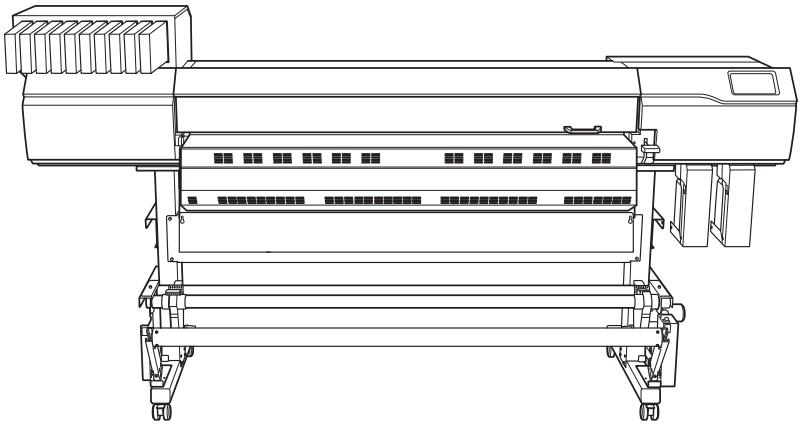
TrueVIS AG-640

User's Manual



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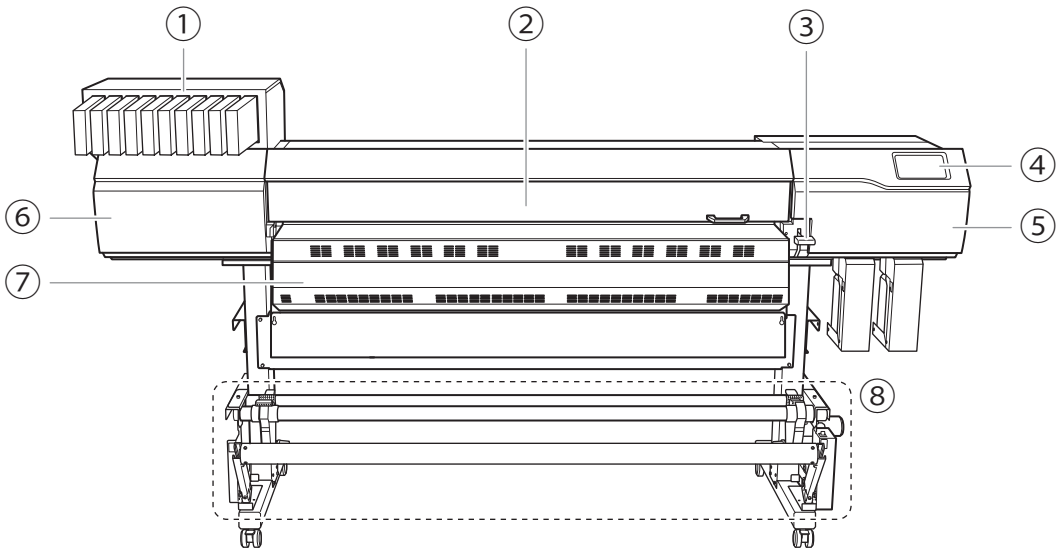
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Part Names and Functions

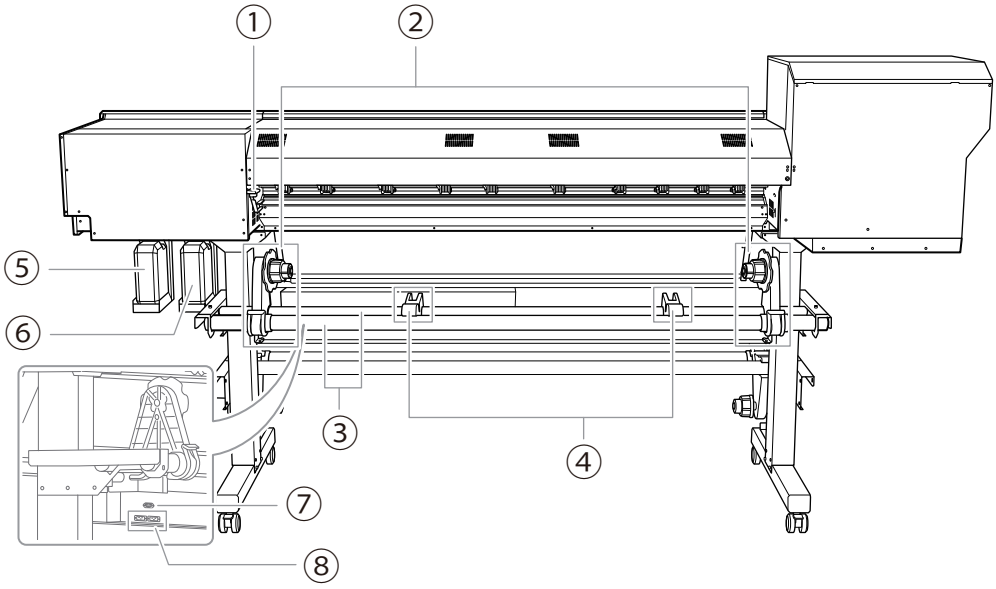
Printer Unit

Front



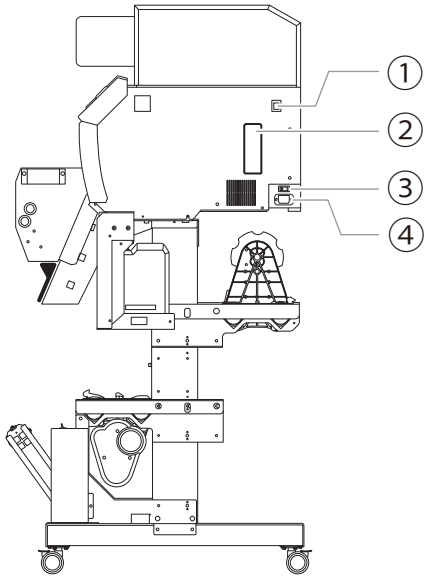
No.	Name	Function overview
①	Ink slots	Insert ink cartridges in which ink pouches have been loaded.
②	Front cover	Open this when necessary, such as when loading media. Another example of an operation that requires this cover to be open is maintenance. When not performing these types of operations, keep this cover closed.
③	Loading lever (front)	Operate this when you load media.
④	Operation panel	The panel used to operate the machine. P. 16 Operation Panel
⑤	Right cover	Open this when you perform maintenance.
⑥	Left cover	Open this when you perform maintenance.
⑦	Dryer	Dries the ink after printing. ⚠ WARNING **High Temperature** The areas inside the dryer, under the dryer, and near the extension apron become hot. Exercise caution to avoid burns.
⑧	Take-up unit	Takes up the media after printing. P. 15 Take-up Unit

Rear



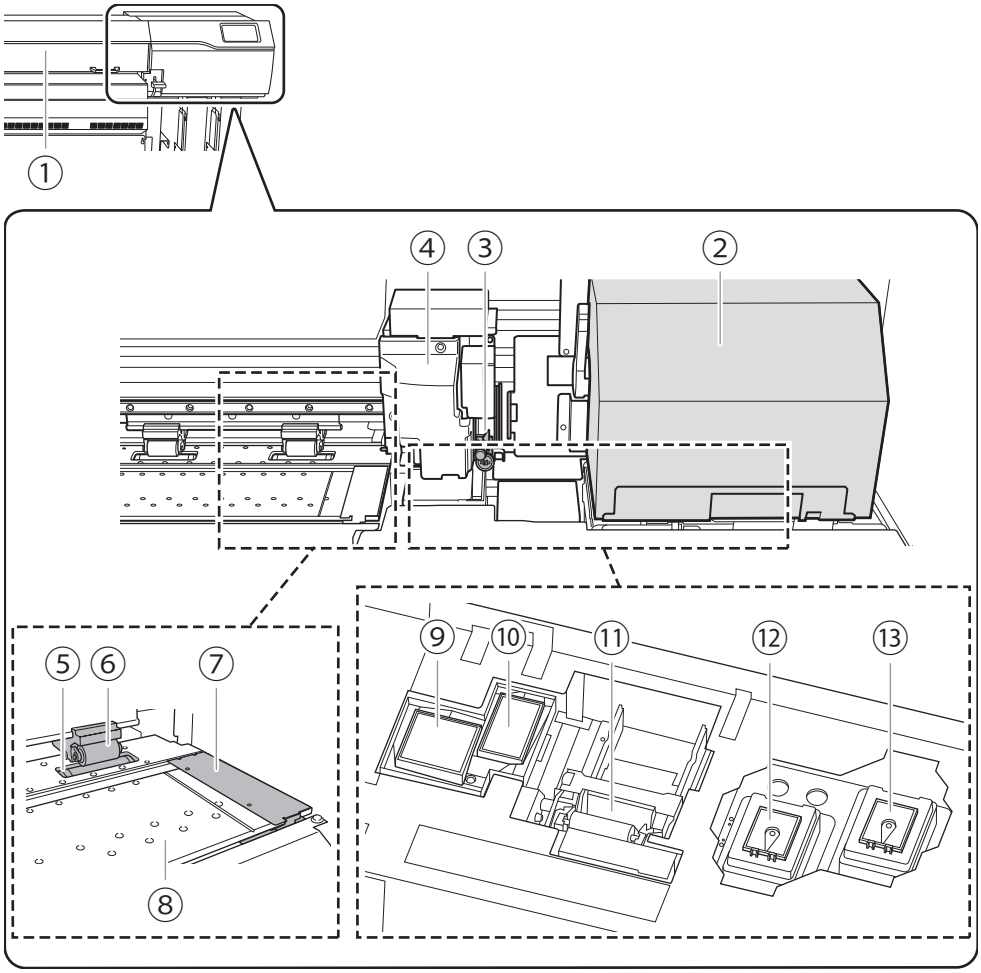
No.	Name	Function overview
①	Loading lever (rear)	Operate this when you load media.
②	Media holders	Operate this when you load media.
③	Shafts	
④	Media stays	
⑤	Drain bottle (color ink section)	Discharged fluid is stored in this bottle. **IMPORTANT** Make sure that the optimizer ink and color ink section drain bottles are installed correctly. If the optimizer ink and color ink mix, the ink may harden and cause a malfunction.
⑥	Drain bottle (optimizer ink section)	
⑦	Relay power-cord connector (dryer controller side)	Connects the printer and dryer controller via a relay power cord.
⑧	Power-cord connectors	Connect the power cord.

Side



No.	Name	Function overview
①	Ethernet connector	Connects an Ethernet cable.
②	Cleaning liquid slot	Stores a cleaning cartridge containing a cleaning liquid pouch.
③	Main power switch	Switches the main power on or off.
④	Relay power-cord connector (printer side)	Connects the printer and dryer controller via a relay power cord.

Front Cover Interior/Print Head Area



No.	Name	Function overview
①	Print light	This light illuminates the front cover interior. This makes it easier to see the printing status. It flashes if a serious error occurs.
②	Print-head carriage	The print heads are inside here.
③	Separating knife	This separates the media.
④	Cutting carriage	Moves independently of the print-head carriage, for example when setting the base point.
⑤	Grit roller	This is one of these rollers that feed the media.
⑥	Pinch roller	This clamps the media when the loading lever is lowered.
⑦	Media clamp	This clamps the edge of the media to keep it from coming loose. It also prevents fuzz on the cut edge of the media from touching the print heads.
⑧	Platen	This is the path over which the media passes. A suction fan that keeps the media from coming loose and a print heater that helps fix the ink are built in.
⑨	Flushing sponge (color ink section)	To maintain print quality, ink discharged from the heads is absorbed.
⑩	Flushing sponge (optimizer ink section)	
⑪	Wiper	Cleans the print heads during automatic cleaning and in similar situations. We recommend that you always keep a replacement wiper on hand. Depending on where the wiper must be shipped to, it may take time for an ordered wiper to reach you.

No.	Name	Function overview
⑫	Print head cap (color ink section)	Protects the print head surfaces and suctions ink during cleaning.
⑬	Print head cap (optimizer ink section)	

RELATED LINKS

- P. 14 Serious Errors Indicated by the Print Light

Serious Errors Indicated by the Print Light

If an error that may lead to serious damage to the printer occurs, the print light blinks.

This indicates one of the situations shown below.

When the print light blinks, the error also appears on the operation panel's display screen.

Display screen	Error overview
[Print Head Dry-out Error]	The print heads were about to dry out. The print heads may be damaged if allowed to dry out.
[Motor Error]	An excessive load was applied to the motor. If this error is not addressed, the print heads may be damaged.
[Low Temperature Error]	The printer's temperature has fallen below the temperature in which operation is possible. If this error is not addressed, the printer may malfunction.
[High Temperature Error]	The printer's temperature has risen above the temperature in which operation is possible. If this error is not addressed, the printer may malfunction.
[Pump Stop Error]	An ink cartridge was pulled out during cleaning or another operation where ink was being suctioned, and the printer was left in this state. If this error is not addressed, the printer may malfunction.
[Cleaning Error (Ink Cartridge)]	An ink cartridge was pulled out or the ink ran out during light choke cleaning. Check the error details on the operation panel screen and take appropriate actions.
[Cleaning Error (Drain Bottle)]	A drain bottle was removed or became full during initial ink filling or light choke cleaning. Check the error details shown on the operation panel screen and take appropriate measures.
[Take-up Unit Communication Error]	There is no response from the take-up unit. It is possible that the take-up unit is not connected correctly.
[Dryer Error]	The dryer temperature has risen too high, the dryer temperature is not rising, or power is not being supplied to the dryer. Check the error details on the operation panel screen and take appropriate actions.
[Service Call]	An unrecoverable error or an error that requires a part replacement has occurred.

RELATED LINKS

- P. 314 Error Messages

If a Cover Opens during Operation

If the front cover, left cover, or right cover (hereinafter referred to as "cover") opens during an output operation or while setting up the media, the machine makes an emergency stop. When an emergency stop occurs, a message prompting you to close the cover appears on the screen. Close the covers as directed in the instructions shown on the screen.

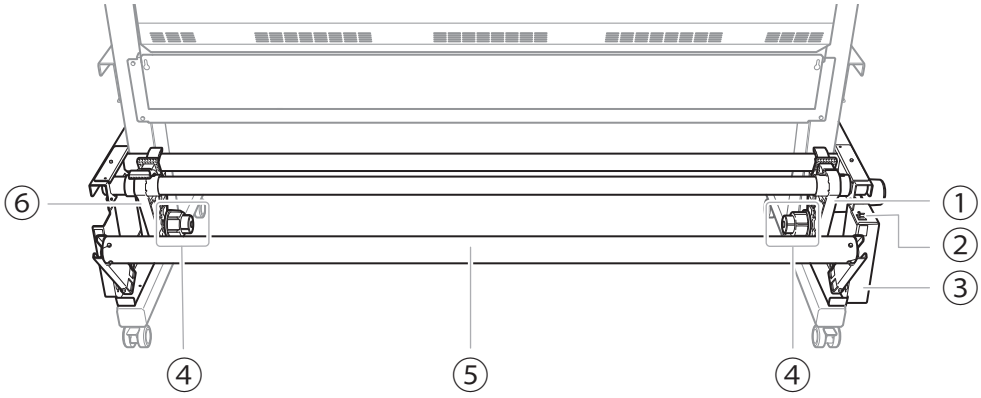
When the cover is closed, you will be able to continue the operation.

If you cannot continue the operation even after you close the cover, a nonrecoverable error may have occurred.

RELATED LINKS

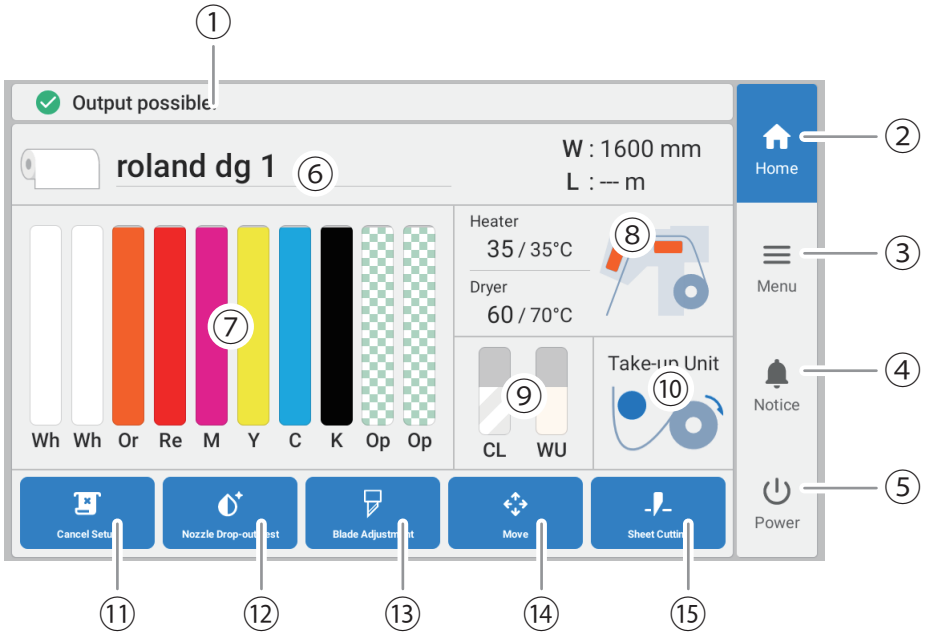
- P. 314 Error Messages

Take-up Unit



No.	Name	Function overview
①	Motorized media holder	This is used when loading the paper tube for take-up. A built-in motor rotates the tube.
②	MANUAL switch	Used when taking up media manually.
③	Control box	This controls the media take-up.
④	End caps	These are used when loading the paper tube for take-up.
⑤	Dancer roller	This keeps the media tension constant.
⑥	Left media holder	This is used when loading the paper tube for take-up.

Operation Panel

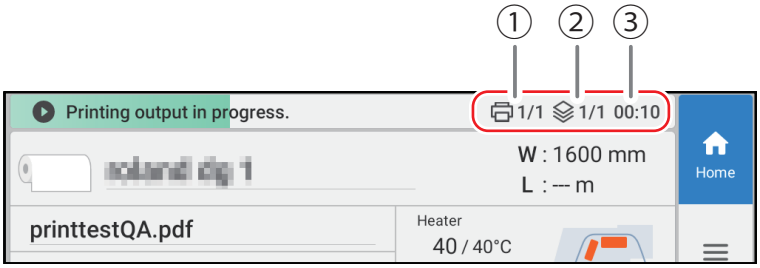


No.	Name	Details
①	Status bar	Displays the printer status and indicates the next operation.
②	Home	Displays the home screen.
③	Menu	Displays various setting menus.
④	Notifications	Displays important information. When there are notifications, their number is displayed next to the icon.
⑤	Sub power	Turn off the sub power. Tap the operation panel to turn the sub power back on.
⑥	Media information	Displays the media name and media width (W) for media that has been set up. If the remaining media setting has been configured, the remaining media (L) is also displayed. Tap the media width (W) or the remaining media (L) to display the [**Remaining Media Management**] screen on which you can set the remaining media. P. 213 Checking the Remaining Media
⑦	Amount of ink remaining	Displays the amount of ink remaining in each ink cartridge. If it is time to replace an ink cartridge, ! is displayed next to the corresponding cartridge. Tap this icon to display the detailed information for the ink.
⑧	Heater and dryer temperatures	The print heater and dryer temperatures are displayed as current temperature/set temperature. Tap one of these items to display a screen for: • Turning [**Print Heater**] on/off and setting its temperature. • Setting the temperature of [**Dryer**].

No.	Name	Details
⑨	Remaining cleaning liquid and wiper	Displays the remaining cleaning liquid and wiper. If there is little or no cleaning liquid or wiper remaining, a warning is displayed. If there is a small amount remaining, is displayed. If there is nothing remaining, is displayed. • [CL]: Amount of cleaning liquid remaining • [WU]: Amount of wiper remaining P. 116 Cleaning Liquid Pouch Replacement P. 267 Replacing the Wiper
⑩	Take-up unit	Displays the status of the take-up unit. Tap this icon to display the [**Take-up**] screen and set [**Take-up during Cutting**], [**Take-up Method**], and [**Take-up Direction**].
⑪	[Setup]/[Cancel Setup]	Starts/cancels the setting up of the media. P. 30 Setup of New Media P. 68 Setup of Registered Media
⑫	[Cleaning]/[Nozzle Drop-out Test]	Displays the menu related to the printing test and cleaning for the nozzle drop-out (dot drop-out) test.
⑬	[Blade Adjustment]	Sets cutting conditions. This is only enabled when media has been set up.
⑭	[Move]	Feeds the media and moves the carriage. You can also set the position moved to as the right edge of the output area (the base point). P. 202 Adjusting the Output-start Location
⑮	[Sheet Cutting]	Activates the separating knife to separate the media. You can also perforate the media to take it up and separate it at a later time.

MEMO

The following are displayed during printing.



No.	Name	Details
①	Copies to Print	*/* is displayed. The left side indicates the number of the copy currently being printed. The right side indicates the total number of copies.
②	Number of Layers	*/* is displayed. The left side indicates which number layer is currently being printed. The right side indicates the total number of layers.
③	Print Time	Displays the remaining print time (approximate).

Menu List

Tap ☰ to display the following list of operations to perform from the screen.

MEMO

[**Media Settings**] only appears when media is loaded. When [**Menu operation in progress: Press [Home] to enable output.**] is displayed in the status bar, the display will automatically return to the home screen after 5 minutes.

Level 1	Level 2	Level 3	Level 4	Details
[Job Management]	[Direct Printing]			Specify the VersaWorks and queue folders via Roland DG Connect Hub, and output the job.
	[Printing Log]			Displays the job [**Printing Log**]. The [**Job Properties**] for each job, and the [**Total Time**] and [**Total Area**] for all jobs, can be checked.
[Media Settings]*1	[List of Media Settings]			Lists the settings of the media that has been set up. Tap a setting to switch to a screen for changing this setting.
	[Printing Settings]	[Print Head Height]		Checks/changes the head height.
		[Batch Automatic Correction]		Adjustments are performed in the following order: [**Multi Sensor Adjustment**], [**Media Gap Adjustment**], then [**Feed Correction**].
		[Feed Correction]	[Simple Correction (Auto)]	Adjusts the media feed amount during printing. With [**Simple Correction (Auto)**], a test pattern is printed and then read with a sensor to automatically set the correction value.
			[Detailed Correction (Manual)]	Adjusts the media feed amount during printing. With [**Detailed Correction (Manual)**], a test pattern is printed, and then the correction value is entered manually after the printed correction value is checked visually.
		[Media Gap Adjustment]	[Simple Correction (Auto)]	Corrects the ink landing position. With [**Simple Correction (Auto)**], a test pattern is printed and then read with a sensor to automatically set the correction value.
			[Detailed Correction (Manual)]	Corrects the ink landing position. With [**Detailed Correction (Manual)**], a test pattern is printed, and then the correction value is entered manually after the printed correction value is checked visually.
	[Cutting Settings]	[Blade Adjustment]		Sets cutting conditions such as [**Blade Force**] and [**Cutting Speed**].
		[Print & Cut Position Adjustment]		Corrects misalignment in the printing position and the cutting position during printing and cutting.
		[Crop Cut Position Adjustment]		Corrects misalignment in the crop mark positions and the cutting position when cutting with crop marks.
		[Cutting Distance Correction]		Corrects misalignment in the cutting line length due to changes in the media movement distance.
		[Over Cut]		Cutting the corners of the border of the cutting line slightly longer makes it possible to cut the corners attractively.

Level 1	Level 2	Level 3	Level 4	Details
[Media Settings][*1]	[Heater Settings]	[Heater Temperature]	[Print Heater]	Switches the print heater on/off and changes the set temperature.
			[Dryer]	Changes the set temperature of the dryer.
		[Pullback After Printing]		Enables/disables the function that pulls back onto the platen the media dried with the dryer after printing.
	[Other Media Settings]	[Multi Sensor Adjustment]		Optimizes the status of the multi sensor used with the automatic correction function.
		[Drying Time Per Scan]		Sets the drying time per scan operation of the print-head carriage.
		[Media Suction Force]		Adjusts the media suction force of the platen.
		[Media Sticking Prevention]		When set to [**Enable**], the media is peeled off before printing.
		[Middle Pinch Auto Raise/Lower]		Causes the middle pinch rollers to go up automatically during pullback printing or printing and cutting.
	[Batch Media Settings]			The minimum settings required for media setup can be configured by following the on-screen instructions on the operation panel.
[Media Management]				Displays a list of registered media. Up to 50 media names can be saved, and the following operations on media settings are possible. • Checking setting details in a list • Changing media names • Copying media settings • Duplicate as Media for Cutting • Deleting media settings
[Cleaning]	[Printing Test]			Before printing, use [**Nozzle Drop-out Test**] to check whether ink is discharged from the print heads correctly. If nozzle drop-out (dot drop-out) is present, perform cleaning appropriate for the severity of the drop-out. If faulty ink discharge cannot be improved, the problematic nozzle can be identified with [**Nozzle Mask Test**], making it possible to stop using this nozzle. You can configure the [**Printing Test**] to dry the media with the dryer after the printing test or to not do so.
	[Normal Cleaning]			If dot drop-out or dot displacement occurs, select the nozzle and then perform cleaning of the print heads. If the problem cannot be fixed, perform more powerful cleaning. If the media has already been set up, the [**After cleaning, perform a printing test.**] menu appears. When this is turned on, a printing test is performed after cleaning.
	[Medium Cleaning]			
	[Powerful Cleaning]			
	[Manual Cleaning]			Use cleaning liquid and a cleaning stick to clean the area around the print heads.

Level 1	Level 2	Level 3	Level 4	Details
[Maintenance]	[Wiper Replacement]			Replace the wipers.
	[Blade Replacement]			Replaces the blade used in cutting.
	[Separating Knife Replacement]			Replaces the separating knife used in media separation.
	[Flushing Sponge Replacement]			To maintain print quality, replace the flushing sponges that absorb the ink discharged from the heads.
	[Ink Renewal]			Perform this operation when ink discharge issues or uneven colors are not resolved even after [**Normal Cleaning**], [**Medium Cleaning**], [**Powerful Cleaning**], and [**Manual Cleaning**]. However, this operation consumes a large amount of ink and may damage the print heads, so do not perform it more than necessary.
	[Ink Circulation]*2			Circulates ink to prevent uneven color issues with white ink.
	[Light Choke Cleaning]			Use this operation to stabilize output when uneven color issues are not resolved even after shaking the ink cartridge to mix the ink or performing [**Ink Circulation**]. However, this operation consumes a large amount of ink and may damage the print heads, so do not perform it more than necessary.
	[Drain Bottle]			Use this menu to discard discharged fluid at any desired time, regardless of any notifications or errors.
	[Automatic Maintenance]			Set the maintenance items that are performed automatically and the [**Type**] and [**Frequency**] according to the printer service environment, types of products that are frequently output, and other factors. A maximum of five settings for automatic maintenance can be saved.
	[Automatic Sub Power On Settings]			This can be set so that the printer sub power is automatically turned on for each day of the week. Set the time at wihich to switch on sub power automatically, and you can also specify days when the sub power will not automatically be turned on.

Level 1	Level 2	Level 3	Level 4	Details
[Preferences]	[Media Edge Detection]			Sets whether to detect the leading and trailing edges of the media. When using transparent media, whose edges cannot be detected, the media can be set up without detecting the edges by selecting [Disable].
	[Print Light]			Select [On], [Off], or [Auto] for the print light. Select [Auto] to automatically turn the light on/off according to the status of the printer.
	[Take-up]			Sets the [Take-up during Cutting], [Take-up Method], and [Take-up Direction] for the take-up unit.
	[Remaining Media Management]			Sets the amount of remaining media that has been set up and displays this amount. This amount can also be printed on the media.
	[Skewing Correction Support at Setup]			Provides support, preventing skewed installation of the media by making a sound and operating an automatic suction fan during setup.
	[Printing Test Position]			Sets the direction for test pattern printing: [Feed] or [Scan].
	[Perforated Sheet Cutting]			Sets the perforated sheet cutting conditions.
	[Standby Heater Temperature]		[Print Heater]	Sets the print heater temperature when media has not been set up.
			[Dryer]	Sets the dryer temperature when media has not been set up.
	[Prefeeding at Output]			Prefeeds the media when it is fed out, such as during cutting, preventing the pulling of the media with undue force.
	[Priority for Cutting Settings]			Sets whether to prioritize the cutting settings of the machine or the software RIP.
	[Ink Circulation Interval]			Sets the frequency of white ink circulation.
	[Notifications On/Off]			When [Enable] is selected, notifications are displayed at the appropriate times. • [Ink Mixing Notification] • [Middle Pinch Roller Placement Notification] • [Media Clamp Placement Notification]
	[Sound at End of Printing]			Selects whether to play a sound at the end of printing.
	[Sleep Time]			Sets the time until sleep mode (the state in which the power-saving features operate) activates.
	[Stopping the Warning Beep]			Sets the duration of the warning beep that sounds when, for example, an error occurs.
	[Reset to Factory Defaults]			Returns all settings other than [Language] and [Units] to their factory default values.

Level 1	Level 2	Level 3	Level 4	Details
[System Information]	[Machine Information]			Displays the [Model], [Serial Number], [Ink Type], [Firmware Version], and [MAC Address].
	[Network]			Sets the [Obtain IP Address Automatically], [IP Address], [Subnet Mask], and [Default Gateway] to connect the machine to a computer.
	[Units]			Sets the [Length] and [Temperature].
	[Language]			Sets the language. Languages that can be set are Japanese, English, French, Italian, German, European Spanish, South American Spanish, South American Portuguese, and Simplified Chinese.
	[Date/Time]			Sets the current year, month, day, hour, minute, and second.
	[Appearance]			Selects the color scheme of the operation panel's screen.
	[Screen Brightness]			Sets the brightness of the operation panel's screen.
	[Screen Operation Sound]			Turns the operation sound of the operation panel on/off.
	[2D Codes]		[User's Manual]	Displays the 2D code for viewing the manual using a smartphone or other mobile terminal.
			[Roland DG Connect]	Displays the 2D code for accessing Roland DG Connect using a smartphone or other mobile terminal.
	[License]			Displays the license information of the operation panel.

*1 This only appears when media has been set up.

*2 This only appears when the machine ink type includes white ink.

About the Media Used

Types of Media

In this manual, the paper used for output is called "media." The two main types of media used in this machine are shown below.

- Roll media: Media wound onto a paper tube
- Sheet media: Media not wound onto a paper tube such as standard-size media

Various paper types of roll media and sheet media are selectable according to your purpose. For detailed information about each media, contact your media supplier.

Conditions for Usable Media

This machine cannot print on every kind of media. When selecting media, be sure to carry out testing in advance to make sure that satisfactory printing results are obtained.

Size

	AG-640
Width *1	335 to 1,625 mm (13.2 to 64 in.)
Cuttable media thickness*1	0.08 to 0.22 mm (3.15 to 8.66 mil; depends on the material of the media)
Maximum media thickness (including backing paper)*1	When performing printing only: 1.0 mm (39.37 mil) When performing cutting: 0.4 mm (15.75 mil)
Maximum roll outer diameter	250 mm (9.84 in.)
Paper tube (core) inner diameter	76.2 mm (3.0 in.) or 50.8 mm (2.0 in.)

*1 Applies to both roll and sheet media

Maximum Roll Weight

- 45 kg (99.21 lb.)

MEMO

If using the take-up unit, this specification depends on the conditions of the take-up unit.

Other Conditions

Media such as the following cannot be used.

- Media whose end is attached to the paper tube (core)
- Media that is severely warped or that has a strong tendency to reroll
- Media that cannot withstand the heat of the dryer
- Media whose paper tube (core) is bent or crushed
- Media that bends under its own weight when loaded
- Media on a sagging roll
- Media that is rolled unevenly

RELATED LINKS

- P. 332 Maximum Area

Take-up Unit

Take-up Unit Use Conditions

Never pull the media with excessive force.

If the media is pulled with excessive force, the protection function will activate and cause an error. Make sure to observe the following to prevent the media from being pulled with excessive force.

- **Do not operate the manual switch on the take-up unit while leaving media secured with the loading lever.**

  It may cause an error because the media is pulled with excessive force.

Never use the automatic separation function for media.

If automatic cut-off of media is set in the software RIP, the media will be cut off after each page is printed. When continually printing and taking up multiple pages, disable the automatic cut-off function in the software RIP. If the media is separated, take-up will be interrupted at that point.

MEMO

Perforated sheet cutting can be set with the software RIP. With this type of cutting, the media is not separated, so the take-up unit can be used.

About the Paper Tube

Paper tubes are consumable items.

Paper tubes are components that wear out. Although replacement timing will vary depending on use, watch the condition of the paper tube and replace at an appropriate time so that the media can be taken up in good working order.

Use the paper tube of the media you are using. To purchase the included paper tube, contact your authorized dealer or visit our website (https://www.rolanddg.com/).

Basic Operations

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Removing Media from the Take-up Unit 109

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Power Supply Operations

IMPORTANT

Always keep the main power switched on.

Never switch off the main power. Leaving the main power enables automatic maintenance to be carried out periodically. If the automatic maintenance is not carried out, it may result in the breakdown of this machine, such as the breakdown of the print heads.

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 power and sub power back on.

Turning the Power On

⚠ WARNING

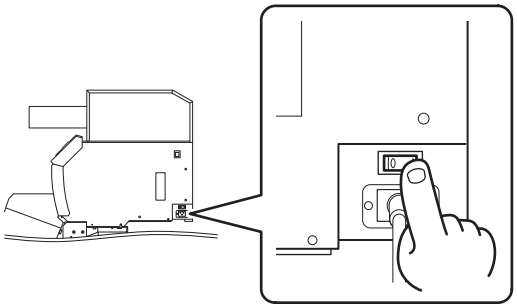
Remove any loaded media or switch off the sub power when printing is not being performed.

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

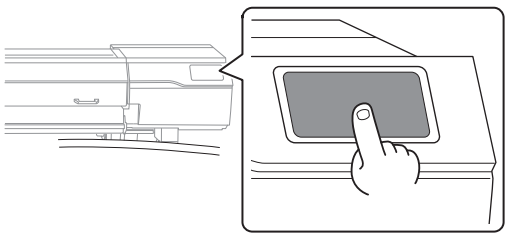
Procedure

1. **Close the front cover.**

2. **Switch on the main power switch.**



3. **Tap the operation panel.**



4. **When instructions appear on the screen, tap the operation panel again.**

Turning the Power Off

⚠ WARNING

Remove any loaded media or switch off the sub power when printing is not being performed.

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. **When printing is complete, tap ⏻ on the operation panel.**

   The confirmation screen appears.

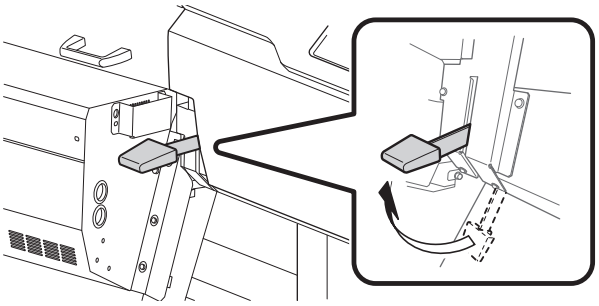
2. **Tap [Yes].**

   After the dryer cools down, the sub power switches off.

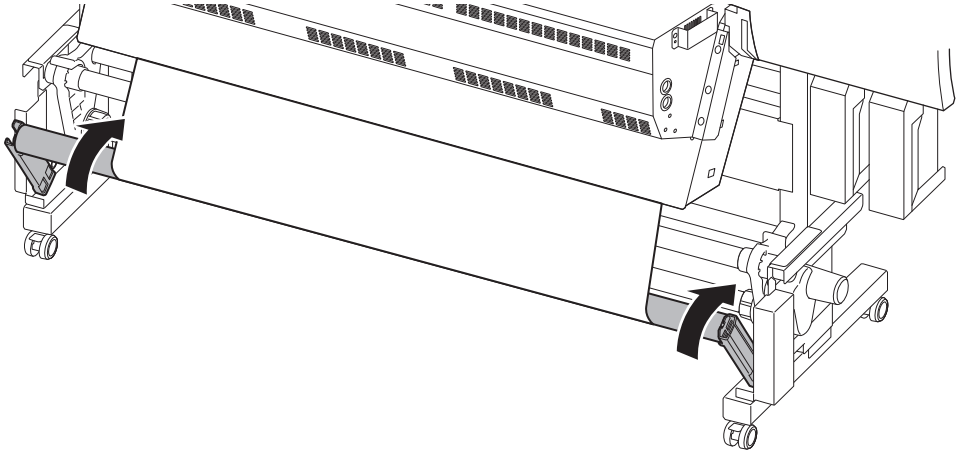
3. **Raise the loading lever and remove the media.**

   If you will leave the sub power on while not using the machine, set it as shown below.

   - Raise the loading lever.



   - Lower the dancer roller toward the rear.



Sleep Mode (Power-saving Feature)

This machine is provided with a power-saving feature that switches to a low-power "sleep mode" when a fixed interval passes with no operation. The factory default for the time after which the machine switches to sleep mode is 30 minutes. The operation panel turns off when the machine enters sleep mode. Using the operation panel or performing operations such as sending print data from the computer restores the machine to its normal mode.

This sleep mode setting can be changed. However, we recommend setting the activation time for sleep mode to 30 minutes or less to reduce power consumption and prevent problems such as overheating.

RELATED LINKS

- P. 216 Setting the Activation Interval for Sleep Mode (Power-saving Feature)

Setup of New Media

⚠ CAUTION

Do not touch the dancer roller needlessly.

The media take-up unit and feeder may move suddenly, which may result in injury.

Setting Up Roll Media

Load the roll media on the printer. When the loading is finished, [**Output possible.**] is displayed as the status. This work is referred to as "Setup of Media."

⚠ CAUTION

Load the roll media correctly.

Otherwise the media may fall and cause injury.

⚠ CAUTION

The roll media is approximately 45 kg (99.21 lb.).

To avoid injury, handle the roll media with care.

⚠ CAUTION

Never load media that weighs over 45 kg (99.21 lb.).

The machine may fail to withstand the weight and tip over or cause the media to fall.

1. Installing the Media on the Media Holders

The media holders of this machine are designed to be used with a paper tube (core) with an inner diameter of 2 inches or 3 inches.

⚠ WARNING

Handling roll media is an operation that must be performed by 2 persons or more, and care must be taken to prevent falls.

Attempting to lift heavy media in a manner that taxes your strength may cause physical injury. Also, if dropped, such items may cause injury.

Procedure

1. **Tap ⏻ on the operation panel.**

   The sub power is switched on.

2. **When using a take-up unit, use the following procedure to set it.**

   (1) **Tap ☰.**

   (2) **Tap [Preferences]>[Take-up].**

   (3) **Tap [Take-up during Cutting].**

   (4) **Select the setting from those shown below and tap [Save].**

[Enabled]	The media is taken up during cutting while slack is being created. This prevents the media from sticking to the floor. Make sure the media is taken up at least halfway around the paper tube beforehand.
[Disabled][*1]	The media is taken up after all cutting finishes.

*1 Default settings

MEMO

- **[Enabled]** cannot be performed in the following situations:
  - **[Blade Adjustment]**>**[Printing Test]**
  - **[Print & Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**
  - **[Crop Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**

IMPORTANT

When **[Preferences]**>**[Take-up]**>**[Enabled]** is set, to preserve cut quality, the speed may be limited to the optimum speed for **[Cutting Speed]** and **[Rise Movement Speed]** depending on the set media.
P. 173 Fine-tuning the Cutting Conditions

(5) **Tap [Take-up Method].**

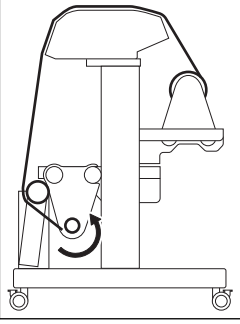
(6) **Select the setting from those shown below and tap [Save].**

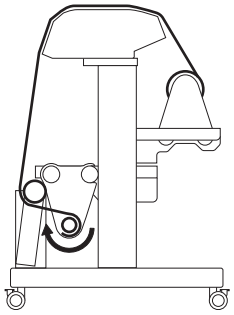
[Loose Winding][*2]	The media is taken up with some slack. This is suited to PVC and other such stiff or slippery media.
[Tension Winding]	The media is stretched and taken up. This is suited to tarpaulin and other such weak media and media that does not slip easily. Even if **[Tension Winding]** is set, if **[Enabled]** is enabled, the media is taken up while slack is being created.

*2 Default settings

(7) **Tap [Take-up Direction].**

(8) **Select the setting from those shown below and tap [Save].**

[Forward][*3]	The media is taken up onto the paper tube with the printed surface on the outside. 

[Backward]	The media is taken up onto the paper tube with the printed surface on the inside. 

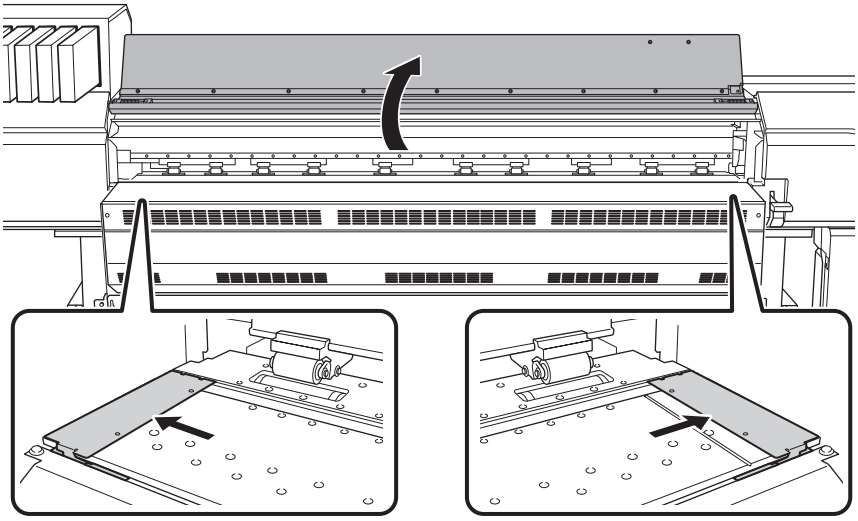
*3 Default settings

(9) **Tap** .

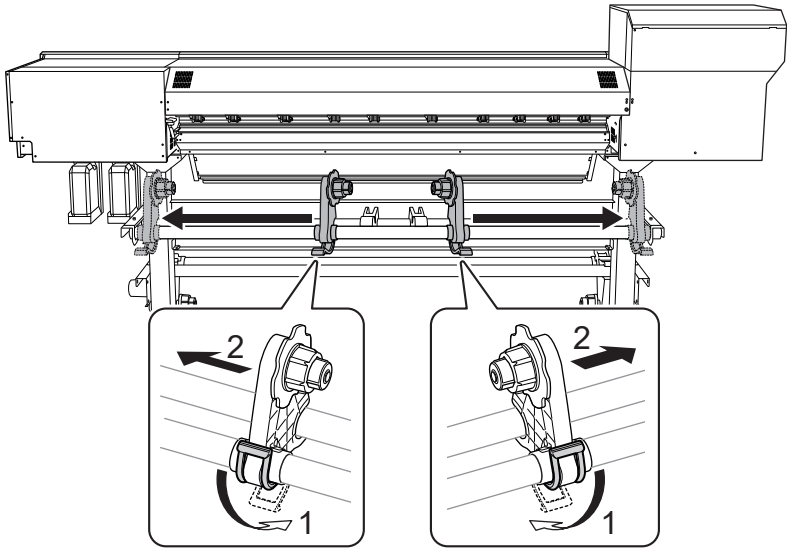
The home screen appears.

3. **Open the front cover.**

4. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



5. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**



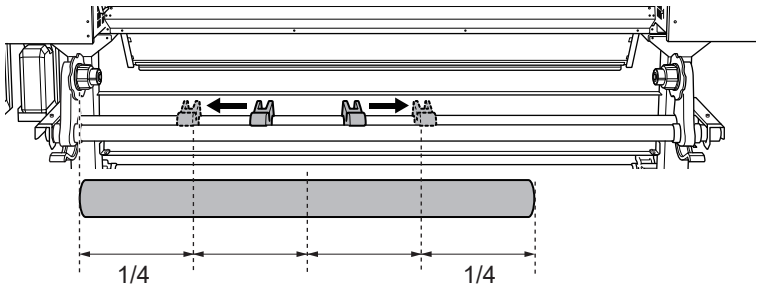
6. **Place the media on the machine.**

IMPORTANT

Do not leave media on the media stays or the shafts for a long period of time. The media may become deformed. Exercise caution.

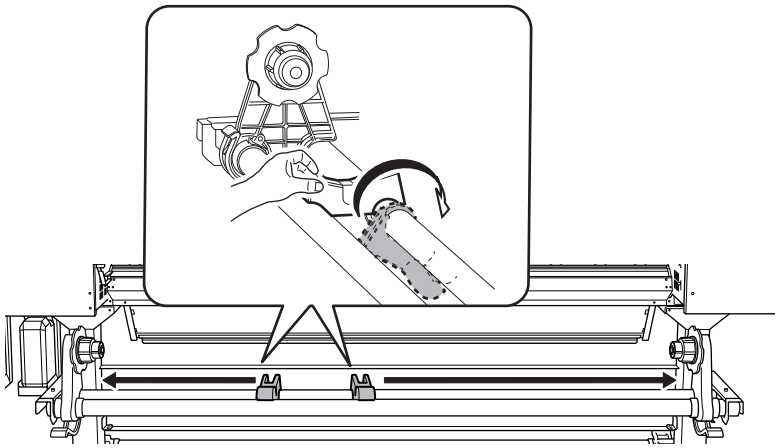
- **Media with an outer diameter of 220 mm (8.66 in.) or less**

  Place the media stays at positions that are 1/4 the length of the media from each end of the media, and then load the media.

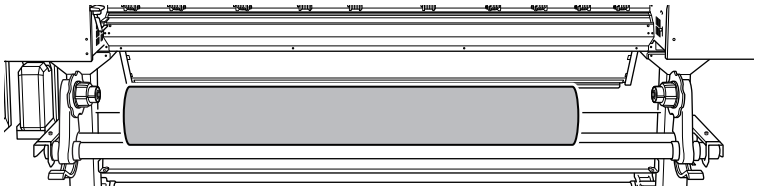


- **Media with an outer diameter exceeding 220 mm (8.67 in.)**

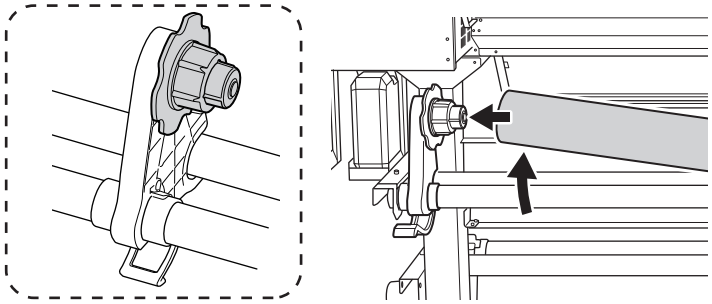
  a. Rotate the media stays to draw them to the media holders.



  b. Place the media directly between the two shafts.

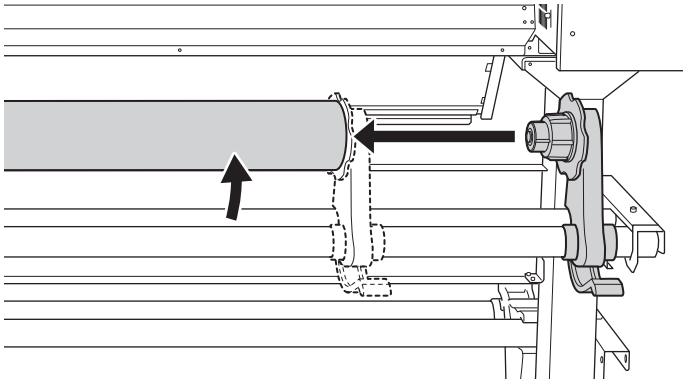


7. **Fit the paper tube (core) of the media onto the end cap of the left media holder.**



8. **Move the right media holder to fit its end cap onto the paper tube (core) of the media.**

Fit the paper tube onto the media holders securely to prevent the media from moving easily.



IMPORTANT

Do not secure the media holders in place just yet.

In the following procedure, you will adjust the positions of the media holders before securing them in place. Do not secure them in place just yet.

The next operation to perform varies depending on the media type and the Preferences. Proceed as shown below.

- For general media: 2. A: Determining the Positions of the Media(P. 35)
- For transparent media or if **[Preferences]**>**[Media Edge Detection]** is set to **[Disable]**: 2. B: Determining the Positions of Media (If **[Media Edge Detection]**: **[Disable]**)(P. 40)

2. A: Determining the Positions of the Media

This section describes how to use the suction fan to prevent media skewing. When using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**], the suction fan does not activate, so media cannot be loaded with this procedure. In these cases, refer to 2. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])(P. 40).

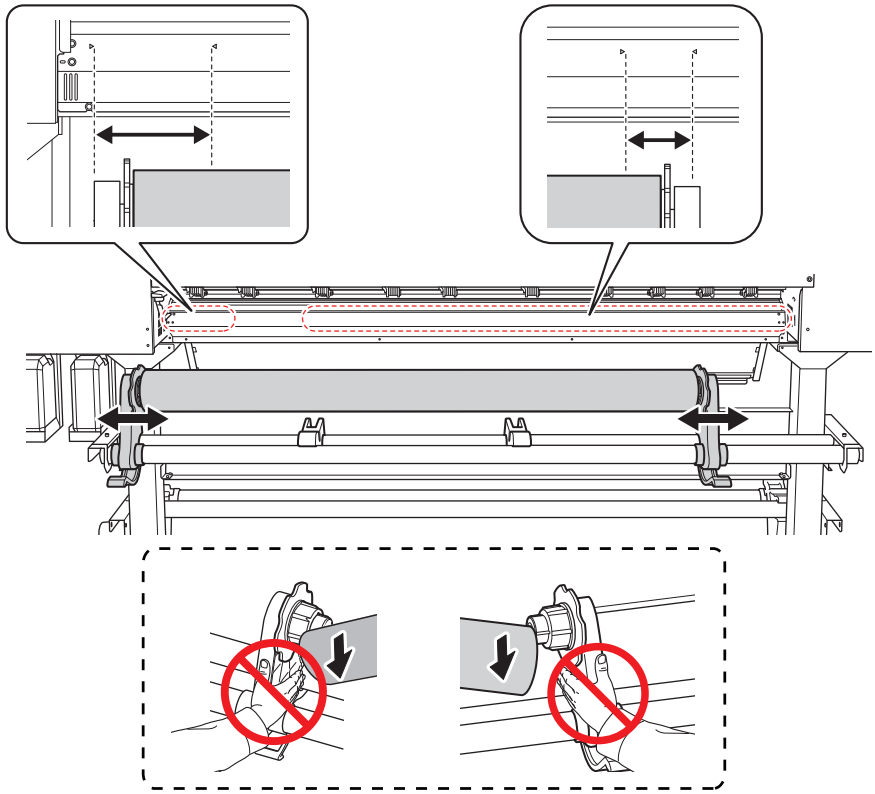
By default, [**Skewing Correction Support at Setup**] is set to [**Enable**].

Procedure

1. **Determine the left and right positions of the media with the grit patterns used as the reference.**

   Note the following points when determining the positions.

   - Hold the media holders from the outside and move them.
   - Ensure that the left edge of the media is positioned so that it is within the range of the grit pattern of the left edge.
   - Ensure that the right edge of the media is positioned so that it is within the range of one of the grit patterns.



⚠ WARNING

Do not hold places other than those instructed. Do not move the media by holding it directly.

Doing so may cause the media to fall off the media holder and cause injury.

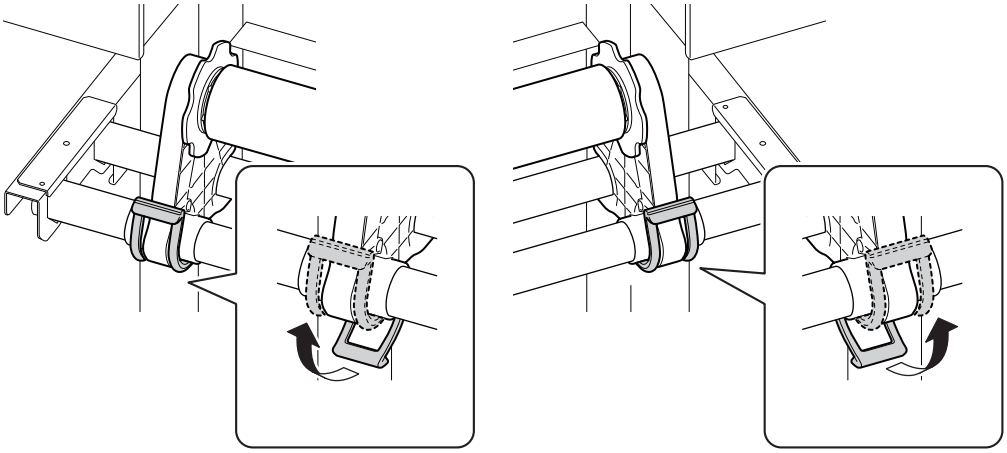
IMPORTANT

Firmly decide the left and right side positions of the media at this point.

After this procedure is completed, if the left and right side positions do not fit the proper positions when securing the media with pinch rollers, you will have to go back to this step to redo this procedure. If you just

hold the media to readjust its position forcibly, the media will be skewed during printing, which will have an adverse effect on the printing results.

2. **Secure the media holders.**



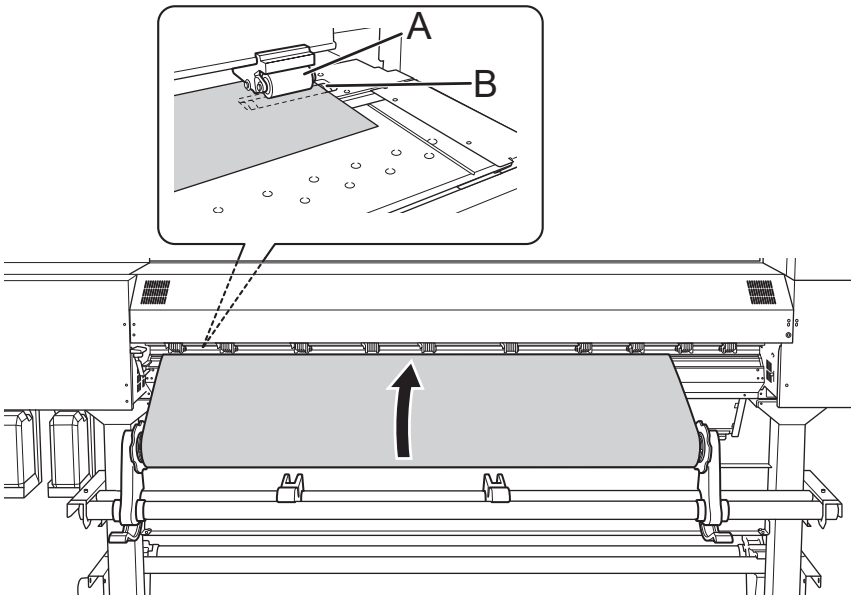
3. **Use the following procedure to load the media.**

Doing so will prevent media skewing.

IMPORTANT

If the leading edge of the media is bent, cut the bent part before loading the media, as it may be difficult for the media to enter the dryer entrance.

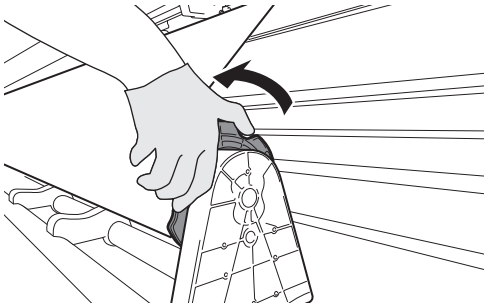
(1) **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



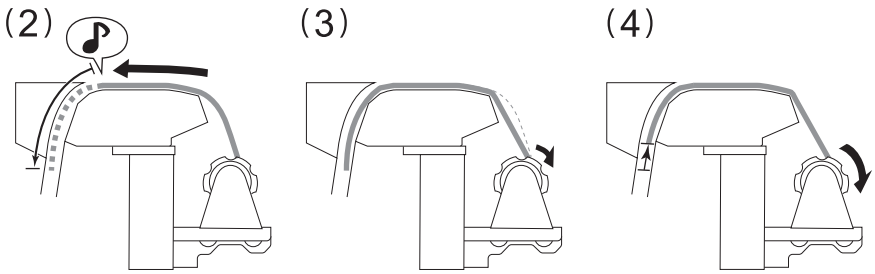
(2) **Feed the media until you hear a beep, and then additionally feed approximately 30 cm (11.81 in.) of the media.**

You will hear a beep. Approximately 5 seconds later, you will hear two beeps, and then the suction fan will activate. While this fan is operating, the position of the media will be maintained even if you remove your hands from it.

(3) **Hold the media holder flange, turning it in the take-up direction to eliminate the slack in the media.**



(4) **Once the media is taut, additionally take up approximately 10 cm (3.94 in.) of media.**

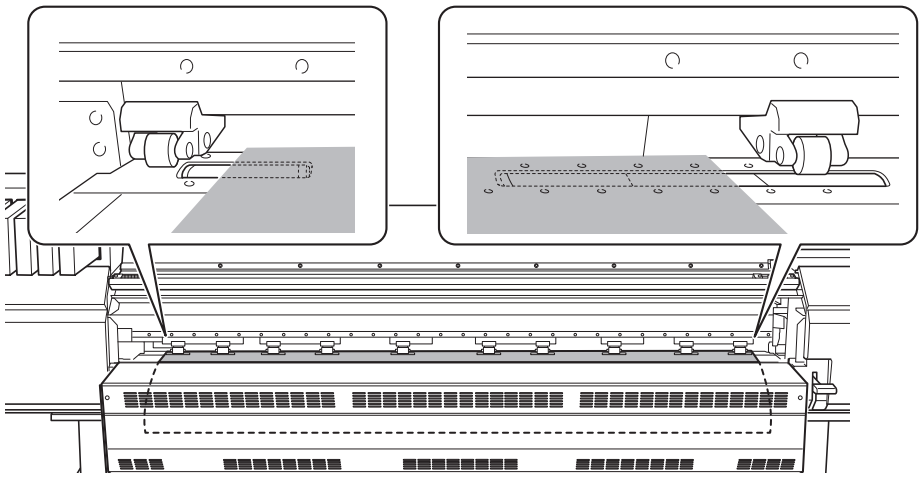


MEMO

If you take up too much media, you will hear two short beeps and the suction fan will stop. Take up the media, and then redo the procedure from Step (1).

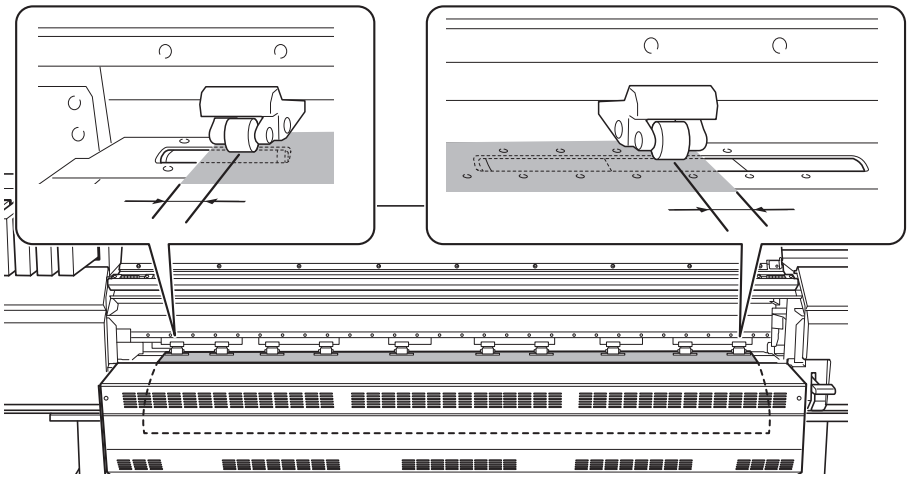
4. **(Move to the front of the printer.) Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



5. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

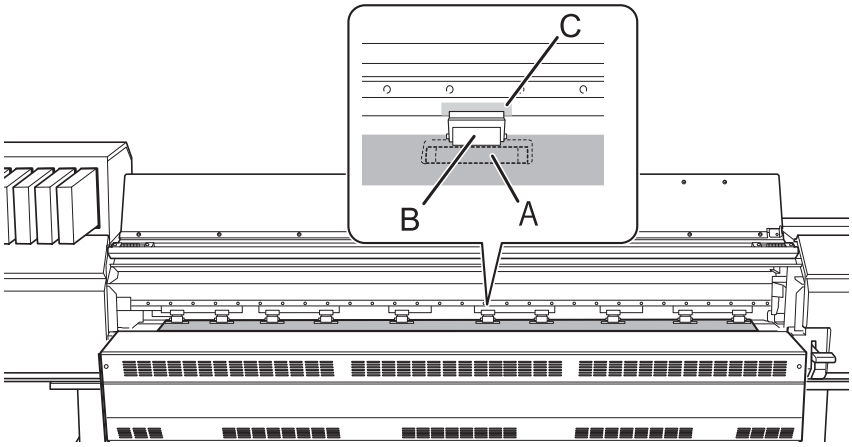
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

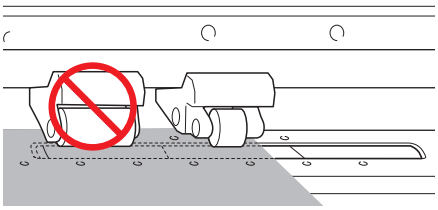
6. Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.

There are grit patterns (C) wherever there are grit rollers.

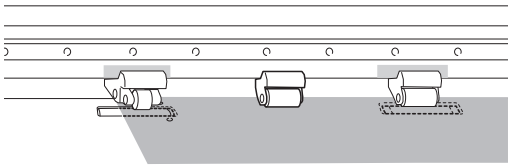


IMPORTANT

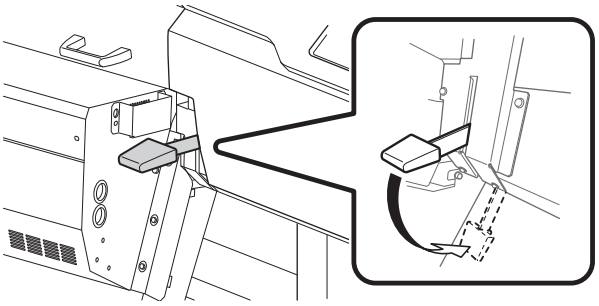
- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.



- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



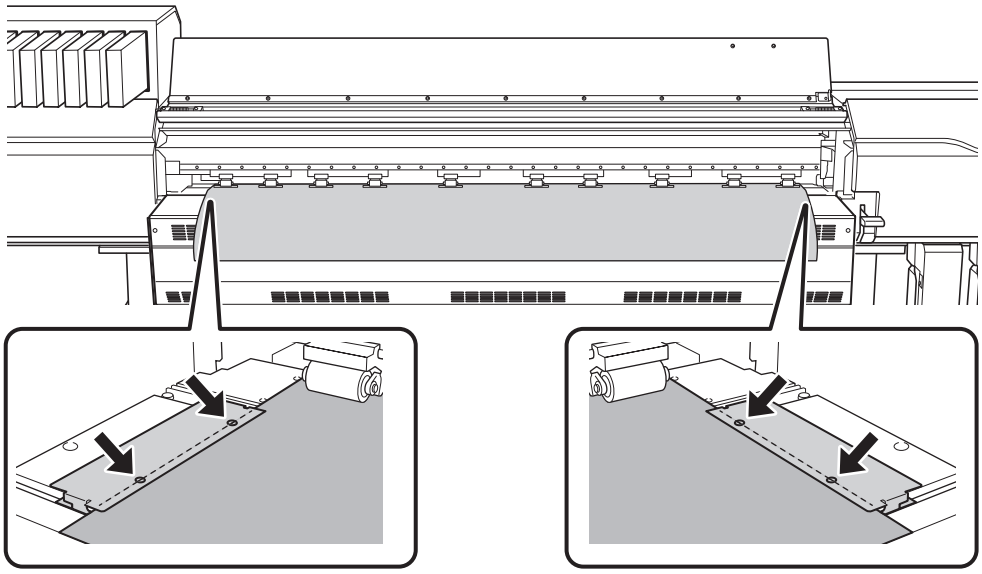
7. **Lower the loading lever (front).**



IMPORTANT

If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

8. **Line up the edges of the media with the centers of the holes of the left and right media clamps.**



9. **Close the front cover.**

2. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])

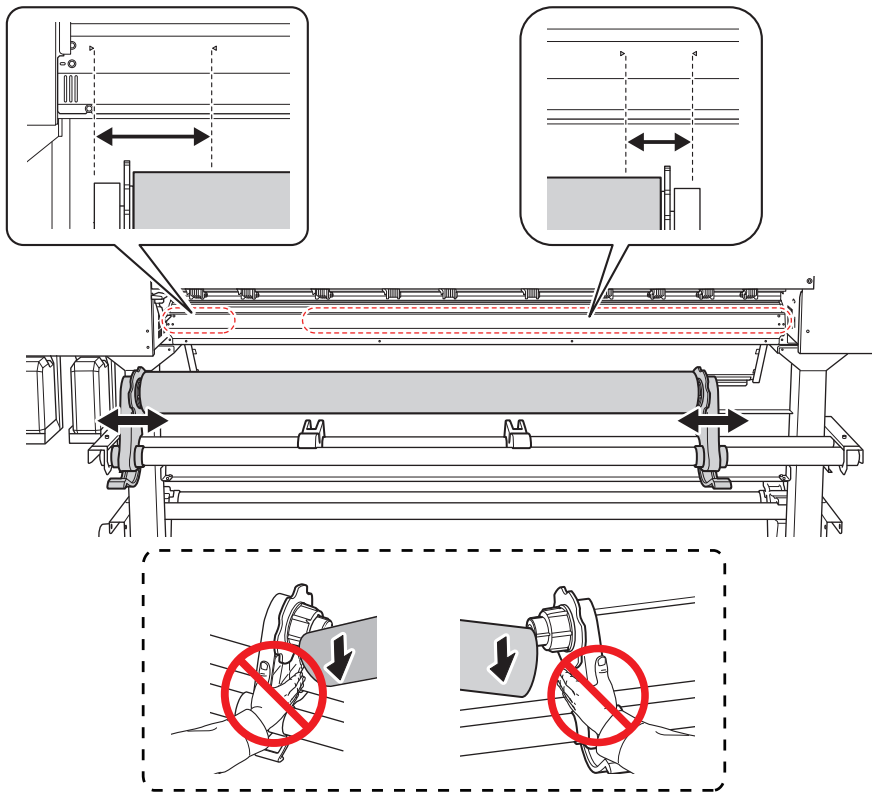
This section describes how to prevent media skewing without using the suction fan. Refer to this information when using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**].

Procedure

1. **Determine the left and right positions of the media with the grit patterns used as the reference.**

   Note the following points when determining the positions.

   - Hold the media holders from the outside and move them.
   - Ensure that the left edge of the media is positioned so that it is within the range of the grit pattern of the left edge.
   - Ensure that the right edge of the media is positioned so that it is within the range of one of the grit patterns.



⚠ WARNING

Do not hold places other than those instructed. Do not move the media by holding it directly.

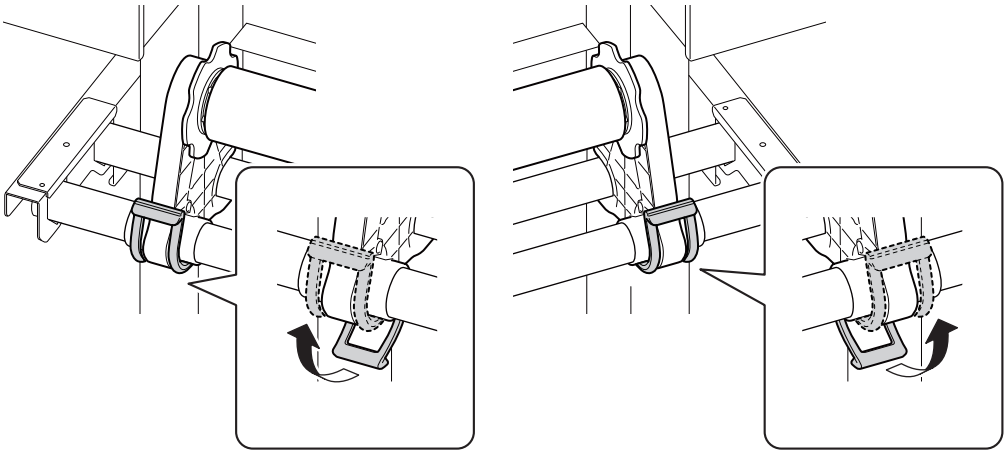
Doing so may cause the media to fall off the media holder and cause injury.

IMPORTANT

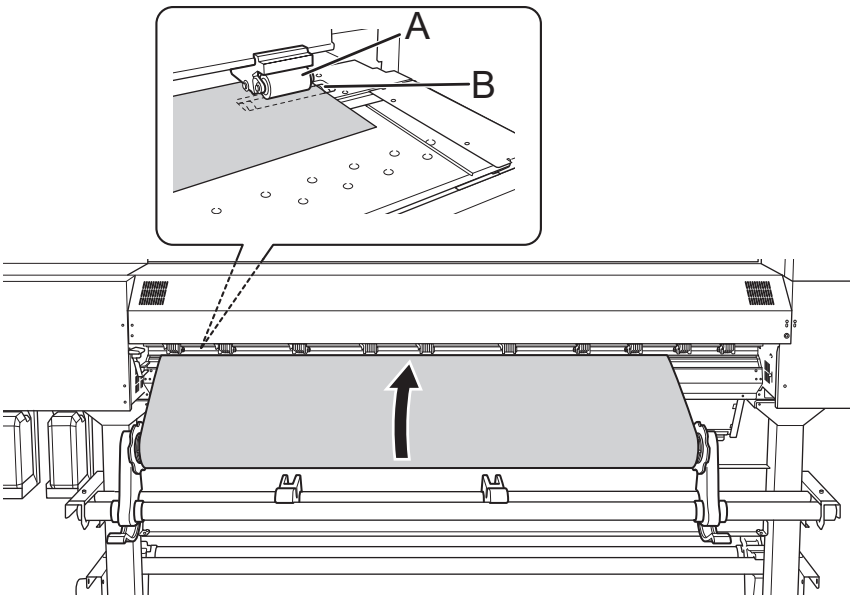
Firmly decide the left and right side positions of the media at this point.

After this procedure is completed, if the left and right side positions do not fit the proper positions when securing the media with pinch rollers, you will have to go back to this step to redo this procedure. If you just hold the media to readjust its position forcibly, the media will be skewed during printing, which will have an adverse effect on the printing results.

2. **Secure the media holders.**

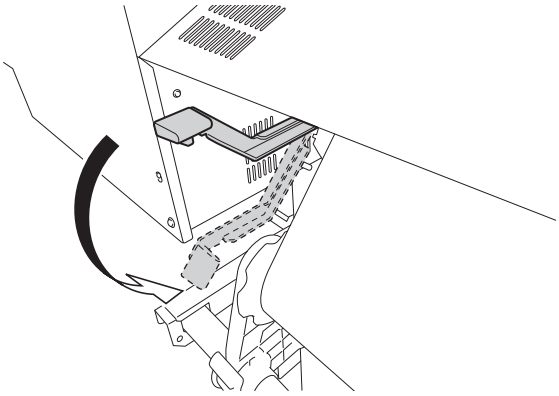


3. **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



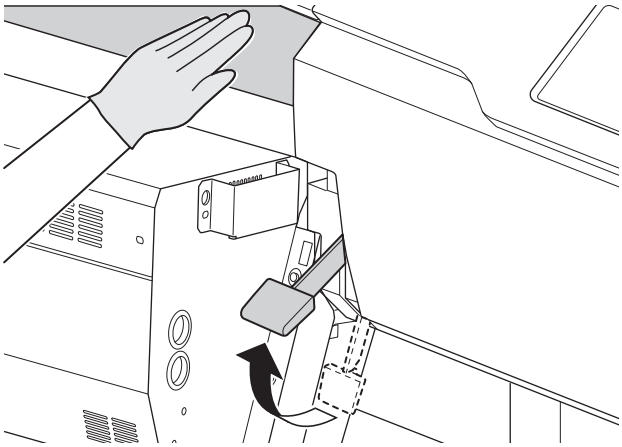
4. **Lower the loading lever (rear).**

The media is held in place.

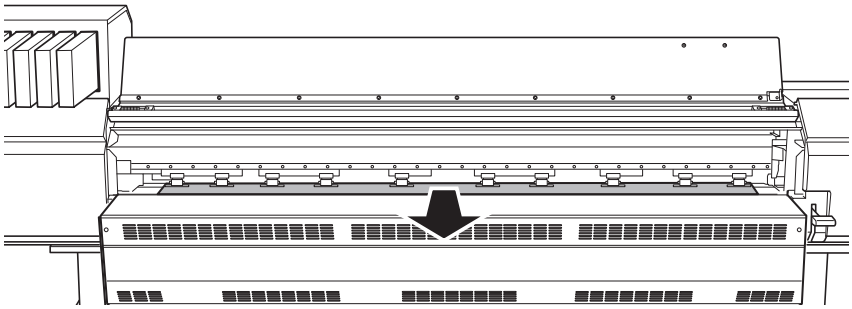


5. **(Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).**

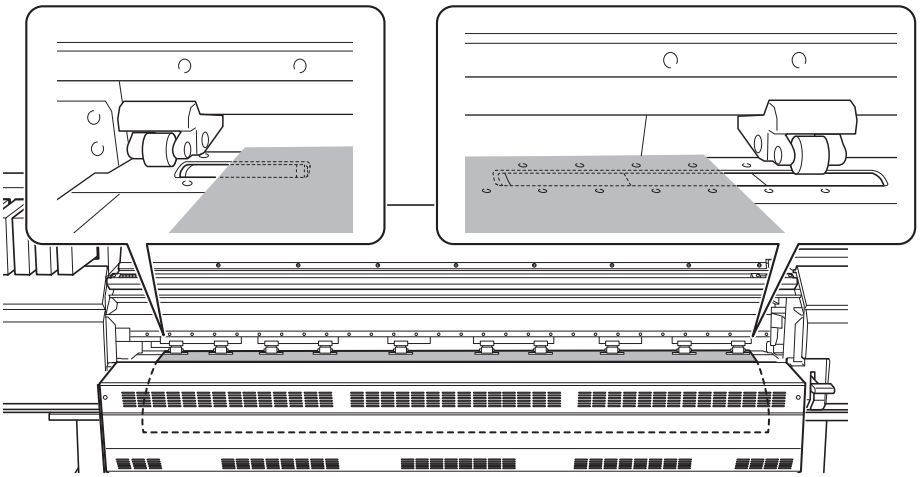
The media is released.



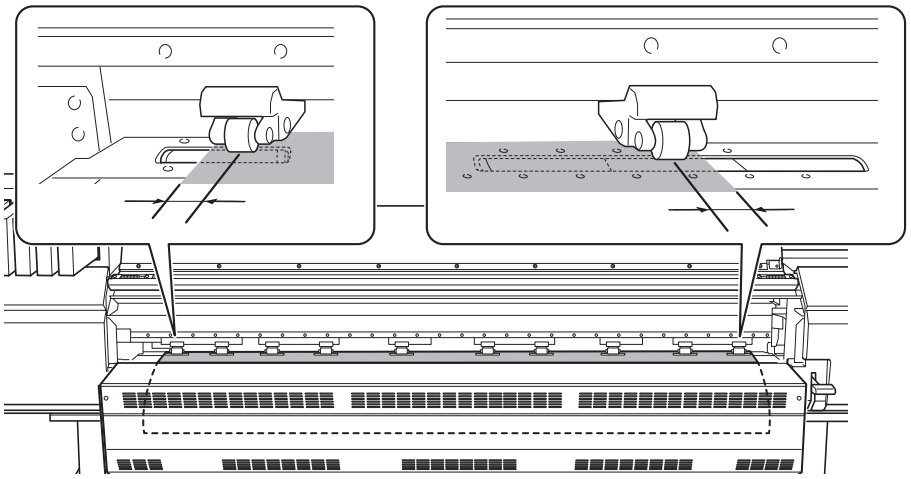
6. **Pull out the media over the apron.**



7. **Make sure both edges of the media are above the grit rollers.**
   Be sure to place the right edge of the media on the right-end grit roller.



8. **Move the left and right pinch rollers, placing them on both edges of the media.**
   Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

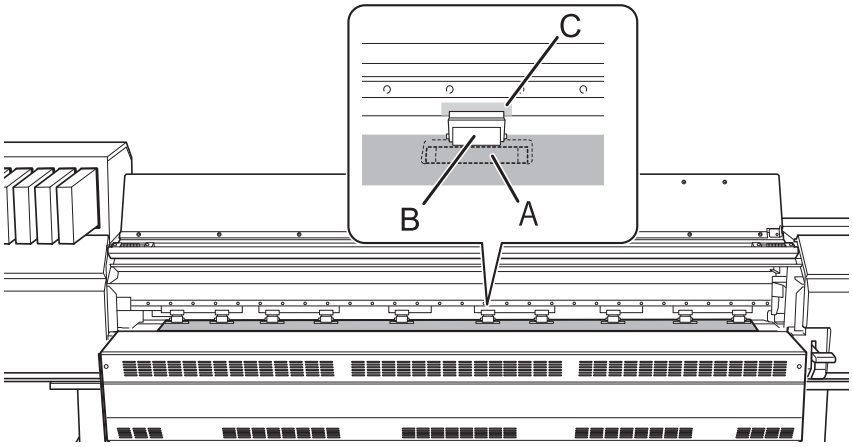
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

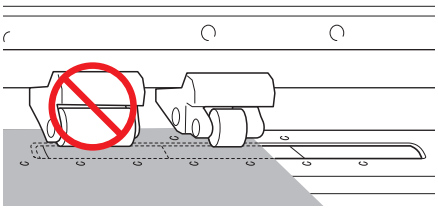
9. Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.

There are grit patterns (C) wherever there are grit rollers.

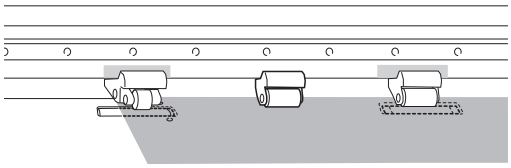


IMPORTANT

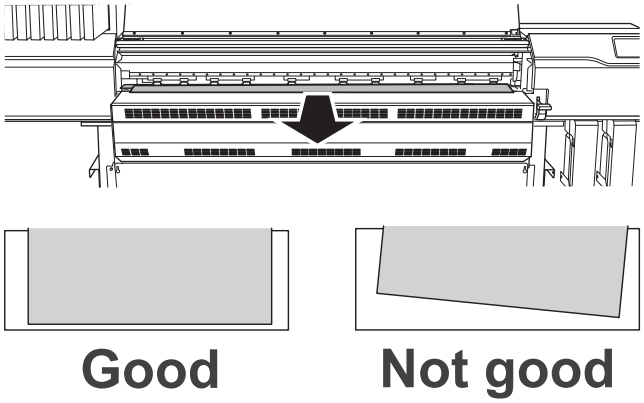
- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.



- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



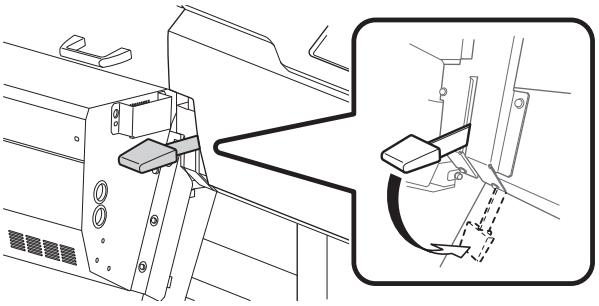
10. **Hold the media at the center and pull it out, being sure to keep it straight and all areas of the media to be taut.**



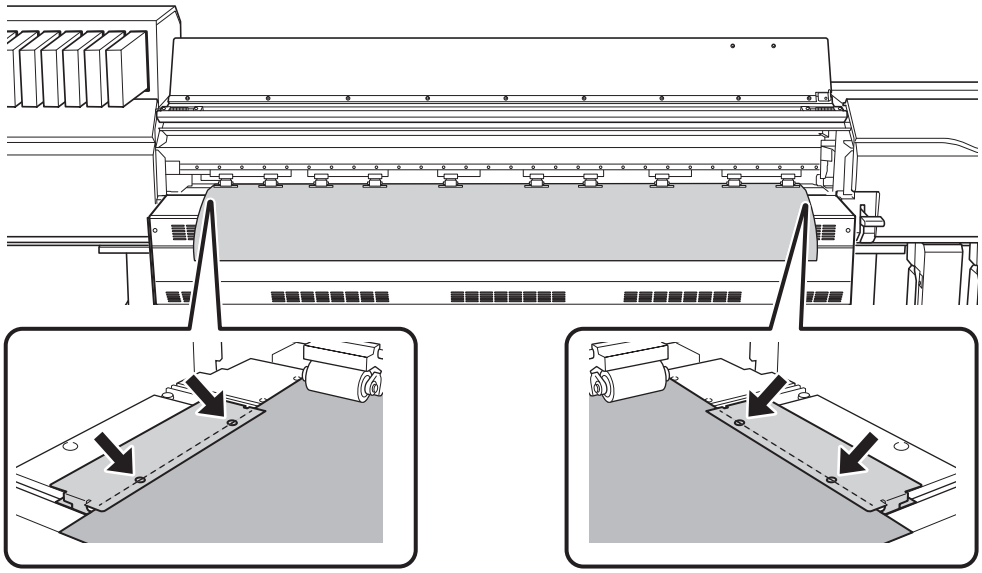
11. **Insert the leading edge of the media into the dryer.**

12. **Lower the loading lever (front).**

The media is held in place.



13. **Line up the edges of the media with the centers of the holes of the (left and right) media clamps.**



IMPORTANT

Be sure to use the media clamps when you load media.

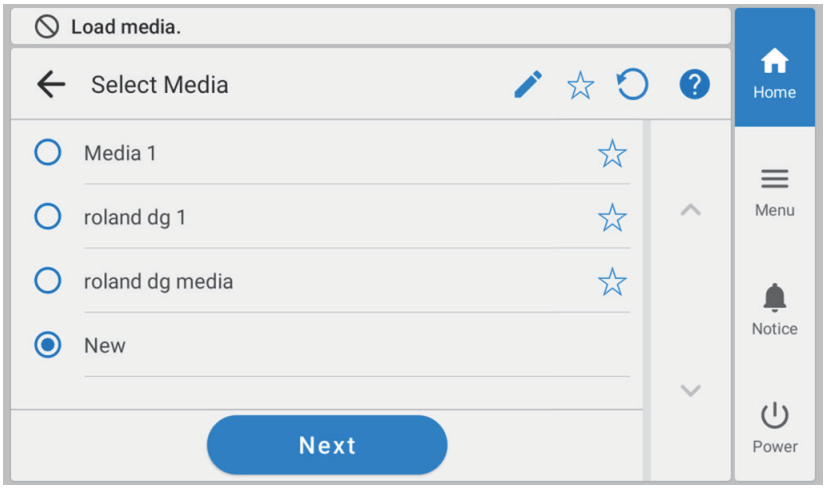
If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

14. **Close the front cover.**

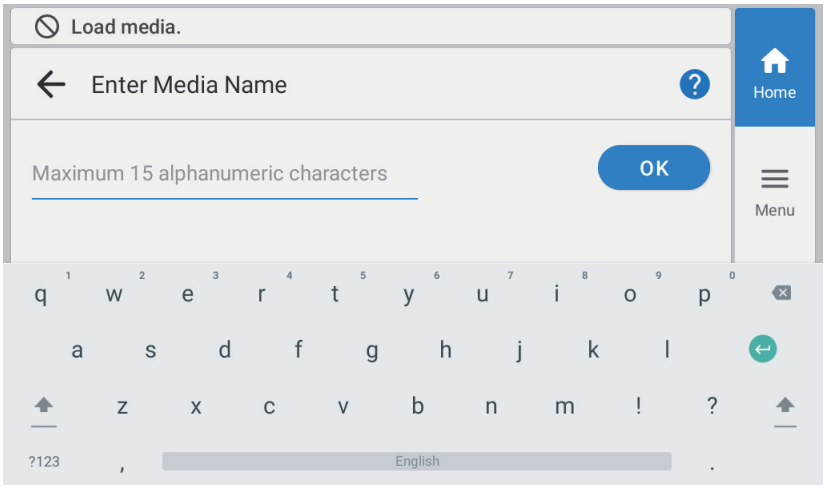
3. Registering the Media

Procedure

1. Tap [Setup].
2. Select [New].
3. Tap [Next].



4. Enter a new media name and tap [OK].



5. Tap [Next].
6. The [Setup Method] screen will appear. Select [Use Take-up Unit] or [Do Not Use Take-up Unit].
7. Tap [Start Setup].

   The cutting carriage moves and detects the width of the media and the positions of the media clamps. This operation is called initialization.
8. When [The media could not be detected automatically. Manually set the printing area.] appears, use the following procedure to configure the settings.

MEMO

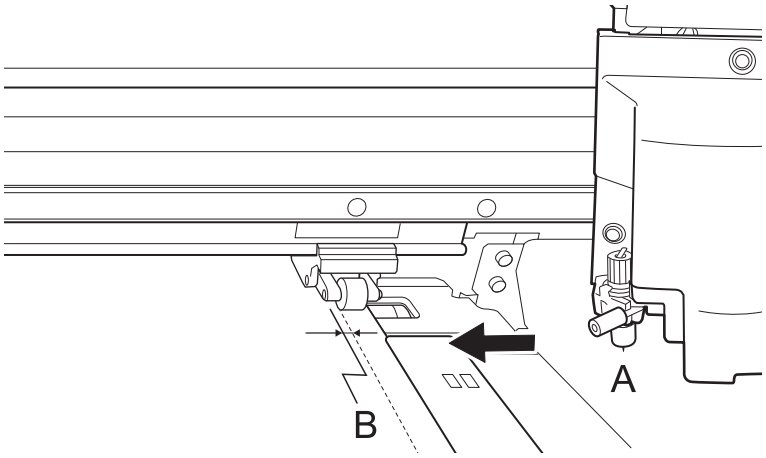
This message may appear when media with high reflectance is set up.

(1) **Tap [OK].**

(2) **Tap [Change].**

The [**Set the right edge of the printing area within the area specified by the pinch rollers.**] screen appears.

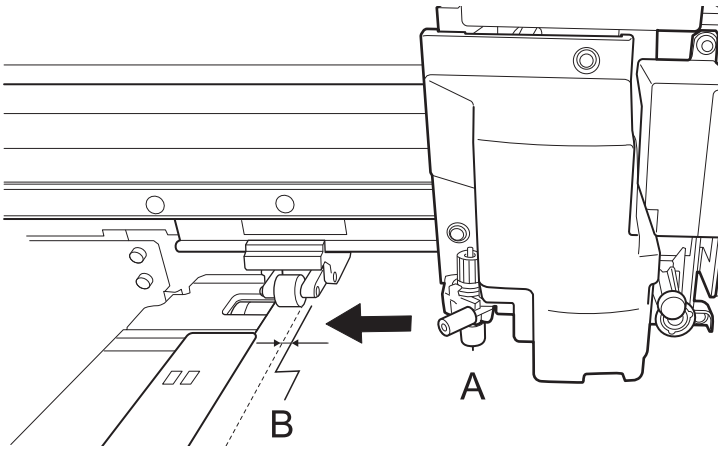
(3) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 mil) to the inside (B) from the left edge of the right pinch roller.**



(4) **Tap [OK].**

The [**Set the left edge of the printing area within the area specified by the pinch rollers.**] screen appears.

(5) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 in.) to the inside (B) from the right edge of the left pinch roller.**



(6) **Tap [OK].**

The set left and right positions are applied to the [**Printing Area (Width)**].

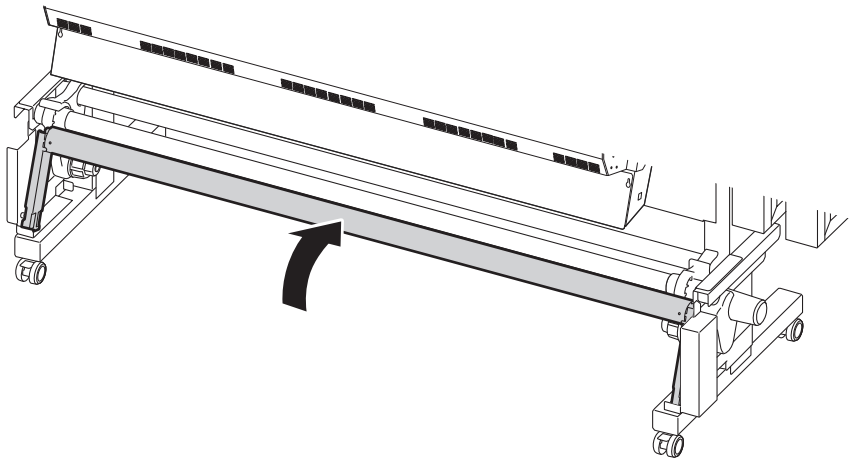
(7) **Tap [OK].**

4. Load the media in the take-up unit.

If you will not use the take-up unit, proceed to 5. Configuring Settings to Match the Media(P. 52).

Procedure

1. Lower the dancer roller toward the rear.



2. Follow the procedure below to load a paper tube on the media holders of the take-up unit.

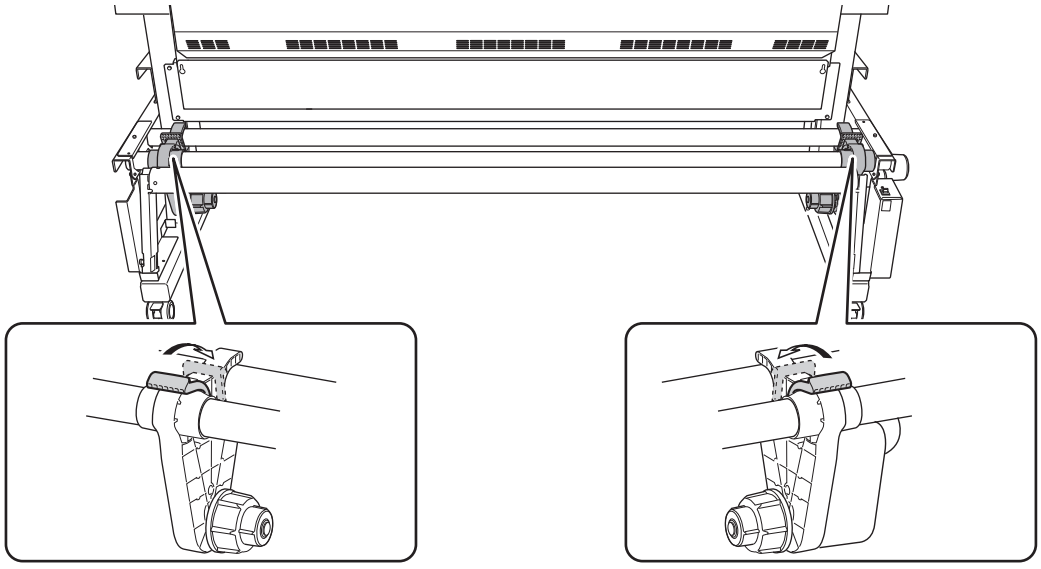
Prepare a paper tube wider than the media that has been set up.

IMPORTANT

Paper tubes are consumable items.

Watch the condition of the paper tube and replace at an appropriate time so that the media can be taken up in good working order.

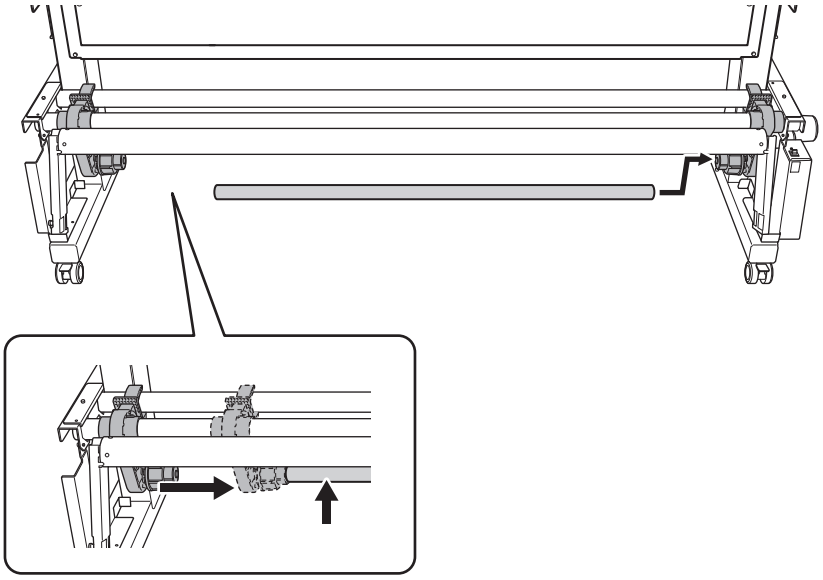
(1) **Release the media holders to enable their movement.**



(2) **Fit the paper tube onto the right end cap.**

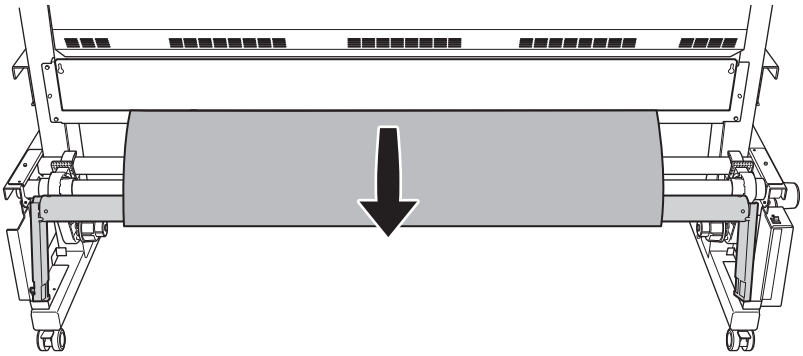
Fit the paper tube securely right to the end of the end cap.

(3) **Push the left media holder into the paper tube.**



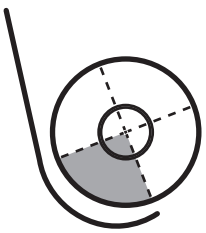
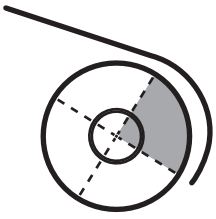
3. **Tap ⌄ on the operation panel to feed out the media until the tip of the media reaches the paper tube.**

Media is fed out 10 mm (0.39 in.) each time you press this button. Holding down the button lets you feed out paper continuously.



MEMO

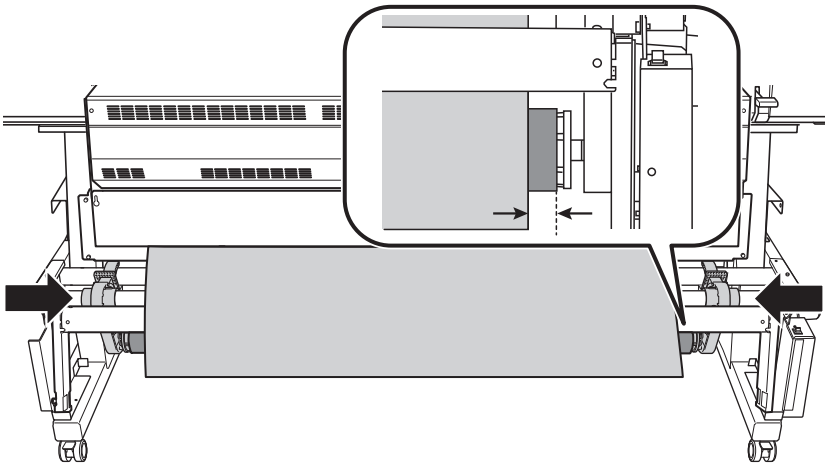
Feed out the media until it can wrap around at least 1/4 of the paper tube.

When using the FORWARD setting	When using the BACKWARD setting
	

4. **Follow the procedure below to adjust the positions of the media holders.**

(1) **Move both media holders so that it is possible to see the paper tube from the right edge of the media.**

Hold the media holders from the outside and move them.



(2) **Secure the left and right media holders.**

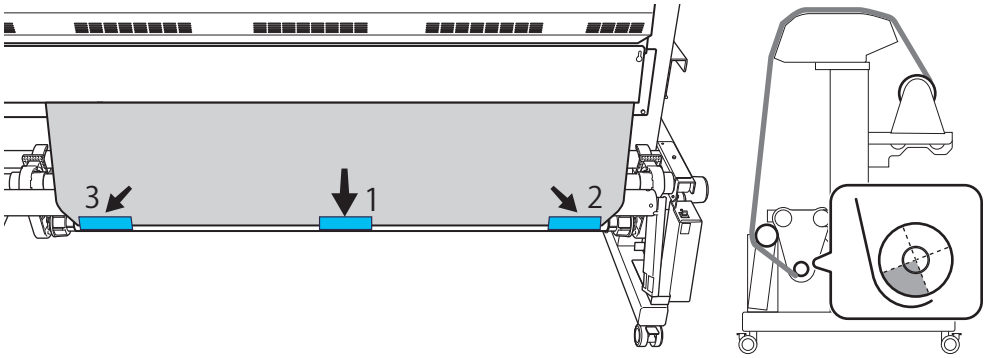
5. **Follow the procedure below to secure the media on the paper tube.**

Secure the media in the [**Take-up Direction**] set in step 2 of 1. Installing the Media on the Media Holders(P. 30).

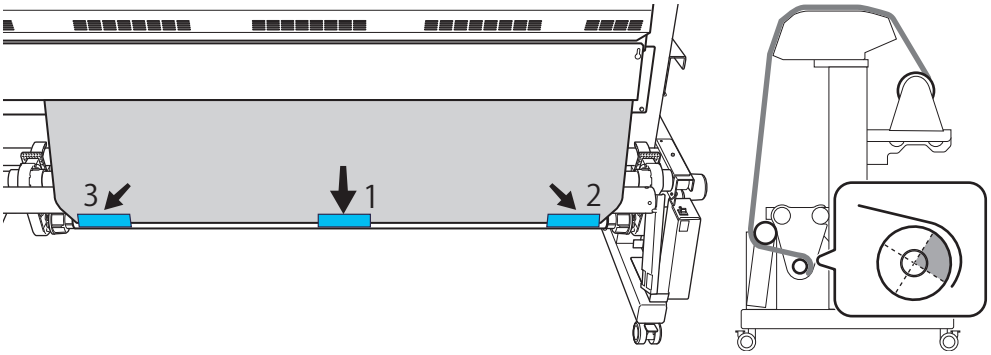
(1) **While pulling the media so that it does not sag, secure the center of the media on the paper tube with adhesive tape.**

(2) **While pulling the media from the center toward the outer edges, secure the left and right edges of the media on the paper tube with adhesive tape.**

- **When using the FORWARD setting**



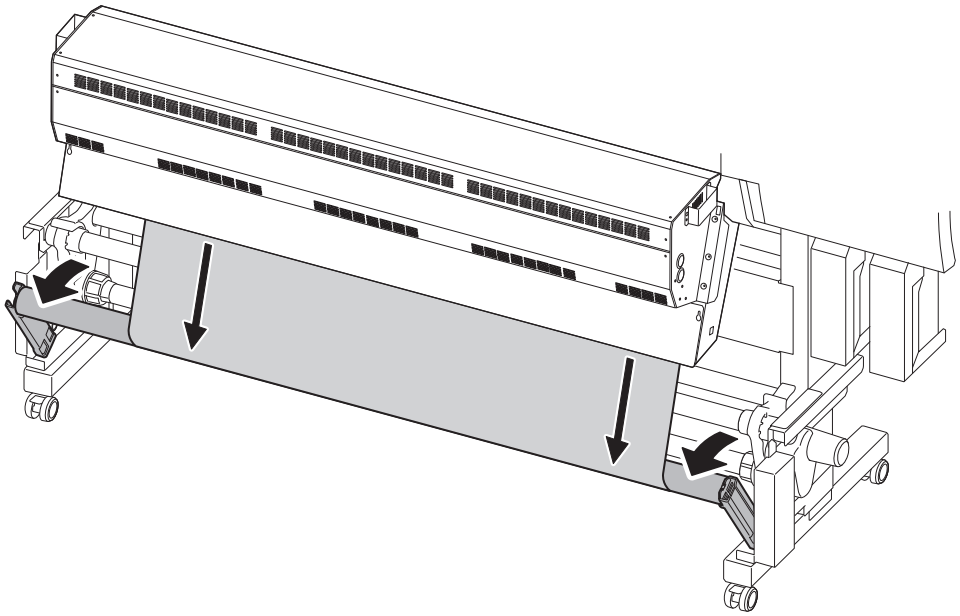
- **When using the BACKWARD setting**



6. **Tap [OK].**

A small amount of the media is fed out.

7. **Lower the dancer roller toward the front.**



8. Tap [OK].

5. Configuring Settings to Match the Media

To ensure the optimal output according to the media size and type, you can set the minimal amount of items. All items set here can be set individually as well.

Procedure

1. **On the [Select Media Output Type] screen, select the output type and tap [Next].**
   - **[Print Only/Print & Cut]**

     Proceed to step 2.
   - **[Cut Only]**

     Switch to the [**Multi Sensor Adjustment**] screen. When automatic adjustment is finished, tap [**OK**]. This completes the settings for [**Cut Only**].

     If the adjustment failed, respond to the failure according to the information in Correcting the Reading Sensor(P. 193).

2. **Set the media-heating temperature with [Heater Temperature], and then tap [Next].**
   - To set [**Print Heater**] to off, tap  .
   - To change the set temperature for [**Print Heater**] and [**Dryer**], tap + or −.

3. **Adjust the print head height using [Print Head Height].**
   - If this is not necessary, tap [**Next**].
   - Follow the procedure below to make adjustments.
     a. Tap [**Change**]
     b. Open the front cover.
     c. Move the height-adjustment lever to adjust the head height.
     d. Close the front cover.
     e. Tap [**OK**].
     f. Tap [**Next**].

   For details on this work, refer to Changing the Print Head Height(P. 160).

4. **On the [Nozzle Drop-out Test] screen, configure the [Printing Test] or [Printing Test (Drying Enabled)] and [Output Start Location] settings.**
   - If this is not necessary, tap [**Next**].
   - To perform a [**Printing Test**], tap [**Printing Test**]>[**Execute**] or [**Printing Test (Drying Enabled)**]>[**Execute**].

   MEMO

   [**Printing Test**] is recommended. However, the ink will not dry, so if you want to dry the ink, select [**Printing Test (Drying Enabled)**].

   For details on what to do after the printing test, refer to Step 2: Performing Normal Cleaning(P. 122).

5. **On the [Select Media Adjustment Method] screen, select the adjustment method.**

   Here, the media feed correction for reducing horizontal bands and the correction of the landing position of the ink will be adjusted. Select manual adjustment for transparent media and media with high reflectance, whose edges cannot be detected.

MEMO

[**Simple Correction (Auto)**] is the recommended adjustment. You can determine the correction values with [**Detailed Correction (Manual)**].

- **Follow the procedure below to make automatic adjustments.**
  a. Tap [**Simple Correction (Auto)**]>[**Next**].
  b. Tap [**Execute**] on the [**Batch Automatic Correction**] screen.

  On successful completion of automatic adjustment, the home screen appears. This completes the settings.

  For more information, refer to Automatically Making Required Adjustments(P. 155).
- **Follow the procedure below to make manual adjustments.**
  a. Tap [**Detailed Correction (Manual)**]>[**Next**].
  b. Perform a printing test on the [**Detailed Feed Correction (Manual)**] screen.

     Set the correction values from the printing test result. For more information, refer to Manual Adjustment: Reducing Horizontal Bands (Feed Correction)(P. 156).
  c. Tap [**Save and Proceed**].
  d. Perform a printing test on the [**Detailed Media Gap Adjustment (Manual)**] screen.

     Set the correction values from the printing test result. For more information, refer to Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)(P. 158).
  e. Tap [**Save and Exit**].

IMPORTANT

When printing and cutting or just cutting, rewind the media from the take-up device to slacken the media.
If sufficient media is not wound on the paper tube immediately after setup, this operation may not be performed well, lowering the cutting quality and preventing continued take-up. When performing cutting immediately after attaching the media to the paper tube, first feed enough media to carry out take-up a few times and set the base point.

This completes the setup of the media.

Setup of Sheet Media

Load the sheet media on the printer. When the loading is finished, [**Output possible.**] is displayed as the status. This work is referred to as "Setup of Media."

1. A: Determining the Positions of the Media

When using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**], the suction fan does not activate, so media cannot be loaded with this procedure. In these cases, refer to 1. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])(P. 95).

By default, [**Skewing Correction Support at Setup**] is set to [**Enable**].

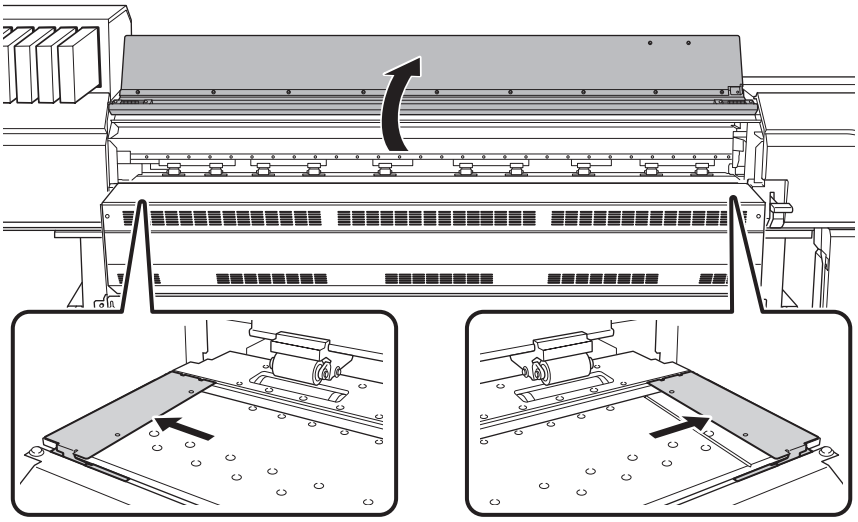
Procedure

1. **Tap on the operation panel.**

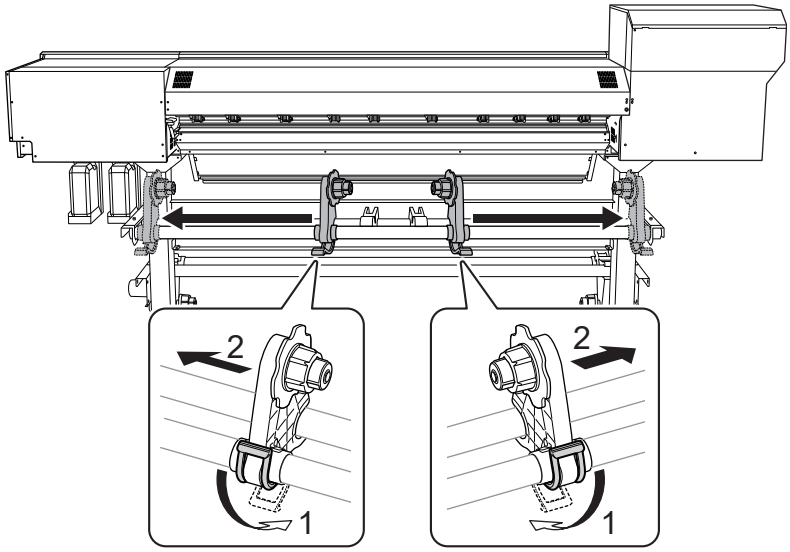
   The sub power is switched on.

2. **Open the front cover.**

3. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



4. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**



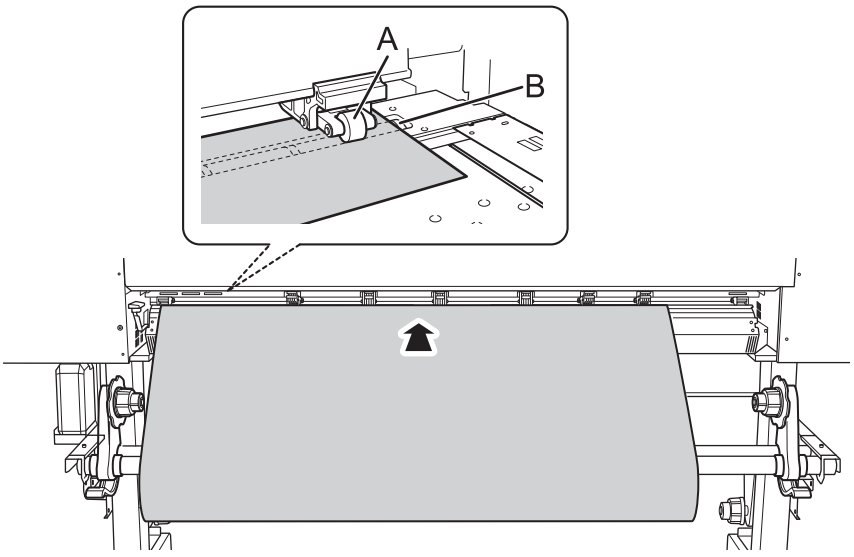
5. **From the rear of the printer, pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**

IMPORTANT

If the leading edge of the media is bent, cut the bent part before loading the media, as it may be difficult for the media to enter the dryer entrance.

You will hear a beep. Approximately 5 seconds later, you will hear two beeps, and then the suction fan will activate. While this fan is operating, the media will not move backward even if you remove your hands from it.

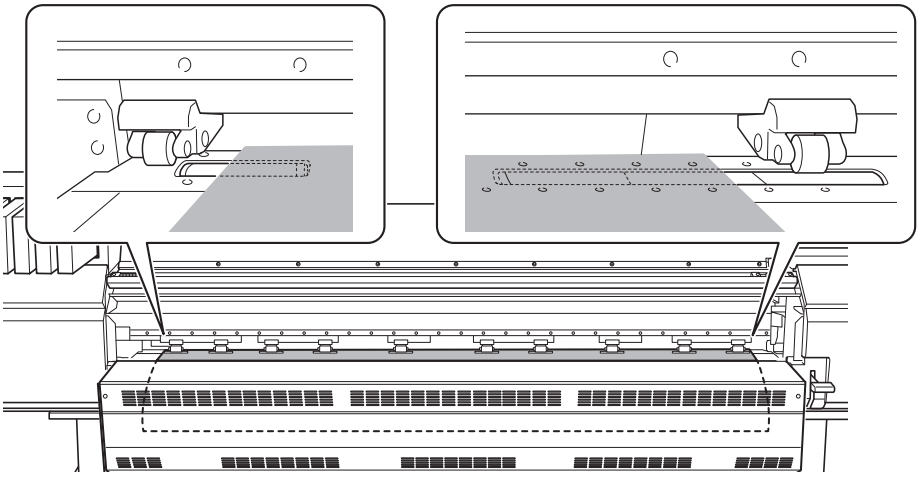
When loading the media from the front of the printer, feed the leading edge of the media (the side where printing will start) over the platen, and then pull the media to the front to activate the suction fan.



6. **(Move to the front of the printer.) Insert the leading edge of the media into the dryer.**

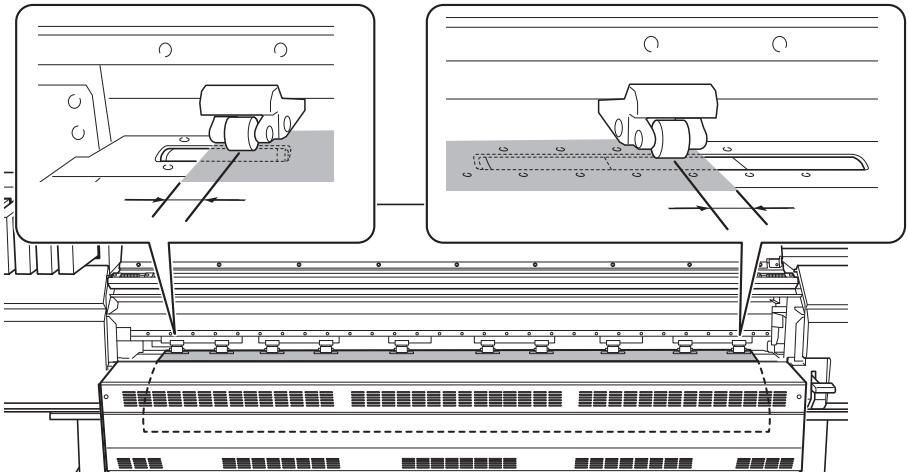
7. **Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



8. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

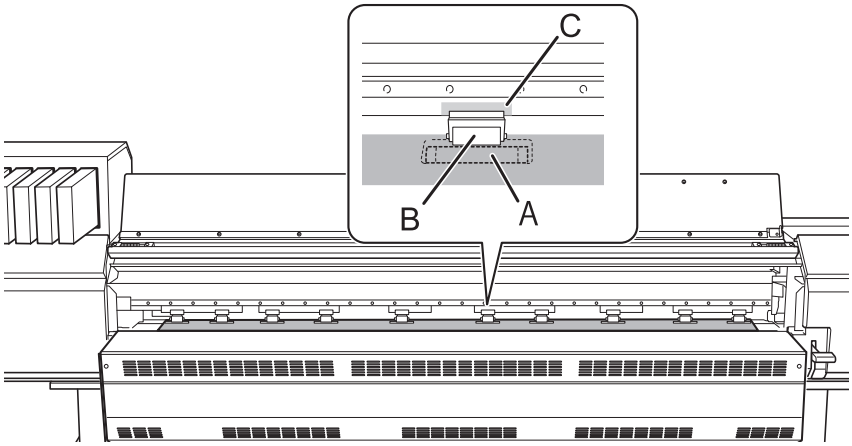
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position before securing it in place, redo the procedure from step 5.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

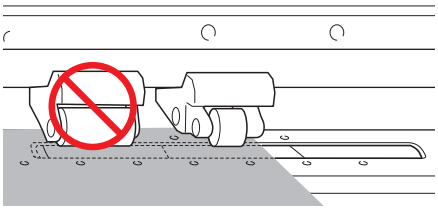
9. **Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.**

There are grit patterns (C) wherever there are grit rollers.

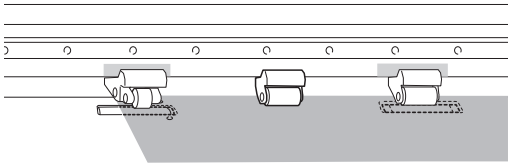


IMPORTANT

- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.

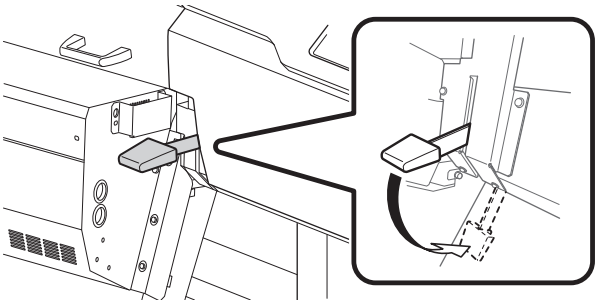


- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



10. Lower the loading lever (front).

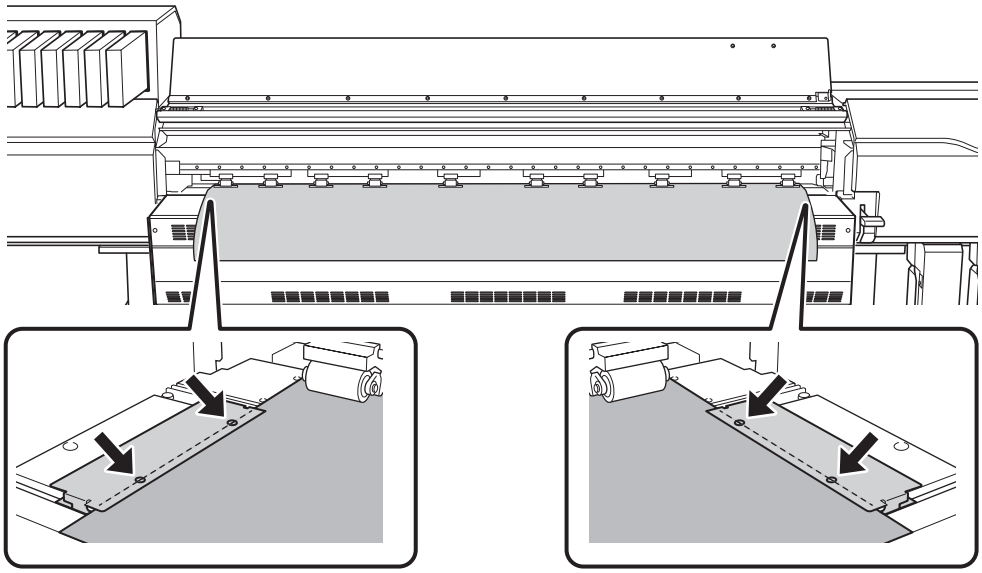
The media is held in place.



IMPORTANT

If you want to readjust the media position before securing it in place, redo the procedure from step 5.

11. Line up the edges of the media with the centers of the holes of the (left and right) media clamps.



IMPORTANT

Be sure to use the media clamps when you load media.

If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

12. **Close the front cover.**

1. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])

Use the following procedure to determine the positions of the media when using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**].

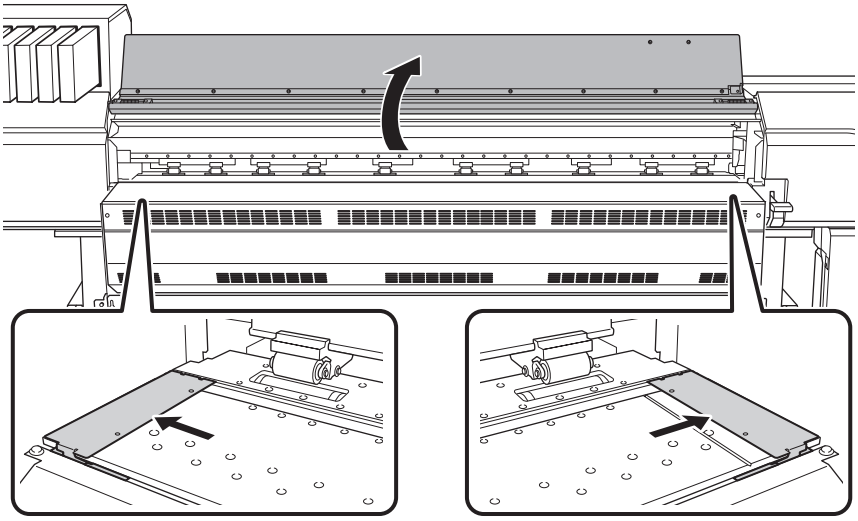
Procedure

1. **Tap on the operation panel.**

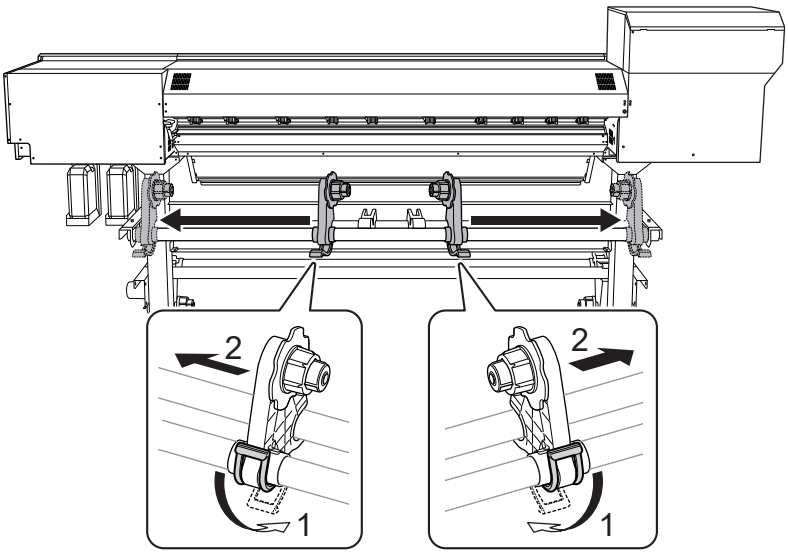
   The sub power is switched on.

2. **Open the front cover.**

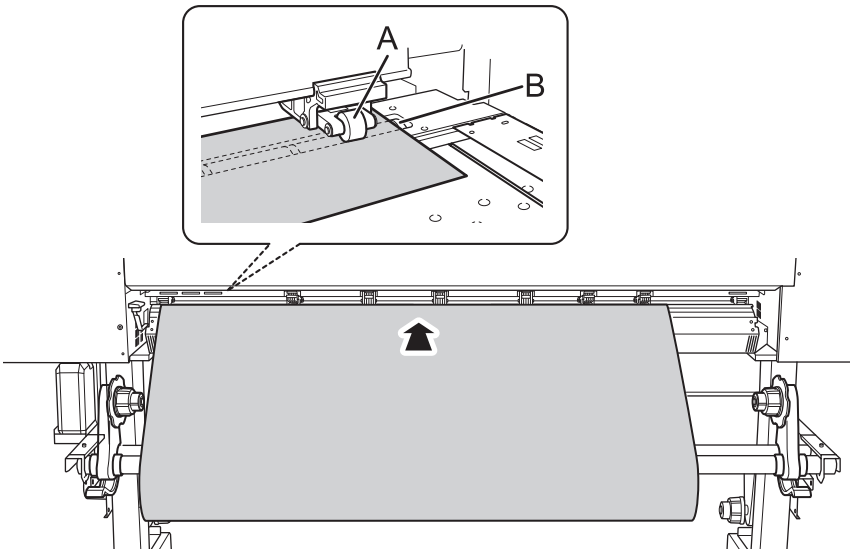
3. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



4. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**

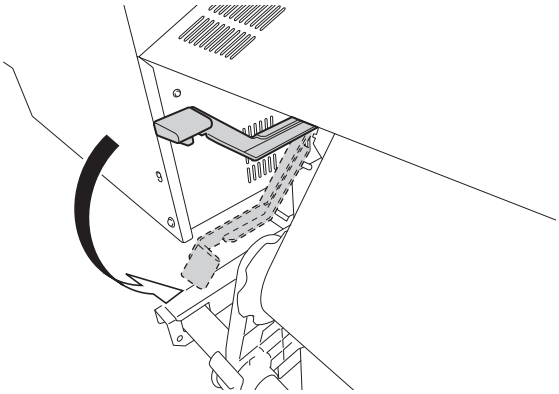


5. **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



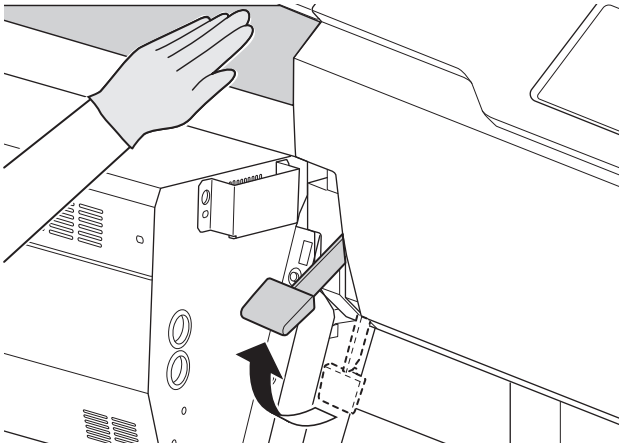
6. **Lower the loading lever (rear).**

The media is held in place.



7. **(Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).**

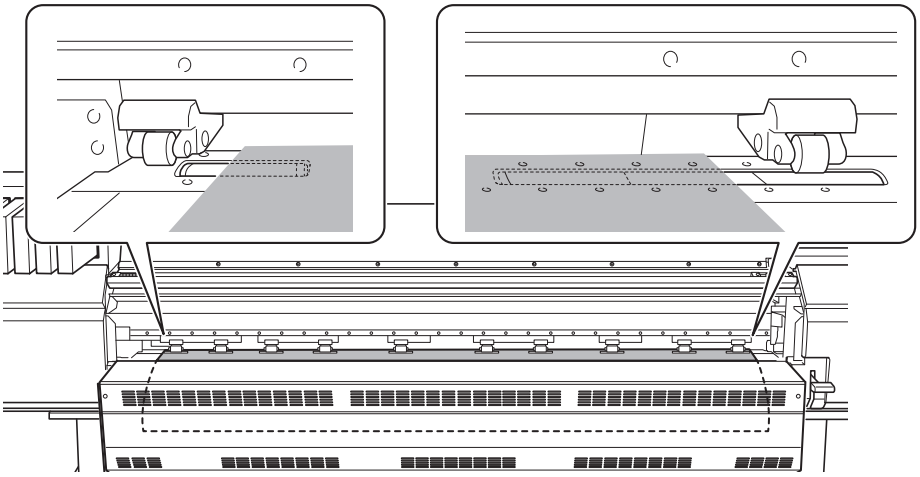
The media is released.



8. **Insert the leading edge of the media into the dryer.**

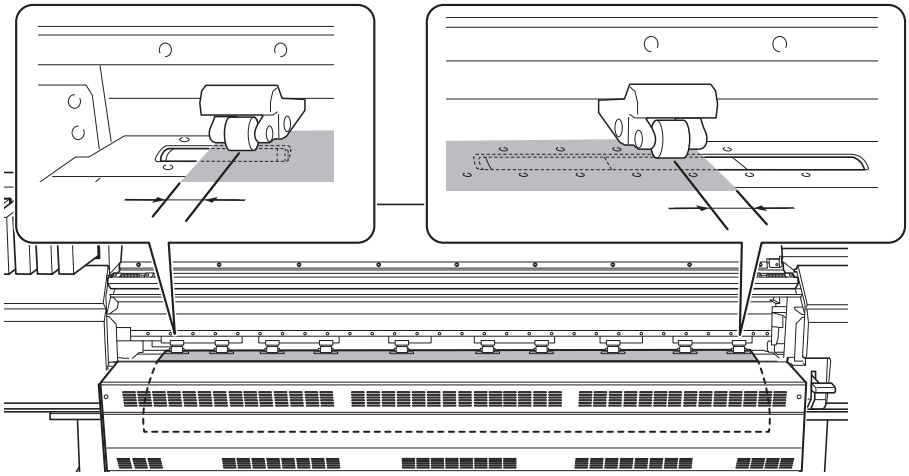
9. **Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



10. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

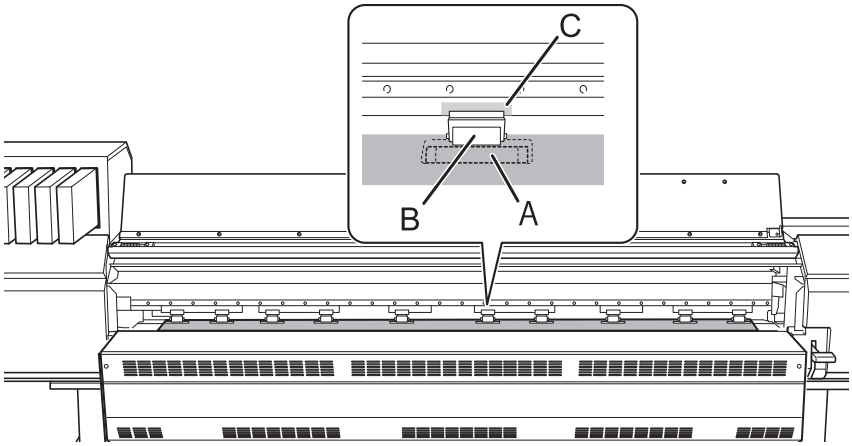
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

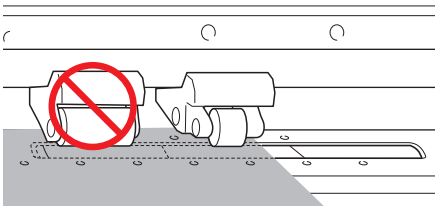
11. **Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.**

There are grit patterns (C) wherever there are grit rollers.

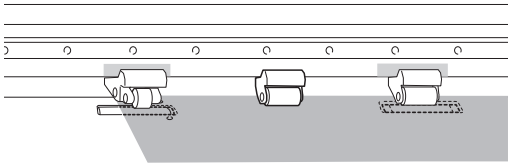


IMPORTANT

- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.

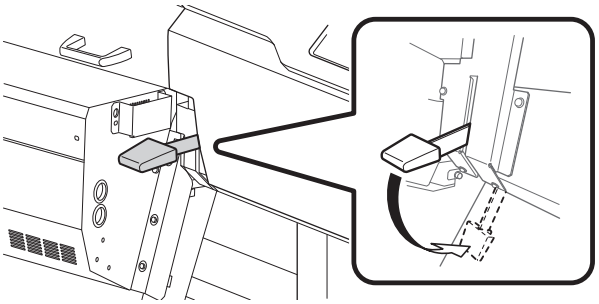


- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



12. Lower the loading lever (front).

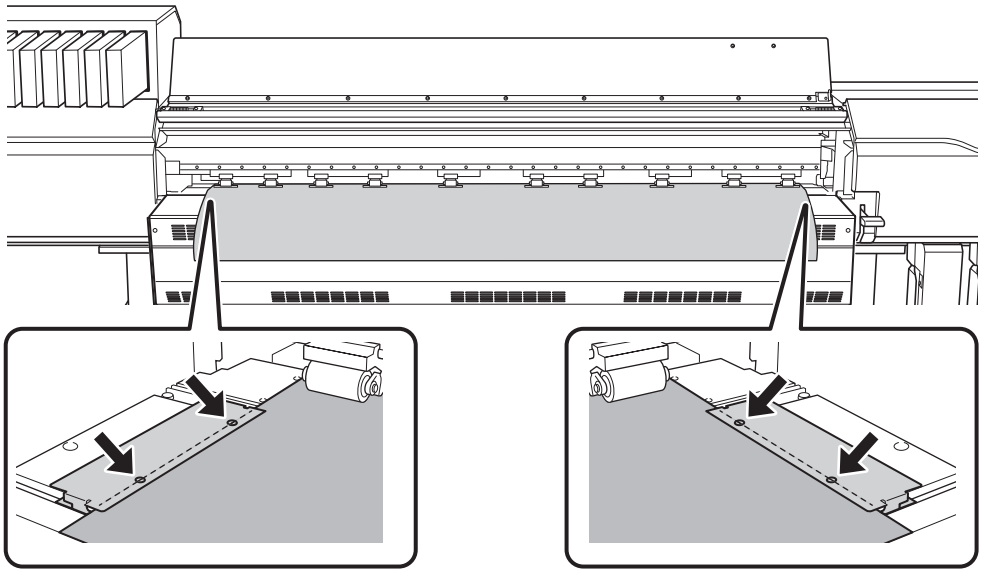
The media is held in place.



IMPORTANT

If you want to readjust the media position before securing it in place, redo the procedure from step 9.

13. Line up the edges of the media with the centers of the holes of the (left and right) media clamps.



IMPORTANT

Be sure to use the media clamps when you load media.

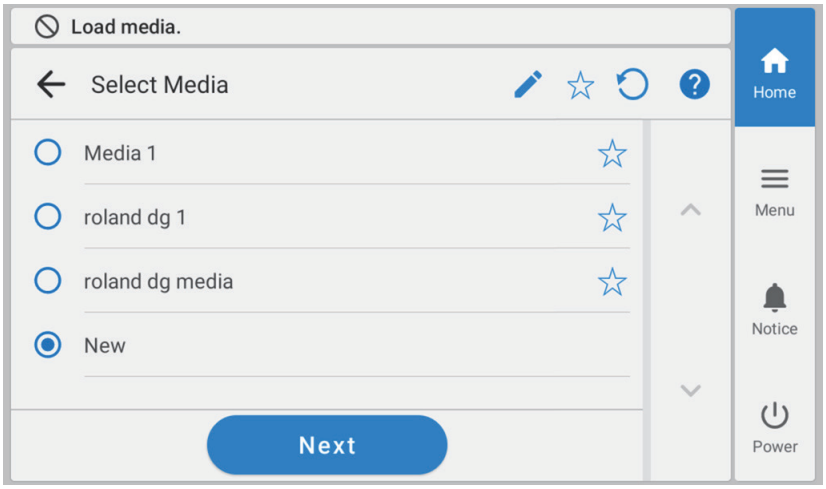
If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

14. **Close the front cover.**

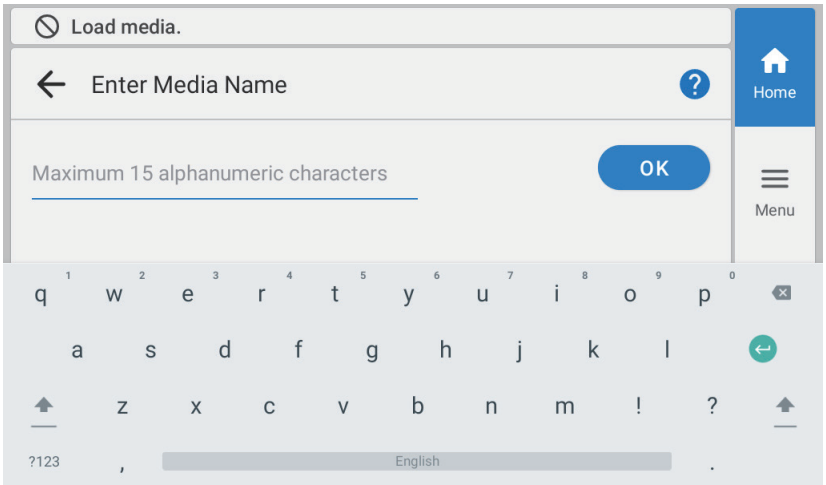
2. Registering the Media

Procedure

1. Tap [Setup].
2. Select [New].
3. Tap [Next].



4. Enter a new media name and tap [OK].



5. Tap [Next].
6. The [Setup Method] screen will appear. Select [Use Take-up Unit] or [Do Not Use Take-up Unit].
7. Tap [Start Setup].

   The cutting carriage moves and detects the width of the media and the positions of the media clamps. This operation is called initialization.
8. When [The media could not be detected automatically. Manually set the printing area.] appears, use the following procedure to configure the settings.

MEMO

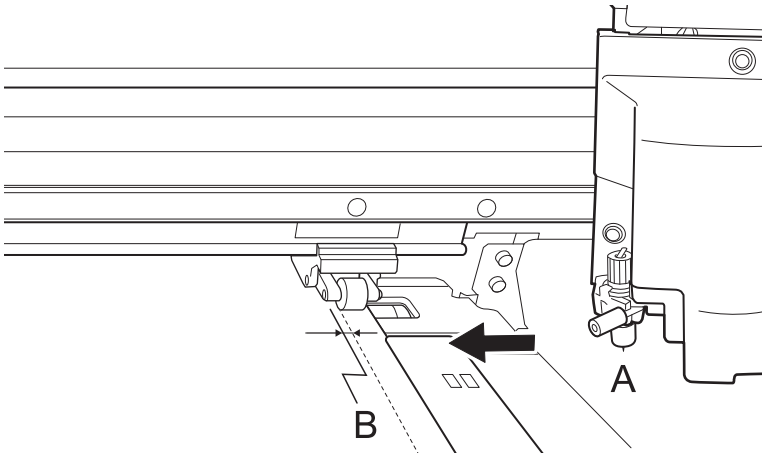
This message may appear when media with high reflectance is set up.

(1) **Tap [OK].**

(2) **Tap [Change].**

The [**Set the right edge of the printing area within the area specified by the pinch rollers.**] screen appears.

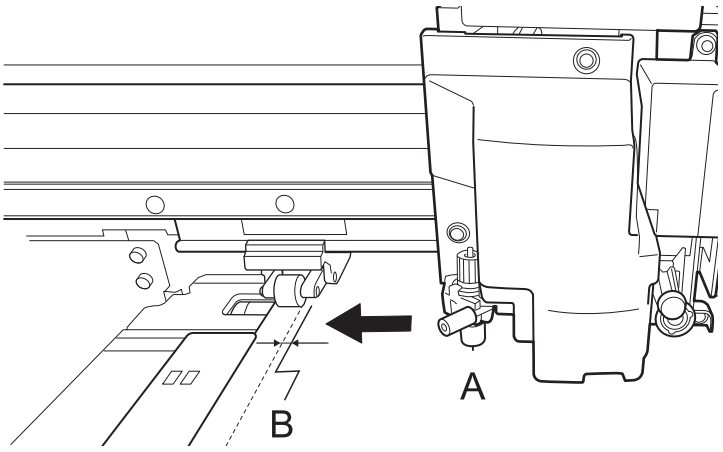
(3) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 mil) to the inside (B) from the left edge of the right pinch roller.**



(4) **Tap [OK].**

The [**Set the left edge of the printing area within the area specified by the pinch rollers.**] screen appears.

(5) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 in.) to the inside (B) from the right edge of the left pinch roller.**



(6) **Tap [OK].**

The set left and right positions are applied to the [**Printing Area (Width)**].

(7) **Tap [OK].**

3. Configuring Settings to Match the Media

To ensure the optimal output according to the media size and type, you can set the minimal amount of items. All items set here can be set individually as well.

Procedure

1. **On the [Select Media Output Type] screen, select the output type and tap [Next].**
   - **[Print Only/Print & Cut]**

     Proceed to step 2.
   - **[Cut Only]**

     Switch to the [**Multi Sensor Adjustment**] screen. When automatic adjustment is finished, tap [**OK**]. This completes the settings for [**Cut Only**].

     If the adjustment failed, respond to the failure according to the information in Correcting the Reading Sensor(P. 193).

2. **Set the media-heating temperature with [Heater Temperature], and then tap [Next].**
   - To set [**Print Heater**] to off, tap  .
   - To change the set temperature for [**Print Heater**] and [**Dryer**], tap + or −.

3. **Adjust the print head height using [Print Head Height].**
   - If this is not necessary, tap [**Next**].
   - Follow the procedure below to make adjustments.
     a. Tap [**Change**]
     b. Open the front cover.
     c. Move the height-adjustment lever to adjust the head height.
     d. Close the front cover.
     e. Tap [**OK**].
     f. Tap [**Next**].

   For details on this work, refer to Changing the Print Head Height(P. 160).

4. **On the [Nozzle Drop-out Test] screen, configure the [Printing Test] or [Printing Test (Drying Enabled)] and [Output Start Location] settings.**
   - If this is not necessary, tap [**Next**].
   - To perform a [**Printing Test**], tap [**Printing Test**]>[**Execute**] or [**Printing Test (Drying Enabled)**]>[**Execute**].

   MEMO

   [**Printing Test**] is recommended. However, the ink will not dry, so if you want to dry the ink, select [**Printing Test (Drying Enabled)**].

   For details on what to do after the printing test, refer to Step 2: Performing Normal Cleaning(P. 122).

5. **On the [Select Media Adjustment Method] screen, select the adjustment method.**

   Here, the media feed correction for reducing horizontal bands and the correction of the landing position of the ink will be adjusted. Select manual adjustment for transparent media and media with high reflectance, whose edges cannot be detected.

MEMO

[**Simple Correction (Auto)**] is the recommended adjustment. You can determine the correction values with [**Detailed Correction (Manual)**].

- **Follow the procedure below to make automatic adjustments.**
  a. Tap [**Simple Correction (Auto)**]>[**Next**].
  b. Tap [**Execute**] on the [**Batch Automatic Correction**] screen.

  On successful completion of automatic adjustment, the home screen appears. This completes the settings.

  For more information, refer to Automatically Making Required Adjustments(P. 155).
- **Follow the procedure below to make manual adjustments.**
  a. Tap [**Detailed Correction (Manual)**]>[**Next**].
  b. Perform a printing test on the [**Detailed Feed Correction (Manual)**] screen.

     Set the correction values from the printing test result. For more information, refer to Manual Adjustment: Reducing Horizontal Bands (Feed Correction)(P. 156).
  c. Tap [**Save and Proceed**].
  d. Perform a printing test on the [**Detailed Media Gap Adjustment (Manual)**] screen.

     Set the correction values from the printing test result. For more information, refer to Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)(P. 158).
  e. Tap [**Save and Exit**].

This completes the setup of the media.

Setup of Registered Media

⚠ CAUTION

Do not touch the dancer roller needlessly.

The media take-up unit and feeder may move suddenly, which may result in injury.

Setting Up Roll Media

Load the roll media on the printer. When the loading is finished, [**Output possible.**] is displayed as the status. This work is referred to as "Setup of Media."

⚠ CAUTION

Load the roll media correctly.

Otherwise the media may fall and cause injury.

⚠ CAUTION

The roll media is approximately 45 kg (99.21 lb.).

To avoid injury, handle the roll media with care.

⚠ CAUTION

Never load media that weighs over 45 kg (99.21 lb.).

The machine may fail to withstand the weight and tip over or cause the media to fall.

1. Installing the Media on the Media Holders

The media holders of this machine are designed to be used with a paper tube (core) with an inner diameter of 2 inches or 3 inches.

⚠ WARNING

Handling roll media is an operation that must be performed by 2 persons or more, and care must be taken to prevent falls.

Attempting to lift heavy media in a manner that taxes your strength may cause physical injury. Also, if dropped, such items may cause injury.

Procedure

1. **Tap ⏻ on the operation panel.**

   The sub power is switched on.

2. **When using a take-up unit, use the following procedure to set it.**

   (1) **Tap ☰.**

   (2) **Tap [Preferences]>[Take-up].**

   (3) **Tap [Take-up during Cutting].**

   (4) **Select the setting from those shown below and tap [Save].**

[Enabled]	The media is taken up during cutting while slack is being created. This prevents the media from sticking to the floor. Make sure the media is taken up at least halfway around the paper tube beforehand.
[Disabled][*1]	The media is taken up after all cutting finishes.

*1 Default settings

MEMO

- **[Enabled]** cannot be performed in the following situations:
  - **[Blade Adjustment]**>**[Printing Test]**
  - **[Print & Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**
  - **[Crop Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**

IMPORTANT

When **[Preferences]**>**[Take-up]**>**[Enabled]** is set, to preserve cut quality, the speed may be limited to the optimum speed for **[Cutting Speed]** and **[Rise Movement Speed]** depending on the set media.
P. 173 Fine-tuning the Cutting Conditions

(5) **Tap [Take-up Method].**

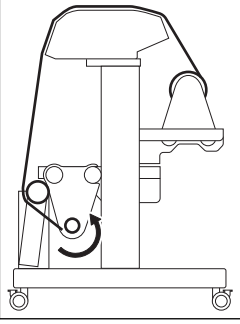
(6) **Select the setting from those shown below and tap [Save].**

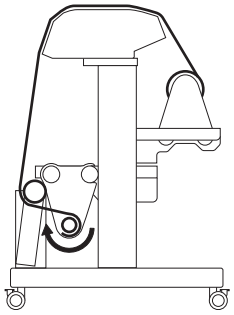
[Loose Winding][*2]	The media is taken up with some slack. This is suited to PVC and other such stiff or slippery media.
[Tension Winding]	The media is stretched and taken up. This is suited to tarpaulin and other such weak media and media that does not slip easily. Even if **[Tension Winding]** is set, if **[Enabled]** is enabled, the media is taken up while slack is being created.

*2 Default settings

(7) **Tap [Take-up Direction].**

(8) **Select the setting from those shown below and tap [Save].**

[Forward][*3]	The media is taken up onto the paper tube with the printed surface on the outside. 

[Backward]	The media is taken up onto the paper tube with the printed surface on the inside. 

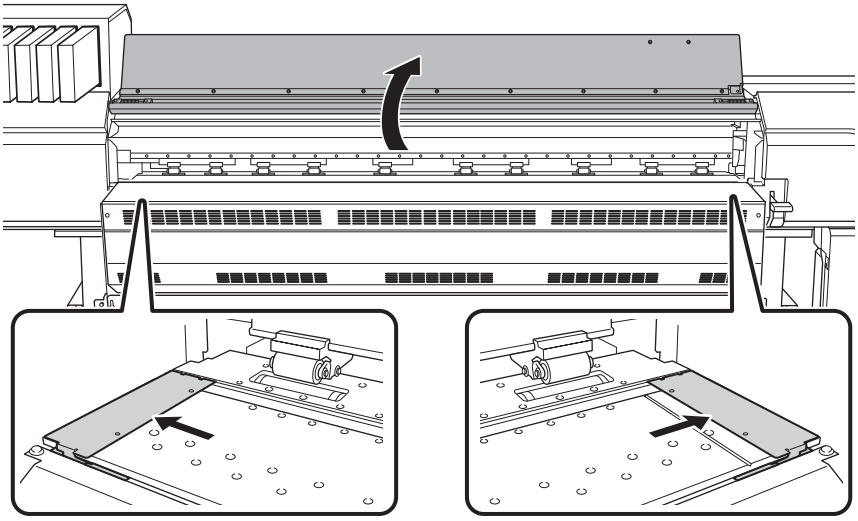
*3 Default settings

(9) **Tap** .

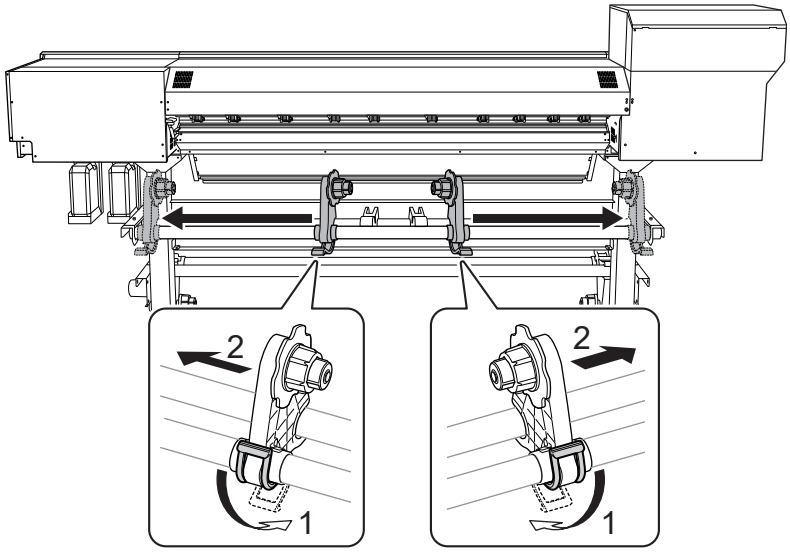
The home screen appears.

3. **Open the front cover.**

4. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



5. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**



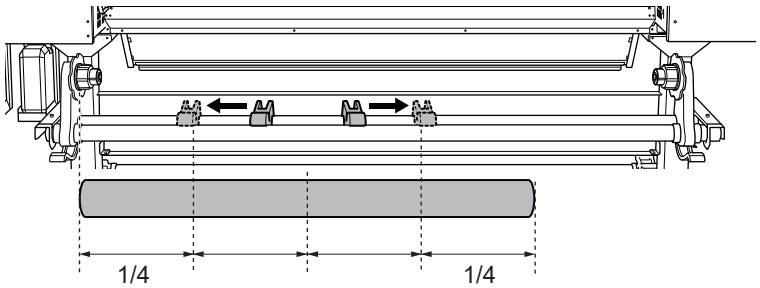
6. **Place the media on the machine.**

IMPORTANT

Do not leave media on the media stays or the shafts for a long period of time. The media may become deformed. Exercise caution.

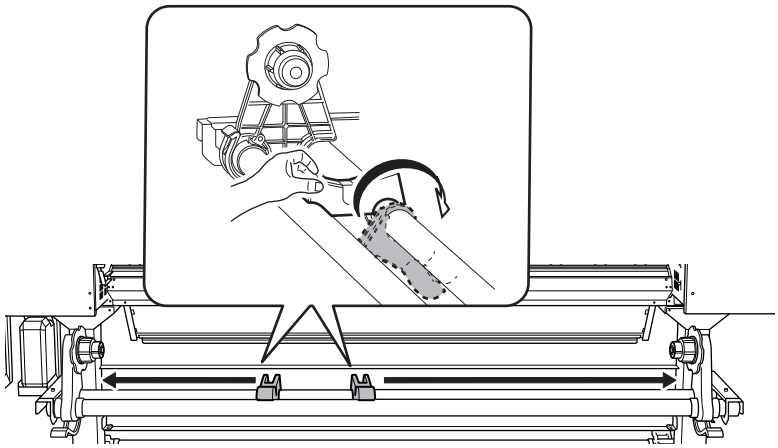
- **Media with an outer diameter of 220 mm (8.66 in.) or less**

  Place the media stays at positions that are 1/4 the length of the media from each end of the media, and then load the media.

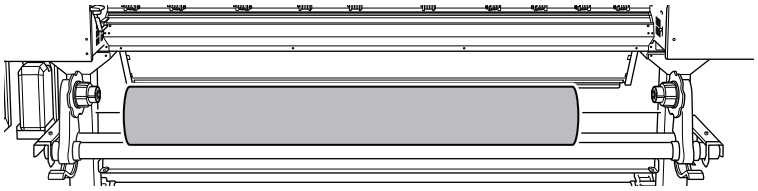


- **Media with an outer diameter exceeding 220 mm (8.67 in.)**

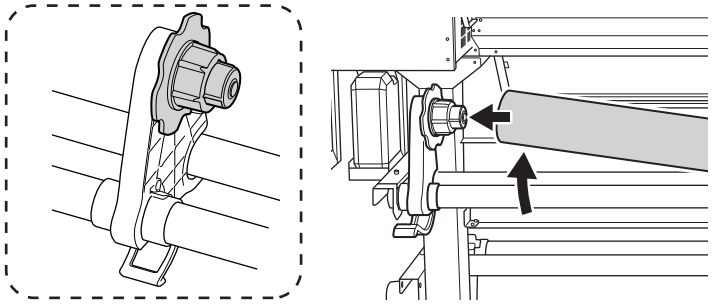
  a. Rotate the media stays to draw them to the media holders.



  b. Place the media directly between the two shafts.

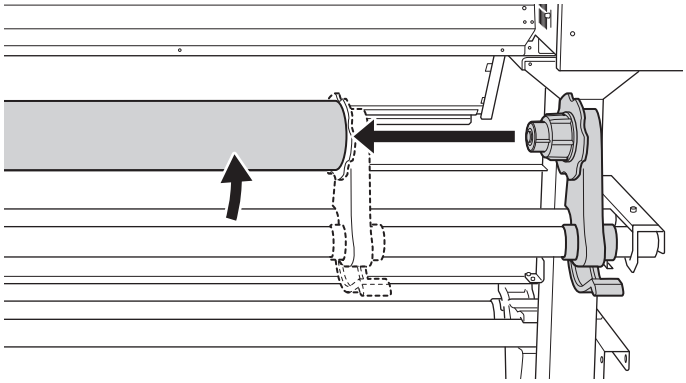


7. **Fit the paper tube (core) of the media onto the end cap of the left media holder.**



8. **Move the right media holder to fit its end cap onto the paper tube (core) of the media.**

Fit the paper tube onto the media holders securely to prevent the media from moving easily.



IMPORTANT

Do not secure the media holders in place just yet.

In the following procedure, you will adjust the positions of the media holders before securing them in place. Do not secure them in place just yet.

The next operation to perform varies depending on the media type and the Preferences. Proceed as shown below.

- For general media: 2. A: Determining the Positions of the Media(P. 73)
- For transparent media or if **[Preferences]**>**[Media Edge Detection]** is set to **[Disable]**: 2. B: Determining the Positions of Media (If **[Media Edge Detection]**: **[Disable]**)(P. 78)

2. A: Determining the Positions of the Media

This section describes how to use the suction fan to prevent media skewing. When using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**], the suction fan does not activate, so media cannot be loaded with this procedure. In these cases, refer to 2. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])(P. 78).

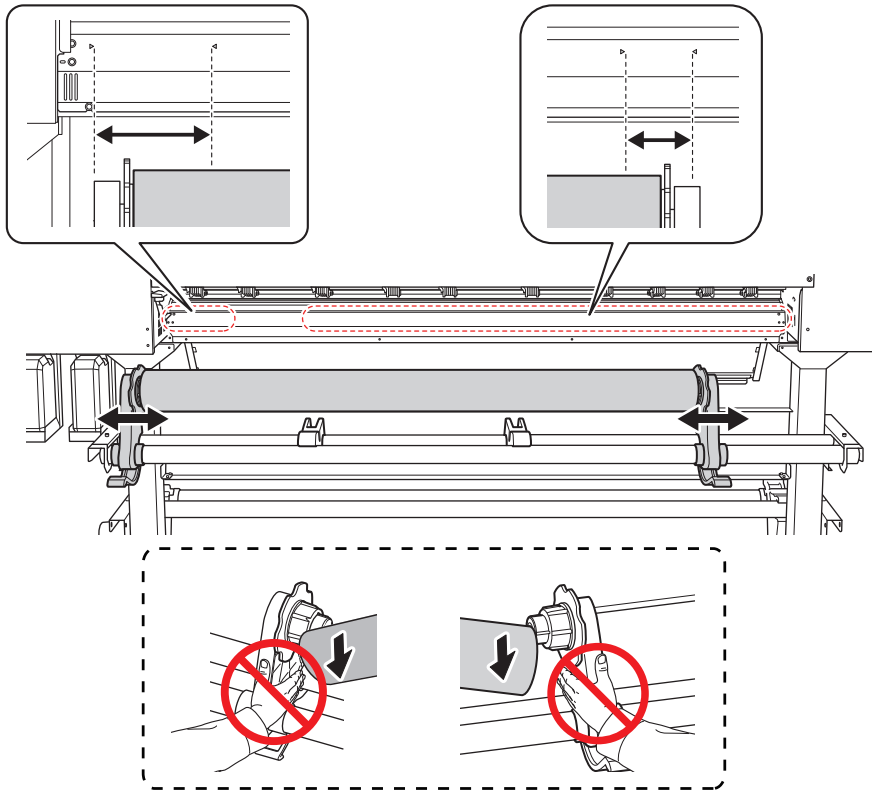
By default, [**Skewing Correction Support at Setup**] is set to [**Enable**].

Procedure

1. **Determine the left and right positions of the media with the grit patterns used as the reference.**

   Note the following points when determining the positions.

   - Hold the media holders from the outside and move them.
   - Ensure that the left edge of the media is positioned so that it is within the range of the grit pattern of the left edge.
   - Ensure that the right edge of the media is positioned so that it is within the range of one of the grit patterns.



⚠ WARNING

Do not hold places other than those instructed. Do not move the media by holding it directly.

Doing so may cause the media to fall off the media holder and cause injury.

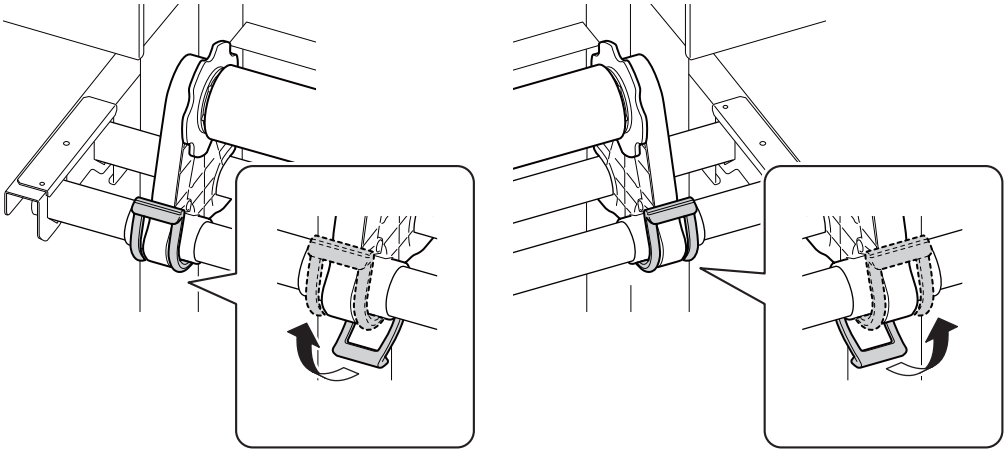
IMPORTANT

Firmly decide the left and right side positions of the media at this point.

After this procedure is completed, if the left and right side positions do not fit the proper positions when securing the media with pinch rollers, you will have to go back to this step to redo this procedure. If you just

hold the media to readjust its position forcibly, the media will be skewed during printing, which will have an adverse effect on the printing results.

2. Secure the media holders.



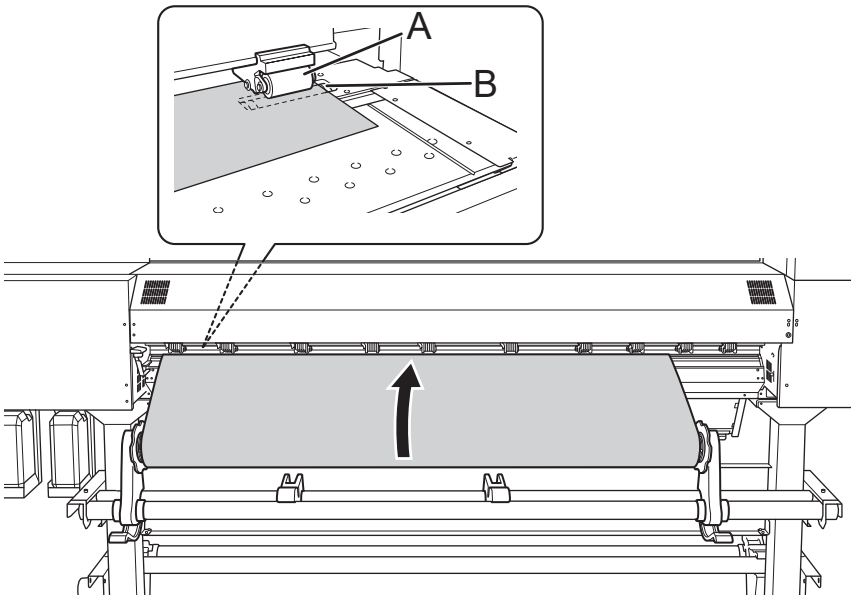
3. Use the following procedure to load the media.

Doing so will prevent media skewing.

IMPORTANT

If the leading edge of the media is bent, cut the bent part before loading the media, as it may be difficult for the media to enter the dryer entrance.

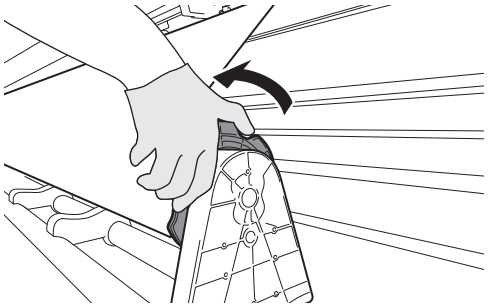
(1) **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



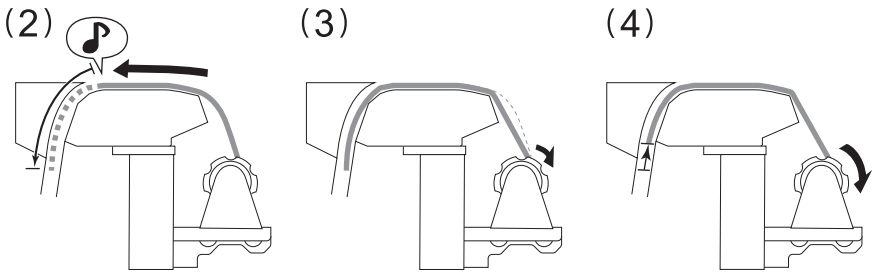
(2) **Feed the media until you hear a beep, and then additionally feed approximately 30 cm (11.81 in.) of the media.**

You will hear a beep. Approximately 5 seconds later, you will hear two beeps, and then the suction fan will activate. While this fan is operating, the position of the media will be maintained even if you remove your hands from it.

(3) **Hold the media holder flange, turning it in the take-up direction to eliminate the slack in the media.**



(4) **Once the media is taut, additionally take up approximately 10 cm (3.94 in.) of media.**

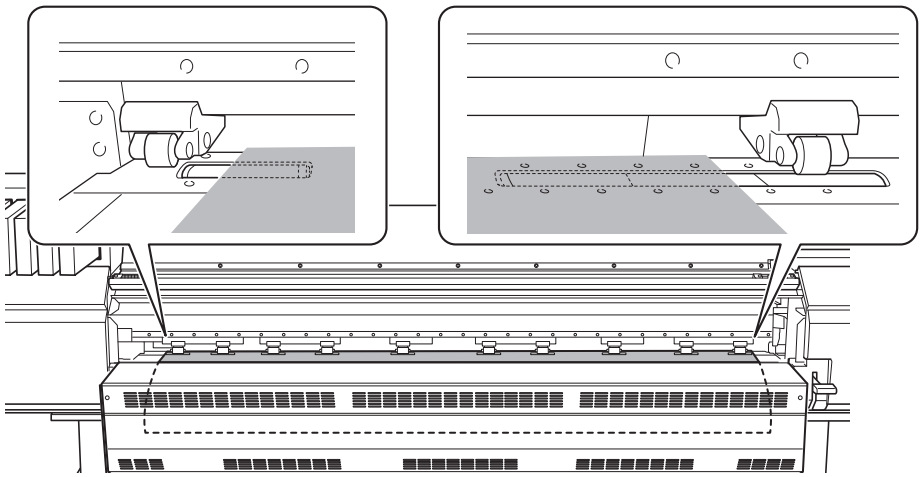


MEMO

If you take up too much media, you will hear two short beeps and the suction fan will stop. Take up the media, and then redo the procedure from Step (1).

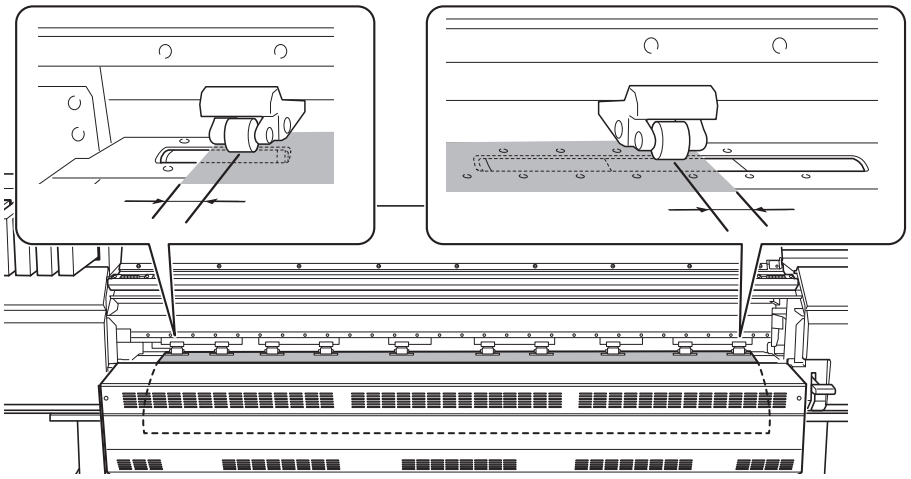
4. **(Move to the front of the printer.) Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



5. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

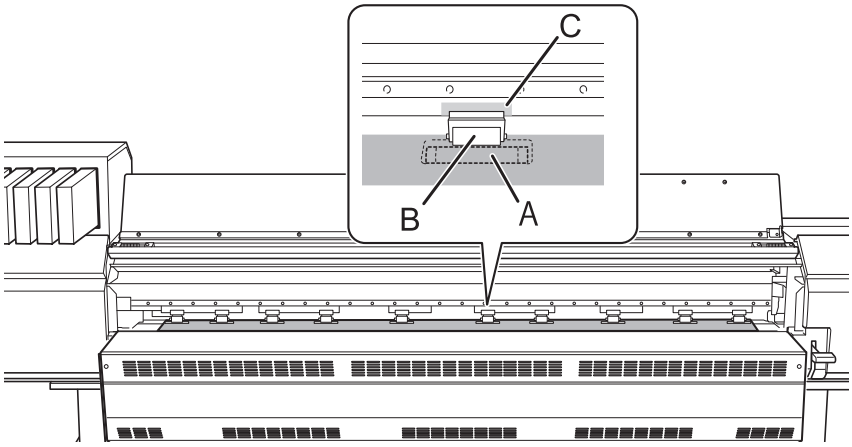
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

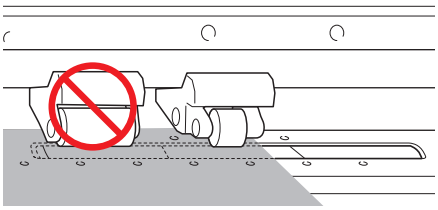
6. Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.

There are grit patterns (C) wherever there are grit rollers.

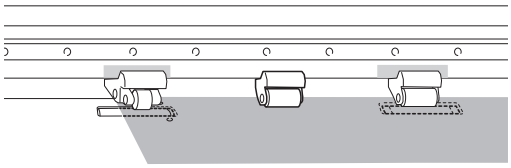


IMPORTANT

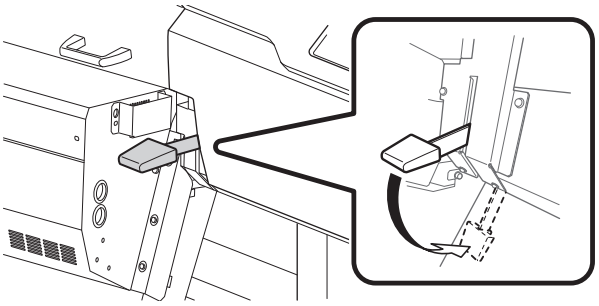
- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.



- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



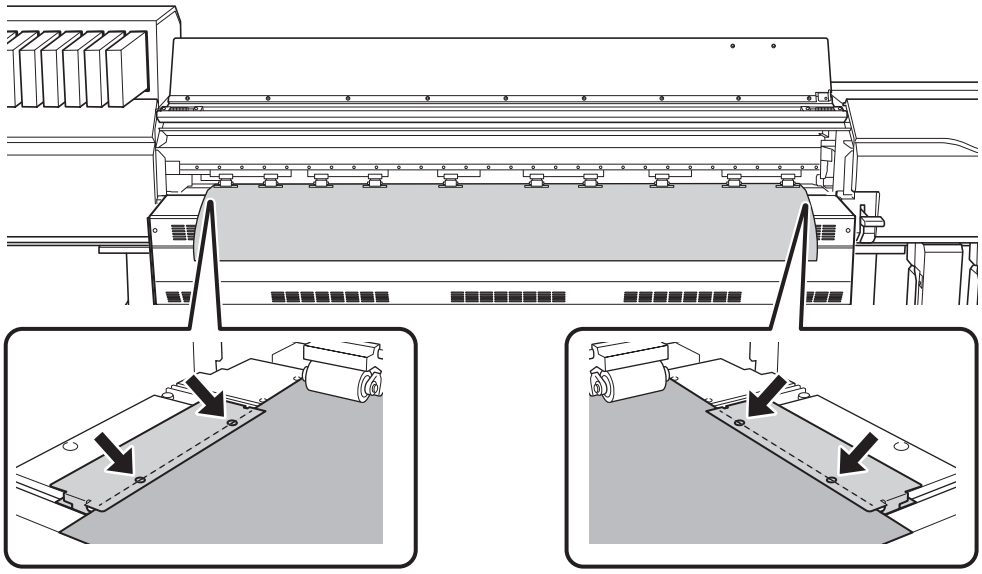
7. **Lower the loading lever (front).**



IMPORTANT

If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

8. **Line up the edges of the media with the centers of the holes of the left and right media clamps.**



9. **Close the front cover.**

2. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])

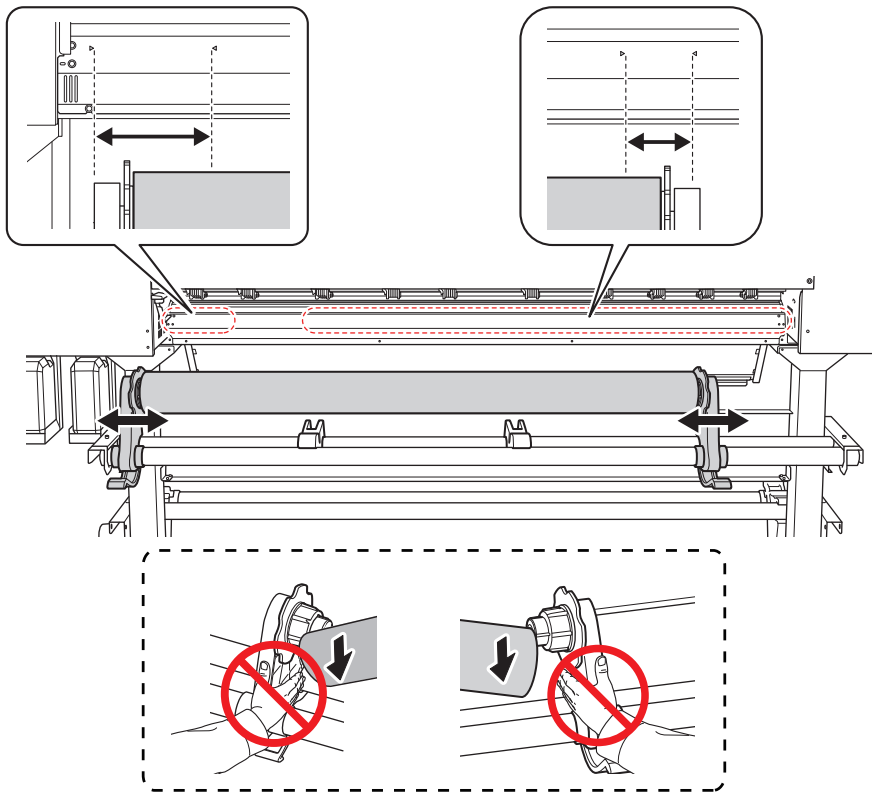
This section describes how to determine the positions of the media without using the suction fan. Refer to this information when using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**].

Procedure

1. **Determine the left and right positions of the media with the grit patterns used as the reference.**

   Note the following points when determining the positions.

   - Hold the media holders from the outside and move them.
   - Ensure that the left edge of the media is positioned so that it is within the range of the grit pattern of the left edge.
   - Ensure that the right edge of the media is positioned so that it is within the range of one of the grit patterns.



⚠ WARNING

Do not hold places other than those instructed. Do not move the media by holding it directly.

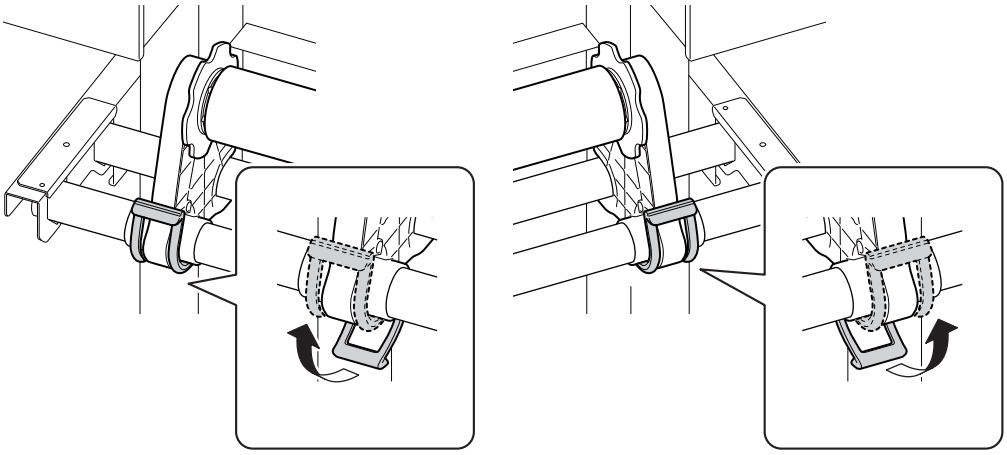
Doing so may cause the media to fall off the media holder and cause injury.

IMPORTANT

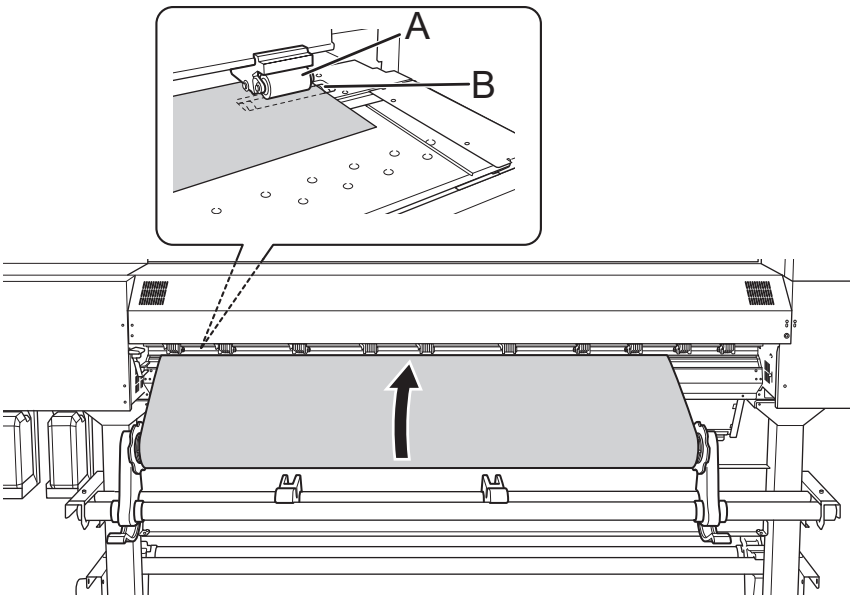
Firmly decide the left and right side positions of the media at this point.

After this procedure is completed, if the left and right side positions do not fit the proper positions when securing the media with pinch rollers, you will have to go back to this step to redo this procedure. If you just hold the media to readjust its position forcibly, the media will be skewed during printing, which will have an adverse effect on the printing results.

2. **Secure the media holders.**

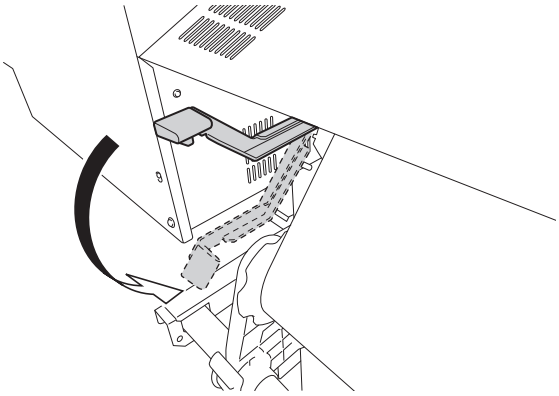


3. **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



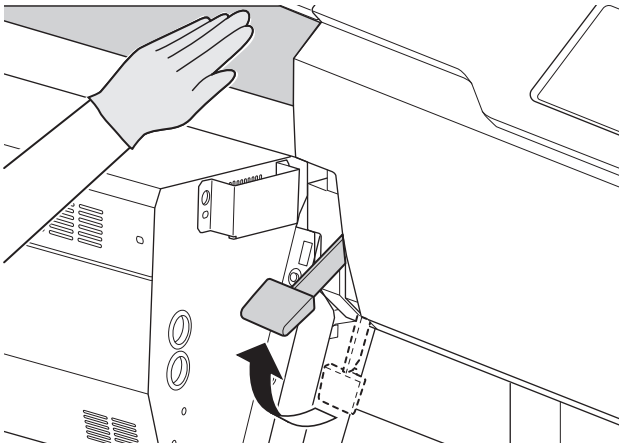
4. **Lower the loading lever (rear).**

The media is held in place.

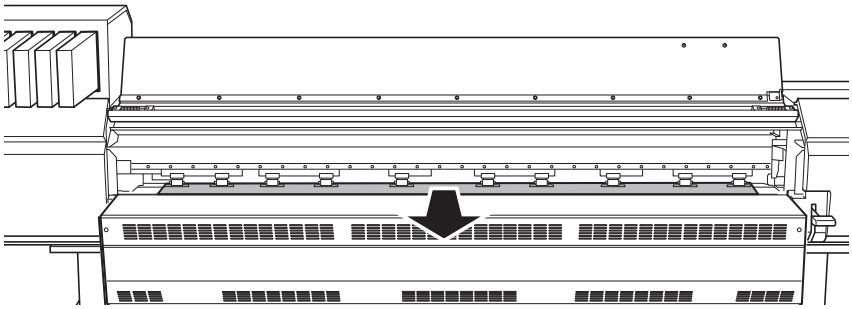


5. **(Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).**

The media is released.

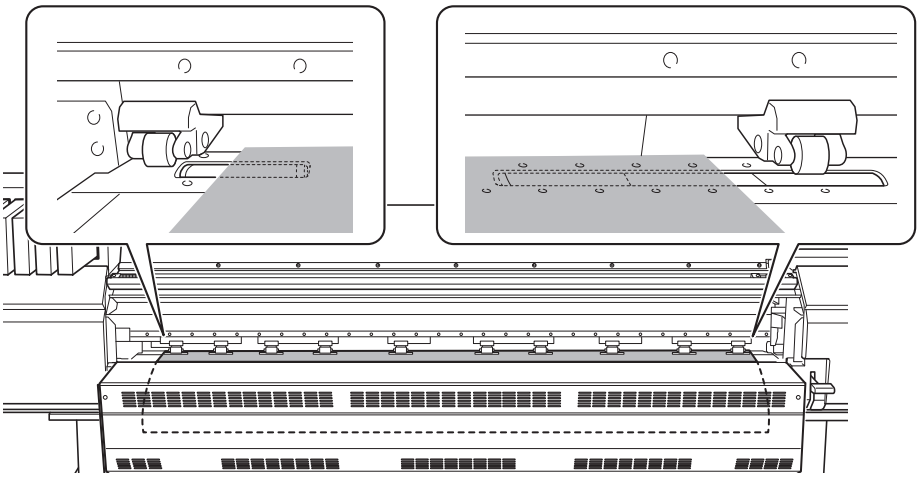


6. **Pull out the media over the apron.**



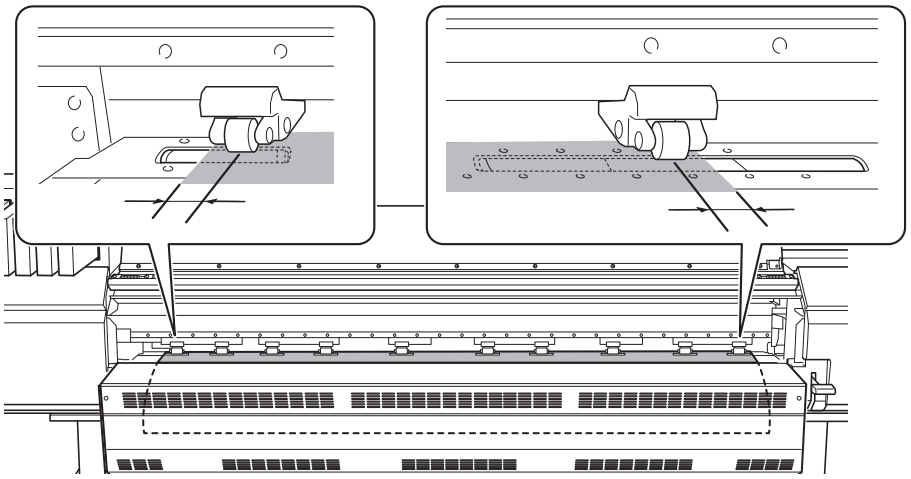
7. **Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



8. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

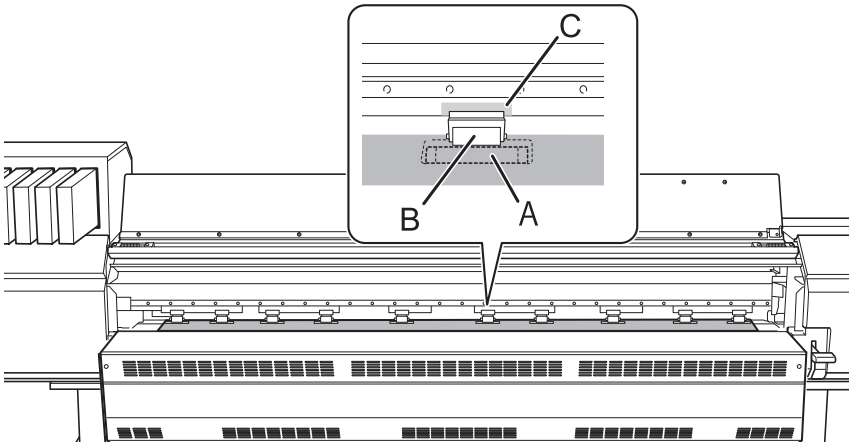
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position, return to the back of the printer, release the media holders, and then redo the procedure from step 1. If you just stand at the front of the printer and hold the media to readjust its position forcibly, the media will be skewed during printing or will come loose, which will affect the printing quality.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

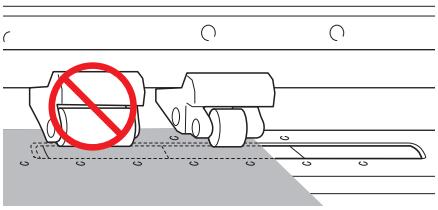
9. Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.

There are grit patterns (C) wherever there are grit rollers.

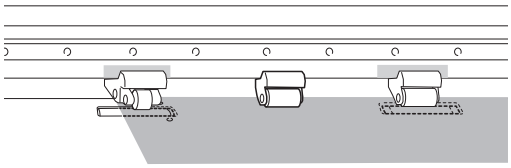


IMPORTANT

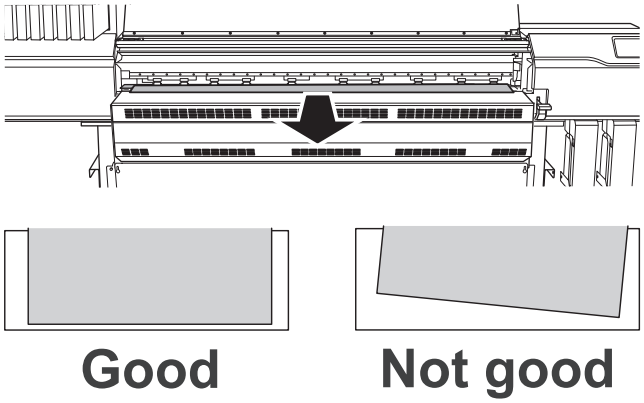
- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.



- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



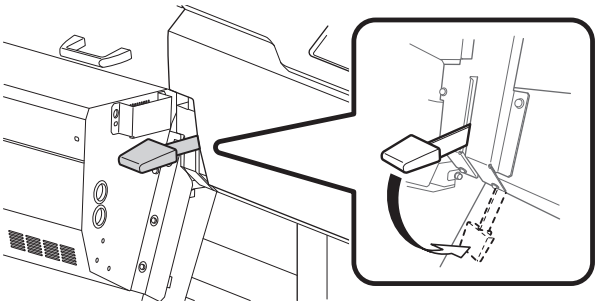
10. **Hold the media at the center and pull it out, being sure to keep it straight and all areas of the media to be taut.**



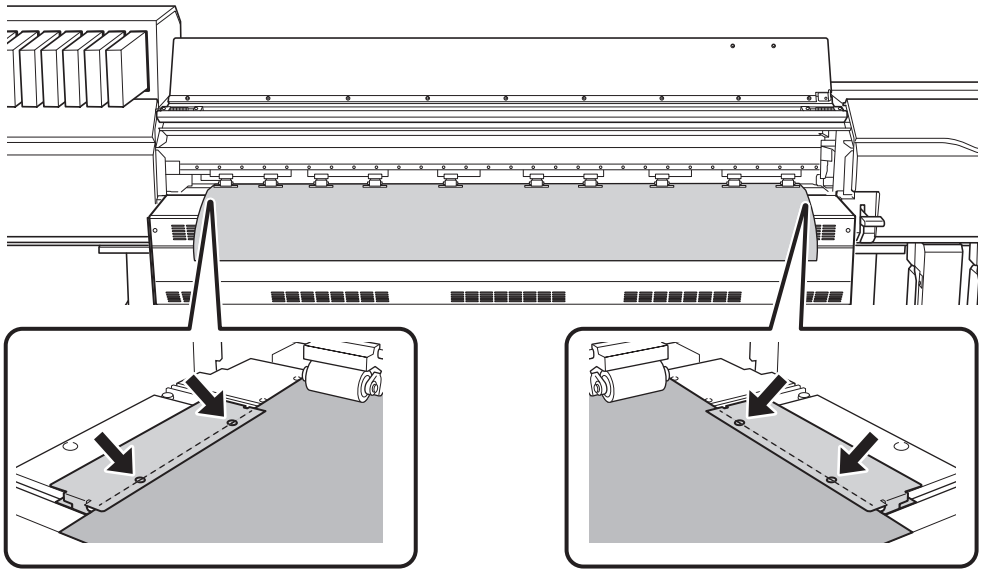
11. **Insert the leading edge of the media into the dryer.**

12. **Lower the loading lever (front).**

The media is held in place.



13. **Line up the edges of the media with the centers of the holes of the (left and right) media clamps.**



IMPORTANT

Be sure to use the media clamps when you load media.

If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

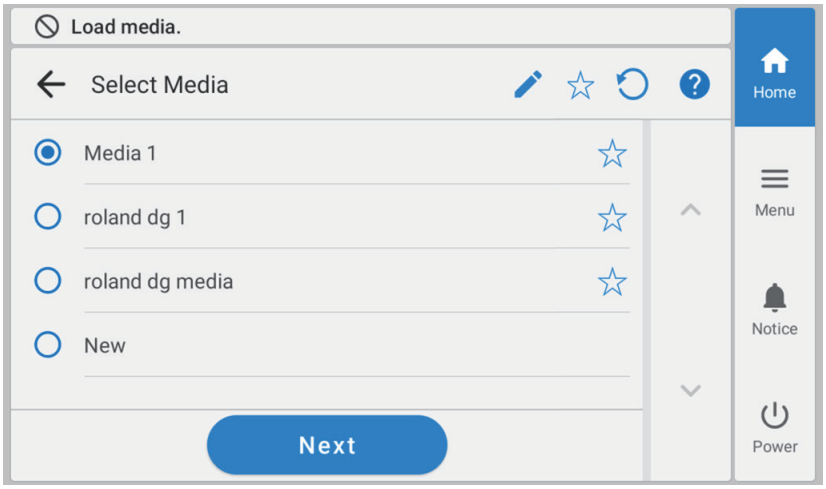
14. **Close the front cover.**

3. Selecting the Media

Procedure

1. **Tap [Setup].**

The registered media is displayed in a list.



2. **Select the media name to use.**

MEMO

- Tapping makes it possible to search the registered media by keyword.
  To reset the entered keyword, tap .
- Tapping to the right of the media name will change the symbol to , and the media will be registered to Favorites.
  Tap the Favorites filter at the top of the operation panel to turn the filter on and show only favorited media.
  Tap to turn the Favorites filter off.
  Tap to turn the Favorites filter off ( ) and reset all keywords.
- Keyword searching and the Favorites filter can be used at the same time.

3. **Tap [Next].**

4. **The [Setup Method] screen will appear. Select [Use Take-up Unit] or [Do Not Use Take-up Unit].**

5. **Tap [Start Setup].**

6. **When [Printing Area (Width)] appears, use the following procedure to configure the settings.**

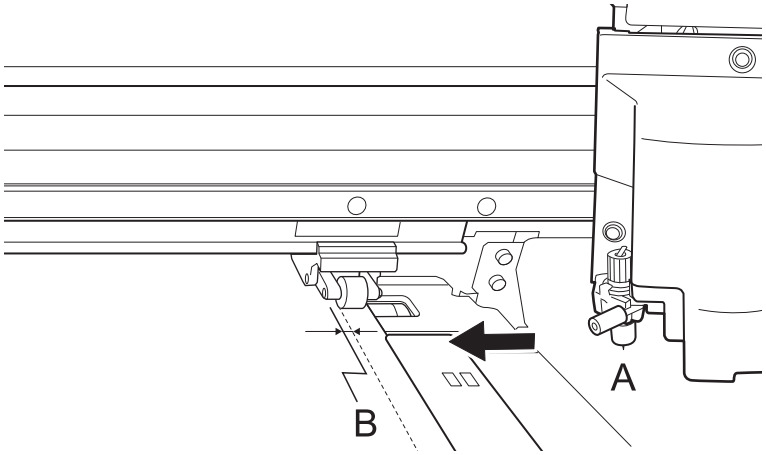
MEMO

The media selected in Step 2 is media whose printing area was set manually when registered as new media.
The printing area must be set manually each time, so the [**Printing Area (Width)**] screen appears.

(1) **Tap [Change].**

The [**Set the right edge of the printing area within the area specified by the pinch rollers.**] screen appears.

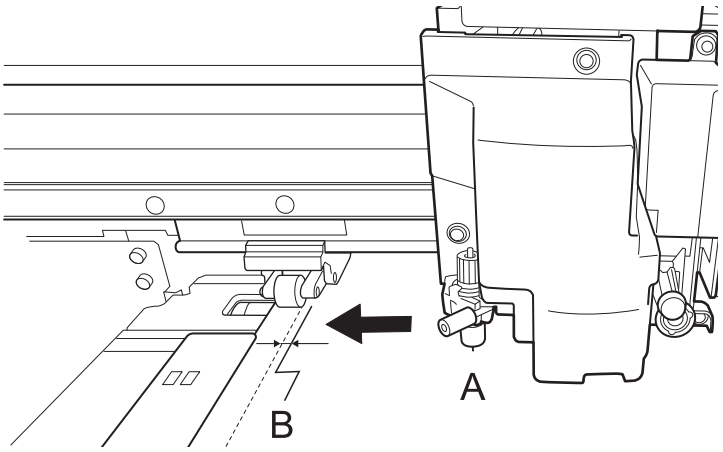
(2) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 mil) to the inside (B) from the left edge of the right pinch roller.**



(3) **Tap [OK].**

The [**Set the left edge of the printing area within the area specified by the pinch rollers.**] screen appears.

(4) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 in.) to the inside (B) from the right edge of the left pinch roller.**



(5) **Tap [OK].**

The set left and right positions are applied to the [**Printing Area (Width)**].

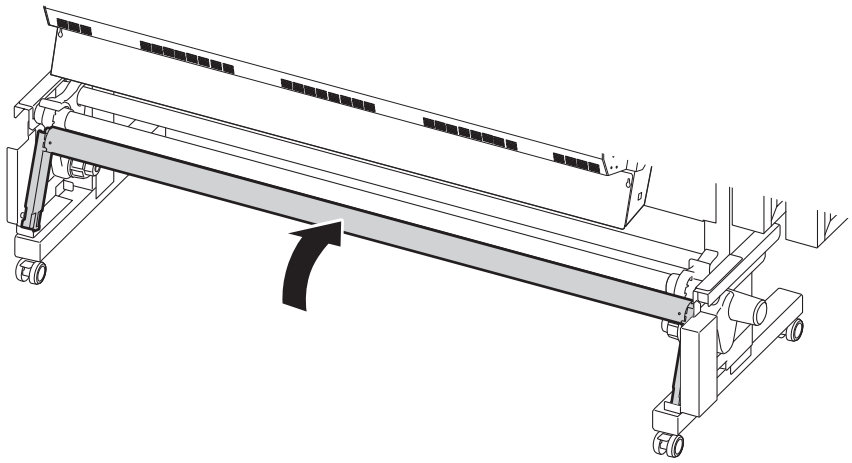
(6) **Tap [OK].**

4. Load the media in the take-up unit.

If you will not use the take-up unit, setup is complete.

Procedure

1. **Lower the dancer roller toward the rear.**



2. **Follow the procedure below to load a paper tube on the media holders of the take-up unit.**

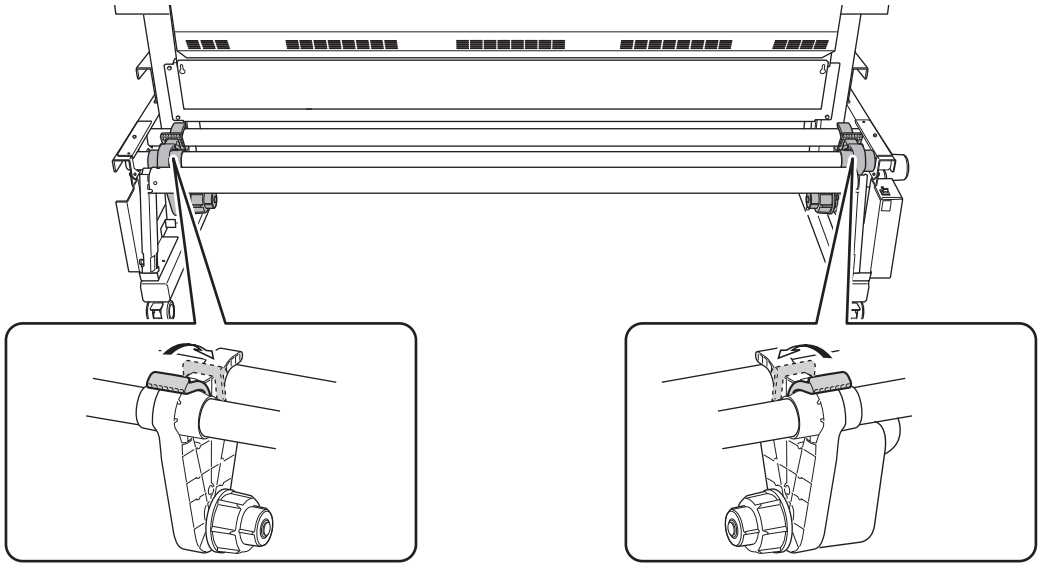
Prepare a paper tube wider than the media that has been set up.

IMPORTANT

Paper tubes are consumable items.

Watch the condition of the paper tube and replace at an appropriate time so that the media can be taken up in good working order.

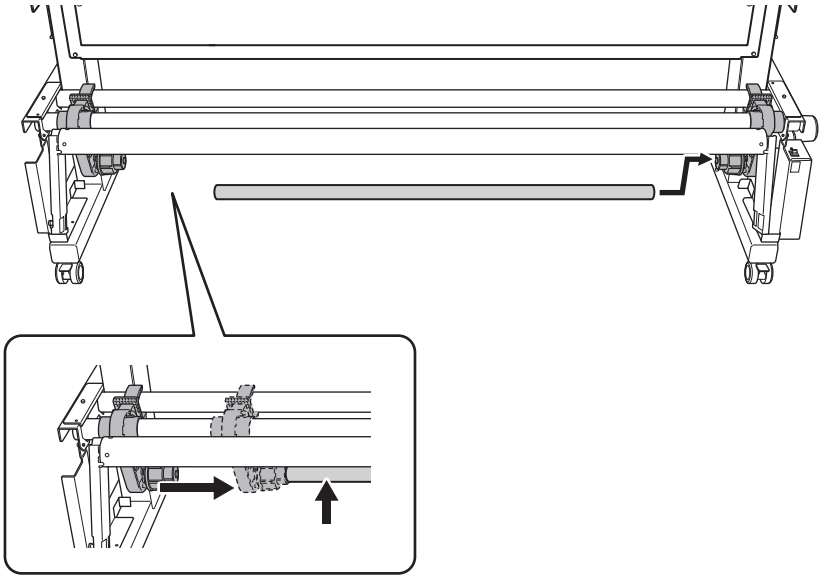
(1) **Release the media holders to enable their movement.**



(2) **Fit the paper tube onto the right end cap.**

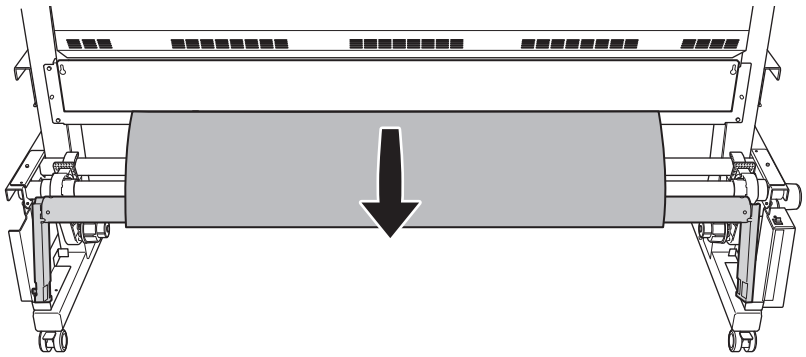
Fit the paper tube securely right to the end of the end cap.

(3) **Push the left media holder into the paper tube.**



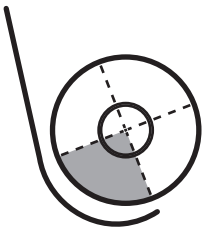
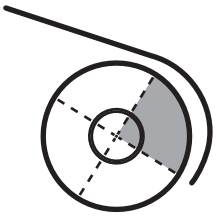
3. **Hold down ⌄ on the operation panel to feed out the media until the tip of the media reaches the paper tube.**

Media is fed out 10 mm (0.39 in.) each time you press this button. Holding down the button lets you feed out paper continuously.



MEMO

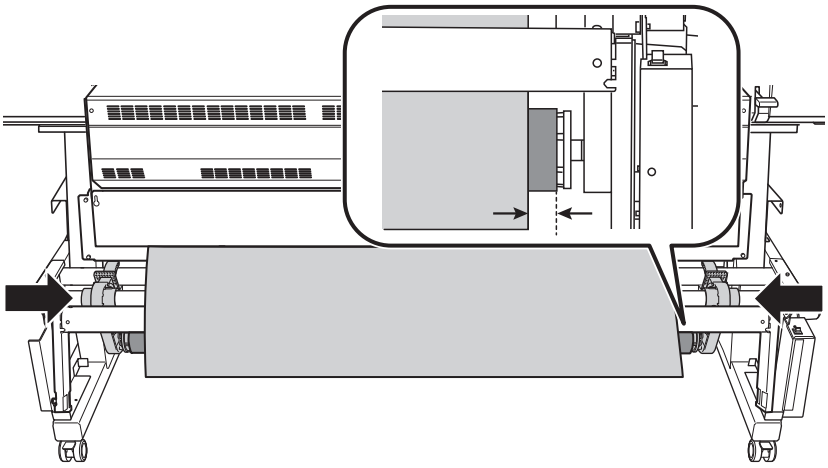
Feed out the media until it can wrap around at least 1/4 of the paper tube.

When using the FORWARD setting	When using the BACKWARD setting
	

4. **Follow the procedure below to adjust the positions of the media holders.**

(1) **Move both media holders so that it is possible to see the paper tube from the right edge of the media.**

Hold the media holders from the outside and move them.



(2) **Secure the left and right media holders.**

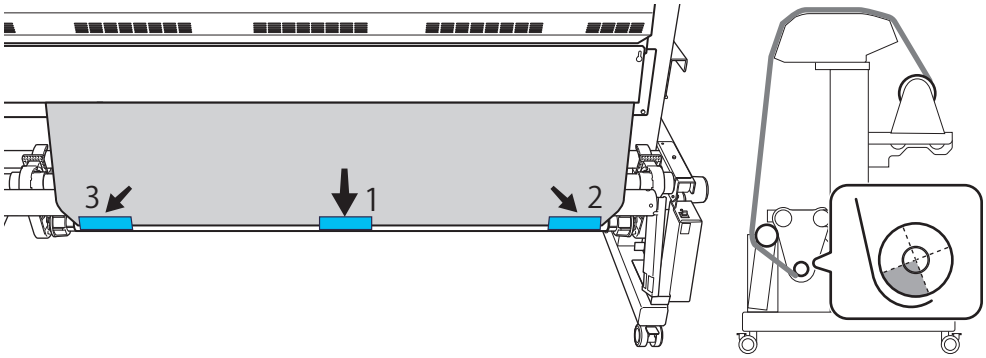
5. **Follow the procedure below to secure the media on the paper tube.**

Secure the media in the [**Take-up Direction**] set in step 2 of 1. Installing the Media on the Media Holders(P. 68).

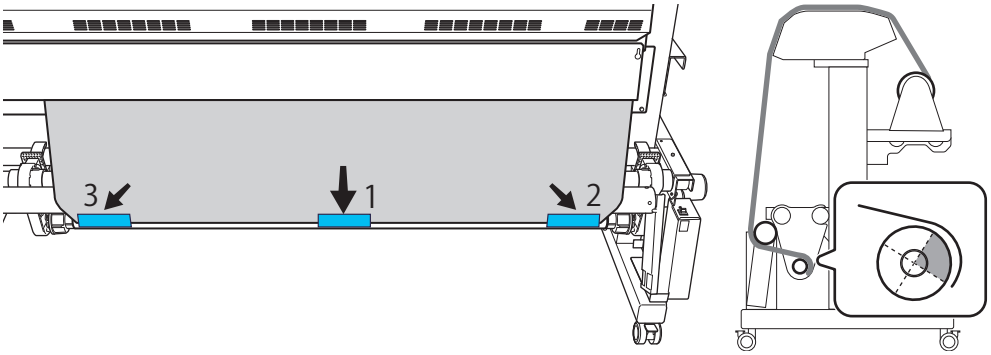
(1) **While pulling the media so that it does not sag, secure the center of the media on the paper tube with adhesive tape.**

(2) **While pulling the media from the center toward the outer edges, secure the left and right edges of the media on the paper tube with adhesive tape.**

- **When using the FORWARD setting**



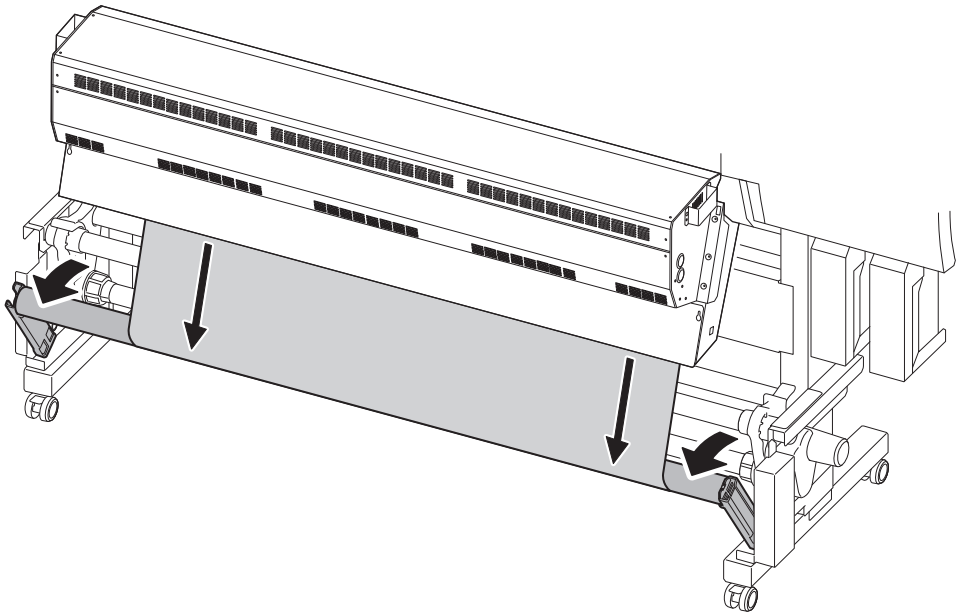
- **When using the BACKWARD setting**



6. **Tap [OK].**

A small amount of the media is fed out.

7. **Lower the dancer roller toward the front.**



8. **Tap [OK].**

IMPORTANT

When printing and cutting or just cutting, rewind the media from the take-up device to slacken the media.
If sufficient media is not wound on the paper tube immediately after setup, this operation may not be performed well, lowering the cutting quality and preventing continued take-up. When performing cutting immediately after attaching the media to the paper tube, first feed enough media to carry out take-up a few times and set the base point.

Setup of Sheet Media

Load the sheet media on the printer. When the loading is finished, [**Output possible.**] is displayed as the status. This work is referred to as "Setup of Media."

1. A: Determining the Positions of the Media

When using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**], the suction fan does not activate, so media cannot be loaded with this procedure. In these cases, refer to 1. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])(P. 95).

By default, [**Skewing Correction Support at Setup**] is set to [**Enable**].

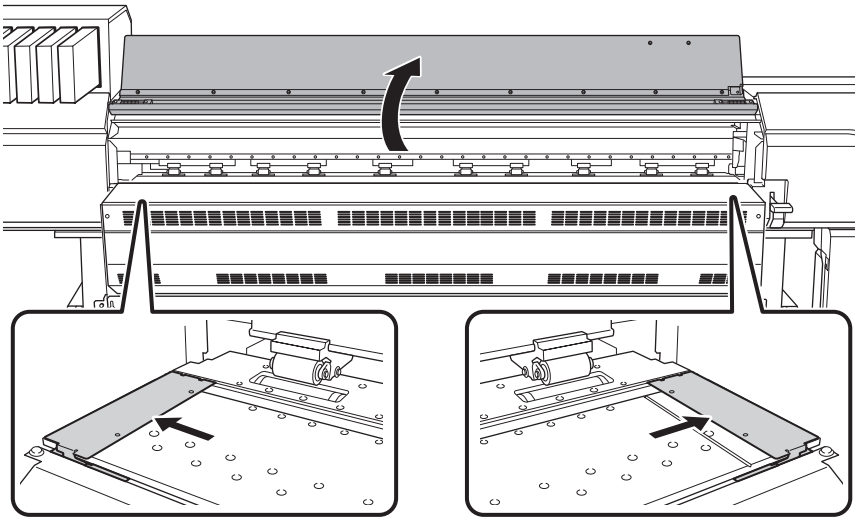
Procedure

1. **Tap on the operation panel.**

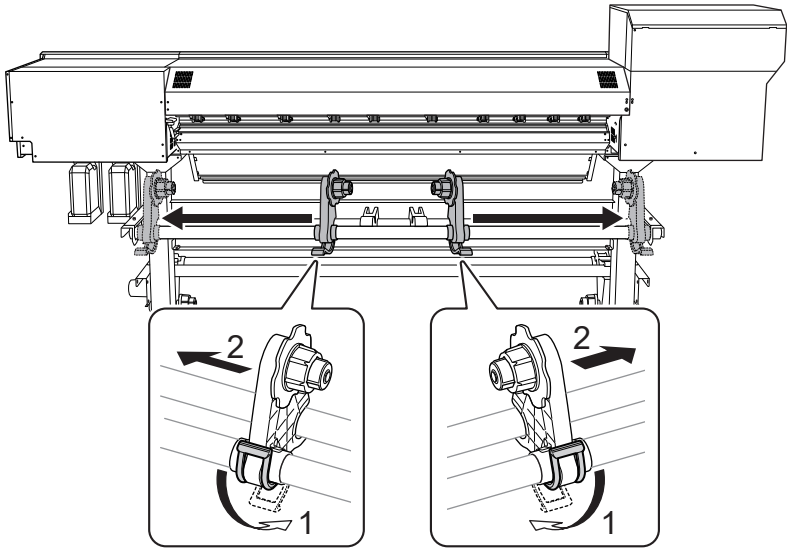
   The sub power is switched on.

2. **Open the front cover.**

3. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



4. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**



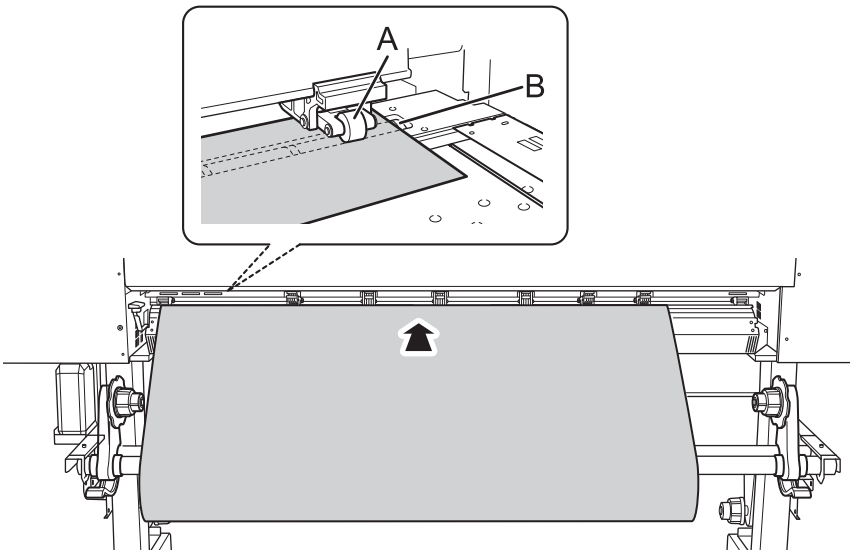
5. **From the rear of the printer, pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**

IMPORTANT

If the leading edge of the media is bent, cut the bent part before loading the media, as it may be difficult for the media to enter the dryer entrance.

You will hear a beep. Approximately 5 seconds later, you will hear two beeps, and then the suction fan will activate. While this fan is operating, the media will not move backward even if you remove your hands from it.

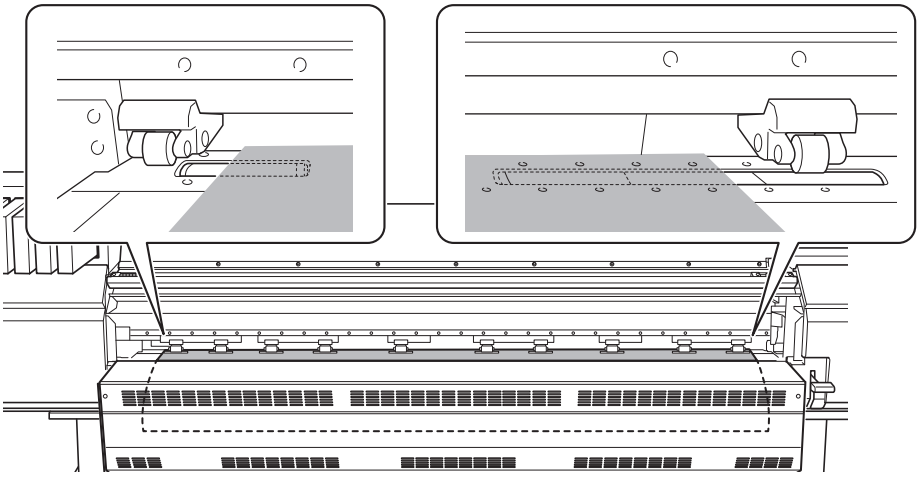
When loading the media from the front of the printer, feed the leading edge of the media (the side where printing will start) over the platen, and then pull the media to the front to activate the suction fan.



6. **(Move to the front of the printer.) Insert the leading edge of the media into the dryer.**

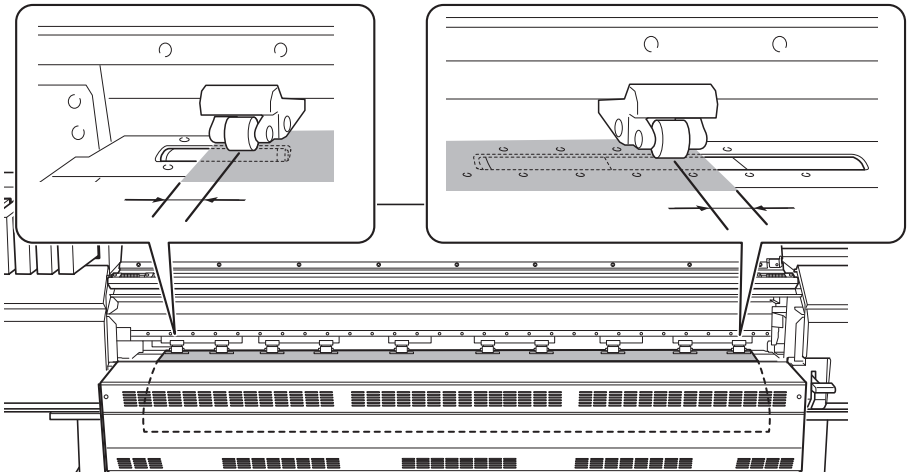
7. **Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



8. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

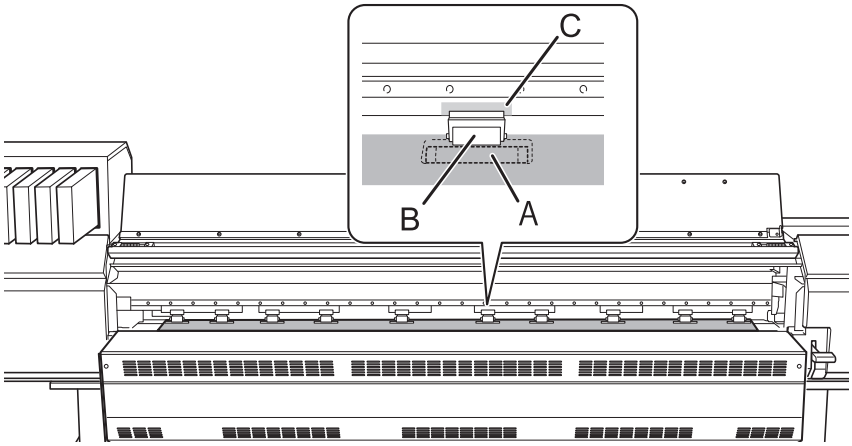
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.
- If you want to readjust the media position before securing it in place, redo the procedure from step 5.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

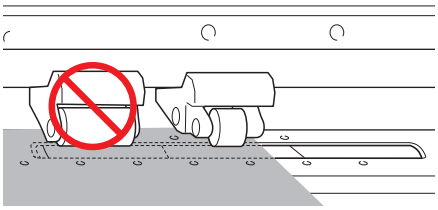
9. **Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.**

There are grit patterns (C) wherever there are grit rollers.

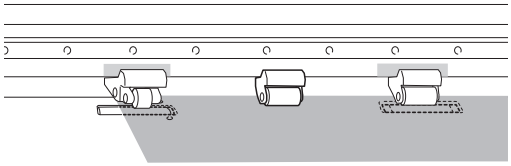


IMPORTANT

- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.

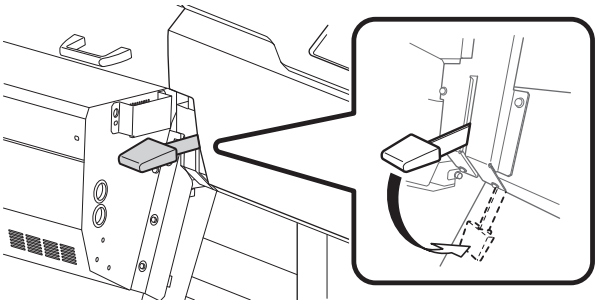


- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



10. Lower the loading lever (front).

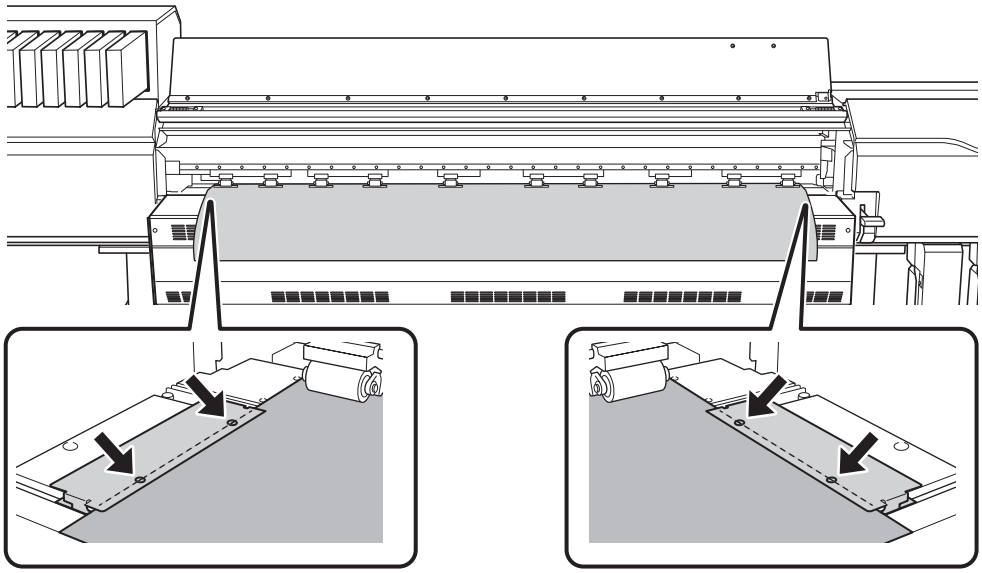
The media is held in place.



IMPORTANT

If you want to readjust the media position before securing it in place, redo the procedure from step 5.

11. Line up the edges of the media with the centers of the holes of the (left and right) media clamps.



IMPORTANT

Be sure to use the media clamps when you load media.

If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

12. **Close the front cover.**

1. B: Determining the Positions of Media (If [Media Edge Detection]: [Disable])

Use the following procedure to determine the positions of the media when using transparent media, whose edges cannot be detected, and when [**Preferences**]>[**Media Edge Detection**] is set to [**Disable**].

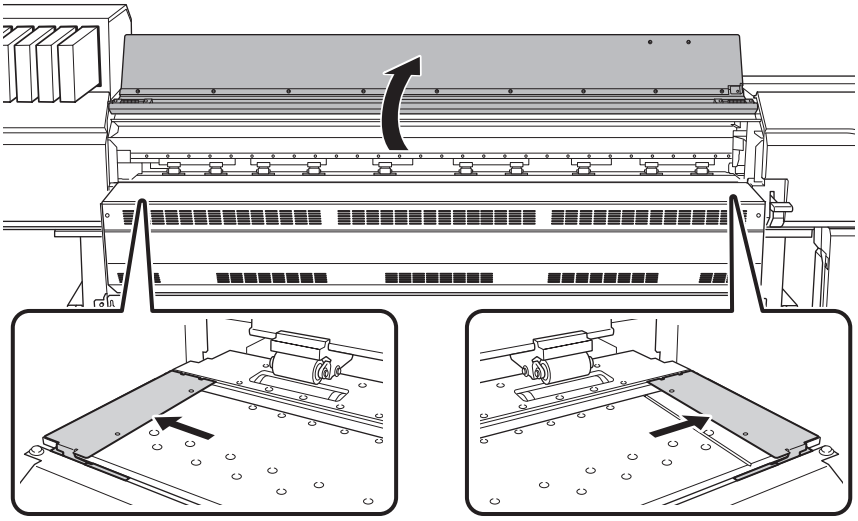
Procedure

1. **Tap on the operation panel.**

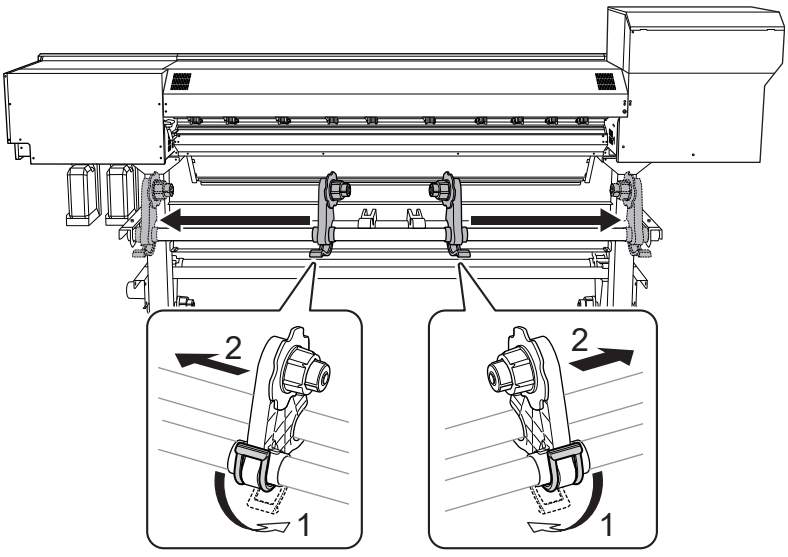
   The sub power is switched on.

2. **Open the front cover.**

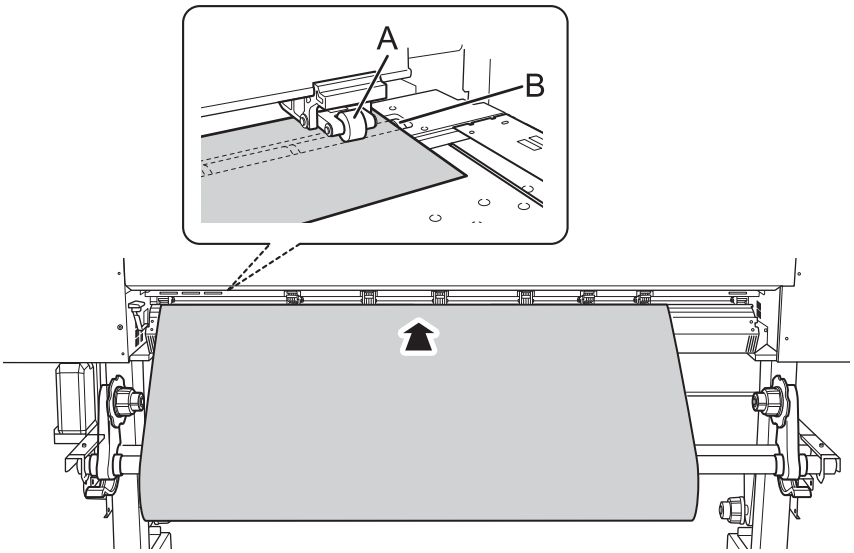
3. **Move the media clamps to the outside of the grit rollers on the left and right edges respectively.**



4. **Move to the rear of the printer. Release the locking mechanisms of the media holders, and then draw them to the left and right ends respectively.**

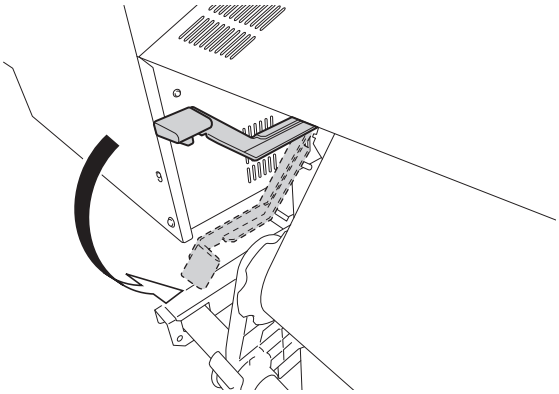


5. **Pass the leading edge of the media between the pinch rollers (A) and the grit rollers (B).**



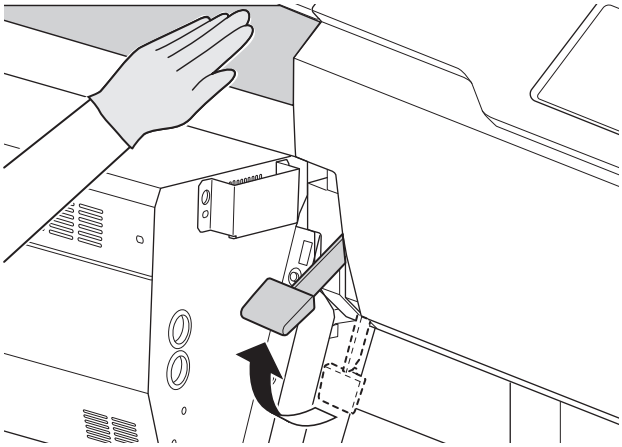
6. **Lower the loading lever (rear).**

The media is held in place.



7. **(Move to the front of the printer.) Gently hold down the media and raise the loading lever (front).**

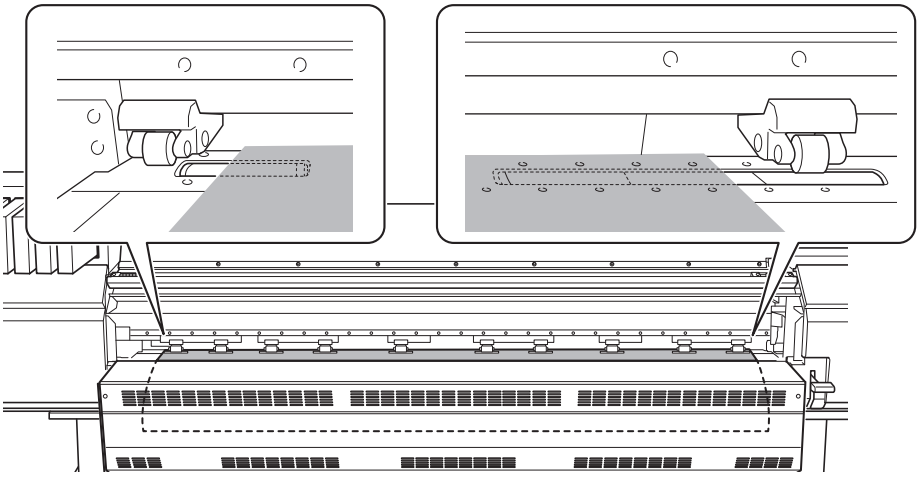
The media is released.



8. **Insert the leading edge of the media into the dryer.**

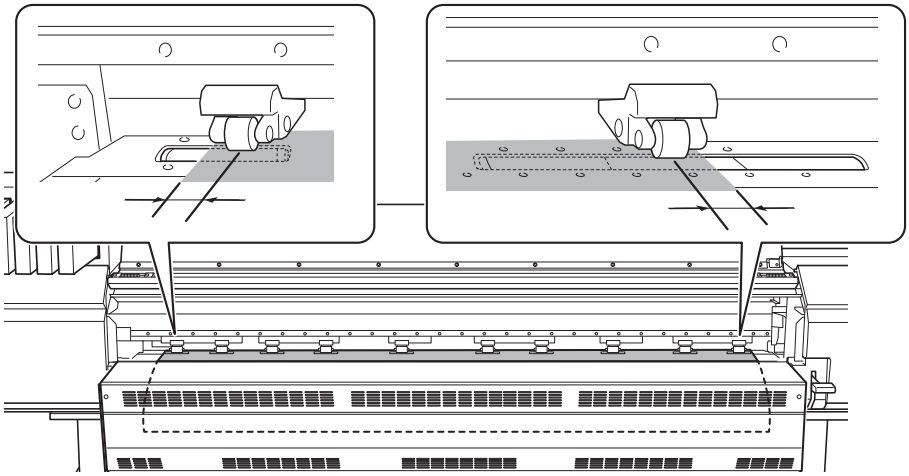
9. **Make sure both edges of the media are above the grit rollers.**

Be sure to place the right edge of the media on the right-end grit roller.



10. **Move the left and right pinch rollers, placing them on both edges of the media.**

Position them approximately 10 mm (0.39 in.) from each edge of the media.



IMPORTANT

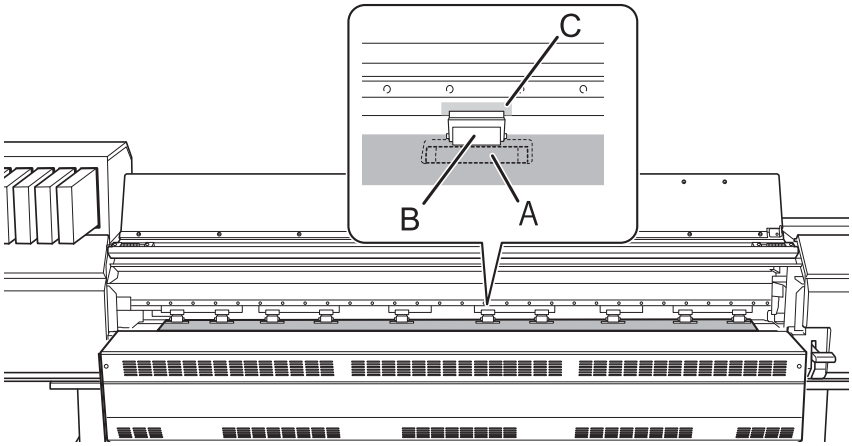
- Be sure to use the left and right pinch rollers. The force with which the media is pinched varies between the middle pinch rollers and the left and right pinch rollers. Using the middle pinch rollers to pinch the media edges will lead to unstable media feeding.

MEMO

To smoothly move the pinch rollers, push down close to the rail.

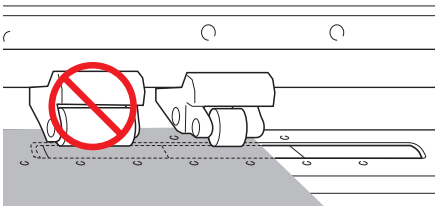
11. **Move the middle pinch rollers (B) over all the remaining grit rollers (A) covered by the media.**

There are grit patterns (C) wherever there are grit rollers.

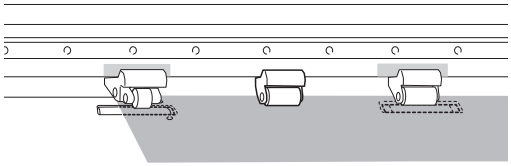


IMPORTANT

- Place the middle pinch rollers over all the grit patterns within the media width. If you have forgotten to place the middle pinch rollers, the media will be skewed during printing or will come loose, which will have an effect on the printing quality.
- The middle pinch roller will not lower onto the three grit rollers from the right end. Place the middle pinch roller on a grit roller other than these three.

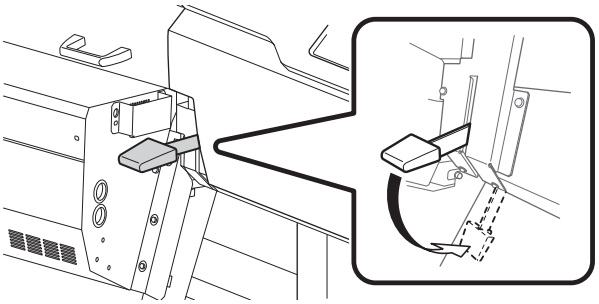


- There may be extra middle pinch rollers depending on the width of the media being used. Move the extra middle pinch rollers to positions where no grit patterns are present. Where no grit patterns are present, the middle pinch rollers will not come down.



12. Lower the loading lever (front).

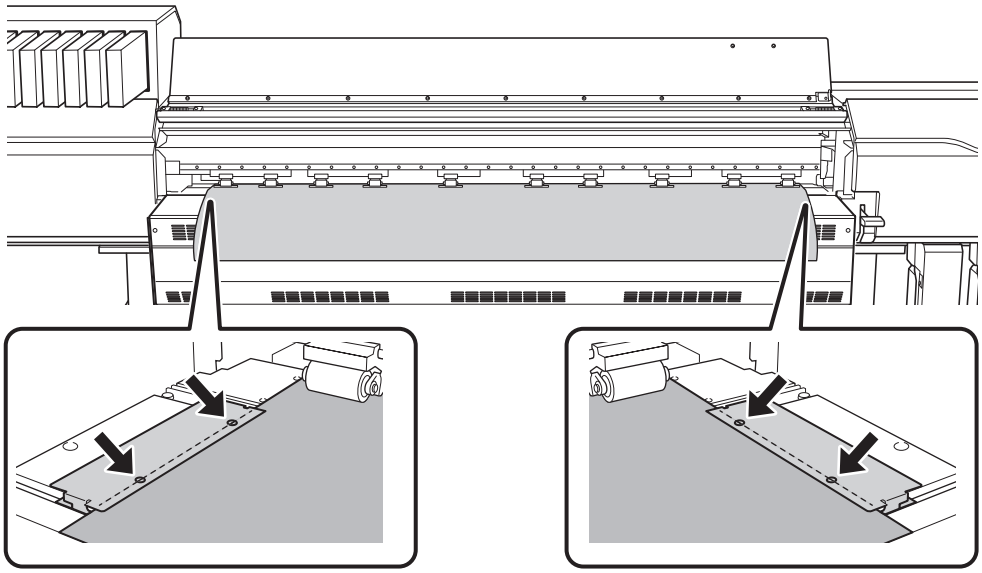
The media is held in place.



IMPORTANT

If you want to readjust the media position before securing it in place, redo the procedure from step 9.

13. Line up the edges of the media with the centers of the holes of the (left and right) media clamps.



IMPORTANT

Be sure to use the media clamps when you load media.

If you attach the media clamps directly before printing after the media setup is complete, the machine may print on the media clamps.

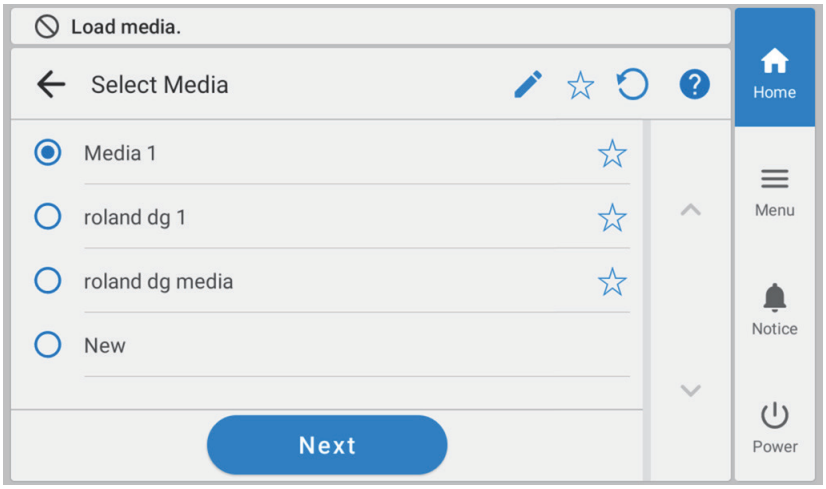
14. **Close the front cover.**

2. Selecting the Media

Procedure

1. **Tap [Setup].**

The registered media is displayed in a list.



2. **Select the media name to use.**

MEMO

- Tapping makes it possible to search the registered media by keyword.
  To reset the entered keyword, tap .
- Tapping to the right of the media name will change the symbol to , and the media will be registered to Favorites.
  Tap the Favorites filter at the top of the operation panel to turn the filter on and show only favorited media.
  Tap to turn the Favorites filter off.
  Tap to turn the Favorites filter off ( ) and reset all keywords.
- Keyword searching and the Favorites filter can be used at the same time.

3. **Tap [Next].**

4. **The [Setup Method] screen will appear. Select [Use Take-up Unit] or [Do Not Use Take-up Unit].**

5. **Tap [Start Setup].**

6. **When [Printing Area (Width)] appears, use the following procedure to configure the settings.**

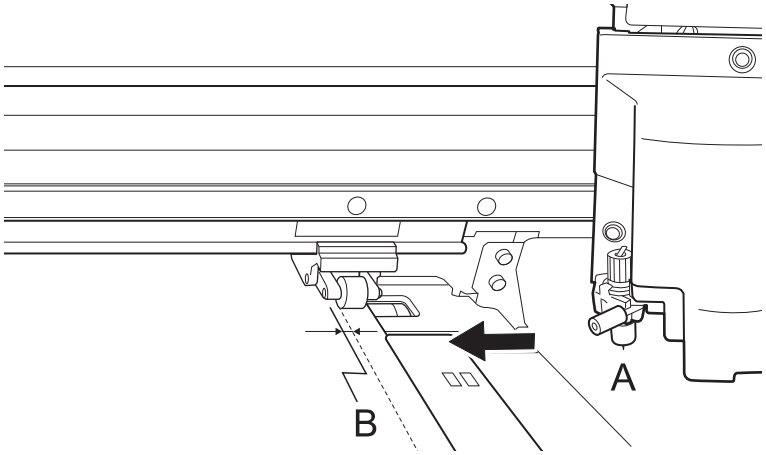
MEMO

The media selected in Step 2 is media whose printing area was set manually when registered as new media.
The printing area must be set manually each time, so the [**Printing Area (Width)**] screen appears.

(1) **Tap [Change].**

The [**Set the right edge of the printing area within the area specified by the pinch rollers.**] screen appears.

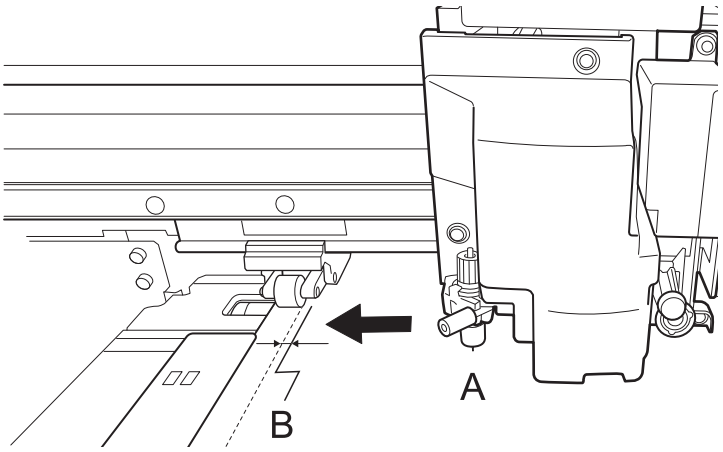
(2) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 mil) to the inside (B) from the left edge of the right pinch roller.**



(3) **Tap [OK].**

The [**Set the left edge of the printing area within the area specified by the pinch rollers.**] screen appears.

(4) **Hold down ‹ or › to move the center of the blade (A) approximately 2 mm (78.74 in.) to the inside (B) from the right edge of the left pinch roller.**



(5) **Tap [OK].**

The set left and right positions are applied to the [**Printing Area (Width)**].

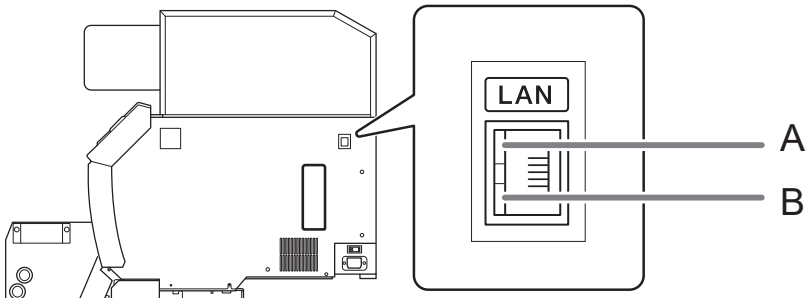
(6) **Tap [OK].**

Checking before Output

LAN (Local Area Network) Settings

Check that you can perform communication through the LAN (Local Area Network).

The LAN is enabled if the status LED (B) on the LAN connector located on the side of the printer is lit in green.



A	Activity LED	This flashes orange while data is being received from the network.
B	Status LED	This indicates the status of the communication function. When it lights in green, communication is possible.

Preventing Sedimentation in Inks

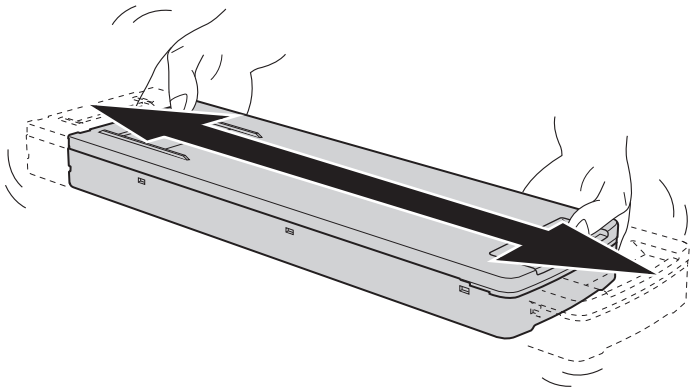
The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the ink cartridge horizontally with a stroke length of around 5 cm (1.97 in.) from each end of the ink cartridge.

Shake the ink cartridges:

- All inks: When replaced with a new product.
- White ink: Each day (before starting the day's operations).

  Remove the white ink cartridge, shake it 50 times (about 20 seconds), and then reinsert this cartridge.

  The ingredients in white ink tend to settle. Each day, before starting the day's operations, be sure to shake this cartridge. Allowing the ink to stand can cause the settled material to harden, resulting in malfunctions or other problems.



IMPORTANT

- Before shaking the ink cartridge, wipe off any ink from around its mouth. If you do not wipe off the ink, it may splatter when you shake the ink cartridge.
- When shaking the ink cartridge, firmly hold it with both hands to prevent the ink cartridge cover from coming loose. The cover and ink pouch coming loose and falling may lead to damage or printer failure.

- When you have finished mixing the ink, reattach the ink cartridge immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you are not using the printer, shake the white ink cartridge 50 times (about 20 seconds) once a week.

Pausing and Canceling Output

You can pause and cancel output before it finishes.

Pausing and Resuming Output

IMPORTANT

We do not recommend resuming printing because horizontal bands and uneven colors are produced at the place where printing was paused.

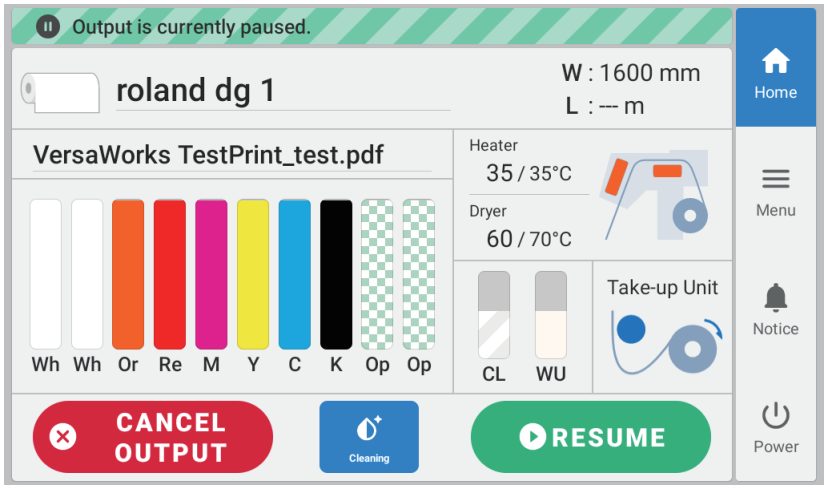
MEMO

Some menu items can be operated during output, but return to the home screen before pausing output.

Procedure

1. **During output, tap [Pause].**
   This pauses the printing operation.

2. **Tap [Resume].**



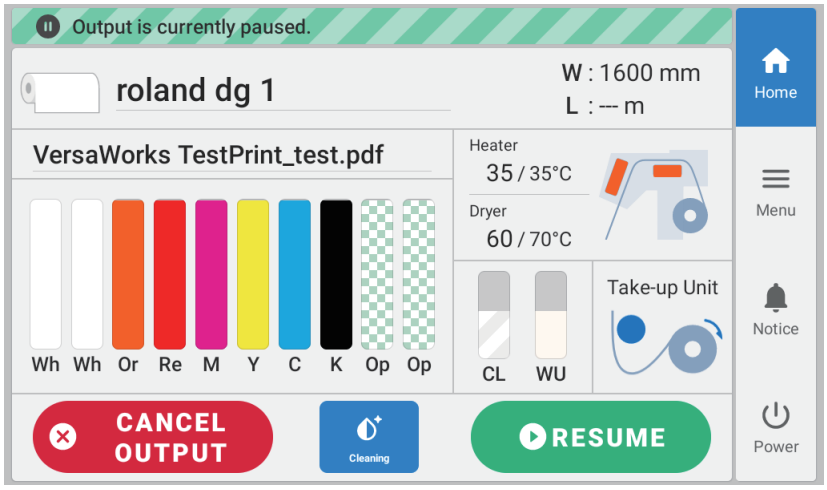
The printing operation resumes.

Canceling Output

Procedure

1. **During output, tap [Pause].**
   This pauses the printing operation.

2. **Tap [Cancel Output] when the following screen appears.**



   The confirmation screen for drying appears.

3. **Tap [Yes] or [No].**

> **IMPORTANT**
> Select [**Yes**] to feed the media to the dryer. Parts exposed to the dryer may suffer damage such as deformation or deterioration, which may result in poor printing quality.

4. **Stop sending the output data from the computer.**

Separating the Media

Separate the media after printing.

When continuously using the set up roll media, use [**Perforated Sheet Cutting**] to separate the media under the dryer after cutting.

When removing the roll media after printing, use [**Sheet Cutting**] to separate the media.

IMPORTANT

Separation Operations

- If the distance from the end of the media to the separation location is short, separation may not be performed smoothly.

When Using a Take-up Unit

- Do not operate the manual switch on the take-up unit leaving the loading lever lowered. Tension is applied to the media by the take-up unit, so avoid operations that pull the media with excessive force.

Give Attention to the Media Composition

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

MEMO

- When using a take-up unit, take-up may be interrupted by media separation, so turn off the automatic separation function or insert perforated sheet cutting with the included software RIP to ensure the media is not separated.
- You can configure settings in the software RIP for automatic media separation after output has finished. For information on how to configure the settings, refer to the documentation for the software RIP you are using.

Procedure

1. **Close the front cover.**

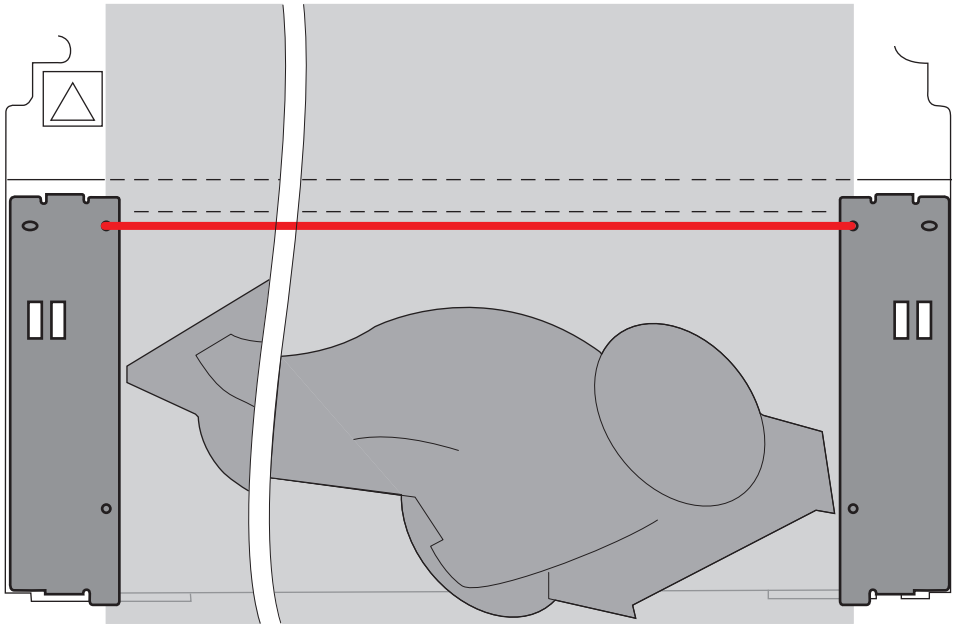
2. **If necessary, use the following procedure to set the separation position.**

(1) **Tap** .

(2) **Tap** **[Move].**

(3) **Tap** **or** **to set the media to the separation position.**

The media is separated at the position in the following figure. Use the media clamp holes as a guideline for this position.



(4) **Tap [Set Base Point Here].**

The separation position is set, and you are returned to the home screen.

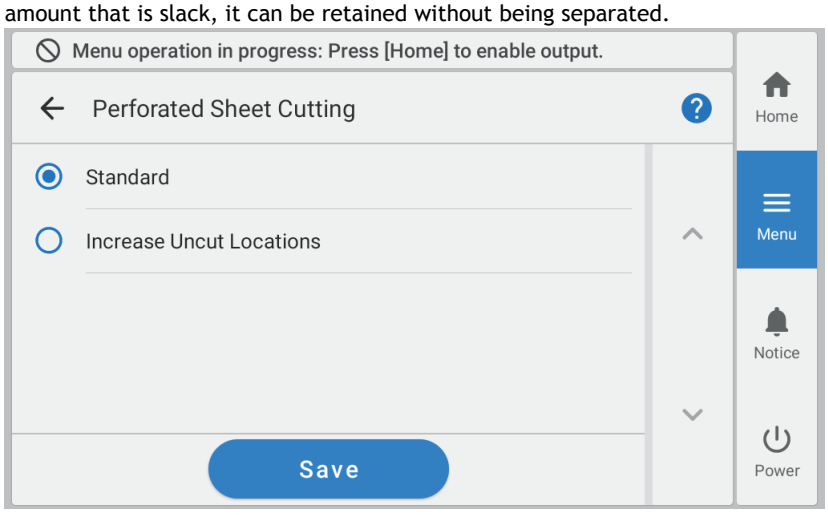
3. **Tap [Sheet Cutting] on the operation panel.**

4. **Select the sheet cutting method.**

- When continuously using the set up roll media: **[Perforated Sheet Cutting]** or **[Perforated Sheet Cutting (Leaving Both Edges)]**
- When removing the roll media after sheet cutting: **[Sheet Cutting]**

MEMO

If the media is separated even after you select **[Perforated Sheet Cutting]**, use **[Preferences]**>**[Perforated Sheet Cutting]** to change to the **[Increase Uncut Locations]** setting. If the media is heavy or has a large amount that is slack, it can be retained without being separated.

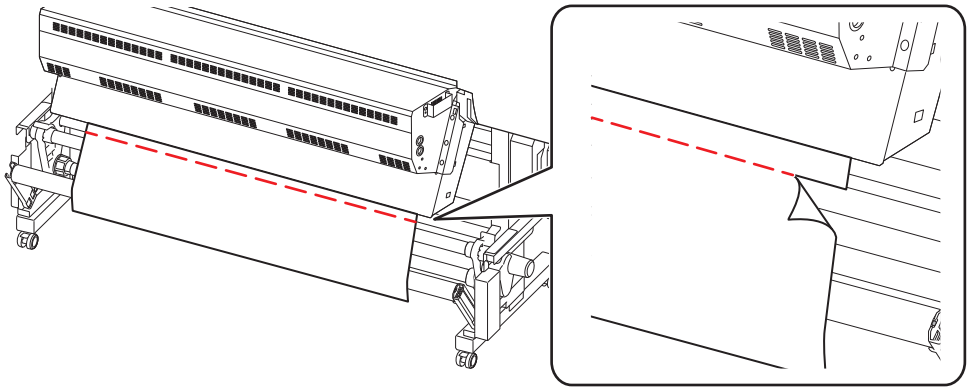


5. **Tap [Execute].**

The media is separated or subjected to perforated sheet cutting.

6. **Remove the printed media.**

If you performed a [**Perforated Sheet Cutting**] or [**Perforated Sheet Cutting (Leaving Both Edges)**], tap ⌄ to feed the media under the dryer. Then, separate the media. If it is difficult to separate the media from the roll because you have left both edges of the media, it is a good idea to cut the edges with a knife.



IMPORTANT

If you separate the media before the dryer, such as above the platen, the leading edge of the media may get caught in the dryer or at its entrance the next time printing is performed.

Removing Media from the Take-up Unit

When output is complete, separate the media, take up the media manually, and then remove the media.

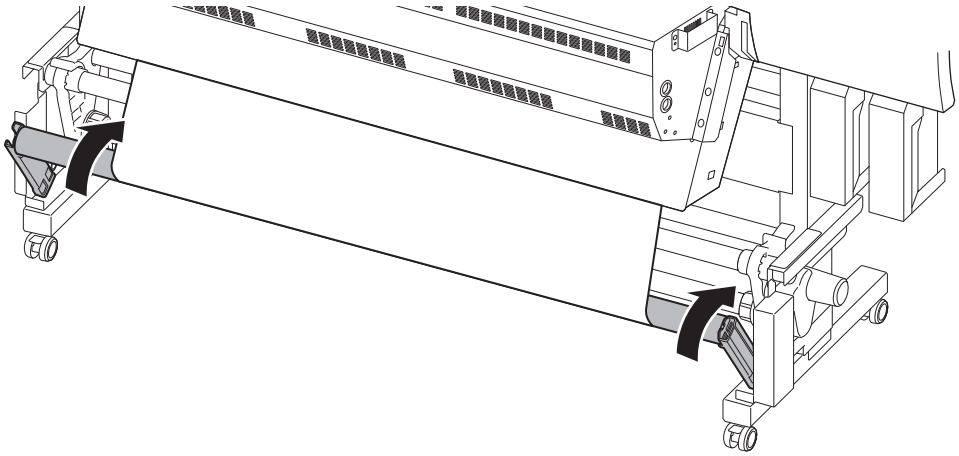
⚠ WARNING

Handling roll media is an operation that must be performed by 2 persons or more, and care must be taken to prevent falls.

Attempting to lift heavy media in a manner that taxes your strength may cause physical injury. Also, if dropped, such items may cause injury.

Procedure

1. **Lower the dancer roller toward the rear.**



2. **Close the front cover.**

3. **With the media held down, tap [Sheet Cutting] on the operation panel.**

⚠ WARNING

High Temperature

The areas inside the dryer, under the dryer, and near the extension apron become hot. Exercise caution to avoid burns.

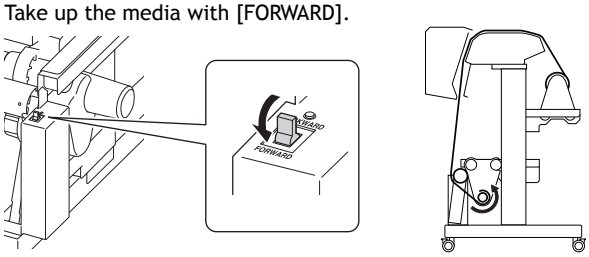
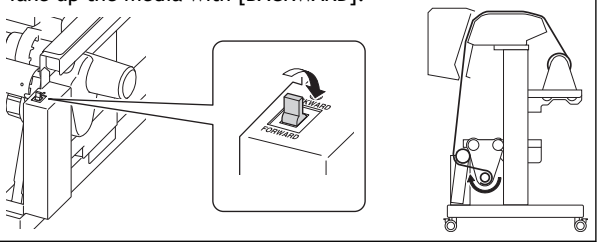
4. **Select [Sheet Cutting] and tap [Execute].**

IMPORTANT

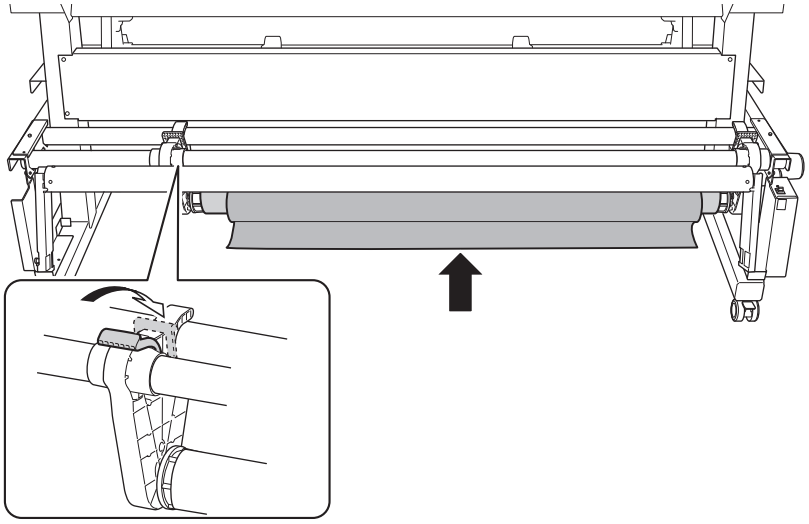
Give Attention to the Media Composition

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

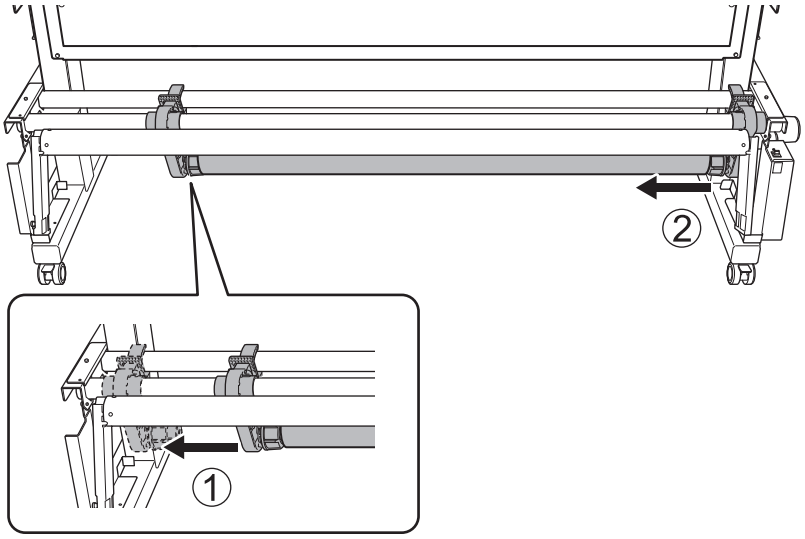
5. **Use the MANUAL switch to take-up the media.**

When using the FORWARD setting	When using the BACKWARD setting
Take up the media with [FORWARD]. 	Take up the media with [BACKWARD]. 

6. **While supporting the media from below, loosen the securing lever on the left media holder.**



7. **With the media supported, pull the paper tube and media from the end cap.**



Ink Pouch Replacement

Out-of-ink Warnings

When an ink pouch runs out, printing pauses and a warning beep sounds. Also, the screen [**Ink has run out.**] will be displayed on the operation panel to request that you replace the ink.

IMPORTANT

Never reuse an ink pouch when the machine shows a sign indicating no ink.

Occasionally the machine will show a sign indicating no ink even if there is a small amount of ink remaining in the pouch, but nevertheless do not use it. Such an ink pouch is in a state where drawing ink from it is impossible. Using it in such a state may force air into the ink path and cause printer malfunctions.

RELATED LINKS

- P. 112 Ink Pouch Replacement

Ink Pouch Replacement

⚠ WARNING

Never store ink, cleaning liquid, 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

Accidental ingestion by children may pose a health hazard.

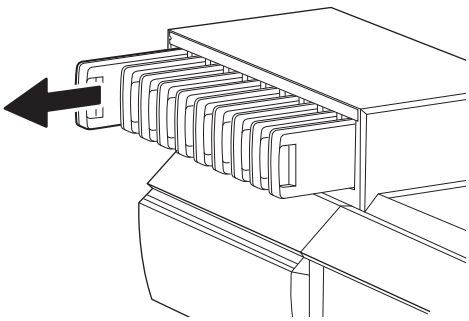
IMPORTANT

Precautions regarding ink pouch replacement

- Be sure to replace each pouch with an item of identical type and color.
- Never use an ink cartridge that has already been used in another machine even if it is an identical type.
- Never mix different types of items. If the optimizer ink and color ink mix, the ink may harden and cause a malfunction.
- Never leave the machine with an ink cartridge removed. The print heads may become clogged.
- Never insert or remove ink cartridges with undue force. Ink may leak.
- Set ink cartridges in the correct positions. Check that the color names indicated on the ink slot labels match the color names indicated on the ink cartridge labels.
- Handle ink pouches carefully to prevent them from dropping and rupturing.
- Use ink before its expiration date.

Procedure

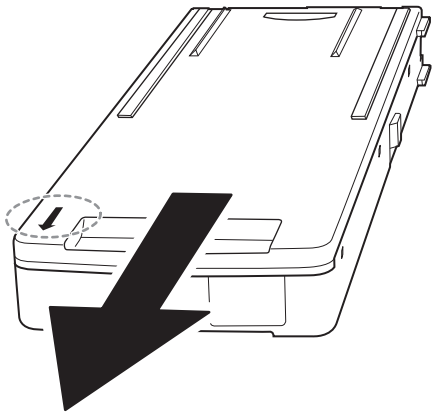
1. Pull out the cartridge of the color to replace.



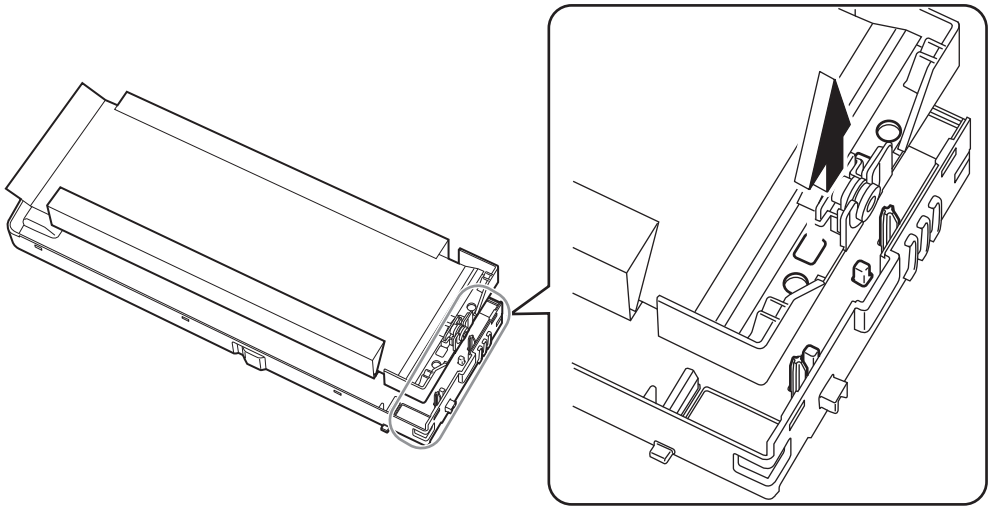
2. Remove the cover of the cartridge.

a. Keep the side with the arrow mark face up.

b. Remove the cover by sliding it in the direction indicated by the arrow.



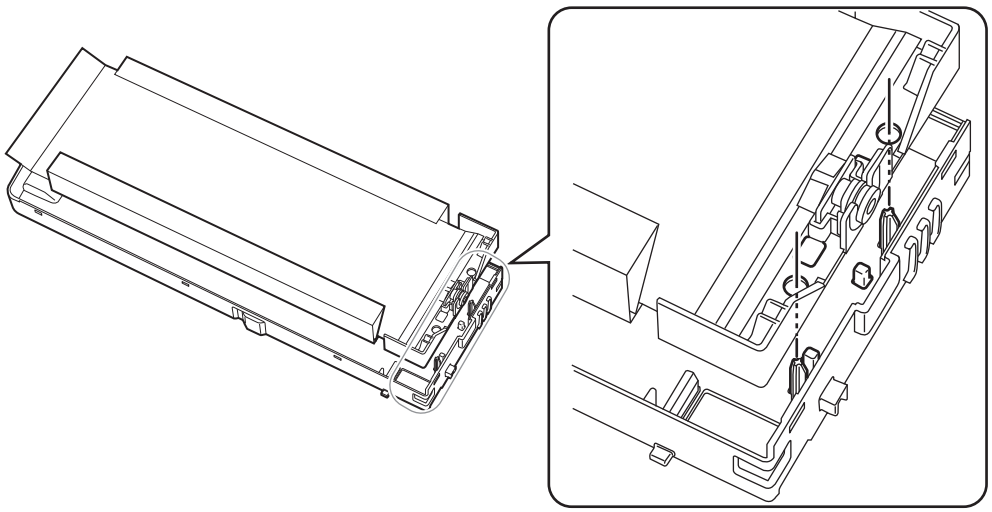
3. **Remove the used pouch from the cartridge case.**



4. **Set the pouch into the cartridge case.**

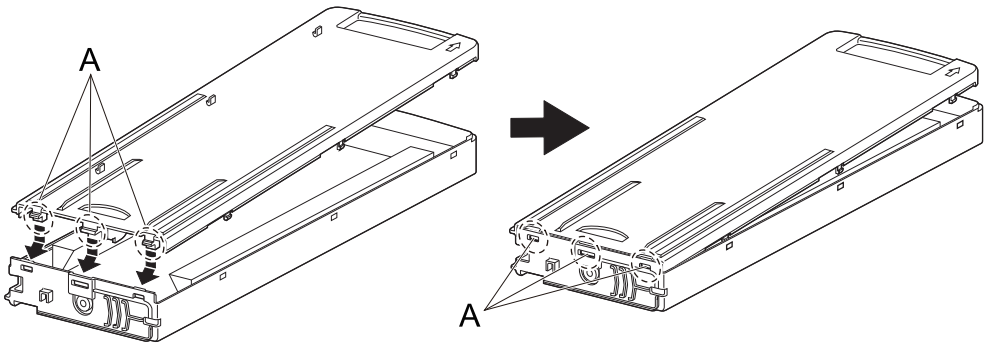
MEMO

To set the pouch in the correct position, pass the protrusions on the cartridge case through the holes in the pouch.



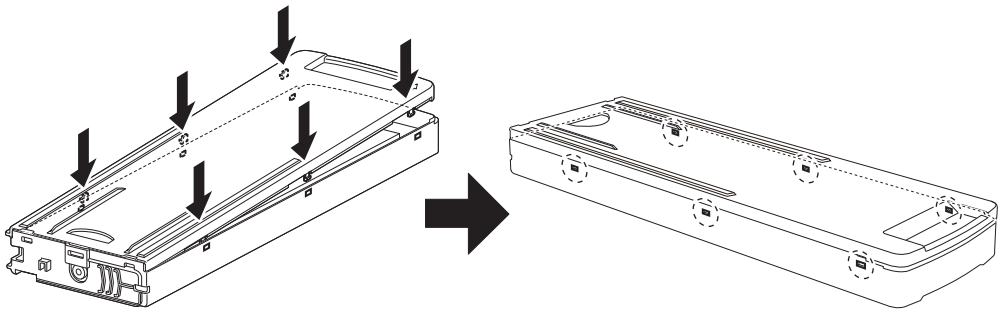
5. **Attach the cover to the cartridge case.**

a. Insert the protrusions (A) at the back of the cover into the holes in the cartridge case.



b. Push the cover to fit its hooks into the holes in the cartridge case.

There are hooks in six locations. Check that all the hooks are seated in the holes and that the cover does not come loose from the cartridge case.



6. Insert the ink cartridge into the slot it was pulled out from.

Insert the ink cartridge as far as it will go. If the inserted ink or cleaning liquid is not recognized and does not show up on the operation panel, remove the cartridge and insert it again.

If the machine recognizes the insertion of the cartridge, a prompt is displayed on the operation panel. Tap [**Yes**].

Replacing the Cleaning Liquid

Cleaning Liquid Replacement Notification

When the cleaning liquid runs out, the machine does not operate until the cleaning liquid is replenished. If the state in which there is no cleaning liquid continues, the heads may be damaged, so be sure to not use up all the cleaning liquid.

You can check the message by tapping  .

- **[Remaining cleaning liquid level low.]**

  If this message appears, you are recommended to replace the cleaning liquid pouch if you have one available. If you do not have a replacement cleaning liquid pouch, obtain one.

- **[Remaining cleaning liquid level low. Immediately stock up on cleaning liquid. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.]**

  If this message appears, replace the cleaning liquid pouch. If you do not have a replacement cleaning liquid pouch, order one. Then, carry out the replacement as soon as the cleaning liquid pouch arrives.

When the cleaning liquid runs out, the following message is displayed, and the machine stops operating. If this message appears, immediately replace the cleaning liquid pouch.

- **[Replace the cleaning liquid pouch immediately. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.]**

  There is no cleaning liquid, making it impossible to perform cleaning and other such work that uses the washer. Immediately replace the cleaning liquid pouch. Leaving the machine in this state may lead to head damage.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

Cleaning Liquid Pouch Replacement

Prepare the cleaning liquid pouch, then set the pouch in cleaning cartridge.

⚠ WARNING

Never store ink, cleaning liquid, 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

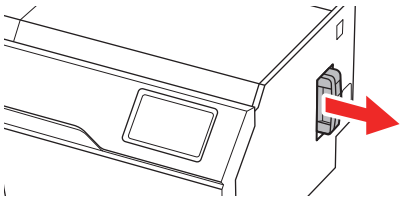
Accidental ingestion by children may pose a health hazard.

IMPORTANT

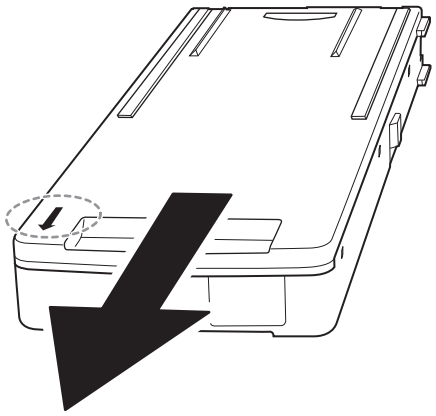
- Be sure to use a new cleaning liquid pouch.
- Never, under any circumstances, use anything other than the specified type of cleaning liquid.
- Cleaning liquid pouches and cleaning cartridges are consumable items. To purchase consumable items, contact your authorized Roland DG Corporation dealer or visit our website (https://www.rolanddg.co.jp/).

Procedure

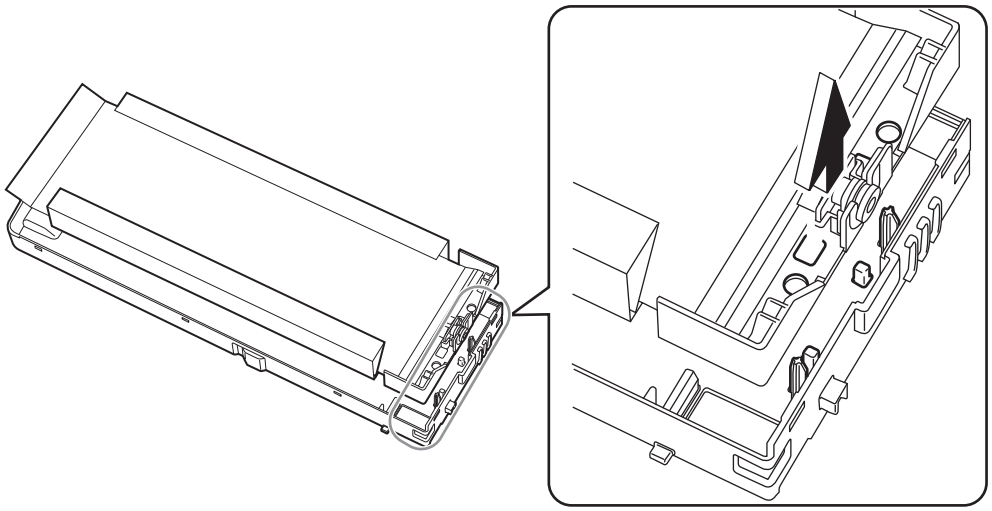
1. **Pull the cleaning cartridge out of the cleaning liquid slot on the side of the printer.**



2. **Remove the cover of the cleaning cartridge.**
   a. Keep the side with the arrow mark face up.
   b. Remove the cover by sliding it in the direction indicated by the arrow.



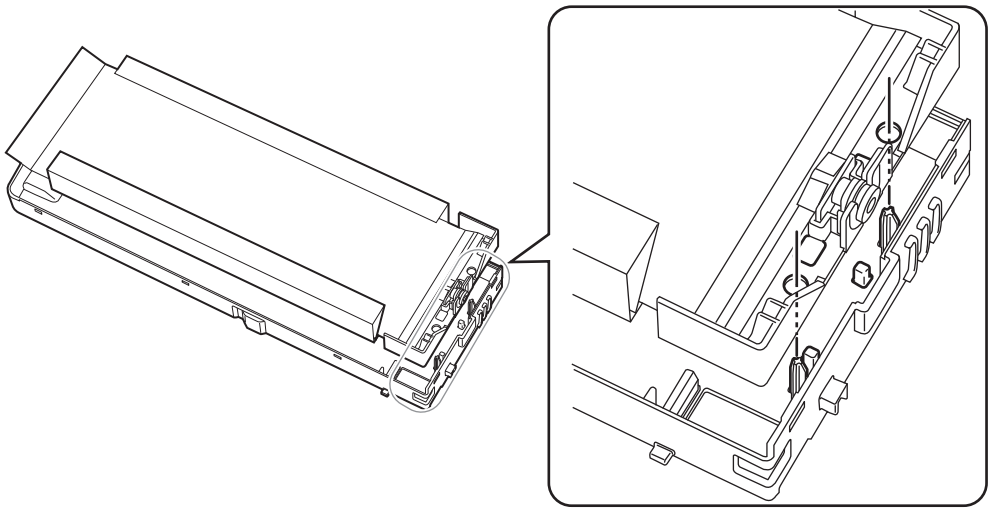
3. **Remove the used cleaning liquid pouch from the cartridge case.**



4. **Set the cleaning liquid pouch into the cartridge case.**

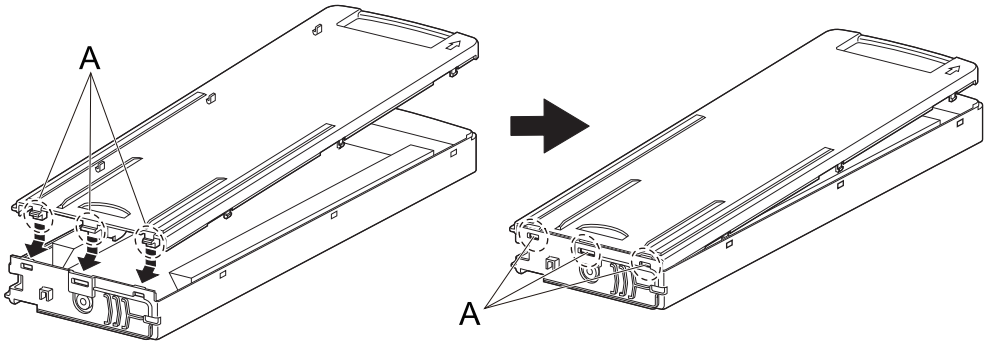
MEMO

To set the pouch in the correct position, pass the protrusions on the cartridge case through the holes in the pouch.



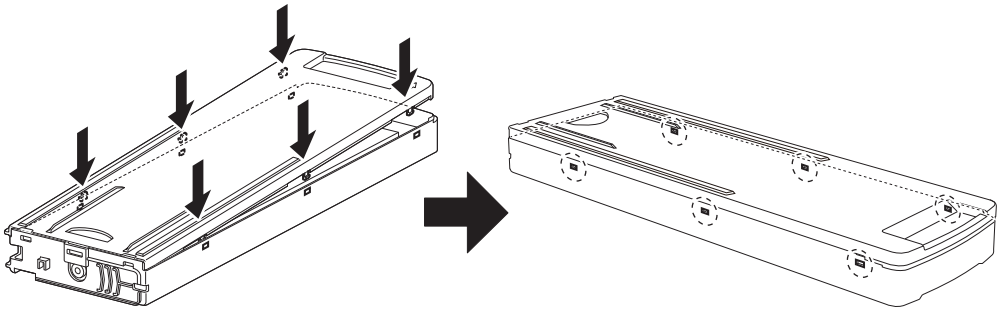
5. **Attach the cover to the cartridge case.**

a. Insert the protrusions (A) at the back of the cover into the holes in the cartridge case.



b. Push the cover to fit its hooks into the holes in the cartridge case.

There are hooks in six locations. Check that all the hooks are seated in the holes and that the cover does not come loose from the cartridge case.



6. **Set the cleaning cartridge in the cleaning liquid slot.**

Insert the ink cartridge as far as it will go. If the inserted cleaning liquid is not recognized and does not show up on the operation panel, remove it and insert it again.

7. **Tap [Yes] when the cleaning liquid pouch replacement confirmation screen appears.**

If you tap [**Yes**] to reset the amount of cleaning liquid remaining, the cleaning liquid pouch will be identified as a new product.

MEMO

If you tap [**Yes**] on the cleaning liquid pouch replacement confirmation screen even though you have not replaced the cleaning liquid pouch, the amount of cleaning liquid remaining is reset. In this situation, no notification will appear even if the amount of cleaning liquid remaining is very small, and the message [**Replace the cleaning liquid pouch.**] will appear when the cleaning liquid runs out. To ensure you have enough time to prepare the replacement cleaning liquid, tap [**No**] if you have not replaced the cleaning liquid.

Output Method

Printing Method

Preparations before Printing Output 121
Step 1: Performing a Nozzle Drop-out (Dot Drop-out) Test 121
Step 2: Performing Normal Cleaning 122
Starting Output 124

Preparations before Printing Output

Step 1: Performing a Nozzle Drop-out (Dot Drop-out) Test

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

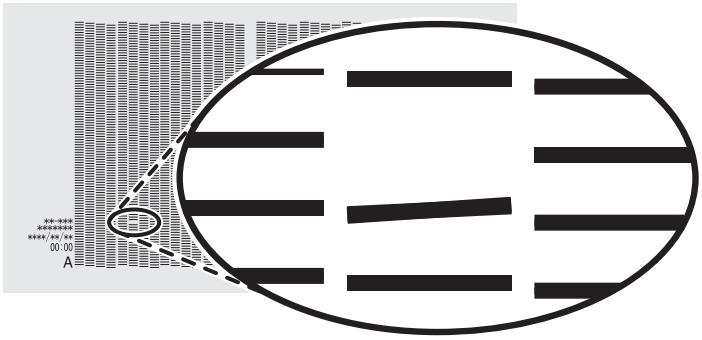
MEMO

When performing printing tests successively, you can select [**Feed**] (vertical printing) or [**Scan**] (horizontal printing) as the printing position for the second and later tests in comparison to the first test.

P. 208 Performing Printing Tests Arranged Horizontally

Procedure

1. **Set up the media.**
2. **Tap [Nozzle Drop-out Test] on the home screen.**
3. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
4. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

5. **If you have opened the front cover, close it.**
   If no dot drop-out or dot displacement occurs, this operation is finished.
6. **Tap .**
   The home screen appears.

RELATED LINKS

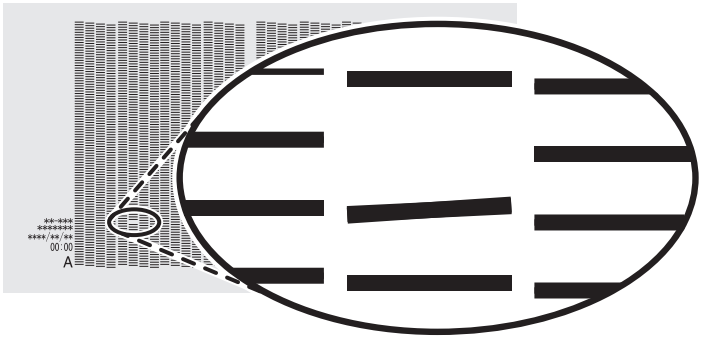
- P. 243 When Dot Drop-out or Dot Displacement Occurs

Step 2: Performing Normal Cleaning

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**

   The space from "A" to "B" is group A. The space from "B" to the right side is group B.



MEMO

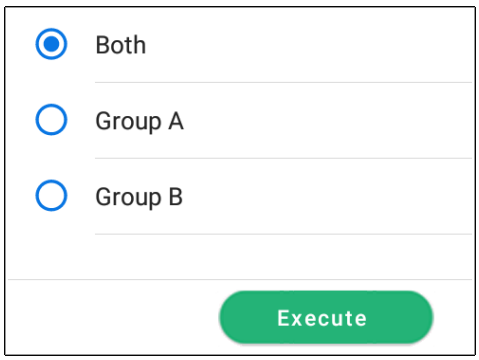
If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

2. **Tap ☰.**

3. **Tap [Cleaning]>[Normal Cleaning].**

4. **Select the group of print heads to clean.**



5. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   On completion, you will return to the original screen.

6. **Tap ←.**

7. **Perform a printing test again.**

8. **Check to make sure the dot drop-out or dot displacement has been corrected.**

If the problem persists, try performing normal cleaning again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing normal cleaning two or three times. If this is the case, clean using a different method.

RELATED LINKS

- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 245 When Normal Cleaning Is Not Effective

Starting Output

⚠ WARNING

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

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

⚠ CAUTION

Do not touch the dancer roller needlessly.

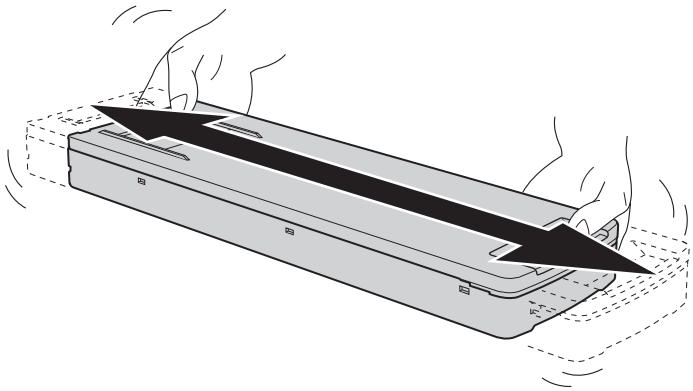
The media take-up unit and feeder may move suddenly, which may result in injury.

IMPORTANT

If you are using white ink

Before the start of daily operations, remove just the white ink cartridge, shake it 50 times (about 20 seconds), and then reinsert it.

The ingredients in white ink tend to settle. Each day, before starting the day's operations, be sure to shake this cartridge. Allowing the ink to stand can cause the settled material to harden, resulting in malfunctions or other problems.



- Before shaking the ink cartridge, wipe off any ink from around its mouth. If you do not wipe off the ink, it may splatter when you shake the ink cartridge.
- When shaking the ink cartridge, firmly hold it with both hands to prevent the ink cartridge cover from coming loose. The cover and ink pouch coming loose and falling may lead to damage or printer failure.
- When you have finished mixing the ink, reattach the ink cartridge immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you are not using the printer, shake the white ink cartridge 50 times (about 20 seconds) once a week.

Procedure

1. **Close the front cover.**
2. **Make sure [Output possible.] is displayed at the top of the operation panel.**
3. **Send the output data from the computer.**

   For information on how to create the output data, refer to the documentation for the included software RIP.

MEMO

- When you send the output data, [**Ink circulation in progress.**] or [**Normal cleaning in progress.**] may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.
- If [**Heater warm up in progress. Please wait.**] is displayed, wait until the set temperature is reached.
- The data being output can be viewed as an image. Tap ^ shown in the following figure to switch to the remaining ink screen. Tap this icon again to return to the screen for checking the data being output. However, this functionality is limited to software RIPs that support the display of the output data image (thumbnail).



IMPORTANT

Output is not possible in these situations

- The machine does not run when a cover (front, left, or right) is open.
- Data from the computer is not accepted when [**Load media.**] is displayed.
- If the print heater and dryer do not reach the set temperature, the output will not start. Wait until the set temperature is reached.
- On menu screens where [**Menu operation in progress: Press [Home] to enable output.**] is displayed, output doesn't start even when data is sent from the computer. When you return to a menu item where output is possible or tap ⌂ to return to the home screen, output starts.

Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the 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.

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

RELATED LINKS

- P. 169 Setting the Print Heater Temperature
- P. 170 Setting the Dryer Temperature

Cutting Method

Preparations for Cutting Output 127
Switching Off the Print Heater 127
Preventing Pulling of the Media with Undue Force 127
Configuring the Cutting Conditions 128
Starting Output 129

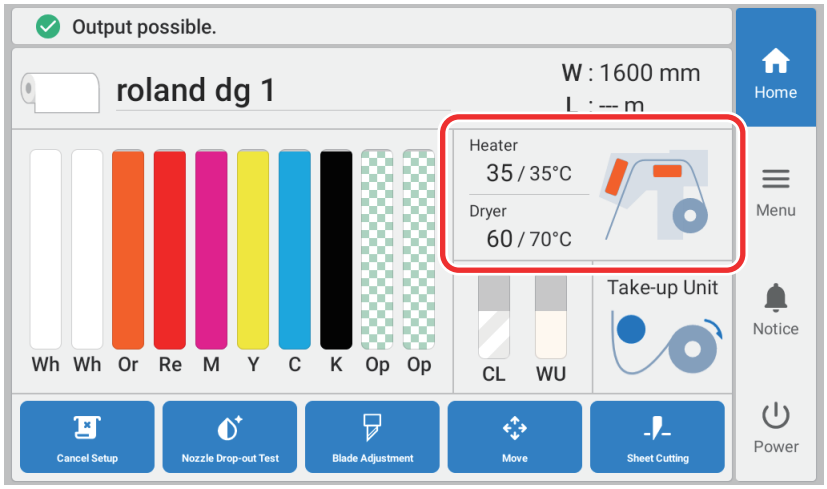
Preparations for Cutting Output

Switching Off the Print Heater

Procedure

1. Tap .
   The home screen appears.

2. **Tap the part enclosed in a square in the following figure.**



3. **Switch off [Print Heater].**
   Tap to set it to (off).
   If it is already off, skip this step and proceed to the next one.

4. **Tap [Save].**

5. Tap .
   The home screen appears.

Preventing Pulling of the Media with Undue Force

Procedure

1. Tap .

2. **Tap [Preferences]>[Prefeeding at Output].**

3. **Select [Enable].**

MEMO

- Default setting: **[Disable]**

4. **Tap [Save] to confirm your entry.**

5. **Tap** .

   The home screen appears.

Configuring the Cutting Conditions

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

Procedure

1. **Close the front cover.**

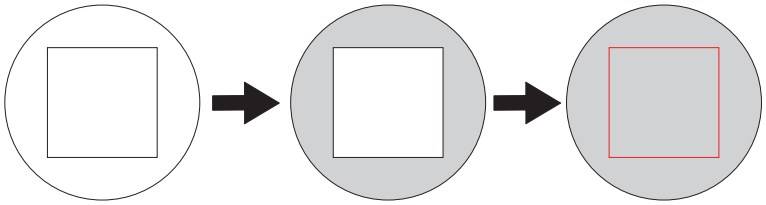
2. **Tap [Blade Adjustment] on the home screen.**

3. **Tap [Execute] next to [Cutting Test].**

   The test pattern is cut.

4. **Peel off the cut shapes and change the [Blade Adjustment] settings according to the cutting quality.**

   Check that the two shapes are peeled off separately, a blade trace (red line) remains on the backing paper, and the backing paper is not cut.

   - **Two shapes are peeled off separately**
     You do not need to perform the setting because the blade force is appropriate.
   - **Two shapes are peeled off together**
     Increase the blade force.
   - **Backing paper is also cut**
     Decrease the blade force.

5. **Tap [Save].**

   The changed settings are saved.

6. **Tap [Execute] next to [Cutting Test].**

   The test pattern is cut.

7. **Check whether the correction was successful.**

In the [**Blade Adjustment**] menu, you can also make settings for other cutting conditions in addition to the blade force.

RELATED LINKS

- P. 173 Fine-tuning the Cutting Conditions

Starting Output

⚠ WARNING

Never touch the cutting carriage while output is in progress.

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

⚠ CAUTION

Do not touch the dancer roller needlessly.

The media take-up unit and feeder may move suddenly, which may result in injury.

MEMO

Prepare just the cutting data, do not include the printing data.

Procedure

1. **Close the front cover.**

2. **Tap**  .

   The home screen appears.

3. **Send the output data from the computer.**

   For information on how to create the output data, refer to the documentation for the software RIP.

   MEMO

   - The data being output can be viewed as an image. Tap shown in the following figure to switch to the remaining ink screen. Tap this icon again to return to the screen for checking the data being output. However, this functionality is limited to software RIPs that support the display of the output data image (thumbnail).



   IMPORTANT

   Output is not possible in these situations

   - The machine does not run when a cover (front, left, or right) is open.
   - Data from the computer is not accepted when **[Load media.]** is displayed.
   - On menu screens where **[Menu operation in progress: Press [Home] to enable output.]** is displayed, output doesn't start even when data is sent from the computer. When you return to a menu item where output is possible or tap  to return to the home screen, output starts.

Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the 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.

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

Cutting and Printing Method

Cutting and Printing Overview 132
Preparations for Cutting and Printing Output 133
Performing a Nozzle Drop-out (Dot Drop-out) Test 133
Performing Normal Cleaning 134
Configuring the Cutting Conditions 135
Correcting the Misalignment of Printing and Cutting 136
Starting Output 138

Cutting and Printing Overview

As its name indicates, this is a method where the machine performs cutting followed by printing.

Because this method minimizes media expansion/contraction, it should provide better alignment than printing and cutting. It also eliminates concerns about damaging the printed surface with the blade holder.

Preparations for Cutting and Printing Output

Performing a Nozzle Drop-out (Dot Drop-out) Test

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

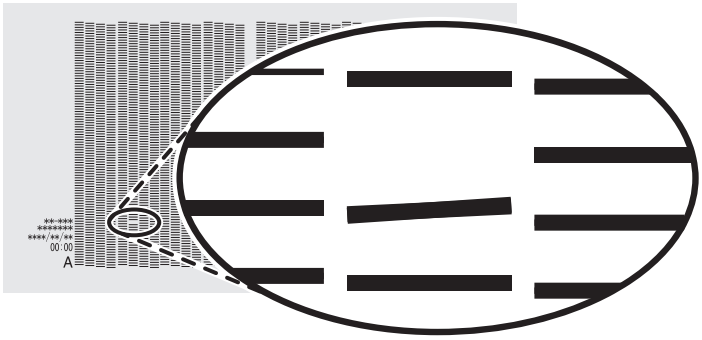
MEMO

When performing printing tests successively, you can select [**Feed**] (vertical printing) or [**Scan**] (horizontal printing) as the printing position for the second and later tests in comparison to the first test.

P. 208 Performing Printing Tests Arranged Horizontally

Procedure

1. **Set up the media.**
2. **Tap [Nozzle Drop-out Test] on the home screen.**
3. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
4. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

5. **If you have opened the front cover, close it.**
   If no dot drop-out or dot displacement occurs, this operation is finished.
6. **Tap .**
   The home screen appears.

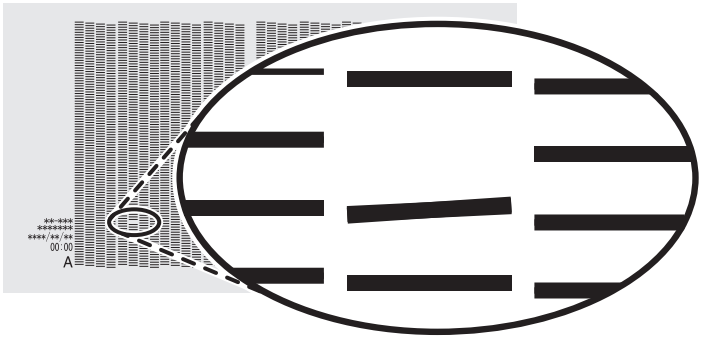
RELATED LINKS

- P. 243 When Dot Drop-out or Dot Displacement Occurs

Performing Normal Cleaning

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**
   The space from "A" to "B" is group A. The space from "B" to the right side is group B.



MEMO

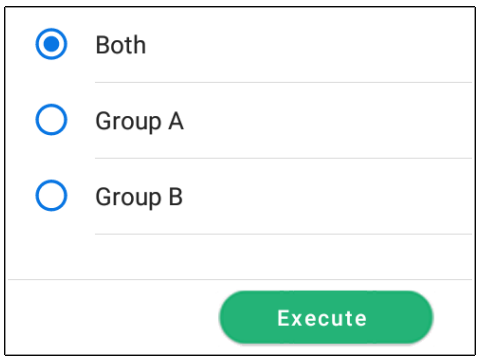
If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

2. **Tap ☰.**

3. **Tap [Cleaning]>[Normal Cleaning].**

4. **Select the group of print heads to clean.**



5. **Tap [Execute].**
   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.
   On completion, you will return to the original screen.

6. **Tap ←.**

7. **Perform a printing test again.**

8. **Check to make sure the dot drop-out or dot displacement has been corrected.**

If the problem persists, try performing normal cleaning again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing normal cleaning two or three times. If this is the case, clean using a different method.

RELATED LINKS

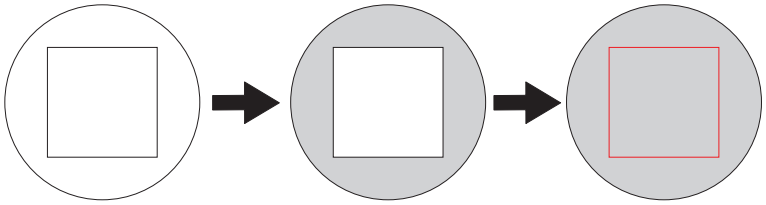
- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 245 When Normal Cleaning Is Not Effective

Configuring the Cutting Conditions

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

Procedure

1. **Close the front cover.**
2. **Tap [Blade Adjustment] on the home screen.**
3. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.
4. **Peel off the cut shapes and change the [Blade Adjustment] settings according to the cutting quality.**
   Check that the two shapes are peeled off separately, a blade trace (red line) remains on the backing paper, and the backing paper is not cut.



   - **Two shapes are peeled off separately**
     You do not need to perform the setting because the blade force is appropriate.
   - **Two shapes are peeled off together**
     Increase the blade force.
   - **Backing paper is also cut**
     Decrease the blade force.
5. **Tap [Save].**
   The changed settings are saved.
6. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.
7. **Check whether the correction was successful.**

In the [**Blade Adjustment**] menu, you can also make settings for other cutting conditions in addition to the blade force.

RELATED LINKS

• P. 173 Fine-tuning the Cutting Conditions

Correcting the Misalignment of Printing and Cutting

Procedure

1. **Tap ☰.**

2. **Tap [Media Settings]>[Cutting Settings]>[Print & Cut Position Adjustment].**

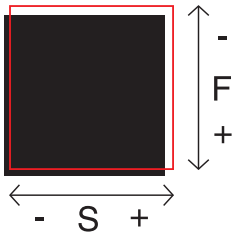
3. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

   Printing Test 1 is printed and cut.

4. **Check the result of Printing Test 1.**

   Check whether the printing position (shaded part) and the cutting position (red line) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

   [F] indicates the feed direction of the media (the feed direction) and [S] indicates the direction of print head movement (the scan direction).

   If the printing position and the cutting position are aligned, no corrections are necessary. Proceed to step 10.

   If the printing position and the cutting position are not aligned, proceed to the next procedure.

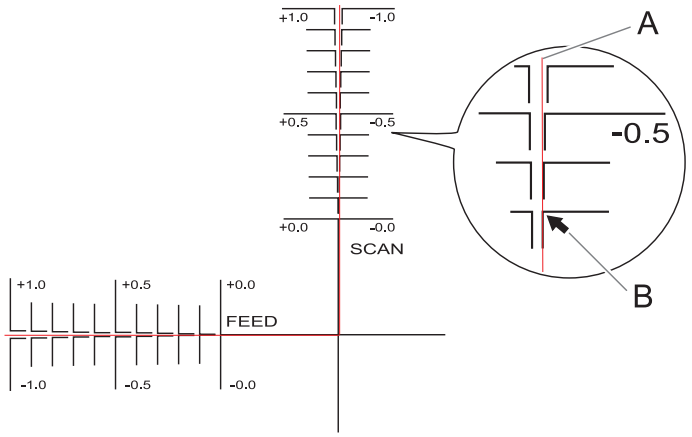
5. **Tap [Execute] next to [Printing Test 2(Correction Values)].**

   Printing Test 2 is printed and cut.

6. **Check the correction values from the Printing Test 2 condition.**

   The point where the cutting line (A) intersects the correction-value scale (B) is the correction value. In the following figure, the correction value is "−0.3."

   Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



7. **Set the correction values in the feed direction of the media (the feed direction) and the direction of print head movement (the scan direction).**

(1) **Tap − or + next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap − or + next to [Correction Value (Scan)] to set the correction value in the direction of print head movement (the scan direction).**

8. **Tap [Save].**

The correction values are saved.

9. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

Printing Test 1 is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, tap − or + next to [**Correction Value (Feed)**] and [**Correction Value (Scan)**] to fine-tune the printing and cutting position, and then tap [**Save**].

MEMO

Default settings

- [**Correction Value (Feed)**] (correction value of the media feed direction): 0.00 mm (0.00 in.)
- [**Correction Value (Scan)**] (correction value of the print head movement direction): 0.00 mm (0.00 in.)

10. **Tap .**

The home screen appears.

Starting Output

⚠ WARNING

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

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

⚠ CAUTION

Do not touch the dancer roller needlessly.

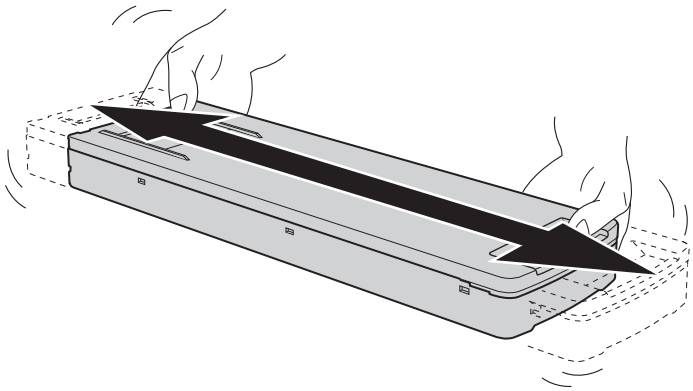
The media take-up unit and feeder may move suddenly, which may result in injury.

IMPORTANT

If you are using white ink

Before the start of daily operations, remove just the white ink cartridge, shake it 50 times (about 20 seconds), and then reinsert it.

The ingredients in white ink tend to settle. Each day, before starting the day's operations, be sure to shake this cartridge. Allowing the ink to stand can cause the settled material to harden, resulting in malfunctions or other problems.



- Before shaking the ink cartridge, wipe off any ink from around its mouth. If you do not wipe off the ink, it may splatter when you shake the ink cartridge.
- When shaking the ink cartridge, firmly hold it with both hands to prevent the ink cartridge cover from coming loose. The cover and ink pouch coming loose and falling may lead to damage or printer failure.
- When you have finished mixing the ink, reattach the ink cartridge immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you are not using the printer, shake the white ink cartridge 50 times (about 20 seconds) once a week.

Procedure

1. **Close the front cover.**
2. **Make sure [Output possible.] is displayed at the top of the operation panel.**
3. **Send the output data from the computer.**

   For information on how to create the output data, refer to the documentation for the included software RIP.

MEMO

- When you send the output data, [**Ink circulation in progress.**] or [**Normal cleaning in progress.**] may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.
- If [**Heater warm up in progress. Please wait.**] is displayed, wait until the set temperature is reached.
- The data being output can be viewed as an image. Tap ^ shown in the following figure to switch to the remaining ink screen. Tap this icon again to return to the screen for checking the data being output. However, this functionality is limited to software RIPs that support the display of the output data image (thumbnail).



IMPORTANT

Output is not possible in these situations

- The machine does not run when a cover (front, left, or right) is open.
- Data from the computer is not accepted when [**Load media.**] is displayed.
- If the print heater and dryer do not reach the set temperature, the output will not start. Wait until the set temperature is reached.
- On menu screens where [**Menu operation in progress: Press [Home] to enable output.**] is displayed, output doesn't start even when data is sent from the computer. When you return to a menu item where output is possible or tap ⌂ to return to the home screen, output starts.

Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the 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.

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

RELATED LINKS

- P. 169 Setting the Print Heater Temperature
- P. 170 Setting the Dryer Temperature

How to Cut with Crop Marks

What Is Cutting with Crop Marks? 141
Preparations for Cutting with Crop Marks 142
- Performing a Nozzle Drop-out (Dot Drop-out) Test 142
- Performing Normal Cleaning 143
- Configuring the Cutting Conditions 144
- Correcting the Misalignment of Printing and Cutting with Crop Marks at the Same Time 145

Printing with Crop Marks 147
Preparations for Cutting Output 149
- Loading Media on Which Crop Marks Have Been Printed 149
- Switching Off the Print Heater 149
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Starting Cutting Output 151

What Is Cutting with Crop Marks?

This is a method in which you print media with marks, remove this media from the printer, perform lamination or other work on the printed media, and then load it again for cutting. During cutting, the machine automatically detects these marks to cut in a manner that matches the already printed positions.

The marks added around the print data are called crop marks and are dedicated for this purpose. Note that crop marks differ from the registration marks for printing that you can add with drawing software and similar applications. The area in which you can print on the media is decreased by the space taken by the crop marks.

RELATED LINKS

- P. 333 Maximum Printing Area When Using Crop Marks

Preparations for Cutting with Crop Marks

Performing a Nozzle Drop-out (Dot Drop-out) Test

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

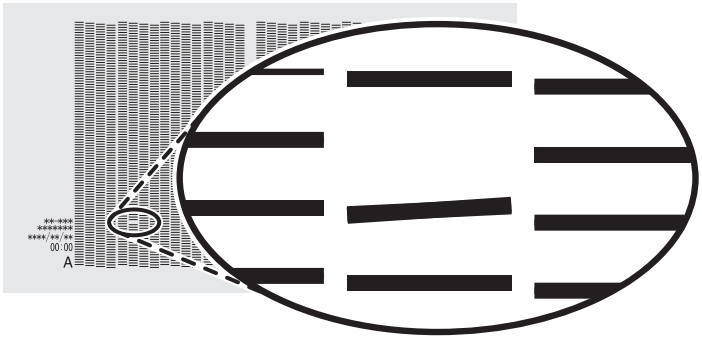
MEMO

When performing printing tests successively, you can select [**Feed**] (vertical printing) or [**Scan**] (horizontal printing) as the printing position for the second and later tests in comparison to the first test.

P. 208 Performing Printing Tests Arranged Horizontally

Procedure

1. **Set up the media.**
2. **Tap [Nozzle Drop-out Test] on the home screen.**
3. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
4. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

5. **If you have opened the front cover, close it.**
   If no dot drop-out or dot displacement occurs, this operation is finished.
6. **Tap .**
   The home screen appears.

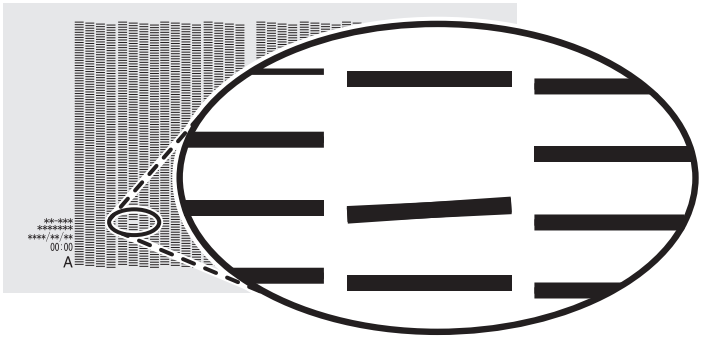
RELATED LINKS

- P. 243 When Dot Drop-out or Dot Displacement Occurs

Performing Normal Cleaning

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**
   The space from "A" to "B" is group A. The space from "B" to the right side is group B.



MEMO

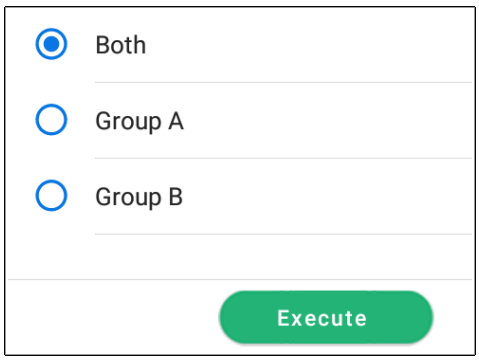
If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

2. **Tap ☰.**

3. **Tap [Cleaning]>[Normal Cleaning].**

4. **Select the group of print heads to clean.**



5. **Tap [Execute].**
   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.
   On completion, you will return to the original screen.

6. **Tap ←.**

7. **Perform a printing test again.**

8. **Check to make sure the dot drop-out or dot displacement has been corrected.**

If the problem persists, try performing normal cleaning again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing normal cleaning two or three times. If this is the case, clean using a different method.

RELATED LINKS

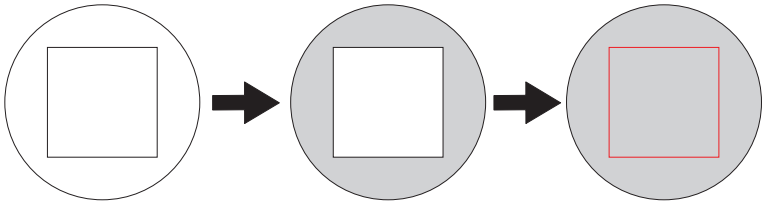
- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 245 When Normal Cleaning Is Not Effective

Configuring the Cutting Conditions

For high-quality cutting, we recommend carrying out a cutting test to check the cutting quality for the media before you perform actual cutting. Adjust the blade force depending on the cutting quality.

Procedure

1. **Close the front cover.**
2. **Tap [Blade Adjustment] on the home screen.**
3. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.
4. **Peel off the cut shapes and change the [Blade Adjustment] settings according to the cutting quality.**
   Check that the two shapes are peeled off separately, a blade trace (red line) remains on the backing paper, and the backing paper is not cut.



   - **Two shapes are peeled off separately**
     You do not need to perform the setting because the blade force is appropriate.
   - **Two shapes are peeled off together**
     Increase the blade force.
   - **Backing paper is also cut**
     Decrease the blade force.
5. **Tap [Save].**
   The changed settings are saved.
6. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.
7. **Check whether the correction was successful.**

In the [**Blade Adjustment**] menu, you can also make settings for other cutting conditions in addition to the blade force.

RELATED LINKS

- P. 173 Fine-tuning the Cutting Conditions

Correcting the Misalignment of Printing and Cutting with Crop Marks at the Same Time

Use the following procedure to print the crop marks and cut the media, checking for misalignment in the positions. In this section, the crop marks are printed simply, and then the crop marks are read and a cutting test is performed without removing the media. To simulate the actual process—printing crop marks, removing the media, and then performing post-processing such as laminating—before loading the media and checking for cutting position misalignment, turn on **[Separate Test for Printing/Cutting with Crop Marks]**. For more information, refer to Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)(P. 189).

Procedure

1. **Tap** .

2. **Tap [Media Settings]>[Cutting Settings]>[Crop Cut Position Adjustment].**

3. **Tap next to [Separate Test for Printing/Cutting with Crop Marks] to turn it off.**

4. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

   Printing Test 1 is printed and cut.

   IMPORTANT

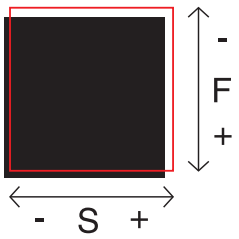
   Printing (crop marks) may not be readable with transparent media, silver or other light-reflective media, or black or other dark-colored media, which may prevent cutting from being performed. Try the following if **[Crop Mark Detection Error]** is displayed.

   - Are you using transparent media?(P. 291)
   - Are You Using Media That Is Likely to Reflect Light?(P. 291)

5. **Check Printing Test 1.**

   Check whether the printing position (shaded part) and the cutting position (red line) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

   [F] indicates the feed direction of the media (the feed direction) and **[S]** indicates the direction of print head carriage movement (the scan direction).

   If the printing position and the cutting position are aligned, no corrections are necessary. Proceed to step 11.

   If the printing position and the cutting position are not aligned, proceed to the next procedure.

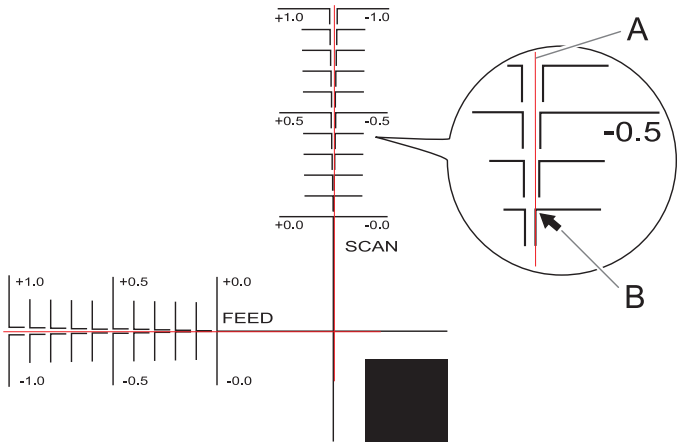
6. **Tap [Execute] next to [Printing Test 2(Correction Values)].**

   Printing Test 2 is printed and cut.

7. **Check the correction values from the Printing Test 2 condition.**

The point where the cutting line (A) intersects the correction-value scale (B) is the correction value. In the following figure, the correction value is "−0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



8. **Set the correction values in the feed direction of the media (the feed direction) and the direction of print head movement (the scan direction).**

(1) **Tap − or + next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap − or + next to [Correction Value (Scan)] to set the correction value in the direction of print head movement (the scan direction).**

9. **Tap [Save].**

The correction values are saved.

10. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

Printing Test 1 is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, tap − or + next to [**Correction Value (Feed)**] and [**Correction Value (Scan)**] to fine-tune the printing and cutting position, and then tap [**Save**].

MEMO

- Default settings
  [**Correction Value (Feed)**] (correction value of the media feed direction): 0.00 mm (0.00 in.)
  [**Correction Value (Scan)**] (correction value of the print head movement direction): 0.00 mm (0.00 in.)
- Depending on the changes in the condition of media caused by laminating and the loading position of the media before cutting, the positioning of cutting may be misaligned. In such cases, correct the misalignment of printing and cutting with crop marks.

11. **Tap .**

The home screen appears.

RELATED LINKS

• P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Printing with Crop Marks

⚠ WARNING

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

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

⚠ CAUTION

Do not touch the dancer roller needlessly.

The media take-up unit and feeder may move suddenly, which may result in injury.

MEMO

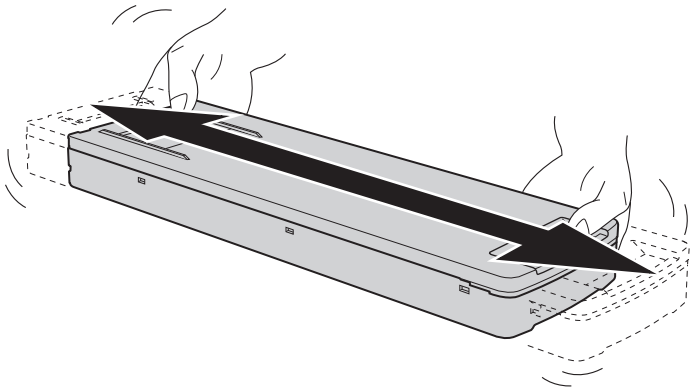
Prepare just the printing data, do not include the cutting data. Use your software RIP to configure the settings to print with crop marks. For information on how to make the settings, refer to the documentation for the software RIP you are using.

IMPORTANT

If you are using white ink

Before the start of daily operations, remove just the white ink cartridge, shake it 50 times (about 20 seconds), and then reinsert it.

The ingredients in white ink tend to settle. Each day, before starting the day's operations, be sure to shake this cartridge. Allowing the ink to stand can cause the settled material to harden, resulting in malfunctions or other problems.



- Before shaking the ink cartridge, wipe off any ink from around its mouth. If you do not wipe off the ink, it may splatter when you shake the ink cartridge.
- When shaking the ink cartridge, firmly hold it with both hands to prevent the ink cartridge cover from coming loose. The cover and ink pouch coming loose and falling may lead to damage or printer failure.
- When you have finished mixing the ink, reattach the ink cartridge immediately. Taking time to reattach the ink cartridge will adversely affect the ink path.
- Even if you are not using the printer, shake the white ink cartridge 50 times (about 20 seconds) once a week.

Procedure

1. **Close the front cover.**
2. **Tap**  **.**

   The home screen appears.

3. **Make sure [Output possible.] is displayed at the top of the operation panel.**

4. **Send the output data from the computer.**

For information on how to create the output data, refer to the documentation for the included software RIP.

MEMO

- When you send the output data, **[Ink circulation in progress.]** or **[Normal cleaning in progress.]** may be displayed on the screen. These indicate the preparation operations performed before output. Output will begin after the time displayed on the screen elapses.
- If **[Heater warm up in progress. Please wait.]** is displayed, wait until the set temperature is reached.
- The data being output can be viewed as an image. Tap shown in the following figure to switch to the remaining ink screen. Tap this icon again to return to the screen for checking the data being output. However, this functionality is limited to software RIPs that support the display of the output data image (thumbnail).



IMPORTANT

Output is not possible in these situations

- The machine does not run when a cover (front, left, or right) is open.
- Data from the computer is not accepted when **[Load media.]** is displayed.
- If the print heater and dryer do not reach the set temperature, the output will not start. Wait until the set temperature is reached.
- On menu screens where **[Menu operation in progress: Press [Home] to enable output.]** is displayed, output doesn't start even when data is sent from the computer. When you return to a menu item where output is possible or tap to return to the home screen, output starts.

Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the 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.

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

RELATED LINKS

- P. 169 Setting the Print Heater Temperature
- P. 170 Setting the Dryer Temperature

Preparations for Cutting Output

Loading Media on Which Crop Marks Have Been Printed

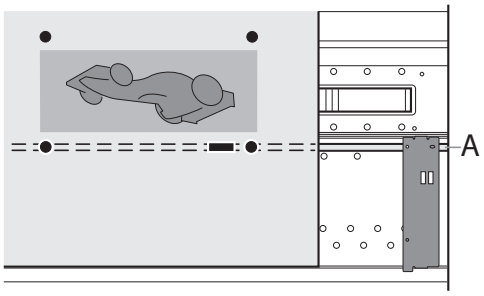
Procedure

1. **Load the media on which crop marks have been printed.**

   Place the front left and right crop marks so they are straight and aligned with the blade protector (A).

   IMPORTANT

   Ensure that the crop marks are not angled by more than 5 degrees. Crop marks cannot be read at higher angles.

2. **Finish the media setup and check that the home screen is displayed.**

   This completes the setup of the media with crop marks. Proceed to Switching Off the Print Heater(P. 127).

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media
- P. 332 Printing/Cutting Area

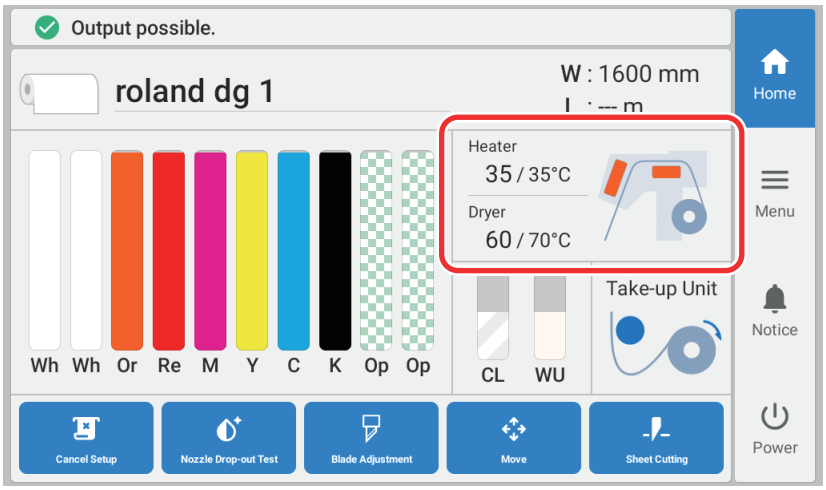
Switching Off the Print Heater

Procedure

1. **Tap** .

   The home screen appears.

2. **Tap the part enclosed in a square in the following figure.**



3. **Switch off [Print Heater].**

   Tap to set it to (off).

   If it is already off, skip this step and proceed to the next one.

4. **Tap [Save].**

5. **Tap .**

   The home screen appears.

Preventing Pulling of the Media with Undue Force

Procedure

1. **Tap .**

2. **Tap [Preferences]>[Prefeeding at Output].**

3. **Select [Enable].**

   MEMO

   - Default setting: **[Disable]**

4. **Tap [Save] to confirm your entry.**

5. **Tap .**

   The home screen appears.

Starting Cutting Output

⚠ WARNING

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

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

⚠ CAUTION

Do not touch the dancer roller needlessly.

The media take-up unit and feeder may move suddenly, which may result in injury.

MEMO

Prepare just the cutting data, do not include the printing data.

Procedure

1. **Close the front cover.**
2. **Tap** .

   The home screen appears.
3. **Make sure [Output possible.] is displayed at the top of the operation panel.**
4. **Send the output data from the computer.**

   For information on how to create the output data, refer to the documentation for the software RIP.

MEMO

- The data being output can be viewed as an image. Tap shown in the following figure to switch to the remaining ink screen. Tap this icon again to return to the screen for checking the data being output. However, this functionality is limited to software RIPs that support the display of the output data image (thumbnail).



IMPORTANT

Output is not possible in these situations

- The machine does not run when a cover (front, left, or right) is open.
- Data from the computer is not accepted when **[Load media.]** is displayed.

- On menu screens where [**Menu operation in progress: Press [Home] to enable output.**] is displayed, output doesn't start even when data is sent from the computer. When you return to a menu item where output is possible or tap  to return to the home screen, output starts.

Points that must be observed

- Never open a cover (front, left, or right) while output is in progress. Doing so interrupts printing.
- When you are performing printing, clamp the edges of the media with the media clamps. Otherwise, the edges of the media may warp and catch on the print heads.
- During output, do not touch the media. Doing so may obstruct the 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.

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

Optimizing Quality and Efficiency

Optimizing the Output Quality

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Using the Correction Functions

To optimize the output quality, it is effective to use some correction functions.

Automatically Making Required Adjustments

To optimize the output quality, corrections must match the media and printing conditions.

Depending on the printing conditions, the ink landing position may be misaligned and the movement distance may change subtly during media feeding. Automatically correct these issues to match the media.

First, print a test pattern. Then read this pattern with the multi sensor and automatically enter the correction values.

Executing automatic correction prints a test pattern, reads this pattern, and enters the correction values for the following operations.

- Multi sensor adjustment (adjusting to the optimal condition the sensor used in correction)
- Media gap adjustment (correcting the ink landing position)
- Feed correction (to reduce horizontal bands)

Procedure

1. **Set up the media.**
2. **Close the front cover.**
3. **Tap** ☰.
4. **Tap [Media Settings]>[Printing Settings]>[Batch Automatic Correction].**
5. **Tap [Execute].**

   Test patterns are printed and correction values are entered for the following operations.
   - Multi Sensor Adjustment
   - Feed Correction
   - Media Gap Adjustment
6. **Tap [OK] when the completion screen appears.**
7. **Perform the operations shown below according to the [Result].**
   - If **[Successful]** is displayed on the operation panel, tap ⌂ to go back to the original screen.
   - If **[Failed]** is displayed on the operation panel, carry out manual adjustment.

RELATED LINKS

- P. 156 Manual Adjustment: Reducing Horizontal Bands (Feed Correction)
- P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Manual Adjustment: Reducing Horizontal Bands (Feed Correction)

Perform corrections to make the band-shaped "stripes" on the printed surface less noticeable.

The band-shaped "stripes" are called "horizontal bands" or "banding." Horizontal bands are caused by the subtle changes in the movement distance that occur when feeding the media depending on the media's thickness and type. We recommend making corrections to match the media you are using.

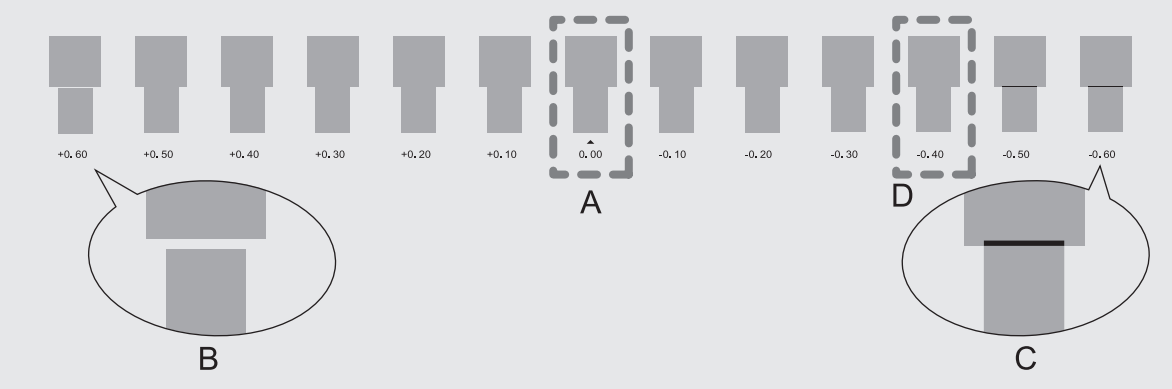
First, print a test pattern, and then determine and enter the correction value. After entering the correction value, print a test pattern again and check the correction results. Repeat the process of printing a test pattern and entering a correction value several times to find the optimal correction value.

Procedure

1. **Set up the media.**
2. **Close the front cover.**
3. **Tap** ☰.
4. **Tap [Media Settings]>[Printing Settings]>[Feed Correction].**
5. **Select [Detailed Correction (Manual)] and tap [Next].**
6. **Tap [Execute] next to [Printing Test].**

   Printing of the test pattern starts.
7. **Check the printed test pattern, and then tap** − **or** + **to enter the correction value.**

   The current correction value (A) is that of the figure indicated by "▲." Select the value to make the gap (B) and overlap (C) between the upper/lower squares smallest. In the case of the following figure, select "−0.40" (D). When you cannot choose between two sequential numbers, specify a value that is between them.



   MEMO

   - If the test pattern is difficult to see, tap ^ or v next to [**Media Feed**] to move the media to a position where it is easier to see.
   - If you want to hold the media to check the test pattern, tap [**Execute**] next to [**Sheet Cutting**] to separate the media. In this situation, wait for the ink to dry before separating the media.

     P. 106 Separating the Media
8. **Tap [Save].**

The entered correction value is saved.

9. **Tap [Execute] next to [Printing Test].**

The test pattern is printed again.

10. **Check the test pattern to see whether the correction was successful.**

Check that the gap and overlap are the smallest for the figure indicated by "▲" (that is, the current correction value). If the gap and overlap are smaller for another figure, set the correction value again.

11. **When you have successfully performed the correction, tap .**

The home screen appears.

Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

This adjusts the landing position of the ink discharged from the print heads. The landing position varies according to the print head height and the thickness of the media, so we recommend that you make corrections to match the media you are using.

First, print a test pattern, and then determine and enter the correction value. After entering the correction value, print a test pattern again and check the correction results.

This adjustment must be performed in the following cases.

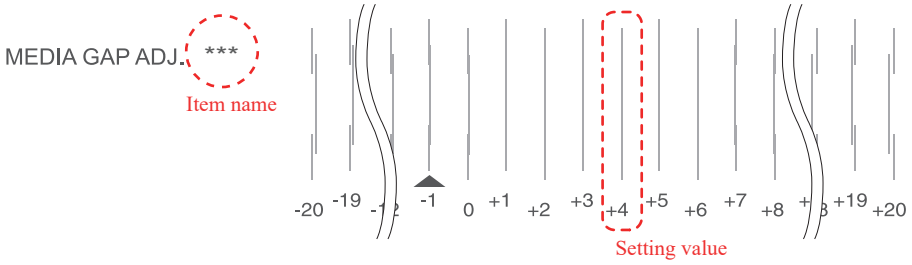
- When using this machine for the first time
- When changing the media to use
- When you have changed the print-head height

Procedure

1. **Load the media.**
2. **Close the front cover.**
3. **Tap** ☰.
4. **Tap [Media Settings]>[Printing Settings]>[Media Gap Adjustment].**
5. **Select [Detailed Correction (Manual)] and tap [Next].**
6. **Tap [Execute] next to [Printing Test].**

   Printing of the test pattern starts.
7. **Check the printed test pattern, and then read all the correction values.**

   Select the value that gives the least misalignment between the two lines. In the case of the following figure, select "+4." When you cannot choose between two sequential numbers, select a value that is between them (you can set correction values in units of "0.5").



   The names of the items where the correction values will be entered are printed to the left of the test pattern (example: No. 1 H1). Read the correction values for all the items.

MEMO

- If the test pattern is difficult to see, tap ^ or v next to [**Media Feed**] to move the media to a position where it is easier to see.
- If you want to hold the media to check the test pattern, tap [**Execute**] next to [**Sheet Cutting**] to separate the media. In this situation, wait for the ink to dry before separating the media.

P. 106 Separating the Media

8. **Tap [−] or [+] to enter the read correction values for the corresponding item names.**

9. **Tap [Save].**

   The entered correction values are saved.

10. **Tap [Execute] next to [Printing Test].**

    The test pattern is printed again.

11. **Check the test pattern to see whether the correction was successful.**

    For all the correction values, check that the misalignment is minimized for the two vertical lines indicated by "▲" (that is, the current correction value). If the misalignment is smaller for another set of vertical lines, set the correction value again.

12. **When you have successfully performed the correction, tap [⌂] to go back to the original screen.**

Configuring Settings to Match the Properties of the Media

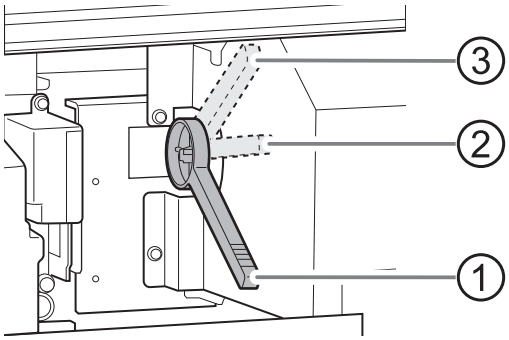
Changing the Print Head Height

This adjusts the print head height to prevent media that is wrinkled or comes loose from the platen from contacting the print heads.

You can select the print head height from [**Low**], [**Medium**], and [**High**]. Printing quality when the print head height is set to [**Medium**] or [**High**] may be coarser or otherwise lower than when set to [**Low**].

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Printing Settings]>[Print Head Height].**
4. **Tap [Change].**
   The print heads move to a position where they can be operated.
5. **Open the front cover.**
6. **Move the height-adjustment lever to adjust the print head height.**
   When you change the position of the height-adjustment lever, the display screen will change.



Position	Operation panel display	Description
①	[Low]*1	Normally set the height-adjustment lever to [**Low**].
②	[Medium]	For media that is wrinkled or comes loose from the platen during printing, set the height-adjustment lever to [**Medium**].
③	[High]	For media that is wrinkled or comes loose from the platen during printing even when the height-adjustment lever is set to [**Medium**], set the lever to [**High**].

*1 Default settings

IMPORTANT

The printing quality degrades as the distance between the media and the print heads increases. Do not move the height-adjustment lever to [**Medium**] or [**High**] needlessly.

7. **Close the front cover.**

8. **Tap [OK].**

   The print heads move to their original position.

9. **Tap**  .

   MEMO

   - If degradation of printing quality occurs after raising the print head height, refer to the following information and try optimizing the quality.

   The home screen appears.

RELATED LINKS

- P. 155 Automatically Making Required Adjustments
- P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Using Media That Wrinkles Easily/Does Not Move Smoothly

The platen uses suction to grip the media and keep it stable. The suction force can be adjusted corresponding to the nature and condition of the media.

MEMO

This section introduces the way to adjust the media's suction force as a method to realize smooth media feeding. In addition to adjusting the suction force, you can also use [**Tension Winding**] (Setting the Take-up Unit(P. 165)) of the take-up unit.

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Other Media Settings]>[Media Suction Force].**
4. **Tap** − **or** + **to enter the value.**

0 to 100%	When the media is flimsy and cannot move smoothly, decreasing this value (reducing the suction force) may correct the problem.
Auto*1	The suction force is automatically adjusted to the optimal level for the media width

*1 Default setting

5. **Tap [Save] to confirm your entry.**
6. **Tap** ⌂.

MEMO

- Depending on the software RIP you are using, you can also make this setting in the software RIP. When you have made the setting in the software RIP, the machine's setting is ignored.

The home screen appears.

Using Sticky Media

This setting is used to peel off the media before starting printing when using media that sticks easily to the platen. This setting is effective to prevent media jams.

Note, however, that peeling off the media may cause unstable media feed. Leave this menu item set to [**Disable**] unless you specifically need to change it.

Procedure

1. **Set up the media.**
2. **Tap** .
3. **Tap [Media Settings]>[Other Media Settings]>[Media Sticking Prevention].**
4. **Select [Enable].**

   MEMO

   - Default setting: **[Disable]**
5. **Tap [Save] to confirm your entry.**
6. **Tap** .

   The home screen appears.

Using Heat-resistant Media with Minimal Waste

This machine feeds media to dry the ink until it passes through the dryer after printing. Since parts exposed to the dryer may suffer damage such as deformation or deterioration, which may result in poor printing quality, they are normally left as a margin without printing.

However, for heat-resistant media, there is little heat impact, so you can set the media to be pulled back and print to the part that was exposed to the dryer. If you want to configure this setting, perform a printing test on the media you are using to see if the printing quality is valid.

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Heater Settings]>[Pullback After Printing].**
4. **Select [Enable].**

[Enable]	After printing, media is fed to the dryer to dry. The media is then pulled back to start the next printing operation.
[Disable]*1	After printing, media is fed to the dryer to dry, and then the next printing operation starts. The margin between the print-end position and the next print-start position is set to a value of 450 mm (17.72 in.).

*1 Default settings

5. **Tap [Save] to confirm your entry.**
6. **Tap** ⌂.

IMPORTANT

When this function is set to [**Enable**], be sure to check the following points related to printing quality.

- Is the media wrinkled or deformed after being pulled back?
  If wrinkles are occurring, set this function to [**Disable**] and stop pulling back the media. This can cause jamming of the media.
- Is the print quality deteriorating after printing?

The home screen appears.

Setting the Take-up Unit

When using a take-up unit, make sure the following settings match the take-up method and output method of the actual media.

The settings will have to be changed from the defaults when:

- Using weak media
- Taking up the media with an inward curl
- Printing multiple colors of ink in layers such as by printing CMYK ink on top of white ink

Procedure

1. **Tap ☰.**
2. **Tap [Preferences]>[Take-up].**
3. **Tap [Take-up during Cutting].**
4. **Select the setting from those shown below and tap [Save].**

[Enabled]	The media is taken up during cutting while slack is being created. This prevents the media from sticking to the floor. Make sure the media is taken up at least halfway around the paper tube beforehand.
[Disabled][*1]	The media is taken up after all cutting finishes.

*1 Default settings

MEMO

- **[Enabled]** cannot be performed in the following situations:
  - **[Blade Adjustment]**>**[Printing Test]**
  - **[Print & Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**
  - **[Crop Cut Position Adjustment]**>**[Printing Test 1(Misalignment Check)]**/**[Printing Test 2(Correction Values)]**

IMPORTANT

When **[Preferences]**>**[Take-up]**>**[Enabled]** is set, to preserve cut quality, the speed may be limited to the optimum speed for **[Cutting Speed]** and **[Rise Movement Speed]** depending on the set media.

P. 173 Fine-tuning the Cutting Conditions

5. **Tap [Take-up Method].**
6. **Select the setting from those shown below and tap [Save].**

[Loose Winding][*2]	The media is taken up with some slack. This is suited to PVC and other such stiff or slippery media.
[Tension Winding]	The media is stretched and taken up. This is suited to tarpaulin and other such weak media and media that does not slip easily. (To keep the media stretched at all times, limit the media feeding to one direction. Set **[Pullback After Printing]** under **[Heater Settings]** to **[Disable]**.)

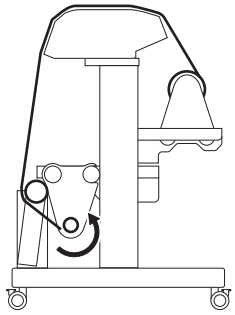
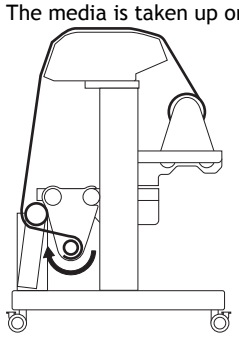
*2 Default settings

IMPORTANT

When the output data includes the cutting operation, this setting is disabled, and no take-up is performed until the output of the piece of data is finished.

7. **Tap [Take-up Direction].**

8. **Select the setting from those shown below and tap [Save].**

[**Forward**]*3	The media is taken up onto the paper tube with the printed surface on the outside. 
[**Backward**]	The media is taken up onto the paper tube with the printed surface on the inside. 

*3 Default settings

9. **Tap .**

The home screen appears.

Preventing Misaligned Media

Use Middle Pinch Rollers When Pulling Back or Feeding Media

Set the setting that causes the middle pinch rollers to go up automatically during pullback printing or printing and cutting to [**Disable**]. Holding down media that is not straight or comes loose is effective in preventing misalignment during printing and cutting.

[**Middle Pinch Auto Raise/Lower**] is a function that causes the middle pinch rollers to automatically rise when media is pulled back, performs overprinting and cutting while they are raised. However, if you are performing lengthy printing or using non-resilient media, the media will be skewed or will come loose, which may have an effect on the output quality.

If you set [**Middle Pinch Auto Raise/Lower**] to [**Disable**], the middle pinch rollers will press down on the media while moving, thus preventing skewing or coming loose. However, because the middle pinch rollers are pressed against the printed surface, it is easier for the rollers to leave a trace on the printed surface. Before pulling back the media, make sure to dry it thoroughly.

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Other Media Settings]>[Middle Pinch Auto Raise/Lower].**
4. **Select [Disable].**

   The middle pinch rollers will lower during media feeding and pullback, pressing down on the media while moving.

   MEMO

   - Default setting: [**Enable**]
5. **Tap [Save] to confirm your entry.**
6. **Tap** ⌂.

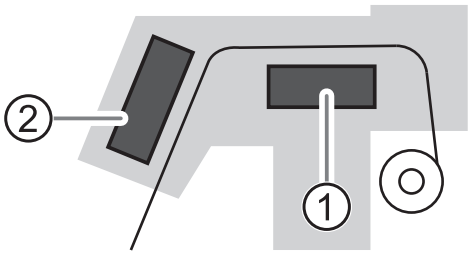
   The home screen appears.

RELATED LINKS

- P. 168 Adjusting the Ink-drying Method

Adjusting the Ink-drying Method

This machine is equipped with functions to improve ink adhesion and also to dry the ink. You can adjust the temperature settings to match the type of media and the printing speed.



①	**[Print Heater]**	This heater is used mainly to improve ink adhesion.
②	**[Dryer]**	This is used to dry the ink.

⚠ WARNING

High Temperature

The areas inside the dryer, under the dryer, and near the extension apron become hot. Exercise caution to avoid burns.

⚠ WARNING

Remove any loaded media or switch off the sub power when printing is not being performed.

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

⚠ WARNING

Never use media that cannot withstand heat.

Doing so may result in fire or the release of toxic gases or may degrade the media.

⚠ WARNING

Never use the platen or dryer for any purpose for which they are not intended, such as to dry clothing.

Doing so may cause overheating, resulting in fire or accident.

IMPORTANT

Use the machine in an environment with an ambient temperature of 20 to 30°C (68 to 86°F) and an ambient humidity of 40 to 60%RH.

If the machine is used at an ambient temperature or humidity that is outside the specified ranges, then depending on the type or width of the media, wrinkling or temperature-caused unevenness may occur. If this happens, try lowering the temperature of the print heater and dryer by about 2°C (3.6°F). To obtain stable printing results, however, use the machine in an environment with an ambient temperature and humidity within the specified ranges.

Setting the Print Heater Temperature

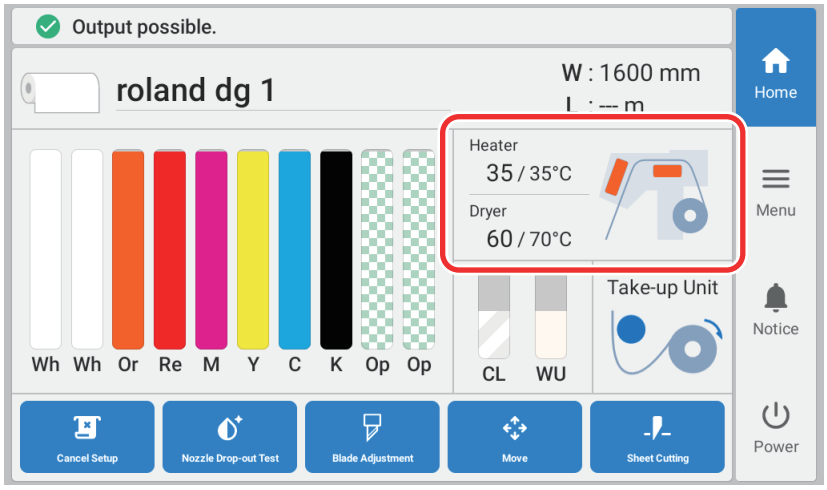
Setting the temperature of the print heater appropriately improves ink adhesion and inhibits smudging.

- With the default settings, simply switching on the power does not make the dryer warm up to the set temperature. On completion of media setup, the temperature rises to the set value.
- Depending on the usage environment, the temperature of the dryer may become higher than the set temperature, but this does not represent a problem.

Procedure

1. **Set up the media.**

2. **Tap the following location on the home screen.**



The [**Heater Temperature**] screen appears.

3. **Tap − or + to set the [Print Heater] temperature.**

If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

MEMO

- Default setting: 35°C (95°F)

4. **Tap [Save] to confirm your entry.**

5. **Tap .**

MEMO

- You can also make this setting in the software RIP. When you have made the setting in the software RIP, the software RIP's setting is used.

The home screen appears.

Setting the Dryer Temperature

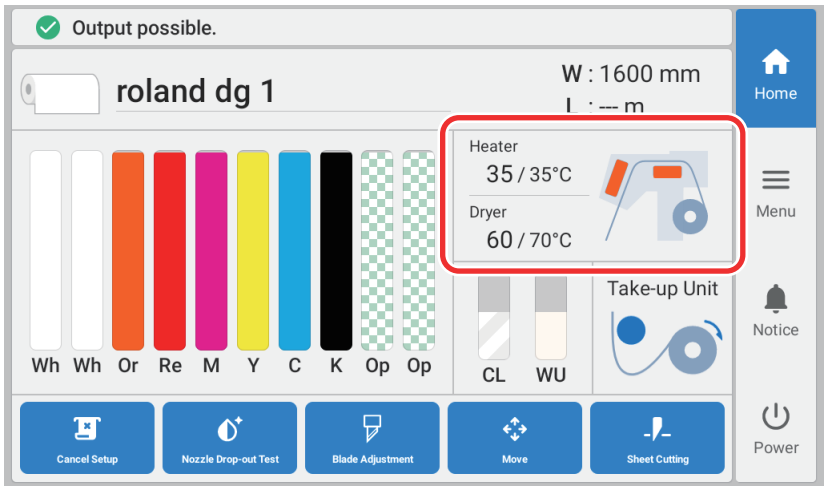
Setting the temperature of the dryer appropriately dries the ink.

- Basically, use the software RIP (color profile) settings for temperature. Even if you use the software RIP settings, if you need to adjust the temperature, such as when there is smudging or poor drying, change the temperature in the machine settings.
- High temperatures make it easier to dry the ink, but temperatures that are too high can damage the media by deforming or deteriorating it. Select settings appropriate for the media.

Procedure

1. **Set up the media.**

2. **Tap the following location on the home screen.**



The [**Heater Temperature**] screen appears.

3. **Tap − or + to set the [Dryer] temperature.**

When ink drying is poor, set the temperature to a higher value. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

MEMO

- Default setting: 94°C (201.2°F)

4. **Tap [Save] to confirm your entry.**

5. **Tap .**

MEMO

- You can also make this setting in the software RIP. When you have made the setting in the software RIP, the software RIP's setting is used.

The home screen appears.

Hints and Tips for Temperature Control

The optimal temperature for the print heater and dryer varies according to such factors as the type of media and the settings of the RIP software.

Relationship between the quality settings of the RIP software and temperature

If smudging or poor drying occurs even after raising the temperature, try setting the printing quality of the RIP software to higher image quality. Conversely, if you want to use a faster print quality, raise the temperature.

Amount of ink

When you change the amount of ink using the settings for your software RIP, adjusting this may yield better results. If problems such as smudging persist even after raising the temperature, try reducing the amount of ink.

Other points to remember

When recommended settings for temperature, printing quality, and other values are given for your media, use the suggested settings.

Setting the Temperature during Standby

Set the print heater temperature used when the main power and the sub power are switched on and the loading of the media is not complete. For the dryer, set the temperature used when the loading of the media is complete.

Procedure

1. **Tap ☰.**
2. **Tap [Preferences]>[Standby Heater Temperature].**
3. **Tap − or + next to [Print Heater] or [Dryer] to set the temperature.**

   When this is set to ⬭ (off), each setting is switched off during standby.

   MEMO

   - Default settings
     [Print Heater]: 25°C (77°F)
     [Dryer]: 60°C (140°F)
4. **Tap [Save] to confirm your entry.**
5. **Tap ⌂.**

   The home screen appears.

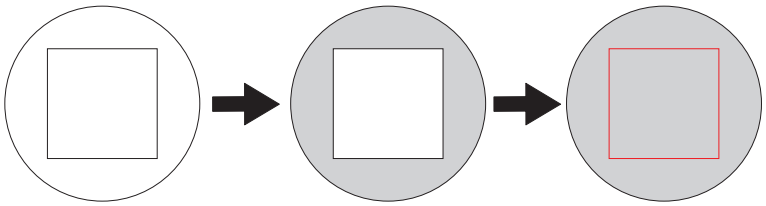
Accurately Adjusting the Cutting Settings

Fine-tuning the Cutting Conditions

You can accurately set items such as the blade force, movement speed, and blade offset to match the nature of the media and the shape to cut. First, perform a cutting test, and then determine and enter the setting values. After entering the setting values, perform a cutting test again and check the results. Repeat the process of performing a cutting test and making the settings several times to find the optimal setting values.

Procedure

1. **Set up the media.**
2. **Close the front cover.**
3. **Tap [Blade Adjustment] on the home screen.**
4. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.
5. **Check the results of the cutting test.**
   If the results are difficult to see, **[Execute]** **[Sheet Cutting]**, separate the media, and then hold it to check the results.



Check item	Result		Setting item	Adjustment
Check the shape.	The cut shape is distorted.		**[Cutting Speed]**	Reduce
Peel off the circle.	The square also peels off.		**[Blade Force]**	Increase
	Some uncut areas remain.		**[Cutting Speed]**	Reduce
Peel off the square.	The blade leaves faint traces on the backing paper.		**[Blade Force]**	No change
	The blade trace is indistinct.			Increase
	The blade trace is too deep and cuts into the backing paper.			Reduce
Check the shape of the square you have peeled off.		The corners are not rounded and do not have "horns."	**[Blade Offset]**	No change
		The corners are rounded.		Increase
		The corners have "horns."		Reduce

6. **Tap [−] or [+] to change the settings.**

Display screen (cutting conditions)	Setting details	Default setting
[**Blade Force**]	Set the force (pressure) of the blade.	50 gf (0.11 lbf)
[**Cutting Speed**]	Set the speed of cutting.	10 cm/s (3.94 in./s)
[**Blade Offset**]	Set the blade offset. Enter the listed offset value for the blade. The offset value for the included blade is 0.250 mm (9.8 mil).	0.250 mm (9.84 mil)
[**Rise Movement Speed**]	Set the blade's up speed during cutting (the speed at which the blade travels when it moves to the next cutting line after cutting one cutting line). If the media comes loose during no-load feed and the blade damages the surface of the media, reduce the speed.	10 cm/s (3.94 in./s)

7. **Tap [Save] to confirm your entry.**

8. **Tap**  .

   The home screen appears.

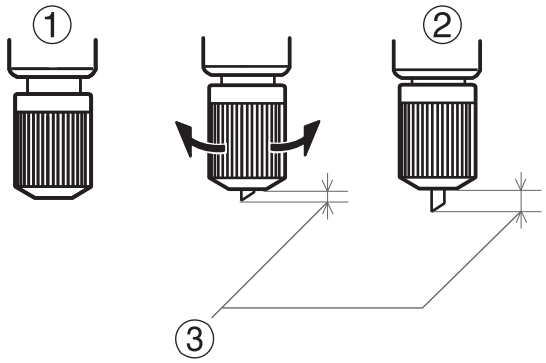
Adjusting the Amount of Blade Extension

Adjustment When Not Cutting the Backing Paper (Normal Cut)

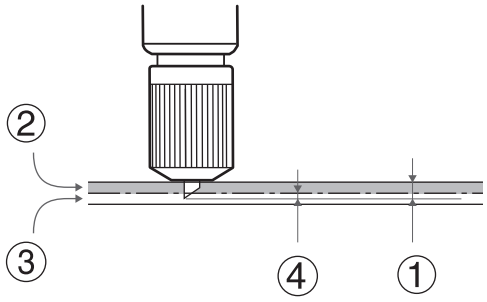
When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin backing paper, you can obtain good results by adjusting the amount of blade extension (③). Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 millimeters, and adjustment for 0.5 millimeters can be made by rotating the cap one full turn.

Note that making the amount of blade extension too small may cause the tip of the blade holder cap to touch the printed surface, soiling and damaging it. It is important to be especially careful about this when you are using media that has poor ink-adhesion properties.

The amount of blade extension (③) is 0 mm (0 in.) (①) at minimum and 2.5 mm (0.09 in.) (②) at maximum.



Set the amount of blade extension (①) to an amount that is the sum of the thickness of the media portion (②) and half (④) the thickness of the backing paper (③).



Adjustment when Cutting the Backing Paper (Perforated Cut)

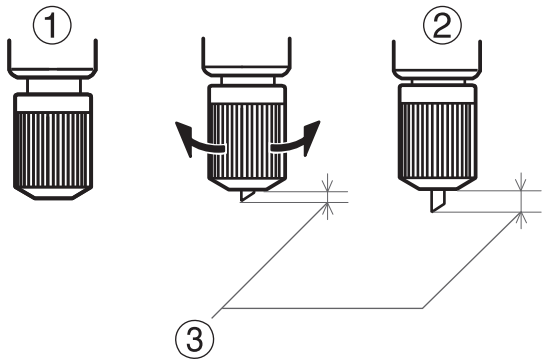
In cases when you want to cut out the printed part, or other cases when you want to cut through the backing paper, use perforated cutting.

IMPORTANT

This function specifies the location to perform perforated cutting in the print data, and performs cutting. This is different from the perforated sheet cutting that cuts to the backing paper at fixed intervals during sheet cutting used when separating the media.

Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 mm (3.9 mil), and adjustment for 0.5 mm (19.7 mil) can be made by rotating the cap one full turn.

The amount of blade extension (③) is 0 mm (0 in.) (①) at minimum and 2.5 mm (0.09 in.) (②) at maximum.



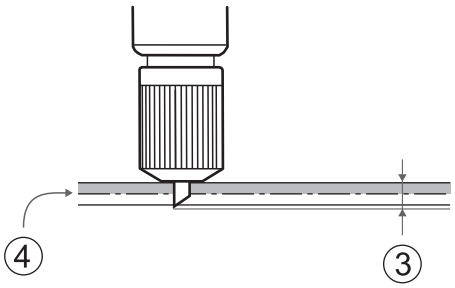
Set the amount of blade extension (③) so that when the cutter pierces the media (④), the blade extends slightly.

For information about the output settings for cutting perforated lines, refer to the documentation for VersaWorks.

https://downloadcenter.rolanddg.com/VersaWorks7

IMPORTANT

Pushing the blade out too far will damage the blade and blade protector and hasten their deterioration, so exercise caution.



Performing Distance Correction during Cutting

This correction is performed when you want to accurately align the lengths of cut lines when cutting. This setting is applied to both cutting only and printing and cutting.

The movement distance of the media changes subtly depending on the media's thickness. This means that the length of a line when cut may differ from the length setting in the data.

Procedure

1. **Set up the media.**
2. **Tap** .
3. **Tap [Media Settings]>[Cutting Settings]>[Cutting Distance Correction].**
4. **Tap** − **or** + **to change the correction values.**

Setting item	Setting details	Default settings
[Correction Value (Feed)]	(correction value of media feed direction)	0.00%
[Correction Value (Scan)]	Correction value of the print head movement direction	0.00%

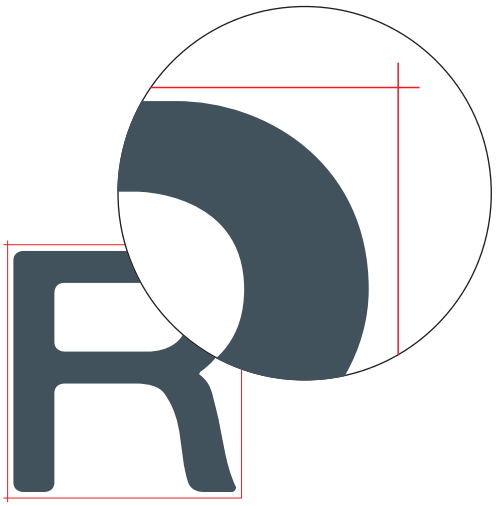
5. **Tap [Save] to confirm your entry.**
6. **Tap** .

   The home screen appears.

Cutting to Make It Possible to Cut Corners Attractively (Over Cut)

Cutting the corners of the border of the cutting line slightly longer makes it possible to cut the corners attractively.

This is effective when using laminated or thick media, or non-resilient media. It also has the effect of making stickers easier to peel off.



Procedure

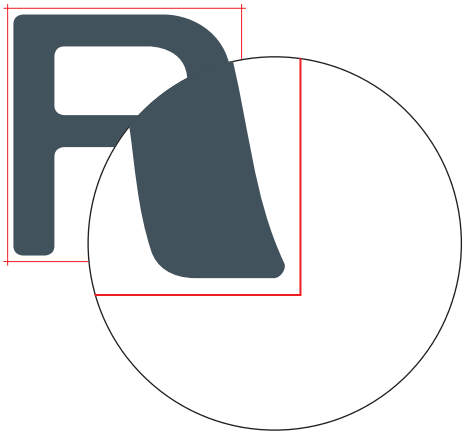
1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Cutting Settings]>[Over Cut].**
4. **Tap [Enable].**

   MEMO

   - Default setting: **[Disable]**
5. **Tap [Save] to confirm your entry.**
6. **Tap** ⌂.

   MEMO

   - The cutting start point is not over cut.



The home screen appears.

Prioritizing the Cutting Settings of This Machine over the Software RIP Settings

This setting is used to prioritize the cutting conditions set on the machine over the software RIP settings. You can also make the settings for the cutting conditions in the software RIP, and normally the software RIP settings are given priority.

Procedure

1. Tap .
2. Tap [Preferences]>[Priority for Cutting Settings].
3. Select [Machine Priority].

   MEMO

   - Default setting: [**Software RIP Priority**]
4. Tap [Save] to confirm your entry.
5. Tap .

   The home screen appears.

Accurately Adjusting the Settings for Printing and Cutting

Correcting the Misalignment of Printing and Cutting

This is a correction method performed when printing followed immediately by cutting yields positioning for printing and cutting that is slightly misaligned.

Print alignment marks, perform detection of the printed marks, and then correct the discrepancy. Subtle misalignment between the printing and cutting positions may occur due to the thickness of the media or the print head height. We recommend that you make corrections to match the media you are using.

Adjusting the Misalignment of the Ink Landing Position

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Printing Settings]>[Media Gap Adjustment].**
4. **Select [Simple Correction (Auto)] and tap [Next].**
5. **Tap [Execute].**
   The test pattern is printed and the media gap is adjusted automatically.
6. **Tap [OK] when the completion screen appears.**
7. **Perform the operations shown below according to the [Result].**
   - If [**Successful**] is displayed on the operation panel, tap ⌂ to go back to the original screen.
   - If [**Failed**] is displayed on the operation panel, manually adjust the media gap.

RELATED LINKS

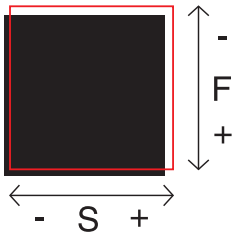
• P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Correcting the Misalignment of Printing and Cutting

Procedure

1. **Tap** ☰.
2. **Tap [Media Settings]>[Cutting Settings]>[Print & Cut Position Adjustment].**
3. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**
   Printing Test 1 is printed and cut.
4. **Check the result of Printing Test 1.**
   Check whether the printing position (shaded part) and the cutting position (red line) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

[F] indicates the feed direction of the media (the feed direction) and [S] indicates the direction of print head movement (the scan direction).



If the printing position and the cutting position are aligned, no corrections are necessary. Proceed to step 10.

If the printing position and the cutting position are not aligned, proceed to the next procedure.

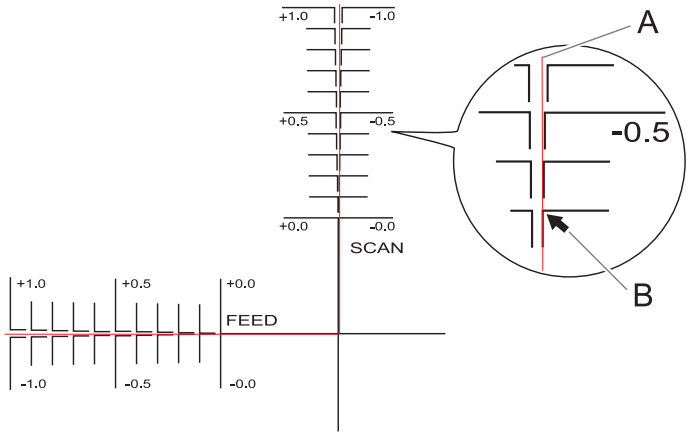
5. **Tap [Execute] next to [Printing Test 2(Correction Values)].**

Printing Test 2 is printed and cut.

6. **Check the correction values from the Printing Test 2 condition.**

The point where the cutting line (A) intersects the correction-value scale (B) is the correction value. In the following figure, the correction value is "–0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



7. **Set the correction values in the feed direction of the media (the feed direction) and the direction of print head movement (the scan direction).**

(1) **Tap [−] or [+] next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap [−] or [+] next to [Correction Value (Scan)] to set the correction value in the direction of print head movement (the scan direction).**

8. **Tap [Save].**

The correction values are saved.

9. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

Printing Test 1 is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, tap [−] or [+] next to [**Correction Value (Feed)**] and [**Correction Value (Scan)**] to fine-tune the printing and cutting position, and then tap [**Save**].

MEMO

Default settings

- [**Correction Value (Feed)**] (correction value of the media feed direction): 0.00 mm (0.00 in.)
- [**Correction Value (Scan)**] (correction value of the print head movement direction): 0.00 mm (0.00 in.)

10. Tap  .

The home screen appears.

Correcting the Misalignment of the Printing and Cutting Positions during Cutting

This method pauses a cutting operation to correct the misalignment of the cutting positions (A) when this misalignment is found during cutting after printing. The correction values set here are applied to the media settings currently set up.



If the printing and cutting positions are misaligned, normally adjust the positions while checking a test pattern.

Procedure

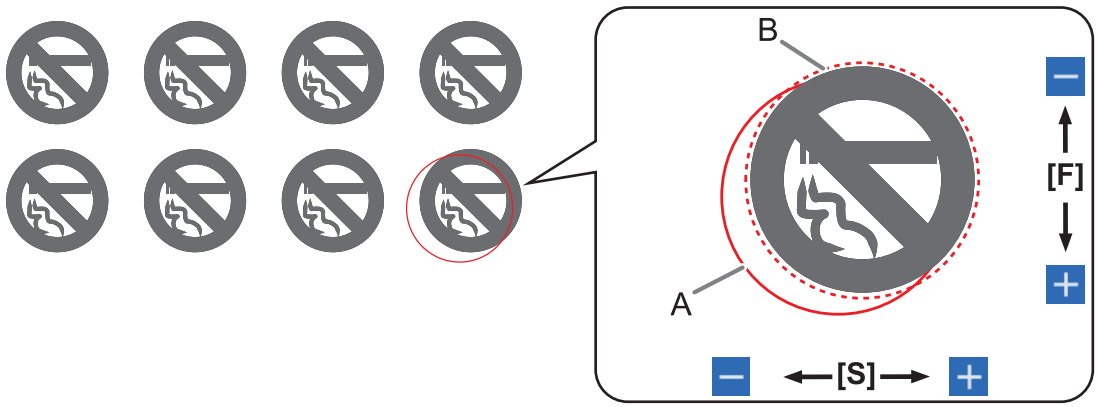
1. **During cutting, tap [Pause].**
   The cutting operation is paused.
2. **Tap ☰.**
3. **Tap [Media Settings]>[Cutting Settings]>[Print & Cut Position Adjustment].**
4. **Determine the correction value for the cutting position.**

MEMO

To decide a correction value

In the following figure, move the solid line (A), representing the current cutting position, to the dashed line (B).

[F] indicates the feed direction of the media (the feed direction) and [S] indicates the direction of print head carriage movement (the scan direction).



- **Media feed direction misaligned in the positive direction**

- Move the cutting position in the negative direction.

- **Print head carriage movement direction (the scan direction) is misaligned in the negative direction.**
  - Move the cutting position in the positive direction.

5. **Set the correction values in the feed direction of the media (the feed direction) and the direction of print-head carriage movement (the scan direction).**

(1) **Tap − or + next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap − or + next to [Correction Value (Scan)] to set the correction value in the direction of print head carriage movement (the scan direction).**

MEMO

- Default settings
  - **[Correction Value (Feed)]** (correction value of the media feed direction): 0.00 mm (0.00 in.)
  - **[Correction Value (Scan)]** (correction value of the print head movement direction): 0.00 mm (0.00 in.)

6. **Tap [Save] to confirm your entry.**

7. **Tap**  .

The home screen appears.

8. **Tap [Resume] to restart the cutting operation.**

Tap [**Cancel Output**] to cancel the cutting operation.

RELATED LINKS

• P. 181 Correcting the Misalignment of Printing and Cutting

Accurately Adjusting the Settings for Cutting with Crop Marks

Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)

Depending on the composition of the media, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using.

In cutting with crop marks, cutting is performed after removing the media after printing. However, with this method, you can make corrections of printing and cutting positions at the same time without removing the media.

Adjusting the Misalignment of the Ink Landing Position

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Printing Settings]>[Media Gap Adjustment].**
4. **Select [Simple Correction (Auto)] and tap [Next].**
5. **Tap [Execute].**
   The test pattern is printed and the media gap is adjusted automatically.
6. **Tap [OK] when the completion screen appears.**
7. **Perform the operations shown below according to the [Result].**
   - If **[Successful]** is displayed on the operation panel, tap ⌂ to go back to the original screen.
   - If **[Failed]** is displayed on the operation panel, manually adjust the media gap.

RELATED LINKS

- P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Correcting the Misalignment of Printing and Cutting with Crop Marks at the Same Time

Use the following procedure to print the crop marks and cut the media, checking for misalignment in the positions. In this section, the crop marks are printed simply, and then the crop marks are read and a cutting test is performed without removing the media. To simulate the actual process—printing crop marks, removing the media, and then performing post-processing such as laminating—before loading the media and checking for cutting position misalignment, turn on **[Separate Test for Printing/Cutting with Crop Marks]**. For more information, refer to Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)(P. 189).

Procedure

1. **Tap** ☰.

2. **Tap [Media Settings]>[Cutting Settings]>[Crop Cut Position Adjustment].**

3. **Tap next to [Separate Test for Printing/Cutting with Crop Marks] to turn it off.**

4. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

Printing Test 1 is printed and cut.

IMPORTANT

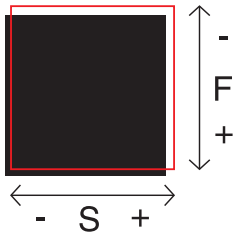
Printing (crop marks) may not be readable with transparent media, silver or other light-reflective media, or black or other dark-colored media, which may prevent cutting from being performed. Try the following if [**Crop Mark Detection Error**] is displayed.

- Are you using transparent media?(P. 291)
- Are You Using Media That Is Likely to Reflect Light?(P. 291)

5. **Check Printing Test 1.**

Check whether the printing position (shaded part) and the cutting position (red line) are aligned. An example of the printing position and the cutting position being misaligned is shown in the following figure.

[**F**] indicates the feed direction of the media (the feed direction) and [**S**] indicates the direction of print head carriage movement (the scan direction).



If the printing position and the cutting position are aligned, no corrections are necessary. Proceed to step 11.

If the printing position and the cutting position are not aligned, proceed to the next procedure.

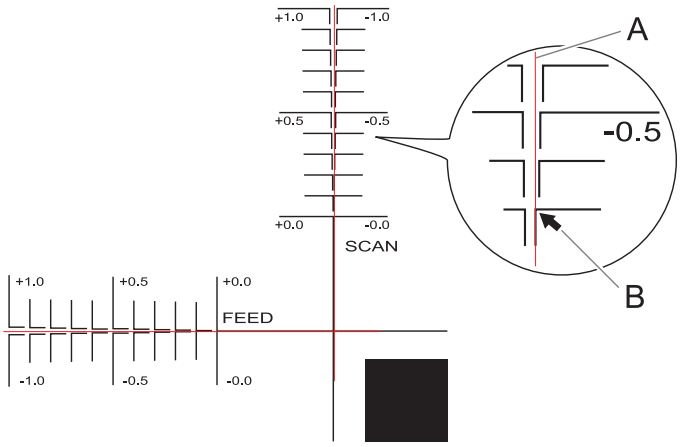
6. **Tap [Execute] next to [Printing Test 2(Correction Values)].**

Printing Test 2 is printed and cut.

7. **Check the correction values from the Printing Test 2 condition.**

The point where the cutting line (A) intersects the correction-value scale (B) is the correction value. In the following figure, the correction value is "−0.3."

Check the media feed direction (the feed direction) and the direction of print head movement (the scan direction).



8. **Set the correction values in the feed direction of the media (the feed direction) and the direction of print head movement (the scan direction).**

(1) **Tap − or + next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap − or + next to [Correction Value (Scan)] to set the correction value in the direction of print head movement (the scan direction).**

9. **Tap [Save].**

The correction values are saved.

10. **Tap [Execute] next to [Printing Test 1(Misalignment Check)].**

Printing Test 1 is printed and cut. If the printing and cutting lines are aligned, adjustment is complete. If further adjustment is needed, tap − or + next to [**Correction Value (Feed)**] and [**Correction Value (Scan)**] to fine-tune the printing and cutting position, and then tap [**Save**].

MEMO

- Default settings
  [**Correction Value (Feed)**] (correction value of the media feed direction): 0.00 mm (0.00 in.)
  [**Correction Value (Scan)**] (correction value of the print head movement direction): 0.00 mm (0.00 in.)
- Depending on the changes in the condition of media caused by laminating and the loading position of the media before cutting, the positioning of cutting may be misaligned. In such cases, correct the misalignment of printing and cutting with crop marks.

11. **Tap .**

The home screen appears.

RELATED LINKS

• P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Due to changes in the thickness of media caused by laminating and misalignment of the loading position of the media before and after it is loaded/removed, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using and its condition.

In this test, so as to create the same conditions as the actual operation, print only the crop marks, remove the media, load the media again, and then cut the media.

MEMO

- The required pre-print margin for [**Separate Test for Printing/Cutting with Crop Marks**] is at least 75 mm (2.96 in.), and the required post-print margin is at least 130 mm (5.12 in.).

Adjusting the Misalignment of the Ink Landing Position

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Media Settings]>[Printing Settings]>[Media Gap Adjustment].**
4. **Select [Simple Correction (Auto)] and tap [Next].**
5. **Tap [Execute].**
   The test pattern is printed and the media gap is adjusted automatically.
6. **Tap [OK] when the completion screen appears.**
7. **Perform the operations shown below according to the [Result].**
   - If [**Successful**] is displayed on the operation panel, tap ⌂ to go back to the original screen.
   - If [**Failed**] is displayed on the operation panel, manually adjust the media gap.

RELATED LINKS

• P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Printing Only the Crop Marks

Procedure

1. **Tap** ☰.
2. **Tap [Media Settings]>[Cutting Settings]>[Crop Cut Position Adjustment].**
3. **Tap** ⬭ **next to [Separate Test for Printing/Cutting with Crop Marks] to turn it on.**

4. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
   The crop marks are printed. When printing is finished, you will return to the original screen.

5. **After the ink dries, remove the media.**
   Use the following procedure to separate the media.
   (1) **Close the front cover.**
   (2) **Tap [Change] next to [Output Start Location].**
   (3) **Tap ⌄ to feed the media until there is a margin of 130 mm (5.12 in.) or more after the printed crop marks.**
   (4) **Tap ← to go back to the previous screen.**
   (5) **Tap [Execute] next to [Sheet Cutting].**
   (6) **Tap [Yes] on the confirmation screen.**

6. **Complete operations before cutting output for normal cutting with crop marks, such as laminating.**

RELATED LINKS

- P. 106 Separating the Media

Performing a Cutting Test

Procedure

1. **Set up the media for which operations before cutting output, such as lamination, is complete.**

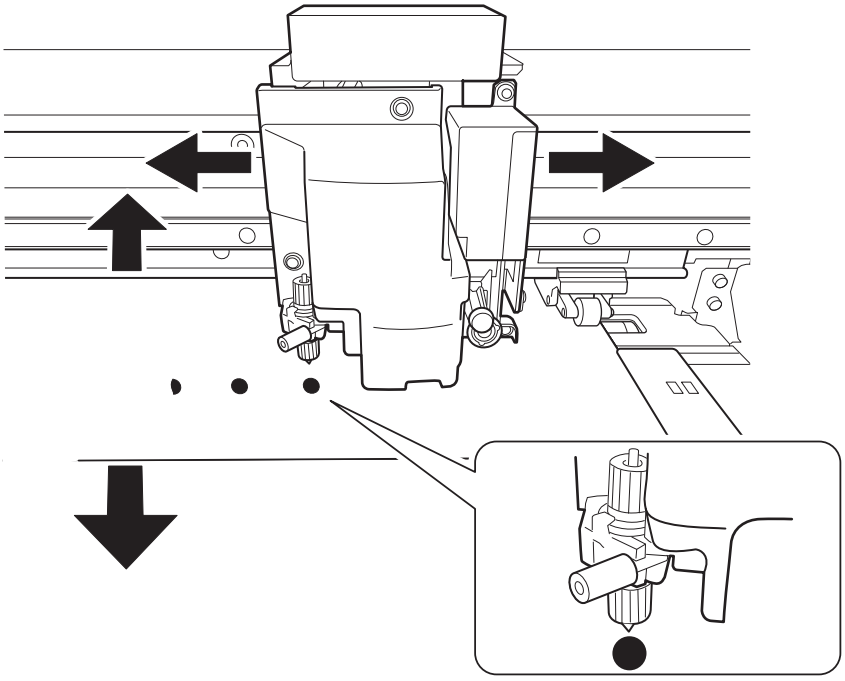
2. **Tap ☰.**

3. **Tap [Media Settings]>[Cutting Settings]>[Crop Cut Position Adjustment].**

4. **Tap ⬭ next to [Separate Test for Printing/Cutting with Crop Marks] to turn it on.**

5. **Tap [Execute] next to [Cutting Test].**
   The [**Move the blade over a crop mark.**] screen appears.

6. **Tap ⌃, ⌄, ‹, or › to move the center of the blade over the crop marks to use in the cutting test.**
   The center of the blade should only be over the crop marks, and does not need to be aligned with the center of the crop marks.



7. **Tap [Execute].**

The cutting test starts.

IMPORTANT

Printing (crop marks) may not be readable with transparent media, silver or other light-reflective media, or black or other dark-colored media, which may prevent cutting from being performed. Try the following if [**Crop Mark Detection Error**] is displayed.

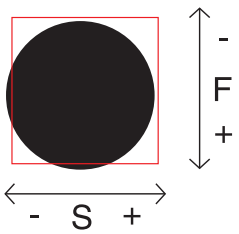
- Are you using transparent media?(P. 291)
- Are You Using Media That Is Likely to Reflect Light?(P. 291)

Setting the Correction Values

Procedure

1. **View the results of the cutting test to determine the correction values.**

Check whether the crop mark (shaded part) and the cutting position (red line) are aligned. An example of the crop mark and the cutting position being misaligned is shown in the following figure.



- If the test printed crop marks are inside the cutting line, correction is not necessary. Proceed to step 5.
- If the test printed crop marks are extending beyond the cutting line, correction is necessary.

[F] indicates the feed direction of the media (the feed direction) and [S] indicates the direction of print head movement (the scan direction). ("F," "S," "+," "−," and the arrows are not displayed on the actual test pattern.)

MEMO

Determine the values so as to correct the misalignment of the cutting position. In the case of the above figure, feed direction [F] is misaligned in a negative direction and scan direction [S] in a positive direction. Therefore, set the correction values for the feed direction [F] to positive values and the scan direction [S] to negative values. Measure the actual misalignment amount when determining the value.

2. Set the correction values in the feed direction of the media (the feed direction) and the direction of print head movement (the scan direction).

(1) **Tap − or + next to [Correction Value (Feed)] to set the correction value in the feed direction of the media (the feed direction).**

(2) **Tap − or + next to [Correction Value (Scan)] to set the correction value in the direction of print head movement (the scan direction).**

MEMO

- Default settings
  [**Correction Value (Feed)**] (correction value of the media feed direction): 0.00 mm (0.00 in.)
  [**Correction Value (Scan)**] (correction value of the print head movement direction): 0.00 mm (0.00 in.)

3. Tap [Save].

4. Perform steps 5 to 7 of Performing a Cutting Test(P. 190) again to check whether the correction was successful.

- If the test printed crop marks are inside the cutting line, correction is complete.
- If the test printed crop marks are extending beyond the cutting line, redo the correction.

5. Tap .

The home screen appears.

MEMO

- You can also make corrections of printing and cutting positions at the same time without removing the media.

RELATED LINKS

• P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Correcting the Reading Sensor

Depending on the characteristics of the media, such as reflectivity and colors, the machine may not be able to read the crop marks. In such cases, correct the sensor for reading crop marks. If you are not cutting with crop marks, operation is not affected even if a failure is displayed.

Procedure

1. **Set up the media.**
2. **Tap** .
3. **Tap [Media Settings]>[Other Media Settings]>[Multi Sensor Adjustment].**
4. **Tap [Execute].**

   The [**Adjustment Result**] screen appears.

   - [**Successful**]:

     Tap to go back to the original screen.
   - [**Failed**]:

     Check the following items.

Cause	Countermeasures
The lighting in the room where the printer is installed or vicinity of the printer is too bright.	Adjust the lighting in the room.
Correction failed for some reason.	Perform the adjustment again.
Crop marks cannot be recognized due to the characteristics (reflectivity and colors) of the media.	To cut with crop marks, change the media.
There is ink on the multi sensor because, for example, the media strikes it immediately after printing.	Contact your authorized dealer.

Optimizing Work Efficiency

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Managing the Media Settings

When you set up media, register the settings that are appropriate for the media with any name. You can delete registered media or check the settings on a list here. You can also duplicate registered media and register it as new media.

Changing the Media Settings

Use the following procedure to change the media settings. These settings can only be changed for the media being set up.

Procedure

1. **Set up the media.**
2. **Tap**  .
3. **Tap [Media Settings]>[List of Media Settings].**
4. **Tap the setting to change to move to the screen for editing this setting.**

   The media settings that can be changed are as follows.

Menu item	Reference page
[Print Head Height]	P. 160 Changing the Print Head Height
[Feed Correction]	P. 156 Manual Adjustment: Reducing Horizontal Bands (Feed Correction)
[Media Gap Adjustment]	P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)
[Blade Adjustment]	P. 173 Fine-tuning the Cutting Conditions
[Print & Cut Position Adjustment]	P. 181 Correcting the Misalignment of Printing and Cutting
[Crop Cut Position Adjustment]	P. 186 Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks) P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)
[Cutting Distance Correction]	P. 177 Performing Distance Correction during Cutting
[Over Cut]	P. 178 Cutting to Make It Possible to Cut Corners Attractively (Over Cut)
[Heater Temperature]	P. 169 Setting the Print Heater Temperature P. 170 Setting the Dryer Temperature
[Pullback After Printing]	P. 164 Using Heat-resistant Media with Minimal Waste
[Multi Sensor Adjustment]	Adjusts the sensor used to make corrections to the optimal condition.

Menu item	Reference page
[Drying Time Per Scan]	Sets the drying time per scan operation of the print-head carriage.
[Media Suction Force]	P. 162 Using Media That Wrinkles Easily/Does Not Move Smoothly
[Media Sticking Prevention]	P. 163 Using Sticky Media
[Middle Pinch Auto Raise/Lower]	P. 167 Use Middle Pinch Rollers When Pulling Back or Feeding Media

5. **If you have changed a setting, tap [Save].**

6. **Tap**  **.**

The home screen appears.

Checking the Registered Media Settings

Procedure

1. Tap .

2. **Tap [Media Management].**
   The registered media are displayed in a list.

3. **Tap the media whose setting details you will check.**

4. **Tap [List of Media Settings].**
   The registered media setting values are displayed in a list.

Menu item	Reference page
[Print Head Height]	P. 160 Changing the Print Head Height
[Feed Correction]	P. 156 Manual Adjustment: Reducing Horizontal Bands (Feed Correction)
[Media Gap Adjustment]	P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)
[Blade Adjustment]	P. 173 Fine-tuning the Cutting Conditions
[Print & Cut Position Adjustment]	P. 181 Correcting the Misalignment of Printing and Cutting
[Crop Cut Position Adjustment]	P. 186 Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks) P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)
[Cutting Distance Correction]	P. 177 Performing Distance Correction during Cutting
[Over Cut]	P. 178 Cutting to Make It Possible to Cut Corners Attractively (Over Cut)
[Heater Temperature]	P. 169 Setting the Print Heater Temperature P. 170 Setting the Dryer Temperature
[Pullback After Printing]	P. 164 Using Heat-resistant Media with Minimal Waste
[Multi Sensor Adjustment]	Adjusts the sensor used to make corrections to the optimal condition.
[Drying Time Per Scan]	Sets the drying time per scan operation of the print-head carriage.
[Media Suction Force]	P. 162 Using Media That Wrinkles Easily/Does Not Move Smoothly
[Media Sticking Prevention]	P. 163 Using Sticky Media
[Middle Pinch Auto Raise/Lower]	P. 167 Use Middle Pinch Rollers When Pulling Back or Feeding Media

5. Tap  .
   The home screen appears.

Changing the Media Name

Procedure

1. Tap  .
2. Tap [Media Management].
   The registered media are displayed in a list.
3. Tap the media whose name you want to change.
4. Tap  .
5. Tap the input field and enter the media name.
6. Tap [OK] to confirm your entry.
7. Tap  .
   The home screen appears.

Duplicating Media Settings

Use the following procedure to duplicate existing media settings.

Procedure

1. Tap  .
2. **Tap [Media Management].**
   The registered media are displayed in a list.
3. **Tap the media to duplicate.**
4. **Select and tap the appropriate duplication method.**
   If the duplicated media can be printed, tap [**Duplicate Media**]. If the duplicated media is only to be cut (it cannot or will not be printed), tap [**Duplicate as Media for Cutting**].
   A screen for entering the name of the duplicated media appears. To create this name, [**COPY**] is added at the start of the name of the media being duplicated.
5. **Enter the media name and tap [OK].**
6. Tap  .
   The home screen appears.

Deleting Media Settings

Use the following procedure to delete existing media settings.

MEMO

This operation cannot be performed on the media being set up. To perform this operation, first cancel media setup.

Procedure

1. **Tap** ☰.
2. **Tap [Media Management].**
   The registered media are displayed in a list.
3. **Tap the media to be deleted.**
4. **Tap [Delete Media].**
5. **Tap [Yes] when the confirmation screen appears.**
   The media is deleted, and you are returned to the screen listing the registered media.
6. **Tap** ⌂.
   The home screen appears.

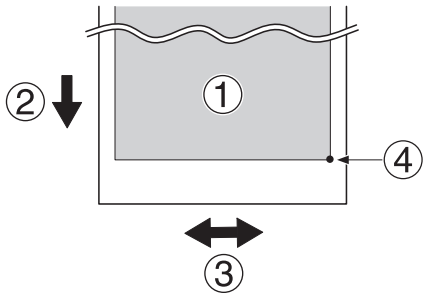
Adjusting the Output-start Location

Setting the Base Point

Set the base point in order to determine the area on the loaded media in which to print (the output area).

The base point (④) indicates the right edge of the output area (①). (②: Media feed direction, ③: print-head carriage movement direction) You can print without setting the base point, but setting the output area enables you to use media without being wasteful and also to print on the targeted location.

Set the base point for each individual page. When the printing of one page finishes, the base point returns to its default value.



IMPORTANT

When the media is set up, the dryer temperature rises to the standby temperature (Setting the Temperature during Standby(P. 172)). For some media, parts exposed to the dryer in the process of setting the base point may suffer damage such as deformation or deterioration, which may result in poor printing quality, so leave these parts in the margin and do not print on them. In the unlikely event that you use that area, check that the media is not wrinkled or deformed before printing, and that the print quality is not degraded after printing.

MEMO

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

Procedure

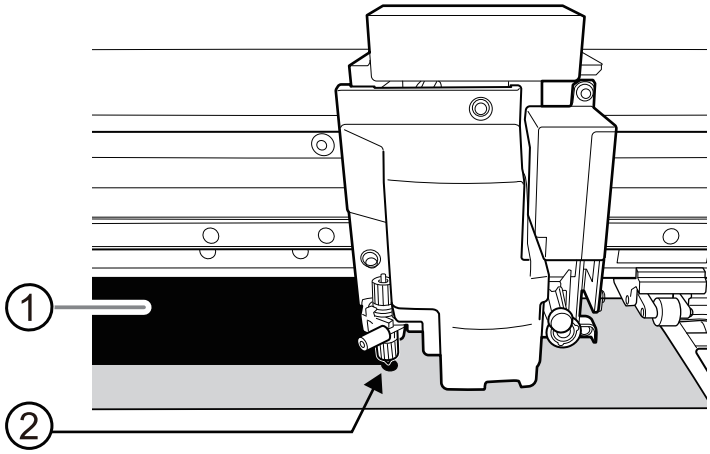
1. **Tap** .

2. **Tap [Move].**

   The [Move] screen appears.

3. **Tap , , , or to move the center of the blade to the position to set as the base point.**

   Tap or to move the media. Tap or to move the cutting carriage.



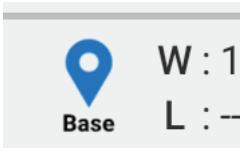
- ①: Output area
- ②: Base point (right edge of the output area)

4. **Once the position has been decided, tap [Set Base Point Here] to confirm it.**

The base point position is updated, and you are returned to the home screen.

MEMO

When the base point position is updated, the following icon is displayed on the home screen.



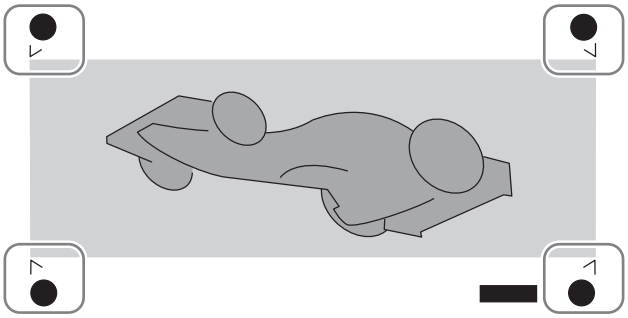
Printing with Crop Marks

Use your RIP software to configure the settings for printing crop marks. For information on how to configure the settings, refer to the documentation for the RIP software you are using.

IMPORTANT

Alignment marks and symbols drawn using graphics software cannot be used as crop marks.

When using VersaWorks, the crop marks are printed as shown in the figure.



Managing VersaWorks Jobs

Outputting a Job

From the operation panel, specify VersaWorks and the queue folder via Roland DG Connect Hub, and print the job.

First, check the following items:

- Roland DG Connect Hub version 3.2.0 or later is installed on the computer where VersaWorks is installed.
- The VersaWorks version is 7.3.0 or later.
- Roland DG Connect Hub has started, and you have signed in.
- VersaWorks is running.
- The printer is ready to print (media has been set up).

Procedure

1. **Tap** .
2. **Tap [Job Management]>[Direct Printing].**
   The VersaWorks list (VersaWorks nicknames that were set with Connect Hub) is displayed.
3. **Tap the desired VersaWorks.**
   A list of the queue folders is displayed.
4. **Tap the desired queue folder.**
   The job list is displayed.

   MEMO

   Tap to update the job and get the latest job status information.
5. **Tap the job you want to print.**
6. **Tap [Execute].**
   The job is printed.

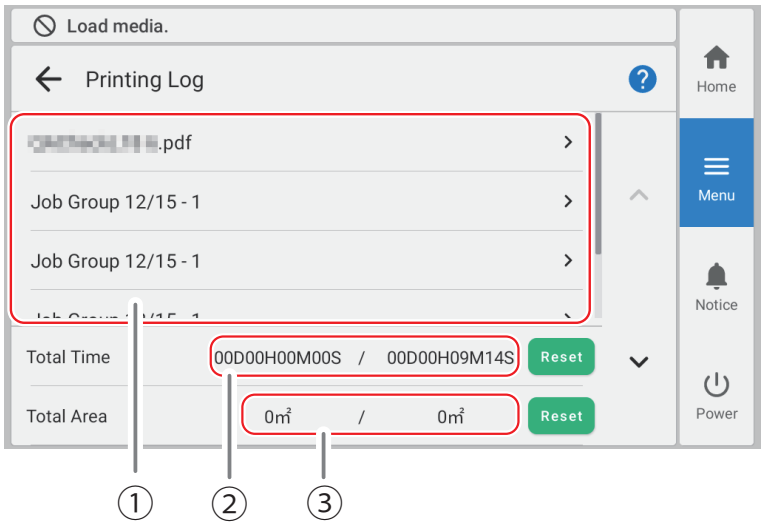
Displaying the Printing Log

Displays [**Printing Log**].
The [**Job Properties**] for each job and the [**Total Time**] and [**Total Area**] for all jobs, can be checked.
First check that VersaWorks is version 7.5.0 or later.

Procedure

1. **Tap ☰.**

2. **Tap [Job Management]>[Printing Log].**
   The following is displayed.



①	[**Printing Log**]
②	[**Total Time**] */* is displayed. The left side indicates the trip [**Total Time**], and the right side indicates the total [**Total Time**]. • Trip [**Total Time**] Displays the total printing hours for any period of time, such as daily or weekly. To reset to 0, tap [**Reset**]. Reset when you wish to start measurement. • Total [**Total Time**] Displays the total cumulative printing time. This function cannot be reset.
③	[**Total Area**] */* is displayed. The left side indicates the trip [**Total Area**], and the right side indicates the total [**Total Area**]. • Trip [**Total Area**] Displays the total printing area for any period of time, such as daily or weekly. To reset to 0, tap [**Reset**]. Reset when you wish to start measurement. • Total [**Total Area**] Displays the total cumulative printing area. This function cannot be reset.

3. **To check the [Job Properties] for a specific job, select the job.**
   The [**Job Properties**] appears.

4. **Tap ⌂ to return to the home screen.**

Other Useful Functions

Using the Print Light (Interior Light)

You can select the status of the light that shines on the platen.

Procedure

1. Tap .
2. Tap [Preferences]>[Print Light].
3. Select the status of the print light.

[Auto]*1	The light is turned on/off automatically according to the status of the printer.
[On]	The light is on at all times.
[Off]	The light is off at all times.

*1 Default settings

4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

Performing Printing Tests Arranged Horizontally

When performing printing tests successively, you can select [**Feed**] (vertical printing) or [**Scan**] (horizontal printing) as the print position for the second and later tests in comparison to the first test.

Procedure

1. Tap .
2. Tap [Preferences]>[Printing Test Position].
3. Select [Scan].

   MEMO

   Default setting: [**Feed**]
4. Tap [Save] to confirm your entry.
5. Tap .

   The home screen appears.

Displaying the 2D Code for Viewing the Manual on the Operation Panel

Displays the 2D code for viewing the manual using a smartphone or other mobile terminal.

Procedure

1. **Tap** .
2. **Tap [System Information]>[2D Codes]>[User's Manual].**
   The 2D code is displayed.
3. **Scan the 2D code with the smartphone.**
   The manual can be viewed.
4. **Tap [OK].**
5. **Tap to return to the home screen.**

Displaying the Roland DG Connect 2D Code on the Operation Panel

Displays the 2D code for accessing [**Roland DG Connect**] using a smartphone or other mobile terminal.

Procedure

1. Tap ☰.
2. Tap [System Information]>[2D Codes]>[Roland DG Connect].
   The 2D code is displayed.
3. Scan the 2D code with the smartphone.
   [**Roland DG Connect**] opens.
4. Tap [OK].
5. Tap ⌂ to return to the home screen.

Optimizing Operation Management

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Managing the Operations Appropriately and Efficiently

Sounding a Buzzer to Notify the User of the End of Printing

Follow the procedure below to configure the settings so that the user is notified of the end of printing with a buzzer.

Procedure

1. Tap .
2. Tap [Preferences]>[Sound at End of Printing].
3. Tap [On] to select it.
4. Tap [Save] to confirm your entry.
5. Tap to return to the home screen.

MEMO

- Default setting: [Off]

Setting the Current Date/Time and Using It for Maintenance

Use the following procedure to set the current date and time. By setting this, when you perform a printing test the printing test date and time will be printed alongside the printed test pattern. Notifications prompting you to perform maintenance will also be displayed at appropriate times.

Procedure

1. Tap .
2. Tap [System Information]>[Date/Time].
3. Tap − or + to set the date and time.
4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

Checking the Remaining Media

You can display how much of the media in use is left. By setting the amount of media currently remaining at the start, the amount remaining will be constantly displayed on the screen until it reaches zero.

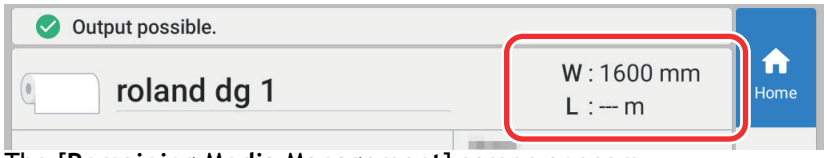
Because the amount of media remaining is not updated automatically when you change the media, redo the setting whenever you change the media.

MEMO

The remaining amount that is displayed is only an estimate. The accuracy of the remaining amount is not guaranteed.

Procedure

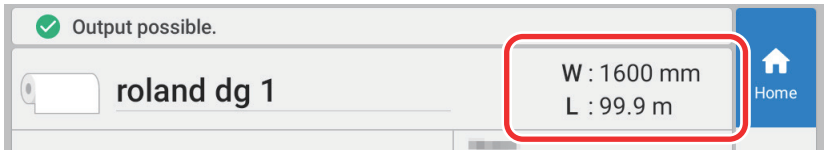
1. **Set up the media.**
2. **Tap the following location on the home screen.**



The [**Remaining Media Management**] screen appears.

3. **Tap − or + to enter the length of the remaining media.**
4. **Tap [Save] to confirm your entry.**
5. **Tap .**

The remaining media is displayed.



Printing the Amount of Remaining Media

Print the amount of remaining media, which is displayed on the home screen.

Use this when you want to make a record of the remaining length of the media currently in use. Printing the amount of media remaining before you change the media enables you to refer to the printed record and use the value to make the setting for the remaining amount the next time you use the media.

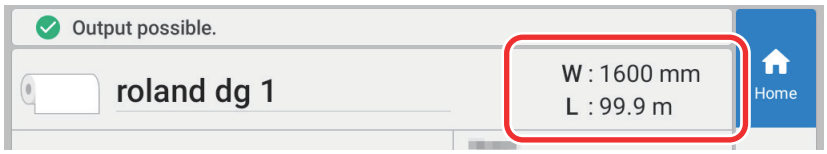
Note, however, that if you continue printing of the test pattern, the printing operation will start on top of the portion where the amount of remaining media is printed. If you want to perform a printing test, separate the media before starting the printing operation.

Procedure

1. **Check that the amount of remaining media is displayed on the home screen.**

   If it is not, set the amount of remaining media by referring to Checking the Remaining Media(P. 213).

2. **Tap the following location on the home screen.**



The [**Remaining Media Management**] screen appears.

3. **Tap [Printing Remaining Media Amount]>[Execute].**

   The amount of remaining media is printed.

Showing/Hiding Notifications

Use the following procedure to show/hide the following notifications, which prompt operators to perform proper operations.

Procedure

1. Tap .
2. Tap [Preferences]>[Notifications On/Off].
3. Tap to show/hide the notifications.

	Displayed notification	Description
[Ink Mixing Notification]*1	[The time for ink mixing has arrived.]	Prompts you to mix the ink cartridge to prevent ink precipitation. When this is on, a message recommending mixing the ink is displayed once a day.
[Middle Pinch Roller Placement Notification]*2	[Placement of the middle pinch rollers has not been performed. Place all middle pinch rollers in the correct positions.]	Prompts you to use the middle pinch rollers, improving media feeding accuracy and preventing the media from coming loose. When this is on, the message appears when the middle pinch rollers have not been placed.
[Media Clamp Placement Notification]*3	[Install the media clamps correctly.]	Prompts you to correctly place the media clamps to prevent the media from coming loose. When turned on, this message appears when the media clamps are not placed at the edges of the media.
	[Media clamps could not be detected.]	This message appears when the media clamps cannot be detected because they are hidden by the media or are dirty with, for example, ink.

*1 Default setting: [Off]
*2 Default setting: [On]
*3 Default setting: [On]

4. Tap [Save] to confirm your entry.
5. Tap .

   The home screen appears.

MEMO

Default settings:

- [Ink Mixing Notification]: On
- [Middle Pinch Roller Placement Notification]: On
- [Media Clamp Placement Notification]: On

Setting the Activation Interval for Sleep Mode (Power-saving Feature)

This setting is used to set how long it should take until the machine goes into sleep mode (the state in which the power-saving feature is working) when no output data is received and no operations are performed for a continued length of time.

Procedure

1. Tap ☰.
2. Tap [Preferences]>[Sleep Time].
3. Tap − or + to set the time.

   MEMO

   - Default setting: [30 min.]
4. Tap [Save] to confirm your entry.
5. Tap ⌂.

   The home screen appears.

Setting the Duration of the Warning Beep

This feature sets the duration of the warning beep that sounds when, for example, an error occurs. If you turn this timer off, the warning beep will continue until the cause of the problem is eliminated.

Procedure

1. Tap ☰.
2. Tap [Preferences]>[Stopping the Warning Beep].
3. Tap ⬭ to switch the setting.
4. Tap − or + to set the time.

   MEMO

   - Default setting: [Off]
5. Tap [Save] to confirm your entry.
6. Tap ⌂.

   The home screen appears.

Managing the Basic Settings of the Printer

Changing the Display Language

This feature sets the language displayed on the display screen of the operation panel.

Procedure

1. **Tap ☰.**
2. **Tap [System Information]>[Language].**
3. **Tap [Language].**
4. **Select the display language.**

   MEMO

   Default setting
   - **[Language]**: ENGLISH
5. **Tap [OK].**
6. **Tap [Save] to confirm your entry.**
   The display language is changed, and you are returned to the home screen.

Changing the Units of Measurement

Use the following procedure to set the units of measurement displayed on the display screen of the operation panel.

Procedure

1. Tap .
2. Tap [System Information]>[Units].
3. Tap [Length].
4. Select the unit.

   MEMO

   - Default setting
     - [Length]: mm
5. Tap [Save] to confirm your entry.
6. Tap [Temperature].
7. Select the unit.

   MEMO

   - Default setting
     - [Temperature]: ˚C
8. Tap [Save] to confirm your entry.
9. Tap .

   The home screen appears.

Viewing Printer Information

This is a method for viewing information of this machine, such as serial number and ink type.

Procedure

1. Tap .

2. **Tap [System Information]>[Machine Information].**
   You can check the following information:
   - **[Model]**: Model name
   - **[Serial Number]**: Serial number
   - **[Ink Type]**: Ink type
   - **[Firmware Version]**
   - **[MAC Address]**

3. Tap .
   The home screen appears.

Viewing Network Information

Use the following procedure to view network information such as the IP address and default gateway.

MEMO

- For details on how to set up a network, see the "Setup Guide."

Procedure

1. Tap .

2. **Tap [System Information]>[Network].**
   You can check the following information:
   - **[Obtain IP Address Automatically]**: Turns the automatic obtaining of IP addresses via DHCP on/off. When this is off, tap to change the following settings.
   - **[IP Address]**
   - **[Subnet Mask]**
   - **[Default Gateway]**

3. Tap .
   The home screen appears.

RELATED LINKS

- AG-640 Setup Guide

Changing the Operation Panel Color Scheme

Selects the color scheme of the operation panel screen.

Procedure

1. Tap .
2. Tap [System Information]>[Appearance].
3. From the displayed options, tap the color scheme to set.
4. Tap [Save] to confirm your entry.
   The home screen appears.

Adjusting the Brightness of the Operation Panel

Procedure

1. Tap .
2. Tap [System Information]>[Screen Brightness].
3. Tap − or + to adjust the brightness.
   The larger the value, the brighter the screen.

   MEMO

   - Default setting: [100 %]
4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

Turning Off Operation Panel Sounds

Use the following procedure to turn off the sound when you tap the operation panel.

Procedure

1. Tap .
2. Tap [System Information]>[Screen Operation Sound].
3. Tap [Off].
   The operation sound turns off.

   MEMO
   - Default setting: [On]
4. Tap [Save] to confirm your entry.
5. Tap .
   The home screen appears.

Returning All Settings to Factory Defaults

This menu returns all settings to the same as their factory defaults.
The settings for [Language] and [Units] are not returned to their factory default values.

Procedure

1. Tap .
2. Tap [Preferences]>[Reset to Factory Defaults].
3. Tap [Reset].
4. Tap [Yes] on the confirmation screen.
5. Tap .
   The home screen appears.

Maintenance

Introduction

Important Notes on Handling and Use 224
Printer 224
Ink Cartridges 225
Basic Maintenance Knowledge 226
Types and Timing of Maintenance 226
Automatic Maintenance Feature and Notes 228
Measures When the Printer Is Not in Use for a Prolonged Period 229

Important Notes on Handling and Use

Printer

- **This machine is a precision device.**
  - Never subject the machine to impacts or excessive force.
  - Never needlessly put your hand or fingers inside the cover, the ink slots (the ink-cartridge ports), or other internal areas of the machine.
- **Install the machine in a suitable location.**
  - Install the machine in a location having the specified temperature and relative humidity.
  - Install the machine in a quiet, stable location offering good operating conditions.
- **Leave the printer's main power switched on 24 hours a day.**
  - Automatic maintenance may be performed even during standby. Never switch off the main power.
- **The print heads are delicate.**
  - Do not touch them needlessly. Only touch them to perform the work described in this manual. Furthermore, to prevent media from scraping the print heads due to (for example) media coming loose during transportation, exercise caution when loading media, when setting the print head height, and when performing similar work. Failure to handle with care may cause damage.
  - The print heads may be damaged if allowed to dry out. The machine prevents desiccation automatically, but improper operation may render this feature inoperative. Operate properly, as specified in this manual.
  - Never leave the machine with an ink cartridge removed. Remaining ink in the printer may harden and clog the print heads.
  - Depending on the situation, the print heads require various types of cleaning. Read this manual thoroughly and perform the appropriate maintenance at the appropriate times.
  - The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use.
- **Keep the operation panel clean.**
  - If dirt or ink adheres to the operation panel, immediately wipe it clean with dry, soft fabric.
- **This machine becomes hot.**
  - Never cover the ventilation holes with cloth, tape, or anything else.
  - If the machine is used for a long time, the temperature in the room will also become hot. In order to maintain the specified temperature, use ventilation or air conditioning to avoid overheating the room.

Ink Cartridges

⚠ WARNING

Never store ink, cleaning liquid, or discharged fluid in any of the following locations.

- Any location exposed to open flame
- 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

Fire may be a danger. Accidental ingestion by children may pose a health hazard.

- **The ink pouches inside ink cartridges come in various types.**
  - Use a type that is compatible with the printer. Also, be sure to use only genuine items from Roland DG Corporation.
- **Never subject ink cartridges and ink pouches to impacts and never attempt to disassemble ink pouches.**
  - Never drop the ink cartridges and ink pouches or shake them forcefully. The impact may rupture the internal pouches and cause the ink to leak.
  - Never attempt to disassemble ink pouches.
  - Never attempt to refill the ink in ink pouches.
  - If ink gets on your hands or clothing, wash it off as soon as possible. Removal may become difficult if you leave such adhered ink untreated.
- **Storage**
  - Use up the ink before the expiration date printed on the ink pouch.
  - Store ink pouches in a location that is not subject to direct sunlight or strong illumination.
  - Store ink pouches unopened in a well-ventilated location at a temperature of 5°C to 30°C (41°F to 86°F).

Basic Maintenance Knowledge

Types and Timing of Maintenance

To use this machine under its optimal conditions, it is important to perform the appropriate maintenance at the appropriate times.

Regular Maintenance

These are the maintenance items that are required on a daily basis.

Timing	Category	Item
Before daily operations	Print head check	P. 121 Step 1: Performing a Nozzle Drop-out (Dot Drop-out) Test
	Ink mixing (white ink)	P. 102 Preventing Sedimentation in Inks
After daily operations	Cleaning the machine	P. 232 Cleaning the Media Path
		P. 233 Cleaning the Cutting Carriage Roller
If a message appears	Cleaning around the print heads	P. 234 Cleaning around the Print Heads
If the discharged fluid disposal message appears	Disposing of discharged fluid	P. 240 If the Discharged Fluid Disposal Message Appears

Advanced Maintenance

Maintenance that is performed in an emergency. Some of this maintenance consumes a large amount of ink, so thoroughly read the explanation, and then perform the operation at the appropriate point in time.

Timing	Category	Item
When dot drop-out or dot displacement occurs	Checking and cleaning the print heads	P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
		P. 122 Performing Normal Cleaning
		P. 245 Medium Cleaning Method
		P. 247 Powerful Cleaning Method
		P. 234 Cleaning around the Print Heads
When the above operations are not effective	Cleaning of the print heads*1	P. 254 Ink Renewal Method
When the operation panel is dirty	Cleaning the operation panel	P. 264 Operation Panel Cleaning Method

*1 This cleaning consumes a large amount of ink.

Replacing Consumable Parts

Thoroughly read the explanation, and then perform the operation at the appropriate point in time.

Timing	Category	Item
When a replacement message appears	Replacing consumable parts for maintenance • Wiper • Flushing sponge	P. 267 Replacing the Wiper
		P. 269 Replacing the Flushing Sponges
When a cutting edge becomes dull	Replacing Consumable Parts	P. 270 Replace the blade.
		P. 274 Replacing the Separating Knife

Automatic Maintenance Feature and Notes

This machine has a feature that automatically performs maintenance periodically.

Set the maintenance items that are performed automatically and the [**Type**] and [**Frequency**] according to the printer service environment, types of products that are frequently output, and other factors. A maximum of five settings for automatic maintenance can be saved.

This function performs operations for preventing the print heads from drying out, so:

- **Always keep the main power switched on.**
- **Do not leave the front, left, and right covers open for a prolonged time.**
- **Return to the home screen after specifying settings in the menus.**

The setting items for automatic maintenance are as follows.

Setting item	Contents	Setting value
[**Cleaning after Printing Finishes**]	Set [**Type**] and [**Frequency**] for the cleaning that is performed when printing ends. This prevents the risk of malfunctions during standby and discharge issues at the next printing.	[Type] • [**Normal Cleaning**] • [**Medium Cleaning**] • [**Powerful Cleaning**] [Frequency] • [**None**] • [**Periodically**] 0.5 to 24 hours • [**Each Time**]
[**Ink Circulation before Printing Starts**]*1	Set [**Frequency**] for the ink circulation that is performed before the start of printing. This prevents uneven color issues caused by precipitation.	[Type] • [**Short**] • [**Full**] [Frequency]: • [**None**] • [**Periodically**] 1 to 12 hours • [**Each Time**]
[**Ink Discharge before Printing Starts**]*1	Set [**Frequency**] for the discharge of ink that cannot be mixed by ink circulation at the start of printing. This prevents uneven color issues caused by precipitation.	[Frequency] • [**Disable**] • [**Enable**]
[**Periodic Ink Circulation**]*1	Set [**Frequency**] for the ink circulation that is performed after the previous ink circulation. This prevents printer malfunctions caused by ink precipitation.	[Type] • [**Short**] • [**Full**] [Frequency] • [**Periodically**] 1 to 12 hours

*1 White ink only

IMPORTANT

If the automatic maintenance settings are configured without an adequate understanding, the maintenance results may not be as the customer wanted. Before configuring the automatic maintenance settings, be sure to contact your authorized dealer.

Measures When the Printer Is Not in Use for a Prolonged Period

Be sure to follow the instructions shown below when the printer is not in use for a prolonged period.

IMPORTANT

- Never switch off the main power. Doing so may damage the printer.
- If you are unable to maintain power, contact your authorized dealer in advance.

- **Empty the drain bottle in advance.**

  If you know that you will not use the machine for a prolonged period, empty the drain bottle. When the main power is on, the machine periodically performs automatic maintenance in which fluid is discharged. Check once a month if the discharged fluid is full.

- **Do not allow the machine to run out of ink or cleaning liquid.**

  The machine discharges ink and cleaning liquid during the automatic maintenance that is performed periodically. Set in the machine ink pouches having sufficient remaining ink. The machine cannot perform automatic maintenance if it has run out of ink or cleaning liquid.

- **Replace the wiper when half or less of it remains.**

  The machine consumes the wiper during the automatic maintenance that is performed periodically. Set in the machine a wiper having a sufficient amount remaining. As a guideline, you are recommended to replace the wiper when half or less of it remains.

- **Keep the machine at a constant temperature and relative humidity.**

  Even when the machine is not in use, keep it at a temperature of 5 to 40°C (41 to 104°F) and a relative humidity of 20 to 80% (with no condensation). Temperatures that are too high may degrade the ink and cause malfunctions. Temperatures that are too low may cause the ink to freeze and damage the print heads.

- **Switch on the sub power once a month.**

  Switch on the sub power once a month. When you turn on the power, the machine automatically performs operations such as those to keep the print heads from drying out. Leaving the machine unused for a prolonged period may damage the print heads, so be sure to switch on the power to perform these automatic operations.

- **Check the nozzle periodically.**

  Perform a printing test and clean the print heads if there are discharge issues. When the cleaning is complete, perform a printing test again to make sure the print heads are working properly.

- **Clean the area around the print heads periodically.**

  Clean the print head caps and the area around them, as well as the nozzle guards.

RELATED LINKS

- P. 238 Disposing of Discharged Fluid
- P. 112 Ink Pouch Replacement
- P. 116 Cleaning Liquid Pouch Replacement
- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 234 Cleaning around the Print Heads
- P. 267 Replacing the Wiper

Regular Maintenance

Print Head Check before Printing 231
Performing a Nozzle Drop-out (Dot Drop-out) Test 231
Cleaning the Machine 232
Cleaning the Media Path 232
Cleaning the Cutting Carriage Roller 233
Cleaning around the Print Heads 234
Cleaning the Area Around the Print Heads 236

Print Head Check before Printing

Performing a Nozzle Drop-out (Dot Drop-out) Test

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

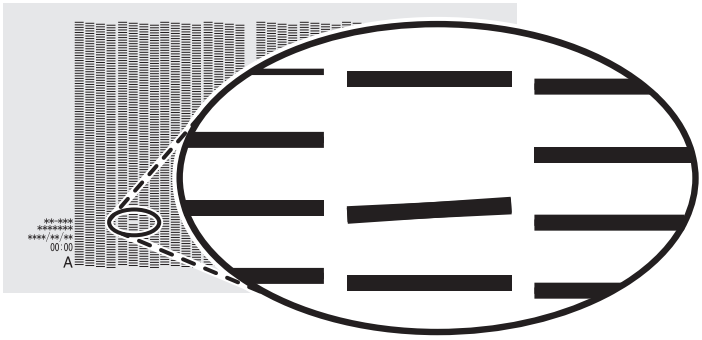
MEMO

When performing printing tests successively, you can select [**Feed**] (vertical printing) or [**Scan**] (horizontal printing) as the printing position for the second and later tests in comparison to the first test.

P. 208 Performing Printing Tests Arranged Horizontally

Procedure

1. **Set up the media.**
2. **Tap [Nozzle Drop-out Test] on the home screen.**
3. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
4. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

5. **If you have opened the front cover, close it.**
   If no dot drop-out or dot displacement occurs, this operation is finished.
6. **Tap .**
   The home screen appears.

RELATED LINKS

- P. 243 When Dot Drop-out or Dot Displacement Occurs

Cleaning the Machine

Cleaning the Media Path

Wipe away any ink or grime on the media path and other areas as part of the daily cleaning procedure. It is easy for ink or grime to affix to the media path, and, if left unattended, this will contaminate new media and have a negative effect on the transport of media when it is output. Pinch rollers, grit rollers, and the platen are particularly prone to the buildup of grime.

⚠ WARNING

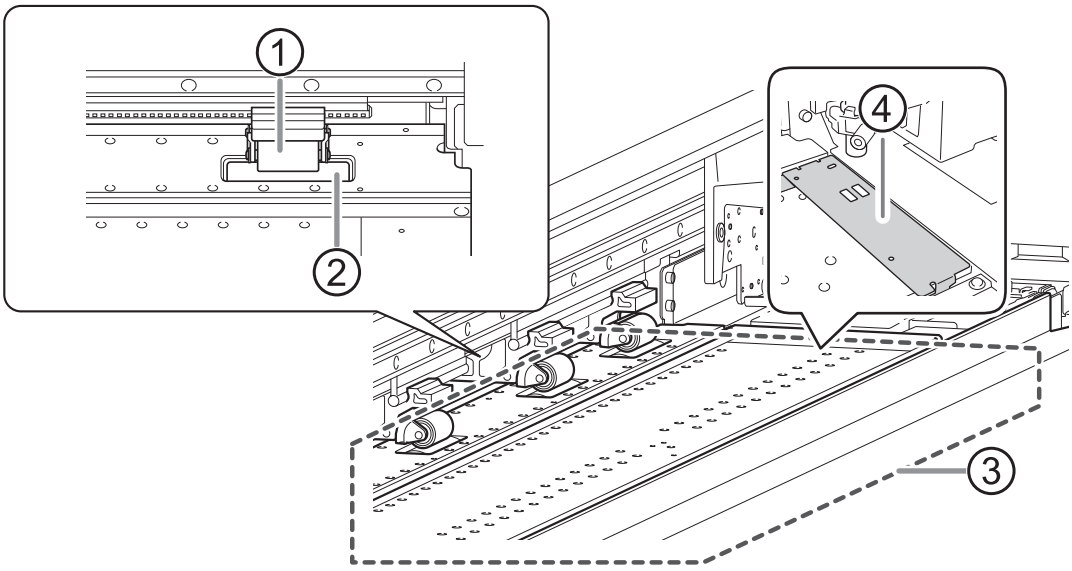
Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.
Doing so may cause a fire.

⚠ 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.

IMPORTANT

- 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.



Clean by wiping with a cloth moistened with neutral detergent diluted with water then wrung dry.

①	Pinch roller	These are the positions where the media is fixed in place or transported, so it is easy for ink and grime to affix to these positions. Failure to clean this part properly may result in the transfer of grime to the surface of media.
②	Grit roller	These are the positions where the media is fixed in place or transported, so it is easy for grime to affix to these positions. Remove buildup of media scraps and other material using a brush. Never use a metal brush.
③	Platen	Wipe away any buildup of ink, grime, or cut media on the media path and in the grooves.
④	Media clamp	Wipe away ink and grime.

Cleaning the Cutting Carriage Roller

Paper dust affixes to the separating knife carriage roller during media separation. Periodically wipe the area clean.

⚠ WARNING

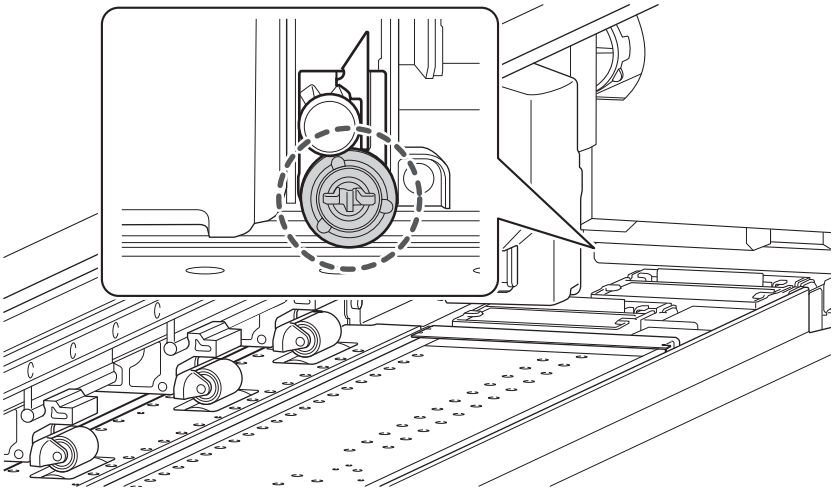
Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.
Doing so may cause a fire.

⚠ 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.

IMPORTANT

- 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.



Open the right cover and clean by wiping with a cloth moistened by neutral detergent diluted with water then wrung dry.

Cleaning around the Print Heads

The print heads are important components that discharge ink and require periodic and appropriate maintenance. Cleaning around the print heads is known as "manual cleaning."

- If you use up the cleaning sticks and cleaning liquid used for this work, contact your authorized dealer or visit our website (https://www.rolanddg.com/).
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Contact your authorized dealer.

IMPORTANT

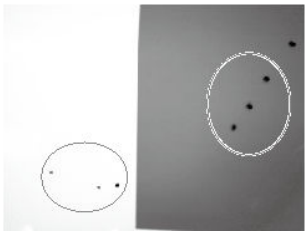
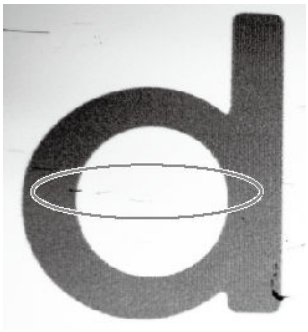
- Be sure to use different cleaning sticks in the color ink section and the optimizer ink section. Using the same cleaning stick may lead to the optimizer ink and color ink mixing, resulting in ink hardening and discharge issues.
- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. After 10 minutes, the alarm will sound, so pause the procedure and perform the following operations.
  - Close all the covers.
  - Tap [**Finish All**] to finish the work.
  - Restart the procedure from the beginning.

When a message appears

When a message appears, you can tap on the home screen to check the notification details. Tap the notification to display the manual cleaning menu screen.

When symptoms of ink drips or dragging dirt occur

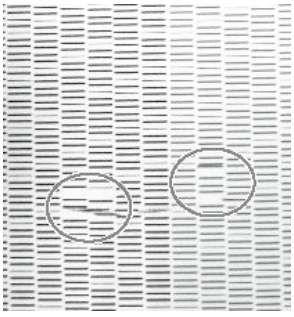
When any of the symptoms given below occur, clean around the print heads.

Ink drips	Dragging dirt
	
Ink pools in dust or dirt adhered to the print heads, and drips onto the media.	The phenomenon where dirt or dust accumulates on the print heads.

When symptoms that cannot be improved with cleaning occur

When any of the symptoms given below occur and performing cleaning functions (normal, medium, and powerful) is not effective, clean around the print heads.

Dot drop-out/Dot displacement



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

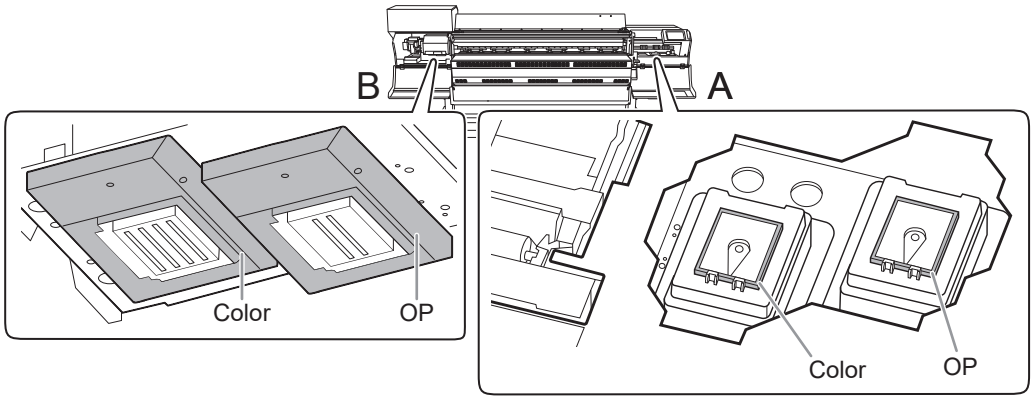
Cleaning the Area Around the Print Heads

Perform manual cleaning to clean the print head caps and the nozzle guards.

Required item	
	
Cleaning sticks (4)	Cleaning liquid bottle for maintenance

Locations to clean with this work

- Print head caps (A)
- Nozzle guards (B)



* Color: Locations to clean in the color ink section

* OP: Locations to clean in the optimizer ink section

IMPORTANT

- Be sure to use different cleaning sticks in the color ink section and the optimizer ink section. Using the same cleaning stick may lead to the optimizer ink and color ink mixing, resulting in ink hardening and discharge issues.
- Do not touch the tips of the cleaning sticks with your hands. Skin oil affixing to the print head caps may lead to malfunctions.
- Use a clean pair of tweezers to remove clumps of ink.
- Do not use cleaning liquid other than the included cleaning liquid.
- Do not dip the cleaning stick in the cleaning liquid bottle again during cleaning. To add cleaning liquid, use a new cleaning stick.

Procedure

1. **Remove any media.**
2. **Tap ☰ on the operation panel.**
3. **Tap [Cleaning]>[Manual Cleaning].**
4. **Tap [Execute].**
5. **Follow the instructions on the operation panel to carry out the work.**

After finishing the instructed work, tap › to display the next step. In this manner, perform each step of the work in order. If you want to check the previous step or perform it again, tap ‹.

When you finish the last step, tap [**Finish All**]. When print-head cleaning finishes after this work, the cleaning is finished. Dispose of used cleaning sticks.

6. Tap .

The home screen appears.

Disposing of Discharged Fluid

Precautions for Disposing of Discharged Fluid 239
If the Discharged Fluid Disposal Message Appears..... 240

Precautions for Disposing of Discharged Fluid

⚠ 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 fire, odor, or physical distress.

IMPORTANT

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 it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

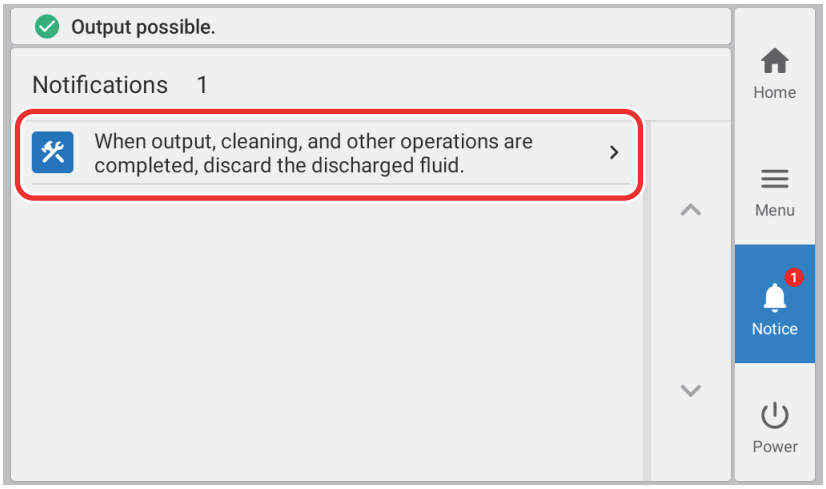
When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

If the Discharged Fluid Disposal Message Appears

The [**When output, cleaning, and other operations are completed, discard the discharged fluid.**] message appears when a certain amount of discharged fluid has collected in the bottle. If this message appears, dispose of the discharged fluid.

Procedure

1. **When the message [When output, cleaning, and other operations are completed, discard the discharged fluid.] appears, tap [OK].**
2. **Tap to display the notification.**
3. **Tap the following notification.**



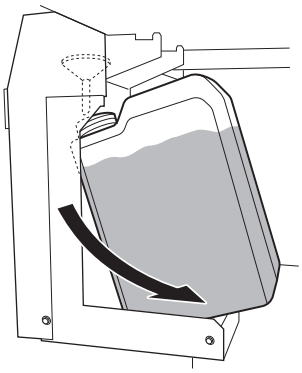
The [**Drain Bottle**] screen appears.

MEMO

You can dispose of discharged fluid even if the above message has not appeared.
Use the following operations to display the drain bottle screen, and then dispose of discharged fluid according to the procedure starting from step 4.

1. Tap .
2. Tap [**Maintenance**]>[**Drain Bottle**].

4. **Tap [Execute] on the drain bottle ([Group A (CMYK)] or [Group B (OP)]) that displays .**
5. **Tap [OK].**
6. **Remove the drain bottle and discard the discharged fluid.**



⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

7. **Quickly attach the emptied bottle to the machine once more.**

IMPORTANT

When installing, take care that you do not mix up the drain bottle on the color ink section and the drain bottle on the optimizer ink section by mistake. If you install an incorrect drain bottle and the optimizer ink and color ink are mixed, the discharged fluid will harden.

8. **Tap [Finish].**

9. **Tap** .

The home screen appears.

Advanced Maintenance

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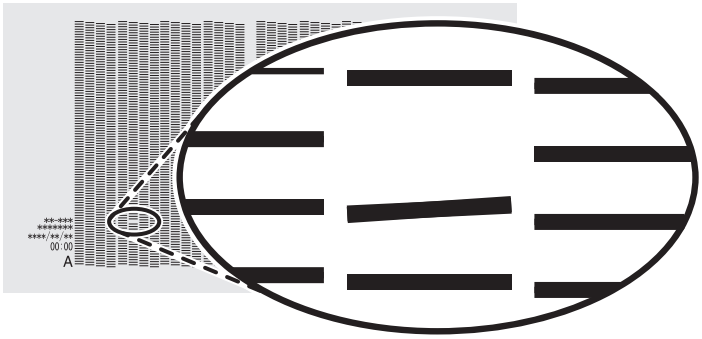
When Dot Drop-out or Dot Displacement Occurs

If dot drop-out or dot displacement occurs, perform cleaning of the print heads (normal cleaning).

Performing Normal Cleaning

Procedure

1. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**
   The space from "A" to "B" is group A. The space from "B" to the right side is group B.



MEMO

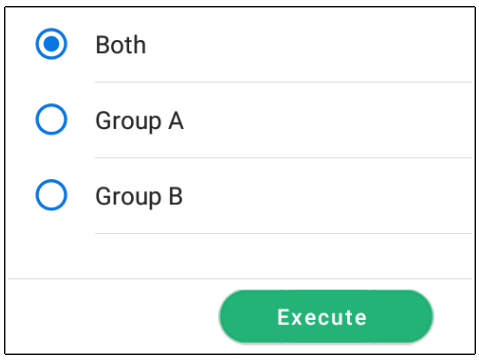
If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

2. **Tap** ☰.

3. **Tap [Cleaning]>[Normal Cleaning].**

4. **Select the group of print heads to clean.**



5. **Tap [Execute].**
   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.
   On completion, you will return to the original screen.

6. **Tap** ←.

7. **Perform a printing test again.**

8. **Check to make sure the dot drop-out or dot displacement has been corrected.**

   If the problem persists, try performing normal cleaning again. If the printer has been used for a long period, dot drop-outs may not be fixed even after performing normal cleaning two or three times. If this is the case, clean using a different method.

RELATED LINKS

- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 245 When Normal Cleaning Is Not Effective

When Normal Cleaning Is Not Effective

Medium Cleaning Method

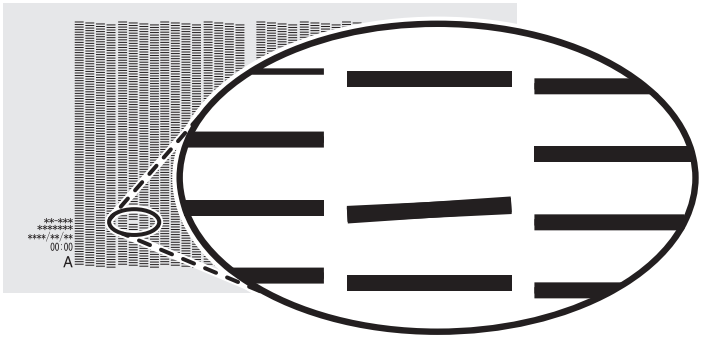
The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by normal cleaning, perform the more forceful "medium cleaning" to remove clogging from the print heads.

IMPORTANT

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

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Cleaning]>[Medium Cleaning].**
4. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**
   The space from "A" to "B" is group A. The space from "B" to the right side is group B.

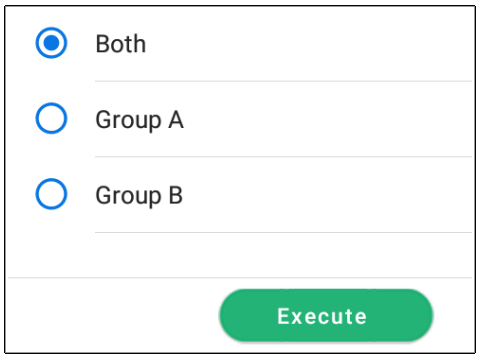


MEMO

If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

5. **Select the group of print heads to clean.**



6. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen. On completion, you will return to the original screen.

7. **Tap ←.**

8. **Tap [Printing Test].**

9. **Select [Nozzle Drop-out Test] and tap [Execute].**

   Perform a printing test again to check whether the dot drop-out and dot displacement have been corrected.

MEMO

- If the problem persists, try performing medium cleaning again.
- If problems such as dot drop-out and dot displacement persist even after you have performed medium cleaning several times, perform "powerful cleaning."
- This cleaning can be effective when carried out periodically, according to the frequency of use.

RELATED LINKS

- P. 247 Powerful Cleaning Method

Powerful Cleaning Method

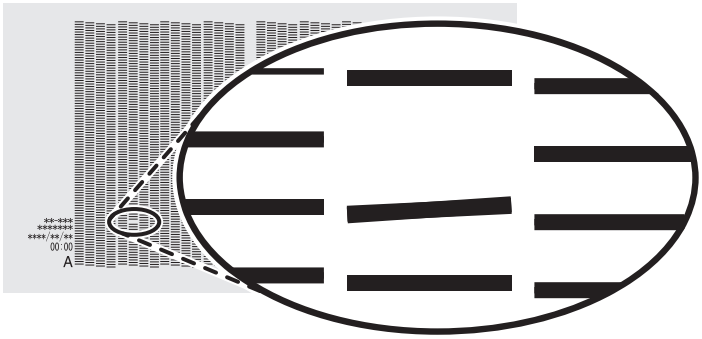
The print heads are important components that discharge ink. They require periodic and appropriate maintenance. When problems such as dot drop-out are not resolved by medium cleaning, perform the more forceful "powerful cleaning" to remove clogging from the print heads.

IMPORTANT

Powerful cleaning consumes more ink than medium cleaning, and overly frequent use may damage the print heads themselves. Avoid performing this operation more than necessary.

Procedure

1. **Set up the media.**
2. **Tap** ☰.
3. **Tap [Cleaning]>[Powerful Cleaning].**
4. **Check for the group with dot drop-out or dot displacement by viewing the results of the printing test.**
   The space from "A" to "B" is group A. The space from "B" to the right side is group B.

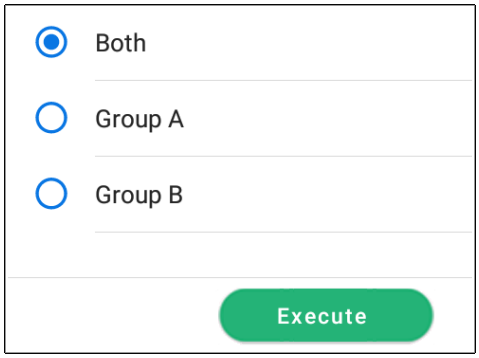


MEMO

If the printing-test results are difficult to interpret

- Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.
- Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see this ink, switch to a different media and perform the printing test again.

5. **Select the group of print heads to clean.**



6. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen. On completion, you will return to the original screen.

7. **Tap ←.**

8. **Tap [Printing Test].**

9. **Select [Nozzle Drop-out Test] and tap [Execute].**

   Perform a printing test again to check whether the dot drop-out and dot displacement have been corrected.

MEMO

- If the problem persists, try performing powerful cleaning again.
- This cleaning can be effective when carried out periodically, according to the frequency of use.
- If problems such as dot drop-out and dot displacement persist even after you have performed [**Powerful Cleaning**] several times, perform [**Manual Cleaning**].

RELATED LINKS

- P. 236 Cleaning the Area Around the Print Heads

If Colors Are Uneven

Perform the following operations.

1. Shake the ink cartridge to mix the ink.
   P. 102 Preventing Sedimentation in Inks
2. When an uneven color issue occurs with white ink, if the uneven color issue is not improved after performing step 1, perform [**Ink Circulation**].
   P. 249 Ink Circulating Method
3. If the uneven color issue is not improved after performing the steps up to step 2, perform [**Light Choke Cleaning**].
   P. 251 Light Choke Cleaning Method
4. If the uneven color issue is not improved after performing the steps up to step 3, perform [**Ink Renewal**].
   P. 254 Ink Renewal Method
5. If the uneven color issue is not improved after performing the above work, contact your authorized dealer.

Ink Circulating Method

If uneven color issues with white ink are not resolved even after shaking the ink cartridges to mix the ink, perform [**Ink Circulation**]. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

Procedure

1. Tap .

2. Tap [Maintenance]>[Ink Circulation].

3. Tap [Execute].

Depending on the timing with which the [**Ink Circulation**] is started, cleaning may start. When cleaning is complete, [**Ink Circulation**] will start.

If uneven output color issues with white ink are not resolved even after performing [**Ink Circulation**], perform [**Powerful Cleaning**].

4. Tap .

The home screen appears.

RELATED LINKS

- P. 250 Method for Eliminating Uneven Color Issues with Powerful Cleaning

Method for Eliminating Uneven Color Issues with Powerful Cleaning

When uneven color issues are not resolved even after performing ink mixing and [**Ink Circulation**], perform the more forceful [**Powerful Cleaning**] to eliminate these issues. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

IMPORTANT

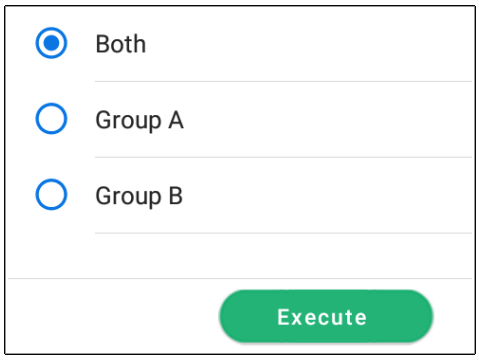
The ink in the print heads is discharged to stabilize the output color, so a certain amount of ink is consumed.

MEMO

If the media has already been set up, the [**After cleaning, perform a printing test.**] menu option will be displayed on the [**Powerful Cleaning**] screen. When this setting is turned on, a printing test is performed after cleaning.

Procedure

1. **Tap** .
2. **Tap [Cleaning]>[Powerful Cleaning].**
3. **Select [Group A].**



4. **Tap [Execute].**

   Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen.

   On completion, you will return to the original screen.

   If uneven output color issues are not resolved even after performing [**Powerful Cleaning**], perform [**Light Choke Cleaning**].

RELATED LINKS

- P. 251 Light Choke Cleaning Method

Light Choke Cleaning Method

If uneven color issues are not resolved even after performing [**Ink Circulation**], perform [**Light Choke Cleaning**]. Uneven colors refers to the symptom of printed colors being uneven (such as the color density being inconsistent) even when the same data is printed with the same settings.

[**Light Choke Cleaning**] can be used to stabilize the output colors by replacing the ink.

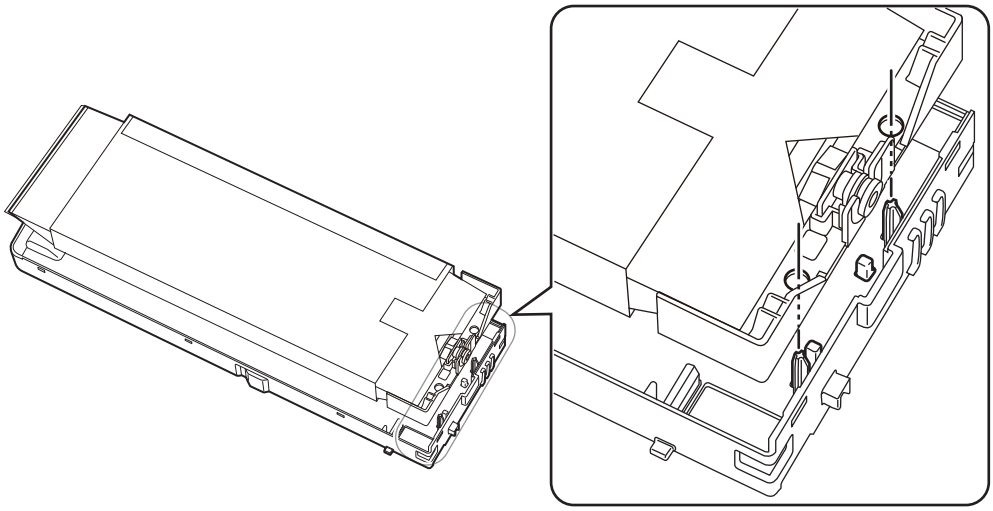
IMPORTANT

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

Procedure

1. Tap ☰.
2. Tap [Maintenance]>[Light Choke Cleaning].
3. Replace all the ink pouches other than that in the OP ink cartridge with new ink pouches.

P. 112 Ink Pouch Replacement

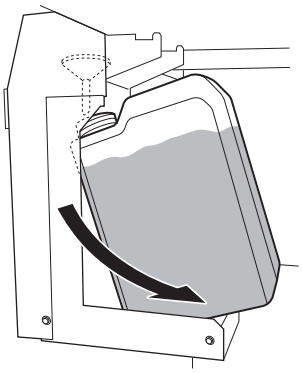


4. Tap [Execute].

Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen. On completion, you will return to the original screen.

MEMO

If [Discard the discharged fluid in the bottle.] appears after tapping [Execute]



1. **Remove the drain bottle and discard the discharged fluid.**

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

2. **Quickly attach the emptied drain bottle to the machine once more.**
3. **Tap [Finish].**

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

⚠ 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 fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

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 it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

5. **If uneven output color issues are not resolved even after performing [Light Choke Cleaning], perform [Ink Renewal].**

6. **Tap**  .

   The home screen appears.

RELATED LINKS

- P. 254 Ink Renewal Method

Handling Severe Dot Drop-out and Dot Displacement

Ink Renewal Method

Perform [**Ink Renewal**] in the following situations.

- When ink discharge issues such as dot drop-out are not corrected after performing cleaning using the cleaning functions (normal, medium, and powerful) and cleaning around the print heads
- When color is uneven even after performing [**Light Choke Cleaning**].

IMPORTANT

A large amount of ink will be discharged during ink renewal. Perform this operation only when ink discharge issues such as dot drop-out, dot displacement, and uneven colors cannot be corrected even after performing the other cleaning functions (normal, medium, powerful, manual, and light choke).

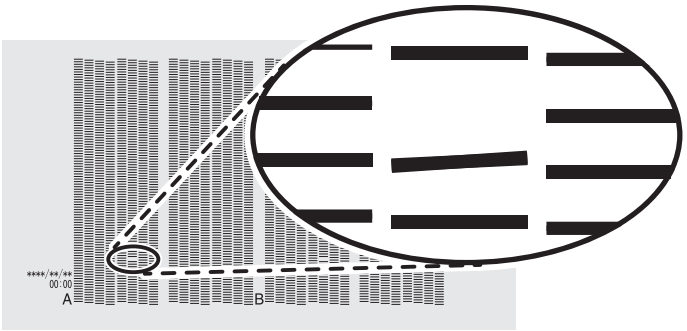
RELATED LINKS

- P. 122 Performing Normal Cleaning
- P. 245 Medium Cleaning Method
- P. 247 Powerful Cleaning Method
- P. 234 Cleaning around the Print Heads
- P. 250 Method for Eliminating Uneven Color Issues with Powerful Cleaning
- P. 251 Light Choke Cleaning Method

Step 1: Performing a Printing Test

Procedure

1. **Set up the media.**
2. **Tap [Nozzle Drop-out Test] on the home screen.**
3. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.
4. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

5. **If you have opened the front cover, close it.**

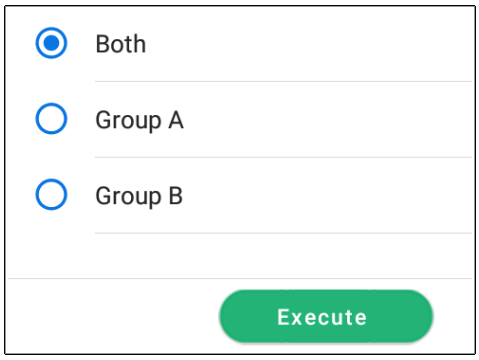
RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Step 2: Performing Ink Renewal

Procedure

1. Tap ☰.
2. Tap [Maintenance]>[Ink Renewal].
3. Select the group of print heads to renew the ink of.

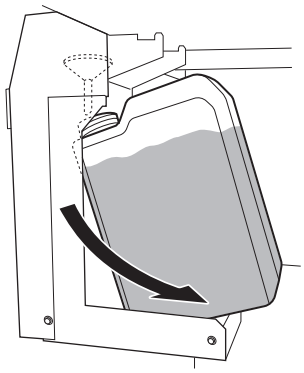


4. Tap [Execute].

   Ink renewal starts. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen. On completion, you will return to the original screen.

MEMO

If [Discard the discharged fluid in the bottle.] appears after tapping [Execute]



1. Remove the drain bottle and discard the discharged fluid.

IMPORTANT

When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

2. Quickly attach the emptied drain bottle to the machine once more.
3. Tap [Finish].

⚠ CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display [Discard the discharged fluid in the bottle.]. After discarding the discharged fluid, promptly attach the drain bottle to the machine.

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

⚠ 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 fire, odor, or physical distress.

IMPORTANT

Do not store discharged fluid in a location where it is exposed to direct sunlight.

When temporarily storing discharged fluid in the included drain bottle, do not store it in a location that is exposed to direct sunlight. The discharged fluid may harden, making the drain bottle unusable. The drain bottle may also deteriorate, leading to discharged fluid leaks.

IMPORTANT

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 it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

5. Tap  .

The home screen appears.

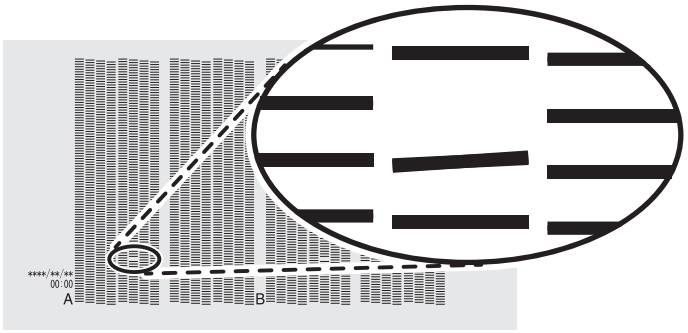
Step 3: Performing a Printing Test to Check the Results

Procedure

1. **Tap [Nozzle Drop-out Test].**

2. **Tap [Execute] next to [Printing Test].**
   Printing of the test pattern starts.

3. **Check whether there is dot drop-out or dot displacement in the test pattern.**
   Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.



IMPORTANT

Depending on the media, locations on which optimizer ink is printed may be difficult to check. If it is difficult to see the optimizer ink, switch to a different media and perform the printing test again.

4. **If you have opened the front cover, close it.**
   If no dot drop-out or dot displacement occurs, this operation is finished.

5. **Tap .**
   The home screen appears.

If the dot drop-out or dot displacement location in the test pattern is different, perform ink renewal again. If dot drop-out or dot displacement occurs in the same location on the test pattern, contact your authorized dealer.

Partially Restricting the Print Heads Used for Printing

When dot drop-out or dot displacement is not improved even after renewing the ink, partially restrict the print heads to use for printing (i.e. prevent the use of the print heads that are causing discharge issues). This operation is called the "nozzle mask," and while it slows down printing speed, it also allows you to decrease the impact of dot drop-out or dot displacement.

First print a test pattern, and then select the nozzle group to use by viewing the test results. After that, use VersaWorks to select the nozzle group used for printing.

Performing a Printing Test for the Nozzle Mask

Procedure

1. **Set up the media.**

2. Tap .

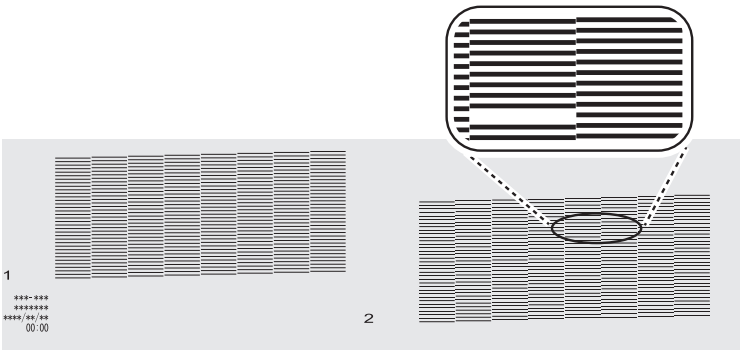
3. Tap [Cleaning]>[Printing Test].

4. Select [Nozzle Mask Test] and tap [Execute].

   Printing of the test pattern starts.

5. Check for the nozzle group with dot drop-out or dot displacement by viewing the results of the printing test.

   "1" or "2" is the nozzle group. The following shows a dot drop-out in nozzle group 2.



MEMO

If the printing-test results are difficult to interpret

Check the results in a bright location, changing your line of vision. They are visible using the reflection of the light.

6. If you have opened the front cover, close it.

7. Tap to return to the home screen.

Restricting the Print Heads Used for Printing

Use VersaWorks to select the nozzle group used for printing. For the detailed procedure, see the VersaWorks Master Guide.

VersaWorks manual

Emergency Measure) Cleaning the Print Head Surface

When dot drop-out or dot deflection is not improved even if cleaning is performed several times, you can clean the surface of the print heads as an emergency measure. The print head surface (nozzle surface) is a very delicate mechanism, so work must be performed carefully and cautiously.

This operation is an emergency measure. It may damage defect-free parts depending on the symptoms, worsening the symptoms. If you have any questions, contact your authorized dealer.

IMPORTANT

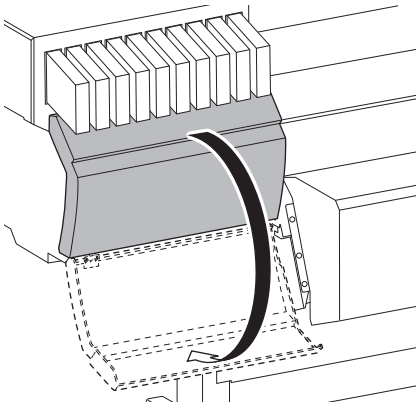
- Be sure to use different cleaning sticks in the color ink section and the optimizer ink section. Using the same cleaning stick may lead to the optimizer ink and color ink mixing, resulting in ink hardening and discharge issues.
- Do not touch the tips of the cleaning sticks with your hands. Skin oil affixing to the print head caps may lead to malfunctions.
- Do not use cleaning liquid other than the included cleaning liquid.
- If you add cleaning liquid while cleaning a given location, do not dip the cleaning stick into the cleaning liquid bottle. Instead, drip the cleaning liquid onto the cleaning stick.

Procedure

1. **Tap ☰ on the operation panel.**
2. **Tap [Cleaning]>[Manual Cleaning].**
3. **Tap [Execute].**
4. **Tap [OK].**

   The print head carriage moves to the left end of the machine.

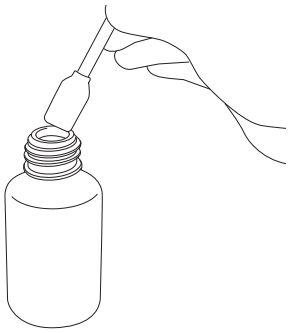
   The following procedure explains the procedure for emergency measures. Be aware that the procedure is different from ordinary manual cleaning.
5. **Open the left cover.**



6. **Moisten a new cleaning stick with the cleaning liquid.**

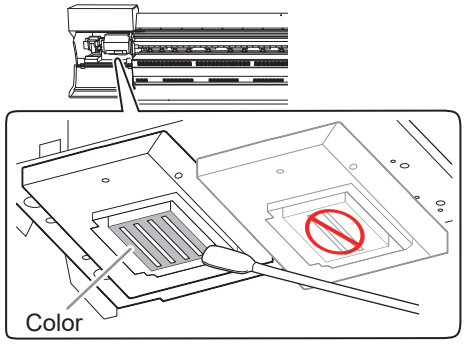
IMPORTANT

- Be sure to use one of the included cleaning sticks.
- Do not use a previously used cleaning stick.
- Do not put a previously used cleaning stick into the cleaning liquid.

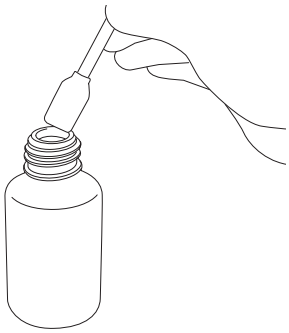


7. **Very gently touch the cleaning stick against the print head surface (Color: color ink section).**

   Very softly press the cleaning stick against the print head so that cleaning liquid soaks into the print head surface (nozzle surface). Never rub the stick on the surface or press it forcibly.

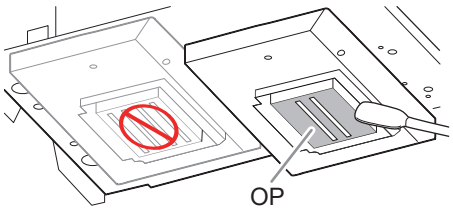


8. **Apply a large amount of cleaning liquid to a new cleaning stick.**



9. **Very gently touch the cleaning stick against the print head surface (OP: optimizer ink section).**

   Very softly press the cleaning stick against the print head so that cleaning liquid soaks into the print head surface (nozzle surface). Never rub the stick on the surface or press it forcibly.



10. **Close the left cover.**

11. **Tap [Finish All].**

Cleaning will start. The details of the operation in progress and the (approximate) remaining time of that work are displayed in the status bar at the top of the screen. When the work is finished, the status bar returns to its original display.

12. Tap  .

The home screen appears.

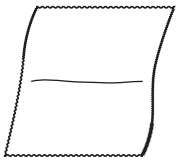
When the Operation Panel Is Dirty

Operation Panel Cleaning Method

IMPORTANT

Important notes on this procedure

- The cloths, alcohol, and similar items used in cleaning are not included with the product.
- Be sure to use a cloth when cleaning the operation panel. Liquid entering into the operation panel through its gaps may cause printer malfunctions.

Required items	
	
Anhydrous ethanol or isopropyl alcohol	Cloth (that is not fluffy)

⚠ CAUTION

When using anhydrous ethanol or isopropyl alcohol, be sure to follow the product's usage precautions.

Exercise caution regarding items such as fire, ventilation, and skin irritation.

⚠ CAUTION

Only use anhydrous ethanol or isopropyl alcohol.

Using chemicals (or similar substances) other than anhydrous ethanol or isopropyl alcohol may lead to operation panel damage.

Procedure

1. **Turn off the sub power followed by the main power.**
2. **Wipe off the operation panel with a cloth soaked in anhydrous ethanol or isopropyl alcohol.**
   Wipe slowly and gently to remove the grime.
3. **Turn on the main power switch.**

Replacing Consumable Parts

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Inquiries for Consumable Parts and Products

Items That You Can Purchase and Perform Work for by Yourself

To purchase the following consumable parts or products, contact your authorized dealer or visit our website (https://www.rolanddg.com/).

Item	Related page
Wiper	P. 267 Replacing the Wiper
Flushing sponge	P. 269 Replacing the Flushing Sponges
Cleaning sticks	P. 236 Cleaning the Area Around the Print Heads
Cleaning liquid	
Blade	P. 270 Replacing the Blade
Separating knife	P. 274 Replacing the Separating Knife

Consumable Parts That Require Inquiries before Replacement

When replacing the following consumable parts, contact your authorized dealer.

Item	Related page
Print heads	P. 234 Cleaning around the Print Heads

Replacing Parts for Maintenance

Replacing the Wiper

The wiper is a component that you use when cleaning the print heads.

When it is almost time to replace the wiper, the message [**There are not many wipers remaining. Immediately stock up on wipers. Leaving the printer in a state in which it does not have a wiper will lead to head damage.**] appears. If you do not have a wiper in stock, order a replacement immediately. We recommend that you always keep a replacement wiper on hand. Depending on where the wiper must be shipped to, it may take time for an ordered wiper to reach you.

For information about purchasing wipers, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

⚠ WARNING

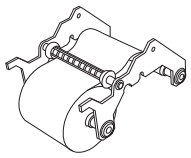
Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.
Sudden movement of the machine may cause injury.

IMPORTANT

- To prevent the print heads from drying out, finish this procedure in 10 minutes or less. After 10 minutes, the alarm will sound, so pause the procedure and perform the following operations.
  - Close all the covers.
  - Tap [**Finish All**] to finish the work.
  - Restart the procedure from the beginning.

IMPORTANT

If the message [**Replace the wiper immediately. Leaving the printer in a state in which it does not have a wiper will lead to head damage.**] appears on the screen, immediately replace the wiper. If you do not have a replacement wiper, immediately order one. Then, carry out the replacement as soon as the wiper arrives.

Required item

Unused, new wiper

MEMO

If the inside of the printer is dirty, refer to Cleaning the Machine(P. 232) and perform cleaning.

Procedure

1. **When the message [The time for wiper replacement has arrived.] appears, tap [OK].**
2. **Remove any media.**

3. **Tap  to display the messages.**

4. **Tap [The time for wiper replacement has arrived.].**

   The [**Wiper Replacement**] screen appears.

5. **Tap [Execute].**

   If the message [**Eliminate static electricity.**] appears, touch the indicated location, and then tap [**Next**].

6. **Follow the instructions on the operation panel to carry out the work.**

   When you finish the work, the screen changes.

Replacing the Flushing Sponges

The flushing sponges are used when the print heads spray ink.

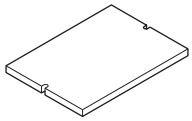
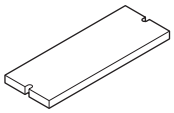
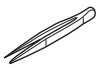
When it is time to replace the flushing sponges, the message [**The time for flushing sponge replacement has arrived.**] appears. In this situation, replace the flushing sponges.

For information about purchasing flushing sponges, contact your authorized dealer or visit our website (https://www.rolanddg.co.jp/).

⚠ WARNING

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

Sudden movement of the machine may cause injury.

Required items		
		
Flushing sponge (square: 1)	Flushing sponge (rectangle: 1)	Tweezers

MEMO

If the inside of the printer is dirty, refer to Cleaning the Machine(P. 232) and perform cleaning.

Procedure

1. **When the message [The time for flushing sponge replacement has arrived.] appears, tap [OK].**
2. **Remove any media.**
3. **Tap to display the messages.**
4. **Tap [The time for flushing sponge replacement has arrived.].**
   The [**Flushing Sponge Replacement**] screen appears.
5. **Tap [Execute].**
6. **Follow the instructions on the operation panel to carry out the work.**
   When you finish the work, the screen changes.

Replacing the Blade/Separating Knife

Replacing the Blade

If the blade becomes dull, if the edge of the blade is chipped, or if the cutting quality is lowered, replace the blade with a new blade.

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.
Sudden movement of the machine may cause injury.

⚠ CAUTION

Never touch the tip of the knife.
Doing so may result in injury. The cutting performance of the blade will also be impaired.

Required item

Replacement blade

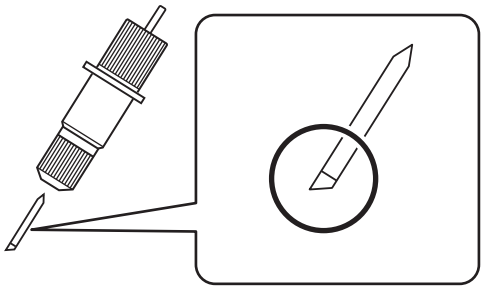
Replace the blade.

Procedure

1. **Remove any media.**
2. **Tap** ☰.
3. **Tap [Maintenance]>[Blade Replacement].**
   The [**Blade Replacement**] screen appears.
4. **Tap [Execute].**
   The cutting carriage moves to a position where blade replacement is possible.
5. **Follow the instructions on the operation panel to replace the blade.**
   - Tap ‹ or › to check the procedure.
   - If you complete the work without viewing the instructions, tap [**Finish All**].

MEMO

When attaching the blade, orient its tip correctly.



6. **When the blade replacement is finished, tap [Finish All].**

7. **When [Close the cover.] appears, close the front cover.**
   When you close the front cover, you are returned to the original screen.

8. **Tap** .
   The home screen appears.

Make adjustments according to the new blade.

Procedure

1. **Set up the media.**

2. **Tap** .

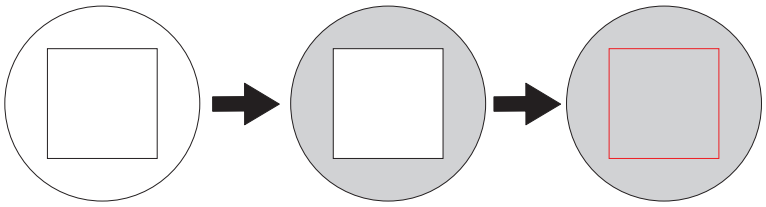
3. **Tap [Change] next to [Output Start Location].**

4. **Tap** , , , **or** **to move the cutting carriage to the location where you want to carry out the cutting test.**
   You can freely set the location for the cutting test.

5. **Tap [Set Base Point Here].**
   You are returned to the [**Blade Adjustment**] screen.

6. **Tap [Execute] next to [Cutting Test].**
   The test pattern is cut.

7. **Check the results of the cutting test.**



Check item	Result	Setting item	Adjustment
Check the shape.	The cut shape is distorted.	[Cutting Speed]	Reduce
Peel off the circle.	The square also peels off.	[Blade Force]	Increase
	Some uncut areas remain.	[Cutting Speed]	Reduce

Check item	Result		Setting item	Adjustment
Peel off the square.	The blade leaves faint traces on the backing paper.		[Blade Force]	No change
	The blade trace is indistinct.			Increase
	The blade trace is too deep and cuts into the backing paper.			Reduce
Check the shape of the square you have peeled off.		The corners are not rounded and do not have "horns."	[Blade Offset]	No change
		The corners are rounded.		Increase
		The corners have "horns."		Reduce

8. **Tap − or + to change the settings.**

Cutting condition	Setting details	Default settings
[Blade Force]	Set the force (pressure) of the blade.	50 gf
[Cutting Speed]	Set the speed of cutting.	10 cm/s (3.94 in./s)
[Blade Offset]	Set the blade offset. Enter the listed offset value for the blade. The offset value for the included blade is 0.250 mm (9.8 mil).	0.250 mm (0.010 in.)
[Rise Movement Speed]	Set the blade's up speed during cutting (the speed at which the blade travels when it moves to the next cutting line after cutting one cutting line). If the media comes loose during no-load feed and the blade damages the surface of the media, reduce the speed.	10 cm/s (3.94 in./s)

9. **Press [Save] to confirm your entry.**

10. **Repeatedly perform the cutting test and adjust the cutting conditions until the settings are optimized.**

Repeat Steps 6 to 9 to adjust the cutting conditions.

11. **Tap .**

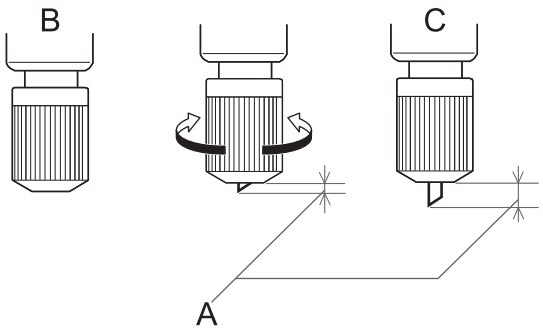
The home screen appears.

Accurately Adjusting the Cutting-in Amount

When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin backing paper, you can obtain good results by adjusting the amount of blade extension. Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 mm (3.9 mil), and adjustment for 0.5 mm (19.7 mil) can be made by rotating the cap one full turn.

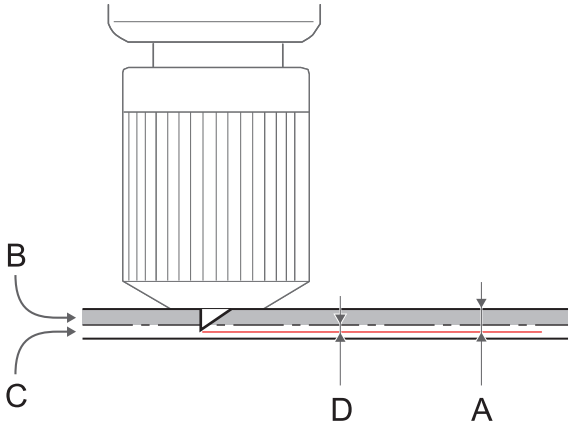
Note that making the amount of blade extension too small may cause the tip of the blade holder cap to touch the printed surface, soiling and damaging it. It is important to be especially careful about this when you are using media that has poor ink-adhesion properties.

The amount of blade extension (A) is 0 mm (0 in.) at minimum and 2.5 mm (98.42 mil) (C) at maximum.



- **Rough Estimate for the Amount of Blade Extension (When Creating a Sticker)**

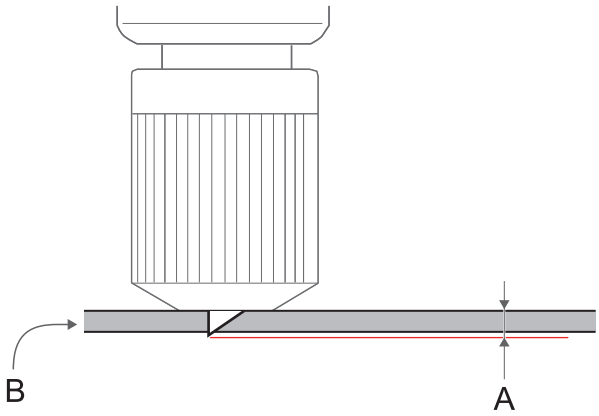
  Set the amount of blade extension (A) to an amount that is the sum of the thickness of the material portion (B) and half (D) the thickness of the backing paper (C).



- **Rough Estimate for the Amount of Blade Extension (When Cutting Perforated Lines)**

  Set the amount of blade extension (A) so that when the blade pierces the media (B), the blade tip extends slightly.

  For information about the output settings for cutting perforated lines, refer to the documentation for VersaWorks.



IMPORTANT

Pushing the blade out too far will damage the blade and blade protector and hasten their deterioration, so exercise caution.

Replacing the Separating Knife

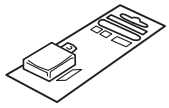
If the separating knife becomes dull, replace it with the included replacement knife.

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.
Sudden movement of the machine may cause injury.

⚠ CAUTION

Do not touch the tip of the separating knife.
Doing so may result in injury.

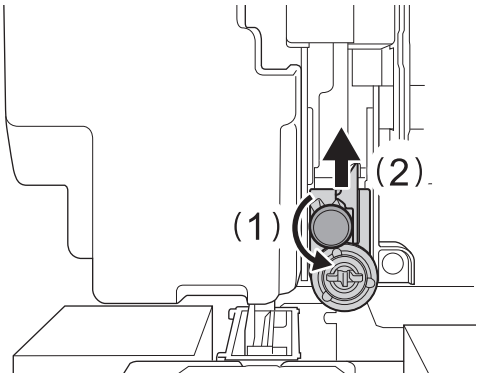
Required item

Replacement blade for separating knife

Procedure

1. **Remove any media.**
2. **Tap** ☰.
3. **Tap [Maintenance]>[Separating Knife Replacement].**
   The [**Separating Knife Replacement**] screen appears.
4. **Tap [Execute].**
   The cutting carriage moves to a position where separating knife replacement is possible.
5. **Follow the instructions on the operation panel to replace the separating knife.**
   - Tap ‹ or › to check the procedure.
   - If you complete the work without viewing the instructions, tap [**Finish All**].

IMPORTANT

Use the following procedure to remove the separating knife.
1. Loosen the screw until it slips out.
2. Grasp the screw portion, and slowly pull in the direction of the arrow.
   When doing this, do not pull it back toward you.



6. **When the separating knife replacement is finished, tap [Finish All].**

7. **When [Close the cover.] appears, close the front cover.**
   When you close the front cover, you are returned to the original screen.

8. **Tap** .
   The home screen appears.

Troubleshooting Methods

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Printed results are coarse or contain horizontal stripes

Do the print heads cause dot drop-out?

Carry out a printing test and make sure no dot drop-out or dot displacement occurs. If dot drop-out or dot displacement occurs, perform cleaning of the print heads.

RELATED LINKS

- P. 121 Performing a Nozzle Drop-out (Dot Drop-out) Test
- P. 122 Performing Normal Cleaning

Is the print head height appropriate?

Printing when the [**Print Head Height**] menu item is set to [**High**] or to [**Medium**] is coarser than when set to [**Low**]. Keep this set to [**Low**] except when changing it is necessary, such as when you are using thick media.

RELATED LINKS

- P. 160 Changing the Print Head Height

Have you carried out [Feed Correction]?

Large misalignment in the amount of feed of the media may result in printing that seems coarse or contains horizontal bands. Either make the setting in the software RIP to match the type of media you are using, or make the setting for correction on the printer.

RELATED LINKS

- P. 155 Automatically Making Required Adjustments
- P. 156 Manual Adjustment: Reducing Horizontal Bands (Feed Correction)

Have you carried out [Media Gap Adjustment] (ink landing position correction)?

The optimal correction varies depending on the distance between the printed surface and the ink discharge section. Set a correction value that is suitable for the combination of the media thickness and the head height. When further correction is required, such as when adjustment made using [**Simple Correction (Auto)**] does not enhance printing, use [**Detailed Correction (Manual)**] to make the correction.

RELATED LINKS

- P. 155 Automatically Making Required Adjustments
- P. 158 Manual Adjustment: Adjusting the Misalignment of the Ink Landing Position (Media Gap Adjustment)

Are the Temperature and Humidity of the Room Suitable?

Use the machine in an environment with a temperature of 20 to 30°C (68 to 86°F) and a humidity of 40 to 60%RH (no condensation).

Is the printer installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. Also make sure that the print heads are not exposed to moving air. These factors may lead to dot drop-out or reduced printing quality.

Is the printer installed in a location that is not exposed to direct sunlight?

Never install the machine in a location that is exposed to direct sunlight. Doing so may result in dot drop-out or other problems with reduced printing quality, or may even result in malfunction.

Is the print heater at a suitable temperature?

If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

RELATED LINKS

- P. 169 Setting the Print Heater Temperature

Is the Temperature of the Room Too Low?

The print heater and dryer may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when the print heater and dryer reach their set temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

Is the print mode suitable?

If attractive printing is impossible even when the print heater is at a high temperature, try using a higher-quality print mode. Depending on the media, smudging may occur when using a high-quality print mode, and results may also vary greatly depending on the settings of your software RIP (such as the color-profile selection). Select settings appropriate for the media you are using.

Is the Optimizer Amount Suitable?

If the printed results are coarse, adjust the optimizer level with the RIP software settings.

Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, output may be adversely affected. Load the media correctly.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Are the [Media Settings] appropriate?

If the settings are not suitable for the type of media, printing may be adversely affected. Choose settings optimized for the media you are using.

RELATED LINKS

- P. 195 Managing the Media Settings

The media becomes soiled when printed

Do the print heads come into contact with the media?

The height of the print heads may be too low. Also, if the media is not loaded and set up correctly, it may wrinkle or come loose and contact the print heads.

RELATED LINKS

- P. 160 Changing the Print Head Height
- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Are the Print Heads Dirty?

The following may cause ink to drip on the media during printing.

- Buildup of fibrous dust (lint) around the heads
- Ink transferred to the heads due to rubbing against the media

  If this happens, perform manual cleaning. We recommend carrying out periodic head cleaning.
- Too low humidity

  Use the machine in an environment with a humidity of 40 to 60%RH (no condensation).

RELATED LINKS

- P. 234 Cleaning around the Print Heads

Are the pinch rollers or the media clamps dirty?

Periodically clean them.

RELATED LINKS

- P. 232 Cleaning the Machine

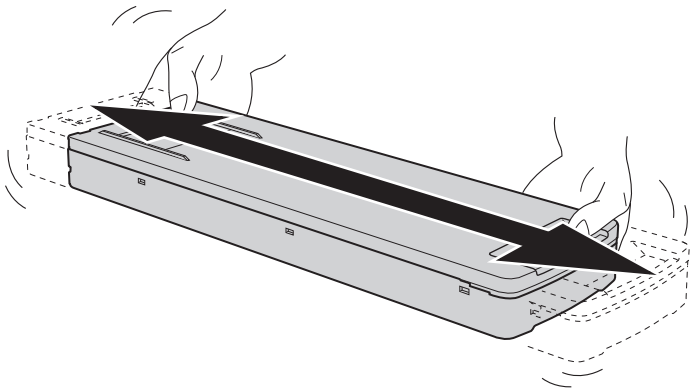
Is the Humidity of the Room Too Low?

Use the machine in an environment with a humidity of 40 to 60%RH (no condensation).

Colors are unstable or uneven

Did You Shake the Ink Cartridges before Installing Them?

Shake the ink cartridge 50 times (about 20 seconds), and then reinsert the cartridge. The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the ink cartridge horizontally with a stroke length of around 5 cm (1.97 in.) from each end of the ink cartridge.



Shake the ink cartridges:

- White ink: Each day (before starting the day's operations).
- Ink other than white ink: When replaced with a new cartridge or when uneven color issues occur

MEMO

To prevent ink precipitation, you can make the machine periodically display a message prompting you to mix the ink.
P. 215 Showing/Hiding Notifications

IMPORTANT

- **The ingredients in white ink tend to settle.**
  Allowing the ink to stand without shaking it can cause the settled material to harden, resulting in malfunction or other problems.
- **Before shaking the ink cartridge, wipe off any ink from around its mouth.**
  If you do not wipe off the ink, it may splatter when you shake the ink cartridge.
- **When you have finished mixing the ink, reattach the ink cartridge immediately.**
  Taking time to reattach the ink cartridge will adversely affect the ink path.

Are Colors Still Uneven After Mixing the Ink by Shaking the Ink Cartridges?

If colors are still uneven after mixing the ink by shaking the ink cartridges, perform the procedure below.

- White ink
  1. Perform [**Ink Circulation**].
     If the uneven color issue is not corrected after performing [**Ink Circulation**], perform the following procedure.
  2. Perform [**Powerful Cleaning**].
     If the uneven color issue is not corrected after performing [**Powerful Cleaning**], perform the following procedure.
  3. Perform [**Light Choke Cleaning**].

If the uneven color issue is not corrected after performing [**Light Choke Cleaning**], perform the following procedure.

4. Perform [**Ink Renewal**].
5. If the uneven color issue is not corrected after performing the above work, contact your authorized dealer.

- Ink other than white ink
  1. Perform [**Powerful Cleaning**].

     If the uneven color issue is not corrected after performing [**Powerful Cleaning**], perform the following procedure.
  2. Perform [**Light Choke Cleaning**].

     If the uneven color issue is not corrected after performing [**Light Choke Cleaning**], perform the following procedure.
  3. Perform [**Ink Renewal**].
  4. If the uneven color issue is not corrected after performing the above work, contact your authorized dealer.

RELATED LINKS

- P. 249 Ink Circulating Method
- P. 250 Method for Eliminating Uneven Color Issues with Powerful Cleaning
- P. 251 Light Choke Cleaning Method
- P. 254 Ink Renewal Method

Is the media wrinkled?

If the media is wrinkled and comes loose from the platen, colors may be uneven or the printing quality may suffer. If the media is wrinkled, load it again. Also, if the dryer temperature is too high the media may wrinkle depending on its characteristics.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Was printing paused partway through?

When printing is paused, the coloring at the seam may be altered when printing resumes. Avoid pausing printing. Before you perform lengthy printing, check the amount of ink remaining in the ink pouches. Printing may also pause when data is not sent from the computer quickly enough. We recommend not performing any other tasks with the computer while printing is in progress.

Is the printer installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. Also make sure that the print heads are not exposed to moving air. These factors may lead to dot drop-out or reduced printing quality.

Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, output may be adversely affected. Load the media correctly.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Are the [Media Settings] appropriate?

If the settings are not suitable for the type of media, printing may be adversely affected. Choose settings optimized for the media you are using.

RELATED LINKS

- P. 195 Managing the Media Settings

Is the printer being used in a location subject to severe changes in the operating environment?

Large fluctuations in temperature or humidity while printing is in progress may cause the colors to change partway through the printing. When printing, use the machine in a location where the temperature and humidity are stable.

Cutting Is Misaligned, Skewed, or Not Clean

Is the media loaded correctly?

If the media is not loaded correctly or the media feed is not smooth, output may be adversely affected. Load the media correctly.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Are the settings for the cutting conditions appropriate?

Misalignment or skewing may occur if the cutting speed is too fast or the blade force is too high. Try changing the cutting conditions. With media having a strong adhesive layer, the adhesive layer reattaches to itself immediately after cutting. However, if a cutting test shows that the peeling of the media and the blade traces on the backing paper are optimal, the media is being cut properly. Be careful not to make the blade force too high.

RELATED LINKS

- P. 173 Accurately Adjusting the Cutting Settings

Is the Cutting Speed in the [Take-up during Cutting] Setting Appropriate?

If the cutting speed in the [**Take-up during Cutting**] setting is not appropriate, the media take-up cannot keep up, resulting in partial tension on the media, leading to misalignment or distortion. The media may also stick to the floor and become dirty. Be sure to check the cutting speed.

Is the length of output too long?

For printing followed immediately by cutting in particular, the longer the page length (that is, the longer the distance the media is returned after printing), the greater the chance of misalignment occurring. It is a good idea to keep the size of each single page to the minimum necessary.

Are you using media that exhibits large expansion and contraction?

When you are performing printing followed immediately by cutting, misalignment occurs if the media expands or contracts. If this happens, try performing printing with crop marks followed by cutting. The cutting position will be corrected to match the expansion and contraction of the media.

RELATED LINKS

- P. 140 How to Cut with Crop Marks

Is the setting for the [Cutting Distance Correction] menu item (under [Cutting Settings]) correct?

When you are performing printing followed immediately by cutting, go to [**Cutting Settings**] and set the [**Cutting Distance Correction**] correction value to 0.00%.

RELATED LINKS

- P. 177 Performing Distance Correction during Cutting

Are the pinch rollers placed on the proper locations?

Be sure to place the pinch rollers on the grit rollers. If the pinch rollers are not placed on the proper locations, misalignment of the media may occur.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media
- P. 167 Use Middle Pinch Rollers When Pulling Back or Feeding Media

Have you corrected the misalignment of printing and cutting?

Misalignment between the printing and cutting positions may occur due to the thickness of the media or the print head height. Make corrections for misaligned printing and cutting for the media you are using.

RELATED LINKS

- P. 181 Accurately Adjusting the Settings for Printing and Cutting

Is the blade holder installed appropriately?

When installing the blade holder, firmly tighten the screw and check that the blade holder is fixed in place.

RELATED LINKS

- P. 270 Replacing the Blade

Is the blade worn?

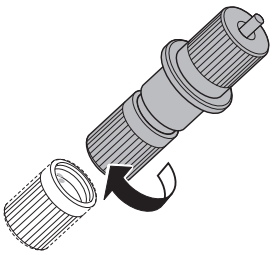
A worn or chipped blade will negatively affect the cutting quality. Check the status of the blade and replace it with a new one if necessary.

RELATED LINKS

- P. 270 Replacing the Blade

Is there any buildup of pieces of material or dust inside the blade holder?

Remove the blade holder, and then take off the tip of the blade holder and remove any pieces of material or dust inside.



RELATED LINKS

- P. 272 Accurately Adjusting the Cutting-in Amount

Print Results Contain Vertical Bands

Is the Suction Force of the Media Too Strong?

When you are printing on cloth or film, the suction fan can cause vertical bands.

Lower the suction force. If the lower suction force causes the media to come loose, suppress this phenomenon by using the media take-up unit to apply tension to the media.

Is There Too Much Ink?

Uneven drying results in partial failure to fully cure and causes banding.

Reduce the amount of ink in the RIP software settings. Or, select a mode with more passes if possible.

The Printed Part Peels Off Immediately

Has the Ink Not Dried Sufficiently?

If the ink does not dry sufficiently, it does not adhere to the media. Use the machine in an environment with a temperature of 20 to 30°C (68 to 86°F) and a humidity of 40 to 60%RH (no condensation).

Problems in Cutting with Crop Marks

Automatic Detection of Crop Marks Fails 291
Are the margins from the pinch rollers to the crop marks too small? 291
Is the media wrinkled or warped? 291
Is the media size too large?..... 291
Are You Using Media That Is Likely to Reflect Light?..... 291
Are you using transparent media? 291
Printing and Cutting Are Misaligned 292
Have you corrected the misalignment of printing and cutting with crop marks? 292

Automatic Detection of Crop Marks Fails

Are the margins from the pinch rollers to the crop marks too small?

If the margins are too small or the pinch roller locations are not correct, it may not be possible to detect the crop marks.

Check the margins and set the pinch rollers in the correct locations.

Is the media wrinkled or warped?

Wrinkled or warped media may cause crop mark detection to fail. Avoid using wrinkled or warped media.

RELATED LINKS

- P. 193 Correcting the Reading Sensor

Is the media size too large?

Large media may lead to large errors, which may cause crop mark detection to fail.

When you want to use lengthy media, we recommend performing output with the data separated into sizes that are as short as possible.

Are You Using Media That Is Likely to Reflect Light?

The machine may not be able to read crop marks printed on media that is likely to reflect light or has deep colors. Try [**Multi Sensor Adjustment**] (the correction function of the sensor for reading crop marks). If the crop marks still cannot be read, change the media you are using.

RELATED LINKS

- P. 193 Correcting the Reading Sensor

Are you using transparent media?

The machine cannot read crop marks from transparent media. Change the media you are using.

Printing and Cutting Are Misaligned

Have you corrected the misalignment of printing and cutting with crop marks?

Depending on the composition of the media, the positioning of printing and cutting may be misaligned even when you are using crop marks. Make corrections for misaligned printing and cutting for the media you are using.

RELATED LINKS

- P. 186 Correcting the Misalignment of Printing and Cutting with Crop Marks (Concurrent Test for Printing and Cutting with Crop Marks)
- P. 189 Correcting the Misalignment of Printing and Cutting with Crop Marks (Separate Test for Printing/Cutting with Crop Marks)

Media Feed Problems

Media Wrinkles or Shrinks 294
- Is the media loaded and set up straight and securely? 294
- Was loaded media allowed to stand for some time? 294
- Are the media clamps attached? 294
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- Is the temperature of the dryer too high? 294
- Is [**Pullback After Printing**] set to [**Enable**]? 294
- Have you stored the media in a low-temperature room? 294
- Is the humidity of the room too high? 295
- Is the media sagging? 295

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Media Feeding Is Not Smooth 297
- Is some other object coming into contact with the media? 297
- Is the media too thick? 297
- Are the grit rollers dirty? 297

A Media Jam Occurs! 298
- Is an error message displayed? 298
- Is the media warped or wrinkled? 298
- Is the height of the print heads too low? 298
- Are the grit rollers dirty? 298
- Are the media clamps installed? 298
- Is the media loaded and set up straight and securely? 298
- Is some other object coming into contact with the media? 299
- Is the media too thick? 299

Media Wrinkles or Shrinks

Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Was loaded media allowed to stand for some time?

Media may shrink or wrinkle if it is heated for an extended time. When printing ends, switch off the sub power and remove the media.

Are the media clamps attached?

When you are performing printing, be sure to attach the media clamps.

Was the media loaded while the print heater was hot?

Loading media after the print heater has warmed up causes the temperature of the media to rise suddenly, which may cause the media to shrink or wrinkle during printing. Before loading media, switch off the sub power and allow the platen to cool.

RELATED LINKS

- P. 168 Adjusting the Ink-drying Method

Is the temperature of the dryer too high?

If the dryer temperature is too high, the media may deform and wrinkle. Set the temperatures to suitable values for the type of media.

RELATED LINKS

- P. 168 Adjusting the Ink-drying Method

Is [Pullback After Printing] set to [Enable]?

Media that has passed once through the dryer may wrinkle depending on its characteristics.

Set [**Media Settings**]>[**Heater Settings**]>[**Pullback After Printing**] to [**Disable**] when using media that is prone to wrinkling caused by the dryer.

Have you stored the media in a low-temperature room?

If the media is loaded while it is still cold, it may wrinkle due to the temperature difference with the print heater. Before using media, allow it to come to room temperature.

Is the humidity of the room too high?

Use the machine in an environment with a humidity of 40 to 60%RH (no condensation).
High humidity can cause the media to sag. If sagging media is used, it may come out wrinkled.

Is the media sagging?

If sagging media is used, it may come out wrinkled.

Media Feeding Is Not Straight

Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Media Feeding Is Not Smooth

Is some other object coming into contact with the media?

Make sure the media does not touch anything else. This may affect output, even when the feed appears to be smooth.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Is the media too thick?

Media that is too thick may not only cause an unstable feed but may scrape the print heads, resulting in a malfunction. Never use such media.

Are the grit rollers dirty?

Check to make sure the grit rollers are free of buildup of foreign material such as media scraps.

RELATED LINKS

- P. 232 Cleaning the Machine

A Media Jam Occurs!

Is an error message displayed?

If an error message is displayed because the media has jammed, immediately correct the problem. Doing so may damage the print heads.

RELATED LINKS

- P. 319 [Motor Error]

Is the media warped or wrinkled?

Many factors can cause warping or wrinkling. Refer to the following and correct the problem.

RELATED LINKS

- P. 294 Media Wrinkles or Shrinks

Is the height of the print heads too low?

Try raising the print heads higher. First, try setting the height to [**Medium**]. If the media is still jammed, change the height to [**High**]. Media may inevitably warp or wrinkle slightly, so adjust the height of the print heads to take this into account.

RELATED LINKS

- P. 160 Changing the Print Head Height

Are the grit rollers dirty?

Check to make sure the grit rollers are free of buildup of foreign material such as media scraps.

RELATED LINKS

- P. 232 Cleaning the Machine

Are the media clamps installed?

When you are performing printing, be sure to install the media clamps.

Is the media loaded and set up straight and securely?

Feeding is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Is some other object coming into contact with the media?

Make sure the media does not touch anything else. This may affect output, even when the feed appears to be smooth.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

Is the media too thick?

Media that is too thick may not only cause an unstable feed but may scrape the print heads, resulting in a malfunction. Never use such media.

Machine Problems

The Print Heads Do Not Move 301
- What to Do First 301
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The printer unit does not run 303
- Is the power switched on? 303
- Is [**Output possible.**] displayed? 303
- Are any covers open? 303
- Is the message [**Output is currently paused.**] displayed on the screen? 303
- Is a message displayed on the screen? 303
- Are the cables connected? 303
- Is the LAN routing appropriate? 304
- Are the LAN settings correct? 304
- Did the software RIP end abnormally? 304
- Is an [**Ink Cartridge Error**] displayed? 304

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- Is the media loaded? 306
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- Is the separating knife installed? 307

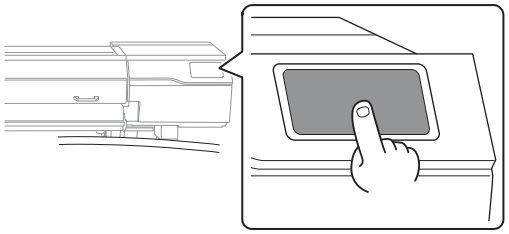
The Print Heads Do Not Move

If the print-head carriage stops over the platen, take action immediately to prevent the heads from drying out.

What to Do First

Switch the sub power off and then back on again. If the media is jammed, also remove the media.

If the print heads move to the home position (inside the right cover), it means the operation has ended successfully.



If the Print Heads Still Do Not Move

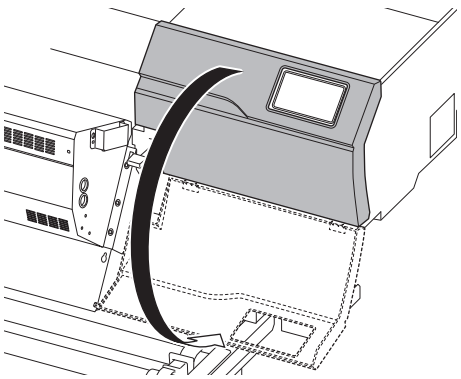
Try switching off the sub power, followed by the main power, then switching on the main power again, followed by the sub power.

If the Print Heads Still Do Not Move

If the heads still do not move, carry out the following emergency response measure, and then contact your authorized dealer.

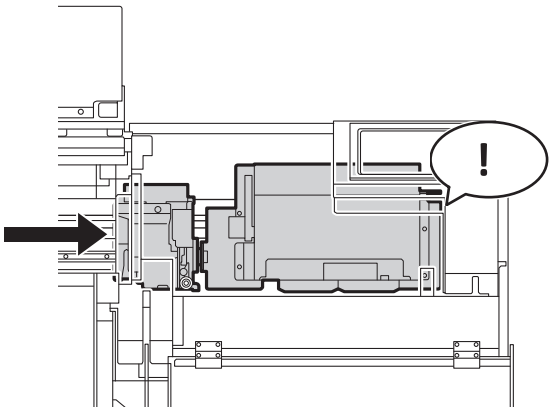
Procedure

1. **Switch off the sub power.**
2. **Switch off the main power, and then open the front cover.**
3. **Open the right cover.**



4. **Gently move the print-head carriage to the home position by hand.**

   Stopping at the place where the audible click is heard locks the print-head carriage in place.



5. **Gently apply pressure from the right side to make sure the print-head carriage does not move to the left.**

   If the print-head carriage moves to the left, move it again slowly by applying pressure from the left side and make sure it locks in place.

6. **Close the right and front covers.**

The printer unit does not run

Is the power switched on?

Switch on the printer's main power, followed by the sub power and make sure the home screen appears.

RELATED LINKS

- P. 27 Turning the Power On

Is [Output possible.] displayed?

Output is not performed when [**Output possible.**] is not displayed at the top of the operation panel. After loading the media and lowering the loading lever, tap [**Setup**]. Follow the instructions on the screen to finish setting up the media. Also, when operating the setting menu, output doesn't start when data is sent from the computer with some menu items. When you return to a menu item where output is possible or tap to return to the home screen, output starts.

RELATED LINKS

- P. 124 Starting Output

Are any covers open?

Close the front, left, and right covers.

Is the message [Output is currently paused.] displayed on the screen?

When [**Output is currently paused.**] is displayed on the screen, operation is paused. To resume, tap [**Resume**].

RELATED LINKS

- P. 104 Pausing and Canceling Output

Is a message displayed on the screen?

RELATED LINKS

- P. 310 Messages
- P. 314 Error Messages

Are the cables connected?

Connect the cables securely.

RELATED LINKS

- AG-640 Setup Guide

Is the LAN routing appropriate?

Check whether or not the network routing is appropriate. Try connecting the computer and the machine to the same hub or connecting them directly using a cable. If this makes it possible to perform output, it means the problem may be in the network itself.

Are the LAN settings correct?

If the cable connections are secure and no problem is found in the network itself, make sure that the IP address and other such settings are appropriate. The settings on both the machine and the computer must be appropriate. Redo the settings, checking to ensure that the IP address does not conflict with the IP address for another device on the network, that the port setting for the software RIP specifies the IP address set on the machine, that the settings have no typing errors, and for other such problems.

RELATED LINKS

- P. 219 Viewing Printer Information
- AG-640 Setup Guide

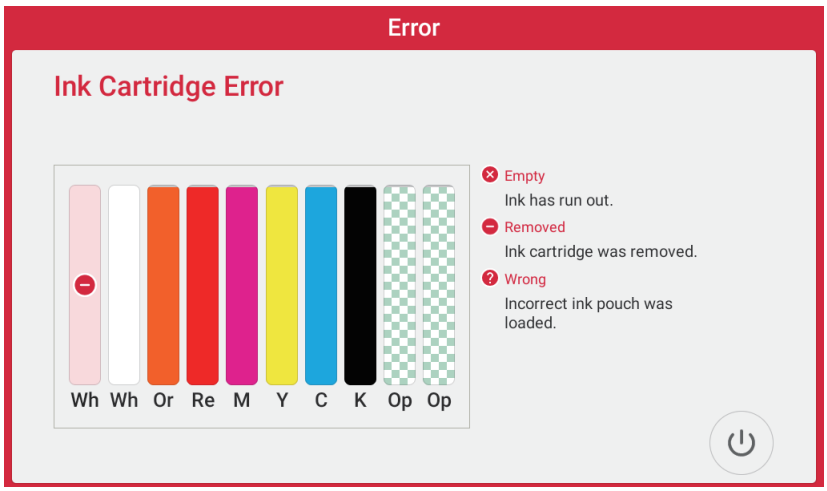
Did the software RIP end abnormally?

Make sure the software RIP is running correctly, and then switch the sub power switch off and back on.

RELATED LINKS

- VersaWorks manual

Is an [Ink Cartridge Error] displayed?



When an [**Ink Cartridge Error**] appears on the display screen, output data cannot be accepted. If there is data that has not yet been output remaining in the machine, output resumes when the error is cleared. If there is unsent data in the computer, output resumes when the data is resent.

When ink runs out

Replace the ink pouch with a new one.

When an ink cartridge with the incorrect color is loaded

Remove the ink cartridge that was loaded incorrectly and load the appropriate ink cartridge.

When an ink cartridge is removed or has not been securely loaded

Securely load the ink cartridge by pushing it all the way to the back.

RELATED LINKS

- P. 112 Ink Pouch Replacement
- P. 314 [**Ink Cartridge Error**]

The Print Heater/Dryer Does Not Become Hot

Is the media loaded?

When media unsetup is performed, the dryer is turned off. If the temperature during standby is set, when the media is set up, the dryer starts warming in an attempt to bring its temperature to the set standby temperature.

RELATED LINKS

- P. 168 Adjusting the Ink-drying Method

Is [Print Heater] turned on?

Set [**Print Heater**] to [**On**].

Is the temperature of the room too low?

The print heater and dryer may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when they reach their set temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

Cannot Separate the Media

Is the separating knife installed?

If the separating knife is not installed, you cannot separate the media.

RELATED LINKS

- P. 274 Replacing the Separating Knife

Messages on the Operation Panel

Messages 310
[When output, cleaning, and other operations are completed, discard the discharged fluid.] 310
[The time for manual cleaning has arrived.] 310
[There are not many wipers remaining. Immediately stock up on wipers. Leaving the printer in a state in which it does not have a wiper will lead to head damage.] 310
[Replace the wiper immediately. Leaving the printer in a state in which it does not have a wiper will lead to head damage.] 310
[The time for flushing sponge replacement has arrived.] 311
[Print head protection mode has activated.] 311
[Remaining cleaning liquid level low.] 311
[Remaining cleaning liquid level low. Immediately stock up on cleaning liquid. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.] 311
[Replace the cleaning liquid pouch immediately. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.] 311
[Install the cleaning liquid pouch.] 312
[Operation of the take-up unit stopped.] 312
[Place the middle pinch rollers over all the grit rollers.] 312
[Install the media clamps correctly.] 312
[Media clamps could not be detected.] 312
[The LAN cable is not connected.] 313
[There is ink that has expired.] 313
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[Wiper Error] 316
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[Software error] 321

Messages

These are the main messages that appear on the machine's display to prompt correct operation. These messages are not errors, so you can close them and perform other work. To check messages again or to carry out their corresponding actions, tap  to display the list of messages. Tap a message to display the menus and procedure required for the action. Perform operations according to the on-screen instructions.

[When output, cleaning, and other operations are completed, discard the discharged fluid.]

This message appears when a certain amount of discharged fluid collects in the drain bottle.

Tap [**When output, cleaning, and other operations are completed, discard the discharged fluid.**]>[**Execute**] to discard this fluid.

RELATED LINKS

- P. 240 If the Discharged Fluid Disposal Message Appears

[The time for manual cleaning has arrived.]

This message appears when it is time to perform manual cleaning.

Tap [**The time for manual cleaning has arrived.**]>[**Execute**] to perform manual cleaning.

RELATED LINKS

- P. 234 Cleaning around the Print Heads

[There are not many wipers remaining. Immediately stock up on wipers. Leaving the printer in a state in which it does not have a wiper will lead to head damage.]

This message appears when the amount of wiper remaining is low and is close to zero.

Replace the wiper. Leaving the printer in a state in which the print heads cannot be wiped for a long time will lead to head damage. If you do not have a replacement wiper, order one. Then, carry out the replacement as soon as the wiper arrives.

RELATED LINKS

- P. 267 Replacing the Wiper

[Replace the wiper immediately. Leaving the printer in a state in which it does not have a wiper will lead to head damage.]

This message appears when the amount of wiper remaining is zero.

There is no wiper, making it impossible to wipe the print heads. Leaving the machine in this state may lead to head damage. In this situation, immediately replace the wiper. If there is no wiper, the machine will not operate.

RELATED LINKS

- P. 267 Replacing the Wiper

[The time for flushing sponge replacement has arrived.]

This message appears when it is time to replace the flushing sponge.

Tap [**The time for flushing sponge replacement has arrived.**]>[**Execute**] to replace the flushing sponge.

RELATED LINKS

- P. 269 Replacing the Flushing Sponges

[Print head protection mode has activated.]

This message appears when the ink in use may not be a product specified by Roland DG Corporation.

If the ink is not a product specified by Roland DG Corporation, the speed and quality of printing will be affected by operations for preventing head malfunctions. To obtain optimal performance, we recommend that you use ink specified by Roland DG Corporation. To purchase ink, contact your authorized dealer.

[Remaining cleaning liquid level low.]

This message appears when there is a small amount of cleaning liquid remaining.

If you have a replacement cleaning liquid pouch, you are recommended to replace the cleaning liquid pouch. If you do not have a replacement cleaning liquid pouch, obtain one.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

[Remaining cleaning liquid level low. Immediately stock up on cleaning liquid. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.]

This message appears when the amount of cleaning liquid remaining is low and is close to zero.

Replace the cleaning liquid pouch. Leaving the printer in a state in which it does not have any cleaning liquid for a long time will lead to head damage. If you do not have a replacement cleaning liquid pouch, order one. Then, carry out the replacement as soon as the cleaning liquid pouch arrives.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

[Replace the cleaning liquid pouch immediately. Leaving the printer in a state in which it does not have any cleaning liquid will lead to head damage.]

This message appears when the cleaning liquid runs out.

There is no cleaning liquid, making it impossible to perform cleaning and other such work that uses the cleaning liquid. Leaving the machine in this state may lead to head damage. If this message appears, immediately replace the cleaning liquid pouch. If there is no cleaning liquid, the machine will not operate.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

[Install the cleaning liquid pouch.]

The cleaning liquid cartridge has not been inserted.

Insert a non-empty cleaning liquid cartridge in the cleaning liquid slot.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

[Operation of the take-up unit stopped.]

This message appears and the take-up unit stops when it is not possible to detect the position of the dancer roller for a continuous length of time during media feeding or pull back.

Tap [**Operation of the take-up unit stopped.**] and follow the instructions on the screen to recover the take-up unit.

[Place the middle pinch rollers over all the grit rollers.]

This message appears when the middle pinch rollers have not been properly placed.

Position these pinch rollers properly between the left and right pinch rollers.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

[Install the media clamps correctly.]

This message appears when the media clamps are not placed at the predetermined positions.

Check the loading status of the media and that the pinch rollers have been positioned correctly, and then correctly set the media clamps at the ends of the media.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

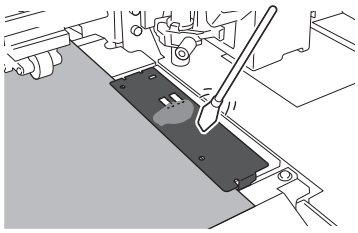
[Media clamps could not be detected.]

This message appears when the media clamps cannot be detected because they are hidden by the media.

Check the loading status of the media and that the pinch rollers have been positioned correctly, and then correctly set the media clamps at the ends of the media.

This message appears when the media clamps cannot be detected because their parts that are read are dirty with, for example, ink.

Use cleaning liquid and a cleaning stick to clean the white parts on the media clamps.



It may not be possible to detect the media clamps because the multi sensor is dirty with ink due to reasons such as the media striking it immediately after printing.

Install the media clamps correctly and clean their parts that are read. If this message still appears, contact your authorized dealer.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

[The LAN cable is not connected.]

This message appears when the machine and a computer are not connected with a LAN cable.

Properly connect the LAN cable.

[There is ink that has expired.]

Ink has expired.

Replace with an ink pouch that is within its expiration date.

RELATED LINKS

- P. 112 Ink Pouch Replacement

[The temperature around the machine is too low. Adjust the room temperature.]

The internal temperature of the machine has fallen below that at which it can operate.

This message appears when the temperature falls to 19°C (66.2°F) or lower during startup or operation (when recovering from sleep mode).

Bring the installed location to a temperature at which operation is possible (20 to 30°C [68 to 86°F]) and allow the machine to come to room temperature.

[The temperature around the machine is too high. Adjust the room temperature.]

The internal temperature of the machine has risen above that at which it can operate.

This message appears when the temperature rises to 35°C (95°F) or higher during startup or operation (when recovering from sleep mode).

Bring the installed location to a temperature at which operation is possible (20 to 30°C [68 to 86°F]) and allow the machine to come to room temperature.

Error Messages

This section describes the error messages that may appear on the machine's display and how to take action to remedy the problem.

Follow the instructions on the screen to clear the error or switch the power off before starting to operate the machine again.

If the action displayed on the screen does not correct the problem or if an error message not described here appears, contact your authorized dealer.

[Ink Cartridge Error]

This message appears when one of the following ink cartridge errors is detected.

MEMO

When an error occurs, the ⊗, ⊖, or ? icon is displayed next to the corresponding ink cartridge on the screen.

Implement appropriate countermeasures according to the error.

- **When ink runs out**

  ⊗[Empty][Ink has run out.]

  Replace the ink pouch with a new one, and then load the ink cartridge.

- **When an ink cartridge is removed**

  ⊖[Removed][Ink cartridge was removed.]

  Load the removed ink cartridge.

- **When an ink cartridge with the incorrect color is loaded**

  ?[Wrong][Incorrect ink pouch was loaded.]

  Remove the incorrectly loaded ink cartridge, and then load the correct ink cartridge.

  When an ink cartridge is removed, ⊖ [Removed] [Ink cartridge was removed.] is displayed.

[Cover Open Error]

The front, right, or left cover is open.

For safety, the machine stops if a cover is opened during operation.

Close the open cover.

[Media End Error]

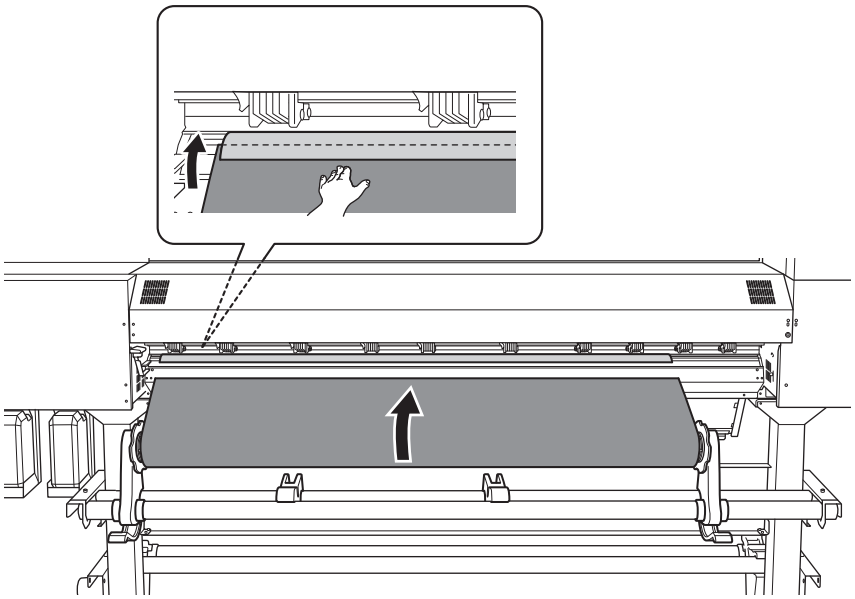
This message appears when one of the following situations is detected.

- Insufficient remaining media during take-up unit setup or printing output
- No media during media feeding

To dry the printed area, the media must be added and sent to the drying feed. Follow the procedure below to add the media.

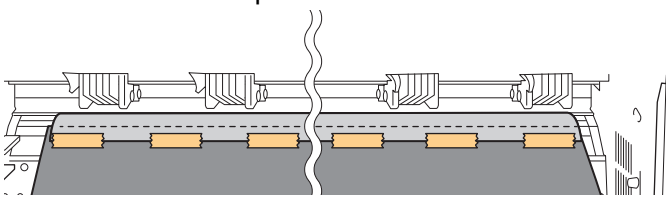
Procedure

1. **Insert the media to add under the loaded media.**



2. **Secure the pieces of media to each other with tape.**

   Use heat-resistant tape.



[Pinch Lever Error]

The loading lever was raised during media setup or after completing this setup.

Lower the loading lever and redo setup.

[Media Loading Error]

This message appears when [Media Edge Detection] is set to [Enable] and media has not been fed with the pinch rollers set incorrectly.

Raise the loading lever, set the pinch rollers correctly, and then set up the media again.

This message appears when [Media Edge Detection] is set to [Enable] and the media is too short.

The media is not long enough to be detected. Raise the loading lever, set [**Media Edge Detection**] to [**Disable**], and then set up the media again.

For the setup method when [**Media Edge Detection**] is set to [**Disable**], refer to 2. B: Determining the Positions of Media (If [**Media Edge Detection**]: [**Disable**])(P. 40).

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

[Loose Media Error]

Media may be caught and become loose at the entrance of the dryer.

Check which locations are causing the media to become loose and eliminate this problem.

Media may become loose because it has stuck to the inside of the dryer.

When you cancel the output, the temperature of the dryer cools. Check that the dryer has cooled down, and then pull the media out from the top of the dryer while exercising caution regarding parts of the media that are not dry.

[Drain Bottle Error]

This message appears when the drain bottle has reached its limit for discharged fluid.

Discard the discharged fluid in the drain bottle, and then attach this bottle again.

MEMO

When the drain bottle is detached, the error message changes to [**Install the drain bottle.**].

This message appears when the drain bottle is misaligned.

Install the drain bottle again.

[Crop Mark Detection Error]

[Crop marks could not be detected.]

Automatic detection of crop marks could not be accomplished.

Try to make corrections using [**Multi Sensor Adjustment**] (the correction function of the sensor for reading crop marks). Depending on the media, it may not be possible to detect crop marks automatically.

[Crop marks were detected however the size or position was incorrect.]

Automatic detection of crop marks could not be accomplished.

Check the data output settings. Then, load the media at the correct position and perform detection of crop marks again. If repeating automatic crop-mark detection also results in an error, start over again from the printing of crop marks.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media
- P. 140 How to Cut with Crop Marks
- P. 193 Correcting the Reading Sensor

[Wiper Error]

Replace the wiper.

The amount of wiper remaining became zero during cleaning.

Load the wiper correctly.

After wiper replacement, it was not possible to take up the wiper.

RELATED LINKS

- P. 267 Replacing the Wiper

[Unable to Fill Cleaning Liquid]

Replace the cleaning liquid pouch.

The machine attempted to perform cleaning, but there was no cleaning liquid.

Replace the cleaning liquid pouch.

Install the cleaning liquid pouch.

The machine attempted to perform cleaning, but no cleaning liquid cartridge was inserted.

Insert a cleaning liquid cartridge in the cleaning liquid slot.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement

[Pinch Roller Error]

The left (right) pinch roller is positioned at a location where it cannot pinch the media.

Raise the loading lever and move the pinch roller to the correct location.

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

[Print Head Height Mismatch]

The set print head height and the actual print head height are different.

Follow the instructions on the screen to change the print head height. When you change this height, [**OK**] is displayed on the screen. Tap [**OK**] to resume printing.

If 10 minutes elapse after the print head carriage moves, this carriage is capped and the data is canceled to prevent the heads from drying out.

RELATED LINKS

- P. 160 Changing the Print Head Height

[Insufficient Media Width]

[The print data is larger than the media width. Continue output?]

This message appears when the size of the printing data is larger than the printing area of the loaded media.

To continue performing output without making corrections, tap [**Continue Output**]. At this time, the portion extending beyond the printing area is not output.

To cancel output, tap [**Cancel**]. Make the printing area wider, for example, by replacing the media with a larger piece of media, and then send the data again.

[Crop marks cannot be added because the print data is larger than the media width. Continue output?]

This message appears when one of the following situations is detected.

- The size of the data with crop marks is larger than the printing area of the loaded media.

- The width of the printing data is 60 mm (2.36 in.) or less.

To continue performing output without making corrections, tap [**Continue Output**]. The data is output without printing the crop marks.

To cancel output, tap [**Cancel**]. Make the printing area wider, for example, by replacing the media with a larger piece of media, and then send the data again.

The size of the data being output is too small.

The horizontal-direction (scan-direction) size of the data should be at least 61 mm (2.41 in.). To continue performing output without making corrections, tap [**Continue Output**]. At this time, the data is output without printing the crop marks.

To cancel output, tap [**Cancel**]. Increase the size of the data, and then send the data again.

[Temperature Increase Timeout Error]

A problem occurred while the temperature of the dryer was increasing and timeout occurred.

The dryer does not rise to the set temperature. Tap [**OK**] to reload the media.

[ConnectHub communication error]

This is displayed when the remaining media management function is used and any of the following has occurred.

- Roland DG Connect Hub has not been launched on the computer.
- This machine is not registered in Roland DG Connect Hub.
- Roland DG Connect Hub cannot communicate with the outside.
- A subscription for Roland DG Connect has not been made.

Eliminate the cause of the error, and then tap [**OK**].

[Barcode scanning error]

This is displayed when correct barcode reading failed when acquiring the remaining media without using the take-up unit during roll media setup.

Reload the media correctly, and then tap [**OK**].

RELATED LINKS

- P. 30 Setup of New Media
- P. 68 Setup of Registered Media

[Communication with Roland DG Connect Hub was not possible.]

[Try again later.]

This message is displayed when Roland DG Connect Hub cannot establish an external connection.

Tap [OK] and try again later.

[Check the status of the connection between Roland DG Connect Hub and VersaWorks.]

This message is displayed when connecting to Roland DG Connect Hub or VersaWorks fails.

Verify that Roland DG Connect Hub and VersaWorks are running.

[Failed to connect to VersaWorks.]

[Restart VersaWorks.]

This message is displayed when connecting to VersaWorks fails.

Restart VersaWorks and tap [OK].

[Printing could not start.]

[Check the status of VersaWorks. (One possibility is that the job could not be found.)]

This message is displayed when no job that has been set to [Print] in VersaWorks is found.

Check the jobs set to [**Print**] in VersaWorks.

[Check the status of VersaWorks. (Two possibilities are that printing is already in progress and that the setup area has been exceeded.)]

This message is displayed when printing is already in progress or when the print data is larger than the printing area.

Check to see if printing is in progress or if the print data is larger than the printing area.

[Motor Error]

A motor error occurred.

Operation cannot be continued. Turn off the sub power. Next, eliminate the cause of the error, then immediately switch on the sub power.

If the machine is allowed to stand with the error uncorrected, the print heads may dry out and become damaged. This error may be caused by such factors as a mistake in loading the media, a media jam, or an operation that pulls the media with excessive force.

The media has jammed.

Carefully remove the jammed media. The print heads may also be damaged. Perform cleaning, and then perform a printing test and check the results.

Has the media been pulled with excessive force?

Excessive tension was applied to the media, and additional action is necessary to recover from this state. First, raise the loading lever and adjust the media to create a small amount of slack, and then switch on the sub power.

[Print Head Dry-out Error]

This message appears when the print heads are forced to the home position to prevent them from drying out.

Operation cannot be continued. Switch the sub power off, and then back on.

[Low Temperature Error]

The internal temperature of the machine has fallen below that at which it can operate.

This message appears when the temperature falls to 16°C (60.8°F) or lower during startup or to 14°C (57.2°F) or lower during operation.

Operation cannot be continued. Turn off the sub power.

Bring the installed location to a temperature at which operation is possible (20°C to 30°C [68°F to 86°F]), allow the machine to come to room temperature, and then turn on the power.

RELATED LINKS

- P. 27 Power Supply Operations

[High Temperature Error]

The internal temperature of the machine has risen above that at which it can operate.

This message appears when the temperature rises to 42°C (107.6°F) or higher during startup or operation (when recovering from sleep mode).

Operation cannot be continued. Turn off the sub power.

Bring the installed location to a temperature at which operation is possible (20°C to 30°C [68°F to 86°F]), allow the machine to come to room temperature, and then turn on the power.

RELATED LINKS

- P. 27 Power Supply Operations

[Take-up Unit Communication Error]

This message appears when an error such as the connection being lost during take-up unit setup occurs.

Operation cannot be continued. Switch off the sub power, followed by the main power. Check that the take-up unit is properly connected, and then once more switch on the main power, followed by the sub power.

[Pump Stop Error]

This message appears when an ink cartridge is pulled out during pump operation, such as during cleaning, and is left in this state for 10 minutes or more.

Operation cannot be continued. Switch the sub power off, and then back on.

[Cleaning Error (Drain Bottle)]

A drain bottle was removed or became full during initial ink filling or light choke cleaning.

Operation cannot be continued. Switch the sub power off, and then back on.

[Dryer Error]

[Power Supply Error]

Power is not supplied to the dryer.

Check whether power is supplied to the dryer, such as if the power cord is connected, the power breaker is not tripped, etc.

[Temperature Increase Error]

A problem occurred while the temperature of the dryer was increasing.

The dryer does not rise to the set temperature. Reload the media and output again.

Other than the above

There may be a problem with the dryer unit.

Try switching off the sub power, followed by the main power, then switching on the main power again, followed by the sub power.

[Service Call]

An unrecoverable error occurred or part replacement that must be performed by a service technician is required.

After turning the power off, contact your authorized dealer.

[Software error]

An error occurred in the internal communication or applications of the machine or part replacement that must be performed by a service technician is required.

Switch off the main power. Then, switch on the main power again, followed by the sub power. If the error still occurs, contact your authorized dealer.

Appendix

Operations When Moving the Unit

Preparing to Move the Machine 324
Step 1: Removing Media and the Blade Holder 324
Step 2: Discarding the Discharged Fluid 326
Step 3: Secure the print heads in place using the retainer. 327
Step 4: Removing the Dryer 328
Step 5: Reinstalling the Machine 329

Preparing to Move the Machine

Before moving the machine, dispose of the discharged fluid, secure the print-head carriage in place, remove the dryer, and perform any other necessary preparations. Attempting to move the machine without first performing these preparations may result in damage to internal components due to leaking ink or damage to the print heads or other components of the machine.

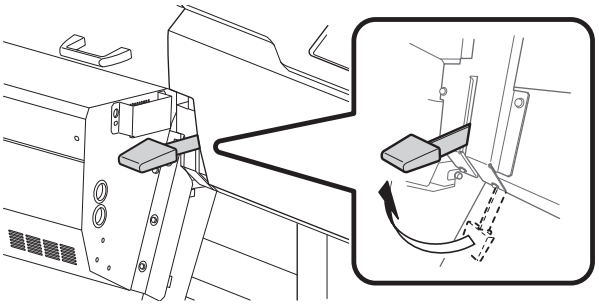
IMPORTANT

- Some work must be performed by a suitably qualified worker. Contact your authorized dealer for help before moving the machine.
- Once the preparations for moving the machine are complete, move the machine promptly and turn on the machine as soon as possible after the machine is relocated. If you leave the machine alone without turning it on, the precipitated ink will coagulate and result in problems such as the clogging of the print heads.
- When moving the machine, keep it at a temperature from 5 to 40°C (41 to 104°F) and at a humidity from 20 to 80%RH (with no condensation). Failure to do so may result in a breakdown.
- Handle the machine with care when moving it, keeping it level (not tilted at an angle) and preventing it from striking other objects.

Step 1: Removing Media and the Blade Holder

Procedure

1. **Remove any media.**
   If any media has been loaded, remove it.
   If no media is loaded, raise the loading lever.



2. **Tap** ☰.
3. **Tap [Maintenance]>[Blade Replacement].**
   The [**Blade Replacement**] screen appears.
4. **Tap [Execute].**
   The cutting carriage moves to a position where blade replacement is possible.
5. **When [Open the front cover.] appears, open the front cover.**
6. **Detach the blade holder.**
7. **Tighten the screw.**
8. **Tap [Finish All].**
9. **Close the front cover.**

10. Tap  .

The home screen appears.

Step 2: Discarding the Discharged Fluid

Procedure

1. **Tap ☰.**
2. **Tap [Maintenance]>[Drain Bottle].**
   The two installed drain bottles are displayed on the screen.
3. **Tap [Execute] for one of the drain bottles.**
   If a message appears, follow its instructions, and then tap [**OK**].
4. **Remove the drain bottle and discard the discharged fluid.**

   IMPORTANT

   When you remove the drain bottle, a few drops of discharged fluid may come out of the machine. Exercise caution to prevent this fluid from soiling your hands or the floor.

   IMPORTANT

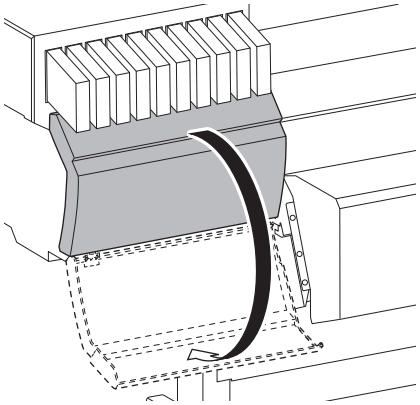
   Dispose of discharged fluid properly, in accordance with the laws in effect in your locale.
5. **Quickly attach the emptied drain bottle to the machine once more.**
6. **Tap [Finish].**
7. **Follow the same procedure to empty the other drain bottle.**
8. **Switch off the sub power.**
9. **Turn off the main power switch.**

Step 3: Secure the print heads in place using the retainer.

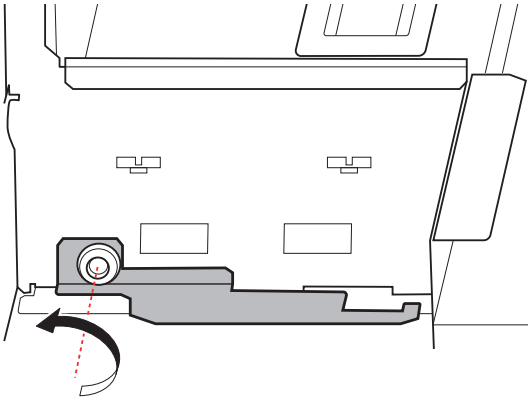
Use the retainer that was attached to the machine during its installation.

Procedure

1. **Open the left cover.**

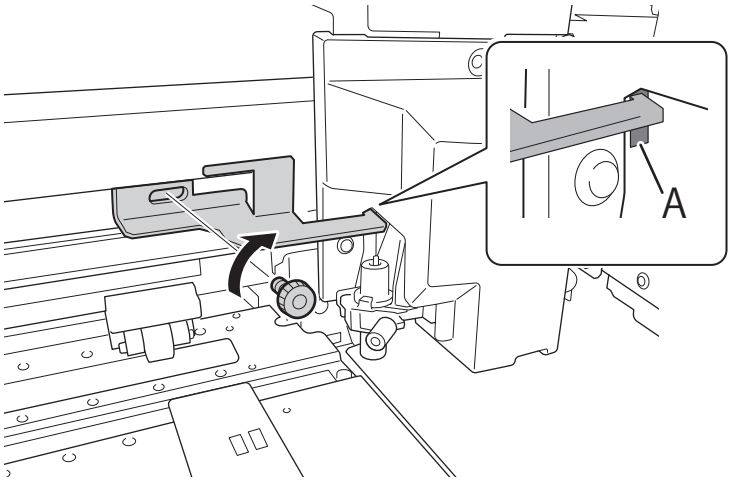


2. **Remove retainer C.**



3. **Open the front cover.**

4. **Hook the removed retainer C into hole A, then fasten with a screw at the position shown in the figure to fasten the cutting carriage in place.**



5. **Close the front and left covers.**

Step 4: Removing the Dryer

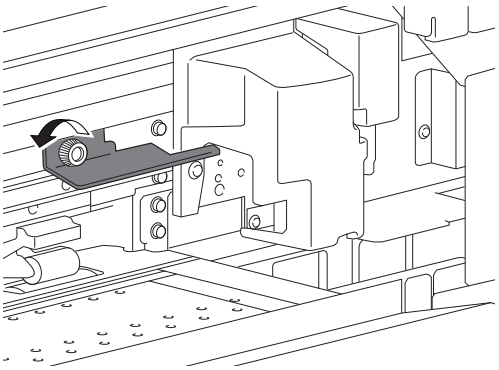
This work must be performed by a suitably qualified worker. Never attempt to perform this work yourself.

Step 5: Reinstalling the Machine

Procedure

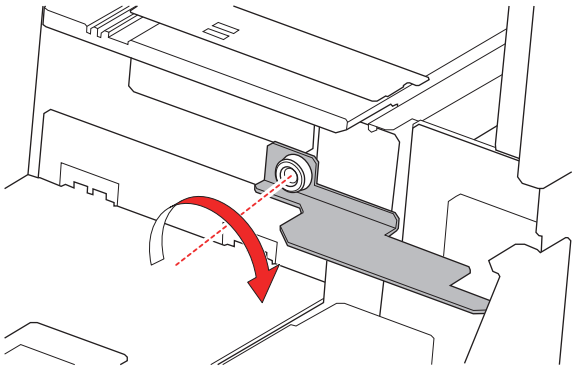
1. **Once the preparations are complete, move the machine without delay.**

2. **Reinstall the printer immediately, and then remove the retainer securing the print heads in place.**



3. **Install the retainer at the position indicated in the figure for storage.**

The installation position is near the left edge of the machine on the inside (visible with the left cover open).



4. **Turn on the main power switch.**

IMPORTANT

To prevent the print heads from being damaged, move the machine with as little delay as possible and switch on the main power as soon as possible after moving the machine. To install the machine again, follow the procedure in the Setup Guide.

5. **Press the sub power button.**

The home screen appears.

6. **Check that the print heads are not dirty.**

If they are dirty, follow the procedure below to clean them.

(1) **Tap ☰ on the operation panel.**

(2) **Tap [Cleaning]>[Manual Cleaning].**

(3) **Tap [Execute].**

The print heads move to the left end of the machine. Check that the areas around the print heads are not dirty. If they are dirty, perform manual cleaning.

RELATED LINKS

- P. 116 Cleaning Liquid Pouch Replacement
- P. 234 Cleaning around the Print Heads

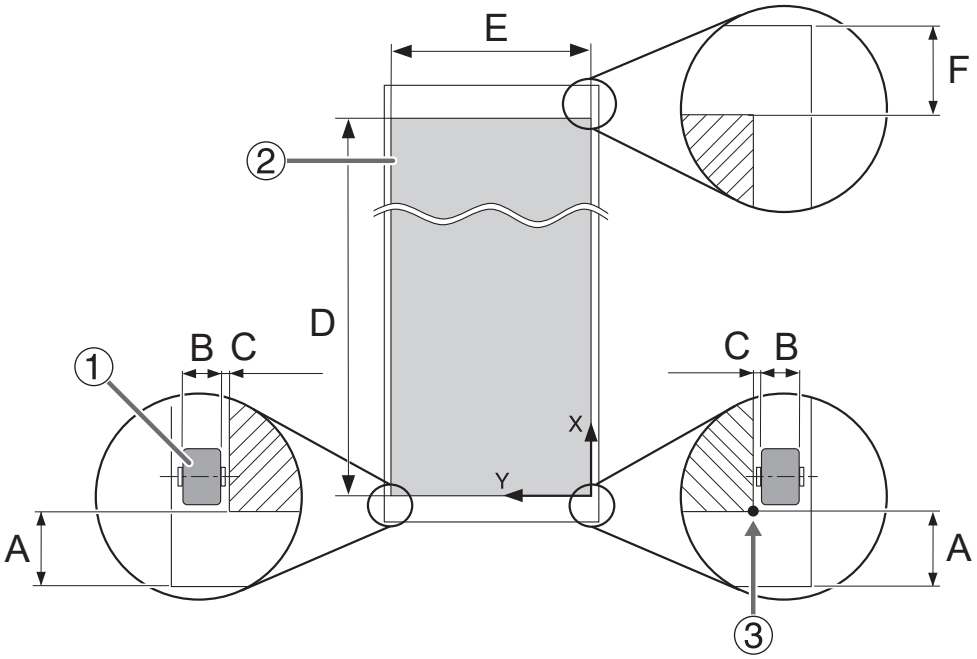
Main Specifications

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Printing/Cutting Area

Maximum Area

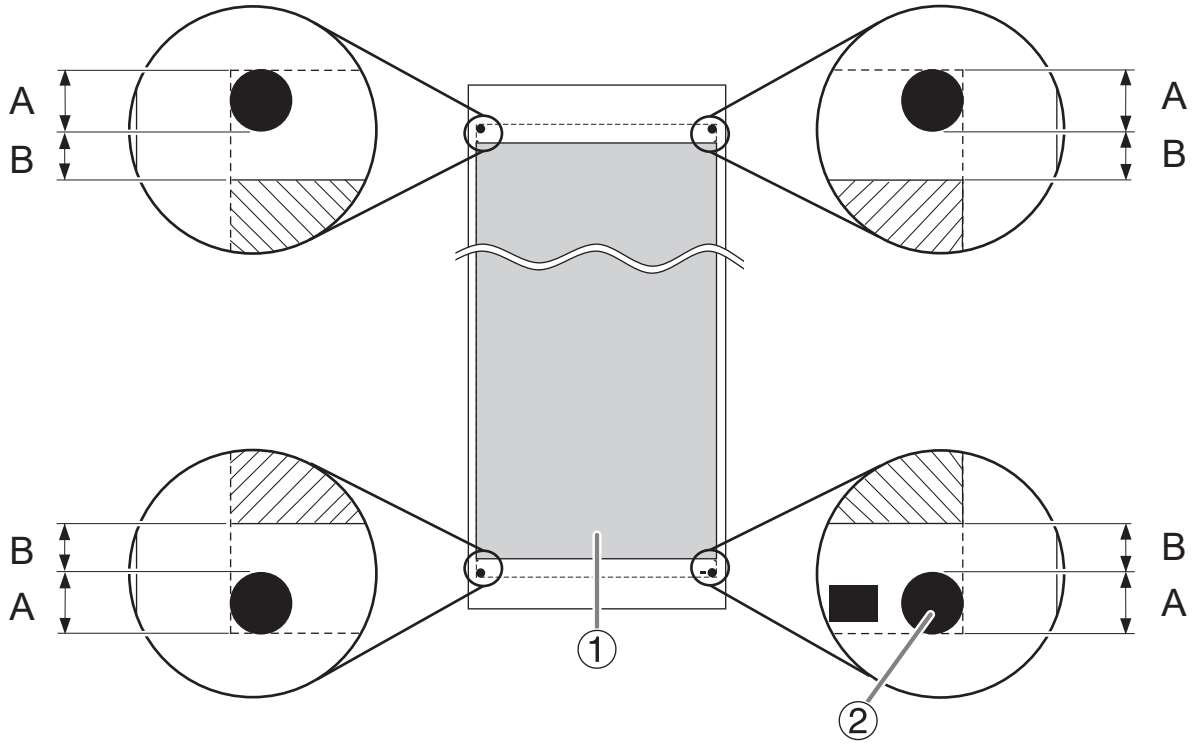
The printing or cutting area along the horizontal plane (the direction in which the carriages move) is determined by the position of the pinch rollers.



①	Pinch roller
②	Printing or cutting area
③	Printing or cutting coordinates origin (0,0)
A	75 mm (2.95 in.)
B	10 mm (0.39 in.)
C	1.5 mm (0.06 in.)
D	Max. 24,998 mm (984.17 in.)
E	Max. 1,600 mm (63 in.)
F	450 mm (17.72 in.)

Maximum Printing Area When Using Crop Marks

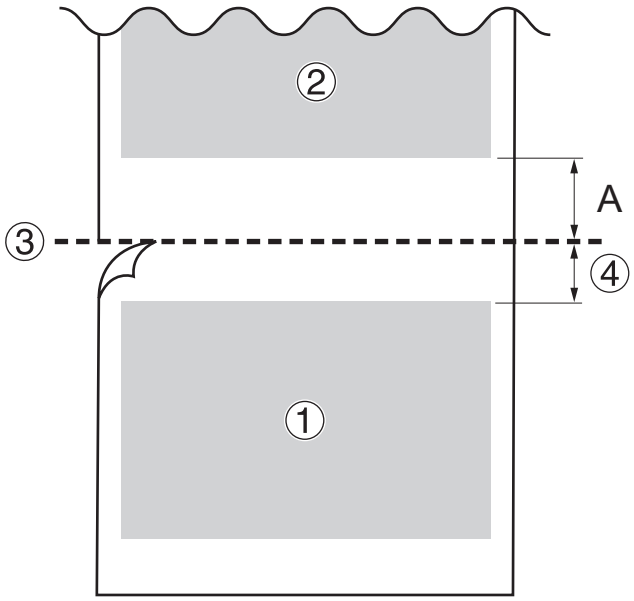
The maximum printing area when crop marks are used is reduced from the maximum printing area when crop marks are not used by an amount equal to the crop marks.



①	Maximum printing area
②	Crop mark
A	12.5 mm (0.5 in.)
B	10 mm (0.39 in.)

Media Separation Location During Continuous Printing

When a command for separating the media is sent from the computer, the separation location on the media is as shown in the figure below.



①	First page
②	Second page
③	Separation location
④	When **[Pullback After Printing]** is **[Disable]**: 450 mm (17.72 in.) When **[Pullback After Printing]** is **[Enable]**: RIP software value
A	When the media is separated with **[Sheet Cutting]**: 450 mm (17.72 in.) When the media is separated with **[Perforated Sheet Cutting]** or **[Perforated Sheet Cutting (Leaving Both Edges)]**: 75 mm (2.95 in.)

About the Blade

The cutting conditions and the service life of the blade change according to the media and the operating environment, even when you're using identical blades. The service life also differs according to the type of blade. A rough guide is shown below.

Blade	Media	Blade force	Amount of blade offset (amount of blade tip correction)	Blade life (general guide)*1
ZEC-U5032	General Signage Vinyl	30 to 100 gf	0.25 mm (0.01 in.)	8,000 mm (26,246.7 ft.)
ZEC-U5025	General Signage Vinyl	30 to 100 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)
	Fluorescent Vinyl	120 to 200 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)
	Fluorescent Vinyl	100 to 200 gf	0.25 mm (0.01 in.)	4,000 mm (13,123.4 ft.)

*1 The values for "Blade life" are estimates for when an identical type of media is used.

When uncut areas remain even when the blade force is increased to a value that is higher than the values shown in this chart by 50 to 60 gf, replace the blade.

Memo

Software 337

Software

This product is equipped with an "eT-Kernel Multi-Core Edition" eT-Kernel and a "PrCONNECT(R)/Pro" TCP/IP protocol stack, both made by eSOL Co., Ltd. eT-kernel and PrCONNECT are registered trademarks of eSOL Co., Ltd.

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Roland