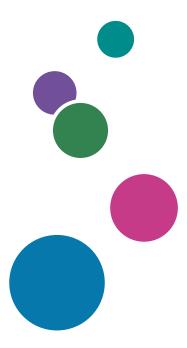
# **Operating Instructions**

# **Troubleshooting: TCRU/ORU**



# **TABLE OF CONTENTS**

Introduction	6
How to Read This Manual	7
Symbols	7
Disclaimer	7
Notes	7
1. Before You Begin	
About This Manual	9
Guide to Components	10
About the Display for Options	11
Before you change a setting	12
About Printing Surfaces	13
2. Troubleshooting Service Call Problems (SC Codes)	
What Are SC Codes?	15
If an SC code appears:	15
SC Code List	16
3. Troubleshooting Image Quality Problems	
Toner Spotting/Staining	17
Paper Is Spotted with Toner	
Black Spots	18
Streaks (1)	19
Streaks (2)	21
Streaks (3)	22
Streaks (4)	22
Two 13-mm Long Vertical Streaks	23
Two 14-mm Wide Streaks	25
Stained Paper Edges	27
Stained Background	27
Ghosting	28
Scratched Images and Stained Paper Edges	29
Toner Scatter	31
Toner Scatter (1)	31
Toner Scatter (2)	32
Toner Scatter (3)	34

Color Loss	37
White Spots	37
Blister-like White Spots	38
Mottling	39
Density Problems	42
Uneven Image Density	42
Uneven Density from Top to Bottom	45
Fainter Leading Edge	46
Fainter Trailing Edge	48
Uneven Density within 90 mm (3.5 in.) of the Trailing Edge	49
Periodic Density Fluctuation	51
Entire Image Faint	52
Color Is Too Dense	53
Broken Thin Lines	54
Blurred Images	55
Dropouts (Character Voids)	56
Afterimages	58
White Streaks	59
Shock jitter: When the paper is inserted	60
Gloss Problems	63
Vertical Glossy Lines	63
Insufficient Gloss	64
Fusing Problems	65
Insufficient Toner Fusing	65
Improving Image Quality When Using Different Types of Paper	66
4. Troubleshooting Paper Delivery Problems	
Frequent Paper Misfeeds	69
Wrapped Around the Upper Fixing Side Separation Plate	70
Messages Reporting Paper Misfeeds	73
If (J049) Appears	73
If (J050) Appears	75
If (J080) Appears	77
If (1082) Appears	78

If (J099/J424/J425/J439/J	440) Appears	80
If (J430/J431/J445/J446/J	460/J461) Appears	81
If (J085/J086/J087) Appears	s When Using Coated Paper	82
Paper Skew		83
Wrong Detection of Skew		84
Double Feeding		85
Wrong Detection of Double Feed	ling	88
Paper Misfeeding		89
Paper Feed Problems Affecting Im	nage Quality	93
The Image Is Positioned Incorre	ectly	93
Image Scaling Error on the Sid	le 1 of Paper	94
Image Scaling Error on the Sid	le 2 of Paper	95
Paper Edges Are Soiled (1)		96
Paper Edges Are Soiled (2)		96
Paper Edges Are Soiled (3)		98
Scratches, Streaks, or Vertical	Creases Appear on the Image	99
Decurling Results in Scratches,	Streaks, or Creases	100
The Leading/Trailing Edge Mo	argin Is Long	102
Curling		103
Ear-fold		104
Cleaning the Paper Feed Path		106
Cleaning Paper Trays 1-3		107
Cleaning the Paper Feed Path	for Paper Trays 1-3	108
Cleaning the Paper Feed Path	in the Drawer	110
Cleaning the Paper Feed Path	in the Wide LCT	122
Cleaning the Paper Feed Path	in the LCT	124
Cleaning the Paper Feed Path	in the Multi Bypass Tray	125
Cleaning the Paper Feed Rolle	rs and Paper Feed Belt in the Interposer	125
Cleaning the Rollers and Guide	e Boards in the Finisher	128
5. Post-Processing Option T	roubleshooting	
Finisher SR5090/Booklet Finishe	r SR5100	
	ked Properly	
Large Delivered Sheets Are No	ot Stacked Properly	136
	· ·	

Trailing edge of stapled sheets close to the paper exit	138
Sheets cannot be stapled properly	139
Finisher SR5110/Booklet Finisher SR5120	141
Delivered Sheets Are Not Stacked Properly	141
Large Delivered Sheets Are Not Stacked Properly	142
Trailing edge of stapled sheets close to the paper exit	144
Sheets cannot be stapled properly	146
The Edge Is Rolled	146
Carbonless Sheets Are Not Stacked In an Aligned Manner	148
Stitching missing, incorrect stitching position, ear-fold, or misaligned occurs	151
Paper is stained	151
Paper jam occurs on thin coated paper of Paper Weight 2 or less	152
Scratches on the edge of the stapled paper occur	153
Paper jam occurs while saddle stitching	153
Multi-Folding Unit	155
Inaccurate Folding (Folding Deviation)	155
Folding Deviation	156
Folds soiled by multi-sheet folding	161
Edges of letter fold bent	162
Z-Folding is Not Performed Properly	164
Folded Sheets Are Not Stacked Properly	165
High Capacity Stacker	167
Delivered Sheets Are Severely Curled	167
The Machine Wrongly Detects That the Tray Is Full	169
The Paper Press Leaves an Impression on the Paper	170
Paper Pressed Down Insufficiently	1 <i>7</i> 1
Paper of Paper Weight 1 does not align correctly	171
Interposer	173
Paper jam due to paper misfeeding or double feeding occurs	173
Vertical lines and scratches occur at random positions	175
6. Improving Throughput	
Reducing the Waiting Time Prior to Printing	177

Improving Throughput When Printing on Coated Paper with a Thickness Equivalent to Paper Weight	7 o
Higher	. 178
Reducing the Waiting Time When Different Types of Paper are Used	180
Reducing the Time the Machine Takes to Return from Standby Mode	182

# 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:



Indicates points to pay attention to when using functions. This symbol indicates points that may result in the product or service becoming unusable or result in the loss of data if the instructions are not obeyed. Be sure to read these explanations.



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

# Reference

Indicates where you can find further relevant information.

[]

Indicates the names of keys or buttons on the product or display.

## 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**

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.

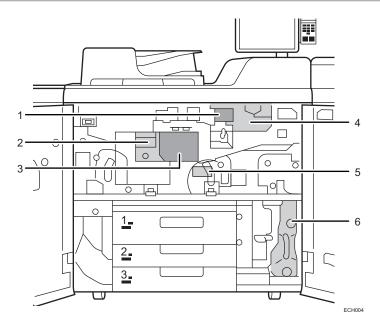
# **ACAUTION**

- 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**

# **MARNING**

- 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. Paper Transfer Unit
- 6. Waste Toner Bottle

#### 1

# **About the Display for Options**

This machine displays all of the adjustment items in the Adjustment Settings for 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.



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

# 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.

#### 1

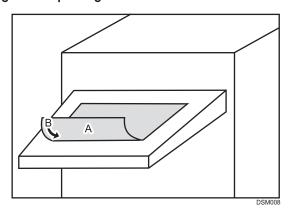
# **About Printing Surfaces**

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.

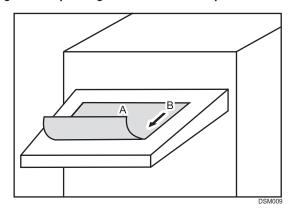
# Single-sided printing: Printed side face down



A. Side 1

B. Paper feed direction of Side 1

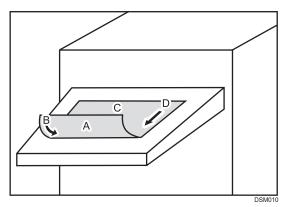
# Single-sided printing: Printed side face up



A. Side 1

B. Paper feed direction of Side 1

# **Duplex printing**



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

П

# 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.
- 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.
- If the SC code reappears, check it against the SC code table. For details, see page 16
  "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.



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

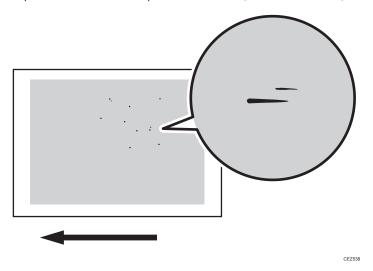
Code	Error	Procedure
332-01	Toner supply motor 1 error (left bottle)	Check that toner supply motor 1 operates properly.
332-05	Toner supply motor 2 error (right bottle)	Check that toner supply motor 2 operates properly.
336-01	Developer imperfect setting (K)	Check the developer.
410-01	Remaining potential: 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

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



#### Cause:

Toner fragments have slipped through the cleaning web, which cleans the pressure roller, and readhered 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



• 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", Preparation.

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. In [Advanced Settings] for the custom paper in use, select 1206: [Fusing Temperature], and then increase the temperature by 5 degrees in [Heat Roller Temp].
- 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 [Heat Roller Temp].
- 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. In [Advanced Settings] for the custom paper in use, select 1209: [Fusing Cleaning], and then set [Cleaning Interval] to 0.01.
- 7. Print the image. Is the problem resolved?

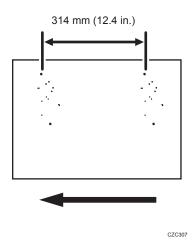
Yes	Finished!
No	No further improvement is likely. Contact your service representative.

**U** Note

• Decreasing the value in [Cleaning Interval] will shorten the replacement cycle of the cleaning web.

# **Black Spots**

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



## 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.

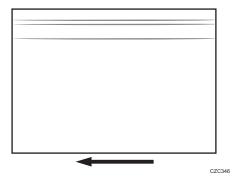
2. If the problem persists, contact your service representative.



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

# Streaks (1)

Streaks parallel to the paper feed direction appear.



#### Cause:

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

## Solution:

- 1. In the [Main Unit: Maintenance] group on the [Adjustment Settings for Operators] menu, select 0522: [Execute Charger Cleaning] and 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.

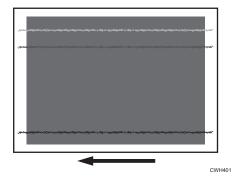




• For details about replacing the charge unit, cleaning unit for PCU and photoconductor unit, see Replacement Guide.

# Streaks (2)

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



#### 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:

Is the printed side affected by the problem?

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

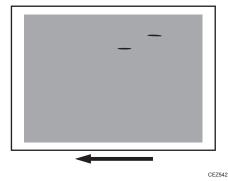
- 2. Replace the cleaning unit for intermediate transfer belt.
- 3. If the problem persists even though you have replaced the cleaning unit for intermediate transfer belt, contact your service representative.



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

# Streaks (3)

Streaks appear in solid-filled areas.



#### 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?

Yes	Finished!
No	Replace the toner bottle.

- 3. Print 350 full-page, solid-fill A3 or DLT sheets.
- 4. If the problem persists, contact your service representative.

# 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.

The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comía feliz cardillo y ki The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comía feliz cardillo y ki The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comía feliz cardillo y kiwi. The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comía feliz cardillo y kiwi.

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
- 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.

3

## Cause:

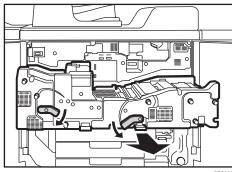
The invert exit drive rollers or invert exit idle rollers in the drawer are soiled.

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

#### Solution:

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

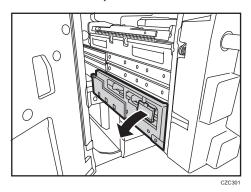
- 1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
- 2. Open the front covers.
- 3. Lower the levers C1 and C2, and then pull the drawer out completely until it stops.



CZC30

#### 3

## 4. Pull down and open the cover D4.



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

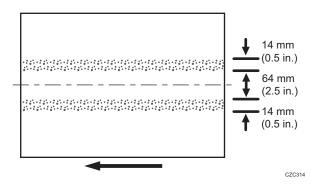
For details about cleaning the parts, see page 106 "Cleaning the Paper Feed Path".



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.

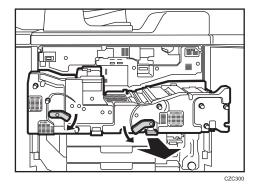


The exit drive rollers, exit idle rollers, exit relay drive rollers, or exit relay idle rollers in the drawer are soiled.

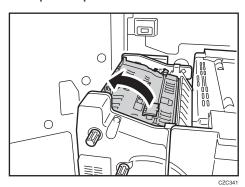
## Solution:

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.

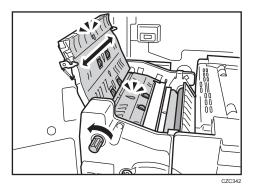


4. Pull up and open the cover D3.



5. Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.
For details about cleaning the parts, see page 106 "Cleaning the Paper Feed Path".





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

# Stained Paper Edges

## Solution:

 If the paper edges are stained, carry out the procedure in page 65 "Insufficient Toner Fusing".

# Stained Background

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

The background may be partially or completely stained.

## Completely stained background



# Partially stained background

The quick brown fox jumps over the lazy dog.

El veloz murciélago hindú comía feliz cardillo y kiwi.

Buvez de ce whisky que le patron juge fameux.

The quick brown fox jumps over the lazy dog.

El veloz murciélago hindú comía feliz cardillo y kiwi.

#### Cause:

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

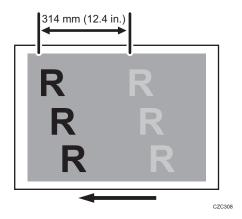
## Solution:

- 1. If a message prompting replacement of a unit has appeared, replace the unit.
- 2. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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

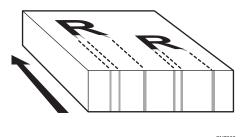
## Solution:

- 1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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.



#### 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.



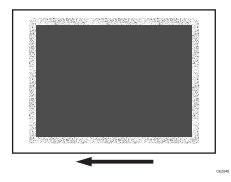
• When storing paper at low humidity, wrap the paper in coated paper or a plastic sheet.

#### 3

# **Toner Scatter**

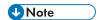
# Toner Scatter (1)

Toner is scattered around a solid-fill print.



#### Cause:

This may occur if printed at low temperature or humidity.



• 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", Preparation.

#### 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

 Adjust the setting for the side 1 of the paper. In [Advanced Settings] for the custom paper in use, select [Machine: Image Quality] and increase the absolute value of [Side 1] by 5% in 1203: [Paper Transfer Output].

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

## 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

 Adjust the setting for the side 2 of the paper. In [Advanced Settings] for the custom paper in use, select [Machine: Image Quality] and increase the absolute value of [Side 2] by 5% in 1203: [Paper Transfer Output].

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

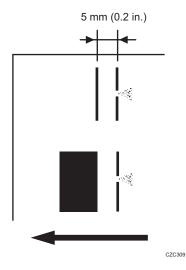
2. Print the image. Is the problem resolved?

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.



#### 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



• 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", Preparation.

#### 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. Select [Machine: Image Position] in [Advanced Settings] for the custom paper in use and specify the following for 1101: [Image Position].
  - On side 1 of the paper: Adjust to [+] direction with [With Feed] of [Image Position: Side 1].
  - On side 2 of the paper: Adjust to [-] direction with [With Feed] of [Image Position: Side 2].
- 2. Adjusting the mask width at the leading edge
  - Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, and then specify [Leading Edge] in 1210: [Erase Margin].
- 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

 Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1202: [Image Transfer Output]. 2. Check the present value. Is it the upper limit?

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

- 3. Increase the absolute value of the current by 5 µA in [Image Transfer Output].
- 4. Print the image. Is the problem resolved?

Yes	Finished!
	Increase the value by 5 µA. If the problem persists even though you have increased the value to the upper limit (150 µA), go to the next step.

5. Do you mind if image density is low?

Υe	S	Contact your service representative.	
N	5	Go to the next step.	

- 6. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1201: [Max Image Density].
- 7. Check the present value. Is it the lower limit?

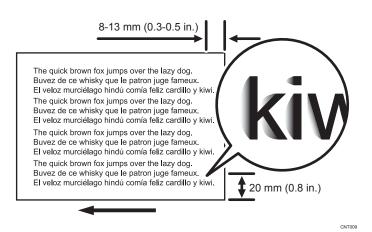
Yes	Contact your service representative.	
No	Decrease the value by 1 in [Max Image Density].	

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.



#### 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.



- 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", Preparation.
- Changing the transfer current may produce either or both of the following side effects:
  - Reduction in toner yields
  - Occurrence of banding (streaks)

#### Solution:

- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1202: [Image Transfer Output].
- 2. Check the present value. Is it lower than 100 PA?

	Yes	Carry out all of the following:		
(1) Increase the value by 5 PA in 1202: [Image Transfer Output].		(1) Increase the value by 5 PA in 1202: [Image Transfer Output].		
		(2) Set [Trailing Edge] of 1204: [Paper Transfer Output Correction: Paper Edge] to "200%".		
	(3) Set [Trailing Edge Length] of 1204: [Paper Transfer Output Correction: Paper Edg "30 mm".			
	No	No further improvement is likely. Contact your service representative.		

## 3. Print the image. Is the problem resolved?

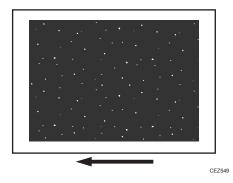
Yes	Finished!
No	Repeat Steps 1 to 3. If the problem persists even though you have increased the value to 100 PA, contact your service representative.

#### 3

## **Color Loss**

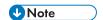
#### White Spots

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.



- 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", Preparation.
- 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

 Adjust the setting for the side 1 of the paper. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, decrease the absolute value of [Side 1] by 5 µA in 1203: [Paper Transfer Output].

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

#### 3

#### 2. Print the image. Is the problem resolved?

	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 PA.	

- 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. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, decrease the absolute value by 5 PA in 1202: [Image Transfer Output].

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

5. Print the image. Is the problem resolved?

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

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

 Adjust the setting for the side 2 of the paper. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, decrease the absolute value of [Side 2] by 5 µA in 1203: [Paper Transfer Output].

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

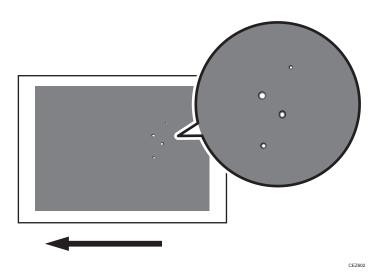
2. Print the image. Is the problem resolved?

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

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.



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 65 "Insufficient Toner Fusing".

## Mottling

Mottling occurs in solid-filled areas.

#### Normal

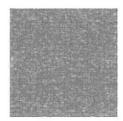






#### Mottled







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 the use rate of the replacement parts does not exceed 100%. To check this, select 0516: [Display Parts Life Counter] of the [Main Unit: Maintenance] group in [Adjustment Settings for Operators].

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

If the [Display Parts Life Counter] has exceeded 100%, replace the corresponding part.

For details about replacing the parts, see Replacement Guide.

- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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	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.

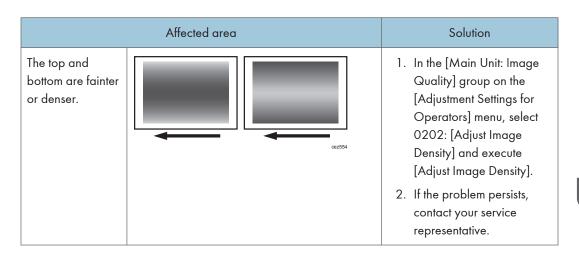
#### Solution:

The solution depends on the type of unevenness.

Carry out the appropriate procedure from those in the following table:

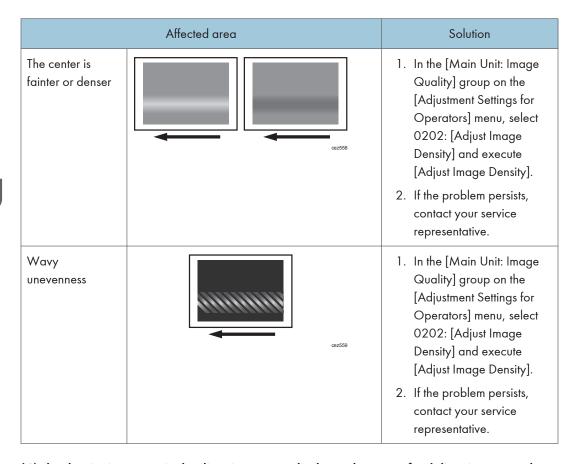
(A) The density is uneven across the entire image.

	Affected area	Solution
The density from top to bottom is uneven.	cez552	1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].  2. If the problem persists, see page 45 "Uneven
		Density from Top to Bottom".
The sides are fainter or denser.	cez553	1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
		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.	Cez555	1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].  2. If the problem persists, see page 46 "Fainter Leading Edge".
The trailing edge is fainter.	cez566	1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].  2. If the problem persists, see page 48 "Fainter Trailing Edge".

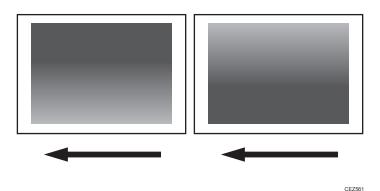


# (C) The density is uneven in the direction perpendicular to the paper feed direction at regular intervals.

	Affected area	Solution
Periodic vertical density fluctuation	CWH40	<ol> <li>In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].</li> <li>If the problem persists, see page 51 "Periodic Density Fluctuation".</li> </ol>

#### **Uneven Density from Top to Bottom**

The density is uneven from top to bottom.



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

#### Cause:

This may occur at high temperature or humidity.

#### Solution:

 In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0206: [Density Difference: Across Feed].

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.

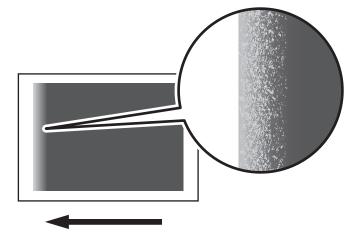
4. If unit replacement does not resolve the problem, contact your service representative.



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

## Fainter Leading Edge

The leading edge is fainter.



#### 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.



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.

CEZ562



• 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", Preparation.

#### 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

- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, and then record the set values of [Leading Edge] and [Leading Edge Length] in 1204: [Paper Transfer Output Correction: Paper Edge].
- 2. For [Leading Edge Length], 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 [Leading Edge], is the set value lower than 200?

Yes	Increase the set value by 10 percentage points.
No	Reset [Leading 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 [Leading Edge] to "200", reset it to the value noted in Step 1 and go to Step "(b) Decrease the current value".
- 7. For [Leading 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 [Leading 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

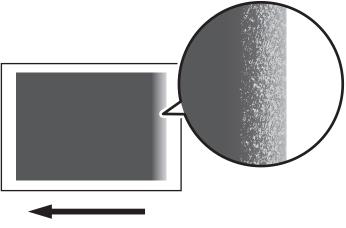
- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use and decrease [Leading Edge] of 1204: [Paper Transfer Output Correction: Paper Edge] by 10%.
- 2. Print the image. Is the problem resolved?

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  $160 \text{ g/m}^2$  (60 lb. Cover) or heavier at low temperature or humidity.



• 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", Preparation.

#### Solution:

- 1. Measure in millimeters how far the fainter area extends from the trailing edge.
- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1204: [Paper Transfer Output Correction: Paper Edge] and configure the following setting.
  - In [Trailing Edge Length], enter the value you measured in Step 1 plus an additional 10 mm.
- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use and record the set values of [Trailing Edge] in 1204: [Paper Transfer Output Correction: Paper 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.

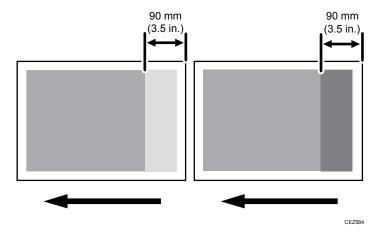
- 6. Repeat Step 5. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 3 and go to the next step.
- 7. Decrease the scaling factor in the above setting by 10 percentage points.
- 8. Print the image. Is the problem resolved?

Ye	es	Finished!
N	0	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.

## 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



• 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", Preparation.

#### 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>

 Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and check the set values of [Transfer Timing Roller] in 1351: [Motor Speed]. Is it the upper limit value?

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

- 2. Increase the value in [Transfer Timing Roller] 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>

 Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and check the set values of [Transfer Timing Roller] in 1351: [Motor Speed]. Is it the lower limit value?

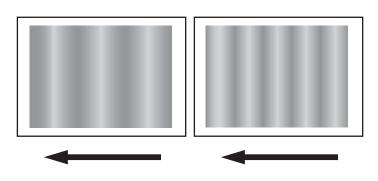
Yes	Contact your service representative.
No	Go to the next step.

- 2. Decrease the value in [Transfer Timing Roller] 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

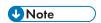
Before you perform the solution procedure, make sure that the environmental conditions where you are using the machine meet those recommended for use. For details on the environmental conditions for use, see "Where to Put Your Machine", Maintenance and Management.

The solution depends on the interval.



• 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", Preparation.

Interval	Solution
Approximately 12-18 mm (0.5-0.7 inches)	Contact your service representative.
Approximately 60 mm (2.4 inches)	Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and adjust the set value of [Transfer Timing Roller] in 1351: [Motor Speed] according to the paper type and thickness.  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.



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

## **Entire Image Faint**

The entire image is fainter than normal.

The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comiá feliz cardillo y kiwi. The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comiá feliz cardillo y kiwi. The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comiá feliz cardillo y kiwi. The quick brown fox jumps over the lazy dog. Buvez de ce whisky que le patron juge fameux. El veloz murciélago hindú comiá feliz cardillo y kiwi.

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:

- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 3. Increase the value by 1 in 0204: [Maximum Image Density].
- 4. Select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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.

Inte quick crown to, jumps over the tazy dog.

El veloz muralélago hindú comía feltz cardillo y ldwl.

The quick brown for jumps over the tazy dog.

Buvez de ce whielky que le patron juge fameux.

El veloz muralélago hindú comía feltz cardillo y ldwl.

The quick brown for jumps over the tazy dog.

Buvez de ce whielky que le patron juge fameux.

El veloz muralélago hindú comía feltz cardillo y ldwl.

The quick brown for jumps over the tazy dog.

Buvez de ce whielky que le patron juge fameux.

El veloz muralélago hindú comía feltz cardillo y ldwl.

El veloz muralélago hindú comía feltz cardillo y ldwl.

CEZ568

#### 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:

- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 2. Print the image. Is the problem resolved?

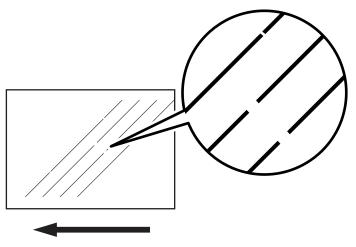
Yes	Finished!
No	Go to the next step.

- 3. Decrease the value by 1 in 0204: [Maximum Image Density].
- 4. Select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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 [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 2. Print the image. Is the problem resolved?

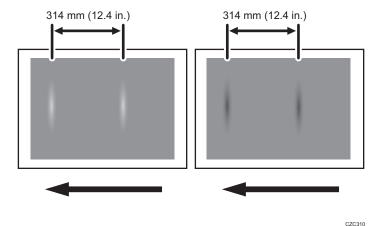
Yes	Finished!
No	Go to the next step.

- 3. Increase the value by 1 in 0205: [Line Width].
- 4. Select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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.



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.

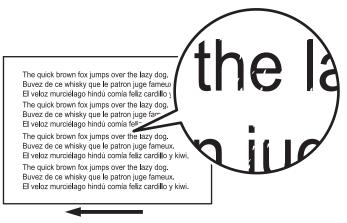
#### Solution:

- In the [Main Unit: Maintenance] group on the [Adjustment Settings for Operators] menu, select 0502: [Execute Photoconductor Refreshing] and 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.



CNT003

#### 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:

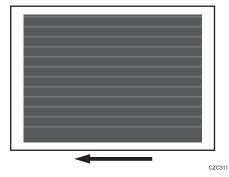
- 1. In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 3. Decrease the value by 1 in 0204: [Maximum Image Density].
- 4. Select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 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.

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



#### 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



• 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", Preparation.

#### Solution:

- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0202: [Adjust Image Density] and execute [Adjust Image Density].
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use and decrease the value of [Side 1] or [Side 2] in 1203: [Paper Transfer Output] by 10 PA.

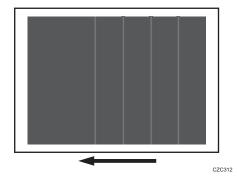
Example: -200 PA to -190 PA

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 PA, contact your service representative.

#### 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.



• 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", Preparation.

#### Solution:

 Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select [Trailing Edge Length in 1204: Paper Transfer Output Correction: Paper Edge].

#### 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 [Trailing Edge Length].
- 4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 5. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select [Trailing Edge in 1204: Paper Transfer Output Correction: Paper Edge].
- 6. Check the present value. Is it the lower limit?

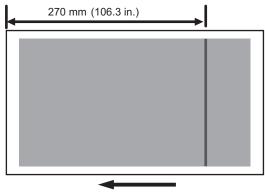
Yes	Reset the value back to the factory-default settings and perform steps from Step 1 again.
No	Decrease the value by 20% in [Trailing Edge].

#### 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.

## Shock jitter: When the paper is inserted

Horizontal black streaks occur at the position 270 mm from the leading edge of the paper due to the shock when the paper is inserted.



ECG078

#### Cause:

Horizontal black streaks might occur at the position 270 mm from the leading edge of the paper due to the shock when the paper is inserted being transmitted to the paper transfer part.

This may occur if:

- When printing on a paper with length longer than 270 mm
- Thick paper is used
- Printing a halftone image



• 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", Preparation.

#### Solution:

1. Can you change the paper length to 270 mm or less?

Yes	Go to the next step.
No	Go to Step 3.

2. Print a paper with length of 270 mm or less. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

- 3. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and check the set value of [Fusing Belt] in 1351: [Motor Speed].
- 4. Decrease the value by 0.1% in [Fusing Belt].
- 5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 4 to 6. If the problem persists even though you have lowered the setting value to -0.4%, go to step 7.

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and check the set value of [Process Speed Setting] in 1351: [Motor Speed].
- 7. Decrease the value of [Process Speed Setting]. Is it okay that productivity will be reduced?

Yes	Go to the next step.
-----	----------------------

- No Contact your service representative.
- 8. Decrease the value by one level in [Process Speed Setting].
- 9. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 8 to 10. If the problem persists even though you have decreased the value to [Low], contact your service representative.

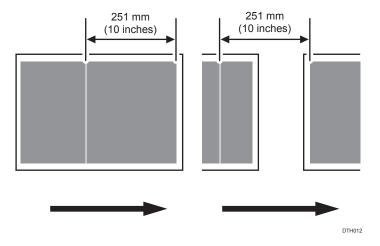
J

#### 3

## **Gloss Problems**

## Vertical Glossy Lines

Glossy lines perpendicular to the paper feed direction appear.



#### 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.

 Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1206: [Fusing Temperature] and decrease the value in [Heat Roller Temp] 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.

## 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 65 "Insufficient Toner Fusing".

#### 3

# **Fusing Problems**

## **Insufficient Toner Fusing**

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



- 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", Preparation.
- 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

- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1206: [Fusing Temperature] and increase the temperature in [Heat Roller Temp] 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

#### 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 8300S?

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 8320S, Pro 8310S, Pro 8320 and Pro 8310.

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 8320S/ Pro 8320>

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)

#### <Pre><Pre> 8310S/ Pre 8310>

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

Pro 8310S and Pro 8310 do not have the [Middle] setting.

- 1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select [Process Speed Setting] in 1351: [Motor Speed].
- 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.

#### Solution:

 In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0212: [Productivity Priority Mode], and then change the setting from [Normal] to [Productivity Priority].



- In [Normal] Productivity Priority Mode, 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 Mode is set to [Fusing 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", Preparation.

## 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", Preparation.

## 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", Preparation.

## 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", Preparation.

## 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", Preparation.

## 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 106 "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 106 "Cleaning the Paper Feed Path".

## Wrapped Around the Upper Fixing Side Separation Plate

A paper jam occurs because the margin at the leading edge of the paper is insufficient, and the paper stacks to the fixing side separation plate.

#### Cause:

This may occur if:

- Printing on thin paper
- Printing on coated paper
- · When the leading edge of the paper is a solid-fill image and the toner adhesion amount is large
- When the leading margin is insufficient

## **U** 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", Preparation.

### Solution:

1. Is it okay to extend the margin at the leading edge of the paper?

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

2. Is it okay not to print some part of the image on the leading edge of the paper?

Yes	Go to the next step.
No	Go to Step 6.

- 3. Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use and increase the value for [Leading Edge] in 1210: [Erase Margin] by 0.5 mm.
- 4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

5. Is the margin at the leading edge of the paper 10 mm or less?

Yes	Repeat Steps 3 to 5.
No	Replace the fusing unit. If the problem persists, contact your service representative.

6. Is it okay to change the image position?

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

- 7. Select [Machine: Image Position] in [Advanced Settings] for the custom paper in use and increase the value for [With Feed] of [Image Position: Side 1] in 1101: [Image Position] by 0.5 mm.
- 8. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

9. Is the margin at the leading edge of the paper 10 mm or less?

Vaa	Panagt Stans 7 to 0
162	kepedi Sieps / 10 7.

No Replace the fusing unit. If the problem persists, contact your service representative.

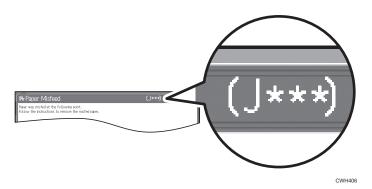


• For details about how to replace the fusing unit, see Replacement Guide.

# **Messages Reporting Paper Misfeeds**

Paper misfeeds are reported by messages and jam codes.

Resolve the problem according to the jam code.



# If (J049) Appears

#### Cause:

Paper is skewed.

### 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 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", Preparation.

# 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", Preparation.

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

If a paper size is A5 or smaller and paper thickness is 0, use the small tab end fence.



- For details about how to attach the small tab end fence, see "Loading Paper into the Two-tray Wide Large Capacity Tray", Preparation.
- Replace the small tab end fence 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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and make a note of the present value in [Paper Edge Detection].
- 2. Increase the value in [Paper Edge Detection].
- 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 [Paper Edge Detection].
- 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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and 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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and set [Skew Detection] to [Off].

### <If custom paper is not used>

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0304: [Skew Detection] to [Off].

# The skew detection level is too high.

The skew detection level may be too high.

Decrease the skew detection level.

- In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, increase the value in 0305: [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 [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, select 1341: [Jam Detection] and set [Skew Detection] to [Off].



- 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 84 "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", Preparation.

# 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", Preparation.

# 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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and make a note of the present value in [Paper Edge Detection].
- 2. Increase the value in [Paper Edge Detection].
- 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 [Paper Edge Detection].
- 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. Select [Machine: Image Position] in [Advanced Settings] for the custom paper in use, select 1101: [Image Position] and set [Deactivate Image Position Adjustment Across Feed] to [Deactivate Only Jam Detection].
- 7. Print the image. Is the problem resolved?

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

No Contact your service representative.



 When you set [Deactivate Image Position Adjustment Across Feed] 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>

Select [Machine: Image Position] in [Advanced Settings] for the custom paper being used, select 1101: [Image Position] and set [Deactivate Image Position Adjustment Across Feed] to [Deactivate Only Jam Detection].

<If not using custom paper>

Under [Adjustment Settings for Operators] menu, in the [Main Unit: Image Position] group, set 0105: [Deactivate Image Position Adjustment Across Feed] to [Deactivate] or [Deactivate Only Jam Detection].



Setting [Deactivate Image Position Adjustment Across Feed] 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:

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and set [Registration Jam Detection with Feed Direction] to [Off].
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

• When you set [Registration Jam Detection with Feed Direction] to [Off], the printed image may become misaligned at the leading edge.

# If (J082) Appears

### Cause:

This may occur if:

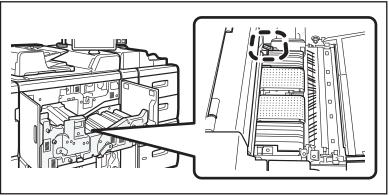
- When printing on a paper with rigidity of Paper Weight 5
- When printing on a paper with rigidity of Paper Weight 6 or more
- When printing on a paper with high smoothness such as coated paper
- When printing on a paper of B5 $\mathbb{D}$ , A4 $\mathbb{D}$ , or 8 $^{1}/_{2}$ ×11 $\mathbb{D}$

## Solution:

1. Is it possible to pull out the drawer unit inside the main unit and operate the lever of the paper transfer unit?

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

2. Open the front cover, then pull out the drawer unit.

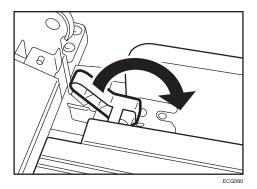


ECG079

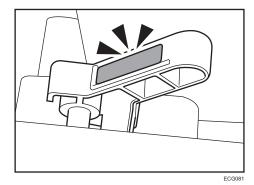
The lever is located in the recess of the drawer unit.

Λ

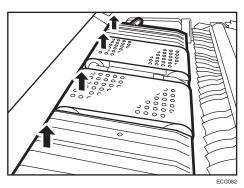
# 3. Lower the lever in the direction of the arrow.



4. Check that the indicator decal on the back of the lever is visible.



The height of the paper transfer unit is changed to allow the applicable types of paper to be fed.



5. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

To feed paper other than the target paper after printing, return the lever to its original position.
 When lever operation is performed when feeding paper other than the target paper, it may cause a paper jam in the post-processing device.

# If (J099/J424/J425/J439/J440) Appears

#### Cause:

Double feeding has occurred.



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", Preparation.

#### 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", Preparation.

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", Preparation.

The edges of the sheets are rough.

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

# Paper is loaded in two-tray wide LCT

- 1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and set [Prevent Double Feed (Weaker Blow)] for [Paper Feed Mode:Fan Level] in 1311: [2-Tray LCIT].
- 2. If the problem persists, set [Prevent Double Feed (Weakest Blow)] for [Paper Feed Mode:Fan Level] in 1311: [2-Tray LCIT].

<When using thin paper that is easy to blow with air such as recycled paper>

In addition to changing the setting of [Paper Feed Mode:Fan Level], perform the following procedure.

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use and set [Vacuum Fan Level] in 1311: [2-Tray LCIT] to 70%.
- 2. If the problem persists, lower [Vacuum Fan Level] by 10% at a time. If the problem still persists even though you have lowered the value to 50%, please contact your service representative.

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

This indicates a paper misfeed when using the two-tray wide LCT.

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:



• 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", Preparation.

### Solution:

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

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper you are using, select 1311: [2-Tray LCIT] and set [Paper Feed Mode:Fan Level] to [Prevent Non Feed (Stronger Blow)].
- 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:Fan Level] to [Prevent Non Feed (Strongest Blow)].

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



• When setting a paper of size B5\$\subseteq\$ to SRA4\$\subseteq\$ with Paper Weight 8, use the small tab end fence. For details about how to attach the small tab end fence, see "Loading Paper", Preparation.

# 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/ $m^2$ ) 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:

- 1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper being used, select 1351: [Motor Speed] and decrease the [Paper Feed Interval Setting].
- 2. Print the image. Has the problem been resolved?

Yes	Finished!
No	Contact your service representative.

# **U** 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", Preparation.

# 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 106 "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 [Main Unit: Image Position] group on the [Adjustment Settings for Operators] menu, change the value in 0103: [Registration Gate: Paper Buckle Amount].

### <If using paper of Paper Weight 5 to 7>

1. In the [Main Unit: Image Position] group on the [Adjustment Settings for Operators] menu, change the value in 0104: [Registration Gate: Paper Buckle Amount: Thick Paper].

## The skew detection level is too low.

Increase the skew detection level.

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, select 0305: [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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and set [Skew Detection] to [Off].

# <If custom paper is not used>

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0304: [Skew Detection] to [Off].



 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 106 "Cleaning the Paper Feed Path".

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

The two-tray wide LCT 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", Preparation.

# The paper is curled.

Double feeding may occur if the paper is curled.

### Type of curl

Face curl: The set paper is warped upward.

Back curl: The set paper is warped downward.

#### Measurement of curl

Load one sheet of paper on a flat surface, apply the scale to the leading edge of the paper, and measure the curl at the four edges. The maximum value is the curl value.

#### Curl standard

Acceptable curl amount varies depending on the basic weight of the paper.

Paper weight	Curl amount
Paper Weight 0 - 6	Face curl: 10 mm Back curl: 10 mm
Paper Weight 7	Face curl: 10 mm Back curl: 5 mm
Paper Weight 8	Face curl: 10 mm Back curl: 3 mm

Paper weight	Curl amount
Paper Weight 9	Face curl: 10 mm Back curl: 0 mm

### Correcting curl

- 1. Place the curled surface down on a flat surface.
- 2. Hold the end of the paper and straighten it in the opposite direction to the curl direction so that the paper is rounded.

# 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 does not have the Pickup Assist function.

### <If custom paper is used>

1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1321: [Main/3-Tray LCIT/Bypass] and set [Pickup Assist] to [Off].

### <If custom paper is not used>

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 03089: [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 may not be strong enough to separate the sheets. Increase the airflow.

### <If custom paper is used>

1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1301: [3-Tray LCIT] and increase the value in [Fan Level].

### <If custom paper is not used>

- 1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, increase the value in 0306: [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 "Preparation" supplied with the machine.

# Two-tray wide LCT is used.

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

Increase the airflow.

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper you are using, select 1311: [2-Tray LCIT] and set [Paper Feed Mode:Fan Level] to [Prevent Double Feed (Weaker Blow)].
- 2. If the problem persists, set [Paper Feed Mode:Fan Level] to [Prevent Double Feed (Weakest Blow)].
- 3. If the problem persists, select 1311: [2-Tray LCIT] and increase the value in [Blower Fan Level] by 10%.
- 4. If the problem persists, increase the value an additional 10% in [Blower Fan Level].

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", Preparation.

# 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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1341: [Jam Detection] and set [Double Feed Detection] to [Off].

# <If custom paper is not used>

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0301: [Double Feed Detection] to [Off].



- 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", Preparation.

# 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", Preparation.

# The paper is curled.

Double feeding may occur if the paper is curled.

### Type of curl

Face curl: The set paper is warped upward.

Back curl: The set paper is warped downward.

#### Measurement of curl

Load one sheet of paper on a flat surface, apply the scale to the leading edge of the paper, and measure the curl at the four edges. The maximum value is the curl value.

### **Curl standard**

Acceptable curl amount varies depending on the basic weight of the paper.

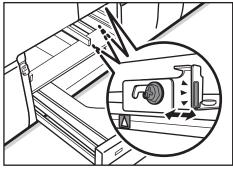
Paper weight	Curl amount
Paper Weight 0 - 6	Face curl: 10 mm Back curl: 10 mm
Paper Weight 7	Face curl: 10 mm Back curl: 5 mm
Paper Weight 8	Face curl: 10 mm Back curl: 3 mm

# Correcting curl

- 1. Place the curled surface down on a flat surface.
- 2. Hold the end of the paper and straighten it in the opposite direction to the curl direction so that the paper is rounded.

# 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.



DTH01







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.



• 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 may not be strong enough to separate the sheets. Increase the airflow.

### <If custom paper is used>

1. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1301: [3-Tray LCIT] and increase the value in [Fan Level].

#### <If custom paper is not used>

- 1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, increase the value in 0306: [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 "Preparation" 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.

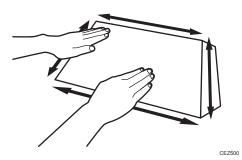
By cleaning the paper feed roller, the frictional force can be restored so that paper misfeeding will not occur.

For details about cleaning the paper feed roller of the wide LCT, see page 106 "Cleaning the Paper Feed Path". Two-tray wide LCT 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 fan disabled?
   Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1301: [3-Tray LCIT] and set [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.



# Two-tray wide LCT is used.

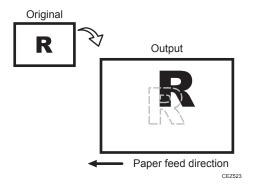
The factory-set airflow of the wide LCT may not be strong enough to separate the sheets.

Increase the airflow.

For details, see page 81 "If (J430/J431/J445/J446/J460/J461) Appears".

# Paper Feed Problems Affecting Image Quality

# The Image Is Positioned Incorrectly



#### Cause:

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

#### Solution:

Adjust the image position.

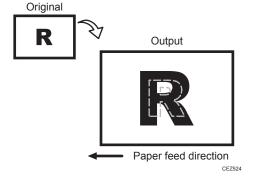
- When using a custom paper, select [Machine: Image Position] in [Advanced Settings] for the
  custom paper in use and specify the following for 1101: [Image Position] to adjust the image
  position.
  - [Across Feed] of [Image Position: Side 1]
  - [With Feed] of [Image Position: Side 1]
  - [Across Feed] of [Image Position: Side 2]
  - [With Feed] of [Image Position: Side 2]
- If you are not using a custom paper, specify the following for [Main Unit: Image Position] group in [Adjustment Settings for Operators] group to adjust the image position.
  - 0101: [Image Position: With Feed]
  - 0102: [Image Position: Across Feed]

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



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

# 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.

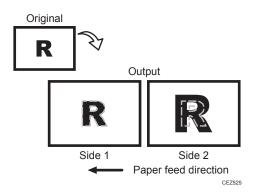
- Select [Machine: Image Position] in [Advanced Settings] for the custom paper in use and adjust the following for 1101: [Image Position].
  - To adjust the horizontal scaling
     [With Feed] of [Image Magnification: Side 1]
  - To adjust the vertical scaling
     [Across Feed] of [Image Magnification: Side 1]

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



#### 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.

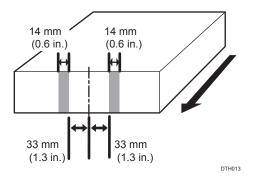
- Select [Machine: Image Position] in [Advanced Settings] for the custom paper in use and adjust the following for 1101: [Image Position].
  - To adjust the horizontal scaling
     [With Feed] of [Image Magnification: Side 2]
  - To adjust the vertical scaling
     [Across Feed] of [Image Magnification: Side 2]

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

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

# Paper Edges Are Soiled (1)



#### Cause:

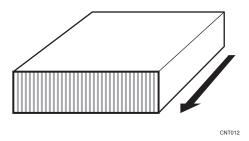
The exit rollers in the drawer are soiled.

### Solution:

Clean the exit rollers in the drawer.

For details about cleaning the exit rollers, see page 25 "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 SR5090/Booklet Finisher SR5100 are soiled.

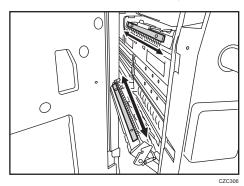
### Solution:

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

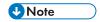
# Procedure 1: Cleaning the antistatic brushes in the exit transport and inverter transport of the drawer

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

Antistatic brushes in the exit transport and inverter transport



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



- 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.
- In the [Main Unit: Paper Feed/Output] group of [Adjustment Settings for Operators], select 0310: [Correct Output Paper Curl] and check the current correction level (Off, Small, or Large).
- 2. Is the current correction level "Correction Level: Small" or "Correction Level: Large"?

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

3. Is it necessary to set the current correction level?

Yes	Go to the next step.			
No	Set [Correct Output Paper Curl] to "Correction Level: Off" (set it back to the default value).			

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

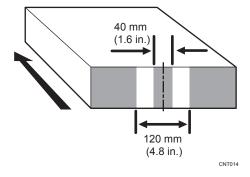
# 5. Is this setting essential?

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.	

# Paper Edges Are Soiled (3)



### Cause:

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



- 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", Preparation.
- 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.

- In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, check the present degree of decurling (Off, Small, or Large) in 0310: [Correct Output Paper Curl].
- 2. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Correction Level: Off", reduce the value in [Decurler: Correction Off] by 0.5%.
  - If the degree of decurling is set to "Correction Level: Small", reduce the value in [Decurler: Correction Weak] by 0.5%.
  - If the degree of decurling is set to "Correction Level: Large", reduce the value in [Decurler: Correction Strong] 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.



• 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", Preparation.

#### Solution:

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

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

 Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and 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 [Paper Output] by 0.1%.

For duplex printing

Reduce the value in [Switchback: Entrance Roller] by 0.1%.

For one-sided printing (delivery of inverted paper)
 Reduce the value in [Switchback: Exit Roller] by 0.1%.

2. Print the image. Is the problem resolved?

Ye	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. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and 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 [Paper Output] by 0.1%.
- For duplex printing, increase the value in [Switchback: Entrance Roller] by 0.1%.
- For one-sided printing (delivery of inverted paper), increase the value in [Switchback: Exit Roller] 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.





• 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", Preparation.

#### 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.

- In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators]
  menu, check the present degree of decurling (Off, Small, or Large) in 0310: [Correct Output
  Paper Curl].
- 2. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Correction Level: Off", reduce the value in [Decurler: Correction Off] by 0.5%.
  - If the degree of decurling is set to "Correction Level: Small", reduce the value in [Decurler: Correction Weak] by 0.5%.
  - If the degree of decurling is set to "Correction Level: Large", reduce the value in [Decurler: Correction Strong] 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.			

#### <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.

- In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators]
  menu, check the present degree of decurling (Off, Small, or Large) in 0310: [Correct Output
  Paper Curl].
- 2. Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Correction Level: Off", increase the value in [Decurler: Correction Off] by 0.5%.
  - If the degree of decurling is set to "Correction Level: Small", increase the value in [Decurler: Correction Weak] by 0.5%.

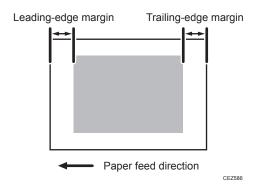
3.	Print the	image.	Is the	problem	resolved?

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.



**U** 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", Preparation.

### Solution:

Adjust the leading/trailing edge margins.

- Select [Machine: Image Quality] n [Advanced Settings] for the custom paper in use, select 1210: [Erase Margin] and reduce the value by 0.5 mm in [Leading Edge].
- 2. Reduce the value by 0.5 mm in [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.



- 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



• 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", Preparation.

#### Solution:

- Select [Machine: Image Quality] in [Advanced Settings] for the custom paper in use, select 1206: [Fusing Temperature] and reduce the value in [Heat Roller Temp] by 5 degrees.
- 2. Print a full-page solid-fill image. Is the problem resolved?

•	es	Finished!
ı	<b>V</b> o	Further reduce the value by 5 degrees until the problem is resolved.
		If the problem persists, contact your service representative.



• To use the decurler unit, specify0310: [Correct Output Paper Curl] in the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu.

## Ear-fold

When using the decurler unit, the corner of the paper is folded.

#### Cause:

If paper U curls during  $\Pi$  curl correction, the paper may be in contact with the roller inside the decurler unit.

### Solution:

(a) Check the paper

1. Is the corner of the paper completely folded?

Yes	See page 100 "Decurling Results in Scratches, Streaks, or Creases".
No	Go to the next step.

2. Is the corner of the paper folded upward?

Yes	Proceed to "(b) Correcting U curl".
No	Proceed to "(c) Correcting Π curl".

## (b) Correcting U curl

- In the [Main Unit: Paper Feed/ Output] group of [Adjustment Settings for Operators], set [U Curl Correction Level: Off] for 0310: [Correct Output Paper Curl].
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 3. Set [U Curl Correction Level: Small] for 0310: [Correct Output Paper Curl].
- 4. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

5. Set [U Curl Correction Level: Large] for 0310: [Correct Output Paper Curl].

## 6. Print the image. Is the problem resolved?

Yes	Finished!
No	Perform the operation in page 103 "Curling".

# (c) Correcting Π curl

- 1. In the [Main Unit: Paper Feed/ Output] group of [Adjustment Settings for Operators], set [

  [

  [

  [

  Curl Correction Level: Small] for 0310: [Correct Output Paper Curl].
- 2. Print the image. Is the problem resolved?

Yes	Finished!	
No	Go to the next step.	

- 3. Set [ $\Pi$  Curl Correction Level: Large] for 0310: [Correct Output Paper Curl].
- 4. Print the image. Is the problem resolved?

Yes	Finished!
No	Perform the operation in page 103 "Curling".

# Cleaning the Paper Feed Path

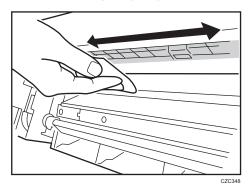
Paper dust sticking to the paper transfer guide board, roller, paper feed roller, or sensor may cause white spots, paper jam, or double feeding. Clean the paper feed path from the paper tray to the paper exit in the drawer.



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

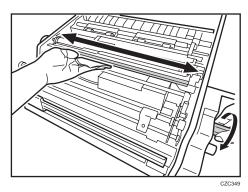
### **Guide Board**

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.



# Roller

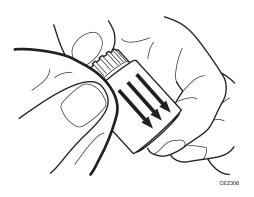
Wipe the roller with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



## **Paper Feed Roller**

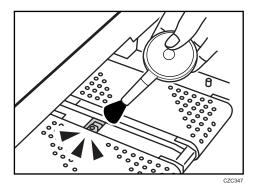
Wipe the entire surface of the paper feed roller lengthwise with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.





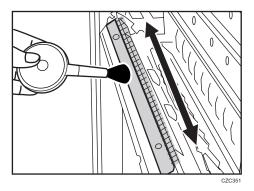
### Sensor

Remove dust with a blower brush.



## **Antistatic Brush**

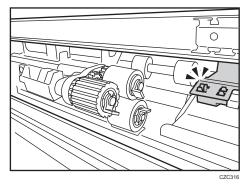
Remove dust with a blower brush.



## Cleaning Paper Trays 1-3

1. Remove the paper tray.

### 2. Clean the sensor.

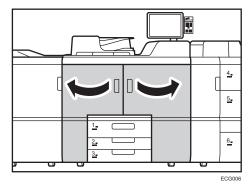


**U** Note

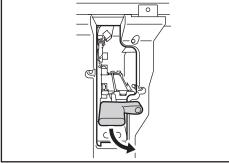
• For details about detaching and reattaching the parts, see Replacement Guide.

# Cleaning the Paper Feed Path for Paper Trays 1-3

## 1. Open the front covers.

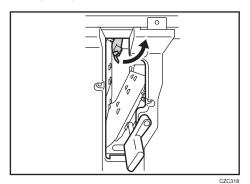


## 2. Pull down the lever A1.

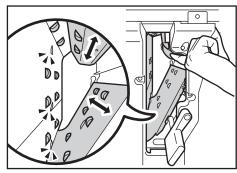


CZC317

## 3. Pull up the plate.

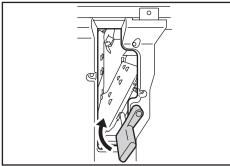


4. Clean the rollers, sensors, and guide boards.



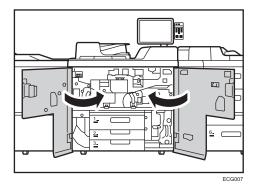
CZC319

- 5. Pull down the plate.
- 6. Pull up the lever A1.



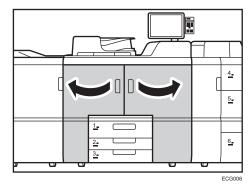
CZC320

### 7. Close the front covers.

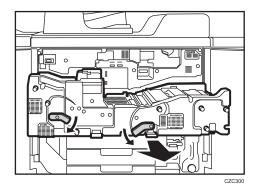


# Cleaning the Paper Feed Path in the Drawer

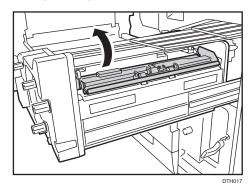
## 1. Open the front covers.



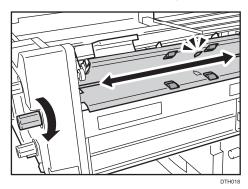
## 2. Pull down the levers C1 and C2, and then pull the drawer out completely until it stops.



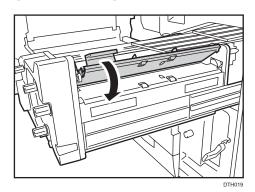
## 3. Pull up and open the cover B6.



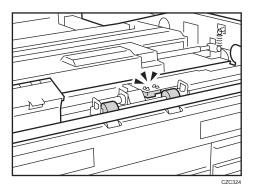
4. Clean the rollers while turning the knob B2. Clean the sensors and guide boards also.



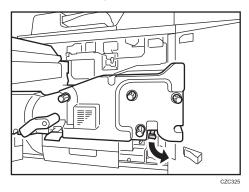
## 5. Close the cover B6.



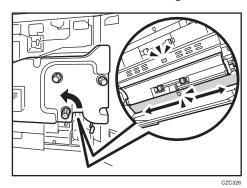
## 6. Clean the rollers and sensors.



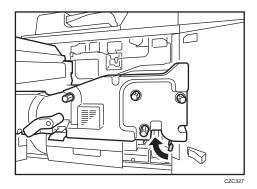
## 7. Pull down and open the cover B3.



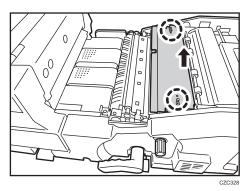
## 8. Clean the rollers while turning the knob B1. Clean the sensors and guide boards also.



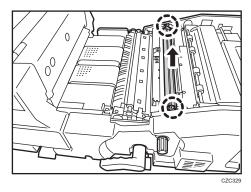
### 9. Close the cover B3.



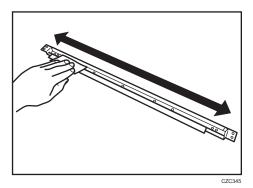
10. Remove the 2 screws, and then remove the cover.



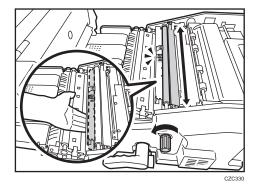
11. Remove the 2 screws, and then remove the dust catcher.



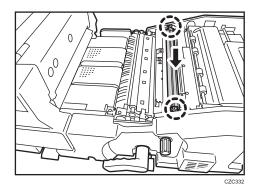
### 12. Clean the dust catcher.



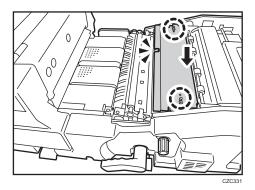
13. Clean the roller while turning the knob B5. Clean the sensor, guide board, and roller in the paper transfer unit also.



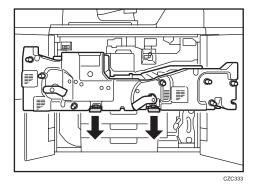
14. Attach the dust catcher, and then secure it with the 2 screws.



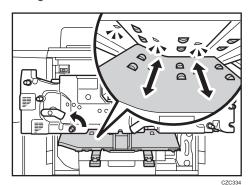
15. Attach the cover, aligning the notch on the cover with the claw, and then secure it with the 2 screws.



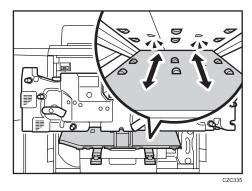
16. Pull down the levers Z2 and Z3.



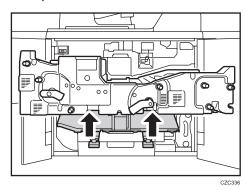
17. Clean the left-hand side rollers while turning the knob Z1. Clean the left-hand side sensors and guide boards also.



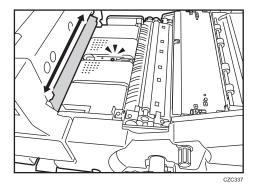
18. Clean the right-hand side rollers, sensors, and guide boards.



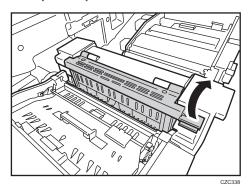
19. Pull up the levers Z2 and Z3.



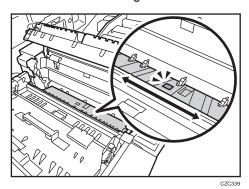
20. Clean the sensor and guide board on the entrance of the fusing unit.



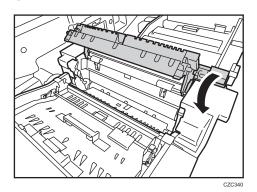
## 21. Pull up and open the cover D2.



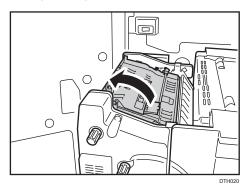
## 22. Clean the sensor and guide board.



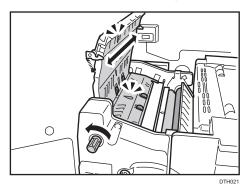
## 23. Close the cover D2.



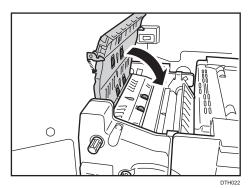
## 24. Pull up and open the cover D3.



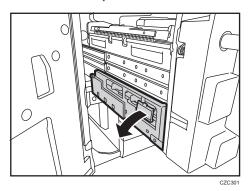
## 25. Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.



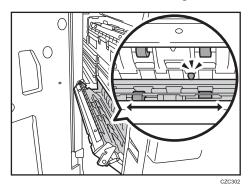
## 26. Close the cover D3.



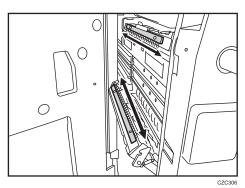
## 27. Pull down and open the cover D4.



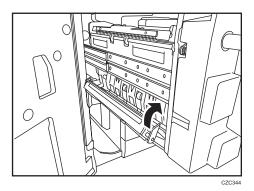
## 28. Clean the rollers, sensor, and guide boards.



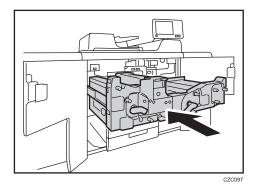
## 29. Clean the antistatic brushes.



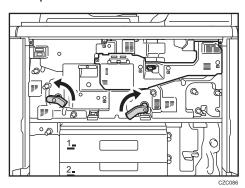
## 30. Close the cover D4.



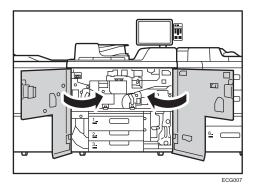
## 31. Push the drawer back into the machine.



## 32. Pull up the levers C1 and C2.



### 33. Close the front covers.



### 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.

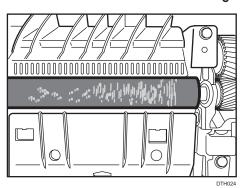
Clean the paper transfer roller until there is no visible dirt or dust on the roller.

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

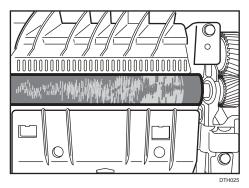
If there is a significant amount of dirt and dust on the paper transfer roller, the paper transfer unit needs to be replaced.

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

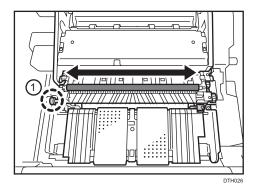
### Paper transfer unit still usable after cleaning



### Paper transfer unit needs replacing



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.

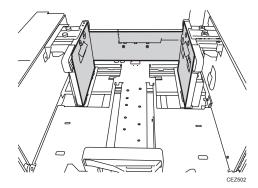


Clean the roller until there is no visible dirt or dust on the entire circumference of the paper transfer roller.

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

## Cleaning the Paper Feed Path in the Wide LCT

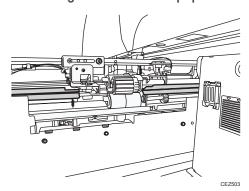
1. Clean the side fences and front guide.



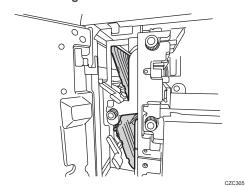
## 2. Clean the paper feed rollers.

Two-tray wide LCT does not have paper feed rollers.

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



4. Clean the guide board interior.



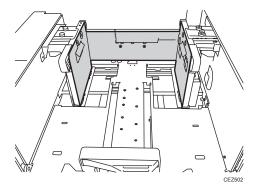
5. After cleaning, restore the machine so that it resumes operation.



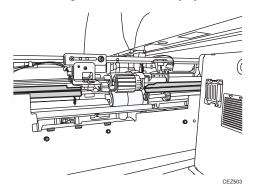
• For details about detaching and reattaching the parts, see Replacement Guide.

## Cleaning the Paper Feed Path in the LCT

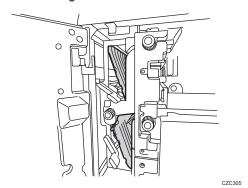
1. Clean the side fences and front guide.



- 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.

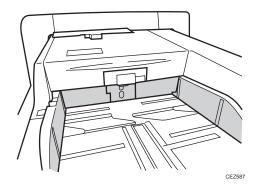
**U** Note

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

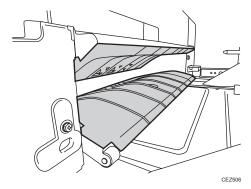
Λ

## Cleaning the Paper Feed Path in the Multi Bypass Tray

1. Clean the side fences and front guide.



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



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



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

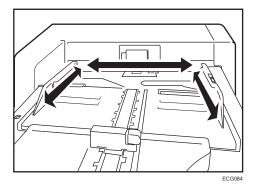
## Cleaning the Paper Feed Rollers and Paper Feed Belt in the Interposer

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

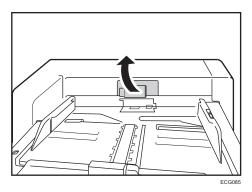
The procedure is explained using the interposer upper tray. The procedure is the same for the lower tray.

1. Remove the loaded paper.

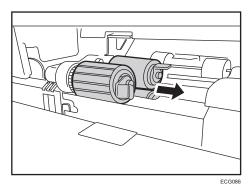
## 2. Clean the side fences and front guide.



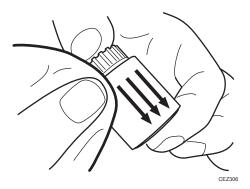
## 3. Open the cover of the paper feed rollers.



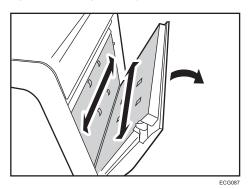
## 4. Remove the paper feed rollers.



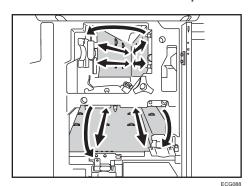
## 5. Clean the paper feed rollers.

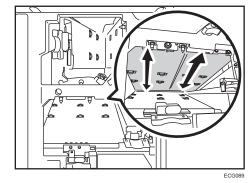


6. Open the interposer right cover and clean the guide board.



## 7. Clean the inside of the interposer.

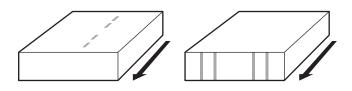




1. After cleaning, restore the machine so that it resumes operation.

## 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.



DVX003

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.

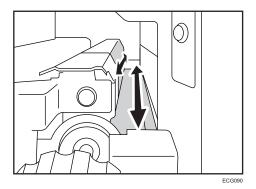
### **Guide Board**

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.

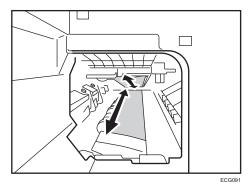
### Finisher SR5090 / Booklet Finisher SR5100

1. Open the finisher front cover.

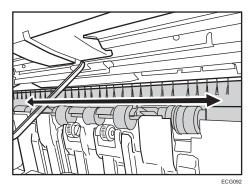
2. Open the guide board (Rb1) and clean the guide board.

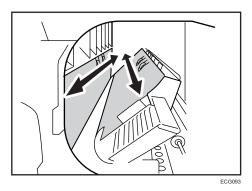


3. Open the guide board (Rb4) and clean the rollers and guide board.

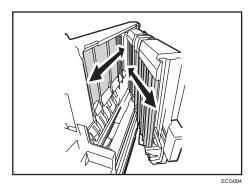


4. Lower the finisher shift tray and clean the guide board through the paper exit of the finisher shift tray.

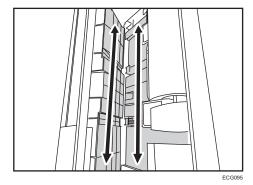




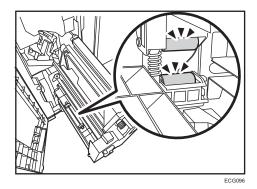
- 6. When using Booklet Finisher SR5100, pull the booklet staple unit.
- 7. Open the guide board (R8) and clean the guide board.



8. Open the lower guide board of the booklet staple unit and clean the guide board.



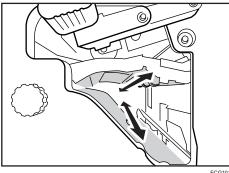
9. Clean the horizontal folding rollers.



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

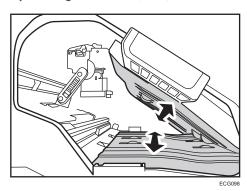
## Finisher SR5110 / Booklet Finisher SR5120

- 1. Open the finisher front cover.
- 2. Open the guide board (Rb1) and clean the rollers and guide board.

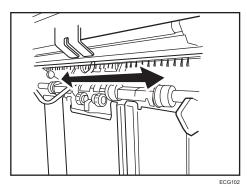


3. Open the guide board (Rb3) and clean the rollers and guide board.

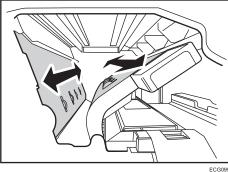




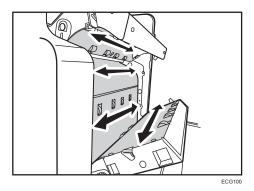
5. Lower the finisher shift tray 2 and clean the guide board through the paper exit of the finisher shift tray 2.



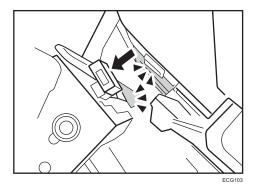
6. Open the guide board (Rb4) and clean the rollers and guide board.



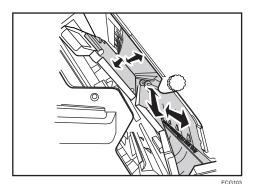
7. Open the finisher shift tray 1 cover and clean the rollers and guide board.

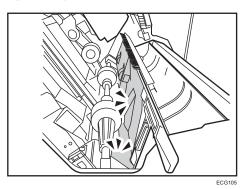


8. Open the guide board on the upper left of the guide board (Rb6) and clean the rollers and guide board.

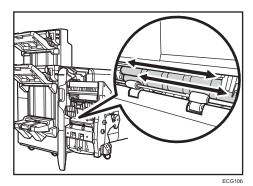


9. Open the guide board (Rb6) and the guide board (Rb7), and clean the rollers and guide board.





- 11. When using Booklet Finisher SR5120, pull the booklet staple unit.
- 12. Clean the rollers while turning the Rb11 knob.



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

# 5. Post-Processing Option Troubleshooting

# Finisher SR5090/Booklet Finisher SR5100

## **Delivered Sheets Are Not Stacked Properly**

### Solution:

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

Coated paper is being used.

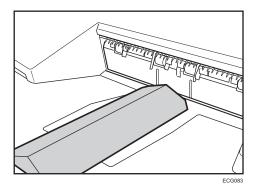
### <If the decurler unit is used>

In the [Main Unit: Paper Feed/Output] group of [Adjustment Settings for Operators], select 0310: [Correct Output Paper Curl] to correct  $\Pi$  curl.

Set the correction level to either "Correction Level: Small" or "Correction Level: Large" according to the paper type.

### <If the decurler unit is not used>

When using coated paper, attach the support tray to the finisher upper tray.



### 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 [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, select 0310: [Correct Output Paper Curl] and adjust the degree of decurling.

To correct curls facing up, specify "U Curl Correction Level".

To correct curls facing down, specify "IT Curl Correction Level".

Select "Large" or "Small" 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.

## Large Delivered Sheets Are Not Stacked Properly

### Cause:

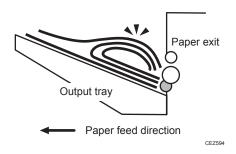
When using large-size or coated and paper-to-paper friction is very high, a sheet may push against another or paper deflection may occur.

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.

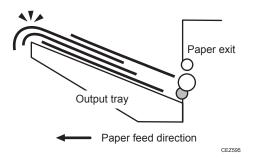
### Sheet bending

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



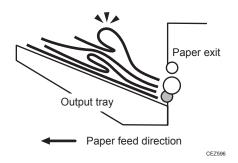
### One sheet pushing out another

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



### Paper deflection

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



### 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>

 In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "U Curl Correction Level".

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

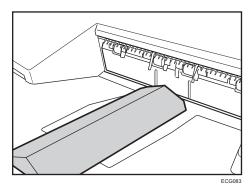
### <If the decurler unit is not used>

1. Load the sheets the other way up.

### Paper of Paper Weight 0 is being used.

If limp paper such as thin paper is being used, set the finisher upper tray to the paper output tray.

If paper is not loaded correctly even if the finisher upper tray is being used, attach the support tray.



## <One sheet pushing out another or sheets becoming crimped>

### Sheets are curled downward.

### <If the decurler unit is used>

 In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "Π Curl Correction Level".

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

· Attach the output jogger.

### <If the decurler unit is not used>

- Set the reverse side of the paper.
- Attach the output jogger.

## Trailing edge of stapled sheets close to the paper exit

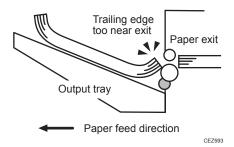
#### Cause:

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.



### Solution:

1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "U Curl Correction Level".

Select "Large" or "Small" to control the level of decurling as required.

2. Print the image. Is the problem resolved?

Yes	Finished!	
No	Contact your service representative.	

## 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:

### When the paper width direction is not aligned neatly

 In the [Finishing: Finisher 2] group of [Adjustment Settings for Operators], select 0701: [Paper Alignment for Stapling: Across Feed] and adjust the width of the paper alignment jogger for stapling.

Use [+] to increase the width, and [-] to decrease the width.

## 1st and 2nd sheets are misaligned.

1. In the [Finishing: Finisher 2] group of [Adjustment Settings for Operators], set 0707: [Number of Sheets Align for Stapling] to -1 sheet.

# Finisher SR5110/Booklet Finisher SR5120

## **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 "Preparation" 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 Operators] menu, select 0310: [Correct Output Paper Curl] and adjust the degree of decurling.

To correct curls facing up, specify "U Curl Correction Level".

To correct curls facing down, specify "IT Curl Correction Level".

Select "Large" or "Small" 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.

# 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:

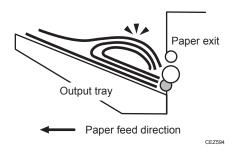
- B4□, 8" × 14"□, or larger size of paper is used.
- Paper that produces high paper-to-paper friction is used.

Large Delivered Sheets Are Not Stacked Properly

• The temperature or humidity is high.

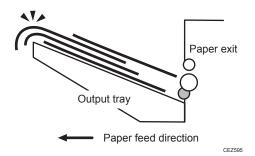
### **Sheet bending**

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



### One sheet pushing out another

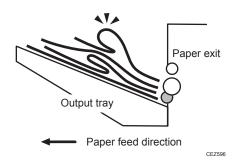
Because of high paper friction, the delivered sheet may get stuck and push out other sheets of paper.



### Paper deflection

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

E



### 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>

 In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "U Curl Correction Level".

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

# <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 "Preparation" supplied with the machine.

# <One sheet pushing out another or sheets becoming crimped>

### Sheets are curled downward.

### <If the decurler unit is used>

 In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "Π Curl Correction Level".

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

### b

### <If the decurler unit is not used>

- 1. Set the reverse side of the paper.
- 2. Print the image. Is the problem resolved?

Ye s	Finished!
N o	Go to the next step.

- 3. In the [Finishing: Finisher 1] group on the [Adjustment Settings for Operators] menu, set 0633: [Output Fan Level] to [Increase Air Volume].
- 4. Print the image. Is the problem resolved?

Ye s	Finished!  When all of the necessary printing is complete, configure [Output Fan Level] back to [Standard].
N o	Contact your service representative.

# 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 "Preparation" supplied with the machine.

# Trailing edge of stapled sheets close to the paper exit

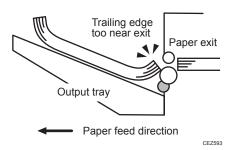
# Cause:

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.



# 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.

 In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "U Curl Correction Level".

Select "Large" or "Small" to control the level of decurling as required.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.



- For details about attaching the Z-fold support tray for multi-folding unit, see "Preparation" 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.

- In the [Finishing: Finisher 1] group on the [Adjustment Settings for Operators] menu, select 0629: [Number of Sheets Align for Stapling], and reduce the number of sheets to be stapled.
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Step 1 and 2. If the problem persists even though the setting has reached its minimum value, contact your service representative.



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

# The Edge Is Rolled

# Cause:

# The leading edge of Paper Weight 1 or Paper Weight 2 is rolled

Paper with Paper Weight 1 (vertical) or Paper Weight 2 (horizontal) and with A3 size or larger is output, the leading edge of the paper may be lifted and upward curl may occur.

Paper curl may block the paper feed and cause a paper jam (JAM 107/109).

# The leading edge of Paper Weight 0 is rolled

When ejecting a paper with Paper Weight 0, the leading edge of the paper may be curled, and downward curling may occur.

Also, if the paper curl is large, upward curling may occur.

Paper curl may block the paper feed and cause a paper jam (JAM 107/109).

### Solution:

# The leading edge of Paper Weight 1 or Paper Weight 2 is rolled

1. In the [Machine: Paper Feed / Output] group on the [Adjustment Settings for Operators] menu, select 0310: [Correct Output Paper Curl] and adjust the degree of decurling.

To correct curls facing up, specify "U Curl Correction Level".

To correct curls facing down, specify "Π Curl Correction Level".

Select "Large" or "Small" depending on the degree of decurling required.

2. Print the image. Is the problem resolved?

Yes	Finished!	
No	Contact your service representative.	

# The leading edge of Paper Weight 0 is rolled

- 1. Attach the SR5000 series output tray for banner sheet.
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to "U Curl Correction Level".

Select "Large" or "Small" depending on the degree of decurling required.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

# Carbonless Sheets Are Not Stacked In an Aligned Manner

# Cause:

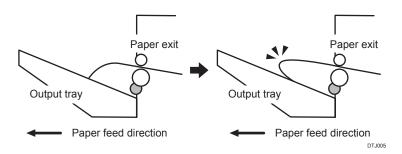
Carbonless sheets with a thickness of 0 or 1 are delivered to the shift tray, but they are not stacked in an aligned manner in the following cases:

# 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.

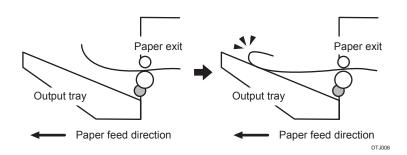
# Sheet buckling

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 SR5000 series output tray for banner sheet.
- 2. In the [Finishing: Finisher 1] group on the [Adjustment Settings for Operators] menu, select 0632: [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 1] group on the [Adjustment Settings for Operators] menu, select 0632: [Output Fan Setting] to [Off].
- 2. Print the image. Is the problem resolved?

Ye s	е	Finished!  When all of the necessary printing is complete, configure [Output Fan Setting] back to [Auto].
N	lo	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>

 Pull the extension tray out from the finisher shift tray, and attach the Z-fold support tray.

- In the [Finishing: Finisher 1] group on the [Adjustment Settings for Operators] menu, select 0632: [Output Fan Setting] to [On].
- 3. Print the image. Is the problem resolved?

Ye s	Finished!  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?

Ye s	Go to the next step.
No	Print on a smaller number of sheets. If the problem persists, configure 0632: [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?

Ye s	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?

Ye s	Finished!
No	Go to the next step.

Print on a smaller number of sheets. If the problem persists, configure 0632:
 [Output Fan Setting] back to [Auto] and contact your service representative.





• 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", Preparation.

# Stitching missing, incorrect stitching position, ear-fold, or misaligned occurs

When printing on thin paper, stitching missing, incorrect stitching position, ear-fold, or misaligned occurs.

### Cause:

It may occur when printing on thin paper of 64.0 g/m<sup>2</sup> or less.

### Solution:

- 1. Load the sheets the other way up.
- 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 Operators] menu, select 0310: [Correct Output Paper Curl] and adjust the degree of decurling.

To correct curls facing up, specify "U Curl Correction Level".

To correct curls facing down, specify "IT Curl Correction Level".

Select "Large" or "Small" depending on the degree of decurling required.

4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

# Paper is stained

Paper stitched inside is stained.

# Cause:

The folding rollers of the booklet staple unit are stained.

# Solution:

Clean the folding rollers of the booklet staple unit.

For details on how to clean the folding rollers, see page 106 "Cleaning the Paper Feed Path".

# Paper jam occurs on thin coated paper of Paper Weight 2 or less

# Cause:

Paper jam may occur when stapling or saddle stitching with thin coated paper of Paper Weight 2 or less.

### Solution:

# 

- A paper strengthening rib is not included. When using a paper strengthening rib, contact your service representative.
- 1. Use a paper strengthening rib.
- 2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 3. Change to the paper in the vertical stitch direction.
- 4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

# Scratches on the edge of the stapled paper occur

### Cause:

Scratches of 10 mm may occur on the edge of the rear end of the paper when stapling the edge of the paper.

# Solution:



• A sponge mylar is not included. To use a sponge mylar, contact your service representative.

Paste a sponge mylar on the reference side of the reference fence.

# Paper jam occurs while saddle stitching

Paper jam occurs when 21 or more sheets of 80 g/m<sup>2</sup> or less are stapled together.

# Cause:

When the paper curls backward, paper deflection may occur during paper transferring in the booklet staple unit and a paper jam may occur.

# Solution:

Fix the paper by either of the following ways: "(a) Set the reverse side of the paper" or "(b) Adjust by the decurler".

# (a) Set the reverse side of the paper

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

Yes	Finished!
No	Contact your service representative.

# (b) Adjust by the decurler

 In the [Main Unit: Paper Feed/ Output] group of [Adjustment Settings for Operators], select 0310: [Correct Output Paper Curl] to correct Π curl.

Set the correction level to either "Correction Level: Small" or "Correction Level: Large" according to the paper type.

1. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

# **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 Operators] menu:

```
0804: [Half Fold Position: Multi-sheet Fold]
0806: [Letter Fold-out Position 1: Multi-sheet Fold]
0808: [Letter Fold-out Position 2: Multi-sheet Fold]
0810: [Letter Fold-in Position 1: Multi-sheet Fold]
0812: [Letter Fold-in Position 2: Multi-sheet Fold]
```

 For single-sheet folding, change the folding position using the following settings in the [Finishing: Fold] group on the [Adjustment Settings for Operators] menu:

```
0801: [Z-fold Position 1]
0802: [Z-fold Position 2]
0803: [Half Fold Position: 1 sheet Fold]
0805: [Letter Fold-out Position 1: 1 sheet Fold]
0807: [Letter Fold-out Position 2: 1 sheet Fold]
0809: [Letter Fold-in Position 1: 1 sheet Fold]
0811: [Letter Fold-in Position 2: 1 sheet Fold]
0813: [Double Parallel Fold Position 1]
0814: [Double Parallel Fold Position 2]
0815: [Gate Fold Position 1]
0816: [Gate Fold Position 2]
```



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

# **Folding Deviation**

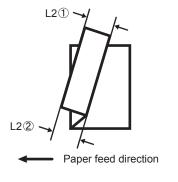
# Cause:

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>



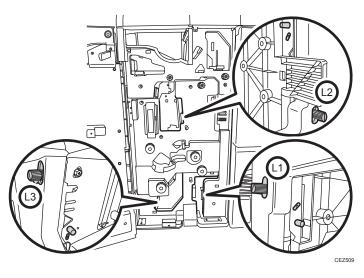
CEZ531

# Solution:

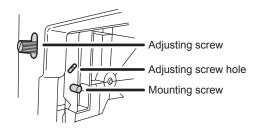
Adjust the deviation.

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



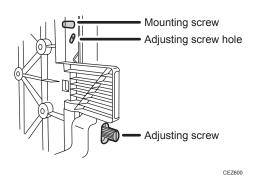


Lī

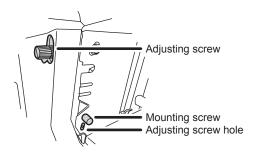


CEZ599

L2



# L3

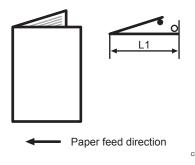


The screws adjust the folding deviations of the following parts:

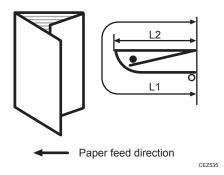
# Z-fold

Paper feed direction

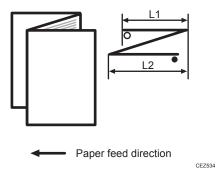
# Half Fold



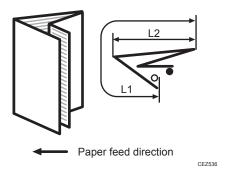
# Letter Fold-in

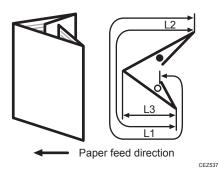


# Letter Fold-out



# **Double Parallel**





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

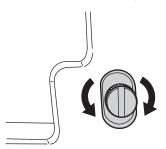
# <How to adjust the folding deviation>

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.



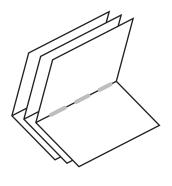
• For multi-sheet folding, folding deviations of the innermost sheet will be adjusted.

 If the deviation is large, the paper may be skewed. For further information, see page 83 "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.



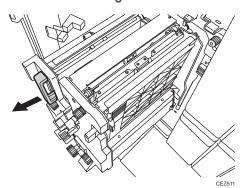
This will produce paper soil of 1-3 cm (0.4-1.2 inches) in width (equal to the width of the blade) in the fold in the center of paper.

CEZ571

# Solution:

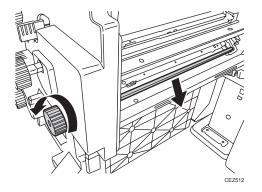
Clean the blade.

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



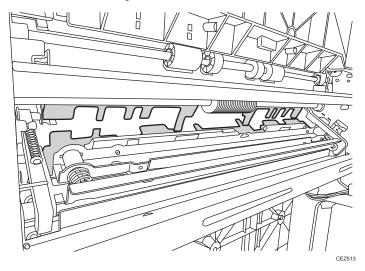
3. Turn the N11 dial counterclockwise until the blade appears.

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



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

Be careful not to damage the blade.



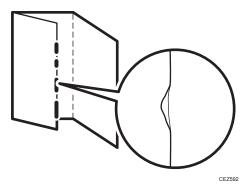
5. After cleaning, restore the machine so that it resumes operation.

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.





### Solution:

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

# <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 Operators] menu, set 0810: [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>



- 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", Preparation.
- In [General Features] in [System Settings], set [Letter Fold-in Position] for a single sheet to "7 mm".
- 2. In the [Finishing: Fold] group on the [Adjustment Settings for Operators] menu, select 0809: [Letter Fold-in Position 1: 1 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.

DFP800

Upward curl (radius 4 cm [1.6 in.] or less) on the leading edge of delivered paper.

Paper feed direction

# Solution:

- 1. In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Small].
- 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.





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

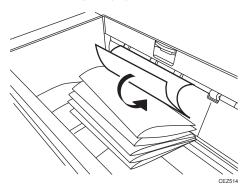
# Folded Sheets Are Not Stacked Properly

# 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.

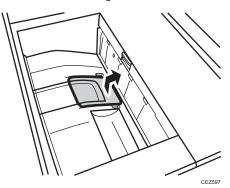


As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

# 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 "Preparation" supplied with the machine.



• 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.

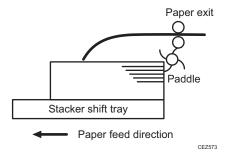
If this happens, other sheets may slip under the delivered sheets, so that the delivered sheets may be curled when loaded.

This may occur if:

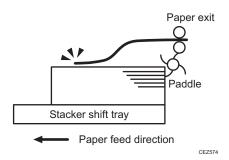
- A4 or larger coated paper weighing up to 135 g/m<sup>2</sup> (50 lb. Cover) is used.
- When using thin paper of Paper Weight 1.

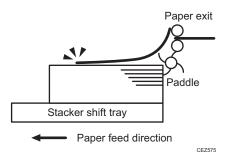
# <How the problem occurs>

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

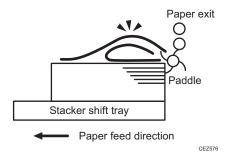


The leading edge of the sheet, while delivered, causes strong paper-to-paper friction against the top sheet of the stack. As there is no air gap between the sheets, and the delivered sheet becomes stuck.





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



### 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.

- In the [Main Unit: Paper Feed/ Output] group on the [Adjustment Settings for Operators]
  menu, set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Small].
- 4. Print the image. Has the problem been resolved?

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

No Go to the next step.	
-------------------------	--

- 5. Set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Large].
- 6. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

# 7. Is the sheet curled downward?

Yes	Contact your service representative.
No	Load the sheets the other way up, and then repeat the steps from Step 3.

# 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 [Main Unit: Paper Feed/ Output] group of the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Off].
- 4. Print the image. Has the problem been resolved?

V	real II	
Yes	rinished!	

No

Go to the next step.

- 5. Set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Small].
- 6. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

- 7. Set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Large].
- 8. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

- 9. Set 0310: [Correct Output Paper Curl] to [Π Curl Correction Level: Small].
- 10. Print the image. Has the problem been resolved?

Yes	Finished!
No	Go to the next step.

- 11. Set 0310: [Correct Output Paper Curl] to [ $\Pi$  Curl Correction Level: Large].
- 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.

# Paper of Paper Weight 1 does not align correctly

# Cause:

This may occur if:

- Thin paper of Paper Weight 1 is used
- Printing is done at low temperature or humidity

# Solution:

- 1. Set the reverse side of the paper.
- 2. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Is the decurler unit attached?

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

- 4. In the [Main Unit: Paper Feed/ Output] group of the [Adjustment Settings for Operators] menu, set 0310: [Correct Output Paper Curl] to [U Curl Correction Level: Small].
- 5. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

# 7. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

# 8. Is the paper curled downward?

Yes	Contact your service representative.
No	Set the reverse side of the paper and repeat steps 4 to 8.

E

# Interposer

# Paper jam due to paper misfeeding or double feeding occurs

# Cause:

This may occur if:

- Coated paper is set
- · Paper with high smoothness is set
- Printing is done at low temperature or humidity

# Solution:

- 1. Measure the curl of the paper.
  - Type of curl

Face curl: The set paper is warped upward.

Back curl: The set paper is warped downward.

Measurement of curl

Load one sheet of paper on a flat surface, apply the scale to the leading edge of the paper, and measure the curl at the four edges. The maximum value is the curl value.

Curl standard

Acceptable curl amount varies depending on the basic weight of the paper.

Paper weight	Curl amount
Paper Weight 0 - 6	Face curl: 10 mm Back curl: 10 mm
Paper Weight 7	Face curl: 10 mm Back curl: 5 mm
Paper Weight 8	Face curl: 10 mm Back curl: 3 mm
Paper Weight 9	Face curl: 10 mm Back curl: 0 mm

# 2. Is the paper curl within the curl standard?

Yes	Proceed to Step 6.
No	Go to the next step.

- 3. Place the curled surface down on a flat surface.
- 4. Hold the end of the paper and straighten it in the opposite direction to the curl direction so that the paper is rounded.
- 5. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 6. Remove the paper, loosen it, and reset it.
- 7. Is the problem resolved?

Ye	es	Finished!
N	lo	Go to the next step.

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for your custom paper being used, select 1331: [Interposer] and adjust the value in [Fan Level].
  - If the present value is 10%:
     Increase the value in [Fan Level] to 30%.
  - If the present value is 30%:
     Increase the value in [Fan Level] to 50%.
  - If the present value is 50%:
     Increase the value in [Fan Level] to 80%.
  - If the present value is 80%:
     Increase the value in [Fan Level] to 100%.

# 9. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

- 10. Select 1331: [Interposer] and adjust the value in [Fan Level].
  - If the present value is 30%:
     Increase the value in [Fan Level] to 50%.
  - If the present value is 50%:

Increase the value in [Fan Level] to 80%.

• If the present value is 80%:
Increase the value in [Fan Level] to 100%.

# 11. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.



• For details about how to loosen paper, see "Loading Paper" in "Preparation".

# Vertical lines and scratches occur at random positions

# Cause:

Due to accumulated paper dust and paper rubs, fine lines or scratches may occur in the ejecting direction and parallel direction.

# Solution:

Clean the guide plate inside the interposer.

For details about how to clean the interposer, see page 106 "Cleaning the Paper Feed Path".

# 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 [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.

- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, change the temperature of 0207: [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 [On Standby Mode], [On Low Power Mode], and [Before Performing a Process].



• 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:

- Select [Machine: Paper Feed / Output] in [Advanced Settings] for the custom paper in use, select 1351: [Motor Speed] and 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. Select 1206: [Fusing Temperature], and then set [Heat Roller Temp] 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.



- 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 8310S and Pro 8310 do not have the [Middle] setting.
- The process speed of Pro 8300S 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 8310S)

111 ppm (Pro 8310)

136 cpm (Pro 8320S)

136 ppm (Pro 8320)

• [Middle]

111 cpm (Pro 8320S)

111 ppm (Pro 8320)

• [Low]

96 cpm (Pro 8310S/8320S)

96 ppm (Pro 8310/8320)

# 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 [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, configure 0212: [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.



- Performing this step increases the amount of power the machine consumes in standby mode.
- In the [Main Unit: Image Quality] group on the [Adjustment Settings for Operators] menu, select 0207: [Fusing Temperature on Standby] and configure [On Low Power Mode] as follows:
  - Pro 8320S / Pro 8320: 170°C
  - Pro 8310S / Pro 8310: 165°C
  - Pro 8300S: 160°C

MEMO

MEMO