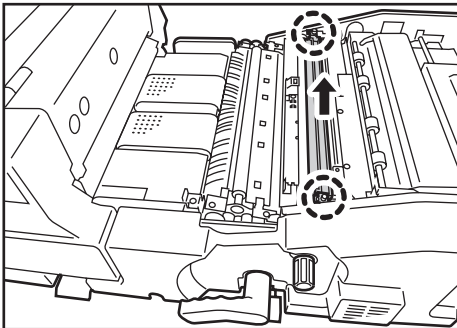
CZC327

10. Remove the 2 screws, and then remove the cover.



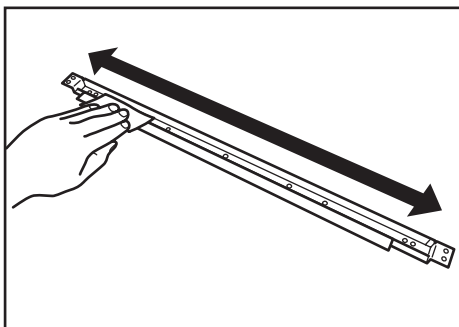
CZC328

11. Remove the 2 screws, and then remove the dust catcher.



CZC329

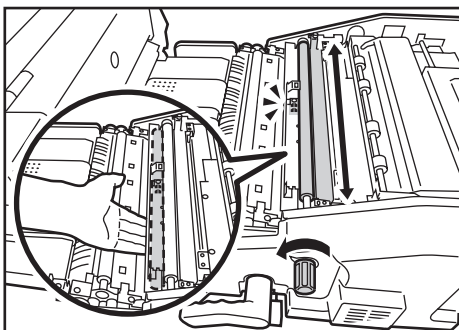
12. Clean the dust catcher.



CZC345

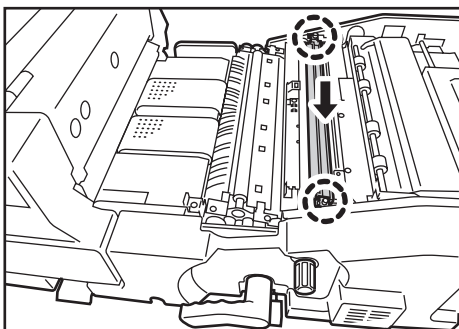
4

13. Clean the roller while turning the knob B5. Clean the sensor, guide board, and roller in the paper transfer unit also.



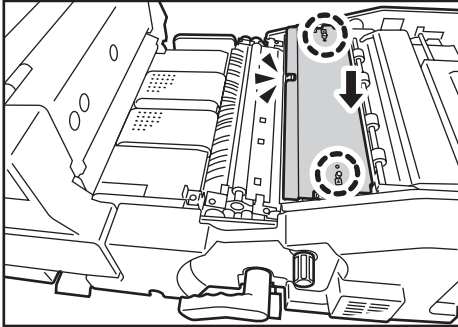
CZC330

14. Attach the dust catcher, and then secure it with the 2 screws.



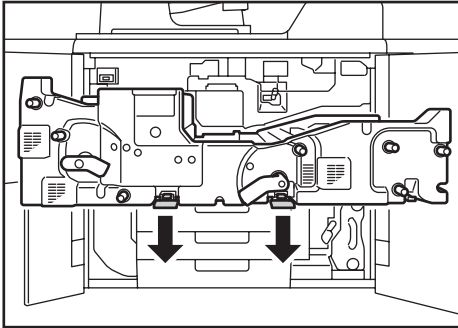
CZC332

15. Attach the cover, aligning the notch on the cover with the claw, and then secure it with the 2 screws.



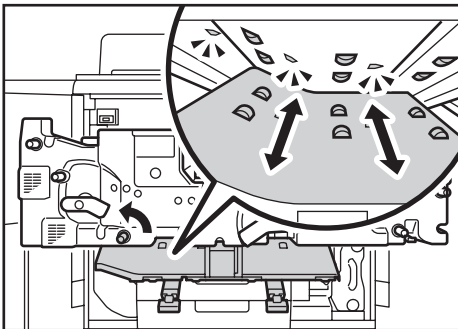
CZC331

16. Pull down the levers Z2 and Z3.



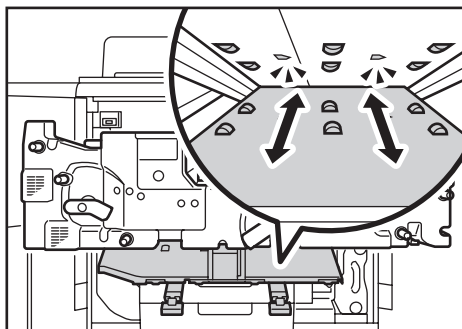
CZC333

17. Clean the left-hand side rollers while turning the knob Z1. Clean the left-hand side sensors and guide boards also.



CZC334

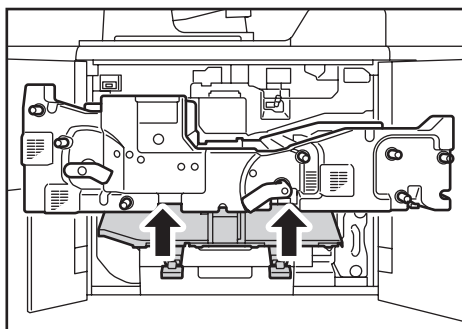
18. Clean the right-hand side rollers, sensors, and guide boards.



CZC335

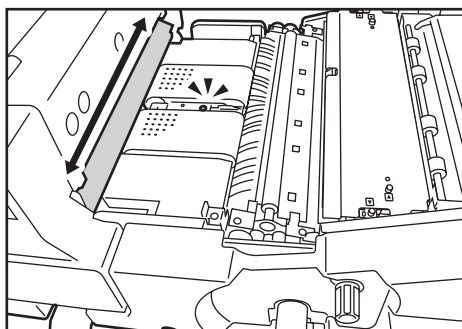
4

19. Pull up the levers Z2 and Z3.



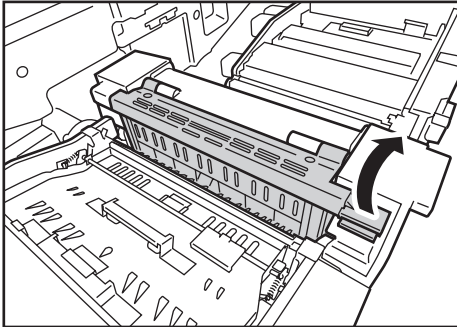
CZC336

20. Clean the sensor and guide board on the entrance of the fusing unit.



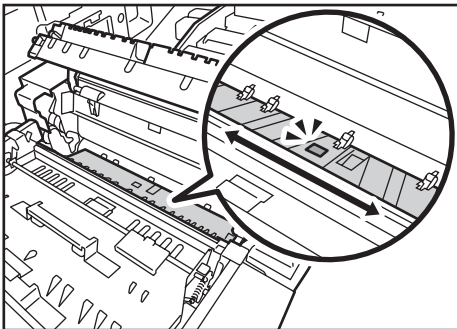
CZC337

21. Pull up and open the cover D2.



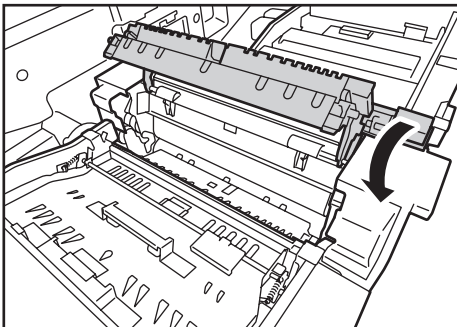
CZC338

22. Clean the sensor and guide board.



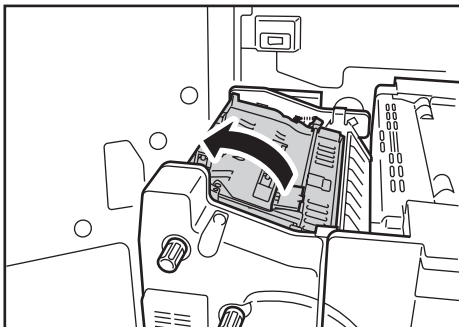
CZC339

23. Close the cover D2.



CZC340

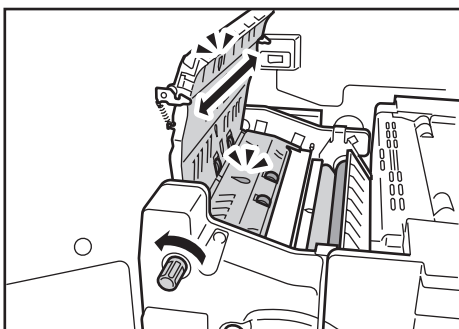
24. Pull up and open the cover D3.



DTH020

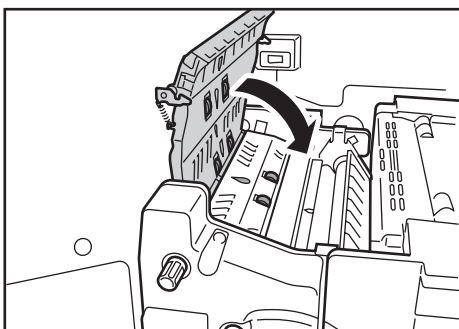
4

25. Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.



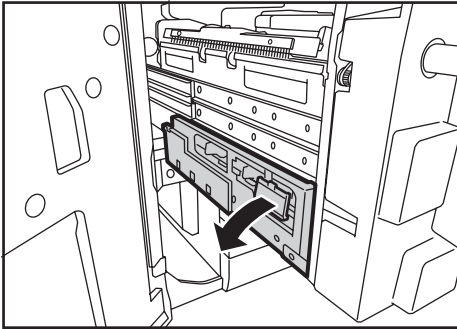
DTH021

26. Close the cover D3.



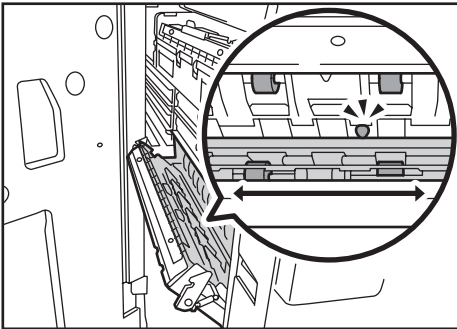
DTH022

27. Pull down and open the cover D4.



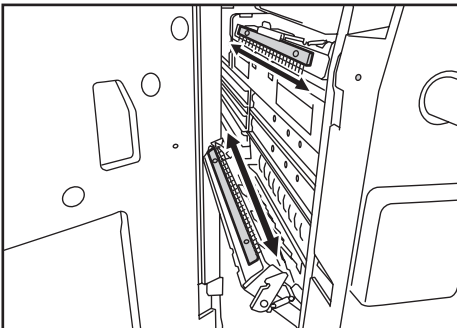
CZC301

28. Clean the rollers, sensor, and guide boards.



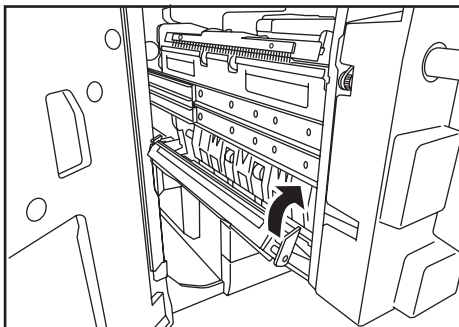
CZC302

29. Clean the antistatic brushes.



CZC306

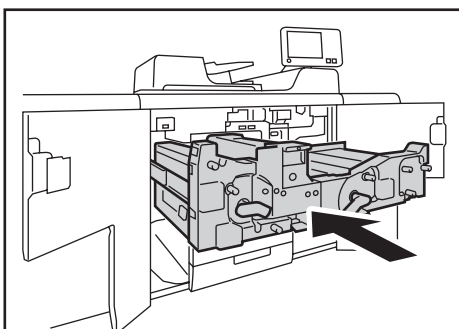
30. Close the cover D4.



CZC344

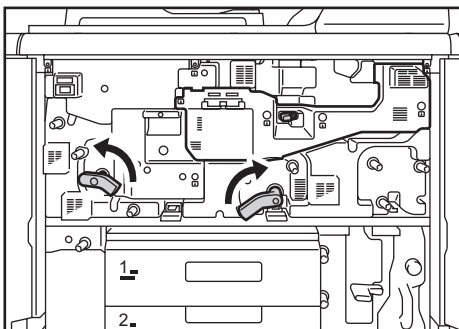
4

31. Push the drawer back into the machine.

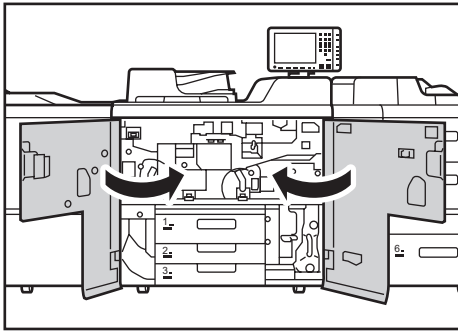


CZC097

32. Pull up the levers C1 and C2.



CZC086

33. Close the front covers.

CZC006

4

Cleaning the Paper Transfer Roller

If normal paper is printed after continuously fed carbonless paper, toner stains or black streaks may appear on the back of the normal paper.

If toner stains or black streaks appear, wipe the paper transfer roller with a rag or other dry cloth.

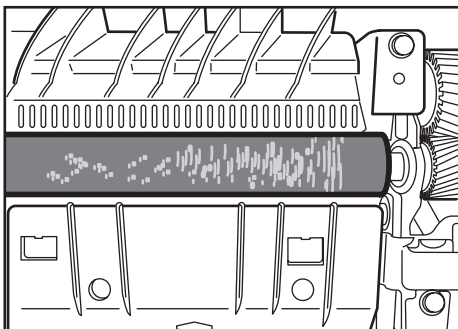
Do not use water or any alcohol-based solvent.

Clean the paper transfer roller until there is no visible dirt or dust on the roller.

While cleaning, be careful of the discharge needles on the guide plate at the paper transfer exit.

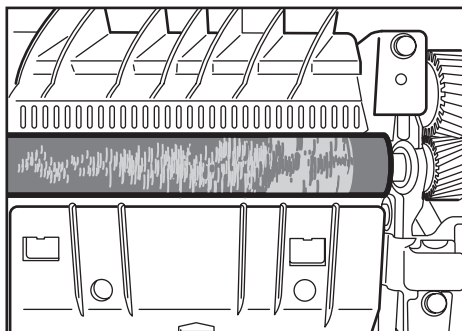
If there is a significant amount of dirt and dust on the paper transfer roller, the paper transfer unit needs to be replaced.

Refer to the following figures to determine whether the paper transfer unit needs to be replaced.

Paper transfer unit still usable after cleaning

DTH024

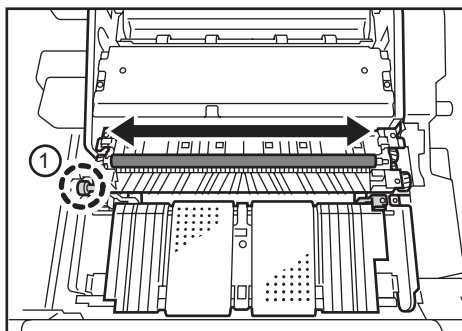
Paper transfer unit needs replacing



DTH025

4

1. Rotating the roller by turning the deep side of the drive axis clockwise (1), wipe the roller in the direction of the arrow from the front to the back.



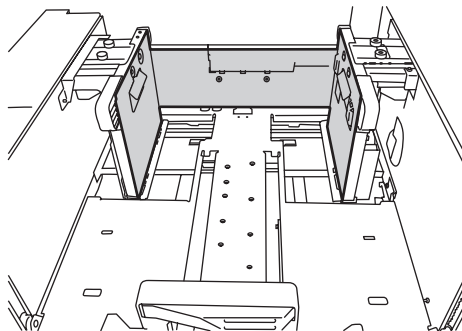
DTH026

Clean the roller until there is no visible dirt or dust on the entire circumference of the paper transfer roller.

2. Visually check that there is no dirt or dust.

Cleaning the Paper Feed Path in the Wide LCT

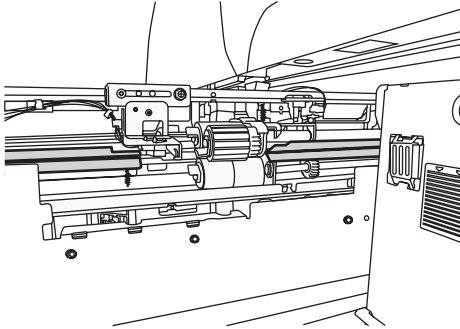
1. Clean the side fences and front guide.



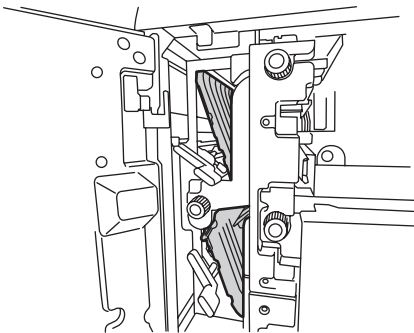
CEZ502

2. Clean the paper feed rollers.

Two-tray wide LCT (Vacuum Feed LCIT RT5100) does not have paper feed rollers.

3. Clean the guide board of the paper feed unit.

CEZ503

4. Clean the guide board interior.

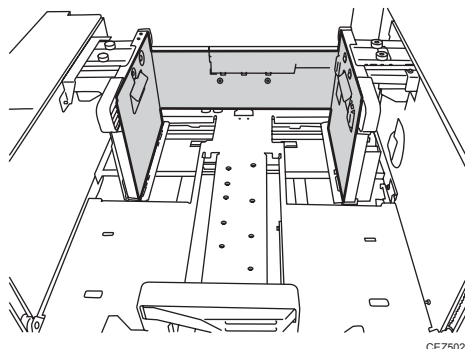
CZC305

5. After cleaning, restore the machine so that it resumes operation.**Note**

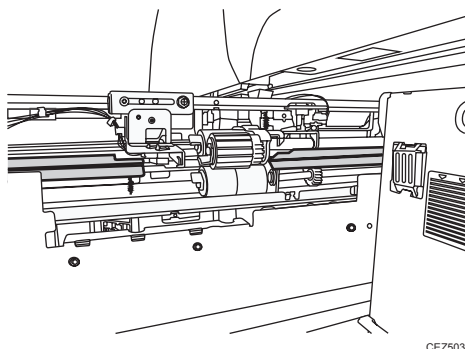
- For details about detaching and reattaching the parts, see Replacement Guide.

Cleaning the Paper Feed Path in the LCT

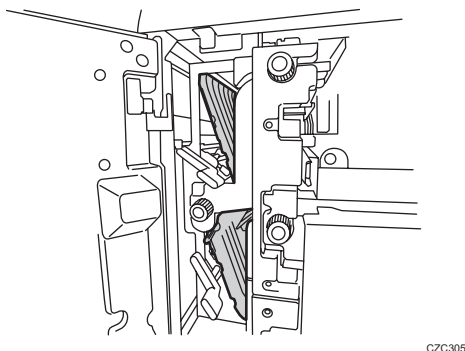
1. Clean the side fences and front guide.



2. Clean the paper feed rollers.
3. Clean the guide board of the paper feed unit.



4. Clean the guide board interior.



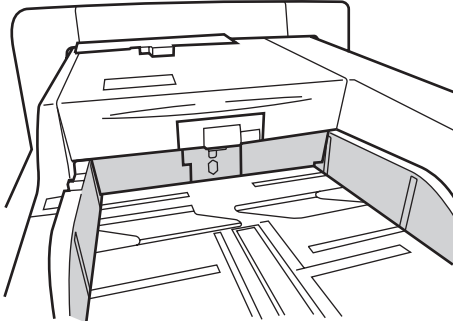
5. After cleaning, restore the machine so that it resumes operation.

Note

- For details about detaching and reattaching the parts, see Replacement Guide.

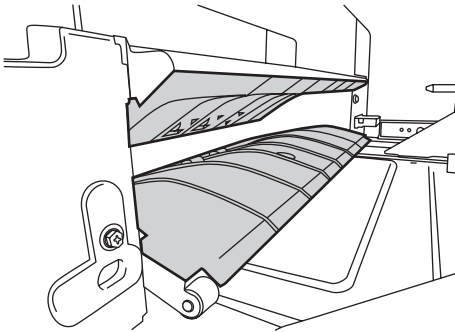
Cleaning the Paper Feed Path in the Multi Bypass Tray

1. Clean the side fences and front guide.



CEZ587

2. Clean the paper feed rollers.
3. Clean the guide board.



CEZ506

4. After cleaning, restore the machine so that it resumes operation.

Note

- For details about detaching and reattaching the parts, see Replacement Guide.

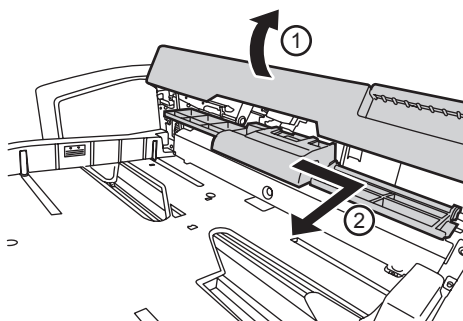
Cleaning the Paper Feed Rollers and Paper Feed Belt in the Interposer

Clean the paper feed belt and paper feed rollers in the interposer.

The procedure is explained using the interposer upper tray. The procedure is the same for the lower tray.

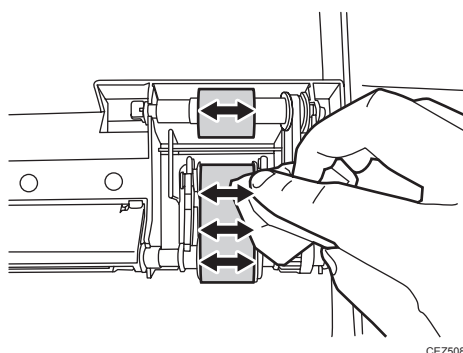
1. Remove the loaded paper.
2. Open the upper cover, and then detach the paper feed unit.

Pull it out slightly, release the metal shaft, and then detach it.



3. Clean the paper feed belt and paper feed rollers in the detached paper feed unit.

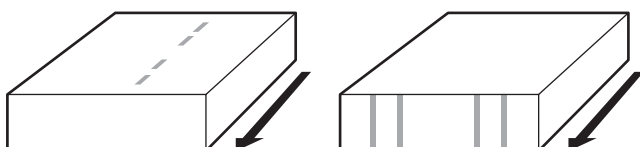
4



4. After cleaning, restore the machine so that it resumes operation.

Cleaning the Rollers and Guide Boards in the Finisher

When a sheet with a high-density image on it is delivered or when the toner is not fused well, toner may stick to the rollers and guide boards in the finisher, where it may stain the transfer surface or sheet edge.



If you notice such staining, clean the rollers and guide boards in the finisher.

Use the following procedures to clean the rollers and guide boards in the finisher:

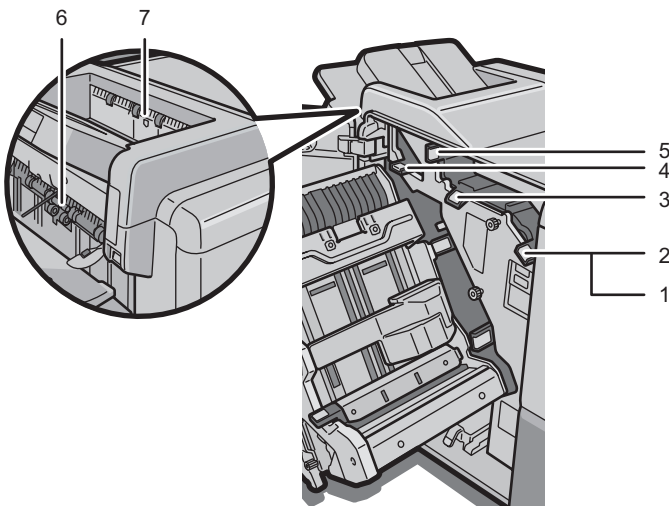
Roller

Wipe the roller with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.

Guide Board

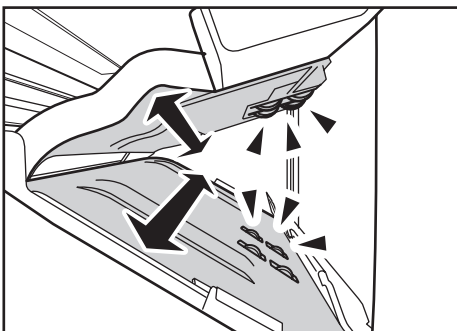
Wipe the guide board with a well-wrung-out damp cloth. To clean the innermost recesses, use a cloth that is as large as your palm.

Perform the following cleaning steps from Steps 1 to 7 in this order:



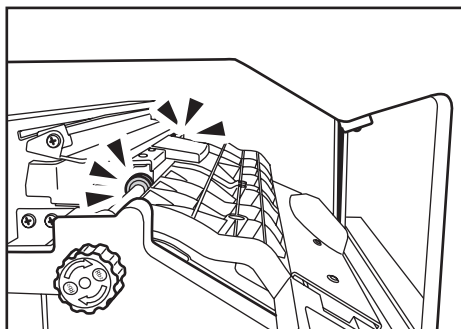
DVX001

1. Open the guide board (Rb1) and clean the rollers and guide board.



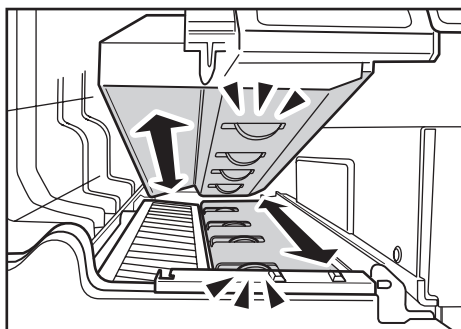
DVX004

2. Close the guide board (Rb1) and clean the rollers.



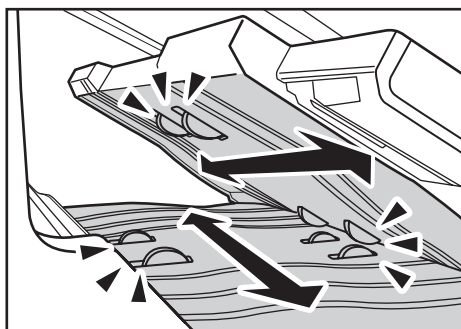
DVX002

3. Open the guide board (Rb3) and clean the rollers and guide board.



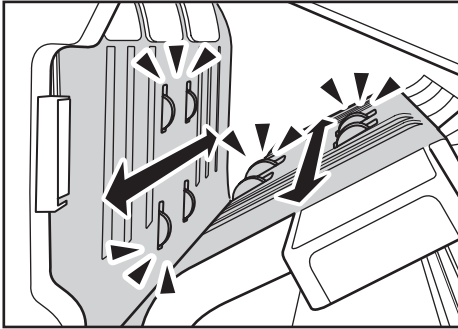
DVX005

4. Open the guide board (Rb5) and clean the rollers and guide board.



DVX006

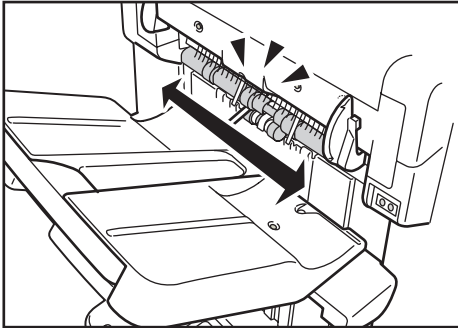
5. Open the guide board (Rb4) and clean the rollers and guide board.



DVX009

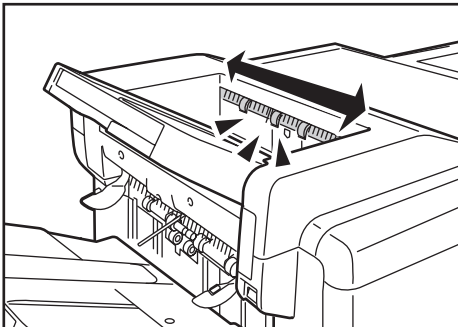
6. Lower the shift tray and clean the guide board and rollers through the paper exit of the finisher shift tray.

4



DVX007

7. Clean the rollers through the paper exit of the finisher upper tray.



DVX008

5. Post-Processing Option Troubleshooting

Finisher SR5050/SR5060

Delivered Sheets Are Not Stacked Properly

Solution:

Depending on the cause of the problem, do one of the following:

Coated paper is being used.

If coated paper is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "About This Machine" supplied with the machine.

There is airflow in the room.

Minimize the airflow. For instance, turn the air conditioner off.

Printed sheets are curled.

<If the decurler unit is used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Paper Curl] and adjust the degree of decurling.

To correct curls facing up, specify "Adjust \smile Curl".

To correct curls facing down, specify "Adjust \frown Curl".

Select "Strong" or "Weak" depending on the degree of decurling required.

<If the decurler unit is not used>

1. Load the sheets the other way up.

There are too many stacked sheets.

Reduce the number of the stacked sheets. To do this, suspend printing and remove the stacked sheets, and then resume printing.

To suspend printing, press the [Suspend / Resume] key on the finisher.

To resume printing, press the [Suspend / Resume] key on the finisher.

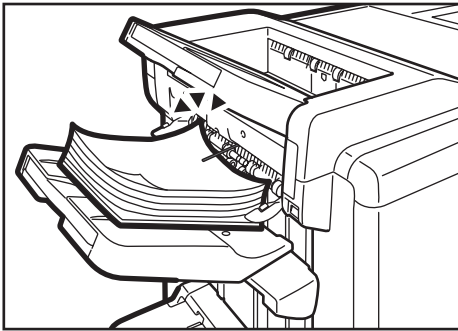
Carbonless Sheets Are Not Stacked In an Aligned Manner

Cause:

Carbonless sheets with a thickness of 0 or 1 are delivered to the shift tray, but they are not stacked in an aligned manner in the following cases:

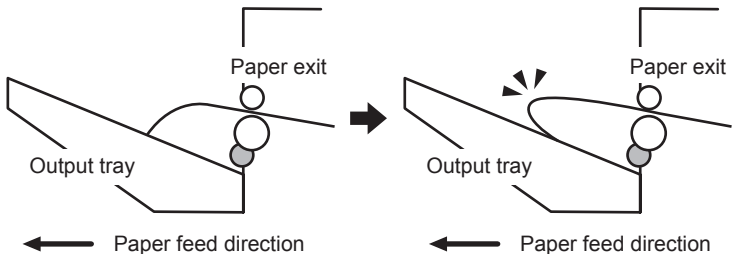
Sheet end curling

If curled sheets continued to be delivered and stacked, these curled sheets may cause both ends of the stack of delivered sheets to be swollen. If this occurs, the paper delivery fan touches the swollen portion, causing succeeding sheets to collide with the sheets already in the stack and be added to the stack obliquely.



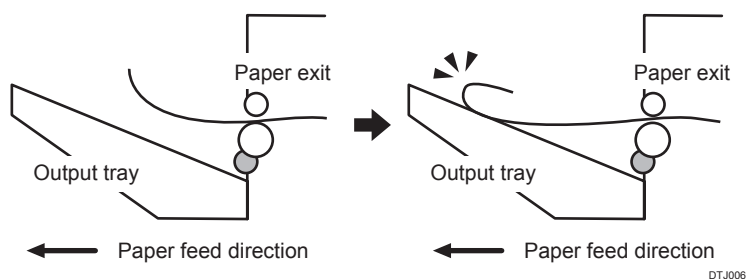
Sheet buckling

The tip of an easily-bent sheet may hang down as it is delivered. Depending on the angle at which the tip is hanging, the sheet may be caught on the shift tray, preventing it from being fed. As the opposite end of the sheet is pushed forward, the tip may be curled.



Tip curling-up

A thin, easily-bent sheet may be delivered with its tip bent upwards and curled due to air resistance.



Solution:

Follow the procedure (a) "Resolving the problem according to the printed surface" first, and then follow the procedure (b) "Resolving the problem according to the cause".

(a) Resolving the problem according to the printed surface

1. Pull the extension tray out from the finisher shift tray, and attach the thin paper support tray.
2. In the [Finishing: Finisher] group on the [Adjustment Settings for Skill Operators] menu, select [Output Fan Setting].
3. Is the sheet delivered with the printed side facing down?

Yes	Select [Output Fan Setting] to [Off].
No	Select [Output Fan Setting] to [On].

4. Print the image. Is the problem resolved?

Yes	Finished! When all of the necessary printing is complete, configure [Output Fan Setting] back to [Auto].
No	Proceed to the procedure (b) "Resolving the problem according to the cause".

(b) Resolving the problem according to the cause

<Sheet end curling>

1. In the [Finishing: Finisher] group on the [Adjustment Settings for Skill Operators] menu, select [Output Fan Setting] to [Off].

2. Print the image. Is the problem resolved?

Yes	Finished!
s	When all of the necessary printing is complete, configure [Output Fan Setting] back to [Auto].
No	Go to the next step.

3. Print on a smaller number of sheets. If the problem persists, configure [Output Fan Setting] back to [Auto] and contact your service representative.**<Sheet buckling>**

1. Pull the extension tray out from the finisher shift tray, and attach the Z-fold support tray.
2. In the [Finishing: Finisher] group on the [Adjustment Settings for Skill Operators] menu, select [Output Fan Setting] to [On].
3. Print the image. Is the problem resolved?

Yes	Finished!
s	When all of the necessary printing is complete, configure [Output Fan Setting] back to [Auto].
No	Go to the next step.

4. Print on a smaller number of sheets. If the problem persists, configure [Output Fan Setting] back to [Auto] and contact your service representative.**<Tip curling-up>**

1. Is it possible to flip the printed side by delivering the paper inverted?

Yes	Go to the next step.
s	
No	Print on a smaller number of sheets. If the problem persists, configure [Output Fan Setting] back to [Auto] and contact your service representative.

2. Press [Output/ Customize Function/ Finisher].
3. Press [Output/ Cstmz.].
4. Press [Rvrse Ejct: FaceUp/Dn].
5. Press [OK].

6. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

7. In [Advanced Settings] for your custom paper being used, adjust the feed speed for the decurler unit.**8. Print the image. Is the problem resolved?**

Yes	Finished!
No	Go to the next step.

9. Print on a smaller number of sheets. If the problem persists, configure [Output Fan Setting] back to [Auto] and contact your service representative.**Note**

- For details about how to attach the thin paper support tray or the Z-fold support tray, see "Guide to Functions of the Machine's Options", About This Machine.

Large Delivered Sheets Are Not Stacked Properly

Cause:

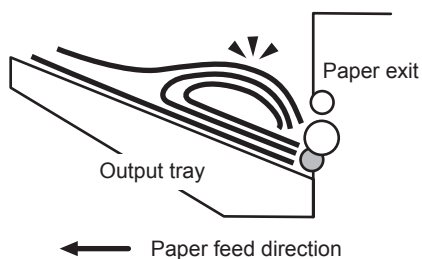
When using large-size or coated and paper-to-paper friction is very high, a sheet may push against another or paper deflection may occur.

This is likely to occur if:

- B4□, 8" × 14"□, or larger size of paper is used.
- Paper that produces high paper-to-paper friction is used.
- The temperature or humidity is high.

Sheet bending

The leading edge of the delivered sheet bends upward and backward.

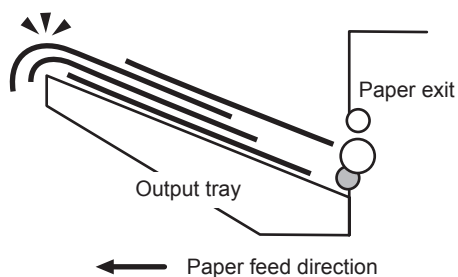


CEZ594

One sheet pushing out another

Because of high paper friction, the delivered sheet may get stuck and push out other sheets of paper.

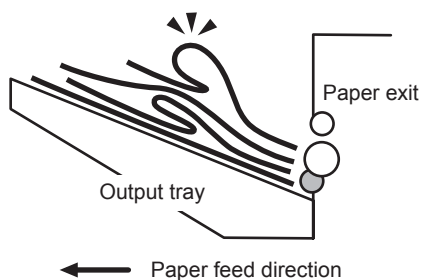
5



CEZ595

Paper deflection

Because of high paper friction, the delivered sheet may arch up and become crimped.



CEZ596

Solution:

Depending on the cause of the problem, do one of the following:

<Sheet bending>**There is airflow in the room.**

Minimize the airflow. For instance, turn the air conditioner off.

Sheets are curled upward.**<If the decurler unit is used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust \smile Curl".

To control the level of decurling, select "Weak" if the present setting is "Off" or "Strong" if the present value is "Weak".

<If the decurler unit is not used>

1. Load the sheets the other way up.

Paper of Paper Weight 0 is being used.

If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "About This Machine" supplied with the machine.

<One sheet pushing out another or sheets becoming crimped>**Sheets are curled downward.****<If the decurler unit is used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust \cap Curl".

To control the level of decurling, select "Weak" if the present setting is "Off" or "Strong" if the present value is "Weak".

<If the decurler unit is not used>

1. Load the sheets the other way up.

Paper of Paper Weight 0 is being used.

If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "About This Machine" supplied with the machine.

↓ Note

- If the Z-fold support tray for multi-folding unit is attached, the number of sheets that can be stacked is reduced.
- If the Z-fold support tray for multi-folding unit is attached, the range of misalignment of the last print may exceed 2 mm (0.08 inches) if the Shift Collate function is used.

Trailing edge of stapled sheets close to the paper exit

Cause:

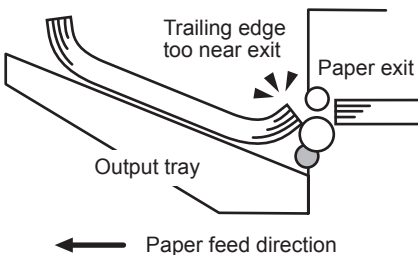
If the stapled sheets are curled strongly or become limp after delivery, the trailing edge of the sheets may be too close to the paper exit when the paper is stacked.

If this happens, stapled sheets, when delivered, may push the previously delivered sheet, resulting in paper bending or misfeeding.

This is likely to occur if:

- There is a tight curl on a delivered set of stapled sheets.
- Limp paper such as thin or recycled paper is used.

5



CEZ593

Solution:

1. Attach the Z-fold support tray for multi-folding unit.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust  Curl".

Select "Strong" or "Weak" to control the level of decurling as required.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Note

- For details about attaching the Z-fold support tray for multi-folding unit, see "About This Machine" supplied with the machine.
- If the Z-fold support tray for multi-folding unit is attached, the trailing edge of the ejected sheets will not be too close to the paper exit, so no problem will occur. However, the stapled sheets may not be stacked properly.

Sheets cannot be stapled properly

Cause:

When the sheets are fed to the staple unit inside the finisher, they may be overlaid, resulting in a misalignment of 5 mm (0.2 inches) relative to each other after stapling.

When coated or other paper producing higher paper-to-paper friction is used, the paper edges are not aligned properly, resulting in misaligned stapling.

This is likely to occur if:

- Coated or other paper producing higher paper-to-paper friction is used.
- Thin or other limp paper is used.

Solution:

Reduce the number of sheets to be stapled.

1. In the [Finishing: Finisher] group on the [Adjustment Settings for Skilled Operators] menu, select [Number of Sheet Align for Stapling], and reduce the number of sheets to be stapled.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	If the problem persists even though the setting has reached its minimum value, contact your service representative.

Note

- If the number of sheets to be stapled is reduced, paper alignment will take longer, compromising the machine's throughput.

Multi-Folding Unit

Inaccurate Folding (Folding Deviation)

Cause:

Depending on paper hardness, inaccurate folds may result. This is referred to as folding deviation.

Solution:

Change the folding position by adjusting the position of the paper edge stopper for folding.

- For multi-sheet folding, change the folding position using the following settings in the [Finishing: Fold] group on the [Adjustment Settings for Skilled Operators] menu:
 - [Half Fold Position (Multi-sheet Fold)]
 - [Letter Fold-out Position 1 (Multi-sheet Fold)]
 - [Letter Fold-out Position 2 (Multi-sheet Fold)]
 - [Letter Fold-in Position 1 (Multi-sheet Fold)]
 - [Letter Fold-in Position 2 (Multi-sheet Fold)]
- For single-sheet folding, change the folding position using the following settings in the [Advanced Settings] for the custom paper you are using:
 - [Adjust Z-fold Position 1]
 - [Adjust Z-fold Position 2]
 - [Half Fold Position: Single-sheet Fold]
 - [Letter Fold-out Posn 1: Single-sheet Fld]
 - [Letter Fold-out Posn 2: Single-sheet Fld]
 - [Letter Fold-in Posn 1: Single-sheet Fold]
 - [Letter Fold-in Posn 2: Single-sheet Fold]
 - [Double Parallel Fold Position 1]
 - [Double Parallel Fold Position 2]
 - [Adjust Gate Fold Position 1]
 - [Adjust Gate Fold Position 2]
 - [Adjust Gate Fold Position 3]

Note

- For details about specifying settings in the [Adjustment Settings for Skilled Operators] menu and [Advanced Settings] menu, see Adjustment Item Menu Guide.

Folding Deviation

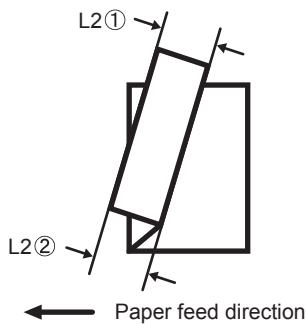
Cause:

Depending on paper hardness, folding deviations (skewed folding) may appear.

A deviation may appear if the edge dimensions of the parts between folds are different.

For example, in the following illustration, the dimensional difference between the top (L2[2]) and bottom (L2[1]) edges is a deviation.

<Folding deviation sample of L2 for Z-fold>

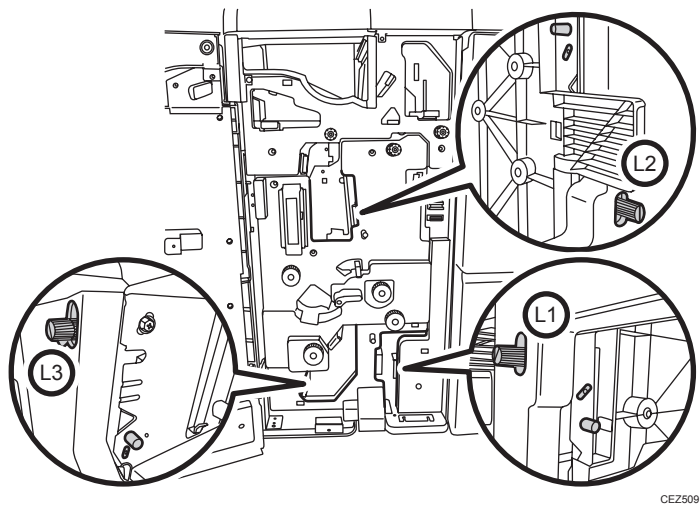


CEZ531

Solution:

Adjust the deviation.

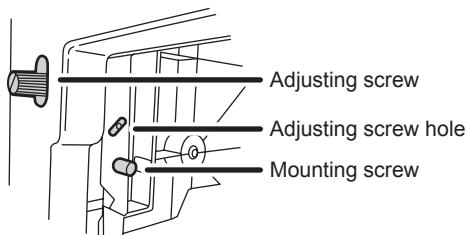
The multi-folding unit has three adjusting screws (L1, L2, and L3) to adjust deviation.



CEZ509

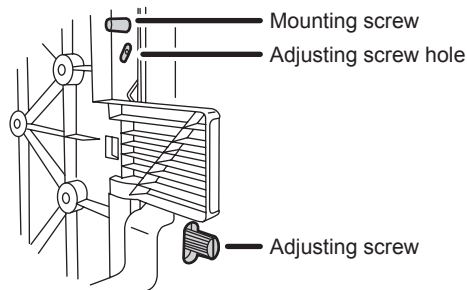
5

L1

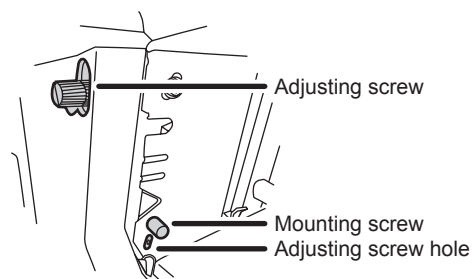


CEZ599

L2

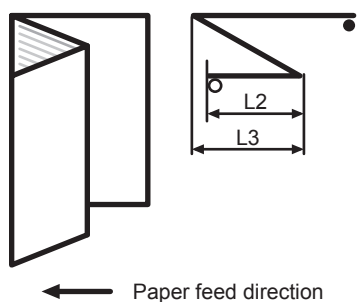


CEZ600

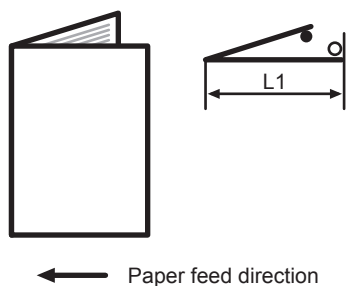
L3

CEZ601

The screws adjust the folding deviations of the following parts:

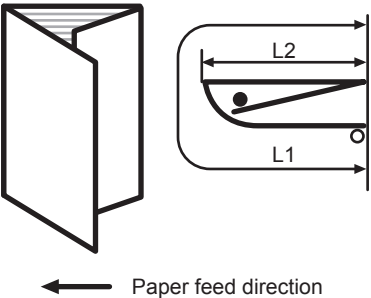
Z-fold

CEZ532

Half Fold

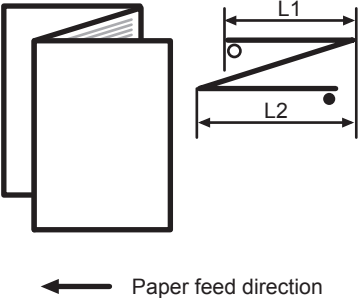
CEZ533

Letter Fold-in



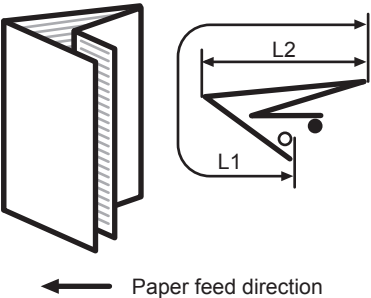
CEZ535

Letter Fold-out



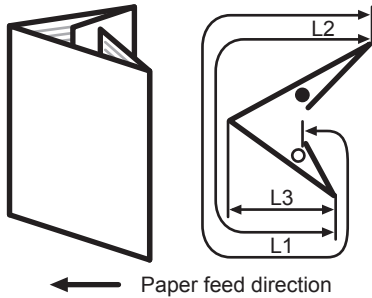
CEZ534

Double Parallel



CEZ536

Gate Fold



CEZ537

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

<How to adjust the folding deviation>

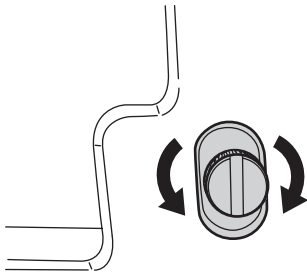
This procedure is the same for L1, L2, and L3.

1. Open the front cover of the multi-folding unit.
2. Remove the mounting screw.

If the mounting screw is attached to the adjusting screw hole, unfasten it.

3. Turn the adjusting screw to adjust the deviation.

- To increase the length at the bottom part of paper, turn the screw clockwise.
- To decrease the length at the bottom part of paper, turn the screw counterclockwise.



CEZ510

4. Attach the mounting screw to fasten the adjusting screw.

If the mounting screw is attached to the adjusting screw hole, fasten it.

5. Close the front cover of the multi-folding unit.

↓ Note

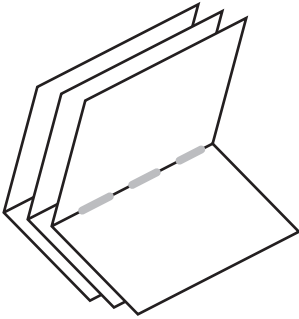
- For multi-sheet folding, folding deviations of the innermost sheet will be adjusted.

- If the deviation is large, the paper may be skewed. For further information, see page 75 "Paper Skew".

Folds soiled by multi-sheet folding

Cause:

If multi-sheet folding is performed after a large number of Z-folds have been performed, the tip of the blade used for the multi-sheet folding may be soiled, resulting in soiled paper.



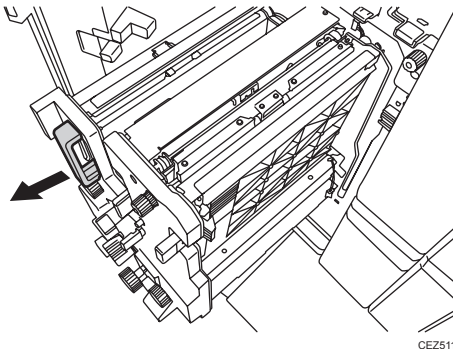
CEZ571

This will produce paper soil of 1-3 cm (0.4-1.2 inches) in width (equal to the width of the blade) in the fold in the center of paper.

Solution:

Clean the blade.

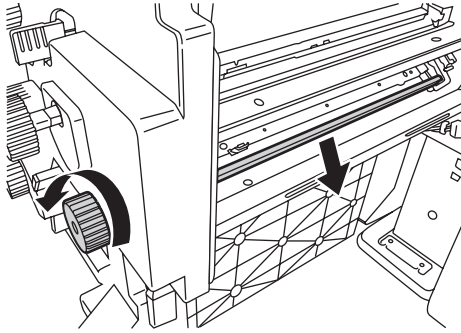
1. Open the front cover of the multi-folding unit.
2. Pull the multi-folding unit out.



CEZ511

3. Turn the N11 dial counterclockwise until the blade appears.

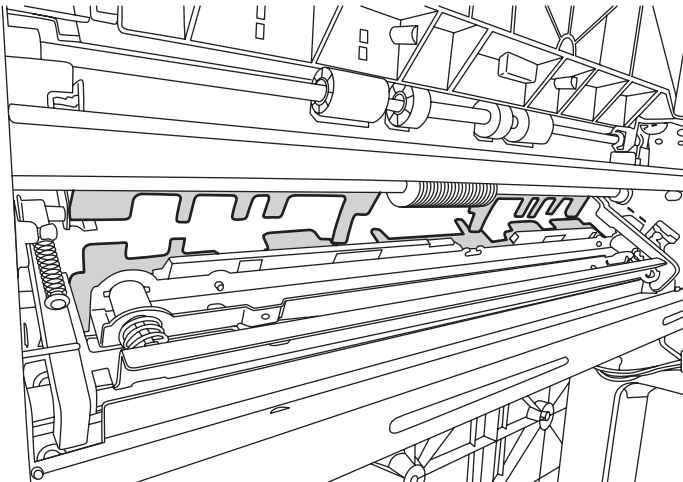
The blade is located in the right part of the multi-folding unit.



CEZ512

4. Wipe the tip and top of the blade with a soft dry cloth.

Be careful not to damage the blade.



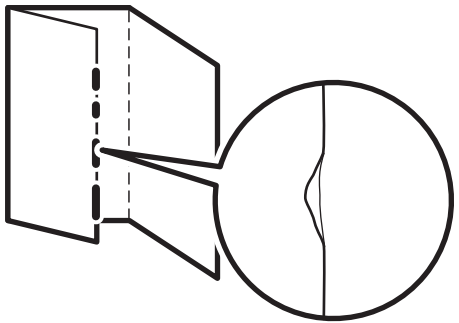
CEZ513

5. After cleaning, restore the machine so that it resumes operation.

Apply multi-sheet folding and print 3-5 copies. The paper soil will disappear.

Edges of letter fold bent

When letter folding is applied, the edge of the inner flap may become bent.



CEZ592

Solution:

The solution depends on whether letter folding is applied to multiple sheets or a single sheet.

5

<When letter folding is applied to multiple sheets>

1. Load the paper the other side up.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. In the [Finishing: Fold] group on the [Adjustment Settings for Skilled Operators] menu, set [Letter Fold-in Position 1 (Multi-sheet Fold)] to "0.0 mm".
4. In [General Features] in [System Settings], set [Letter Fold-in Position] for multiple sheets to "7 mm".
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

<When letter folding is applied to a single sheet>

Note

- This procedure is applied especially to coated paper.
 - To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings.
1. In [General Features] in [System Settings], set [Letter Fold-in Position] for a single sheet to "7 mm".
 2. In [Advanced Settings] for the custom paper in use, select [Letter Fold-in Posn 1: Single-sheet Fold].

3. Increase the value by 0.2 mm.
4. Print the image. Is the problem resolved?

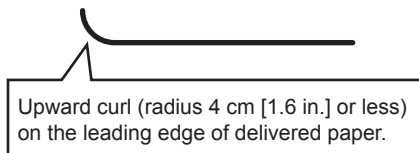
Yes	Finished!
No	Repeat Step 2 to 4. If the problem persists even though you have increased the value to 4 mm, contact your service representative.

Z-Folding is Not Performed Properly

Cause:

If a sheet is curled and its edge touches the guide board, proper folding may not be possible.


5



← Paper feed direction

DFP800

Solution:

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust  Curl: Weak].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Load the paper the other way up.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

Note

- This folding error will not occur if uncurled paper is used or sheets that curl downward.

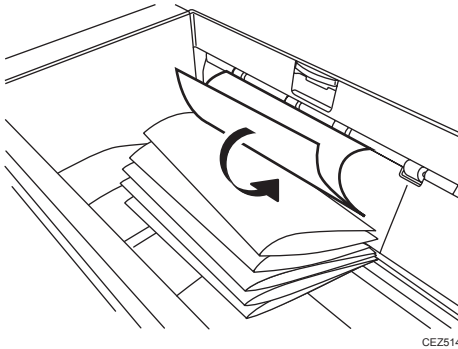
Folded Sheets Are Not Stacked Properly

Cause:

If a large number of half-folded multi-sheet is delivered, the edge of the sheets may bulge and some part of the edge will be swollen. If this happens, other sheets loaded on the bulged paper may turn over in the output tray.

This is likely to occur if:

- Thick, relatively stiff paper is used.

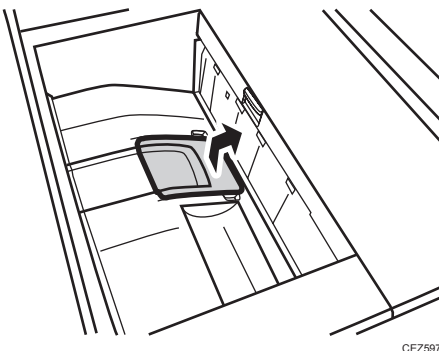


As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

Solution:

Use the Z-fold support tray for multi-folding unit.

This will reduce the angle of stacked bundles and prevent bundles flipping over as they are delivered.



For details about attaching the Z-fold support tray for multi-folding unit, see "About This Machine" supplied with the machine.

 **Note**

- Attaching the Z-fold support tray for the multi-folding unit cannot prevent folded paper such as letter- and gate-folded paper from being turned over when it is delivered to the output tray.

High Capacity Stacker

Delivered Sheets Are Severely Curled

Cause:

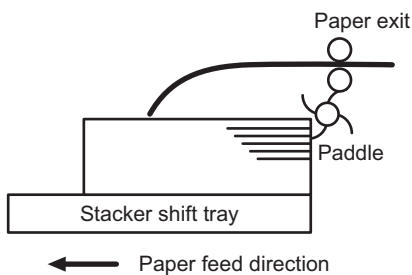
Sheets with downward curls cause strong friction on the leading edges. This may result in paper misfeeds. Sheets will not be ejected completely and the trailing edges will be left inside the paper exit. If this happens, other sheets may slip under the delivered sheets, so that the delivered sheets may be curled when loaded.

This may occur if:

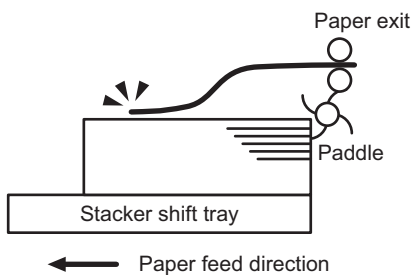
- A4 or larger coated paper weighing up to 135 g/m² (50 lb. Cover) is used.

<How the problem occurs>

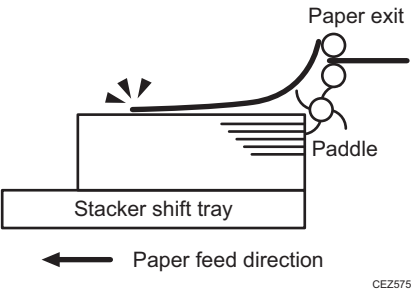
1. Downward curled paper is delivered to the stacker tray.



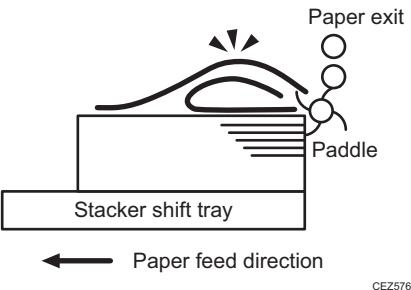
2. The leading edge of the sheet, while delivered, causes strong paper-to-paper friction against the top sheet of the stack. As there is no air gap between the sheets, and the delivered sheet becomes stuck.



3. The trailing edge of the sheet, while delivered, is left in the paper exit.



4. The next sheet to be delivered slips under the sheet still in the paper exit and bends back.



5

Solution:

Straighten out the sheet by decurling it upward.

- 1. Load the sheets the other way up.
- 2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

To follow the steps below, attach the decurler unit.

- 3. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust ^ Curl: Weak].
- 4. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

- 5. Set [Adjust Paper Curl] to [Adjust ^ Curl: Strong].

6. Print the image. Has the problem been resolved?

Yes	Finished!
No	Contact your service representative.

Delivered Sheets Are Not Aligned

Cause:

When sheets are delivered to the stacker tray, because of paper-to-paper friction, the paddle fails to pull the trailing edge back into the front guide, resulting in misalignment.

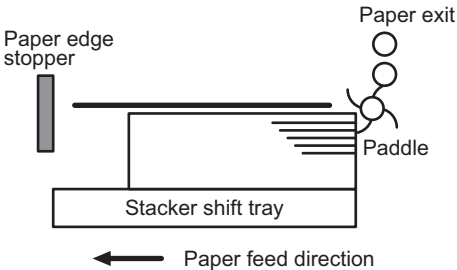
The paper edge stopper also fails to push back the protruding leading edge.

This may occur if:

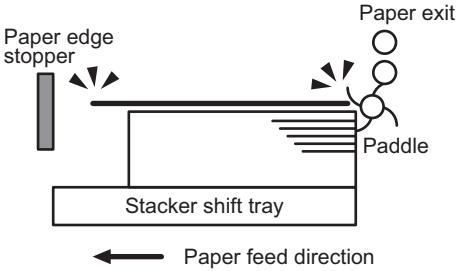
- Thick (280 g/m² [105 lb. Cover] or heavier), uncurled A3 or larger paper is used.

<How the problem occurs>

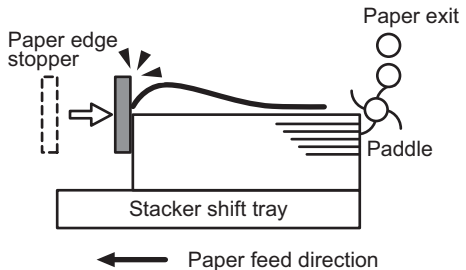
1. An uncurled sheet is delivered to the stacker shift tray.



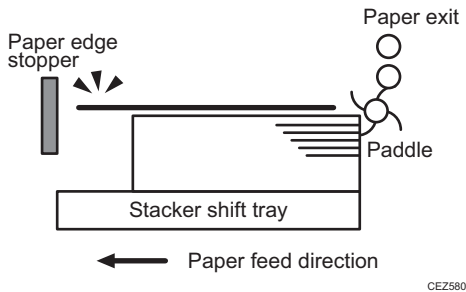
2. Strong friction occurs on the trailing edge so that the paddle cannot pull the sheet back and align the edges of the sheet with those of the stack.



3. The paper edge stopper fails to push back the protruding leading edge and align the sheet as required.



4. Stacked sheets are not aligned properly.



5

Solution:

Curl the sheet upward.

To do this, the decurler unit must be attached.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust \cap Curl: Weak].
2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

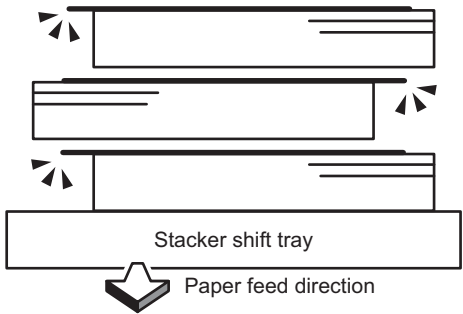
3. Set [Adjust Paper Curl] to [Adjust \cap Curl: Strong].
4. Print the image. Has the problem been resolved?

Yes	Finished!
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No	Contact your service representative.
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Note

- The top sheet of each offset bundle of delivered sheets may protrude above the rest of the bundle by about 7 mm.



CEZ605

5

The Machine Wrongly Detects That the Tray Is Full

Cause:

Depending on the paper size, the machine may detect that the shift tray has reached the maximum number of sheets that can be stacked on it.

This may occur if paper with a width of 191-261 mm (7.6 - 10.4 inches) is being used.

Solution:

< Paper with a width of 191–261 mm (7.6 - 10.4 inches) is being used >

1. Load the sheets the other way up.
2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

To follow the steps below, attach the decurler unit.

3. In the [Machine: Paper Feed/ Output] group of the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust[∩] Curl: Off].

4. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

5. Set [Adjust Paper Curl] to [Adjust[~]Curl: Weak].**6. Print the image. Has the problem been resolved?**

Yes	Finished!
No	Go to the next step.

7. Set [Adjust Paper Curl] to [Adjust[~]Curl: Strong].**8. Print the image. Has the problem been resolved?**

Yes	Finished!
No	Go to the next step.

5**9. Set [Adjust Paper Curl] to [Adjust[~]Curl: Weak].****10. Print the image. Has the problem been resolved?**

Yes	Finished!
No	Go to the next step.

11. Set [Adjust Paper Curl] to [Adjust[~]Curl: Strong].**12. Print the image. Has the problem been resolved?**

Yes	Finished!
No	Contact your service representative.

The Paper Press Leaves an Impression on the Paper

Cause:

The pressure applied by the paper press leaves an impression on the paper.

Solution:

Insert an extra sheet of paper between the paper press and the paper stack.

Paper Pressed Down Insufficiently

Cause:

The screws on the handle of the paper cart and the bolts at its bottom are loose.

Solution:

Tighten the screws on the handle and the bolts at the bottom of the paper cart.

6. Improving Throughput

Reducing the Waiting Time Prior to Printing

After receiving a print job, the machine usually stops to allow the fusing temperature to reach an appropriate level for printing. Conversely, when thinner sheets are used, the fusing unit needs longer to cool down to the specified temperature.

By decreasing the fusing temperature during standby, you can reduce the waiting time.

Increasing the value of [Adjust Fusing Temperature on Standby] may reduce the waiting time to start paper delivery after the machine is ready to print. However, with thin paper, it will increase the possibility of wrinkled paper or an uneven sheen on images.

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skill Operators] menu, change the temperature of [Adjust Fusing Temperature on Standby] as follows:

- When thinner sheets are used more frequently, decrease the temperature by 10 degrees.
- When thicker sheets are used more frequently, increase the temperature by 10 degrees.

Repeat this step for each of [Temperature on Standby Mode], [Temperature on Low Power Mode], and [Temperature Before Performing a Process].

Note

- Performing this step changes the amount of power the machine consumes.

Improving Throughput When Printing on Coated Paper with a Thickness Equivalent to Paper Weight 7 or Higher

When printing on coated paper with a thickness equivalent to Paper Weight 7 or higher, the machine's copy/print speed must be reduced to 80% of full speed (for A4 paper) so that the degree of toner fixation can be enhanced.

To have the machine print at full speed, follow the procedure below:

1. In [Advanced Settings] for the custom paper in use, increase the value in [Process Speed Setting] by one step.
 - If it is presently set to [Low], change it to [Middle].
 - If it is presently set to [Middle], change it to [High].
2. Set [Fusing Heat Roller Temperature Adj] to "185 degrees".
3. Print the image. Does it exhibit any fusing problem?

Yes	You cannot improve throughput under the present condition. Restore the previous setting.
No	You can operate the machine using this setting.

 **Note**

- When printing is performed in an indoor environment at a temperature below 15°C (59°F), the throughput may not be improved by this solution.
- Pro 8210S and Pro 8210 do not have the [Middle] setting.
- The process speed of Pro 8200EX cannot be changed in this option. It is fixed at 96 cpm.
- The following list shows the copy/print speed for each setting in [Process Speed Setting] when printing is performed on A4/LT size paper:
 - [High] (full speed)
 - 111 cpm (Pro 8210S)
 - 111 ppm (Pro 8210)
 - 136 cpm (Pro 8220S)
 - 136 ppm (Pro 8220)
 - [Middle]
 - 111 cpm (Pro 8220S)
 - 111 ppm (Pro 8220)
 - [Low]

96 cpm (Pro 8210S/8220S)

96 ppm (Pro 8210/8220)

Reducing the Waiting Time When Different Types of Paper are Used

When different types of paper are used, the machine switches between different sets of fusing temperature conditions for each paper type. This may result in a delay while the machine switches between different paper types, resulting in decreased productivity.

Depending on the paper types used and the image to be printed, it may be possible to reduce the waiting time when switching between different paper types by simplifying the temperature configuration. Note that this may cause glossy streaks or poor fusing. You can use this procedure if your priority is productivity.

Conditions that may cause delays

- 1. The paper types used vary significantly in terms of temperature settings.
- 2. The paper types used vary significantly in terms of width.
- 3. The job involves printing many copies of a small number of pages using different paper types.

The following procedure may reduce the waiting time that may be caused by condition 1 described above:

- 1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skill Operators] menu, configure [Productivity Priority Mode] to [Productivity Priority].
- 2. Print the image. Does it exhibit any fusing problem?

Yes	Go to next step.
No	Finished! The waiting time cannot be reduced. Change the setting back to the original value.

- 3. Is there any problem with the delivered paper?

Yes	Finished! The waiting time cannot be reduced. Change the setting back to the original value.
No	Go to next step.

If the sheets used are thin, they may be badly curled (including paper jams) or wrinkled.

- 4. Is there any problem with image quality?

Yes	Finished! The waiting time cannot be reduced. Change the setting back to the original value.
No	You can use this setting.

If the sheets used are thin, excessive gloss, glossy streaks, or blistering may result.

Reducing the Time the Machine Takes to Return from Standby Mode

If the machine is not operated for a certain period of time, the screen will go blank and the machine will enter standby mode. In standby mode, the machine consumes less power than it does in regular mode. However, it takes longer for the machine to return to a ready-to-print state from standby mode.

To reduce the time the machine takes to switch from standby mode, increase the fusing temperature for standby mode.

★ Important

- Performing this step increases the amount of power the machine consumes in standby mode.
1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skill Operators] menu, select [Adjust Fusing Temperature on Standby] and configure [Temperature on Standby Mode] as follows:
 - Pro 8220S / Pro 8220Y / Pro 8220HT: 120°C
 - Pro 8210S / Pro 8210Y / Pro 8210HT: 165°C
 - Pro 8200S: 160°C

