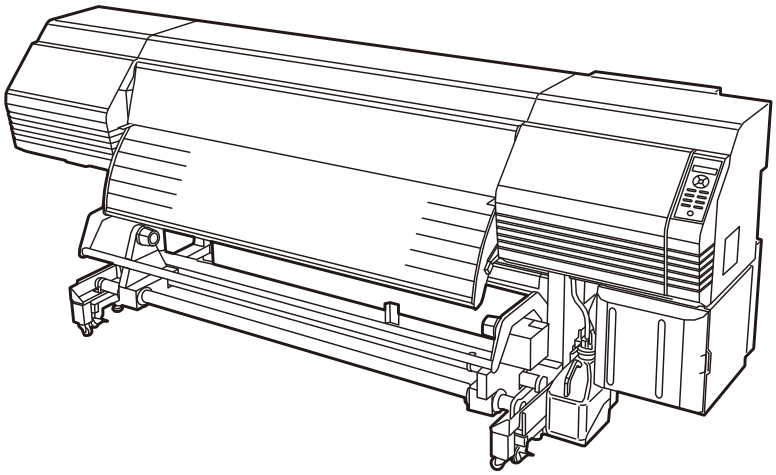
OKI

User's Guide

Solvent Ink Color Inkjet Printer

IP-6620



IP-6620 Solvent Ink Color Inkjet Printer User's Guide

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All other trademarks are the properties of their respective companies.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

The CE mark, that shows that the products sold in the EU are conformed to the requirements of EC directive, is statutorily required to be affixed to the products.
In each directive, the scope of directive to be applied to equipment is explicitly defined. Our company's product IP-6620 conforms the EMC directive, low voltage directive and RoHS Directive.

Introduction

Your printer is the IP-6620 Color Inkjet Printer (hereafter simply called the printer.)

IP-6620 supports media up to 64 inch width. The printer is a color inkjet printer using solvent ink and equiped with USB 2.0 interface.

The printer has two types of specifications, 7 color specifications and 6 color specifications, depending on the number of print heads.
Two models are available for the 6 color specifications printer, the cartridge ink system (CIS) model and the large capacity ink system (LCIS) model*.

This guide provides explanations for the IP-6620 7 color specifications model. However, individual information is given when necessary.

This guide, the **IP-6620 Solvent Ink Color Inkjet Printer User's Guide**, describes the features and functions of the printer and the printing procedure. In addition, troubleshooting is also included. Read the sections suitable for your purpose.

The following items should be read before using the printer to ensure correct and safe operations.

- **Safety precautions**
- **Components delivered with this product**
- **Manual legend (Notational rules)**
- **Operating conditions**

Keep this guide in an easily accessible location to use it as a reference when needed.

* About the LCIS
The LCIS (Large Capacity Ink System) is available in some regions.
The LCIS model is available only in 6 color specifications.
For more information, contact your dealer or a service representative.

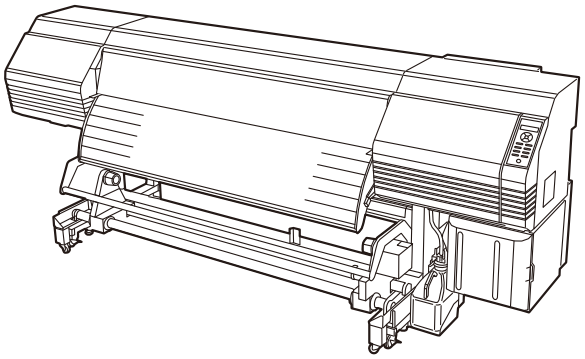
To maintain an excellent print quality

Be sure to pay attention to the following three points to maintain an excellent print quality and use the printer over a long time.

(1) Load the media correctly

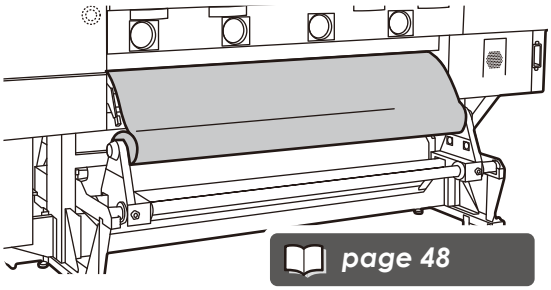
(2) Adjust the media advance adjustment value and the bidirectional print position adjustment value properly

(3) Perform the necessary maintenance operations



1. Load the media correctly

Load the media on the feed unit.



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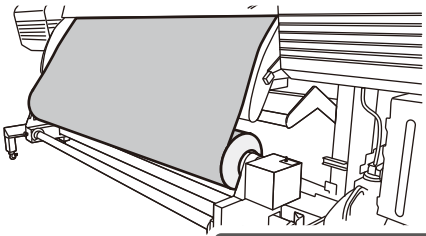
Set the media on the take-up reel (TUR) unit.



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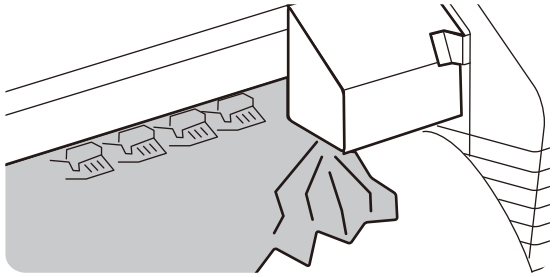
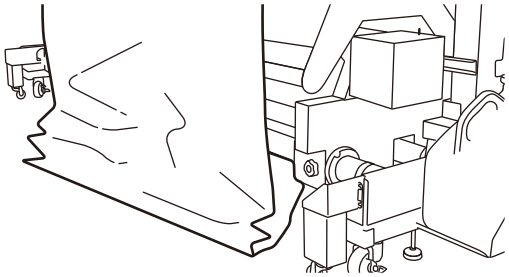
If the media is not set correctly…

The media may skew or contact the print heads, which will decrease the print quality.

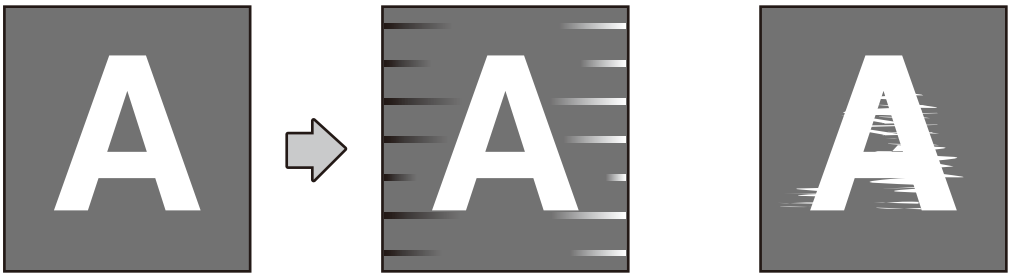
Media jam caused by skewed media



Incorrect winding



<Examples>

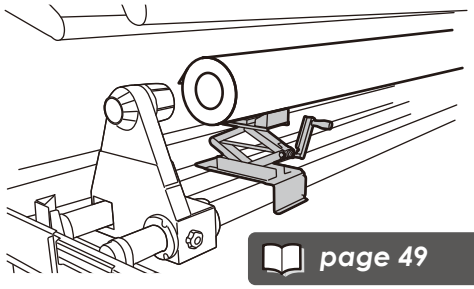


Colors on the right and left differ due to skewed media.

The printout is not clean due to media contacting the print heads.

The printer has been designed to facilitate media installation.

Raise the media with the media jack.



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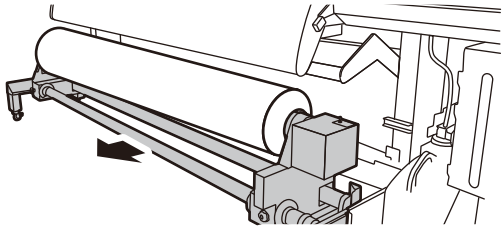
Move the take-up reel unit toward you.



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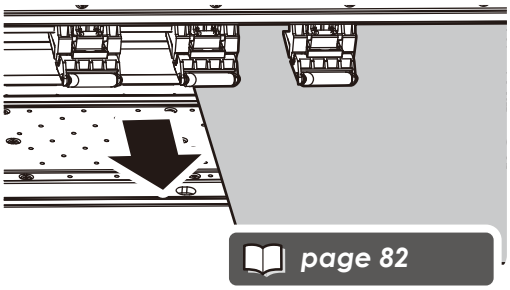
2. Adjust the media advance adjustment value and the bidirectional print position adjustment value properly

Media advance



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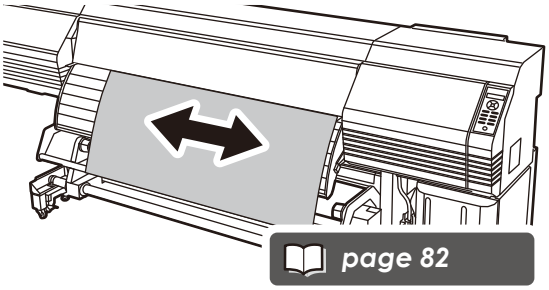
Bidirectional print positions



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If these adjustment operations are not performed when using a new media…

The ink may not be output to the right position and the print quality may decrease.

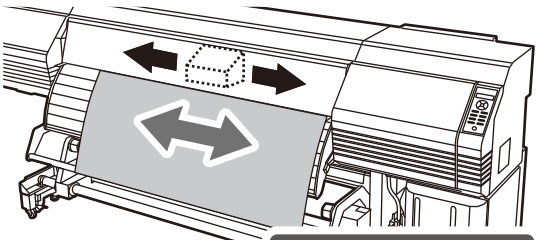
<Examples>

Banding (white or black bands) may appear if media advance adjustment is not performed correctly.

Grains may become visible and the image may appear blurred if the bidirectional print positions are not adjusted.

The printer has been designed to facilitate adjustment.

Adjustment can be performed automatically.



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3. Perform the necessary maintenance operations

Clean the capping unit.

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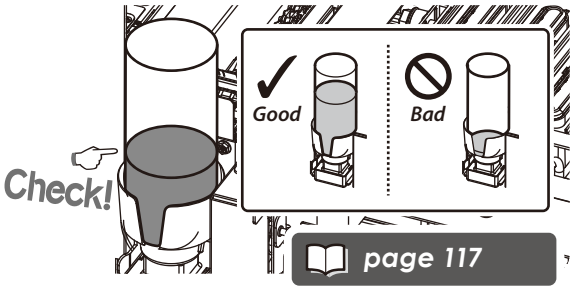
Check the wiper cleaning liquid.



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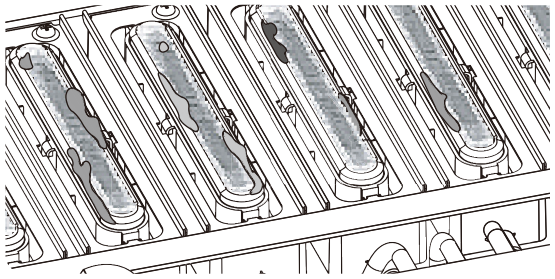
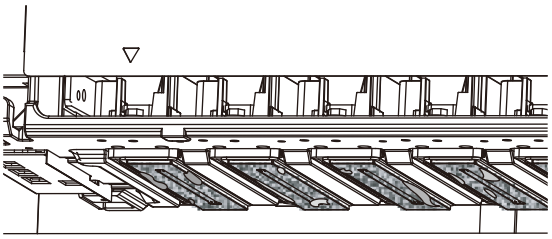
If the printer is used when not clean…

The print quality may not only decrease but the printer may also malfunction.

The capping unit is dirty.



The print heads are dirty.



Use CP_Manager…

to make maintenance operations easier.

Maintenance status and periods can be grasped at a glance.

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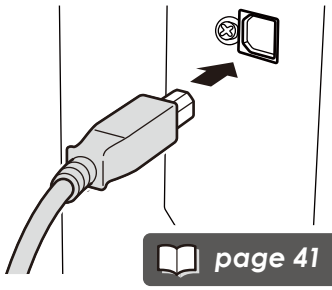
Starting out...

Connect to a computer.



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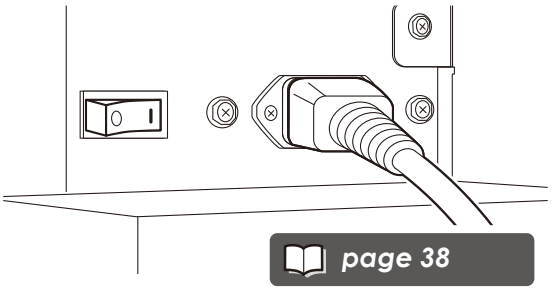
Turn on the power.



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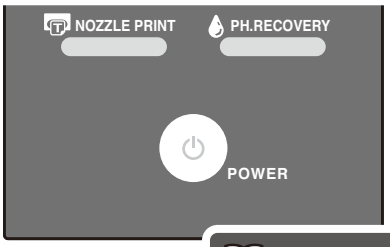
Turn off the power.



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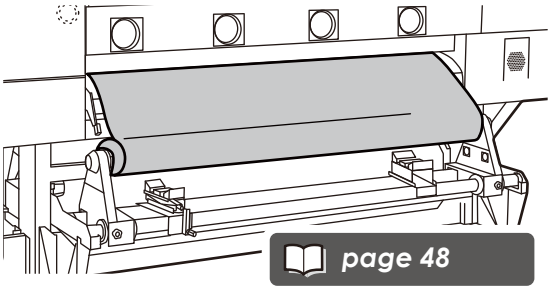
Load the roll media.



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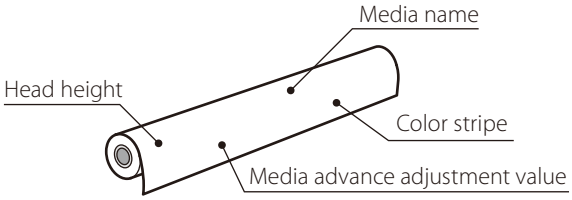
Register the media.



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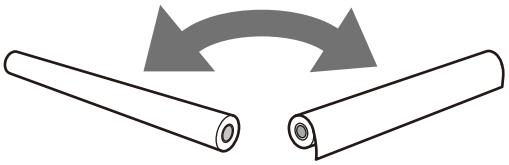
Replace the media.



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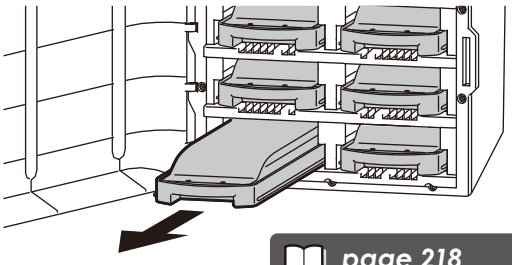
Replace the ink cartridge (CIS).



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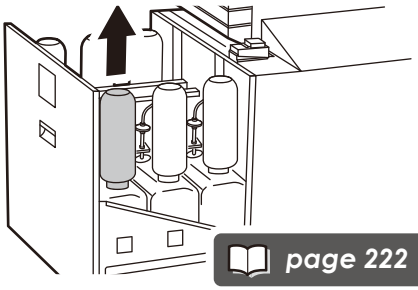
Replace the ink bottles (LCIS).



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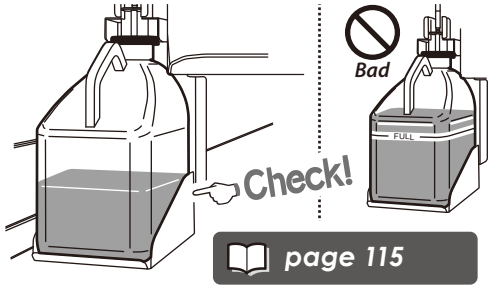
Regular Inspection (Maintenance)

Check the Waste ink bottle.



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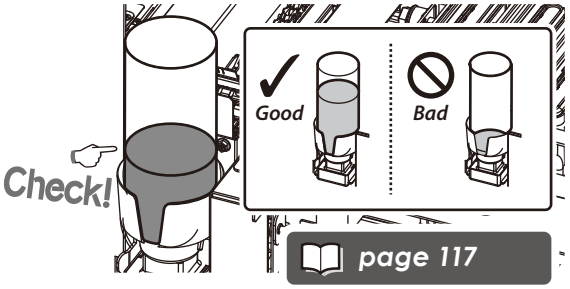
Check the wiper cleaning liquid.



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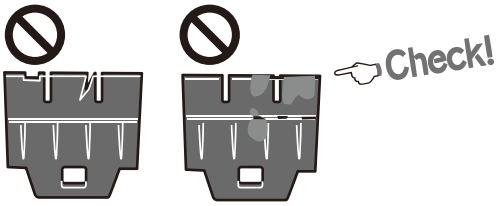
Check stains on the wiper blade.



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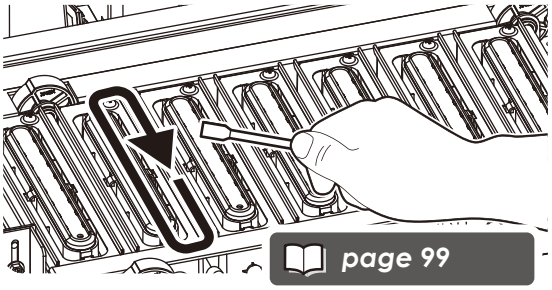
Clean the capping unit.



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Perform a NORMAL print head cleaning.

```
#PH RECOVERY
>NORMAL
```

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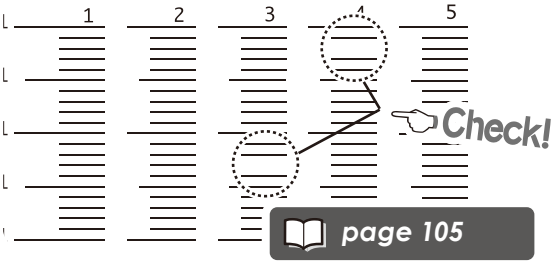
Perform a NOZZLE PRINT pattern.



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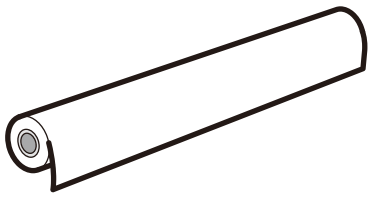
When you want to...

Print on a thick media.



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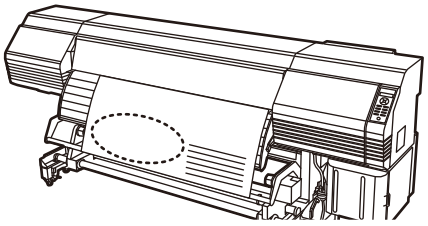
Print on the margin of the media.



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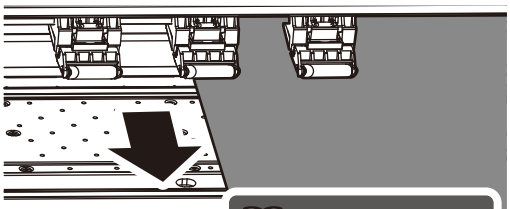
Change the media advance adjustment value during printing.



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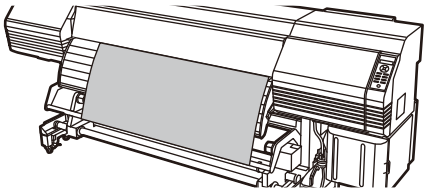
Change the heater temperature during printing.



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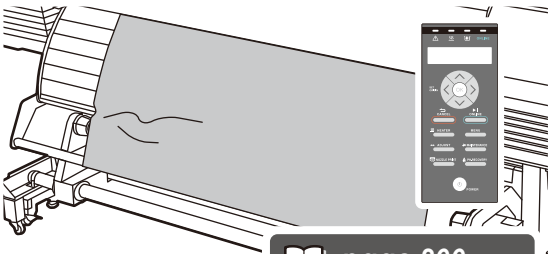
Remove media wrinkles during printing



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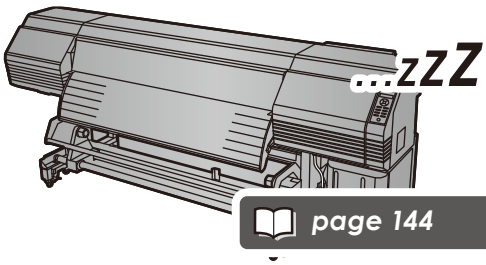
(During holidays and so on)

Switch off the printer for a long period of time.



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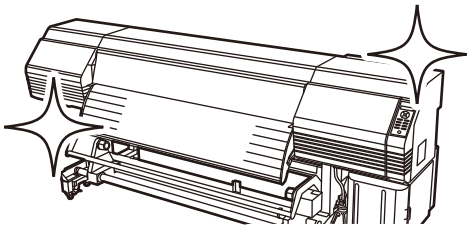
Clean the printer.



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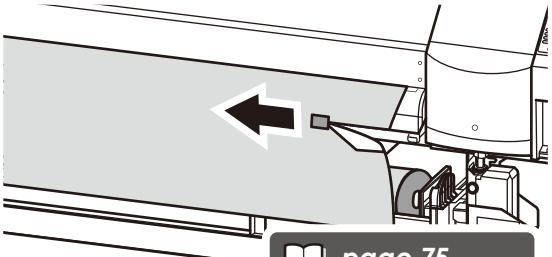
Cut the media (when an option is installed)



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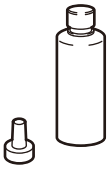
Replacement and troubleshooting

Replace consumables.



Wiper cleaning liquid

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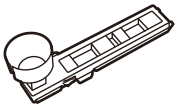

Wiper sponge

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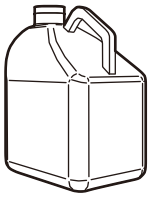

Waste ink bottle

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Wiper blade

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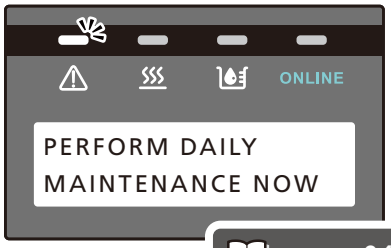
A warning message is displayed.



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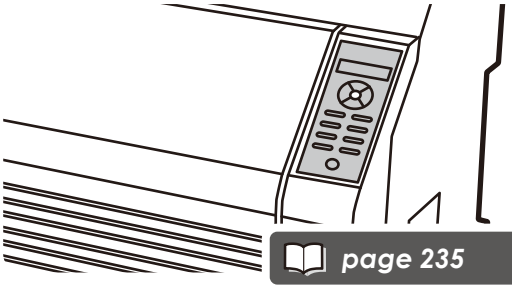
An error message is displayed.



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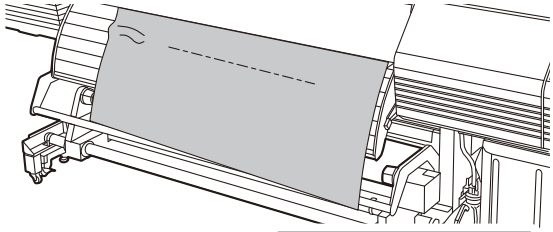
The media is not straight.



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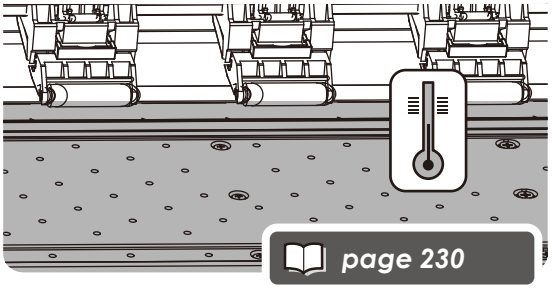
The heater does not warm up.



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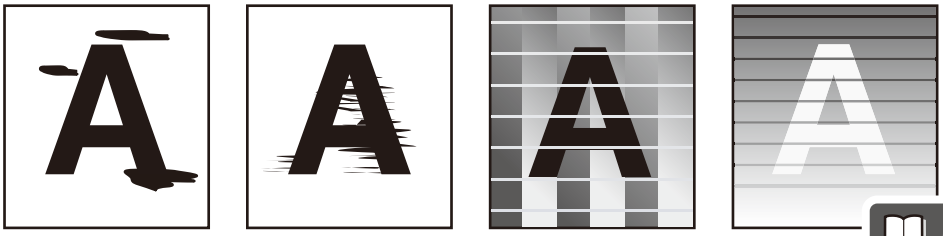
Smears or stripes appear on the print.



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Advanced operations

Troubleshooting

Menu tree

Appendix

Safety precautions

The following symbols are used in the guide to ensure the printer's proper operation and to prevent the printer from being damaged. Follow the instructions marked with these symbols:

⚠ **WARNING**	**Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.**
⚠ **CAUTION**	**Failure to follow the guidelines marked with this symbol could result in minor personal injury or damage to the product.**

Example of symbols:

This symbol (Triangle) denotes items that require special care while executing a certain procedure or operation.

This symbol (Crossed circle) denotes items that are forbidden.

This symbol (Plain circle) denotes items you should follow to prevent accidents or injury.

This equipment is not suitable for use in locations where children are likely to be present.

⚠ WARNING Be sure to read warnings below before use.

Use the power supply voltage specified on the nameplate. Avoid overloading the electrical outlet used for the printer with multiple devices.

Make sure that the printer is well grounded. Failure to ground the printer may result in electrical shock, fire, and increased susceptibility to electromagnetic interference.

Always hold the power cord by the plug when connecting to and disconnecting from the power outlet.

Never pull on the cord directly. Doing so may damage the cord and create a risk of fire and electric shock.

Do not use a conversion plug.

Do not disassemble or repair the printer yourself. Do not reinstall the printer in a new location. In such cases, call your service representative.

Do not damage, break, process, or heat the power cable. If it is damaged, replace it with a new one. Using a damaged power cable may cause fire or electric shock.

Never use the printer in a place of extreme humidity or any place where it can possibly be splashed by any liquid. If any liquid enters inside the printer, it could lead to fire, electric shock, or a breakdown.

Do not allow metal or liquids to touch the internal parts of the printer. This may cause fire, electric shock, or other serious hazards.

Do not disconnect or connect the power cord with wet hands. Doing so may lead to electric shock.

Ink used in the ink cartridges is combustible. Do not use or store ink cartridges near open flames, sparks, or other sources of ignition.

Turn off the printer, unplug the power cord from the power outlet, and contact your service representative in any of the following cases. Using the printer continuously in an abnormal state may result in an accident or fire.

- Smoke, strange noise or smell is generated from the printer or the printer is overheated.
- There is smoke or an unusual smell coming from the printer.
- The printer is making an unusual noise during normal operation.
- A piece of metal or a liquid (not part of cleaning and maintenance routines) has touched internal parts of the printer.
- An error requiring service by a service representative occurs.

Avoid contact between skin, eyes, and clothing and the printer's following consumables: ink, storage liquid, cleaning liquid, cap cleaning liquid, wiper cleaning liquid, and waste ink.

- In case of contact, immediately wash your skin with soap and water.
- Use an approved eye wash station if ink splashed into your eyes and consult a doctor if necessary. If an approved eye wash station is unavailable, rinse your eyes with cold water and consult a doctor. Remove clothing soaked with ink to avoid contact with your skin.

Do not swallow ink. If swallowed, do not induce vomiting but seek immediate medical attention.

Do not place the printer on an unstable table or at a slant place. If it falls, it may lead to injury.

Do not touch heater surfaces in the media path. This may cause burns.

Keep ink cartridges and waste ink bottles out of the reach of children.

⚠ CAUTION Be sure to read warnings below before use.

Operate the printer carefully near the printer's movable parts, so that your hands or your clothes are not caught in the printer.

Install and operate the printer in a well-ventilated area. Otherwise the operator may feel sickish. In such a case, take a rest in a well-ventilated place.

Media rolls are heavy. Handle them with care using a dolly or other tools to prevent them from falling. Dropping a media roll could cause personal injury or damage to the printer.

It is recommended to carry media rolls with a dolly.

Be careful not to let ink come into contact with your skin or clothes. If ink touches your skin, immediately wash it off with soap and water.

⚠ CAUTION

◆ **Make sure the media rolls are secured when stored. They are heavy and may cause injury if they roll or fall.**

To ensure safe operation of the Printer, pay attention to all the warnings and cautions contained throughout this manual.

Power supply

1. Install the printer near the socket. To be able to pull out the power plug in an emergency, the power socket must be reached easily.
2. Do not share the power supply with noise generating devices such as a motor.
3. Use the power supply voltage specified on the nameplate.
4. Monthly turn off the printer and check the following:

- The power plug is securely inserted into the socket.
- No dust is accumulated between the plug terminals and the socket. When dust is found, clean the area with a dry cloth.

Printer

1. Do not place anything on the top of the printer. Do not rest your elbows on the printer.
2. Do not apply shock or stress to the printer.
3. During the print operation, do not open the front cover, nor set the pressure roller lever to the open (top) position. Otherwise the printer operation will end.
4. Do not clean the cover's surface with benzene or paint thinner. This may damage the printer's paint. Clean the cover's smear with a soft cloth. If the cover is considerably smeared, wipe it off with a cloth moistened with water-diluted neutral detergent. If it is not cleaned, the printer's surface paint may be damaged.
5. Always use the OKI Data specified attachments and options. The other products may degrade the image quality, damage the printer, and make maintenance impossible.

Regular inspection and maintenance

Due to solvent ink characteristics, inspection and maintenance need to be performed periodically. (For details on maintenance, see the Maintenance section starting on 📖 ***page 97***.)

1. Perform the start maintenance every day before starting using the printer.
2. Pay particularly attention to the items below.
   - Supply wiper cleaning liquid when the bottle is empty.
   - Print heads are highly-precise parts. Do not wipe the nozzle surface directly.
3. If you stop using the printer for more than 2 weeks, perform the service cleaning.
4. If, after the service cleaning, you have left the printer for a long time and you start printing with the printer again, be sure to perform the head cleaning operation and to prime the ink system.
5. The printer performs periodically automatic maintenance operations. Keep the printer always to allow it to perform these maintenance operations.

Consumables

1. OKI Data ink cartridges should be installed before the **Install By** date printed on the pack. Other non-genuine ink cartridges may damage the printer. In this case, printer repair fees will borne by you.
2. To guarantee print quality, expiration dates are indicated for ink cartridges, cleaning liquid cartridge sets, and storage liquid cartridge sets. Use these consumables before their expiration date.
3. Put used ink cartridges into a plastic bag and dispose of them as industrial waste. Observe local regulations for disposal of consumables.
4. Unpack the OKI Data ink cartridges only to install them. Do not store OKI Data ink cartridges in direct sunlight. Store the OKI Data ink cartridges in a cool, dry place. This prevents deterioration of the ink during storage.
5. Do not disassemble the ink cartridges. They are intended for single use only.
6. Do not drop the ink cartridges. Avoid shock to them. The drop or shock may cause an ink leakage.

Media

Supported media

The Printer supports solvent inkjet media of the types below. Note that print conditions may change depending on environmental conditions and the media production batch. So you are recommended to test the print with the media beforehand.

For details, contact your service representative.

- Vinyl
- Banner
- Mesh banner (with liner)
- Backlit banner (FF)
- Solvent printing coated paper

Precautions when storing media

- When storing media, packed or unpacked, avoid direct sunlight and humidity. To avoid dust put the media into a box or a bag, and keep it in a cool and dark place.
- Avoid rapid temperature change to prevent condensation.
- Do not store media upright. A media stored upright may be deformed, move on the roll due to its weight, or may its edges may be damaged.
- Do not pile up roll media.
- Make sure the media rolls are secured when stored. They are heavy and may cause injury if they roll or fall.

Precautions when disposing of media

- Dispose of media or printout in compliance with all local, state, and federal regulations.

Precautions when using media

- Do not subject unpacked media to temperature and humidity variations. Before loading the media on the printer, leave the media in the operating environment for three hours or more. Note that ambient humidity variations caused by turning on or off the air conditioner may affect the media.
- The media may curl at low temperature, and wrinkle at high temperature. Keep the temperature around 23°C and the humidity around 50% when you use the media.
- Do not use a media when a part of it is scratched, wrinkled, curled, or that is covered with foreign matters. Never use a damaged media, as the right and left edges of the media are especially critical to feed media on the printer. Also, do not drop the media and avoid water stains, which may degrade the image quality and cause the printer to malfunction.
- Do not touch the printed part of the media. Always hold the media by the margin. The image quality may be degraded by human sebum and sweat.
- If the media is wound in the shape of a cone, correct the winding before loading and using the media.

Precautions when handling printouts

- Do not touch the printed surface of the media before the ink dries, or especially 24 hours after printing. Handle the printout by the margins.
- Do not scratch the printout to avoid lost or transfer of colors. To avoid color transfer, do not stack printed media on one another with their printed surface facing in contact.
- Do not put printed media on a printout from a copier or laser printer. The printouts' ink or toner may make the two printouts to stick together.
- Note that ink on a printed surface may come off if the surface is rubbed hard or scratched.
- The printed image may bleed or disappear if scratched or left while being wet.

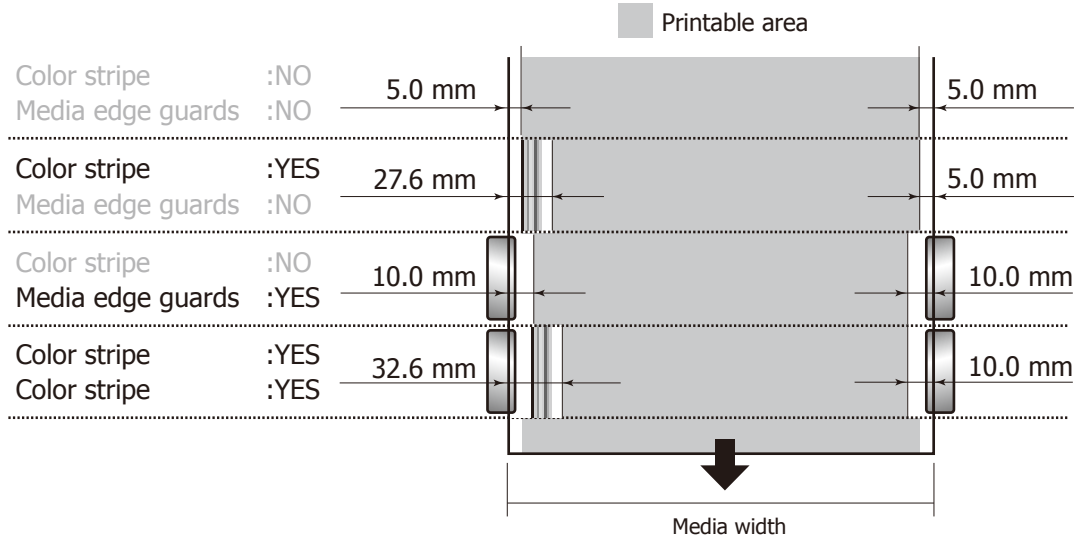
Other precautions

- Media loses its color and quality with age. Check the media condition and select the media in the best condition.
- Cut the media carefully, as paper dust may make irregular surfaces.
- When adhesive-backed media is applied, some adhesive agent may be left on the platen, which may cause a media jam. So clean the agent completely with a soft cloth moistened with the neutral detergent.

Available area on media

The available area on media in the scanning direction depends on the media width, the media edge guards application, and the presence pf the color stripe. With the media edge guards and color stripe applied, the available area decreases by 34.9 mm on the right and 10.0 mm on the left.

Without mesh printing kit nor wide type media edge guards for platen sheet



Manual legend (Notational rules) —

The notational rules used for explanation in this guide are as follows:

Marks

⚠ WARNING

◆ **Boxes marked with a WARNING describe points of caution to avoid serious personal injury.**

⚠ CAUTION

◆ **Boxes marked with a CAUTION describe points of caution to avoid injury to yourself or damage to the printer.**

TIP:

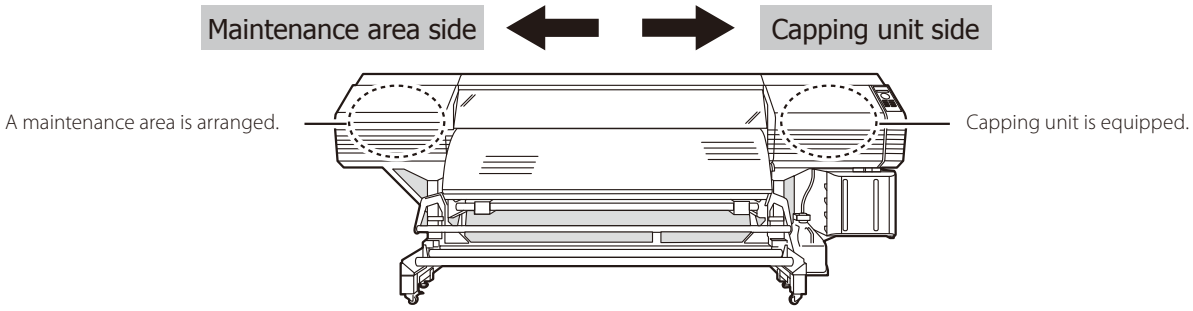
◊ This mark indicates useful information, additional items and important operations.

📖 This mark is followed by a reference section or page number.

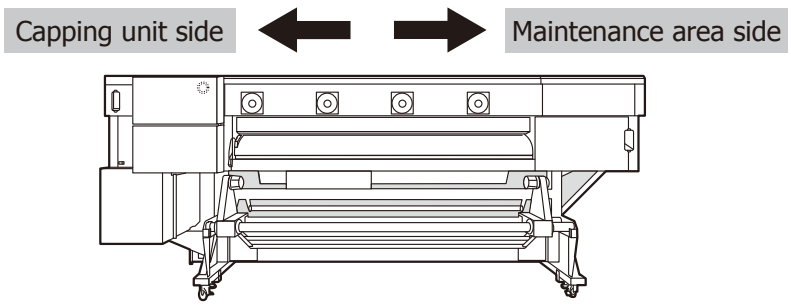
Capping unit side and maintenance area side

To identify the printer's right and left, this guide mentions the capping unit side and maintenance area side as follows.

Viewed from the printer's front (media take-up side)



Viewed from the printer's rear (media supply side)

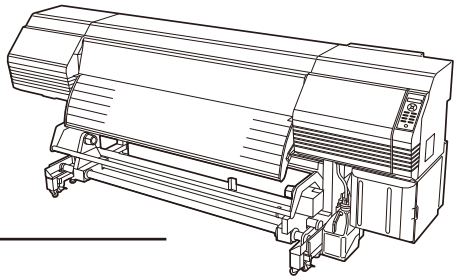


Components delivered with the printer

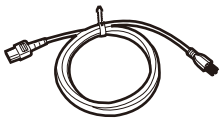
Various components, including optional parts, are delivered with the printer. They must be attached to the printer during its installation. Check that all the components below are delivered.
If any item is missing or damaged, contact the dealer from whom you purchased the printer or a service representative.

Printer

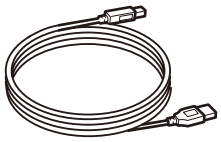
<1 unit>
- with USB interface
- with the feed unit and take-up reel unit



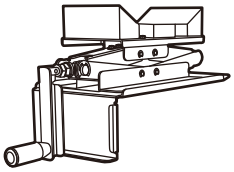
Items packed with printer



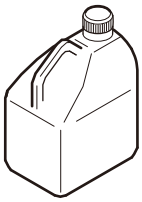
Power cord
<1 pieces>



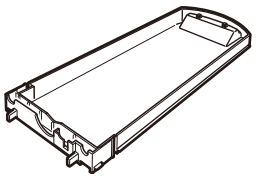
USB 2.0 cable
<1 piece>



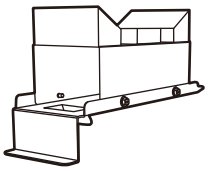
Media jack
<1 piece>



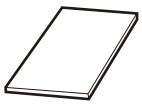
Waste ink bottle
IP6-109
<1 bottle>



Ink tray
IP7-123
6 colors: <6 pieces>
7 colors: <7 pieces>



Media support
<1 piece>



Quick reference guide
<1 volume>

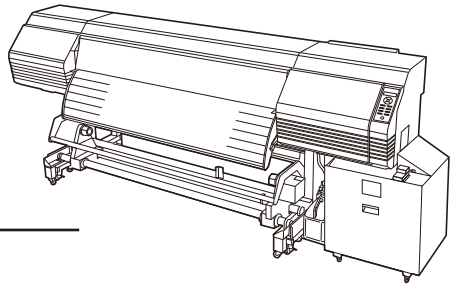
CD-ROM
- CP Manager
- User's Guide
- Quick Reference Guide
<1 volume>

PS-RIP
<1 volume>

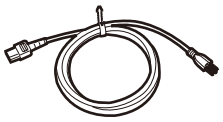
Printer

<1 unit>

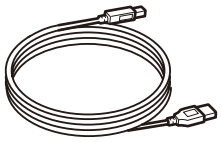
- with USB interface
- with the feed unit and take-up reel unit



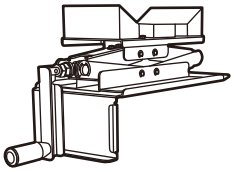
Items packed with printer



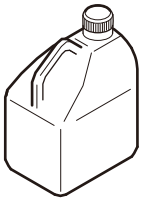
Power cord
<1 pieces>



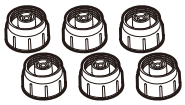
USB 2.0 cable
<1 piece>



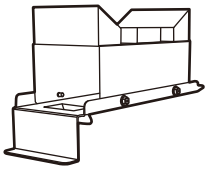
Media jack
<1 piece>



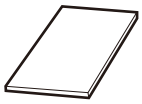
Waste ink bottle
IP6-109
<1 bottle>



Bottle adapter
IP6-269
<6 piece>



Media support
<1 piece>



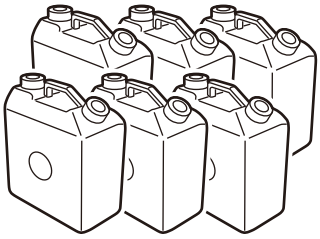
Quick reference guide
<1 volume>

CD-ROM

- CP Manager
- User's Guide
- Quick Reference Guide

<1 volume>

PS-RIP
<1 volume>

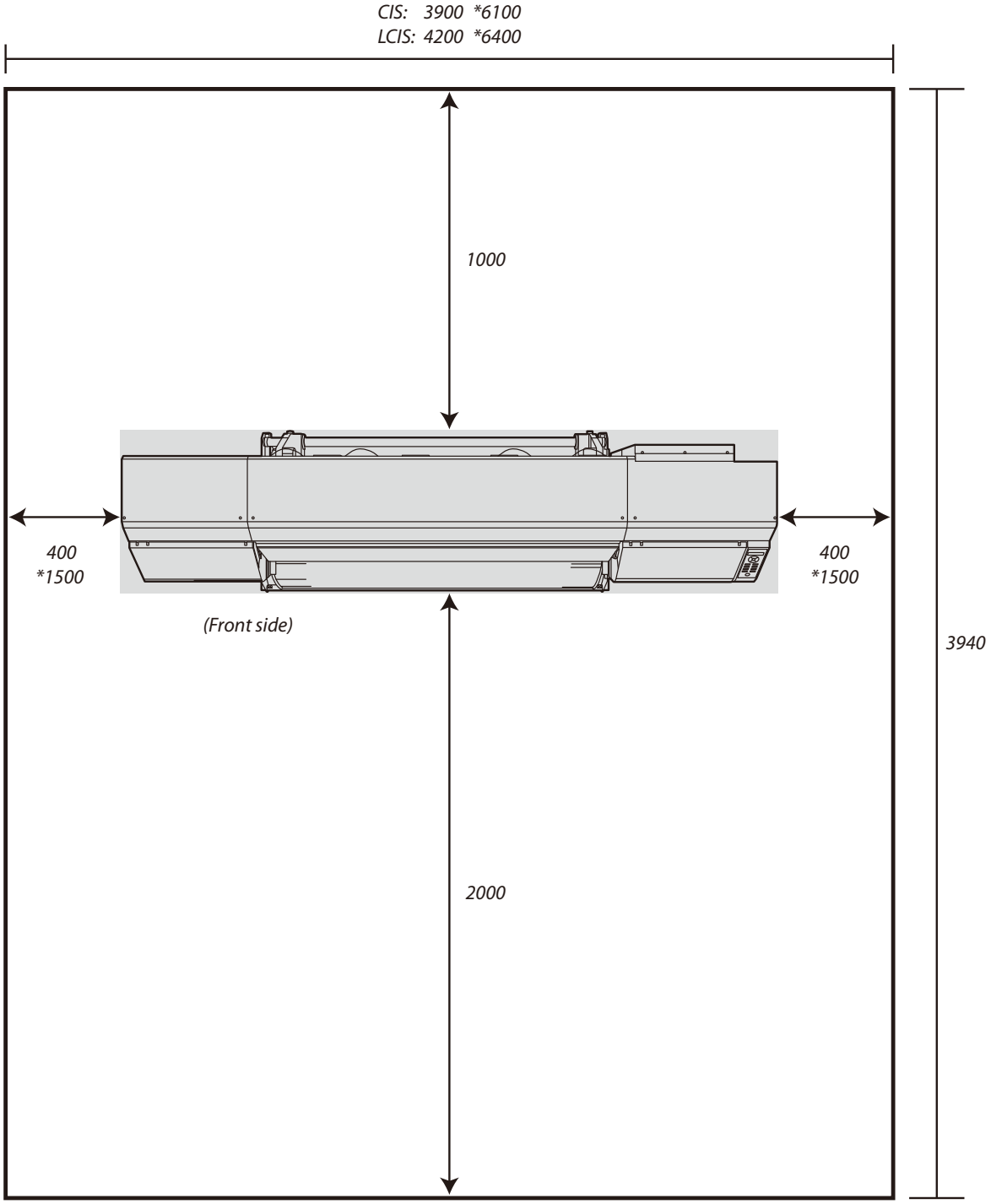


Reservoir
IP6-268
<6 piece>

Operating conditions

Installation and maintenance space

Adequate space is required around the printer for replacement of consumables and parts, print processing, and ventilation during normal operation and maintenance.
Secure the space shown in the figure below.



Secure 2200 mm in the horizontal direction.

* : Maintenance space

(Unit: mm)

Environmental conditions

Operating temperature and humidity levels

Use the printer within the temperature and humidity levels shown below.

Temperature: 15°C to 30°C (60°F to 80°F)
Humidity: 30% to 70%

- To obtain better print quality, use the printer within a temperature range of 20 to 25°C (68 to 77°F).
- To ensure a stable and good print quality, the printer slows down the print speed when the head temperature exceeds 40°C (104°F).

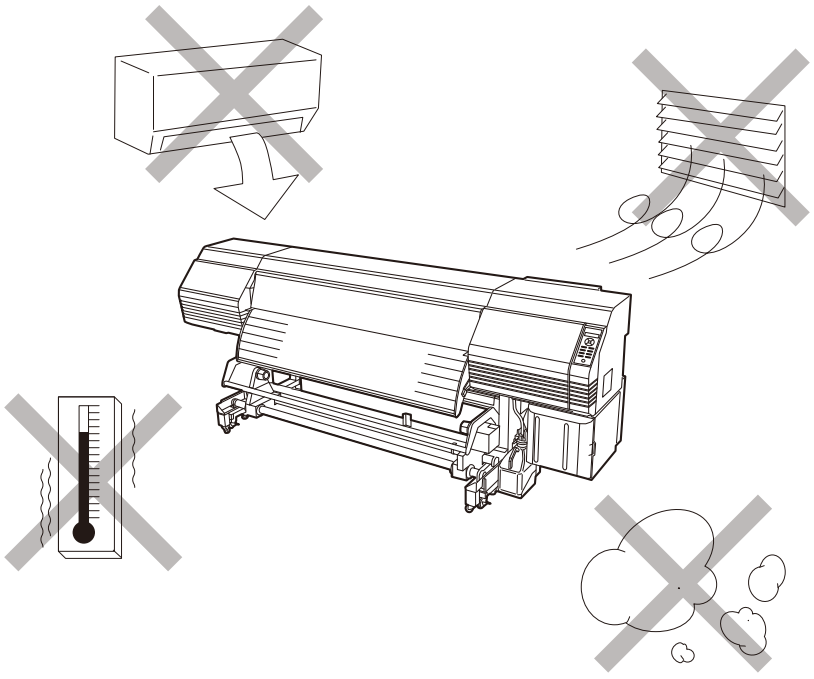
⚠ NOTE

◆ **If the Printer is not used within the operating temperature and humidity ranges, the print process may stop or the print quality may be degraded.**

Places where the printer should not be installed

Do not install the printer in the following places.

- Places near a fire
- Places exposed to direct sunlight
- Places subject to vibration
- Places with excessive dust
- Places subject to extreme changes in temperature or humidity
- Places near an air conditioner or a heater
- Places where the printer may get wet
- Places exposed to direct exhaust air from an air vent
- Places near a diazo copier that may generate ammonia gas
- Places with poor ventilation
- Unstable places



FFTSS Library, Employed by the Software Installed on the Printer ——

The software of the controller integrated in the printer (hereinafter called as Software) employs the FFTSS Library developed by Dr. Akira Nukada.
The FFTSS Library is a part of the research achievement of the project,

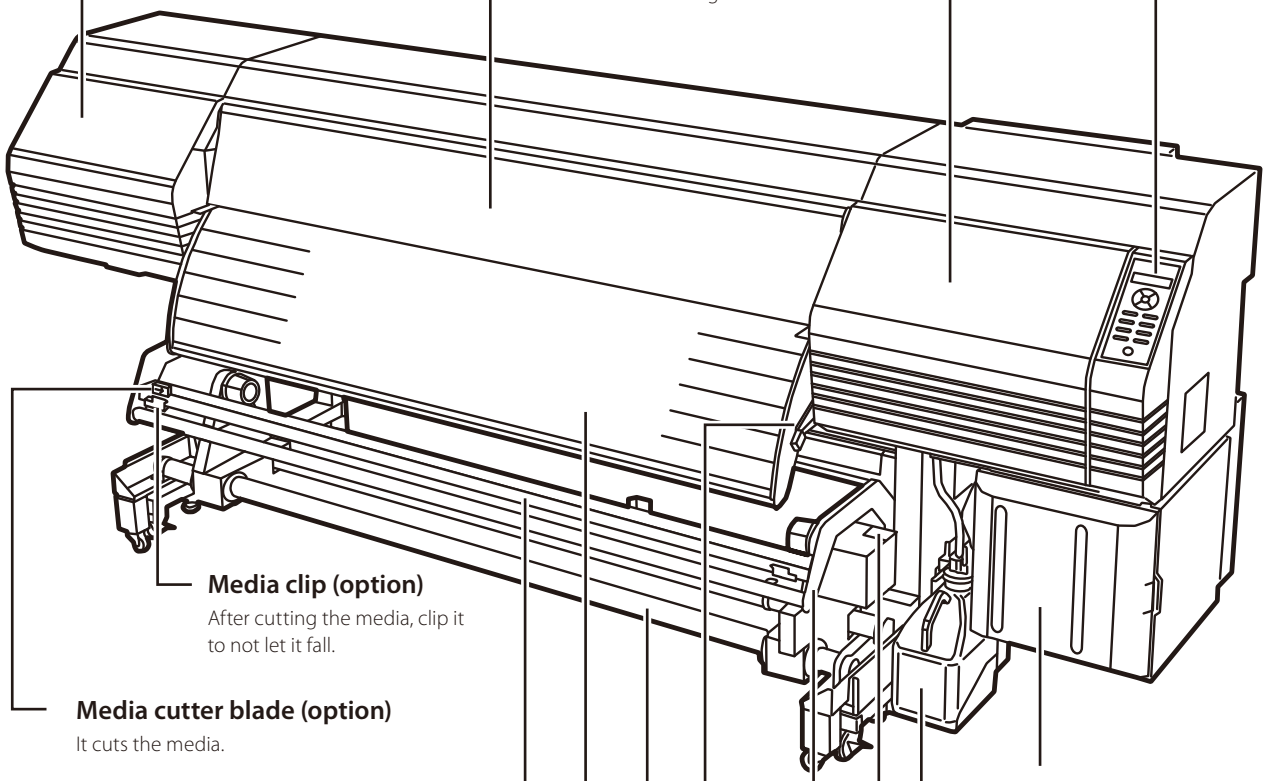
> The Innovation of Simulation Technology and the Construction of Foundations for Its Practical Use in the research area,
> Development of Software Infrastructure for Large Scale Scientific Simulation
> promoted by the Strategic Basic Research Programs(CREST) of Japan Science and Technology Agency.

The Software including the FFTSS is supported by OKI Data Corporation, and the FFTSS library's developers and its related organizations do not undertake any responsibility and obligations on the Software.

Before printing

Appearance / Main components

Printer front (take-up side)



Front cover
Must be closed during printing.

Operation panel
Equipped with LEDs and LCD to display the printer status, and buttons to set functions.

Maintenance area cover
Open to perform print head maintenance.

Capping unit cover
Opened when cleaning the capping unit or the carriage.

Media clip (option)
After cutting the media, clip it to not let it fall.

Media cutter blade (option)
It cuts the media.

Cutter unit (64) (option)

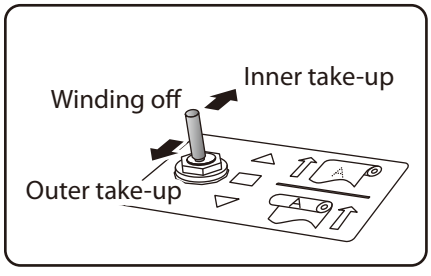
Ink box
Open the cover to install the ink cartridges.

Waste ink bottle

Output paper guide
Contains the after heater that dries ink.

Take-up direction switch
Sets the media take-up direction.

Take-up reel unit
Winds the printed media.

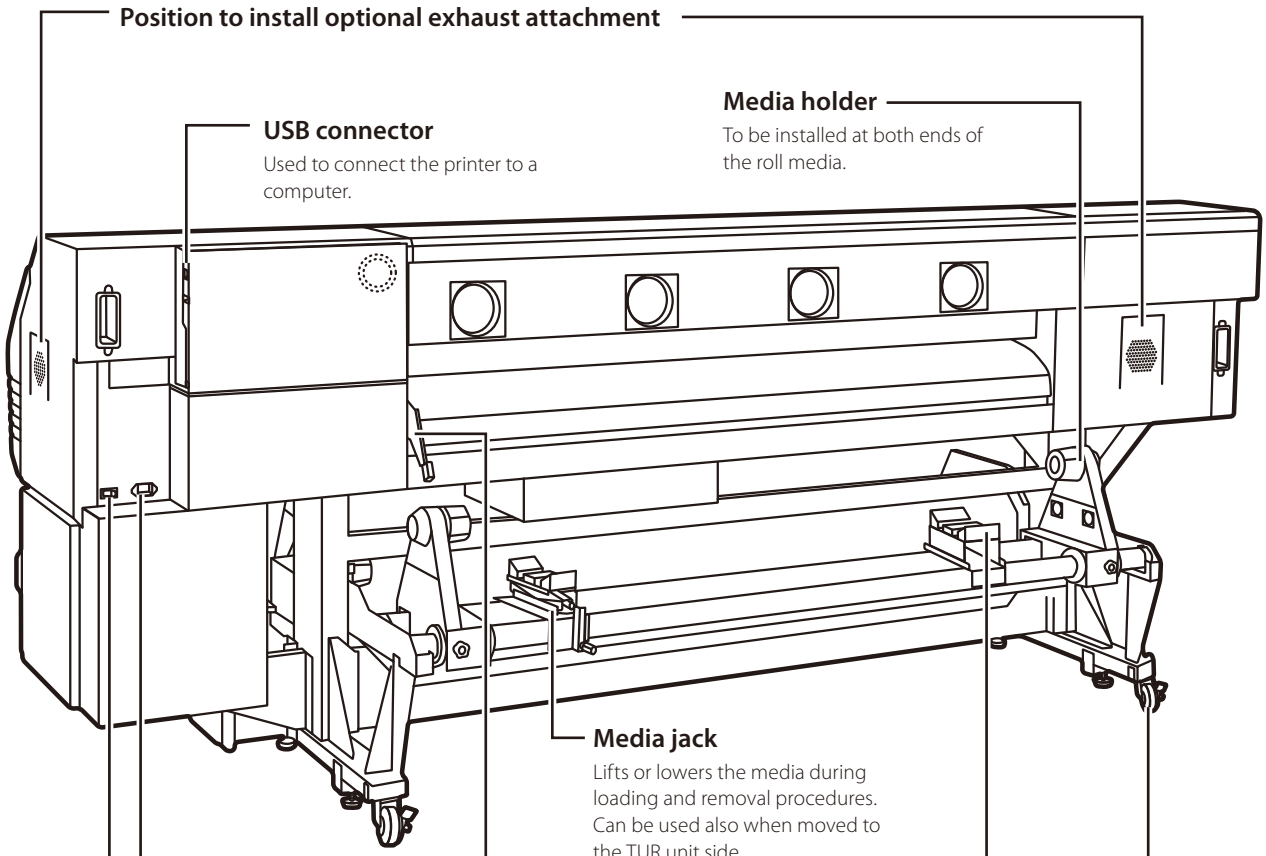


Pressure roller lever
This lever fixes or releases the media.

Guide bar
Guides the media in loose mode.

and their functions (CIS)

Printer rear (supply side)



Position to install optional exhaust attachment

USB connector
Used to connect the printer to a computer.

Media holder
To be installed at both ends of the roll media.

Media jack
Lifts or lowers the media during loading and removal procedures.
Can be used also when moved to the TUR unit side.

Power inlet
Connect the power cable to the power inlet.

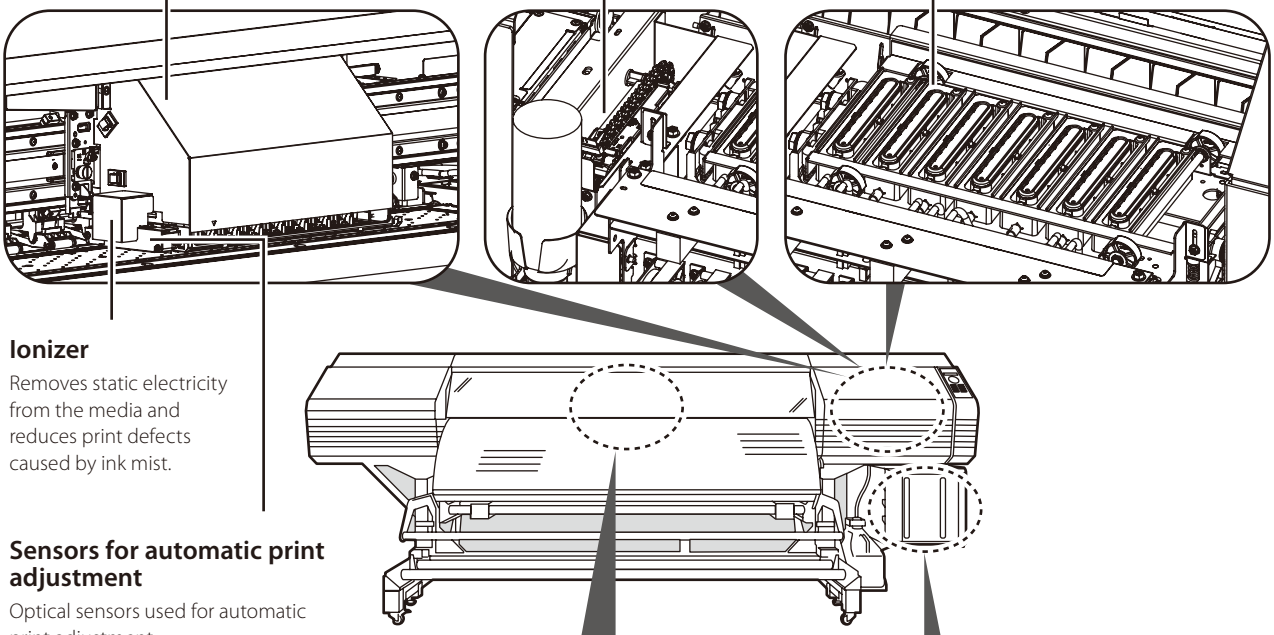
Media support
Temporarily supports the media during loading and removal procedures.
Can be used also when moved to the TUR unit side.

Printer power switch

Caster
Set the lock to OFF when moving the printer and set the lock to ON when locking the printer.

Pressure roller lever
A lever used to fixe or release the media.
Moves together with the pressure roller lever at the printer front side.

Printer interior



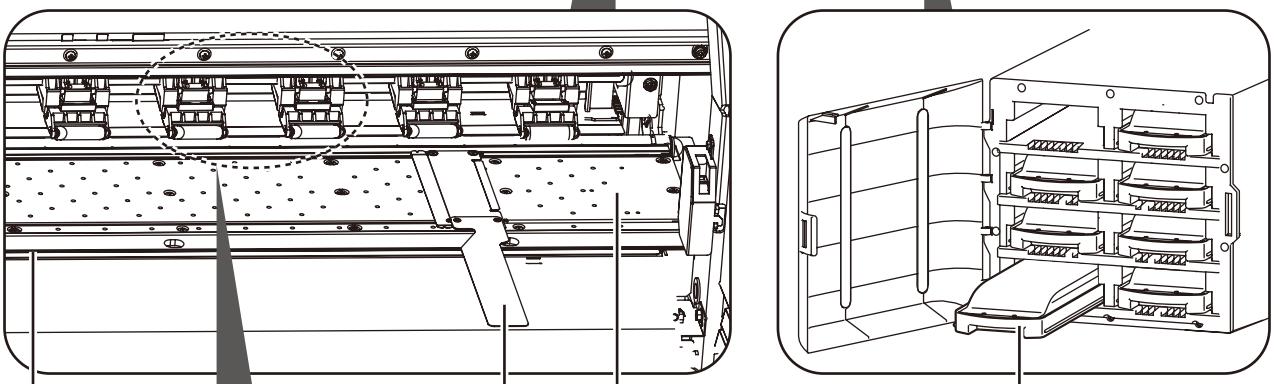
Carriage
Houses the print heads inside, and prints image while moving over the media.

Wiping unit
Removes foreign substances on the print head's nozzle surface.

Capping unit
Prevents the print head's nozzles from drying.

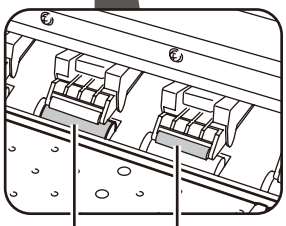
Ionizer
Removes static electricity from the media and reduces print defects caused by ink mist.

Sensors for automatic print adjustment
Optical sensors used for automatic print adjustment.



Ink tray
Supports ink cartridges.

Platen
Transports the media.
The platen includes the suction fans and the printheater to dry the ink.



Media edge guards
Prevent print heads from being damaged by deformed the media edges.

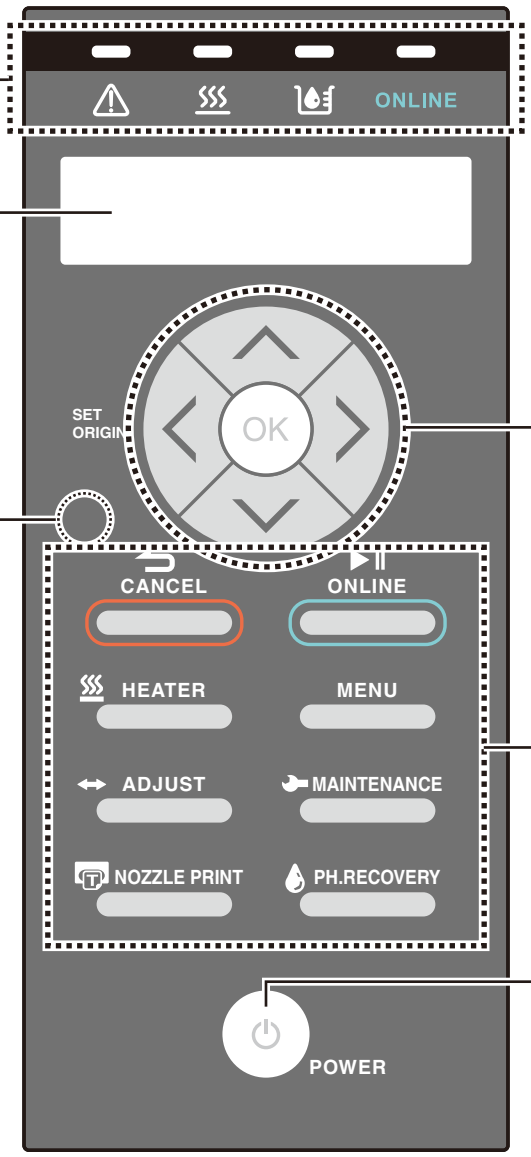
Grit roller
The grit roller advances or rewinds the media.

Pressure roller
When lowering the pressure roller up/down lever, it pinches the media.

Cutter groove
The cutter blade is inserted into this groove when cutting the media so that it is cut straight.

Operation panel

The buttons, LEDs and LCD are placed on the printer's operation panel as shown below. In addition, the operation panel is also equipped with a buzzer to draw attention in case an error occurs or an invalid button is pressed.
The printer enters waiting mode if it is not used for a given length of time.



LED

ON, blinking and OFF indicate the status of the printer.
Refer to the table below.

LCD

Shows the status of the printer and displays the menu window (2 rows, 20 characters).

Waiting mode

(During waiting mode)
LCD: Display and backlight turned off
Online LED: Flashes slowly
Other LEDs: Off

(Exiting waiting mode)
The printer exits waiting mode when
- any button is pressed,
- the printer receives print data.

Buzzer

Sounds when an error occurs or an invalid button is pressed, and warns of daily maintenance and when the print heads are uncapped.

Up, Down, Left, Right buttons

Used to select menu options, switch between menus (selection, increasing/decreasing values), etc.

OK button

Used to confirm the menu and parameters.

Buttons

Use these buttons to operate the menu of the printer.
Refer to the table below.

Power switch

Used to turn on or off the power of the printer.
Used to manually enter and exit waiting mode.

LED	
Error LED (Orange)	Indicates whether an error has occurred. ON: An error has occurred. Blink: Warning state. OFF: Normal (no error)
Media heater LED (Green)	Indicates the status of the media heater. - ON: The set temperature has been reached - Blink: Currently heating - OFF: Media heater is off
Ink LED (Green)	Indicates whether ink is remaining. ON: Ink for all colors is present. Blink: Ink near-end (The level of any color is low.) OFF: No ink.
ONLINE LED (Green)	Indicates the online, offline, data reception, and pause status. - ON: Online - Blink (slowly): In pause - Blink (fast): Data reception - OFF: Offline

Buttons	
CANCEL	Cancels entered parameters or returns back to the upper menu.
ONLINE	Switches between online and offline states, and puts the printer in pause or resumes printing.
HEATER	Enters heater control menu.
MENU	Used to display information about the printer and change printer settings.
ADJUST	Used to enter the adjustment menu.
MAINTENANCE	Used to enter the maintenance menu.
NOZZLE PRINT	Used to perform a nozzle print.
PH.RECOVERY	Used to enter the cleaning menu.

LCD messages

This LCD installed on the printer operation panel can display two rows of 20 characters.
Examples of messages displayed on the LCD are shown below.

Menu display

The level of the menu is indicated by the number of **>** marks displayed at the left of the upper row on the LCD.

Top menu:

Top menus are displayed when the **MENU** button, the **ADJUST** button or other menu buttons are pressed. No **>** marks are displayed for top menus.

<Display example>

Level 1 to level 4 menus:

A **>** mark is added each time a lower menu is selected starting from a top menu.

<Display examples>

(Level 1 menu)

(Level 3 menu)

Menu and parameter selection display

A ↕ mark is indicated at the left of the lower row on the LCD when menus or parameters can be selected in the current menu using the Up and Down buttons.

<Display examples>

(Menu selection)

(Parameter selection)

OK button input display

A ◎ mark is indicated at the right of the lower row on the LCD when you can enter a menu or execute an operation in the current menu by pressing the OK button.

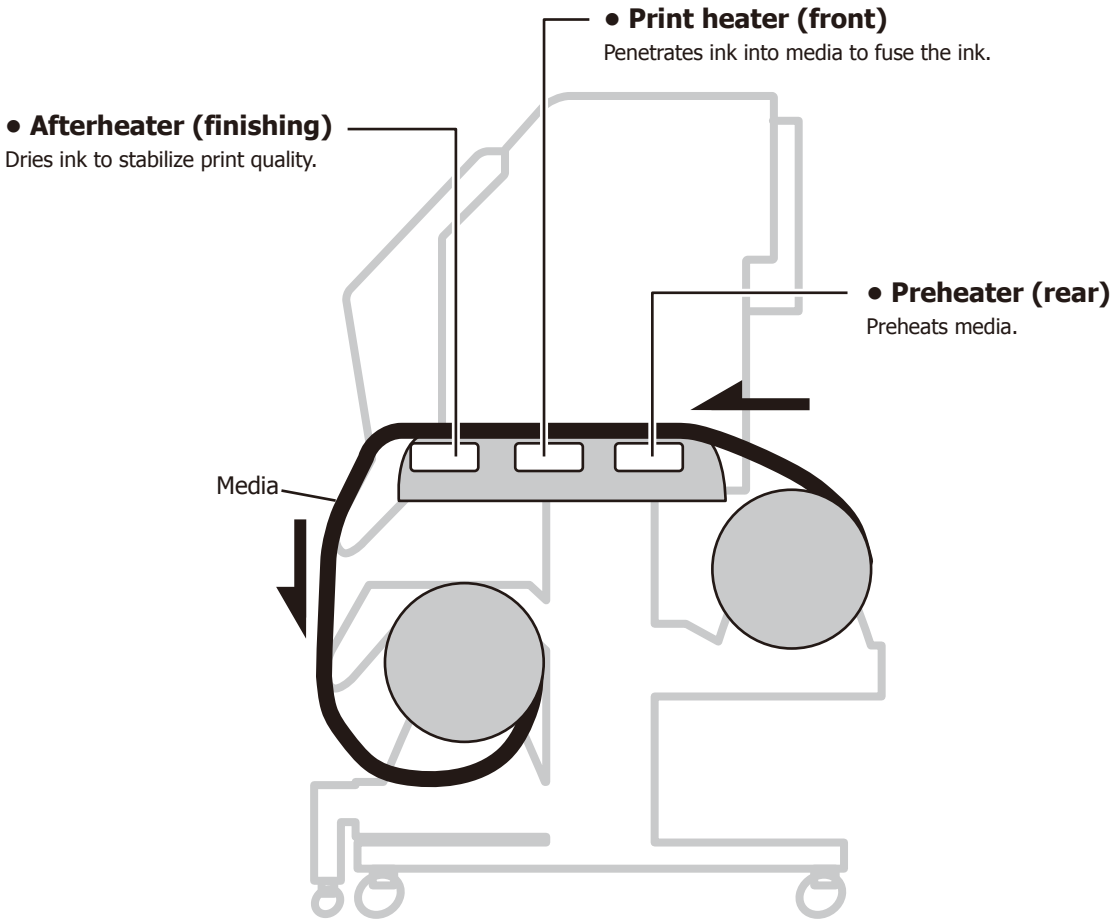
<Display examples>

(Enter a level 2 menu)

(Execute an operation)

Printer heater unit

The printer is equipped with three heaters for ink fusing and image quality stabilization.



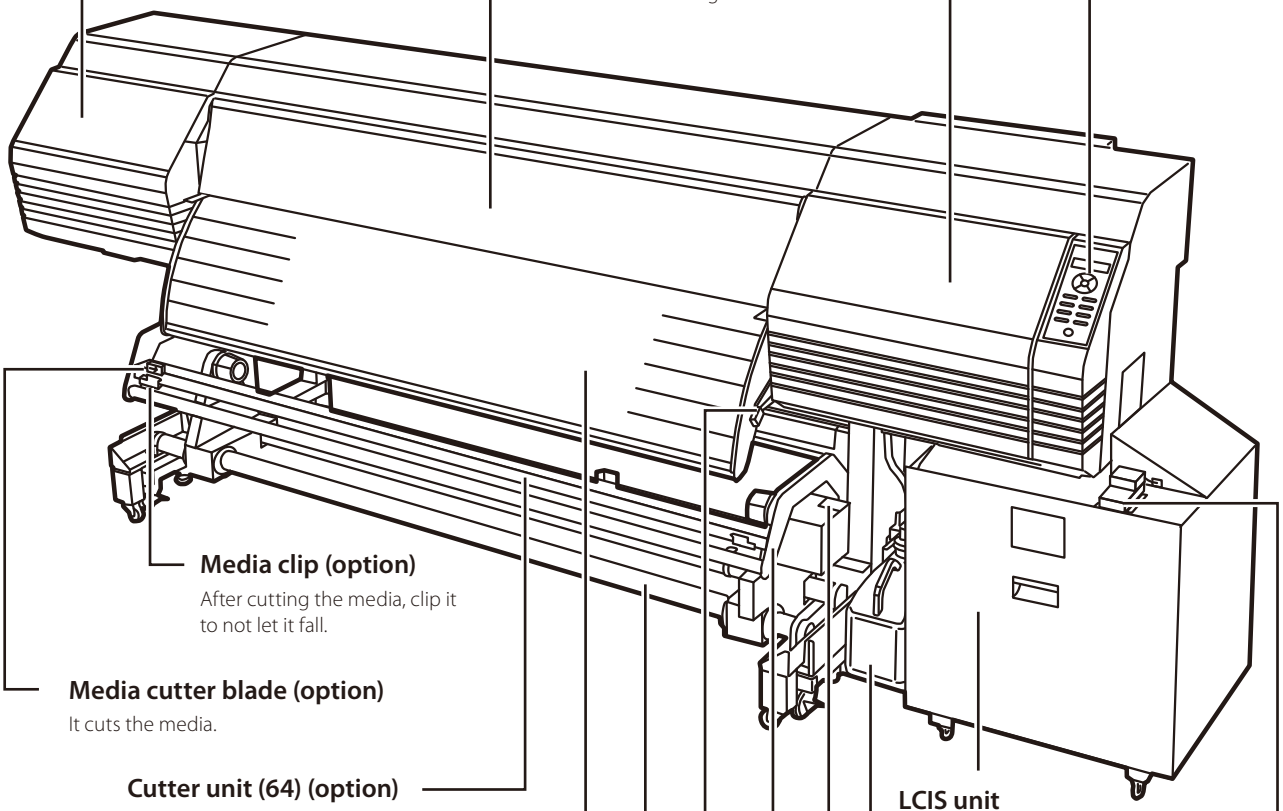
* These three heaters are controlled independently.
The temperature of the heaters can be controlled from the operation panel, the RIP software and CP_Manager.

⚠ WARNING

◆ **Do not touch these heaters to avoid burn as they become hot.**

Appearance / Main components

Printer front (take-up side)



Front cover
Must be closed during printing.

Operation panel
Equipped with LEDs and LCD to display the printer status, and buttons to set functions.

Maintenance area cover
Open to perform print head maintenance.

Capping unit cover
Opened when cleaning the capping unit or the carriage.

Media clip (option)
After cutting the media, clip it to not let it fall.

Media cutter blade (option)
It cuts the media.

Cutter unit (64) (option)

Output paper guide
Contains the after heater that dries ink.

LCIS unit
Open the drawer to install the ink bottles.

Chip reader
To be used with the ink amount extension chip.

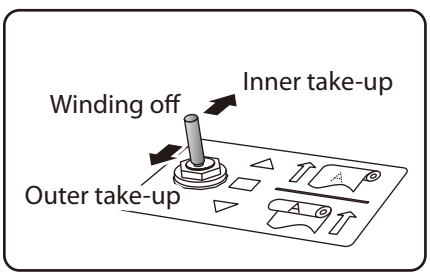
Take-up reel unit
Winds the printed media.

Waste ink bottle

Take-up direction switch
Sets the media take-up direction.

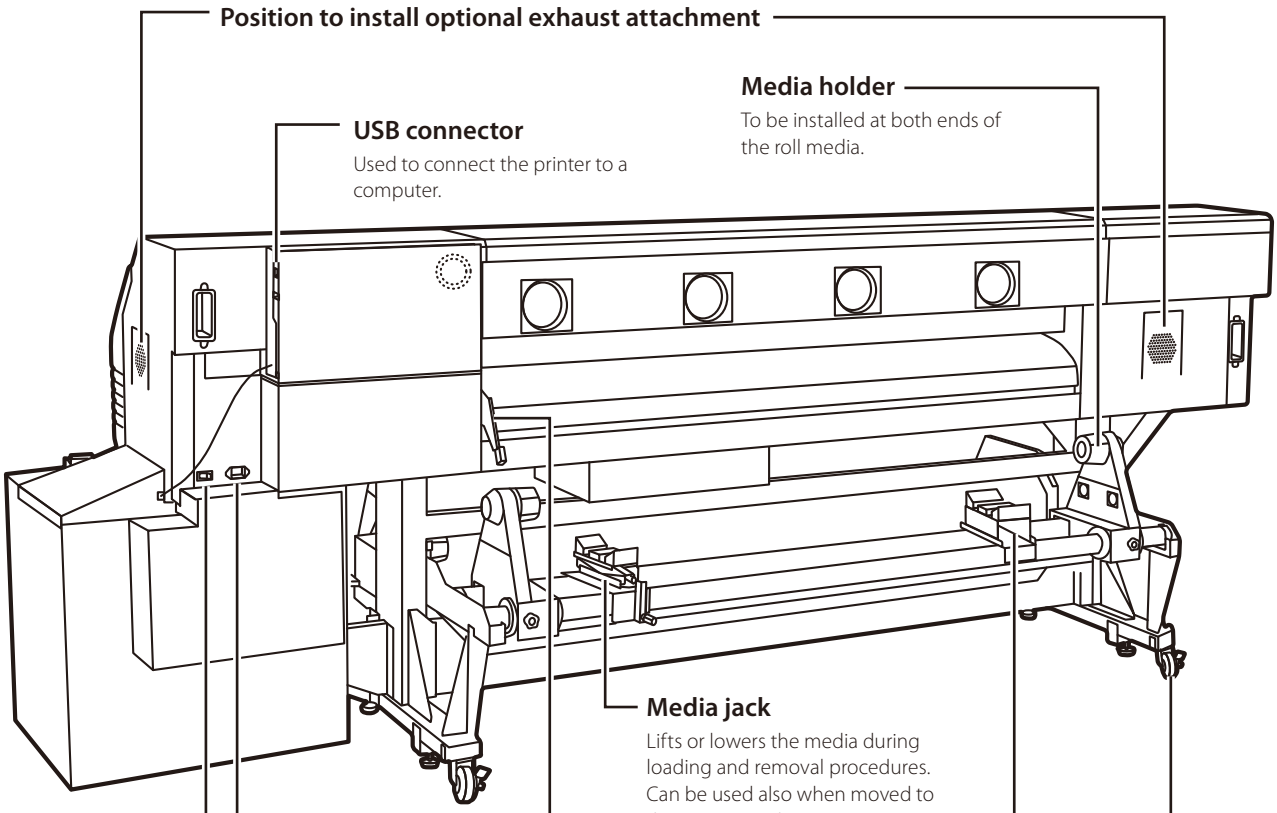
Pressure roller lever
This lever fixes or releases the media.

Guide bar
Guides the media in loose mode.



and their functions (LCIS)

Printer rear (supply side)



Position to install optional exhaust attachment

USB connector
Used to connect the printer to a computer.

Media holder
To be installed at both ends of the roll media.

Media jack
Lifts or lowers the media during loading and removal procedures.
Can be used also when moved to the TUR unit side.

Power inlet
Connect the power cable to the power inlet.

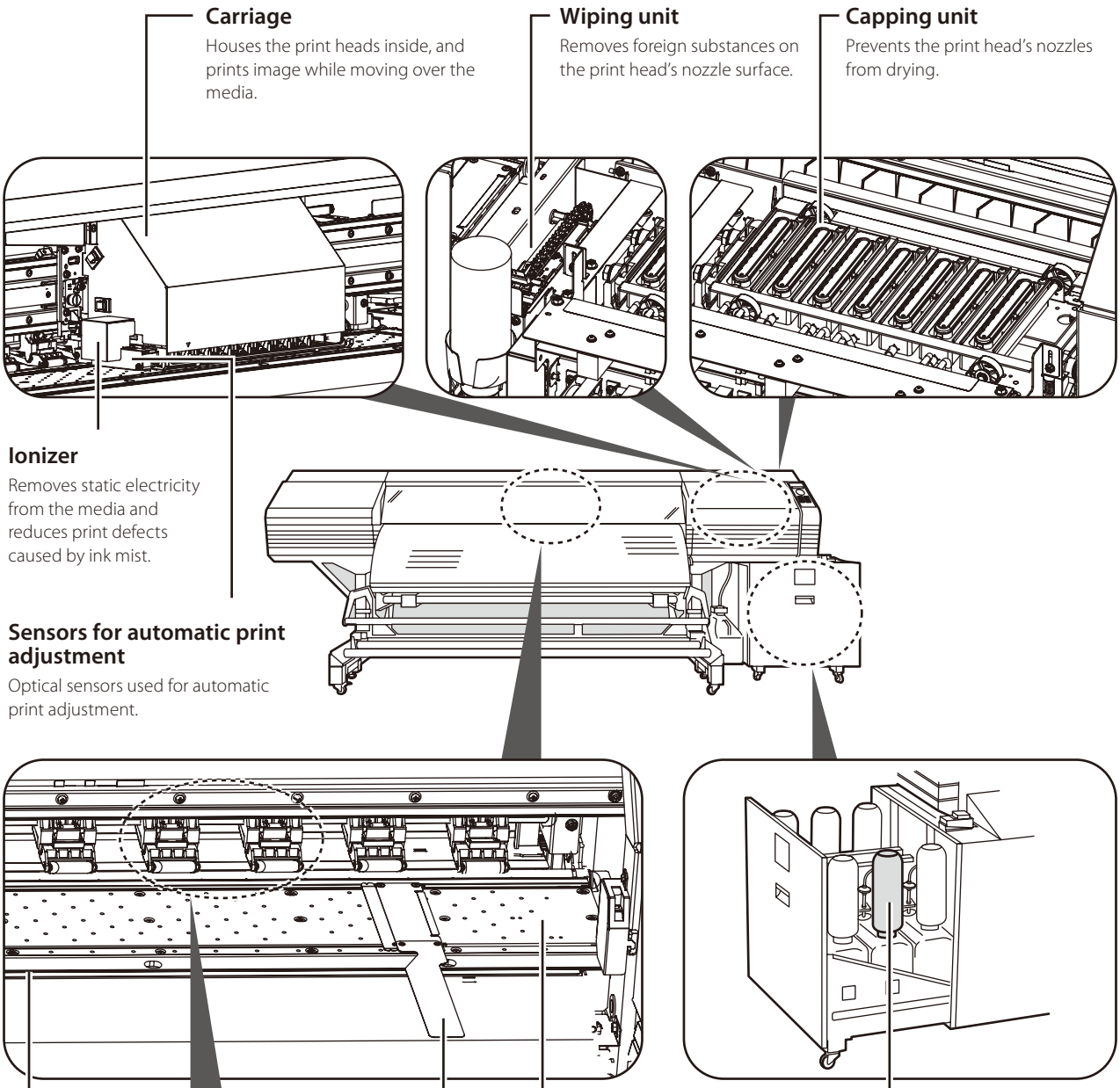
Media support
Temporarily supports the media during loading and removal procedures.
Can be used also when moved to the TUR unit side.

Printer power switch

Caster
Set the lock to OFF when moving the printer and set the lock to ON when locking the printer.

Pressure roller lever
A lever used to fixe or release the media.
Moves together with the pressure roller lever at the printer front side.

Printer interior



Carriage
Houses the print heads inside, and prints image while moving over the media.

Wiping unit
Removes foreign substances on the print head's nozzle surface.

Capping unit
Prevents the print head's nozzles from drying.

Ionizer
Removes static electricity from the media and reduces print defects caused by ink mist.

Sensors for automatic print adjustment
Optical sensors used for automatic print adjustment.

Ink bottle
Used to supply ink.

Platen
Transports the media.
The platen includes the suction fans and the printheater to dry the ink.

Media edge guards
Prevent print heads from being damaged by deformed the media edges.

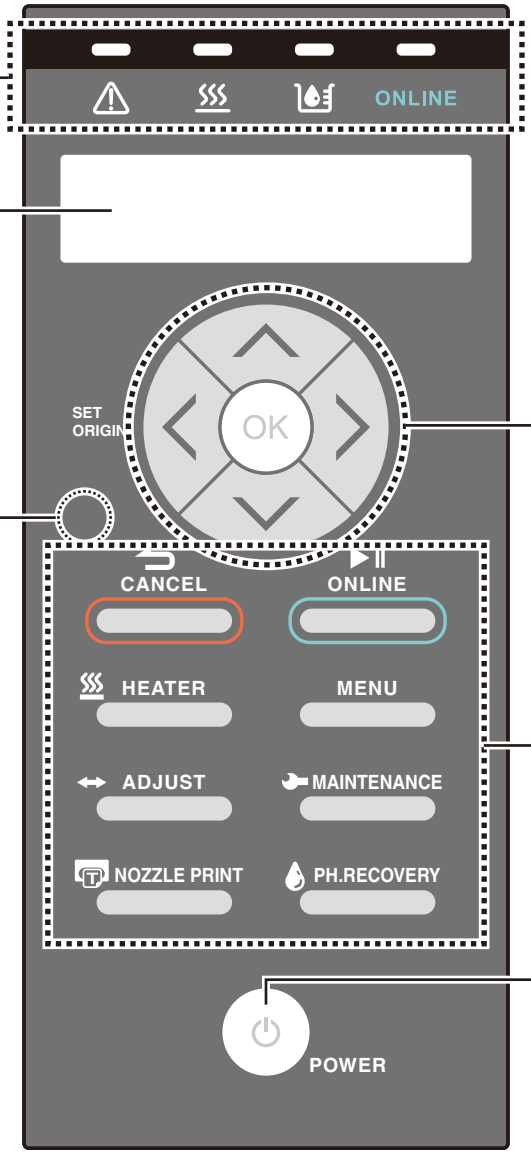
Grit roller
The grit roller advances or rewinds the media.

Pressure roller
When lowering the pressure roller up/down lever, it pinches the media.

Cutter groove
The cutter blade is inserted into this groove when cutting the media so that it is cut straight.

Operation panel

The buttons, LEDs and LCD are placed on the printer's operation panel as shown below. In addition, the operation panel is also equipped with a buzzer to draw attention in case an error occurs or an invalid button is pressed.
The printer enters waiting mode if it is not used for a given length of time.



LED

ON, blinking and OFF indicate the status of the printer.
Refer to the table below.

LCD

Shows the status of the printer and displays the menu window (2 rows, 20 characters).

Waiting mode

(During waiting mode)
LCD: Display and backlight turned off
Online LED: Flashes slowly
Other LEDs: Off

(Exiting waiting mode)
The printer exits waiting mode when
- any button is pressed,
- the printer receives print data.

Buzzer

Sounds when an error occurs or an invalid button is pressed, and warns of daily maintenance and when the print heads are uncapped.

Up, Down, Left, Right buttons

Used to select menu options, switch between menus (selection, increasing/decreasing values), etc.

OK button

Used to confirm the menu and parameters.

Buttons

Use these buttons to operate the menu of the printer.
Refer to the table below.

Power switch

Used to turn on or off the power of the printer.
Used to manually enter and exit waiting mode.

LED	
Error LED (Orange)	Indicates whether an error has occurred. ON: An error has occurred. Blink: Warning state. OFF: Normal (no error)
Media heater LED (Green)	Indicates the status of the media heater. - ON: The set temperature has been reached - Blink: Currently heating - OFF: Media heater is off
Ink LED (Green)	Indicates whether ink is remaining. ON: Ink for all colors is present. Blink: Ink near-end (The level of any color is low.) OFF: No ink.
ONLINE LED (Green)	Indicates the online, offline, data reception, and pause status. - ON: Online - Blink (slowly): In pause - Blink (fast): Data reception - OFF: Offline

Buttons	
CANCEL	Cancels entered parameters or returns back to the upper menu.
ONLINE	Switches between online and offline states, and puts the printer in pause or resumes printing.
HEATER	Enters heater control menu.
MENU	Used to display information about the printer and change printer settings.
ADJUST	Used to enter the adjustment menu.
MAINTENANCE	Used to enter the maintenance menu.
NOZZLE PRINT	Used to perform a nozzle print.
PH.RECOVERY	Used to enter the cleaning menu.

LCD messages

This LCD installed on the printer operation panel can display two rows of 20 characters.
Examples of messages displayed on the LCD are shown below.

Menu display

The level of the menu is indicated by the number of **>** marks displayed at the left of the upper row on the LCD.

Top menu:

Top menus are displayed when the **MENU** button, the **ADJUST** button or other menu buttons are pressed. No **>** marks are displayed for top menus.

<Display example>

Level 1 to level 4 menus:

A **>** mark is added each time a lower menu is selected starting from a top menu.

<Display examples>

(Level 1 menu)

(Level 3 menu)

Menu and parameter selection display

A ↕ mark is indicated at the left of the lower row on the LCD when menus or parameters can be selected in the current menu using the Up and Down buttons.

<Display examples>

(Menu selection)

(Parameter selection)

OK button input display

A ◎ mark is indicated at the right of the lower row on the LCD when you can enter a menu or execute an operation in the current menu by pressing the OK button.

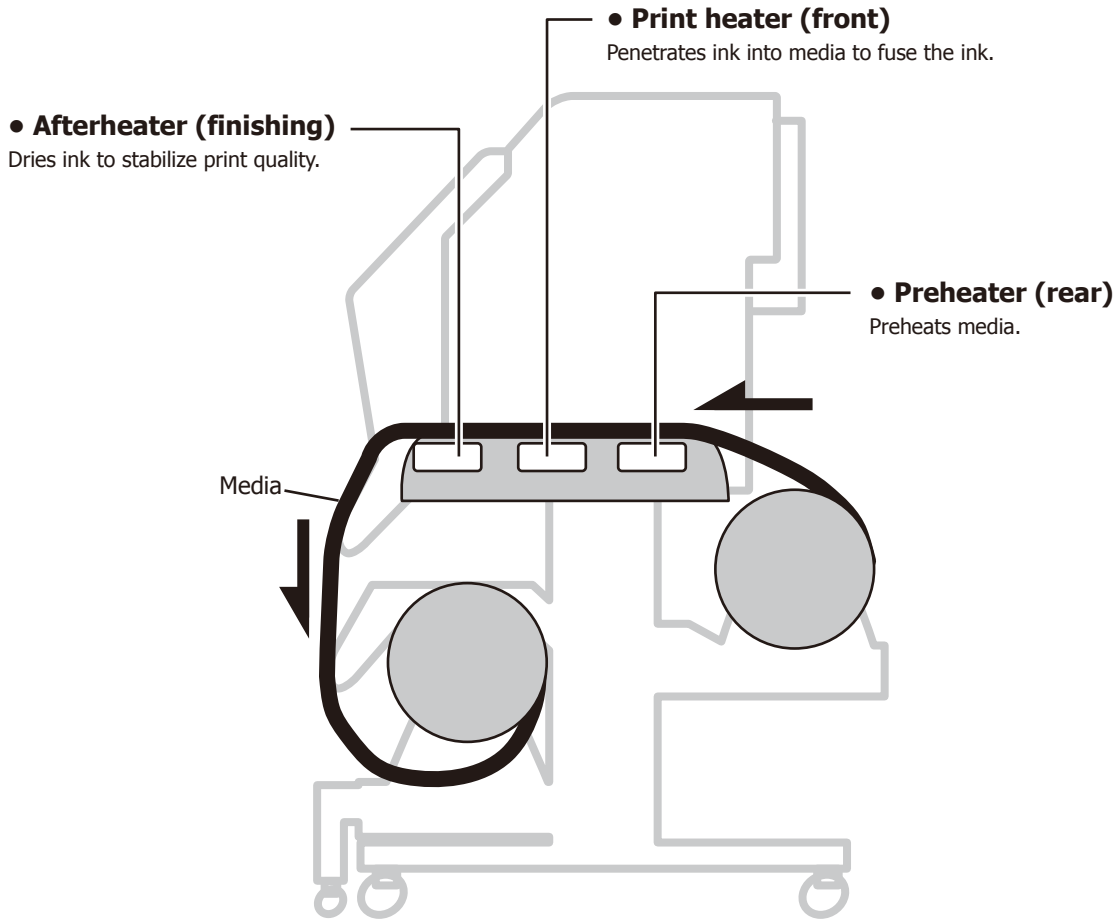
<Display examples>

(Enter a level 2 menu)

(Execute an operation)

Printer heater unit

The printer is equipped with three heaters for ink fusing and image quality stabilization.



* These three heaters are controlled independently.
The temperature of the heaters can be controlled from the operation panel, the RIP software and CP_Manager.

⚠ WARNING

◆ **Do not touch these heaters to avoid burn as they become hot.**

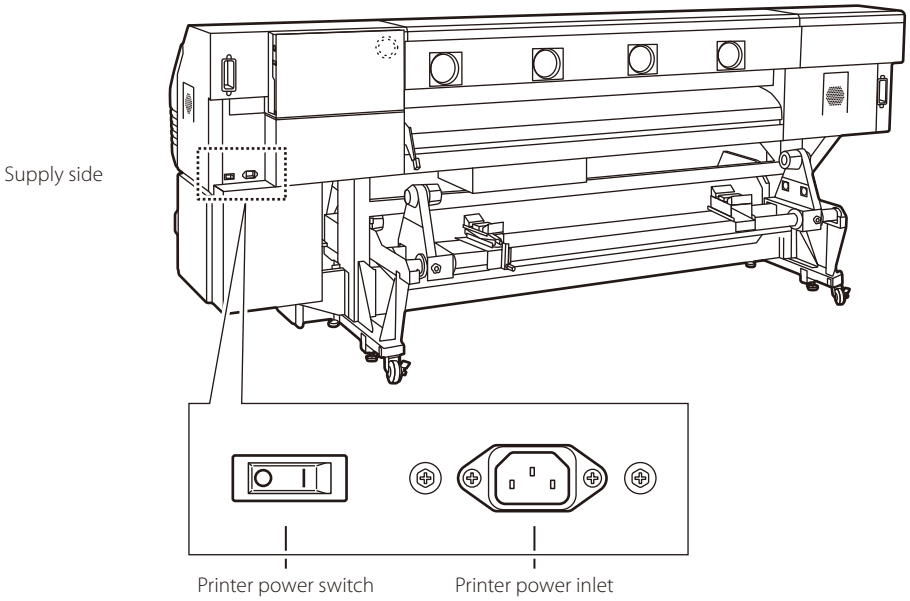
To turn the printer on and off

The power supply must be 200 V.

⚠ CAUTION

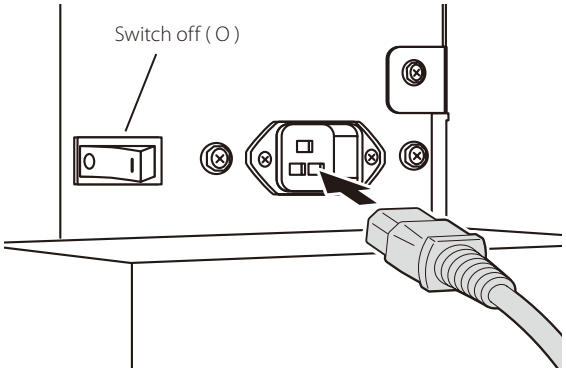
- **Do not use any power cable other than the one supplied with the printer.**
- **The supplied power cable is for 200 V AC only. Note that the plug shape differs from that for 100 V AC.**

First turn the printer main power switch on, then use the power switch on the operation panel to turn the printer on or off.



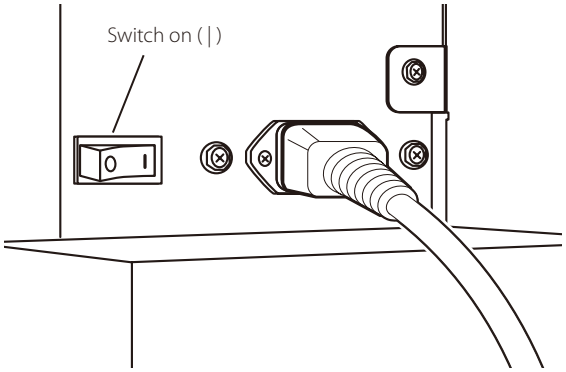
Power-on procedure

1



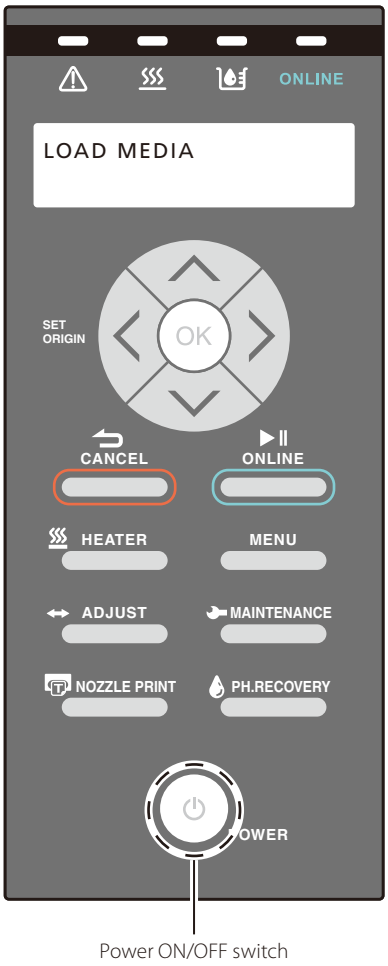
Confirm that the printer power switch at the back of the printer is turned off (O). If on (I), turn it off (O).
Plug one end of the supplied power cable into the printer power inlet and the opposite end into a power outlet.

2



Turn on (I) the printer power switch at the back of the printer.

3



Power ON/OFF switch

Press the power switch on the operation panel.

The printer executes a self-diagnostic test and displays the message to the left on the operation panel.

If an error message appears...

- ◊ To recover the error, refer to **When an error message is displayed.**
- ◊ If the LEDs on the operation panel do not turn on after turning on both the power switches at the rear of the printer and on the operation panel, there is a problem with the power supply.

⚠ CAUTION

- ◆ **Except for emergency, turn off the power while the message PRINTER READY is displayed. If the power is turned off when the printer is displaying INITIALIZING... or CLEANING, the ink may dribble, the print head may be damaged, or saved parameters may be lost.**

Power-off procedure

1 SHUTTING DOWN...
REQUIRED TIME Y:YY

Y:YY : Required time

To turn off the power of the printer, keep the power switch on the operation panel pressed for 2 seconds.

The message shown above is displayed on the LCD to indicate that the shutdown process is being executed. The power turns off after the shutdown procedure is finished.

However, maintenance operations are automatically performed to maintain the printer in good condition. Therefore, always keep the power of the printer on.

If you need to temporarily turn the printer off in case of emergency, for cleaning, or other reasons, use one of the following methods to turn it off.

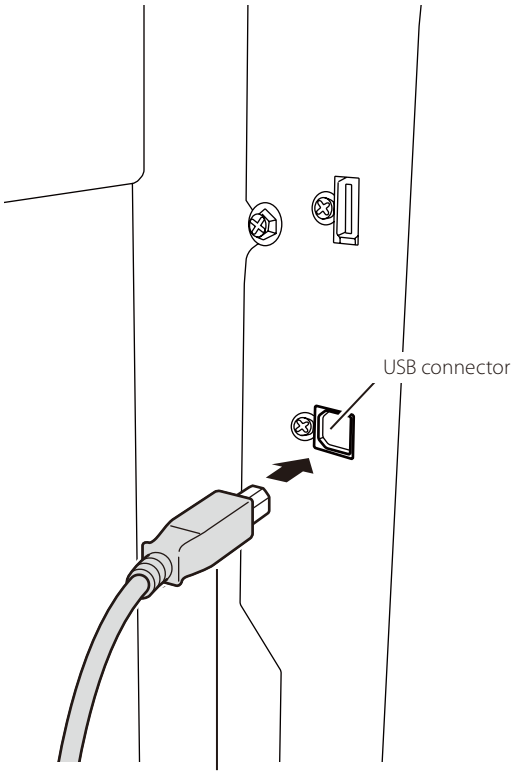
Method 1: **Keep the power switch pressed for 2 seconds.**	Usually, use this method to turn the printer off. During shutdown, the fill cap operation (state where the cap is filled with ink) is performed to keep the print heads in good condition.
Method 2: **Keep the power switch pressed for 2 seconds while holding the CANCEL button.**	This method can be used to turn the printer off only for a short time (less than 1 hour). With this method, the fill cap operation is skipped and the printer is turned off.

⚠ Notes

- **After turning the power off, wait at least 5 seconds before turning it back on.**
- **To keep the print heads in good condition, the printer perform automatically and periodically the fill cap operation while in standby mode. It is recommended to keep on the power switch on the operation panel during this operation.**

To connect the USB cable

1



USB 2.0 cable (B-type connector)

Connect the printer's USB 2.0 cable to the USB connector at the center of the printer rear.

Important!

- ◊ Use the supplied USB 2.0 cable.
- ◊ For the USB connection and related systems, use hubs and cables supporting USB 2.0. Note that normal operation cannot be guaranteed if the hubs, cables, and the other related devices are not USB-compliant.
- ◊ Use a cable of 5 m or shorter. If the connection length exceeds 5 m, use hubs to extend the connection. The hub quantity must be five or less in total. Note that normal operation cannot be guaranteed if the cable exceeds 5 m, or if the cable connection exceeds 5 m without hubs.

Online and offline

The printer operates in both online and offline states.

When the printer is in online:

- The printer prints the data sent from the computer's Raster Image Process (RIP) software.

When the printer is in offline:

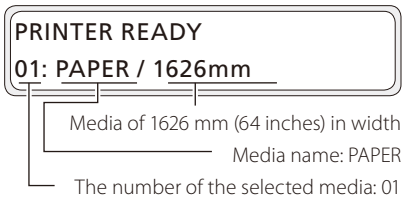
- The menu is operated with the operation panel buttons.

The Online button switches between online and offline states.
When the **MENU**, **ADJUST**, **MAINTENANCE**, **NOZZLE PRINT**, or **PH.RECOVERY** button is pressed in online state, the printer switched to offline to make menu operations possible.

Online

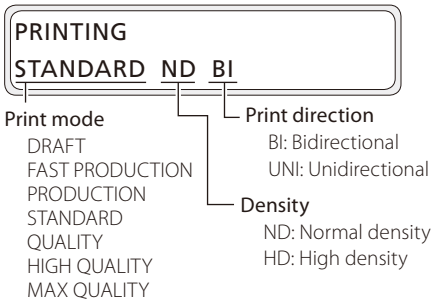
When the **ONLINE** LED is on, the printer is online.

Online state (idle mode) display

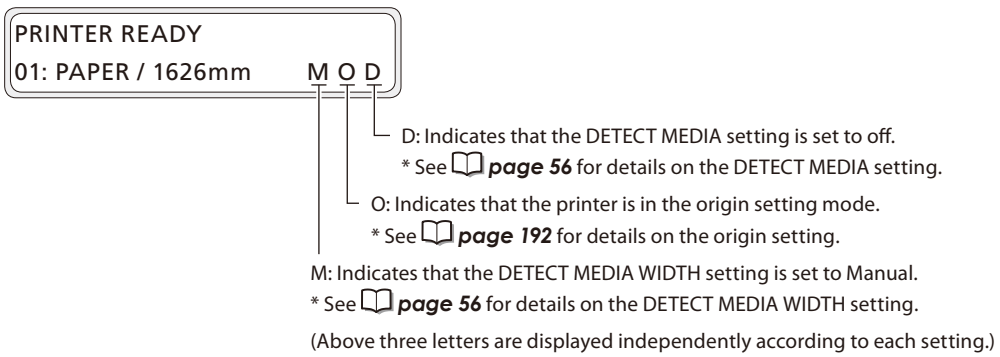


When the **ONLINE** LED blinks, the printer is printing.

Online state (print mode) display



The following letters are displayed on the right of the lower row of the panel depending on the media registration setting and the origin setting mode.



Offline

ONLINE When the **ONLINE** LED is off, the printer is offline.

The message displayed on the panel when the printer switches to offline differs depending on the button that has been pressed.

When the **ONLINE** button is pressed:

When the **ADJUST** button is pressed:

When the **PH.RECOVERY** button is pressed:

When an operator call error is displayed...

◊ When an operator call error (📖 ***page 239***) is displayed, the printer may not operate even if the **CANCEL** button is pressed.

CP_Manager

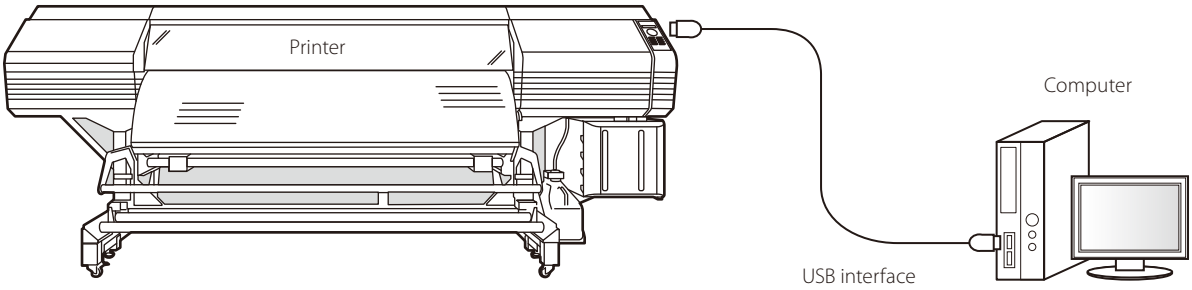
The Printer supports the CP_Manager software which provides a general view of the printer status. The following operations can be performed with CP_Manager™.

Panel operations

- Display the printer status
- Create media preset, input adjustment values
- Execute nozzle print, adjustment patterns print
- Maintenance time notice, maintenance operation

Additional functions

- Display operation guidance
- Display the instruction manual (PDF)



CP_Manager display example

Install CP_Manager™ using the CD-ROM supplied with the printer.

Supported media

Vinyl

Vinyl is media with PVC-material surface. As generally vinyl is adhesive-backed, by removing the release paper on the back you can stick the media easily. Depending on its gloss grade, the vinyl is classified into three categories: glossy vinyl (with high gloss), matte vinyl (with no gloss), and semi-glossy vinyl (with medium gloss).
When the media is applied on some prints, a gray adhesive-backed vinyl is effective to avoid the prints seen through the top media.
For backlit purpose application, the PVC material surface is sometimes transparent or translucent.

Banner

Banner is polyester fiber cloth media with both sides coated with synthetic plastic film such as PVC. As the banner is water- and tear-resistant, it is used for tent canvas, construction wrap sheets, and inkjet-printed banner advertisements.
Depending on its gloss grade, the banner is classified into three categories: glossy banner (with high gloss), matte banner (with no gloss), and semi-glossy banner (with medium gloss).

Mesh banner (with liner)

Mesh banner is perforated banner media reinforced with mesh grid. As its open structure allows wind to permeate, the mesh banner is wind- and tear-resistant, and withstands heavy wind.
Depending on whether liner (ink absorbing back sheet) is present, the mesh banner is classified into two categories: backed and unbacked.

Backlit banner (FF)

Backlit banner flexible face (FF) is translucent, that is, semi-transparent banner media. Thanks to that, it is used for backlit signs inside light boxes.
Compared with an acrylic sign, the backlit banner is lightweight and easy to handle, wind- and tear-resistant, and highly safe. it can withstand strong wind pressure.

Solvent printing coated paper

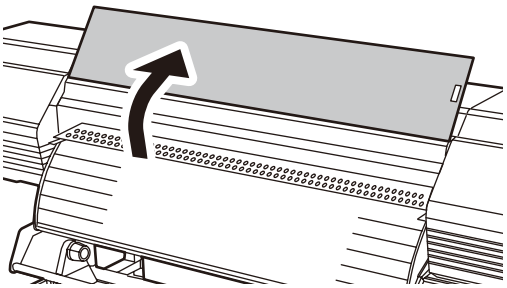
Solvent printing coated paper is a type of paper media with a coated printing surface that facilitates solvent ink adhesion and renders vivid colors.
When the media is applied on some prints, a blue back type is effective to avoid the prints seen through the top media.

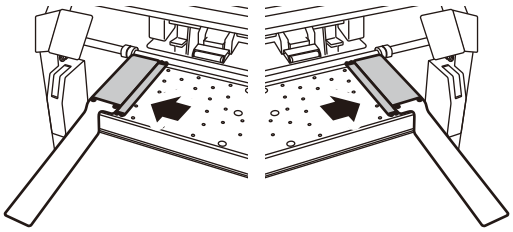
Loading the media

Loading the media on the printer

Procedure to load roll media

1



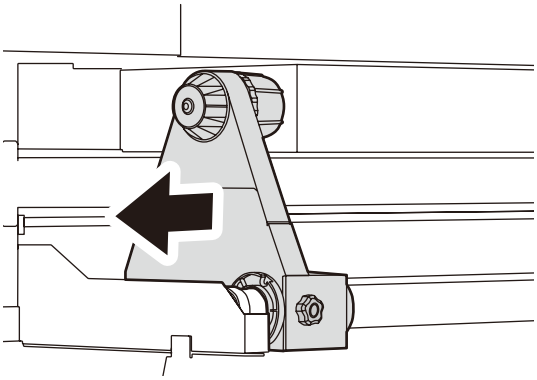


Open the front cover and place the right and left edge guards at each extremity of the platen. Close the front cover.

⚠ Notes

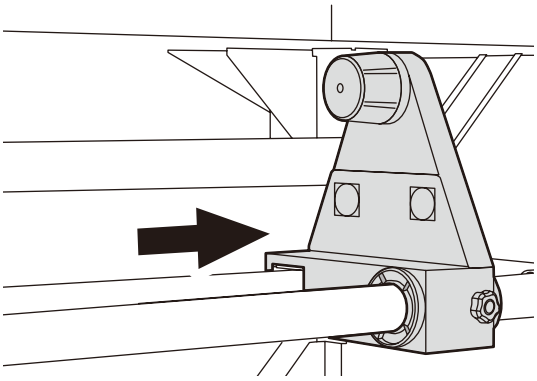
- The media edge guards are put aside to avoid any contacts with the roll ends when loading the media.
- When using a media whose end is attached to the roll tube with adhesive, this adhesive may adhere to the paper guide or the platen. In this case, be sure to remove all adhesive before loading the new media.

2



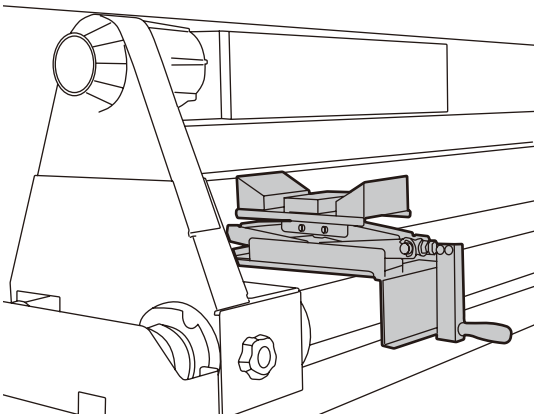
Move the left media holder fully to the left.

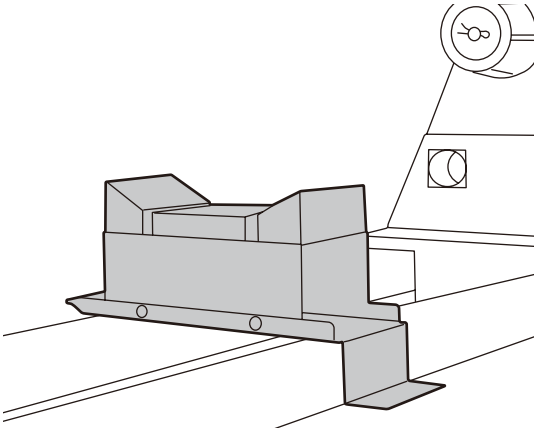
3



Move the right media holder fully to the right.

4

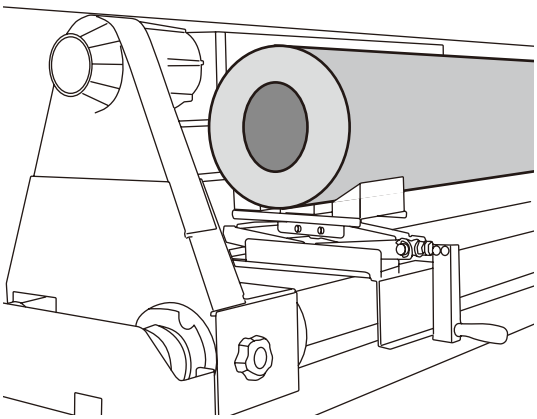


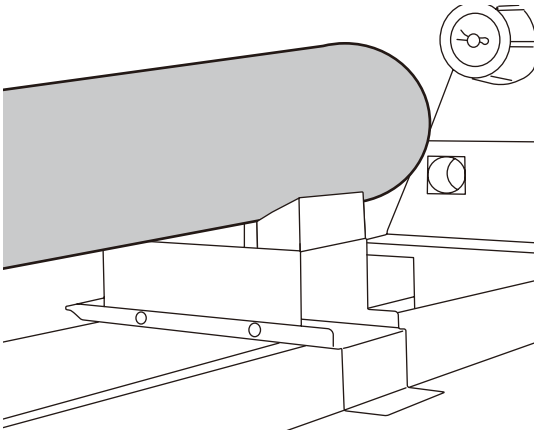


Install the media jack and media support.

- ◊ The media will be loaded from the left side, so install the media jack to the left side and the media support to the right side.
- ◊ Install them considering the media width.

5





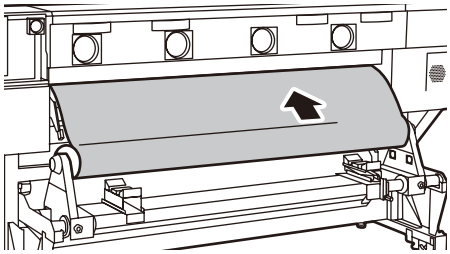
Load the media onto the media jack and media support.

⚠ Notes

- **Be careful not to drop the media when loading it onto the media jack.**
- **Do not let the media jack fall. Otherwise it may be damaged during use.**
- **Do not grab the moving parts when holding the media jack.**
  Otherwise, your fingers may get caught in the moving parts, leading to an injury.

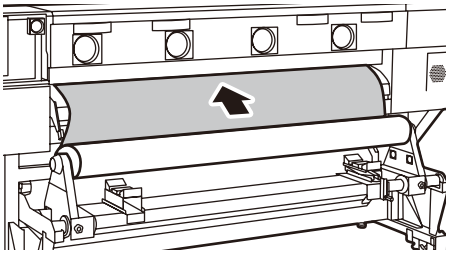
Media orientation

<When the surface to be printed on is at the outer side of the roll>



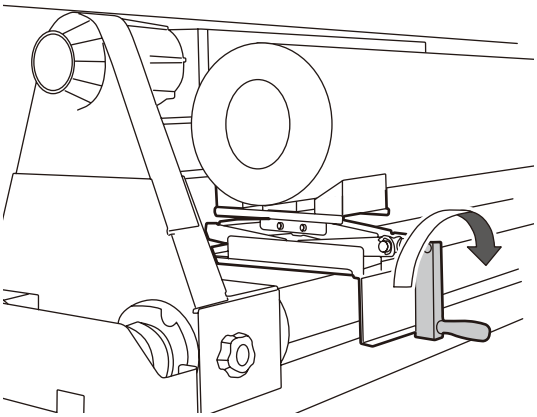
: printing surface

<When the surface to be printed on is at the inner side of the roll>



: printing surface

6

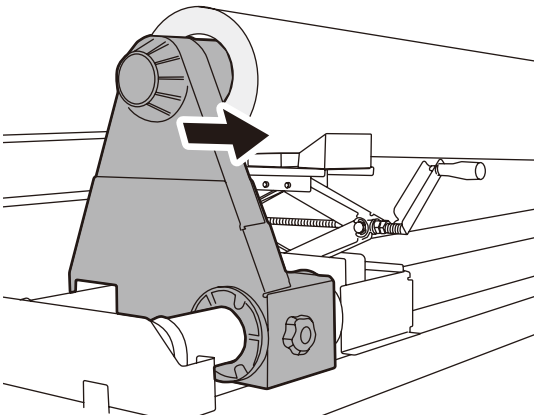


Turn the media jack's handle clockwise to raise the media until the roll tube is aligned with the media holder.

⚠ Note

- **Pay attention not to insert you fingers into the moving pantograph mechanism or otherwise touch it during operation.**

7



Insert the left media holder into the roll tube.

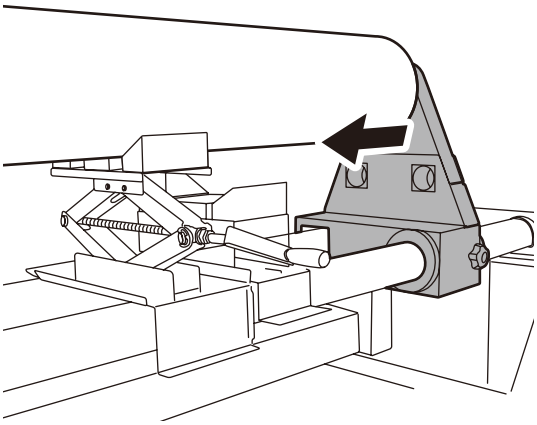
⚠ Notes

- **Pay attention not to unwind the media or damage the ends of the roll media when inserting it into the media holder.**
- **Insert as far as it goes to secure the roll tube to the media holder.**

8

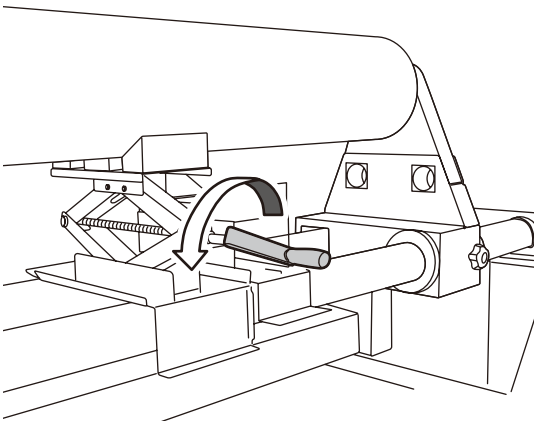
Turn the media jack's handle counter-clockwise to remove the jack. Then install it to the right side of the roll.

9



Adjust the roll level using the media jack and insert the right media holder into the roll the same way as you did for the left side.

10

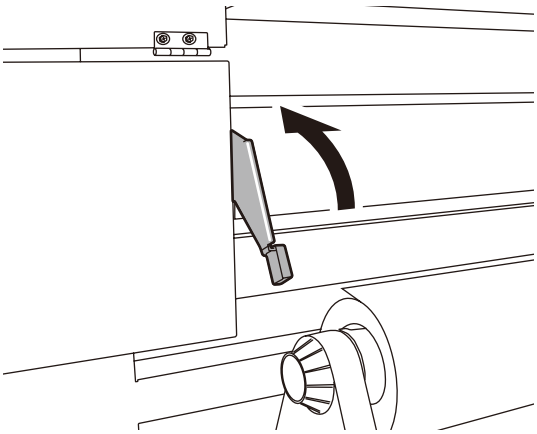


Turn the media jack's handle counter-clockwise to lower and remove the jack. Then put the media jack and the media support away.

⚠ Note

- **If you leave the media jack or the media support in place under the roll media, the media may curl or be damaged when back feeding it. Be sure to put them away.**

11



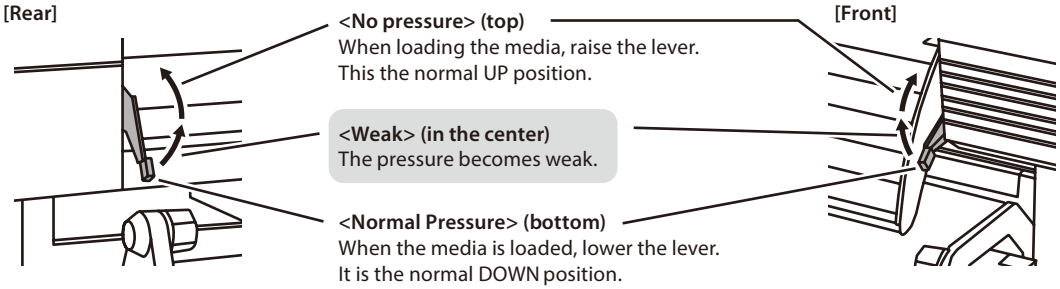
Lift the pressure roller lever.

⚠ Note

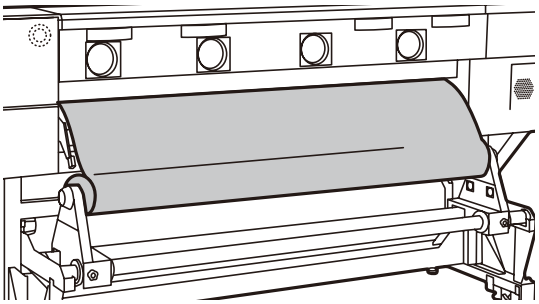
- **The pressure roller lever has three positions (low, medium, and high). Always put the lever in the highest position when loading the media.**

⚠ Note

- **Switch over the pressure between the pressure roller and the grit roller used for media feeding to match different media. The bottom position is normally used. When skew occurs in the media and the media cannot be fed or when using a media with weak elasticity such as a thin cloth, switch to [weak], the center position. The pressure force is switched using the pressure roller up / down lever. (See figure below.)**



12



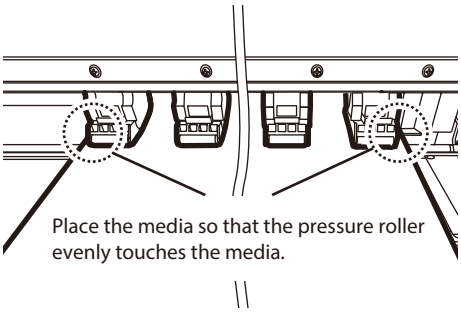
Pass the media between the pressure roller and the grit roller. When you hear a beep sound, feed the media 80 cm further.

The printer emits a sound when the media leading edge comes out from the front cover.

Notes

- **Depending on the environment, the media may stick to the paper guide and have difficulty to advance. In such a case, hold both ends of the roll to separate the media from the paper guide and then feed the media.**
- **If the leading edge of the media curls up or down, it may get caught inside the printer and may not be installed properly. Do not use heavily curled media.**
- **Make sure that the leading edge of the media does not touch the front cover. If the media forms a curve, straighten it before the installation.**
- **Check that the media edge guards are not caught under the media.**

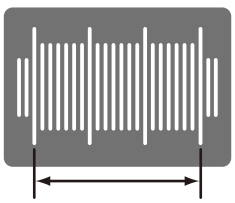
13



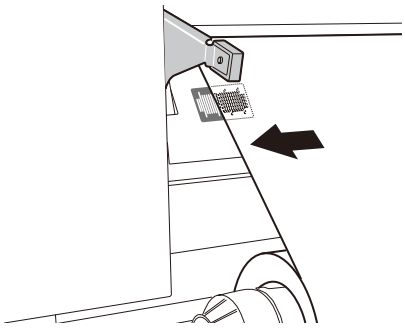
Place the media so that the pressure roller evenly touches the media.

Move the media holders so that the media edges are evenly placed under the pressure roller.

◊ Note the position of the media edges on the sticker gradations to facilitate position adjustment the next time you load the media.



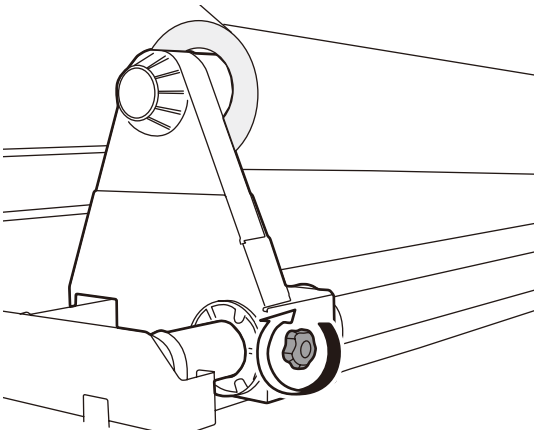
Adjust the media position so that the edge is place above the gradations.



Note

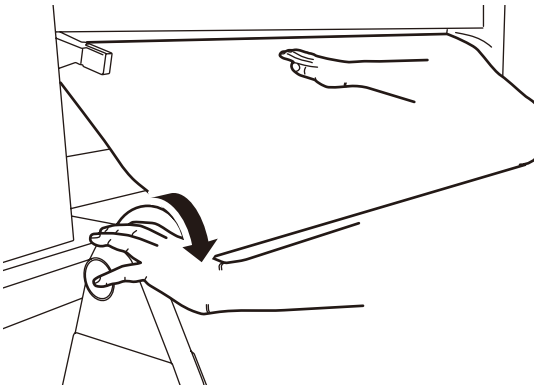
- **Always move the media holders to adjust the position. Moving only the media may cause it to skew.**

14



Turn the knob screws on both media holders to secure them.

15

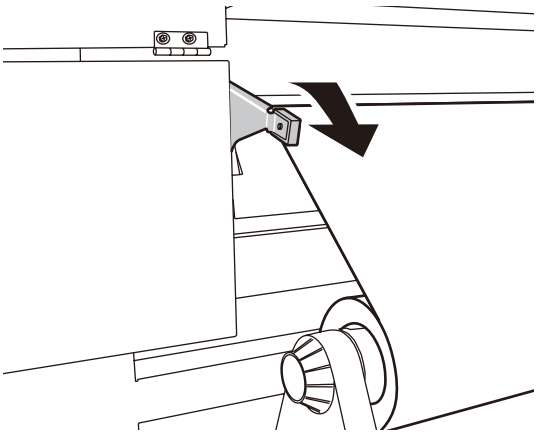


While keeping your hand on the media to straighten it, turn the flange to wind the media until only 20 cm comes out from the front cover.

⚠ Note

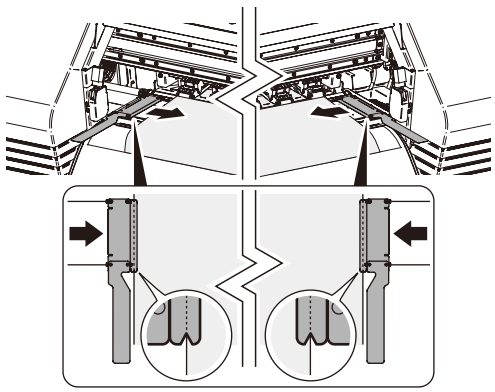
- **Do not try to forcibly align the media with the gradations lines but install the media parallel to the roll.**

16



Put the pressure roller lever to the lowest position.
From here, continue the procedure following the messages displayed on the LCD screen.

17

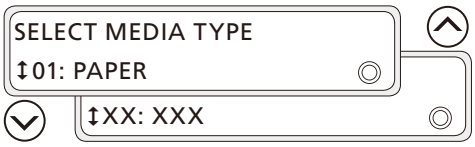


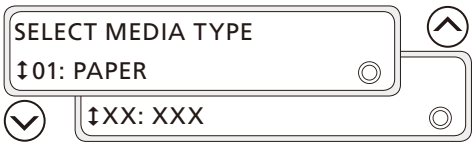
Open the front cover and place both edge guards on the media edges. Place the media edges in the notches on the edge guards. Then close the front cover.

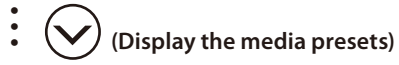
Check that the edge guards do not go under the media, or that the media advance smoothly in case of particularly thick media.

Check visually that the media edge guards are correctly placed then press the **OK** button.

18







Select the media type.

Select a registered media type using the **Up** and **Down** buttons, then press the **OK** button.

To create a new media preset

At the end of the media preset list, **CREATE NEW PRESET** is displayed.
Press the **OK** button to enter the media registration menu.
The procedure to create a preset is the same as in the MEDIA REG menu.
Press the **CANCEL** button to cancel the entered parameters.

19

Set the amount of remaining media.

Set the amount of remaining media and press the **OK** button.

To register the amount of remaining media

The menu used to set the amount of remaining media is displayed only when **ON** is set for **REMAIN MEDIA MONIT** in the media preset menu.
See **Procedure to monitor remaining media** on *page 55* for details on how to configure remaining media monitoring.

20

The media loading operation starts automatically.

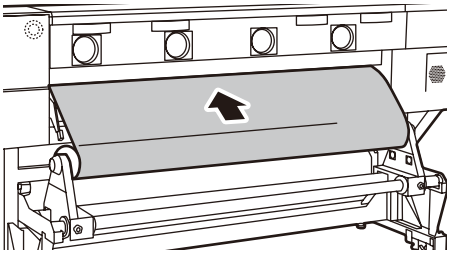
- When the operation completes successfully, the printer returns to the online or offline state.
- If the operation fails, an error message is displayed.

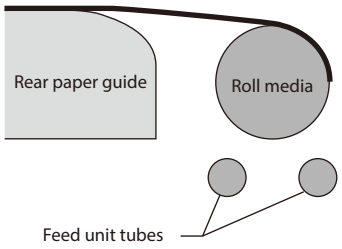
In this case, perform the procedure again starting from step *1*.

Notes

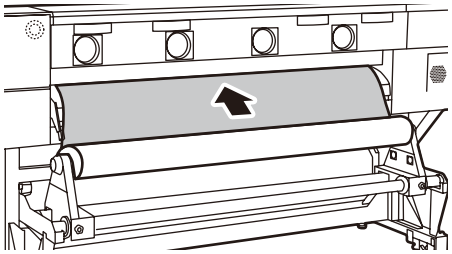
- **After the media has been installed, check that the media does no enter the gap formed by the cutter blade (option) or that it is not caught in the media clips (options). Also check that the media evenly contacts the platen and that it does not wrinkle.**
- **When using tarpaulin or other high basis weight media, pay attention not to let a media slack of more than 15 cm form on the roll side. The weight of the media slack may make the media roll rotate and unwind.**
- **When back feeding more than 30 cm or media, do not do it in a single operation but back feed the media slowly while removing the slack by rotating the media roll manually.**

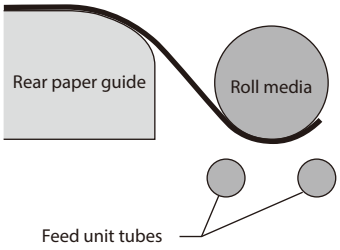
<When the surface to be printed on is at the outer side of the roll>





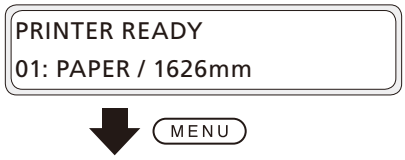
<When the surface to be printed on is at the inner side of the roll>



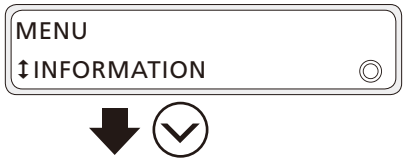


Procedure to monitor remaining media

1 Press the **MENU** button.



2 Press the **Down** button to select **EDIT MEDIA PRESETS.**



3 Press the **OK** button.

4 Press the **Down** button to select **MISC SETTINGS.**

5 Press the **OK** button.

6 >>MISC SETTINGS
↕REMAINING MEDIA ◎

Press the Down button to select REMAIN MEDIA MONIT.

7 >>MISC SETTINGS
↕REMAIN MEDIA MONIT ◎

Press the OK button.

8 >>>REMAIN MEDIA MONIT
↕OFF

Press the Down button once.

9 >>>REMAIN MEDIA MONIT
↕ON ◎

Press the OK button.

10 >>>REMAIN MEDIA MONIT
↕ON

♢ Set **ON** for **REMAIN MEDIA MONIT** in one of the following cases:
- You want to enter the amount of remaining media when loading the media.
- You want to print the amount of remaining media with this function.

Procedure to load transparent media and media with a black reverse side

Configure the settings as follows when loading transparent media and media with a black reverse side.

⚠ Note

◆ **Media end of transparent media or media with black reverse side cannot be detected. It is therefore recommended to use media whose end is stuck to the roll with glue.**

1 PRINTER READY
01: PAPER/1626mm

Press the MENU button.

2 MENU
↕INFORMATION ◎

Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

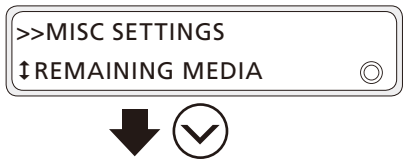
4

Press the Down button to select MISC SETTINGS.

5

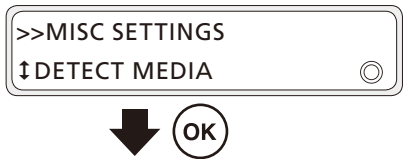
Press the OK button.

6



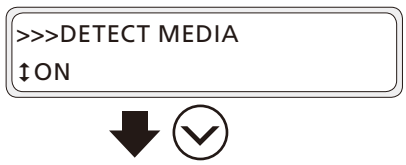
Press the Down button to select DETECT MEDIA.

7



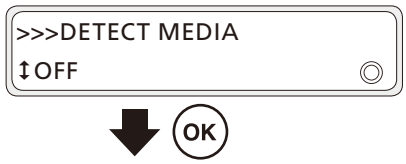
Press the OK button.

8



Press the Down button once.

9



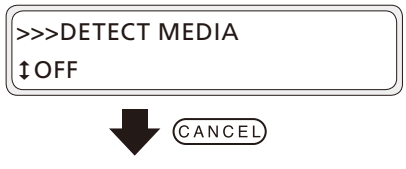
Press the OK button.

10

◊ For media with a black reverse side, continue the procedure as described in Procedure to load roll media on 📖 ***page 48***.

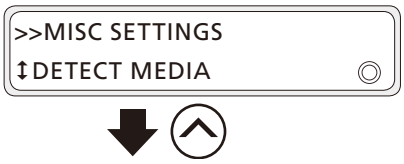
◊ For transparent media, continue the procedure as described below.

11



Press the CANCEL button to exit the DETECT MEDIA menu.

12



Press the Up button to select DETECT MEDIA WIDTH.

13

Press the OK button.

14

Press the Down button once.

15

Press the OK button.

16

Press the CANCEL button to exit the DETECT MEDIA WIDTH menu.

17

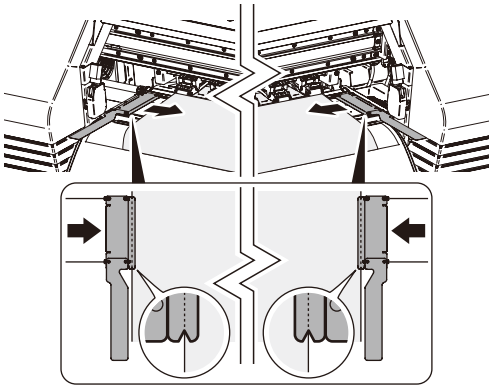
Press the ONLINE button.

◊ To load transparent media, continue the procedure as described in Procedure to load roll media on *page 48*. But follow the procedure below for the panel operations after the media has been loaded instead of that described from the step 17 on *page 53*.

18

EDGE GUARDS POSITION
OK?

OK



Open the front cover and place both edge guards on the media edges. Place the media edges in the notches on the edge guards. Then close the front cover.

Check that the edge guards do not go under the media, or that the media advance smoothly in case of particularly thick media.

Check visually that the media edge guards are correctly placed then press the **OK** button.

19

SELECT MEDIA TYPE
↕01: PAPER
↕XX: XXX

Select the media type.

Select a registered media type using the **Up** and **Down** buttons, then press the **OK** button.

20

SELECT MEDIA TYPE
↕07: TRANSPARENT

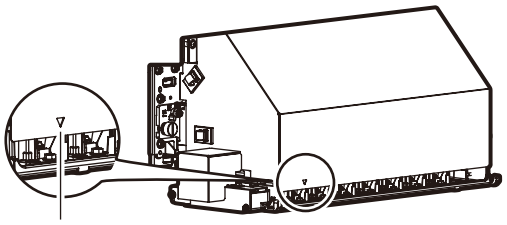
OK

TRANSPARENT: It is recommended to register a preset for transparent media in advance.

21

MOVE CARR. TO MEDIA
R EDGE WITH R/L KEYS

Press the Left or Right button to move the carriage to the right edge of the media. Align the ▽ mark at the bottom left on the front of the carriage cover with the media right edge.



Move the carriage so that this mark is aligned with the right edge of the media.

22

MOVE CARR. TO MEDIA
R EDGE WITH R/L KEYS

OK

Press the OK button when the carriage is aligned with the media right edge.

23

SET MEDIA RIGHT EDGE
OK? ◎

OK

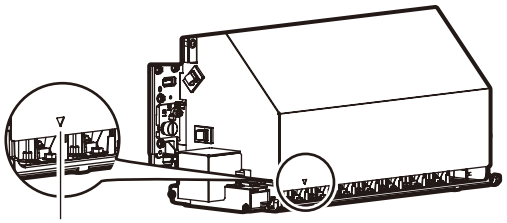
Press the OK button to set the media right edge position.

24

MOVE CARR. TO MEDIA
L EDGE WITH R/L KEY ◎

<, >

Press the Left or Right button to move the carriage to the left edge of the media. Align the ▽ mark at the bottom left on the front of the carriage cover with the media left edge.



Move the carriage so that this mark is aligned with the left edge of the media.

25

MOVE CARR. TO MEDIA
L EDGE WITH R/L KEY ◎

OK

Press the OK button when the carriage is aligned with the media left edge.

26

SET MEDIA LEFT EDGE
OK? ◎

OK

Press the OK button to set the media left edge position.

27

CHECKING MD EDGES
PLEASE WAIT

PRINTER READY
07: TRANSPARENT/1626mm

The carriage returns to its previous position and the printer is ready to print (online state).

⚠ Notes

- **DETECT MEDIA** and **DETECT MEDIA WIDTH** settings change with the media preset.
  When using transparent media or media with black reserve side, it is recommended to use a media preset dedicated to these types of media.
- If you use only one media preset and transparent media and media with black reverse side, change the **DETECT MEDIA** and **DETECT MEDIA WIDTH** settings to use these types of media, and then return the settings to their previous values when using conventional media.

Replacing the media when the end of the roll is reached

When there is no more media on the roll, the printer detects it automatically and displays a message.
However, note that with some media types, the printer may not be able to automatically detect the end of the roll. If printing continues when there is no more media, the printer may get dirty or malfunction. Be sure to check visually the remaining length of media.

1

A message is displayed on the LCD screen.

2 **Replace the media following the Procedure to remove the roll media and the Procedure to load the roll media.**

Replacing the media after a media jam

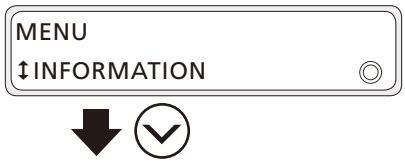
Refer to **How to clear a media jam** on 📖 ***page 233***.

Setting the media remaining length

1

Press the MENU button.

2

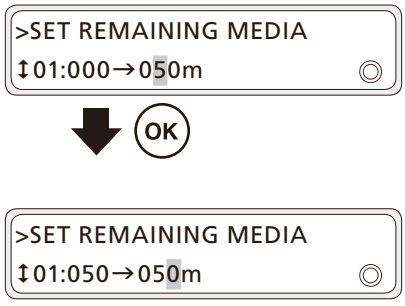


Press the Down button to select SET REMAINING MEDIA.

3

Press the OK button.

4



Set the remaining media length and press the OK button.

Setting the media on the take-up reel unit

Tension and loose mode setting procedure

Two modes, tension mode or loose mode, can be selected for take-up reel unit (TUR) operation.
Usually, select loose mode when printing on vinyl (adhesive-backed) media.
When printing on tarpaulin or other media that does not slide well, use the tension mode if the media tends to shift on the TUR unit.

⚠ Note

- **The take-up reel unit cannot take up some types of media, even if the printer can print on it. (E.g. rigid media or when winding inward media in outer take-up mode)**

Inner take-up direction cannot be used in loose mode.

◊ Set the outer take-up direction in loose mode or the inner take-up direction in tension mode.

Tension and loose mode setting procedure

Set the mode using TUR MODE in the EDIT MEDIA PRESETS menu.

1 PRINTER READY
01: PAPER/1626mm
MENU

Press the MENU button.

2 MENU
↕INFORMATION ◎

Press the Down button to select EDIT MEDIA PRESETS.

3 MENU
↕EDIT MEDIA PRESETS ◎
OK

Press the OK button.

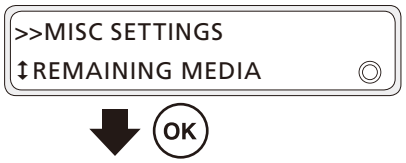
4 >EDIT MEDIA PRESETS
↕SELECT MEDIA ◎

Press the Down button to select MISC SETTINGS.

5

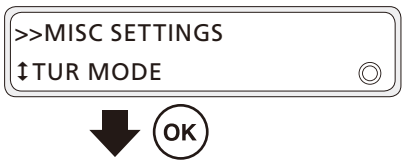
Press the OK button.

6



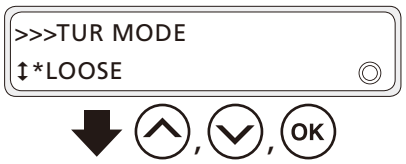
Press the Down button to select TUR MODE.

7



Press the OK button.

8

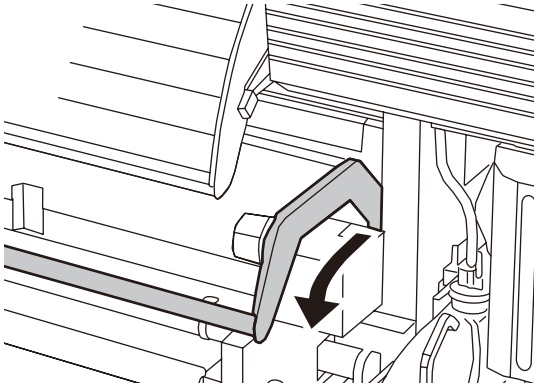


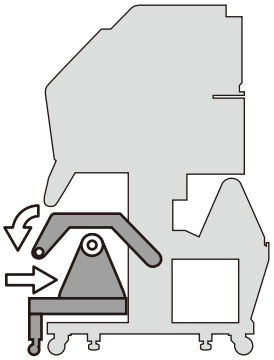
Select LOOSE or TENSION using the Up and Down buttons, and then press the OK button.

In loose mode

Loose mode is recommended for vinyl and solvent printing coated paper media.

Before printing, pull the guide bar toward you to lower it from the standby position to the usage position.





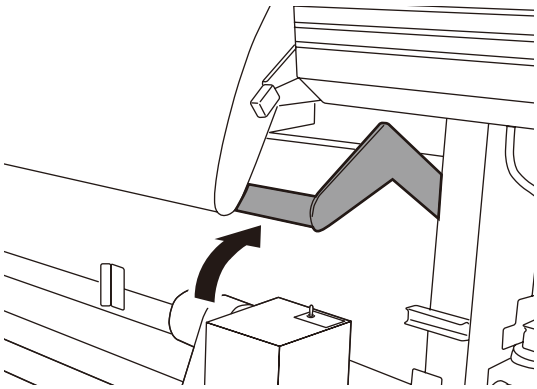
Note

- **Taking up the media in loose mode with the guide bar in the standby position may cause the media to shift.**
- **Do not put your hand on the guide bar. Doing so may damage the guide bar or you may be injured by the guide bar falling.**

In tension mode

Tension mode is recommended for tarpaulin media.

Leave the guide bar in the standby position.

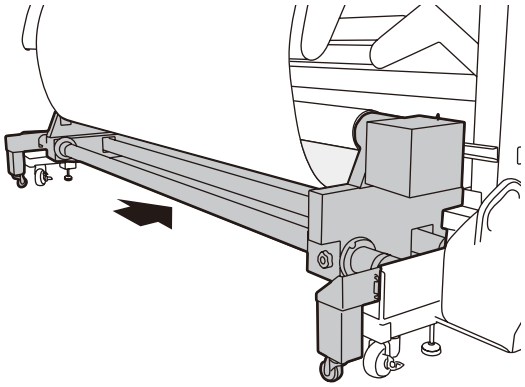


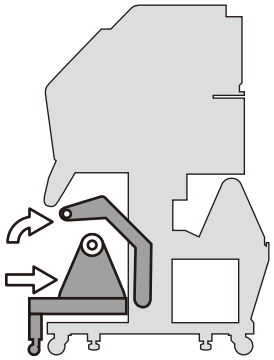
Note

- **Taking up the media in tension mode with the guide bar in the usage position may cause the media to shift.**

With the outer take-up direction

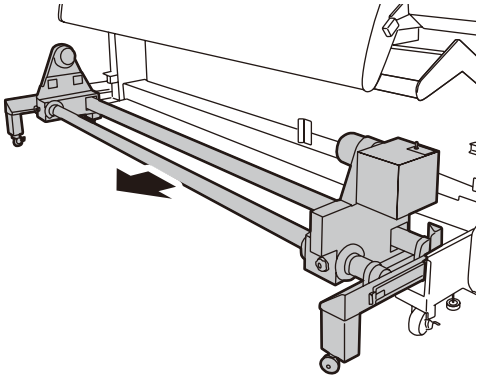
Print with the TUR unit pushed as far as it goes inside the printer.

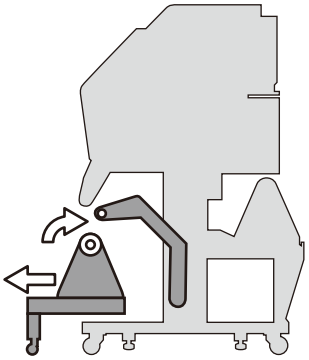




With the inner take-up direction

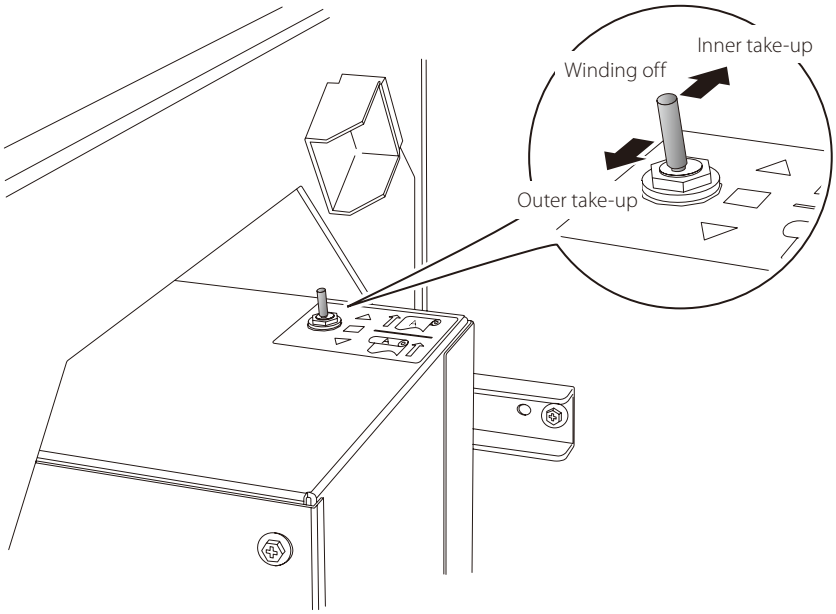
Print with the TUR unit pulled forward.



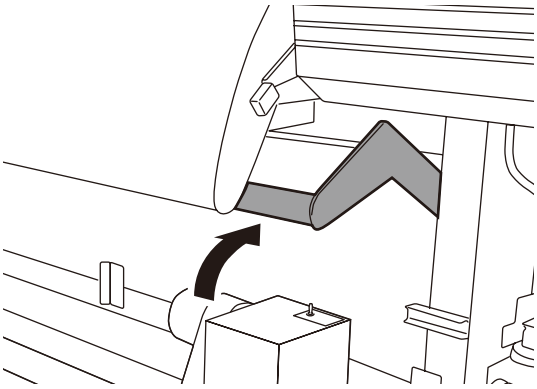


Procedure to set the media on the TUR unit

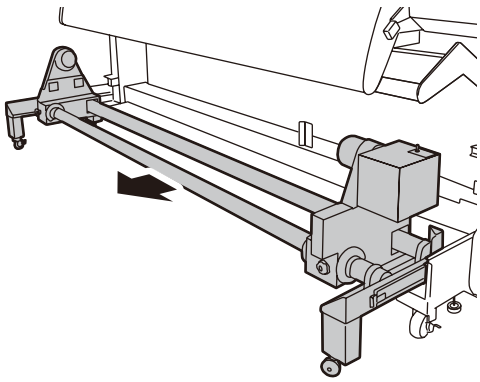
1 **Put the take-up direction switch installed on the right media holder in the off position.**



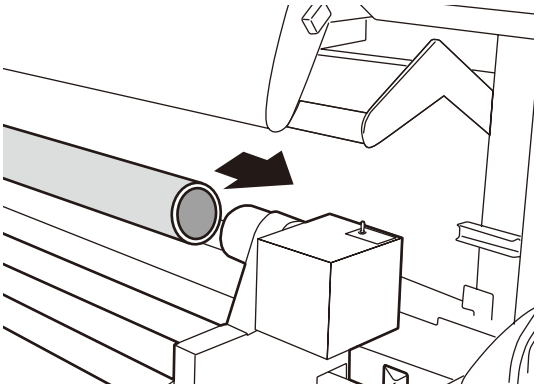
2 **Move the guide bar to the standby position.**



3 **Hold the front pipe of the TUR unit by the center and pull the TUR unit toward you.**

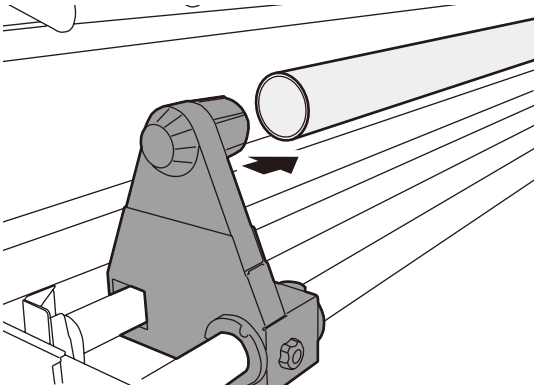


4



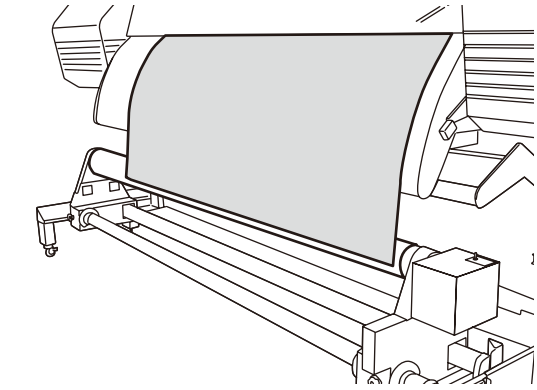
Insert the right flange into one end of a paper tube.

5



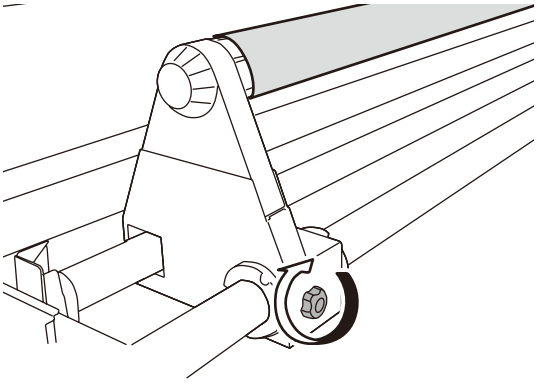
Move the left flange and insert it into the other end of the paper tube.

6



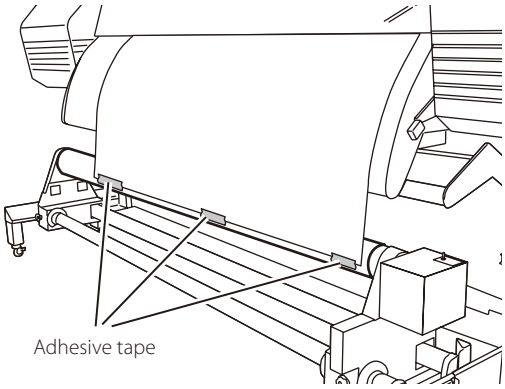
Tighten the knob screw on the left flange to secure the position.

7



Feed the media until the leading edge reaches the paper tube.

8

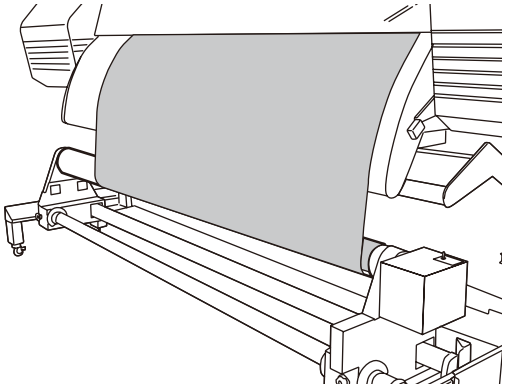


Maintain the media stretched and attach it to the paper tube with some adhesive tape.

⚠ Notes

- **Attach the media with three pieces of tape, one at the center and one at both the right and left edges.**
- **Pay attention to keep the media straight as it may skew otherwise.**

9

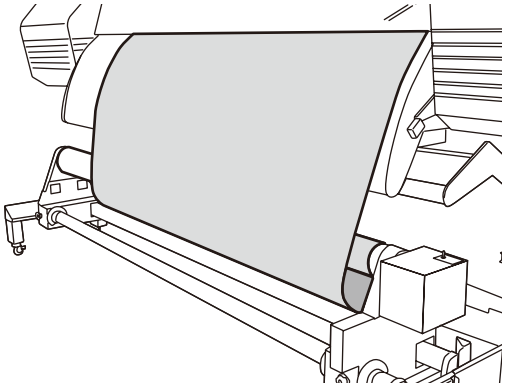


Rotate the tube one turn to prevent the media from detaching from the tube.

To take up the media, either rotate the flange manually or use the take-up reel switch while feeding the media.

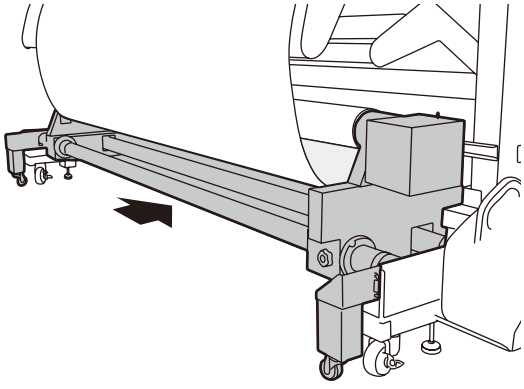
Switch between the on and off positions of the take-up reel switch to wind the adequate length of media.

10



Feed the media a little more to create a slack.

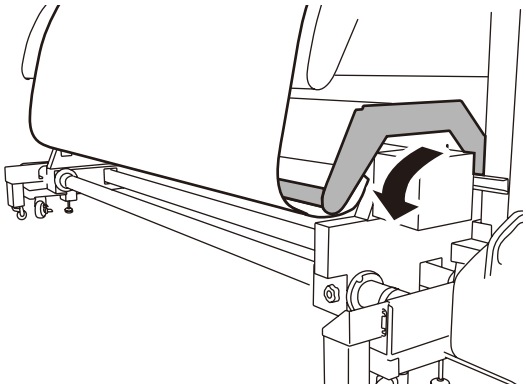
11



When the TUR unit is set to outer take-up direction, push the TUR unit under the printer as far as it goes.

When the TUR unit is set to inner take-up direction, leave the TUR unit in its current pulled out position.

12



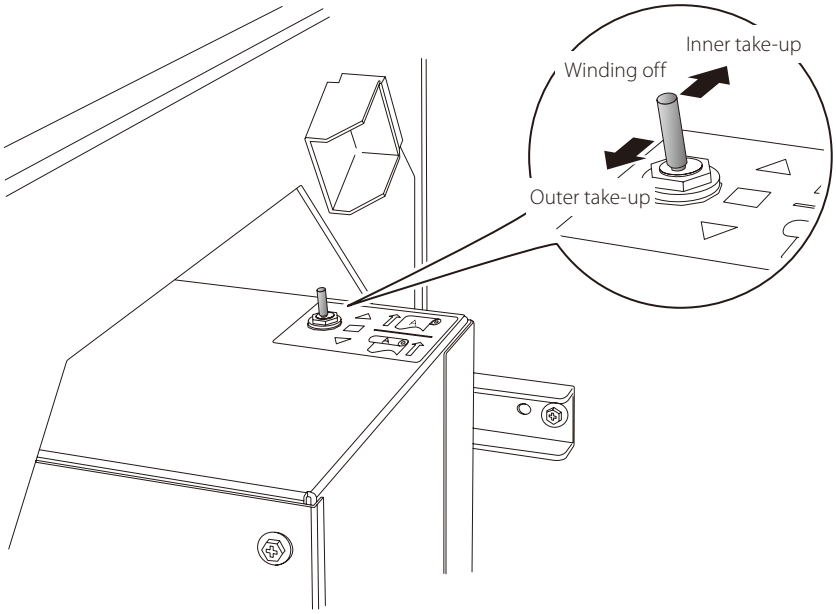
If loose mode is selected, place the guide bar in the usage position.

13

Set the take-up direction switch.

In loose mode, always select outer take-up direction.

Refer to the figure below to set the switch.



Removing the media

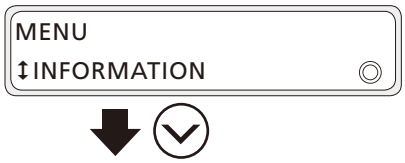
Procedure to print the amount of remaining media

The amount of remaining media can be printed on the media before removing the media.

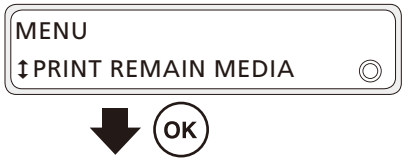
◊ Printing the amount of remaining media before removing it allows you to refer to it to enter the exact amount of remaining media the next time you install the same media.

1 Press the **MENU** button.

2 Press the **Down** button to select **PRINT REMAIN MEDIA.**

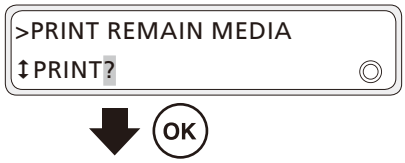


3 Press the **OK** button.

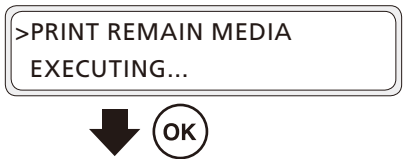


4 **Press the OK button to start the operation.**

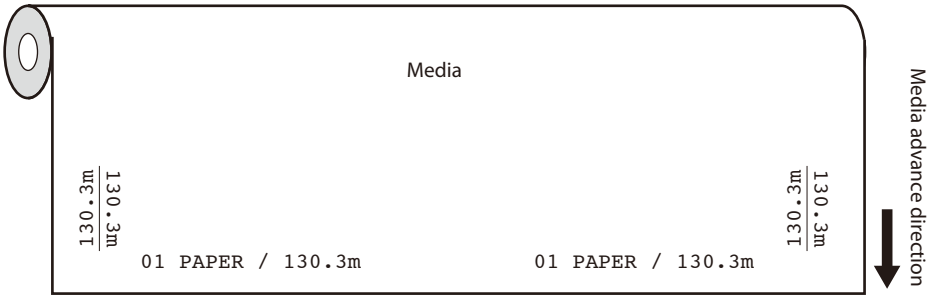
To cancel the operation, press the **CANCEL** button.



5 The amount of remaining media is printed.



◊ The amount of remaining media is printed in several locations as shown in the figure below.

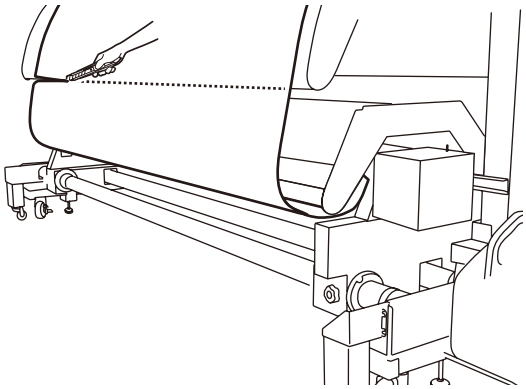


Procedure to remove the roll media (output side)

1

Feed the media until all the printed part that will be used has passed the output paper guide.

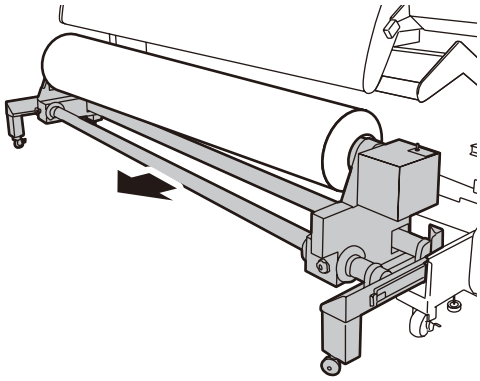
2



Cut the media at the edge of the output paper guide.

If you use the optional cutter unit, refer to **Cutting the media** on *page 75*.

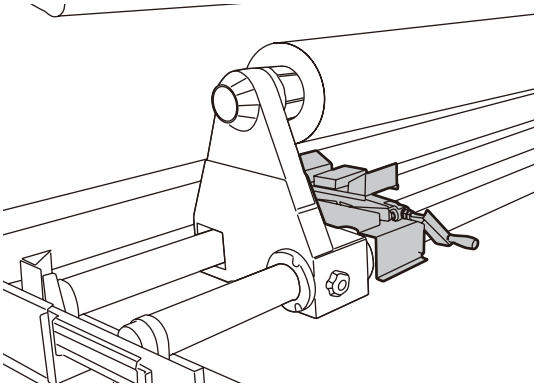
3



Place the guide bar in the standby position and pull the TUR unit toward you.

Hold the front pipe of the TUR unit and pull it toward you.

4

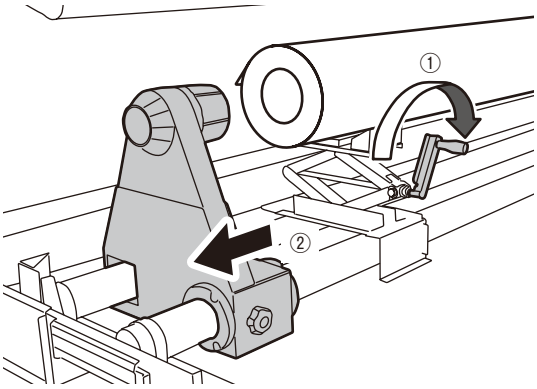


Install the media jack at the left side.

Notes

- **Do not let the media jack fall.**
  Otherwise it may be damaged during use.
- **Do not grab the moving parts when taking the media jack.**
  Otherwise, your fingers may get caught in the moving parts, leading to an injury.

5



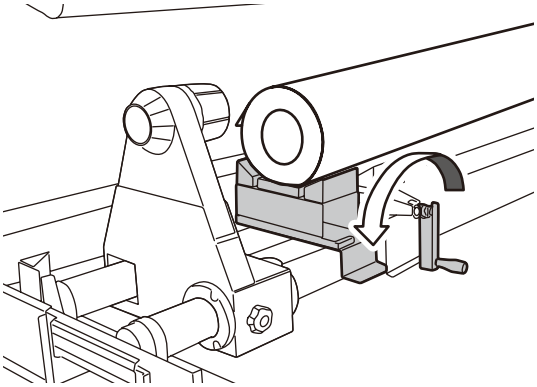
Remove the left side first.

1 Turn the media jack's handle clockwise to raise the media jack to the level of the media.
2 When the jack supports the media, slide the left media holder to remove it from the media roll.

⚠ Notes

- **Do not raise the media jack too high when the media is still installed on the media holder. Doing so may damage the media holder or the media jack.**
- **Pay attention not to insert you fingers into the moving pantograph mechanism or otherwise touch it during operation.**

6



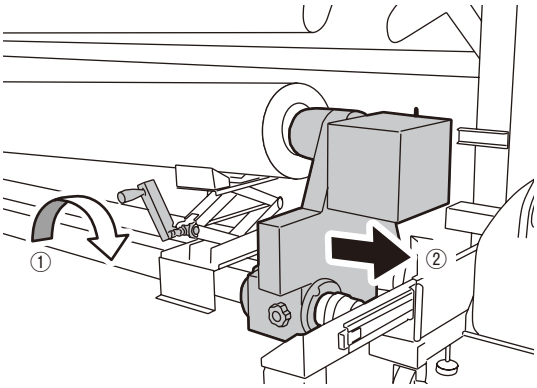
Place the left side of the media on the media support.

1 Install the media support next to the jack.
2 Turn the media jack's handle counter-clockwise to lower the media until it is supported by the stand.

7

Slide the media jack and install it to the right side.

8



Next, remove the right side.

1 Turn the media jack's handle clockwise to raise the media jack to the level of the media.
2 When the jack supports the media, slide the right media holder to remove it from the media roll.

⚠ Notes

- **Do not raise the media jack too high when the media is still installed on the media holder. Doing so may damage the media holder or the media jack.**
- **Pay attention not to insert you fingers into the moving pantograph mechanism or otherwise touch it during operation.**

9

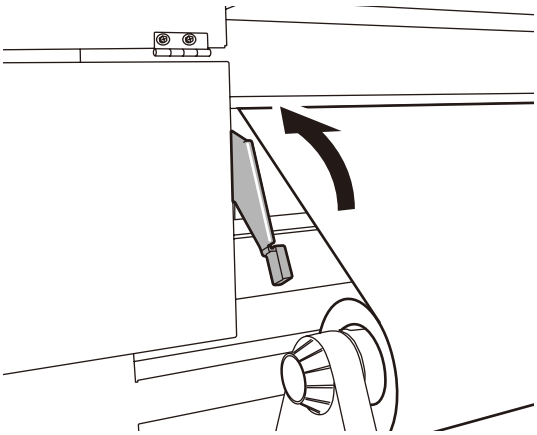
Turn the media jack's handle counter-clockwise to lower the media, and then remove the media.

⚠ Notes

- **The media is heavy. Always use two or more people when handling roll media to prevent injury, such as when the media fall over someone's feet. Also, if you feel that the media is too heavy, take measures to handle it properly such as increasing the number of people carrying out the operation. Incorrect handling of the media may lead to personal injury.**
- **To prevent injuries, use a dolly equipped with a lifter (recommended dolly) when loading, removing or replacing the media.**

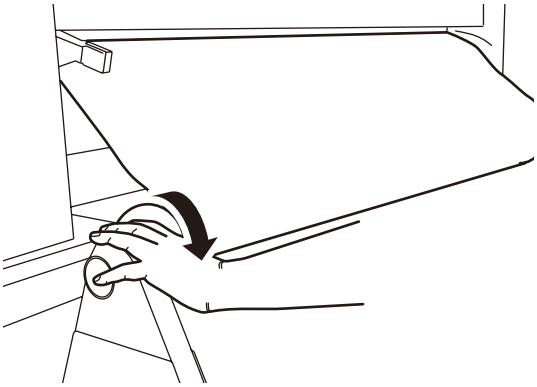
Procedure to remove the roll media (feed side)

1



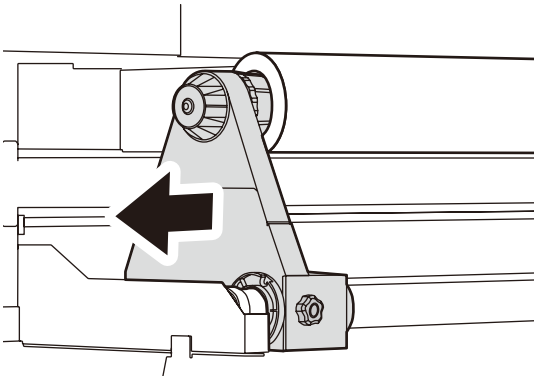
Lift the pressure roller lever.

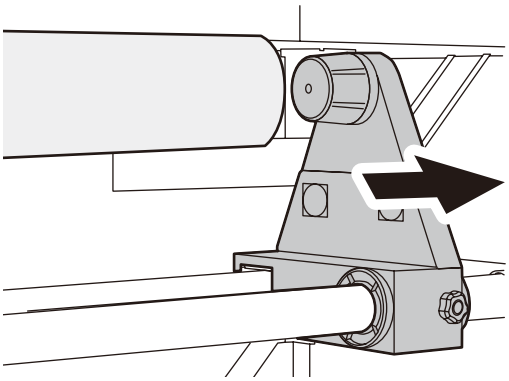
2



Rotate the flange to rewind the media.

3





Move both the right and left flanges to remove them from the tube, and then remove the media.

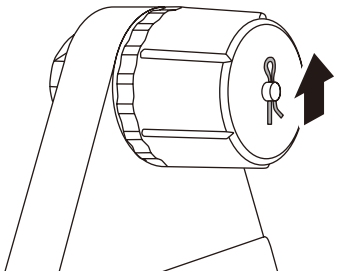
⚠ Notes

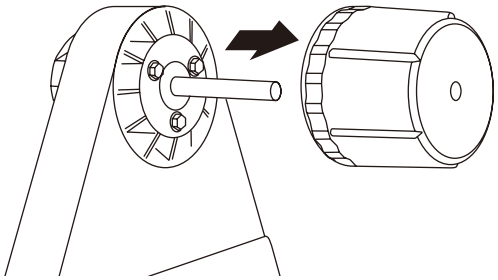
- If a lot of media remains and the roll is heavy, use tools to help you and remove the media using the loading procedure in the reverse order.
- Be careful that the media does not fall when removing the media holders from the roll. Workers may be injured if their hands get caught under the media or if the media falls on their feet.

When using 2-inch tubes

Optional 2-inch flanges can be installed to use roll media with a tube of 2 inches in diameter.
You can use this type of roll media on both the feeding side and TUR side.
Use the procedure below to install 2-inch flanges.

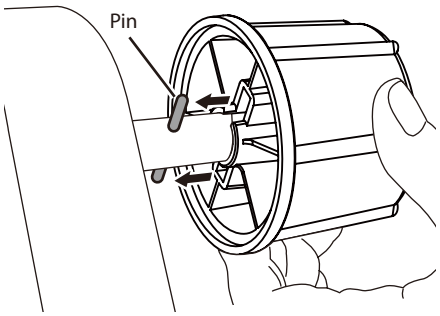
1





Remove the R-pin from the 3-inch flange, and then remove the flange.

2



Install the 2-in flange.

⚠ Notes

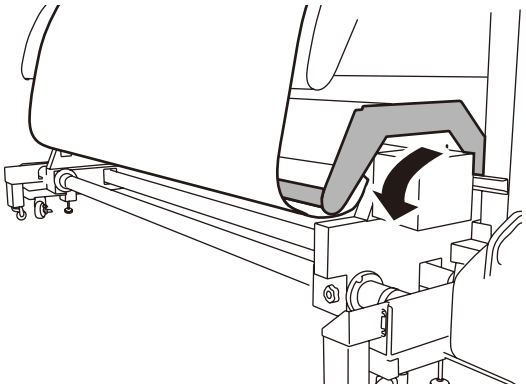
- **Align the pin and the groove in the flange when installing the new flange.**
- **The new flange may not slide smoothly around the shaft. Make sure the shaft is inserted completely in the flange.**
- **Pay attention not to lose the R-pin or the pin.**

3

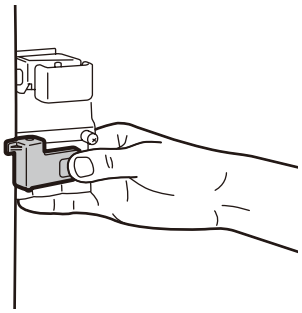
Install the R-pin.

Cutting the media

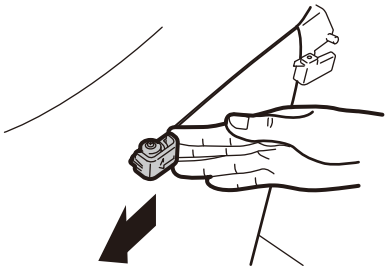
The following explains the procedure to cut the media using the optional cutter unit.

1 

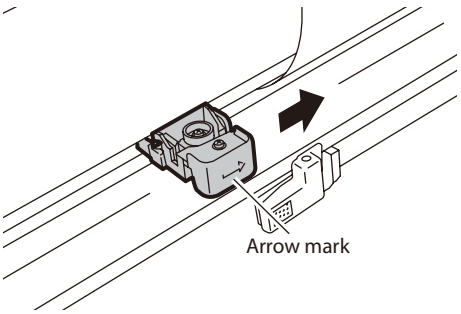
Place the guide bar in the usage position.

2 

Fix both media edges using media clips.

3 

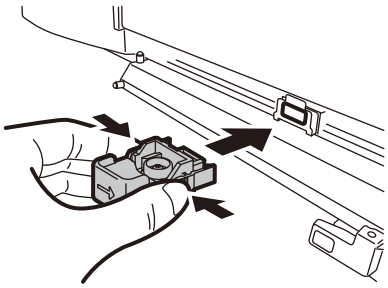
Move the media cutter blade to cut the media.



⚠ Note

- **An arrow mark (→) is engraved on the media cutter blade.**
- **The cutter cuts only in the direction of the arrow. If the arrow is not oriented in the cutting direction, change the blade orientation following the procedure below.**

4



Grasp both sides of the cutter blade, push the two hooks securing the blade, and then remove the blade with the hooks released.

5

Reverse the orientation of the blade and reinstall it.

⚠ Notes

- **If the media cutter blade gets stuck while cutting, return the cutter blade to the side, remove curls or other causes of the problem, and then cut the media again by slowly moving the media cutter blade. Do not forcibly cut the media otherwise the blade may be damaged and lose its cutting performance.**
- **Pay attention not to drop the media cutter blade. If it falls the blade may be damaged and lose its cutting performance. Handle the cutter blade with care.**
- **It may be impossible for the cutter blade to cut thick media or cloth. In such cases, use a pair of scissors or other adequate means. Forcibly cutting thick media may damage the media cutter blade and degrade its cutting performance.**

Procedure to feed the media up to the cut position after printing

Follow the procedure below to cut the media at the end of the print out after printing.

1 PRINTER READY
01: PAPER/1626mm

Press the Down button.

2 FEEDING MEDIA...
STOP AT CUT POS >

After the operation panel display has changed to the screen shown on the left, keep the Down button pressed and press Right button.

3 FEEDING MEDIA...

After the operation panel display has changed to the screen shown on the left, release both the Down and Right buttons.

The media is fed automatically up to the cut position even if you release the buttons.

- ◊ Press the **OK** button or the **CANCEL** button to cancel automatic feeding of the media.
- ◊ Even after canceling automatic feeding of the media, you can perform steps *1* and *2* again to automatically feed the media up to cut position.

(Automatic feeding ends or is canceled.)

4 PRINTER READY
01: PAPER/1626mm

- ◊ Use the **Down** and **Up** buttons if you want to fine adjust the cut position.

5 **(Cut the media.)**

Cut the media following the procedure in Cutting the media on *page 65*.

Note

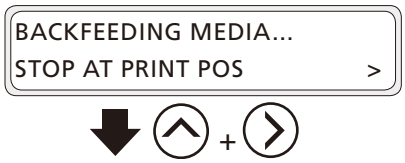
- **The automatic feeding function is disabled in the following cases.**
  - **No media is installed.**
  - **No printing has been performed after installing the media.**
  - **The end of the printout is located before the cut position.**

Procedure to backfeed the media to the print position after cutting

1

Press the Up button.

2



After the operation panel display has changed to the screen shown on the left, keep the Up button pressed and press Right button.

3

After the operation panel display has changed to the screen shown on the left, release both the Up and Right buttons.

The media is backfed automatically to the print position even if you release the buttons.

(Automatic backfeeding ends or is canceled.)

- ◊ Press the **OK** button or the **CANCEL** button to cancel automatic backfeeding of the media.
- ◊ Even after canceling automatic backfeeding of the media, you can perform steps *1* and *2* again to automatically backfeed the media to print position.

4

- ◊ Use the **Down** and **Up** buttons if you want to fine adjust the printing position.

⚠ Notes

- **After backfeeding the media, wind the media manually to remove the slack before performing the next print job.**
- **The automatic backfeeding function is disabled in the following cases.**
  - **No media is installed.**
  - **No printing has been performed after installing the media.**
  - **The end of the printout is located after the print position.**

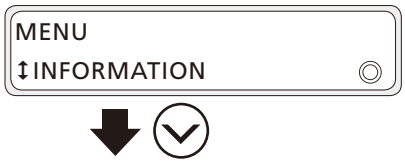
Unwind the media from the TUR unit

Procedure to unwind the media from the TUR unit

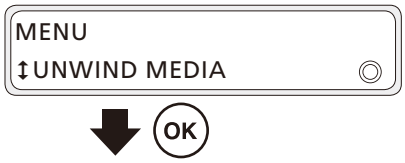
Follow the procedure below to unwind the media wound on the TUR unit.

1 

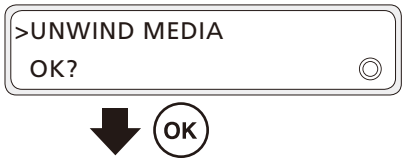
Press the MENU button.

2 

Press the Down button to select UNWIND MEDIA.

3 

Press the OK button.

4 

Press the OK button.

5 

The TUR unit starts unwinding the media.

Press the **OK** button again to stop the unwinding of the media.

- ◊ The unwinding also stops if you press the **CANCEL** button to exit the UNWIND MEDIA menu.
- ◊ Set the take-up direction switch to off then to the desired direction to unwind the media several times.

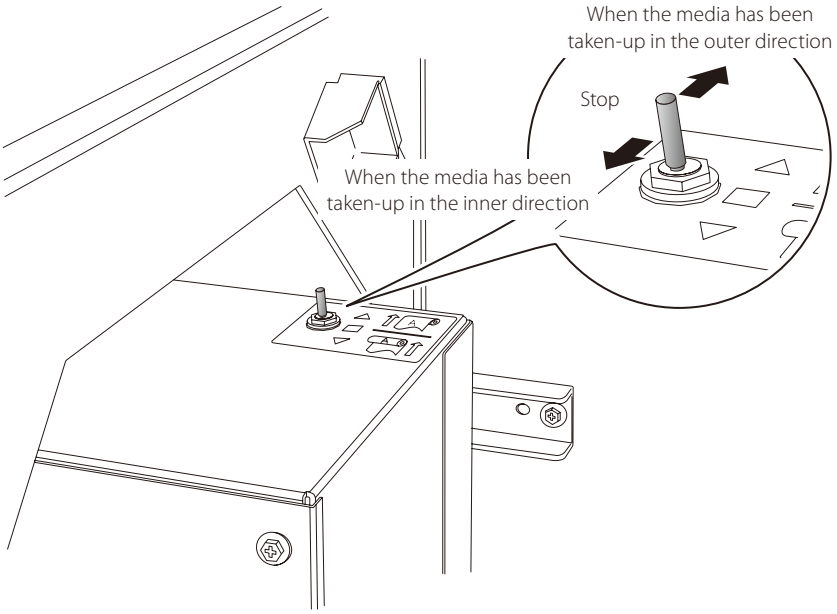
6 

About the unwinding direction

◊ The unwinding direction depends on the take-up direction switch setting.
You must set the switch to a different position if the media has been taken up in the inner or the outer take-up direction. Refer to the figure below when setting the switch.

About the duration of the unwinding operation

◊ The unwinding operation stops automatically after a certain length of time. To continue unwinding the media, return temporarily the take-up direction switch to the off position, and then set it again to the adequate unwinding direction.



Adjustment

Before making adjustment

Make adjustments to maximize the print quality.

Notes

- **Before starting the adjustment, turn on the force heating function on the printer for 30 minutes or more.**
- **Correct adjustment is not possible if the printer is not sufficiently warmed.**
- **Always make print adjustment after installing a new media or changing the print mode.**

Two types of adjustment are available: **Media advance adjustment** and **bidirectional adjustment**.
You can select **automatic print adjustment** and **manual print adjustment** for each type.

	Automatic print adjustment	Manual print adjustment
Media advance adjustment Adjust the media feeding	*page 85*	*page 87*
Bidirectional adjustment Adjust the ink output position during bidirectional printing	*page 91*	*page 93*

Two modes are available to adjust print: automatic print adjustment and manual print adjustment.
With automatic print adjustment, the printer prints an adjustment pattern, checks the result with sensors, and sets an adjustment value automatically.
With manual print adjustment, the printer prints an adjustment pattern, then the user selects visually an adjustment value and set the value on the printer.

How to differentiate between automatic and manual print adjustment

◊ Automatic print adjustment is recommended for the following users.
- Users who do not have much experience with the printer
- Users who find manual print adjustment difficult
- Users who want finish adjustment quickly

* Automatic print adjustment may not be available depending on the media type. If automatic print adjustment does not improve the print quality, use manual print adjustment.

◊ Manual print adjustment is recommended for the following users.
- Users who needs the best print quality

Cautions regarding automatic print adjustment

⚠ Notes

- **The printer cannot set a correct media advance adjustment value through automatic print adjustment in the following cases. In such cases, improve the conditions or perform manual print adjustment.**
  The automatic print adjustment determines mechanically the media advance adjustment value, so absolute precision of the setting cannot be guaranteed.

- The media used makes the check via sensors impossible.
(Some media types, even conventional ones, may not be supported by automatic print adjustment.)
<Examples>
- Transparent or colored media
- Media with a rough surface
- Media with an extremely high or low degree of reflection
- Media on which the pattern cannot be printed properly, such as when the ink tends to bleed
- The media surface is soiled with dust, ink, finger marks, etc.
- A gap tends to form between the platen and the media
- Lots of nozzles are clogged
- The media heater temperatures are not suitable
- The environmental luminosity is too strong

- **With automatic print adjustment, the printed pattern is read automatically to determine the media advance adjustment value. However, discrepancies may appear in the printed pattern between media lots or if the media is old. Therefore, the detection results may be incorrect even when using the same media.**
  In such cases, use manual print adjustment.

When automatic print adjustment cannot be performed

Automatic adjustment is not possible if one of the following messages appears when automatic print adjustment is performed.
In such a case, perform manual adjustment or check the items and perform the measures described below.

MANUALLY ADJUST 1
ADV VAL/PRINT POS ◎

Meaning	The amount of light received by the sensors did not reach the reference level.

Items to be checked	Corrective measures
Check that the sensors for automatic print adjustment are not covered with ink mist.	Clean the sensors for automatic print adjustment. (See Cleaning around the ionizers and the sensors for automatic print adjustment on 📖 *page 139*.)
Check that the media is clean.	Feed the media until you reach a clean section.
Check that the media is not wrinkled.	Reinstall the media or feed the media until you reach a section without wrinkles.
Check that you are not using a media type with a light reflection rate too low.	Automatic print adjustment may not be possible with some media types. In such a case, use manual print adjustment.

MANUALLY ADJUST 2
ADV VAL/PRINT POS ◎

Meaning	The amount of light received by the sensors exceeds the reference level.

Items to be checked	Corrective measures
Check that the media is not wrinkled.	Reinstall the media or feed the media until you reach a section without wrinkles.
Check that no external light reaches the sensors.	Block the external light or change the printer installation location.
Check that you are not using a media type with a light reflection rate too high.	Automatic print adjustment may not be possible with some media types. In such a case, use manual print adjustment.

MANUALLY ADJUST	3
ADV VAL/PRINT POS	◎

Meaning The adjustment values cannot be determined correctly.

Items to be checked	Corrective measures
Check that the media is not wrinkled.	Reinstall the media or feed the media until you reach a section without wrinkles.
Check that no nozzles are clogged.	Perform a print head cleaning.
Check that the media heater temperature is correct.	Change the media heater temperature so that the ink does not spread too much.
Check that you are not using a media type on which the pattern does not form correctly and from which the pattern cannot be read properly.	Automatic print adjustment may not be possible with some media types. In such a case, use manual print adjustment.

Adjustment methods

Adjusting media feeding: Media advance adjustment

The media feeding operation can be adjusted depending on media characteristics, such as thickness, rigidness, and smoothness of the surface.
To maintain a high print quality, perform media advance adjustment and set the most suitable media advance adjustment value.

What is the timing to perform media advance adjustment?

◊ When one of the following changes has been made
- The media has been changed
- The print mode has been changed
- The position of the pressure roller lever has been changed
- The TUR unit usage setting or TUR mode (loose or tension) has been changed
- The media advance mode has been changed
- The suction fan setting (off, low, medium, high) has been changed

◊ When the media advance adjustment value is incorrect.
When the media advance adjustment value is incorrect, banding (horizontal bands) appears periodically on the printout.

Automatic print adjustment

See **Cautions regarding automatic print adjustment** (📖 ***page 83***)

<Workflow>

STEP1 Select the print mode ▶ **STEP2** Execute automatic print adjustment ▶ **Completed**

↓ If the print quality has not been improved

Perform manual print adjustment (📖 *page 87*)

<Procedure>

1 **Load the media.**

Load the media in the same conditions as normal printing.

2

Press the ADJUST button.

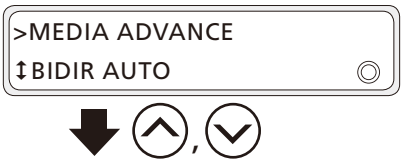
3

Press the Up and Down buttons to select MEDIA ADVANCE.

4

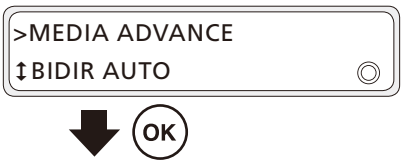
Press the OK button.

5



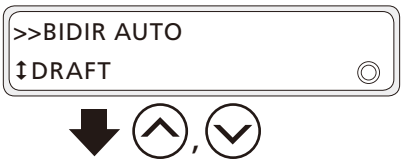
Press the Up and Down buttons to select BIDIR AUTO.

6



Press the OK button.

7



Press the Up and Down buttons to select the print mode.

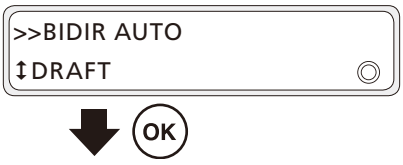
(CIS model)

Print mode
DRAFT
FAST PRODUCTION
PRODUCTION
STANDARD
QUALITY
HIGH QUALITY
MAX QUALITY

(LCIS model)

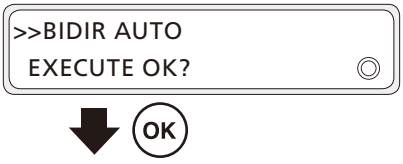
Print mode
FAST PRODUCTION
PRODUCTION
STANDARD
QUALITY
HIGH QUALITY
MAX QUALITY

8

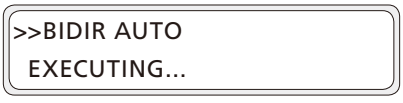


Press the OK button.

9



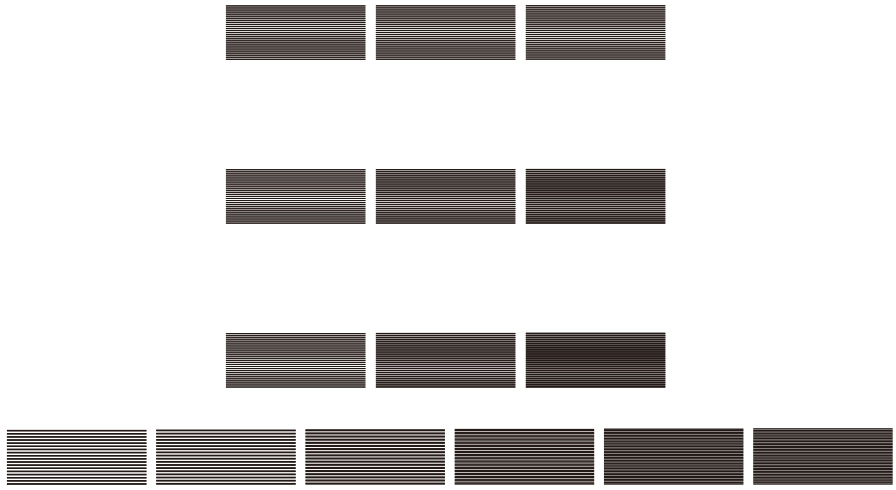
Press the OK button to execute media advance adjustment.



The printer prints the media advance adjustment pattern and check the result with its sensors.

After the results have been checked, the printer automatically set the media advance adjustment value. The procedure is complete.

During this procedure, the printer prints and checks patterns similar to those shown below.



10 If the print quality has not been improved, perform manual print adjustment.

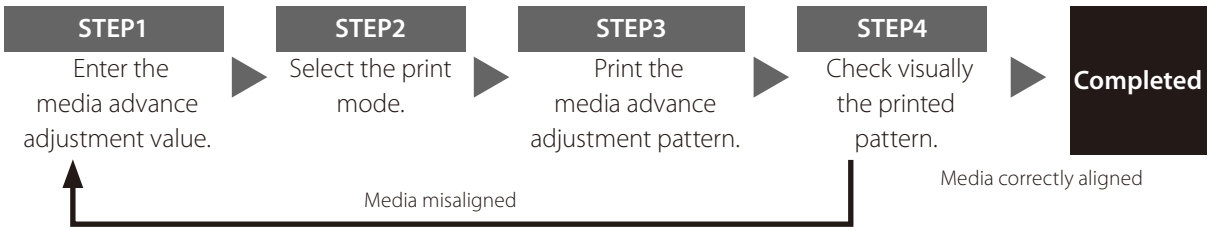
Manual print adjustment

Through manual adjustment, you can choose between 1 pattern or 3 patterns to be printed.
With 1 pattern, the printer prints the media advance adjustment pattern with the set adjustment value.
With 3 patterns, the printer prints three media advance adjustment patterns, one with the set adjustment value, one with the set adjustment value +0.2%, and one with the set adjustment value -0.2%.

TIP:

◊ It is recommended to use 3 patterns if you have no idea of a suitable for media advance adjustment.

<Workflow>



<Procedure>

1

Load the media.

Load the media in the same conditions as normal printing.

2

Press the ADJUST button.

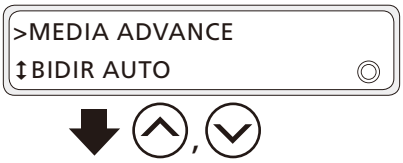
3

Press the Up and Down buttons to select MEDIA ADVANCE.

4

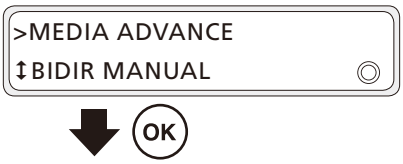
Press the OK button.

5



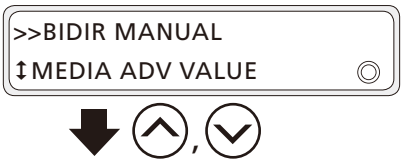
Press the Up and Down buttons to select BIDIR MANUAL.

6



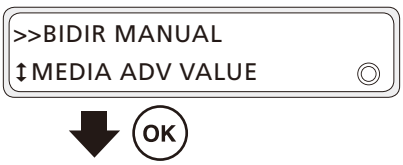
Press the OK button.

7



Press the Up and Down buttons to select MEDIA ADV VALUE.

8



Press the OK button.

9

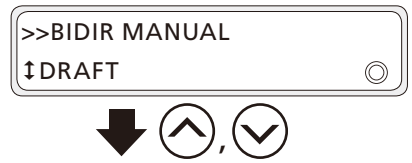
*: Registration mark (A registration mark * is displayed if the media preset is registered)
XXX.XX: Media advance adjustment value currently set
YYY.YY: Entered media advance adjustment value (Setting range 97.00 to 106.00%)

Press the Right and Left buttons to select the digit, and press the Up and Down buttons to select a value for media adjustment.

10

Pres the OK button to confirm the entered value, and press the CANCEL button to exit MEDIA ADV VALUE.

11



Press the Up and Down buttons to select a print mode.

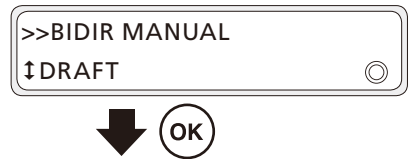
(CIS model)

Print mode
DRAFT
FAST PRODUCTION
PRODUCTION
STANDARD
QUALITY
HIGH QUALITY
MAX QUALITY

(LCIS model)

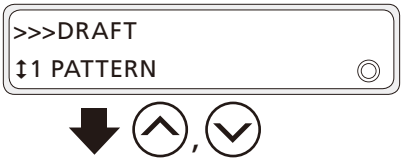
Print mode
FAST PRODUCTION
PRODUCTION
STANDARD
QUALITY
HIGH QUALITY
MAX QUALITY

12



Press the OK button.

13

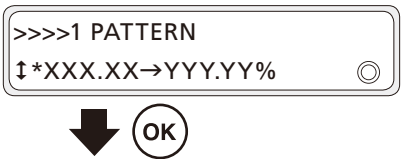


Press the Up and Down buttons to select an option between 1 PATTERN and 3 PATTERNS.

14

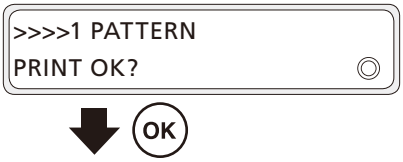
Press the OK button.

15



Press the OK button.

16



Press the OK to print the media advance adjustment pattern.

17

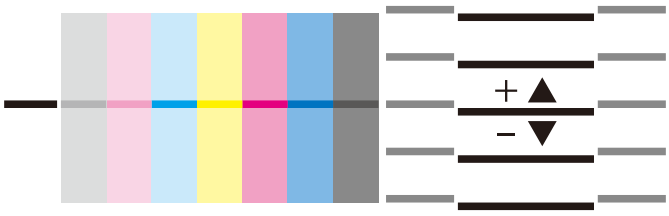
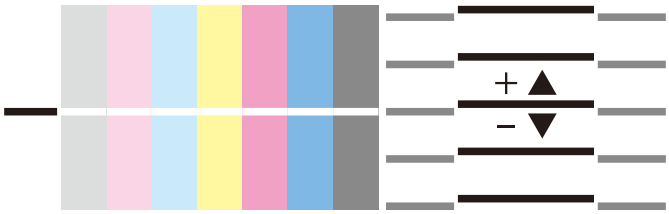
The print starts.

18 **Check the printed pattern visually.**

When adjustment value is correct, the adjustment procedure is complete.

If the adjustment value is not suitable, perform the adjustment procedure again from step 9 through 17.

Check the media advance adjustment pattern

	When the media advance adjustment value is too low.
	When the media advance adjustment value is correct.
	When the media advance adjustment value is too high.

Notes

- If the correct media advance adjustment value differs between the media right and left sides, set the average value.
- If the correct media advance adjustment value differs between the media right and left sides, it may be caused by a skewed media.
  Check that the media has not skewed.

Correcting ink output position: Bidirectional adjustment

During bidirectional printing, a slight difference may appear in the ink output position between the first scanning direction and the second scanning direction.
To maintain a high print quality, perform bidirectional adjustment and set the most suitable bidirectional adjustment value.

What is the timing to perform bidirectional adjustment?

◊ When one of the following changes has been made
- The media has been changed
- The print mode has been changed
- The carriage speed (normal, slow) has been changed
- The height of the print heads has been changed

◊ When the bidirectional adjustment value is incorrect.
When the bidirectional adjustment value is incorrect, grains may appear on the printout or the printout may be blurred.

Automatic print adjustment

See **Cautions regarding automatic print adjustment** (📖 ***page 83***)

<Workflow>

STEP1 Select a bidirectional adjustment pattern suitable for the print mode ▶ **STEP2** Execute automatic print adjustment ▶ **Completed**

↓ If the print quality has not been improved

Perform manual print adjustment (📖 page 93)

<Procedure>

1 **Load the media**

Load the media in the same conditions as normal printing.

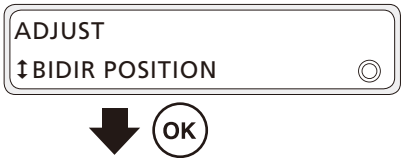
2

Press the ADJUST button.

3

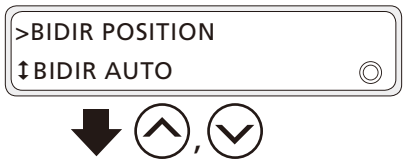
Press the Up and Down buttons to select BIDIR POSITION.

4



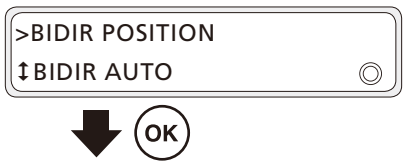
Press the OK button.

5



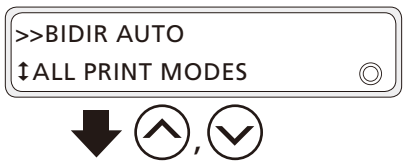
Press the Up and Down buttons to select BIDIR AUTO.

6



Press the OK button.

7



Press the Up and Down buttons to a bidirectional adjustment pattern suitable for the print mode.

Bidirectional adjustment patterns corresponding to the print modes

Correspondence between print modes and bidirectional adjustment patterns

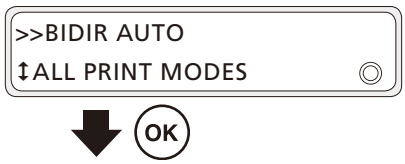
(CIS model)

Bidirectional adjustment pattern	Print mode
ALL PRINT MODES	All print modes
1: DRA,FAST PR,PRO	Draft, fast production, and production
2: STD & QUALITY	Standard and quality
3: HIGH QUALITY	High quality
4: MAX QUALITY	Max quality

(LCIS model)

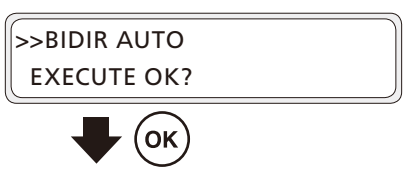
Bidirectional adjustment pattern	Print mode
ALL PRINT MODES	All print modes
1: FAST PRO, PRO	Fast production and production
2: STD & QUALITY	Standard and quality
3: HIGH QUALITY	High quality
4: MAX QUALITY	Max quality

8



Press the OK button.

9



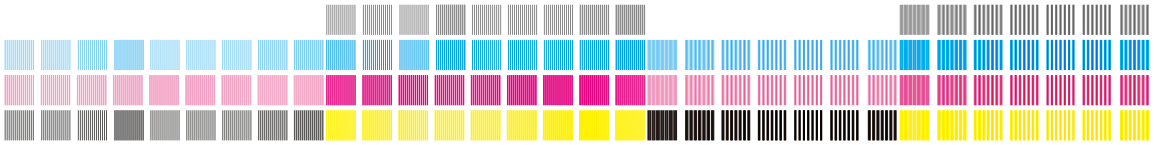
Press the OK button to execute the bidirectional adjustment.

>>BIDIR AUTO EXECUTING

The printer prints the bidirectional adjustment pattern and check the result with its sensors.

After the results have been checked, the printer automatically set the bidirectional adjustment value. The procedure is complete.

During this procedure, the printer prints and checks a pattern similar to the one shown below.



10 If the print quality has not been improved, perform manual print adjustment.

Manual print adjustment

<Workflow>

STEP1	STEP2	STEP3	STEP4	
Select the print mode. ▶	Print the bidirectional adjustment pattern. ▶	Check visually the bidirectional adjustment pattern and select a bidirectional adjustment value. ▶	Enter the bidirectional adjustment value. ▶	**Completed**

<Procedure>

1 **Load the media.**

Load the media in the same conditions as normal printing.

2

PRINTER READY 01: PAPER / 1626mm

↓ ADJUST

Press the ADJUST button.

3

ADJUST ↕MEDIA ADVANCE ◎

↓ ▲, ▼

Press the Up and Down buttons to select BIDIR POSITION.

4

ADJUST ↕BIDIR POSITION ◎

↓ OK

Press the OK button.

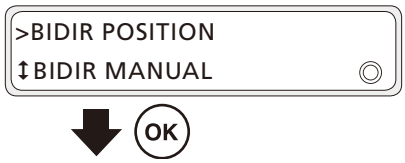
5

>BIDIR POSITION ↕BIDIR AUTO ◎

↓ ▲, ▼

Press the Up and Down buttons to select BIDIR MANUAL.

6



Press the OK button.

7

Press the Up and Down buttons to a bidirectional adjustment pattern suitable for the print mode.

Correspondence between the bidirectional adjustment patterns and the print modes.

Correspondence between print modes and bidirectional adjustment patterns

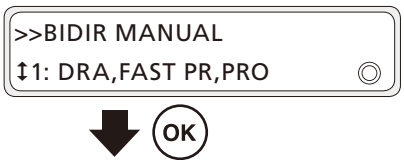
(CIS model)

Bidirectional adjustment pattern	Print mode
ALL PRINT MODES	All print modes
1: DRA,FAST PR,PRO	Draft, fast production, and production
2: STD & QUALITY	Standard and quality
3: HIGH QUALITY	High quality
4: MAX QUALITY	Max quality

(LCIS model)

Bidirectional adjustment pattern	Print mode
ALL PRINT MODES	All print modes
1: FAST PRO, PRO	Fast production and production
2: STD & QUALITY	Standard and quality
3: HIGH QUALITY	High quality
4: MAX QUALITY	Max quality

8



Press the OK button.

9

Press the Up and Down buttons to PRINT PATTERN.

10

Press the OK button.

11

>>>1: DRA,FAST PR,PRO
EXECUTE OK?

OK

Press the OK button to print the bidirectional adjustment pattern.

>>>1: DRA,FAST PR,PRO
EXECUTING

The print starts.

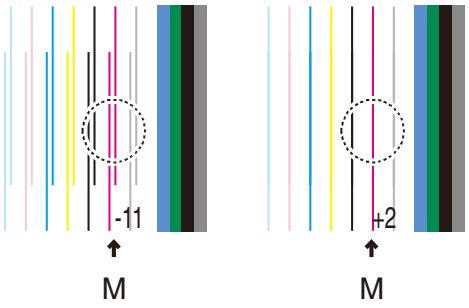
12

Check visually the bidirectional adjustment pattern and select a bidirectional adjustment value.

Select a value for both the right and left of each print head.

How to check a bidirectional adjustment pattern

Enter the value indicated in the case where both lines are the closest for each print head.
For example to set the left adjustment value for the M print head, enter +2 as in the pattern to the right the lines are separated for -11 but they form only one line for +2.



13

>>>1: DRA,FAST PR,PRO
↕PRINT PATTERN ◎

▲, ▼

Press the Up and Down buttons to select right or left adjustment and the color of the print head.

This example explains how to set a bidirectional adjustment value of **+2** for the left adjustment of the M print head.

14

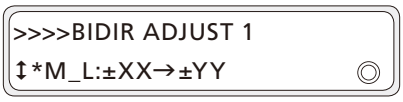
>>>1: DRA,FAST PR,PRO
↕*M_L:±XX ◎

M : Print head color
L : Adjustment value right or left
±XX : Current adjustment value

OK

Press the OK button.

15



*: Registration mark (A registration mark * is displayed if the media preset is registered)
XXX. XX: Current adjustment value
YYY. YY: Adjustment value after change (setting range -15 to +15)

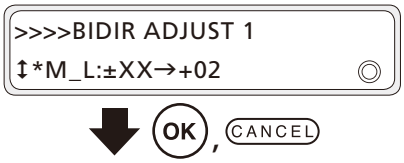
Press the Right and Left buttons to select the digit, and press the Up and Down buttons to select a value for bidirectional adjustment.

Correspondence between the bidirectional adjustment values and the print modes.

Bidirectional adjustment value	Print mode
BIDIR ADJUST 1	Draft*, fast production, and production
BIDIR ADJUST 2	Standard and quality
BIDIR ADJUST 3	High quality
BIDIR ADJUST 4	Max quality

* Only supported by the CIS model.

16



Press the OK button to set the bidirectional adjustment value, or press the CANCEL button to exit BIDIR ADJUST 1.

17

Set the bidirectional adjustment values of the other side and the other print heads following the same procedure.
When bidirectional adjustment values have been set for both sides of all print heads, the adjustment procedure is complete.

Maintenance

Daily maintenance

Perform daily maintenance to maintain the printer in good condition and maximize the print quality.
Pay particularly attention to the following three items.

- Clean the capping unit (start maintenance) every day.
- Check the level of the wiper cleaning liquid every day. Supply liquid if the level is low.
- Print heads are highly-precise parts. Do not wipe the nozzle surfaces directly.

Daily maintenance can be executed from the operation panel.

The daily maintenance items are listed below.

Replacement period of consumable.

Item		Quantity	Replacement period(Warning message appear)
IP6-251	Wiper cleaning liquid set A (200ml)	3 bottles	1 bottel per 1 month
IP6-258	Wiper sponge	1 piece	Around 6 month
IP6-259	Wiper blade		
	Rubber blade	2 pieces	Around 12 month
	Sponge blade	1 piece	

··· *Check* ··· *Replace* ··· *Remove*
··· *Set* ··· *Clean* ··· *Panel operation*

No.	Item		Daily	When a message is displayed	When it is noticeably dirty	Consumables
A	Media installation		S R			
B	Start maintenance	Wiper blades check				IP6-272 Cap cleaning liquid A *1 IP7-264 Cleaning swab (Thick) *1
		Capping unit cleaning	P C			
		Cleaning				
C	Nozzle print		P			
D	Waste ink bottle check and replacement					IP6-109 Waste ink bottle
E	Wiper cleaning liquid check and supply					IP6-251 Wiper cleaning liquid set A *1
F	Wiper blade cleanliness check and replacement					IP6-259 Wiper blade *1
G	Wiper sponge replacement					IP6-258 Wiper sponge
H	Sheet mount cleaning (This operation must be performed approximately once per month)			S R	S R	IP6-261 Sheet mount cleaning kit A
I	Printer cleaning (This operation must be performed approximately once per week)	Media edge guard cleaning			C	IP6-147 Cleaning swab *1 IP6-272 Cap cleaning liquid A *1
		Head guard cleaning			C	
		Platen cleaning			C	
		Paper guide cleaning			C	
		Pressure roller cleaning			C	
		Front cover cleaning			C	
J	Cleaning around the ionizers and the sensors for automatic print adjustment (This operation must be performed approximately once per year)			S R	S R	IP6-147 Cleaning swab *1

*1 Also included in the IP6-271 daily maintenance kit A.

Routine maintenance

A Media installation

1

Check that the media is not wrinkled.

If it is wrinkled, either set the media again or feed it up to an area without wrinkles.

* Printing on wrinkled media may damage the nozzle surfaces.

B Start maintenance (wiper blades check, capping unit cleaning, cleaning)

Select START MAINTENANCE on the panel and follow the instructions to perform both capping unit cleaning and cleaning at the same time. You may also perform cleaning independently in this manner.

Performing wiper blades check, capping unit cleaning and cleaning at the same time

⚠ CAUTION

To prevent the ink from drying inside the print head's nozzles:

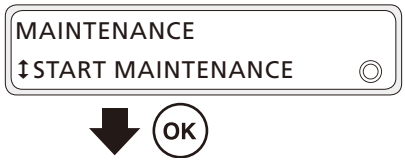
- Do not leave the printer with the carriage detached from the capping unit.

- Complete the capping unit cleaning operation and cap the print heads within 5 minutes.

1

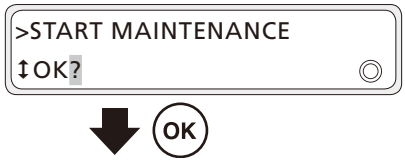
Press the MAINTENANCE button.

2



Press the OK button.

3



Press the OK button to start the operation.

To cancel the operation, press the **CANCEL** button.

4

1ST WIPING OPERATION
PLEASE WAIT 1:00

Carriage stops moving.

After the wiping of the print heads finishes, the carriage moves to the maintenance area.

The printer issues a warning beep.

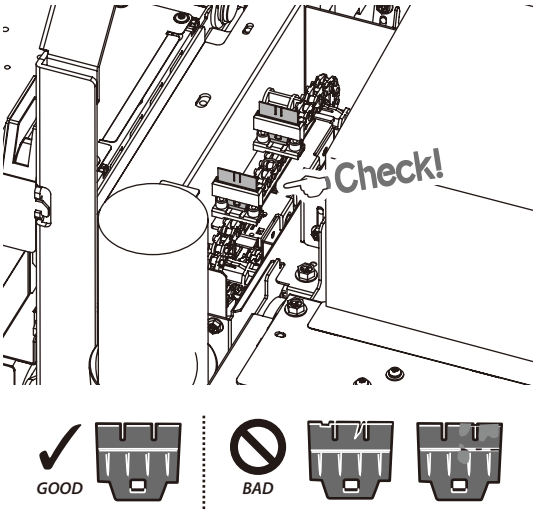
◊ When the carriage moves, the printer issues a warning beep.
To disable the warning beep, see the 📖 ***page 202***.

5

OPEN COVERS, CLEAN
CAPS AND CHECK WIPER

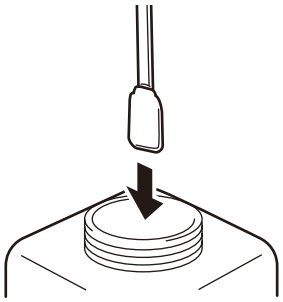
After the carriage has moved to the maintenance area, open the front cover, and then the capping unit cover.

6



If you notice dirt or damage on the wiper blades, execute REPLACE BLADE to replace them after the start maintenance has finished.

7

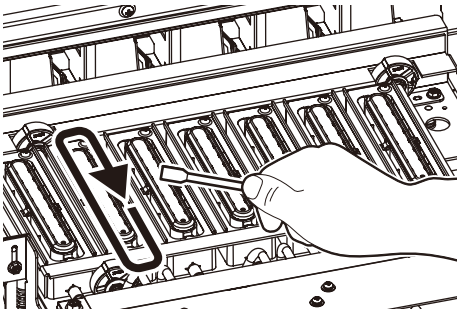


Soak the cleaning swab (thick) in the cap cleaning liquid.

TIP

◊ To keep the cap cleaning liquid clean, do not soak the cleaning swab (thick) in the cap cleaning liquid bottle again after you have cleaned the caps with it.
◊ You can clean the entire capping unit with one cleaning swab (thick) soaked once in cap cleaning liquid.

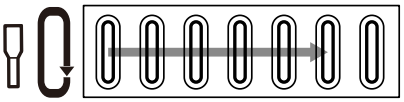
8



Clean the top surface of the caps by using the cleaning swab (thick).

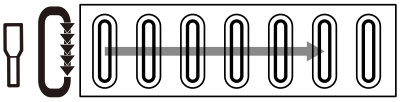
(1) First, pass the cleaning swab (thick) over the entire circumference of each cap top surface to impregnate the dirt on the surface with cap cleaning liquid.

Pass the cleaning swab (thick) starting from the leftmost cap and continue to the rightmost cap in order.



(2) Next, clean all the dirt by passing the cleaning swab (thick) 5 times over the circumference of each cap top surface.

Start from the leftmost cap and continue to the rightmost cap in order.



CAUTION

- **Be careful so that the cap cleaning liquid does not adhere to any part other than the caps.**
- **The cleaning swab (thick) is intended for a single use only. Use a new cleaning swab (thick) for each cleaning.**
- **If the caps are not completely clean after one cleaning operation, use a new cleaning swab (thick) and clean the caps again.**
- **With the 6 color specification printer, the rightmost cap does not need do be cleaned.**

9

CLEAN CAPS, CHECK
WIPER & CLOSE COVERS

Close the capping unit cover and the front cover.

The carriage returns automatically to the home position.

10

CAP CLEANING COMPLETES?

OK

Press the OK button.

11

START PH RECOVERY?
OK/CANCEL ◎

OK

Press the OK button.

Press the CANCEL button to skip the cleaning.

12

START PH RECOVERY
BOTTLE IS EMPTY?

OK

Press the OK button.

◊ This message is not displayed if you have pressed the **CANCEL** button in step *11*.

13

2ND WIPING OPERATION
PLEASE WAIT 1:00

After the wiping of the print heads finishes, the carriage moves to the home position.

14

PH RECOVERING	1234567
REQUIRED TIME	Y:YY

Y:YY : Required time

The cleaning is complete.

The print head cleaning operation (PH recovery) starts automatically after the second wiping operation has finished

◊ Strong cleaning is automatically performed if a given length of media has been printed since the last cleaning operation.

15

PERFORM NOZZLE PRINT

OK

MAINTENANCE
↕START MAINTENANCE ◎

Press the OK button.

Missing dots are still found even after the cap cleaning...

◊ If you still see missing dots even after the cap cleaning above, check the caps visually and remove foreign matters and ink stains from them with a cleaning swab dampened with cap cleaning liquid.

Performing cleaning independently

1

Press the **PH.RECOVERY** button.

You can perform PH recovery in the following situations.
- When the printer is idle online
- When the printer is offline
- During printing
- When the printer is in pause

2

Press the **OK** button.

◊ NORMAL (cleaning) is not displayed if a given length of media has been printed since the last cleaning operation.
In this case, execute STRONG (strong cleaning).
(See **Strong cleaning** on 📖 ***page 247***.)

3

Press the **Right** and **Left** buttons to select the digit, and press the **Up** and **Down** buttons to select the print head number.

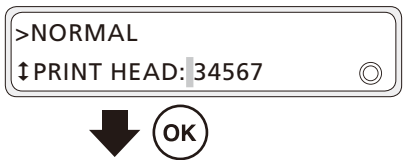
The numbers correspond to the print head to be cleaned.

The correspondence between the ink colors and the print head numbers is shown in the table below.

Head group 1		Head group 2			Head group 3	
Lc	Lm	C	Y	K	M	Gy
1	2	3	4	5	6	7

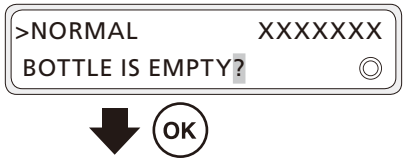
◊ You cannot select print heads independently to clean them if a given length of media has been printed since the last cleaning operation.

4



Press the **OK** button.

5



Press the **OK** button.

The numbers correspond to the print head to be cleaned.

6

PH RECOVERING	XXXXXXX
REQUIRED TIME	Y:YY

Y:YY: Required time

The cleaning is complete.

PRINTER READY
01: PAPER / 1626mm

An error occurs if the waste ink bottle is full. Follow the instructions to replace the waste ink bottle.

(*page 115* **Waste ink bottle check and replacement**)

Start the print head cleaning.

Print head cleaning takes several minutes.

When the cleaning starts, the required time is displayed and the time is counted down every 10 seconds.

Online idle: Switches to online state

Offline: Stays offline

Printing: Resume printing

In pause: Stays in pause

C Nozzle print

Print the NOZZLE PRINT pattern

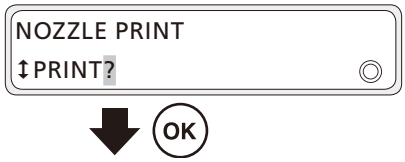
Nozzle print is used to check that no nozzle (opening to eject ink) on the print heads is clogged. Perform a nozzle print following the timing below.

- Every day before the first print.
- When the carriage has been separated from the capping unit for a long time, for example after cleaning the capping unit.

1

Press the NOZZLEPRINT button.

2



Press the OK button to start the operation.

To cancel the operation, press the **CANCEL** button.

3

The nozzle print pattern prints.

4

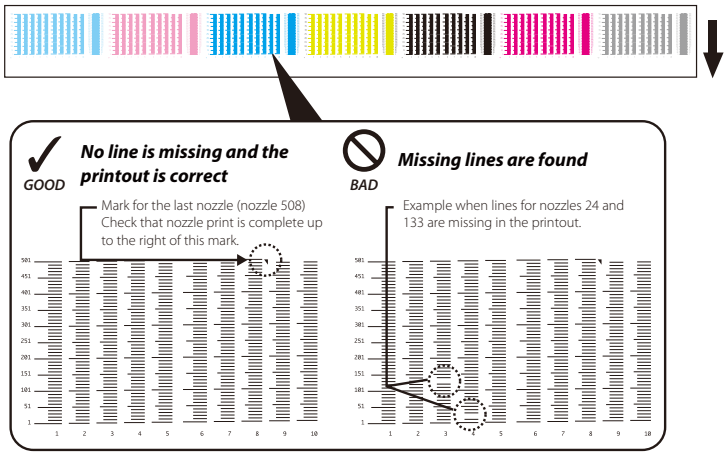
Check for missing dots and incorrect print.

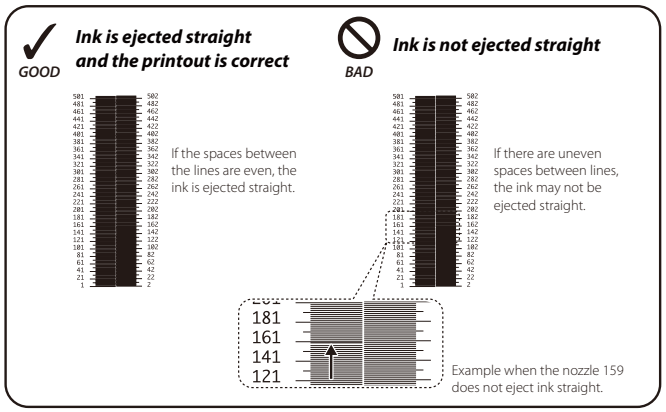
A pattern such as the figure shown on the right is printed.

Check that no line is missing and that the ink ejection direction is straight.

Perform a normal cleaning (**PH RECOVERY**) if a line is missing or the ink ejection direction is not straight.

If the same problems still appear after performing normal cleaning several times, configure nozzle map with the procedure below.





Configure nozzle map

When lines are missing on the nozzle print pattern or the ink is not ejected straight, that means that a nozzle is clogged. Nozzle map can be configured to set a nozzle that will be used instead of the clogged nozzle. With this function, good print quality can be maintained without reducing the print speed.
Up to 10 nozzles can be set with nozzle map for each print head.

Nozzle map can be configured manually or automatically.

* Only nozzles that are completely clogged are detected with automatic configuration. Nozzle map must be configured manually in the following cases.
  - The nozzle is partially clogged.
  - The nozzle does not eject ink straight.
* Use media of more than 762 mm (30 inches) with automatic configuration.

Manual configuration 🕮 *page 107*
Automatic configuration 🕮 *page 108*

How to choose between manual and automatic configuration

◊ Configure nozzle map manually in the following cases.
- The media used is less than 762 mm (30 inches).
- A nozzle is partially clogged.
- A nozzle does not eject ink straight.
- You want to set the nozzles more precisely.
- You want to quickly complete configuration.
- You are used to manual configuration.

◊ Configure nozzle map automatically in the following cases.
- There are no partially clogged nozzles.
- All nozzles eject ink straight.
- You do not want to set the nozzles manually.
- You are not used to manual configuration.

Cautions regarding automatic configuration

⚠ Notes

- ◆ Automatic configuration sets nozzle map mechanically, so absolute precision of the setting cannot be guaranteed.
- ◆ The printer cannot configure correctly nozzle map in the following cases. In such cases, improve the conditions or perform manual configuration.

- The media used makes the check via sensors impossible.
  (Some media types, even conventional ones, may not be supported by automatic configuration.)
  <Examples>
  - Transparent media
  - Media with a rough surface
  - Media with an extremely high or low degree of reflection
  - Media on which the pattern cannot be printed properly, such as when the ink tends to bleed
  - Media where density differences do not appear on the printed pattern.
  - Media that does not advance smoothly
  - Media that wrinkles easily
- The media surface is soiled with dust, ink, finger marks, etc.
- A gap tends to form between the platen and the media
- Lots of nozzles are clogged
- The media heater temperatures are not suitable
- The environmental luminosity is too strong
- The bidirectional or media advance adjustment value is not set correctly

- ◆ With automatic configuration, the printed pattern is read automatically. However, discrepancies may appears in the printed pattern between media lots or if the media is old. Therefore, the detection results may be incorrect even when using the same media.
  In such cases, use manual print adjustment.
- ◆ Depending on the environment temperature and humidity, nozzles may clog after automatic configuration, even if it happens rarely.
  In such a case, first perform cleaning to recover the nozzles, and then perform manual configuration.

Manual configuration

1

Press the ADJUST button.

You can set up to 10 nozzle map parameters for each print head.

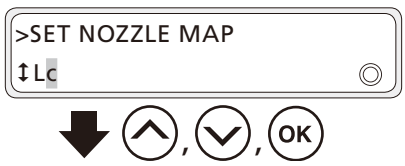
2

Press the Up and Down buttons to select SET NOZZLE MAP.

3

Press the OK button.

4



Press the Up and Down buttons to select the color to be set and press the OK button.

This example explains how to set a nozzle number 365 for the nozzle map 1 of Lc head.

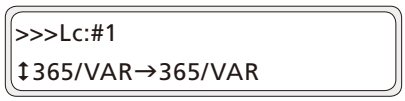
5

Press the OK button.

6

Press the Up, Down, Left, Right buttons to set the nozzle map or nozzle number, and then press the OK button.

7



The setting is complete.

To check the numbers of the nozzles with nozzle map

◊ The numbers of the nozzles for which nozzle map has been set are indicated on the nozzle print pattern printout.

Automatic configuration

< Operation flow >

STEP1	STEP2
- Select the print head - Execute automatic configuration	- Select manually additional nozzles to set in nozzle map - Set overwrite protection

Proceed to **STEP** 2 as needed.

- See **Cautions regarding automatic configuration** (📖 *page 107*)
- Use media that is 762 mm (30 inches) or larger.
- Only nozzles that are completely clogged are detected with automatic configuration. Nozzles that are partially clogged or that do not eject ink straight must be added manually.
- Overwrite protection can be configured to skip the manual addition of partially clogged nozzles or nozzles that do not eject ink straight from the next time.

<STEP 1>

Before automatically configure nozzle map!

◊ If the bidirectional or media advance adjustment value is not set correctly, media may be detected incorrectly depending on the media used.

◊ It is recommended to perform bidirectional adjustment and media advance adjustment before configuring nozzle map automatically. Use the following settings to perform these adjustments.
- Bidirectional adjustment: 1: DRA,FAST PR,PRO
- Media advance adjustment: FAST PRODUCTION

1

Press the NOZZLEPRINT button.

You can set up to 10 nozzle map parameters for each print head.

2

NOZZLE PRINT
↕PRINT?

Press the **Up** or **Down** button to select **AUTO NOZZ MAP.**

3

NOZZLE PRINT
↕AUTO NOZZ MAP

Press the **OK** button.

4

>AUTO NOZZ MAP
↕PRINT HEAD:1234567

Press the **Right** or **Left** button to select the cursor, and press the **Up** or **Down** button to select a print head number.

The print heads whose number is displayed are selected for nozzle map.

The print head number and ink color correspondence is shown in the table below.

Head group 1		Head group 2			Head group 3	
Lc	Lm	C	Y	K	M	Gy
1	2	3	4	5	6	7

5

>AUTO NOZZ MAP 1234567
↕PRINT?

Press the **OK** button.

6

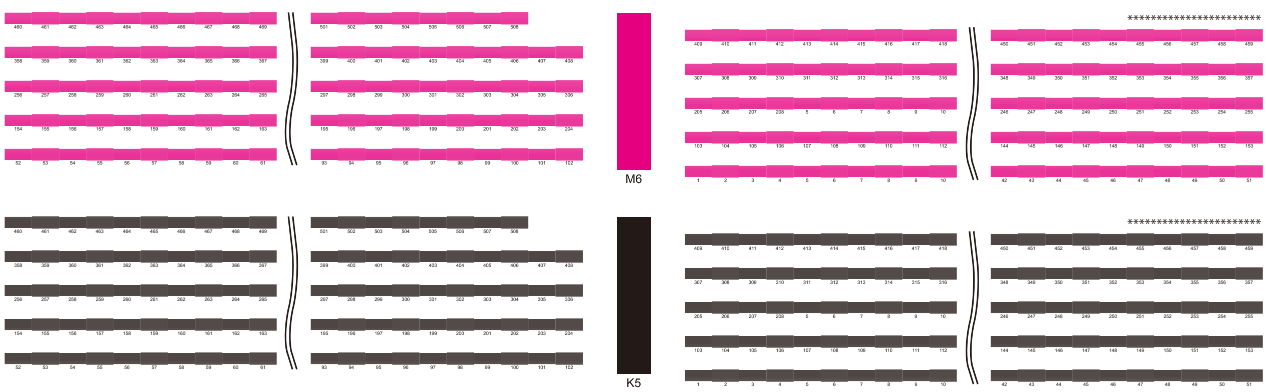
>AUTO NOZZ MAP 1234567
EXECUTING... XX:YY

XX: YY : Required time

How long does it takes?

- ◇ The time needed to print the pattern varies depending on the number and type of the selected colors.
  It takes approximately 2 minutes and 30 seconds per color.

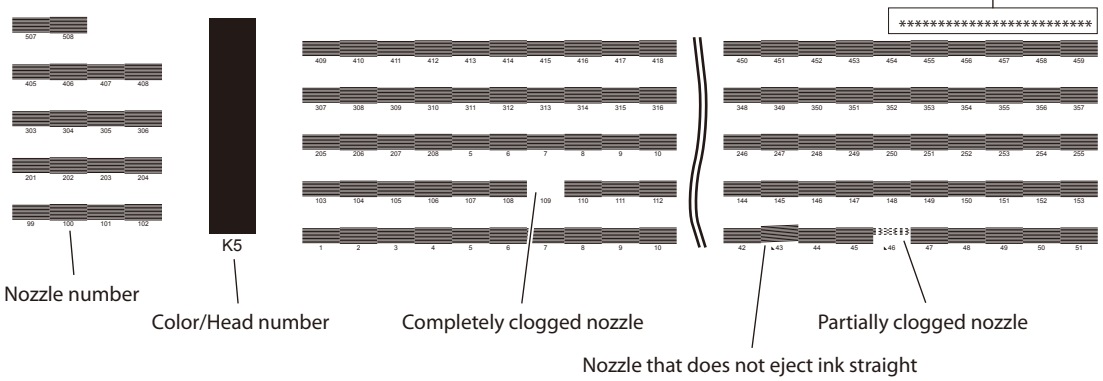
The following pattern is printed and the printer reads the printout.



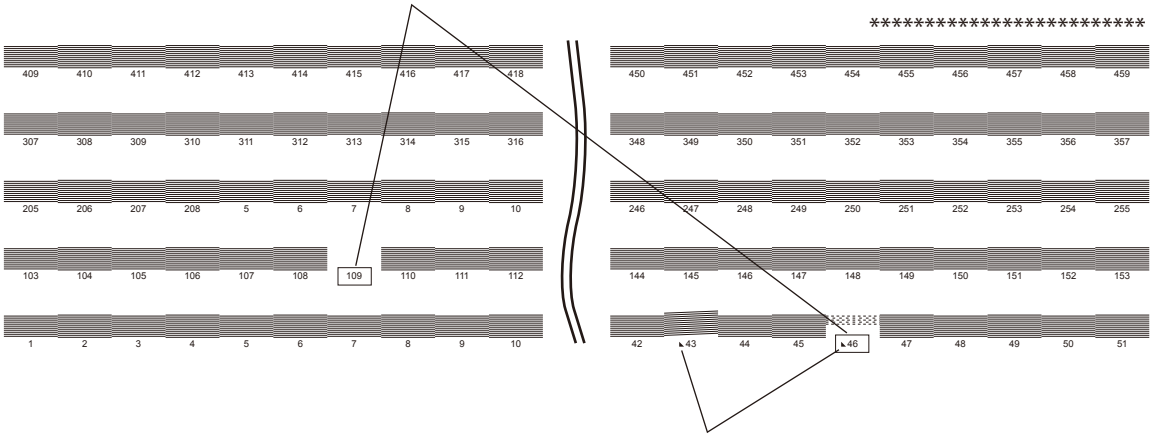
Error message

See **When an error occurs with automatic configuration** on *page 113* for details.

Completed successfully is printed when the configuration ends normally.



These nozzle numbers are detected as defective

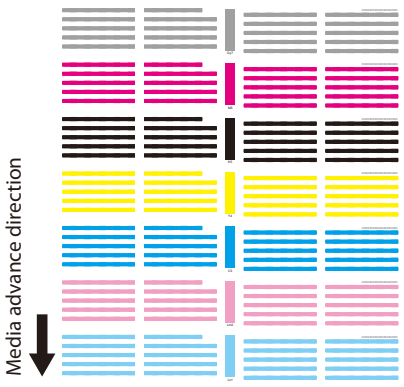


Numbers of the nozzle for which overwrite protection has been set.

See < **STEP2** > on *page 111* for details.

Layout with all colors selected
Media width of 1371 mm (54 inches) or larger

Layout with all colors selected
Media width of less than 1371 mm (54 inches)

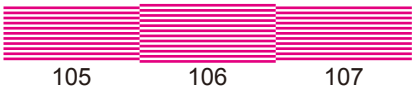


Completely clogged nozzle

Will be substituted.

Normal nozzle

Will not be substituted.



Partially clogged nozzle

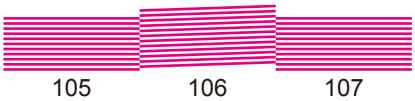
Will be substituted or not depending on its condition.

→ Go to STEP 2

→ Go to STEP 2

Nozzle that does not eject ink straight

Will not be substituted.



→ Go to STEP 2

<STEP 2>

If there are defective nozzles that have not been set, add them manually as shown in manual configuration on *page 107*.

In case there are nozzles that are always defective, you can set overwrite protection when selecting the nozzles to always substitute them with other nozzles regardless of the detection results of automatic configuration.

Overwrite protection setting

VAR: Not overwrite protected

FIX: Overwrite protected

◊ The numbers of defective nozzles are easier to find while looking at the print result of automatic nozzle map when setting the nozzles.

1

Press the ADJUST button.

You can set up to 10 nozzle map parameters for each print head.

2

Press the Up and Down buttons to select SET NOZZLE MAP.

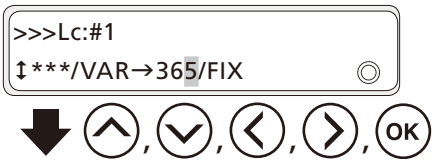
3 Press the **OK** button.

4 **Press the Up and Down buttons to select the color to be set and press the OK button.**

This shows an example of setting nozzle 365 of print head Lc in nozzle map 1 with the overwrite protection set.

5 Press the **OK** button.

6 **Press the Up, Down, Left, Right buttons to set the nozzle map, nozzle number and overwrite protection (VAR/FIX), and then press the OK button.**



7 **The setting is complete.**

To check the numbers of the nozzles with nozzle map

- ◊ The numbers of the nozzles for which nozzle map has been set are indicated on the nozzle print pattern printout.
- ◊ Nozzle numbers with overwrite protection are identified with the ◣ mark.

When an error occurs with automatic configuration

If one of the following errors occurs when executing automatic configuration, try manual configuration or perform the checks and the actions explained below.

* Automatic configuration is not performed. Nozzle map settings from before the execution are maintained.

Meaning	Media of less than 762 mm (30 inches) is used.

Items to be checked	Corrective measures
Check that the media is not less than 762 mm (30 inches).	Use media of 762 mm (30 inches) or larger with automatic configuration. Otherwise use manual configuration.

* Automatic configuration is not performed. Nozzle map settings from before the execution are maintained.

Meaning	The amount of light received by the sensors did not reach the reference level.

Items to be checked	Corrective measures
Check that the sensors for automatic print adjustment are not covered with ink mist.	Clean the sensors for automatic print adjustment. (See Cleaning around the ionizers and the sensors for automatic print adjustment on *page 139*.)
Check that the media is clean.	Feed the media until you reach a clean section.
Check that the media is not wrinkled.	Reinstall the media or feed the media until you reach a section without wrinkles.
Check that you are not using a media type with a light reflection rate too low.	Automatic print adjustment may not be possible with some media types. In such a case, use manual print adjustment.

* Automatic configuration is not performed. Nozzle map settings from before the execution are maintained.

Meaning	The amount of light received by the sensors exceeds the reference level.

Items to be checked	Corrective measures
Check that the media is not wrinkled.	Reinstall the media or feed the media until you reach a section without wrinkles.
Check that no external light reaches the sensors.	Block the external light or change the printer installation location.
Check that you are not using a media type with a light reflection rate too high.	Automatic print adjustment may not be possible with some media types. In such a case, use manual print adjustment.

(Panel display)

```
AUTO NOZZ MAP ERROR
Lc Lm C Y K M Gy      ◎
```

The lower line shows the color with which the automatic nozzle map error occurs.
The error message is also printed on the result of automatic nozzle map.

(Print result of automatic nozzle map error)
XXX: ERROR 1 MANUALLY CONFIGURE
XXX: ERROR 2 MANUALLY CONFIGURE
* XXX indicates the head color and number (e.g. Lm2, Y4).

* The print result does not show the color for which the error occurred. Nozzle map settings from before the execution are maintained.
  Colors for which no error has occurred are shown in the print result.

Meaning	Detection was not performed correctly.

Items to be checked	Corrective measures
Check that the media is not skewed or wrinkled and that there are no other media transfer problems.	Install the media again or advance it until there are no wrinkles or dirt. Some media types are not supported by automatic configuration. In such cases, use manual configuration.
Check that the pattern is not dirty or damaged.	You may also change the media and use automatic configuration.
Check that there is no problem with the print head (too many missing dots, etc.).	Perform PH. Recovery. See **Clear missing dots (nozzle clogging)** on 📖 ***page 247***.

XXX: ERROR 3 PERFORM CLEANING
* XXX indicates the head color and number (e.g. Lm2, Y4).

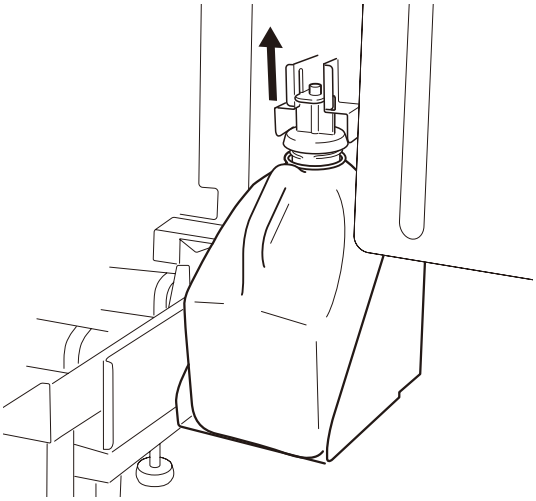
* The print result does not show the color for which the error occurred. Nozzle map settings from before the execution are maintained.
  Colors for which no error has occurred are shown in the print result.

Meaning	The total of the number of clogged nozzles and the number of overwrite protected nozzles exceeds the limit of 10.

Items to be checked	Corrective measures
Check that the total of the number of clogged nozzles and the number of overwrite protected nozzles does not exceed 10.	Perform PH. Recovery. Remove the settings of unnecessary overwrite protected nozzles. See **< STEP2 >** on 📖 ***page 111***. See **Clear missing dots (nozzle clogging)** on 📖 ***page 247***.

D Waste ink bottle check and replacement

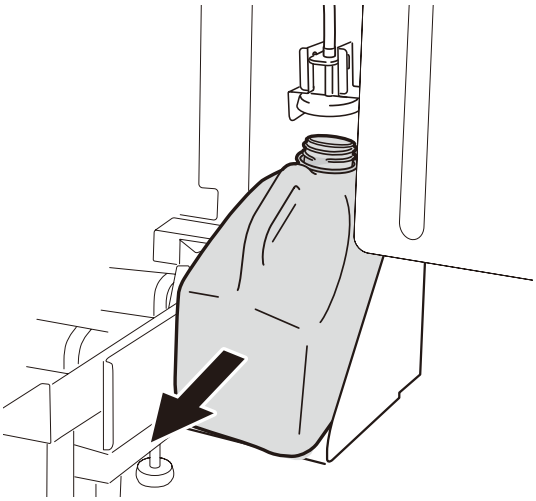
1



Slide the lever up and lift the splash guard sufficiently to remove the waste ink bottle.

The ink drips from the tube. Leave it for a while.

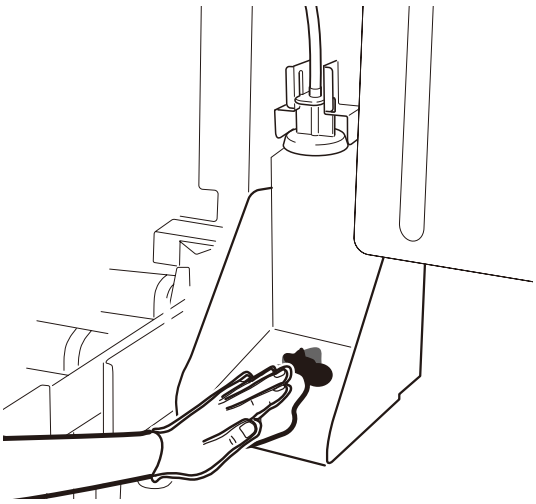
2



Carefully pull out the full waste ink bottle, taking care not to spill any on the printer or on the floor.

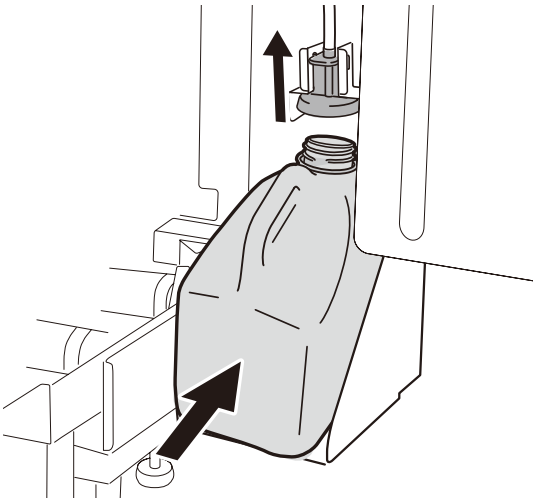
Securely close the cap on the waste ink bottle.

3



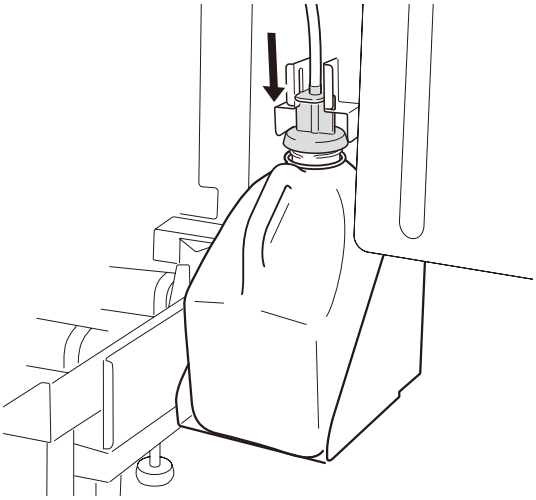
Wipe off the spilt ink in the waste ink bottle unit.

4



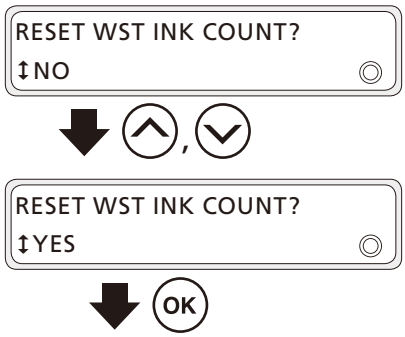
Slide the lever up and install a empty waste ink bottle.

5



Lower the lever, and make sure that the splash guard was lowered.
Then the operation panel will request you to reset the waste ink counter.

6



Press the Up and Down buttons to select YES, and then press the OK button.

⚠ Note

- **If the waste ink counter is not reset, the bottle replacement message will be not displayed when the bottle will be full, and the bottle will overflow.**

E Wiper cleaning liquid check and supply

Supply wiper cleaning liquid with the procedure below in the following cases.

- When a printer message prompts you to do so.
- When you notice that the liquid level is low during a daily inspection. Generally, wiper cleaning liquid should be supplied approximately once per month.

1

PRINTER READY
01: PAPER / 1626mm

MAINTENANCE

Press the MAINTENANCE button.

2

MAINTENANCE
↕START MAINTENANCE ◎

Press the Down button to select WIPER MAINTENANCE.

3

MAINTENANCE
↕WIPER MAINTENANCE ◎

OK

Press the OK button.

4

>WIPER MAINTENANCE
↕REPLACE LIQUID ◎

, OK

Press the Down button to select REPLACE LIQUID, and then press the OK button.

5

>>REPLACE LIQUID
↕OK? ◎

OK

Press the OK button to start the operation.

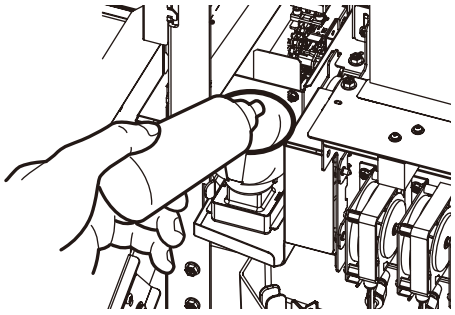
To cancel the operation, press the **CANCEL** button.

6

OPEN COVERS, REPLACE
WIPER CLEANG LIQUID

Open the front cover, and then the capping unit cover.

7

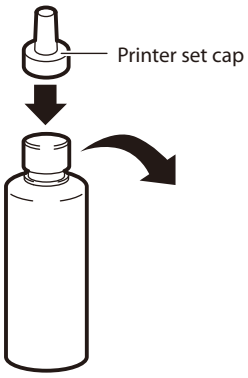


Raise the old wiper cleaning liquid bottle a little and pull out the bottle after making sure that all the liquid has flowed into the printer.

⚠ Note

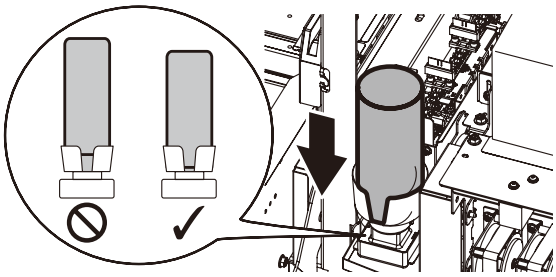
- **Visually check that the waste ink bottle is not full before removing it.**

8



Replace the cap of the new wiper cleaning liquid bottle with the printer dedicated cap.

9



Set the wiper cleaning liquid bottle in the printer and push in the stopper of the printer cap by pressing the top of it.

10

Close the cap cover and the front cover.

11

Press the Down button to select YES.

12

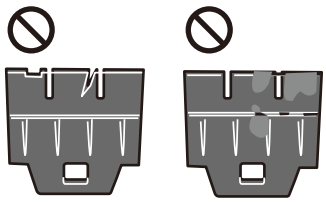
Press the OK button.

13

F Wiper blade cleanliness check and replacement

Replace the wiper blade in the following cases.
- When a printer message prompts you to do so.
- When you notice that the blade is not clean or damaged during a daily inspection.

Follow the procedure below to replace the wiper blade.
Always replace the 3 blades at the same time.



1

PRINTER READY
01: PAPER / 1626mm

↓ MAINTENANCE

Press the MAINTENANCE button.

2

MAINTENANCE
↕START MAINTENANCE ◎

↓ (v)

Press the Down button to select WIPER MAINTENANCE.

3

MAINTENANCE
↕WIPER MAINTENANCE ◎

↓ OK

Press the OK button.

4

>WIPER MAINTENANCE
↕REPLACE BLADE ◎

↓ (^), (v), OK

Press the Up and Down buttons to select REPLACE BLADE, and then press the OK button.

5

>>REPLACE BLADE
OK? ◎

↓ OK

Press the OK button to start the operation.

To cancel the operation, press the **CANCEL** button.

6

CARRIAGE IS MOVING
PLEASE WAIT

↓ **Carriage stops moving.**

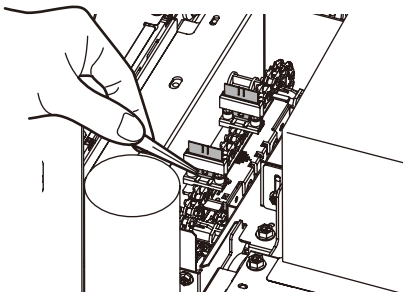
7

OPEN COVERS AND
REPLACE WIPER BLADE

↓

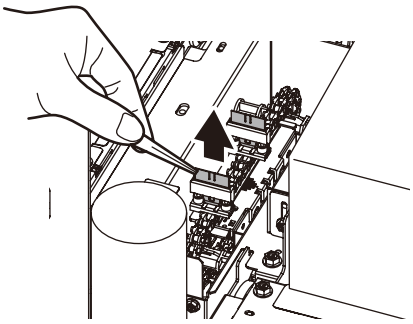
Open the front cover, and then the capping unit cover.

8



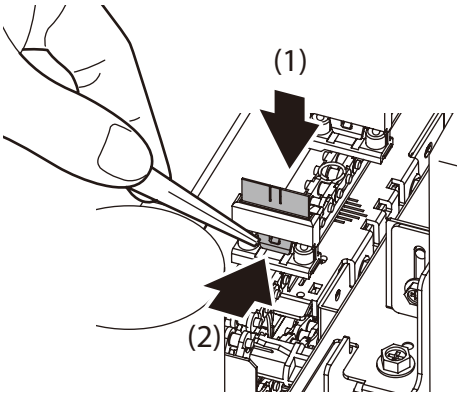
Pinch the lower edge of the wiper blade with a pair of tweezers and pull out the plastic protrusion.

9



Lift upward to remove the wiper blade.

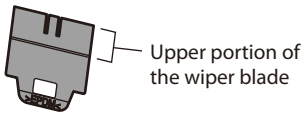
10



Pinch the rubber portion of a new wiper blade with the pair of tweezers and insert the wiper blade straight from the top. Install it so that the plastic protrusion fits into the hole of the rubber portion.

⚠ CAUTION

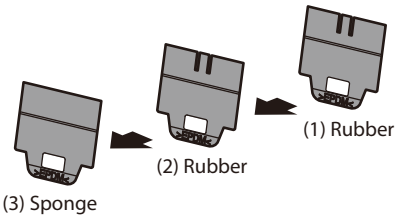
- **The front and back of the wiper blade are the same.**
- **As the upper portion of the wiper blade touches directly the print head, do not touch it with your hands or pinch it with the tweezers when handling.**



- **Replace the two rubber blades and the sponge blade. Install the blades in the following order starting from the rear.**

  Rubber → Rubber → Sponge

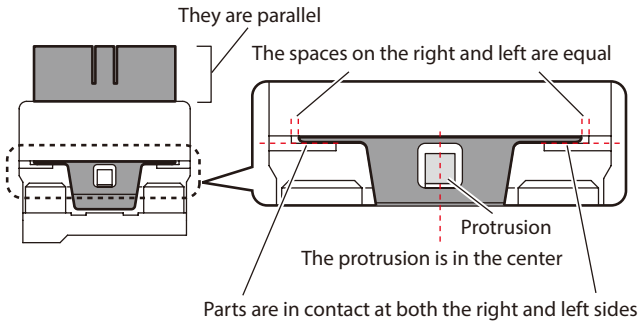
If you make a mistake in the order, cleaning will not be performed effectively and the print heads will malfunction.



Notes

◆ **If the rubber blades are not installed correctly, the print head cleaning will not be effective. As a result not only the print quality will decrease, but this may also lead to a malfunction.**
Refer to the example below to install the blades correctly.

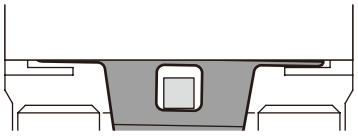
<Correct installation>



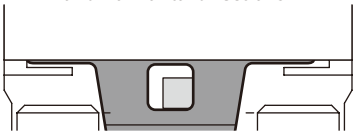
◆ **The cleaning will not be effective if the blades are mistakenly installed as shown below.**
Refer to the example above to correct the position.

<Incorrect installation>

The blade is installed at a slant



The blade is not aligned in the vertical and horizontal directions



11

AFTER REPLACING WB
CLOSE COVERS

↓

CARRIAGE IS MOVING
PLEASE WAIT

↓ **Carriage stops moving.**

Close the cap cover and the front cover.

12

REPLACED WIPER BLADE?
↕NO

↓ OK

Press the Down button to select YES.

13

REPLACED WIPER BLADE?
↕YES

↓ OK

Press the OK button.

14

>WIPER MAINTENANCE
↕REPLACE BLADE

Maintenance when a message is displayed

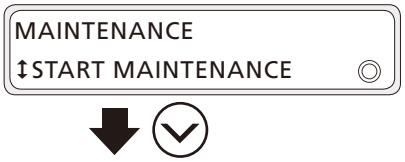
G Wiper sponge replacement

Replace the wiper sponge with the procedure below when a printer message prompts you to do so. Generally, the wiper sponge should be replaced approximately once every six month.

1

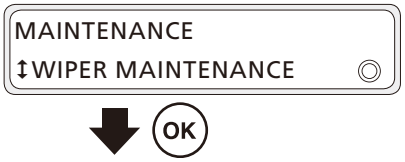
Press the MAINTENANCE button.

2



Press the DOWN button to select WIPER MAINTENANCE.

3



Press the OK button.

4

Press the Down button to select REPLACE SPONGE, and then press the OK button.

5

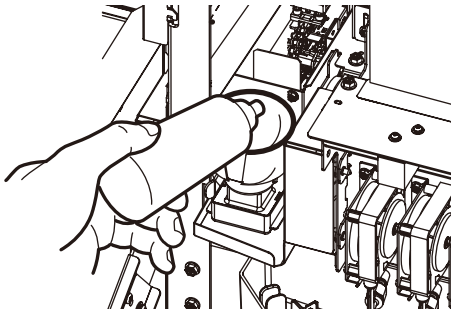
Press the OK button to start the operation.

To cancel the operation, press the **CANCEL** button.

6

Open the front cover, and then the capping unit cover.

7

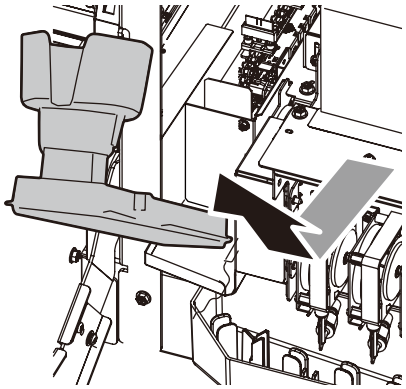


Raise the wiper cleaning liquid bottle a little and pull out the bottle after making sure that all the liquid has flowed into the printer.

Note

- **Visually check that the waste ink bottle is not full before removing it.**

8

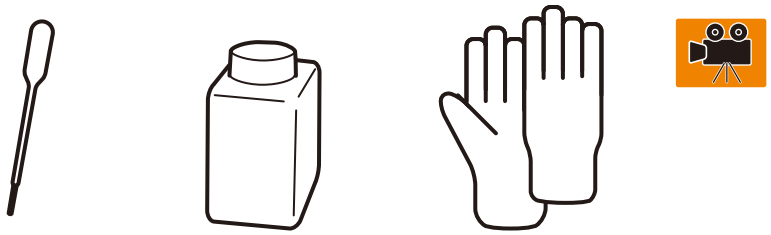


Lift the wiper sponge little by little while pulling it toward you. After confirming that the liquid in the wiper sponge has completely flowed in the printer, remove the wiper sponge.

To check the numbers of the nozzles with nozzle map

- ◊ If you can remove the wiper sponge from the wiper unit, remove it and then go to step ***9***.
- ◊ If the wiper sponge adheres because ink has dried and you cannot remove it, perform the following steps ***8-a***, ***8-b***, ***8-c***, and ***8-d*** before you continue to step 9.

Required items

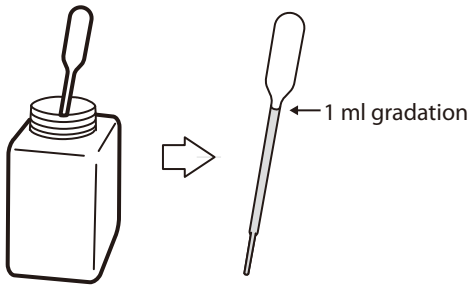


1. Dropper 2. Sheet mount cleaning liquid 3. Gloves

Note

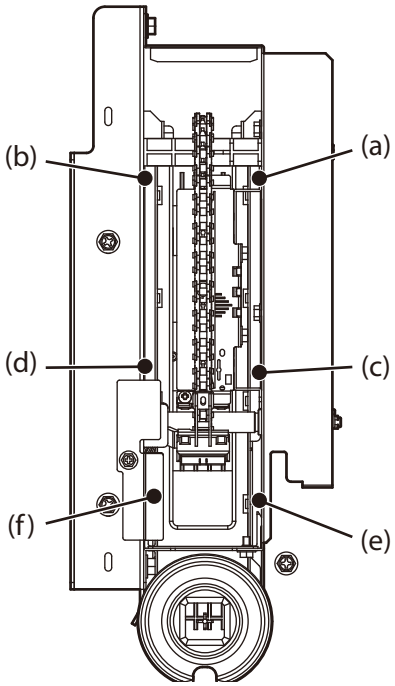
- **The items 1, 2, and 3 above are included in the sheet mount cleaning kit A (IP6-261).**
- **Do not discard the items 1 and 2 above after use, but use them again for sheet mount cleaning.**

8-a



Draw 1 ml of sheet mount cleaning liquid using the dropper.

8-b



On the inside of the right side frame, touch the area (a) shown in the figure on the left with the dropper tip and inject the sheet mount cleaning liquid.

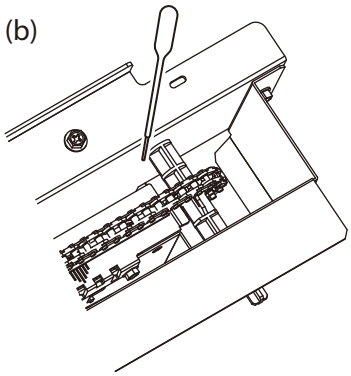
(The injected sheet mount cleaning liquid will follow the side frame inner surface and will drop toward the bottom.)

In the same manner, inject 1 ml of sheet mount cleaning liquid to the areas (b), (c), (d), (e), and (f).

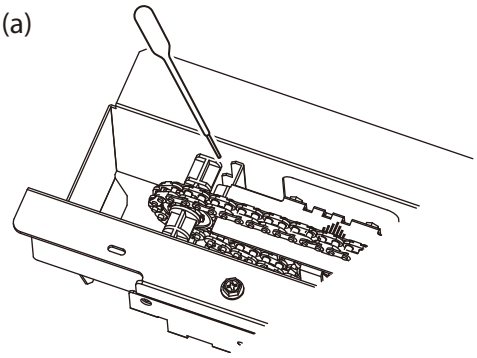
⚠ Note

- **To inject the sheet mount cleaning liquid in the area (f), insert the dropper tip lower than the sensor cover.**

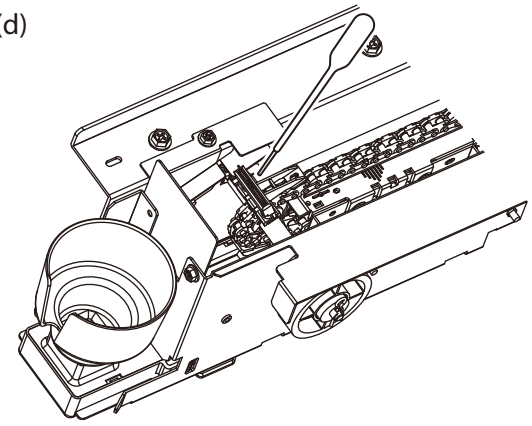
(b)



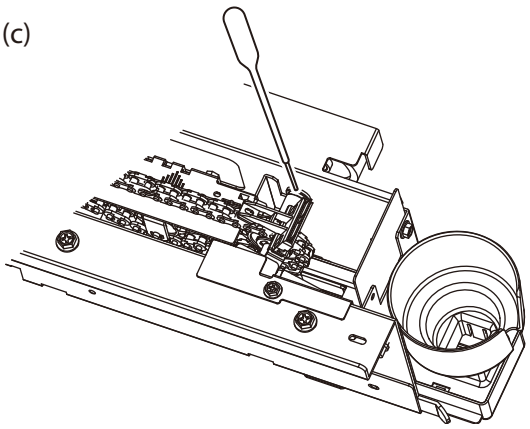
(a)



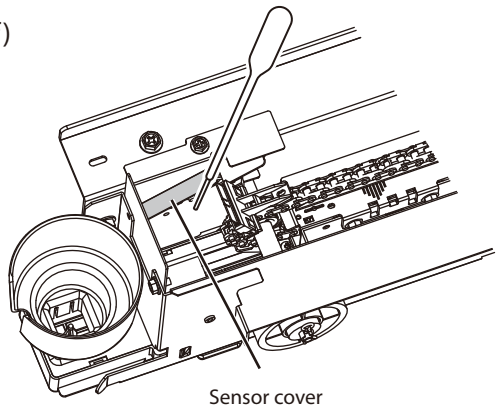
(d)



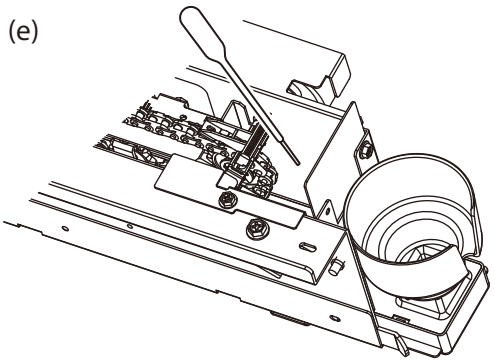
(c)



(f)



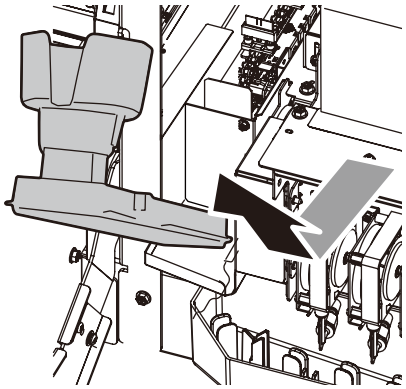
(e)



8-c

Wait 5 minutes.

8-d

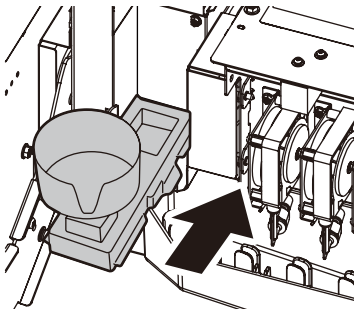


Gradually raise the wiper sponge while pulling it toward you. Check that all the liquid inside the sponge has flowed into the printer before removing it.

⚠ Note

- **If you cannot remove the wiper sponge, perform the procedure again from step *8-a*.**

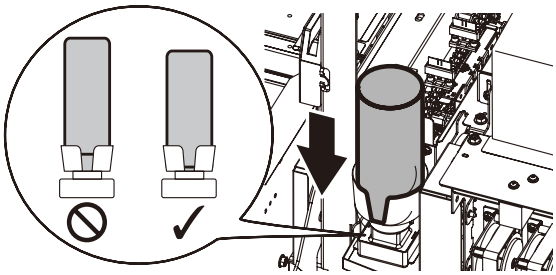
9



Install a new wiper sponge.

Insert it as far as it goes until it clicks.

10



Install a new wiper cleaning liquid bottle.

(*page 117* **Wiper cleaning liquid check and supply**)

11

AFTER REPLACING WIPER
SPONGE, CLOSE COVERS

↓

CARRIAGE IS MOVING
PLEASE WAIT

↓ **Carriage stops moving.**

Close the cap cover and the front over.

12

REPLACED SPONGE?
↕NO ◎

↓ ⌄

Press the Down button to select YES.

13

Press the OK button.

14

You may also be prompted by a printer message to replace one of the following consumables.

- Waste ink bottle
- Wiper cleaning liquid bottle
- Wiper blade

See Routine maintenance for the replacement procedures for these consumables.

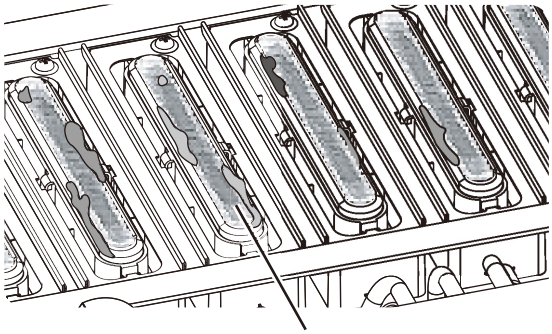
H Sheet mount cleaning

Perform sheet mount cleaning using a head cleaning sheet when the printer displays a message prompting you to do so. Generally, sheet mount cleaning should be performed approximately once per month.

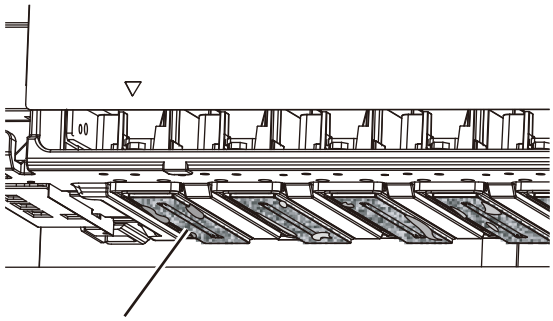
How long does it take?

◊ The required time for sheet mount cleaning is approximately 1 hour.

<Capping unit>



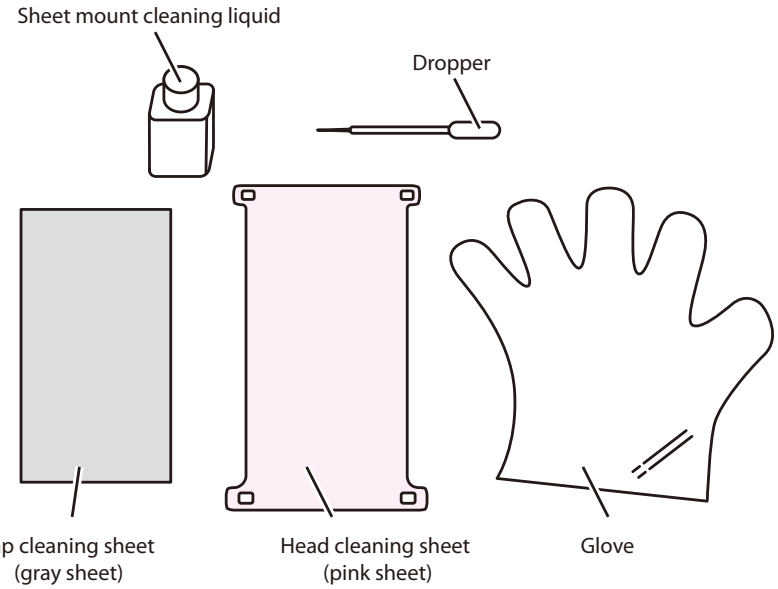
<Print head>



Note

◆ **Do not rub the print heads with a cleaning swab. This may cause the printer to malfunction.**

Preparing the sheet mount cleaning



◊ It is recommended to remove the media before executing sheet mount cleaning.

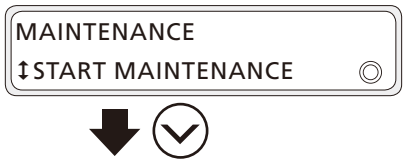
Performing sheet mount cleaning

Perform the operation following the instructions below.

1

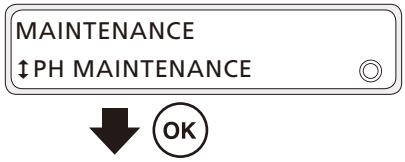
Press the MAINTENANCE button.

2



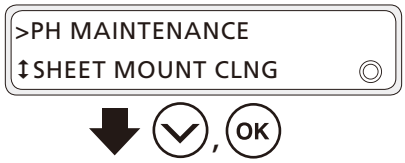
Press the Down button to select PH MAINTENANCE.

3



Press the OK button.

4



Press the Down button to select SHEET MOUNT CLNG, and then press the OK button.

5

Press the OK button.

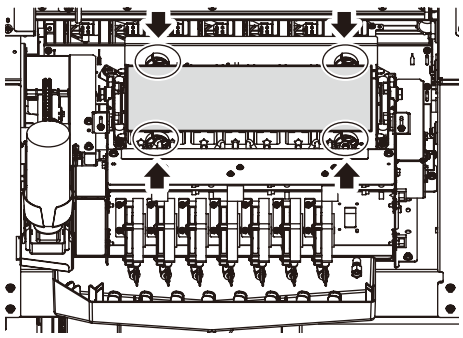
The carriage moves to the maintenance position.

Carriage stops moving.

6

Open the front cover, and then the Capping unit cover.

7 INSTALL GRAY SHEET



Place the gray sheet (cap cleaning sheet) to cover all seven caps.

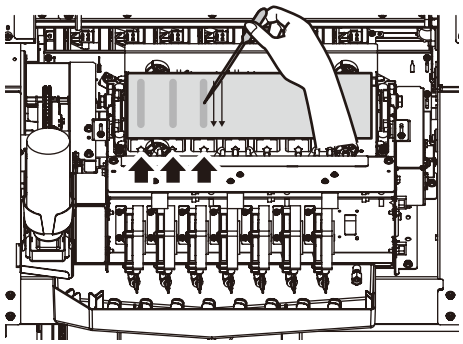
Note

- **Do not place the sheet onto the 4 rollers indicated by the arrows in the figure on the left. Otherwise this may decrease the cleaning effectiveness.**

OK

Press the OK button.

8 DRIP CLEANING LIQUID ON GRAY SHEET



Apply 1 ml of cleaning liquid twice to the sheet for each cap.

Draw 1 ml of sheet mount cleaning liquid with the dropper (use the gradations), and apply 2 ml to the gray sheet (cap cleaning sheet) for each color.

Apply the liquid in the vertical direction starting from each color tube indicated by the arrows twice in parallel.

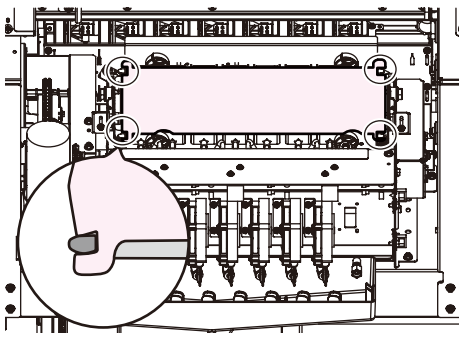
For the 6 color specifications printer, apply the liquid on the sheet only for the six first caps starting from the left.

(For the 7 color specifications printer, apply the liquid for the seven caps.)

OK

Press the OK button.

9 INSTALL PINK SHEET



Place the pink sheet (head cleaning sheet) over the gray sheet and attach the hooks.

⚠Note

- **Securely attach the four hooks. Otherwise the sheet may detach when entering into contact with the print heads, which decreases the effectiveness of the cleaning. The four hooks are placed at the four corners of the capping unit as shown in the figure to the left.**

OK

Press the OK button.

10 CLOSE COVERS

Close the capping unit cover and the front cover.

OK

CARRIAGE IS MOVING
PLEASE WAIT

The carriage moves to the home position.

Carriage stops moving.

⚠Note

- **If the current procedure is interrupted by an error before the step 10, start sheet mount cleaning again from step 1.**

11 CLEANING...
REQUIRED TIME XX:XX

The sheet mount cleaning is complete.

Note

- **The required time for sheet mount cleaning is approximately 1 hour.**
  When sheet mount cleaning has finished, follow the panel messages to remove the cleaning sheet without delay.

To interrupt the sheet mount cleaning

Press the **CANCEL** button.

CANCEL SHEET MOUNT
CLEANING?

OK

Go to **12**.

12 CLEANING COMPLETE
PRESS OK BUTTON

Press the OK button.

OK

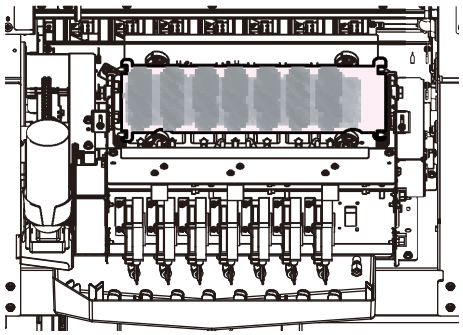
CARRIAGE IS MOVING
PLEASE WAIT

The carriage moves to the maintenance position.

Carriage stops moving.

13 OPEN COVERS

Open the front cover, and then the capping unit cover.



14 REMOVE PINK SHEET

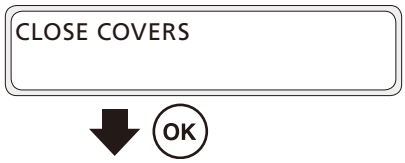
Remove the pink sheet (head cleaning sheet) and press the OK button.

OK

15

Remove the gray sheet (cap cleaning sheet) and press the OK button.

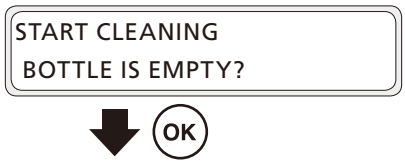
16



Close the capping unit cover and the front cover.

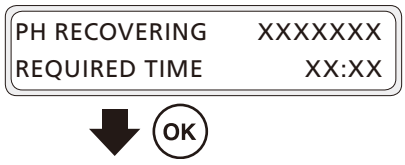
The carriage moves to the home position.

Carriage stops moving.



Press the OK button.

Check visually that the waste ink bottle is not full.



(The cleaning starts.)

Sheet mount cleaning is complete.

Note

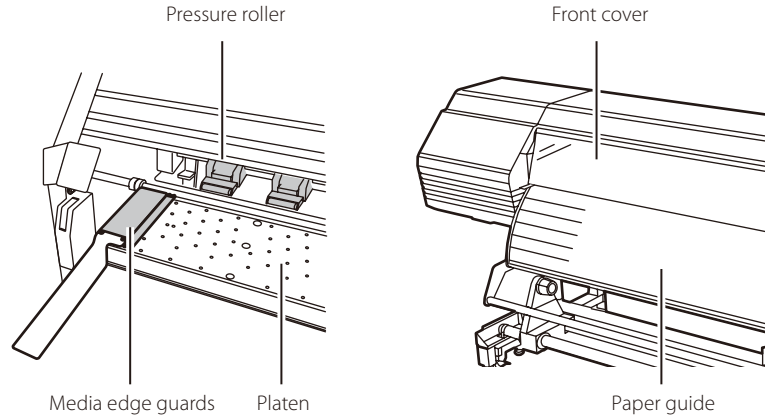
- **If the current procedure is interrupted by an error before you remove the pink sheet and the gray sheet, follow the procedure below to remove the sheets.**

  1. Move the carriage to the maintenance area. (See Head guard cleaning on page 133.)
  2. Open the front cover, and then the capping unit cover.
  3. Remove the pink sheet and the gray sheet that remained on the caps.
  4. Close the capping unit cover, and then the front cover.
  5. Move the carriage to the home position.
  6. Perform a strong cleaning. (See Strong cleaning on page 247.)

Maintenance when the printer is dirty

I Printer cleaning

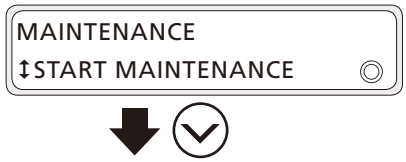
Clean the printer when the dirt becomes noticeable. Clean the printer approximately once per week.



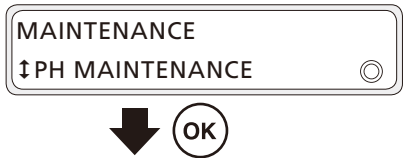
Head guard cleaning

1 Press the **MAINTENANCE** button.

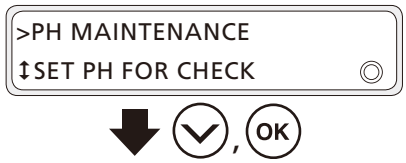
2 Press the **Down** button to select **PH MAINTENANCE.**



3 Press the **OK** button.



4 Press the **Down** button to select **SET PH FOR CHECK**, and then press the **OK** button.



5

>>SET PH FOR CHECK
OK?

OK

Press the OK button.

6

CARRIAGE IS MOVING
PLEASE WAIT

Carriage stops moving.

The carriage moves to the maintenance area.

The printer issues a warning beep.

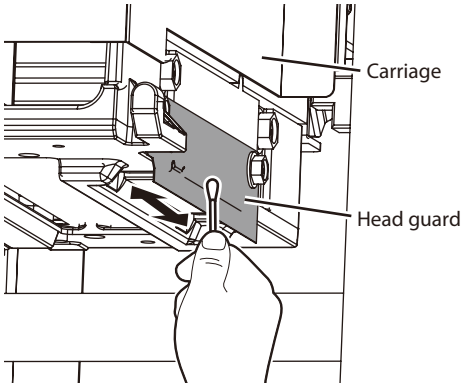
◊ When the carriage moves, the printer issues a warning beep.
To disable the warning beep, see the ***page 202***.

7

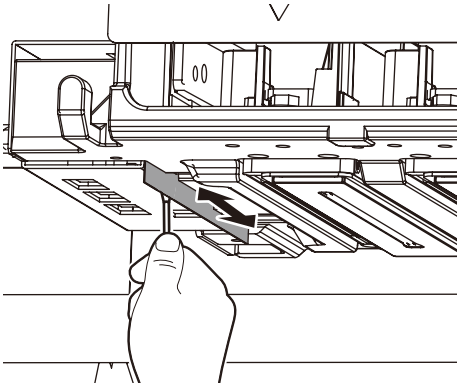
OPEN COVERS AND
CHECK PRINT HEADS

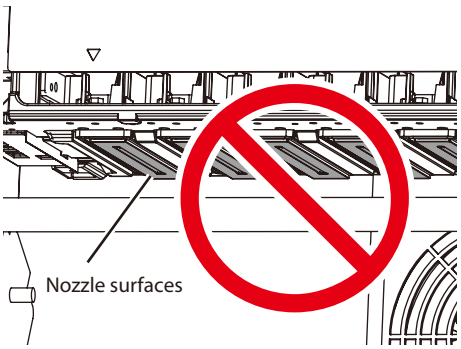
Open the front cover, and then the maintenance area cover.

8



Clean the head guard at the right and left sides of the carriage using a cleaning swab or a soft cloth.
Use a cleaning swab moistened with cap cleaning liquid when the area is very dirty.





Do not clean directly the nozzle surfaces. (Execute the dedicated sheet mount cleaning to clean them.)

⚠ CAUTION

◆ **Do not rub the head nozzle surfaces with a cleaning swab. It may cause the printer to malfunction.**

9

CHECK PRINT HEADS
THEN CLOSE COVERS

Close the maintenance area cover and the front cover.

10

CARRIAGE IS MOVING
PLEASE WAIT

Carriage stops moving.

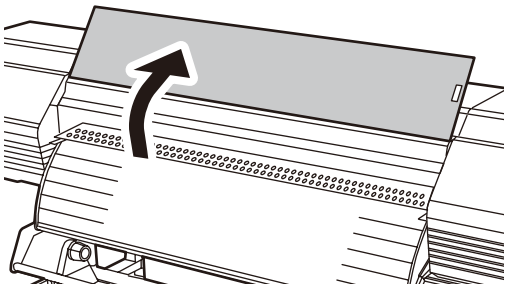
>PH MAINTENANCE
↕SET PH FOR CHECK

Media edge guard cleaning

1

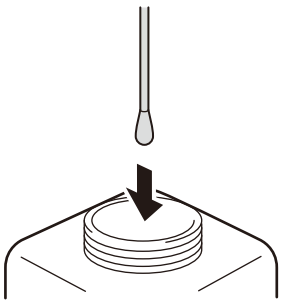
If a media is installed, remove it.

2



Open the front cover.

3

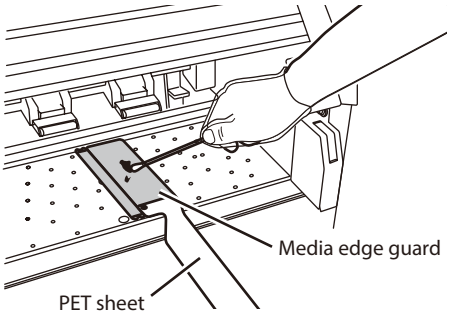


Soak a cleaning swab in the cap cleaning liquid.

TIP

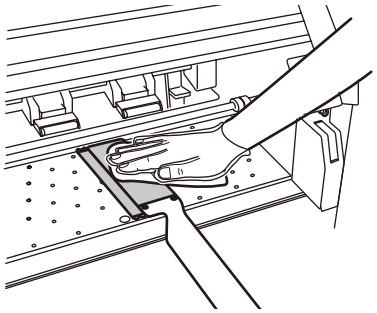
- ◊ To keep the cap cleaning liquid clean, do not soak the cleaning swab in the cap cleaning liquid bottle again after you have cleaned the edge guards with it.
- ◊ The cleaning swab is intended for a single use only. Use a new cleaning swab for each cleaning.

4



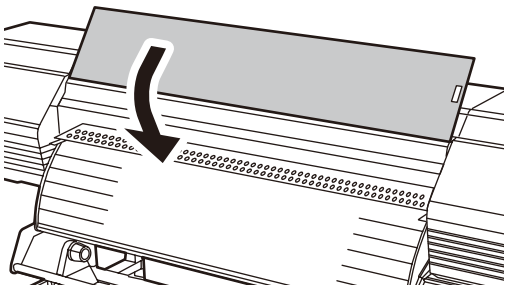
Apply the cap cleaning liquid to the stains of the media edge guard and PET sheet.

5



Clean the stains with a soft and clean cloth.

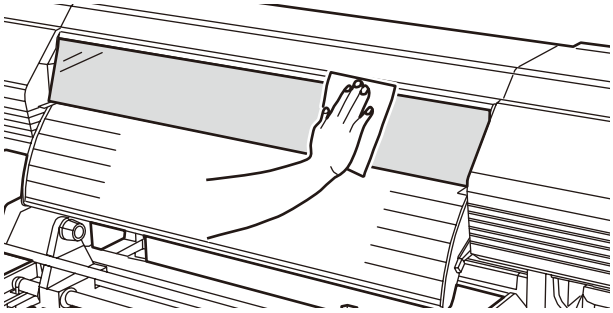
6



Close the front cover.

Front cover cleaning

If the printer exterior is smeared, moisten a soft cloth with water or water-diluted neutral detergent, wring it, and clean the exterior.

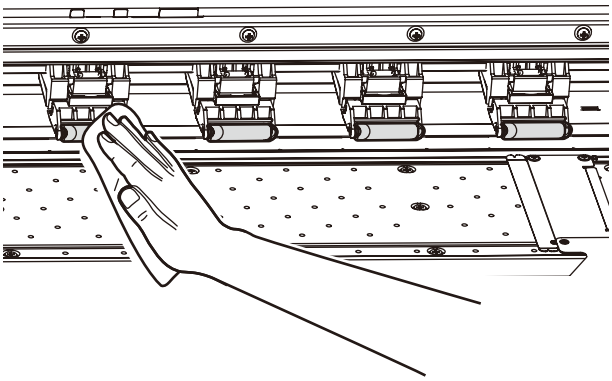


⚠ Notes

- **Always turn the printer off before cleaning or doing other maintenance operation on the printer.**
- **Never use volatile solvent such as thinner and benzene. The coating may come off or discolor.**

Pressure roller cleaning

If ink or other substances are on the pressure roller, they may soil the media printed surface.
In such cases, wipe off any substances using a soft cloth moistened with water or water-diluted neutral detergent.

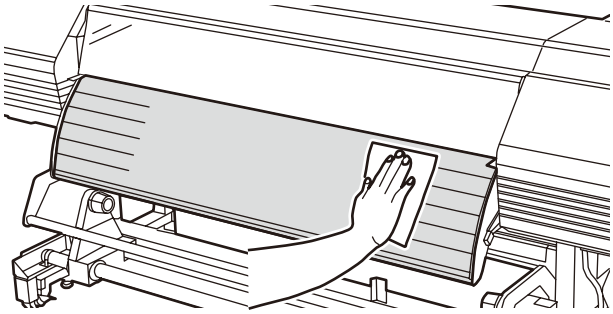


Notes

- **Always turn the printer off before cleaning or doing other maintenance operation on the printer.**
- **Pay attention not to put some dust or particles onto the pressure roller by touching the grit rollers with the cloth.**

Paper guide cleaning

In case of dust or paper dust, clean the printer with a vacuum cleaner. If lots of ink or other substance adhere to the printer, clean it with soft cloth moistened with a neutral detergent.



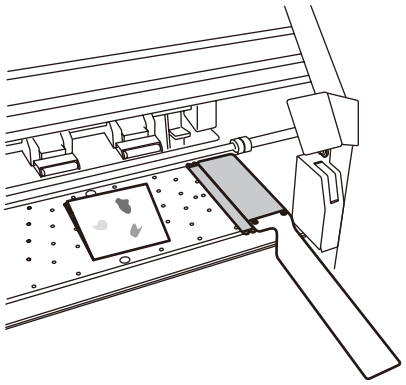
Notes

- **Always turn the printer off before cleaning or doing other maintenance operation on the printer.**
- **Do not blow paper dust away. The printer may malfunction if paper dust or dust enters inside. This may also degrade the print quality.**
- **If the end of the media used is glued to the paper tube, the glue may adhere to the paper guide or the platen. In such cases, be sure to remove all adhered glue.**

Platen cleaning

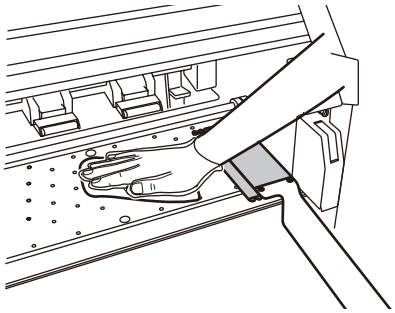
Use the following procedure to clean the platen if
- vinyl chloride adhesive gets on the platen
- ink drops on the platen (the procedure to clean ink stains is explained)

1



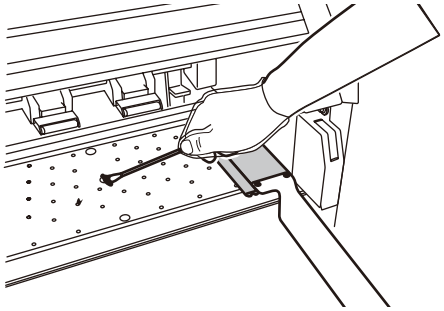
Open the front cover and soak up the ink on the platen with a piece of waste cloth.

2



Wipe the ink stains off the platen with a soft cloth moistened with a neutral detergent.

3



If the ink penetrates into the vacuum hole on the platen, wipe out the ink stuck in the hole with a commercially available cotton swab*. Then, moisten the cotton swab with neutral detergent and wipe out once more.

* Use a cotton swab with a tip of 3 mm diameter.

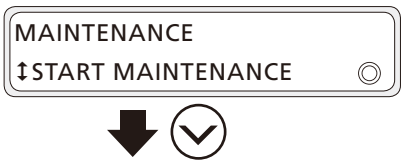
J Cleaning around the ionizers and the sensors for automatic print adjustment

Ink may adhere to the area around the ionizers and to the sensors for automatic print adjustment due to the effect of the ions generated by the ionizers. Periodic cleaning is required because this may cause a loss of precision of the automatic print adjustment function and ink particles to fall onto the printout. The amount of ink that adheres to these areas varies depending on the print data and the ionizer usage, but it is recommended to clean the area approximately once per year.

1

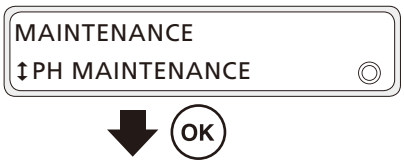
Press the MAINTENANCE button.

2



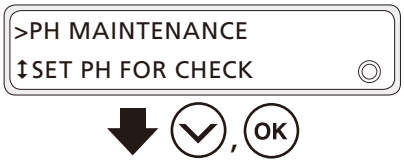
Press the Down button to select PH MAINTENANCE.

3



Press the OK button.

4

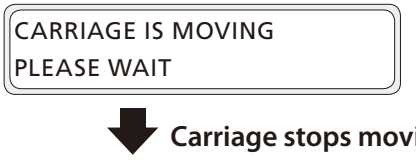


Press the Down button to select SET PH FOR CHECK, and then press the OK button.

5

Press the OK button.

6



Carriage stops moving.

The carriage moves to the maintenance area.

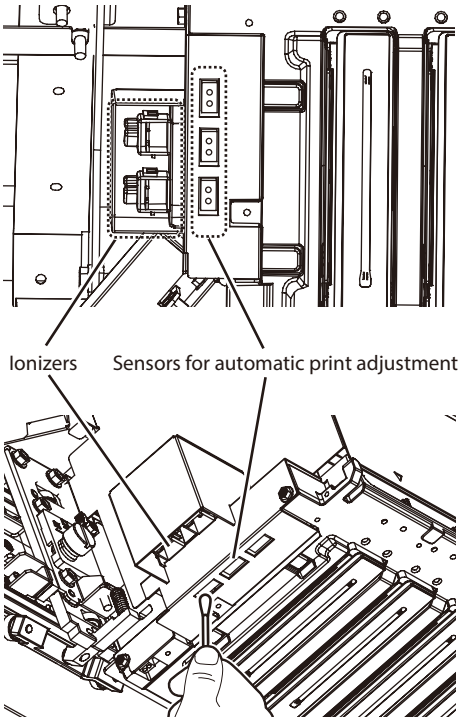
The printer issues a warning beep.

◊ When the carriage moves, the printer issues a warning beep.
To disable the warning beep, see the ***page 202***.

7

Open the front cover, and then the maintenance area cover.

8

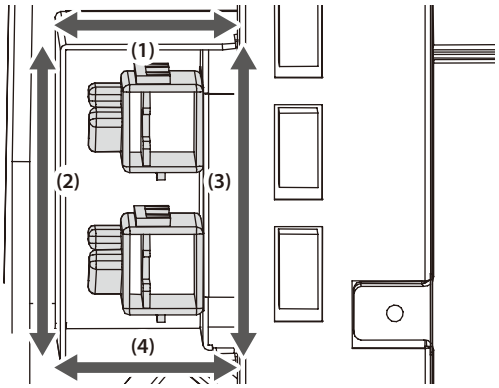


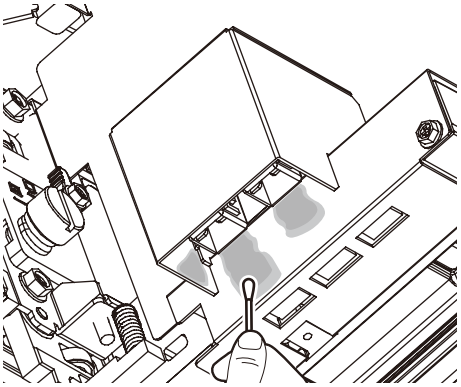
Clean the surface of the sensors for automatic print adjustment with a cleaning swab.
Three holes are aligned on the bottom plate at the carriage left side.
There is a sensor inside each hole. Clean them by softly wiping their surface with a cleaning swab to remove the ink.

⚠ Note

- **Do not put any substances onto the cleaning swab as it may cause the sensors to malfunction.**

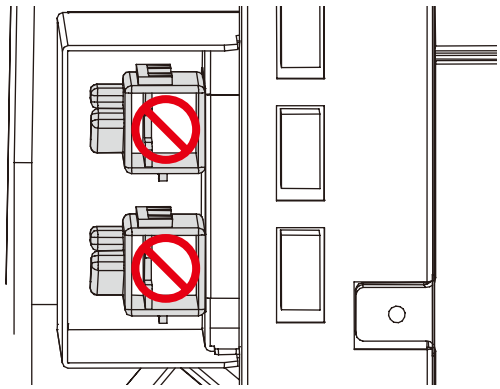
9





Clean the areas around the ionizer nozzles with a cleaning swab. The ink adheres principally onto four areas ((1) to (4) in the figure) inside the ionizers cover plate at the bottom of the carriage.

Wipe off any ink from these areas with a cleaning swab.



Note

- Do not touch the inside of the ionizer module (blue part) with the cleaning swab. The electrode that generates ions is made of a thin wire and can be broken easily if touched. If broken, the ionizers will not generate ions anymore.

10

CHECK PRINT HEADS
THEN CLOSE COVERS

Close the maintenance area cover and the front cover.

11

CARRIAGE IS MOVING
PLEASE WAIT

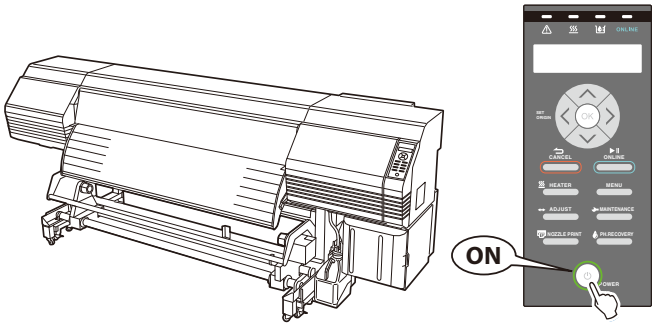
Carriage stops moving.

>PH MAINTENANCE
↕SET PH FOR CHECK

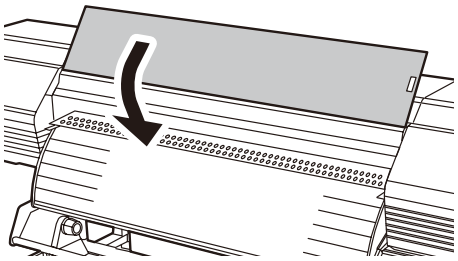
After the operation of the day

The printer has an internal clock which allows it to wash the print heads automatically, flushing some ink through the print heads, which keeps the print heads in good condition. To ensure the printer's automatic maintenance operation, after the operations of the day keep the printer in the conditions below.

1. Keep the printer turned on.



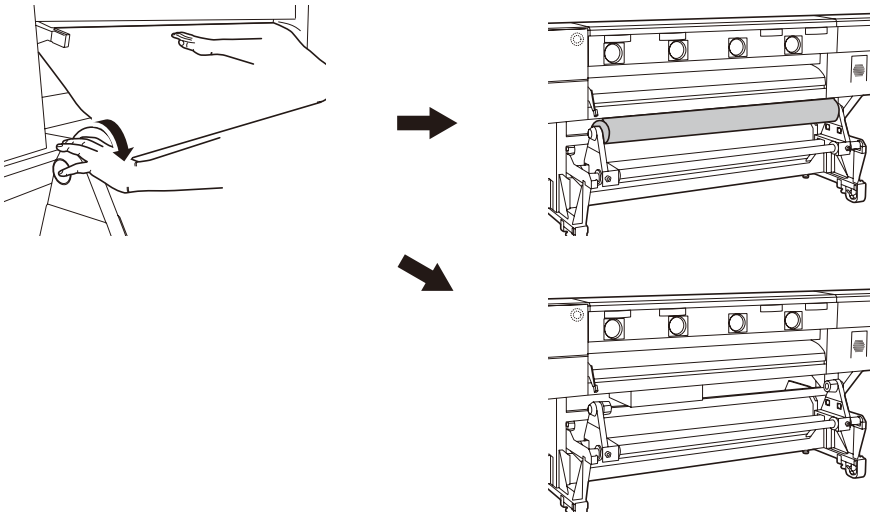
2. Keep the front cover closed.



3. Take up the media on the TUR unit, or remove the media from the printer.

If you keep the media loaded on the printer for a long time, the media may wrinkle on the platen or a gripping trace may be left on the media. To keep the media in good condition, the operation below is recommended.

Especially after printing on vinyl media, be sure to remove it from the printer. Note that vinyl media wrinkles easily.



Advanced operations

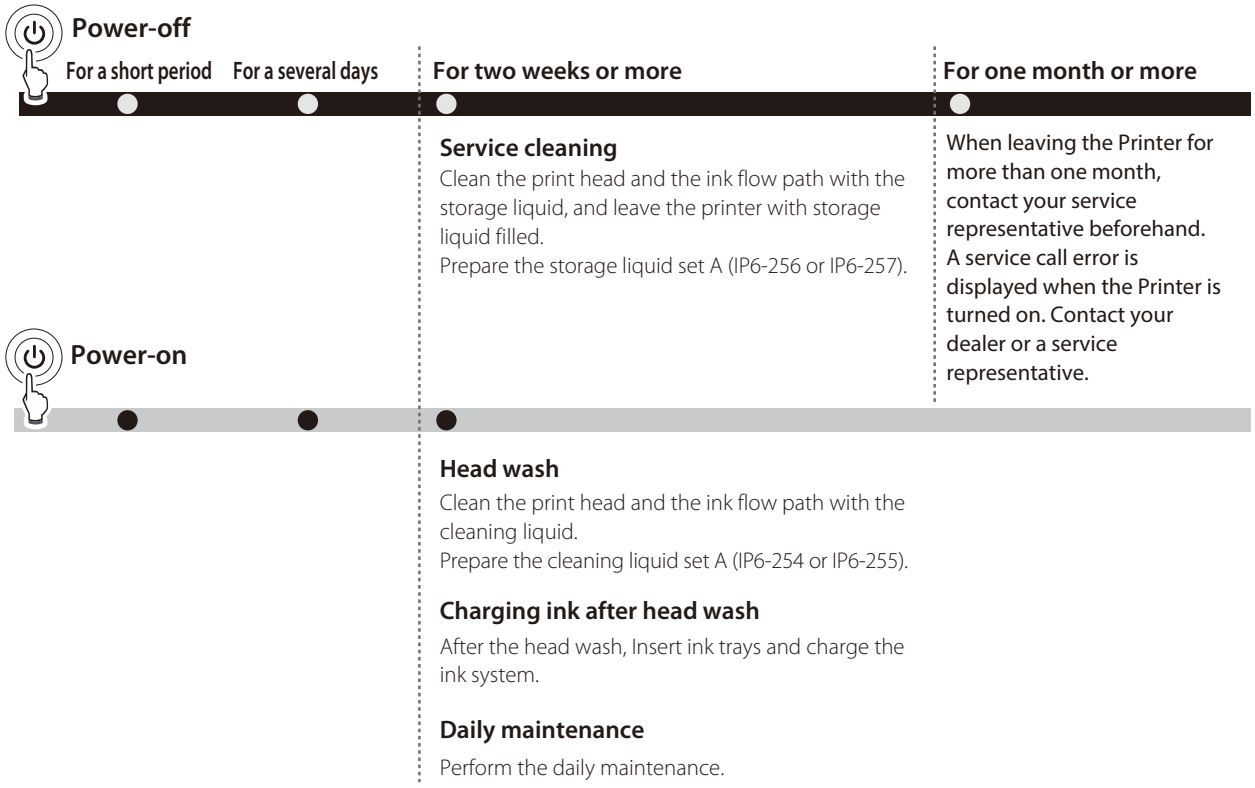
When not using the printer for more than 2 weeks

Always set the printer power to on to perform the fill cap operation.

What is fill cap?

◊ This function fills the caps with ink to soak the print heads (nozzle surface) in order to prevent clogged nozzles due to ink drying.
Use this function also when several cleaning operations could not clear the clogged nozzles.

The printer automatically performs the fill cap operation, which keeps the print heads in good condition, when 72 hours has elapsed after it entered the standby state (then once every 3 days).
It is therefore recommended to always keep the printer turned on.
If the printer stays turned on and is not used for 2 weeks or longer, you will have to perform the wash operation, fill the ink system, and execute daily maintenance following the procedure below.
If you have to leave the printer turned off for a long time, follow the instructions below to perform service cleaning before turning the printer off.



⚠CAUTION

- **To protect the print heads, do not leave the printer for more than one month with no ink in the system.**
- **During the service cleaning or head wash, do not open or close the front cover or the pressure roller lever. Otherwise, the printer may restart its initial operation from the beginning, and waste the ink and cleaning liquid.**

Service cleaning (CIS)

1

PRINTER READY
01: PAPER / 1626mm

MAINTENANCE

Press the MAINTENANCE button.

2

MAINTENANCE
↕START MAINTENANCE ◎

Press the Down button to select PH MAINTENANCE.

3

MAINTENANCE
↕PH MAINTENANCE ◎

OK

Press the OK button.

4

>PH MAINTENANCE
↕SHEET MOUNT CLNG ◎

OK

Press the Down button to select CLEAN FOR STORAGE.

5

>PH MAINTENANCE
↕CLEAN FOR STORAGE ◎

OK

Press the OK button.

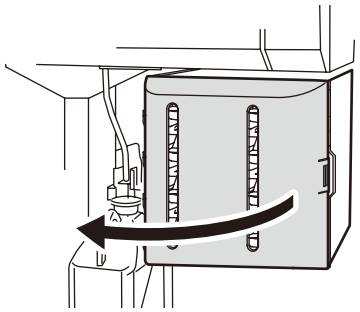
6

>>CLEAN FOR STORAGE
BOTTLE IS EMPTY? ◎

OK

Confirm that the waste ink bottle is empty and press the OK button.

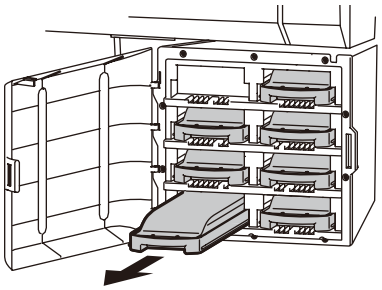
7



OPEN INK BOX COVER

Open the ink box cover.

8

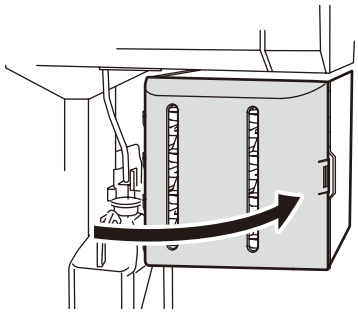


REMOVE K INK
CARTRIDGE

Remove the ink trays.

Remove all the ink trays.

9



CLOSE INK BOX COVER

Close the ink box cover.

10

START DRAINING
BOTTLE IS EMPTY? ◎

OK

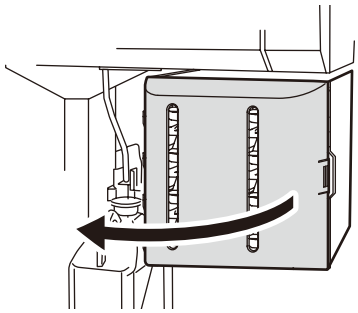
DRAINING
REQUIRED TIME Y:YY

Y: YY : Required time (min:sec, decrease every 10 seconds)

Confirm that the waste ink bottle is empty and press the OK button.

Draining starts.

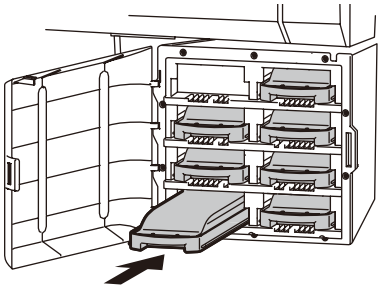
11



OPEN INK BOX COVER

Open the ink box cover.

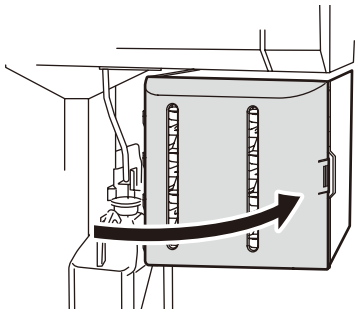
12



LOAD
K SL cartridge

Insert all the ink trays, with storage liquid cartridges set on them, into the slots of the ink box.

13



CLOSE INK BOX COVER

Close the ink box cover.

14

START SL CHARGING
BOTTLE IS EMPTY? ◎

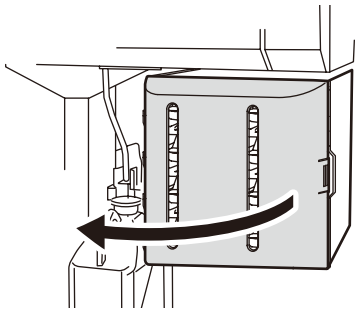
OK

CHARGING SL
REQUIRED TIME Y:YY

Y :YY : Required time (min:sec, decrease every 10 seconds)

Confirm that the waste ink bottle is empty and press the OK button.

15



OPEN INK BOX COVER

Open the ink box cover.

16

>PH MAINTENANCE
↕CLEAN FOR STORAGE ◎

Repeat steps *8* to *15*.

Service cleaning (LCIS)

Refer to the leaflet supplied with the storage liquid set.

Head wash (CIS)

◊ Set the cleaning liquid cartridges to the optional ink trays in advance to facilitate the procedure.

1

PRINTER READY
01: PAPER / 1626mm

MAINTENANCE

Press the MAINTENANCE button.

2

MAINTENANCE
↕START MAINTENANCE ◎

Press the Down button to select PH MAINTENANCE.

3

MAINTENANCE
↕PH MAINTENANCE ◎

OK

Press the OK button.

4

>PH MAINTENANCE
↕SHEET MOUNT CLNG ◎

Press the Down button to select CLEAN PH & INK SYS.

5

>PH MAINTENANCE
↕CLEAN PH & INK SYS ◎

OK

Press the OK button.

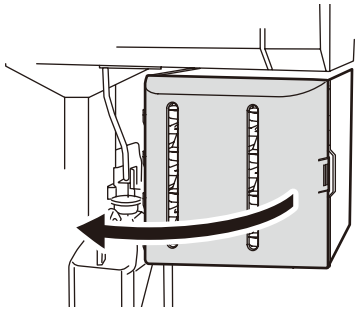
6

>>CLEAN PH & INK SYS
BOTTLE IS EMPTY? ◎

OK

Confirm that the waste ink bottle is empty and press the OK button.

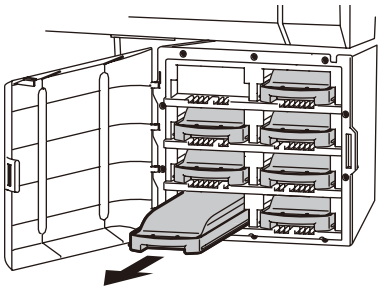
7



OPEN INK BOX COVER

Open the ink box cover.

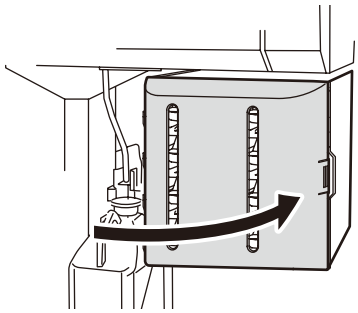
8



REMOVE
K SL cartridge

Remove all the ink trays.

9



CLOSE INK BOX COVER

Close the ink box cover.

10

START DRAINING
BOTTLE IS EMPTY? ◎

OK

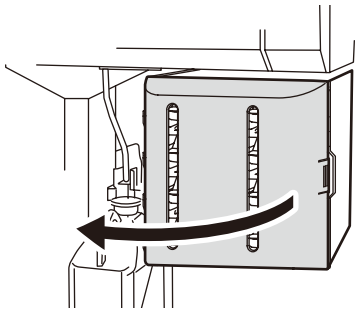
DRAINING
REQUIRED TIME Y:YY

Y: YY : Required time (min:sec, decrease every 10 seconds)

Confirm that the waste ink bottle is empty and press the OK button.

Draining starts.

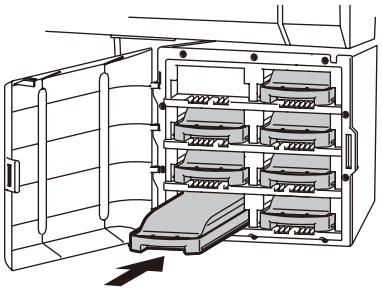
11



OPEN INK BOX COVER

Open the ink box cover.

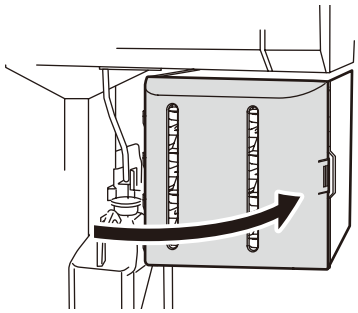
12



LOAD
K CL cartridge

Insert all the ink trays, with cleaning liquid cartridges set on them, into the slots of the ink box.

13



CLOSE INK BOX COVER

Close the ink box cover.

14

START CL CHARGING
BOTTLE IS EMPTY?

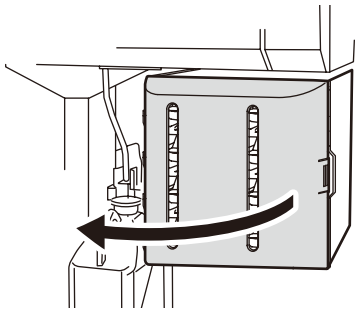
OK

CHARGING CL
REQUIRED TIME Y:YY

Y: YY : Required time (min:sec, decrease every 10 seconds)

Confirm that the waste ink bottle is empty and press the OK button.

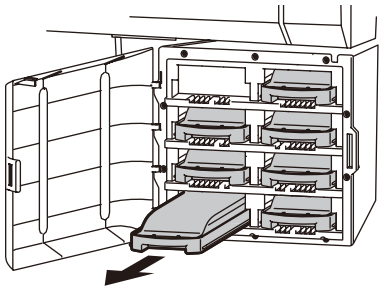
15



OPEN INK BOX COVER

Open the ink box cover.

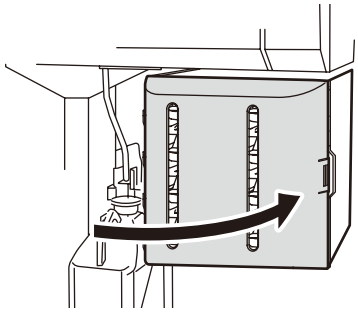
16



REMOVE
K CL cartridge

Remove all the ink trays, with cleaning liquid cartridges set on them.

17



CLOSE INK BOX COVER

Close the ink box cover.

18

START DRAINING
BOTTLE IS EMPTY? ◎

OK

DRAINING
REQUIRED TIME Y:YY

Y: YY : Required time (min:sec, decrease every 10 seconds)

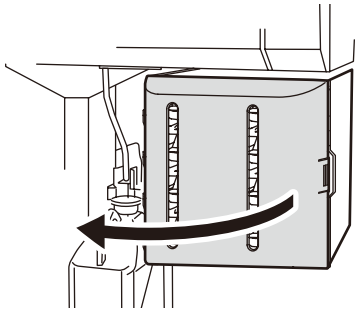
Confirm that the waste ink bottle is empty and press the OK button.

Draining starts.

19

Repeat steps *11* to *15*.

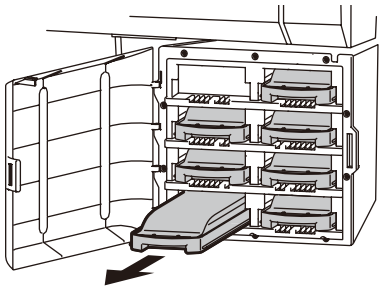
20



OPEN INK BOX COVER

Open the ink box cover.

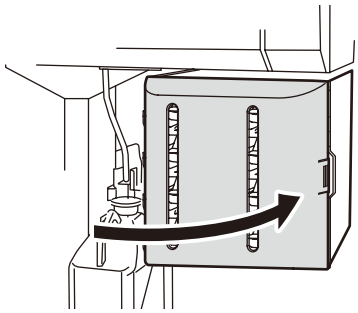
21



REMOVE
K CL cartridge

Remove all the ink trays, with cleaning liquid cartridges set on them.

22



CLOSE INK BOX COVER

Close the ink box cover.

23

Confirm that the waste ink bottle is empty and press the OK button.

Draining starts.

Head wash (LCIS)

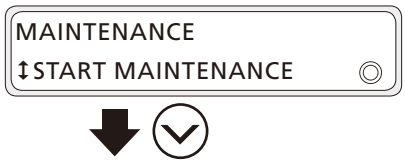
Refer to the leaflet supplied with the cleaning liquid set.

Priming the ink system after head wash (CIS)

1

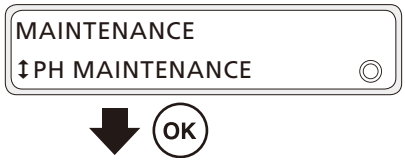
Press the MAINTENANCE button.

2



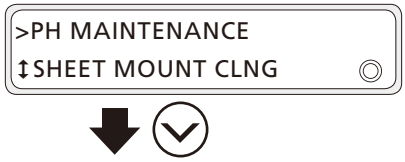
Press the Down button to select PH MAINTENANCE.

3



Press the OK button.

4



Press the Down button to select PRIME INK SYSTEM.

5

>PH MAINTENANCE
↕PRIME INK SYSTEM

OK

Press the OK button.

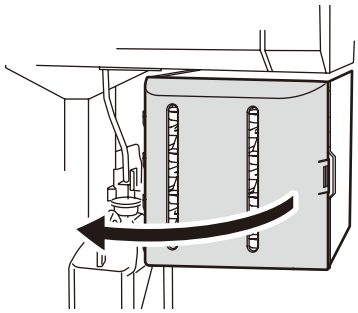
6

>>PRIME INK SYSTEM
BOTTLE IS EMPTY?

OK

Confirm that the waste ink bottle is empty and press the OK button.

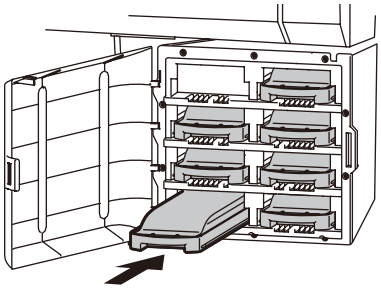
7



OPEN INK BOX COVER

Open the ink box cover.

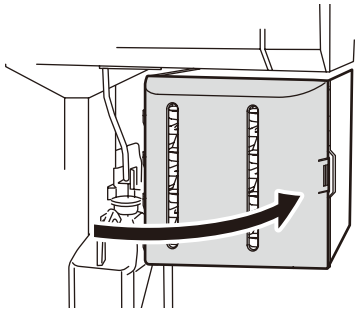
8



INSTALL K
INK CARTRIDGE

Insert the ink trays.

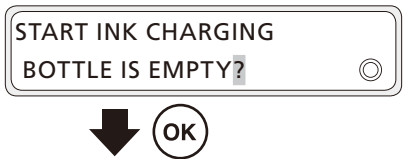
9



CLOSE INK BOX COVER

Close the ink box cover.

10



Confirm that the waste ink bottle is empty and press the OK button.

Y:YY : Required time (min:sec, decrease every 10 seconds)

11

Press the OK button.

Normal cleaning starts.

The panel display returns to the previous screen after the cleaning has finished.

Y: YY : Required time (min:sec, decrease every 10 seconds)

Priming the ink system after head wash (LCIS)

Refer to the leaflet supplied with the cleaning liquid set.

Check the printer information

◊ Press the MENU button during printing to check the printer information. Then press the **ONLINE** button to return to the normal panel display.

Check the remaining ink level

During printing

1 

Press the MENU button.

2 

Press the Down button to select INK INFORMATION.

3 

Press the OK button.

4 

Press the OK button.

5 

CC: ink color
XXX%: Remaining ink

When the remaining ink (total ink - used ink) falls under 2%, LOW is displayed.

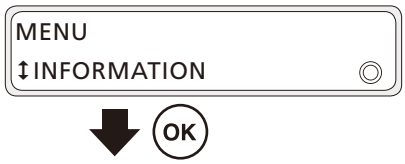
Press the Up and Down buttons to select the color whose ink you want to check.

Not during printing

1

Press the MENU button.

2

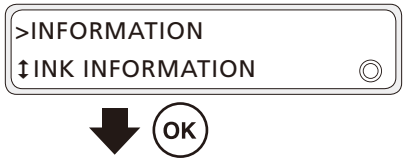


Press the OK button.

3

Press the Down button to select INK INFORMATION.

4



Press the OK button.

5

Press the OK button.

6

CC: ink color
XXX%: Remaining ink

When the remaining ink (total ink - used ink) falls under 2%, LOW is displayed.

Press the Up and Down buttons to select the color whose ink you want to check.

Check the number of ink bottles that can be supplied (LCIS)

During printing

1 

Press the **MENU** button.

2 

Press the **Down** button to select **INK INFORMATION.**

3 

Press the **OK** button.

4 

Press the **OK** button.

5 

*: Number of ink bottles that can be supplied to the reservoir.

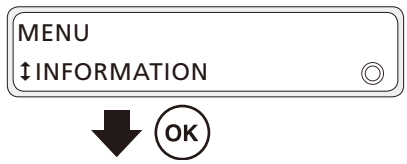
⚠ Note

- **When the reservoir drawer is open, the number of bottles is replaced by a hyphen -.**
  In this case, close the reservoir drawer.

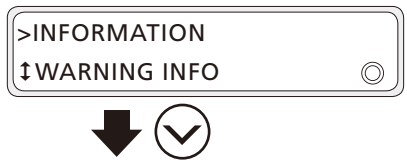
Not during printing

1 

Press the **MENU** button.

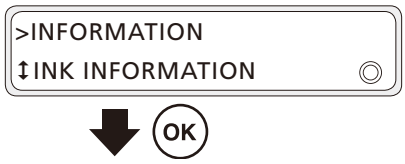
2 

Press the **OK** button.

3 

Press the **Down** button to select **INK INFORMATION.**

4

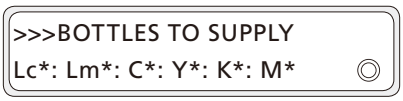


Press the OK button.

5

Press the OK button.

6



*: Number of ink bottles that can be supplied to the reservoir.

⚠ Note

- **When the reservoir drawer is open, the number of bottles is replaced by a hyphen -.**
  In this case, close the reservoir drawer.

Opening and closing the reservoir drawer

1

Open the reservoir drawer.

2

Close the reservoir drawer.

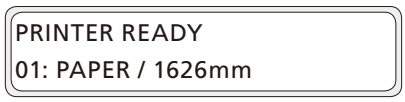
3

*: Number of ink bottles that can be supplied to the reservoir.

The number of bottles that can be supplied is displayed during 3 seconds.

(After 3 seconds)

4



Check the amount of ink that can be used (LCIS)

During printing

1 

Press the MENU button.

2 

Press the Down button to select INK INFORMATION.

3 

Press the OK button.

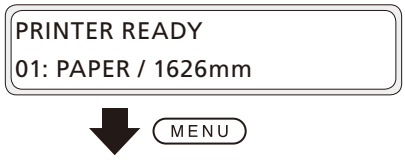
4 

Press the OK button.

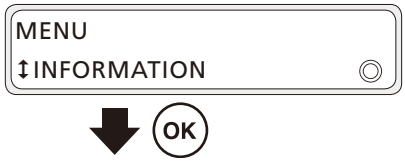
5 

X.XXL: Amount of ink that can be used

Not during printing

1 

Press the MENU button.

2 

Press the Down button to select INK AMOUNT EXTENSION.

3 

Press the OK button.

4

Press the OK button.

5

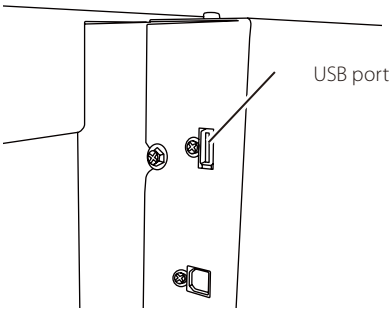
X.XXL: Amount of ink that can be used

Press the OK button.

Export printer information

Menu information can be exported in the PDF format to the USB drive.

1



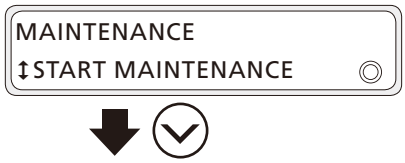
Insert a USB drive in the USB port.

The FAT32 format is recommended for the USB drive.

2

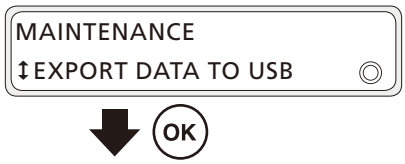
Press the MAINTENANCE button.

3



Press the Down button to select EXPORT DATA TO USB.

4



Press the OK button.

5

Press the OK button.

6

EXPORT COMPLETED is displayed when the export finishes successfully.

Press the OK button.

If the export failed, an error message is displayed.

XX is an error code.
- 01: Insufficient space on the USB drive
- 02: The USB drive is write-protected.

7

After the export has finished, the panel display returns to the previous screen.

Check remaining media length

During printing

1

Press the MENU button.

2

Press the Down button to select REMAINING MEDIA.

3

Press the OK button.

4

Displayed in the unit set in the length unit menu.
- XX: Preset number
- NNNNNN: Media name
- YYY: Remaining length

Not during printing

1

Press the MENU button.

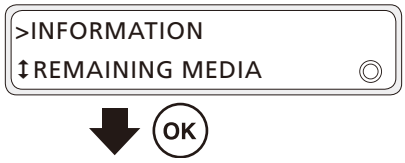
2

Press the Down button to select INFORMATION, and then press the OK button.

3

Press the Down button to select REMAINING MEDIA.

4



Press the OK button.

5

Displayed in the unit set in the length unit menu.
YYY: Remaining length

Check the USB connection status

During printing

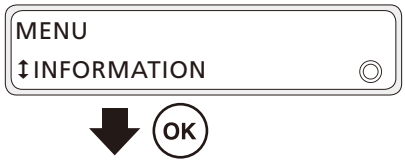
The USB connection status cannot be checked during printing.
Check the connection when the printer is not printing.

Not during printing

1

Press the MENU button.

2



Press the Down button to select INFORMATION, and then press the OK button.

3

Press the Down button to select USB INFO.

4

Press the OK button.

5

The panel displays the USB address.

If the address is different from **000**, the address is valid.

Note

- **If the panel displays the USB address as 000, connect the USB cable connection once again.**

6

Press the Down button to select SPEED.

The printer checks the connection speed.

7

The panel displays the USB connection speed.

The panel should display **HS**.

If the panel displays **FS**, the print process will be slower.

Check the firmware version on the printer

During printing

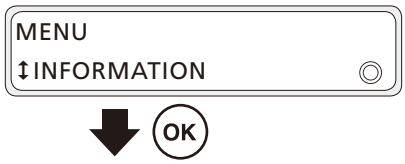
The firmware version cannot be checked during printing.
Check the version when the printer is not printing.

Not during printing

1

Press the MENU button.

2

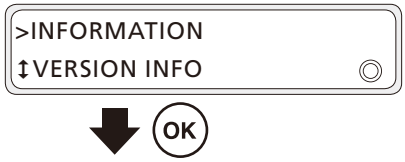


Press the Down button to select INFORMATION, and then press the OK button.

3

Press the Down button to select VERSION INFO.

4



Press the OK button.

5

Press the Down button to select FIRMWARE.

6

The panel displays the printer's firmware version.

Check the print length

During printing

1

```
PRINTING...
STANDARD ND BI
```

↓ MENU

Press the **MENU** button.

2

```
MENU
↕WARNING INFO
```

↓ (Down button)

Press the **Down** button to select **TOTAL PRINT LENGTH**.

3

```
MENU
↕TOTAL PRINT LENGTH
```

↓ OK

Press the **OK** button.

4

```
>TOTAL PRINT LENGTH
 YYYYYm
```

Displayed in the unit set in the length unit menu.

Not during printing

1

```
PRINTER READY
01: PAPER / 1626mm
```

↓ MENU

Press the **MENU** button.

2

```
MENU
↕INFORMATION
```

↓ OK

Press the **Down** button to select **INFORMATION**, and then press the **OK** button.

3

```
>INFORMATION
↕WARNING INFO
```

↓ (Down button)

Press the **Down** button to select **TOTAL PRINT LENGTH**.

4

```
>INFORMATION
↕TOTAL PRINT LENGTH
```

↓ OK

Press the **OK** button.

5

Displayed in the unit set in the length unit menu.

Check the ink amount extension chip (LCIS)

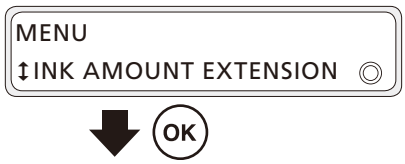
1

Press the MENU button.

2

Press the Down button to select INK AMOUNT EXTENSION.

3



Press the OK button.

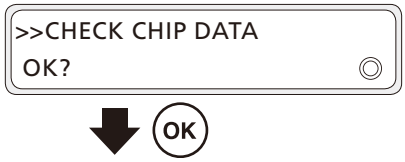
4

Press the Down button to select CHECK CHIP DATA.

5

Press the OK button.

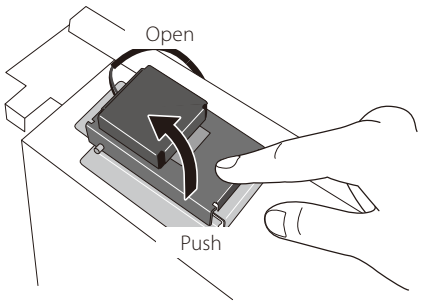
6



Press the OK button.

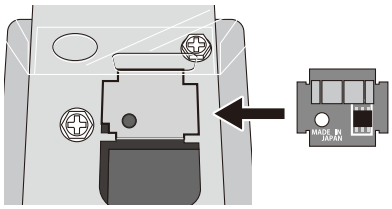
7

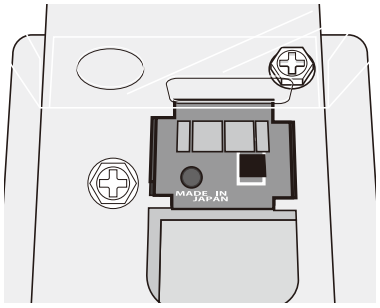
8



Open the cover of the ink chip reader.

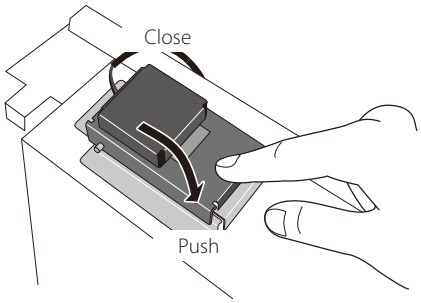
9





Insert the ink amount extension chip in the ink chip reader.

10



Close the cover of the ink chip reader.

11

The data of the ink amount extension chip is read automatically.

12

XXXXXXXXXXXXXX: Type of chip that has been read.

Chip type	Description
INK EXTENSION CHIP	This is an ink amount extension chip.
INCORRECT INK TYPE	This is not a chip supported by the printer.
UNKNOWN CHIP	This is not an ink amount extension chip.
UNABLE TO READ CHIP	The chip could not be read.

Press the OK button.

Press the **CANCEL** button to exit the procedure to check the ink amount extension chip (go to step ***15***).

13

XXXXXXXXXXXXXX: Date of the last time the chip has been read.

Chip type	Description
YYYY/MM/DD	Date of the last time the available ink amount has been extended.
UNUSED CHIP	This chip has not been used yet.
UNABLE TO READ CHIP	This is not an ink amount extension chip. Or the chip could not be read.

Press the OK button.

Press the **CANCEL** button to exit the procedure to check the ink amount extension chip (go to step ***15***).

14

XXXXXXXXXXXXXX: Printer that read the chip.

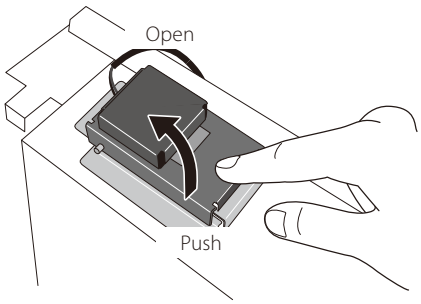
Chip type	Description
THIS PRINTER	This printer read the chip.
12A3456A	Another printer (with this serial number) read the chip.
UNUSED CHIP	This ink amount extension chip has not been used yet.
UNABLE TO READ CHIP	The chip could not be read.

Press the OK button.

Press the **CANCEL** button to exit the procedure to check the ink amount extension chip (go to step ***15***).

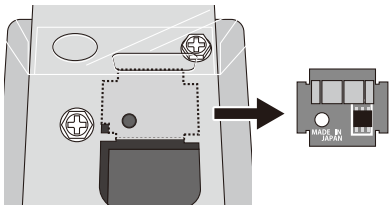
15

16



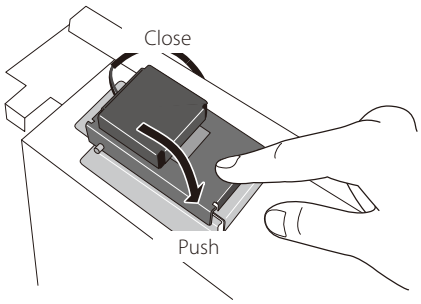
Open the cover of the ink chip reader.

17



Remove the ink amount extension chip from the ink chip reader.

18



Close the cover of the ink chip reader.

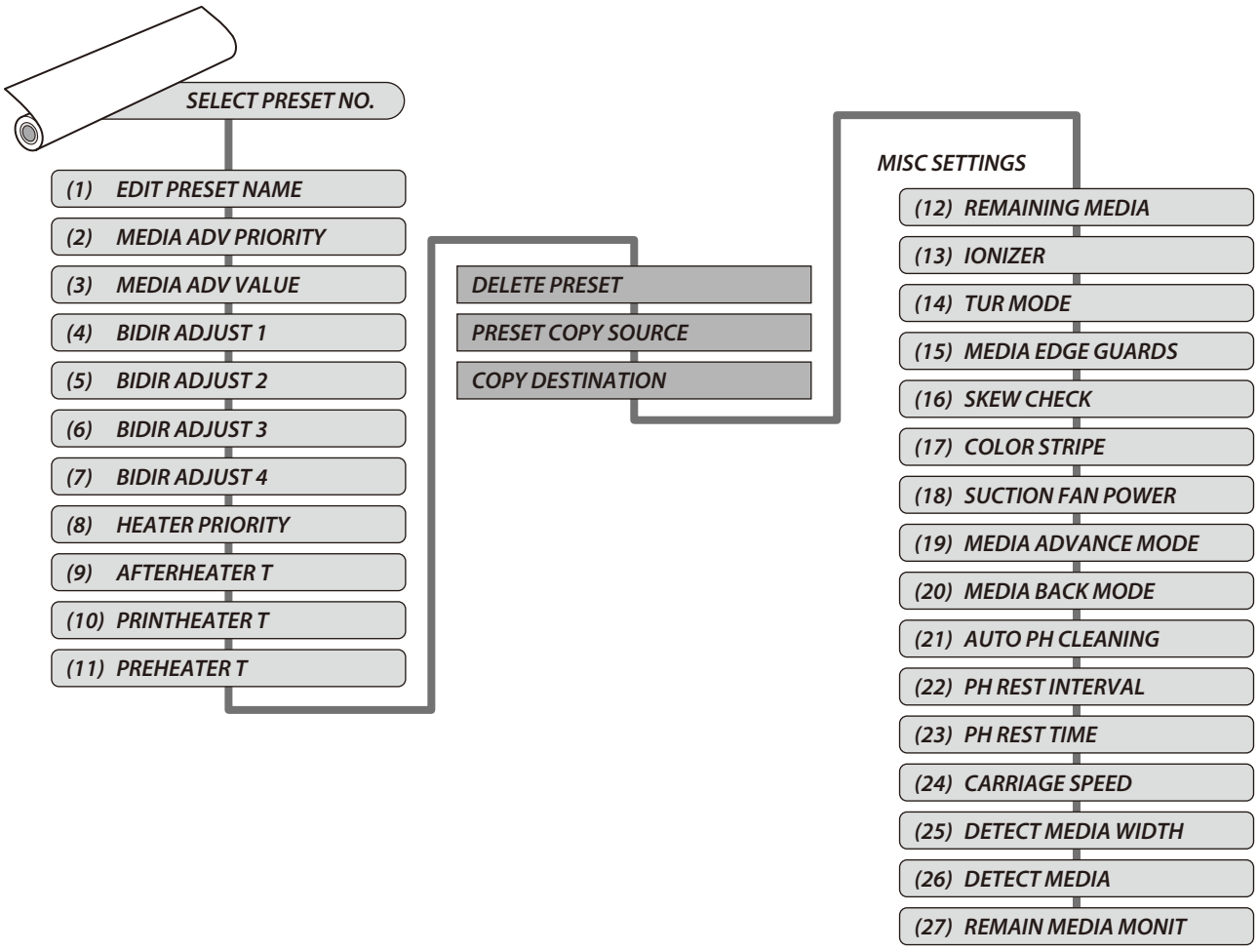
19

To check the ink amount extension chip again, return to step *5*.

Handle the media

Create a new media preset

You can register 20 media presets in the printer (No.01 to 20).
The parameters in the preset menu are in the order shown below. You can select the number of the preset to edit with **SELECT PRESET NO**.
You can save the setting values for the 27 parameters ((1) to (27) below) for each media.

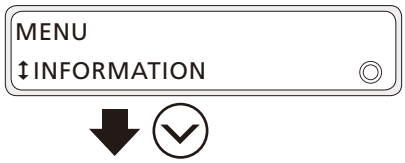


This example explains how to enter a media advance adjustment value for the media preset number 02.

1

Press the MENU button.

2



Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

4

Press the OK button.

5

Press the Down button.

6

Press the OK button.

The paper type of the preset changes from 01PAPER to 02Glossy.

7

Press the CANCEL button to exit the SELECT PRESET NO. menu.

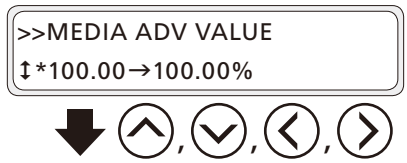
8

Press the Down button to select MEDIA ADV VALUE.

9

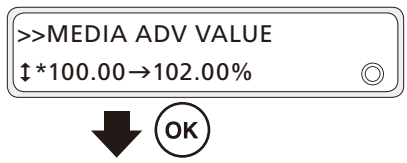
Press the OK button.

10



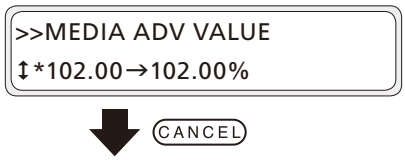
Press the Left and Right buttons to select a digit, and press the Up and Down buttons to set a value.

11



Enter the media advance adjustment value and press the OK button.

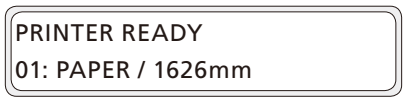
12



Press the CANCEL button to exit the MEDIA ADV VALUE menu.

13

Press the ONLINE button.



Preset media default values

Up to 20 presets (No. 01 to 20) of media can be registered. Media presets can also be deleted or changed. However, preset No. 01 (PAPER) and the media initially set in the printer cannot be deleted.

For the media preset 01 to 05, the initial values are listed below.

Preset No. / Setting	01	02	03	04	05	06
EDIT PRESET NAME	Paper	Glossy	Matte	Banner	BLT_B	LWT_B
MEDIA ADV PRIORITY	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING
MEDIA ADV VALUE	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
BIDIR ADJUST 1	00	00	00	00	00	00
BIDIR ADJUST 2	00	00	00	00	00	00
BIDIR ADJUST 3	00	00	00	00	00	00
BIDIR ADJUST 4	00	00	00	00	00	00
HEATER PRIORITY	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING	DATA SETTING
AFTERHEATER T	** °C	50°C	50°C	50°C	50°C	50°C
PRINTHEATER T	** °C	40°C	40°C	40°C	40°C	40°C
PREHEATER T	** °C	45°C	45°C	45°C	45°C	45°C
MISC SETTINGS						
REMAINING MEDIA	0m	0m	0m	0m	0m	0m
IONIZER	OFF	OFF	OFF	OFF	OFF	OFF
TUR MODE	LOOSE	LOOSE	LOOSE	TENSION	TENSION	TENSION
MEDIA EDGE GUARDS	ON	ON	ON	ON	ON	ON
SKEW CHECK	ON	ON	ON	ON	ON	ON
COLOR STRIPE	OFF	OFF	OFF	OFF	OFF	OFF
SUCTION FAN POWER	MEDIUM	MEDIUM	MEDIUM	LOW	LOW	LOW
MEDIA ADVANCE MODE	FORWARD ONLY	FORWARD ONLY	FORWARD ONLY	FORWARD ONLY	FORWARD ONLY	BACK & FWD MAX
MEDIA BACK MODE	ON	ON	ON	ON	ON	ON
AUTO PH CLEANING	BEFORE&AFTER PRINT	BEFORE&AFTER PRINT	BEFORE&AFTER PRINT	BEFORE&AFTER PRINT	BEFORE&AFTER PRINT	BEFORE&AFTER PRINT
PH REST INTERVAL	0 CYCLES	0 CYCLES	0 CYCLES	0 CYCLES	0 CYCLES	0 CYCLES
PH REST TIME	1 SECONDS	1 SECONDS	1 SECONDS	1 SECONDS	1 SECONDS	1 SECONDS
CARRIAGE SPEED	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DETECT MEDIA WIDTH	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO
DETECT MEDIA	ON	ON	ON	ON	ON	ON
REMAIN MEDIA MONIT	OFF	OFF	OFF	OFF	OFF	OFF

***Modify the media advance adjustment value and the bidirectional adjustment values to fit the media you are using.**

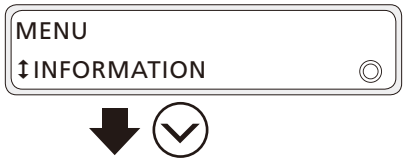
Minimize the right and left margins

Deactivate the media edge guards

1

Press the **MENU** button.

2



Press the **Down** button to select **EDIT MEDIA PRESETS**.

3

Press the **OK** button.

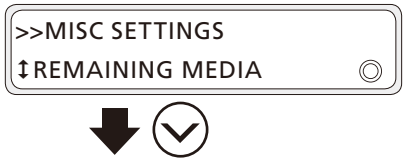
4

Press the **Down** button to select **MISC SETTINGS**.

5

Press the **OK** button.

6



Press the **Down** button to select **MEDIA EDGE GUARDS**.

7

Press the **OK** button.

8

Press the **Down** button once.

9

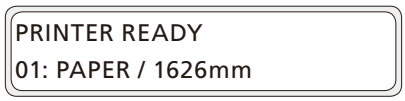
Press the **OK** button.

10

Press the **CANCEL** button to exit the MEDIA EDGE GUARDS menu.

11

Press the **ONLINE** button.

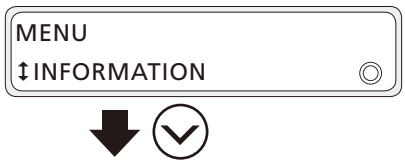


Activate the color stripe

1

Press the **MENU** button.

2



Press the **Down** button to select **EDIT MEDIA PRESETS.**

3

Press the **OK** button.

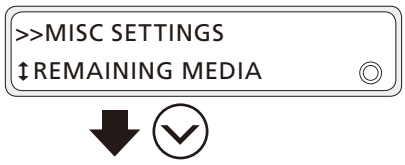
4

Press the **Down** button to select **MISC SETTINGS.**

5

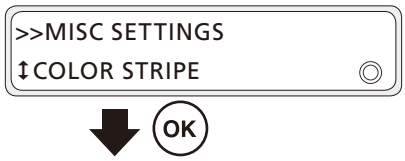
Press the **OK** button.

6



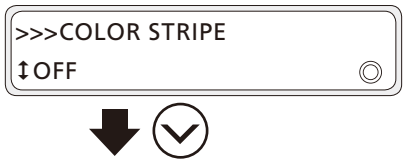
Press the **Down** button to select **COLOR STRIPE.**

7



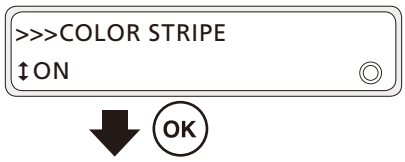
Press the OK button.

8



Press the Down button once.

9



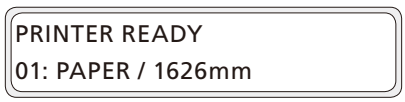
Press the OK button.

10

Press the CANCEL button to exit the COLOR STRIPE menu.

11

Press the ONLINE button.



Prevent the media from sticking and wrinkling

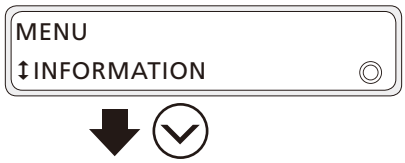
Decrease the platen suction fan power

The vacuum pressure applied to the media in the printing zone helps to hold the media down on the platen to keep the distance from media to print heads constant.
When the media sticks to the platen, set the vacuum pressure to LOW. The LOW vacuum pressure is also effective when your media is very flexible and wrinkles easily.

1

Press the MENU button.

2



Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

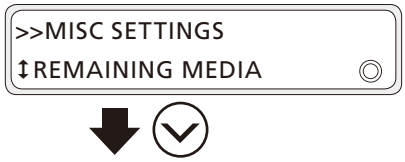
4

Press the Down button to select MISC SETTINGS.

5

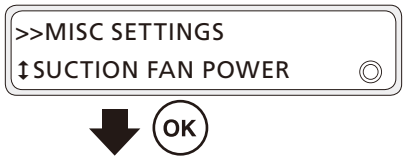
Press the OK button.

6



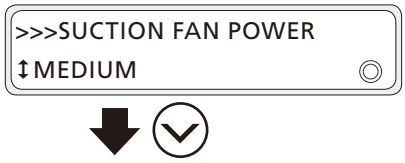
Press the Down button to select SUCTION FAN POWER.

7



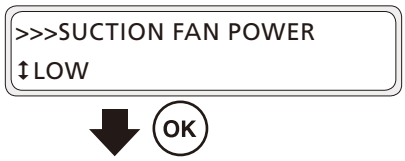
Press the OK button.

8



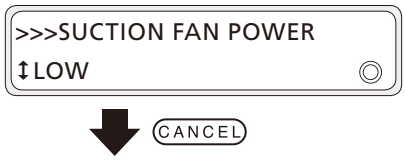
Press the Down button once.

9



Press the OK button.

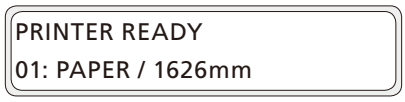
10



Press the CANCEL button to exit the SUNCTION FAN POWER menu.

11

Press the ONLINE button.



Change the media advance mode

Some types of media may tend to adhere to the platen or the paper guide, making it difficult for the media to advance smoothly.

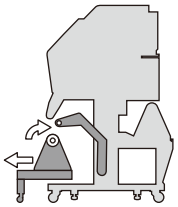
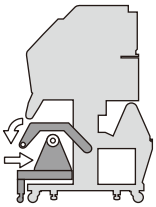
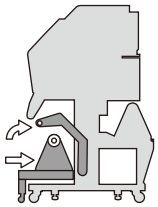
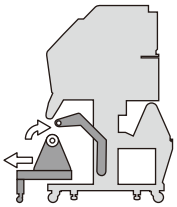
In such cases, change the media advance mode.

The operation required to advance the media smoothly depends on the level of adhesion.

Change the advance mode in accordance with the media being used.

FORWARD ONLY	Advance the media normally.
BACK & FWD LOW	An operation to separate the media from the platen is performed when printing starts and after a pause. Always make the following setting when using this mode. - Set TUR MODE to LOOSE. (See **Tension and loose mode setting procedure** on *page 62*.)
BACK & FWD HIGH	In addition to the operation executed with BACK & FWD LOW, the operation to separate the media from the platen is performed during each scan. Always make the following setting when using this mode. - Set TUR MODE to LOOSE. (See **Tension and loose mode setting procedure** on *page 62*.)
BACK & FWD MAX	In addition to the operation executed with BACK & FWD LOW, the media is advanced slowly. Always make all the following four settings when using this mode. (1) Set SUCTION FAN POWER to LOW. (See **Decrease the platen suction fan power** on *page 176*.) (2) Use the TUR unit and set TUR MODE to TENSION. (3) Set the take-up direction switch to the outer direction position. (4) Use the TUR unit in the pulled forward position. (For more information on (2) to (4), see **Setting the media on the take-up reel unit** on *page 62*.) This mode is recommended for thin banner or other media that adheres easily.
FWD LESS WRINKLES	In this mode, the media is fed 55 cm before the printing starts if 5 minutes or more has passed since the previous printing finishes. The other operations are the same as in normal mode. This mode is used to remove the wrinkles that may appear when using solvent printing coated paper.

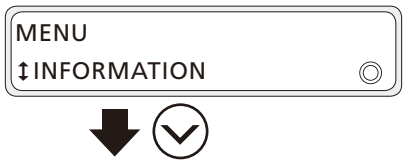
◊ The printing speed is slower than normal in the **BACK & FWD LOW**, **BACK & FWD HIGH**, and **BACK & FWD MAX** modes.

TUR MODE	LOOSE	TENSION	TENSION
SUCTION FAN POWER	HIGH (recommended)	LOW (recommended)	LOW (required)
MEDIA ADVANCE MODE	FORWARD ONLY BACK & FWD LOW BACK & FWD HIGH FWD LESS WRINKLES	FORWARD ONLY FWD LESS WRINKLES	BACK & FWD MAX
Target media	Vinyl and coated paper	Banner	Thin banner
Inner take-up 	 Cannot be used		 Cannot be used
Outer take-up 			

1

Press the MENU button.

2



Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

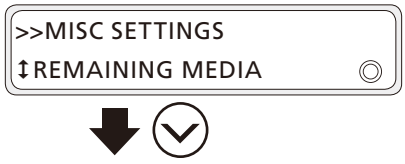
4

Press the Down button to select MISC SETTINGS.

5

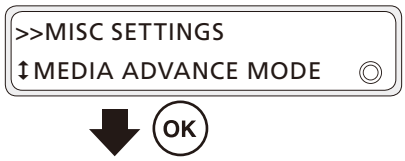
Press the OK button.

6



Press the Down button to select MEDIA ADVANCE MODE.

7



Press the OK button.

8

Press the Up and Down buttons to select an advance mode.

9

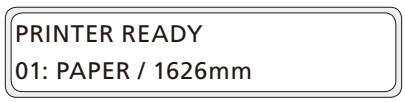
Press the OK button.

10

Press the CANCEL button to exit the MEDIA ADVANCE MODE menu.

11

Press the ONLINE button.



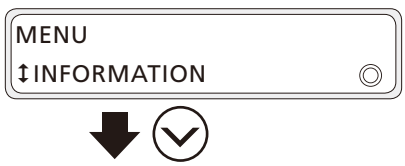
Prevent the media from lifting up

The vacuum pressure applied to the media in the printing zone helps to hold the media down on the platen to keep the distance from media to print heads constant.
When a gap tends to form between the media and the platen, set the vacuum pressure to HIGH.

1

Press the MENU button.

2



Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

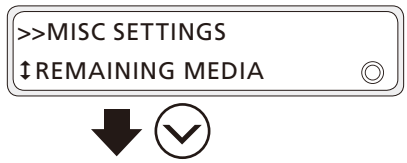
4

Press the Down button to select MISC SETTINGS.

5

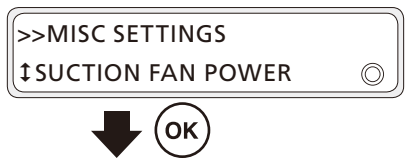
Press the OK button.

6



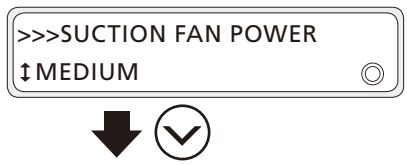
Press the Down button to select SUCTION FAN POWER.

7



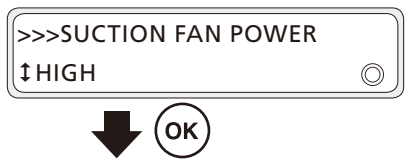
Press the OK button.

8



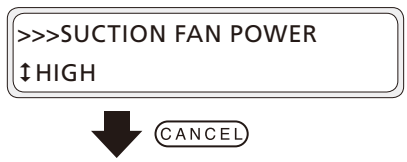
Press the Up and Down buttons to select HIGH.

9



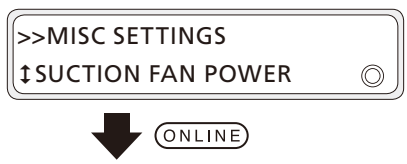
Press the OK button.

10

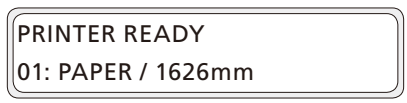


Press the CANCEL button to exit the SUCTION FAN POWER menu.

11



Press the ONLINE button.



Change the height of the print heads

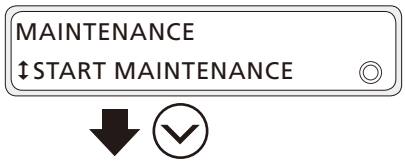
Be sure to adjust the height of the print heads when printing on thick media to prevent the print heads from contacting the media.
Change the print head height depending on the media used with the head up/down mechanism.

On the operation panel enter the print head height adjustment option in the preset menu.

1

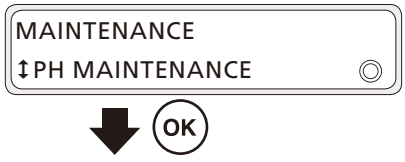
Press the MAINTENANCE button.

2



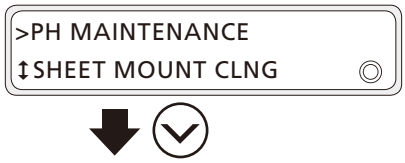
Press the Down button to select PH MAINTENANCE.

3



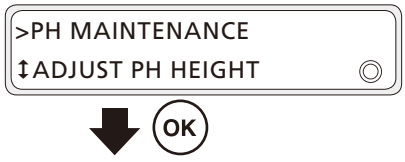
Press the OK button.

4



Press the Down button to select ADJUST PH HEIGHT.

5



Press the OK button.

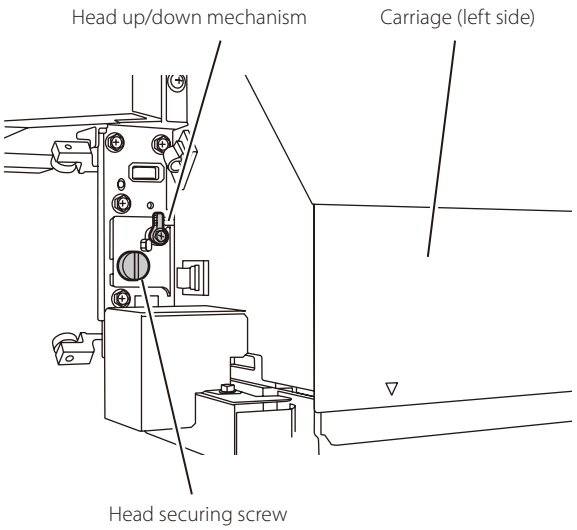
6

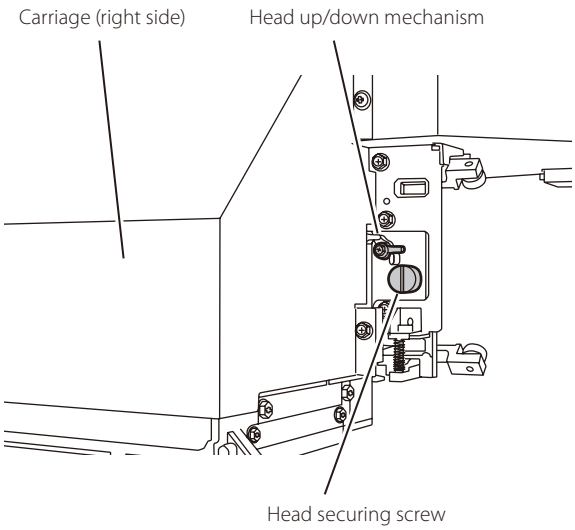
Press the OK button.

Carriage stops moving.

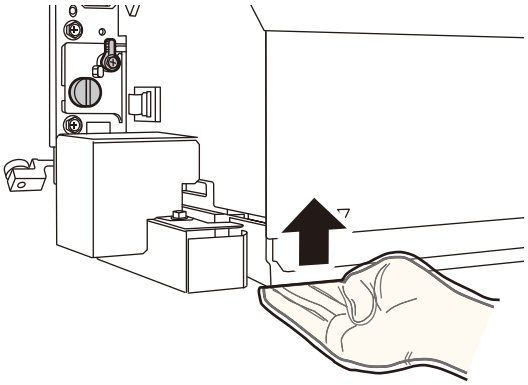
7

Open the front cover and the maintenance area cover and loosen the two head securing screws.





8

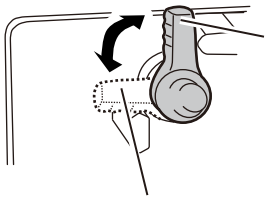


While raising the front of the carriage, change the position of the left head up/down mechanism.

TIP

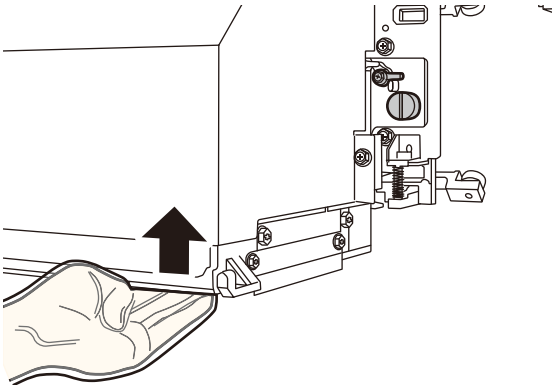
◊ We recommend wearing glove during this operation to keep your hands clean.

Head up/down mechanism positions



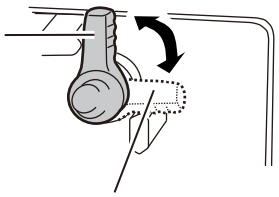
Normally the mechanism is set to the up position.
(For thin or normal thickness media)

The carriage moves to a higher position when the mechanism is set to the left.
(For thick media)



Head up/down mechanism positions

Normally the mechanism is set to the up position.
(For thin or normal thickness media)



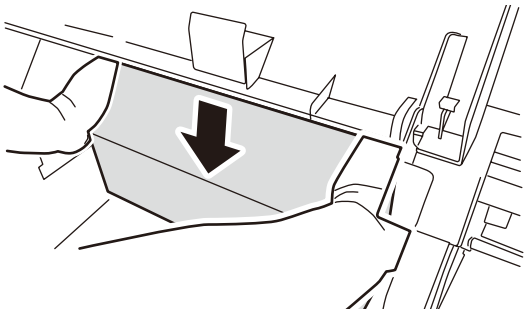
The carriage moves to a higher position when the mechanism is set to the right.
(For thick media)

Next, while raising the front of the carriage, change the position of the right head up/down mechanism.

TIP

◊ The carriage position is 0.5 mm higher when both the right and left head up/down mechanisms are set to the horizontal position.
Generally, Normal is used for glossy and matte vinyl chloride media, and High is used for tarpaulin and FF media. If the media thickness exceeds 0.5 mm, High should be used regardless of the media type. Use also High even with thin media if it is severely wrinkled or contains irregularities that may touch the print head.

9



After changing the position of the head up/down mechanism, push lightly the carriage downward with your hands.

Note

◆ **This operation is required to make sure the height of print heads has been changed correctly.**

10

Tighten the two securing screws.

Note

◆ **Securely tighten the head securing screws using a flathead screwdriver.**
If the head securing screws become loose, the print heads may incline to the right or left, which may affect the print quality.

11

ADUST PH HEIGHT
CLOSE COVERS

↓

CARRIAGE IS MOVING
PLEASE WAIT

↓ **Carriage stops moving.**

Close the maintenance area cover and the front cover.

12

⚠ Notes

- **Do not move the head up/down mechanism with the head securing screws tightened. The head up/down mechanism may break.**
- **After changing the print head height, bidirectional printing may be slightly misaligned. In this case, adjust bidirectional print positions with BIDIR POSITION in the ADJUST menu.**
- **As the gap between the side plate of the printer and the carriage is narrow, if it is hard to reach the head up/down mechanism and the head securing screws, move the carriage to the right (or the left) manually.**
- **Confirm that the right and left head securing screws are tightened. If the carriage moves with the head securing screws loosened, they may strike the media or edge guards, causing poor image quality and damage to the printer.**
- **Always operate the two head up/down mechanisms at the same time and make sure that they are set to the same position.**
- **During adjustment of the head height, a warning beep will be issued.**

Prevent the ink from spreading over the printout

If the ink tends to spread over the printout, set the ionizer to ON.
Generally do not let the ionizer setting to ON but change the setting depending on the characteristics of the media.
After setting the ionizer to ON, the blue LED for automatic print adjustment lights up during printing.

◊ Turning the ionizer on may solve the problem in the following situations.
- Ink dribbles on the media when using a type of media that easily generates static electricity.
- The printout is blurred or ink sprayed over white portions of the media due to the media being charged with static electricity.

1

Press the MENU button.

2

Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

4

Press the Down button to select MISC SETTINGS.

5

Press the OK button.

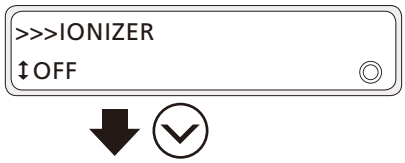
6

Press the Down button to select IONIZER.

7

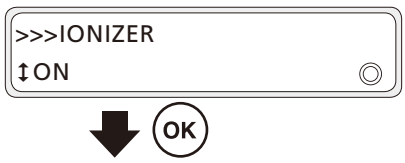
Press the OK button.

8



Press the Up and Down buttons to select ON.

9



Press the OK button.

10

Press the CANCEL button to exit the IONIZER menu.

11

Press the ONLINE button.

Change the automatic cleaning timing

To ensure the print heads' good condition, the printer performs the automatic cleaning. The cleaning mode can be specified for each media preset. Select the cleaning mode depending on the media characteristics.

BEFORE&AFTER PRINT	Based on the previous printing operations, the printer performs the automatic cleaning when starting or when completing the print operation.
BEFORE&DURING PRNT	Based on the previous printing operations, the printer performs the automatic cleaning when starting the print operation or during printing. After cleaning, the printer resumes printing if it was interrupted.
OFF	Automatic cleaning is not performed. Set this mode in the following case. - When printing continuously several data files on media with which differences between printouts will be noticeable if automatic cleaning is performed between two files. If automatic cleaning is set to OFF, determine suitable timing to execute cleaning manually.
INK SAVING	Based on the previous printing operations, the printer performs the automatic cleaning when starting or when completing the print operation. * With INK SAVING, the interval between automatic cleaning operations is longer than with BEFORE&AFTER PRINT.

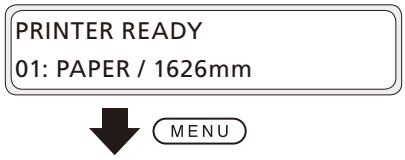
⚠ CAUTION

Pay attention to the following points when automatic cleaning is set to OFF or INK SAVING.

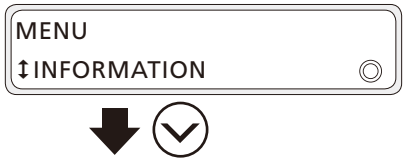
- **Missing dots may appear if the cleaning operation has not been performed for a long time.**
- **Manually perform cleaning when the PH RECOVERY RECOMMENDED message is displayed on the panel to prevent the missing dots problem.**

The following procedure explains how to set BEFORE&DURING PRNT for automatic cleaning in the media preset No.2.

1 **Press the MENU button.**



2 **Press the Down button to select EDIT MEDIA PRESETS.**



3 **Press the OK button.**

4

Press the Down button to select MISC SETTINGS.

5

Press the OK button.

6

Press the Down button to select AUTO PH CLEANING.

7

Press the OK button.

8

Press the Up and Down buttons to select BEFORE&DURING PRNT.

9

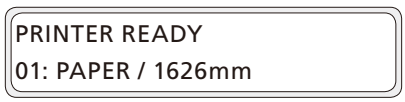
Press the OK button.

10

Press the CANCEL button to exit the AUTO PH CLEANING menu.

11

Press the ONLINE button.



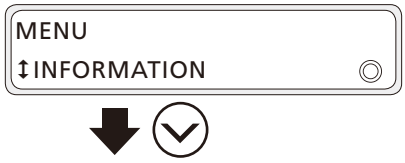
Copy a media preset

The following procedure explains how to copy the parameters registered in media preset No. 2 to media preset No. 10.

1

Press the MENU button.

2



Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

4

Press the Down button to select COPY MEDIA PRESET.

5

Press the OK button.

6

Press the Up, Down, Right, and Left buttons to select a copy source.

Select the copy source and the copy destination number.

7

Press the OK button.

8

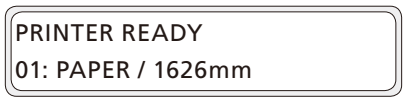
Press the OK button.

9

Press the CANCEL button to exit the COPY DESTINATION menu.

10

Press the ONLINE button.



Change the type of the preset media without reloading the media

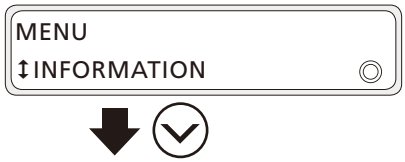
The following procedure explains how to change from Paper media type in preset No. 1 to Glossy media type in preset No. 2.

The media type parameter (02:Glossy here) is called automatically when starting printing, together with the 24 parameters set for each media preset.

1

Press the MENU button.

2



Press the Down button to select CHANGE PRESET.

3

Press the OK button.

4

Press the Up and Down buttons to select the media preset number to set.

5

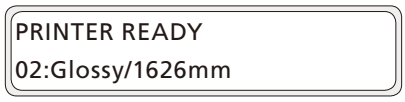
Press the OK button.

6

Press the CANCEL button to exit the CHANGE PRESET menu.

7

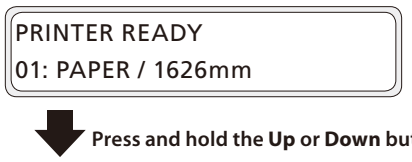
Press the ONLINE button.



Feed or rewind media

Feeding and rewinding operations can be executed in the online state (idle mode).

1



Press and hold the Up or Down button.

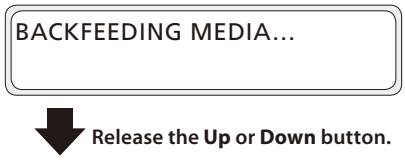
To feed media, press the **Down** button.

To rewind media, press the **Up** button.

2

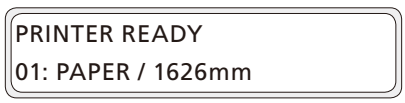
When the Down button is pressed.

When the Up button is pressed.



Release the Up or Down button.

The printer stops feeding or rewinding media, and the display returns to online state.



Move the print start position

Move the print start position (origin), to start printing on your preferred position.
After printing, rewind the roll, and with this function you can print an image in the blank area.

⚠ CAUTION

- **Complete this operation as quickly as possible. Otherwise the print heads may dry, which may cause ink ejection failure. In such a case perform a cleaning.**

1

BACKFEEDING MEDIA...

▼ (^)

Rewind the media.

See **Feed or rewind media** on 📖 *page 191*.

⚠ CAUTION

- **Rewind the media after the printout has completely dried. If the media is rewound while the printout is not sufficiently dry, the printout may be damaged.**

2

PRINTER READY
01: PAPER / 1626mm

▼ (<)

Press the Left button.

3

START ORIGIN SETTING
OK? ◎

▼ (OK)

Press the OK button.

4

ORIGIN SETTING
CARRIAGE IS MOVING

▼ **Carriage stops moving.**

The carriage moves and the origin setting function is activated.

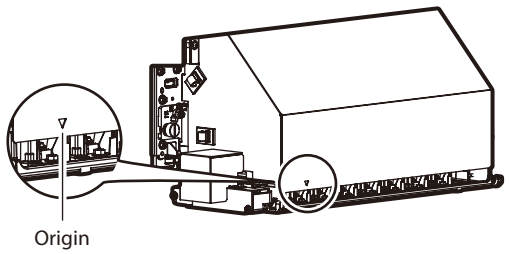
5

SET ORIGIN
OK? ◎

▼ (<), (>)

Move the carriage with the Left or Right button to the position to be set as the origin.

Align the ▽ mark at the bottom left of the carriage cover's front panel with the origin of the next printout.



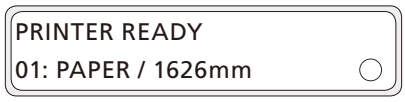
6

Carriage stops moving.

7

Press the OK button to set the origin.

The carriage returns, and the printer enters online state and becomes ready to print.



During origin setting mode, a ◯ symbol is displayed next to the paper width value.

Exit origin setting mode

To cancel an origin that has been set, reinstall the media, or exit the origin setting mode following the procedure below.

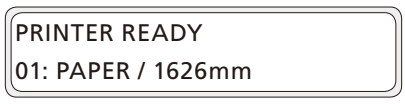
1

Press the Left button when the printer is online in origin setting mode.

2

Press the OK button to exit origin setting mode.

3



The ◯ symbol disappears.

Adjust the head margin before printing

Advance or rewind the media during the preheating time before printing to adjust the margin to the previous printout.

Once printing (scan) has started, this function cannot be used until the job has finished.

1

Press the ONLINE button during the preheating time before printing.

2

The printer enters pause mode. Keep the Down button pressed.

3

Release the Down button to stop feeding the media.

4

Press the ONLINE button to resume printing.

5

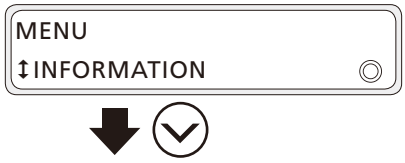
Press the **Up** button to rewind the media.

Fix the print position (margin size)

To secure the print position (margin size) from the media edges, even if the media has skewed, change the SKEW CHECK setting from ON to ON, FIXED MARGIN.

1 

Press the MENU button.

2 

Press the Down button to select EDIT MEDIA PRESETS.

3 

Press the OK button.

4 

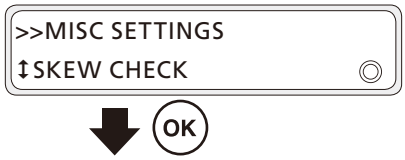
Press the Down button to select MISC SETTINGS.

5 

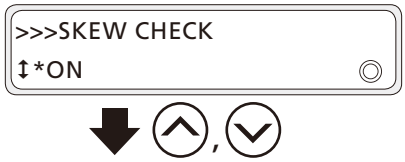
Press the OK button.

6 

Press the Down button to select SKEW CHECK.

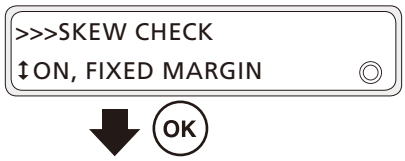
7 

Press the OK button.

8 

Press the Up and Down buttons to select BEFORE&DURING PRNT.

9



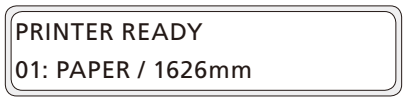
Press the OK button.

10

Press the CANCEL button to exit the SKEW CHECK menu.

11

Press the ONLINE button.



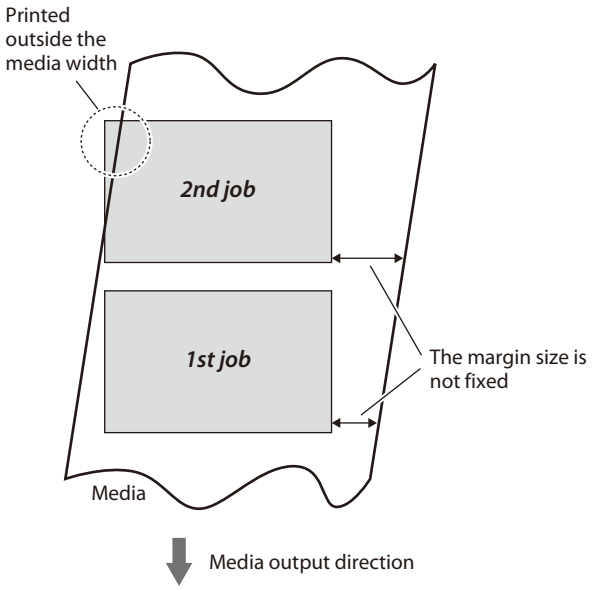
Difference in the print position (margin size) between the SKEW CHECK ON and ON, FIXED MARGIN settings.

Depending of the media used, even if it is installed straight, it may become skewed because it has shifted on the roll or when being fed into the printer.
Usually the image is not printed outside the media width, but this may happen when the image width is almost the same as the media width (with **SKEW CHECK** set to **ON**).
To prevent that, the media edges are detected before the print starts and a margin of a certain size is secured (with **SKEW CHECK** set to **ON, FIXED MARGIN**).
This function is called **fixed margin**.

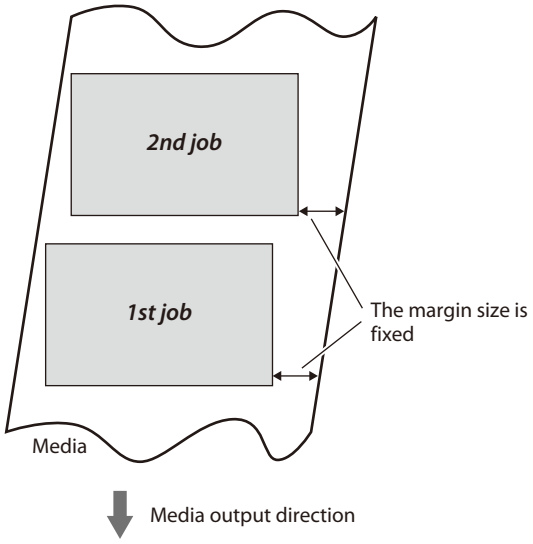
Note

◆ **With the fixed margin mode, a margin of a certain size is secured, but on the other hand printed images with the same size but of a different job may not be aligned when printed consecutively.**

With SKEW CHECK set to ON



With SKEW CHECK set to ON, FIXED MARGIN



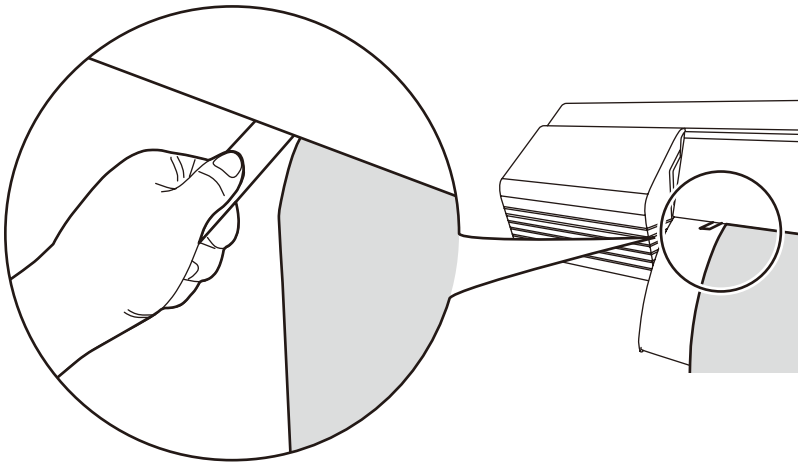
◊ With the skew check function, an error is displayed when the media has greatly skewed from a reference position. The judgment criteria are the same for the **ON** and the **ON, FIXED MARGIN** settings.

Reset the media edge guards during printing

If the media edge guards are not correctly placed on the media edges, or if you want to adjust the edge guards' position during printing, you can manipulate the seat part of the media edge guards to adjust them without opening the front cover.

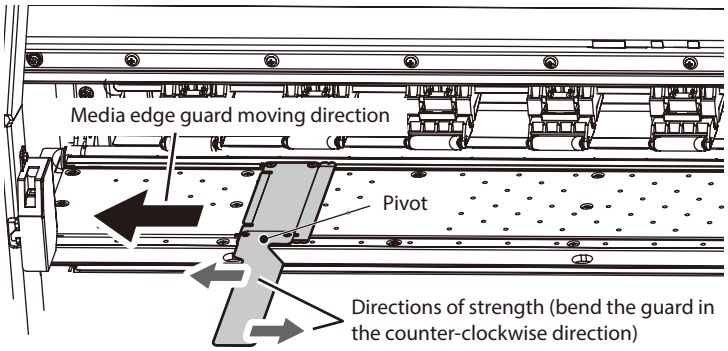
⚠ CAUTION

- **Do not make the adjustment when the carriage passes above the media edge guards.**
  If the media edge guards or the media touch the print heads surfaces, it may cause clogged nozzles or a malfunction.

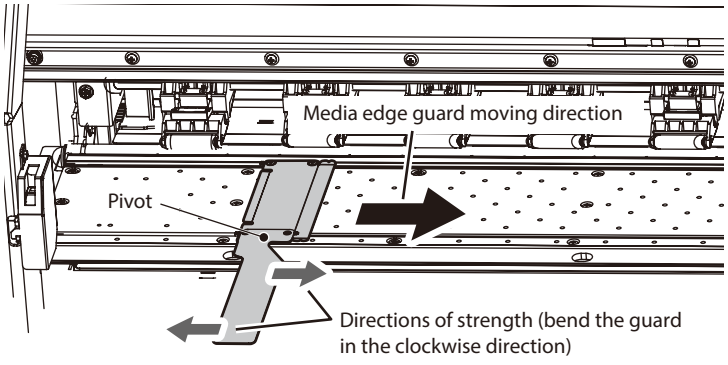


Bend the media edge guards to slide them smoothly.

<To slide the media edge guards to the left>



<To slide the media edge guards to the right>

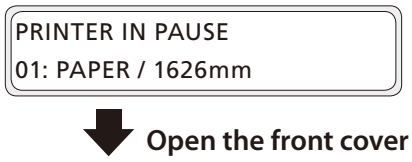


In pause mode during print, the front cover can be opened and closed without canceling the print job.
If the media edge guards are not correctly placed on the media edges, or if the foreign matter is present on the media feeding path, put the printer in pause, open the front cover, and reset the media edge guards or remove the foreign matter.

1

Press the ONLINE button during printing.

2



The printer enters pause mode. Open the front cover.

3

Close the cover to return to the printer pause display.

4

Press the ONLINE button to resume printing.

5

Remove some media wrinkles during printing

If the media wrinkles during printing (online mode), put the printer in pause mode to be able to release the grip.

⚠ CAUTION

- **Some wrinkles can be removed by releasing the the pressure roller (lifting the lever) but this may also decrease the print quality as the media may slip.**

1

PRINTING...
STANDARD ND UNI

ONLINE

Press the ONLINE button during the preheating time before printing.

2

PRINTER IN PAUSE
01: PAPER / 1626mm

Lift the pressure roller lever.

After entering pause mode, lift the pressure roller lever.

When lifting the lever, place your hand on the media to prevent it from slipping.

3

LOWER THE LEVER

Lower the pressure roller lever.

Lower the pressure roller lever and the panel returns to the pause mode display.

4

PRINTER IN PAUSE
01: PAPER / 1626mm

ONLINE

Press the ONLINE button to resume printing.

5

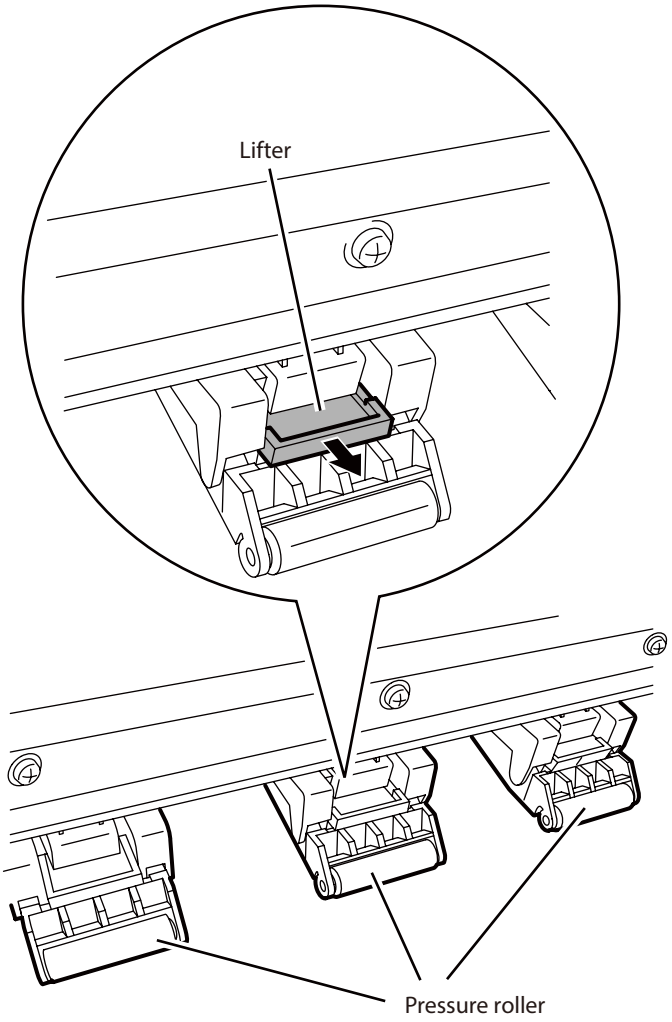
PRINTING...
STANDARD ND UNI

How to use the lifter

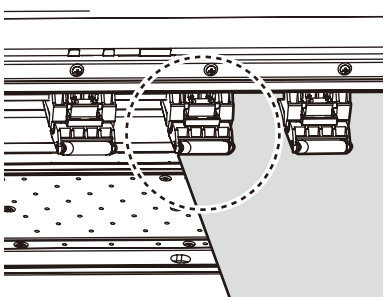
Unless the media is under the entire pressure roller, wrinkles and skews may occur.
In such case, pull toward you the lifter at the upper side of pressure roller to release the pressure force of pressure roller.

⚠ Notes

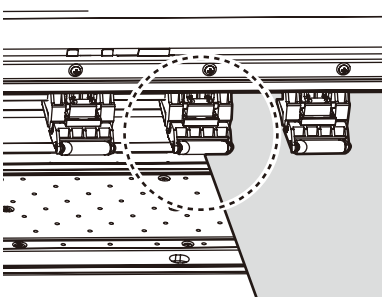
◆ **Wrinkles may be eliminated in all medias.**



Example of when it is not necessary to pull the lifter toward you (The pressure of pressure roller is needed.)



Example of when pulling the lifter toward you (Releasing the pressure force of pressure roller is needed.)



To change the printer's basic settings

Turn the warning beep off

Normally, the printer emits a warning beep when an error occurs. However, the warning beep can be turned off for the three following cases.

- When the print heads are not covered by the caps (during daily maintenance operations, print head height adjustment, or when a media jam occurs)
- When a media take-up error occurs
- When the ink runs out or ink cartridges are not installed

1

Press the MENU button.

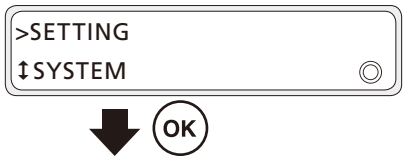
2

Press the Down button to select SETTING.

3

Press the OK button.

4

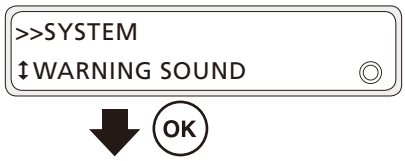


Press the OK button.

5

Press the Down button to select WARNING SOUND.

6



Press the OK button.

7

Press the Up and Down buttons to select the type of the warning sound to change.

8

Press the OK button.

9

Press the Down button to select OFF.

10

Press the OK button.

11

Cleaning options

Perform cleaning only for the specified print head

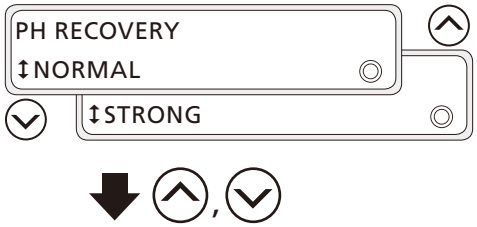
In the printer, the six or seven print heads are classified into the following three groups. Whether or not to perform cleaning can be set for each group. (Cleaning is set to on for each group by default.)

You cannot select print heads independently to clean them if a given length of media has been printed since the last cleaning operation.

Head group 1: Lc and Lm
Head group 2: C, Y, and K
Head group 3: M (6-color printer) / M and Gy (7-color printer)

1 

Press the PH.RECOVERY button.

2 

Press the Up and Down buttons to select the cleaning option.

3 

Press the OK button.

4

Select the print heads to clean.

The correspondence between the ink colors and the print head numbers is shown in the table below.

Head group 1		Head group 2			Head group 3	
Lc	Lm	C	Y	K	M	Gy
1	2	3	4	5	6	7

(1) Press the **Left** and **Right** buttons to select the print head number.

(2) Then press th **Down** and **Up** buttons to display or hide the number. Display it to clean the print head, or hide it not to clean the print head.

Changing the setting for one head in a group changes the setting for all the other heads in the group.

5

Press the OK button.

In the example to the left, the print heads Lc and Lm, and M and Gy will be cleaned.

6

Press the OK button.

Check visually that the waste ink bottle is not full.

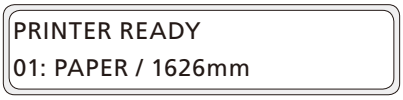
The time is counted down every ten seconds.

Cleaning starts.

Print head cleaning takes several minutes.

When the cleaning starts, the required time is displayed and the time is counted down every 10 seconds.

7



The printer enters the online mode.

When the cleaning finishes, the printer enters the online mode.

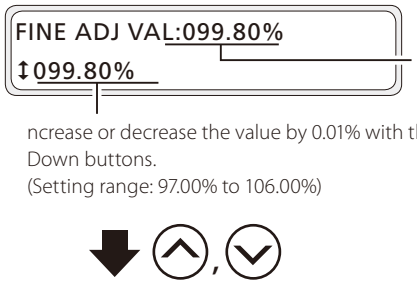
Controlling the media advance adjustment value

Change the media advance adjustment value during printing

1

Press the Up or Down button while PRINTING... is displayed.

2

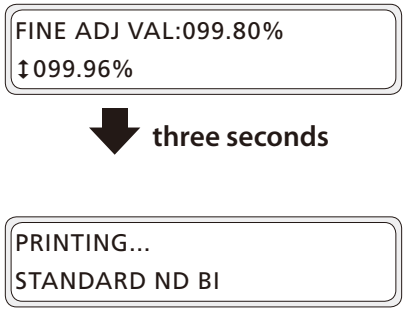


Press the Up and Down buttons to modify the adjustment value.

The changed value is applied immediately after change.

The adjustment value displayed when the print started does not change until the print finishes.

3



The changed value is registered as the adjustment value and will be applied for the next print.

The panel display of the adjustment value during printing returns automatically to the previous screen if no buttons are pressed for three seconds.

Print conditions

Twelve print modes are available on the printer, including different density levels for the same resolution.
* Print modes are limited on the LCIS model, for a total of eight modes.
You can also select two speeds for the carriage in each of the 12 print modes.
Select print conditions to achieve the productivity and quality that match the media and the application.

Generally use the printer in Standard print mode with Standard carriage speed.
Use the other mode to prioritize productivity or quality.

If you have changed the print mode...

◊ Depending on the media, the media advance adjustment value may change for each mode.
◊ Determine the media advance adjustment value manually if banding or other problems appear on the printout.
(📖 page 59)

Print modes

Set the print mode for your desired resolution, number of passes, and density.
The lower the resolution and number of passes, the higher the productivity.
Increasing the resolution and number of passes the enhances the print quality reduces the visible grains.

(CIS)

Print mode	Resolution	Number of passes	Maximum density (When the STANDARD is 1)	Description
DRAFT	360 dpi x 180 dpi x DDP	3	1	Fastest print mode. Use this mode when prioritizing productivity.
FAST PRODUCTION	360 dpi x 360 dpi x DDP	4	1	Mode that prioritizes productivity over quality.
PRODUCTION	360 dpi x 360 dpi x DDP	6	1	Mode that slightly prioritizes productivity compared to standard mode.
PRODUCTION / HIGH DENSITY	360 dpi x 360 dpi x DDP	6	1.5	The high-density mode that prioritizes productivity. The ink may takes time to dry as a large quantity of ink is used. Consequently do not use the TUR unit with this mode.
STANDARD	540 dpi x 360 dpi x DDP	6	1	This is the standard mode. Generally use this mode.
STANDARD / HIGH DENSITY	540 dpi x 360 dpi x DDP	6	2	Productivity is more prioritized in this mode than in high-density high quality mode. The ink may takes time to dry as a large quantity of ink is used. Consequently do not use the TUR unit with this mode.
QUALITY	540 dpi x 540 dpi x DDP	9	1.1	Mode that slightly prioritizes quality compared to standard mode.
QUALITY / HIGH DENSITY	540 dpi x 540 dpi x DDP	9	1.9	Productivity is slightly more prioritized in this mode than in high-density high quality mode. The ink may takes time to dry as a large quantity of ink is used. Consequently do not use the TUR unit with this mode.
HIGH QUALITY	720 dpi x 720 dpi	12	1	Mode that achieves high-resolution quality.
HIGH QUALITY / HIGH DENSITY	720 dpi x 720 dpi	12	2	Generally use this mode to print in high density.
MAX QUALITY	900 dpi x 900 dpi	15	1.5	Mode that achieves the best quality in high resolution.
MAX QUALITY / HIGH DENSITY	900 dpi x 900 dpi	15	3.1	Mode that achieves the best quality in high resolution and high density.

(LCIS)

Print mode	Resolution	Number of passes	Maximum density (When the STANDARD is 1)	Description
FAST PRODUCTION	360 dpi x 360 dpi x DDP	4	1	Mode that prioritizes productivity over quality.
PRODUCTION	360 dpi x 360 dpi x DDP	6	1	Mode that slightly prioritizes productivity compared to standard mode.
STANDARD	540 dpi x 360 dpi x DDP	6	1	This is the standard mode. Generally use this mode.
QUALITY	540 dpi x 540 dpi x DDP	9	1.1	Mode that slightly prioritizes quality compared to standard mode.
HIGH QUALITY	720 dpi x 720 dpi	12	1	Mode that achieves high-resolution quality.
HIGH QUALITY / HIGH DENSITY	720 dpi x 720 dpi	12	2	Generally use this mode to print in high density.
MAX QUALITY	900 dpi x 900 dpi	15	1.5	Mode that achieves the best quality in high resolution.
MAX QUALITY / HIGH DENSITY	900 dpi x 900 dpi	15	3.1	Mode that achieves the best quality in high resolution and high density.

*DDP: Means Dynamic Dot Printing which is a technology used to print with dots of different sizes. Small dots are used to reduce the visible grains and large dots are used to increase the density.

⚠Notes

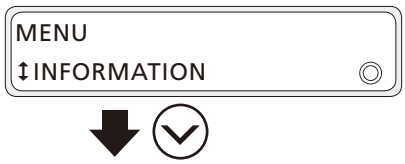
- **The recommended modes are STANDARD to print in normal density and HIGH QUALITY / HIGH DENSITY to print in high density.**
  Use the other modes according to your needs for productivity and quality.
- **Printing in HIGH DENSITY uses large quantity of ink. Sometimes it may cause the ink to blur, ink drying problems, or take-up problems.**
  In such cases, reduce the printing speed.

Set the carriage speed

You can set the carriage to NORMAL or SLOW.
Normally, set the speed to NORMAL. Select SLOW to obtain a better resolution and a more precise print.
(The carriage speed cannot be changed from the RIP software. Use panel operations or CP_Manager)

1 

Press the MENU button.

2 

Press the Down button to select EDIT MEDIA PRESETS.

3 

Press the OK button.

4

Press the Down button to select MISC SETTINGS.

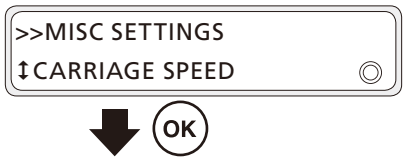
5

Press the OK button.

6

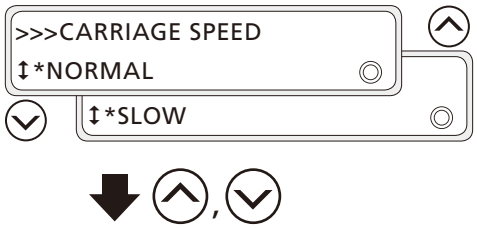
Press the Down button to select CARRIAGE SPEED.

7



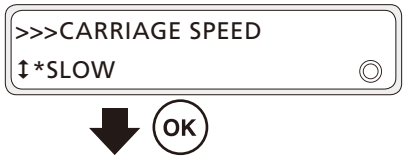
Press the OK button.

8



Press the Up and Down buttons to select NORMAL or SLOW.

9



Press the OK button.

SLOW is set in the example on the left.

10

Print speed

The print speed depends on the print mode and the carriage speed. Print speeds are shown in the table below. The real print speed may be slower than the indicated values depending on factors such as the media width. The print speed values are the same with the LCIS model.

Print speeds of the IP-6620 *1

Print mode	Carriage speed	
	NORMAL	SLOW
DRAFT *2	66.5 m²/h	40.6 m²/h
FAST PRODUCTION	49.7 m²/h	30.4 m2/h
PRODUCTION	33.1 m²/h	20.2 m²/h
PRODUCTION / HIGH DENSITY *2		
STANDARD	23.9 m²/h	14.2 m²/h
STANDARD / HIGH DENSITY *2		
QUALITY	16.0 m²/h	9.5 m²/h
QUALITY / HIGH DENSITY *2		
HIGH QUALITY	9.2 m²/h	5.4 m²/h
HIGH QUALITY / HIGH DENSITY		
MAX QUALITY	6.0 m²/h	3.5 m²/h
MAX QUALITY / HIGH DENSITY		

*1 The indicated speed values are when printing full width on a media of 1626 mm (64 inches) in width.

*2 Only supported by the CIS model.

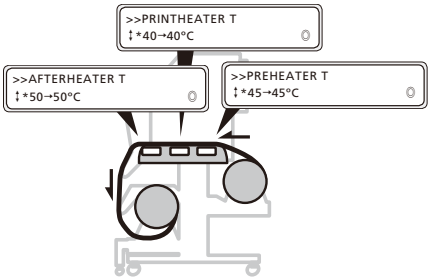
Adjust the heaters temperatures

Each heater initial value is set in the media preset menu. These values are automatically set for the heaters temperatures.

Therefore, normally the heater control menu is not required.
The heater control menu is used to:
- Complete the temperature fine adjustment during the print operation; or
- Confirm the current heater temperature

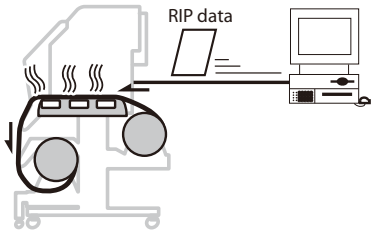
Procedure to set the heaters temperatures

(1) The heaters are in standby at the initial temperature registered with the media used.



When a media type is selected after installing the media, initial temperature values of each heater for the selected media type are displayed on the menu.

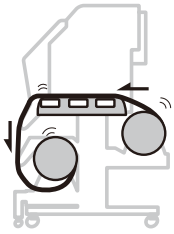
(2) Heating starts after receiving the data from the RIP software.



When the heaters temperatures are set with the print and job data from the RIP software, the temperatures on the heater control menu are overwritten by the temperatures from the RIP.

◊ To use the initial temperatures set on the operation panel rather than the temperature set with the RIP, set HEATER PRIORITY in the media preset menu to PANEL SETTING.

(3) When the heaters temperatures have almost reached the set temperatures, the print operation starts.

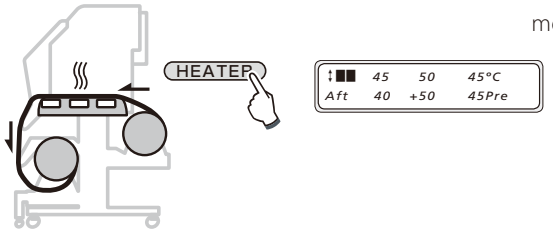


When the current temperatures of the afterheater, printheater, and preheater reach a temperature of 1°C lower than the set temperature, the printer starts printing.

◊ The heaters maximum set temperatures are as follows.
Afterheater: 55°C
Printheater: 55°C
Preheater: 55°C

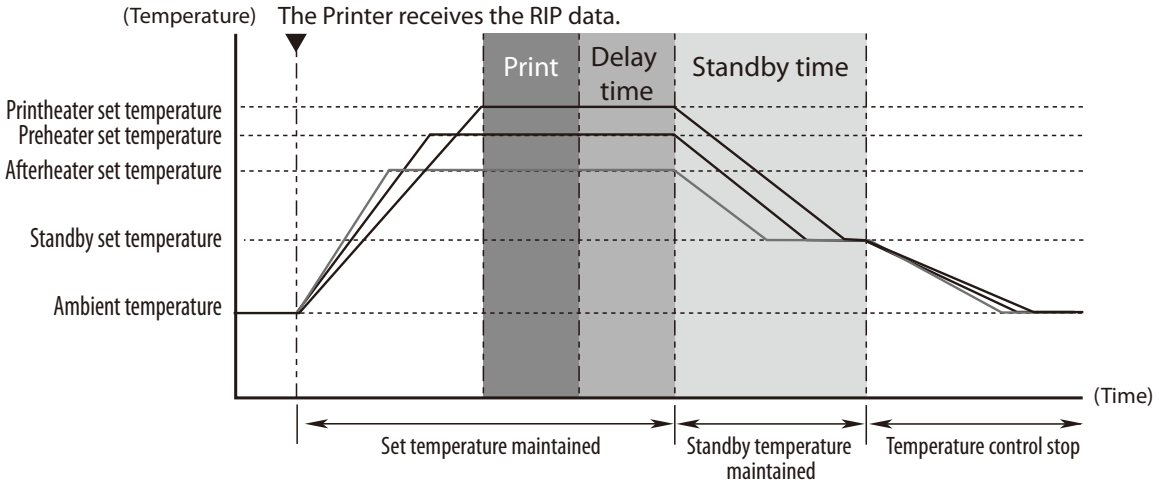
◊ Even after the print is completed, the temperatures changed during this procedure remain as the heaters setup temperatures, until the media is installed again or the printer is turned off. However, the heater temperature settings in the media preset menu are not changed.

(4) Changing the heaters temperatures during the print operation.



During the print operation the heaters temperatures may be changed by specifying set temperatures in the heater control menu.

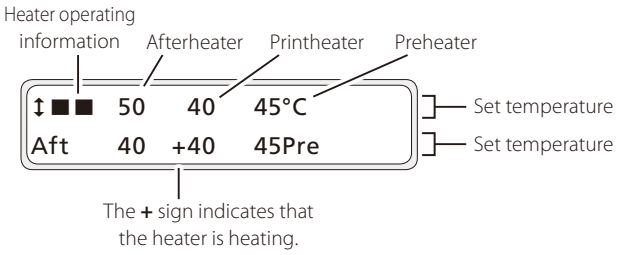
The heater temperature control system for printing



◊ The heaters are in standby at the temperatures below.
Preheater: 35 °C
Printheater: 35 °C
Afterheater: 35 °C
However, the heaters temperatures above are lowered to the set temperatures if the set temperatures are lower than the standby temperatures.

Display the heater control menu

Press the **HEATER** button to display the heater control menu.



Heater operating information

- Force heating ON:

- Normal operation:

- Heater temporarily OFF:

Button operations in the heater control menu

and buttons	Change the digit (select the target of the operations)
and buttons	Change the heater temperature or the heater operation.
OK **button**	Set the afterheater, printheater, or preheater on and off individually.

Exit the heater control menu display

Press the **HEATER** button while the heater control menu is displayed.

When the heater control menu display ends automatically

If no buttons are input for 30 seconds while the heater control menu is displayed, the message **HEATER DISPLAY ENDED** appears automatically for two seconds and then the heater control menu display ends. While this message is displayed, no button input is effective.

Heater preset temperature for each media

The heater preset temperatures for each media type are listed below. Preset the heater temperature according to the media you use.

Media	Media type	Recommended heater temperature setting			Print mode
		Afterheater	Printheater	Preheater	
Glossy vinyl	Glossy	50 °C	40°C	45°C	STANDARD, bidirectional
Matte vinyl	Matte	50 °C	40°C	45°C	STANDARD, bidirectional
Banner	Banner	50 °C	40°C	45°C	STANDARD, bidirectional

We recommend setting the preheater, the printheater, and the afterheater temperatures to the following ranges.

Preheater: 50°C or lower

Printheater: 45°C or lower

Afterheater: 55°C or lower

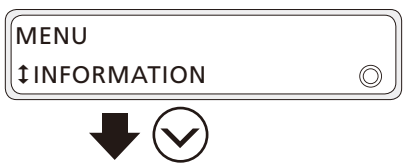
Notes

- **When the printheater temperature is set very high, the ink fusion on the media is improved, however this may cause the media to wrinkles or the printout to be very matte. Adjust heater temperatures according to the media type and the environmental temperature.**
- **When the printheater temperature is too high, the printer may print at low speed to ensure stable print quality.**
- **Set the preheater/afterheater temperatures 5°C higher than the printheater temperature. Incorrect temperature balance between preheater/afterheater and printheater may cause the media to wrinkle.**
- **Setting the printheater temperature too high may lead to missing dots on the printout.**

Set the heater preset temperature

1 

Press the MENU button.

2 

Press the Down button to select EDIT MEDIA PRESETS.

3

Press the OK button.

4

Press the Down button to select AFTERHEATER T.

5

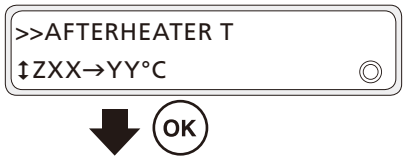
Press the OK button.

6

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Temperature currently set
YY: Temperature after the change

Enter the temperature.
Press the Left and Right buttons to select a digit, and press the Up and Down buttons to set a value.

7



Press the OK button.

8

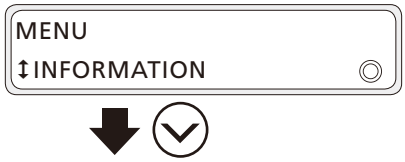
Set the print end heating time

Set the duration the heater maintains the set temperature after printing.

1

Press the MENU button.

2

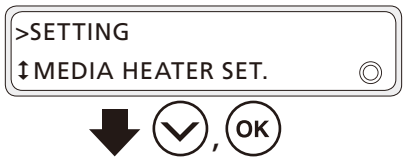


Press the Down button to select SETTING.

3

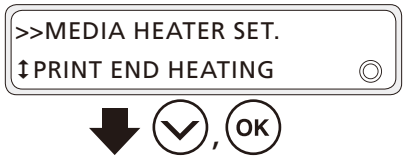
Press the OK button.

4



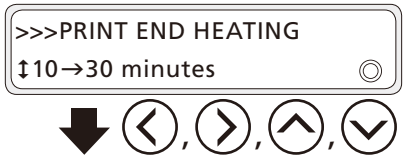
Press the Down button to select MEDIA HEATER SET., and then press the OK button.

5



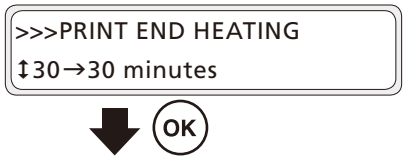
Press the Down button to select PRINT END HEATING, and then press the OK button.

6



Press the Right and Left buttons to select the digit, and press the Up and Down buttons to select a value for the print end heating time.

7



Press the OK button.

8

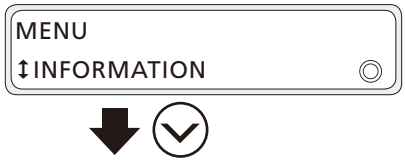
Select the standby time

Select the time to maintain the standby set temperature of the heater (including the time for transition to the standby set temperature) after printing.

1

Press the MENU button.

2

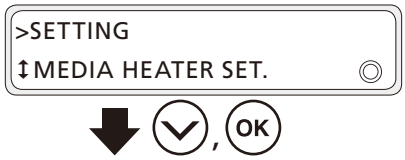


Press the Down button to select SETTING.

3

Press the OK button.

4



Press the Down button to select MEDIA HEATER SET., and then press the OK button.

5

Press the Down button to select STANDBY TIME, and then press the OK button.

6

Press the Up and Down buttons to set the standby time.

7

Press the OK button.

8

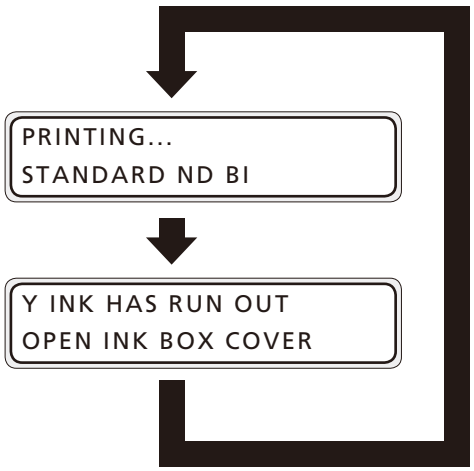
Out of ink while printing (CIS)

You can replace ink cartridges while printing without suspending the print operation.
When an ink cartridge is empty, the **INK** LED goes off. You are advised to follow the message instructions.

1

INK LED goes off.

2



The message appears and a warning beep is emitted to prompt you to replace the ink cartridge.

3

Open the ink box cover, and replace the ink cartridge.

See **Install and replace an ink cartridge (CIS)** on 🕮 ***page 218***.

The warning beep does not stop.

◊ The printer continues to emit the warning beep if there is still no more ink left when the printing finishes. However, the warning beep does not emit if another error occurs.

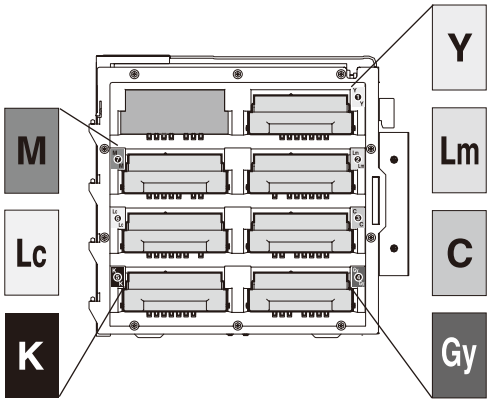
◊ Perform one of the following action to stop the warning beep.
- Replace the empty ink cartridge.
- Open and close the ink box cover.

Opening and closing the ink box cover temporarily stops the warning beep. However, since the warning beep will be emitted again if you continue printing without ink, it is recommended to quickly replace the empty ink cartridge.

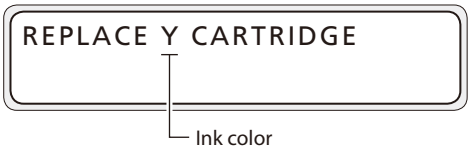
◊ Refer to page 🕮 ***page 202*** if you want to stop the warning beep from being emitted when you print with no more ink left.

Install and replace an ink cartridge (CIS)

When installing ink trays, be sure to insert each tray into its correct slot position in the ink box.
Note that an ink tray position (slot) is decided depending on its ink color.



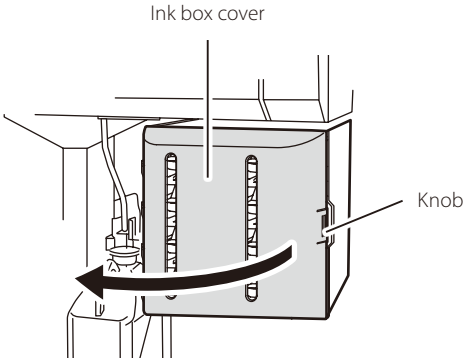
LCD message



⚠ CAUTION

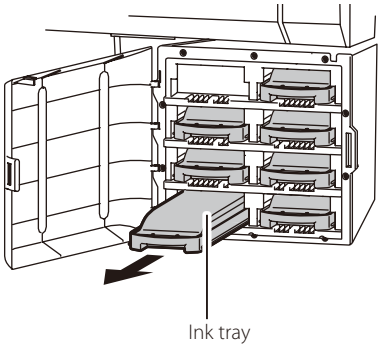
- **Do not remove ink trays in the following cases. Otherwise, ink may spill in the printer depending on its state, which may damage the printer.**
  - **The printer is not turned on because the power was interrupted or because the circuit breaker is off.**
  - **An error other than ink end has occurred.**
- **Do not touch the contact point on the ink cartridge's plate.**

1



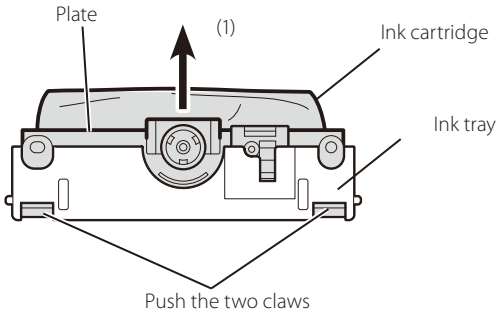
Push the knob of the ink box cover to open the ink box.

2



Confirm the color of the ink cartridge to be replaced, and pull its ink tray out of the printer.

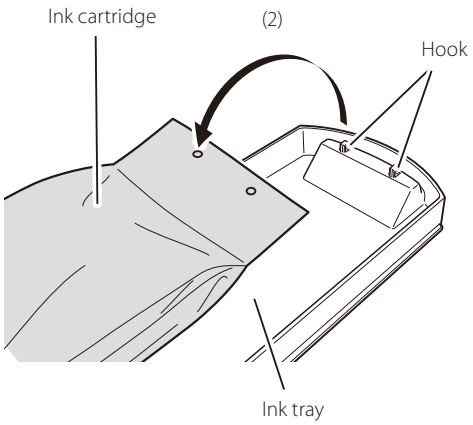
3



If no ink cartridge is installed on the ink tray, go to the step **4**.

Remove the empty ink cartridge from the ink tray.

(1) Push the two claws at the lower part of the the ink cartridge's plate, and pull up the plate.

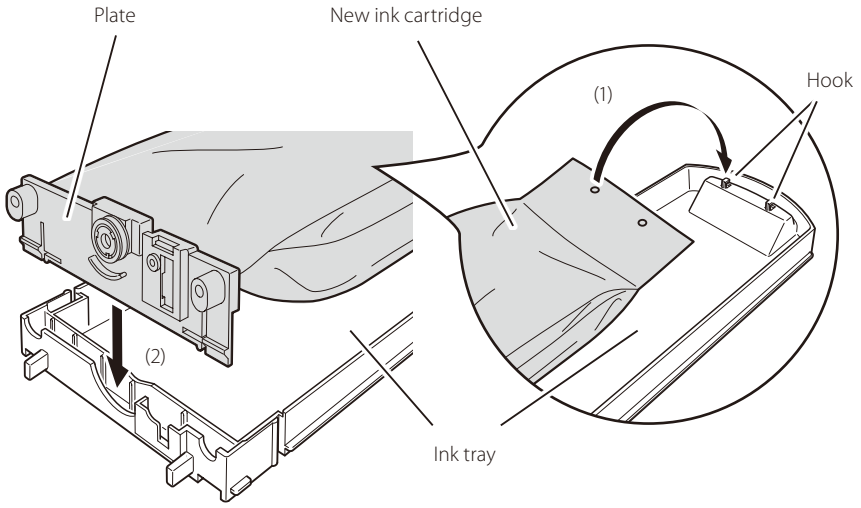


(2) Remove the ink cartridge from the hook of the ink tray.

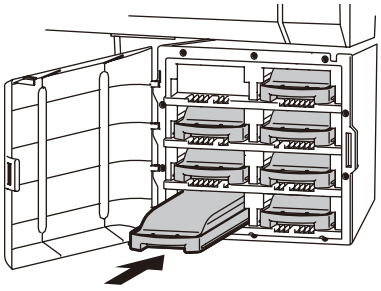
4

Take a new ink cartridge out of the package and set it on the ink tray.

Hook the two holes (1) at the ink cartridge end on the ink tray's two protrusions. Then insert the ink cartridge plate into the ink tray until you hear a click (2).



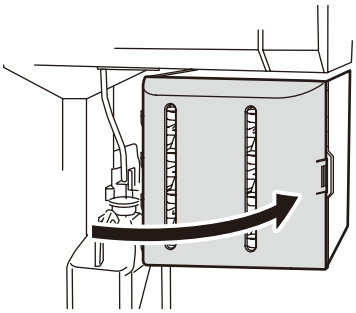
5



Insert the ink tray into the slot in the printer.

Insert the ink tray as far as it goes.

6



Close the ink box cover.

7

Confirm that the ink cartridge has been successfully replaced.

- When the replacement is successfully completed, the printer returns to the online or offline state.
- If the replacement is not completed, an error message appears. Retry the replacement procedure beginning from step ***1***.
- The print operation is performed even during the ink cartridge replacement, as far as ink remains in the subcartridge.

Out of ink while printing (LCIS)

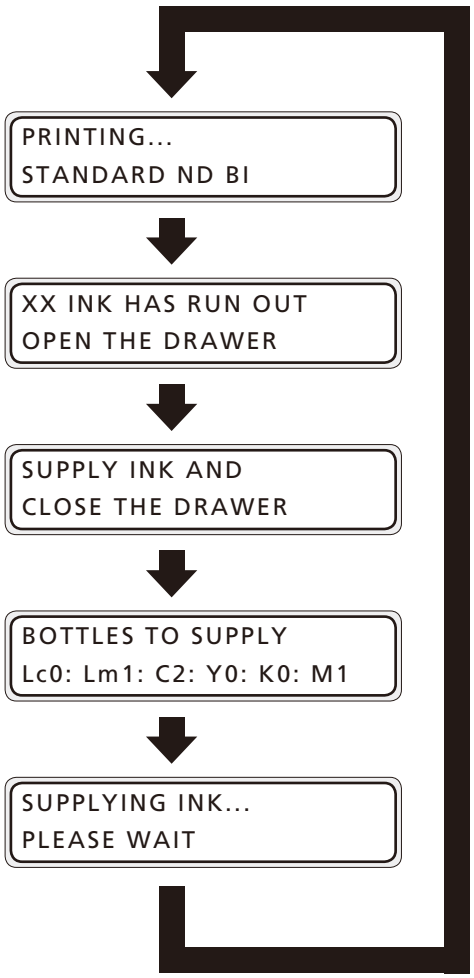
You can replace ink bottles (supply ink to the reservoirs) while printing in online state without suspending the print operation.
When ink has run out, the **INK** LED goes off. You are advised to follow the message instructions.

1

INK LED goes off.

2

The message appears and a warning beep is emitted to prompt you to supply ink.



3

Open the LCIS drawer, and replace the ink bottles.

See **Install and replace an ink bottle (LCIS)** on 🕮 ***page 222***.

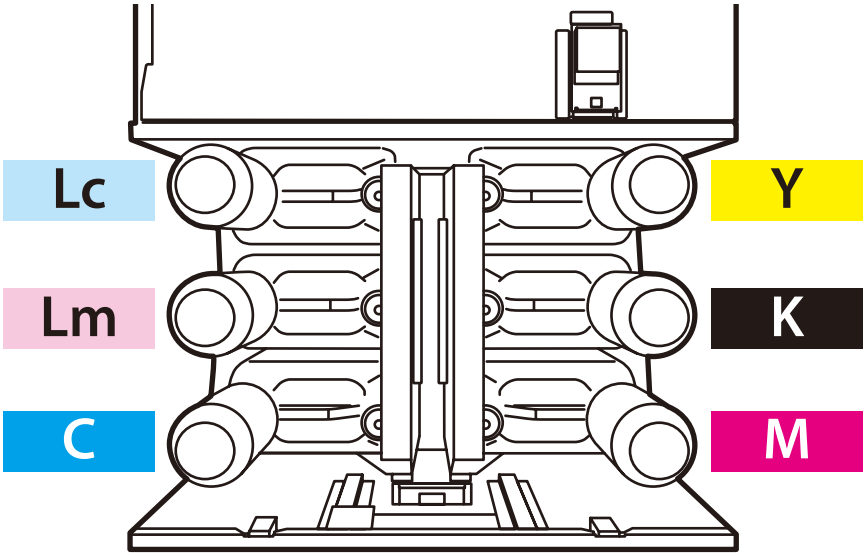
The warning beep does not stop.

- ◊ The printer continues to emit the warning beep if there is still no more ink left when the printing finishes. However, the warning beep does not emit if another error occurs.
- ◊ Perform one of the following action to stop the warning beep.
  - Supply ink that has run out.
  - Open and close the LCIS unit drawer.

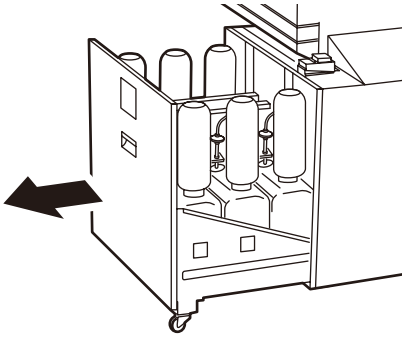
  Opening and closing the LCIS unit drawer temporarily stops the warning beep. However, since the warning beep will be emitted again if you continue printing without ink, it is recommended to quickly supply ink that has run out.
- ◊ Refer to page 🕮 ***page 202*** if you want to stop the warning beep from being emitted when you print with no more ink left.

Install and replace an ink bottle (LCIS)

The installation locations for the ink bottles are determined by color. Always install the bottles to their specific reservoir.

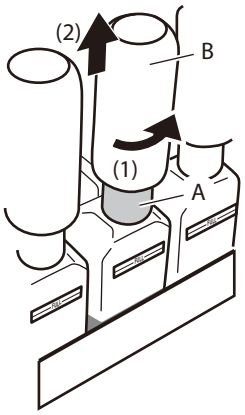


1



Open the LCIS unit drawer.

2



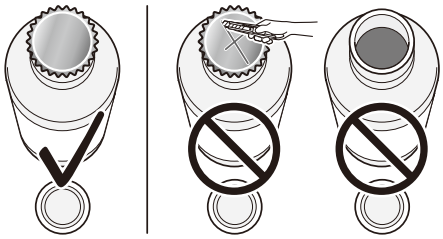
Verify the color of the ink bottle to replace, and remove the ink bottle.

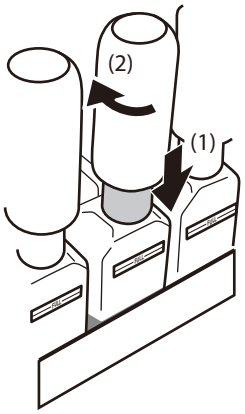
Turn slowly the B part in the counter-clockwise direction while holding the A part with your hand to prevent it from turning.

Note

- **Pay attention not to soil yourself or the surroundings when removing the bottle.**

3



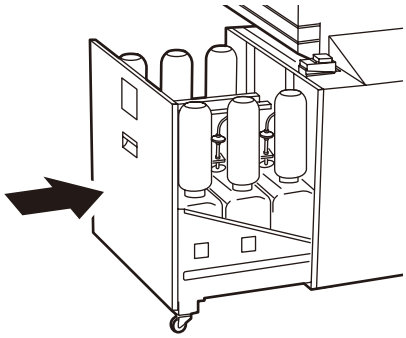


Install the ink bottle to supply ink to the reservoir.

Note

- **Pay attention to the color of the ink to supply when installing the bottle.**
- **When supplying several ink bottles, always wait until the ink in the bottle has completely poured into the reservoir before removing the bottle.**
- **Leave the bottle on the reservoir after you have finished supplying all the ink.**

4



Close the LCIS unit drawer.

5

The replacement procedure is complete.

- When the procedure is completed normally, the printer returns to the online or offline state.
- An error message is displayed if the procedure is not completed normally.
  In such as case, start the procedure again from step 1.
- Printing continues as long as ink remains in the reservoir, even when ink is being supplied.

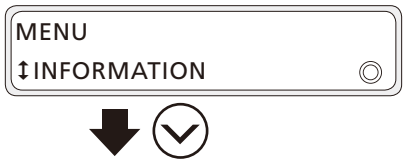
Read the ink amount extension chip (LCIS)

If you have supplied ink with the ink bottles, always read with the ink chip reader the ink amount extension chip supplied with the ink bottles.
If you do not read the ink amount extension chip, the amount of ink that can be used will decrease and you will not be able to print anymore.

1

Press the MENU button.

2



Press the Down button to select INK AMT EXTENSION.

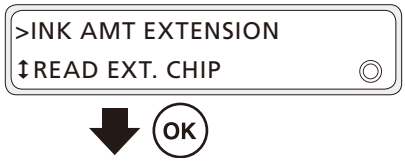
3

Press the OK button.

4

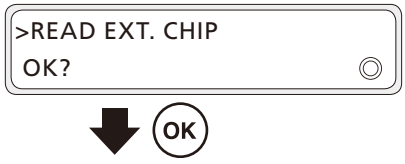
Press the Down button to select READ EXT. CHIP.

5



Press the OK button.

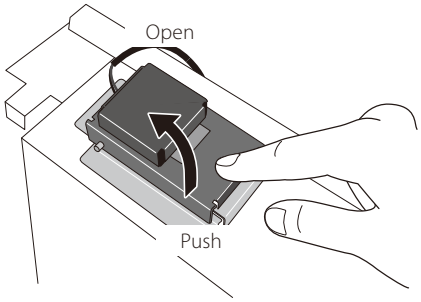
6



Press the OK button.

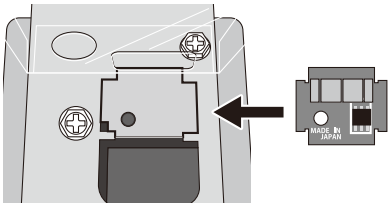
7

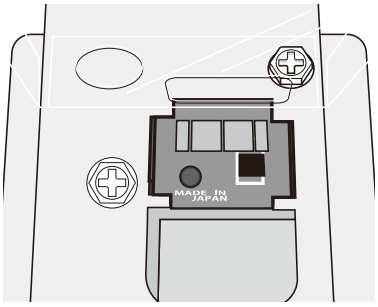
8



Open the cover of the ink chip reader.

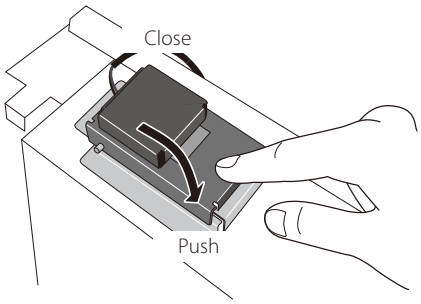
9





Insert the ink amount extension chip in the ink chip reader.

10



Close the cover of the ink chip reader.

11

```
READING...
PLEASE WAIT
```

The data of the ink amount extension chip is read automatically.

12

```
OPERATION COMPLETED
X.XXL
```

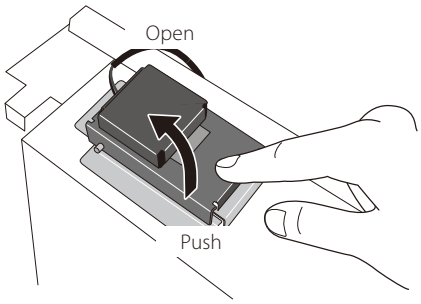
X.XXL: Amount of ink that can be used

After the ink amount extension chip has been read, a completion message is displayed.

13

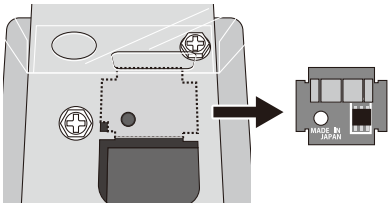
```
REMOVE THE
EXTENSION CHIP
```

14



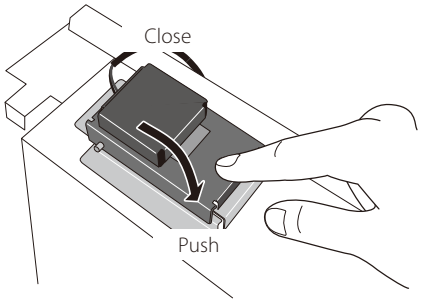
Open the cover of the ink chip reader.

15



Remove the ink amount extension chip from the ink chip reader.

16



Close the cover of the ink chip reader.

17

INSERT EXT. CHIP
PRESS CANCEL TO QUIT

CANCEL

>INK AMT EXTENSION
↕READ EXT. CHIP ◎

If you have finished reading ink amount extension chip, press the **CANCEL** button.

To read another ink amount extension chip, perform the steps ***8*** to ***16*** of this procedure again.

⚠ Note

◆ **The following message is displayed if the ink amount extension has failed.**

<When the read chip has already been used>

OPERATION FAILED
ALREADY USED CHIP ◎

(Solution)

Read an ink amount extension chip that has not been used with the printer.

<When the read chip is not supported by the printer>

OPERATION FAILED
INCORRECT INK TYPE ◎

(Solution)

Read an ink amount extension chip that has been supplied with the ink bottles for this printer.

<When the read chip is not an ink amount extension chip>

OPERATION FAILED
UNKNOWN CHIP ◎

(Solution)

Read an ink amount extension chip that has been supplied with the ink bottles for this printer.

<When the chip could not be read>

OPERATION FAILED
UNABLE TO READ CHIP ◎

(Solution)

Ask your dealer or a service representative.

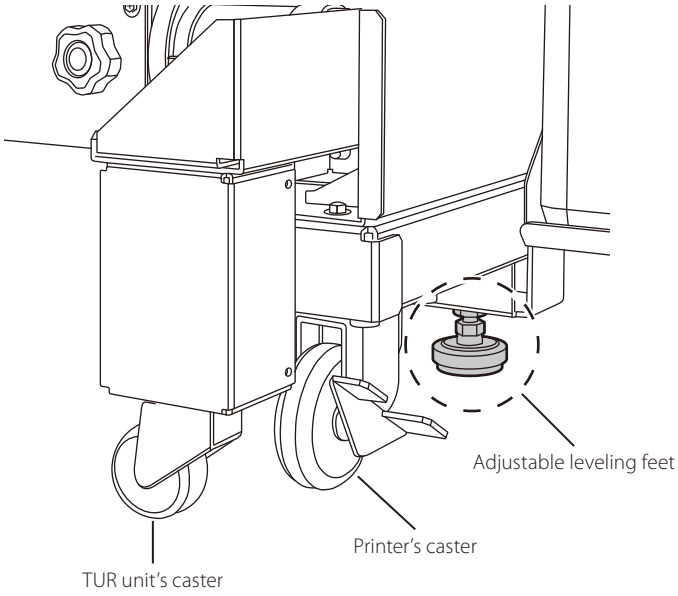
Or read another ink amount extension chip.

Move the printer

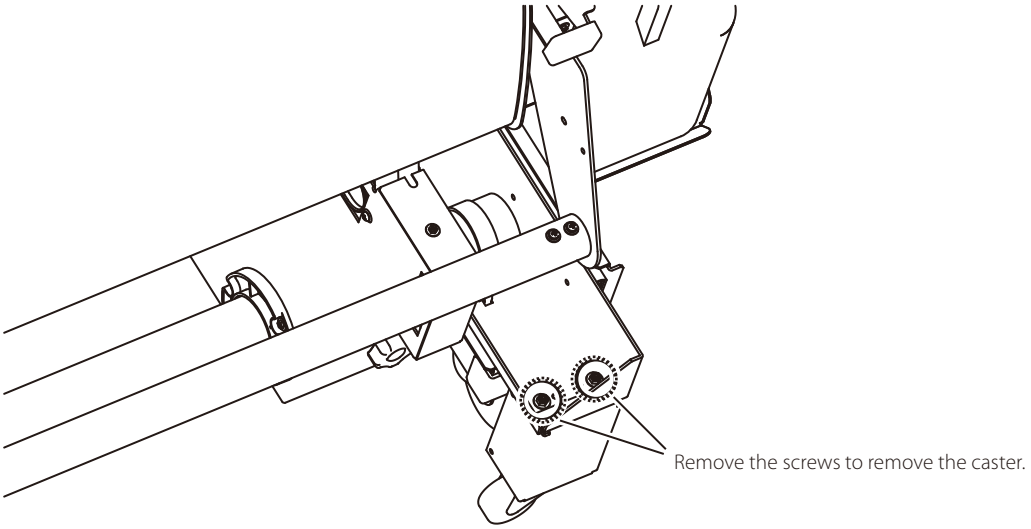
If you wish to move the printer several meters on the same site, across a horizontal floor with no steps and no slopes, see the following instructions.
For more difficult movement, contact your dealer or a service representative.

⚠ CAUTION

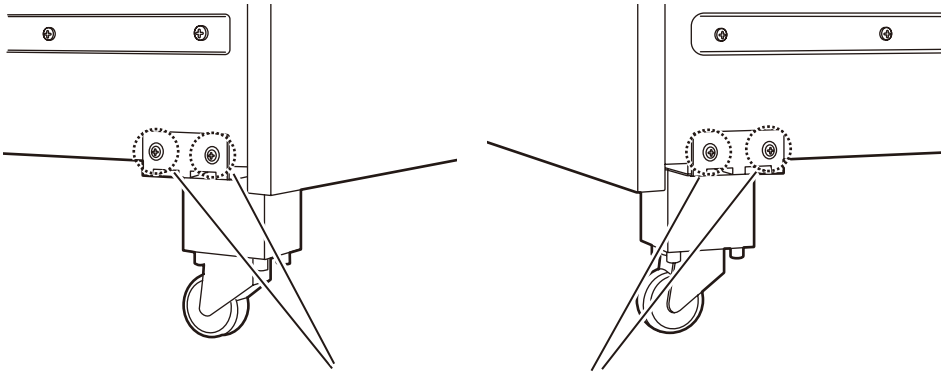
- **Do not move the printer with a media roll attached. Otherwise the heavy media may damage the printer.**
- **Raise a little the leveling feet (two on the front and two on the rear) of the printer before moving the printer. Do not forget to set these leveling feet again after moving the printer to secure it.**
- **Move the printer carefully so that the leveling feet do not hit any obstructions.**
- **Make sure that the TUR unit casters do not reach the floor when moving the printer.**



- **If the casters touch the floor, remove the screws shown circled in the figure below and remove the casters. One caster is equipped at both the right and left sides of the TUR unit. Moving the printer without removing them may damage the TUR unit casters.**



◆ **If the LCIS unit casters touch the floor, remove the screws shown circled in the figure below and remove the casters.**



Remove the screws to remove the caster.

Troubleshooting

Check the problem

Before deciding that there is a serious problem with the printer, check the following items.

Power does not turn on.

Items to be checked	Corrective measures
Power cable connection	Check that the power cable is correctly plugged into the power outlet.
Power supply to the outlet	Supply power to the power outlet.
Power switch on/off	Turn on the power switch. See **Turn the printer on** on *page 38*.

The paper guide is not heated even when the heater is turned on.

Items to be checked	Corrective measures
Printer status	The paper guide is heated during printing or when the heater is turned on with the heater control menu. Make sure that the paper guide is heated by printing the nozzle print pattern or set the heater to ON. See **Adjust the heaters temperatures** on *page 211*.
Host computer RIP software setting	The heater temperature can also be set in the RIP software on the host computer. Check the host computer setting.
Heater control menu	Turn on the heaters (afterheater/printheater/preheater) again, and then print the nozzle print pattern or forcibly set the heater to ON to check that the paper guide is heated. See **Adjust the heaters temperatures** on *page 211*.
Power voltage	Connect the printer to 200 V AC power.

The printer does not start or operate correctly.

Items to be checked	Corrective measures
ERROR LED and message on the operation panel	See **When an error message is displayed** on *page 235*.

The printer cannot print.

Items to be checked	Corrective measures
USB cable connection	Connect the USB cable correctly. See **To connect the USB cable** on *page 41*.
ERROR LED and message on the operation panel.	See **When an error message is displayed** on *page 235*.
ERROR LED off	Print the nozzle adjustment pattern. See **Print the nozzle print pattern** on *page 105*. (Confirm that the RIP software **Test pattern** is printed.)
Print head cleaning	Clean the print heads. See **Performing cleaning independently** on *page 103*.

Although the printer is in the print mode, printing does not start with **PREHEATING** displayed on the operation panel.

Items to be checked	Corrective measures
Room temperature	Raise the room temperature. (Recommended temperature: 20 to 25ºC)
Effect of air flow	If the air from an air conditioner or a fan is blowing against the paper guide, change the air flow direction, the orientation of the printer, or the location of the printer.

The transmitted data is not printed.

Items to be checked	Corrective measures
ONLINE LED (flashing?)	Check the communication conditions to the host computer.

Media jams occur frequently.

Items to be checked	Corrective measures
Media type	Check whether the media type setting matches the type of media installed.
Media installation	Install the media properly. See **Loading the media on the printer** on 🕮 ***page 48***.
Obstructions in the carriage path preventing the carriage from moving well	Remove any obstructions. See **How to clear media jams** on 🕮 ***page 233***.
Obstructions in the media path preventing the media from advancing well	Remove any obstructions. See **How to clear media jams** on 🕮 ***page 233***.
Suction fan power	If the suction fan power is not proper, reduce the power. See **Prevent the media from sticking and wrinkling** on 🕮 ***page 185***.
Heater temperature setting	If the heater temperature is not optimally set, lower the heater temperature. See **Adjust the heaters temperatures** on 🕮 ***page 211***.

Print quality is poor.

See **Solve print quality issues** on 🕮 ***page 184***.

Printout are blank sheets.

Items to be checked	Corrective measures
Print data	Check the current print data to confirm that you sent blank sheet data.

Cannot load the media

See **Procedure to load transparent media and media with a black reverse side** on 🕮 ***page 56***.

Printing is slow. The carriage sometimes moves.

Items to be checked	Corrective measures
USB connection speed	When the data transmission speed is slow, the printer waits for the data with the print heads capped. Check the USB's transmission speed. If the USB connection is full speed, the speed can be improved by changing the conditions of the connection to the computer as follows, so that the connection becomes high speed. - Reconnect the USB cable. - Connect the USB cable to the USB 2.0 port. - Reinstall the driver. - Change the USB cable to a cable supporting high speed transmissions. - If a hub is used, change the hub to a model supporting high speed transmissions.

Printing is slow. During print, print heads are capped frequently.

Items to be checked	Corrective measures
High-temperature environment	If the printer temperature is 40°C or more, the printer prints at a lower speed. Set the ambient temperature to 20 to 25°C (recommended temperature), and leave the printer for one hour or more before starting the print.
Computer specifications	Remove any additional devices connected via USB.
Computer specifications	Connect the printer to a computer satisfying the recommended operational environment for your RIP software. For the recommended operational environment, contact the manufacturer of your RIP software.
Computer other processing	Terminate other software applications, for example, anti-virus software.

You cannot understand the current operation panel display language.

Items to be checked	Corrective measures
Language setting	Start with the printer turned off. On the operation panel, press the **MENU** button and hold it down. While holding the **MENU** button down, press the **POWER** switch and hold it down. Continue to hold down both buttons. Then the language selection menu appears on the operation panel display. Highlight your preferred language with the **Up** and **Down** buttons, then press the **OK** button.

Clogged nozzles cannot be cleared.

Items to be checked	Corrective measures
Damaged media edges	If the media is damaged with some sections coming out from the edge guards, it may contact the heads nozzle surfaces and cause nozzles to clog. Cut any damaged sections with a pair of scissors or a cutter before installing the media.
Adhesive coming off the vinyl causing the media to rise	Feed the media to beyond the risen area.
Media wrinkling and rising	Set the suction fan level to HIGH. Decrease the printheater temperature.
Media adhering to the platen	Set the suction fan level to LOW or OFF to make it advance again. Setting media advance mode to BACK & FWD LOW may also prevent the media from adhering to the platen.
Daily maintenance	Check that the daily maintenance has been executed and that it is performed periodically.

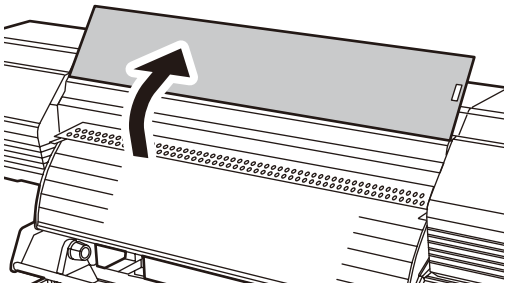
How to clear media jams

1 MEDIA JAM ERROR 1
LIFT THE LEVER

The message to the left appears.

X: Media jam type	Meaning
1: Media jam 1	A jam on the carriage is preventing the printer from operating correctly.
2: Media jam 2	A media not supported is used. The media cannot be detected correctly.

2 **Lift the pressure roller lever and open the front cover.**



When you lift the lever

OPEN COVERS AND
REMOVE MEDIA

When you open the cover

LIFT THE LEVER AND
REMOVE MEDIA

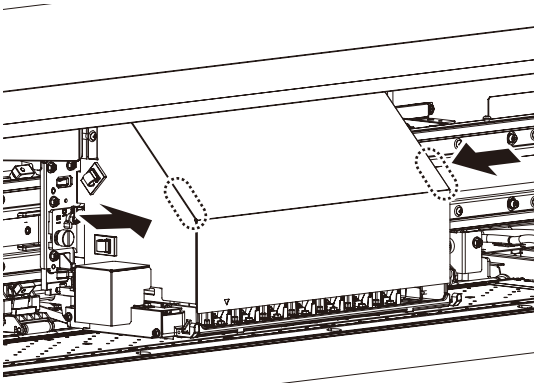
3 **Clear the media jam, make sure that no obstruction is left in the carriage path and the media feed path, and then close the front cover.**

Note

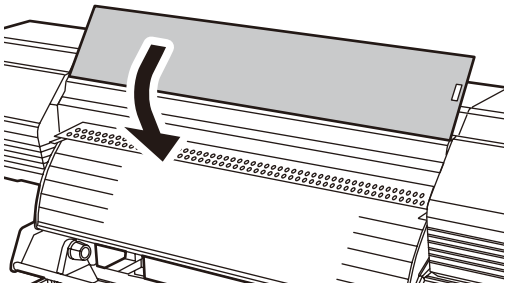
- **In case of roll media, rewind some of the media.**

To manually move the carriage...

◊ If the carriage must be moved manually, slide the carriage by softly pressing locations indicated with the arrows.



4



Close the front cover.

The carriage moves to the home position.

5

CARRIAGE IS MOVING
PLEASE WAIT

Load the media on the printer again.

See To load media on the Printer on 🕮 *page 48*.

⚠ Note

- **When the printer is jammed with media, the print heads may contact the media and cause print misses. In such cases, perform print head recovery. (🕮 *page 204*)**

When an error message is displayed

When the **ERROR** LED lights up, check the message displayed on the operation panel.
Error messages shown below are classified into two groups.

Service call errors:
Errors that the operator (customer) cannot recover, such as hardware/software failures. Contact your service representative.

Operator call errors:
Errors that the operator (customer) can recover.

To recover the error, follow the advice described here.

Service call errors

Restart the printer.

◊ If a service call error occurs, restart the printer by turning it off and on as follows. Then the error may be recovered.
(1) Turn off the operation panel's POWER switch and the main printer power switch on the rear of the printer and the heater power switch.
(2) Remove the power cable front he power outlet, and then remove it from the power inlet at the rear of the printer.
(3) Hold the Printer for one minute or more.
(4) Connect each power cord above to its inlet, then connect the two cords to the socket.
(5) Turn on all three switches above.

<System error>

SYSTEM ERROR nnnn
RESTART PRINTER

nnnn: Error code

Meaning	An unrecoverable error occurred.
Action	Contact your service representative, and inform them of the displayed error code.

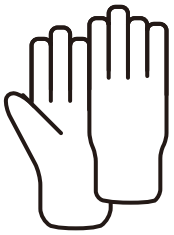
If the system error 2320 is displayed

◊ Try the following procedure as it may recover the error.

Required items

1. Dropper

2. Sheet mount cleaning liquid



3. Gloves

4. Cleaning swab

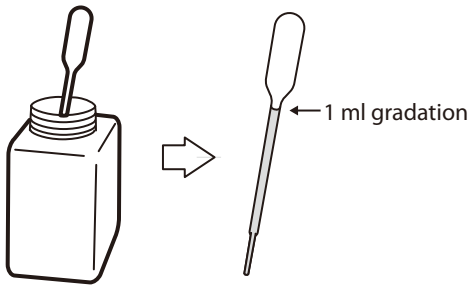
Note

- **The items 1, 2, and 3 above are included in the sheet mount cleaning kit A (IP6-261).**
- **Do not discard the items 1 and 2 above after use, but use them again for sheet mount cleaning.**

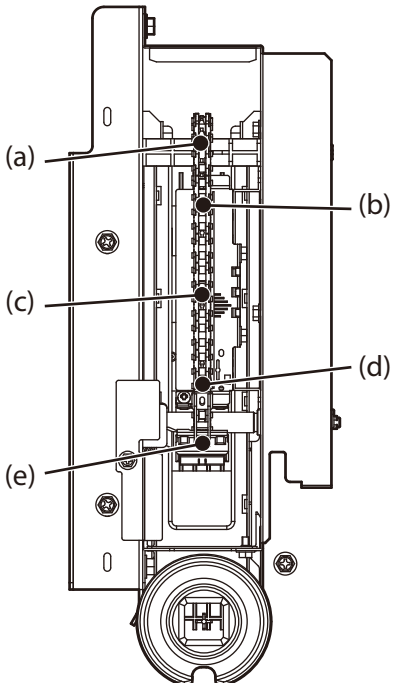
1 **Turn the printer off.**

2 **Open the front cover and then the capping unit cover.**

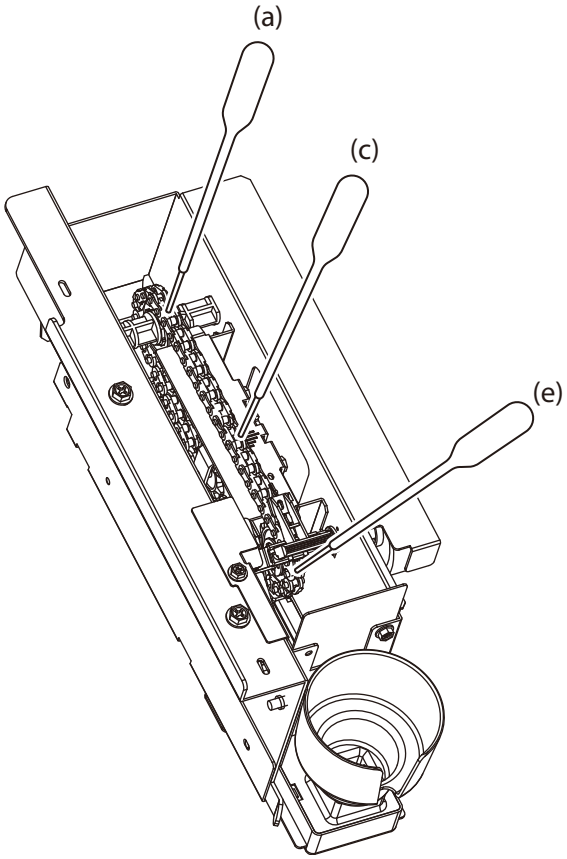
3 **Draw 1 ml of sheet mount cleaning liquid using the dropper.**

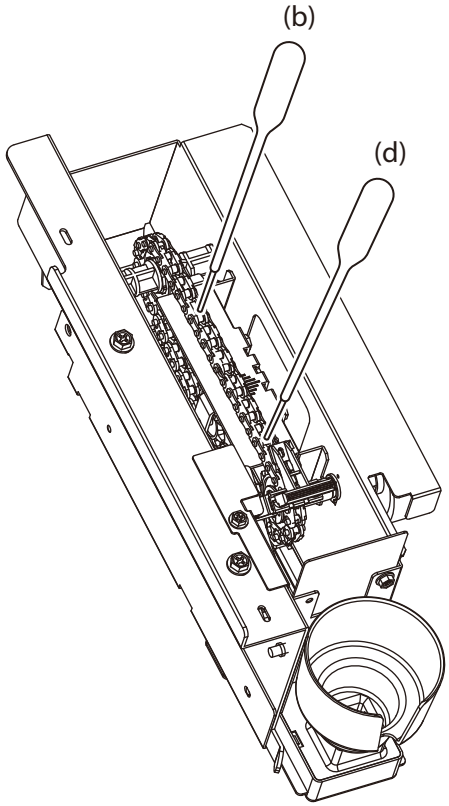


4



Below the chain shown in the figure, insert the dropper tip in the area (a) and inject the sheet mount cleaning liquid.
In the same manner, inject 1 ml of sheet mount cleaning liquid to the areas (b), (c), (d), and (e) shown in the figure.

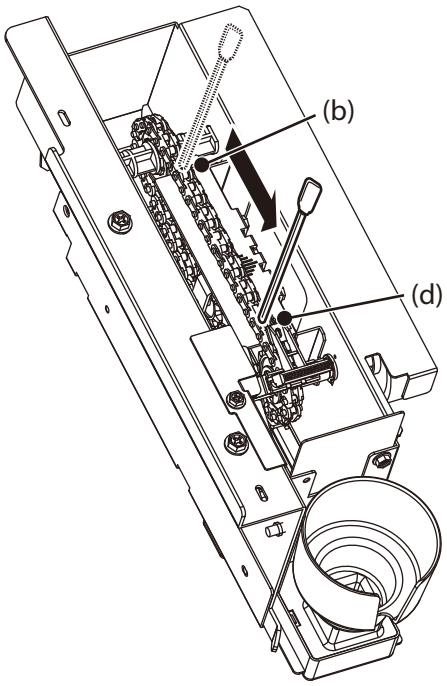




5

Wait 5 minutes.

6



Insert the cleaning swab handle in the area (b) shown in the figure of the chain on the left and move it in the direction of the arrow until it reaches the area (d).

7

Close the capping unit cover and then the front cover.

8

Turn the printer on.

The procedure is complete when the printer starts without the system error 2320.

Operator call errors

The following errors can be recovered by the operator.

<Ink errors>

<CIS model>

CLOSE INK BOX COVER

Meaning	The ink box cover is open.
Action	You are advised to follow the message instructions.

<LCIS model>

CLOSE THE
RESERVOIR DRAWER

Meaning	The reservoir drawer is open.
Action	You are advised to follow the message instructions.

<CIS model>

NO CC CARTRIDGE
OPEN INK BOX COVER

CC: Ink color

Meaning	An ink cartridge is not installed.
Action	You are advised to follow the message instructions. If this message appears when a ink cartridge is installed for the specified color, the ink cartridge installation may not be correct. Check that it is installed properly.

<CIS model>
(With the ink box cover open)

SET CC INK CARTRIDGE

CC: Ink color

Meaning	An ink cartridge is not installed.
Action	You are advised to follow the message instructions. If this message appears when a ink cartridge is installed for the specified color, the ink cartridge installation may not be correct. Check that it is installed properly.

<CIS model>

CC CARTRIDGE ERROR
OPEN INKBOX COVER nn

nn: Ink error code CC: Ink color

Meaning	A problem occurred with an ink tray, or the ink cartridge was identified as non genuine.
Action	You are advised to follow the message instructions. Write down the displayed error code.

<CIS model>
(With the ink box cover open)

CHECK CC CARTRIDGE
nn

nn: Ink error code CC: Ink color

Meaning	A problem occurred with an ink tray, or the ink cartridge was identified as non genuine.
Action	You are advised to follow the message instructions. Write down the displayed error code.

<CIS model>

CC INK HAS RUN OUT
OPEN INK BOX COVER

CC: Ink color

Meaning	The ink cartridge is empty.
Action	You are advised to follow the message instructions. See **Install and replace an ink cartridge** on 📖 ***page 218***.

<CIS model>
(With the ink box cover open)

REPLACE CC CARTRIDGE

CC: Ink color

Meaning	The ink cartridge is empty.
Action	You are advised to follow the message instructions. See **Install and replace an ink cartridge** on 📖 ***page 218***.

<LCIS model>

CC INK HAS RUN OUT
OPEN THE DRAWER

CC: Ink color

Meaning	Ink has run out.
Action	You are advised to follow the message instructions. (See **Install and replace an ink bottle (LCIS)** on *page 222*.

<LCIS model>
(When you have opened the reservoir drawer)

SUPPLY INK AND
CLOSE THE DRAWER

CC: Ink color

Meaning	Ink has run out.
Action	You are advised to follow the message instructions. (See **Install and replace an ink bottle (LCIS)** on *page 222*.

<CIS model>

WRONG COLOR FOR CC
OPEN INK BOX COVER

CC: Ink color

Meaning	The ink cartridge color is not correct.
Action	Install the correct ink cartridge.

<CIS model>
(With the ink box cover open)

INK COLOR ERROR
CHECK CC CARTRIDGE

CC: Ink color

Meaning	The ink cartridge color is not correct.
Action	Install the correct ink cartridge.

<CIS model>

INCORRECT CC INK TYPE
OPEN INK BOX COVER

CC: Ink color

Meaning	The ink cartridge type is not correct.
Action	Install the correct ink cartridge.

<CIS model>
(With the ink box cover open)

CARTRIDGE TYPE ERROR
CHECK CC CARTRIDGE

CC: Ink color

Meaning	The ink cartridge type is not correct.
Action	Install the correct ink cartridge.

<Waste ink bottle errors>

INSTALL

Meaning	No waste ink bottle is installed.
Action	You are advised to follow the message instructions. See **Waste ink bottle check and replacement** on *page 115*.

REPLACE
WASTE INK BOTTLE

Meaning	The waste ink bottle is full.
Action	You are advised to follow the message instructions. See **Waste ink bottle check and replacement** on *page 115*.

<Media jam errors>

MEDIA JAM ERROR 1 LIFT THE LEVER		
	Meaning	An obstruction is left in the carriage path and the printer cannot drive the carriage normally.
	Action	Lift the pressure roller lever and open the front cover. If the media jam (0) error occurs repeatedly although there is no media jam or no obstruction in the carriage path, contact your service representative. See **How to clear media jams** on 📖 ***page 233***.

MEDIA JAM ERROR 2 LIFT THE LEVER		
	Meaning	A media not supported is used and the media cannot be detected correctly.
	Action	Lift the pressure roller lever and open the front cover. Check also that the settings are correct. See **How to clear media jams** on 📖 ***page 233***.

<Media errors>

LIFT THE LEVER AND LOAD THE MEDIA		
	Meaning	No media is installed on the printer.
	Action	When there is no media, install new media. If the flange is not attached correctly, attach it correctly. See **Load media on the Printer** on 📖 ***page 48***.

LOAD THE MEDIA		
	Meaning	The media cannot be detected.
	Action	See **Load media on the Printer** on 📖 ***page 48***.

MEDIA WIDTH ERROR CHECK MEDIA WIDTH		
	Meaning	The width of the installed media is not correct (longer than 64 inches).
	Action	Load media of the specified size. See **Load media on the Printer** on 📖 ***page 48***.

MEDIA HAS SKEWED ALIGN MEDIA		
	Meaning	The media has skewed.
	Action	Reinstall the media correctly. Ink may have been discharged on the platen depending on the skew level. In that case, completely remove the ink from the platen. See **Load media on the Printer** on 📖 ***page 48***.

MEDIA SKEW. CONTINUE PRINT? OK/CANCEL		
	Meaning	Skewed media was detected during printing.
	Action	Continue to print or stop printing.

<Print head error>

PH COOLING PROCESS PLEASE WAIT		
	Meaning	The printer operation was suspended, as the print heads temperature exceeded 40ºC. The print heads temperature is always monitored by the printer to guarantee stable ink ejection.
	Action	Secure an ambient temperature between 15 and 30ºC to prevent the print heads temperature increase. You may also press the **CANCEL** button to suspend the printing.

PH TEMP IS TOO HIGH PRINT? OK/CANCEL ◎	

Meaning	The print heads temperature exceeds the printer operating range.
Action	Secure an ambient temperature between 15 and 30°C to prevent an increase in the print heads temperature. Press the **OK** button to start the printing. You may also press the **CANCEL** button to suspend the printing.

PH COOLING PROCESS STANDARD ND BI	

Meaning	The printer monitors the print heads temperature to make sure the ink is ejected in a stable manner. If the temperature exceeds 40°C, a protection mechanism is triggered and the printing is suspended.
Action	Secure an ambient temperature between 15 and 30°C to prevent an increase in the print heads temperature. The printing resumes automatically after the print heads temperature has decreased.

<Communication errors>

NO DATA RECEIVED CHECK CONNECTION	

Meaning	During the print data transfer, a USB connection failure or cable disconnection was detected.
Action	Check the USB cable connection.

DATA COMMUNICATION WAS INTERRUPTED	

Meaning	Though a timeout occurs during the print data transfer, its cause is not a printer failure.
Action	Check the USB cable connection.

<Other errors>

CLOSE COVERS	

Meaning	The front cover is open.
Action	You are advised to follow the message instructions.

PRIME INK SYSTEM	

Meaning	Cleaning or printing was started before priming the ink system.
Action	Prime the ink system before starting cleaning or printing.

MANUALLY ADJUST n ADV VAL/PRINT POS ◎	

n: Error code

Meaning	Automatic print adjustment could not be performed.
Action	You are advised to follow the message instructions. (See **When automatic print adjustment cannot be performed** on 🕮 ***page 83***.)

INSTALL WIDER MEDIA ◎	

Meaning	Media of less than 762 mm (30 inches) in width was installed when automatic nozzle map was performed.
Action	Use media of 762 mm (30 inches) or larger when performing automatic nozzle map. (See **When an error occurs with automatic configuration** on 🕮 ***page 113***.)

MANUALLY CONFIGURE n NOZZLE MAPPING ◎	

n: Error code

Meaning	Automatic nozzle map could not be performed.
Action	You are advised to follow the message instructions. (See **When an error occurs with automatic configuration** on 🕮 ***page 113***.)

AUTO NOZZ MAP ERROR
Lc Lm C Y K M Gy ◎

Meaning	An error occurred during automatic nozzle map.
Action	You are advised to follow the message instructions printed on the error print result of automatic nozzle map. (See **When an error occurs with automatic configuration** on ***page 113***.)

PLEASE WARM THE ROOM
AND WAIT FOR A WHILE

Meaning	The ambient temperature is below the printer operating range.
Action	Operate the printer within the operating temperature range (15 to 30ºC). You may also press the **CANCEL** button to suspend the printing.

ROOM TEMP TOO HIGH
PRINT? OK/CANCEL

Meaning	The ambient temperature exceeds the printer operating range.
Action	Operate the printer within the operating temperature range (15 to 30°C). Press the **OK** button to start the printing. You may also press the **CANCEL** button to suspend the printing.

DECREASE ROOM TEMP
STANDARD ND BI

Meaning	The ambient temperature exceeds the printer operating range.
Action	Operate the printer within the operating temperature range (15 to 30°C). The printing resumes automatically after the ambient temperature has decreased.

DECREASE ROOM TEMP

Meaning	The temperature of the room where the printer is installed is too low.
Action	Increase the room temperature to 5°C or above.

PLEASE WARM THE ROOM

Meaning	The temperature of the room where the printer is installed is too high.
Action	Cool the room to 35°C or lower.

AN ERROR OCCURRED
PLEASE WAIT

Meaning	An error was detected during printing.
Action	Wait until the error message is displayed. If no error messages are displayed after five minutes, restart the printer.

<LCIS model>

NO MORE INK AVAILBLE
USE EXTENSION CHIP

Meaning	No more ink is available for use.
Action	Read an ink amount extension chip with the printer.

The media has skewed.

When the media skew check setting is on, the printer checks for skewed media after printing a certain length of media. If the media has skewed more than a defined distance, the print pauses and a screen where you can select to continue or stop the print is displayed.

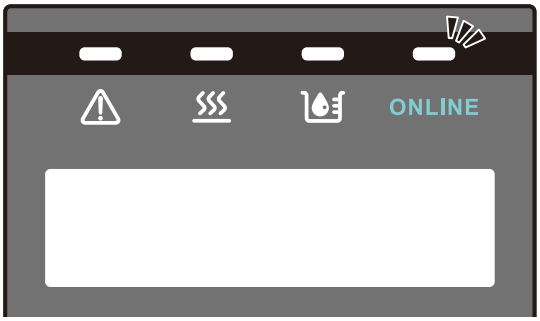
PRINTING...
STANDARD ND BI

The printer checks for skewed media.

MEDIA SKEW. CONTINUE
PRINT? OK/CANCEL

Skewed media was detected.

- The ONLINE LED flashes slowly.



Continue printing with the OK button.

PRINTING...
STANDARD ND BI

Stop printing with the Cancel button.

LIFT THE LEVER
ALIGN THE MEDIA

CANCEL is recommended.

If you select [OK] to continue the print, the rest of the suspended printing job is started. However, the media may be disengaged from the media edge guards, or the printer may be jammed with media. When the printout is lengthy, the skew may worsen, which may damage the printer.

Warning messages

After printing, occasionally you may see one of the following messages appear on the operation panel with the **ERROR** LED ⚠ flashing. They are warning messages. In such cases, follow the instructions in the Action rows.

CHECK MEDIA
FOR WRINKLES

Meaning	The media has not been fed for a long time (about 250 min). Check the media for wrinkles.
Action	Perform one of the following actions. (1) Release the pressure roller lever and remove the wrinkles. (2) Execute FEED MEDIA and BACK FEED MEDIA to remove the wrinkles. (3) If there are no wrinkles, press any button to remove the warning message.

ADJUST BIDIRECTIONAL
PRINT POSITION

Meaning	Bidirectional print positions have not been adjusted.
Action	Adjust the bidirectional print positions.

ADJUST MEDIA
ADVANCE VALUE

Meaning	Media advance adjustment value has not been adjusted.
Action	Adjust the media advance adjustment value.

PH RECOVERY
RECOMMENDED

Meaning	It is recommended to perform cleaning (PH recovery) to prevent the missing dots problem.
Action	Perform cleaning (PH recovery).

PERFORM
PH RECOVERY NOW

Meaning	Automatic cleaning will be performed when the next printing starts.
Action	Perform cleaning (PH recovery). Performing cleaning in advance prevents automatic cleaning when the next printing starts.

PERFORM
SHEET MOUNT CLEANING

Meaning	Sheet mount cleaning has not been performed.
Action	Perform sheet mount cleaning.

WASTE INK BOTTLE IS
ALMOST FULL

Meaning	The waste ink bottle is almost full.
Action	Prepare a new waste ink bottle. See **Waste ink bottle check and replacement** on 📖 ***page 115***.

<CIS model>

CC INK IS
RUNNING OUT

CC: Ink color

Meaning	CC ink is running out.
Action	Prepare a new ink cartridge. See **Install and replace an ink cartridge** on 📖 ***page 218***.

<LCIS model>

CC INK IS
RUNNING OUT

CC: Ink color

Meaning	CC ink is running out.
Action	Prepare a new ink bottle. (See **Read the ink amount extension chip (LCIS)** on 📖 ***page 222***.

<LCIS model>

AVAILABLE INK IS
RUNNING OUT

CC: Ink color

Meaning	Ink available for use is about to run out.
Action	Prepare a new ink bottle and read the ink amount extension chip. (See **Read the ink amount extension chip (LCIS)** on *page 222*.

PERFORM
START MAINTENANCE

Meaning	20 hours has passed since the last start maintenance operation.
Action	Perform the start maintenance.

CHECK TUR UNIT

Meaning	A timeout occurs with a TUR unit process.
Action	Change the TUR unit switch configuration.

PUSH TUR UNIT
AS FAR AS IT GOES

Meaning	The TUR unit is not installed properly.
Action	Push the TUR unit as far as it goes inside the printer.

The **INK** LED blinks:

Meaning	Ink is running out.
Action	Prepare a new ink cartridge. See **Install and replace an ink cartridge** on *page 218*.

<Life-limited parts warnings>

TO REPLACE XXXXXX
CONTACT YOUR DEALER

XXXXXX: Part number

Meaning	The lifespan of the displayed part has almost ended.
Action	Contact your dealer or a service representative to replace the part.

REPLACE WIPER BLADE

Meaning	The wiper blades need to be replaced.
Action	Replace the wiper blades.

REPLACE WIPER
CLEANING LIQUID

Meaning	The wiper cleaning liquid is running out.
Action	Supply wiper cleaning liquid.

REPLACE WIPER SPONGE

Meaning	The wiper sponge needs to be replaced.
Action	Replace the wiper sponge.

Clear missing dots (nozzle clogging)

If the missing dots still appear after the daily maintenance and after setting NOZZLE MAP, perform the operation below.

Strong cleaning

Perform the strong cleaning when missing dots still appear after the normal cleaning.

*Perform the **NOZZLE PRINT***

Fill the cap with ink

To clear the nozzle clogging, fill the cap with ink and moisten the print head nozzle surface with ink. After this operation, leave the printer for 1 to 2 hours.

*Perform the **NOZZLE PRINT***

Perform sheet mount cleaning

Clean the print heads surfaces with sheet mount cleaning.
See 🕮 ***page 128***.

Strong cleaning

1

Press the PH.RECOVERY button.

You can perform PH recovery in the following situations.
- When the printer is idle online
- When the printer is online
- During printing
- When the printer is in pause

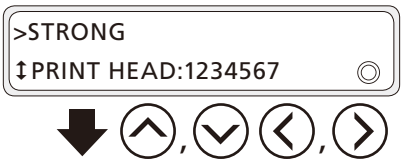
2

Press the Down button to select STRONG.

3

Press the OK button.

4



Select the print heads to clean.

The correspondence between the ink colors and the print head numbers is shown in the table below.

Head group 1		Head group 2			Head group 3	
Lc	Lm	C	Y	K	M	Gy
1	2	3	4	5	6	7

(1) Press the **Left** and **Right** buttons to select the print head number.

(2) Then press th **Down** and **Up** buttons to display or hide the number. Display it to clean the print head, or hide it not to clean the print head.

◊ You cannot select print heads independently to clean them if a given length of media has been printed since the last cleaning operation.

5

Press the OK button.

In the example to the left, the print heads C, Y, and K, and M and Gy will be cleaned.

6

Press the OK button.

Check visually that the waste ink bottle is not full.

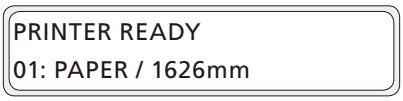
The time is counted down every ten seconds.

Cleaning starts.

Print head cleaning takes several minutes.

When the cleaning starts, the required time is displayed and the time is counted down every 10 seconds.

7



The cleaning is complete.

The printers return to its state before cleaning.

- Online idle and online: Switches to online state
- Printing: Resume printing
- In pause: Stays in pause

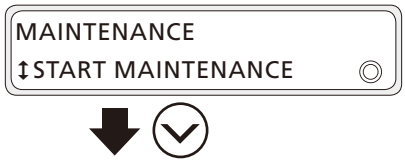
Fill the cap with ink

1

Press the MAINTENANCE button.

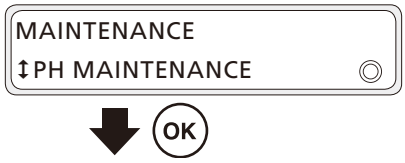
You can perform PH recovery in the following situations.
- When the printer is idle online
- When the printer is online
- During printing
- When the printer is in pause

2



Press the Down button to select PH MAINTENANCE.

3



Press the OK button.

4

Press the Down button to select FILL CAP WITH INK.

5

Press the OK button.

6

Press the OK button.

7

8

Cap filling is complete.
Leave the printer for 1 to 2 hours.

After the printer has be left for 1 to 2 hours, perform the normal cleaning.

Solve print quality issues

This section contains hints to enhance the print quality with the printer based on several symptoms.
Take appropriate actions according to the symptoms.
When several actions are described, they are arranged in order of effectiveness. Therefore, you are recommended to take the actions starting from the top and confirm the effect on the improvement. (Note that all the described actions are not always necessary to solve the problem.)

The print is pale.

Cause	Solution
The density setting is not correct.	Set density to HIGH DENSITY if high density printing is required, such as when using backlit banner media.
The operating environment is outside the specification of the Printer.	Raise the ambient temperature to 15ºC or more (20 to 25ºC recommended) to warm the printer adequately.
Media is not selected properly on RIP.	Check the media selection on RIP.

The printout is blurred or grains appear.

Cause	Solution
The bidirectional print position adjustment and media advance adjustment values are not correct.	(1) Perform bidirectional adjustment and media advance adjustment again. (2) If automatic adjustment has been performed, perform manual adjustment.

Missing dots are found at the beginning of printing.

Cause	Solution
Outside the operating temperature/ humidity range	Use the printer within the operating temperature/humidity range. (📖 page 23)
Obstructions in the nozzle surface	Check the platen, the media edge guards, the capping unit, the wiper blade, the pressure roller, and the head guards, and remove any foreign matter.
	Lint or paper fibers coming from a damaged media may touch the print heads, which may cause missing dots. Replace the media with a media with no lint or paper fibers.
The media entered into contact with the nozzle surfaces.	Perform normal cleaning. If the problem persists, perform the action 📖 page 247.
Cleaning did not finish normally.	Perform the daily maintenance. Clean the caps.

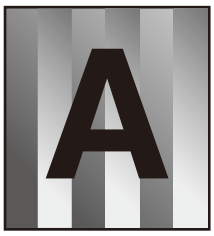
The media is curled or wrinkled.

Cause	Solution
Outside the operating temperature/ humidity range	(1) Use the printer within the operating temperature/humidity range. *** Note that some media may wrinkles even within the operating temperature and humidity range.** (2) Use proven media.
The media storage conditions are not the same as the printer operating conditions.	The difference between the media storage conditions and the printer operating conditions may cause the media to curl or wrinkle. To prevent this, after carrying the media from storage to the operation area, leave the media for while time in the new environment before printing. *** The time depends on the media type and the storage conditions.**
The media was not installed properly.	Check that the media was installed properly in the conditions below. **- The installed media is installed parallel to the printer.** **- The operation panel shows the media type correctly.** **- The media winding mode is optimal for the installed media.** **- Check that the leading of the media output from the printer is installed straight to the TUR unit paper tube.**
The media wrinkled because of the heater temperatures.	(1) If the media wrinkles while the printer is warmed by the heaters, install the media only after the printer is warmed up by the heaters. (2) Change the heater temperature. Increase or decrease all three heaters by 5°C.*1 (3) Use proven media. (4) If the media is still wrinkle, feed the media until you reach a portion without wrinkles. (5) If the media wrinkles between each print job, change the media advance mode.
The media is curled.	(1) Do not use media curled in the vertical direction direction (vertical to the media). (2) Do not use media curled in the horizontal direction (from the right edge to left edge). The is so curled that the media edge guards and the suction fan cannot flat the media. (3) Use proven media.
Set the suction fan parameter of the preset to LOW.	Set the suction fan parameter of the preset to a stronger setting.
Wrinkles caused by media advance	(1) Remove the media and install it again. (2) Use proven media.

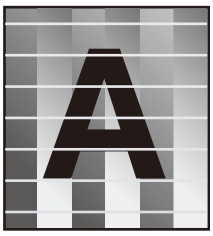
***1 When the heaters temperatures are changed, adjust the media advance adjustment value again.**

White stripes appear on the print.

Basic image



[Symptom A]



[Cause]
The media advance adjustment value is not proper.

[Check]
White stripes appear in all colors when a color stripe bar is printed.

[Symptom B]

[Cause]
The print head nozzles are clogged.

[Check]
White stripes appear in some colors when a color stripe bar is printed.

[Symptom C]

[Cause]
The ink does not match well with the media.

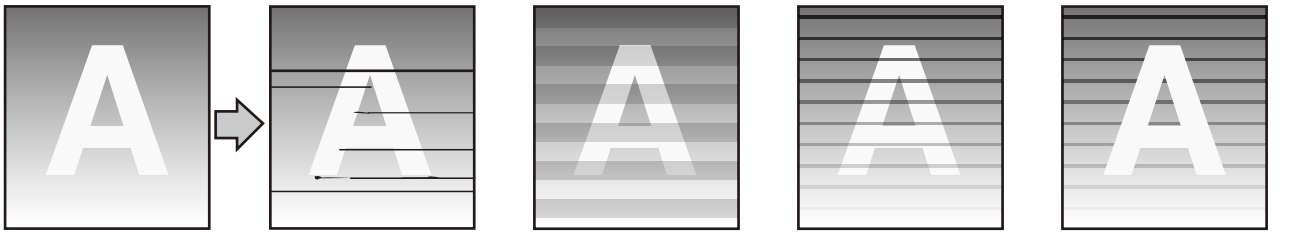
Cause	Solution
[Symptom A] The media advance adjustment value is not proper.	Adjust the media advance adjustment value. * The media advance adjustment value differs depending on the winding mode, loose or tension. - Be sure to adjust the media advance adjustment value again after changing the winding mode (loose or tension). - Be sure to adjust the media advance adjustment value again after changing the pressure roller lever position. - Be sure to adjust the media advance adjustment value again after changing the suction fan setting of the media preset.
[Symptom A] The media advance accuracy is poor, or is not stable.	(1) Check that the media was installed properly in the conditions below. - The installed media is installed parallel to the printer. - The operation panel shows the media type correctly. - The media winding mode is optimal for the installed media. - If the media is curled or wrinkled, see the description on the problem, The media is curled or wrinkled. (2) Adjust the pressure on the media with the pressure roller lever. *1 (3) Change the print mode to be slower. *1 *2 (4) Check that the media is correctly stretched between the paper roll and the pressure roller. * If the media is loose when performing the media advance adjustment, the value will be incorrect.
[Symptom B] Print head nozzles are clogged.	(1) Perform a nozzle print, and set nozzle map for the clogged nozzles. (📖 ***page 105***) (2) Check for obstructions such as media lint or ink clot in the nozzle scanning path including the platen surface, and remove them. (3) If the media is curled or wrinkled, solve the problem by referring to the description on the problem, The media is curled or wrinkled. (4) Perform the daily maintenance. * Do not forget to clean the head guard and media edge guards. * Be sure to perform the print head cleaning. (5) Clean the print heads surfaces with print sheet mount cleaning (📖 ***page 127***). - Printing with a color stripe bar is effective to prevent missing dots. (📖 ***page 174***)

[Symptom B] Print head nozzles inclination	(1) Print a nozzle print pattern, and set nozzle map for the inclined nozzles. (**page 105**) (2) Printing with a color stripe bar is effective to prevent missing dots. (**page 174**)
[Symptom C] The ink does not match the media. (Media with low dot spread rate)	(1) Decrease the temperature of all three heaters by 5°C. *1 * Before starting the print, ensure that the heater temperatures have been decreased to the target temperature. * With some media, the increasing the heater temperatures may be effective. (2) Change the print mode to be slower. *1 *2 (3) Use proven media. (4) Print in high density.

*1 Adjust the media advance adjustment value again.

*2 Note that the print speed differs depending on the mode selected.

Black stripes appear on the print.



[Cause]
The print head periphery is smeared.

[Cause]
At bidirectional printing, the ejected ink's color order in rightward print is different from in leftward print.

* Black stripes appear over the print.
[Cause]
The media advance adjustment value is not proper.

* Black stripes appear partly on the print.
[Cause]
The ink dries too slowly.

Cause	Solution
[Symptom A] The print heads periphery is smeared.	(1) Check for obstructions such as media lint or ink clot in the nozzle scanning path including the platen surface, and remove them. (2) If the media is curled or wrinkled, solve the problem by referring to the description on the problem, The media is curled or wrinkled. (3) Perform the daily maintenance. * Do not forget to clean the head guard and media edge guards. * Be sure to perform the print head cleaning. (4) Clean the print heads surfaces with print sheet mount cleaning (page 127).
[Symptom B] During bidirectional printing, the order of ejected ink colors in the rightward direction differs form that in the leftward dircetion.	(1) Change the print mode to be slower. *1 *2 *3 (2) Print in unidirectional mode. *2 (3) Use proven media.
[Symptom C] The media advance adjustment value is incorrect.	(1) Adjust the media advance adjustment value. (2) Check that the media is correctly stretched between the paper roll and the pressure roller. * If the media is loose when performing the media advance adjustment, the value will be incorrect. - The adjustment value differs depending on the winding mode, tension or loose. - Be sure to adjust the media advance adjustment value again after changing the suction fan setting. - Be sure to adjust the media advance adjustment value again after changing the pressure roller lever position. - If the ionizer is set to ON, set it to OFF. - If automatic adjustment has been performed, perform manual adjustment.
[Symptom C] The media advance accuracy is poor, or is not stable.	(1) Check that the media was installed properly in the conditions below. - The installed media is installed parallel to the printer. - The operation panel shows the media type correctly. - The media winding mode is optimal for the installed media. - If the media is curled or wrinkled, see the description on the problem, The media is curled or wrinkled. (2) Adjust the pressure on the media with the pressure roller lever. *1 (3) Change the print mode to be slower. *1 *2 (4) Change the suction fan power. *1 (5) If the ionizer is set to ON, set it to OFF.

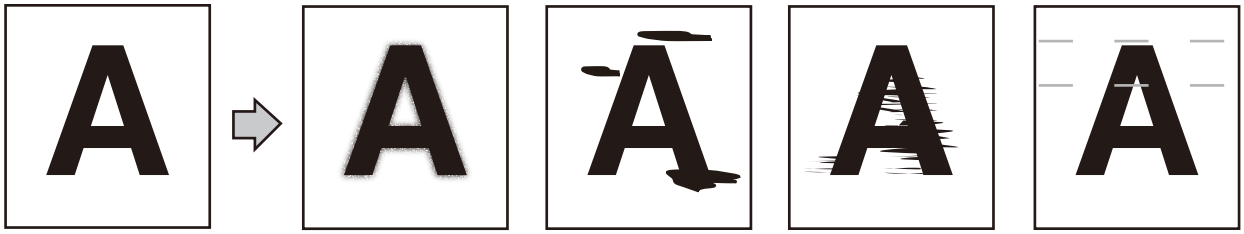
[Symptom D] The ink dries too slowly. (Mottling or bleeding occurs.)	(1) Increase the temperature of all three heaters by 5°C. *1 *** Before starting the print, ensure that the heater temperatures have been decreased to the target temperature.** (2) Change to a more suitable print mode, or set the carriage speed to SLOW. *1 *2 *3 (3) Print in unidirectional mode. *2 (4) Use proven media. (5) With the RIP software, apply the profile with a low ink amount to be ejected. *** Note that the hue may change if the ejected ink amount decreases.**

***1 Adjust the media advance adjustment value again.**

***2 Note that the print speed differs depending on the mode selected.**

***3 Be sure to adjust the bidirectional adjustment value again after changing the carriage speed.**

The printout is not clean.



[Cause]
The ink is improperly sprayed from the print head.

[Cause]
The ink is drooling.

[Cause]
The print head is scratched by media.

[Cause]
The pressure roller is dirty.

Cause	Solution
[Symptom A] The ink is improperly ejected from the print heads.	(1) Use the printer within the operating temperature/humidity range. (2) Perform the daily maintenance. * Be sure to clean the head guard, media edge guards, carriage bottom surface, and the right and left sides of the top of the print heads. (3) Perform print head cleaning (STRONG). (4) Change to a more suitable print mode, or set the carriage speed to SLOW. *1 *2 *3 (5) Clean the print heads surfaces with print sheet mount cleaning (page 127). (6) If the print heads height setting is set to high, set it to normal. *4 * If problems occur with the media used when the print heads height setting is set to normal, set it to another option. (page 182)
[Symptom B] The ink dribbles.	(1) Use the printer within the operating temperature/humidity range. (2) Check for obstructions such as media lint or ink clot in the nozzle scanning path including the platen surface, and remove them. (3) If the media is curled or wrinkled, solve the problem by referring to the description on the problem, The media is curled or wrinkled. (4) Perform the daily maintenance. * Do not forget to clean the head guard and media edge guards. * Be sure to perform print head cleaning. * Be sure to clean the caps. (5) Clean the print heads surfaces with print sheet mount cleaning (page 127). (6) With media that easily creates static electricity, the static electricity may cause the ink to dribble. With such media, set the ionizer to ON. *1 (7) With some banner media, light media edges may touches the print heads, which may cause the ink to dribble.
[Symptom C] The print heads are scratched by the media.	(1) Check that the media was installed properly in the conditions below. - The installed media is installed parallel to the printer. - The operation panel shows the media type correctly. - The media winding mode is optimal for the installed media. - If the media is curled or wrinkled, see the description on the problem, The media is curled or wrinkled. (2) Check for obstructions such as media lint or ink clot in the nozzle scanning path including the platen surface, and remove them. (3) Perform the daily maintenance. * Do not forget to clean the head guard and media edge guards. * Be sure to perform print head cleaning. (4) Clean the print heads surfaces with print sheet mount cleaning (page 127). (5) Set the suction fan parameter of the preset to a stronger setting. *1 (6) If the ionizer is set to ON, set it to OFF.

[Symptom D] The pressure roller is dirty.	(1) Follow the procedure on page 137 to clean the pressure roller.

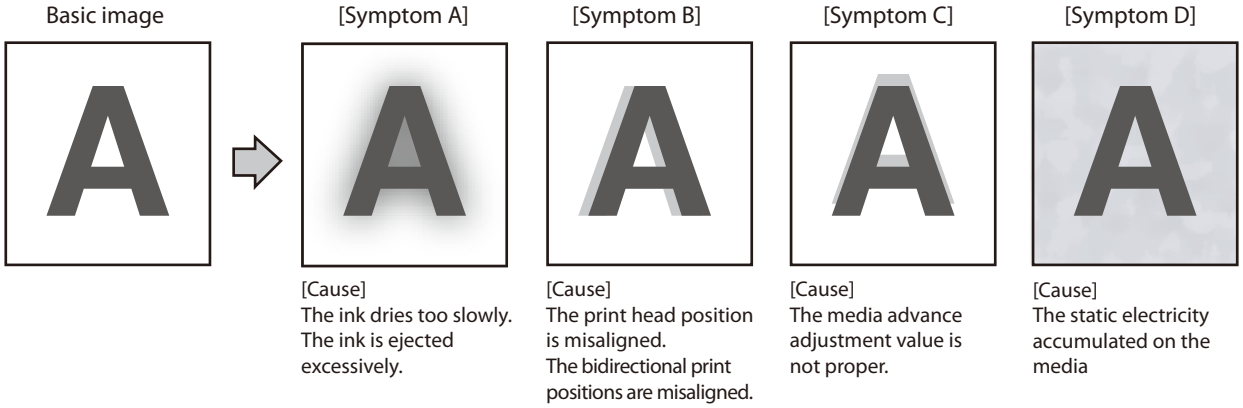
*1 Adjust the media advance adjustment value again.

*2 Note that the print speed differs depending on the mode selected.

*3 Be sure to adjust the bidirectional adjustment value again after changing the carriage speed.

*4 Adjust the bidirectional adjustment value again.

Contours of objects are blurred.



Cause	Solution
[Symptom A] The ink dries too slowly. The ink is ejected excessively.	(1) Decrease the temperature of all three heaters by 5°C. *1 * Before starting the print, ensure that the heater temperatures have been decreased to the target temperature. (2) Change to a more suitable print mode, or set the carriage speed to SLOW. *1 *2 *3 (3) Print in unidirectional mode. *2 (4) If printing in high density, print in normal density. (5) Use proven media. (6) With the RIP software, apply the profile with a low ink amount to be ejected. * Note that the hue may change if the ejected ink amount decreases.
[Symptom B] The print heads positions are misaligned. The bidirectional print positions are misaligned.	(1) Adjust the print heads positions. (***page 85***) (2) Perform bidirectional adjustment. (***page 91***) (3) If bidirectional adjustment has been performed automatically, perform it again manually.
[Symptom C] The media advance adjustment value is incorrect.	Correct the media advance adjustment value. If media advance adjustment has been performed automatically, perform it again manually. - The adjustment value differs depending on the winding mode, tension or loose. - Be sure to adjust the media advance adjustment value again after changing the suction fan power. - Be sure to adjust the media advance adjustment value again after changing the pressure roller lever position. - If the ionizer is set to ON, set it to OFF. - If automatic adjustment has been performed, perform manual adjustment.
[Symptom C] The media advance accuracy is poor, or is not stable.	(1) Check that the media was installed properly in the conditions below. - The installed media is installed parallel to the printer. - The operation panel shows the media type correctly. - The media winding mode is optimal for the installed media. - If the media is curled or wrinkled, see the description on the problem, The media is curled or wrinkled. (2) Adjust the pressure on the media with the pressure roller lever. *1 (3) Change to a more suitable print mode, or set the carriage speed to SLOW. *1 *2 *3 (4) Check that the media is correctly stretched between the paper roll and the pressure roller. * If the media is loose when performing the media advance adjustment, the value will be incorrect. (5) If the ionizer is set to ON, set it to OFF.

[Symptom D] Print defect caused by media static electricity / Ink sprayed over white portions of the media.	(1) Set the ionizer to ON. *4 (2) Change to a more suitable print mode, or set the carriage speed to SLOW. *1 *2 *3 (3) Use proven media.

*1 Adjust the media advance adjustment value again.

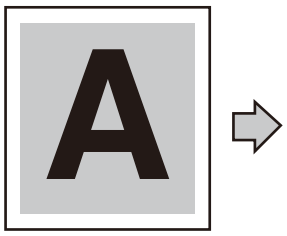
*2 Note that the print speed differs depending on the mode selected.

*3 Be sure to adjust the bidirectional adjustment value again after changing the carriage speed.

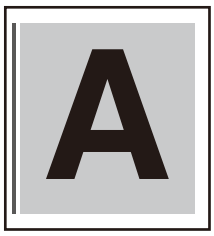
*4 Set the ionizer to OFF with media where no print defects caused by static electricity occur.

Vertical banding appears at the printout edges.

Basic image

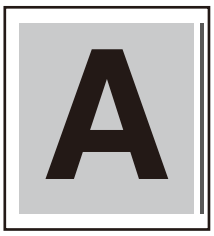


[Symptom A]

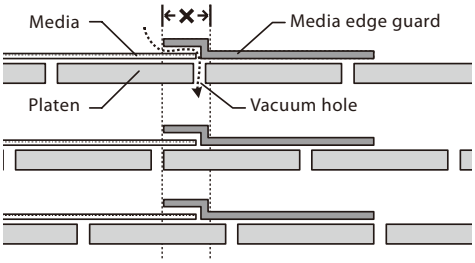


[Cause]
On the platen, the contacting point of the media left edge and the media edge guard is near the platen's vacuum hole.

[Symptom B]

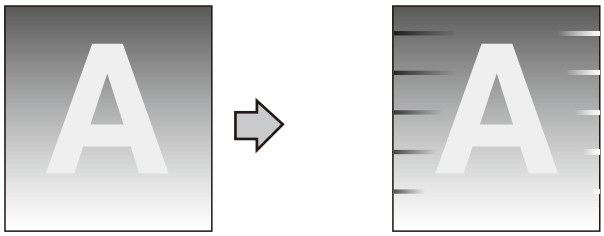


[Cause]
On the platen, the contacting point of the media right edge and the media edge guard is near the platen's vacuum hole.

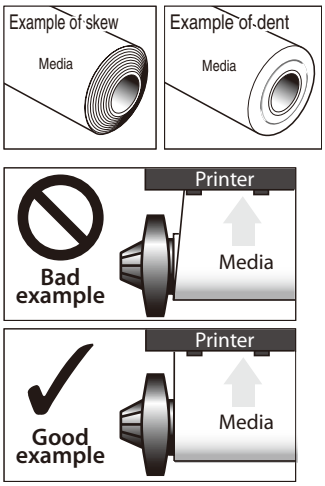
Cause	Solution
[Symptom A] [Symptom B] When, on the platen, the contacting point between a media edge and the media edge guard is near a platen's vacuum hole, the printer may suck the ejected ink partially between the media and the media edge guard. As a result, vertical banding may appear.	Shift the media so that the contacting point between the media edge and the media edge guard on the platen does not come close to the vacuum hole. * Avoid the platen's vacuum hole for this area. An example of media position when a vertical banding appear Example (1) of shifting the media position when a vertical banding appear Example (2) of shifting the media position when a vertical banding appear 

Different bands appear on the printout right and left sides.

Basic image



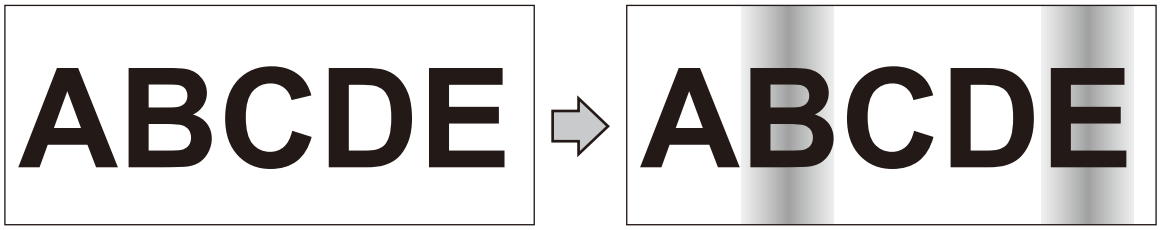
[Cause]
The media is skewed.

Cause	Solution
A skewed media is fed. 	(1) Check that the media condition is good. If the media roll is damaged or wound in the shape of a cone, replace the roll with a good one. (2) Check that the media was installed properly in the conditions below. - **The installed media is installed parallel to the printer.** - **The operation panel shows the media type correctly.** - **The media winding mode is optimal for the installed media.** - **If the media is curled or wrinkled, see the description on the problem, The media is curled or wrinkled.** (3) Check that the take up-side media shows no irregular winding. If an irregular winding is found, reinstall the media on the printer and onto the take-up reel unit. (4) Adjust the pressure on the media with the pressure roller lever. *1 (5) Use proven media. (6) Check that the media holders on the supply side securely and firmly support the media. (7) Check that the media holders on the supply side are secured to the shaft with the screws.

*1 Adjust the media advance adjustment value again.

Vertical bands appear on the printout.

Basic image



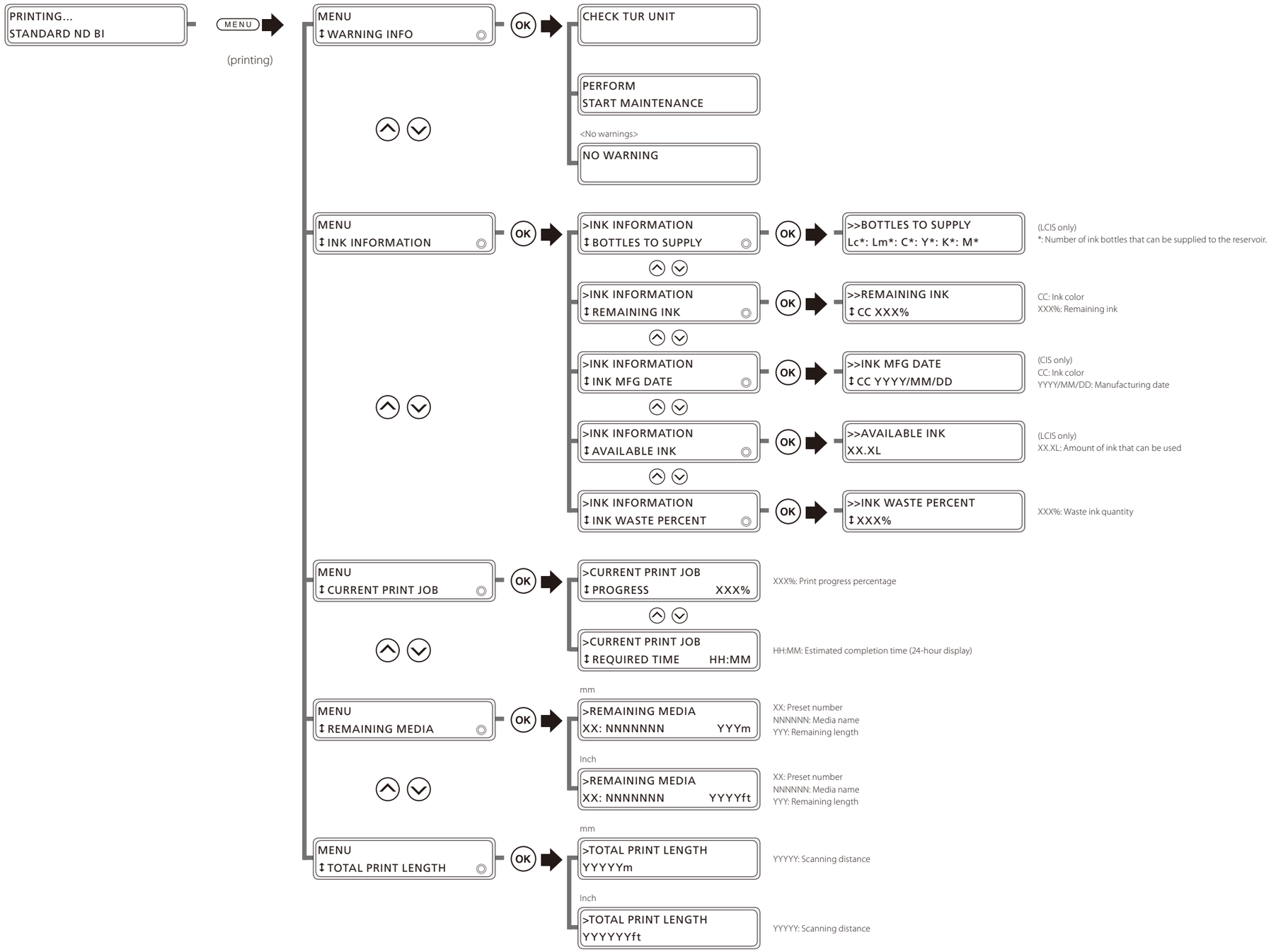
[Cause]
- The media advance adjustment value is not appropriate for the media used.
- The media is curled or wrinkled.

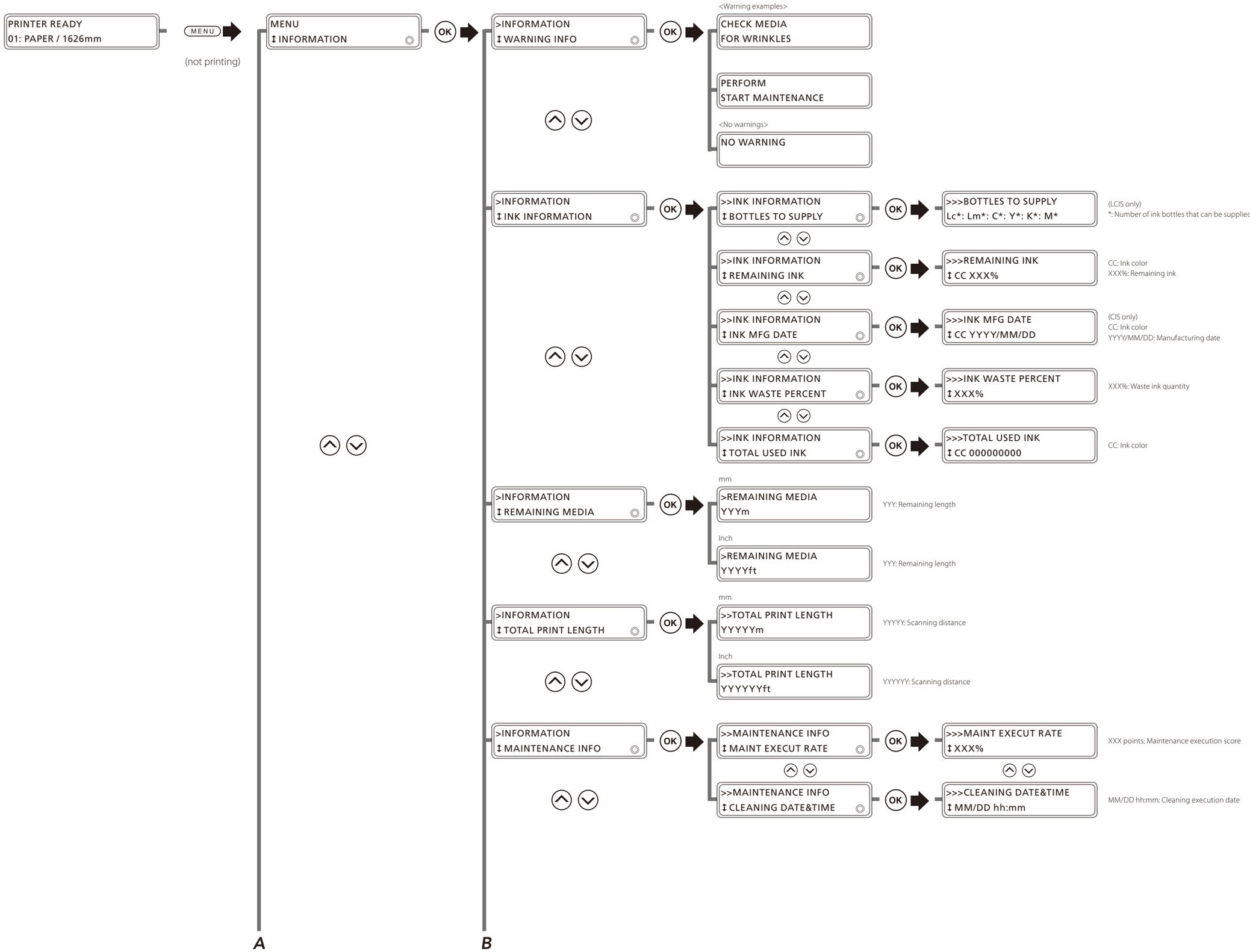
Cause	Solution
The media advance adjustment value is not appropriate for the media used.	(1) Fine adjust the media advance adjustment value in the ± 0.3% range. **- If the action in (1) did not solve the problem, execute the following.** (2) Change the print mode. *1 *2
The media is curled or wrinkled.	If the media is curled or wrinkled, refer to The media is curled or wrinkled and execute the appropriate actions.

*1 Adjust the media advance adjustment value again.

*2 Note that the print speed differs depending on the mode selected.

MENU


PRINTING...
STANDARD ND BI
MENU
(printing)
MENU
↕WARNING INFO
OK
CHECK TUR UNIT
PERFORM
START MAINTENANCE
<No warnings>
NO WARNING
MENU
↕INK INFORMATION
OK
>INK INFORMATION
↕BOTTLES TO SUPPLY
OK
>>BOTTLES TO SUPPLY
Lc*: Lm*: C*: Y*: K*: M*
(LCIS only)
*: Number of ink bottles that can be supplied to the reservoir.
>INK INFORMATION
↕REMAINING INK
OK
>>REMAINING INK
↕CC XXX%
CC: Ink color
XXX%: Remaining ink
>INK INFORMATION
↕INK MFG DATE
OK
>>INK MFG DATE
↕CC YYYY/MM/DD
(CIS only)
CC: Ink color
YYYY/MM/DD: Manufacturing date
>INK INFORMATION
↕AVAILABLE INK
OK
>>AVAILABLE INK
XX.XL
(LCIS only)
XX.XL: Amount of ink that can be used
>INK INFORMATION
↕INK WASTE PERCENT
OK
>>INK WASTE PERCENT
↕XXX%
XXX%: Waste ink quantity
MENU
↕CURRENT PRINT JOB
OK
>CURRENT PRINT JOB
↕PROGRESS XXX%
XXX%: Print progress percentage
>CURRENT PRINT JOB
↕REQUIRED TIME HH:MM
HH:MM: Estimated completion time (24-hour display)
MENU
↕REMAINING MEDIA
OK
mm
>REMAINING MEDIA
XX: NNNNNNN YYYm
XX: Preset number
NNNNNN: Media name
YYY: Remaining length
Inch
>REMAINING MEDIA
XX: NNNNNNN YYYYft
XX: Preset number
NNNNNN: Media name
YYY: Remaining length
MENU
↕TOTAL PRINT LENGTH
OK
mm
>TOTAL PRINT LENGTH
YYYYYm
YYYYY: Scanning distance
Inch
>TOTAL PRINT LENGTH
YYYYYYft
YYYYY: Scanning distance


PRINTER READY
01: PAPER / 1626mm
MENU
(not printing)
MENU
↕ INFORMATION
OK
>INFORMATION
↕ WARNING INFO
OK
<Warning examples>
CHECK MEDIA
FOR WRINKLES
PERFORM
START MAINTENANCE
<No warnings>
NO WARNING
>INFORMATION
↕ INK INFORMATION
OK
>>INK INFORMATION
↕ BOTTLES TO SUPPLY
OK
>>>BOTTLES TO SUPPLY
Lc*: Lm*: C*: Y*: K*: M*
(LCIS only)
*: Number of ink bottles that can be supplied to the reservoir.
>>INK INFORMATION
↕ REMAINING INK
OK
>>>REMAINING INK
↕ CC XXX%
CC: Ink color
XXX%: Remaining ink
>>INK INFORMATION
↕ INK MFG DATE
OK
>>>INK MFG DATE
↕ CC YYYY/MM/DD
(CIS only)
CC: Ink color
YYYY/MM/DD: Manufacturing date
>>INK INFORMATION
↕ INK WASTE PERCENT
OK
>>>INK WASTE PERCENT
↕ XXX%
XXX%: Waste ink quantity
>>INK INFORMATION
↕ TOTAL USED INK
OK
>>>TOTAL USED INK
↕ CC 000000000
CC: Ink color
>INFORMATION
↕ REMAINING MEDIA
OK
mm
>REMAINING MEDIA
YYYm
YYY: Remaining length
Inch
>REMAINING MEDIA
YYYYft
YYY: Remaining length
>INFORMATION
↕ TOTAL PRINT LENGTH
OK
mm
>>TOTAL PRINT LENGTH
YYYYYm
YYYYY: Scanning distance
Inch
>>TOTAL PRINT LENGTH
YYYYYYft
YYYYYY: Scanning distance
>INFORMATION
↕ MAINTENANCE INFO
OK
>>MAINTENANCE INFO
↕ MAINT EXECUT RATE
OK
>>>MAINT EXECUT RATE
↕ XXX%
XXX points: Maintenance execution score
>>MAINTENANCE INFO
↕ CLEANING DATE&TIME
OK
>>>CLEANING DATE&TIME
↕ MM/DD hh:mm
MM/DD hh:mm: Cleaning execution date
A
B

A´

B´

>INFORMATION
↕ PRINTER CONFIG

OK

>>PRINTER CONFIG
↕ INK SYSTEM :XXX

XXX: Printer ink system

>INFORMATION
↕ VERSION INFO

OK

>>VERSION INFO
↕ BOOT X.XX

Displays boot version.

>>VERSION INFO
↕ FIRMWARE X.XX_YY

Displays firmware version.

>>VERSION INFO
↕ IPB :XXX

Displays version and revision of IPB board.

>>VERSION INFO
↕ ACT :XXX

Displays version of ACT board.

>>VERSION INFO
↕ HCB :XXX

Displays version of HCB board.

>>VERSION INFO
↕ BTC :XXX

Displays version of BTC (FPGA) board.

>INFORMATION
↕ USB INFO

OK

>>USB INFO
↕ ADDRESS :XXX

Displays USB address.
* 000 means not connected.

>>USB INFO
↕ SPEED:XX

Displays USB connection speed.

(LCIS only)

MENU
↕ INK AMOUNT EXTENSION

OK

>INK AMOUNT EXTENSION
↕ AVAILABLE INK

OK

>>AVAILABLE INK
XX.XL

XX.XL: Amount of ink that can be used

OK

>INK AMOUNT EXTENSION
↕ READ EXT. CHIP

OK

>INK AMOUNT EXTENSION
↕ CHECK CHIP DATA

MENU
↕ CHANGE PRESET

OK

>CHANGE PRESET
↕ XX→YY:NNNNNN

XX: Current media preset number
YY: Selected preset number
NNNNNN: Media name

MENU
↕ EDIT MEDIA PRESETS

OK

>EDIT MEDIA PRESETS
↕ SELECT PRESET NO.

OK

>>SELECT PRESET NO.
↕ XX→ZYY:NNNNNN

XX: Current media preset number
Z: Registration mark (A registration mark * is displayed if the media preset is registered)
YY: Selected preset number
NNNNNN: Media name

>EDIT MEDIA PRESETS
↕ EDIT PRESET NAME

OK

>>EDIT PRESET NAME
↕ ZXX:NNNNNN

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Preset number
NNNNNN: Media name

C

D

C´

D´

>EDIT MEDIA PRESETS
↕ MEDIA ADV PRIORITY ◎
OK
>>MEDIA ADV PRIORITY
↕ ZYYYY ◎

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
YYYY: Media advance setting priority after change

>EDIT MEDIA PRESETS
↕ MEDIA ADV VALUE ◎
OK
>>MEDIA ADV VALUE
↕ ZXXX. X→YYY. Y% ◎

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XXX. X: Current adjustment value
YYY. Y: Adjustment value after change

>EDIT MEDIA PRESETS
↕ BIDIR ADJUST 1 ◎
OK
>>BIDIR ADJUST 1
↕ CC_P:±XX ◎

CC: Print head color
P: Head left or right
±XX: Current adjustment value

>EDIT MEDIA PRESETS
↕ BIDIR ADJUST 2 ◎
OK
>>BIDIR ADJUST 2
↕ CC_P:±XX ◎

CC: Print head color
P: Head left or right
±XX: Current adjustment value

>EDIT MEDIA PRESETS
↕ BIDIR ADJUST 3 ◎
OK
>>BIDIR ADJUST 3
↕ CC_P:±XX ◎

CC: Print head color
P: Head left or right
±XX: Current adjustment value

>EDIT MEDIA PRESETS
↕ BIDIR ADJUST 4 ◎
OK
>>BIDIR ADJUST 4
↕ CC_P:±XX ◎

CC: Print head color
P: Head left or right
±XX: Current adjustment value

>EDIT MEDIA PRESETS
↕ HEATER PRIORITY ◎
OK
>>HEATER PRIORITY
↕ ZYYYY ◎

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
YYYY: Heater setting priority after change

>EDIT MEDIA PRESETS
↕ AFTERHEATER T ◎
OK
Celsius
>>AFTERHEATER T
↕ ZXX→YY°C ◎
Fahrenheit
>>AFTERHEATER T
↕ ZXXX→YYY°F ◎

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Currently set temperature
YY: Set temperature after change

>EDIT MEDIA PRESETS
↕ PRINTHEATER T ◎
OK
Celsius
>>PRINTHEATER T
↕ ZXX→YY°C ◎
Fahrenheit
>>PRINTHEATER T
↕ ZXXX→YYY°F ◎

Z Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Currently set temperature
YY: Set temperature after change

>EDIT MEDIA PRESETS
↕ PREHEATER T ◎
OK
Celsius
>>PREHEATER T
↕ ZXX→YY°C ◎
Fahrenheit
>>PREHEATER T
↕ ZXXX→YYY°F ◎

Z Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Currently set temperature
YY: Set temperature after change

>EDIT MEDIA PRESETS
↕ DELETE PRESET ◎
OK
>>DELETE PRESET
↕ ZXX: YYYYYY ◎

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XX: Preset number
YYYYYY: Media name

>EDIT MEDIA PRESETS
↕ COPY MEDIA PRESET ◎
OK
>>COPY MEDIA PRESET
↕ XX→YY ZNNNNNN ◎

XX: Number of preset to copy
YY: Copy destination number
Z: Registration mark A registration mark * is displayed if the media preset is registered
NNNNNN: Copy destination media name

E

F

E´

F´

>EDIT MEDIA PRESETS
↕ MISC SETTINGS

OK

>>MISC SETTINGS
↕ REMAINING MEDIA

OK

Millimeters

>>>REMAINING MEDIA
↕ ZXXX→YYYm

Z: Registration mark A registration mark * is displayed if the media preset is registered
XXX: Current remaining media
YYY: Remaining media after change

Inches

>>>REMAINING MEDIA
↕ ZXXXX→YYYYft

>>MISC SETTINGS
↕ IONIZER

OK

>>>IONIZER
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ TUR MODE

OK

>>>TUR MODE
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ MEDIA EDGE GUARDS

OK

>>>MEDIA EDGE GUARDS
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ SKEW CHECK

OK

>>>SKEW CHECK
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ COLOR STRIPE

OK

>>>COLOR STRIPE
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ SUCTION FAN POWER

OK

>>>SUCTION FAN POWER
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ MEDIA ADVANCE MODE

OK

>>>MEDIA ADVANCE MODE
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ MEDIA BACK MODE

OK

>>>MEDIA BACK MODE
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ AUTO PH CLEANING

OK

>>>AUTO PH CLEANING
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ PH REST INTERVAL

OK

>>>PH REST INTERVAL
↕ ZXXXX→YYYY CYCLES

Z: Registration mark A registration mark * is displayed if the media preset is registered
XXXX: Current setting
YYYY: Setting after change

>>MISC SETTINGS
↕ PH REST TIME

OK

>>>PH REST TIME
↕ ZXX→YY SECONDS

Z: Registration mark A registration mark * is displayed if the media preset is registered
XXXX: Current setting
YYYY: Setting after change

>>MISC SETTINGS
↕ CARRIAGE SPEED

OK

>>>CARRIAGE SPEED
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ DETECT MEDIA WIDTH

OK

>>>DETECT MEDIA WIDTH
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

>>MISC SETTINGS
↕ DETECT MEDIA

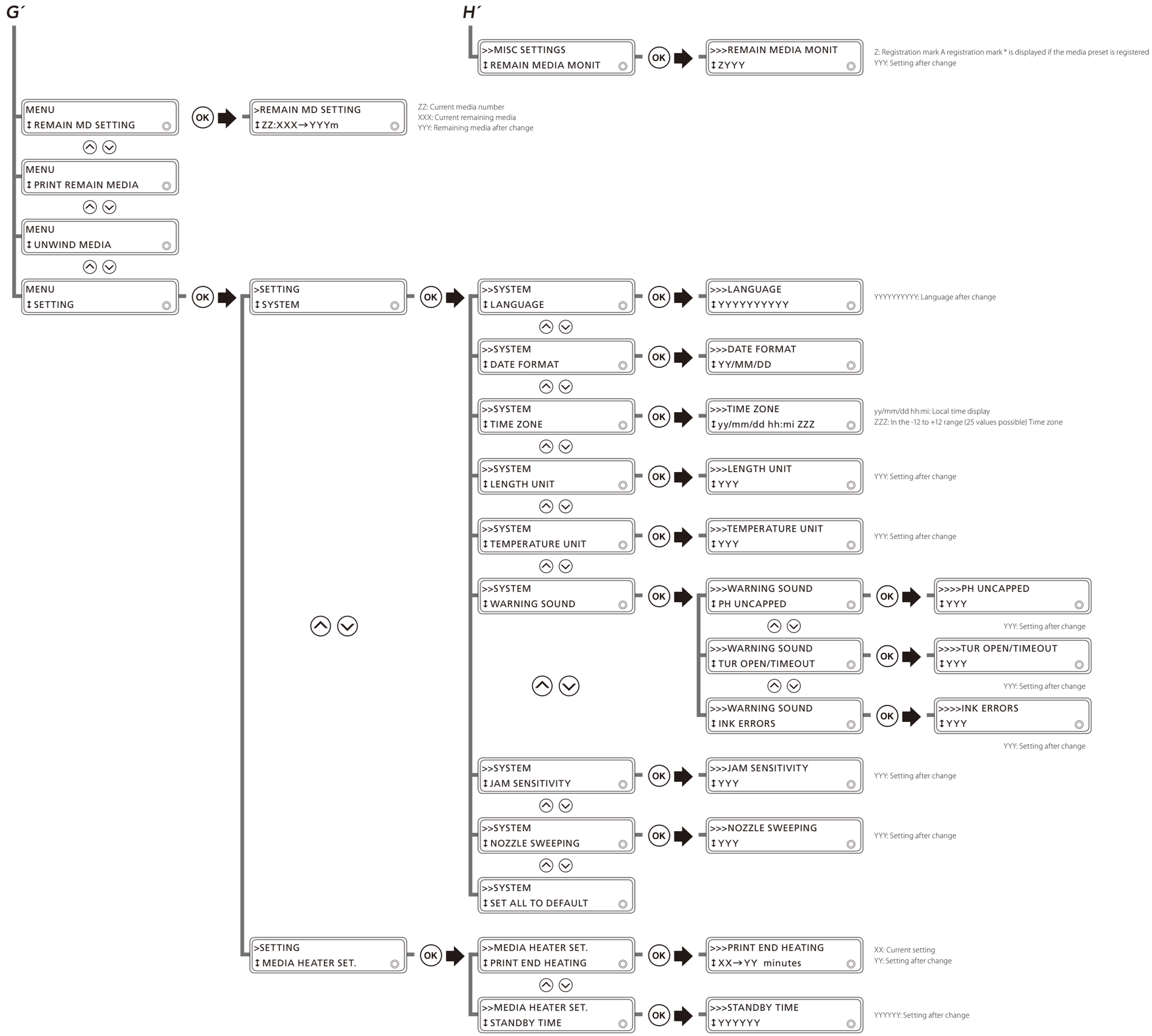
OK

>>>DETECT MEDIA
↕ ZYYY

Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

G

H


G´
MENU
↕ REMAIN MD SETTING
OK
>REMAIN MD SETTING
↕ ZZ:XXX→YYYm
ZZ: Current media number
XXX: Current remaining media
YYY: Remaining media after change
MENU
↕ PRINT REMAIN MEDIA
MENU
↕ UNWIND MEDIA
MENU
↕ SETTING
OK
>SETTING
↕ SYSTEM
OK
>>SYSTEM
↕ LANGUAGE
OK
>>>LANGUAGE
↕ YYYYYYYYYY
YYYYYYYYY: Language after change
>>SYSTEM
↕ DATE FORMAT
OK
>>>DATE FORMAT
↕ YY/MM/DD
>>SYSTEM
↕ TIME ZONE
OK
>>>TIME ZONE
↕ yy/mm/dd hh:mi ZZZ
yy/mm/dd hh:mi: Local time display
ZZZ: In the -12 to +12 range (25 values possible) Time zone
>>SYSTEM
↕ LENGTH UNIT
OK
>>>LENGTH UNIT
↕ YYY
YYY: Setting after change
>>SYSTEM
↕ TEMPERATURE UNIT
OK
>>>TEMPERATURE UNIT
↕ YYY
YYY: Setting after change
>>SYSTEM
↕ WARNING SOUND
OK
>>>WARNING SOUND
↕ PH UNCAPPED
OK
>>>>PH UNCAPPED
↕ YYY
YYY: Setting after change
>>>WARNING SOUND
↕ TUR OPEN/TIMEOUT
OK
>>>>TUR OPEN/TIMEOUT
↕ YYY
YYY: Setting after change
>>>WARNING SOUND
↕ INK ERRORS
OK
>>>>INK ERRORS
↕ YYY
YYY: Setting after change
>>SYSTEM
↕ JAM SENSITIVITY
OK
>>>JAM SENSITIVITY
↕ YYY
YYY: Setting after change
>>SYSTEM
↕ NOZZLE SWEEPING
OK
>>>NOZZLE SWEEPING
↕ YYY
YYY: Setting after change
>>SYSTEM
↕ SET ALL TO DEFAULT
>SETTING
↕ MEDIA HEATER SET.
OK
>>MEDIA HEATER SET.
↕ PRINT END HEATING
OK
>>>PRINT END HEATING
↕ XX→YY minutes
XX: Current setting
YY: Setting after change
>>MEDIA HEATER SET.
↕ STANDBY TIME
OK
>>>STANDBY TIME
↕ YYYYYY
YYYYYY: Setting after change
H´
>>MISC SETTINGS
↕ REMAIN MEDIA MONIT
OK
>>>REMAIN MEDIA MONIT
↕ ZYYY
Z: Registration mark A registration mark * is displayed if the media preset is registered
YYY: Setting after change

ADJUST

PRINTER READY
01: PAPER / 1626mm

ADJUST

ADJUST
↕ MEDIA ADVANCE

OK

>MEDIA ADVANCE
↕ BIDIR AUTO

OK

>>BIDIR AUTO
↕ YYYYYYYYY

YYYYYYYYY: Print mode
- DRAFT (CIS model only)
- FAST PRODUCTION
- PRODUCTION
- STANDARD
- QUALITY
- HIGH QUALITY
- MAX QUALITY

>MEDIA ADVANCE
↕ BIDIR MANUAL

OK

>>BIDIR MANUAL
↕ YYYYYYYYY

OK

>>>YYYYYYYYY
↕ 1 PATTERN

>>>YYYYYYYYY
↕ 3 PATTERNS

>>>YYYYYYYYY
↕ FEED MEDIA

>>>YYYYYYYYY
↕ BACK FEED MEDIA

YYYYYYYYY: Print mode
- DRAFT (CIS model only)
- FAST PRODUCTION
- PRODUCTION
- STANDARD
- QUALITY
- HIGH QUALITY
- MAX QUALITY

>>BIDIR MANUAL
↕ MEDIA ADV VALUE

OK

>>> MEDIA ADV VALUE
↕ ZXXX. XX→YYY. YY %

Z: Registration mark (A registration mark * is displayed if the media preset is registered)
XXX. XX: Current adjustment value
YYY. YY: Adjustment value after change

ADJUST
↕ BIDIR POSITION

OK

>BIDIR POSITION
↕ BIDIR AUTO

OK

>>BIDIR AUTO
↕ YYYYYYYYY

YYYYYYYYY: Bidirectional adjustment pattern
- ALL PRINT MODES
- 1: DRA,FAST PR,PRO (CIS model)
- 1: FAST PRO, PRO (LCIS model)
- 2: STD & QUALITY
- 3: HIGH QUALITY
- 4: MAX QUALITY

>BIDIR POSITION
↕ BIDIR MANUAL

OK

>>BIDIR MANUAL
↕ 1: DRA,FAST PR,PRO

OK

>>>1: DRA,FAST PR,PRO
↕ PRINT PATTERN

>>>1: DRA,FAST PR,PRO
↕ FEED MEDIA

>>>1: DRA,FAST PR,PRO
↕ BACK FEED MEDIA

>>>1: DRA,FAST PR,PRO
↕ CC_P: ± XX

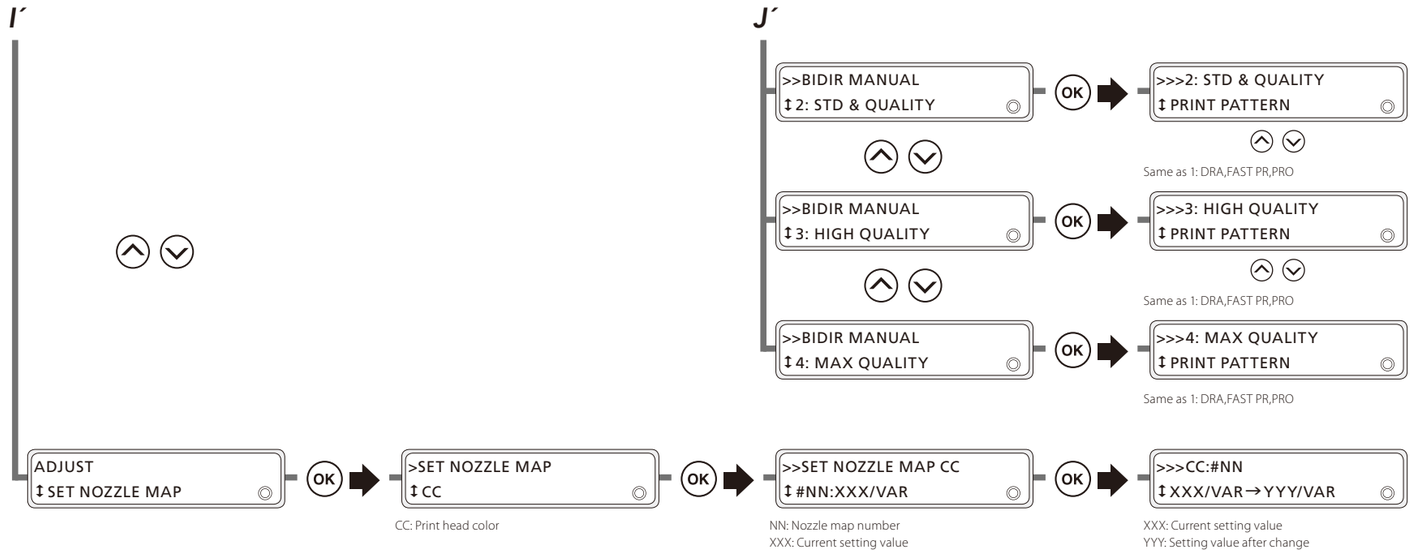
OK

>>>BIDIR ADJUST 1
↕ ZCC_P: XX→YY

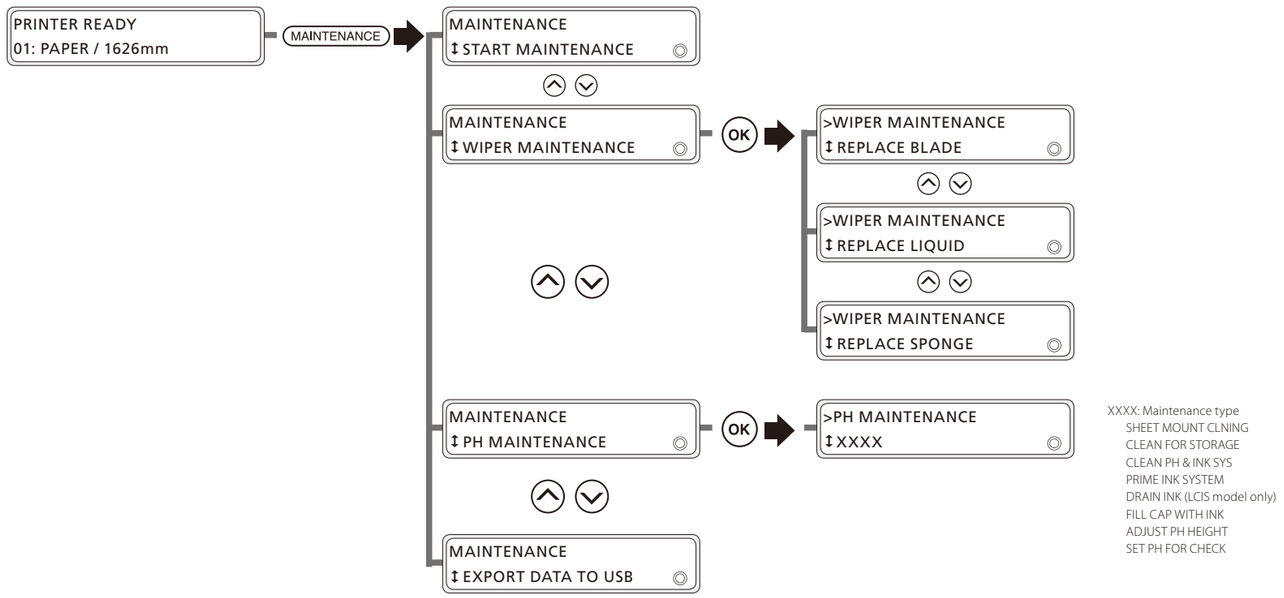
CC: Print head color
P: Head left or right
XX: Current adjustment value

I

J

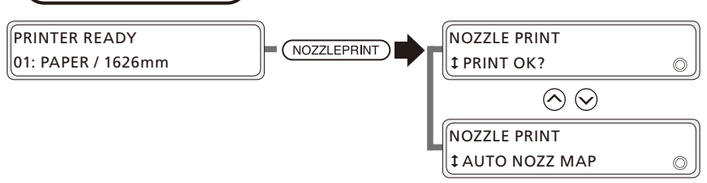

I´
J´
ADJUST
↕SET NOZZLE MAP
OK
>SET NOZZLE MAP
↕CC
CC: Print head color
OK
>>SET NOZZLE MAP CC
↕#NN:XXX/VAR
NN: Nozzle map number
XXX: Current setting value
OK
>>>CC:#NN
↕XXX/VAR→YYY/VAR
XXX: Current setting value
YYY: Setting value after change
>>BIDIR MANUAL
↕2: STD & QUALITY
OK
>>>2: STD & QUALITY
↕PRINT PATTERN
Same as 1: DRA,FAST PR,PRO
>>BIDIR MANUAL
↕3: HIGH QUALITY
OK
>>>3: HIGH QUALITY
↕PRINT PATTERN
Same as 1: DRA,FAST PR,PRO
>>BIDIR MANUAL
↕4: MAX QUALITY
OK
>>>4: MAX QUALITY
↕PRINT PATTERN
Same as 1: DRA,FAST PR,PRO

MAINTENANCE

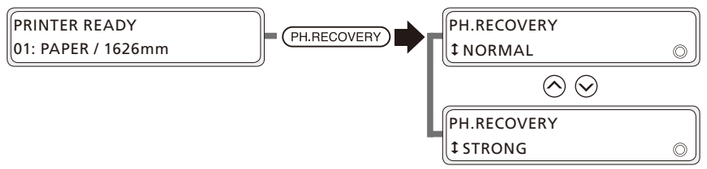


XXXX: Maintenance type
- SHEET MOUNT CLNING
- CLEAN FOR STORAGE
- CLEAN PH & INK SYS
- PRIME INK SYSTEM
- DRAIN INK (LCIS model only)
- FILL CAP WITH INK
- ADJUST PH HEIGHT
- SET PH FOR CHECK

NOZZLEPRINT



PH.RECOVERY



Appendix

Basic specifications

Item	Specification / Function
	IP-6620
Print method	Piezo-type color inkjet printing
Resolution	(main scanning direction) x (subscanning direction) 360 dpi × 180 dpi × DDP, 360 dpi × 360 dpi × DDP, 540 dpi × 360 dpi × DDP, 540 dpi × 540 dpi × DDP, 720 dpi × 720 dpi, 900 dpi × 900 dpi
Print speed	23.9 m2/h for 64-inch width at 6-pass bidirectional STANDARD mode
Media supply/take-up direction	Rear: Supply side, Front: Take-up side
Media type	Vinyl/Banner/Backlit banner (FF)/Solvent printing coated paper
Media width	Max. 64 inches (1626 mm)
Ink cartridge (CIS)	Normal solvent ink (7 colors) (black, cyan, magenta, yellow, light cyan, light magenta, gray) 1500 ml for each color
Ink bottle (LCIS)	Normal solvent ink (6 colors) (black, cyan, magenta, yellow, light cyan, light magenta) 1000 ml for each color
Interface	USB 2.0
Noise	Standby: 50 dB (A) or less Operating: 60 dB (A) or less (continuous sound) excluding supply/take-up motor noise and ink filling noise
Calorific power	10368 kJ/H
Guaranteed print area	Area excluding top/bottom margins (5 mm) and right and left margins (5 mm) (When media edge guards are used, right and left margins are 10 mm.)
Power supply voltage	200 V AC to 240 V AC, 12 A, 50 Hz/60Hz
Input power voltage range	180 V AC to 260 V AC, 50Hz/60 Hz ± 1 Hz
Power consumption	2880 W or less
External dimensions	CIS: 3095 mm (W) × 935 mm (D) × 1247 mm (H) ± 10 mm LCIS: 3327mm (W) × 935mm (D) × 1247mm (H) ± 10mm
Mass	CIS: 321 kg ± 10 kg LCIS: 360 kg ± 10 kg (excluding media and ink)
Print guaranteed temperature/ humidity	20 to 25°C, 40 to 60% RH (no condensation)
Operating temperature/humidity	15 to 30°C, 30 to 70% RH (no condensation)
Storage temperature/humidity	5 to 35°C, 10 to 80% RH (no condensation)
Installation space (W) x (D) x (H)	CIS: Min. 3900 x 3940 x 2200 mm LCIS: Min. 4200mm x 3940mm x 2200mm
Maintenance space (W) x (D) x (H)	CIS: Min. 6100 x 3940 x 2200 mm LCIS: Min. 6400mm x 3940mm x 2200mm

Consumables

Consumables common to both CIS and LCIS models

Waste ink bottle

Type	Content	Quantity
IP6-109	Waste ink bottle	1 piece

⚠ WARNING

- **The waste ink is combustible. Keep the waste ink bottle containing the waste ink away from open flames, sparks, or other sources of ignition.**
- **Do not swallow ink and avoid contact with the eyes to prevent breathing trouble or visual impairment. If ink gets into your eyes, wash it off with clean water and consult a doctor. If it is swallowed, do not try to induce vomiting, but consult a doctor.**

⚠ CAUTION

- **A waste ink bottle must always be installed. When it is removed to dispose of waste ink, another empty waste ink bottle must be installed.**

Daily maintenance kit A

Type	Content	Quantity
IP6-271	Cap cleaning liquid A	300 ml
	Wiper cleaning liquid A	200 ml
	Cleaning swab	10 pieces
	Cleaning swab (Thick)	30 pieces
	Tweezers	1 pair
	Rubber blade	2 pieces
	Sponge blade	1 piece

⚠ WARNING

- **Do not swallow cleaning liquid and avoid contact with the eyes to prevent breathing trouble or visual impairment. If cleaning liquid gets into your eye, wash it off with clean water and consult a doctor. If it is swallowed, do not try to induce vomiting, but consult a doctor.**

Cap cleaning liquid A

Type	Content	Quantity
IP6-272	Cap cleaning liquid A (300 ml)	1 bottles

Wiper cleaning liquid set A

Type	Content	Quantity
IP6-251	Wiper cleaning liquid A (200 ml)	3 bottles

Cleaning swab

Type	Content	Quantity
IP6-147	Cleaning swab	300 pieces
	Bag	6 pieces

Wiper sponge

Type	Content	Quantity
IP6-258	Wiper sponge	1 pieces

Wiper blade

Type	Content	Quantity
IP6-259	Rubber blade	2 pieces
	Sponge blade	1 piece

Cleaning swab (Thick)

Type	Content	Quantity
IP7-264	Cleaning swab (Thick)	120 pieces

Glove set

Type	Content	Quantity
IP7-138	Gloves	100 pieces (50 pairs)

Media cutter blade

Type	Content	Quantity
IP5-124	Media cutter blade	1 piece

Sheet mount cleaning kit A

Type	Content	Quantity
IP6-261	Head cleaning sheet	12 sheets
	Cap cleaning sheet	12 sheets
	Sheet mount cleaning liquid A (100 ml)	3 piece
	Dropper	3 piece
	Gloves	24 pieces (12 pairs)

CIS consumables

Ink cartridge

One package contains one ink cartridge.

Type	Ink color	Quantity
IP6-221	Y (yellow)	1500 ml
IP6-222	M (magenta)	1500 ml
IP6-223	C (cyan)	1500 ml
IP6-224	K (black)	1500 ml
IP6-225	Lc (light cyan)	1500 ml
IP6-226	Lm (light magenta)	1500 ml
IP6-227	Gy (gray)	1500 ml

The type number may vary depending on the region. Contact your dealer for more information.

⚠ WARNING

- **The ink is combustible. Keep the ink away from open flames, sparks, or other sources of ignition.**
- **Do not swallow ink and avoid contact with the eyes to prevent breathing trouble or visual impairment. If ink gets into your eyes, wash it off with clean water and consult a doctor. If it is swallowed, do not try to induce vomiting, but consult a doctor.**

⚠ CAUTION

- **Always use OKI Data specified ink cartridges. Failure to use the recommended ink cartridges may lead to a deterioration of the print quality or a printer malfunction. This may also invalidate your warranty.**
- **The ink validity period is 18 months from the date of production.**
- **Do not shake the ink cartridges before use.**
- **Set all the ink cartridges (six for the 6-color printer, seven for the 7-color printer) in the ink trays. When removing a cartridge, always replace it with a new one.**

Storage liquid set

Type	Content	Quantity
IP6-256	Storage liquid cartridge A	6 pieces

Storage liquid set

Type	Content	Quantity
IP6-257	Storage liquid cartridge A	7 pieces

⚠ CAUTION

- **The expiration date of storage liquid cartridges A is 24 months after the date of production.**
- **Using storage liquid cartridges A whose expiration has passed may not only affect the print quality, but also cause the printer to malfunction.**

Cleaning liquid set A

Type	Content	Quantity
IP6-254	Cleaning liquid cartridge A	6 pieces

Cleaning liquid set

Type	Content	Quantity
IP6-255	Cleaning liquid cartridge A	7 pieces

Ink tray

Type	Content	Quantity
IP7-123	Ink tray	1 piece

LCIS consumables

Ink bottle

One package contains two bottles of 1000 ml and one ink amount extension chip.

Type	Ink color	Quantity
IP6-241	Y (yellow)	2 pieces
IP6-242	M (magenta)	2 pieces
IP6-243	C (cyan)	2 pieces
IP6-244	K (black)	2 pieces
IP6-245	Lc (light cyan)	2 pieces
IP6-226	Lm (light magenta)	2 pieces

The type number may vary depending on the region. Contact your dealer for more information.

⚠ WARNING

- **The ink is combustible. Keep the ink away from open flames, sparks, or other sources of ignition.**
- **Do not swallow ink and avoid contact with the eyes to prevent breathing trouble or visual impairment. If ink gets into your eyes, wash it off with clean water and consult a doctor. If it is swallowed, do not try to induce vomiting, but consult a doctor.**

⚠ CAUTION

- **Always use OKI Data specified ink bottles. Failure to use the recommended ink bottles may lead to a deterioration of the print quality or a printer malfunction. This may also invalidate your warranty.**
- **The ink validity period is 18 months from the date of production.**
- **Do not shake the ink bottles before use.**

Reservoir

Type	Content	Quantity
IP6-268	Reservoir	6 pieces
	Pierced cover with PET sheet	6 pieces
	Color label	1 set

Bottle adapter

Type	Content	Quantity
IP6-269	Bottle adapter	6 pieces

STORAGE LIQUID SET A

Type	Content	Quantity
IP6-266	Storage liquid bottle	4 pieces
	Reservoir	1 pieces
	Connection tube, tube for storage, etc.	1 set

CLEANING LIQUID SET A

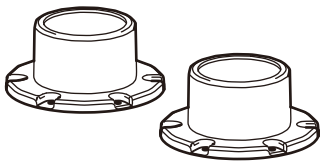
Type	Content	Quantity
IP6-265	Cleaning liquid bottle	4 pieces
	Reservoir	1 pieces
	Connection tube, etc.	1 set

Options

Exhaust attachment (IP7-013)

An optional unit to attach an exhaust duct to the printer

The recommended flow of air is as follows.
1.0 to 1.3 cmm (air velocity 2.5 to 3.2 m/s)

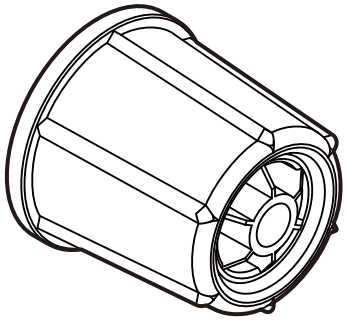


Cutter unit (64) (IP6-010)

This cutter unit is optional to cut the media.

2 inch flange (IP5-261)

This flange is used to install a roll media with a 2-inch core.



Distributors

Contact the nearest service representative or your dealer for information about maintenance and repair services, and consumables.

Contact Us

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OKI DATA CORPORATION

47106002EE Rev10