

Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)

Perform the initial adjustment of this machine. This adjustment must be performed in the following cases:

- When using this machine for the first time
- When changing the media to use
- When printing is not improved by performing simple correction for bidirectional printing (P. 96 "Correcting for Misalignment in Bidirectional Printing")

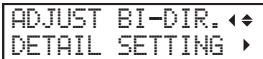
1. Print a test pattern.

1 Press **MENU**.

2 

Press **▼** several times to display the screen shown on the left.

Press **▶**, then **▲**.

3 

Press **▶**.

4 

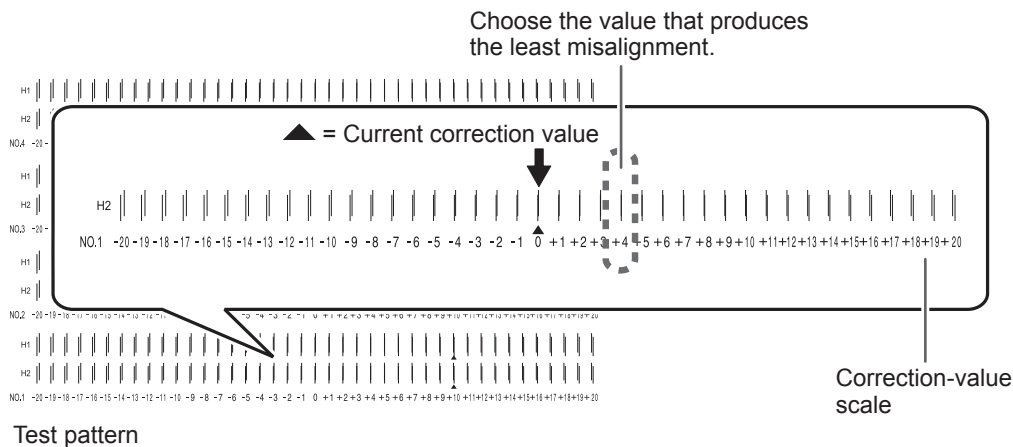
Press **ENTER**.

A test pattern is printed.

When printing ends, press **▼**.

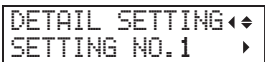
2. Read the correction values from the test pattern.

Choose the value that produces the least misalignment of the 2 lines. When you cannot choose between two numbers, select a value that is halfway between them.



3. Enter the correction values that you read.

Enter the corresponding correction values for H1 and H2.

① 

Press .

② 

Press  or  to select H1 or H2.

Press  or  to select the correction value.
Select the correction values that you read in step 2.

When you have finished setting the correction values,
press .

This completes the configuration of [SETTING NO. 1]. Next, press  and set the correction values for [SETTING NO. 2] to [SETTING NO. 4] in the same manner.

③ Press , then  to go back to the original screen.

Setup of Media

About "MEDIA SETTING" menu

To ensure the optimal printing according to the media size and type, various setting items are provided in the machine. The machine provides the "MEDIA SETTING" menu that guides you through these settings in an interactive mode. Using this menu, you can set all of the basic settings simply by following the instructions on the display.

Since setting details can be stored as a preset menu, you can work efficiently by skipping the setup procedure when using the same type of media. Once the basic settings have been stored in a preset, fine adjustments can be made as necessary.

The items set through the "MEDIA SETTING" menu can be also set individually.

Setup of Media ("MEDIA SETTING" menu)

Note: If a setting is not necessary, you can go to the next menu by selecting [NEXT].

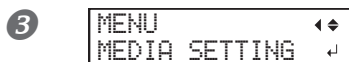
1. Start the "MEDIA SETTING" menu.

1 Load media.

Check that the media is not sagging. If any sagging exists, the following correction value settings will not function effectively.

☞ P. 17 "Loading Media"

2 Press **MENU**.

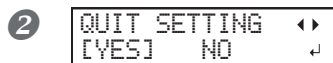


When the screen shown on the left is displayed, press **ENTER**.

To cancel setup

Procedure

1 Press **MENU** during setup.



Press **←** to select [YES].
Press **ENTER**.



The screen on the left appears again.
Selecting [NO] returns you to the screen that was displayed when you pressed **MENU**.

2. Set the dryer temperature.



Press or to set the temperature.

Recommended temperature: 40°C

Press to confirm your entry.

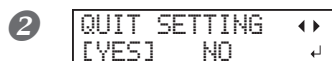
For the individual setting method and the description of this setting item, refer to the following section.

☞ P. 92 "Setting the Temperature of the Dryer"

To cancel setup

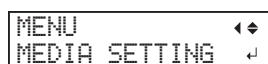
Procedure

1 Press during setup.



Press to select [YES].

Press .



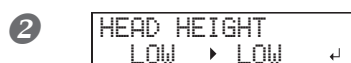
The screen shown in the figure on the left appears again. Selecting [NO] returns you to the screen that was displayed when you pressed .

3. Adjust the print head height.



Press to select [CHANGE].

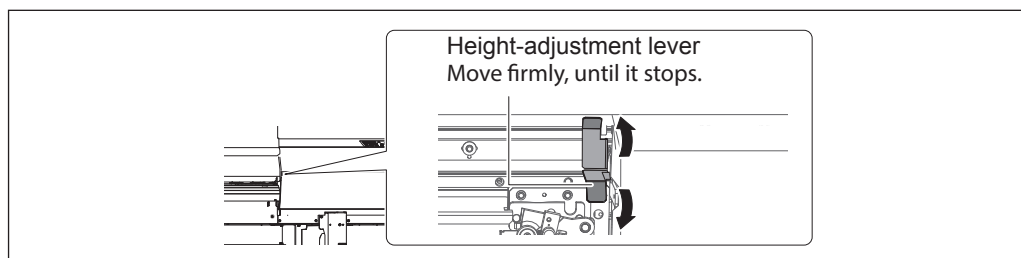
Press to confirm your entry.



When the screen shown on the left is displayed, open the front cover.

3 Move the height-adjustment lever to adjust the print head height.

When the lever is moved to the "High" direction, the buzzer sounds twice. When it is moved to the "Low" direction, the buzzer sounds once.



POINT!

Normally move the height-adjustment lever to "Low." For media that is wrinkled or comes loose from the platen, move the height-adjustment lever to "High."

4 Close the front cover.

For the individual setting method and the description of this setting item, refer to the following section. P. 100

"Adjusting Print Head Height to Match Media Thickness"

4. Perform position correction of the feed direction (reduce horizontal stripes).**POINT!**

Feed direction means the feed direction of the media. Perform correction adjustments to the media in advance because horizontal stripes are more likely to occur during printing when the movement distance of the media changes subtly depending on the media type or thickness.

1

CALIBRATION [SET] NEXT

Press to select [SET].

Press to confirm your entry.

The test pattern of feed correction is printed.

2

INPUT ADJ. VALUES

When the screen shown on the left is displayed, press

.

3

CALIBRATION 0.00% ▶ +0.40%

Use and to set the correction value.

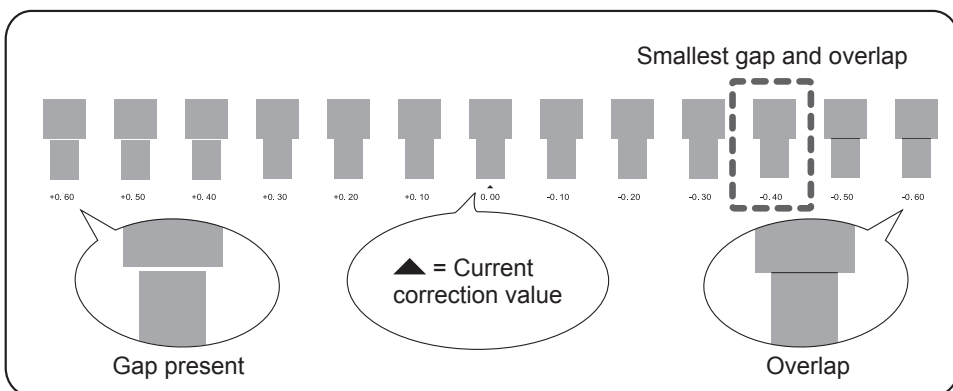
Press to confirm your entry.

Current correction value

Value to be set

To decide a correction value

Select the value to make the upper/lower rectangular gap and overlap smallest. When you cannot choose between two numbers, select a value that is halfway between them.



4

REDO ADJ.?	◀ ▶
[YES] DONE	↵

To confirm again/adjust again

Press **◀** to select [YES].

Press **ENTER** to confirm your entry.

The test pattern of feed correction is printed again. Go back to step 3 and set again.

To go to the next after correction is completed

Press **▶** to select [DONE].

Press **ENTER** to confirm your entry.

For the individual setting method and the description of this setting item, refer to the following section. [P. 97](#)
"Reducing Horizontal Bands (Feed Correction Function)"

5. Perform correction for misalignment in bidirectional printing.

POINT!

This machine prints by the bidirectional mode (in which the print-head carriage performs printing during both its outbound pass and return pass). This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten printing times, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction."

1

ADJUST BI-DIR.	◀ ▶
[SET] NEXT	↵

Press **◀** to select [SET].

Press **ENTER** to confirm your entry.

The test pattern of bidirectional correction is printed.

2

INPUT	
ADJ. VALUES	↵

When the screen shown on the left is displayed, press

ENTER.

3

ADJUST BI-DIR.	◀ ▶
0 6	↵

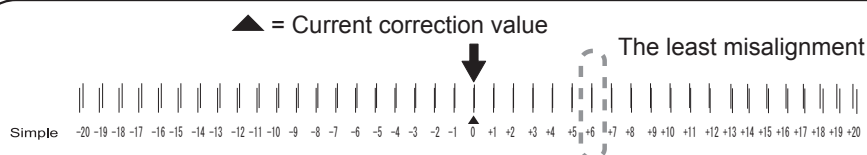
Current correction value Value to be set value

Use **▲** and **▼** to set the correction value.

Press **ENTER** to confirm your entry.

To decide a correction value

Choose the value that produces the least misalignment of the 2 lines. When you cannot choose between two numbers, select a value that is halfway between them.



4

To confirm again/adjust again

Press to select [YES].

Press to confirm your entry.

The test pattern of bidirectional correction is printed again. Go back to step 3 and set again.

To go to the next after correction is completed

Press to select [DONE].

Press to confirm your entry.

For the individual setting method and the description of this setting item, refer to the following section. P. 96

"Correcting for Misalignment in Bidirectional Printing"

6. Set the drying method and time after printing.

1

Press or to select a value.

Press to confirm your entry.

POINT!

Drying method after printing

Set whether the media should be fed until the trailing edge of the printed area is put on the dryer after the 1st page is printed. To make sure to dry the entire printed area, select "ENABLE". If "DISABLE" is selected, the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.

For the individual setting method and the description of this setting item, refer to the following section. P. 94

"Drying the Trailing Edge of the Printing Area on the Dryer"

2

Current setting

Setting after change

Press or to set the drying time.

Example of setting time (general guide)

Note: The setting time varies according to the settings such as the type of media and the printing quality.

Condition: Non-coated vinyl chloride media

Setting time: About three minutes

Press to confirm your entry.

POINT!

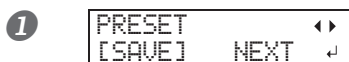
Drying time after printing

Set the drying time after the 1st page is printed. The next operation is not started until the set time passes.

For the individual setting method and the description of this setting item, refer to the following section. P. 95

"Setting the Drying Time after Printing"

7. Save the setting as preset.



Press to select [SAVE].

Press to confirm your entry.

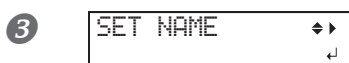
If you select [NEXT], the screen in step 4 is displayed, and the settings you have selected up to this point are not saved as a preset. However, they will remain as the current settings values for the machine.



Press or to select a destination to save the preset.

You can select a name from NAME1 to NAME8.

Press to confirm your entry.



Press or to select a character.

Press to move to the next character.

Select the following characters in the same way.

You can enter up to 15 characters.

Press to confirm your entry.



Press to go back to the original screen.

For the individual setting method and the description of this setting item, refer to the following section. [P. 88](#)
 "Fully Utilizing the Preset Function"

This completes the operation of the "MEDIA SETTING" menu.

Setting the Printing-start Location

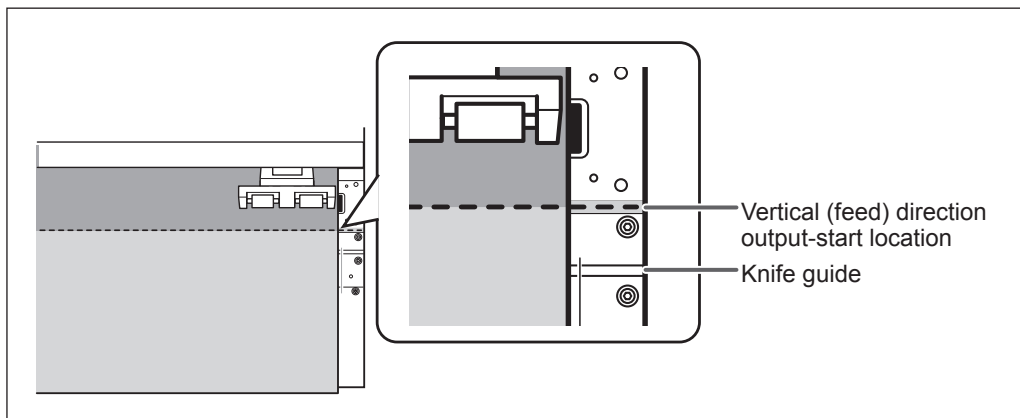
The output-start location can be set to any location you desire. (It is possible to print even if this setting is not configured.) Note, however, that this setting must be made for each individual page. When the printing of one page finishes, the output-start location returns to its default value.

POINT!

Note that the left and right positions are not restored to their defaults for test patterns.

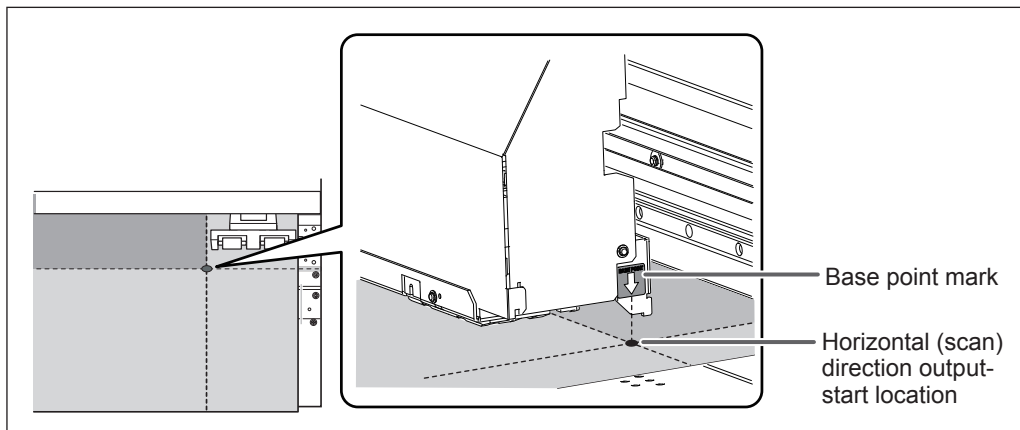
Procedure

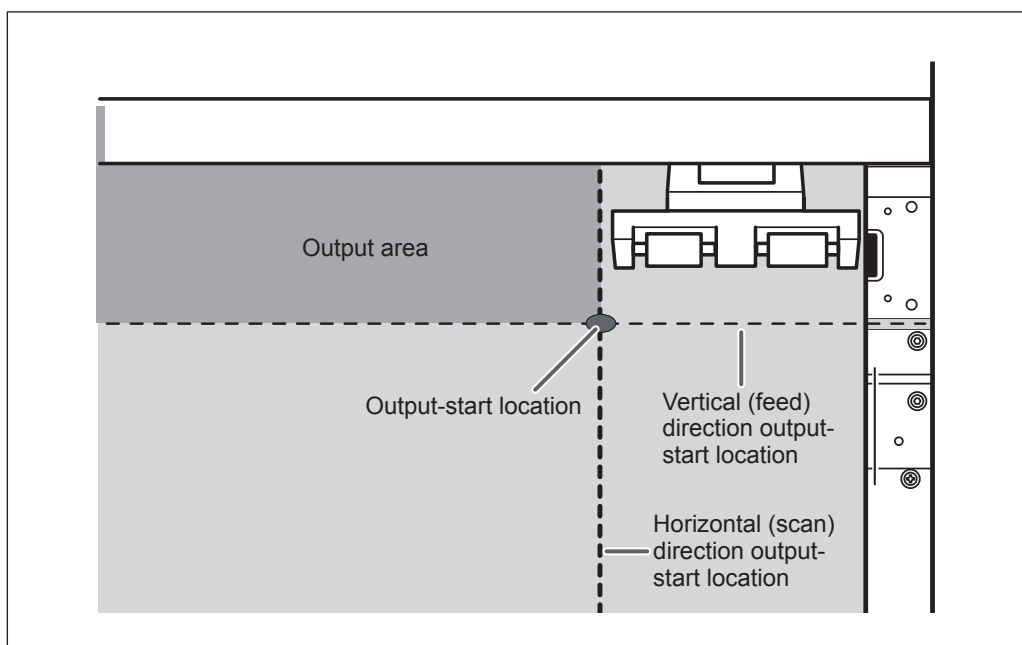
- 1 Set the output-start location in the vertical (feed) direction by pressing  and  to move the media.



- 2 Set the output-start location in the horizontal (scan) direction by pressing  and  to move the print heads.

When a cursor key is pressed, preparations for moving the print heads are started. When the preparations are finished, move the print heads.





- 3 When the location is set, press **BASE POINT**.

W1100mm
B

BASE POINT lights. When the screen displays the character "B" together with the output-possible width at the location, setting is complete.

Printing Tests and Normal Cleaning

Before you carry out actual printing, perform a printing test to ensure no dot drop-out occurs. If dot drop-out occurs, perform cleaning of the print heads (normal cleaning).

1. Setting a test print direction

*The factory default setting of the test print direction is "FEED." When performing printing tests successively, you can select "FEED" or "SCAN" as the print direction applied to the second and later tests.

- 1 Press **MENU**.

2

MENU	◀▶
SUB MENU	▶

Press **▼** several times until the screen on the left appears.

Press **▶**.

3

SUB MENU	◀▶
TEST PRINT POS	▶

Press **▼** several times until the screen on the left appears.

Press **▶**.

- 4  Press   to select "SCAN."
Press  to enable the setting.
- 5 Press  to go back to the original screen.

2. Perform a printing test

1 Setting the Print-start Location.

☞ P. 44 "Setting the Printing-start Location"

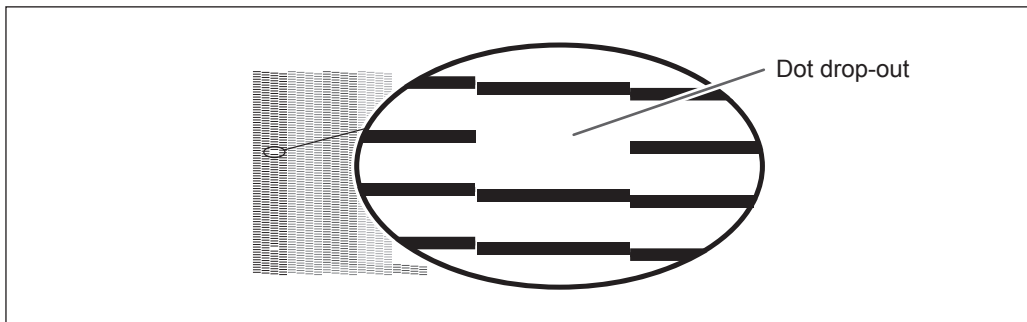
POINT!

When performing the tests successively, you don't need to set the print-start location for the second and later tests. However, if one of the followings is conducted, the default print-start location takes effect. Set the desired print-start location again as necessary.

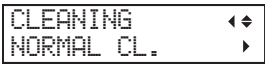
- Cutting of sheet
- Printing of data you created
- Cancellation of media loading

2 Hold down for one second or longer.

A test pattern is printed.

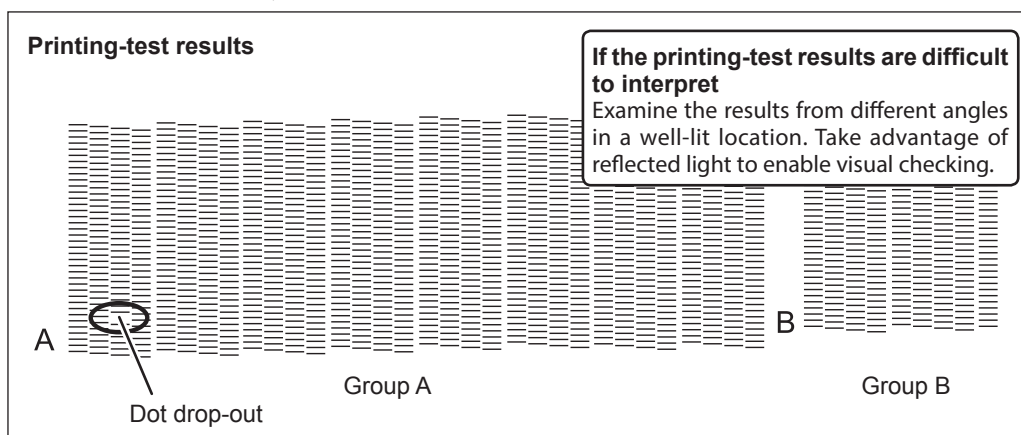


3. Perform a normal cleaning

- 1 Press .
- 2  Press .

3 Check for the group with dot drop-out by viewing the printing-test results.

With normal cleaning, only the group of print heads having dot drop-out is cleaned.

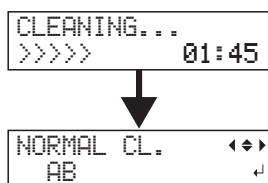


Press ◀ or ▶ to select the group of print heads that is not to be cleaned.

Press ▲ or ▼ to get rid of the group display. Repeat this process to display only the group of print heads that requires cleaning.

The only groups that can be cleaned are those that are displayed as A or B.

5 Press ENTER.



The screen shown in the figure appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. ("01:45" = "1 minute and 45 seconds")

When cleaning finishes, the screen shown in the figure appears again.

6 Press MENU, then ◀ to go back to the original screen.

7 Perform a printing test again to make sure the dot drop-out has been corrected.

If the problem persists, try performing cleaning again. If the printer has been used for a long period, the problem may not be fixed even after performing cleaning two or three times. If the problem doesn't go away, try cleaning using a different method.

☞ P. 62 "When Normal Cleaning Is Not Effective"

When You Want to Clean All Print Heads Simultaneously

Hold down CLEANING for one second or longer. Cleaning for all print heads starts automatically.

Getting Ready to Receive Data from a Computer

When P. 17 "Loading Media" and P. 38 "Setup of Media" are completed, get the machine ready to receive the data from the computer.

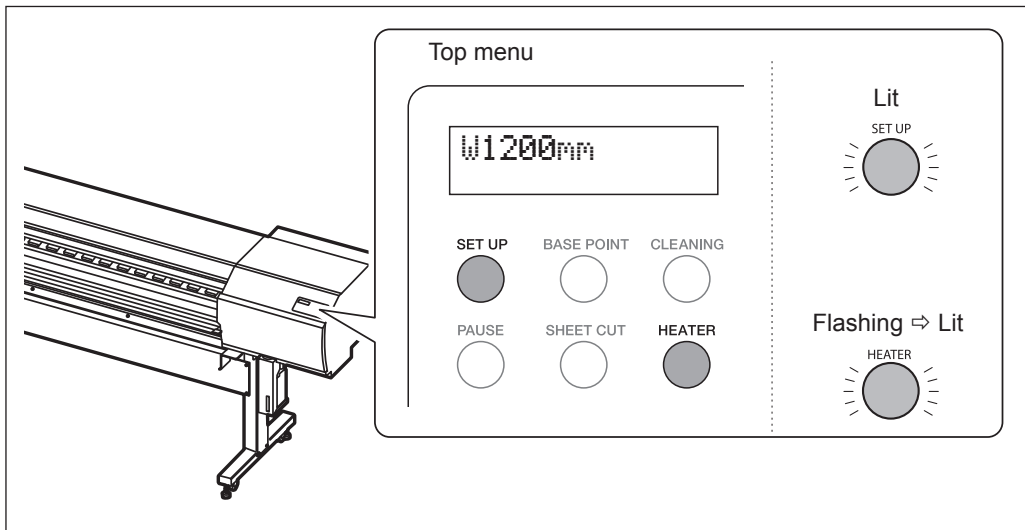
⚠ CAUTION

Never touch the print-head carriage while printing is in progress.

The print-head carriage moves at high speed. Coming into contact with the moving carriage may cause injury.

Procedure

- 1 Close the front cover.
- 2 Check that **SET UP** is lit.
If it is not lit, lower the loading lever and press **SET UP**.
- 3 Wait until **HEATER** stops flashing and stays lit.
- 4 Check that the top menu is displayed.
If the top menu is not displayed, press **MENU** several times.



POINT!

Printing is not possible in these situations

- The machine does not run when a cover (front, left, or right) is open.
- Never open a cover (front, left, or right) while printing is in progress. Doing so interrupts printing.
- Data from the computer is not accepted when **SET UP** is dark.
- Printing does not start until **HEATER** lights. (If the dryer is set to "OFF," printing is possible even if **HEATER** is not lit.)
- Data from the computer is not accepted when you are not at the top menu.

Starting Printing

When P. 48 "Getting Ready to Receive Data from a Computer" is completed, it is possible to start printing. To print, the following procedure is required

① Creating printing data

Create printing data using application software such as Adobe Illustrator. For information on how to create the data, refer to the documentation of your application software.

② Sending the output data to this machine using the software RIP

For information about installing and using the software RIP, refer to the documentation for the software RIP.

IMPORTANT!

Points that must be observed when printing

- When performing printing, be sure to attach the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- Do not touch the media during printing. Doing so may obstruct media feed or cause the media to rub against the print heads, which may result in a paper jam or damage to the heads.
- Keep the loading lever raised when the machine is not in use.

Remaining Ink during Printing

Ensure there is sufficient remaining ink

When the ink in the sub tanks runs out (or, if using 4 colors, when all ink of the same color runs out) during printing, printing pauses. When printing pauses, the coloring at the seam may be altered when printing resumes. Before performing printing, check the amount of ink remaining in the ink pouches by examining them to see how full they are. Take care particularly when performing lengthy printing.

☞ P. 55 "Out-of-ink Warnings", P. 56 "Ink Pouch Replacement"

If a Cover Opens during Operation

If the front cover, left cover, or right cover (hereafter collectively referred to as "covers") is opened during printing or any other operation where the print-head carriage (hereafter referred to as "carriage") is moving, the machine will perform an emergency stop.

When an emergency stop occurs, a message requesting the covers be closed will be displayed on the screen. Close the covers as directed in the instructions shown on the screen.

After closing the covers, the following message appears on the screen. Press **ENTER** as directed in the instructions shown on the screen. Once recovery from the error is complete, you will be able to continue working.

PRESS THE ENTER
KEY TO CONTINUE

If the above message does not appear even after closing the covers, it may be that an unrecoverable error has occurred. Refer to P. 134 "An Error Message Appears" for details.

Pausing or Canceling Printing

You can pause and cancel printing before it finishes. We do not recommend resuming printing because horizontal bands are produced at the place where printing was paused.

Procedure

- 1 Press **PAUSE** during printing.

Printing operation is paused.

Press **PAUSE** again to resume printing.

To cancel printing, go the next procedure without pressing **PAUSE** at this stage.

- 2

TO CANCEL, HOLD
DOWN SETUP KEY

When the screen shown in the figure appears, hold down **SET UP** for one second or longer.

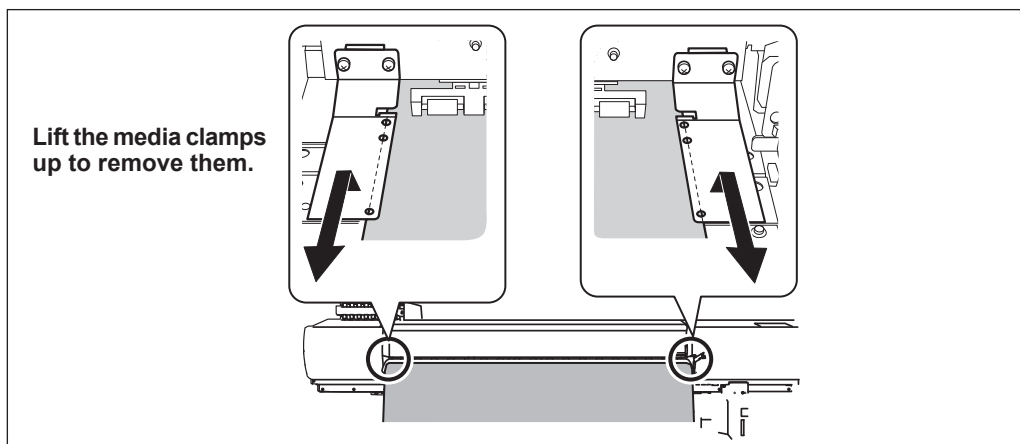
The printing operation is canceled.

- 3 Stop sending the data from the computer.

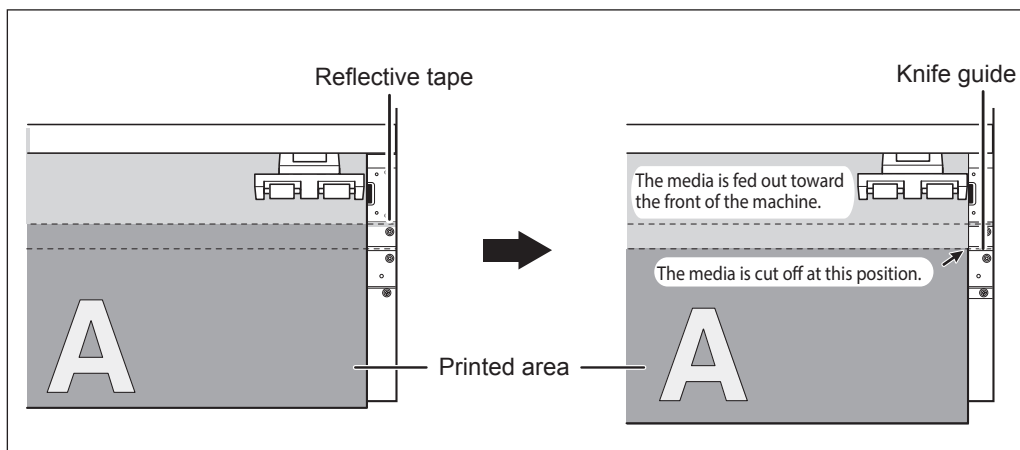
Cutting Off the Media

Procedure

- 1 Remove the left and right media clamps.



- 2 Close the front cover.
- 3 Check that **SET UP** is lit.
- 4 Hold down **SHEET CUT** for one second or longer.
The media is cut off.



It is possible to configure the settings in the software RIP for automatic media cutoff after printing has finished. For information on how to configure the settings, refer to the documentation for the software RIP you are using.

IMPORTANT! Cutoff Operations


When the media clamps are attached, the screen shown on the left appears. Open the front cover, remove the left and right media clamps, and then press **ENTER**.

- Be sure to remove the media clamps. If you attempt to perform the cutoff operation while the media clamps are attached, the machine will detect them and interrupt the operation.
- Even if you enable the automatic media-cutoff function in the software RIP, if the media clamps are attached, the machine will detect them and interrupt the operation.
- When performing cutoff, do not use  to pull the media back. Unless the end of the media has been pulled out to a location to the front of the platen, cutoff may not be performed smoothly.

IMPORTANT! Give attention to the media composition

- For some types of media, cutoff is not possible.
- Some types of media may remain on the platen after cutoff. If the media remains on the platen, remove it by hand.

Transfer conditions

Recommended Transfer Conditions (Ink: genuine Roland DG ink compatible with the machine)

Heat bonded at 200°C (392°F) for 60 seconds

Note: Transfer conditions for materials other than cloth may differ from the above.

Other Points to Remember

To ensure stable transfer quality, we recommend waiting for at least 1 hour after printing before transferring. Insufficient dry time may result in a reduction in quality.

Switch Off

Switch Off

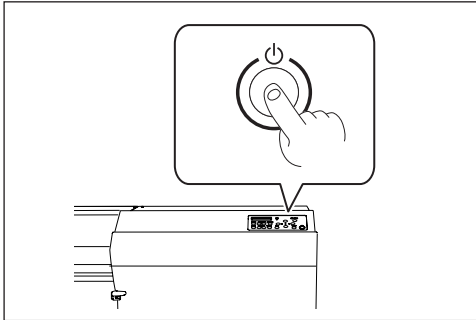
WARNING

When output is not being performed, remove any loaded media or switch off the sub power.

The continued application of heat at a single location may cause the release of toxic gases from the media or pose a fire hazard.

Procedure

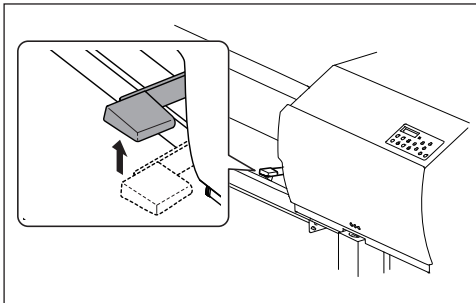
1



Switch off the sub power whenever printing is finished.

Hold down the sub power switch for one second or longer.

2



Raise the loading lever and remove the media.

When not using the machine, raise the loading lever even if the sub power is on.

IMPORTANT!

Leave the main power switched on at all times.

Never switch off the main power. When the main power is on, the automatic maintenance function is carried out periodically. If the automatic maintenance is not carried out, the printer may malfunction. For example, the print heads may be damaged.

Never switch off the main power or unplug the power cord suddenly while operation is in progress.

Switching off the main power or unplugging the power cord suddenly while operation is in progress may damage the print heads. Be sure to first switch off the sub power. If the main power is accidentally switched off, immediately turn the main and sub power back on.

POINT!

When not using the machine, remove any media and store it in a suitable environment.

If the machine is left with the media loaded, the media may be damaged, which may be adversely affect printing. When not using the machine, remove any media and store it in a suitable environment.

➤ P. 15 "Media Storage Environment"

2

Basic
Operation

Chapter 3

Maintenance:

Keeping the Machine in Good Working Order

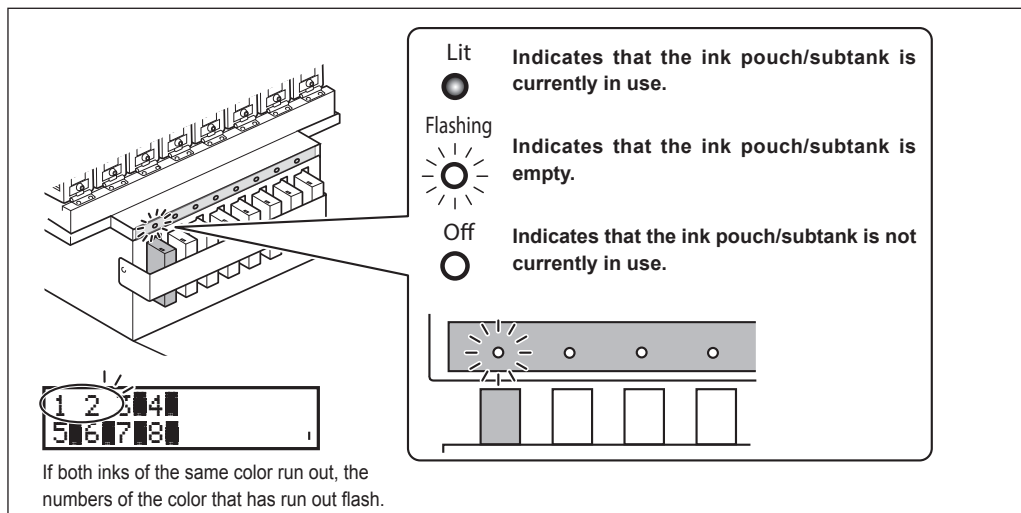
Ink Pouch Replacement.....	55
Out-of-ink Warnings	55
Ink Pouch Replacement.....	56
Maintenance That Should Be Performed Daily.....	58
Disposing of Discharged Fluid	58
Cleaning.....	60
Care and Maintenance of the Print Heads.....	61
When Normal Cleaning Is Not Effective.....	62
Medium Cleaning	62
Powerful Cleaning.....	63
If Colors Are Uneven.....	64
Mixing the Ink by Shaking the Ink Pouch	64
Light Choke Cleaning.....	64
Maintenance That Should Be Performed More than Once a Month	66
When Manual Cleaning Becomes Necessary	66
Manual Cleaning	67
Maintenance That Should Be Performed Every Six Months.....	73
Refreshing Subtanks (REFRESH SUBTANKS).....	73
When Problems Such as Dot Drop-Out Are Not Fixed	76
When Problems Such as Dot Drop-Out Are Not Fixed	76
Replacing Consumable Parts	78
Replacing the Wiper.....	78
Replacing the Felt Wiper.....	81
Replacing the Separating Knife.....	84
When Not in Use for a Prolonged Period.....	86
Keep Performing Maintenance.....	86
Alarm Feature	86
If the Machine has not been Used for Over One Month	86

Ink Pouch Replacement

Out-of-ink Warnings

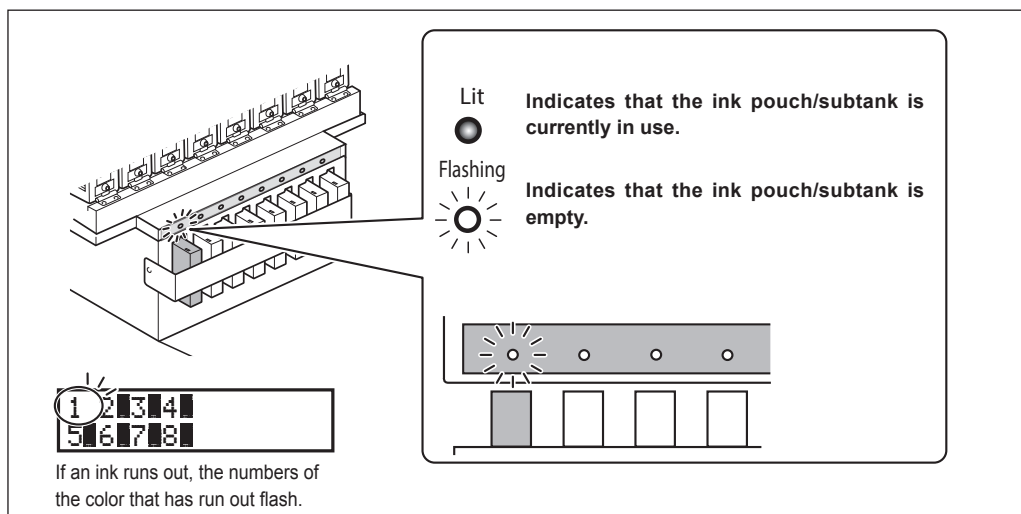
➤ P. 56 "Ink Pouch Replacement"

If Using 4 Colors (CMYK)



If one ink cartridge of the same color runs out, the machine continues printing using the other ink cartridge. When all ink cartridges of the same color run out, printing pauses and a warning beep sounds.

If Using 8 Colors (CMYKLcLmOrVi or CMYKFyFpOrVi)



When an ink runs out, printing pauses (unless the factory default settings have been changed,) and a warning beep sounds.

Ink Pouch Replacement

IMPORTANT!

Precautions regarding ink pouch replacement

- Be sure to replace each pouch with an item of identical type and color.
- Install a pouch in each port. If there is a port that does not have a pouch installed, ink may dry up or air may enter the ink path, resulting in malfunction. Depending on the state of the machine, it may take some time to restore operation.
- Lower the ink pouch holders slowly without letting go. If you let go of the ink pouch holders partway through moving them, they will be subjected to a strong impact, which may cause the ink to leak.
- Never use an ink pouch that has already been used in another machine even if it is an identical type.
- Never mix different types of items.
- Never insert or remove a partially used ink pouch. Ink may leak.
- Do not remove subtanks.
- Take care not to drop ink pouches.

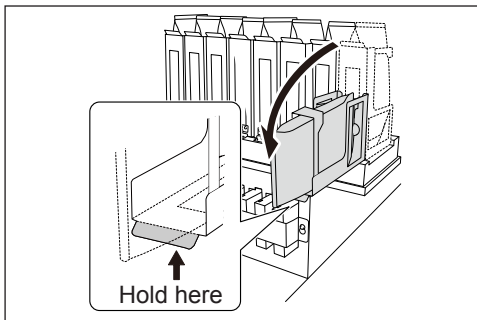
⚠ WARNING

Never store ink or discharged fluid in any of the following locations:

- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children

Procedure

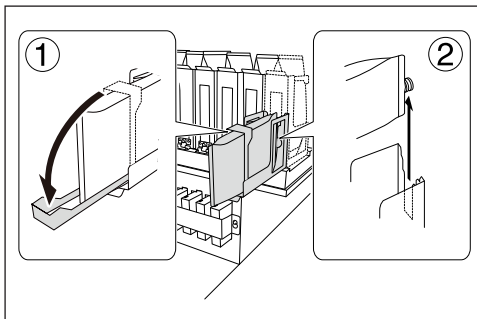
1



Pull the ink pouch holder for the empty ink forward.

Lower the ink pouch holders slowly without letting go of them.

2



① **Remove the stoppers.**

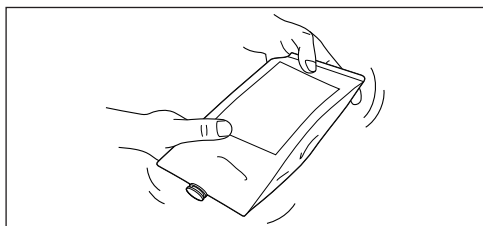
② **Remove the ink pouch.**

If ink gets on the machine or the floor when removing an ink pouch, wipe it off with a dry cloth or similar object.

IMPORTANT!

Do not raise an ink pouch holder if there is no ink pouch installed in it. Doing so may cause air to enter the ink path, resulting in malfunction. It may take some time to restore operation in the event of malfunction.

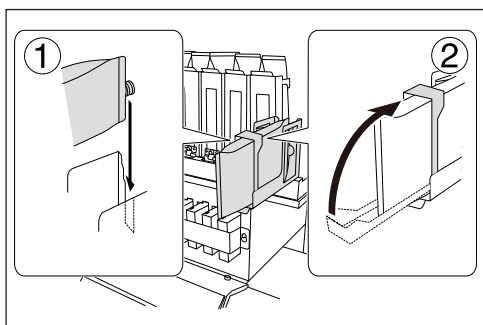
3



Shake an ink pouch of the same type and color 50 times (for around 15 seconds).

If ink components precipitate, it will not be possible to print with correct colors.

4



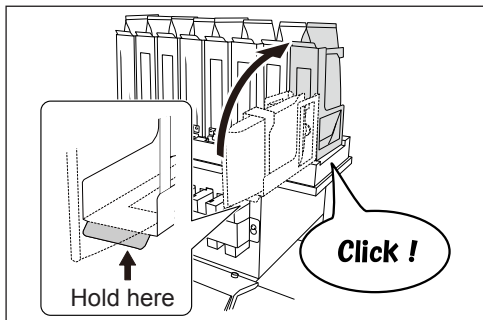
① Install the new ink pouch.

Install the new ink pouch, taking care to use the right color.

② Attach the stoppers.

Take care not to crush the ink pouches.

5



Raise the ink pouch holder.

Raise the ink pouch holders slowly without letting go of them.

IMPORTANT!

When installing an ink pouch and returning the ink pouch holder to its original position, raise the ink holder firmly until it clicks into place. Ink will leak if the ink pouch holder is not returned to the correct position.

3

Maintenance

Maintenance That Should Be Performed Daily

Disposing of Discharged Fluid

CHECK
DRAIN BOTTLE ↵

The drain bottle collects discharged fluid. Dispose of collected material before the bottle becomes full. The message shown in the figure appears when a certain amount of discharged fluid has collected in the bottle. Follow the procedure below to discard the discharged fluid.

Procedure

1 CHECK
DRAIN BOTTLE ↵

When the message shown in the figure appears, press **ENTER**.

2 Press **MENU**.

3 MENU
SUB MENU ↵

Press **▼** several times until the screen on the left appears.

Press **▶**.

4 SUB MENU
MAINTENANCE ↵

Press **▼** several times until the screen on the left appears.

Press **▶**.

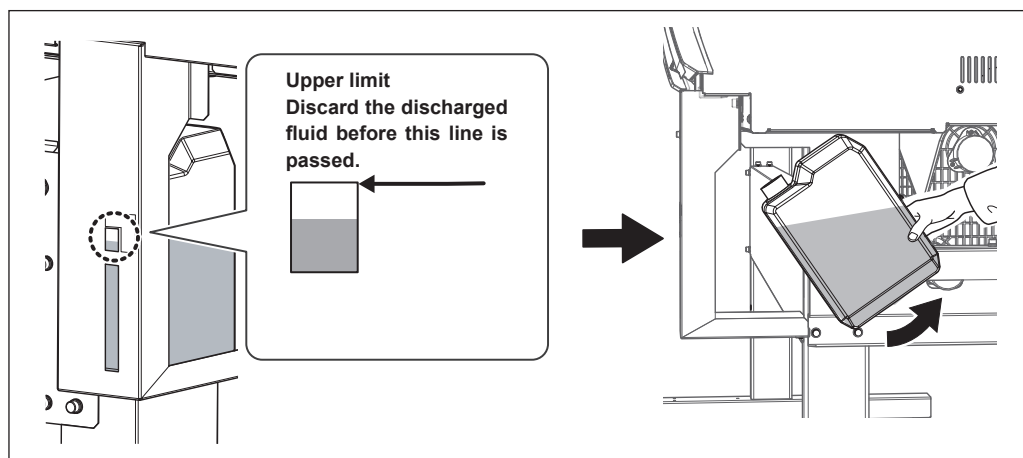
5 MAINTENANCE
DRAIN BOTTLE ↵

Press **▼** several times until the screen on the left appears.

Press **ENTER**.

6 EMPTY
DRAIN BOTTLE ↵

When the screen shown on the left is displayed, remove the bottle and discard the discharged fluid.



⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE."

Failing to follow this procedure may cause discharged fluid to flow out of the tube and spill onto your hands or the floor and cause a stain.

7 EMPTY
DRAIN BOTTLE ↵

Attach the emptied drain bottle to the machine once more. Press **ENTER**.

8  Press .

9 Press , then  to go back to the original screen.

WARNING

Never place discharged fluid or ink near an open flame. Doing so may cause a fire.

CAUTION

To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap the container tightly.

Any spillage or vapor leakage may cause a fire, an odor, or physical distress.

Store discharged fluid in a location not exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, keep the drain bottle out of direct sunlight. Otherwise the discharged fluid may harden, the waste bottle may become unusable, or the waste bottle may be deteriorated, the discharged fluid may leak.

Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.

Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not dispose of fluid in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

If It Is Not Possible to Check the Amount of Discharged Fluid in the Drain Bottle

Sometimes, ink affixes to the inside of the drain bottle, which makes it difficult to check the amount of discharged fluid. In this situation, clean the inside of the drain bottle.

Cleaning method A

Scrape the inside of the drain bottle clean using one of the included cleaning sticks.

Dispose of used cleaning sticks. They cannot be used for any other cleaning.

If this method is not effective, perform cleaning method B, shown below.

Cleaning method B (when cleaning method A is not effective)

- 1 Remove the drain bottle, which you will clean, from the machine.
- 2 Attach another drain bottle (included) to the machine.
- 3 When discarding the liquid from the removed drain bottle, leave about 2 to 3 cm (0.8 to 1.2 inches) of discharged fluid in the bottom of the bottle.
- 4 Securely cap the drain bottle.
- 5 Gently shake the drain bottle to wet the inside of the bottle with the discharged fluid. Tilt the drain bottle to make the entirety of the inside of the bottle wet.
- 6 Stand the bottle upright and leave it for 1 to 2 hours.
- 7 If ink stains are not cleaned sufficiently from the inside of the bottle, repeat steps 4 and 5.

8 Discard the remaining discharged fluid.

Cleaning

⚠ WARNING

Never use gasoline, alcohol, thinner, or any other flammable material. Doing so may cause a fire.

⚠ CAUTION

Before attempting cleaning, switch off the sub power and wait until the platen and dryer cool (approximately 30 minutes).

Sudden movement of the machine may cause injury, or hot components may cause burns.

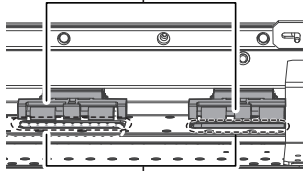
Wipe away any ink or grime on the media path and other areas as part of the daily cleaning procedure. Pinch rollers, grit rollers, and the platen are particularly prone to the buildup of grime. Clean by wiping with a cloth moistened with neutral detergent diluted with water then wrung dry.

POINT!

- This machine is a precision device and is sensitive to dust and dirt. Perform cleaning on a daily basis.
- Never attempt to oil or lubricate the machine.

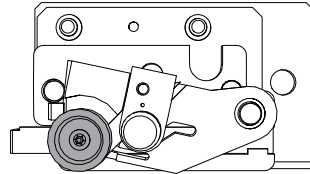
Pinch roller

Periodically wipe away any grime. Failure to clean properly may result in the transfer of grime to the surface of media.



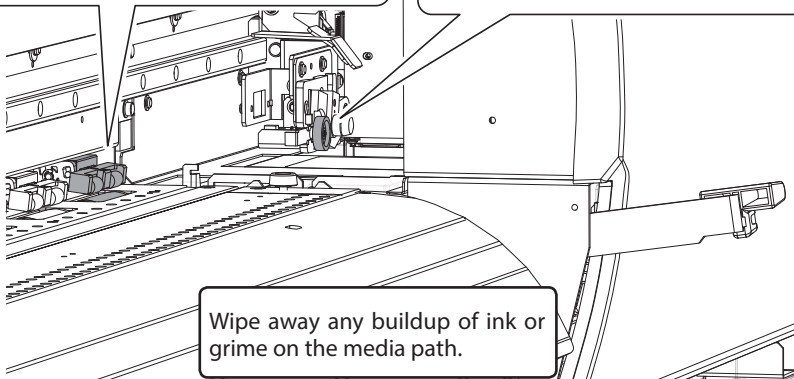
Grit rollers

Remove buildup of media and other material using a brush. Never use a metal brush.



Separating knife roller

This part is prone to paper dust buildup. Periodically wipe the area clean. Failure to clean properly may result in the transfer of grime to the surface of media.



Wipe away any buildup of ink or grime on the media path.

Care and Maintenance of the Print Heads

To keep a stable printing condition at all times, the print heads need to be maintained. There are maintenance tasks that should be performed daily and those that should be performed periodically.

Daily Care and Maintenance

➤ **Printing tests and normal cleaning**

We recommend performing a printing test and normal cleaning before day-to-day operation.

☞ P. 45 "Printing Tests and Normal Cleaning"

Periodic Care and Maintenance

➤ **Medium cleaning/powerful cleaning**

Perform medium cleaning or powerful cleaning when problems such as dot drop-out are not corrected after performing normal cleaning.

☞ P. 62 "Medium Cleaning"

➤ **Manual cleaning**

Perform manual cleaning periodically according to the frequency of use.

☞ P. 67 "Manual Cleaning"

➤ **Refreshing subtanks (REFRESH SUBTANKS)**

Perform this procedure once every six months. (This procedure is effective when light choke cleaning does not resolve uneven color issues.)

☞ P. 73 "Refreshing Subtanks (REFRESH SUBTANKS)"

Care and Maintenance When Uneven Color Occurs

➤ **Light choke cleaning**

Perform this procedure when printed colors are unstable or uneven, e.g., when color density is inconsistent even if the same data is printed with the same settings.

☞ P. 64 "Light Choke Cleaning"

➤ **Refreshing subtanks (REFRESH SUBTANKS)**

Use this procedure when light choke cleaning does not resolve uneven color issues. (Note that it is necessary to perform this procedure once every six months regardless of whether or not there are problems with uneven colors.)

☞ P. 73 "Refreshing Subtanks (REFRESH SUBTANKS)"

* The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Purchase them from your authorized Roland DG Corp. dealer.

When Normal Cleaning Is Not Effective

POINT!

Medium and powerful cleaning consume more ink than normal cleaning, and overly frequent use may damage the print heads themselves. Avoid performing more than necessary.

Medium Cleaning

When problems such as dot drop-out are not resolved by normal cleaning (P. 45 "Printing Tests and Normal Cleaning"), perform the more forceful "medium cleaning" to remove clogging from the print heads.

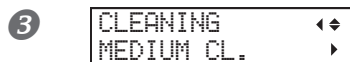
Procedure

1 Perform a printing test.

☞ P. 45 "Printing Tests and Normal Cleaning"

When the printing test is complete, remove the media.

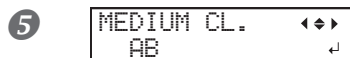
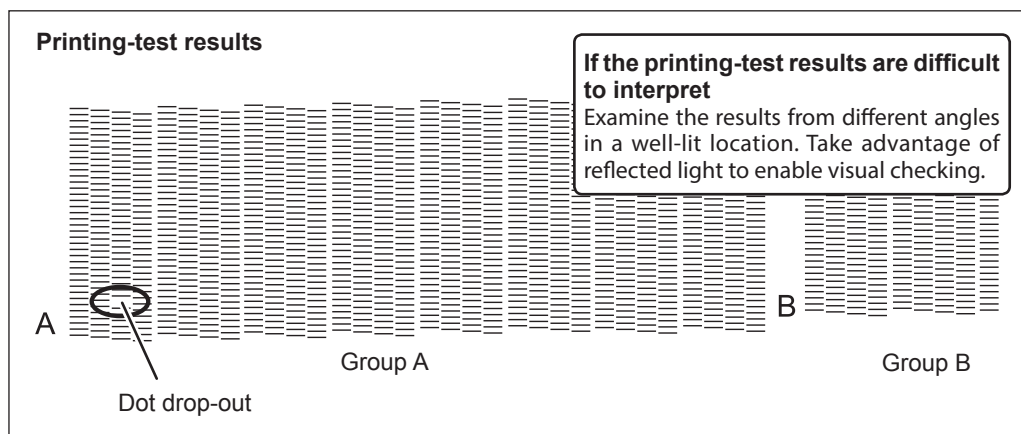
2 Press **CLEANING**.



Press  to display the screen shown on the left.
Press .

4 Check for the group with dot drop-out by viewing the printing-test results.

With medium cleaning, only the group of print heads having dot drop-out is cleaned.

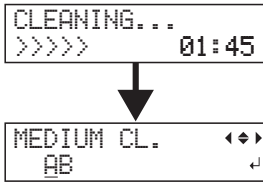


Press  or  to select the group of print heads that is not to be cleaned.

Press  or  to get rid of the group display. Repeat this process to display only the group of print heads that requires cleaning.

The only groups that can be cleaned are those that are displayed as A or B.

- 6 Press **ENTER**.



The screen shown in the figure appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. ("01:45" = "1 minute and 45 seconds")

When cleaning finishes, the screen shown in the figure appears again.

- 7 Press **MENU**, then **←** to go back to the original screen.

If problems such as dot drop-out persist even after you have performed medium cleaning, perform the more powerful "powerful cleaning."

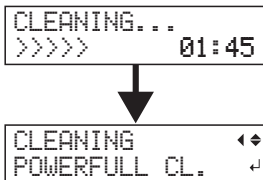
Powerful Cleaning

Procedure

- 1 Press **CLEANING**.



Press **▲** to display the screen shown on the left.
Press **ENTER**.



The screen shown in the figure appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. ("01:45" = "1 minute and 45 seconds")

When cleaning finishes, the screen shown in the figure appears again.

- 3 Press **MENU**, then **←** to go back to the original screen.

When powerful cleaning is not effective

If problems such as dot drop-out persist even after you have performed powerful cleaning several times, perform manual cleaning. Such cleaning can be effective when carried out periodically, according to the frequency of use.

☞ P. 67 "Manual Cleaning"

If Colors Are Uneven

Mixing the Ink by Shaking the Ink Pouch



If ink components precipitate in the ink pouch, colors may be uneven (unevenness in printed colors). If colors are uneven, remove the ink pouches and shake them gently.

IMPORTANT!

- **Before shaking an ink pouch, wipe off any ink from around the mouth of the ink pouch.**
If you do not wipe off the ink, it may splatter when you shake the ink pouch.
- **When you have finished agitating the ink, reattach the ink pouch immediately.**
Taking time to reattach the pouch will adversely affect the ink path.
- **When installing an ink pouch and returning the ink pouch holder to its original position, raise the ink holder firmly until it clicks into place.**
Ink will leak if the ink pouch holder is not returned to the correct position.

If uneven color issues are not resolved even after shaking the ink pouches, perform light choke cleaning.

Light Choke Cleaning

IMPORTANT!

Light choke cleaning consumes a lot of ink, and overly frequent use may damage the print heads themselves. Avoid performing more than necessary.

If printing is not performed for several days, printed colors may become unstable or uneven, e.g., when color density is inconsistent, even if the same data is printed with the same settings. In such cases, perform light choke cleaning. This will stabilize printed colors by agitating the ink.

Procedure

1 Press **MENU**.

2

MENU	◀▶
SUB MENU	▶

Press **▼** several times to display the screen shown on the left.

Press **▶**.

3

SUB MENU	◀▶
INK CONTROL	▶

Press **▲** several times to display the screen shown on the left.

Press **▶**.

4

```

INK CONTROL  ◀▶
LIGHT CHOKE CL.  ↵
  
```

Press  several times to display the screen shown on the left.

Press .

If the message [EMPTY DRAIN BOTTLE] is displayed on the screen

```

EMPTY  ◀
DRAIN BOTTLE  ↵
  
```

When the screen shown on the left is displayed, discard the discharged fluid. When you attach the empty drain bottle to the machine again and press , the machine performs the procedure below.

⚠ CAUTION

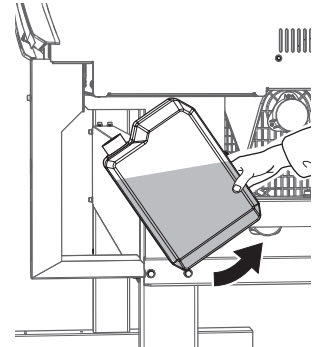
The discharged fluid must be discarded at this stage.

If you do not discard it at this stage, discharged fluid will overflow from the drain bottle during the procedure that follows.

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [EMPTY DRAIN BOTTLE].

Failing to follow this procedure may cause discharged fluid to flow out of the machine and spill, soiling your hands or the floor.



3

Maintenance

```

CLEANING...
>>
  
```



```

INK CONTROL  ◀▶
LIGHT CHOKE CL.  ↵
  
```

The screen on the left is displayed.

The (approximate) remaining time for the procedure is displayed on the screen. ("01:45" = "1 minute and 45 seconds")

When finished, the screen shown on the left appears again.

5

Press , then  to go back to the original screen.

If uneven color issues are not resolved by light choke cleaning, refresh the sub tanks.

➤ P. 73 "Refreshing Subtanks (REFRESH SUBTANKS)"

Maintenance That Should Be Performed More than Once a Month

When Manual Cleaning Becomes Necessary

Perform Manual Cleaning Once a Month or More

To keep the stable printing condition at all times, perform manual cleaning once a month or more. Manual cleaning takes approximately 10 minutes.

Manual Cleaning Is Recommended When The Following Symptoms Occur

It is recommended to perform manual cleaning when any of the symptoms given below occur and cannot be solved by automatic cleaning functions such as normal cleaning.

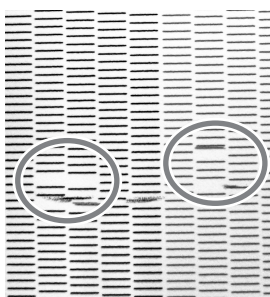
Replacing the wiper or felt wiper is also an effective means of improving the symptoms.

➤ P. 78 "Replacing the Wiper", P. 81 "Replacing the Felt Wiper"

3

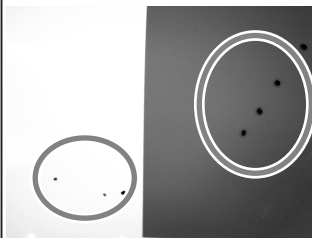
Maintenance

Dot drop-out/Dot displacement



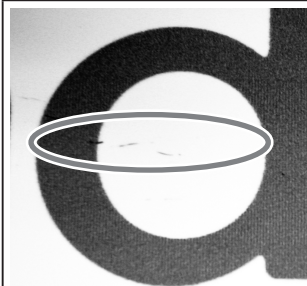
Dust or other foreign matter adheres to the print heads and impedes correct ink discharge.

Ink drips



Ink accumulates on dirty areas around the print heads and drips onto the media.

Dragging dirt



Dirt accumulates on the area around the print heads and touches the media.

- If you use up the cleaning sticks used for manual cleaning, contact your authorized Roland DG Corp. dealer.
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Contact your authorized Roland DG Corp. dealer.

Manual Cleaning

IMPORTANT!

Important notes on this procedure

- Before attempting this operation, remove any media.
- To prevent the print heads from drying out, finish this procedure in 30 minutes or less. A warning beep sounds after 30 minutes.
- Never use any implements other than the included cleaning sticks. Cotton swabs or other lint-producing items may damage the print heads. If you use up the cleaning sticks, contact your authorized Roland DG Corp. dealer.
- Use one cleaning stick per cleaning session, and then discard the stick after use. Reusing cleaning sticks will adversely affect the printing results.
- Never rub the print head surface (nozzle surface).
- Stroke the sponges very gently, applying as little pressure as possible. Never rub, scrape, or crush them.

If a warning beep sounds during cleaning

A warning beep sounds 30 minutes after operation starts. Temporarily stop work, attach the left and right covers, and then close the front cover. Press **ENTER** to finish manual cleaning mode. After that, restart operation from the first procedure.

CAUTION

Be sure to perform operations as specified in the instructions, and never touch any area not specified in the instructions.

Failure to observe these instructions may cause the machine to move suddenly, resulting in injury.

Required items

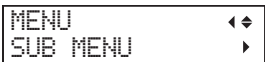


Cleaning sticks

1. Enter manual cleaning mode.

① Remove any media.

② Press **MENU**.

③ 

Press **▼** several times until the screen on the left appears.

Press **▶**.

4 SUB MENU
MAINTENANCE

Press  several times until the screen on the left appears.

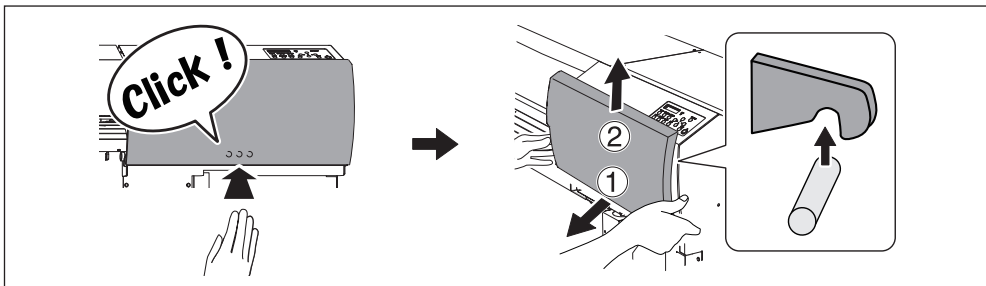
Press .

5 MAINTENANCE
CLEANING

Press .

6 OPEN COVER R

When the screen shown on the left is displayed, open the right cover.

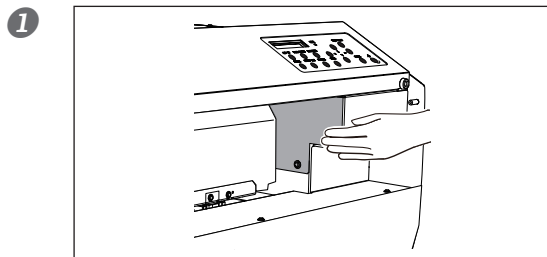


FINISHED?

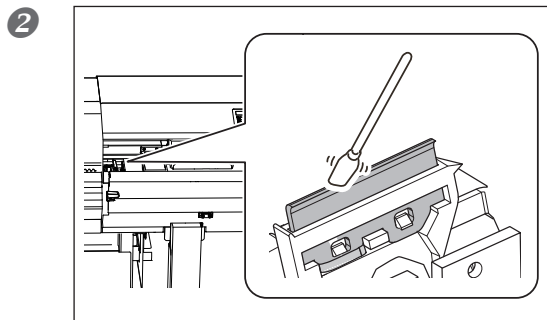
Preparations are complete when this screen appears.

2. Clean the wipers using a cleaning stick.

Note: Clean the two wipers one at a time.



Touch the location shown in the figure to discharge any static electricity.



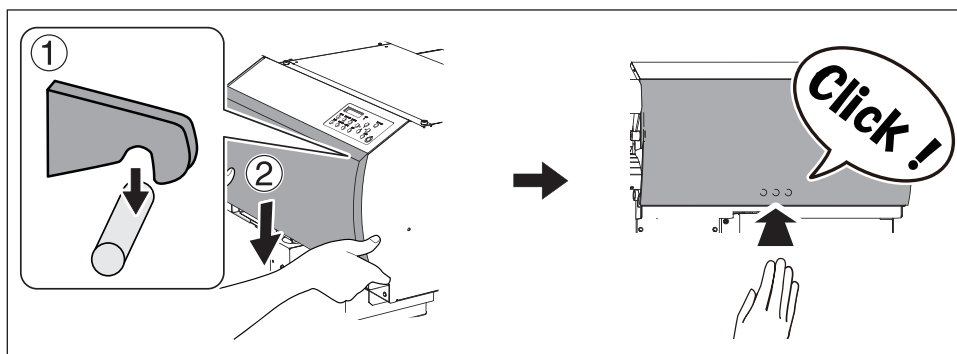
Clean the first wiper.

3 When cleaning is finished, press .

4

CLOSE COVER R

Close the right cover.



5

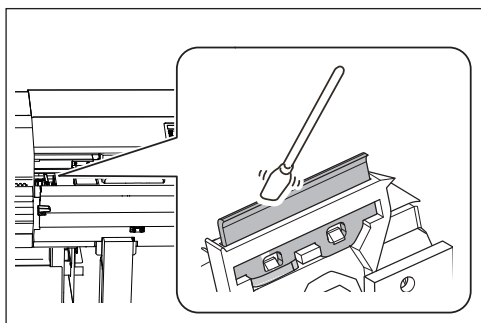
OPEN COVER R

When the screen shown on the left is displayed, open the right cover.

FINISHED?

Preparations are complete when this screen appears.

6



Clean the second wiper.

7

When cleaning is finished, press **ENTER**.

8

CLOSE COVER R

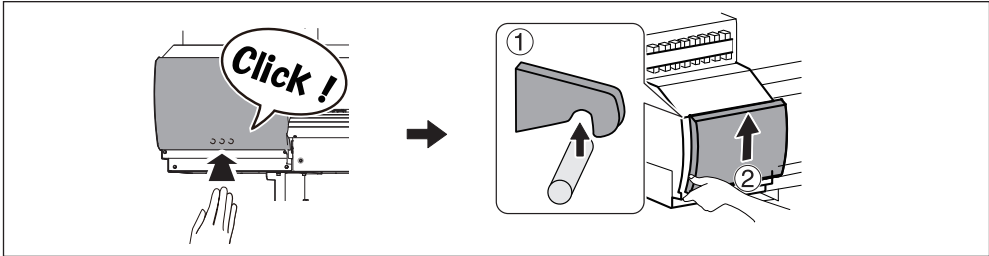
Close the right cover.

3

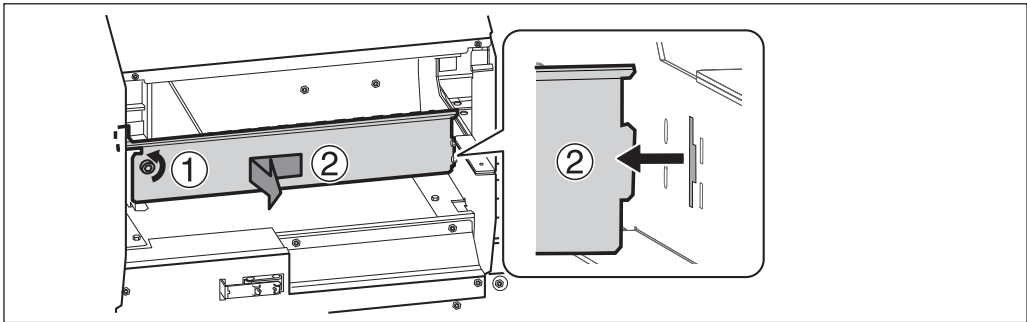
Maintenance

3. Clean the area around the print heads with the cleaning stick.

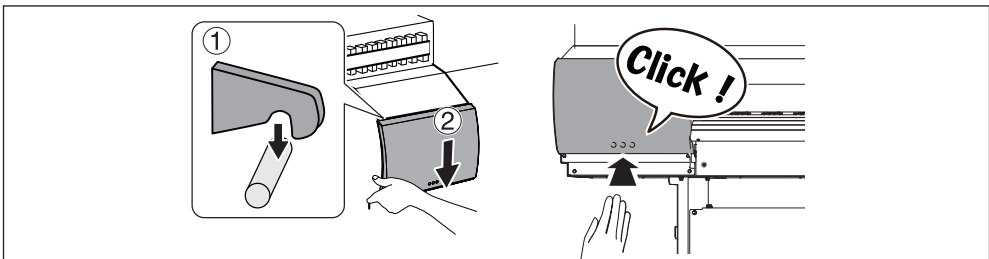
- ① OPEN COVER L Open the left cover.



- REMOVE CUT RAIL ↵ Remove the bolt (①), and then remove the cut rail (②). Press ENTER .



- ② CLOSE COVER L Close the left cover.



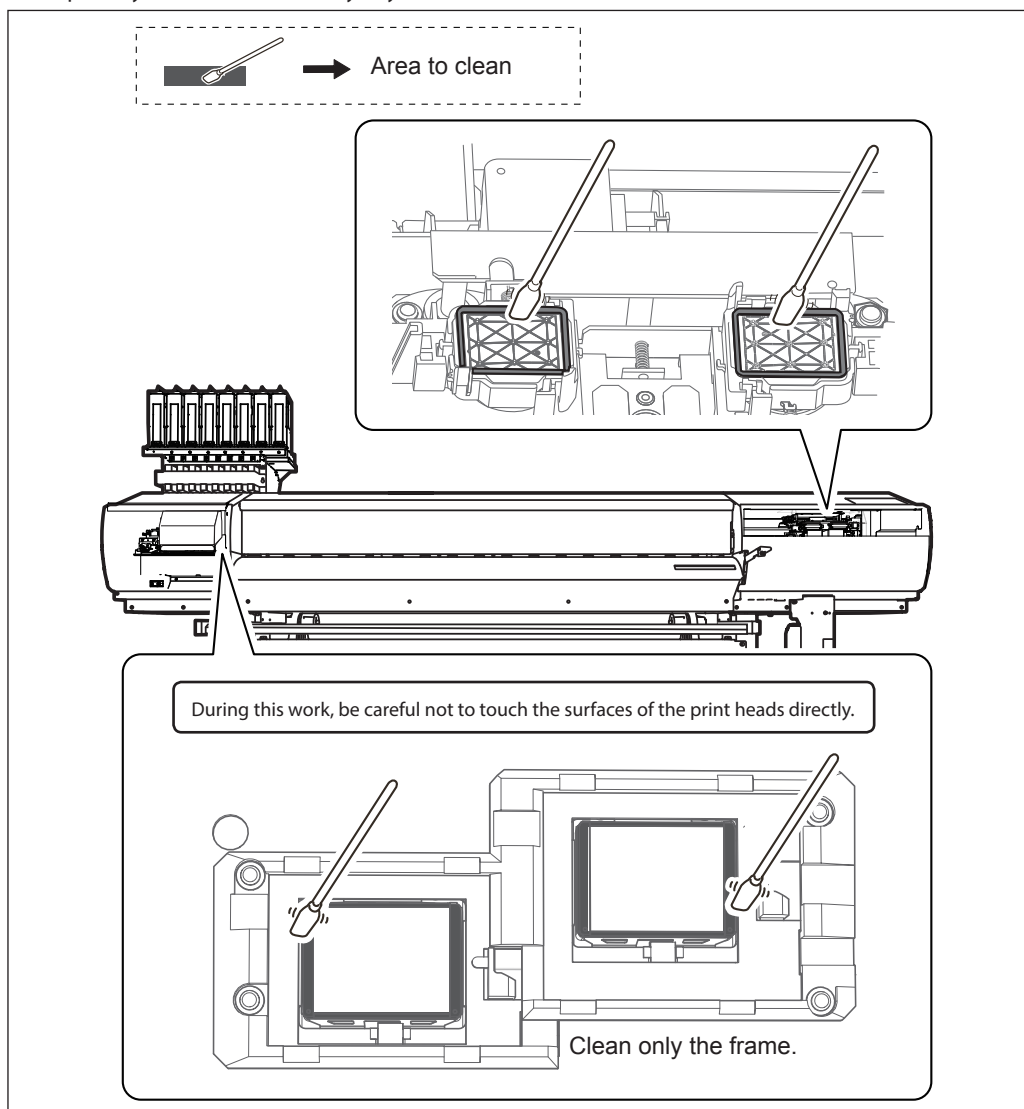
- ③ OPEN COVER L Open the left cover.

- ④ OPEN COVER R Open the right cover.

- FINISHED? ↵ Preparations are complete when this screen appears.

5 Clean the locations shown in the following figure.

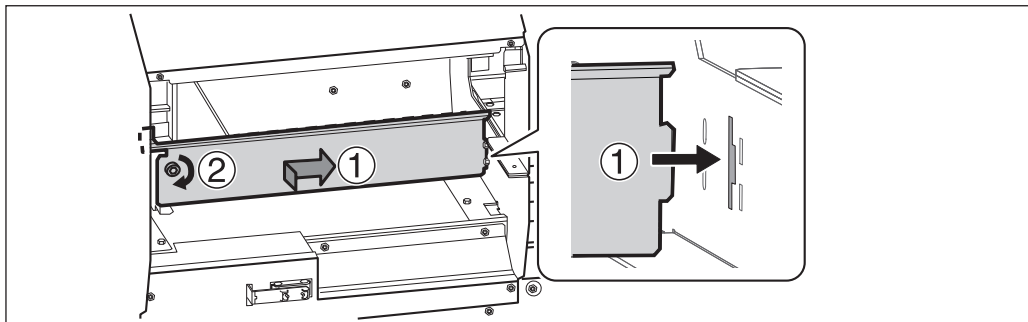
Be especially careful to clean away any fibrous dust (lint).



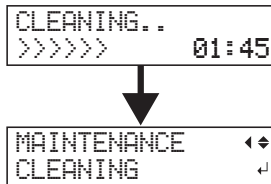
6 When cleaning is finished, press **ENTER.**

4. Reattach the left and right covers, and finish manual cleaning mode.

- 1 CLOSE COVER L Close the left cover.
- 2 CLOSE COVER R Close the right cover.
- 3 OPEN COVER L Open the left cover.
- 4 REPLACE CUT
RAIL ↵ Attach the cut rail (①), and then tighten the bolt (②).
Press ENTER.



- 5 CLOSE COVER L Close the left cover.



The screen shown in the figure appears, and then cleaning starts. The (approximate) remaining time for the procedure is displayed on the screen. ("01:45" = "1 minute and 45 seconds")

When cleaning finishes, the screen shown in the figure appears again.

- 6 Press MENU, then ◀ to go back to the original screen.

5. Perform a printing test to verify the results of the procedure.

Perform a printing test to check the results.

Perform cleaning using the machine's cleaning feature several times when necessary.

☞ P. 45 "Printing Tests and Normal Cleaning"