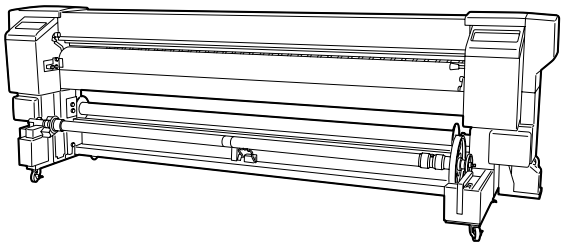
SII

User's Guide

U00094405401

Solvent Ink
Color Inkjet Printer

IP-6900



Read this User's Guide to use the printer safely and properly. Keep this manual in a place where you can quickly access it at any time.

Seiko I Infotech Inc.

IP-6900 Solvent Ink Color Inkjet Printer User's Guide
Documents Number U00094405401

First Edition, May 2005
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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.

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Januar 1996:- EG-Direktive 89/336/EEC, Angleichung der Gesetze der einzelnen Mitgliedsstaaten bezüglich elektromagnetischer Kompatibilität.

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Introduction

Thank you very much for purchasing the IP-6900 Color Inkjet Printer (simply called the printer below).

This printer is a color inkjet printer that uses solvent ink, supports 104 inch media width, and has a built-in SCSI interface.

This manual, the IP-6900 User's Guide, describes the features of the printer, names of components, information needed before use, and basic operations, such as how to turn the power ON and OFF and set media and ink.

The following items should be read before reading Section 1:

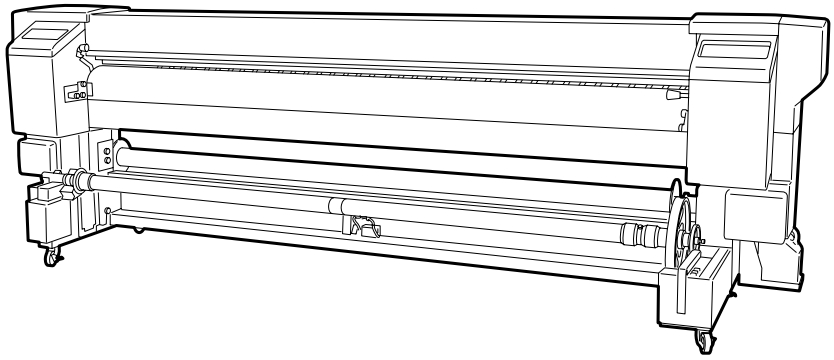
- Contents of package
- Safety precautions
- Handling precautions
- Notation

Read these items to use the printer safely and properly. Keep this manual in a place where you can quickly access it at any time.

Contents of Package

The printer components, including options, are installed on the main unit on delivery. Make sure that the items listed on this page and the next page are present.
If any parts are missing or damaged, contact the shop where you purchased the product or the nearest service center.

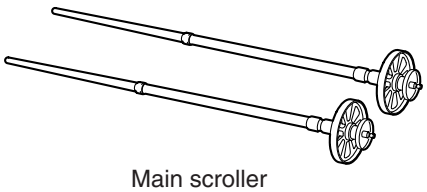
Basic components



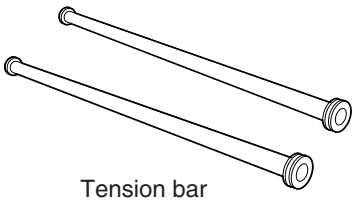
Printer main unit <1>

- Built-in SCSI interface.
- Main unit includes the paper feeder and take-up unit

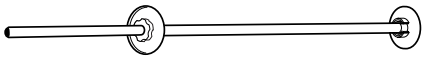
Accessories packed together with main unit



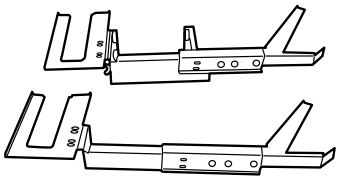
Main scroller
<2>



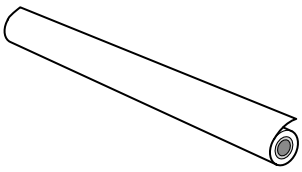
Tension bar
<2>



Sub scroller
<1>

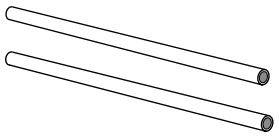


Tension bar guide
<1>



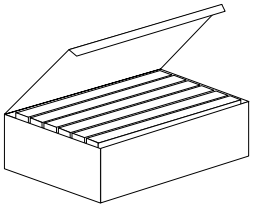
Media for adjustment
<1>

Waste ink bottle IP6-109
<1>



Paper tube 104"
(For take-up unit)
<2>

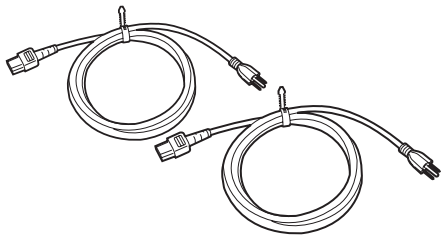
Options



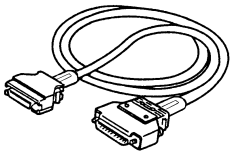
Starter kit 6 colors IP6-160
(Y, M, C, Bk, Lc, Lm)
<1>

*: The ink capacity of each ink cartridge for starter kit 6 colors IP6-160 is 1000ml.
Part of the ink in the starter kit is consumed for initial ink charge and installation check, so that the full amount of ink cannot be used for printing.

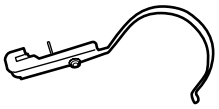
Accessories box



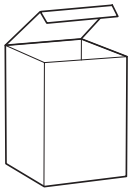
Power cable
<2>



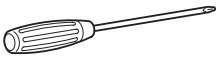
SCSI cable
<1>



Tension bar holder
<5>

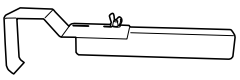


Maintenance kit IP6-108
<1 set>
- Cap cleaning liquid: 100 ml
- Wiper cleaning liquid: 100 ml
- Cleaning swab: 50 pieces
- Syringe: 10 pieces

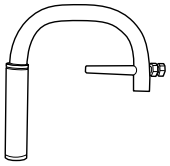


Phillips head screw driver
(for head up/down adjustment)

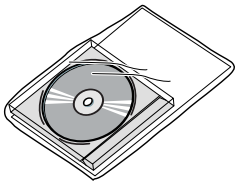
Flanges and fixing rings
(2 each) for tension bar



Media positioning tool
<1>



Scroller grip
<1>



Update CD
<1>

User's Guide
<1 copy, this manual>

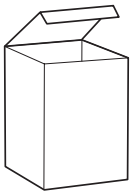
Dryer power cable
<1>

Optional accessories

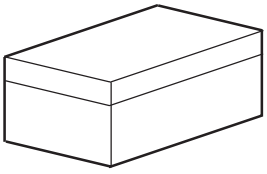
• Dryer 100 (IP-270)	: 1	• Main scroller	: 1
• Exhaust Attachment 100	: 1	• Sub scroller	: 1
• PS RIP (PhotoPrint 4 DX)	: 1	• Tension bar	: 1
• PS RIP (PhotoPrint 4 Server)	: 1	• Peeling bar	: 1
• Footswitch	: 1	• Dual roll set	: 1
• SCSI cable (9 m)	: 1	• Edge guide (for special printing)	: 2

* : Optional accessories can be ordered separately.

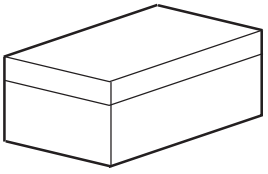
Consumables



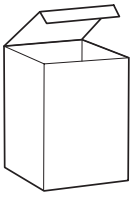
Maintenance Kit IP6-108
<1 set>
- Cap cleaning liquid: 100 ml
- Wiper cleaning liquid: 100 ml
- Cleaning swab: 50 pieces
- Syringe: 10 pieces



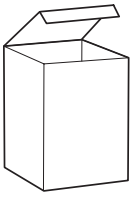
Cleaning Kit IP6-117
<1 set>
- Cleaning liquid cartridge: 6
- Dummy cartridge: 6



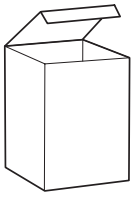
Storage Kit IP6-137
<1 set>
- Maintenance liquid cartridge: 6
- Dummy cartridge: 6



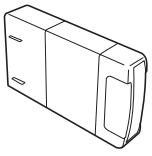
Cap cleaning liquid: 6 bottles
IP6-138 < 1 set >
Cap cleaning liquid (100ml) : 6 bottles



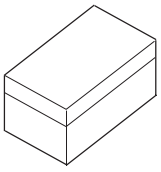
Wiper cleaning liquid: 6 bottles
IP6-139 < 1 set >
- Wiper cleaning liquid (100ml) : 6 bottles
- Syringe: 10 pieces



Cleaning swab
IP6-147
<300 pieces>

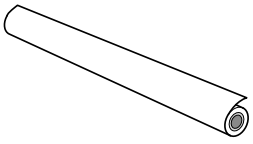


Ink cartridges IP6-XXX
(Y, M, C, Bk, Lc, Lm)
See page 1-8 for the item number.

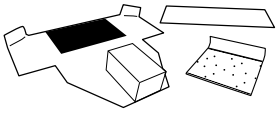


Ink cartridge 4 colors
(Y, M, C, Bk)
See page1-8 for the item number.

Waste ink bottle
IP6-109
<1>



Liner
IP6-161



Head cleaning sheet
IP6-148

* : Consumables can be ordered separately.

Safety Precautions

The symbols listed below are used in this manual to ensure the proper use of the printer and to prevent the printer from being damaged.
Follow the instructions marked with these symbols.

⚠ WARNING	Serious personal injury or death: Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.
⚠ CAUTION	Minor personal injury or product and/or peripheral damage: Failure to follow the guidelines marked with this symbol could result in minor personal injury or product and/or peripheral damage.

Example of symbols:

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

This symbol (⃠) denotes items that are forbidden.

This symbol (●) denotes items you should follow to prevent accidents or injury.
The example at left indicates “Unplug the power cable.”

⚠ WARNING

Use the power supply voltage specified on the nameplate. DO NOT plug several devices into one electrical outlet as this might result in fire or electric shock.

Make sure the printer is well grounded. If it is not, a short circuit may cause fire or electrical shock.

DO NOT disassemble or remodel the printer. DO NOT repair the printer by yourself. Doing so may cause fire, electric shock or other accidents.

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 liquids. Liquids which get into the printer could cause fire, electric shock, or other serious accidents.

DO NOT remove the covers attached to the printer because they contain high voltage and extremely hot parts. Careless removal might result in an electric shock or burn.

DO NOT allow metal or liquids to touch the internal parts of the printer. Doing so may cause fire, electric shock, or other accidents.

DO NOT disconnect or connect the power cable with wet hands. Doing so may lead to electric shock.

Turn the printer OFF and unplug the power cable immediately if it sparks.

⚠ WARNING

Turn power to the printer OFF and unplug the power cable from the power outlet in the following cases:

- Before cleaning or maintenance.
- Smoke, strange noise or smells generate from the printer.
- A piece of metal or liquid touches the internal parts or slot of the printer.
- An error requiring service by a service center occurs.

DO NOT put your hand into the paper discharge slot as it may be injured by the cutting device.

Since the ink is flammable, never use fire near the device. It may cause fire.

Do not swallow ink or permit it to splash on the eye. If it gets into the eye, wash it off with clean running water and consult a doctor. If it is swallowed, do not try to force vomiting, but consult a doctor.

Keep ink cartridges out of reach of children.

If ink adheres to the surface of the printer, promptly wipe it OFF. Leaving it on may damage the coating.

⚠ CAUTION

Handle the media rolls with care because they are very heavy. Dropping them could lead to personal injury.

Hold the electric cable by the plug when connecting or disconnecting it. Holding the cable directly may cause the cable to fray or break, which could lead to electric shock and/or fire.

DO NOT get ink on your skin or clothes. Wash off any ink immediately with soapy water.

DO NOT put any paper rolls on an unstable table or a tilted surface as they could fall, causing injury.

The heater will be hot.
Be careful not to touch it and not to be burned.

In order to ensure the safe operation of the printer heed all of the cautions and warnings contained throughout this manual.

Handling Precautions

Power Supply

1. Install the printer near an easily accessible electrical outlet.
2. Do not provide power to the printer through the same power line as for noise-generating devices, such as a motor.
3. Use a power supply matched with the printer specification.
4. Connect the power cable directly to an electrical outlet. Do not plug several devices into one electrical outlet.

Printer

1. Do not place anything on top of the printer. Do not rest your elbows on the printer.
2. Open and close the top cover gently from the front of the printer with both hands.
3. Before connecting or disconnecting the interface connector, turn the printer OFF.
4. Do not clean the surface of the cover with benzene or paint thinner. The coating may come off or deteriorate.
   Wipe the cover clean with a soft cloth. If the cover is very dirty, use a cloth moistened with a neutral detergent.
5. Do not touch the ink-jet head surface.

Regular Inspection and Maintenance

The following regular inspection and maintenance must be performed in terms of characteristics of solvent ink:

1. Clean the capping unit and wiper blade every day.
2. Check moisture of wiper sponge every day.
3. Perform head cleaning every month.
4. Perform service cleaning when leaving the printer for a long time (2 weeks or more with power OFF.)
5. Perform head washing and ink charging before printing after leaving the printer idle for a long time.

See pages 2-68 and 2-82 for regular inspection and maintenance.

Consumables

1. Always use the recommended consumables (media, ink, etc.). Failure to follow this instruction may cause poor print quality or breakdown.
2. Do not use ink past the expiration date as this may cause a breakdown.
3. Put a used ink cartridge into a plastic bag and dispose of it as industrial waste. Observe local regulations for disposal of waste ink bottles.
4. Do not get ink on your skin or clothes. Wash any ink off immediately with soapy water.
5. Check the waste ink bottle regularly so as not to permit waste ink to leak.
6. When the waste ink bottle is installed or removed, spread a stain preventing sheet so as not to stain the floor with spilt ink.
7. Store ink in a dark and cool place.
   NEVER store ink in high temperature or direct sunshine.
   Doing so may cause ink to deteriorate.
8. Do not attempt to disassemble ink cartridges.
9. Commercially available media for use with solvent ink can be used in this printer.

Manual Legend (Notational rules)

This manual uses the following notation for marks, keys, LCDs, and LEDs:

Marks

WARNING

Boxes marked with "WARNING" describe points requiring caution to avoid serious personal injury.

CAUTION

Boxes marked with "CAUTION" describe points requiring caution to avoid injury to yourself or damage to the printer.

NOTE

Boxes marked with a note describe precautions while handling the printer.

HINT: Hint mark

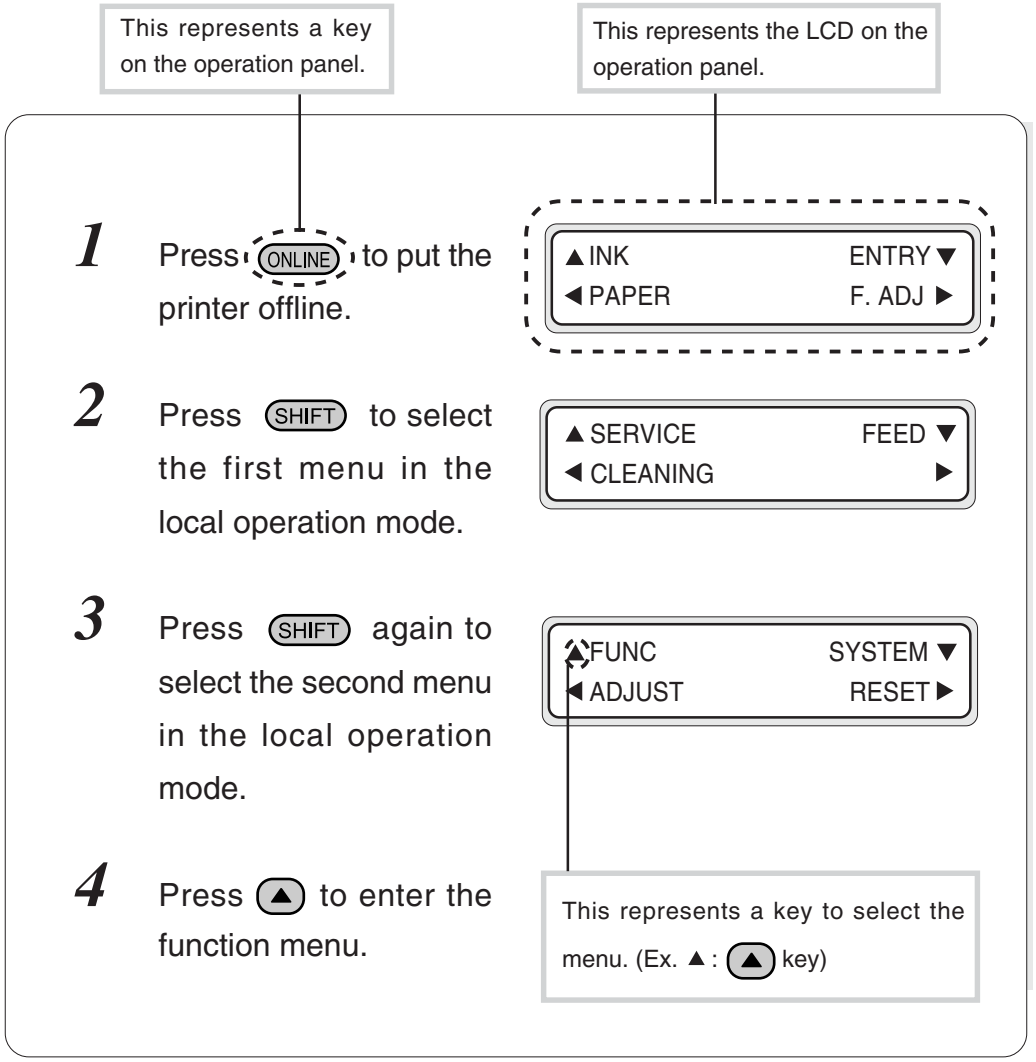
The hint symbol describes operations that make using or handling the printer easier.

⇒ Reference mark

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

Notation for Keys/LCD/LED

Example 1: Keys in the text and display on the LCD

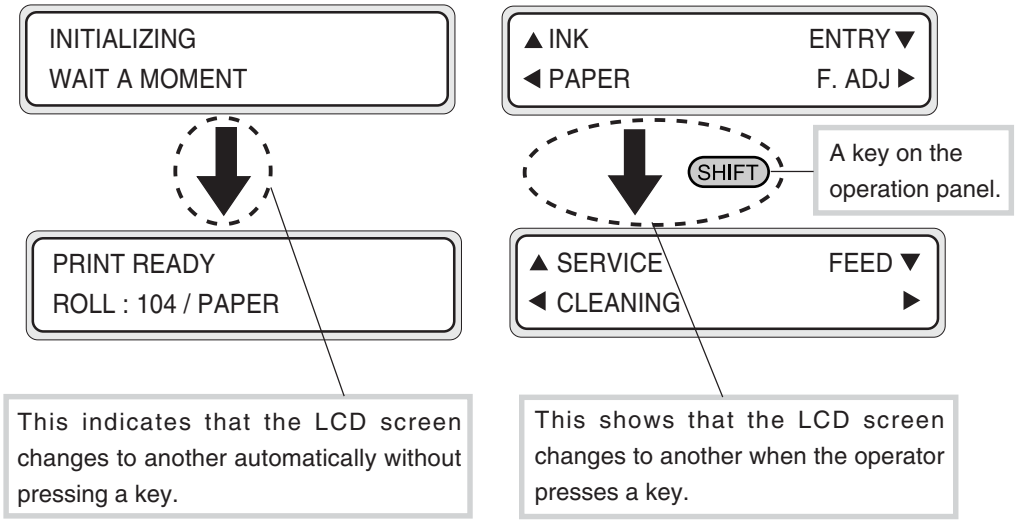


Example 2: LED states

The LED states "On", "flashing", and "Off" are indicated as follows:

- On
- Flashing
- Off

Example 3: LCD state transitions and key operations



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Section 1 Getting Started

(Basic knowledge)

This section provides necessary information to operate the printer. Familiarize yourself with the basics of the printer before reading Section 2 and later.

Contents of this section

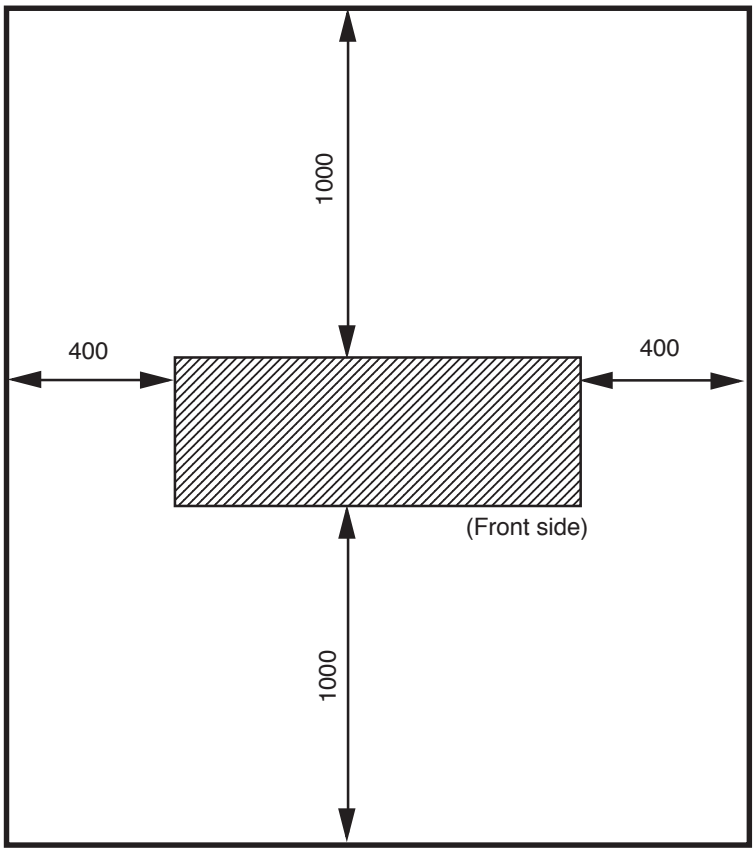
Operating Conditions

This section describes the operating conditions for the printer.

Installation Space

There must be sufficient space around the printer for the replacement of frequently used parts, for the output of drawings, and for ventilation. In addition, maintenance space, shown below, is required to repair the printer or replace components.
The installation/maintenance space is shown in the following figure:

■ Installation and maintenance space



Height direction: 1700

(Unit : mm)

Environmental Conditions

■ Operating temperature and humidity levels

The printer should be used within the temperature and humidity ranges shown below.
Temperature: 15 °C to 30 °C
Humidity: 30% to 70%

- To obtain better print quality, use the printer within temperatures of 20° to 25 °C.
- When the operating temperature is lower than 20 °C or higher than 40 °C, print speed is reduced to two-thirds of normal print speed to maintain good print quality.

NOTE

- When the printer is used out of range of the operating temperature and humidity, printing may stop or print quality may be degraded.

■ Places where the printer must not be installed

Do not install the printer in the following places:

- A location near 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 subject to direct air circulation from vents
- Places near a diazo copier that may generate ammonia gas
- Places with poor ventilation
- Unstable places

Consumables

Media

■ Available media types

The following types of media are available:
For details, ask our sales office or a nearby agent.

- Vinyl chloride
- FF
- Tarpaulin
- Mesh tarpaulin
- Fabric banner (cloth)

Contact our service center for details.

■ Precautions for storing media

- Avoid direct sunlight and water both before and after opening the package. Put media in a box or envelope to prevent dust and store media in a dry, cool and dark place.
- Avoid rapid change of temperature and humidity, and store media where condensation will not occur.
- Do not store media standing on end to prevent disorder of media and damage to the roll edge.
- Do not pile up media rolls.

■ Precautions for disposing of media

- Dispose of media in accordance with local conditions and regulations.

■ Precautions in use

- Avoid change of temperature or humidity after opening the package.
  Set media in the printer after leaving media in the operation environment for 3 hours or more. Suppress change of humidity by turning the air conditioner ON/OFF.
- Due to media characteristics, curling of media in low humidity and wrinkling of media in high humidity may occur easily.
  Use media in a normal temperature and humidity environment (around 23 °C and 50%RH).
- Do not use scratched, wrinkled, curled, or dust-stained part of media.
  Especially, damaged edges (both edges) affect media feeding. Also, do not drop or wet the media. Doing so may adversely affect print quality and cause malfunctioning.
- Hold margins of the media so as not to touch the print surface.
  Adhesion of sebaceous matter or sweat may adversely affect print quality.
- Roll media correctly before setting in the printer.

■ Precautions for handling prints.

- Do not touch the print surface before ink dries.
  Hold margins of the media for handling.
  Especially use care within 24 hours after printing.
- Rubbing the print surface causes color fading or color transfer.
  Do not superimpose print surfaces, to prevent color transfer.
- Do not superimpose on copy prints or laser prints, to prevent sticking due to ink or toner.
- Do not rub, scratch, or hold the media, to prevent peeling.
- Do not rub or leave the media in wet condition, to prevent blurring.

■ Other precautions

- Aging of media causes color fading and a change in quality.
  Check media condition and use well-conditioned media.
- Media dust due to cutting may cause floating of laminated coating.
- When using media with glue, adhesive matter (glue) may stick to the platen.
  In this case, wipe up the adhesive matter, referring to "Section 2 Inspection & Maintenance".
  Sticking of adhesive matter may cause paper jamming.

Ink Cartridge

■ Ink types

Use our recommended ink cartridges listed below.

[6-color ink cartridge] 1 cartridge/box

Item No.	Ink color	Ink capacity
IP6-101	Y (Yellow)	1000 ml
IP6-102	M (Magenta)	1000 ml
IP6-103	C (Cyan)	1000 ml
IP6-104	Bk (Black)	1000 ml
IP6-105	Lc (Light Cyan)	1000 ml
IP6-106	Lm (Light Magenta)	1000 ml

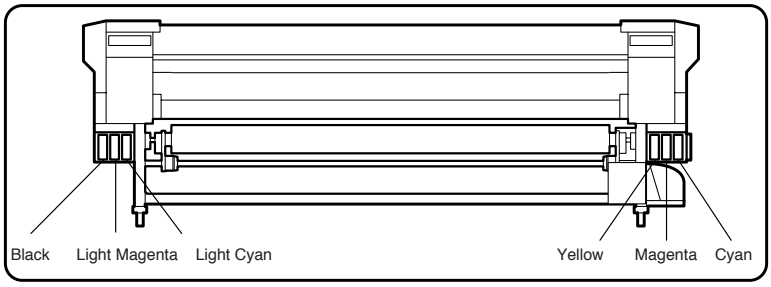
[4-color ink cartridge] 3 cartridge/box

Item No.	Ink color	Ink capacity
IP6-141	Y (Yellow)	1000 ml
IP6-142	M (Magenta)	1000 ml
IP6-143	C (Cyan)	1000 ml
IP6-144	Bk (Black)	1000 ml

NOTES

- Failure to use the recommended ink cartridge may lead to deterioration of print quality or printer malfunction.
- The ink lifetime is 12 months after the manufacture date.
- Do not shake ink cartridges before use.
- All six color cartridges must be installed.
  If any of the cartridges is removed, install a new one.

Ink cartridges must be installed in all six slots. The positions of ink cartridges are specified by color. (See the figure below.)



WARNING

- Never bring the ink close to fire. Failure to follow this warning might result in fire.

CAUTION

- Do not swallow ink or let it splash on the eye. If it gets into the eye, wash it off with clean running water and consult a doctor. If it is swallowed, do not try to force vomiting, but see a doctor.
- Do not attempt to disassemble ink cartridges.

■ *Precautions for ink storage and processing*

> ⚠ CAUTION
>
> - Securely put a used ink cartridge into a plastic bag and dispose of it as industrial waste. Observe regulations for disposal of ink cartridges.

> NOTE
>
> - Ink has an expiration date. After expiration, the print quality may deteriorate or the printer may malfunction.
> - Store ink cartridges in a dry, cool and dark place. Always use the recommended ink. Failure to follow this instruction may cause poor print quality or a breakdown.

Waste Ink Bottle

Use our recommended waste ink bottle listed below.

Item No.	Remarks
IP6-109	1 piece

⚠ WARNING

- Never put the waste ink bottle near an open flame. Failure to follow this warning might result in fire.

⚠ CAUTION

- Do not swallow ink or let it splash on the eye. If it gets into the eye, wash it off with clean running water and consult a doctor. If it is swallowed, do not try to force vomiting, but see a doctor.

NOTE

- Install the waste ink bottle securely.
- A waste ink bottle must always be installed. If it is removed for replacement, a new one must be installed.

■ Precautions for handling the waste ink bottle

⚠ CAUTION

- After use, securely fasten the attached cap and dispose of the waste ink bottle as industrial waste.

NOTE

- When the waste ink bottle is installed or removed, hold it with both hands with its mouth facing up. If not, waste ink may spill from the bottle.

Maintenance Kit

For cleaning the cap and wiper, use our specified cleaning liquid listed below.

Item No.	Remarks	Quantity
IP6-108	Cap cleaning liquid	100 ml
	Wiper cleaning liquid	100 ml
	Cleaning swab	50 pieces
	Syringe	10 pieces

⚠ CAUTION

- Do not swallow ink or let it splash on the eye. If it gets into the eye, wash it off with clean running water and consult a doctor. If it is swallowed, do not try to force vomiting, but see a doctor.

Cap Cleaning Liquid 6-Bottle Set

Item No.	Remarks	Quantity
IP6-138	Cap cleaning liquid (100ml)	6

Wiper Cleaning Liquid 6-Bottle Set

Item No.	Remarks	Quantity
IP6-139	Wiper cleaning liquid (100ml)	6
	Syring	10

Cleaning Swab

Item No.	Remarks
IP6-147	300 pieces

Storage Kit

Item No.	Remarks	Quantity
IP6-137	Maintenance liquid cartridge (IP6-107)	6
	Dummy cartridge (IP6-118)	6

Cleaning Kit

Item No.	Remarks	Quantity
IP6-117	Cleaning liquid cartridge (IP6-119)	6
	Dummy cartridge (IP6-118)	6

Liner

Item No.	Remarks	Quantity
IP6-161	Liner	1 piece

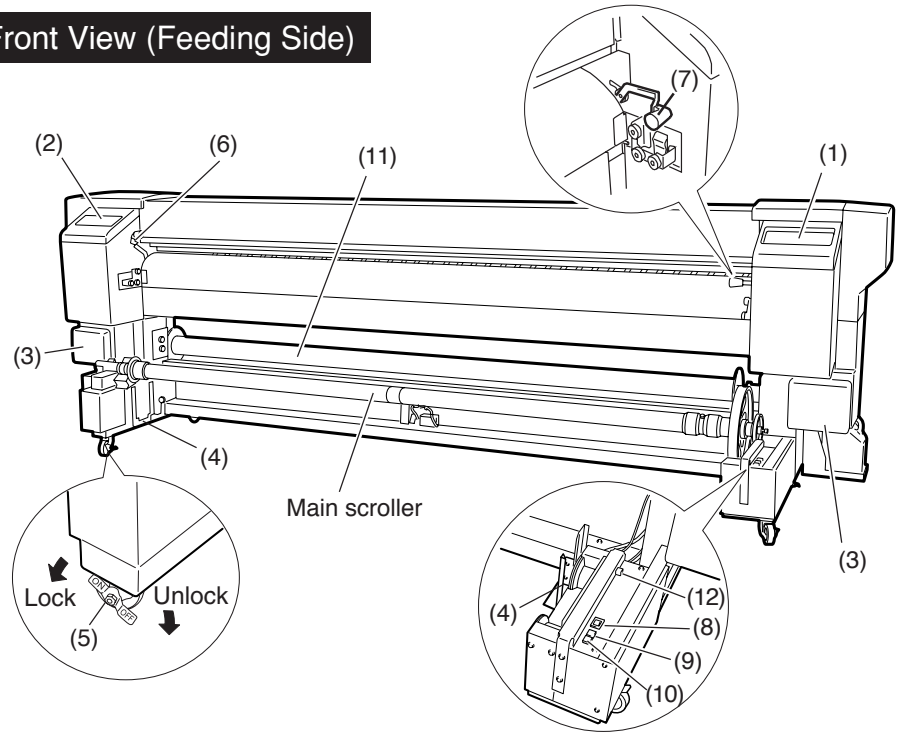
Head Cleaning Sheet

Item No.	Remarks	Quantity
IP6-148	Head cleaning sheet	6 sheets

External Views, Part Names, and Functions

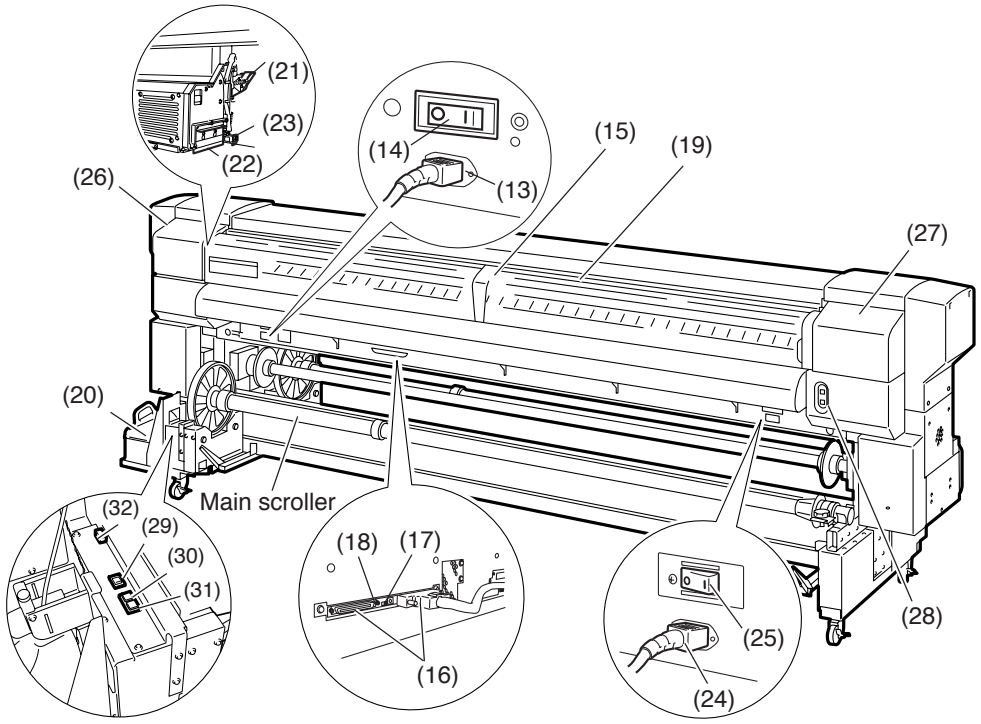
This section shows external views of the printer and names of printer parts, and describes their functions.

Front View (Feeding Side)



(1) Operation panel	The lamps and LCD, which indicate the printer status, and keys for setting functions are located on the operation panel. (⇒See page 1-18)
(2) Heater control panel	The keys for setting heater temperature are located on the heater control panel. (⇒See page 1-20)
(3) Ink holder	Holds the ink cartridge.
(4) Tension bar guide	(⇒See page 2-15)
(5) Caster	Unlock the caster to move the printer, and locks it to secure the printer.
(6) Paper pressure alternation lever	Alternates media pressure depending on the media thickness. (⇒See page 2-65)
(7) Pressure roller up/down lever	Presses down and releases media inserted in the feeding unit.
(8) Feed direction switch1	(⇒See page 2-16)
(9) Take-up Switch	(⇒See page 2-16)
(10) Feed Switch	(⇒See page 2-16)
(11) Sub scroller	(⇒See page 2-21)
(12) Footswitch connector	Connects the footswitch (option). (⇒See page 1-20)

Rear View (Discharge Side)



(13) Power receptacle
(14) AC1 switch
} AC1

(15) Rear cover

(16) SCSI connector
(17) ID switch
(18) Terminator switch
} SCSI controller

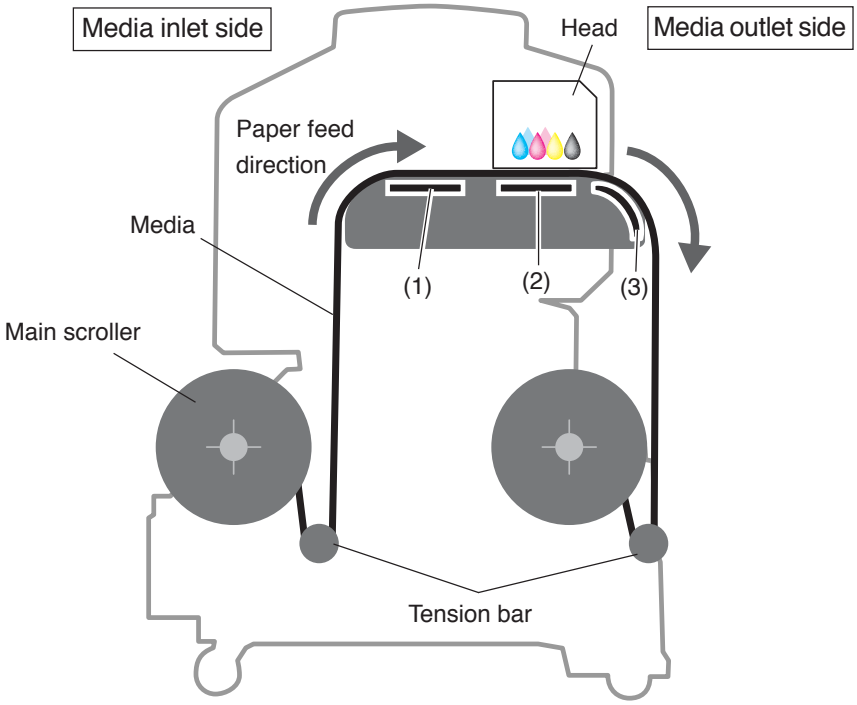
(19) Paper outlet
(20) Waste ink bottle
(21) Head Up/Down lever
(22) Shield HB
(23) Brush

(24) Power receptacle
(25) AC2 switch
} AC2

(26) Cap cover
(27) Wiper cover
(28) Print stop/restart, cancel keys (⇒See page 2-69)
(29) Take-up direction switch (⇒See page 2-28)
(30) Feed switch (white) (⇒See page 2-28)
(31) Winder switch (green) (⇒See page 2-28)
(32) Footswitch connector (⇒See page 1-21)

Heater

The printer has three built-in heaters for fixing and stabilizing the print image on the print media.



(1) Front heater (Front)	Preheats the media.
(2) Print heater (Rear)	Infiltrates ink into the media and fixes ink.
(3) Rear heater (Finish)	Dries ink and stabilizes print image.

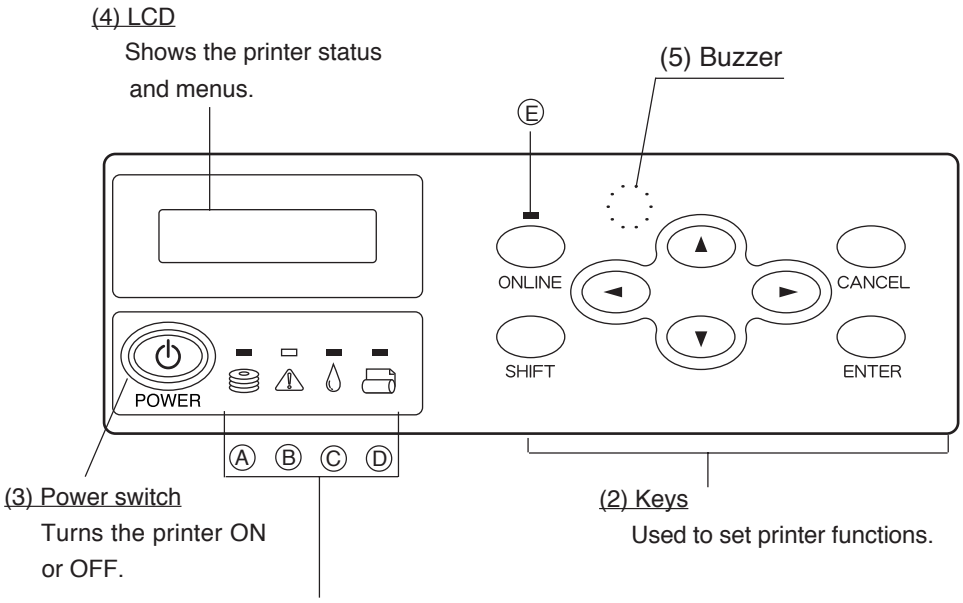
* The three heaters are controlled separately.
The heater temperature can be controlled from the operation panel and host PC (RIP).
(⇒See page 2-60 “Changing Heater Control Setting Temperature”)

⚠ WARNING

- Heaters become hot.
  NEVER touch the heaters. Doing so could cause a burn.

Operation Panel

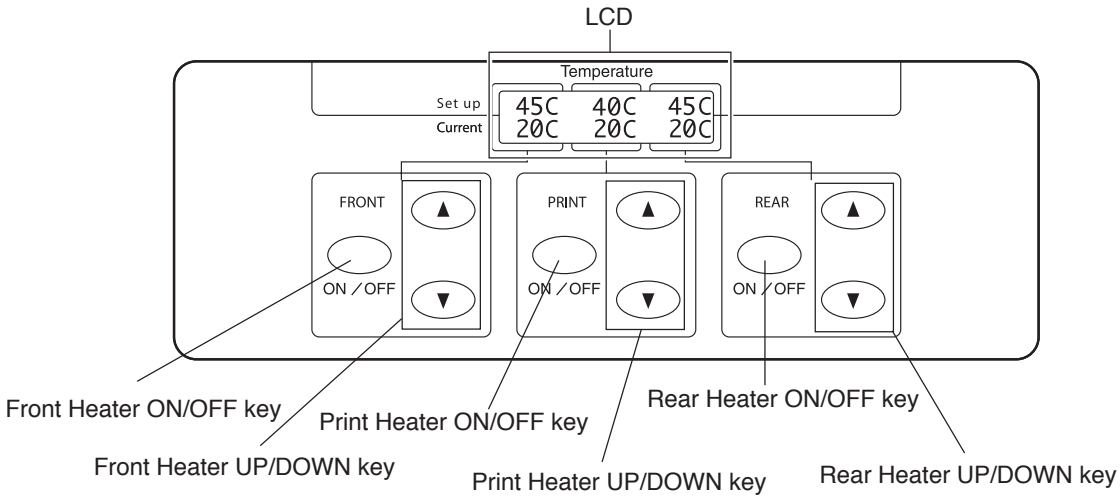
Keys, LED, and the LCD are laid out on the operation panel as shown below. A buzzer sounds to alert the user to errors or invalid key operations.



■ Functions of LCD, LED and keys

Number	Name	Function
(1) LED	(A) Data LED (green)	Shows the data reception state. - Flashing : Data are being received from the computer - Off : No data are being received
	(B) Error LED (orange)	Indicates whether an error has occurred. - On : An error has occurred - Flashing : Warning state (Winder time out error) - Off : Normal (No error has occurred.)
	(C) Ink LED (green)	Shows whether there is an ink cartrige or indicates a warning. - On : All ink cartridges are present. - Flashing : Ink is running out. (One of the color inks has run out.) - Off : No ink (One of the color inks has run out.)
	(D) Media LED (green)	Shows whether media is set. - On : Media is set. (Roll paper or cut sheet is set.) - Off : No media (Neither roll paper nor cut sheet is set.)
	(E) Online LED (green)	Shows whether the printer is online or offline. - On : Online - Flashing : Online pause mode - Off : Offline
(2) Key	ONLINE key	Switches between online and offline states.
	SHIFT key	Used as an auxiliary key for parameter input (switches the menu level display).
	CANCEL key	Cancels an input parameter.
	ENTER key	Selects a menu or enters a parameter.
	▲ key	Selects the menu group or switches the menu (selection, number up/down).
	▼ key	
	◀ key	
	▶ key	
(3) Power switch	Power Switch	Used to turn the printer ON or OFF.
(4) LCD	LCD	Shows printer messages or status with alphanumeric characters, katakana, or symbols (16 digits, two lines). Menus have a hierarchical structure. Access each menu with ▲ , ▼ , ◀ , ▶ or (SHIFT) key.
(5) Buzzer	Buzzer	Sounds an alarm to notify the operator of an error.

Heater Control Panel



■ Functions of LCD, LEDs and keys

Number	Name	Function and description
LCD	FRONT	Indicates the setting temperature and the current temperature of the front heater. When the main switch of the heater is turned off, a message instructs the user to turn the main switch ON. When the front heater is turned off, "OFF" is indicated.
	PRINT	Indicates the setting temperature and the current temperature of the print heater. When the main switch of the heater is turned OFF, a message instructs the user to turn the main switch ON. When the print heater is turned off, "OFF" is indicated.
	REAR	Indicates the setting temperature and the current temperature of the rear heater. When the main switch of the heater is turned off, a message insturucts the user to turn the main switch ON. When the rear heater is turned off, "OFF" is indicated.
key	FRONT ON/OFF key	Turns the front heater ON/OFF.
	FRONT UP key	Increases the setting value for the front heater.
	FRONT DOWN key	Decreases the setting value for the front heater.
	PRINT ON/OFF key	Turns the print heater ON/OFF.
	PRINT UP key	Increases the setting value for the print heater.
	PRINT DOWN key	Decreases the setting value for the print heater.
	REAR ON/OFF key	Turns the rear heater ON/OFF.
	REAR UP key	Increases the setting value for the rear heater.
	REAR DOWN key	Decreases the setting value for the rear heater.

Dryer 100 (Option)

The dryer 100 dries the output media.

Footswitch (Option)

Operates the functions of the take-up switch and feed switch of the paper feeder and the winder by foot.

SCSI Cable (9 m) (Option)

Connects the printer to the host PC. It is longer than the standard cable by 3 m.

Main Scroller (Option)

Used in common for the feeder and the winder.

Sub Scroller (Option)

Used for the liner and sub roll.

Exhaust Attachment 100 (Option)

Attached to the printer to mount an exhaust duct.

Tension Bar Set (Option)

Peeling Bar Set (Option)

Peels sticky media.

Dual Roll Kit (Option)

Additional parts to feed dual rolls.

Edge Guide (Option)

Retains the media when the liner is used.

PS RIP (PhotoPrint 4 DX) (Option)

PS RIP (PhotoPrint 4 Server) (Option)

RIP software for the IP-6900.

Section 2 Basic Operations

Contents of this section

Connecting to a Computer

This section describes how to connect the printer to a computer.

System Configuration (Connection Example)

The following is a typical connection:

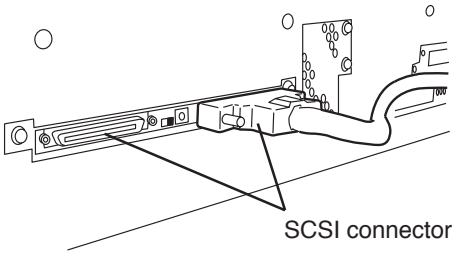
Connection Procedure

Connect the cable as follows:

1 Turn the printer and the computer OFF.

> NOTE
> - When the printer is connected to the computer, turn the printer ON, and then turn the computer ON. To turn the system OFF, turn the computer OFF, and then turn the printer OFF.

2 Connect a SCSI cable to either of the SCSI connectors on the rear of the printer.

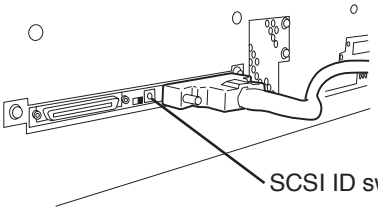


(It can be connected to either of two SCSI connectors.)

NOTE

- Use a dedicated SCSI cable (68-68-pin, 6 m) or optional SCSI cable (68-68-pin, 9m).
  If any other cable is used, the radio wave level may increase, in particularly the printer might not satisfy FCC and CE regulations.

3 Set the SCSI ID switch on the rear of the printer.

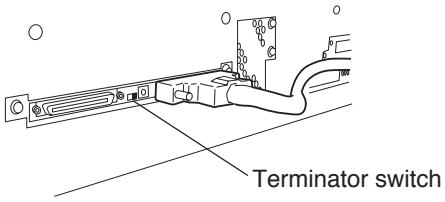


Set the SCSI ID number with a small slotted screwdriver. (Initial ID value: 4)

NOTE

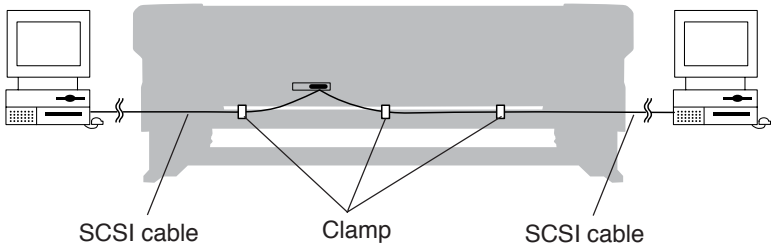
- The ID number must be unique in the SCSI chain. (Initial setting: 4)

4 Set the terminator on the rear of the printer to ON or OFF.



The printer has a SCSI terminator ON/OFF function. If the printer is the terminal device in the SCSI chain (only one SCSI connector is connected), set the terminator switch to ON. If the printer is not the terminal device, set it to OFF.

5 Secure the cable to the clamp.



Secure the SCSI cable to either side according to the installation position of the printer and computer.

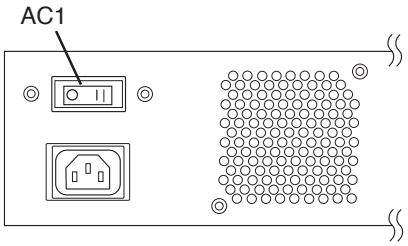
> NOTE
> - Take care not to allow the SCSI cable to touch the media.

Turning the Power ON/OFF

This printer has two power supply systems. Be careful that both are 200V.

AC1 switch

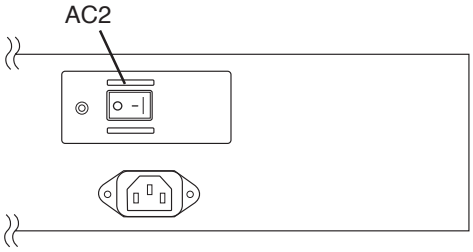
The AC1 switch is located on the printer rear (left side).



Printer rear (left side)

AC2 switch

The AC2 switch is located on the printer rear (right side).



Printer rear (Right side)

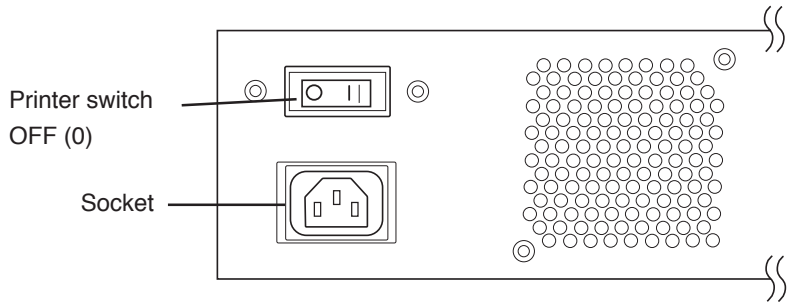
NOTES

- When the printer is connected to the computer, turn the printer ON, and then turn the computer ON. To turn the system OFF, turn the computer OFF, and then turn the printer OFF.
- Turn the computer ON after the printer is in the online state.

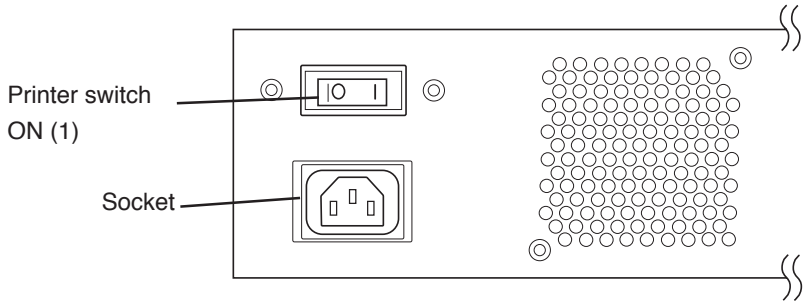
Turning the Power ON

<Power ON Procedure>

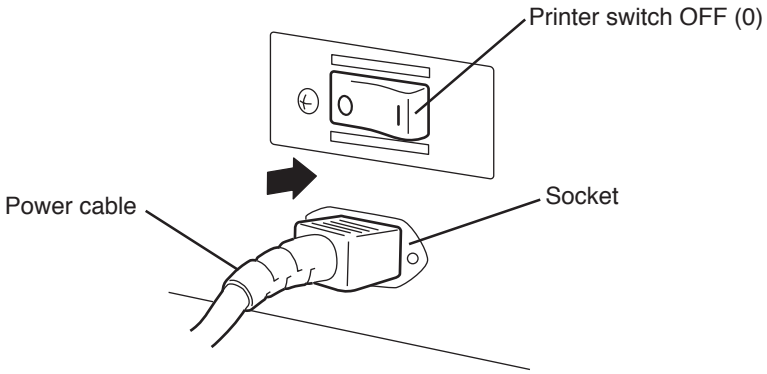
1 Turn the AC1 switch on the left rear of the printer OFF (0), and plug one end of the supplied power cable into the AC1 socket. Insert the other power plug of the cable into an electrical outlet.



2 Turn the AC1 switch on the left rear of the printer ON (1).



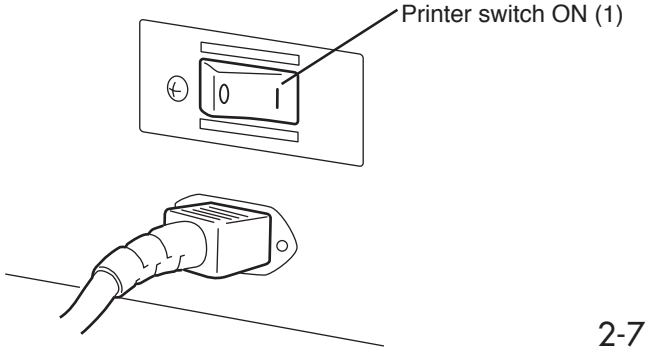
3 Turn the AC 2 switch on the right rear of the printer OFF (0), and plug one end of the supplied power cable into the AC 2 socket. Insert the other power plug of the cable into an electrical outlet.



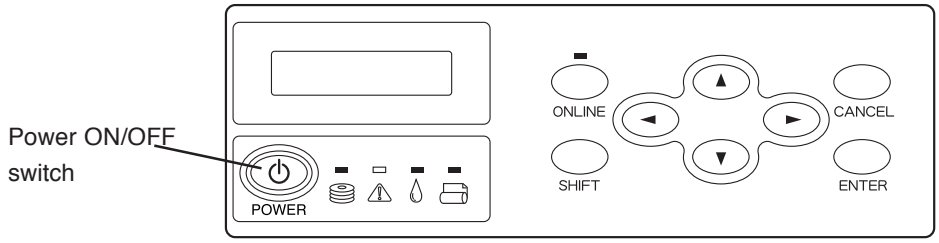
NOTES
- Do not use a power cable other than the one specified for this printer.
- The supplied power cable is for 200VAC. The shape of the plug is different from the plug for 100VAC.

⚠ CAUTION
- Fix the power cable in place using a clamp. If this is not done, the power cable can be wound up in the scroller, possibly causing electric shock and damage to the equipment.

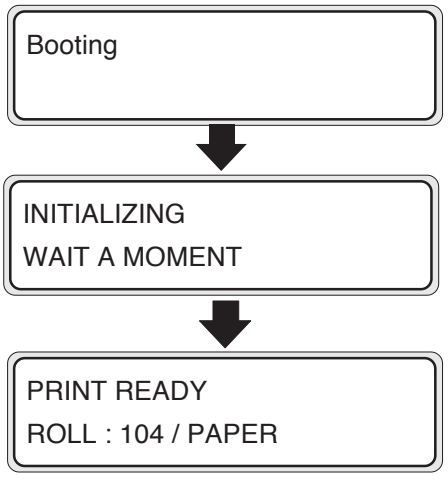
4 Turn the AC 2 switch on the right rear of the printer ON (1).



5 Turn the power ON/OFF switch on the operation panel ON.



When the switch is turned ON, a power-on self-diagnostic test is performed and the following message appears on the LCD on the operation panel:



If a 104" media roll is used

If the POWER ON/OFF switch on the operation panel is turned ON with the AC2 switch in the OFF position, the following message is displayed on the operation panel:

Turn the AC2 switch ON, and then turn the POWER switch ON again.

NOTE

- Turn the printer OFF while “PRINT READY” is displayed on the LCD panel except in an emergency.
  Do not turn the printer OFF while “INITIALIZING” or “CLEANING” is displayed on the LCD panel to avoid dripping of the ink and damage of the head. Saved parameters may be lost.

- If the fan does not run or the operation panel lamp does not light when the AC1 switch and power ON/OFF switch on the operational panel are turned ON, the power supply may be faulty.
- If an error is detected during the self-diagnostic test at power ON, an error message appears on the LCD. See Section 5, Troubleshooting, and take appropriate action.

Turning the Power OFF 1

*For restarting the printer within 20 hours

1 To turn the power OFF without fill cap operation, simultaneously press the power ON/OFF switch and the CANCEL key on the operation panel continuously for 2 to 3 seconds.

```
SHUTDOWN
WAIT A MOMENT
```

The above message is displayed on the LCD to indicate that the shutdown process is in progress. After the process ends, the power is turned OFF.

Use this procedure to turn the power OFF to recover from an error or communication disorder.

Turning the Power OFF 2

*When turning the printer OFF for 20 hours or more

1 Turn the power ON/OFF switch on the operation panel OFF for a couple of seconds.

```
SHUTDOWN
WAIT A MOMENT
```

The above message is displayed on the LCD to indicate that the shutdown process is in progress. After the process ends, the power is turned OFF.

At shutdown, fill cap operation (filling the cap with ink) is executed to maintain the head in good condition.

CAUTION

- The AC1 switch and AC2 switch on the rear of the printer should be used only when the printer is turned OFF completely in order to move it, connect it with a computer, install or maintain its parts.
- When turning the power ON/OFF switch OFF, wait for at least ten seconds, then turn it ON again.
- The printer automatically performs fill cap operation to maintain good head condition after the first 20 hours in the standby state and every 3 days thereafter.
  It is recommended to keep the printer ON.
- The fill cap operation is effective for protecting the head, but it consumes extra ink.

Installing/Removing the Media

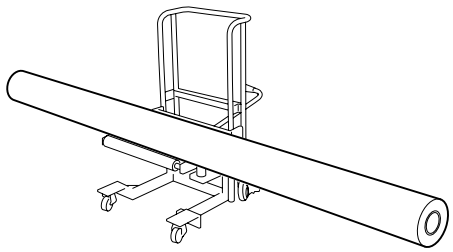
The media can be fed to the printer in the following five ways:

- "MAIN" : Normal feed from the main scroller
- "SUB" : Feed from sub scroller
- "DUAL" : For dual roll printing
- "FACE or BACK" : For duplex printing (⇒ See Section 4)
- "SHEET" : Feed of cut sheet

This section explains MAIN, SUB, and CUT SHEET feeds.

Installing Main Scroller

1 Place the media on the table.

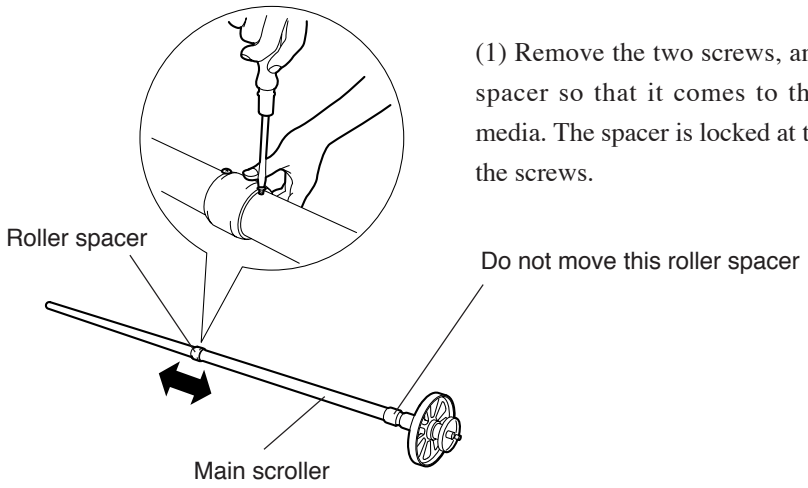


If a cart is used, it should be the recommended model. (For further information, please contact us.)

2 Adjust the roll spacer position according to the media width.

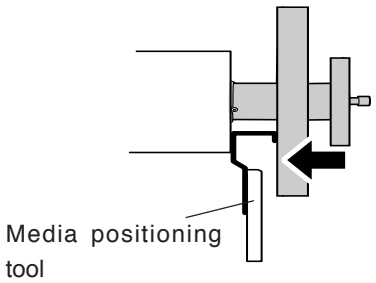
HINT

- The roll spacer prevents the paper tube from sagging in the center by the weight of media.

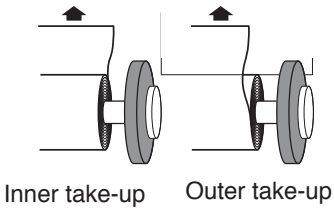


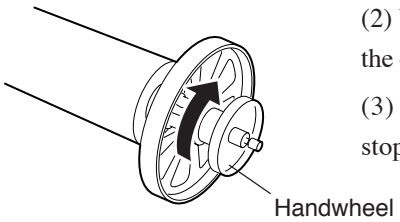
(1) Remove the two screws, and move the roll spacer so that it comes to the center of the media. The spacer is locked at three places with the screws.

3 Pass the scroller through the paper tube, determine the distance between the media edge and flange, and lock the main scroller.



(1) Confirm the media winding direction, and pass the scroller through the paper tube.

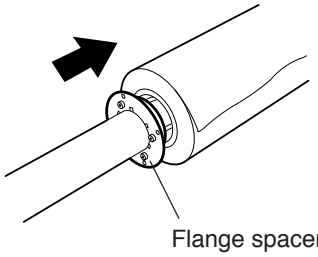




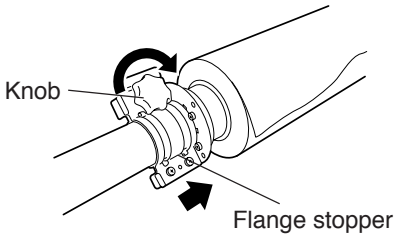
(2) Using the media positioning tool, determine the distance between the media edge and flange.

(3) Rotate the handwheel clockwise until it stops, then lock the main scroller.

4 Engage the flange spacer with the flange stopper, and install them.



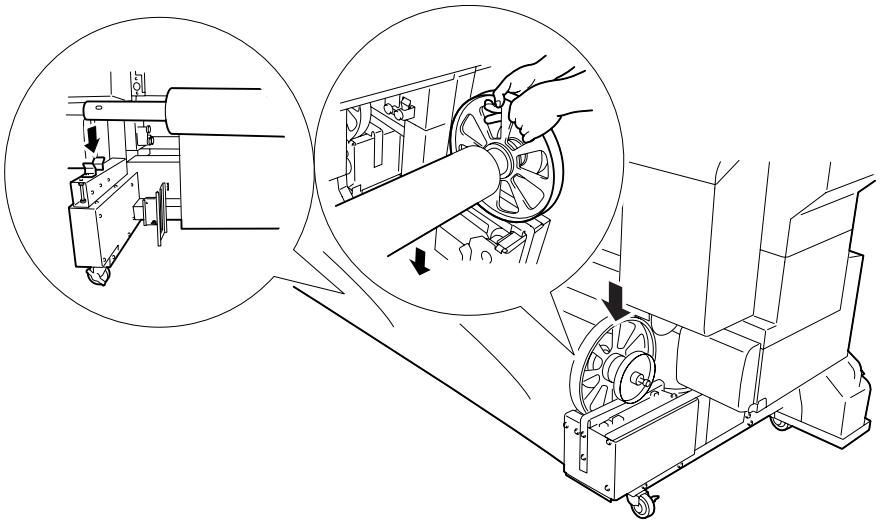
(1) Push in the toothed flange spacer until it stops.



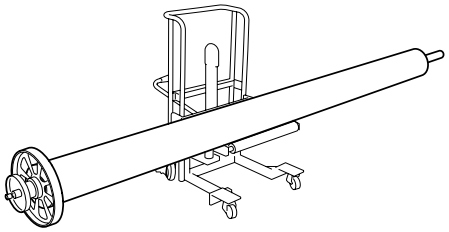
(2) Install the flange stopper by aligning it to the hook of the flange spacer, then tighten the knob to lock.

(3) Shift the tension bar guide to avoid interference.

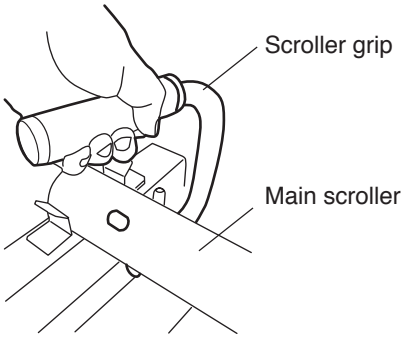
5 Fitting in the roll groove, install the main scroller on the printer.



- For installation with one person:
  Use the recommended cart.

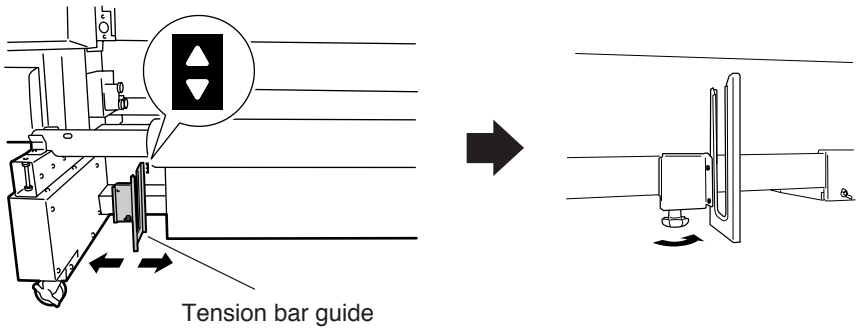


- For installation with two persons by holding the scroller by hand:
  Use the attached scroller grip.

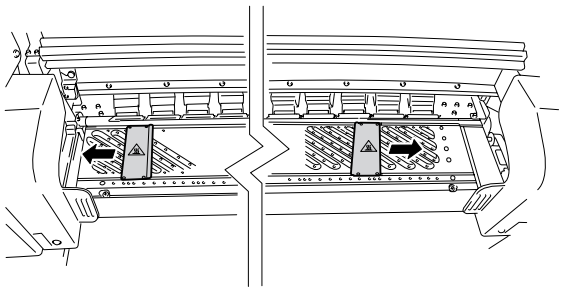


Media Setting

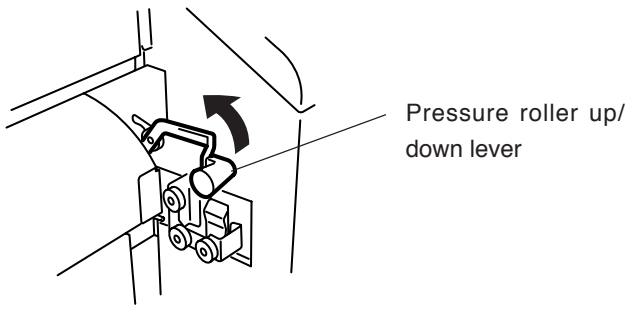
1 Move the tension bar guide to the position of the label, then fix it in place with the screw below the guide.



2 Shift the media edge guards to both sides so that they are not hidden under the media.

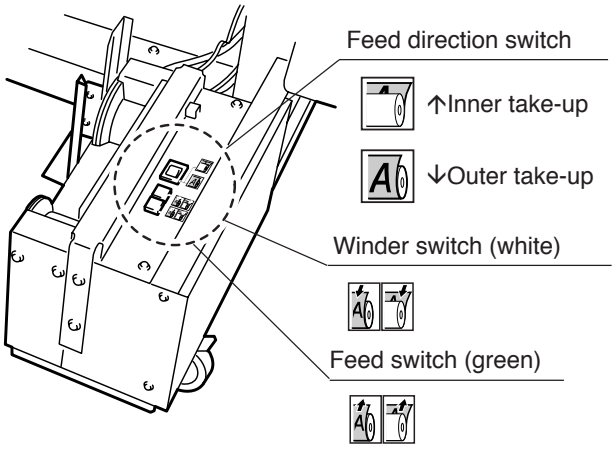


3 Lift the pressure roller up/down lever.

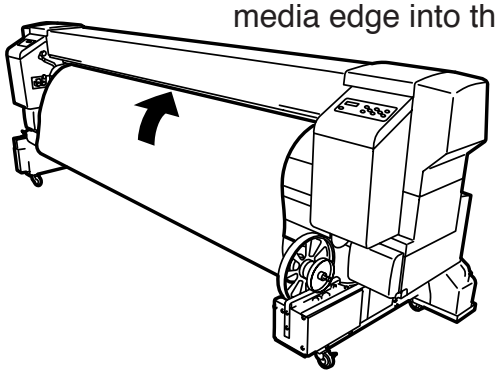


4 Set the feed direction switches.

■ Feed direction switch, Winder switch, Feed switch



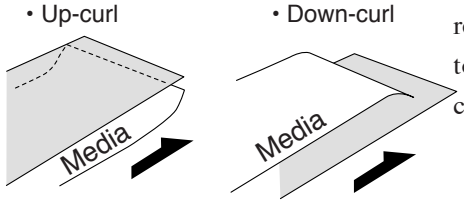
5 Slacken the media using the Feed switch and insert the media edge into the paper feeder.



(1) Insert the media into the paper feeder while stretching the media with your hands to prevent wrinkle.

If the media curls and is hard to insert into the paper feeder, place a backing sheet on the curled media and insert the media edge. (See the figure at left.)

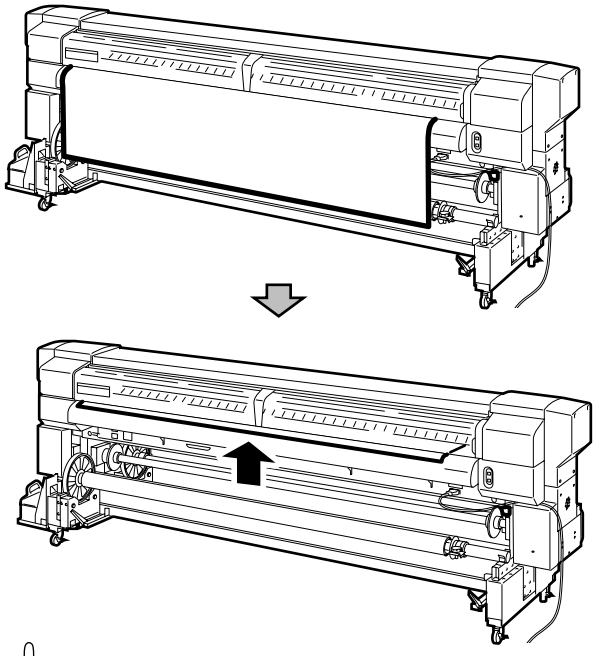
(2) Feed the media until its top edge is about to reach the floor. At this time, smooth the media toward both sides on the platen so that the central area of the media is tensioned.



NOTE

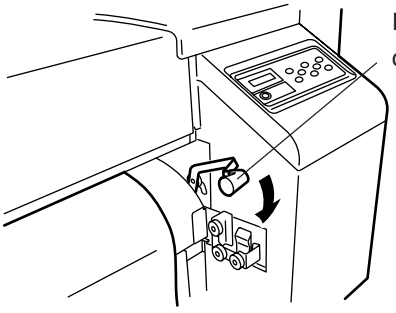
- Inserting the media obliquely or inserting wrinkled media causes a paper jam or skewed feed.

6 Using the Winder switch on the feeder side, rewind the media so that the media edge protrudes from the rear cover a little.



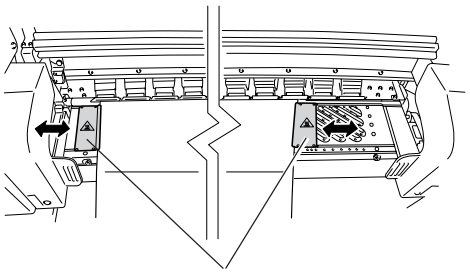
HINT - Work in step 6 is important for correct setting of the media.

7 Push the pressure roller up/down lever down.



Pressure roller up/ down lever

8 Set the media edge guard, and close the rear cover.



Media edge guard

CLOSE REAR COVER	(1) Close the rear cover.
⇩	
CHECK EDGE GUARD *OK?	(2) Confirm the media edge guard position and press the ENTER key, and the media width checking operation will start.
⇩ ENTER	

9 Select the media feed position.

MEDIA POSITION SELECT: MAIN	From the parameters, select "MAIN" with ▲ or ▼ key.
⇩	

Press the ENTER key to change the setting.
Press the CANCEL key to hold the last setting as it is.

10 Select the base function.

BASE FUNCTION SELECT: NOT USED	Select "USED" if the "Origin Point Setting Function (⇒ See page 2-58)" is used.

NOTE

- The base function selecting menu may not be displayed depending on the version of the firmware. To use the base function, select "SELECT: MAIN B" for the media feed selection.

11 Select the media type.

```
SELECT PAPERTYPE
PAPER : PAPER
```

Press the ENTER key to change the setting.
Press the CANCEL key to leave the setting as it is.

HINT When registering a new media type

```
SELECT PAPERTYPE
PAPER : PAPER
```

Select a media type with the ▲ and ▼ keys.

```
SELECT PAPERTYPE
PAPER : TYPE01
```

(Only registered media types can be selected.)

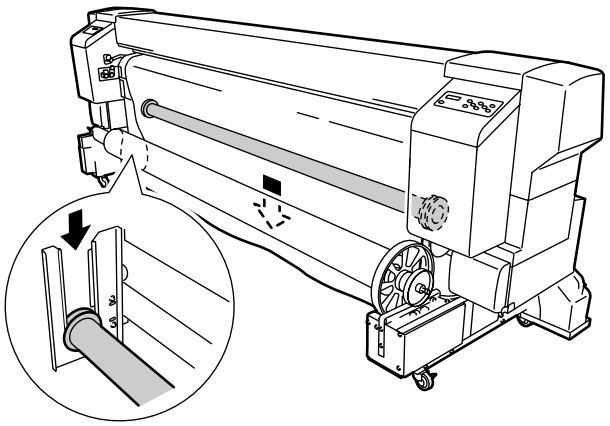
```
SELECT PAPERTYPE
NEW PAPER ENTRY
```

Press the ENTER key to enter the NEW PAPER ENTRY menu. Operation for a new paper entry is the same as operation for media entry from the ENTRY menu. (⇒ See Section 3, Entry Menu)

Press the ◀ key to return to the SELECT PAPERTYPE menu.

12 Using the feed switch on the feeder side, slacken the media and install the tension bar.

Adjust the tension bar length according to the media width. (See page 2-53, Tension Bar Length Adjustment.)



CHECK BUFFER
✻OK?

ENTER

- This message is skipped if cut media is used.
- The next operation will not start if the media slack is inadequate.

13 Media setting operation will start automatically.

PREPARING PAPER
WAIT A MOMENT

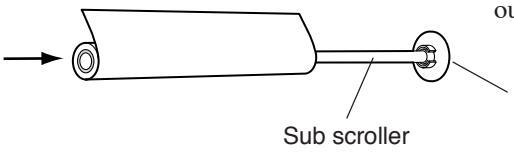
- If the operation terminates normally, the printer returns to the online or offline state.
- If it terminates unsuccessfully, an error message will be displayed.

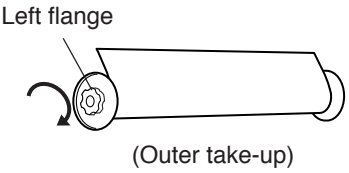
Go back to step 5.

Installing the Sub Scroller

1 Install the media on the sub scroller.

(1) Confirming the media for inner take-up or outer take-up, insert it into the sub scroller.





(2) Lock the left flange tightly.

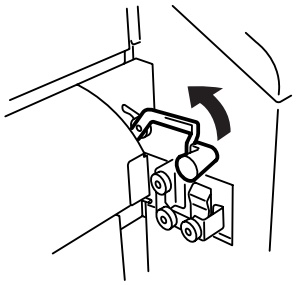
NOTES

- Take care not to damage the media edge when inserting the media.
- Place the media on the table when installing or removing the media. Holding the media erect causes the media winding to come loose, thereby skewed feed.
- Before installing the media, clean the print surface and sides of the media.
- Specifications of media
  Diameter: 165 mm
  Weight: 24 kg (When dual roll kit is used)
- When heavy media is fed to the sub scroller, the shaft becomes bent, causing degrading of print quality and skewing. When it is desired to use heavy media with the sub scroller, use the optional dual roll kit. It can handle media up to 24 kg.

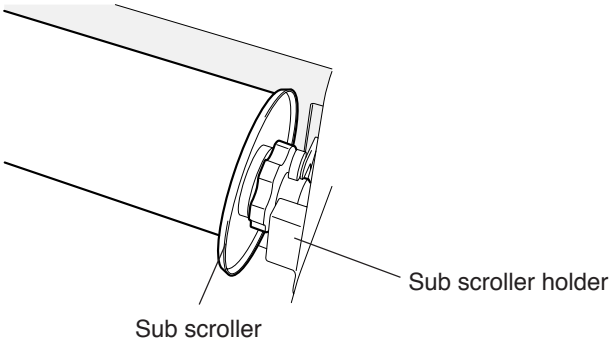
Installing the Sub Scroller on the Printer

1 Shift the media edge guards toward both sides.

2 Lift the pressure roller up/down lever.

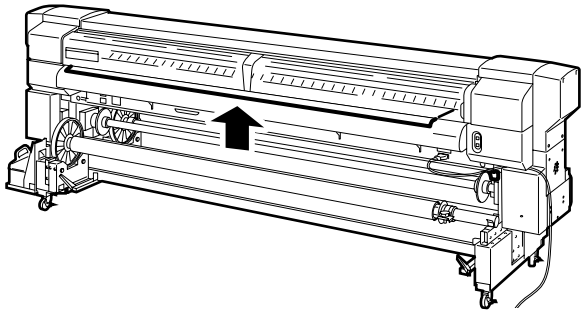


3 Place the sub scroller on the sub scroller holder.



4 Insert the media into the feeder, and feed the media until its top edge is about to reach the floor.

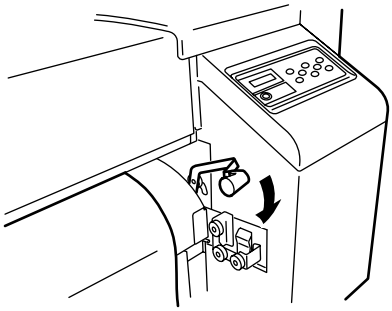
5 Rotating the sub scroller by hand, rewind the media so that the media edge protrudes from the rear cover a little.



HINT

- Restrain the central area of the media by hand to eliminate slack in the media.

6 Push the pressure roller up/down lever down.



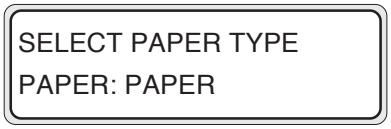
7 Set the media edge guards, and close the rear cover.

8 Select the media feed.

From the parameters, select "SUB" with the ▲ or ▼ key.

Press the ENTER key to change the setting.
Press the CANCEL key to hold the last setting as it is.

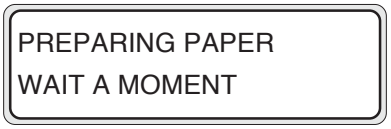
9 Select the media type.



Press the ENTER key to change the setting.
Press the CANCEL key to hold the last setting as it is.

Select "USED" if the "Origin Point Setting Function (⇒ See page 2-58)" is used.

10 Media setting operation will start automatically.



• If operation terminates normally, the printer returns to the online or offline state.

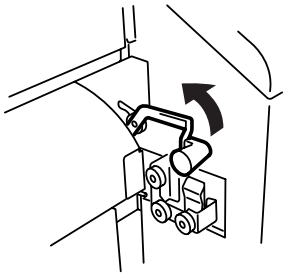
• If it terminates unsuccessfully, an error message will be displayed.

Return to step 4 for retry.

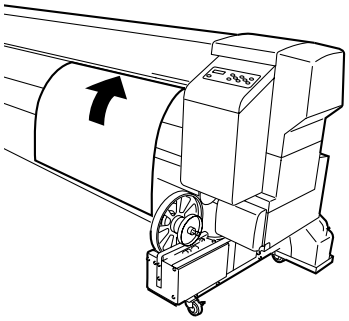
Installing or Removing the Cut Sheet

1 Shift the media edge guards toward both sides.

2 Lift the pressure roller up/down lever.

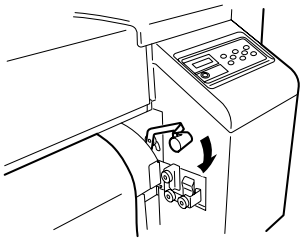


3 Aligning the right edge of a cut sheet with the guideline, insert the cut sheet into the paper feeder.



4 Set the media edge guards, and close the rear cover.

5 Push the pressure roller up/down lever down.

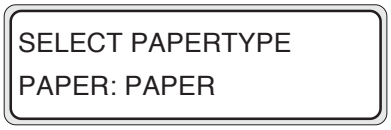


6 Select the media feed.

From the parameters, select "SHEET" with the ▲ or ▼ key.

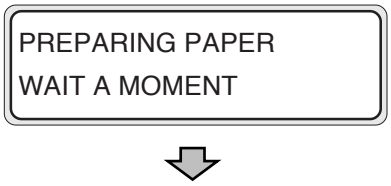
Press the ENTER key to change the setting.
Press the CANCEL key to hold the last setting as it is.

7 Select the media type.



Press the ENTER key to change the setting.
Press the CANCEL key to hold the last setting as it is.

8 Media setting operation will start automatically.



• If the operation terminates normally, the printer returns to the online or offline state.

• If it terminates unsuccessfully, an error message will be displayed.

Return to step 1 for retry.

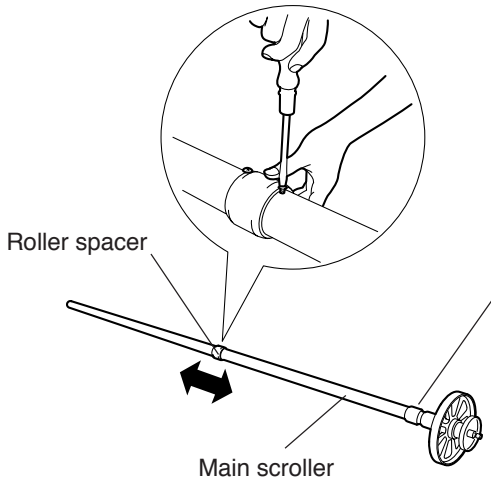
REMOVE

To remove the cut sheet, lift the pressure roller up/down lever and remove it.

Installing the Media Roll in the Winder

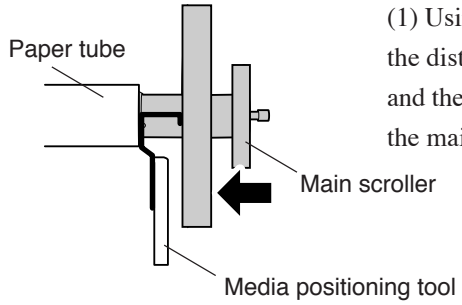
1 Adjust the roll spacer position according to the media width.

HINT - The roll spacer prevents the paper tube from sagging in the center by the weight of media.

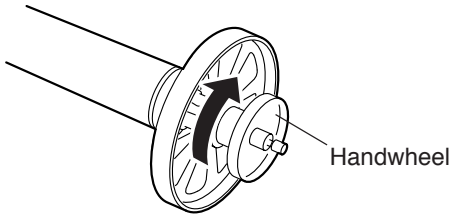


(1) Remove the two screws, and move the roll spacer so that it comes to the center of the media. The spacer is locked at three places with screws.

2 Prepare the paper tube, and insert it into the scroller.

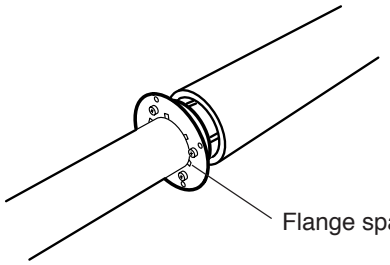


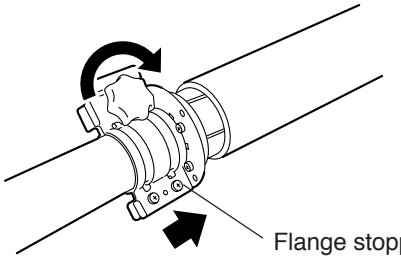
(1) Using the media positioning tool, determine the distance between the edge of the paper tube and the flange, and rotate the handwheel to lock the main scroller.



3 Engage the flange spacer with the flange stopper, then install them.

(1) Push in the toothed flange spacer until it stops.



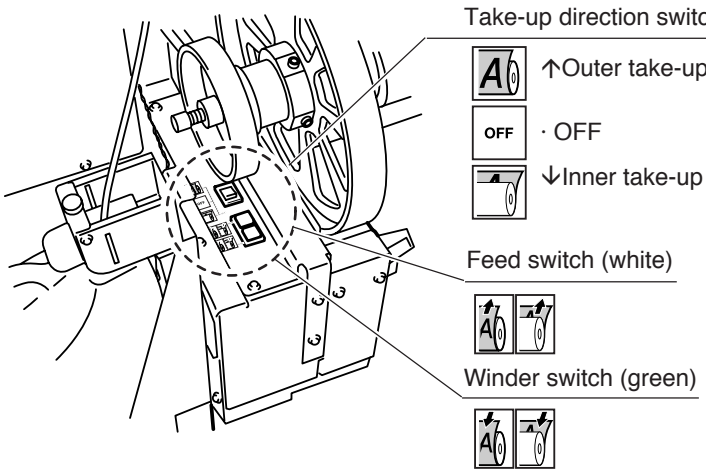


(2) Install the flange stopper by aligning it to the hook of the flange spacer, then tighten the knob to lock.

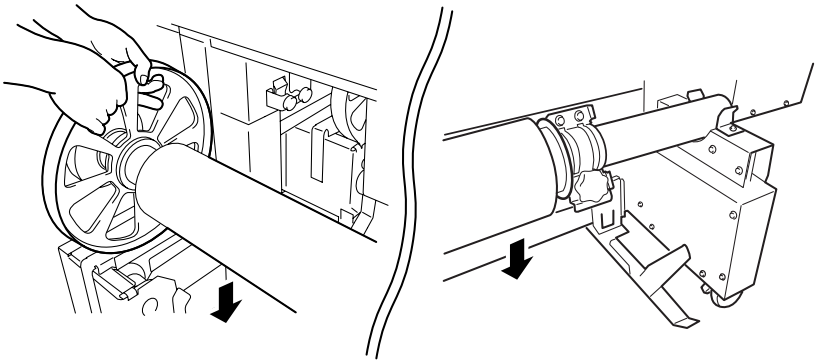
4 Set the take-up direction switch to the "OFF" position.

> NOTE
> - If you proceed to the next step without setting the take-up direction switch to the "OFF" position, the scroller is not locked, thus causing your hand to be caught.

■ Take-up direction switch, Winder switch, and Feed switch

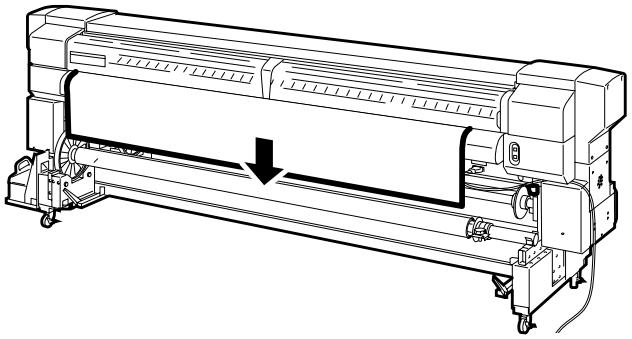


5 Fitting in the roll groove of the printer, install the main scroller.

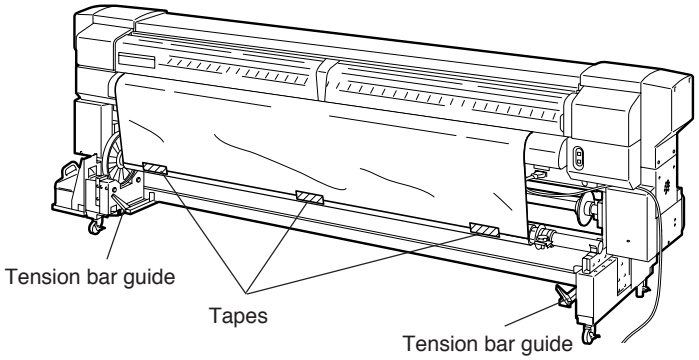


NOTE
- Engage the tension bar with the tension bar hook in advance.

6 Using the feed menu on the operation panel, feed the media to the extent that the media can be wound.



7 Secure the fed media to the paper tube.



Inner take-up :
Paper is wound so that the print surface comes outside.

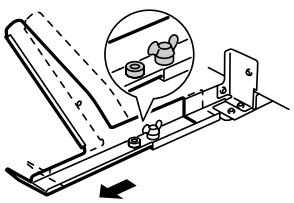
Outer take-up :
Paper is wound so that the print surface comes inside.

(1) Confirm the take-up direction, and secure the media with adhesive tapes at three places; first secure the center so that it is straight, and then secure both sides.

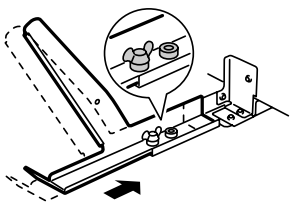
NOTES
- Make sure that the direction of the attaching tape on the take-up side matches the take-up direction setting (outer side rewind/ inner side rewind).
- If the media is attached to the paper tube at an angle it will be fed at an angle, so use caution.

8 Adjust the tension bar guide position according to the take-up direction.

■ Inner take-up

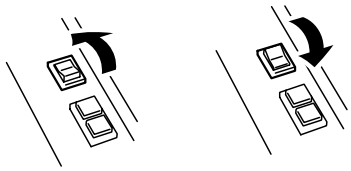


■ Outer take-up



9 Press the take-up direction switch according to the take-up direction.

■ Outer take-up ■ Inner take-up

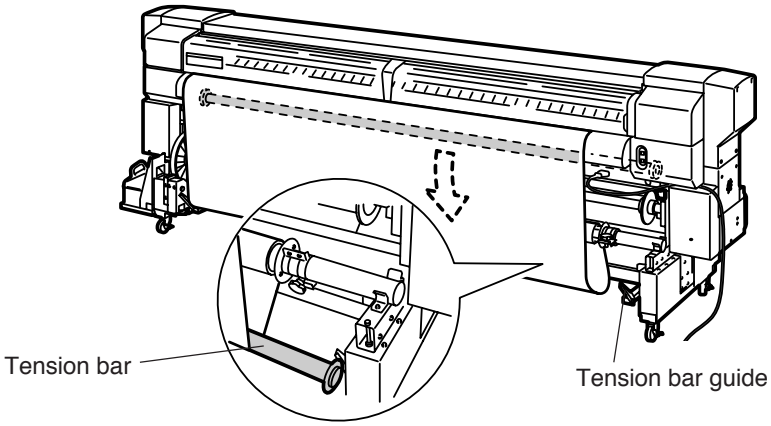


10 Using the feed menu on the operation panel, feed the media to wind it on the paper tube by one turn. Then, set the winding direction switch in the "OFF" position.

> NOTE
> - Installing the tension bar without winding the media by one turn causes the tapes to be peeled off.

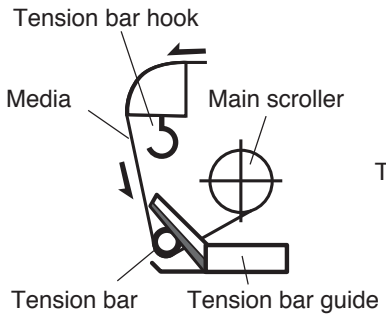
11 Using the feed menu on the operation panel, feed the media to the extent (about 30 cm) that slack appears.

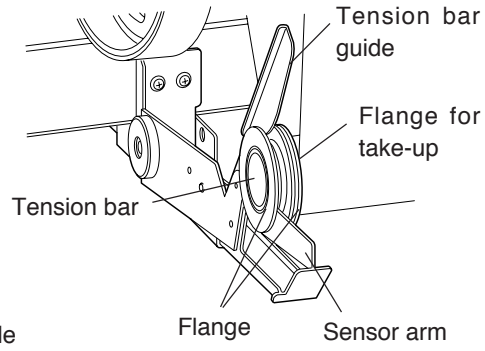
12 Install the tension bar in a slack part of the media.



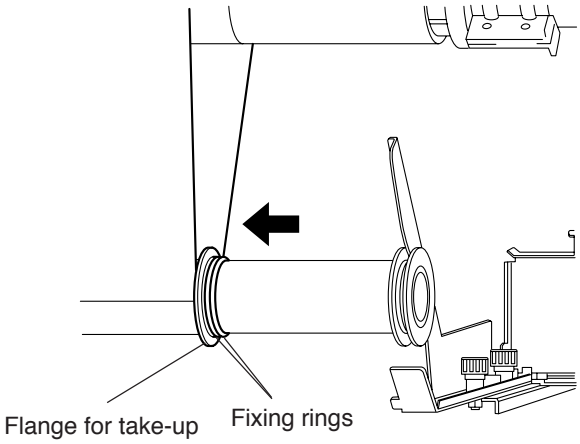
NOTE

- Attach the tension bar so that it is gripped between the tension bar guide and the sensor arm.
- Adjust the guide position so that the tension bar guide is gripped between the 2 flanges.





13 Move the flange according to the media width.



14 Press the take-up direction switch according to the take-up direction.

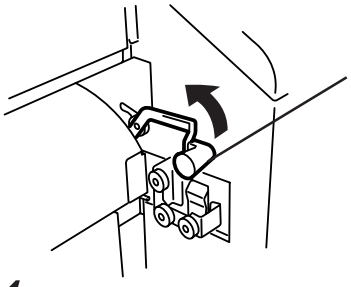
Removing the Paper Roll from the Printer

1. Remove the tension bars on the media feed side and outlet side.
2. Cut the media.

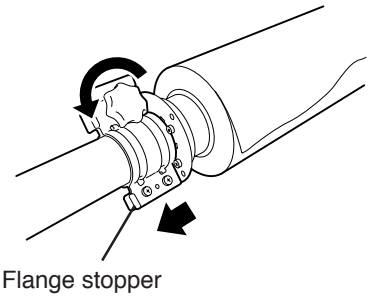
NOTES

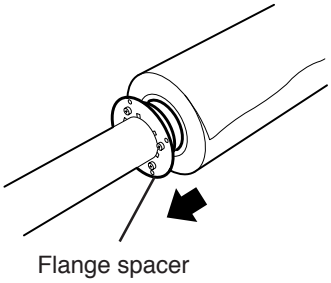
- A net is spread out on the feeding side and take-up side paper guides, respectively so that the media will not adhere to the guides. Do not remove these nets.
- When cutting the media, be careful not to damage the paper guide net.

3. Lift the pressure roller up/down lever.



4. Using the winder switch on the feed side, wind the media.
5. Place the media roll on the table.
6. Remove the flange stopper and the flange spacer.

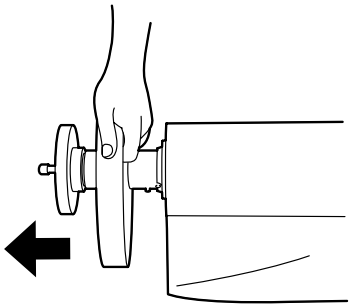




7 Remove the scroller.

(1) Rotate the handwheel counterclockwise.

(2) When a gap appears between the handwheel and scroller shaft, remove the scroller.



NOTE
- Do not touch the scroller hook.

Replacing Media on Main Scroller

1 The following message appears on the LCD screen.

```
LIFT LEVER
SET PAPER
```

2 Replace the media following "Installing/Removing the Media."

Replacing Media on Sub Scroller

1 The following message appears on the LCD screen.

NOTES
- If the bottom edge of the media on the sub scroller has been secured with tapes, the media end is detected with a jam error. In this case, cleaning is not executed.
- If the media is not secured with tapes, the media end is detected by the feed sensor.

Replacing Jammed Media Roll

See “Clearing Media Jam” in Section 6, Troubleshooting.

Feed Correction Value Setting

The feed correction value is changed by the following causes:

- Backing sheet is used/not used
- Print mode is changed
- Pressure is changed by the media pressure alternation lever
- Winder is used/not used
- Media type
- Media feed path is different
- Feed mode "SEQUENCE 1" or "SEQUENCE 2"

1 Set media of length longer than 1 m.

For the feed correction, obtain approximate feed correction value in the ROUGH mode, and set exact correction value in the DETAIL mode. One printing requires a media length of 48 to 58 cm in the ROUGH mode, or 27 to 32 cm in the DETAIL mode. (Printing of the feed adjustment pattern can be cancelled by pressing the CANCEL key.)

2 Set the printer to OFFLINE mode.
(Press the ONLINE key)

▲ INK	ENTRY▼
◄ PAPER	F. ADJ ►

3 Press the ▶ key, and then the ENTER key to display a feed adjustment pattern.

```
#FEED PATTERN
*ROUGH (NORMAL)
```

Select the print mode you usually use for the media to which the feed correction value is set.

For details of the print modes, see page 4-2 "Print Modes".

NOTE
- Change the mode if the following setting is used:

FAST, FINE DRAFT	→	NORMAL
F-H-QUALITY	→	H-QUALITY
F-H-DENSITY	→	H-DENSITY
F-H-QUAL2	→	H-QUALITY2
F-H-DENS2	→	H-DENSITY2
F-3 TIMES	→	3 TIMES

4 Press the ▼ or ▲ key to select the ROUGH print mode, and press the ENTER key.

```
#FEED PATTERN
*OK?
```

5 If you press the ENTER key, the feed adjustment pattern "ROUGH" is printed.

The feed adjustment pattern "ROUGH" is printed in the selected print mode.

```
#FEED PATTERN
*EXECUTING
```

6 From the printed result, select the approximate feed correction value.

Nine patterns are printed in steps of 0.25% in the range of 99.00% to 101.00%. Select the approximate correction value.

7 Press the ▼ key, and then the ENTER key to display the feed correction value entry screen.

```
#FEED ADJUST
*100.00%
```

8 Enter the feed correction value, and press the ENTER key.

Adjust the place with the ◀ and ▶ keys and enter the numeric value with the ▼ and ▲ keys.

9 Press the ▼ key, and then the ENTER key to display the feed adjustment pattern.

```
#FEED PATTERN
*ROUGH (NORMAL)
```

10 Press the ▼ or ▲ key to select the DETAIL print mode.

```
#FEED PATTERN
*DETAIL (NORMAL)
```

Select the same pattern as that for ROUGH.

11 Press the ENTER key twice to print the feed adjustment pattern "DETAIL".

```
#FEED PATTERN
✻EXECUTING
```

12 From the printed result, select the exact feed correction value.

Five patterns are printed for the entered correction value in steps of 0.06% in the range of -0.12% to +0.12%. Select the appropriate correction value.

13 Press the ▼ key, and then the ENTER key to display the feed correction value entry screen.

```
#FEED ADJUST
✻100.00%
```

14 Enter the feed correction value, and press the ENTER key.

Adjust the place with the ◀ and ▶ keys, and set the numeric value with the ▼ and ▲ keys.

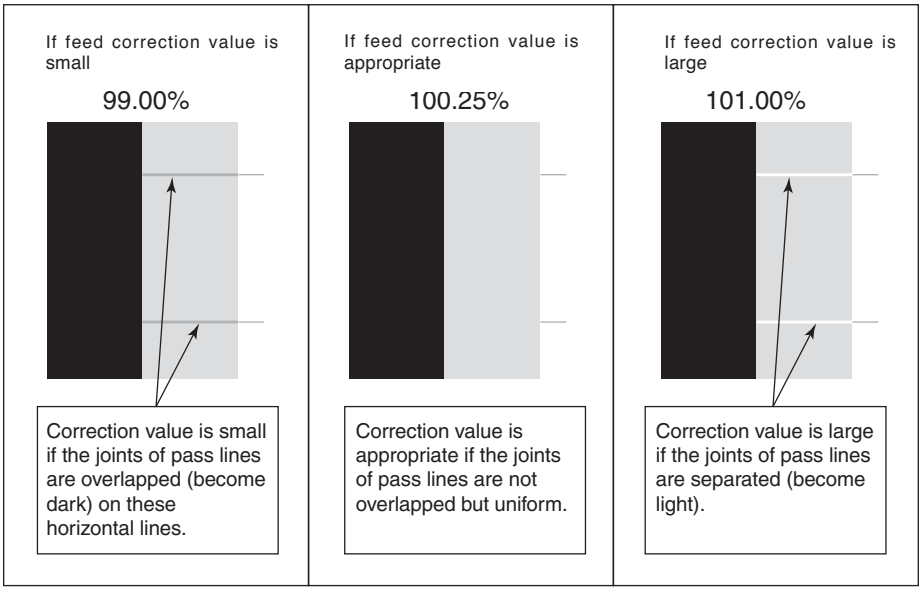
15 Press the ◀ key to return to the initial OFFLINE state.

HINT

- To change the feed correction value during the printing, see page 3-6.

■ How to identify feed adjustment pattern

This description is for the case of black color.



NOTES

- Set the average value if the appropriate correction value is for different for every head (every color). However, if the image to be printed has a preferential color, set the correction value for that color.
- Set the average value if the appropriate correction value is different between left and right sides of the media.
- Different appropriate correction values between left and right sides of the media may be caused by skew. Check again if the media is set at an angle.

Replacing Ink Cartridges

This section describes how to replace an ink cartridge.
Ink cartridges should be installed in the following four cases:

- If ink has run out
- If an ink cartridge is not installed
- If a 4-color ink cartridge is to be replaced
- If a 6-color ink cartridge is to be replaced

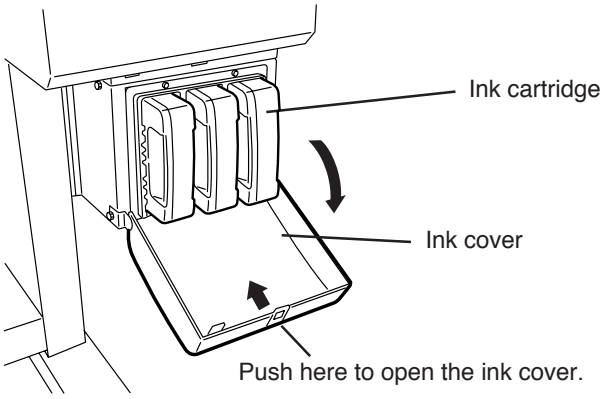
The ink cartridge replacement procedure in each case is explained below.

NOTES

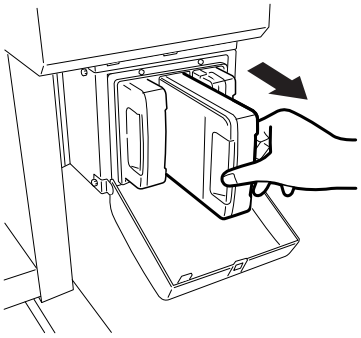
- Do not remove the ink cartridge in the following cases:
  - No power is supplied to the printer due to a power failure or breaker action.
  - An error other than ink end has occurred.
- Depending on the printer status, the ink in the ink box may spill, causing malfunction.
- Select the offline state if the ink cartridge in which the ink remains is replaced. (⇒ See Section 3, Ink Menu (5))
  For ink replacement during printing, see "Replacing the cartridge during printing".
- Make sure the ink cartridge is right side up before installing.

Ink Cartridge Replacement Procedure

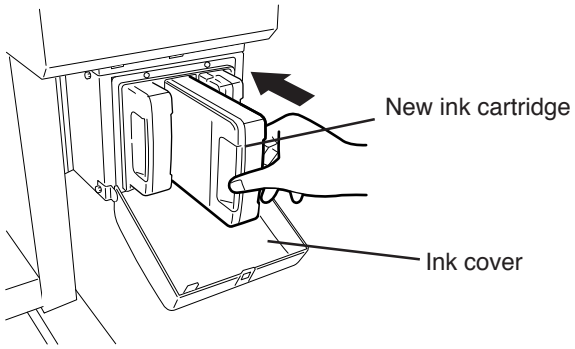
1 Open the ink cover.



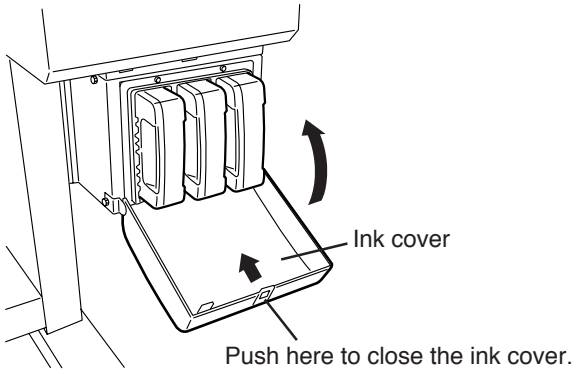
2 Remove the ink cartridge to be replaced from the printer.



3 Insert a new ink cartridge into the printer.



4 Close the ink cover.



5 End of ink cartridge replacement.

- If replacement ends normally, the printer returns to the offline or online state.
- If replacement ends in an abnormal manner, an error message will be displayed.
  Go back to step 1 and repeat the procedure.
- The printer continues to print as long as ink remains in the sub-tank during ink cartridge replacement.

Replacing an Empty Ink Cartridge

1 The following guidance message appears:

```
OPEN L INKCOVER
CHANGE XX INK
```

XX: Ink name
Bk: BLACK
Lm: LIGHT MAGENTA
Lc: LIGHT CYAN

```
OPEN R INKCOVER
CHANGE XX INK
```

XX: Ink name
C: CYAN
M: MAGENTA
Y: YELLOW

2 Replace the ink cartridge according to the “Ink Cartridge Replacement Procedure.”

If an Ink Cartridge is not Installed

1 The following guidance message appears:

```
OPEN L INKCOVER
SET XX INK
```

XX: Ink name
Bk: BLACK
Lm: LIGHT MAGENTA
Lc: LIGHT CYAN

```
OPEN R INKCOVER
SET XX INK
```

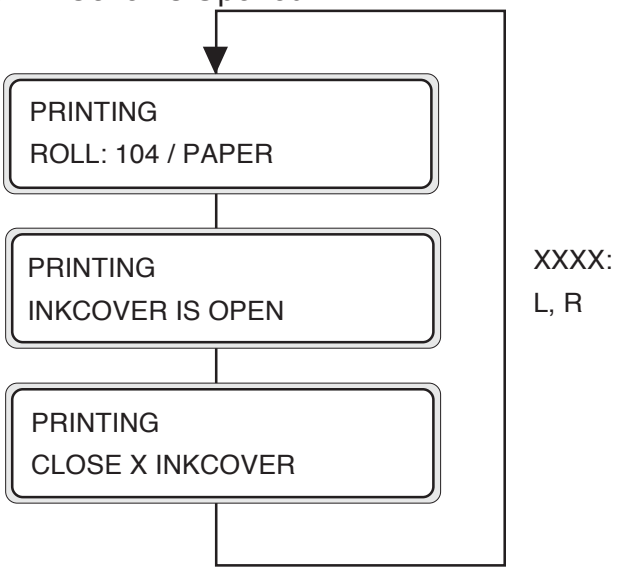
XX: Ink name
C: CYAN
M: MAGENTA
Y: YELLOW

2 Replace the ink cartridge according to the “Ink Cartridge Replacement Procedure.”

Replacing Cartridges during Printing

The ink cartridges can be replaced during online printing without interrupting the printing operation. Accordingly, guidance for ink replacement during the online printing is displayed on the second line of the LCD. The following describes how the guidance is shown if the ink cover is opened during online printing or if the ink in the main cartridge is used up:

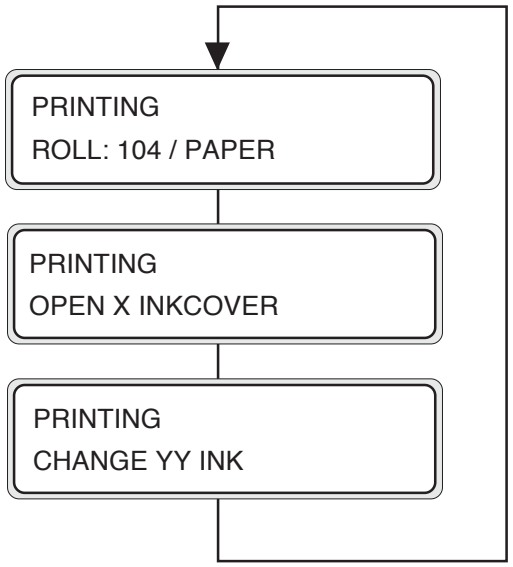
<If the Ink Cover is Opened>



The guidance that prompts you to close the ink cover is displayed on the second line of the LCD. The printing operation continues if ink is present in the sub tank even though the ink cover is open. However, no ink is supplied to the sub tank because the ink cover is open.

If the ink in the sub tank is used up, the print pause mode is activated and the printing operation is interrupted until the ink cover is closed. To recover from the interrupted state, close the ink cover and press the (ONLINE) key. The pause mode is cancelled and printing will restart.

<If the Ink in Main Cartridge is Used Up>



The guidance that prompts you to replace the main cartridge is displayed on the second line of the LCD. The printing operation continues until the ink in the sub tank is used up. If replacement is completed while ink remains in the sub tank, the printing operation can continue without interruption.

If the main cartridge is not replaced even after the ink in the sub tank is used up, the print pause mode is activated and the printing operation is interrupted until the main cartridge is replaced.

To recover from the interrupted state, close the ink cover and press the ONLINE key. The pause mode is then cancelled and printing will restart.

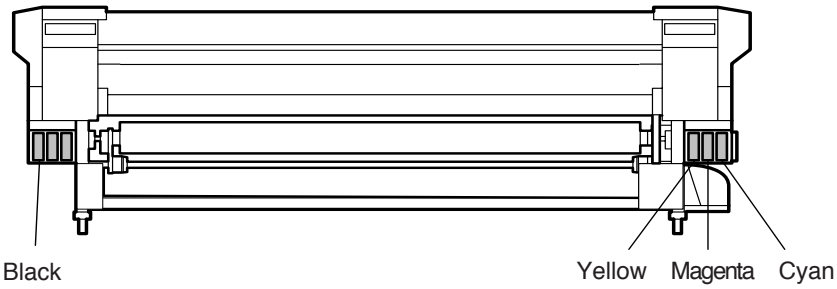
HINT

- The guidance concerning the ink replacement during the online printing is displayed on the second line of the LCD in turn, as the guidance mentioned above.
  The printer can restart by operation performed to restart after an error.

Replacing 4-Color Ink Cartridges

1 Prepare 4-color ink cartridge.

Set the cartridges in position to the target ink holder.



2 Then, replace the ink cartridges following "Ink Cartridge Replacement Procedure."

NOTES

- Exchange between 6-color ink cartridges and 4-color ink cartridges should not be carried out more than 5 times.
- When exchanging the cartridges between 4 colors and 6 colors, replace all cartridges. If even one color of a 4-color ink cartridge has been set, the printer operates in the 4-color mode.
- If 6-color data are received in the 4-color mode (4-color ink cartridges are set), the host posts an error to the printer and printing is disabled.
- Cleaning is executed for all 6 colors even in the 4-color mode. Accordingly, Lc and Lm not used for printing are also consumed. Adjustment patterns are printed in 6 colors.

If an Ink Cartridge is not Detected

1 The following guidance message appears:

```
OPEN L INK COVER
CHECK XX INK
```

XX: Ink name
Bk: BLACK
Lm: LIGHT MAGENTA
Lc: LIGHT CYAN

```
OPEN R INKCOVER
CHECK XX INK
```

XX: Ink name
C: CYAN
M: MAGENTA
Y: YELLOW

2 Replace the ink cartridge according to the “Ink Cartridge Replacement Procedure.”

Replacing the Waste Ink Bottle

This section describes how to replace a waste ink bottle.

A waste ink bottle should be replaced in the following two cases:

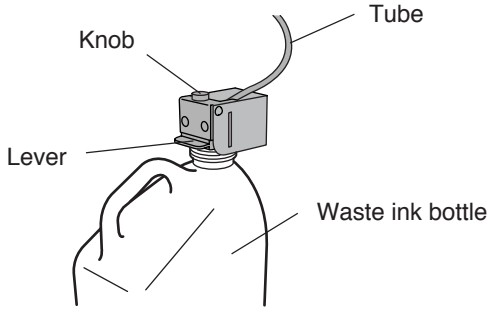
- If the waste ink bottle is full
- If a waste ink bottle is not installed

The waste ink bottle replacement procedures for these cases are explained below.

> NOTE
> - Do not replace the waste ink bottle during printing.

Waste Ink Bottle Replacement Procedure

1 Loosen the knob and lift up the lever from the waste ink bottle.

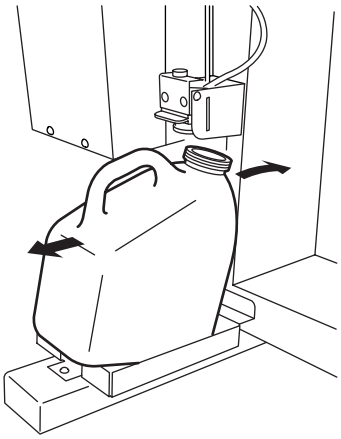


2 Wait for a while to drop the remaining ink into the ink tube.

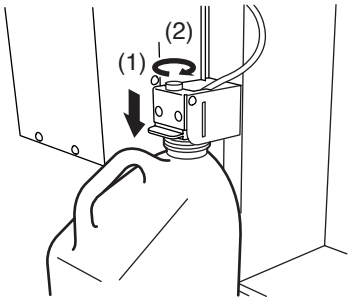
3 Take out the filled waste ink bottle from the printer, and securely cap the waste ink bottle.

4 Wipe up any spilt ink in the waste ink bottle unit.

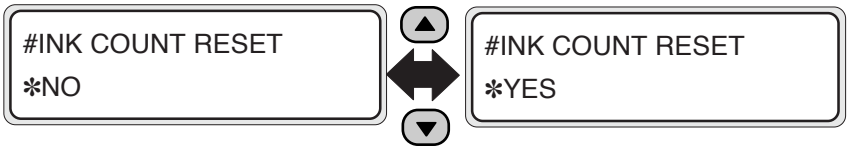
5 Lift the lever and mount a new waste ink bottle.



6 Drop the lever, insert the ink tube securely and tighten the knob.



7 The waste ink counter setting selection message (reset (clear)) will be displayed.



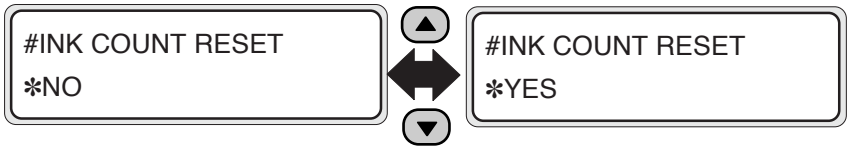
8 Select “YES” and press the ENTER key.

If the Waste Ink Bottle is Full

1 Replace the waste ink bottle according to the “Waste Ink Bottle Replacement Procedure.”

> NOTE
> - Check visually whether or not the waste ink bottle is full before using the printer.
> - If it is ful, replace it according to “Waste Ink Bottle Replacement Procedure.”

2 The waste ink counter setting selection message (reset (clear)) will be displayed.

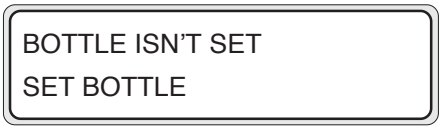


> NOTE
> - The waste ink count is the amount of used ink (waste ink) counted by the printer. When the count exceeds a certain amount, an error is output prompting waste ink disposal. It is a pseudo detection of waste ink full, not an actual detection. Counting starts when the printer recognizes that an empty waste ink bottle is set. Therefore, each time the waste ink bottle is removed and mounted, *YES should be selected to reset the waste ink counter. If this relationship is not maintained, not only will the waste ink bottle full detection counter malfunction, but also the waste ink bottle could be full before a warning is output and the excessive ink could spill out of the bottle.

3 Select “✻YES” and press the ENTER key.

If the Waste Ink Bottle is not Installed

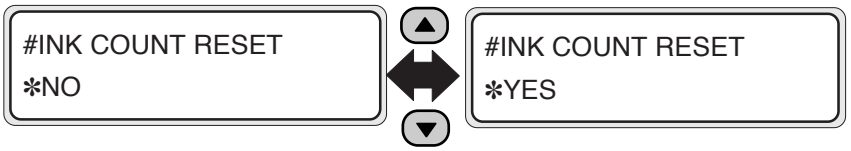
1 A guidance message appears on the LCD.



2 Insert a new waste ink bottle into the printer and install the waste ink bottle cover.

⇒ See the Waste Ink Bottle Replacement Procedure.

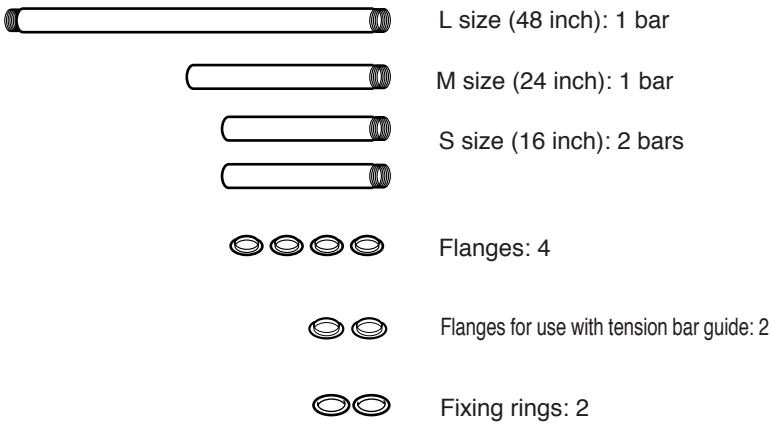
3 The selection message of the waste ink counter setting (reset (clear)) will be displayed.



4 Select "✻YES" and press the ENTER key.

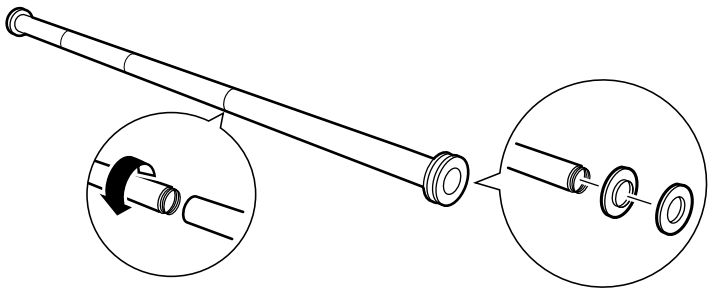
Tension Bar Length Adjustment

Use the same tension bars on the feed side and the take-up side. Insert the exclusive flange and fixing ring before attaching the tension bar on the take-up side.
One set of tension bars includes 2 S size (16 inch, about 40.6cm) bars, 1 M size (24 inch, about 60.7cm) bar and 1 L size (48 inch, about 123.3cm) bar; and 4 flanges.



■ Jointing method (feed side)

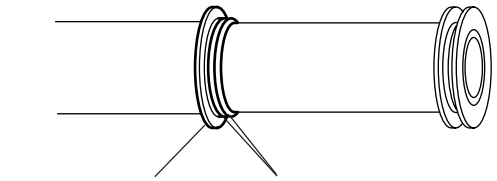
The bars connect by being screwed in to one another. If all 4 are connected, the total length is 104 inches. The L size bar has male joints on both ends, and must always be used. The M and S size bars have female joints at one end for jointing to the L size bar. Both ends of the jointed tension bar should be male to attach the flanges.



■ Jointing method (take-up side)

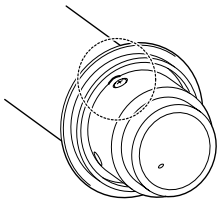
Set the flanges and fixing rings for exclusive use on the take-up side as shown in the figure. After setting them, joint the bars as on the supply side.

Both ends of the jointed tension bar should be male to attach the flanges.



CAUTION

-When setting the fixing ring, clean the fixing ring and the tension bar (for example by wiping with alcohol). If dirt remains, the flange can become displaced during wind-up, causing the wound-up media to be displaced.



-When inserting the tension bar into the flange, match the positions of the depression in the inner circumference in the flange and the tension bar thread.

■ Examples of tension bar combination

Sizes used	Tension bar length	Matching media width
L	48 inch	36 inch to 48 inch
L, S	64 inch	49 inch to 64 inch
L, S, S	80 inch	73 inch to 80 inch
L, M, S, S	104 inch	89 inch to 104 inch

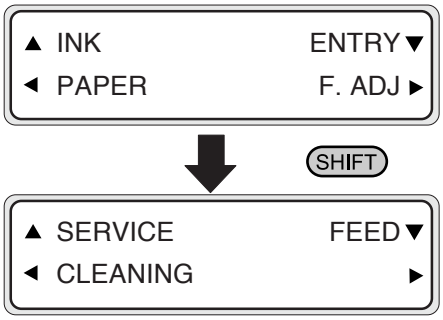
Head Cleaning "CLEANING"

This section explains how to clean the head.
Three types of cleaning are available. Use either one according to the application.

Cleaning type	Application	Ink consumption
NORMAL	Recovery from dot-off in printing	2.45 cc
STRONG	Recovery from jam Recovery from dot-off in printing if NORMAL fails to recover	10.82 cc

1 Put the printer offline. (Press the ONLINE key.)

2 Press the SHIFT key to display the CLEANING menu.



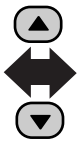
3 Press the ◄ key to enter the head cleaning menu.

4 Press the ENTER key.

```
# CLEANING
* NORMAL
```

5 Press the ▲ key and ▼ key to select a cleaning option.

```
#CLEANING
*NORMAL
```



```
#CLEANING
*STRONG
```

6 Press the ENTER key.

```
#CLEANING
*BOTTLE OK?
```

7 Make sure that the waste ink bottle is not full, and then press the ENTER key again.

```
#CLEANING
*WAIT A MOMENT          XXX
```

XXX : Figure will be incremented in about 10 seconds.

> NOTE
> - The cleaning takes several minutes.

8 When the cleaning is completed, the screen is returned to step 3 automatically.

```
#CLEANING
>NORMAL
```

9 Press the ◀ key to return to the original offline mode.

Paper Feed "FEED"

This section describes how to manually feed media after printing is completed.

1 Put the printer offline. (Press the ONLINE key.)

2 Press the SHIFT key to display the FEED menu.

3 Hold down the ▼ key.

While the ▼ key is kept pressed, the currently selected roll media is fed. If a cut sheet is used, it is discharged.

4 When the ▼ key is released, feeding stops and the top screen in offline mode returns.

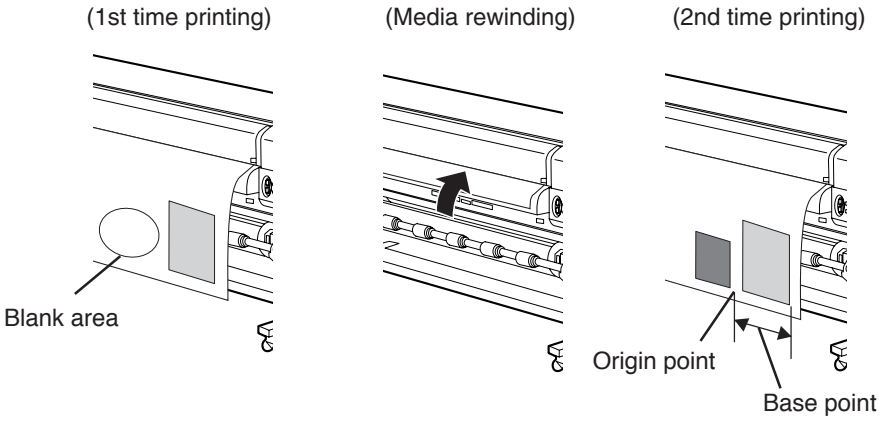
Using the Origin Point Setting Function

<Origin Point Setting>

When a small size image such as an A4 size image is printed on 64-inch width media, a large blank will be generated as the figure shows below.

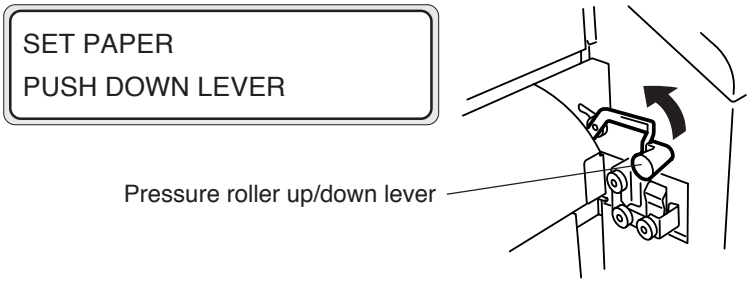
In this case, rewind the print media and newly set the print origin point to print an image on the blank area.

The print origin point setting at media rewinding is called the "Origin Point Setting Function."



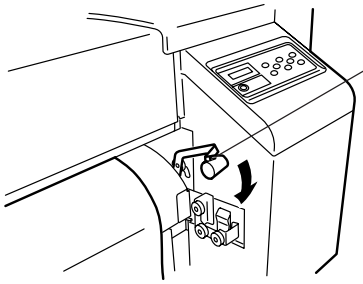
<How to Use the Origin Point Setting Function>

1 Lift the pressure roller up/down lever and rewind the media.



NOTE
- Rewind the media after the media is thoroughly dried. If drying is not sufficient, the previously printed image may be damaged.

2 Push the pressure roller up/down lever down.



3 Select the media position.

MEDIA POSITION SELECT: MAIN

From the parameters, select "MAIN" or "SUB" with the ▲ or ▼ key.

4 Select "USED" in the BASE FUNCTION menu and press the ENTER key.

BASE FUNCTION SELECT: NOT USED

NOTE

- The base function selection menu may not be displayed, depending on the firmware version. To use the base function, select "SELECT: MAIN B" for the media selection.

5 Input the Media width and press the ENTER key.

PAPER WIDTH *2642 mm

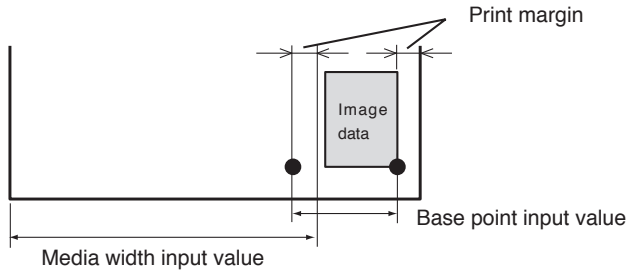
The previously detected media width time is displayed as the initial value.

6 Input the base point (print offset value for media width direction: origin point).

BASE POINT *0000 mm

Normally the previously set base point is displayed.

The origin moves if either the media width or base point is set.



7 Select "*Yes" or "No" for feed back operation.

PAPER FEED BACK *NO

The area from the paper discharge sensor position to the print start position (the grid roller) becomes a dead area.

PAPER FEED BACK *YES

The dead area can be decreased by rewinding the media for the distance between the paper discharge sensor and the grid roller. (20 to 30 mm from the front edge cannot be printed.)

NOTE

- Cut the edge of the media so that it will be parallel to the guide line before installing the media.
  If the edge of the media is not parallel to the guide line, the print area at the top is cut, the platen is stained with ink, and a media jam may be caused.

8 Select a media type again.

SELECT PAPER TYPE PAPER: TYPE01	Press the ENTER key to set the media.

9 Press the feed switch to slacken the media, and install the tension bar in a slack part.

CHECK BUFFER *OK?

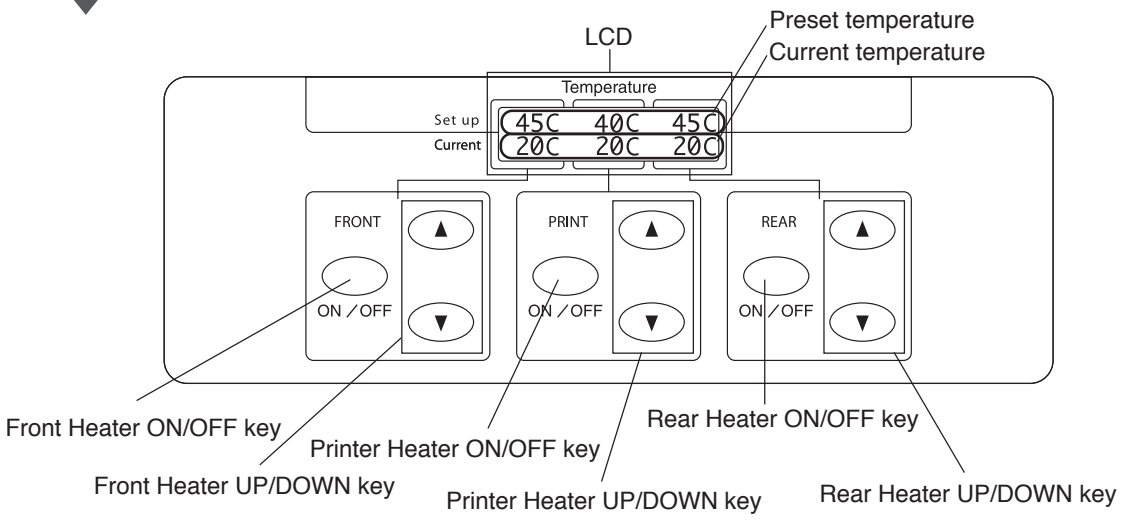
ENTER

PREPARING PAPER WAIT A MOMENT

NOTES

- The media width and base point settings cannot be saved.
- The origin point setting function can be used only for a paper roll. It is not available for cut sheet.

Changing Heater Control Setting Temperature



In normal use, temperatures of each heater for each selected media are preset automatically.
Therefore, ON/OFF settings and temperature settings for all heaters are not necessary.
Use the heater control panel only when the fine adjustment of the heater temperature is desired.
ON/OFF and temperatures of the three heaters can be set on the heater control panel individually.

- ON/OFF setting: Use ON/OFF key for each heater.
- Temperature setting: Use the UP/DOWN key for each heater.
- LCD screen: (When the heater is turned ON)
  - Upper line: Preset temperature for each heater
  - Lower line: Current temperature for each heater

  (When the heater is turned OFF)
  - "OFF" for each heater on all lines

  The preset temperature range is fixed at 15 °C to 55 °C.

Regarding menu operation, see Section 5 "Heater Controller Menu Operations".

■ Heater preset temperature by media

Recommended heater temperature and print mode set values (initial values) by media are listed in the table below. Preset the heater temperature according to the media you use.

Media	Type	Recommended preset temperature			Print mode
		FRONT	PRINT	REAR	
Glossy vinyl chloride	Glossy	45° C	40° C	45° C	Normal 4-pass bi-direction
Matte vinyl chloride	Matte	45° C	40° C	45° C	Normal 4-pass bi-direction
Banner	Banner	45° C	40° C	45° C	Normal 4-pass bi-direction

It is recommended that the front heater, the printer heater and the rear heater be set to 50 °C, 45 °C and 50 °C or lower, respectively. When the print heater is set to higher than 45 °C, we recommend setting the head action mode to "HIGHLIGHT PRIORITY."

NOTES

- When the printer heater temperature is set to high, fixing of the ink is improved, but media wrinkle or matte media surface may be caused.
  Adjust heater temperature according to the media type and ambient temperature.
- When the print heater temperature is set to high, the printer may print at low speed to ensure stable print quality .
- Set the front/rear heater temperatures 5 °C higher than the print heater's.
  Bad temperature balance between the front/rear heater and print heater may cause media wrinkle.

■ Flow of heater temperature setting

(1) If the media type is selected when setting the media, the initial temperature of each heater for that media is set on the heater control panel.

- If the initial temperature has been set, the heater turns on. (Heating does not start yet.)
- If the initial temperature is set to **, the heater turns off. (The set temperature display on the heater control panel becomes OFF.)

(2) If print data are sent from the host (PC), either of the following operations is performed before printing starts:

A) If "Priority Setting (Heater)" set for the media is "Data Priority"

- The temperature set with RIP (print data, job) overwrites the set temperature on the heater control panel, and the heating starts. (The heating does not start if the temperature set value is OFF.)
- If the temperature is not set with RIP (print data, job), the heating starts at the temperature set on the heater control panel.

B) If "Priority Setting (Heater)" set for the media is "Panel Priority"

- The temperature set with RIP is ignored and the heating starts with the temperature set on the heater control panel.

(3) Printing starts when the current temperatures of the front, printer, and rear heaters all reach values exceeding "set temperature -2 °C".

If the current temperature is higher than the set temperature, printing starts without waiting for the temperature to drop. Even after printing starts, temperature control is applied so that the heaters maintain the set temperature.

(4) After that the temperature can be varied during printing by changing the set temperature with the "TEMPERATURE UP/DOWN" key on the heater control panel.

After printing is finished, the temperature changed in this section remains the "set temperature".

(5) After that the print job returns to step (2).

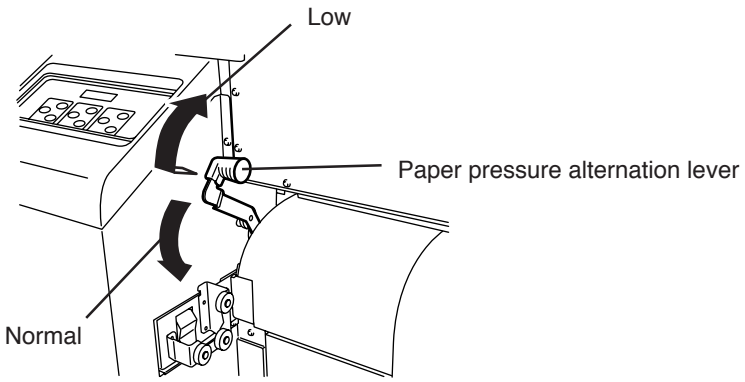
For the initial temperature settings of front, printer, and rear heaters, and the priority setting (heater), see Section 3 Entry Menu.

- The heaters operate under the condition displayed on the heater control panel, whatever means are used to set the temperature.

Using the Media Pressure Alternation Lever

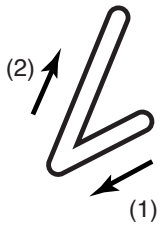
Alternate the media gripping pressure of the media transmission roller according to the media.

Generally, use the media pressure alternation lever in "Normal" position. When media such as a cloth that has weak stiffness is used, alternate the lever to the "Low" position. To alternate the media gripping force, use the media pressure alternation lever (see the figure below).



NOTE

- The shape of the lever groove is shown below.



To alternate the lever from "Normal" to "Low", first pull the lever to your side and then push it up.

Using the Head Up/Down Lever

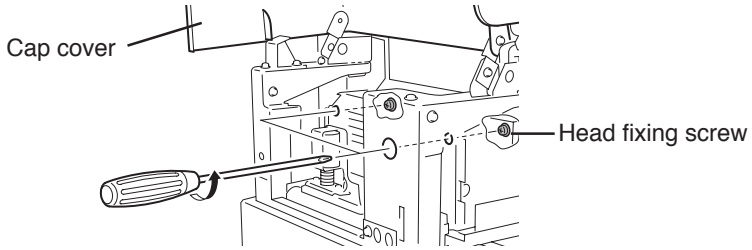
Alternate the head height according to the media you use.
Use the head up/down lever to alternate the head height.
(See the figure below)

1 Select the SERVICE menu and execute HEAD HEIGHT ADJ on the operation panel.

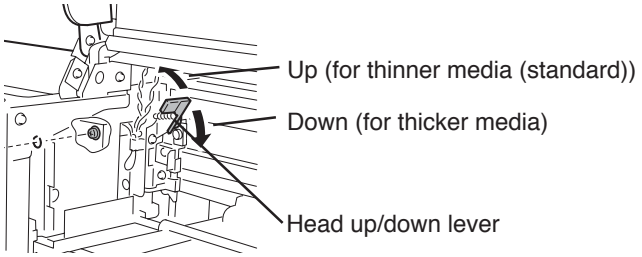
```
#ADJUST HEIGHT
>
```

The alarm buzzer will sound.

2 Open the cap cover and loosen the 2 head fixing screws with a screwdriver.



3 Alternate the head height with the head up/down lever.



Generally, preset the head down for glossy vinyl chloride and matte vinyl chloride, and preset the head up for banner and FF.

When the media thickness is 0.5 mm or more, preset the head up regardless of media type.

If slip sheets are used for mesh tarpaulin or during media feed, or if thin media are used, the head is rubbed with the media due to the media floating. Preset the head in the up position in this case.

4 Tighten the 2 head fixing screws (2 pieces).

NOTES

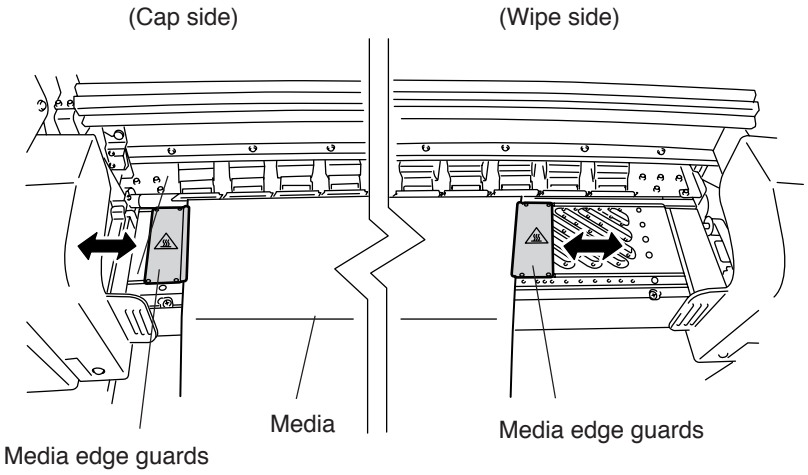
- When changing the head height, tighten the head fixing screws while pushing the head down softly with your hand.
- When the head height is changed, change head height setting (16) in the ENTRY menu (Section 3).
- When the head height is changed, displacement of the printing may occur during bi-directional printing. In that case, adjust the correction value for reciprocating printing. (See (17) Reciprocating print position (Left) adjustment, and (18) Reciprocating print position (Right) adjustment in ENTRY menu.)

5 Close the rear cover and the cap cover.

The alarm buzzer stops.

Using the Media Edge Guard

Mount the media edge guard on the right and left media feed paths to protect the head from nap and curl of the media edge.



HINT

[Specifications of media edge guard]

- Media thickness: Up to 0.65 mm
- The width of the print area decreases when the media edge guard is used.
- The influence of the vacuum fan is eliminated.

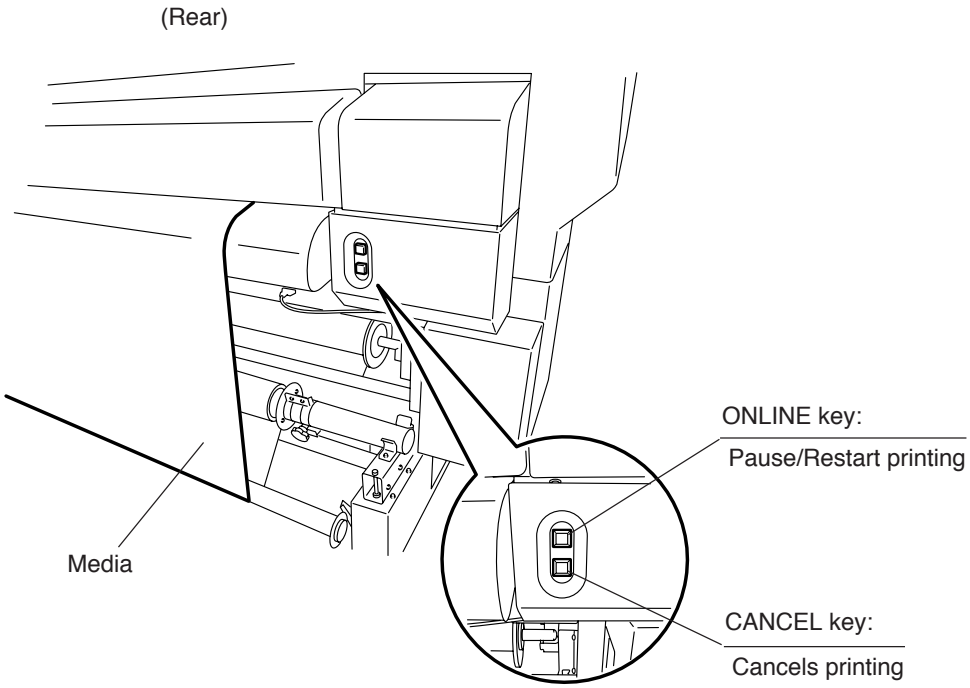
NOTES

- Preset use of the edge guard in the ENTRY menu on the operation panel. The right and left margins of the media can be controlled by setting on the operation panel.
- The right and left margins of the print area will be changed by 10 mm when the edge guard is used.
  (5 mm if not used)
- Clean the media edge guard, if dirty. (⇒ See page 2-83 "Cleaning platen")
- The nap that cannot be removed with the media edge guard causes gaps in printing. Remove it in advance.

Using the Print Pause/Restart and Cancel Keys

Print pause/ restart and cancel are also available from the rear (discharge) side of the printer.

This arrangement permits print pause/re-start and print cancel to be done while checking the print condition from the paper discharge side.



Operations of the ONLINE and CANCEL keys are the same as those of the operation panel's.

HINT <Special use of Print Pause/Restart and Cancel key>

- If the Cancel key is pressed continuously for one second with the LED in ON state, the media can be fed.

Inspection & Maintenance

Regular inspection and maintenance are described below.

Regular Inspection and Maintenance Guide

The printer needs regular inspection and maintenance.
The table below lists all regular inspection and maintenance.
For details of each item, see the page referred to.

	Category	Inspection/Maintenance	Refer to
1	Daily inspection and maintenance	- Wiper Blade Cleaning - Wiper Sponge Cleaning - Capping Unit Cleaning - Waste Ink Bottle Disposal - Carriage Cleaning - Normal Head Cleaning - Test Printing	2-71 2-73 2-74 2-75 2-75 2-76 2-76
2	Monthly inspection and maintenance	- Head cleaning	2-77
3	When leaving the printer for a long time in the power OFF state (2 weeks or more)	- Service Cleaning	2-77
4	When restarting the printer after a long absence (2 weeks or more)	- Head Washing - Ink charging after head washing	2-78
5	When restarting the printer after a long absence (within 2 weeks) with the printer in the power OFF state.	- Head Washing - Ink charging after head washing	2-80 2-81
6	When leaving the printer with power OFF for one month or more.	A service call error message will be displayed on the operation panel. Contact our service center.	2-81

Refer to Section 3 for details of operation.

Daily Inspection and Maintenance

Perform the following every day to ensure stable print quality.

(1) Wiper Blade Cleaning
(2) Wiper Sponge Cleaning
(3) Capping Unit Cleaning
(4) Waste Ink Bottle Disposal
(5) Carriage Cleaning
(6) Normal Head Cleaning
(7) Test Printing

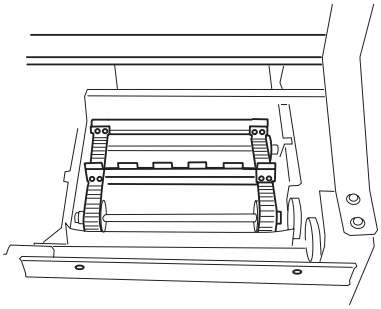
> NOTE
> - Perform the above every day before printing.
> - Always use our specified cleaning liquid and cleaning swab.

<Wiper Blade Cleaning>

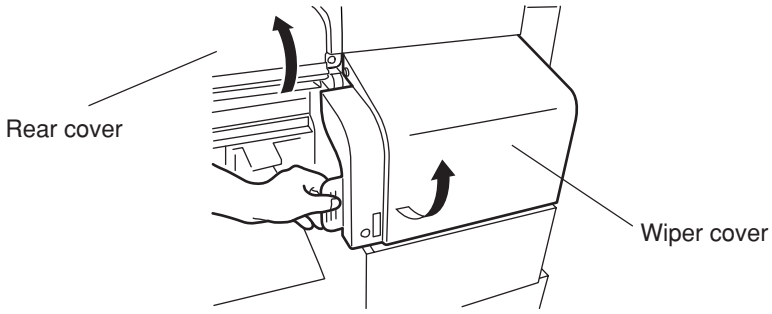
Select the "SERVICE" menu on the operation panel, then select "WIPER CLEANING".

```
#WIPER CLEANING
>
```

The wiper blade will come up for cleaning.



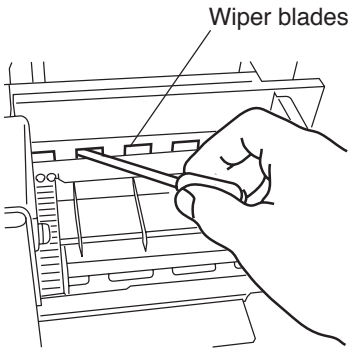
Open the rear cover and the wiper cover.



Check that there are no dregs of dried ink on and no damage to the blades.

Clean the front and back of the blades with a cleaning swab soaked in wiper cleaning liquid.

After completion of the cleaning, close the wiper cover and the rear cover to return the wiper to its original position.



NOTE

- Take extreme care not to allow the wiper cleaning liquid to contact to parts other than wiper blades.
  Contact of wiper cleaning liquid with belts or sensors may cause malfunction.

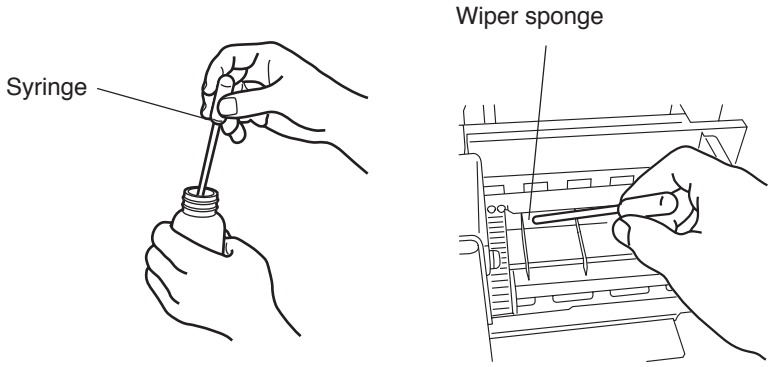
<Wiper Sponge Cleaning>

The wiper sponge has to be moistened at regular intervals.

Check the moisture in the sponge every day before printing.

Check whether the sponge is dried by pressing a dried swab on the sponge.

If the sponge is dried, moisten it with wiper cleaning liquid. For details, contact our service center.



NOTE

- Take extreme care not to spill wiper cleaning liquid on parts other than the wiper sponge.
  Spilling wiper cleaning liquid on belts or sensors may cause malfunction.

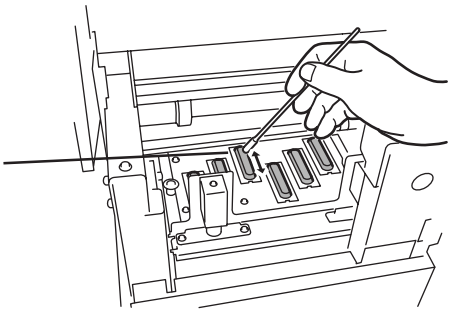
<Capping Unit Cleaning>

Select the SERVICE menu on the operation panel, then select CAP CLEANING".

```
#CAP CLEANING
>
```

The head carriage will move to the wipe side and you can easily access the capping unit.
(The buzzer stops.)
Open the rear cover and cap cover. Wipe the edge and periphery of the upper surface of all (six) caps carefully with the cleaning swab.

Clean the edge and periphery of the upper surface of the cap.



Close the cap cover and rear cover. The head carriage will return to the capping unit position (home position) automatically.
(The buzzer stops)

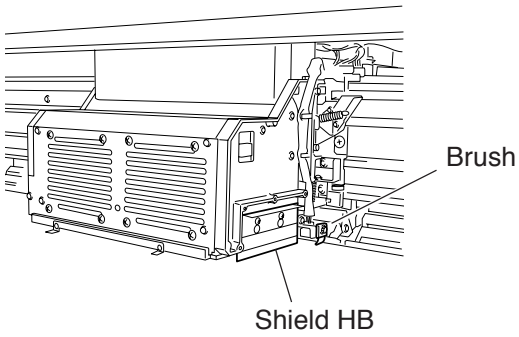
NOTE

- Do not leave the printer for a long time with the head carriage not on the capping unit.

<Waste Ink Bottle Disposal>

If the waste ink bottle is full, pour the waste ink into the proper container you prepared to empty the waste ink bottle.

<Carriage Cleaning>



Clean the carriage brush.

Clean the shield HB frequently to which the dust stained with ink will attach. This dust soils the surface of printed matter.

Also, clean the platen surface.

<Normal Head Cleaning>

Enter the “CLEANING” menu and select “NORMAL” on the operation panel.

<Test Printing>

Enter the “ADJUST” menu and select “TEST PRINT” on the operation panel.

Check no print dot-off and missing.
Perform test printing as the 1st print on every day and especially after cap cleaning for head cleaning.

When print dot-off occurs on a test print, perform normal head cleaning again.

NOTE

- Do not leave the print head at a position other than on the capping unit for a long time. Finish the work within 5 minutes and cap the print head.
  Perform normal head cleaning after completion of the test print.

Monthly Inspection and Maintenance

<Head Cleaning>

Clean the head once per month according to the documentation attached to the head cleaner kit.

When Leaving the Printer for a Long Time (2 weeks or more) in Power OFF State

Store the printer after cleaning the head and ink path with the maintenance liquid, and charge the maintenance liquid.
Six maintenance liquid cartridges and six dummy cartridges are necessary.
Prepare the storage kit (IP6-137).
Six maintenance liquid cartridges (IP6-107) and six dummy cartridges (IP6-118) are packed together in the storage kit.
Six maintenance liquid cartridges are used up by one service clean.

<Service Cleaning>

Select the “SERVICE” menu on the operation panel, then select “ SERVICE CLEAN.”

```
#SERVICE
>SERVICE CLEAN
```

After service cleaning is finished, turn the power OFF with dummy cartridges inserted and leave the printer as it is.
Head washing is mandatory when restoring the printer from the status in which service cleaning is performed.

When Restarting the Printer After a Long Absence (2 weeks or more)

Clean the head and ink path with cleaning liquid.
Six cleaning liquid cartridges and six dummy cartridges are necessary.
Prepare the cleaning kit (IP6-117).
Six cleaning liquid cartridges (IP6-119) and six dummy cartridges (IP6-118) are packed together in the cleaning kit.
Six cleaning liquid cartridges are used up by one head wash.

<Head Wash>

Select HEAD WASH in the SERVICE menu on the operation panel.

```
#SERVICE
>HEAD WASH
```

After performing a head wash, charge the ink (See Ink Charge after Head Washing).

CAUTION

- The printer performs fill cap operation to maintain good head condition after the first 20 hours on standby and every 3 days thereafter.
  It is recommended to keep the printer ON except when the printer is not used for a long time.
  Avoid leaving the printer with no ink for one month or more for head protection.
- Do not open and close the rear cover and do not lift and push down the levers during service cleaning and head washing.
  Doing so can cause the printer to start service cleaning and head washing from the beginning.

<Ink Filling After Head Washing>

Fill the ink after head washing before printing after the printer has not been used for a long time.

Select the “SERVICE” menu on the operation panel, then select “INK CHARGE”.

```
#SERVICE
>INK CHARGE
```

Insert the ink cassettes and fill the ink.

Leave the printer for at least one hour after completion of ink filling.

Check moisture in the wiper sponge.

Perform test printing.

If characters are shipped during test printing, perform normal cleaning in the “CLEANING” menu.

NOTE

- About 300cc of ink is used for the ink filling. If a cartridge in which the remaining amount of ink is less than 300cc has been inserted, replace it with a cartridge that contains at least 300cc.

When Restarting the Printer After a Long Absence (within 2 weeks) in Power OFF State

<Head Washing>

Cleaning the head and ink path with cleaning liquid.
Six cleaning liquid cartridges and six dummy cartridges are mandatory.
Prepare the cleaning kit (IP6-117).
Six cleaning liquid cartridges (IP6-119) and six dummy cartridges (IP6-118) are packed together in the cleaning kit.
Six cleaning liquid cartridges are used up by one head wash.

```
#SERVICE
>HEAD WASH
```

After performing the head wash, fill the ink.

NOTE

- The printer performs fill cap operation to maintain good head condition after the first 20 hours in the print wait state and every 3 days thereafter.
  It is recommended to keep the printer ON except when the printer is not used for a long time.
  Avoid leaving the printer with no ink for one month or more for head protection.
- Do not open and close the rear cover and do not lift and push down the levers during service cleaning and head washing.
  If this is done, the printer may start service cleaning and head washing from the beginning.

<Ink Filling After Head Washing>

Charge the ink after head washing before printing when the printer is left idle for a long time.

Enter the "SERVICE" menu and select "INK CHARGE" on the operation panel.

```
#SERVICE
>INK CHARGE
```

Insert the ink cassettes and fill the ink.

Leave the printer for at least one hour after completion of ink filling.

Check moisture in the wiper sponge.

Perform test printing.

If characters are shipped during the test printing, perform normal cleaning in the "CLEANING" menu.

(See page 2-55.)

NOTE

- About 300cc of ink is used for the ink filling. If a cartridge in which the remaining amount of ink is less than 300cc has been inserted, replace it with a cartridge that contains more than 300cc of ink.

When Leaving the Printer with Power OFF for One Month or More

Regardless of whether service cleaning is performed, a service call error message will be displayed on the operation panel.
Contact an SIIT service center.

CAUTION

- For head protection do not leave the printer unfilled with maintenance liquid more than 2 weeks in the power OFF state.
- When leaving the printer for one month or more, consult with your dealer or our nearest service center in advance.

Cleaning

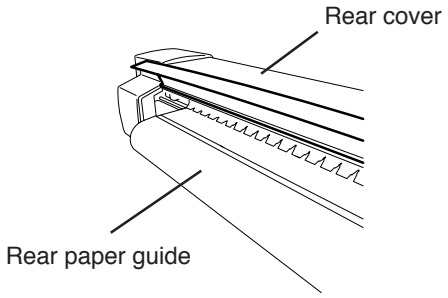
■ Cleaning housing

If the housing of the printer becomes stained, wipe up the stain with a soft cloth soaked in water or water dissolved neutral detergent and wringed well.

NOTES
- Before cleaning, turn the AC1 and AC2 power switches OFF.
- Do not use volatile solvent such as thinner or benzine to prevent fading or deterioration of the coating.

■ Cleaning rear cover and rear paper guide

Vacuum with a vacuum cleaner.
If stains are heavily accumulated, wipe them with a soft cloth soaked in cleaning liquid.



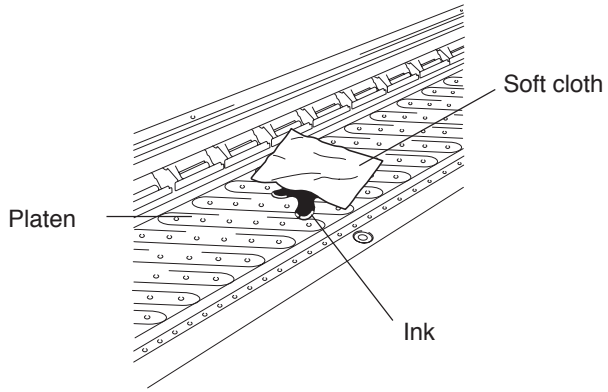
NOTES
- Turn the printer and heater power switches OFF before cleaning.
- Do not blow paper dust off.
  Doing so can cause print quality to deteriorate.

■ Cleaning platen

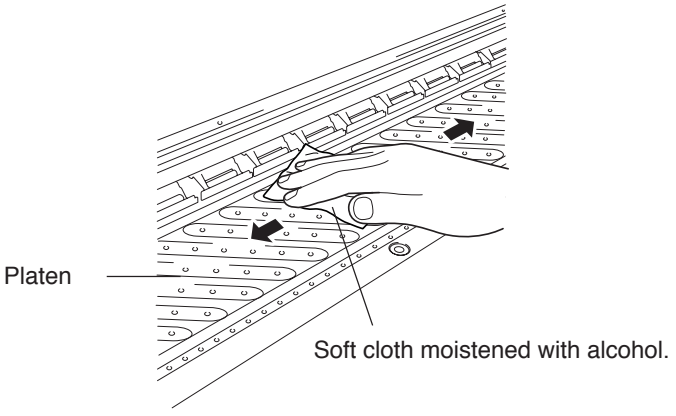
When glue adheres to the platen or ink drips on the platen, clean the platen according to the following procedures:

1 Open the rear cover and put a soft cloth on the ink stained on the platen to soak up the ink into a soft cloth.

Absorb ink into the soft cloth with care so as not to spread it.

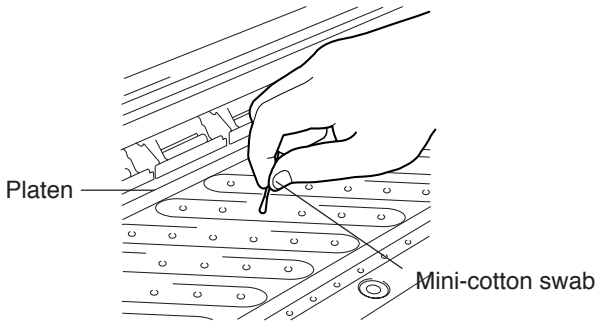


2 Wipe ink marks off of the platen with a soft cloth moistened with alcohol.



3 If ink gets into vacuum holes on the platen, wipe ink out of the holes with a commercially-available mini-cotton swab, then wipe out again with a mini-cotton swab moistened with alcohol.

Use a ø3 mm mini-cotton swab.



Section 3 Operation Panel Menu Operations

This section outlines the user menu structure and operations.

Contents of This Section

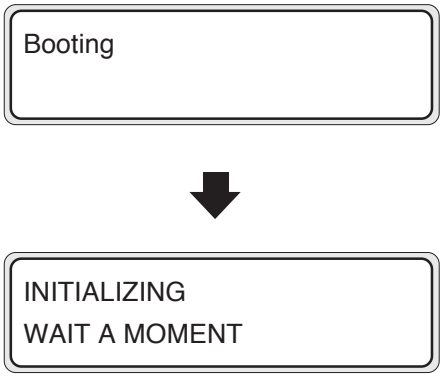
LCD Messages and Printer State

This section explains the display on the LCD and printer state.

Display on the LCD

(1) Initialization

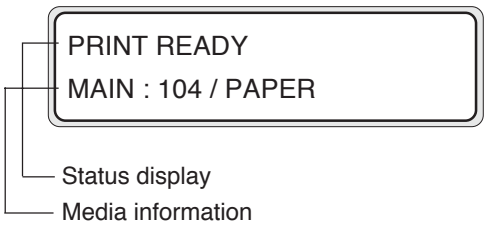
The printer is being initialized.



*: When the system starts normally, the printer goes goes online and enters idle mode automatically.

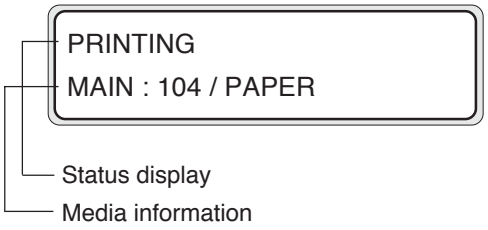
(2) Online state (idle mode)

The printer can receive data from the computer.



(3) Online state (print mode)

The printer is printing.



Operation in Online State

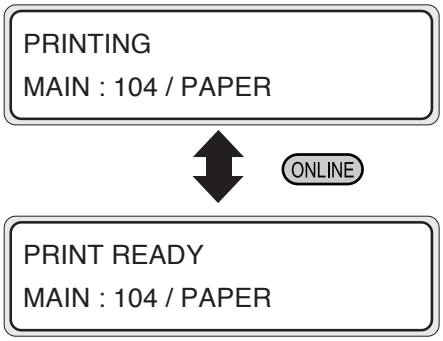
Operation panel keys enabled in online state

State/Mode		Online state			
		Idle mode	Printing mode	Pause mode	Ref.
Panel keys	ONLINE	Moves to the offline mode.	After one scan is finished, the printer interrupts printing and enters the pause mode.	Cancels the print pause mode and moves to the printing mode.	(1)
	CANCEL	Invalid	Invalid	Cancels printing and returns to the idle mode.	(6)
	ENTER	Moves to offline cleaning.	Invalid	Moves to cleaning mode.	(2)
	SHIFT	Device information display	Device information display	Device information display	(4)
	▲ ▼	Invalid	Moves to the feed correction value operation.	Invalid	(3)
	POWER	Moves to shutdown mode and turns power OFF.	Moves to shutdown mode and turns power OFF.	Moves to shutdown mode and turns power OFF.	(7)

(1) Online state (print pause mode) display

The printer pauses.

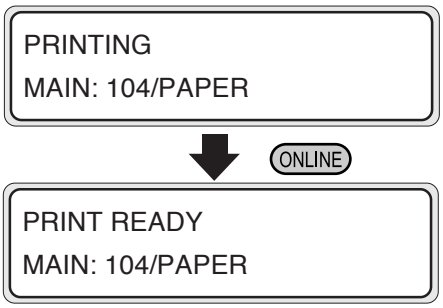
- Print stop and resume



The ONLINE LED flashes.

(2) Cleaning during printing

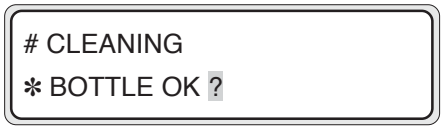
During online printing, cleaning can be performed by the following operation.



1 Press the ENTER key in pause mode.

2 Select "NORMAL" or "STRONG" with the ▲ or ▼ key and press the ENTER key.

3 Check the waste ink bottle and press the ENTER key.



4 Press the ENTER key. The printer returns to the pause mode if the CANCEL key is pressed.

xxx: Count down about every 10 seconds.

5 After cleaning is finished, the printer returns to the initial state in the pause mode.

(3) Changing paper feed adjustment correction value during printing

During online printing, the paper feed adjustment correction value can be changed by the following operation.

1 Press the ▲ key or ▼ key when "PRINTING" is displayed.

PRINTING MAIN: 104/PAPER

Data receiving starts
DATA LED flashes.

2 The current feed correction value is displayed.
Change the value with the ▲ or ▼ key.

FINE ADJ: 099.80 % ✻ 099.80 %

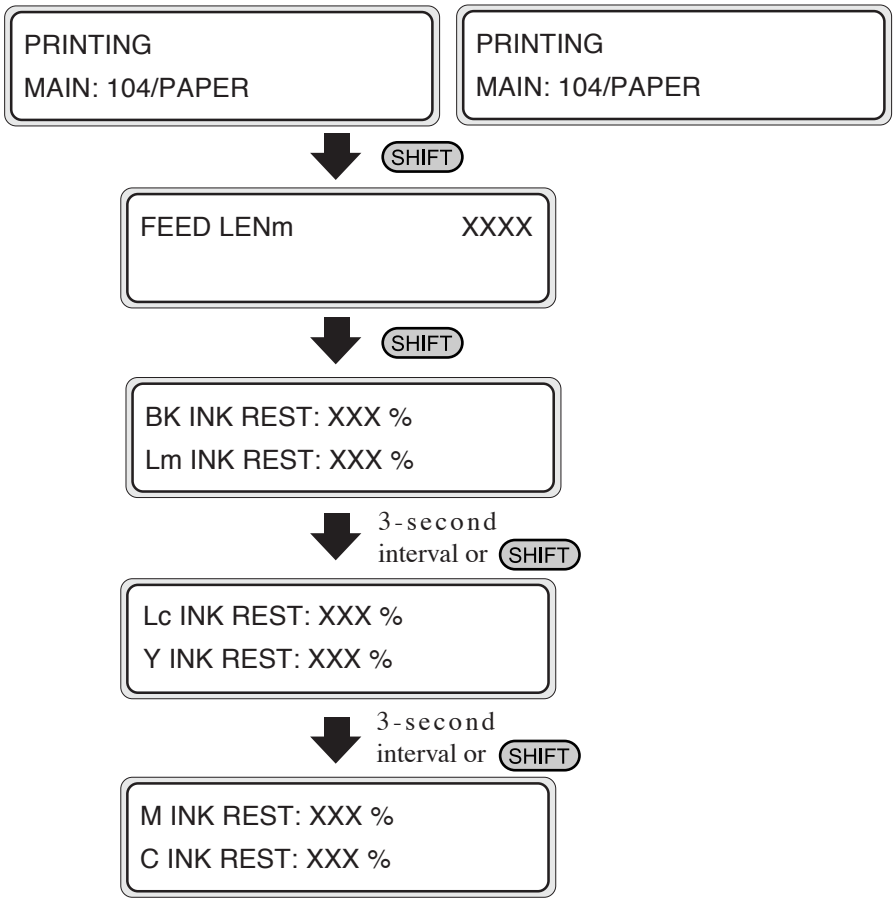
Setting range: 97.00% - 103.00%

The value at the start of printing is displayed on the right side of the first line, and does not change until printing finishes.
However, if cleaning is executed in cleaning mode 2 during printing, the value changed during cleaning is displayed after cleaning.

- 0.01% up or down with ▲ or ▼ key.
- The value is reflected in printing immediately when it is changed.
- The changed value is registered, and retained afterward.
- The original display is restored if no key is operated for 3 seconds.

(4) Online state (print information mode)

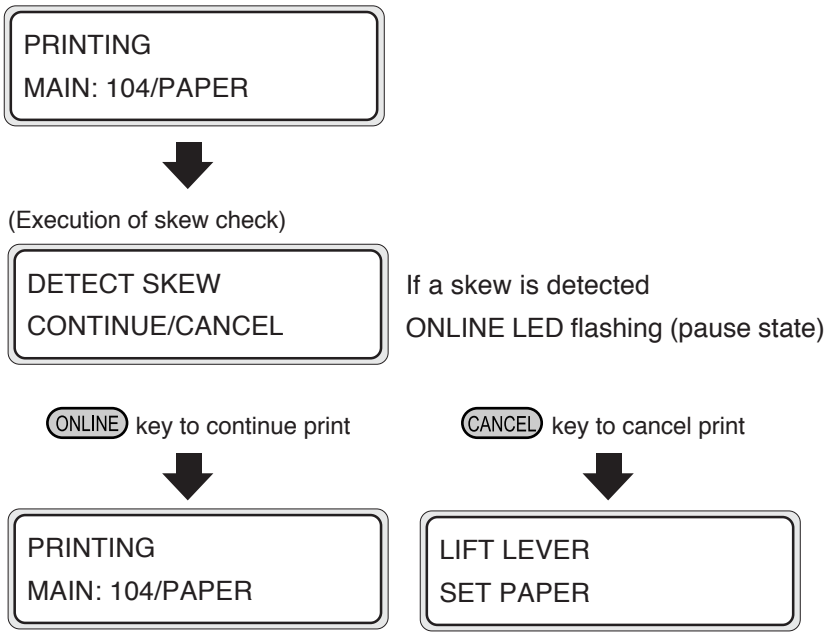
The media feed length and ink remaining amount are displayed if the SHIFT key is pressed during idling, online printing, or print pause.



After this is displayed, the printer returns to the online state.

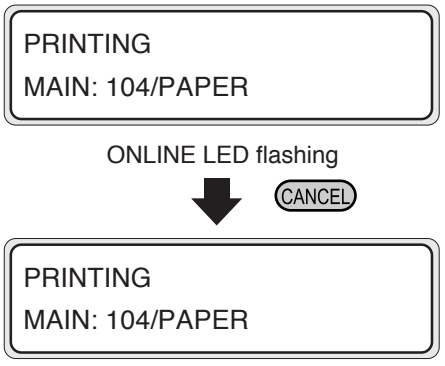
(5) Skew check during printing

The printer checks for skew of media every 2 meters of print length. If a skew exceeding the specified value is detected, the printer enters the print pause mode and displays an inquiry as to whether printing is to be continued or cancelled on the screen.



(6) Print cancel

To cancel the print, press the CANCEL key in the online pause mode.



(7) Shutdown

Pressing the Power ON/OFF switch in idle mode, during online printing or print pause causes the printer to execute shutdown.

The printer can be shut down in two ways:

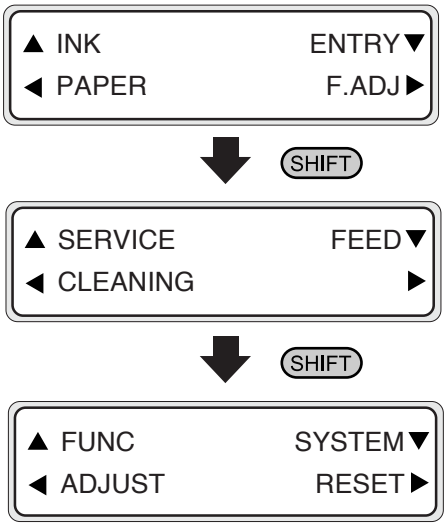
1. Turning power OFF without fill cap operation
   Press the power ON/OFF key together with the CANCEL key, and the power is turned OFF, skipping the fill cap operation. Use this operation for temporary power OFF in such cases as an error recovery or failure of communication with the host.

2. Turning power OFF with fill cap operation
   Press the power ON/OFF key on the operation panel continuously for 2 to 3 seconds. Power is turned OFF after the fill cap operation is executed.

For further information, see "Section 2 Turning Power ON/OFF."

Basic Menu Operation in Offline State

When the ONLINE key is pressed in the online idle mode, the printer enters the offline mode, a menu group appears on the LCD, and menu operations are enabled.



Menu Hierarchical Structure

The menu has the following hierarchical structure:

<Menu group>

This menu is displayed at the first level.
Some menus have several sub-menus.

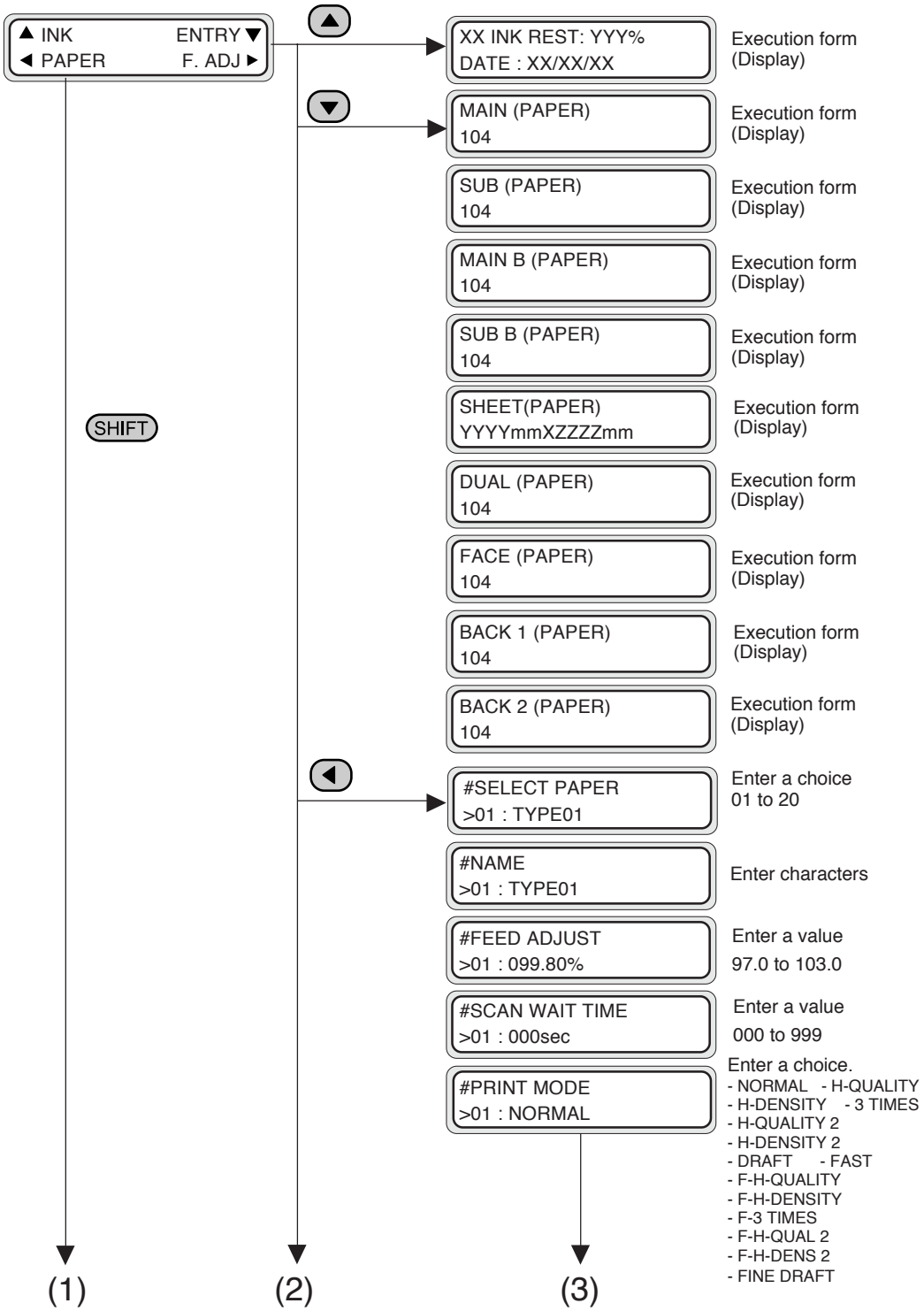
<Second-level menus>

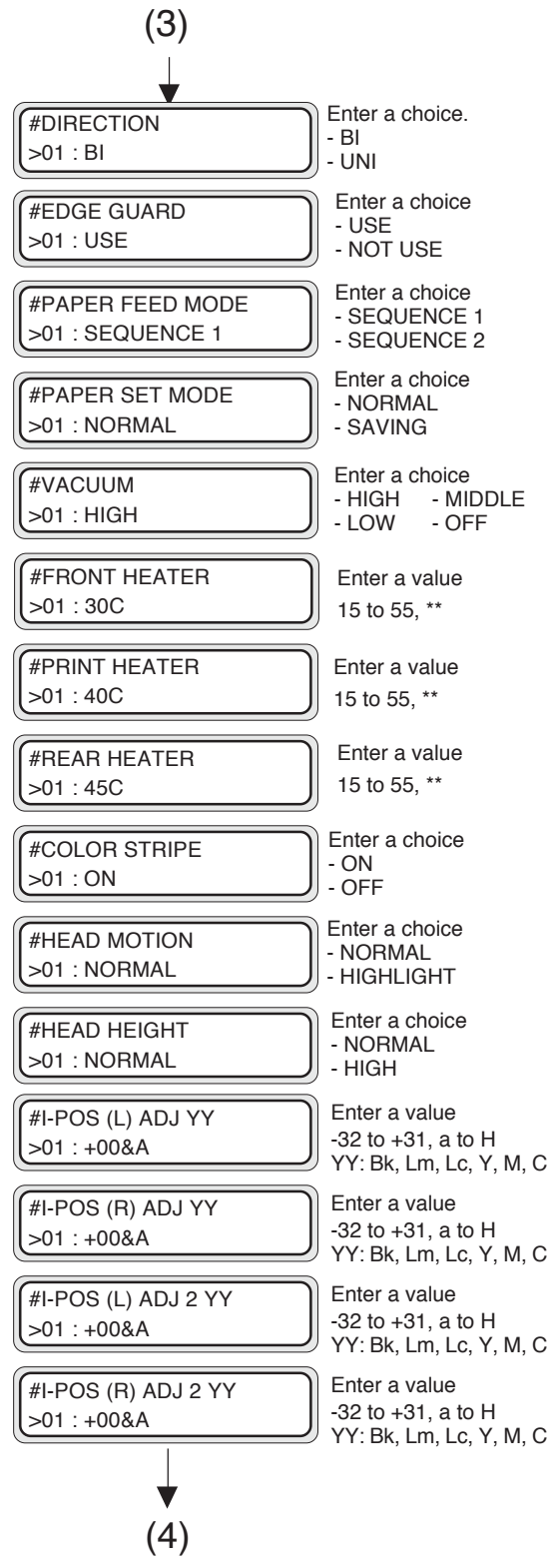
Sub-menus of the menu group

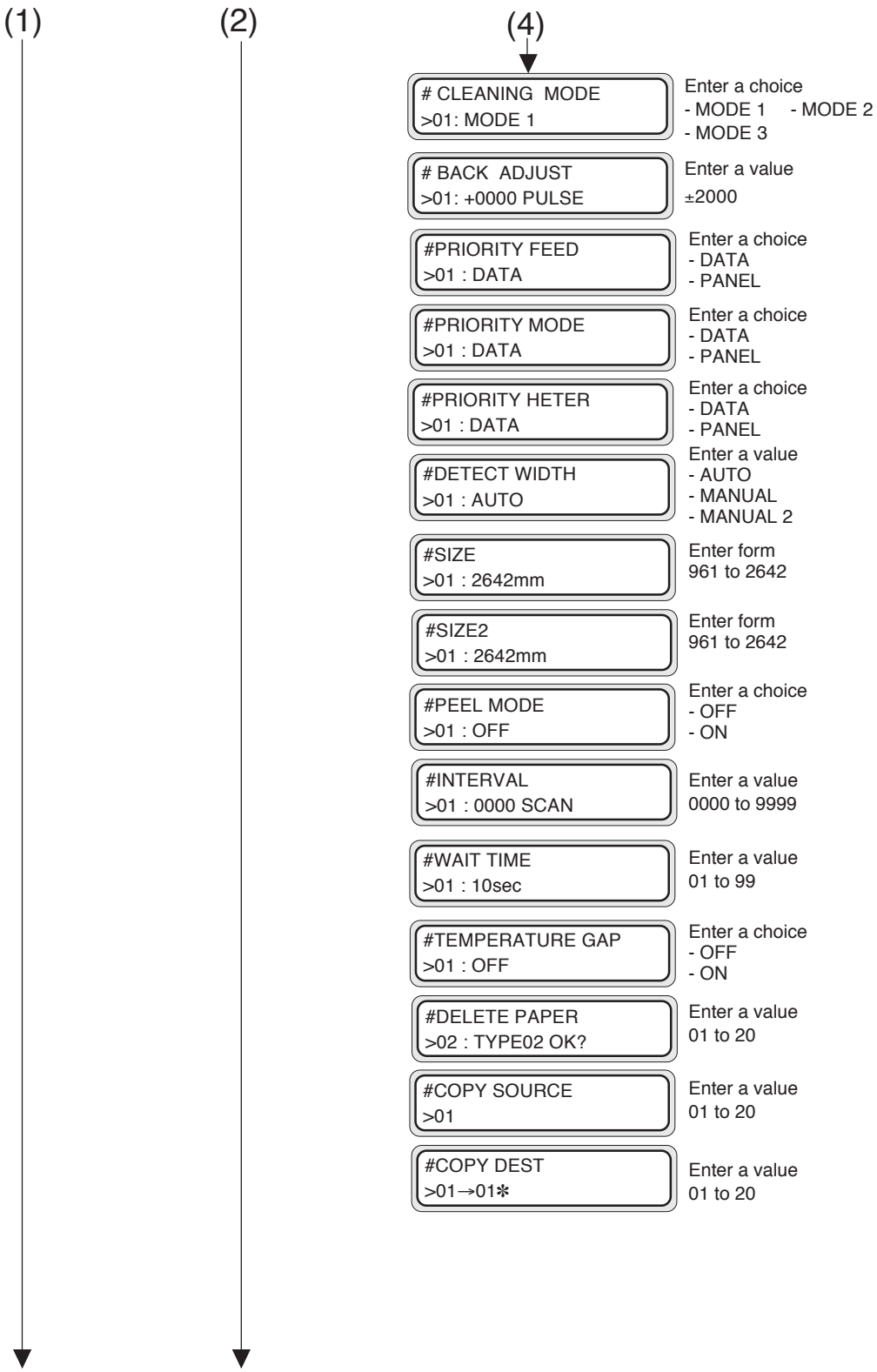
<Parameters>

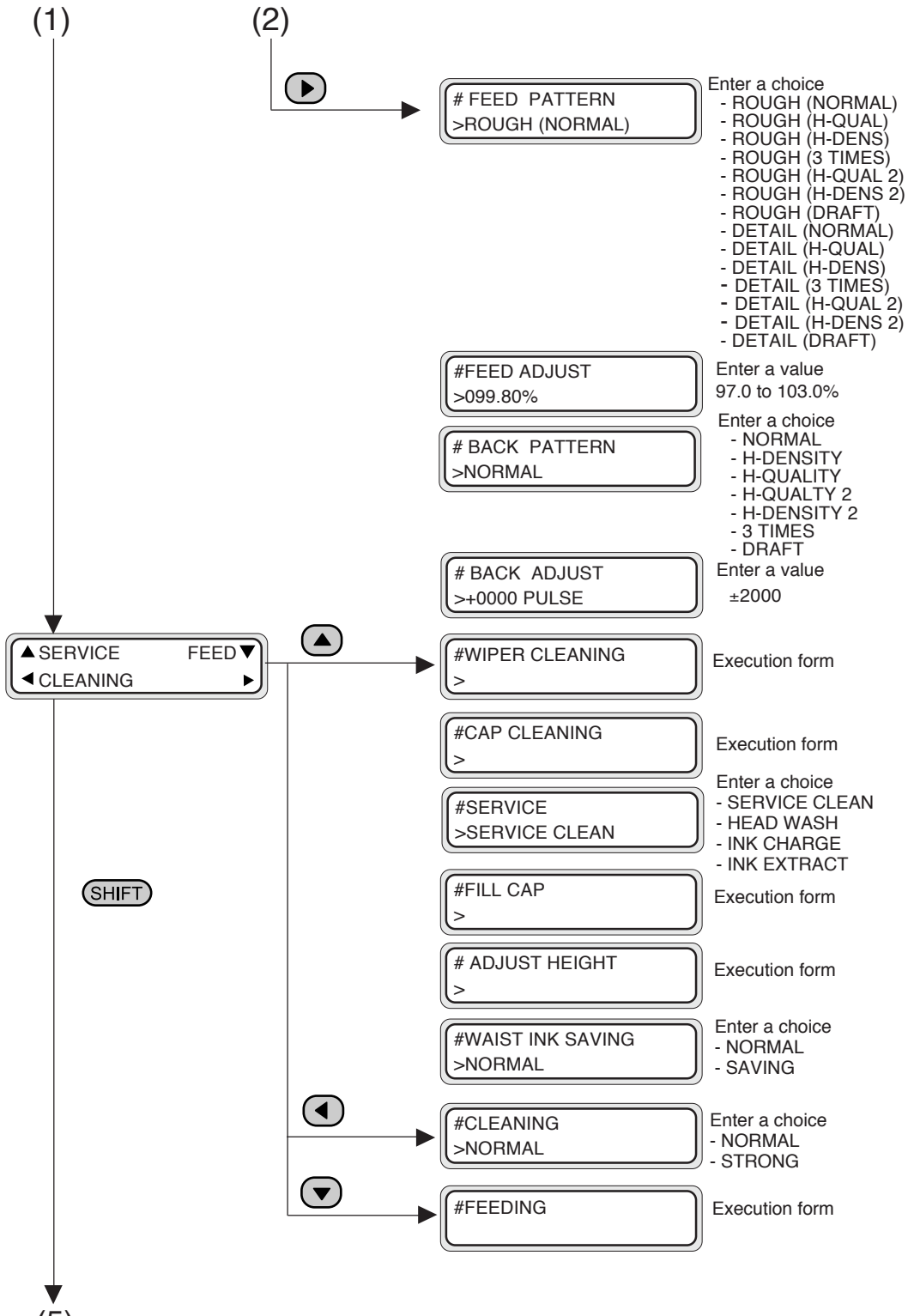
Select a menu item or enter a value.
There are three methods to set parameters: choice, value entry, and execution.

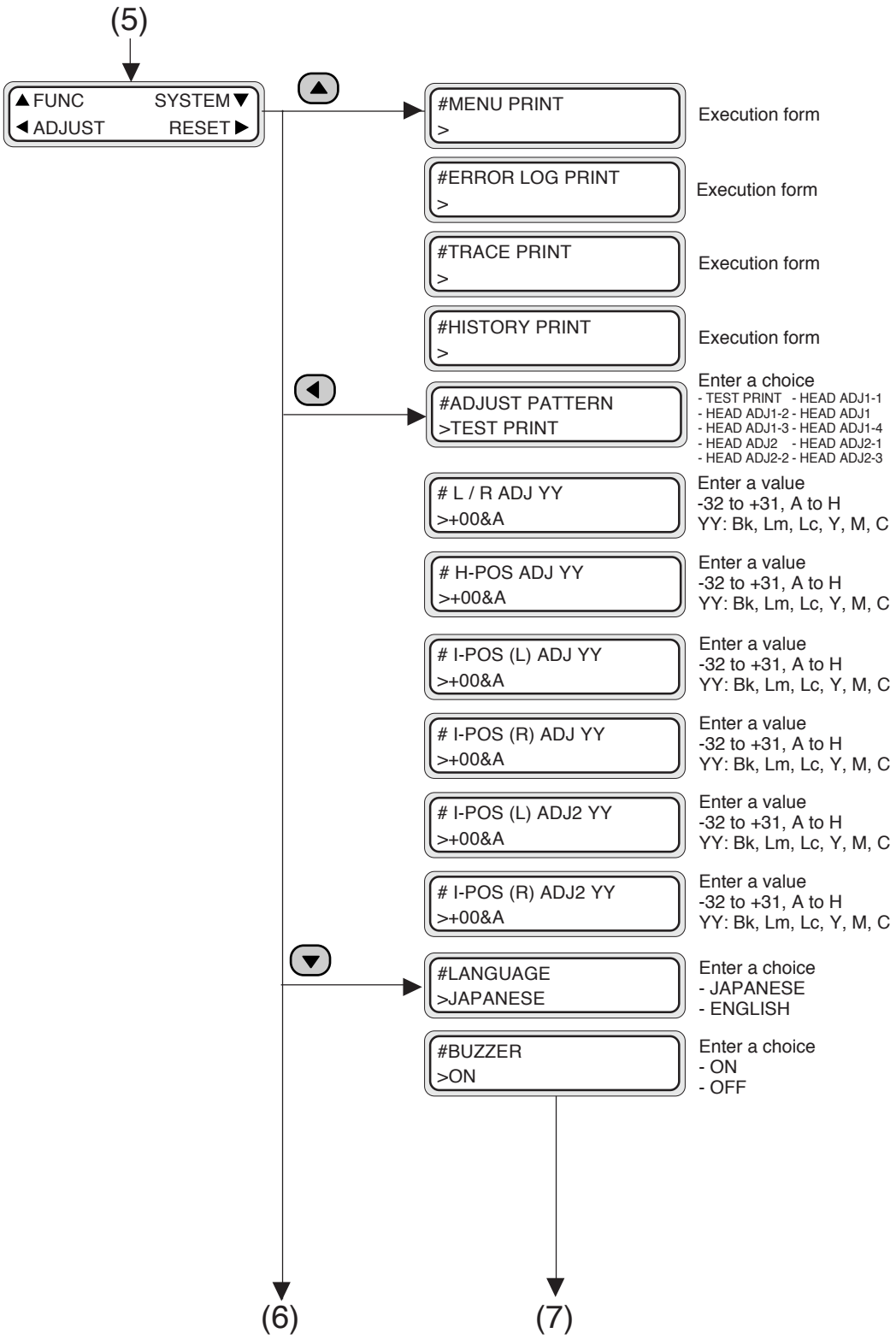
Menu Tree

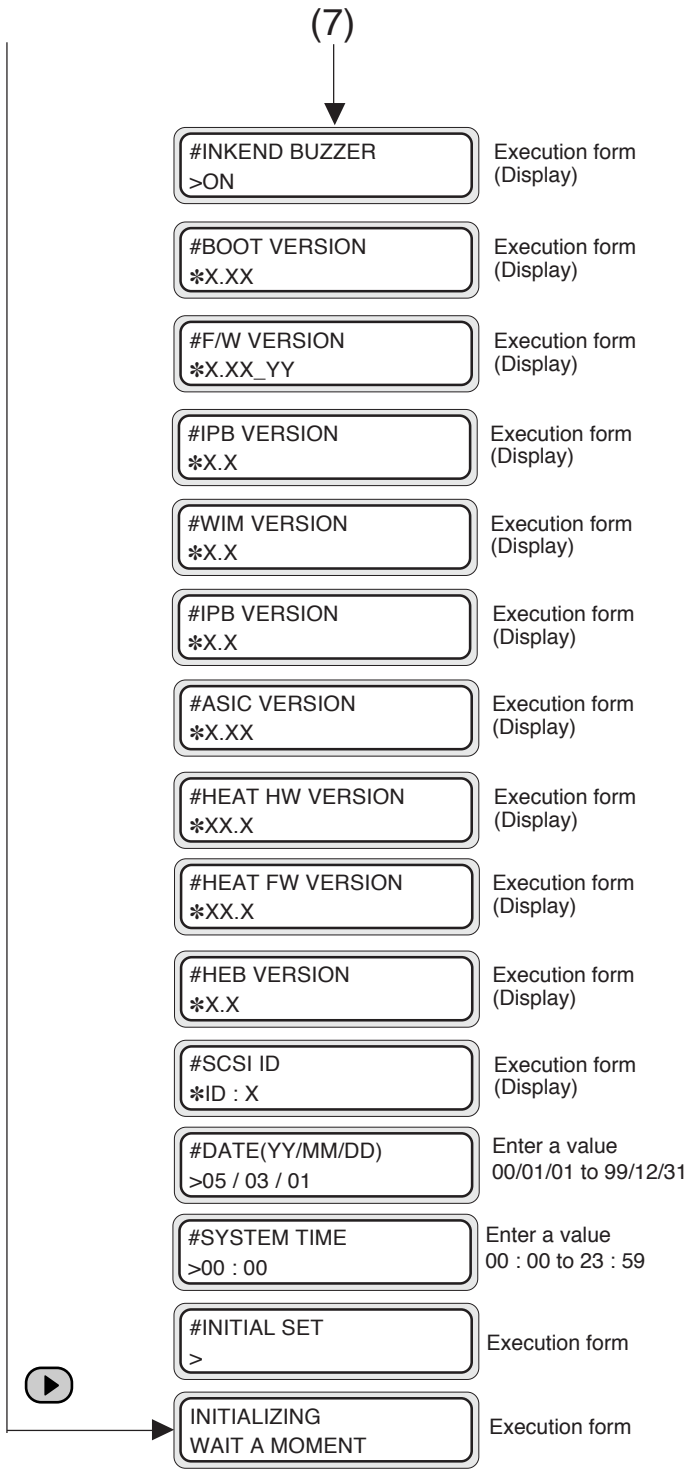

▲ INK ENTRY ▼
◄ PAPER F. ADJ ►
SHIFT
XX INK REST: YYY%
DATE : XX/XX/XX
Execution form (Display)
MAIN (PAPER)
104
Execution form (Display)
SUB (PAPER)
104
Execution form (Display)
MAIN B (PAPER)
104
Execution form (Display)
SUB B (PAPER)
104
Execution form (Display)
SHEET(PAPER)
YYYYmmXZZZZmm
Execution form (Display)
DUAL (PAPER)
104
Execution form (Display)
FACE (PAPER)
104
Execution form (Display)
BACK 1 (PAPER)
104
Execution form (Display)
BACK 2 (PAPER)
104
Execution form (Display)
#SELECT PAPER
>01 : TYPE01
Enter a choice
01 to 20
#NAME
>01 : TYPE01
Enter characters
#FEED ADJUST
>01 : 099.80%
Enter a value
97.0 to 103.0
#SCAN WAIT TIME
>01 : 000sec
Enter a value
000 to 999
#PRINT MODE
>01 : NORMAL
Enter a choice.
- NORMAL - H-QUALITY
- H-DENSITY - 3 TIMES
- H-QUALITY 2
- H-DENSITY 2
- DRAFT - FAST
- F-H-QUALITY
- F-H-DENSITY
- F-3 TIMES
- F-H-QUAL 2
- F-H-DENS 2
- FINE DRAFT
(1)
(2)
(3)


(3)
#DIRECTION
>01 : BI
Enter a choice.
- BI
- UNI
#EDGE GUARD
>01 : USE
Enter a choice
- USE
- NOT USE
#PAPER FEED MODE
>01 : SEQUENCE 1
Enter a choice
- SEQUENCE 1
- SEQUENCE 2
#PAPER SET MODE
>01 : NORMAL
Enter a choice
- NORMAL
- SAVING
#VACUUM
>01 : HIGH
Enter a choice
- HIGH - MIDDLE
- LOW - OFF
#FRONT HEATER
>01 : 30C
Enter a value
15 to 55, **
#PRINT HEATER
>01 : 40C
Enter a value
15 to 55, **
#REAR HEATER
>01 : 45C
Enter a value
15 to 55, **
#COLOR STRIPE
>01 : ON
Enter a choice
- ON
- OFF
#HEAD MOTION
>01 : NORMAL
Enter a choice
- NORMAL
- HIGHLIGHT
#HEAD HEIGHT
>01 : NORMAL
Enter a choice
- NORMAL
- HIGH
#I-POS (L) ADJ YY
>01 : +00&A
Enter a value
-32 to +31, a to H
YY: Bk, Lm, Lc, Y, M, C
#I-POS (R) ADJ YY
>01 : +00&A
Enter a value
-32 to +31, a to H
YY: Bk, Lm, Lc, Y, M, C
#I-POS (L) ADJ 2 YY
>01 : +00&A
Enter a value
-32 to +31, a to H
YY: Bk, Lm, Lc, Y, M, C
#I-POS (R) ADJ 2 YY
>01 : +00&A
Enter a value
-32 to +31, a to H
YY: Bk, Lm, Lc, Y, M, C
(4)


(1)
(2)
(4)
CLEANING MODE
>01: MODE 1
Enter a choice
- MODE 1 - MODE 2
- MODE 3
BACK ADJUST
>01: +0000 PULSE
Enter a value
±2000
#PRIORITY FEED
>01 : DATA
Enter a choice
- DATA
- PANEL
#PRIORITY MODE
>01 : DATA
Enter a choice
- DATA
- PANEL
#PRIORITY HETER
>01 : DATA
Enter a choice
- DATA
- PANEL
#DETECT WIDTH
>01 : AUTO
Enter a value
- AUTO
- MANUAL
- MANUAL 2
#SIZE
>01 : 2642mm
Enter form
961 to 2642
#SIZE2
>01 : 2642mm
Enter form
961 to 2642
#PEEL MODE
>01 : OFF
Enter a choice
- OFF
- ON
#INTERVAL
>01 : 0000 SCAN
Enter a value
0000 to 9999
#WAIT TIME
>01 : 10sec
Enter a value
01 to 99
#TEMPERATURE GAP
>01 : OFF
Enter a choice
- OFF
- ON
#DELETE PAPER
>02 : TYPE02 OK?
Enter a value
01 to 20
#COPY SOURCE
>01
Enter a value
01 to 20
#COPY DEST
>01→01*
Enter a value
01 to 20


(1)
(2)
FEED PATTERN
>ROUGH (NORMAL)
Enter a choice
- ROUGH (NORMAL)
- ROUGH (H-QUAL)
- ROUGH (H-DENS)
- ROUGH (3 TIMES)
- ROUGH (H-QUAL 2)
- ROUGH (H-DENS 2)
- ROUGH (DRAFT)
- DETAIL (NORMAL)
- DETAIL (H-QUAL)
- DETAIL (H-DENS)
- DETAIL (3 TIMES)
- DETAIL (H-QUAL 2)
- DETAIL (H-DENS 2)
- DETAIL (DRAFT)
#FEED ADJUST
>099.80%
Enter a value
97.0 to 103.0%
BACK PATTERN
>NORMAL
Enter a choice
- NORMAL
- H-DENSITY
- H-QUALITY
- H-QUALTY 2
- H-DENSITY 2
- 3 TIMES
- DRAFT
BACK ADJUST
>+0000 PULSE
Enter a value
±2000
▲SERVICE FEED▼
◀CLEANING ▶
#WIPER CLEANING
>
Execution form
#CAP CLEANING
>
Execution form
#SERVICE
>SERVICE CLEAN
Enter a choice
- SERVICE CLEAN
- HEAD WASH
- INK CHARGE
- INK EXTRACT
SHIFT
#FILL CAP
>
Execution form
ADJUST HEIGHT
>
Execution form
#WAIST INK SAVING
>NORMAL
Enter a choice
- NORMAL
- SAVING
#CLEANING
>NORMAL
Enter a choice
- NORMAL
- STRONG
#FEEDING
Execution form
(5)


(5)
▲FUNC SYSTEM▼
◀ADJUST RESET▶
#MENU PRINT
>
Execution form
#ERROR LOG PRINT
>
Execution form
#TRACE PRINT
>
Execution form
#HISTORY PRINT
>
Execution form
#ADJUST PATTERN
>TEST PRINT
Enter a choice
- TEST PRINT - HEAD ADJ1-1
- HEAD ADJ1-2 - HEAD ADJ1
- HEAD ADJ1-3 - HEAD ADJ1-4
- HEAD ADJ2 - HEAD ADJ2-1
- HEAD ADJ2-2 - HEAD ADJ2-3
L / R ADJ YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
H-POS ADJ YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
I-POS (L) ADJ YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
I-POS (R) ADJ YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
I-POS (L) ADJ2 YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
I-POS (R) ADJ2 YY
>+00&A
Enter a value
-32 to +31, A to H
YY: Bk, Lm, Lc, Y, M, C
#LANGUAGE
>JAPANESE
Enter a choice
- JAPANESE
- ENGLISH
#BUZZER
>ON
Enter a choice
- ON
- OFF
(6)
(7)


(7)
#INKEND BUZZER
>ON
Execution form
(Display)
#BOOT VERSION
*X.XX
Execution form
(Display)
#F/W VERSION
*X.XX_YY
Execution form
(Display)
#IPB VERSION
*X.X
Execution form
(Display)
#WIM VERSION
*X.X
Execution form
(Display)
#IPB VERSION
*X.X
Execution form
(Display)
#ASIC VERSION
*X.XX
Execution form
(Display)
#HEAT HW VERSION
*XX.X
Execution form
(Display)
#HEAT FW VERSION
*XX.X
Execution form
(Display)
#HEB VERSION
*X.X
Execution form
(Display)
#SCSI ID
*ID : X
Execution form
(Display)
#DATE(YY/MM/DD)
>05 / 03 / 01
Enter a value
00/01/01 to 99/12/31
#SYSTEM TIME
>00 : 00
Enter a value
00 : 00 to 23 : 59
#INITIAL SET
>
Execution form
INITIALIZING
WAIT A MOMENT
Execution form

Basic Operations and Keys

(1) To enable menu operations:

- Enter the offline mode.
- When the printer enters the offline mode, a menu group screen is displayed.

(2) Menu group selection:

- Select a menu group directly with the ▲, ▼, ◀ and ▶ keys.
- Switch between menu group screens with the SHIFT key.

(3) Menu selection:

- ▲, ▼ keys : Change between menus at the same level.
- ◀ key : Return to menu group selection.
- ENTER key : Select a menu so that parameters can be changed.

(4) Parameter setting or change:

- ▲, ▼ keys : Switch between parameters. Increment or decrement a value when it is entered.
- ◀, ▶ keys : Shift digit when entering a value.

(5) Parameter setting or canceling:

- ENTER key : Set a parameter.
- CANCEL key : Cancel an input parameter value and return to the menu selection.

(6) Save:

- The changes in the Setup menu, System menu, and Mechanical Adj. menu are automatically saved as parameters.

(7) End of setting:

- When the ONLINE key is pressed, the printer goes back to the online mode.

Operation Procedure for Choice Input, Value Input, Execution, and Character Input

■ If a choice is used for a parameter setting:

An example of PRINT MODE of the ENTRY menu is given below.

(1) Select a menu group with the ▲, ▼, ◀, ▶ keys.
Select the ENTRY menu with the ▼ key.

(2) Select a sub-menu of the ENTRY menu with the ▲ and ▼ keys.
Select PRINT MODE .
You can return to (1) with the ◀ key.

(3) Press the ENTER key so that parameters can be changed.

(4) Select a parameter for the menu with the ▲ and ▼ keys.
Select 01 : FINE.

(5) Press the ENTER key to change the parameter and return to (2).

■ If a value is input for a parameter setting:

The PAPER FEED ADJ menu of the ADJUST menu is given as an example.

(1) Select a menu group with the ▲, ▼, ◀, ▶ keys.
Select ADJUST with the ◀ key.

(2) Select a sub-menu of the ADJUST menu with the ▲ and ▼ keys.
Select the PAPER FEED ADJ. menu.
You can return to (1) with the ◀ key.

(3) Press the ENTER key so that parameters can be changed.

(4) Move to the digit to be modified with the ◀ and ▶ keys.

(5) Modify the value by pressing the ▲ and ▼ keys.

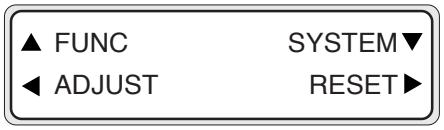
(6) Press the ENTER key to change the parameter and return to (2).

■ If a parameter is executed:

Case 1: To print

The MENU PRINT menu of the FUNC menu is given as an example.

(1) Select a menu group with the ▲, ▼, ◀, ▶ keys.
Select the FUNC menu with the ▲ key.



(2) Select a sub-menu of the FUNC menu with the ▲ and ▼ keys.
Select MENU PRINT menu.
You can return to (1) with the ◀ key.

(3) Press the ENTER key.

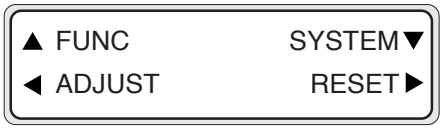
(4) Press the ENTER key to execute the function.
Press the CANCEL key to return to (2) without executing the function.

(5) After execution, the display returns to (2).

Case 2: To display only

The SCSI ID menu of the SYSTEM menu is given as an example.

(1) Select a menu group with the ▲, ▼, ◀, ▶ keys.
Select the SYSTEM menu with the ▼ key.



(2) Select a sub-menu of the SYSTEM menu with the ▲ and ▼ keys.
When the SCSI ID is selected, it is displayed.

*x: SCSI ID number

(3) Another sub-menu of the SYSTEM menu can be selected with the ▲ and ▼ keys.
You can return to (1) with the ◀ key.

■ If character is input for parameter setting:

The example of NAME of the ENTRY menu is given below.

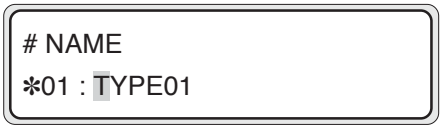
(1) Select a menu group with the ▲, ▼, ◀, ▶ keys.

Select the ENTRY menu with the ◀ key.

(2) Select a sub-menu of the ENTRY menu with the ▲ and ▼ keys.

Select NAME.

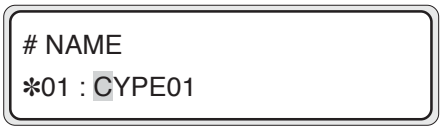
(3) Press the ENTER key so that the parameter can be changed.



(4) Select a character code group by pressing the SHIFT and ▲ keys or SHIFT and ▼ keys.

Modify the value by pressing the ▲ or ▼ key.

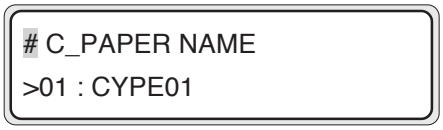
(See "Character List" on the next page.)



(5) Move to a digit by pressing the ◀ and ▶ keys.

Then, modify the value.

(6) Press the ENTER key to determine the parameter.

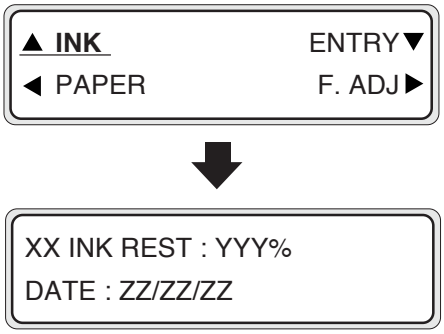


<Character List>

Character code group		Character ▼ key ◄► ▲ key
Backward (SHIFT + ▼ key) ↕ Forward (SHIFT + ▲ key)	Symbols	space, !, ••••
	Numerals	0 to 9
	Alphabet • Capital letter	A to Z
	Alphabet • Small letter	a to z
	Katakana: ア line	ア, イ, ウ, エ, オ
	Katakana: カ line	カ, キ, ク, ケ, コ
	Katakana: サ line	サ, シ, ス, セ, ソ
	Katakana: タ line	タ, チ, ツ, テ, ト
	Katakana: ナ line	ナ, ニ, ヌ, ネ, ノ
	Katakana: ハ line	ハ, ヒ, フ, ヘ, ホ
	Katakana: マ line	マ, ミ, ム, メ, モ
	Katakana: ヤ line	ヤ, ユ, ヨ
	Katakana: ラ line	ラ, リ, ル, レ, ロ
	Katakana: ワ line	ワ, ヲ, ン
	Small katakana	ァ, イ, ゥ, エ, ォ, ャ, ュ, ョ, ッ
	Special characters	a, ä, b, ••••

INK Menu

This menu is used to display ink information or replace the ink. When the ▲ key is pressed, information on each color ink is displayed at three-second intervals.



XX: Color name, such as Bk, Lm, Lc, Y, M, and C.
YYY: Remaining amount of ink.
ZZ: Date

(1) XX INK indicates the remaining amount of ink.
DATE indicates the manufacture date of the ink cartridge.
(2) When the SHIFT key is pressed, you can go to the next step without waiting for three seconds.
(3) When the CANCEL or ◀ key is pressed, display scrolling ends and the top menu is displayed in offline state.
(4) When the ONLINE key is pressed, display scrolling ends and the printer is put online.
(5) When the ENTER key is pressed, display scrolling ends and the printer enters the ink cartridge replacement.
(See Section 2, Replacing Ink Cartridges.)

PAPER Menu

This menu is used to display media information or replace the media. When the ◀ key is pressed, information on media is displayed at three-second intervals.

<Main feed>

MAIN (XXXXXX) YYY	X: Media type Y: Media size

<Sub feed (media roll)>

SUB (XXXXXX) YYY	X: Media type Y: Media size

<Main feed (media roll) with origin point function valid>

MAIN B (XXXXXX) YYY	X: Media type Y: Media size

<Sub feed (media roll) with origin point function valid>

SUB B (XXXXXX) YYY	X: Media type Y: Media size

<Cut Sheet>

SHEET (XXXXXX) YYYYmm x ZZZMM	X: Media type Y: Media size (mm) Z: Media length (mm)

<Dual roll>

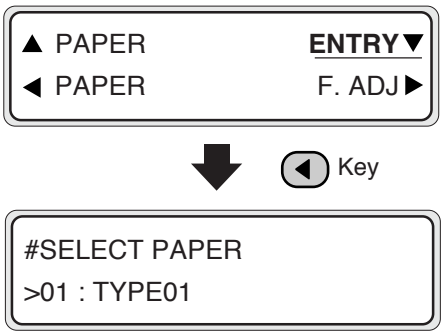
DUAL (XXXXXX) YYY	X: Media type Y: Media size

<Double-Sided Printing>

(1) When the CANCEL and ◀ keys are pressed, display scrolling ends and the top menu is displayed in offline state.
(2) When the ONLINE key is pressed, display scrolling ends and the printer moves online state.
(3) When the ENTER key is pressed, display scrolling ends and the printer enters the media setting sequence.
(4) When the PAPER menu is displayed, the feed switch and winder switch on both the paper feeder and winding unit are active even if the pressure roller up/down lever is in the down position.

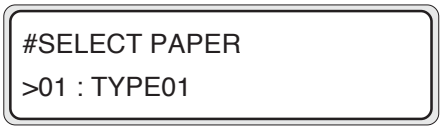
ENTRY Menu

This menu is used to set up parameters for printing.
When the ▼ key is pressed, parameter setting is enabled.



(1) Media selection (SELECT PAPER)

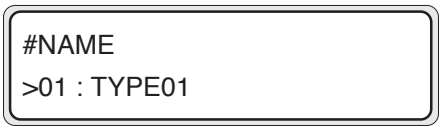
Select a media number to be newly registered or revised. Twenty media types (from 01 to 20) can be selected.



<Parameter (Enter a choice.)>
Media number: 01 to 20

(2) Media name setting (NAME)

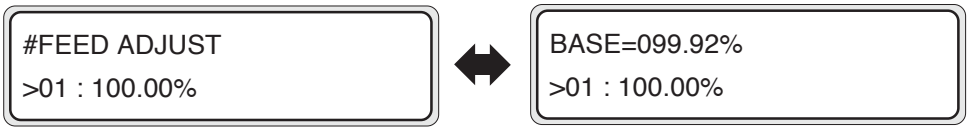
Set the media name.
Six-digit characters (or symbols) can be input as the media name.
Symbols, alphanumerics, and katakana characters can be used for six-digit characters.



<Parameter (Enter characters)>
A six-digit character (symbols, alphanumerics, katakanas, others)

(3) Feed correction value (Unit: %)

Set the feed correction value for the selected media.



<Parameter (Enter a value)>

XXX.XX% (97.00 to 103.00%)

(4) Scan waiting time (SCAN WAIT TIME) (Unit: second)

Set the media scanning wait time for the selected media.

<Parameter (Enter a value)>

Input three decimal digits in second units. (0 to 999 seconds)

(5) Print mode setting

Set a print mode for the selected media.

<Parameter (Enter a choice)>

NORMAL: (4-pass)
FINE: (8-pass)
DENSITY: (8-pass)
3 TIMES: (12-pass)
H-QUALITY 2: (16-pass)
H-DENSITY 2: (16-pass)
DRAFT: (2-pass)
FAST: (4-pass)
F-H-QUALITY: (8-pass)
F-H-DENSITY: (8-pass)
F-3 TIMES: (12-pass)
F-H-QUAL 2: (16-pass)
F-H-DENS 2: (4-pass)


HINT

For further information on parameters, see page 4-2 "Print Modes."

(6) Print the direction setting

Set the print direction.

```
#DIRECTION
>01 : BI
```

<Parameter (Enter a choice)>

BI: Bidirectional printing

UNI: Unidirectional printing

(7) Edge guard setting

Set whether the media edge guard is used or not.

The right and left print margins will be changed by this setting.

```
#EDGE GUARD
>01 : USE
```

<Parameter (Enter a choice)>

- USE : Select when the edge guard is used.
- NOT USE : Select when the edge guard is not used.

(8) Feed mode setting

Set the feed mode for the selected media.

```
#PAPER FEED MODE
>01 : SEQUENCE 1
```

<Parameter (Enter a choice)>

- SEQUENCE 1 : Feeds the media in the normal feed sequence.
- SEQUENCE 2 : Feeds the media in the counter measure sequence to prevent media from being glued.

(9) Media setting mode

Detection of the media edge when replacing or setting the media, and selection of whether the media should be returned to the waiting position are set.

When the take-up unit is in operation, the media will not be returned to the waiting position regardless of this setting.

```
#PAPER SET MODE
>01 : NORMAL
```

<Parameter (Enter a choice)>

- NORMAL: Detects the media width when the media is replaced or set, and then completes the media setting after checking media skew at the end of media feeding.
- SAVING: Detects the media width when the media is replaced or set and then completes the media setting after detecting the edge of the media at the end of media rewinding.

NOTES

Usually set "NORMAL". When "SAVING" is selected, use caution regarding the following points:

- Trim the edge of the media so that it is parallel to the guide line and set the media to the printer.
  If the edge of the media is not parallel, the print at the top is missed, the platen is stained by ink and a paper jam is caused.
- Set the media after checking that there is no wrinkle on the edge of the media.
  Using media with wrinkles can cause a paper jam.
- Set the media after checking that there is no tape or glue attached to the edge of the media. Using media with tape or glue can cause a paper jam.

(10) Air flow setting for suction FAN

Sets the air flow of the FAN.

```
#VACUUM
>01 : NORMAL
```

<Parameter (Enter a choice)>

- HIGH: Applies suction to media with strongest flow.
- MIDDLE: Applies suction to media with intermediate flow.
- LOW: Applies suction to media with weak flow.
- OFF: Stops the vacuum fan.

To check for fan error, the vacuum fan rotates in "HIGH" mode once, and then it rotates in the preset mode even if the fan is preset to "LOW" or "OFF."

(11) Initial temperature setting for the front heater (FRONT HEATER)

Sets the front heater temperature.

(Celsius)

```
#FRONT HEATER
>01 : 30C
```

(Fahrenheit)

```
#FRONT HEATER
>01 : 086F
```

<Parameter (Enter a value)>

- Range: 15 °C to 55 °C
  (The heater will be OFF when "✻✻" is set.)

(12) Initial temperature setting for the printer heater

Sets the platen heater temperature.

(Celsius)

(Fahrenheit)

<Parameter (Enter a value)>

- Range: 15 °C to 55 °C
  (The heater will be OFF when "✻✻" is set.)

(13) Initial temperature setting for the rear heater

Sets the rear heater temperature.

(Celsius)

(Fahrenheit)

<Parameter (Enter a value)>

- Range: 15 °C to 55 °C
  (The heater will be OFF when "✻✻" is set.)

Celsius or Fahrenheit display can be alternated on the heater panel.
The setting will be reflected when power is next turned ON.

HINT Celsius and Fahrenheit conversion equation.
F=(9/5) C+ 32
C=(5/9) (F-32)

(14) Color stripe setting (COLOR STRIPE)

Sets color stripe print ON/OFF.

```
#COLOR STRIPE
>01 : ON
```

<Parameter (Enter a choice)>

- ON: Prints the color stripe print on the origin side.
- OFF: Does not print the color stripe on the origin side.

NOTES

- If the color stripe is not set, dot-off in printing may occur. It is recommended to set the color stripe for printing, if practicable.
- The color stripe is printed on the test print regardless of this setting.

(15) Head action mode setting

Selects a head action mode.

```
#HEAD MOTION
>01 : NORMAL
```

<Parameter (Enter a choice)>

- NORMAL: Use this usually.
- HIGHLIGHT: Use this for print gradation data.

NOTE

If a pattern having very low printing rate in even one color is printed continuously at high temperature, gaps in printing may occur at a low printing rate color. In this case, set the head mode to HILIGHT PRIORITY.

(16) Head height setting (HEAD HEIGHT)

Sets the a head height. This setting should be matched to the head height changes on the printer.

```
#HEAD HEIGHT
>01 : NORMAL
```

<Parameter (Enter a choice)>

- NORMAL: Use this usually.
- HIGH: Use this for thick media.

(17) Reciprocating print position (Left) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts reciprocating print positions (Left) for all heads. (I-POS ADJ YY)

Enter correction value based on the head adjustment pattern print.

```
#I-POS (L) ADJ YY
>01 : +00&A
```

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(18) Reciprocating print position (Right) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts reciprocating print positions (Right) for all heads. (I-POS ADJ YY)

Enter correction value based on the head adjustment pattern print.

```
#I-POS (R) ADJ YY
>01 : +00&A
```

YY: Ink color

Display order:

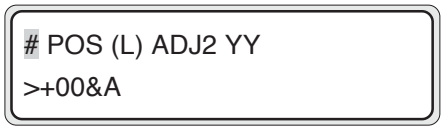
Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(19) For fine draft reciprocating print position (left) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts reciprocating print position (left) of all heads for fine draft (main scan 540 dpi mode). Enter correction value based on the head adjustment pattern print.



YY: Ink color

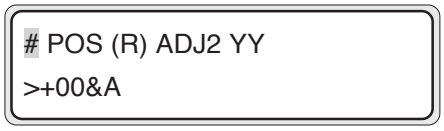
Display order: Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value: -32 to +31, A to H (A=0/8, B=1/8, ... H=7/8)

(20) For fine draft reciprocating print position (right) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts reciprocating print position (right) of all heads for fine draft (main scan 540 dpi mode). Enter correction value based on the head adjustment pattern print.



YY: Ink color

Display order: Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value: -32 to +31, A to H (A=0/8, B=1/8, ... H=7/8)

(21) Cleaning mode

Selects a cleaning mode to be performed automatically during printing.

```
# CLEANING  MODE
>01: MODE 1
```

<Parameter (Enter a value)>

MODE 1: Performs cleaning automatically according to the print history record at the start of printing or at the end of printing.

MODE 2: Performs cleaning automatically at regular intervals during printing. (Select this mode when using media such as PVC sensitive to the heater temperature.)

MODE 3: Performs cleaning automatically at regular intervals during printing. (Select this mode when using media such as tarpaulin insensitive to the heater temperature.)

NOTES

- When sequence 2 has been set as the media feed mode, the printer performs the same as in "mode 1" even if "mode 2" is selected.
- When selecting mode 2, separator lines will be generated on the print because cleaning is performed during printing. These lines can be adjusted with media back correction value input in the "BACK ADJUS" menu.
  However, these lines may be shifted depending on the media, and in such a case, use "mode 1" or "mode 3".
- In case of "mode 2", complete printing of the image before and after the separator line, and then perform cleaning.
- In case of "mode 3", perform cleaning with the separator line in the midway of print path status.

(22) Media back feed correction value (unit: pulses)

Sets the media back feed correction value for the selected media. Adjusts separator lines when the image is separated due to automatic cleaning during printing.

```
# BACK  ADJUST
>01: +0000 PULSE
```

<Parameter (Enter a value)>

- ±2000 pulses (+5 mm)
- 1 pulses=2.5 μm

(23) Priority setting (media feed correction value)

Selects the priority of the media feed correction value.

```
#PRIORITY FEED
>01 : DATA
```

<Parameter (Enter a value)>

- DATA: Gives priority to data.
- PANEL: Gives priority to the panel.

(24) Priority setting (PRINT MODE)

Selects the priority of the print mode.

```
#PRIORITY MODE
>01 : DATA
```

<Parameter (Enter a value)>

- DATA: Gives priority to data.
- PANEL: Gives priority to the panel.

(25) Priority setting (HEATER)

Selects the priority of heater temperature setting.

```
#PRIORITY HEATER
>01 : DATA
```

<Parameter (Enter a value)>

- DATA: Gives priority to data.
- PANEL: Gives priority to the panel.

(26) Selecting the media width detection method

Sets the media width detection method.

Set the media width manually when media of which width cannot be detected by the edge sensor is used.

```
# DETECT WIDTH
AUTO
```

<Parameter (Enter a choice)>

- AUTO: Detects the media width automatically using the edge sensor.
- MANUAL 1: The printer works using the value set to the SIZE parameter as the media width.
- MANUAL 2: The printer works using the value set to the SIZE parameter as the media width.

- Select MANUAL 1 if a liner size is different from the media width when a liner is set during the print on mesh media.
- Select MANUAL 2 if a media such as clear film that cannot be detected by the edge sensor is used.
- This setting is validated when media is set. If this setting is changed, the media must be set again.

(27) Setting the media width size

Select the media width size.

The printer works using the value set here as the media width when "DETECT WIDTH" is set to MANUAL.

If this item is set, the same value is automatically set to SIZE 2.

```
# SIZE
>01: 2642mm
```

<Parameter (Enter a value)>

Value: 914 to 2642

- This setting is validated when media is set. If this setting is changed, the media must be set again.

(28) Setting media width size 2

Select the media width size (mesh printing liner)

The printer works using the value set here as the media width when "DETECT WIDTH" is set to MANUAL.

```
# SIZE 2
>01: 2642mm
```

<Parameter (Enter a value)>

Value: 914 to 2642

- This setting is validated when media is set. If this setting is changed, the media must be set again.

(29) Peeling operation

Select whether peeling operation is executed on the selected media.

Numbers 01 to 20 of the registered media can be selected.

```
# PEEL MODE
>01: OFF
```

<Parameter (Enter a choice)>

- ON: Media is fed in usual operation mode.
- OFF: Media peeling operation is executed after standby operation at the start of printing.

(30) Standby interval

Select the interval of scan waiting during printing.

```
#INTERVAL
>0000 SCAN
```

<Parameter (Enter a value)>

0000 to 9999 scans

"0" is treated as no setting (OFF). (The printer does not go on stanby during scanning.)

HINT - 111 scans correspond to one meter in standard (720dpi/4 pass) and bidirectional printing.

(31) Standby time

Select the standby for every scan time set to occur in INTERVAL.

```
#WAIT TIME
>01 : 10 sec
```

<Parameter (Enter a value)>

1 to 99 seconds

When the standby interval is 0 scan (OFF), this parameter is ignored.

(32) Temperature gap mode

Select whether the printer goes on standby for every scan if there is a gap between the media print heater set temperature and head temperature.

```
#TEMPERATURE GAP
>01 : OFF
```

<Parameter (Enter a choice)>

- OFF: The printer does not go on standby even if there is a temperature gap.
- ON: If there is a temperature gap, the printer goes on standby for every scan until the temperature gap is eliminated.

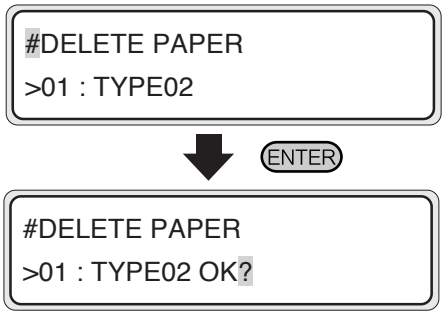
(33) Deleting registrated media (DELETE MEDIA)

Deletes a registered media.

Registered media from 01 to 20 can be selected.

The registered media 01 is defined as the standard media. This cannot be deleted.

When the ENTER key is pressed, confirmation guidance will be displayed.



(34) Parameter copy source

Register the copy source of the registered media numbers.

Setting of this parameter and (35) Parameter copy destination copies the registered media information.

<Parameter (Enter a choice)>

- Value: 01 to 20
  However, only the registered numbers are displayed.

(35) Parameter copy destination

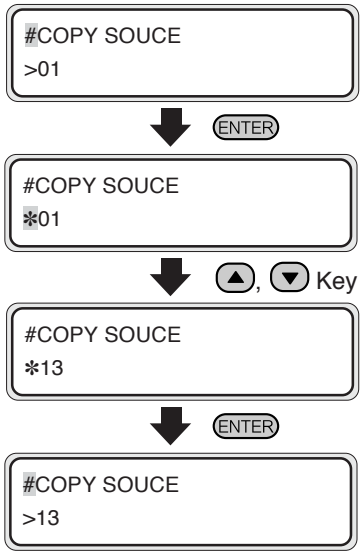
Select the copy destination number of the registered media.

<Parameter (Enter a choice)>

- Value: 01 to 20
  "✻" is displayed for an already registered number.

■ Parameter copy method

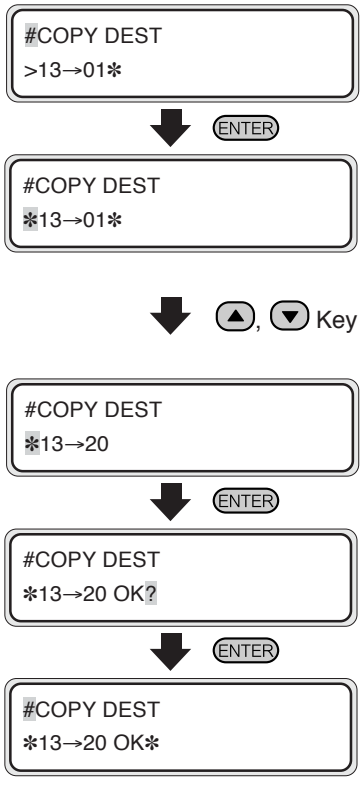
(1) Select the copy source.



Select the copy source parameter with the ▲ or ▼ key.

Enter the copy source parameter with the ENTER key.

(2) Select the copy destination



Select the copy destination parameter with the ▲ or ▼ key.
(As copy destination numbers, 01 to 20 are displayed.)
"✻" is displayed for already registered copy destination number.

Enter the copy destination parameter with the ENTER key.

Execute a parameter copy with the ENTER key.

- When the CANCEL key is pressed, the initial menu comes back.

■ Initial values for the preset media

A maximum of 20 media can be registered, and media 01 to 05 are preset on the printer.
(The parameters registered are changeable and deletable. However, 01 (MEDIA) cannot be deleted.)
The table lists the initial values for the media registered.

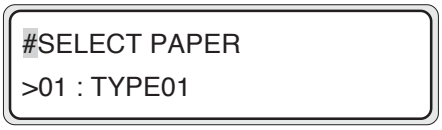
	01	02	03	04	05
NAME	MEDIA	Glossy	Matte	Banner	BLT_B
FEED ADJUST	99.80%	99.96%	99.96%	99.94%	99.94%
SCAN WAIT TIME	0 sec	0 sec	0 sec	0 sec	0 sec
PRINT MODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DIRECTION	BI	BI	BI	BI	BI
EDGE GUARD	USE	USE	USE	USE	USE
MEDIA FEED MODE	SEQUENCE1	SEQUENCE1	SEQUENCE1	SEQUENCE1	SEQUENCE1
MEDIA SET MODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
VACUUM	HIGH	HIGH	HIGH	HIGH	HIGH
FRONT HEATER	None	45° C	45° C	45° C	45° C
PRINT HEATER	None	40° C	40° C	40° C	40° C
REAR HEATER	None	45° C	45° C	45° C	45° C
COLOR STRIPE	ON	ON	ON	ON	ON
HEAD MOTION	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
HEAD HEIGHT	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
IPOS (L/R) ADJ	+00&A	+00&A	+00&A	+00&A	+00&A
IPOS (L/R) ADJ2	+00&A	+00&A	+00&A	+00&A	+00&A
CLEANING MODE	MODE1	MODE1	MODE1	MODE1	MODE1
PRIORITY FEED	DATA	DATA	DATA	DATA	DATA
PRIORITY MODE	DATA	DATA	DATA	DATA	DATA
PRIORITY HEATER	DATA	DATA	DATA	DATA	DATA
DETECT WIDTH	AUTO	AUTO	AUTO	AUTO	AUTO
MEDIA SIZE	2642 mm	2642 mm	2642 mm	2642 mm	2642 mm
MEDIA SIZE2	2642 mm	2642 mm	2642 mm	2642 mm	2642 mm
PEEL MODE	OFF	OFF	OFF	OFF	OFF
INTERVAL	0 (None)	0 (None)	0 (None)	0 (None)	0 (None)
WAIT TIME	10 sec	10 sec	10 sec	10 sec	10 sec
TEMPERATURE GAP	OFF	OFF	OFF	OFF	OFF

■ Example of media registration

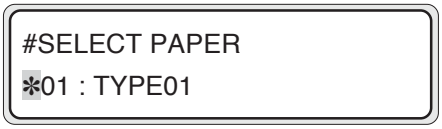
1. Select a media number to be registered newly or revised.

(1) Press the ▼ key to select the ENTRY menu.

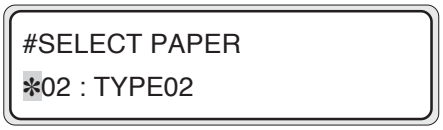
(2) Select the "SELECT PAPER" menu with the ▲ and ▼ keys.



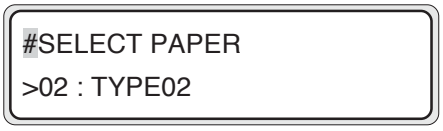
(3) Press the ENTER key to change the parameter.



(4) Select a media number to be registered with the ▲ and ▼ keys.



(5) Press the ENTER key to finalize the media number selection. Then the display returns to (2).

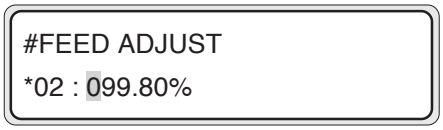


2. Example of parameter setting

In this example, a feed correction value will be entered.

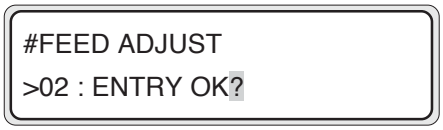
(1) Select the "FEED ADJUST" menu with the ▲ and ▼ keys.

(2) Press the ENTER key and revise the parameter.



NOTE
- Determine the feed correction value by printing the feed adjustment pattern.

(3) Press the ENTER key to display the message.
(This message will be displayed at new registration only.)

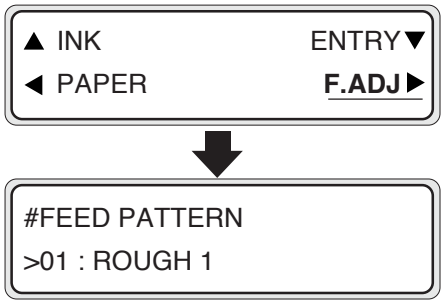


(4) When the ENTER key is pressed, media number 02 is registered newly and a "✻" mark that shows the media has already been registered is displayed. Then the display returns to (1).

Press the CANCEL key to stop new registration. The display returns to (1).

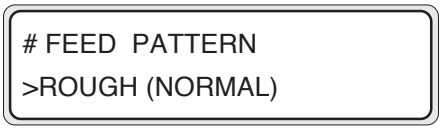
F.ADJ Menu

This menu is used to set paper feed adjustment parameters.
When the ▶ key is pressed, parameters setting is enabled.



(1) Feed adjustment pattern

Prints a pattern for adjusting the feed amount.
Two pattern parameters are available, ROUGH that prints the feed amount adjustment pattern at every 0.25% step between 99.0 and 101.0 %, and DETAIL that prints the feed amount adjustment pattern at every 0.06% step between the current setting value ±0.12%.
Obtain the approximate value with the ROUGH parameter, and determine the setting value with the DETAIL parameter.
Press the CANCEL key during printing to stop the printing.



<Parameter (Enter a choice)>

- ROUGH (NORMAL)
- ROUGH (H-QUAL)
- ROUGH (H-DENS)
- ROUGH (3 TIMES)
- ROUGH (H-QUAL 2)
- ROUGH (H-DENS 2)
- ROUGH (DRAFT)
- DETAIL (NORMAL)
- DETAIL (H-QUAL)
- DETAIL (H-DENS)
- DETAIL (3 TIMES)
- DETAIL (H-QUAL 2)
- DETAIL (H-DENS 2)
- DETAIL (DRAFT)

HINT

- Select the parameter according to respective print modes by referring to the following table:

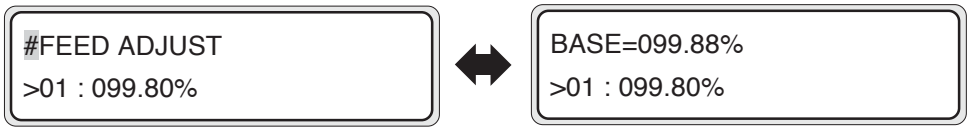
Print modes	Parameters	
	ROUGH (0.25% step in 99.0 to 101.0%)	DETAIL (0.06% step in set value ±0.12%)
NORMAL	ROUGH (NORMAL)	DETAIL (NORMAL)
H-QUALITY	ROUGH (H-QUALITY)	DETAIL (H-QUALITY)
H-DENSITY	ROUGH (H-DENSITY)	DETAIL (H-DENSITY)
3 TIMES	ROUGH (3 TIMES)	DETAIL (3 TIMES)
H-QUALITY 2	ROUGH (H-QUAL 2)	DETAIL (H-QUAL 2)
H-DENSITY 2	ROUGH (H-DENS 2)	DETAIL (H-DENS 2)
DRAFT	ROUGH (DRAFT)	DETAIL (DRAFT)
FAST	ROUGH (NORMAL)	DETAIL (NORMAL)
F-H-QUALITY	ROUGH (H-QUALITY)	DETAIL (H-QUALITY)
F-H-DENSITY	ROUGH (H-DENSITY)	DETAIL (H-DENSITY)
F-3 TIMES	ROUGH (3 TIMES)	DETAIL (3 TIMES)
F-H-QUAL 2	ROUGH (H-QUAL 2)	DETAIL (H-QUAL 2)
F-H-DENS 2	ROUGH (H-DENS 2)	DETAIL (H-DENS 2)
FINE DRAFT	ROUGH (NORMAL)	DETAIL (NORMAL)

(2) Feed correction value setting

Sets the feed correction value.

Enter a correction value according to the feed adjustment pattern print.

The BASE value is displayed alternately on the 1st line.



<Parameter (Enter a value)>

xxx.xx% (97.00 to 103.00)

(3) Back feed adjustment pattern

Prints a pattern for adjusting the media back feed amount.
Select the proper parameter according to the print mode.

```
# BACK PATTERN
>NORMAL
```

<Parameter (Enter a value)>

- NORMAL:
  Select at adjustment in standard and high speed print modes.
- H-QUALITY:
  Select at adjustment in high quality print mode.
- H-DENSITY:
  Select at adjustment in high density print mode.
- 3 TIMES:
  Select at adjustment in 3 TIMES print mode.
- H-QUALITY 2:
  Select at adjustment in the high quality 2 print mode.
- H-DENSITY 2:
  Select at adjustment in the high density 2 print mode.
- DRAFT:
  Select at adjustment in draft print mode.

(4) Media back feed correction value (unit: pulses)

Input a correction value of the media back feed based on the result of the back pattern.

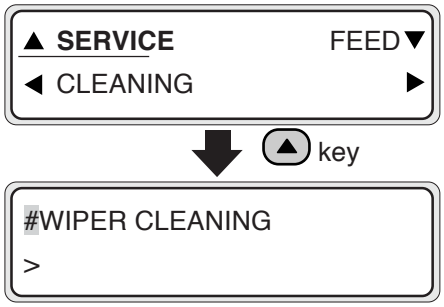
```
# BACK  ADJUST
>+0000 PULSE
```

<Parameter (Enter a value)>

±2000 pulses (±5 mm)
1 pulse=2.5μm

SERVICE Menu

This menu is used to maintain the cap and the wiper as well as to clean the ink path.
When the ▶ key is pressed, the service menu will be operable.



(1) Moving wiper to manual cleaning position

The wiper blade is lifted so that you can clean the wiper blade manually.

<Parameter (Execution form)>

None

(2) Moving capping unit to manual cleaning position

Moves the print head carriage to the wiper position so that you can clean the cap unit manually.

<Parameter (Execution form)>

None

(3) Service cleaning

Selects a service cleaning.

```
#SERVICE
>SERVICE CLEAN
```

<Parameter (Enter a choice)>

- SERVICE CLEAN

  Use this parameter to clean the head and ink path with the maintenance liquid while the ink is filled into the printer, and then refill the maintenance liquid in the printer to ensure long-term storage.

  Six maintenance liquid cartridges and six dummy cartridges are mandatory.

- HEAD WASH

  Use this parameter to clean the head with cleaning liquid (with strong washing power) during cleaning or service cleaning after long-term storage.

  Six cleaning liquid cartridges and six dummy cartridges are necessary.

- INK CHARGE

  Use this parameter when filling the ink in the printer.

(4) Filling ink to the cap (FILL CAP)

Fills the ink into the cap and soaks the head (nozzle surface) into the ink for 1 to 2 hours to remove nozzle clogging.

Use this menu when dot-off in printing cannot be eliminated by cleaning repeatedly.

```
#FILL CAP
>
```

<Parameter (Execution form)>

None

NOTES

- Always perform cleaning (slight) after filling cap action.
- If dot-off in printing cannot be eliminated when leaving the printer for 24 hours, contact our service center.

(5) Opening cap during head height adjustment

Use this operation during head height adjustment.

The cap is opened after performing this operation.

```
# HEAD HEIGHT
>
```

<Parameter (Execution form)>

None

```
# ADJUST  HEIGHT
>OK
```

```
# ADJUST  HEIGHT
>EXECUTING
```

```
OPEN  REAR  COVER
ADJUST  HEIGHT
```

```
# ADJUST  HEIGHT
>
```

(6) Waste ink saving setting

Select the waste ink saving mode in the auto cleaning operation.

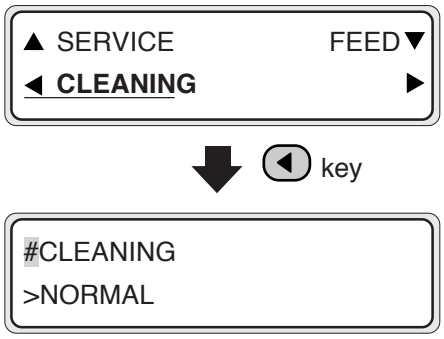
```
# WASTE INK SAVING
>NORMAL
```

<Parameter (Enter a choice)>

- NORMAL: Executes auto cleaning in normal operation mode.
- SAVE: Executes auto cleaning in the ink consumption economizing operation mode.

CLEANING Menu

This menu is used to clean the printer head.
When the ◀ key is pressed, the cleaning menu appears.



<Parameter (Enter a choice)>

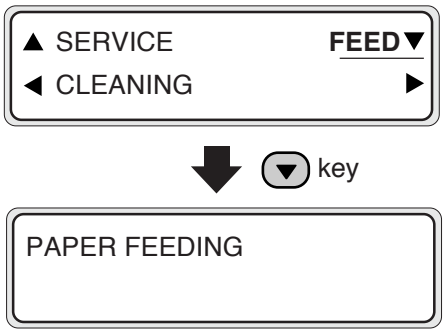
- NORMAL: Cleans the head normally.
- STRONG: Cleans the head strongly.

See Section 2, Head Cleaning for details.

FEED Menu

While the ▼ key is held down, the currently selected media roll is fed. (If a cut sheet is being used, it is discharged.)

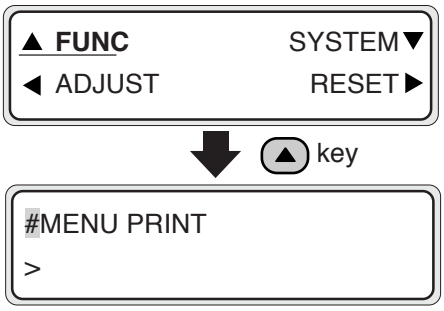
A feeding message appears on the LCD.



When the ▼ key is released, feeding stops and the top menu appears on the LCD in offline mode.

FUNC Menu

This menu is used to execute functions provided for the printer.
When the ▲ key is pressed, functions can be executed.



(1) Menu print (MENU PRINT)

Prints information on the printer and panel settings.

<Parameter (execution form)>

None

(2) Printing error log information (ERROR LOG PRINT)

Prints error log information saved in the printer.

<Parameter (execution form)>

None

(3) Printing SCSI trace information (TRACE PRINT)

Prints SCSI protocol trace data.

```
#TRACE PRINT
>
```

<Parameter (execution form)>

None

(4) Printing history (HISTORY INK)

Prints the ink system cleaning data saved in the printer.

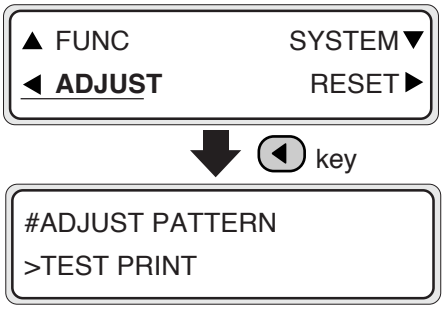
```
#HISTORY INK
>
```

<Parameter (execution form)>

None

ADJUST Menu

This menu is used to set mechanical adjustment parameters.
When the ◀ key is pressed, mechanical adjustment parameters can be set.



(1) Adjustment pattern print (ADJUST PATTERN)

Prints the adjustment pattern for adjusting the printer mechanically and electrically.
Printing can be stopped by pressing the CANCEL key during printing.

<Parameter (Enter a choices)>

- TEST PRINT: Prints a block pattern with black and other color.
- HEAD ADJ 1: Prints a head adjustment pattern.
- HEAD ADJ 2: Prints a pattern for checking the head adjustment.
- ADJUST 1-1: Prints only the left and right adjustment pattern of HEAD ADJ 1.
- ADJUST 1-2: Prints only the inter-head position adjustment pattern of HEAD ADJ 1.

- ADJUST 1-3: Prints only the reciprocating adjustment pattern of HEAD ADJ 1.
- ADJUST 1-4: Prints the fine draft reciprocating adjustment pattern of HEAD ADJ 1.
- ADJUST 2-1: Prints the phase, left and right, and inter-head position adjustment patterns of HEAD ADJ 2.
- ADJUST 2-2: Prints only the reciprocating adjustment pattern of HEAD ADJ 2.
- ADJUST 2-3: Prints the fine draft reciprocating adjustment pattern of HEAD ADJ 2.

(2) Nozzle jet position adjustment (Bk/Lm/Lc/Y/M/C) (L/R ADJ YY)

Adjusts the nozzle jet position.

Enter a correction value according to the head adjustment pattern.

```
#L/R ADJ YY
>+00&A
```

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(3) Head position adjustment (Lm/Lc/Y/M/C) (H-POS ADJ YY)

Adjusts the head position in the scanning direction.

Enter a correction value according to the head adjustment pattern.

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(4) Reciprocating print position (Left) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts the head reciprocating position (Left).

Enter a correction value according to the head adjustment pattern.

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(5) Reciprocating print position (Right) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts the head reciprocating position (Right).

Enter a correction value according to the head adjustment pattern.

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(6) For fine draft reciprocating print position (Left) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts the head reciprocating position (Left).

Enter a correction value according to the head adjustment pattern.

```
#I-POS (L) ADJ YY
>+00&A
```

YY: Ink color

Display order:

Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

(7) For fine draft reciprocating print position (Right) adjustment (Bk/Lm/Lc/Y/M/C)

Adjusts the head reciprocating position (Right).

Enter a correction value according to the head adjustment pattern.

```
#I-POS (R) ADJ YY
>+00&A
```

YY: Ink color

Display order:

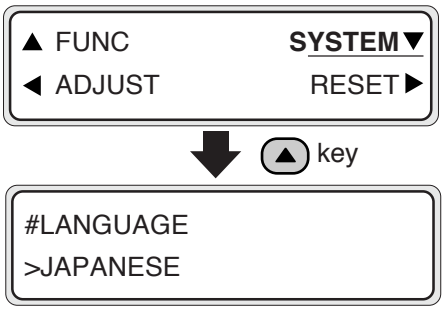
Bk -> Lm -> Lc -> Y -> M -> C

<Parameter (Enter a value)>

- Sign: +/-
- Value:-32 to +31, A to H (A=0/8, B=1/8...H=7/8)

SYSTEM Menu

This menu is used to set or display system parameters.
When the ▼ key is pressed, system parameter setting is enabled.



(1) Language for LCD messages (LANGUAGE)

Sets Japanese or English for messages displayed on the LCD.

<Parameter (Enter a choice.)>

- ENGLISH : Displays English messages.
- JAPANESE : Displays Japanese messages.

(2) Buzzer setting

Sets whether the buzzer sounds when the head is removed from the cap in routine maintenance or head height adjustment or when the head cannot be capped due to a paper jam error, etc. during printing.

```
#BUZZER
>ON
```

<Parameter (Enter a choice)>

- ON: Sounds the buzzer.
- OFF: Does not sound the buzzer.

> NOTE
>
> The buzzer set here is an alarm for head protection. The usual buzzer for an error sounds when an error occurs regardless of this setting.

(3) Ink end buzzer setting

Sets whether the buzzer sounds when the main cartridge ink is used up.

```
#INKEND BUZZER
>ON
```

<Parameter (Execution form)>

- ON: Sounds the buzzer.
- OFF: Does not sound the buzzer.

> NOTE
>
> The buzzer set here is an alarm for head protection. The usual buzzer for an error sounds when an error occurs regardless of this setting.

(4) BOOT version display (BOOT VERSION)

Displays the BOOT version.

X: Boot version

<Parameter (Execution form)>

None

(5) F/W version display (F/W VERSION)

Displays the engine firmware version.

X: System program version number
Y: Control number

<Parameter (Execution form)>

None

(6) Engine controller board version display (IPB VERSION)

Displays the version number of the Engine controller board (IPB).

X: Version number

<Parameter (Execution form)>

None

(7) SCSI board version display (WIM VERSION)

Displays the ICB board version.

X: Version number

<Parameter (Execution form)>

None

(8) ICB board version display (ICB VERSION)

Displays the version number of the ICB board (WIM).

X: Version number

<Parameter (Execution form)>

None

(9) ASIC version display (ASIC VERSION)

Displays the ASIC version.

X: Version number

<Parameter (Execution form)>

None

(10) Heater H/W version display

Displays the heater hardware version.

X: Version number

<Parameter (Execution form)>

None

(11) Heater F/W version display

Displays the heater firmware version.

If the heater cannot be recognized, "--.-" is displayed.

X: Version number

<Parameter (Execution form)>

None

(12) HEB board version display

Displays the HEB board version.

X: ID number

<Parameter (Execution form)>

None

(13) SCSI ID number display (SCSI ID)

Displays the SCSI ID number set with the rotary switch on the SCSI board.

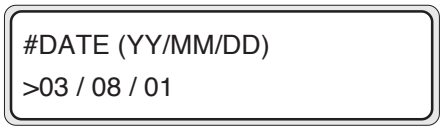
X: ID number

<Parameter (Execution form)>

None

(14) System date setting (SYSTEM DATE)

Sets system date used internally in the printer in the order of YY (year), MM (month), DD (day).



<Parameter (Enter a value)>

00/01/01 to 99/12/31

(15) System time setting (SYSTEM TIME)

Sets system time used internally in the printer.

<Parameter (Enter a value)>

00 : 00 to 23 : 59

(16) Factory setting

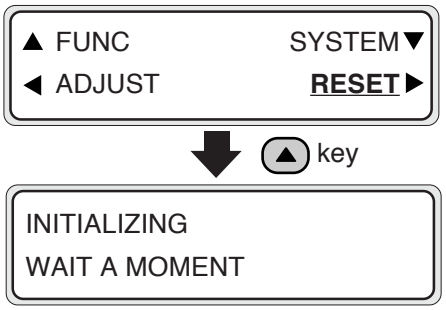
Sets all parameters to factory settings.

<Parameter (Execution form)>

None

RESET Menu

This menu is used to reset the printer.
When the ▲ key is pressed, the reset function is executed.
An initializing message appears on the LCD.



After resetting, the printer goes online.

HINT

- The set values including correction values are not cleared.

Section 4 Special Printing

Contents of This Section

Special Printing

This section explains the details of print modes and gives an outline of special printing such as duplex printing.

Print Modes

This printer provides 14 print modes. Choose a print mode according to the media type, productivity, and image quality. (⇒ See page 3-28)

1. "NORMAL" [Productivity + Image quality oriented] (4-pass)

Standard print mode of this printer. Normally, use this mode. The print resolution is 720×720 dpi. The print speed is 16 m^2/h. The image quality is processed at high resolution.

2. "H-QUALITY" [Image quality oriented] (8-pass)

The print resolution is 720×720 dpi, the same as that of NORMAL mode. Use this mode if media of which drying performance is poor in NORMAL mode are used or if uneven printing is noticeable. The print speed is half the speed of NORMAL mode.

3. "H-DENSITY" [High density printing] (8-pass)

This mode is effective for printing on transparent media such as FF, transparent vinyl chloride, etc. and when high density is required. A solid image of 100% density is printed at maximum 200% density. The print speed is the same as that of NORMAL mode.

4. "3 TIMES" [High density printing] (12-pass)

This mode is effective for printing on transparent media such as FF, transparent vinyl chloride, etc. and when high density is required. Use this mode particularly when you want to print at higher density than the density of H-DENSITY or H-DENSITY2 mode. In case of poor drying performance, unidirectional printing will be effective. A solid image of 100% density is printed at maximum 300% density.

5. "H-QUALITY2" [Image quality oriented] (16-pass)

The print resolution is 720×720 dpi, the same as that of NORMAL mode. Use this mode if media of which drying performance is poor in H-QUALITY mode are used or if uneven printing is noticeable. The print speed is half the speed of H-QUALITY mode.

6. "H-DENSITY2" [High density printing] (16-pass)

This mode is effective for printing on transparent media such as FF, transparent vinyl chloride, etc. and when high density is required. Use this mode if media of which drying performance is poor in H-DENSITY mode are used or if uneven printing is noticeable. A solid image of 100% density is printed at maximum 200% density. The print speed is half the speed of H-DENSITY mode.

7. "DRAFT" [Productivity oriented] (2-pass)

The print resolution is 360×720 dpi. The print speed is maximum 30 m^2/h but the print density is entirely lighter than that of NORMAL mode, and uneven printing may be noticeable depending on the type of media. A solid image of 100% density is printed at 50% the density of NORMAL mode. This mode can also be used for checking the layout.

8. "FAST" [PC processing time reduction] (4-pass)

The density is equivalent to that of NORMAL mode. The print speed is the same as that of NORMAL mode.

9. "F-H-QUALITY" [PC processing time reduction] (8-pass)

Use this mode if the drying performance is poor in FAST mode or if uneven printing is noticeable. However, the print speed is half the speed of FAST mode.

10."F-H-DENSITY" [PC processing time reduction + High density printing] (8-pass)

The density and print speed are equivalent to those of H-DENSITY mode.

11. "F-3 TIMES" [PC processing time reduction + High density printing] (12-pass)

The density and print speed are equivalent to those of 3 TIMES mode.

12."F-H-QUAL2" [PC processing time reduction] (16-pass)

Use this mode if the drying performance is poor in F-H-QUALITY mode or if uneven printing is noticeable. The print speed is half the speed of F-H-QUALITY mode.

13."F-H-DENS2" [PC processing time reduction + High density printing] (16-pass)

The density is equivalent to that of H-DENSITY mode. The print speed is half the speed of F-H-DENSITY mode.

14."FINE DRAFT" [Productivity + Image quality oriented] (4-pass)

The print resolution is 540×720 dpi. The print speed is 20 m^2/h, faster than that of NORMAL mode by about 20%. Use this mode if high productivity is required. The image quality of photographs is almost equivalent to that of NORMAL mode, but a solid image of 100% density is printed at 75% the density of NORMAL mode. Therefore, if the darkness of colors is important, use the NORMAL mode.

- The recommended print mode for this printer is "NORMAL" mode. Use other modes if productivity and image quality are important.
- Use the FAST mode in 8 - 13 if the CPU speed of the PC is slow or the memory or HDD capacity is small. These modes put emphasis on the PC processing speed and thus the RIP time of the PC is shortened, but the input resolution of image quality is 360×360 dpi. Accordingly, the printed image will be rather rough compared to that of normal modes (1-6).

Double sided Printing

Capable of printing on both face and back sides of media.

Mesh Tarpaulin Printing

Capable of printing on a mesh type tarpaulin without a liner.

Textile Printing

Capable of printing on textile media having weak stiffness.
For details, see the User's Guide provided separately.

Dual Roll Print

Capable of printing simultaneously on two media rolls of 50 inches or less. Simultaneous printing shortens the print time.
For details, see the User's Guide provided separately.

Double-Sided Printing

The following explains the types of double-sided printing and their procedures.
In the explanation, the surface printed first is referred to as the “front surface”, and the surface printed second as the “rear surface”.

Types of Double-Sided Printing

The following three types of double-sided printing are available:

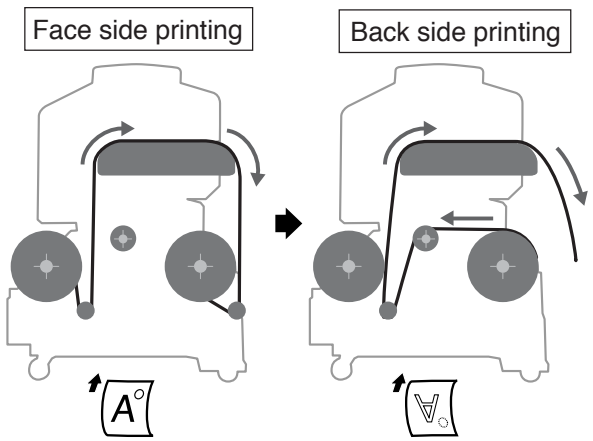
- Printing on the back side of media from the take-up unit (Rear 1)
- Printing on the back side of media from the feeder (Rear 2)
- After rewinding, printing on the back side of media from the feeder (Rear 2)

HINT

- When printing data at a high printing rate, use the optional liner and sub scroller to prevent media from sticking.
- When a liner is used in printing the rear surface from the take-up unit (rear 1), one more subscroller is necessary.

Printing on Back Side from Winding unit

After printing on the face side of media, the media is cut and inserted again into the feeder through a space at the bottom of the printer for printing on the back side. (About 2.5 m margin is required at the top edge of media.)



1 Set the media.

For the installation of media, see page 2-12 to 2-20 "Installing/ Removing the Media."
At this time, select "FACE" with the ▲ or ▼ key on the operation panel for "Media Position."

```
MEDIA POSITION
SELECT: FACE
```

NOTES

- If a tarpaulin (surface condition is different between face and back) intended for single side printing is used, first print on the more uneven surface side as the face side.
- For printing on thick tarpaulin (0.5 mm or thicker), the head height must be raised. (⇒ See page 2-66)

2 Set media to the take-up unit.

For setting the media to the winding unit, see pages 2-27 to 2-33 "Installing the Media Roll in the Winder."
Also, the back side print requires a margin exceeding about 2.5m, so wind the media on the winder by about 4 turns in advance.

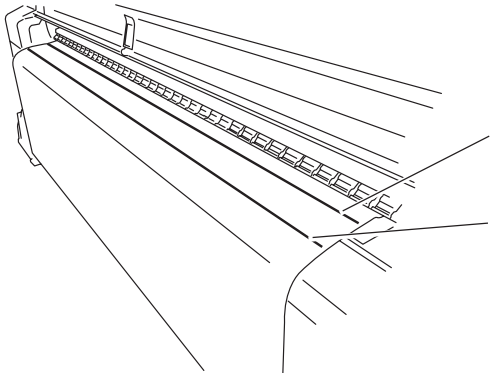
3 Start the printing on the face side.

4 After the printing is finished, cut the media.

When the printing on the face side is completed, two more lines are printed. The first line is a solid line for aligning the print position between the face and back; the second line is a broken line for a cutting guideline.
Cut the media on the paper feed side, leaving the two lines.

HINT

- Marking the first solid line for aligning the print position on both edges of the back side will be convenient when setting the back side.

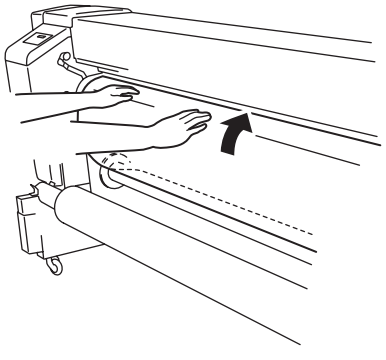


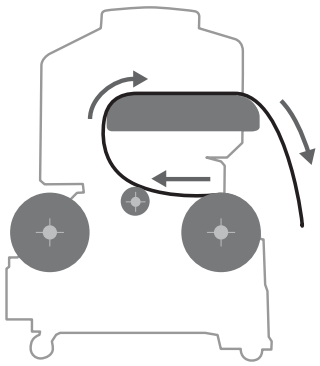
NOTES

- The drying time of a printed side varies depending on the image. Confirm that the printed side has dried before performing the next operation.
  In general, dry the printed side for more than 3 hours (a whole day and night in case of printing with dark density), and then print on the back side.
- Wind up the liner set to the sub scroller and secure the top edge of the liner to the roll with tape. Printing on the back side with the top edge of the liner hanging causes false detection by the sensor, resulting in malfunction.

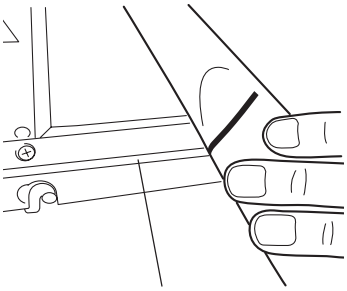
5 Insert the media edge into the feeder.

Feed the printed media edge toward the feeder through the top surface of the sub scroller, and insert it into the feeder. (Front and rear are reversed.)





6 Adjust the media so that the solid line for aligning the print position comes to the platen groove position.

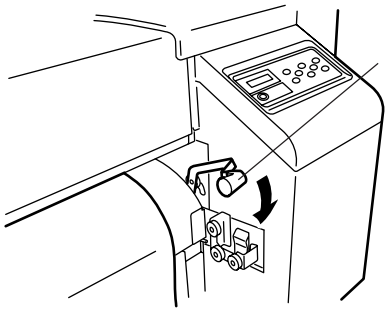


If the solid line does not align with the platen groove between the left and right sides, align either side first, and while holding this side in place, pull the other side to adjust the position.

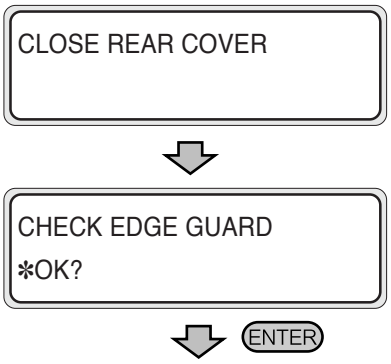
HINT

- When printing on the back side using a liner, if the solid line for aligning the print position does not come to the platen groove, move the media such that it slides on the liner to align over the whole width. At this time, be sure to align the right edges of the liner and media.
  For setting the liner, see page 4-25.

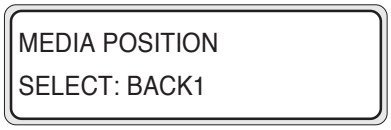
7 Push the pressure roller up/down lever down.



8 Set the media edge guard, and close the rear cover.



9 Select the media position.

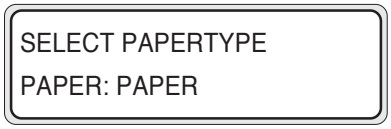


Select "BACK1" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

10 Select a media type.



Select "PAPER" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

11 Select whether a liner is used or not.

LINER
SELECT: NOT USE

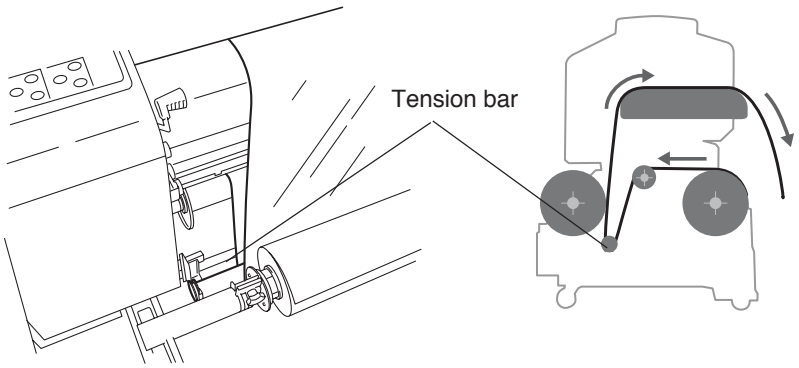
Select whether a liner is used or not with the ▼ or ▼ key.

If a liner is used, see page 4-25.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

12 Slacken the media and install the tension bar using the feed switch.



CHECK BUFFER
*OK?

ENTER

- The next operation will not start if the media slack is inadequate.

13 Media setting operation will start automatically.

PREPARING PAPER
WAIT A MOMENT

- If the operation terminates normally, the printer returns to the online or offline state.
- If it terminates unsuccessfully, an error message will be displayed.

  Return to step 4 for retry.

NOTE

- Before starting the printing on the back side, change the "VACUUM" and "PEEL MODE" settings from the operation panel according to the media used.
  For sticky media, set the “VACUUM” to “LOW” and the “PEEL MODE” to “ON”.

HINT

- It is recommended that the head be cleaned before starting the printing on the back side.

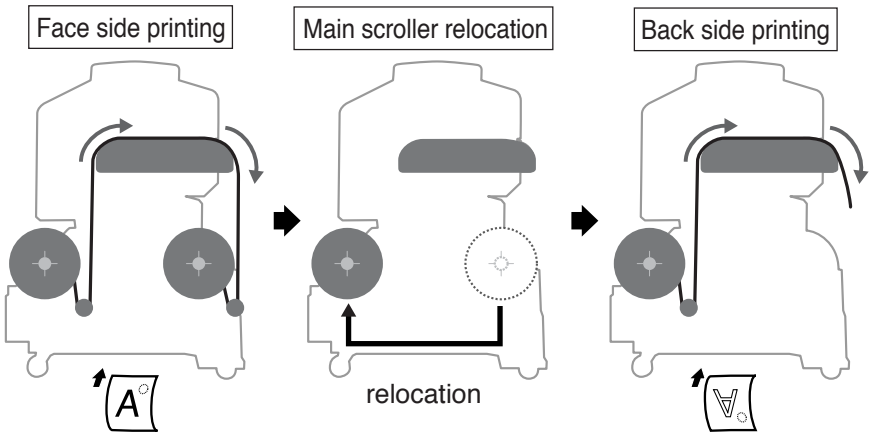
14 Print on the back side.

NOTE

- The data from the RIP are transferred in 180° rotated state on the face and back.

Printing on Back Side from Paper Feeder

After printing on the face side, the main scroller to which the media was wound is set in the feeder, and printing on the back side is performed.



1 Set the media.

For the installation of media, see P.2-12 to 2-20 "Installing/Removing the Media."

At this time, select "FACE" with the ▲ or ▼ key on the operation panel for "Media Position."

MEDIA POSITION SELECT: FACE

NOTES

- If a tarpaulin (surface condition is different between face and back) intended for single side printing is used, first print on the more uneven surface side as a face side.
- If printing on thick tarpaulin (0.5 mm or thicker), the head height must be raised. (⇒ See page 2-66)

2 Set media to the take-up unit.

For setting the media to the take-up unit, see pages 2-27 to 2-33 "Installing the Media Roll in the Winder."

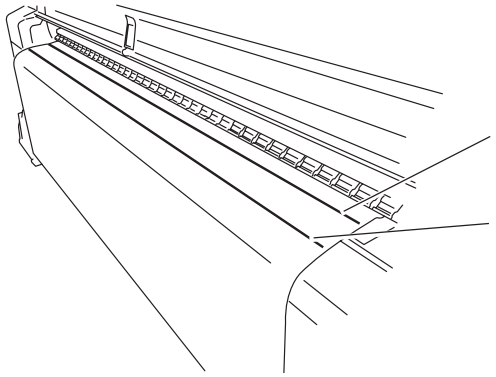
3 Start the printing on the face side.

4 After the printing is finished, cut the media.

When the printing on the face side is completed, two more lines are printed. The first line is a solid line for aligning the print position between face and back, and the second line is a broken line for a cutting guideline.
Cut the media on the feed side, leaving two lines.

HINT

- Marking the first solid line for aligning the print position on both edges of the back side will be convenient when setting the back side.



NOTES

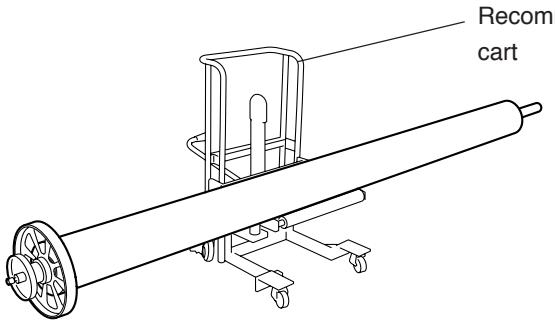
- The drying time of the printed side varies depending on the image. Confirm that the printed side has dried before performing the next operation.
  In general, dry the printed side for more than 3 hours (a whole day and night in case of printing with dark density), and then print on the back side.
- Wind up the liner set on the sub scroller and secure the top edge of the liner to the roll with tape. Printing on the back side with the top edge of the liner hanging causes false detection by the sensor, resulting in malfunction.

5 Remove the scroller on the feed side from the printer.

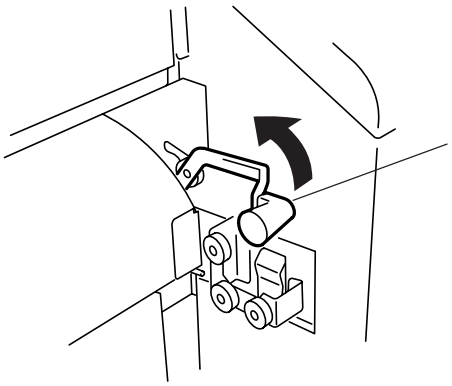
6 Remove the scroller on the media discharge side from the printer, and install it on the feed side.

NOTE

- Use the recommended cart with care when removing and installing the scroller.

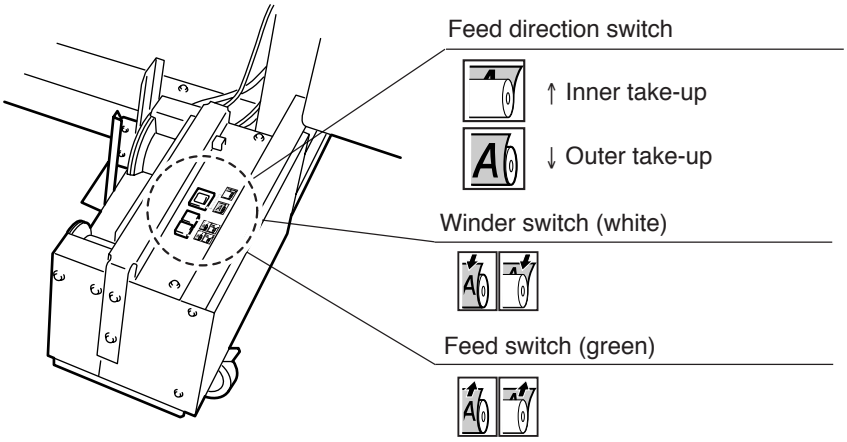


7 Lift the pressure roller up/down lever.

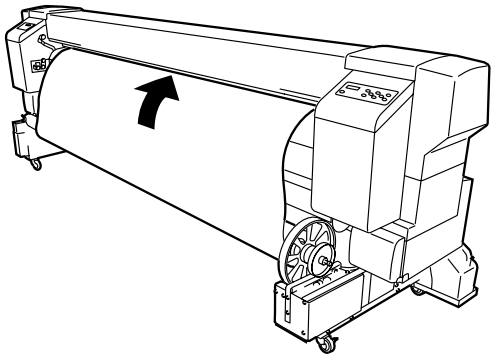


8 Set the feed direction switch again.

■ Feed direction switch, Winder switch, Feed switch



9 Slacken the media using the Feed switch and insert the media edge into the feeder.



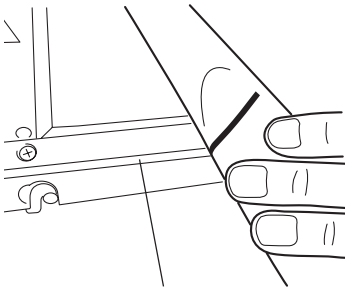
Insert the media into the feeder while stretching the media with your hands to prevent wrinkle.

If the media curls and is hard to insert into the paper feeder, use a liner and insert the media top edge under the liner to feed the media.

NOTE

- Inserting the media obliquely or inserting wrinkled media causes a paper jam or skewed feed.

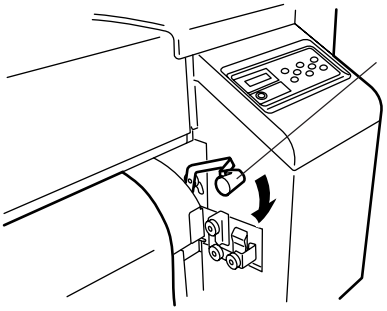
10 Insert media into the feeder, and adjust it so that the solid line for aligning the print position at the media top edge comes to the platen groove position.



Platen groove

If the solid line does not align with the platen groove between left and right sides, align either side first, and while holding this side, pull the other side to adjust the position.

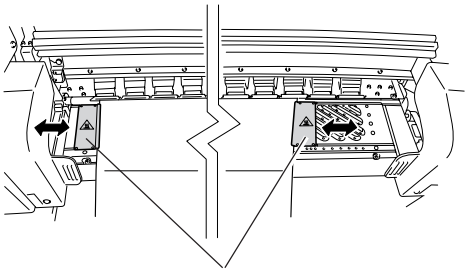
11 Push the pressure roller up/down lever down.



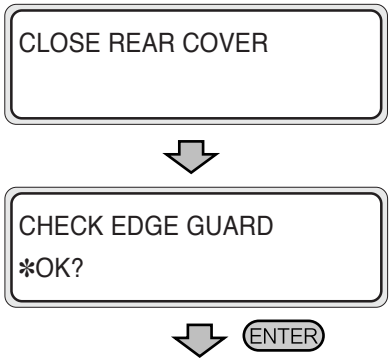
Pressure roller up/ down lever

12 Set the media edge guard, and close the rear cover.

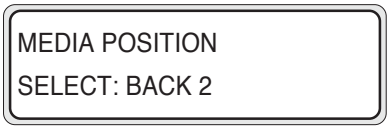
Check that the media edge guard is located under the media.



Media edge guard



13 Select the media position.

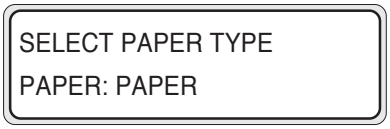


Select "BACK2" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

14 Select a media type.



Select "PAPER" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

15 Select whether the liner is used or not.

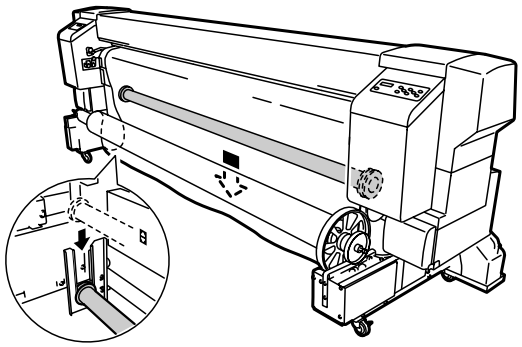
LINER
SELECT: NOT USED

Select whether a liner is used or not with the ▲ or ▼ key. If a liner is used, see page 4-25.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

16 Slacken the media using the feed switch and install the tension bar.

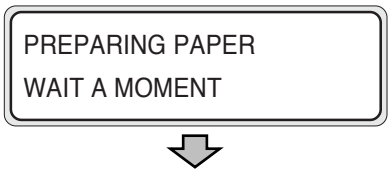


CHECK BUFFER
*OK?

ENTER

- The next operation will not start if the media slack is inadequate.

17 Media setting operation will start automatically.



- If the operation terminates normally, the printer returns to the online or offline state.
- If it terminates unsuccessfully, an error message will be displayed.

  Return to step 4 for retry.

NOTE
- Before starting the printing on the back side, change the settings of "VACUUM" and "PEEL MODE" from the operation panel according to the media used.
  For sticky media, set "VACUUM" to "LOW" and "PEEL MODE" to "ON".

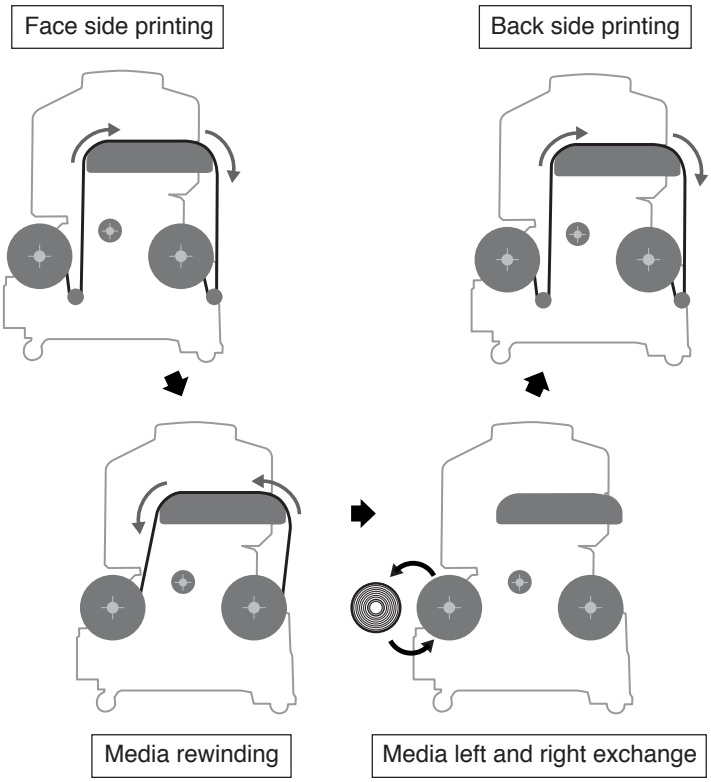
HINT
- It is recommended that the head be cleaned before starting the printing on the back side.

18 Print on the back side.

NOTE
- The data from the RIP are transferred in 180° rotated state between face and back.

Printing on Back Side from Paper Feeder After Rewinding

After printing on the face side, the media is rewound on the roll in the paper feeder, the roll is removed and re-set reversely between left and right, and then printing on the back side is performed.



1 Set the media.

For the installation of media, see page 2-12 to 2-20 "Installing/ Removing the Media."
At this time, select "FACE" with the ▲ or ▼ key on the operation panel for "Media Position."

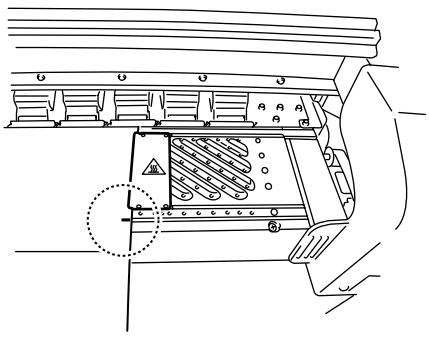
```
MEDIA POSITION
SELECT: FACE
```

NOTE
- If a tarpaulin (surface condition is different between face and back) intended for single side printing is used, first print on the more uneven surface side as the face side.
- If printing on thick tarpaulin (0.5 mm or thicker), the head height must be raised. (⇒ See page 2-66)

2 Set media in the winding unit.

For setting the media in the winding unit, see page 2-27 to 2-32 "Installing the Media Roll in the Winder."

3 Make a mark for media positioning.

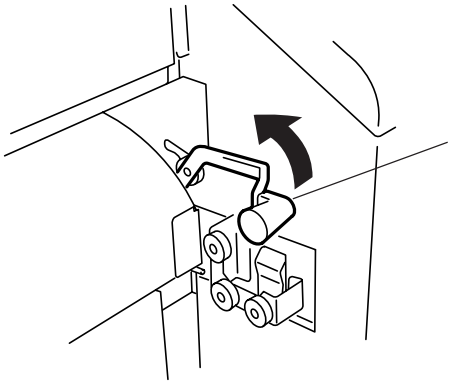


Make a mark for aligning the face side and back side at the position where both edges of the media come to the platen groove.

HINT
- Making marks on both edges of the back side will be convenient when setting the back side.

4 Start printing on the face side.

5 After printing is finished, remove the tension bars on both the feed side and paper outlet side, and lift the pressure roller up/down lever.



6 Rewind the media on the main scroller in the feeder.

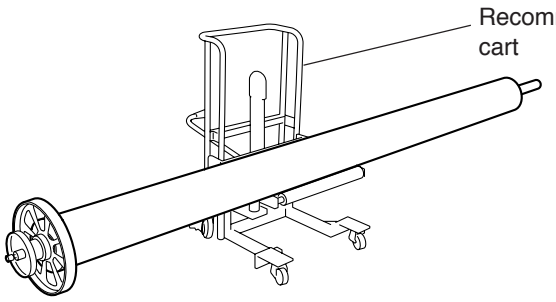
Press the winder switch on the feed side and the feed switch on the paper outlet side simultaneously to rewind the media.

NOTES

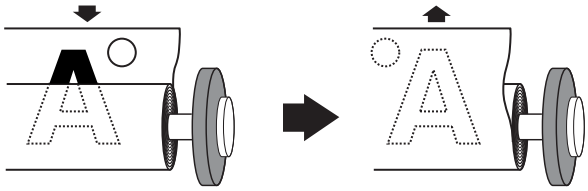
- The printed side drying time varies depending on the image. Confirm that the printed side has dried before performing the next operation.
  In general, dry the printed side for more than 3 hours (a whole day and night in case of printing with dark density), and then print on the back side.
- Avoid uneven take-up when rewinding the media.

7 Remove the media roll including the scroller.

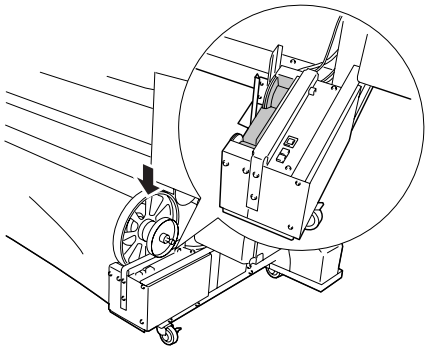
NOTE
- Use the recommended cart with care when removing and installing the scroller.



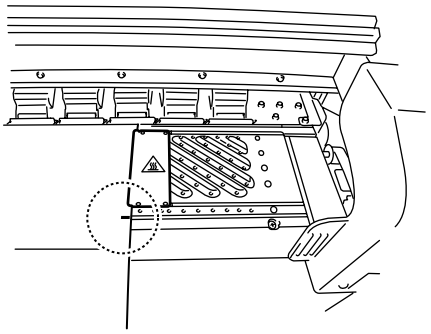
8 Remove the media from the main scroller, exchange the media between left and right, and reinsert the media into the main scroller.



9 Install a media roll attached with the main scroller on the printer, aligning with the roll slot.



10 Adjust the media so that the mark on the media made in step 3 comes to the groove in the platen.



The operation after step 10 is same as that in step 7 and subsequent steps in "■ Printing on Back Side from Feeder." See page 4-14.

NOTE

- The data transferred from RIP need not be rotated.

Using the Liner

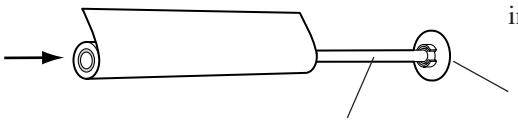
Printing on the back side may require a liner to be used depending on the media type. Also, use a liner when printing on the back side if printing of dark density was performed on the face side.

> NOTE
> - Confirm the vertical scale in advance because the vertical scale is different if the liner is used.
> - The liner wrinkles easily, and therefore if the liner is wound on the winder, it is recommended that only the liner be wound, not the printed media.

The following explanation assumes that the printing on the face side has been completed.

1 Insert a liner roll into the sub scroller.

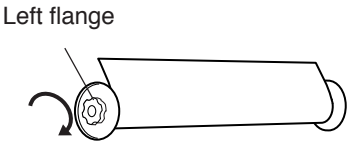
Confirm the take-up direction of media, and insert the sub scroller into the liner roll.



The flange on the right side is secured to the sub scroller. When setting the sub scroller in the printer, this side comes to the right.

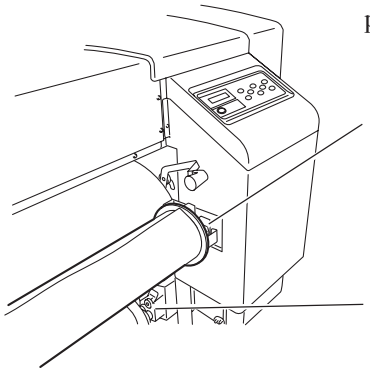
2 Lock the flange on the left side.

Insert the left flange into the shaft, and rotate the knob clockwise to lock the left flange.



(In case of outer take-up)

3 Set the sub scroller in the printer.



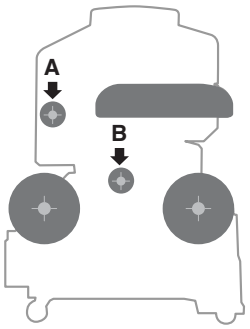
The set position varies depending on the printing method.

- Printing on back side from take-up unit

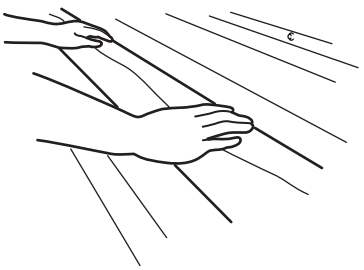
→ Set the sub scroller on the spare holder close to the pressure roller up/down lever (A in the figure).

- Printing on back side from the feeder
- After rewinding, print on the back side feeding from the feeder.

→ Set the sub scroller in the sub scroller holder (B in the figure).



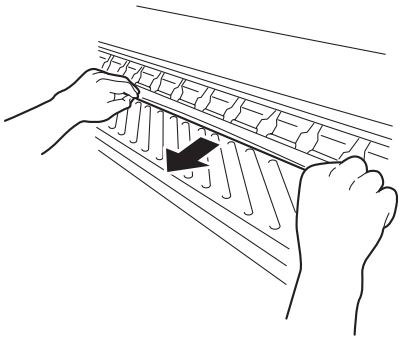
4 Bend the top edge of the liner by about 5 cm, and insert it into the feeder.



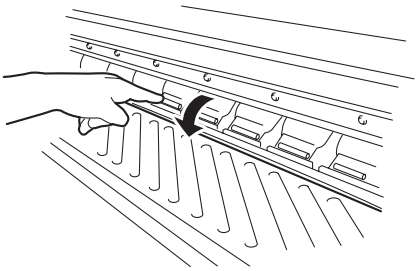
NOTE

- As the liner is thin and very weak in stiffness, it could be caught in the grid roller when it is inserted unless the top edge is bent.

5 Pull the liner out of the discharge side.



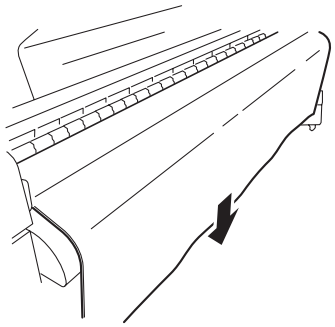
HINT - If it is hard to pull the liner out, rotate the grid roller with your finger to feed the liner through.



(1) Check on the feed side and the discharge side respectively that the liner is fed out straight from the liner roll. If it is set obliquely, raise the liner a little to shift it to the left or right.

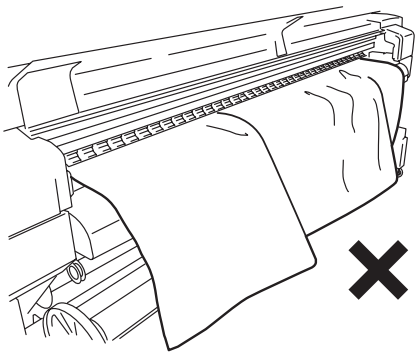
(2) Take care not to allow the liner to wrinkle.

6 Gripping the central area of the top edge of the liner, pull the liner out until it is about to reach the floor.



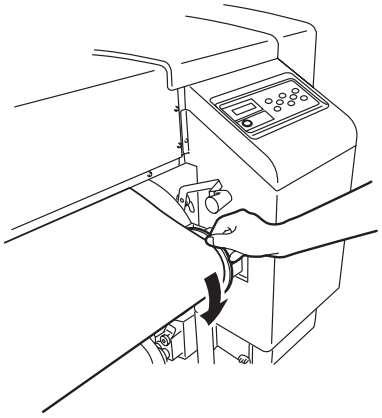
NOTE

- If the liner waves extremely on the platen, rewind the liner completely and remove it from the printer once, and then reinstall. A wavy liner causes wrinkles.



Pull the liner out evenly on the left and right sides so that it does not wave. Also, stretch the liner toward both sides to prevent the liner from slackening in the center.

7 Rotating the flange on the right side of the sub scroller counterclockwise, rewind the liner until its top edge protrudes from the rear cover.

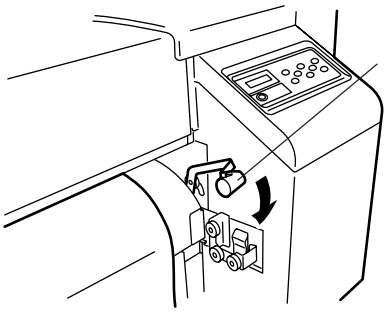


HINT

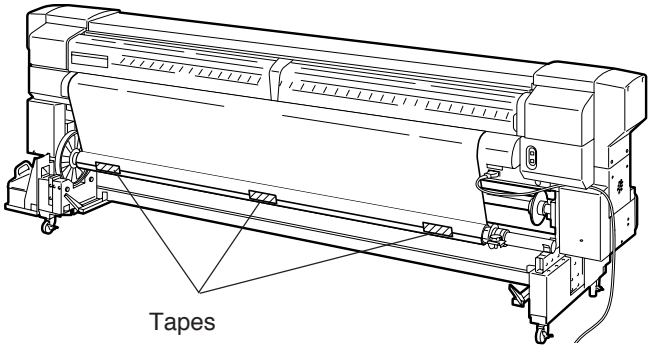
- This rewinding motion eliminates small waving.

8 Pull the liner out to the position where the liner can be secured to the winder with tapes.

9 Push the pressure roller up/down lever down.



10 With the liner stretched, secure it to the winder with tapes.



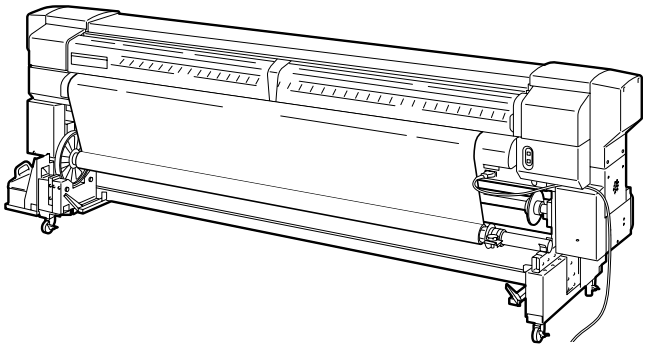
Confirm the take-up direction, and secure the liner in the center first, and then both edges with the tapes.

NOTE

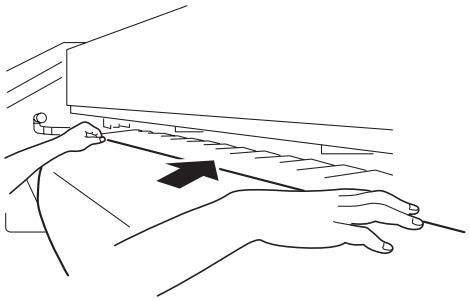
- In "printing on the back side from the take-up unit", the liner cannot be wound on the winder.

11 Lift the pressure roller up/down lever.

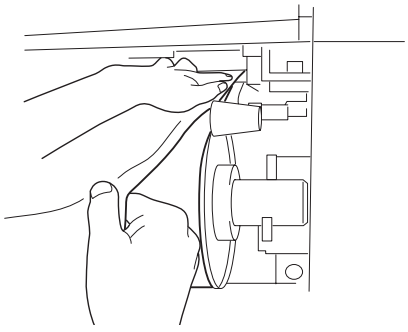
12 Press the winder switch on the winder side to wind the liner on the paper tube by about 4 turns.



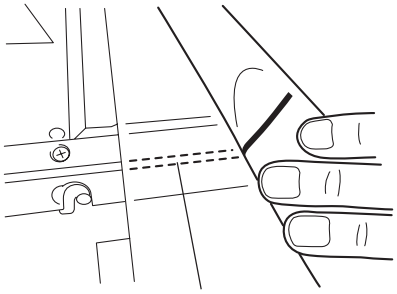
13 Holding the flange of the sub scroller by hand so that the liner is not fed out, insert the media into the feeder so as to feed out the media only.



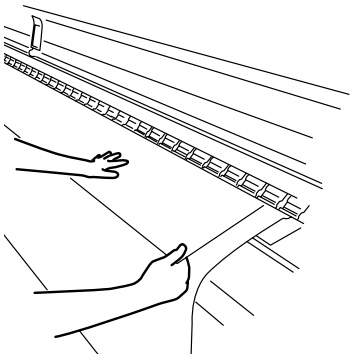
14 Overlap the liner and the media so that their right edges are aligned.



15 Adjust the media so that the solid line for aligning the print position at the media top edge comes to the platen groove position.



Platen groove

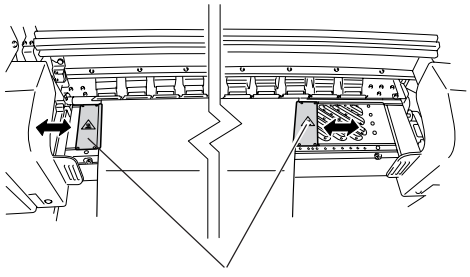


If the solid line does not align with the platen groove between left and right sides, align either side first, and while holding this side, pull the other side to adjust the position of the media only.

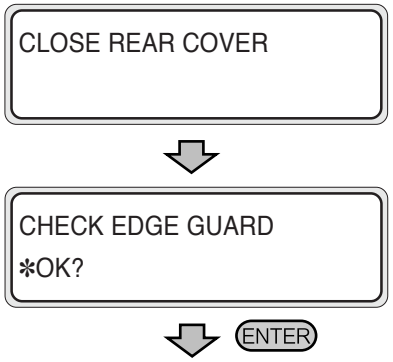
16 Push the pressure roller up/down lever down.

17 Set the media edge guard, and close the rear cover.

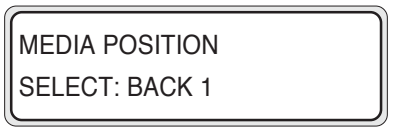
Check if the media edge guard is located under the media.



Media edge guard



18 Select the media position.



Select "BACK1" or "BACK2" with the ▲ or ▼ key.

"BACK1":

- Printing on back side from take-up unit

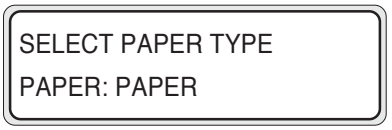
"BACK2":

- Printing on back side from paper feeder
- After rewinding, printing on back side from paper feeder

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

19 Select a media type.



Select "PAPER" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

20 Select the liner.

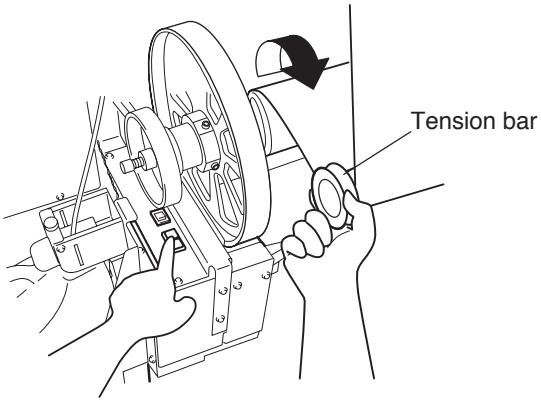
LINER SELECT: USED

Select "USED" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

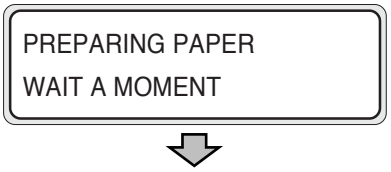
21 Press the feed switch on the winder side to rewind the liner from the paper tube, and set the tension bar.



CHECK BUFFER *OK?

ENTER

22 Media setting operation will start automatically.



- If the operation terminates normally, the printer returns to the online or offline state.
- If it terminates unsuccessfully, an error message will be displayed.

  Return to step 8 for retry.

NOTES

- Before starting the printing on the back side, set "VACUUM" to HIGH from the operation panel according to the media used.
- Vertical scale value is different from the media width because the liner is used. Reenter the vertical scale value confirmed in advance.

- It is recommended that the head be cleaned before starting the printing on the back side.

23 Print on the back side.

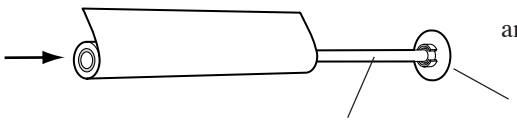
Printing on Mesh Tarpaulin

Here, we explain the case of printing on mesh media to which a liner is not attached. If a liner is used with the mesh media, the special method explained in this section is not necessary.

NOTES

- The dedicated liner must be used for printing on mesh tarpaulin. Printing without using the liner allows the ink to pass through the mesh of the mesh tarpaulin, thus soiling the back side and the platen.
- When printing on the mesh tarpaulin, the head position must be raised in advance. Adjust the head height by referring to "Using Head Up/Down Lever."
- Measure the width of the mesh tarpaulin in advance.
- Do not use a mesh tarpaulin which is thin and weak in stiffness. Otherwise, the head will be rubbed.
- The liner wrinkles easily, and therefore if the liner is wound on the winder, it is recommended that only the liner be wound and the printed media should not be wound.

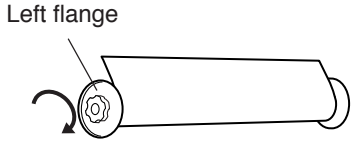
1 Insert a liner roll into the sub scroller.



Confirm the winding direction of the media, and insert the sub scroller into the liner roll.

The flange on the right side is secured to the sub scroller. When setting the sub scroller in the printer, this side comes to the right.

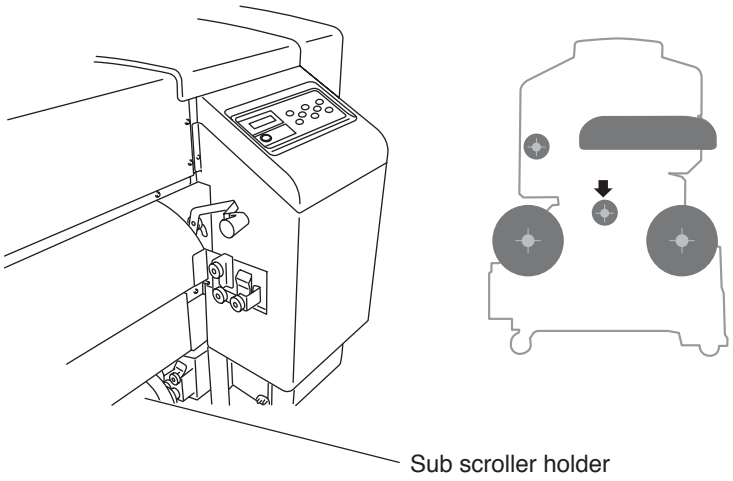
2 Lock the flange on the left side.



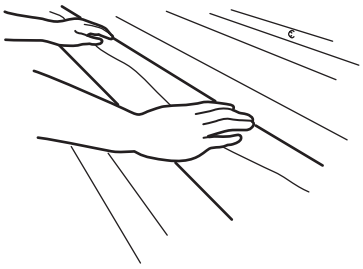
(In case of outer take-up)

Insert the left flange into the shaft, and rotate the knob clockwise to lock the left flange.

3 Set the sub scroller in the printer.



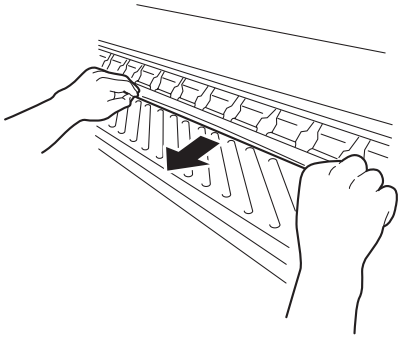
4 Bend the top edge of the liner by about 5 cm.



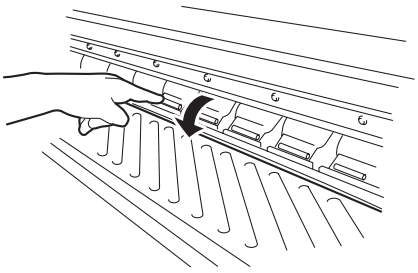
NOTE

- As the liner is thin and very weak in stiffness, it could be caught in the grid roller when it is inserted unless the top edge is bent.

5 Insert the liner and pull the liner out of the discharge side.



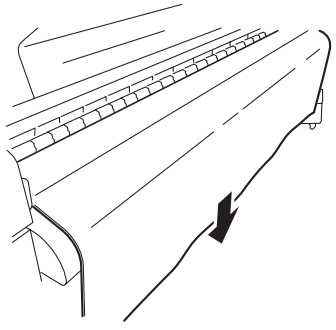
HINT - If it is hard to pull the liner out, rotate the grid roller with your finger to feed the liner through.



(1) Check on the feed side and the discharge side respectively that the liner is fed out straight from the liner roll. If it is set obliquely, raise the liner a little to shift it to the left or right.

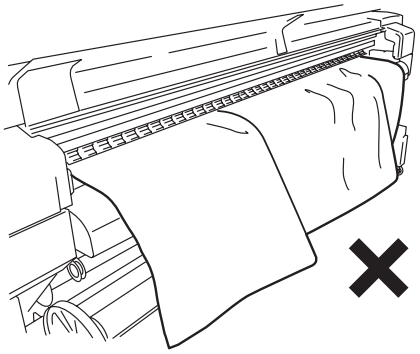
(2) Take care not to allow the liner to wrinkle.

6 Gripping the central area of the top edge of the liner, pull the liner out until it is about to reach the floor.



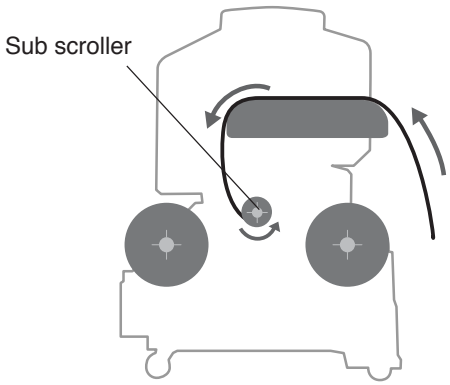
NOTE

- If the liner waves extremely on the platen, rewind the liner completely and remove it from the printer once, and then reinstall. A wavy liner causes wrinkles.



Pull the liner out evenly on the left and right sides so that it does not wave. Also, stretch the liner toward both sides to prevent the liner from slackening in the center.

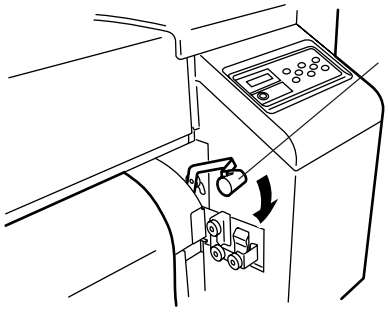
7 Rotating the flange on the right side of the sub scroller counterclockwise, rewind the liner until its top edge protrudes from the rear cover.



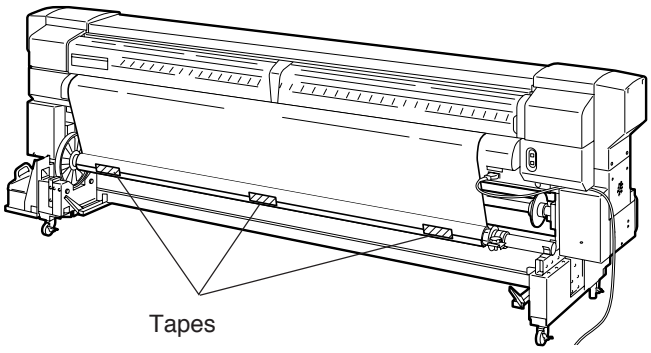
HINT - This rewinding motion eliminates small waving.

8 Pull the liner out to the position where the liner can be secured to the winder with tapes.

9 Push the pressure roller up/down lever down.



10 With the liner stretched, secure it to the winder with tapes.

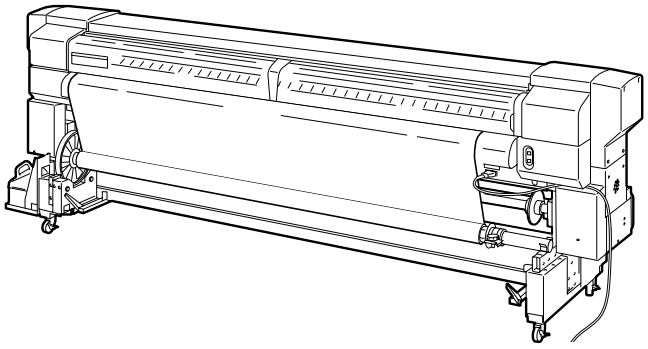


Confirm the winding direction, and secure the liner in the center first, and then both edges with the tapes.

NOTE
- In printing on the back side from the take-up unit, the liner cannot be wound on the winder.

11 Lift the pressure roller up/down lever.

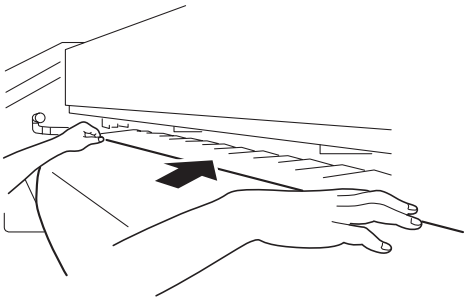
12 Press the winder switch on the winder side to wind the liner on the paper tube by about 4 turns.



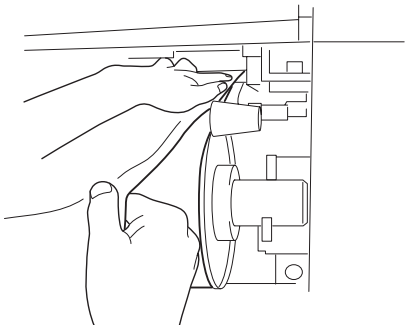
13 Set a mesh tarpaulin roll.

For installation of a mesh tarpaulin roll, see Section 2 Basic Operations (⇒ See page 2-12 to 2-15).

14 Holding the flange of the sub scroller by hand so that the liner is not fed out, insert the mesh tarpaulin into the paper feeder so that only the mesh tarpaulin is fed out.



15 Overlap the liner and the media so that their right edges are aligned, and set so that the top edge of the mesh tarpaulin protrudes from the rear cover.

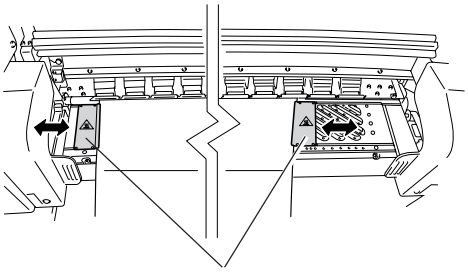


If the right edge does not align correctly, shift the mesh tarpaulin to the left or right so as to align with the liner position.

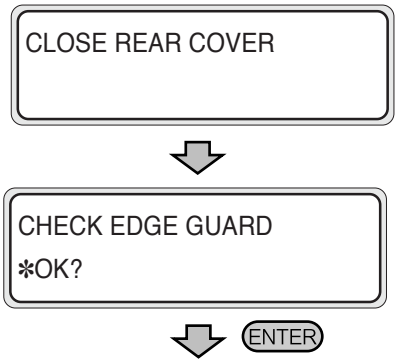
16 Push the pressure roller up/down lever down.

17 Set the media edge guard, and close the rear cover.

Check if the media edge guard is located under the media.



Media edge guard



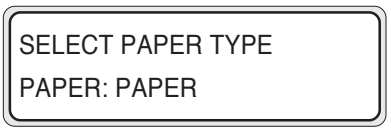
18 Select the media position.

Select "MAIN" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

19 Select the media type.



Select "PAPER" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

If the mesh tarpaulin has not been registered in advance, enter it newly. For details of the entry method, see Section 3 "ENTRY Menu."

NOTE
- If the mesh tarpaulin is narrower than the liner, set "DETECT WIDTH" to "MANUAL1" in the ENTRY menu. Selecting "AUTO" allows the printer to recognize the liner width as the mesh tarpaulin width and to print the data at the right edge on the liner.

The contents set with the ENTRY menu are as follows:

DETECT WIDTH → MANUAL1
SIZE → Enter the mesh tarpaulin width
SIZE2 → Enter the liner width

20 Select the liner.

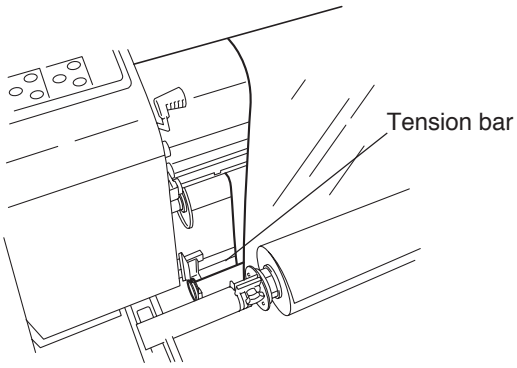
```
LINER
SELECT: USED
```

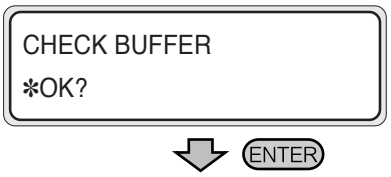
Select "USED" with the ▲ or ▼ key.

Press the ENTER key to change the setting.

Press the CANCEL key to hold the last setting as it is.

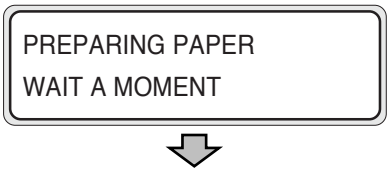
21 Press the feed switch to slacken the mesh tarpaulin and install the tension bar.





- The next operation will not start if the media slack is inadequate.

22 Media setting operation will start automatically.



- If the operation terminates normally, the printer returns to the online or offline state.
- If it terminates unsuccessfully, an error message will be displayed.

  Return to step 13 for retry.

Section 5 Heater Controller Menu Operation

This section describes heater controller temperature control, LCD displays, parameter setup mode operations, and error messages.

Contents of This Section

Temperature Control

The following are the three states of heater control:

(1) Maintaining a preset temperature

Function: To heat the media for reduction of ink drying time, improvement of ink fixing, and media winkle prevention.

Status: Each heater temperature is maintained at the preset temperature on the heater control panel.

Conditions:
(1) The heater ON/OFF setting on the heater control panel is set to ON and a print start command is received.
(2) Under condition (1) above, the specified delay time has elapsed after the print end command was received.

(2) Maintaining the heater at standby temperature

Function: To shorten the time to reach the preset temperature at print start.

Status: The heater temperature is maintained at the specified standby temperature (35 °C) for all heaters. When the preset temperature is lower than the specified standby temperature (35 °C), the printer maintains the preset temperature.

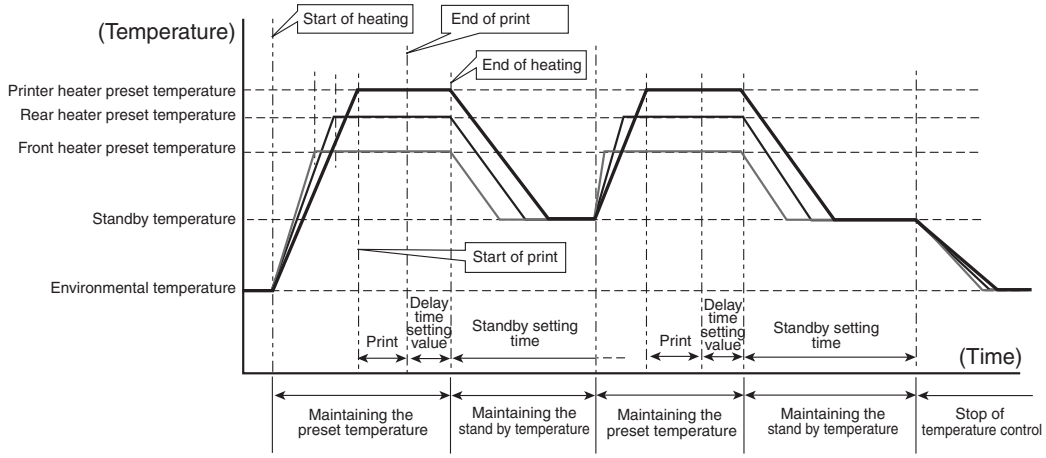
Condition: The specified standby time has elapsed after completion of the preset temperature maintaining condition.

(3) Temperature Control Stop Condition

Function: To prevent useless current consumption, to protect the media from being damaged due to heating by heaters, and to protect the user from being burned by touching the heaters when printing is not being performed.

Status: The ambient temperature is reached slowly.

Condition: The printer is neither in preset temperature maintaining status nor in standby temperature maintaining status.



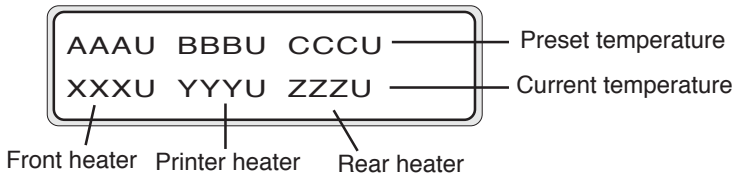
Start of heating: The print start command is received and heating starts. (The print operation does not start until the heaters reach the preset temperature. However, if "WAIT HEATER" is set to "SKIP", print operation starts even though the heaters do not reach the preset temperature.)

Start of printing: The heaters reach the preset temperature and printing starts.

End of printing: A print end command is received and printing ends.

LCD Display

(1) Display in normal mode



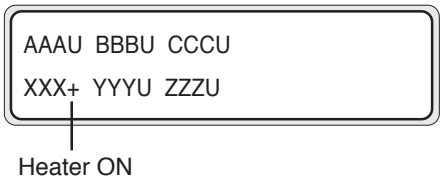
Display: (AAA to CCC, YYY to ZZZ) Temperature unit: (U)

Heater	Setup temperature	Current temperature
FRONT	AAA	XXX
PRINT	BBB	YYY
REA	CCC	ZZZ

C	Celsius
F	Fahrenheit

- Preset temperature display
  When using a Fahrenheit display, the temperature is displayed to three digits.
  (99° Fahrenheit or less temperature is displayed with a space plus 2 digits.)
- Display renewal period
  The temperature is measured every 5 seconds and the display is renewed.

(2) Display at heater ON



When each heater is heated, "+" is displayed in place of the unit of each heater current temperature on the second line. The unit display is restored at the completion of heating. In the display example shown above, the front heater is heated.

(3) Display at heater OFF

"OFF" is displayed in three digits in the setup temperature area of the heater turned OFF on line 1.

The temperature unit of the heater turned OFF is not displayed.

The current temperature area is displayed as it is on line 2.

(4) Display when heater AC power is turned OFF

"TURN ON HEATER POWER SWITCH" massage is displayed on the LCD.

Parameter Setup Mode

This mode is used when the operator sets the heater system control parameters.

(1) Setup items and parameters

The setup items and parameters are listed in the table below.

No.	Item	Item Display (upper line)	Parameter Display (lower line)	Description	Initial value
1	Temperature unit	UNIT	CELSIUS FAHRENHEIT	-	CELSIUS
2	Heat suspending time after printing	DELAY TIME	00 to 30 MINUTE	UNIT: minute	05 MINUTES
3	Standby heating time after completion of DELAY TIME	STANDBY TIME	0, 30, 60, 90, 120, ENDLESS	Unit: minutes	30
4	Version display	VERSION	FW=vv.r HW=vv.r	Display only	-
5	Diagnostics	DIAGNOSTICS	NO, YES	NO: Does not perform diagnostics. YES: Performs diagnostics.	NO
6	Display language	LANGUAGE	ENGLISH JAPANESE	-	ENGLISH
7	Exit of setup mode	EXIT	YES, NO	YES: Exits from parameter mode. NO: Does not exit from parameter mode.	YES

*1 Display only, ON/OFF key is ignored.

(2) Entering the parameter setup mode

Press the ON/OFF key, ▲ key, and ▼ key on the heater control panel at the same time to enter to the parameter setup mode.

The 1st setup item in the parameter setup mode will be displayed.

Note: # will blink.

(3) Moving among the setup items

Select the desired setup item with the ▲ and ▼ keys on the heater control panel.

Press the ▼ key on the heater control panel to move to the next (lower) setup item on the "(1) Parameter Setting Mode Parameter List". When the lowest setup item is already selected, the selection returns to the highest setup item.

Press the ▲ key on the front heater to move to the next higher item on the "(1) Parameter Setting Mode Parameter List." When the highest item is already selected, the selection returns to the lowest item.

(4) Selecting the setup item

When the setup item for which you want to set a parameter is displayed, press the ON/OFF key on the heater control panel to enter the setup item.

(Example) Temperature unit setting.

```
# UNIT
* CELSIUS
```

Note: - # will be returned to normal display.
- * blinks.

(5) Selecting a setting value

Select a setting value with the ▲ and ▼ keys on the heater control panel.

Press the ▼ key on the heater control panel temperature unit setting screen.

```
# UNIT
* FAHRENHEIT
```

Note: - * blinks

Press the ▲ key on the heater control panel to move to the previous (upper) setup item.

Press the ▼ key on the heater control panel to move to the next (lower) setup item.

(6) Finalizing the setting.

Display the desired setting on the 2nd line.

Press the ON/OFF key on the heater control panel to finalize the setting.

The display returns to the setup item setting screen.

Note: - # blinks

When a setting which is not desired is displayed on the 2nd line, press the ON/OFF key on the heater control panel to cancel that setting and return to the setup item selection screen.

(7) Exiting from parameter setting mode

Move to the last setup item, EXIT menu.

Note: - # blinks

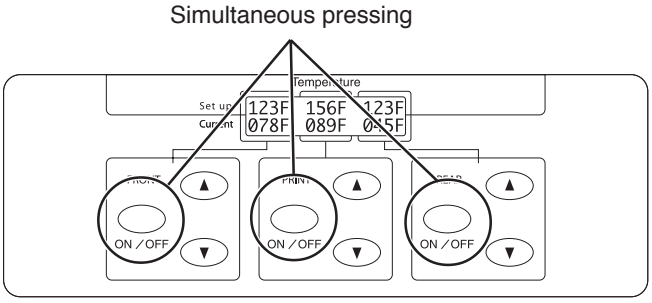
Press the ON/OFF key on the heater control panel.

Note: - ✻ blinks

Press the ON/OFF key on the heater control panel.

(8) Preheat by manual operation

The front heater, printer heater, and rear heater start to heat until they reach the set temperature by simultaneously pressing respective ON/OFF buttons on the heater panel.



Turning the respective heaters on prior to the printing can shorten the heater temperature rise waiting time at the start of printing.

NOTES

- After heating is started by manual operation, the heaters turn off automatically through the delay time and standby time set by the parameters.
- During printing, these buttons function as normal ON/OFF buttons.

Error Messages

When any of the following error messages are displayed on the heater control panel, contact our service center.

<System error>

ERROR H01
SYSTEM ERROR

<The relay board cannot be detected>

ERROR H02
PLY BOARD ERR

<Front heater thermistor temperature error> (-10 °C or less, 70 °C or more)

ERROR H03
F TEMP ERR

<Rear heater thermistor temperature error> (-10 °C or less, 70 °C or more)

ERROR H04
R TEMP ERR

<Print heater thermistor temperature error> (-10 °C or less, 70 °C or more)

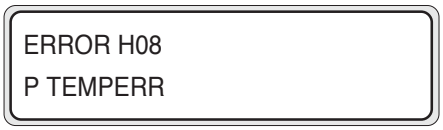
ERROR H05
F TEMP ERR

<Front heater thermistor cannot reach the preset temperature even after 30 minutes>

ERROR H06
F TEMP ERR

<Rear heater thermistor cannot reach the preset temperature even after 30 minutes.>

<Printer heater thermistor cannot reach the preset temperature even after 30 minutes.>



<Switch test error occurs in the diagnostics >

<Zero cross error occurs in the diagnostics.>

Section 6 Troubleshooting

This section describes troubleshooting for the printer. If the problem cannot be solved, contact your dealer or our service center.

Contents of This Section

Troubleshooting

Before deciding that there is a serious problem with the printer, check the following items.

■ Items to be checked

Symptom	Items to be checked	Corrective measures
No power	Power cable connection	Plug the power cable into the outlet correctly.
	Power supply to the outlet	Supply power to the outlet.
	Power switch ON/OFF	Turn the power switch ON. See Section 2, Turning Power ON/OFF.
The paper guide is not heated even when the heater is turned ON.	Printer status	The paper guide is heated during printing. Be sure the paper guide is heated by printing the test pattern.
	Heater control panel	Press the desired heater ON key (FRONT/PRINT/REAR) again and then be sure the paper guide is heated by printing the test pattern.
	Check power supply voltage	Connect to 200VAC.
The printer fails to start or operate correctly.	ERROR lamp and message on the LCD	Take appropriate action according to the error message. See Section 6, When an Error Message Appears.
Cannot print.	Interface cable connection	Connect the interface cable correctly. See Section 2, Turing Power ON/OFF.
	ERROR lamp and message on the LCD	Take appropriate action according to the error message. See Section 6, When an Error Message Appears.
	ERROR lamp OFF	Print nozzle adjustment pattern. See Section 3, Mechanical Adjustment Menu.
Transmitted data are not processed immediately	DATA lamp (flashing?)	Check the communication conditions to the computer.
Poor print quality	Media type	Check for improvement by changing the settings of heater temperature, print mode, RIP, etc. If there is no improvement, the media is not suitable for the ink. Replace the media with another type.
	Ink type	Use our recommended ink. See Appendix, Consumables.
	Ink head cleaning	Clean the ink head. See Section 2, Head Cleaning.
	Color stripe is not set.	Set the color stripe. See, Section 3 Entry Menu, (14) Color stripe setting.
	Gaps in color printing at a low printing rate.	Set the head mode to HIGHLIGHT PRIORITY. See Section 3, Entry Menu, (15) Head action mode setting. Set smaller interval value. See Section 3 Entry Menu, (30) Wait interval setting.
	Operation temperature	Use the printer in 20° C to 25° C temperature.
Media jams occur frequently	Media type	Check whether the media type setting matches the type of the loaded media. See Section 2, Installing Media Roll in the Printer and Removing the media roll from the Printer. Use our recommended media. See Appendix, Consumables.
	Media setting	Set the media correctly. See Section 2, Replacing the Media Roll.
	Check whether there is any foreign material in the carriage path or the media path.	Remove any foreign material. See Section 6, Clearing Media Jams.
	Suction FAN	Try weakening the suction power of the suction FAN. See Section 6, When an error message appears "Media jam"
	Heater temperature setting	Try lowering the heater temperature setting. See Section 6, When an error message appears "Media jam"
Printing is slow	Operation temperature	Use the printer in 20 to 25 ° C temperature.

Clearing Jams

Clear media jams according to the guidance message displayed on the LCD.

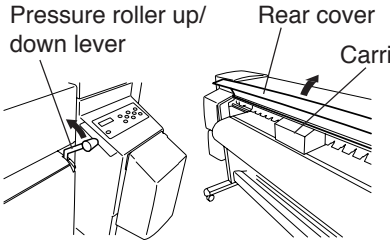
1 A guidance message appears on the LCD.

LIFT LEVER &	X
OPEN REAR COVER	

X: Types of media jam
0: Media jam 0
1: Media jam 1
2: Media jam 2

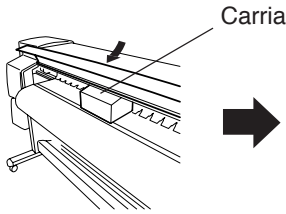
See “When an Error Message Appears”.

2 Open the pressure roller up/down lever and rear cover.



REMOVE PAPER
CLOSE REAR COVER

3 Remove the jammed media, check that there are no obstacles in the carriage path and the media transport path, and close the rear cover.



CARRIAGE MOVING
WAIT A MOMENT

4 The carriage will move to its home position.

5 Set the media according to “Installing Media Roll in the Printer and Removing the Media Roll from the Printer”. (See page 2-12.)

When an Error Message Appears

If the ERROR lamp lights, check the message to be displayed on the LCD.

There are four types of error messages.

- Service call errors:

  Operator unrecoverable errors, such as H/W, S/W failure.

  Contact our service center.

- Communication errors:

  Communication protocol errors.

  Take appropriate action according to the error code or message.

- Operator call errors:

  The operator can correct these errors.

  Take appropriate action according to the message.

The error messages are as follows. Take appropriate action according to the error message.

If a communication error or a data error occurs, the ERROR lamp does not light. An error message appears on the LCD and disappears when the next operation is performed.

Service Call Errors

If any of the following service call error messages appears, turn the power switch OFF and then ON again. This may release the error condition.

<POC error>

INITIALIZING E Ennnn

nnnn: Error code

Description: An unrecoverable error has occurred in the engine section. (This error message appears when an error is detected during self-diagnosis after the power is turned ON.)

Measure : Contact your dealer or our service center (the error code on the LCD is needed) .

<Engine error>

ENGINE ERROR nnnn POWER OFF/ON	nnnn: Error code

Description: An unrecoverable error has occurred in the network controller section. (H/W failure)

Measure : Contact your dealer or our service center (the error code on the LCD is needed) .

<System error>

F_e s : n n n n POWER OFF/ON	nnnn: Error code

Description: An unrecoverable error has occurred. (F/W failure)

Measure : Contact your dealer or our service center (the error code on the LCD is needed) .

Communication Errors

PRINT READY W SCSI ERROR nnn

nnn: Error code
001: Parity error
002: Bus timeout error

Description: The condition or protocol for communication with the computer is incorrect.

Measure : (1) Check the SCSI cable connection and terminator switch.
(2) Set the host SCSI parity bit generation setting to ON.
(3) Check the host SCSI driver setting.

Operator Call Errors

The following errors can be corrected by the operator.

(AC2 power supply)

```
CHECK AC2 POWER
POWER  ON/OFF
```

Description: The power switch on the AC2 side is not turned ON.
Measure : Turn the power switch on the AC2 side ON, and turn the printer power OFF andON.
=> "Section 2 Basic Operations (Turning the Power ON/OFF)"

(Ink cartridge)

```
OPEN X INKCOVER
CHANGE YY INK
```

X: L (left) /R (Right)
YY: Y, M, C, Bk, Lm, Lc

Description: There is no ink.
Measure : Take appropriate action according to the message.
=> Section 2 Basic Operations (Ink Cartridge Replacement)

```
OPEN X INKCOVER          Z
CHECK YY INK
```

X: L (left) /R (Right)
YY: Y, M, C, Bk, Lm, Lc
Z: Error code (1 to 9)

Description: An ink cartridge error has occurred.
Measure : Take appropriate action according to the message.
=> Section 2 Basic Operations (Ink Cartridge Replacement)

```
OPEN X INKCOVER
SET YY INK
```

X: L (left) /R (Right)
YY: Y, M, C, Bk, Lm, Lc

Description: No ink cartridge is installed.
Measure : Take appropriate action according to the message.
=> Section 2 Basic Operations (Ink Cartridge Replacement)

INKCOVER IS OPEN CLOSE X INKCOVER

X: L (left) /R (Right)

Description: The ink cover is open.
Measure : Take appropriate action according to the message.

- The ink LED flashes.

Description: Ink is running out. (Warning)
Measure : Have a new ink cartridge ready.

(Waste ink bottle)

WASTE INK FULL CHANGE BOTTLE

Description: The waste ink bottle is full.
Measure : Take appropriate action according to the message.
=> Section 2 Basic Operations (Waste Ink Bottle Replacement)

BOTTLE ISN'T SET SET BOTTLE

Description: No waste ink bottle is installed.
Measure : Take appropriate action according to the message.
=> Section 2 Basic Operations (Waste Ink Bottle Replacement)

(Jam)

LIFT LEVER &	0
OPEN REAR COVER	

Description: A media jam (0) occurs when the feed system cannot be driven due to obstacles in the feed path.

Measure : Take appropriate action according to the message.
If a media jam error (1) occurs repeatedly even though the media is not jammed and there is no foreign matter in the feed path, it is possible that the media has adhered to the platen or the paper guide and cannot be driven. Try lowering the heater temperature setting.

=> Section 3 Registration menu (11) “Front heater temperature initial setting”

=> Section 3 Registration menu (12) “Print heater temperature initial setting”

=> Section 3 Registration menu (13) “Rear heater temperature initial setting”

Alternatively, try weakening the air flow in the suction FAN.

=> Section 3 Registration menu (10) “Suction FAN air flow setting”

LIFT LEVER &	1
OPEN REAR COVER	

Description: Media jam (1) occurs when the carriage cannot be driven due to obstacles in the carriage path.

Measure : Take appropriate action according to the message.
If media jam (1) occurs frequently even when no media jams or there is no obstacle in the carriage path, please contact our service center.

=> Section 6 Troubleshooting (Clearing Media Jam)

LIFT LEVER &	2
OPEN REAR COVER	

Description: Media jam (2) occurs when the carriage cannot be driven due to obstacles in the carriage path.

Measure : Take appropriate action according to the message.
Also, check setting parameters.

=> Section 6 Troubleshooting (Clearing Media Jam)

(Media)

LIFT LEVER SET PAPER

Description: Media runs out.
Measure : Set new media.
=> Section 2 Basic Operations (Media Replacement)

LIFT LEVER CHECK PAPER

Description: Media with an invalid size (less than 297 mm width or 104 inch width or more) is set.
Measure : Set media with a correct size.
=> Section 2 Basic Operations (Media Replacement)

LIFT LEVER SET PAPER

Description: Media is skewed.
Measure : Set media correctly.
Ink may adhere to the platen because of the skew. Wipe ink off the platen.
=> Section 2 Basic Operations (Media Replacement)

SET PAPER PUSH DOWN LEVER

XX: Ink color

Description: The lever is in the up position.
Measure : Set media according to the message.

- Error LED is blinking

Description: Take-up failed in the winder.
Measure : Remove the media in the vicinity of the take-up sensor. Check if the media is set correctly.
=> Section 2 Installing Media in Winder

(Others)

CLOSE REAR COVER

Description: The rear cover is opened.
Measure : Take appropriate action according to the message.

HEAD TEMP. ERROR
WAIT A MOMENT

Description: The head temperature is out of the operating temperature range.
Measure : Stay within the operating temperature range. Leave the printer idle for a while until the head temperature falls within the range.

ENV. TEMP. ERROR
CHANGE CONDITION

Description: The ambient temperature is not within the operating temperature range for the printer.
Measure : Stay within the operating temperature range (15 °C to 30 °C).

TIME TO CHANGE
CAP PUMP

Description: It is about time to change the cap pump.
Measure : Please contact our service center to have the cap pump changed.

TIME TO CHANGE
XX PUMP

XX: Ink color

Description: It is about time to change the ink supply pump.
Measure : Please contact our service center to have the ink supply pump changed.

When the Printer Fails to Work Correctly

This section describes what to do when the printer fails to work correctly. Take appropriate action according to the symptoms.

■ Action to be taken when the printer malfunctions

Problem	Possible cause	Corrective action
A no-ink message is displayed even when there is enough ink.	The ink bottle is not installed correctly.	Open the ink cover and check whether the joint is correctly inserted into the ink bottle.

When a Print Error Occurs

This section explains how to solve print quality problems. Take appropriate action according to the symptoms.

■ Action to solve print quality problems when a print error occurs

Symptom	Possible cause	Corrective action
A blank sheet is output or the printed drawing is faded.	Blank data are transmitted.	Check print data.
	The environmental conditions do not meet the printer specifications.	Use the printer in the specified environmental conditions (temperature and humidity). (See "Section 1, Environmental Conditions".)
	The media is set incorrectly.	Check the media settings.
Parts of a drawing are missing or the printing is unclear.	Foreign matter is adhering to the head.	Clean the head from the CLEANING menu.
	A low printing ratio pattern is printed continuously at high temperature environment.	Set the head mode to HIGHLIGHT PRIORITY.
The printing is blurred.	The media is loaded upside down.	Check whether the media is loaded correctly.
	The media is set incorrectly.	Check the media settings.
	Heater temperature is low.	Raise the set temperature of the heater.
The printing is stained.	The leading edge of the media is curled.	Check whether the leading edge of the media is curled. If it is curled, cut the leading edge.
	The media is slightly folded or winkled.	If it is wrinkled, feed the media and cut off the wrinkled part of the media.
	The platen is stained.	Clean the platen, referring to "Section 2, Inspection & Maintenance".
	The media edge guard setting is incorrect.	Set the media edge guard correctly.
Parts of a drawing are missing at the start of printing.	Ambient temperature.	Use the printer in the specified environmental conditions.
Parts of a drawing are missing even when cleaning is performed repeatedly.	The nozzle is clogged.	Perform fill cap operation.
Poor printing cannot be improved even when cleaning is performed.	The cap or wiper is stained.	Check whether the cap and wiper are stained. If they are stained, clean them.

When There is an Abnormal Sound

If an abnormal sound is heard, contact your agent or an SIIT service center.

When it is Desired to Move the Printer

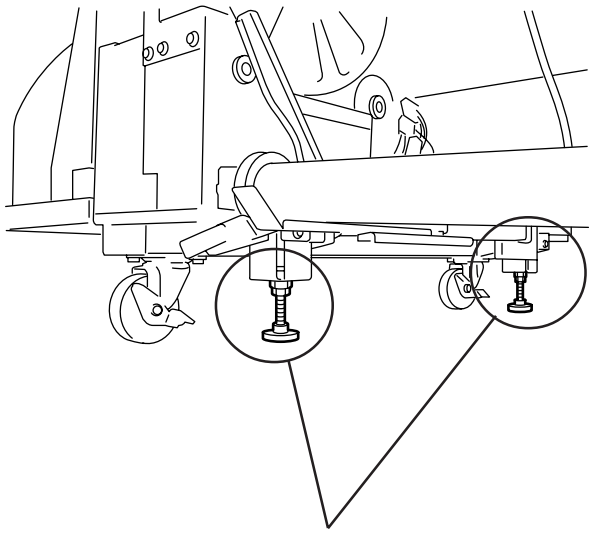
To move this printer, contact your dealer or our nearest service center.

When it unavoidably becomes necessary to move the printer several meters across a flat surface, use caution regarding the following points:

- Do not move the printer with the main scroller and/or the sub scroller attached. The weight of the media can damage the printer.

- Loosen and lift up the leveler below the feeder and the take-up unit before moving the printer. Also, after completing the move, be sure to tighten the leveler.

- When moving the printer, make sure that no objects contact the leveler.



Appendix

This Appendix shows the basic specifications, components, and Celsius and Fahrenheit conversion table.

Contents of This Section

Basic Specifications

Printer Specifications

■ Basic printer specifications

Item	Specification / Function
Recording method	Piezo-type color ink-jet printing
Resolution	720 dpi x 2720 dpi, 540 dpi (main scan direction) x 2720 dpi (sub scan direction)
Recording speed	About four minutes / A0 with 4 pass printing. (Changes according to surrounding temperature and head temperature.)
Media feed/dischage direction	Front feed, rear discharge
Media types	Vinyl chloride, Tarpaulin, Flexible face
Media width	Maximum 104 inches
Ink cartridge	Six colors (black, cyan, magenta, yellow, light magenta, light cyan) 1000 ml ink bottles
Noise	Standby: 45 dB(A) or less Operating: 60 dB(A) or less (Continuous sound)
Heat output	Printer: 720000J/H or less, Heater: 5040000J/H or less
Maximum print guaranteed range	Area excluding top, bottom margins (5 mm) and right and left margins (5 mm) (When using the paper edge guard, right and left margins will be 10 mm.)
Rated power supply	AC1 : 1A 200VAC- 230VAC - 50Hz/60Hz AC2 : 8A 200VAC- 230VAC - 50Hz/60Hz
Power supply input range	AC1 : 200VAC - 230VAC ± 10% 50Hz/60Hz ±1Hz AC2 : 200VAC - 230VAC ± 10% 50Hz/60Hz ±1Hz
Power consumption	Maximum power consumption AC1: 200W or less AC2: 1400W or less (at 200VAC input) 1800W or less (at 230VAC input) Cumulative power AC1: 130Wh or less AC2: 350Wh or less (at 200VAC input) 400Wh or less (at 230VAC input) (Typical values in continuous printing with all heaters set to 45˚C at room temperature 20˚C)
External dimensions	3710 mm (W) x 890 mm (D) x 1210 mm (H) ±10 mm
Weight	500 kg or less (excluding media roll and ink)
Printing guaranteed range	20˚ to 25˚C/40% to 60% RH (no condensation)
Operating temperature/humidity range	15˚ to 30˚C/30% to 70% RH (no condensation)
Temperature/humidity range while printer is idle or in long-term storage	5˚ to 35˚C/10% to 80% RH or less (no condensation)
Installation space	4500 mm (W) x 2900 mm (D) x 1700 mm (H)
Maintenance space	4500 mm (W) x 2900 mm (D) x 1700 mm (H)