

CIP Training

L5160/L5130

3 Operation

RICOH
imagine. change.

Offline Ready

K M C Y W W W

Pre 20°C 31°C Print 20°C 50°C Post 20°C 59°C Cure 20°C 20°C Heater Setting

Remaining: 300.0 m Width: 0.0 mm Origin Setting /Cut

Heater Settings Close

Pre	Print	Post	All +5°C	Cure
▲	▲	▲	▲	▲
30 °C	50 °C	59 °C		20 °C
▼	▼	▼	▼	▼
<input type="checkbox"/> On	<input type="checkbox"/> On	<input type="checkbox"/> On	All On	<input type="checkbox"/> On

Nozzle Cleaning: Low Close

Select a target head and press [Execute].
Select Print Head(s).

Head 1 Head 2 Head 3

Clean All Print Heads Execute

CIP Training L5160/L5130

Basic Operation

Please refer to CIP Training 1: Input for "Media Setup" before changing any of the follow settings.

Changing Print Origin

This section explains how to change the position of the print origin.

You cannot change the origin when a misfeed error occurs or during maintenance.

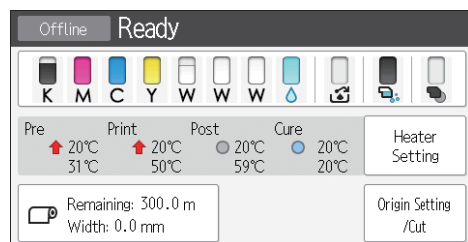
★ Important

- The carriage moves when setting the horizontal origin. A buzzer sounds after 10 minutes or more have elapsed since the carriage moved. As a discharge defect may be caused by dry nozzles, carry out the work promptly.

About the print origin

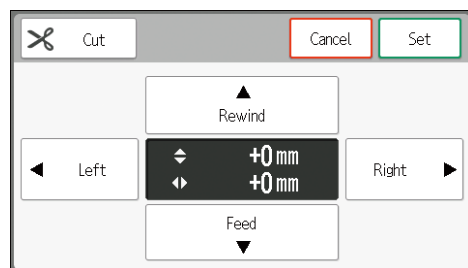
When entering origin setting mode, the LED pointer on the bottom of the carriage will indicate the print origin. Check the position indicated by the pointer when changing the origin. When the change is completed, the position set will be used as the reference point for printing.

1. Press [Origin Setting/Cut] on the bottom right of the screen.



2. Press [Left] or [Right] to change the horizontal origin.

The carriage will move in accordance with the latest numerical value. If the latest numerical value is larger, hold down the button.



3. Press [Rewind] or [Feed] to change the vertical origin.

The media is fed in accordance with the latest numerical value. If the latest numerical value is larger, hold down the button.

4. After the origin is fixed, press [Set].

The origin is changed, and the carriage will return back to its original position.

Basic Operation

Adjusting the Heater Temperature

⚠ WARNING

Set the heater temperature to meet the characteristics of the media. Set the temperature of the pre heater, print heater, post heater, and cure heater according to the type and characteristics of the media used. Automatic temperature setting can be made on the operation panel by setting the profile on the dedicated RIP. For setting on the RIP, see the instruction manual for your RIP.

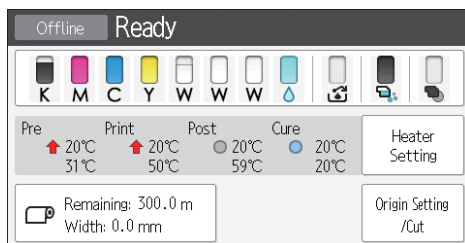
o not leave the media with the heater ON for a long time.

This section explains how to check and change the temperature of the pre-heater, print heater, post-heater, and cure heater.

Set the temperature of each heater depending on the media to be used. It takes several minutes or hours to reach the configured temperature depending on the operating environment.

1. Check the temperature of each heater on the home screen.

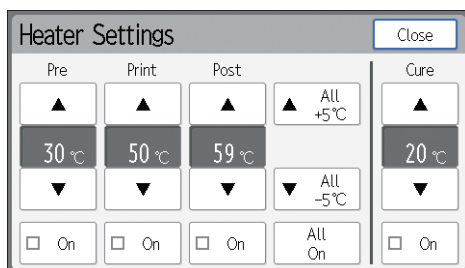
For details about how to check the temperature, see "Checking the state of the heater".



2. Press [Heater Setting].

3. Select the [On] check box when enabling the heater.

Press [All On] or [All Off] to enable or disable the pre heater, print heater, post heater, and cure heater collectively.



4. Press [▲] [▼] to set the temperature of each heater.

🌐 Region A (mainly Europe and Asia)

- Press ▲ [All +5°C] ▼ [All -5°C] to change the temperature of the pre-heater, print heater, post-heater, and cure heater collectively. The temperature of each heater can be set between 20 to 70°C or 20 to 95°C.

CIP Training L5160/L5130

Basic Operation

5. Press [Close].

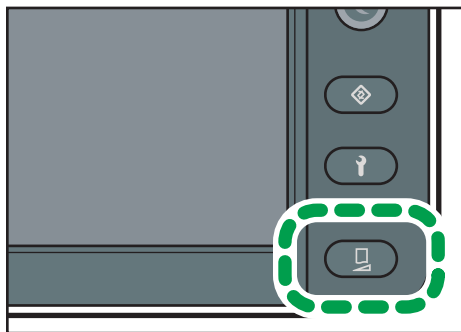
↓ Note

- Operate the machine in an environment that is within 15–30°C (59–86°F). The heater temperature may not reach the setting value due to the surrounding temperature conditions.
- When you turn the heater temperature down, change the job settings for the RIP software to the following to ensure enough time for drying. For details about the settings, see "Changing Printer Settings", RIP Settings Guide.
 - Increase the drying time.
 - Select a print mode with a higher number of passes.
 - Print unidirectionally.
- The temperature of heaters can also be set in the RIP software. When the temperature settings for the heaters are sent from the RIP software, the settings configured in the RIP software take priority over the settings configured on the control panel of the machine. For details, see "Changing Printer Settings", RIP Settings Guide.
- Setting the heater temperature too high may lead to temperatures outside the operating range of the machine. Avoid setting the heater temperature too high.

Test Feeding

Perform test feeding to check whether the temperature settings of each heater are appropriate for the media to be used.

1. Press the [Standard Procedure] key.

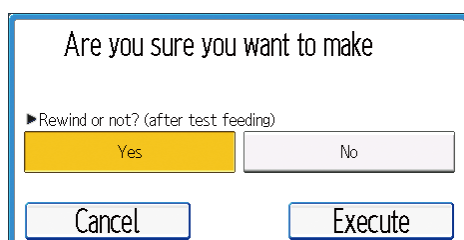


DWU103

2. Press [v].

3. Press [Test Feed].

4. Press [Yes] when you rewind the media to its original position after performing test feeding.



CIP Training L5160/L5130

Basic Operation

5. Press [Execute].

6. Press [Cancel] to stop test feeding.

When you select [Yes] in Step 4, stop test feeding, and then rewind the media to its original position.

7. Check the result of test feeding.

8. Press [Confirm].

9. Press [End].

If a problem is indicated in the result of the test feed, change the temperature settings for each heater, and then perform test feeding again. For details about changing the heater temperature, see "Adjusting the Heater Temperature".

Note

- Depending on the media to be used, the media may ripple as the heater becomes hot. If the media ripples when feeding, see "When Media Curls While Feeding".

Test Printing

Print a nozzle check pattern and check whether there are discharge defects such as nozzle clogging (blurring or drop-out of printing).

You cannot print a test pattern on narrow media. When performing test printing, use media that has a width of 420 mm (approx. 16.5 inches) or more.

Important

- When using roll media, rewind the roll media and make sure there is no warping before printing. Failure to do so may cause defects in image quality.

Performing Test Printing

WARNING

- Never open the center cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.

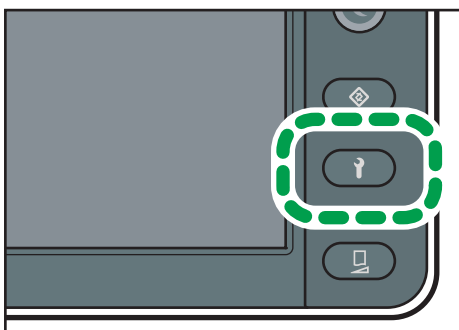
1. Set media.

For details, see "Setting Media".

2. Change the print origin.

For details, see "Changing Print Origin".

3. Press the [Maintenance] key.



DWU102

CIP Training L5160/L5130

Basic Operation

4. Press [Print Test].

5. Press [Execute].

The result of the nozzle check is printed.

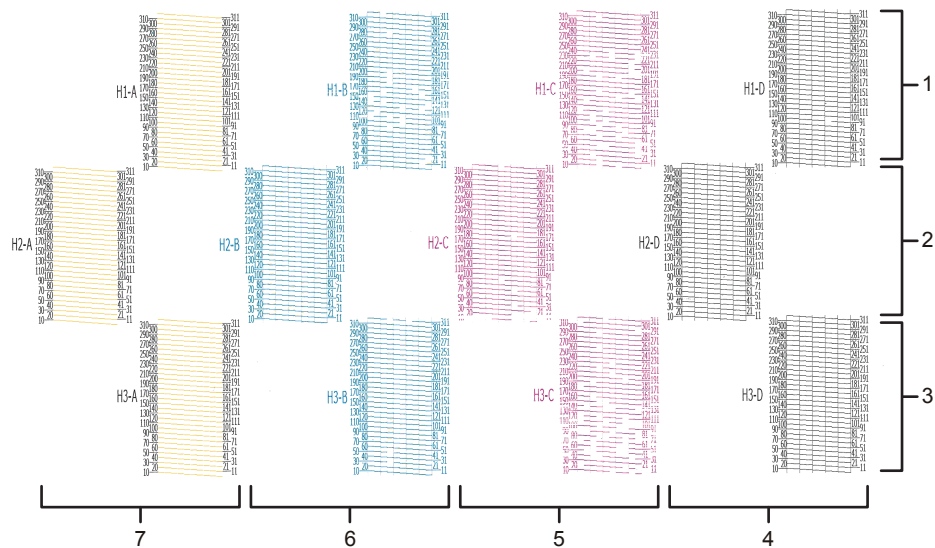
6. Check the printed result.

- For details about the printing result, see "How to Read the Printing Result".
- If there are abnormalities, perform head cleaning. For details about head cleaning, see "Cleaning Print Head Nozzles".

7. Press [End].

How to Read the Printing Result

How to read the test printing result is explained below.



DWT171

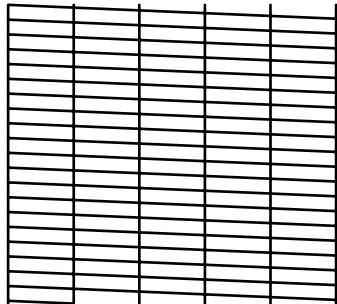
1. Print head 1
2. Print head 2
3. Print head 3
4. Nozzle D column
5. Nozzle C column
6. Nozzle B column
7. Nozzle A column

Check the position of the print heads where discharge defects such as clogging nozzles in the nozzle check pattern have occurred. Check the print heads with discharge defects by referring to the following illustration.

CIP Training L5160/L5130

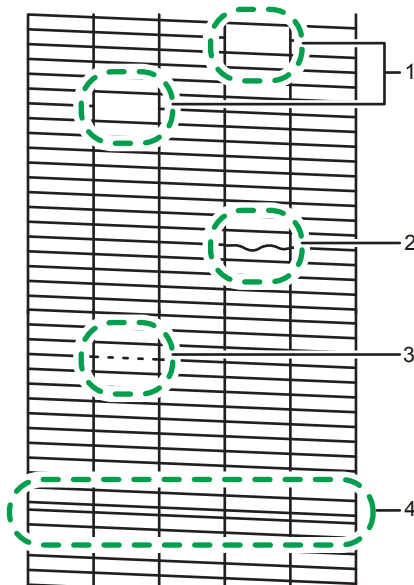
Basic Operation

Normal printing result



CFT168

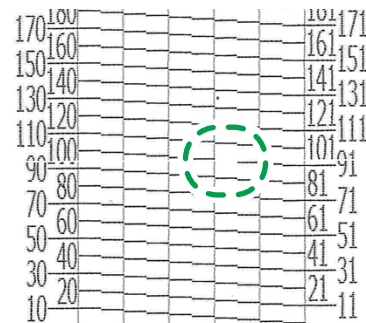
When there are discharge defects in the heads



DVB195

1. Nozzle clogging has occurred.
2. The nozzle check pattern is wave-like.
3. The nozzle check pattern is intermittent.
4. The intervals in the nozzle check pattern are not equal. (Bending lines have occurred.)

Check the clogged nozzle number. The numbers on the left and right of the test pattern are used for determining which nozzle is clogged. For example, if nozzle clogging is in the location shown in the following illustration, count left from nozzle number 91 to determine that the clogged nozzle is on nozzle number "94".



DWT216

Basic Operation

Cleaning Print Head Nozzles

This section explains how to handle print heads.

Important

- Head cleaning consumes ink. Perform this function only when necessary.
- Perform no other operations during head cleaning.
- Cleaning may be incomplete if ink in a cartridge gets too low or runs out during cleaning.
- An error will occur and head cleaning will not be possible if:
 - There is a misfeed.
 - One of the machine's covers is open.
 - The machine is performing maintenance operations.
 - The machine has run out of ink.
 - The waste ink bottle is full.
 - The service call icon is displayed on the display panel.

About Head Cleaning

There are two types of head cleaning. Perform head cleaning according to the result of test printing.

- Nozzle Cleaning: Low
If there are bending lines or clogged nozzles in the test printing result, perform Nozzle Cleaning: Low.
- Nozzle Cleaning: High
If there are missing lines or ink has mixed, perform Nozzle Cleaning: High. Nozzle Cleaning: High cleans the print heads more powerfully than Nozzle Cleaning: Low. Perform [Nozzle Cleaning: High] also in the case of a media jam (scratches on the media) and extended decap. The ink consumption for Nozzle Cleaning: High is greater than that of Nozzle Cleaning: Low.

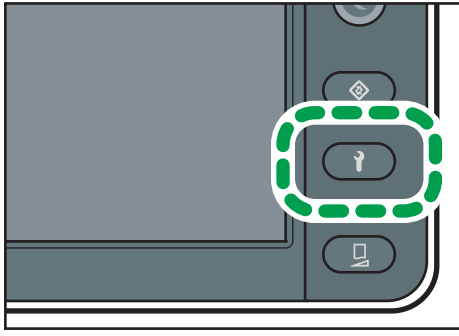
If the printing problem is still not resolved even after performing Nozzle Cleaning: Low three times, perform Nozzle Cleaning: High and clean the cap. See "Cleaning the Caps", Requests for Daily Care and Maintenance. If the problem is still not resolved, see "When You Want to Clear Nozzle Clogging".

CIP Training L5160/L5130

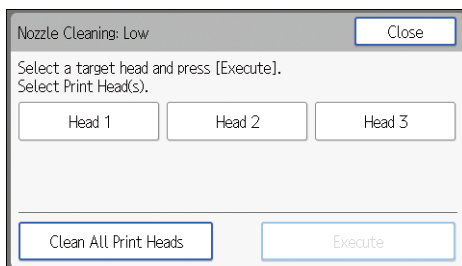
Basic Operation

Performing Head Cleaning

1. Press the [Maintenance] key.



2. Press [Nozzle Cleaning].
3. Press [Nozzle Cleaning: Low] or [Nozzle Cleaning: High].
4. Select which print heads to clean from [Head 1], [Head 2], or [Head 3], and then press [Execute].
You can select multiple print heads simultaneously. To perform all print heads, press [Clean All Print Heads].



5. After the message is displayed, press [Execute].
Head cleaning will be performed.
6. Press [Confirm].
7. Press [Close].
8. Perform test printing again to check the printing result.
Perform cleaning and test printing repeatedly until the printing result is normal.

Basic Operation

Adjusting the Media Feed Quantity

WARNING

- Never open the center cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.

This section explains how to adjust the media feed quantity if image quality defects such as horizontal misalignments or image surface irregularities occur.

You cannot print a test pattern on narrow media. When adjusting the media feed quantity, use media that has a width of 297 mm or more.

Important

- Before executing this after positioning the media, carry out a test print (nozzle check pattern).
- Do not adjust the media feed to the part where the media has been fed and moved back. Doing so may cause problems with the adjustment to the part moved back, such as leaving roller marks on it. If this happens, press [Origin Setting/Cut] to feed the media.
- Printing the test pattern consumes ink. Perform this function only when necessary.
- Perform no other operations while the test pattern is printing.
- An error will occur and test pattern will not print if:
 - There is a misfeed.
 - One of the machine's covers is open.
 - The machine is performing maintenance operations.
 - The machine has run out of ink.
 - The machine has run out of media.

Note

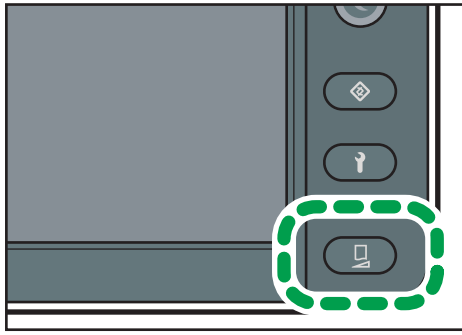
- Before adjusting, ensure that there is no media floating or skewing. If such issues occur, feed the media from the [Origin Setting] screen to reset the media or to resolve the skewing.
- Before adjusting, ensure that the heaters reach a temperature appropriate for use. Otherwise, it may take a long time for the heater to warm up, resulting in the media bulging.
- When printing on media with the heaters switched off, set the temperatures of the pre-heater, print heater, and post-heater to minimum.
- If nozzle clogging or bending lines occur, the machine cannot perform the adjustment successfully. We recommend performing head cleaning before adjusting.
- The auto adjustment may fail if the media feed quantity is incorrect. If the auto adjustment fails, perform the adjustment manually.
- The machine cannot adjust the media feed quantity automatically for transparent or colored media. Adjust the media feed quantity manually. For details, see "Adjusting the Media Feed Quantity Manually".

Basic Operation

Adjusting the Media Feed Quantity Automatically

The machine prints the test pattern of the media feed adjustment, and then adjusts the media feed quantity automatically.

1. Press the [Standard Procedure] key.



2. Press [Media Feed Adjustment].
3. Press [Auto].
4. Select a print mode from [6 Pass] or [8 Pass / 12 Pass / 16 Pass / 32 Pass].
If using the machine with white ink, select a print mode from [6 Pass], [8 Pass / 12 Pass / 16 Pass], or [32 Pass / 12 Pass (White)].
5. Press [Execute].
The test pattern of the media feed adjustment is printed, and then the media feed quantity adjustment is performed.
6. Press [Confirm].
7. Press [End].

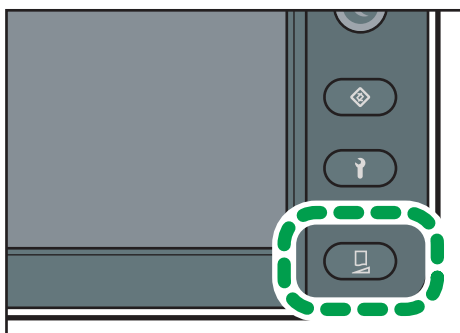
Adjusting the Media Feed Quantity Manually

You can print the test pattern of the media feed adjustment, and then adjust the media feed quantity manually.

Note

- If the control panel is not used for 30 minutes, the adjustment value entry menu is canceled and the Home screen returns. If this happens, carry out the adjustment procedure again from the beginning.

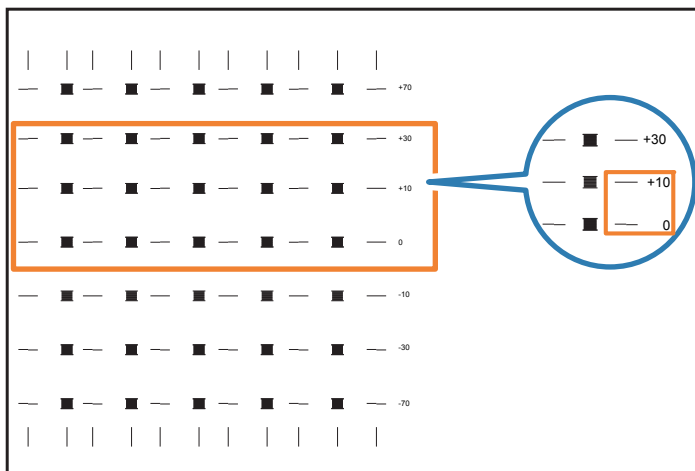
1. Press the [Standard Procedure] key.



CIP Training L5160/L5130

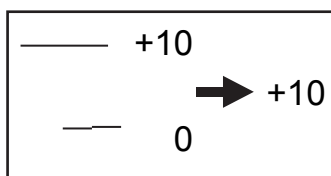
Basic Operation

2. Press [Media Feed Adjustment].
3. Press [Manual].
4. Press [Execute].
5. Select a print mode from [6 Pass] or [8 Pass / 12 Pass / 16 Pass / 32 Pass].
If using the machine with white ink, select a print mode from [6 Pass], [8 Pass / 12 Pass / 16 Pass], or [32 Pass / 12 Pass (White)].
6. Press [Execute].
The test pattern of the media feed adjustment is printed.
7. Press [Feed] or [Rewind] to feed the media to the position where the pattern can be seen properly.
8. Press [Next].
9. Check the optimal adjustment value based on the printing result of the test pattern of the media feed adjustment.
The value with the straightest horizontal lines and faintest squares is the appropriate adjustment value. Assess according to the horizontal lines at 6 positions.



EDP012

1. If the horizontal line for "+10" is the straightest, the adjustment value is +10.



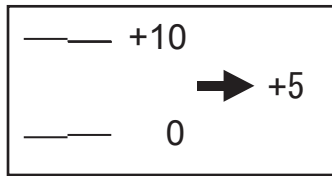
EDP017

If the lines for "0" and "+10" are oblique contrariwise, the adjustment value is between 0 and +10.

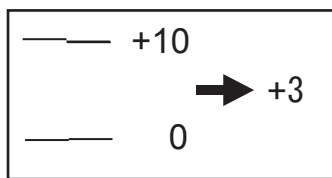
CIP Training L5160/L5130

Basic Operation

2. If the obliqueness of "+10" and "0" is the same, the adjustment value is +5.



3. If the obliqueness of "+10" is greater than 0, the adjustment value is between +1 and +4. (Enter "+3" for 3.)



After completing the adjustment, perform media feed adjustment again and check that the adjustment value has been set correctly.

10. Press [Adjustment Amount Entry].
11. Enter the adjustment value that you checked in Step 9 using the number keys, and then press [Set].
12. Press [Close].
13. Press [Confirm].
14. Press [End].

Adjusting the Drop Position

⚠ WARNING

- Never open the center cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.

This section explains how to correct misalignment of the ink dropping position. You can reduce misaligned verticals or blurred colors.

Adjust the drop position if:

- You have changed the thickness of media or the height of the print heads.
- Bidirectional printing produces misaligned verticals or blurred colors.

CIP Training L5160/L5130

Basic Operation

★ Important

- Printing the test pattern consumes ink. Perform this function only when necessary.
- Perform no other operations while the test pattern is printing.
- An error will occur and test pattern will not print if:
 - There is a misfeed.
 - One of the machine's covers is open.
 - The machine is performing maintenance operations.
 - The machine has run out of ink.
 - The machine has run out of media.

↓ Note

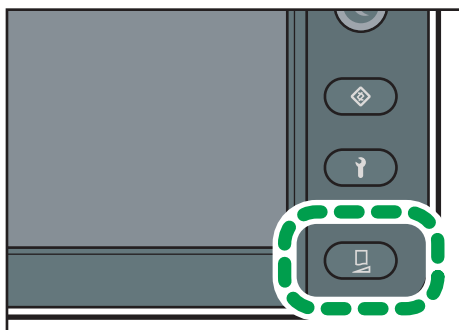
- Before adjusting, ensure that there is no media floating or skewing. If such issues occur, feed the media from the [Origin Setting] screen to reset the media or to resolve the skewing.
- Before adjusting, ensure that the heaters reach a temperature appropriate for use.
- When printing on media with the heaters switched off, set the temperatures of the pre-heater, print heater, and post-heater to minimum.
- If nozzle clogging or bending lines occur, the machine cannot perform the adjustment successfully. We recommend performing head cleaning before adjusting.
- This machine cannot adjust the drop position automatically for transparent or colored media. Adjust the drop position manually. For details, see "Adjusting the Drop Position Manually".
- If the message "Failed to print." appears while printing the test pattern, press [Confirm] to clear it, check the message that appears on the control panel, and then carry out the adjustment procedure accordingly from the beginning.

Adjusting the Drop Position Automatically

This function corrects the misalignment of the ink dropping position automatically so that it reduces image quality defects.

You cannot print a test pattern on narrow media. When adjusting the drop position automatically, use media that has a width of 297 mm (approx. 11.7 inches) or more.

1. Press the [Standard Procedure] key.



DWU103

CIP Training L5160/L5130

Basic Operation

2. Press [Drop Position Adjustment].
3. Press [Auto].
4. Select a print mode from [6 Pass / 8 Pass], [12 Pass], [16 Pass], or [32 Pass].
If the ink configuration used for the machine is 4C+W, you can select [12 Pass (White)].
5. Press [Execute].
The test pattern of the drop position adjustment is printed, and then drop position adjustment is performed.
6. Press [Confirm].
7. Press [Close] twice.
8. Press [End].

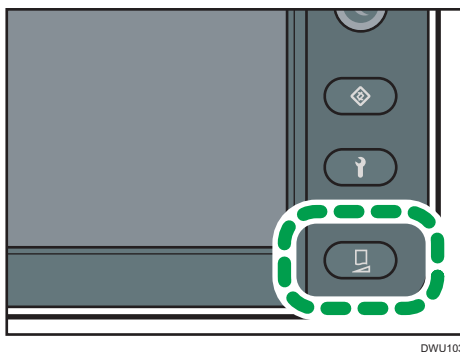
Adjusting the Drop Position Manually

If image quality defects cannot be reduced even after adjusting the drop position automatically or you want to adjust visually, adjust the drop position manually.

When using transparent or colored media, adjust the drop position manually.

You cannot print a test pattern on narrow media. When adjusting the drop position manually, use media that has a width of 420 mm (approx. 16.5 inches) or more.

1. Press the [Standard Procedure] key.



2. Press [Drop Position Adjustment].
3. Press [Manual].
4. Select a print mode from [6 Pass / 8 Pass], [12 Pass], [16 Pass], or [32 Pass].
If the ink configuration used for the machine is 4C+W, you can select [12 Pass (White)].
5. Press [Execute].
The test pattern of the drop position adjustment is printed.
According to following steps 6 to 11, cut off the roll media the printed test pattern for adjusting the drop position. If the paper is not attached to the roll-up unit, Steps 6 to 8 for cutting the leading edge of the paper are unnecessary.
6. To cut the leading edge of the test pattern for adjusting the drop position, feed the media by pressing [Feed] or [Rewind].
7. Press [Cut].
The selection screen for the cutting position is displayed.
8. Select [Position of the cutter], and press [Cut].

CIP Training L5160/L5130

Basic Operation

The optimal adjustment value is the number above the square pattern that has the faintest color closest to gray and aligned verticals on both sides. If the value in row "A" is " 2", the adjustment value of "A" is " 2". We recommend checking the optimal adjustment value by using a magnifying glass.

13. Select a row from [A] to [W] that needs adjusting. If an item you want to select is not displayed, press [▼] or [▲] to switch the screen.
14. Enter the adjustment value that you checked in Step 12 using the number keys, and then press [Set].
15. Press [Completed].
16. Press [Completed].
As required, press [Back] and return to Step 13.
17. Press [End].

Note

- If the control panel is not used for 30 minutes, the adjustment value entry menu is canceled and the Home screen returns. If this happens, carry out the adjustment procedure again from the beginning.
- If the print result does not include a square pattern with aligned verticals on both sides, enter as the adjustment value the number above the closest match to such a pattern. Then, after the adjustment, manually perform drop position adjustment again.
- Perform the adjustment repeatedly until a square pattern having the faintest and closest color to gray and aligned verticals on both sides is printed below "0".

Printing Data

Before Print Start

Check the state of the ink cartridges, cleaning cartridge, flushing cartridge, and waste ink bottle before printing. For details about how to check the conditions, see "Checking Machine Status and Settings".

For details about replacing consumables, see "Replacing Consumables".

Important

- If the ink cartridge becomes empty during printing or the waste ink bottle is full, printing will be interrupted. Check the remaining capacity of the ink cartridges and the waste ink bottle beforehand.
- If you send the RIP data to start printing when the heater is still not warmed up (such as when the heater is still off), ripples may be produced in the media. Increase the temperature up to that required for printing. Also, if there are ripples on the media on the platen or roll feed unit, feed the media using the [Origin Setting] menu, eliminate the ripples, and then send the RIP data to start printing.

Basic Operation

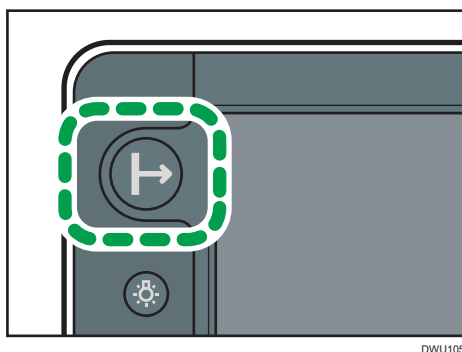
Start Printing

⚠ WARNING

- Never open the center cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.
- Keep the center cover closed even when the machine is not printing. If not, dust can accumulate on the nozzles in the heads.

★ Important

- When using roll media, rewind the roll media and make sure there is no warping before printing. Failure to do so may cause defects in image quality.
 - As you may not obtain the printing result you want for some printing data or media types, we recommend performing trial printing beforehand.
 - Do not open the cover during printing. Doing so may cause a misfeed.
 - If you send the RIP data to start printing when the heater is still not warmed up (such as when the heater is still off), ripples may be produced in the media. Increase the temperature up to that required for printing. Also, if there are ripples on the media on the platen or roll feed unit, feed the media using the [Origin Setting] menu, eliminate the ripples, and then send the RIP data to start printing.
1. **Set media.**
For details, see "Setting Media".
 2. **Check the heater temperature on the display panel.**
 3. **Press [Heater Setting] to adjust the temperature as required.**
For details about adjusting the heater temperature, see "Adjusting the Heater Temperature".
 4. **Send the RIP data to be printed from a computer.**
 - When data has been received from a computer, the Data In indicator of the machine flashes.
 - For details about sending RIP data from a computer, see "Functions on the Main Menu", RIP Settings Guide.
 5. **Press the [Off Line/On Line] key on the control panel to set the status to online.**



"Ready" is displayed on the home screen. Start printing.

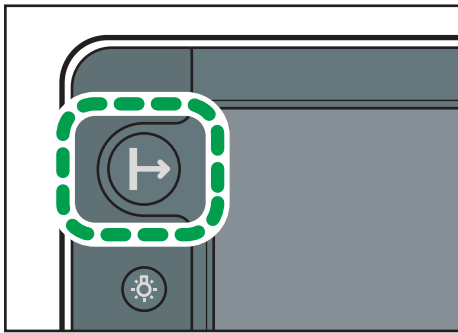
CIP Training L5160/L5130

Basic Operation

Interrupt or Abort Printing

When you interrupt or abort ongoing printing jobs, perform the following operations.

1. Press the [Off Line/On Line] key during printing.



DWU105

Printing is interrupted.

2. Press [Resume] to resume printing or [Abort] to abort printing.

When pressing [Resume], the machine starts printing from the interrupted state.

↓ Note

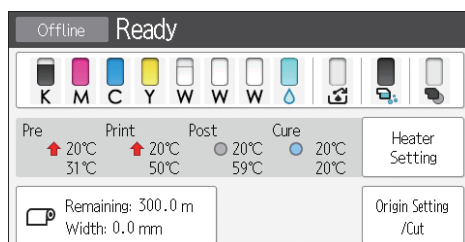
- For details about operations for interrupting, resuming, and stopping using a computer, see "Functions on the Main Menu", RIP Settings Guide.
- The regular print quality cannot be guaranteed if printing is restarted.

Cutting Media

This section explains how to cut roll media.

Roll up cut media with the roll-up unit so that the printing surface of the media does not touch the floor or the printing surface of another piece of media.

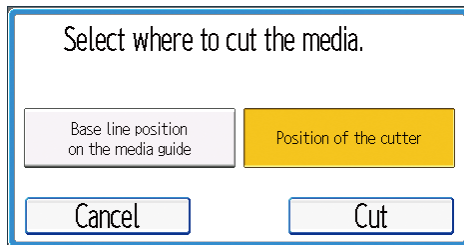
1. Press [Origin Setting/Cut] on the bottom right of the screen.



2. Press [Cut].
3. Select the position from where to cut media from either [Base line position on the media guide] or [Position of the cutter].
Select [Base line position on the media guide] to cut media at the base lines on the media guides.

CIP Training L5160/L5130

Basic Operation



4. Press [Cut].

- Start cutting at the cut position that you set.
- When [Base line position on the media guide] is selected, media is fed to the media cutter position before starting cutting.

5. Press [Set].

ⓘ Note

- When automatically cutting printed media, the settings in RIP software are required. For details, see "Changing Printer Settings", RIP Settings Guide.

Performing the Connection Methods

⚠ WARNING

- Never open the center cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.

This section explains procedures for connection methods to reduce image quality defects such as black lines and white lines as well as variation in concentration. There are two connection methods, the connection method for the print heads and the media feed.

When executing print-head alignment, the test pattern for adjustment is printed. Note that the test pattern cannot be printed on narrow media. When executing print-head alignment, use media having a width of 297 mm (approx. 11.7 inches) or more.

★ Important

- Printing the test pattern consumes ink. Perform this function only when necessary.
- Perform no other operations while the test pattern is printing.
- An error will occur and test pattern will not print if:
 - There is a misfeed.
 - One of the machine's covers is open.
 - The machine is performing maintenance operations.
 - The machine has run out of ink.
 - The machine has run out of media.

CIP Training L5160/L5130

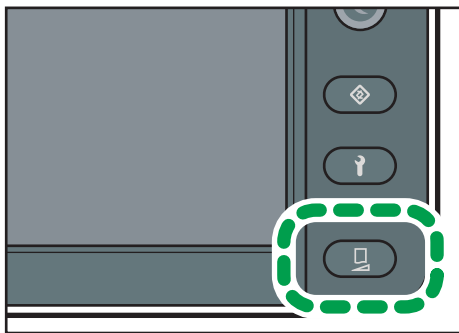
Basic Operation

- Before adjusting, ensure that there is no media floating or skewing. If such issues occur, feed the media from the [Origin Setting] screen to reset the media or to resolve the skewing.
- Before adjusting, ensure that the heaters reach a temperature appropriate for use.
- If nozzle clogging or bending lines occur, the machine cannot perform the adjustment successfully. We recommend performing head cleaning before adjusting.
- This machine cannot execute print-head alignment automatically for transparent or colored media. Perform it manually. For details, see "Performing the Connection Method for the Print Heads Manually".
- When using white ink, you cannot perform print-head alignment. Set [Print Head Alignment] to [Off].

Performing the Connection Method for the Print Heads Automatically

Performs image processing automatically in the connection parts between each head. Performing the connection method for the print heads can reduce image quality defects if the defects appear in the connection parts between each head.

1. Press the [Standard Procedure] key.

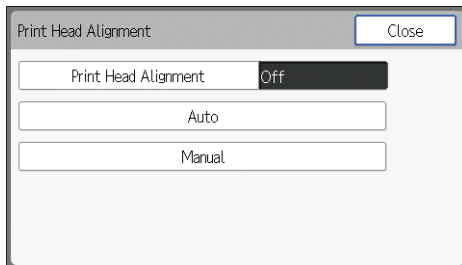


DWU103

2. Press [Selected Setting for Head Alignment].
3. Press [Print Head Alignment].
4. Press [Auto].
5. Press [Execute].
The test pattern of the print head alignment is printed, and then the connection method for the print heads is performed.
6. Press [Confirm].
7. Press [Print Head Alignment].

CIP Training L5160/L5130

Basic Operation



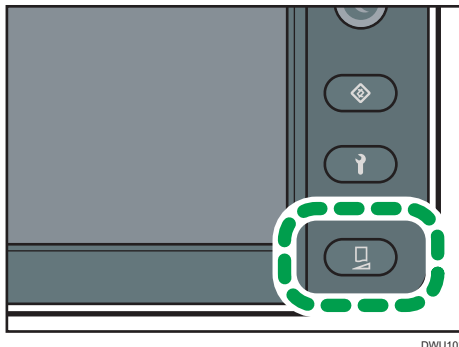
8. Press [On].
9. Press [Close] twice.
10. Press [End].

Performing the Connection Method for the Print Heads Manually

If image quality defects cannot be reduced even after performing the connection method for the print heads automatically or you want to adjust visually, perform the connection method for the print heads manually.

When using transparent or colored media, perform the connection method for the print heads manually.

1. Press the [Standard Procedure] key.



2. Press [Selected Setting for Head Alignment].
3. Press [Print Head Alignment].
4. Press [Manual].
5. Press [Execute].

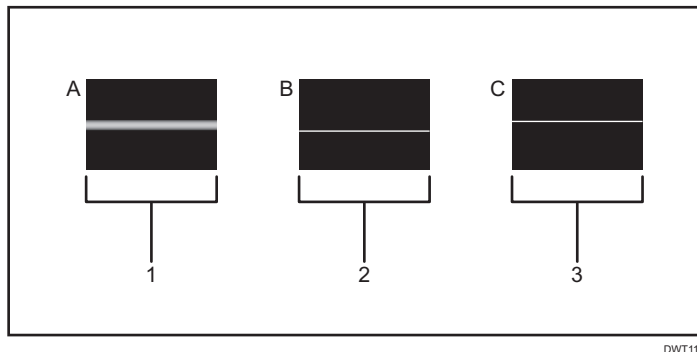
The test pattern of the print head alignment is printed.

6. Check the optimal mode based on the printing result of the test pattern of the print head alignment.

Determine which test pattern has the least visible line, and use the letter on the left of the test pattern to identify the optimal mode. In the following example, [A] has the least visible line and is therefore optimal.

CIP Training L5160/L5130

Basic Operation



2. Press [Selected Setting for Head Alignment].
3. Press [Media Feed Correction].
4. Press [Media Feed Correction].
5. Press [On].
6. Press [Close] twice.
7. Press [End].

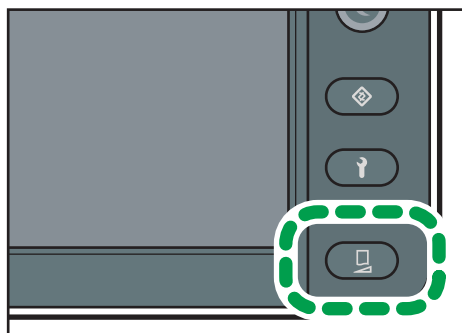
The connection method for the print heads will be applied to the first printing job after these settings are configured.

Configuring Print-Head Alignment for Media Feed Correction

If the print image quality problem persists even after [Media Feed Correction] is set to [On], change the media feed correction level.

(If the ink combinations are 4C)

1. Press the [Standard Procedure] key.



CIP Training L5160/L5130

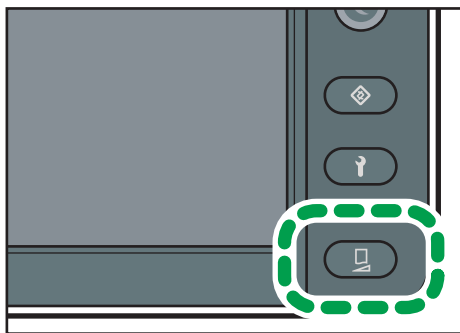
Basic Operation

2. Press [Selected Setting for Head Alignment].
3. Press [Media Feed Correction].
4. Press [Level Setting].
5. Select the print mode to change the media feed correction level to [6 Pass], [8 Pass], [12 Pass], [16 Pass], or [32 Pass].
6. Select the media feed correction level from [Level 0], [Level 1], [Level 2], and [Level 3].
7. Press [Close] 3 times.
8. Press [End].

The connection method for the print heads will be applied to the first printing job after these settings are configured.

(If the ink combinations are 4C+W)

1. Press the [Standard Procedure] key.



DWU103

2. Press [Selected Setting for Head Alignment].
3. Press [Media Feed Correction].
4. Press [Level Setting].
5. Select the print layer to change the media feed correction level to [4 color], [white], [4 color -> white], [white -> 4 color], or [4 color -> white -> 4 color].
6. Select the print mode to change the media feed correction level to [6 Pass], [8 Pass], [12 Pass], [16 Pass], or [32 Pass].
7. Select the media feed correction level from [Level 0], [Level 1], [Level 2], and [Level 3].
8. Press [Close] 5 times.
9. Press [End].

The connection method for the print heads will be applied to the first printing job after these settings are configured.

Basic Operation

Using the Auto Maintenance Function

You can prevent nozzle clogging by performing auto maintenance periodically. The auto maintenance function has the following items. The frequency of maintenance will differ depending on each maintenance item. Set the maintenance frequency in accordance with the usage of this machine.

Flushing Interval

Set the frequency for discharging ink that accumulates in the print heads.

- Level 1 (Lo): every 30 minutes
- Level 2: every 20 minutes
- Level 3 (Hi): every 10 minutes

Default: [**Level 1 (Lo)**]

Cleaning Interval

Set the frequency for cleaning print head nozzles.

- Level 1 (Lo): every 12 hours
- Level 2: every 6 hours
- Level 3 (Hi): every 3 hours

Default: [**Level 1 (Lo)**]

Cleaning (White) Interval

Set the cleaning frequency to prevent white ink from clogging.

- Level 1 (Lo): every 4 hours
- Level 2: every 2 hours
- Level 3 (Hi): every hour

Default: [**Level 1 (Lo)**] Ink

Circulation Interval

Set the circulation frequency to avoid white ink from settling in the ink supply route.

- Level 1 (Lo): every 3 hours
- Level 2: every 2 hours
- Level 3 (Hi): every hour

Default: [**Level 3 (Hi)**]

Note

- Even if you perform each maintenance item manually, auto maintenance will execute according to the configured maintenance period.

CIP Training L5160/L5130

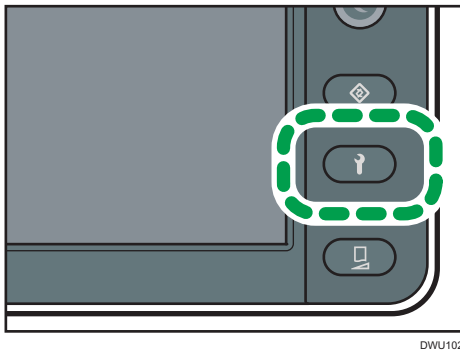
Basic Operation

- If the waste ink bottle is full, a message will appear on the control panel and auto maintenance will not be executed. If the message appears, replace the waste ink bottle. For details, see "Replacing a Waste Ink Bottle".

Configuring Auto Maintenance Interval

The setting procedure for the maintenance frequency of each auto maintenance item is the same. This section uses the procedure for the flushing interval as an example.

1. Press the [Maintenance] key.



2. Press [▼].
3. Press [Auto Maintenance].
4. Press [Flushing Interval].
When setting other maintenance items, select the desired item.
5. Select a level from [Level 1 (Lo)], [Level 2], or [Level 3 (Hi)].
Maintenance is more frequent the higher the level: [Level 1 (Lo)] > [Level 2] > [Level 3 (Hi)]
6. Press [Close].
7. Press [End].

Basic Operation

Recovering the Clogged Nozzle by Compensating with Another Nozzle

Register a clogged nozzle and compensate it with another nozzle. Perform this function when nozzle clogging is not resolved even after performing head cleaning and corrective measures for nozzle clogging. Recovering the clogged nozzle may not be enough to fully compensate for a clogged nozzle.

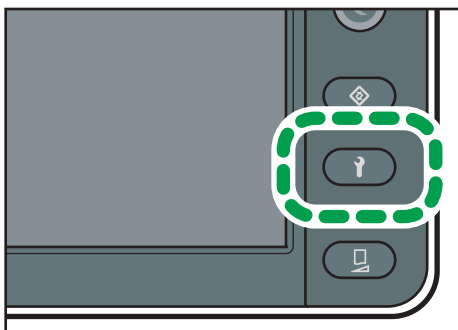
★ Important

- When registering clogged nozzles, make sure to restart the RIP software. RIP software performs corrections based on the setting information of the machine to create the optimal printing image. When printing without the registration information of the clogged nozzle updated by the RIP software, the print result may be different than expected. For details, see the RIP software manual.
- Printing the test pattern consumes ink. Perform this function only when necessary.
- Perform no other operations while the test pattern is printing.
- An error will occur and test pattern will not print if:
 - There is a misfeed.
 - One of the machine's covers is open.
 - The machine is performing maintenance operations.
 - The machine has run out of ink.
 - The machine has run out of media.
- Make sure to switch [Nozzle Recovery] to [Off] after nozzle defects are cleared. If you continue to print with [Nozzle Recovery] set to [On], it may cause image quality defects.
- When using white ink, a clogged nozzle cannot be detected automatically. Compensating for a clogged nozzle that discharges white ink must be done manually. For details, see "Compensating the Clogged Nozzle Manually".

Compensating the Clogged Nozzle Automatically

After the nozzle check pattern is printed, the colorimetric sensor automatically detects and registers a clogged nozzle. After registering a clogged nozzle, make sure to enable [Nozzle Recovery].

1. Press the [Maintenance] key.



DWU102

CIP Training L5160/L5130

Basic Operation

2. Press [▼].

3. Press [Clogged Nozzle Settings].

4. Press [Auto Nozzle Check].

5. Press [Execute].

The nozzle check pattern is printed, and the clogged nozzle is detected.

6. Press [Confirm].

The clogged nozzle is registered.

7. Press [Nozzle Recovery].

8. Press [On].

The clogged nozzle is compensated with another nozzle. Prints with the compensated nozzle from the first printing job after these settings are configured.

9. Press [Close].

10. Press [End].

Note

- It is not reflected in the result of the test print even when [Nozzle Recovery] is set to [On]. When checking the print result in which the clogged nozzle is recovered, print the recovery check pattern by using the RIP software. For details about how to print, see "Functions on the Main Menu", RIP Settings Guide.

Compensating the Clogged Nozzle Manually

After printing the nozzle check pattern, manually register a clogged nozzle. After registering a clogged nozzle, make sure to enable [Nozzle Recovery].

1. **Perform test printing to print the nozzle check pattern.**

For details about test printing, see "Performing Test Printing".

2. **Cut the nozzle check pattern.**

For details about how to cut media, see "Cutting Media".

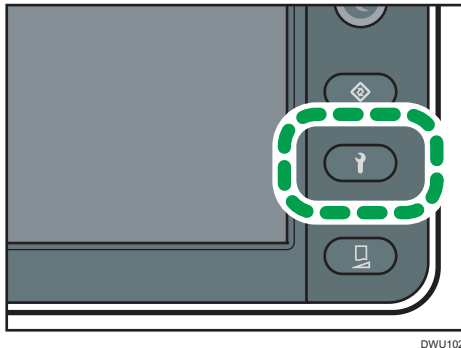
3. **Check for clogged nozzles based on the printing result of the nozzle check pattern.**

For details about how to check the print head, nozzle column, and nozzle number, see "How to Read the Printing Result".

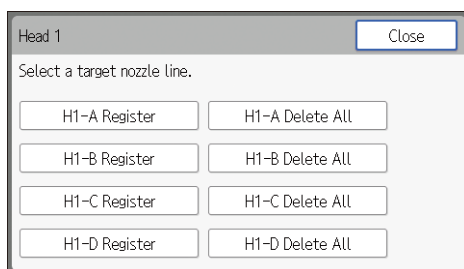
4. **Press the [Maintenance] key.**

CIP Training L5160/L5130

Basic Operation

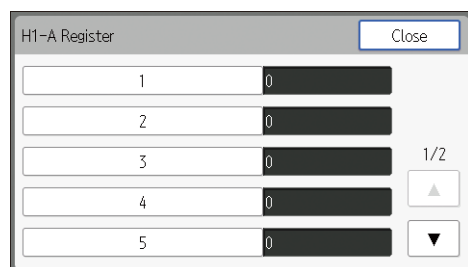


5. Press [▼].
6. Press [Clogged Nozzle Settings].
7. Press [Registering Clogged Nozzle].
8. Select the print head that you checked in Step 3.
9. Select the nozzle column that you checked in Step 3.
If you want to register the nozzle A column of Head 1, select [H1-A Register].



10. Select the registration number.

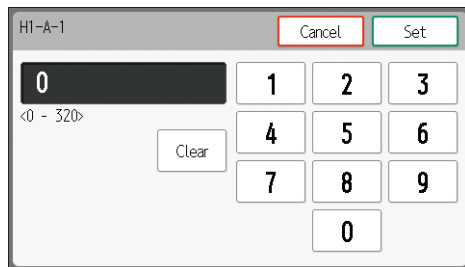
You can register up to 10 clogged nozzles to one nozzle column. You can display the next page using [▼] or [▲].



11. Enter the number of the clogged nozzle that you checked in Step 3 using the number keys, and then press [Set].

CIP Training L5160/L5130

Basic Operation



The clogged nozzle is registered.

12. Press [Close] 3 times.

13. Press [Nozzle Recovery].

14. Press [On].

The clogged nozzle is compensated with another nozzle. Prints with the compensated nozzle from the first printing job after these settings are configured.

15. Press [Close].

16. Press [End].

Note

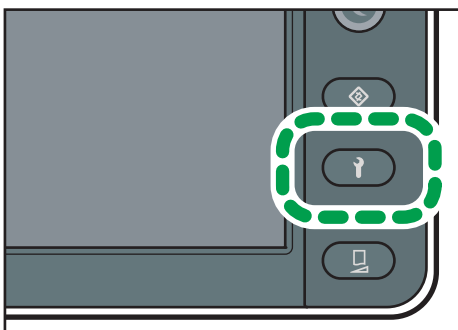
- It is not reflected in the result of the test print even when [Nozzle Recovery] is set to [On]. When checking the print result in which the clogged nozzle is recovered, print the recovery check pattern by using the RIP software. For details, see "Functions on the Main Menu", RIP Settings Guide.

Deleting the Registered Clogged Nozzle

Delete the registered clogged nozzle by nozzle column.

When the clogged nozzle is cleared by performing head cleaning, delete the registered clogged nozzle. Make sure to switch [Nozzle Recovery] to [Off] after all nozzle defects are cleared.

1. Press the [Maintenance] key.



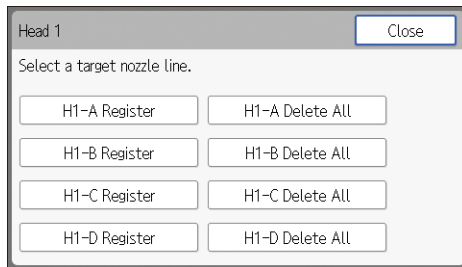
DWU102

CIP Training L5160/L5130

Basic Operation

2. Press [▼].
3. Press [Clogged Nozzle Settings].
4. Press [Registering Clogged Nozzle].
5. Select the print head to be deleted.
6. Select the nozzle column to be deleted.

If you want to delete registration of nozzle A column of Head 1, select [H1-A Delete All].



7. Confirm the message on the control panel, and then press [Execute].
Registration of the clogged nozzle is deleted.
8. Press [Confirm].
9. Press [Close] 3 times.
10. Press [End].

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