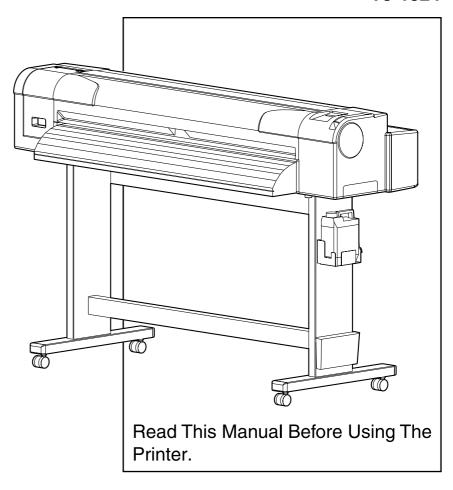
# **MUTOH**

# QUICK REFERENCE

**Full-Color Inkjet Printer** 



VJ-1324



Rev. VJ1324E-C-00

# **Important Notice**

# 1. For Users in Europe



The CE marking is a mandatory European marking for certain product groups to indicate conformity with the essential health and safety requirements set out in European Directives.

By affixing the CE marking, the manufacturer, his authorized representative, or the person placing the product on the market or putting it into service ensures that the item meets all the essential requirements of all applicable EU directives and that the applicable conformity assessment procedures have been applied.

### 2. For Users in the United States

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### 3. Trademark Mentioned in this Manual

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# **Warranty Limitations**

- 1. MUTOH INDUSTRIES LTD. warrants part repair or replacement as a sole measure only if a failure is found in the system or in the materials and workmanship of the product the seller produced. However, if the cause of failure is uncertain, decide the action after due mutual consultation. Details concerning the warranty are written in the warranty certificate included with the product.
- 2. The warranty shall not apply to any direct or indirect loss, or compensation for the loss due to the product that has been subject to misuse, neglect, or improper alternation.

## **About this Manual**

### 1. Contents of the Manual

There are three manuals for this product.

#### Installation manual

Explains operating procedures along with unpacking, installation and preparation before use.

### **Quick Reference (this manual)**

### **Operation Manual**

Provides information regarding preparation before using the product, directions for daily use, and useful functions.

# 2. Purpose and Target Readers

This manual explains preparations before use and operation procedures for MUTOH Full Color Ink Jet Printer VJ-1324.

This manual is prepared for the owners and operators of this printer.

Before using this printer, fully understand the contents and directions in this manual.

# 3. Manual Configuration

Section	Description
1 Safety instructions	This chapter explains the installation of this printer, warning terms that operators need to know, caution items and warning labels on the printer main unit.
2 Product overview	This chapter explains the features of the printer along with the names and functions of each part.
3 Basic usage	This chapter explains how to handle this printer.
4 Daily maintenance	This chapter explains daily maintenance.
5 Troubleshooting	This chapter describes possible troubles during the use of this product and countermeasures.

### **NOTE**

- "1 Safety instructions" to "3 Basic usage"must be read before using the printer.
- Read "4 Daily maintenance" through "5 Troubleshooting" as necessary.

# 4. Manual Notation

This section explains general cautions that must be followed in order to use this printer safely.

Warning	Meaning
<b>⚠</b> WARNING	Used for dangerous situations where death or serious injury may be caused.
A CAUTION	Used for dangerous situations that may cause slight or medium injury, or when all or parts of products are damaged.
NOTE	It is used for special cautions and for information that needs to be emphasized.
TIP	Indicates useful tips for operating or understanding the printer.
0	Indicates "prohibited" operations.
0	Indicates required operations.
LF	Indicates referrence pages in this manual.

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# 1 Safety instructions

This chapter explains the installation of this printer, warning terms that operators need to know, caution items and warning labels on the printer main unit.



• When installing and operating this printer, be sure to follow the directions and warnings in this book.

# 1.1 Types and meanings of warnings

The warnings in the Operation Manual and the warning labels attached to the printer are categorized into three stages.

Understand the meanings of the following warning terms and follow the contents (instructions) in this manual.

Warning	Meaning
• WARNING	Used for dangerous situations where death or serious injury may be caused.
<b>A</b> CAUTION	Used for dangerous situations that may cause slight or medium injury, or when all or parts of products are damaged.
NOTE	Used for special cautions and for information that needs to be emphasized.

# 1.2 Important safety instructions

This section explains general cautions that must be followed in order to use this printer safely.





Do not install this printer in the following places.

It may cause an injury if the printer falls down.

- · On a shaky stand
- · Slanting location
- · Places where vibration of other machines etc. is transmitted



Do not step on this printer or place heavy things on top of it.

It may cause an injury if the printer falls down.



Do not block the vent by covering the printer with cloths, such as a blanket or tablecloth.

If the vent is blocked, heat may accumulate inside the printer and it may cause fire.



Do not install the printer where it is humid or dusty.

It could lead to an electric shock and fire.



Do not use a damaged power cable.

It could lead to an electric shock and fire.



Do not pull out or insert the power plug with a wet hand.

This could lead to an electric shock.



Do not connect an earth wire to the following places.

· Gas pipes

There is a possibility of ignition and explosion.

- Earth wire of telephone cables and lightning rods Heavy current might flow whenever lightning strikes.
- Water pipe and faucet

The earth might not work if a plastic pipe is connected in the middle of the metal pipe.



Do not insert or drop metal or flammable objects into the printer through openings such as a vent. It could lead to an electric shock or fire.

\_ ....



Do not spill flammable liquid on the platen. This could lead to a fire.



Do not place any combustible materials on the platen while the heater is working.

There may be a risk of fire.



If foreign substances or liquids such as water entered the printer, do not use the printer as it is.

It could lead to an electric shock or fire.

Immediately turn OFF the power switch, disconnect the power plug from the electric socket, and contact your local MUTOH dealer.



Wire the various cords as directed in the Operation Manual.

Mistaken wiring could cause fire.



Be sure to use the specified power cable.

Using power cables other than the specified can cause an electric shock or fire.



Make sure to use only the specified power supply (AC 100 V to 120 V or AC 220 V to 240 V).

If a power supply other than the specified voltage is used, it could cause an electric shock and fire.



Take power for the printer directly from the power socket (AC 100 V - 120 V or AC 220 V - 240 V).

Do not use multiple plugs on the same socket.

This could generate heat and might cause fire.



Be sure to use a dedicated power socket with earth wire for the power supply, and connect it to the earth wire. If the earth wire is not connected, an electric shock or fire may occur.



The waste fluid from the printer falls under the category of waste oil (waste ink) of industrial waste (out of the 19 items of general waste from business activities).

You are obligated to properly dispose of waste fluid in compliance with Wastes Disposal and Public Cleansing Act and local ordinances.

Delegate disposal to an industrial waste disposal contractor.

### A CAUTION



Pay attention to the following points when handling power cable.

- Do not tamper with the power cable.
- Do not put heavy objects on the power cable.
- Do not bend, twist or pull the power cable by force.
- Do not route the power cable near heating appliances.



Pay attention to the following points when handling the power supply plug.

Any mishandling of the power cable could cause a fire.

- Make sure that no foreign substances such as dust etc. are stuck to the power plug.
- Make sure that the power plug is firmly inserted to the edge of the power socket.



When handling ink cartridges, pay attention so that ink does not get into your eyes or stick to your skin.

If ink gets into your eyes or sticks to your skin, immediately wash it off with water.

Failing to do so might cause irritation or light inflammation of eyes.

In case of any abnormality, consult a physician immediately.



Do not disassemble ink cartridges.

If disassembled, there is a possibility that ink might come into contact with eyes or skin.



Do not operate the media loading lever during the initial operation or printing.

The print head portion may touch the pressurizing roller portion, and cause a malfunction.



Do not use volatile solvents such as thinner, benzene, or alcohol.

These solvents could cause damage to the paint.



Do not touch the media guide while printing.

The media guide becomes very hot and you could burn yourself.



Do not touch the media feed slot, platen, and media guide while the heater is working.

The media feed slot, platen, and media guide become very hot and you could burn yourself.



Be careful that no moisture enters the printer.

There is a possibility that the electric circuit inside the printer is short circuited.



Do not open covers attached using screws under any circumstances.

This may cause an electric shock or a malfunction.



When cleaning the cleaning wiper,

- Do not touch the cleaning wiper and head cap unit.
   Head cleaning may not be performed correctly because of oil from your hands.
- Make sure to wipe the print head using the cleaning stick.
  - A wet cleaning stick may cause the print head to clog.
- Do not reuse the cleaning stick.

The attached dust, etc may damage the print head.



When cleaning around the print head,

- Do not touch the nozzles of the print head.
   Doing so may damage the print head.
- Do not touch the tip of the cleaning stick.
   The print head may be damaged because of oil from your hands.
- Never put water, etc on the tip of the cleaning stick.
   Doing so may damage the print head.
- Do not reuse the cleaning stick.

  The attached dust, etc may damage the print head.



Do not slant the printer, prop it against a wall or turn it upside down.

There is a possibility that ink inside the printer may leak.

Moreover, normal operation after shifting (to these positions) cannot be guaranteed.



Unpacking or moving this printer must be done by the following number of people.

• VJ-1324: more than three persons



Installing the dedicated stands on the printer must be done by the following number of people.

• VJ-1324: more than three persons



When installing the dedicated stands, make sure to turn OFF the printer and unplug the power cable.

There may be a risk of electric shock.



When you do not use the printer for a long period, make sure to pull out the power plug from the power socket for safety.



Make sure to connect an earth wire to the earth connection that meets the following standards.

- · Earth terminal of power socket
- Earth wire with copper plate which is buried at 650 mm or more, deep in the ground.
- O

Before operation, make sure to read the Material Safety Data Sheet (MSDS).



Ventilate the workplace.

Not doing so may make you feel sick or may lead to a fire.



Right after printing, the media guide becomes very hot.

Allow the media guide to cool down before the next operation.



When loading the roll media, place it on a flat surface such as a desk.

If the roll media is loaded with the scroller up, the scroller may be damaged.



Pay attention to the following points when cutting roll media.

Mishandling the razor blade may cause a cut on your finger or hand.

- When you hold media, do not place your finger on the media cut groove.
- Move the razor blade along the media cut groove.



When cleaning the areas other than the wiper, make sure to turn OFF the power and unplug the power cable.



Move the printer maintaining a horizontal position.

# 1.3 Warning labels

This section explains the handling of warning label, pasting location and types.

Warning labels are attached to parts of the printer that need special caution.

Understand the locations and the descriptions of the danger associated with each label before operating the printer.

### 1.3.1 Handling the warning labels

When handling the warning labels, be careful about the following points.



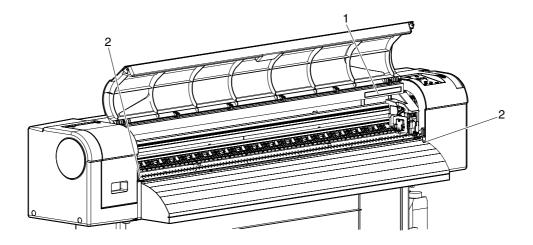
- Check whether all the warning labels can be read.

  If the letters or illustrations on the label are not clear, remove the dirt from the label.
- Use cloth, water and mild detergent for removing dirt from the warning label. Avoid either organic solvents or gasoline.
- It is necessary to replace the labels if they are damaged, lost or illegible. If the warning labels have to be replaced, contact your local MUTOH dealer.

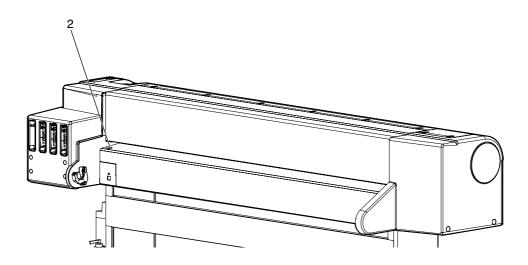
### 1.3.2 Location and type of warning labels

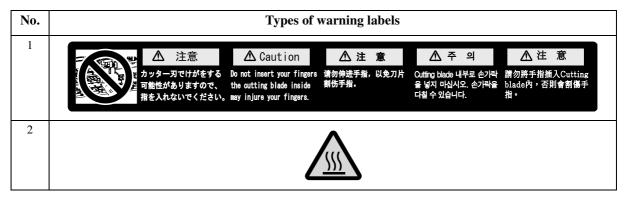
Pasting locations of the warning labels are shown in the following figure.

### (1) Front



### (2) Rear





# 1.4 Operating Instruction Labels

This section explains the handling of operating instruction labels and their locations and types. This printer has some operating instruction labels with simplified operation procedures where special attention is required during operation.

Make sure to fully understand the locations and contents of the labels before operating the printer.

### 1.4.1 Cautions on Handling the Operating Instruction Labels

When handling the operating instruction labels, note the following.

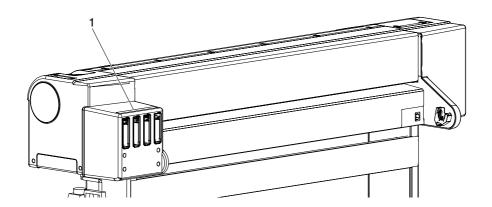


- Check if all of the operating instruction labels can be read.

  If the letters or illustrations on the label are not clear, remove the dirt from the label.
- When cleaning the operating instruction labels, use a cloth, water, and mild detergent. Avoid either organic solvents or gasoline.
- It is necessary to replace the operating instruction labels if they are damaged, lost or unreadable. If the operating instruction labels have to be replaced, contact your local MUTOH dealer.

### 1.4.2 Locations and Types of Operating Instruction Labels

Locations of the operating instruction labels are shown in the following figure.



No.	Types of the operating instruction labels	Reference
1		图 4.1.1 Replacing ink cartridges

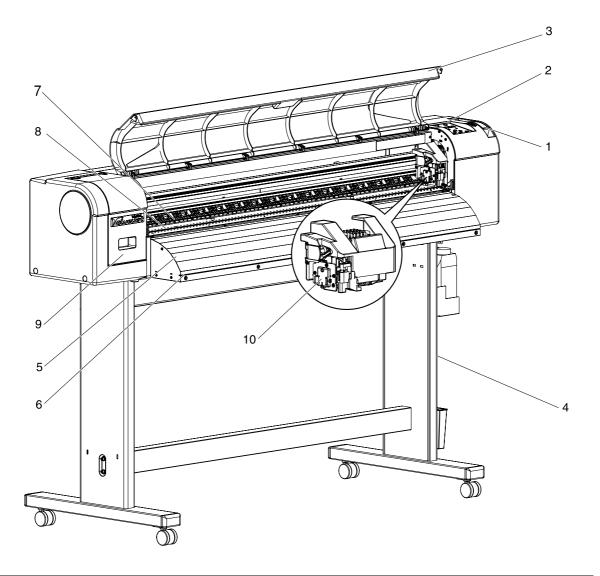
# 2 Product overview

This chapter explains the features of the printer along with the names and functions of each part.

# 2.1 Names of parts and functions

This section explains the names and functions of each part.

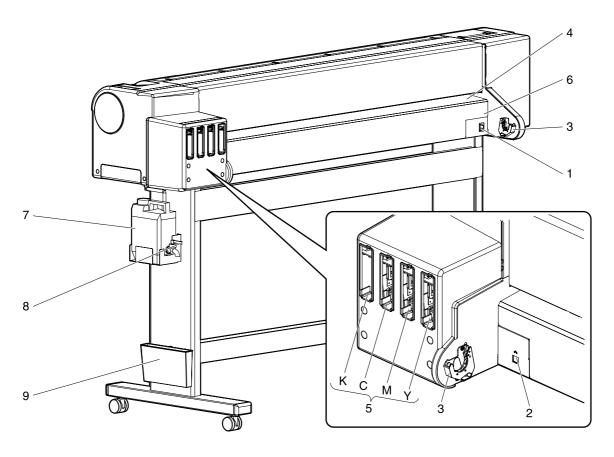
### 2.1.1 Front section



No.	Name	Function
1	Media loading lever	Used for fixing or releasing media.
2	Operation panel	Operation condition setting, printer display and various function settings are performed.
3	Front cover	Used for preventing a user from coming in contact with the driving mechanism during the printer operation.  Opened and closed when media is set or jammed.  It is normally closed.
4	Stand	Used when installing the printer on a flat floor.
5	Media guide	Used for feeding media smoothly when the media is set or printed.

No.	Name	Function
6	Media cut groove	Used to cut media straight.
7	Pressurizing rollers	Installed inside of the front cover. Press and hold the media when printing.
8	Platen	Installed inside of the front cover. Stabilizes the print side of the media.
9	Maintenance cover	Used to prevent the user from touching the inner mechanical section.  Open and close in the following cases.  • When cleaning the cleaning wiper  • When cleaning around the print head.  • When replacing the cutter  It is normally closed.
10	Connector	Used to install spectrophotometer (SPECTROVUE VM-10).

# 2.1.2 Rear section



No.	Name	Function
1	AC inlet	Used for connecting the power cable.
2	Network interface cable connector	Connects a network interface cable.
3	Scroller holder	Set the scroller here when using the roll media.
4	Media feed slot	Used for feeding media.

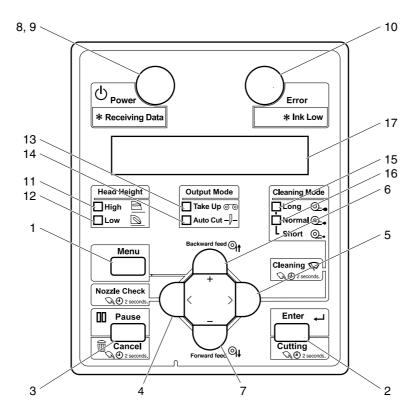
No.	Name	Function
5	Ink cartridge slot	Insert the ink cartridge.
6	Media guide	Used for feeding media smoothly when the media is set or printed.
7	Waste fluid tank	Used for collecting waste ink discharged from the printer.
8	Waste fluid valve	Open and close when discharging the waste fluid from the waste fluid tank. It is normally closed.
9	Book holder	Quick reference etc can be stored.

### 2.1.3 Operation panel

Used to set the operating conditions, to display the status of the printer, and to set various functions. Names of each operation key and status display along with the functions are explained.



- · Refer to the following for details regarding the operation method of the operation panel.
  - When setting the menu from the operation panel: \(\sigma^2 3.8\) Menu setups on the operation panel
  - When performing various operations in the operation panel: \(\mathbb{E}\) 3.7 Operating from the operation panel



### (1) Operation keys

NOTE

• The operation keys are assigned with different functions and names depending on printer status (Normal or Setup menu display).

For details about printer status, refer to "2.2 Printer status".

No.	Name	Normal	Setup menu display
1	[Menu] key	Shifts to the Setup menu.	Shifts from Setup menu display to Normal.
2	[Enter] key	Restarts printing when the printing is suspended.	<ul> <li>Select the menu to be set, and shifts to the next hierarchy.</li> <li>The setting is determined and saved.</li> </ul>
	[Cutting] key	Cuts the media when pressed for more than two seconds.	_
3	[Pause] key	Pauses printing.	_
	[Cancel] key	When printing:     When pressed for more than two seconds, forcefully terminates printing and deletes one file of the remaining data.      When receiving or analyzing data:     When pressed for more than two seconds, deletes the data already received and analyzed.	<ul> <li>Returns to the previous menu hierarchy.         Changes made in the setting are discarded.     </li> <li>Shifts from Setup menu display to Normal.</li> </ul>
4	[<] key	_	_
	[Nozzle Check] key	Press and hold this key for two seconds or more to perform Nozzle Check printing.	_
5	[>] key	Sets Cleaning Mode.     The lamp of Cleaning Mode that you set lights up in green.	Down the menu level in the directory tree.
	[Cleaning] key	When pressed for more than two seconds, cleaning starts.	_
6	[Backward↑] key	Media is fed in the reverse direction.	_
	[+] key	_	<ul> <li>Changes to the previous item in the displayed menu.</li> <li>The setting is changed to the reverse direction.</li> <li>The numeric value is increased during numerical input.</li> </ul>
7	[Forward↓] key	Media is fed in the forward direction.	_
	[-] key	_	<ul> <li>Changes to the previous item in the displayed setting.</li> <li>The setting is changed to the forward direction.</li> <li>The numeric value is decreased during numerical input.</li> </ul>
8	[Power] key	Turns the printer ON and OFF.	Turns the printer ON and OFF.

### (2) Display section

No.	Name	Color	Status	Description
9	Power lamp	Blue	Lamp ON	Power ON.
			Lamp blinks	Receiving and analyzing the data.     Performing media initial operation.
			Lamp OFF	Power OFF.
10	Error lamp	Orange	Lamp ON	An error has occurred. Error content is displayed on the LCD.
			Lamp blinks	The remaining amount of ink is low.
			Lamp OFF	There is no error.
11	High lamp	Green	Lamp ON	The head height is set to High.
			Lamp OFF	The head height is set to Low.
12	Low lamp	Green	Lamp ON	The head height is set to Low.
			Lamp OFF	The head height is set to High.
13	Take Up lamp	Green	Lamp ON	Media ejection mode is set to "Take Up".
			Lamp OFF	Media ejection mode is set to "Off" or "Auto Cut".
14	Auto Cut lamp	Green	Lamp ON	Media ejection mode is set to "Auto Cut".
			Lamp OFF	Media ejection mode is set to "Off" or "Take Up".
15	Long lamp	Green	Lamp ON	<ul><li>Cleaning mode is set to Long.</li><li>When the Normal lamp is also on, Cleaning mode is set to Short.</li></ul>
			Lamp OFF	Cleaning Mode is set to Normal.
16	Normal lamp	Green	Lamp ON	<ul><li>Cleaning Mode is set to Normal.</li><li>When the Long lamp is also on, Cleaning mode is set to Short.</li></ul>
			Lamp OFF	Cleaning Mode is set to Long.
17	LCD display section		_	Displays operation status of the printer or an error message.



<sup>•</sup> When an error requiring a restart (fatal malfunction for the printer operation) occurs, all lamps blink with an alarm.

Left "7.2.3 Error requiring restart" in the Operation Manual

If the error persists even when the malfunction is fixed, contact your local MUTOH dealer.

### 2.2 Printer status

This section explains printer status.

### **2.2.1** Normal

Printing is possible when media is loaded.

The various functions for printing can be performed on the operation panel.

### 2.2.2 Setup menu display

Various settings regarding printing can be made from the operation panel. The various functions for printing can be performed on the operation panel. Display contents in the LCD monitor of the operation panel are as follows.

### 2.2.3 Changing printer status

Follow the procedure below and change printer status.

### (1) Normal → Setup menu display

Press the [Menu] key on the operation panel when the printer is Normal.

• "Menu1: Setup>" is displayed on the operation panel and the display shifts to the Setup menu.

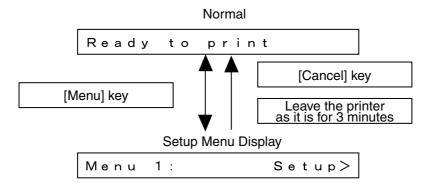


• For details regarding the Setup menu, refer to "3.8 Menu setups on the operation panel".

### (2) Setup menu display $\rightarrow$ Normal

When the printer is at the Setup menu display, perform either of the following operations to shift the operation panel to the Normal display.

- Press the [Cancel] or [Menu] key on the operation panel.
- In the Setup menu, leave the keys untouched for three minutes.





• For details on Status message, refer to "5.4.1 Status messages".

# 3 Basic usage

This chapter explains how to handle this printer.

### 3.1 Print flow chart

The following flow chart illustrates the procedure to perform printing with the printer. Refer to each section as required.

Create print data.

Create print data with application software.

.]

2. Turn the power ON and set the media.

13.5 Loading media

"4.2 Media" in the Operation Manual

 $\downarrow$ 

3. Set up printing conditions.

13.8 Menu setups on the operation panel

 $\downarrow$ 

4. Perform the printing.

13.7 Operating from the operation panel



- Do not place any combustible materials on the platen while the heater is working. There may be a risk of fire.
- Do not spill flammable liquid on the platen.
   This could lead to a fire.



- Do not touch the media guide while printing.

  The media guide becomes very hot and you could burn yourself.
- Do not touch the media feed slot, platen, and media guide while the heater is working.

The media feed slot, platen, and media guide become very hot and you could burn yourself.

Ventilate the workplace.
 Not doing so may make you feel sick or may lead to a fire.

### NOTE

Do not open the front cover and maintenance cover during printing.
 If the front cover/maintenance cover is opened, printing will be interrupted.
 Printing restarts if you close the front cover/maintenance cover. However, the result of your print is not guaranteed.

### 3.2 Power cable connection

This section explains power cable connection.



- Be sure to use the specified power cable.

  Using power cables other than the specified can cause an electric shock or fire.
- Use a power cord set which is compatible with the safety standards, power supply voltage, and plug shape used in the country where this printer is used.
- Use a power cord set which is equipped with a protective earth, and securely connect it to the outlet.
- Do not use a damaged power cable.
   It could lead to an electric shock and fire.

# **A** CAUTION

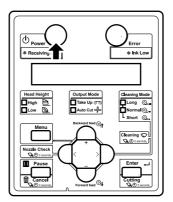
- Pay attention to the following points when handling power cable.
  - Do not tamper with the power cable.
  - Do not put heavy objects on the power cable.
  - Do not bend, twist or pull the power cable by force.
  - Do not route the power cable near heating appliances.

### NOTE

• Contact your local MUTOH dealer in case of power cable damage.

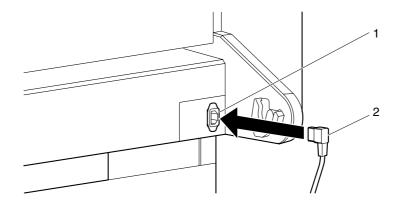
Follow the procedure below to install the power cable.

1. Make sure that the printer is turned OFF.



NOTE

- The power is ON when the [Power] key of the operation panel is pressed in. Press the key once again to turn OFF the power.
- 2. Connect the power cable to the AC inlet on the back of the printer.



No.	Name
1	AC inlet
2	Power cable

3. Insert the power cable plug firmly in the socket.



- Do not pull out or insert the power plug with a wet hand.
   This could lead to an electric shock.
- Make sure to use only the specified power supply (AC 100 V to 120 V or AC 220 V to 240 V).

If a power supply other than the specified voltage is used, it could cause an electric shock and fire.

 Take power for the printer directly from the power socket (AC 100 V - 120 V or AC 220 V - 240 V).

Do not use multiple plugs on the same socket.

This could generate heat and might cause fire.

• Be sure to use a dedicated power socket with earth wire for the power supply, and connect it to the earth wire.

If the earth wire is not connected, an electric shock or fire may occur.

- Do not connect an earth wire to the following places.
  - Gas pipes
     There is a possibility of ignition and explosion.
  - Earth wire of telephone cables and lightning rods Heavy current might flow whenever lightning strikes.
  - Water pipe and faucet
     The earth might not work if a plastic pipe is connected in the middle of the metal pipe.

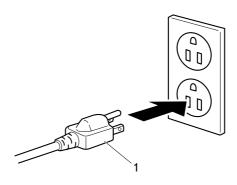


- Pay attention to the following points when handling the power supply plug.
   Any mishandling of the power cable could cause a fire.
  - Make sure that no foreign substances such as dust etc. are stuck to the power plug.
  - Make sure that the power plug is firmly inserted to the edge of the power socket.
- When you do not use the printer for a long period, make sure to pull out the power plug from the power socket for safety.
- Make sure to connect an earth wire to the earth connection that meets the following standards.
  - Earth terminal of power socket
  - Earth wire with copper plate which is buried at 650 mm or more, deep in the ground.

### NOTE

- Contact the retail outlet of purchase if the earth connection cannot be established, or if the earth connection is not given.
- When the power supply of the printer is ON, do not pull out the power cable from the power socket.

Whenever the plug is pulled out from the power socket, allow one minute or more before inserting the plug in the power socket again.



No.	Name
1	Power plug

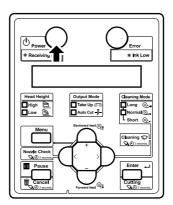
# 3.3 Turning the power ON/OFF

This section explains how to turn the printer ON/OFF.

### 3.3.1 Turning the power ON

Follow the procedure below to turn the power ON.

- 1. Press the [Power] key on the operation panel to turn ON the printer.
  - Power lamp on the operation panel turns on (blue).



- The printer starts initial operation.
- When the initial operation is complete, the printer enters Normal.



• If there is a problem during the initial operation, a message is displayed on the operation panel and the printer may stop operating.

If operation stops, refer to "5.3 Troubleshooting" and deal with the problem.

# 3.3.2 Turning the power OFF

Follow the procedure below to turn the printer OFF.

- 1. Verify the following regarding the operational condition of the product.
  - Printing or other operations are not in progress.
  - The operation panel display is Normal.
  - The Low lamp on the operation panel lights up in green.

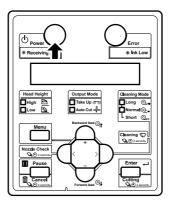
#### NOTE

- If the High lamp on the operation panel lights up in green, the head height is set to High. Return the head height to Low before turning the power OFF.
  - 13 "4.2.5.2 When returning the print head to the original position" in the Operation Manual
- 2. Press the [Power] key on the operation panel to turn OFF the printer.
  - The Power lamp on the operation panel is turned off.

### NOTE

- If the operation panel is in the following status, the power is ON.
  - The [Power] key is pressed in.
  - Power lamp is on (blue).

Press the key once again to turn OFF the power.



- The printer starts the procedure to turn the power OFF.
- "Power Off" is displayed on the operation panel.

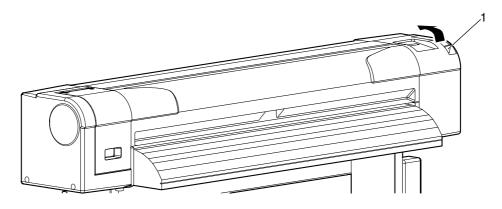
#### NOTE

- If the head height is set to High, "Set Height to Low" is displayed on the operation panel and the procedure to turn the power OFF stops.
  - To restart the procedure, return the head height to Low.
  - 138"4.2.5.2 When returning the print head to the original position" in the Operation Manual
- All the lamps on the operation panel and the LCD monitor are turned OFF.
- The printer automatically turns the power OFF.



- If there is a problem during turning OFF operation, a message is displayed on the operation panel and the printer may stop operating.

  If operation stops, refer to "5.3 Troubleshooting" and deal with the problem.
- After turning OFF the printer, wait for ten seconds or longer to turn it ON again.
- 3. Raise the media loading lever when the product is not used for a long time.



No.	Name
1	Media loading lever

# 3.4 Installing ink cartridges

This section describes the procedure to install the ink cartridges and high capacity pack adapter.



- Before operation, make sure to read the Material Safety Data Sheet (MSDS).
- When handling ink cartridges, pay attention so that ink does not get into your eyes or stick to your skin.
  - If ink gets into your eyes or sticks to your skin, immediately wash it off with water. Failing to do so might cause irritation or light inflammation of eyes. In case of any abnormality, consult a physician immediately.
- Do not disassemble ink cartridges.
   If disassembled, there is a possibility that ink might come into contact with eyes or skin.
- · Do not perform the following operations during ink filling.
  - · Do not turn OFF the printer.
  - Do not unplug the power cable.
  - · Do not open the front cover.
  - Do not raise the media loading lever.

#### NOTE

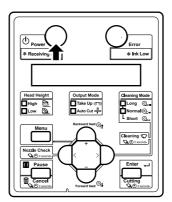
- Do not share the ink cartridge once installed with another printer. The cartridge will not be usable from that time onward.
- Use genuine ink cartridges or ink packs for charging.
   This printer is designed to use genuine ink cartridges or ink packs.
   If you use ink cartridges or ink packs which are not produced by the original manufacturer,
  - Printing might become blurred and the end of the ink in the cartridge or pack might not be detected correctly.
  - Any problems caused by using an ink cartridge or pack other than those recommended above will not be covered by the warranty, and repair expenses will be paid by the customer.
- For types and details of ink cartridges or ink packs and ink packs, contact your local MUTOH dealer.
- Do not give ink cartridges or ink packs strong shakes. Doing so may cause ink leakage.
- Do not disassemble ink cartridges or ink packs . A disassembled ink cartridge cannot be used.
- Make sure to use the dedicated cleaning fluid (Model number: VJ-MSINK3-CL220/VJ-MSINK3-CL1000).
- Before installing the ink cartridges or ink packs, shake it gently. Doing so will preserve print quality.
- When an ink cartridges or ink packs is moved from a cold place to warm place, keep the ink cartridges or ink packs for three hours or more in the new printing environment before printing.
- Do not insert or remove the ink cartridges or ink packs more than 10 times.

  If the ink cartridge has been removed/inserted more than 10 times, it cannot be used even though ink remains.
- The ink cartridges and ink packs for this printer have dedicated IC chip on them. If removing/inserting the ink cartridges or ink packs and high capacity pack adapters (option) in the following situations, the information within the IC chips may be damaged and the cartridges cannot be used.
  - During printing
  - · For several seconds after inserting the ink cartridge

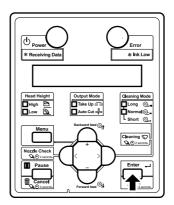
# 3.4.1 Installing 220ml ink cartridges

Follow the procedure below to install the 220ml ink cartridge.

1. Turn the printer ON.

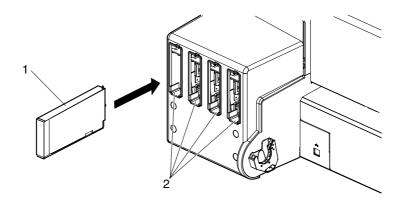


- The printer starts the initializing operation.
- After the initial operation is compete, "Start Ink Charge > E" is displayed on the operation panel.
- 2. Press the [Enter] key on the operation panel.



- "Insert CleaningCart." is displayed on the operation panel.
- 3. Take out the cleaning cartridge from the bag.

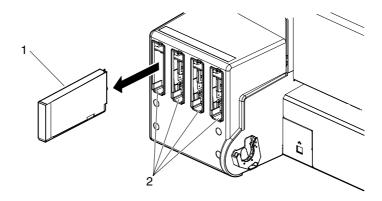
- 4. Set the cleaning cartridge to the ink cartridge slot.
  - Keep ▲ mark of the cleaning cartridge facing up and insert towards the printer side.
  - Insert the cleaning cartridge all the way to the end of the slot.



No.	Name
1	Cleaning cartridge
2	Ink cartridge slots

- When all cleaning cartridges are installed, "Busy-Washing" is displayed on the operation panel, and the printer starts charging the cleaning fluid.
- When the cleaning fluid has been charged, "Remove Cartridges" is displayed on the operation panel.

5. Remove all cleaning cartridges.

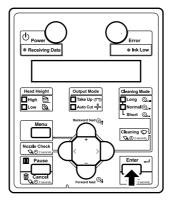


No.	Name
1	Cleaning cartridge
2	Ink cartridge slots

- "Busy-Washing" is displayed on the operation panel and the printer starts head cleaning.
- When head cleaning is complete, "Wash retry? No" is displayed on the operation panel.

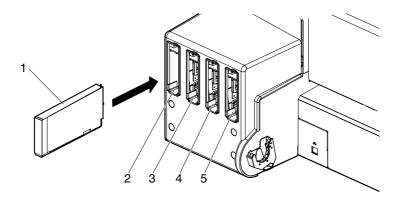


- When performing head cleaning again before ink charge, press the [+] or [-] key on the operation panel to select "Yes", and press the [Enter] key to perform head cleaning.
- 6. Press the [Enter] key on the operation panel.



• "Insert InkCartridges" is displayed on the operation panel.

- 7. Take out the ink cartridge from the bag and shake it gently two to three times and insert it into the printer.
  - Make sure that the ink cartridges are inserted into the correct slots.
     Match the mark in front of the slot and the color of the ink before inserting the ink cartridge.
  - Keep ▲ mark of the ink cartridge facing up and insert towards the printer side.
  - Insert the ink cartridge all the way to the end of the slot.



No.	Name
1	Ink cartridge
2	Ink cartridge slot K
3	Ink cartridge slot C
4	Ink cartridge slot M
5	Ink cartridge slot Y

- "Ink Refill \*\*%" is displayed on the operation panel and initial ink charge starts.
- Initial ink charge takes about four minutes.

  Ink filling operation and pause operation are repeated during the initial ink charge.
- When "100%" is displayed, the initial ink charge is complete.



- Do not perform the following operations during ink filling. If filling is interrupted, ink will be lost when filling is resumed.
  - Do not turn OFF the printer.
  - Do not unplug the power cable.
  - Do not open the front cover.
  - Do not open the maintenance cover.
  - · Do not raise the media loading lever.
- After the initial ink charge is complete, "Media End" is displayed on the operation panel.

#### NOTE

- If the printer perform the nozzle check printing immediately after initial ink charge is complete, the following results may occur.
  - Printed lines become blurred.
  - The data is partially not printed.

In such cases, follow "4.2.3 Head cleaning" and refill a small amount of ink. Then, check the printing result.

If there is no improvement in the print result even after refill a small amount of ink, leave the printer unused for an hour or more. Then, refill a small amount of ink again and check the print result.

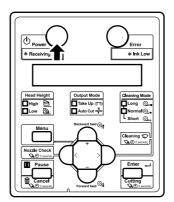
If there is still no improvement, contact your local MUTOH dealer.

## 3.4.2 Installing high capacity pack adapters (optional)

Use the optional high capacity pack adapters to use the 1000ml ink packs on this printer.

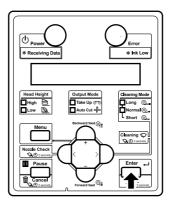
Follow the procedure below to install the high capacity pack adapters.

1. Turn the printer ON.



- The printer starts the initializing operation.
- After the initial operation is compete, "Start Ink Charge > E" is displayed on the operation panel.

2. Press the [Enter] key on the operation panel.



- "Insert Cleaning cart." is displayed on the operation panel.
- 3. Take out the cleaning fluid packs (4 pieces) from the bag.
- 4. Install the cleaning fluid pack and smart chip card to the high capacity pack adapters.



• To install or remove the cleaning fluid pack and smart chip card to/from the high capacity pack adapter, refer to the operation manual included with high capacity pack adapter.

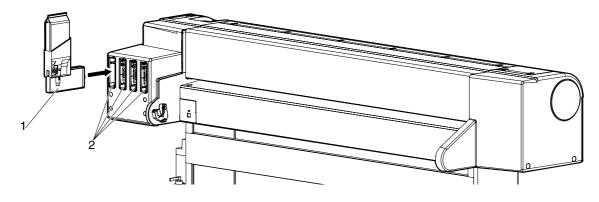
5. Insert the high capacity pack adapters into the ink cartridge slot.

#### NOTE

• Do not insert the high capacity pack adapter into the ink cartridge slot without a cleaning fluid pack attached.

The information of the remaining amount will be overwritten and the cleaning fluid pack will not be usable.

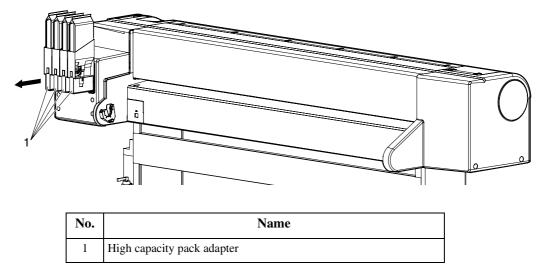
• Insert the high capacity pack adapter all the way to the end of the slot.



No.	Name
1	High capacity pack adapter
2	Ink cartridge slots

- When all high capacity pack adapters are installed, "Busy-Washing" is displayed on the operation panel, and the printer starts charging the cleaning fluid.
- When the cleaning fluid has been charged, "Remove Cartridges" is displayed on the operation panel.

6. Remove all the high capacity pack adapters.

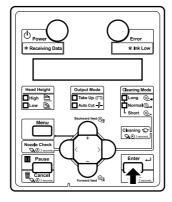


- "Busy-Washing" is displayed on the operation panel and the printer starts head cleaning.
- When head cleaning is complete, "Wash retry? No" is displayed on the operation panel.



Do not remove only cleaning fluid pack while high capacity pack adapter is installed on the printer. The information of the remaining smart chip card will be rewritten and the cleaning fluid pack will not be usable.

7. Press the [Enter] key on the operation panel.



• "Insert InkCartridges" is displayed on the operation panel.

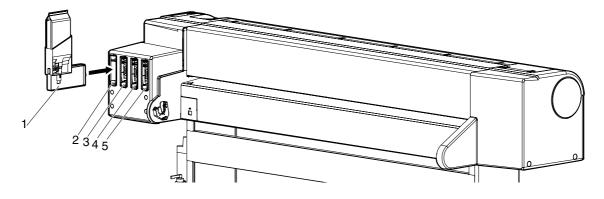
8. Remove the cleaning fluid pack and smart chip card from the high capacity pack adapter.

NOTE

- When there is remaining cleaning fluid pack and smart chip card, clarify the corresponding pack and card, and store it as a set.
- 9. Install the ink pack and smart chip card to high capacity pack adapter.
- 10. Shake the high capacity pack adapter gently two to three times and insert it to the slot.

NOTE

- Do not insert the high capacity pack adapter into the ink cartridge slot without a cleaning fluid pack attached.
  - The information of the remaining amount will be overwritten and the cleaning fluid pack will not be usable.
- Insert the high capacity pack adapter all the way to the end of the slot.



No.	Name
1	High capacity pack adapter
2	Ink cartridge slot K
3	Ink cartridge slot C
4	Ink cartridge slot M
5	Ink cartridge slot Y

- When a high capacity pack adapter is installed, "Ink Refill \*\*%" is displayed on the operation panel and ink replenishment starts.
- Initial filling takes about four minutes.

  Ink filling operation and pause operation are repeated during the ink replenishment.
- When "100%" is displayed, the ink replenishment is complete.

#### A CAUTION

- Do not perform the following operations during ink filling. If filling is interrupted, ink will be lost when filling is resumed.
  - Do not turn OFF the power of the printer.
  - Do not unplug the power cable of the printer.
  - Do not open the front cover.
  - Do not open the maintenance cover.
  - · Do not raise the media loading lever.
- After the ink replenishment is complete, "Media End" is displayed on the operation panel.

#### NOTE

- If the printer performs the nozzle check printing immediately after initial ink replenishment is complete, the following results may occur.
  - Printed lines become blurred.
  - The data is partially not printed.

In such cases, follow "4.2.3 Head cleaning" and refill a small amount of ink. Then, check the printing result.

If there is no improvement in the print result even after refill a small amount of ink, leave the printer unused for an hour or more. Then, refill a small amount of ink again and check the print result.

If there is still no improvement, contact your local MUTOH dealer.

# 3.4.3 When using the high capacity pack adapter for the printer whose ink is charged for the first time

The air inside the high capacity pack adapter goes into the printer ink tube and may cause nozzle clogging. Make sure to perform initial ink charge from the Cleaning menu in the following case.

- When using the high capacity pack adapter for the printer whose ink is charged for the first time
- When replacing the high capacity pack adapter's adapter itself with a new one

15.3 Cleaning menu" in the Operation Manual

# 3.5 Loading media

This section explains how to load and set media, and settings for each media type.



- Refer to the following for details about handling media. \[ \mathbb{E}^\mathbb{"}4.2 \text{ Media}^\mathbb{"} in the Operation Manual
- For details of the recommended media, contact your local MUTOH dealer.

#### 3.5.1 Loading roll media

This section describes the procedure to load the roll media. To load the roll media, use the scroller included with the printer.



- The following roll media can be loaded on the scroller included with the printer.
  - Media tube with a diameter of three inches: Less than 150mm in outer diameter, less than 19kg in weight
  - Media tube with a diameter of two inches: Less than 150mm in outer diameter, less than 19kg in weight

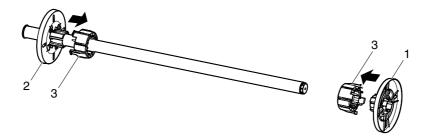
Follow the procedure below to load the roll media.



• When loading the roll media, place it on a flat surface such as a desk.

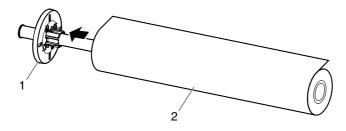
If the roll media is loaded with the scroller up, the scroller may be damaged.

1. When using the roll media with the media tube width of two inches, remove the attachments for three-inch media from the movable media stopper and fixed media stopper.



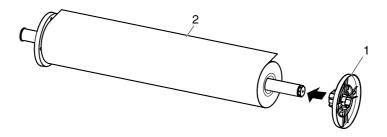
No.	Name
1	Movable media stopper
2	Fixed media stopper
3	Attachments for three-inch media

- 2. To set the roll media on the scroller, make sure that the paper is rolled counter-clockwise when seen from the fixed media stopper.
- 3. Insert the roll media all the way till its core touches the right edge of the fixed media stopper.



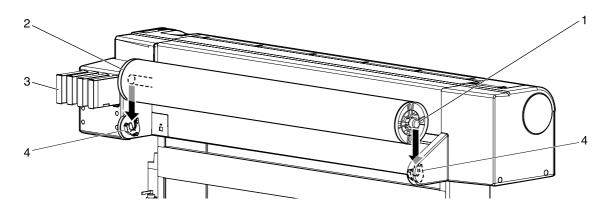
No.	Name
1	Fixed media stopper
2	Roll media

4. Attach the movable media stopper firmly to the core of the roll media.



No.	Name
1	Movable media stopper
2	Roll media

5. Set the scroller on the holder with the fixed media stopper on the ink cartridge slot side.



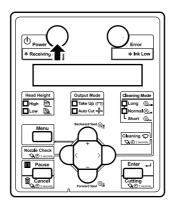
No.	Name
1	Scroller
2	Fixed media stopper
3	Ink cartridge slots
4	Scroller holder

## 3.5.2 Setting Roll Media

This section explains how to set the roll media.

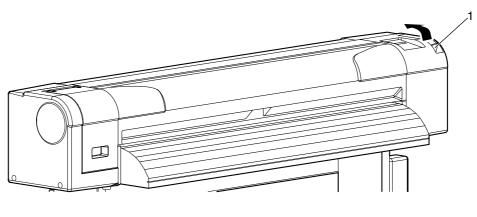
Follow the procedure below to set the roll media.

1. Turn the printer ON.





- Do not operate the media loading lever during the initial operation or printing. The print head portion may touch the pressurizing roller portion, and cause a malfunction.
- The printer starts the initializing operation.
- "Media End" is displayed on the operation panel.
- 2. Raise the media loading lever.



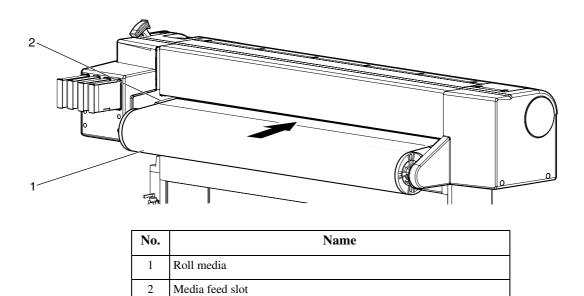
No.	Name
1	Media loading lever

• "Lever Up" is displayed on the operation panel.

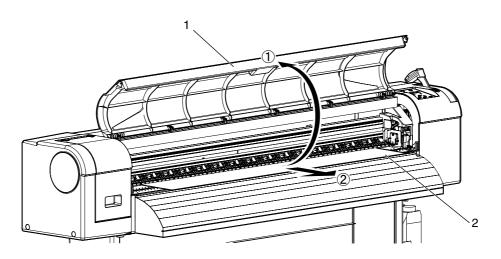
3. Set the roll media to the media feed slot.

NOTE

• If the end of the roll media is not wound tightly, wind it tightly again, and then load it.

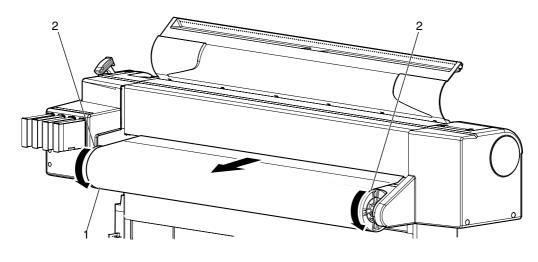


4. Open the front cover to pull out the roll media.



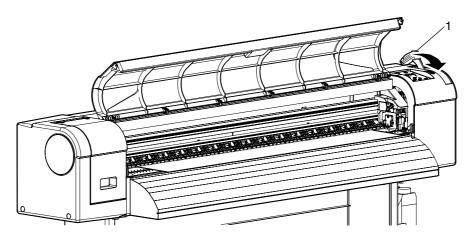
No.	Name
1	Front cover
2	Roll media

5. While holding the edge of the media, rewind the roll media a little by turning the scroller by hand and eliminate any slack or slant.



No.	Name
1	Roll media
2	Scroller

6. Lower the media loading lever.

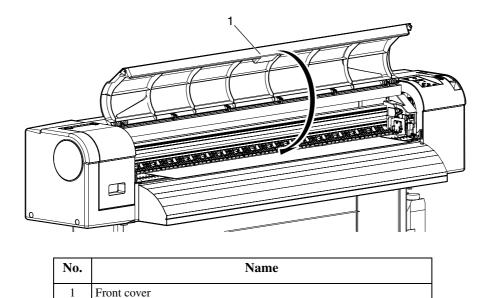


No.	Name	
1	Media loading lever	

NOTE

• When loading the new roll media, cut the front edge of the media if it is not straight. \(\mathbb{E}\)3.7.3 Cutting media

#### 7. Close the front cover.



• The User type setup menu is displayed on the operation panel.



• To change the media type, follow IP"3.4.3 Setting the User Type Setting" in the Operation Manual and set the media type.

# 3.6 Connecting the printer to PC

This section explains how to connect the printer and a PC.

#### 3.6.1 System requirements

The following are the system requirements for this printer.

Operating system	Windows 2000 Professional, Windows XP Professional, Windows Vista Business, Windows 7 Professional, and Windows Server 2003
CPU	Pentium 4 processor 2.5GHz or more
Memory (RAM)	Requires 1GB or more
Hard disk free space	Requires 20GB or more



- The required memory varies depending on the application software or the print data type.
- · A large hard disk and memory are recommended.

#### 3.6.2 Preparing cables

The printer is equipped with a network interface for connecting with a PC. You need a network interface cable to connect a PC with this printer. Prepare the cable depending on the PC that it will be connected to.



- About connecting a network interface cable, refer to "3.6.3 Connecting a network interface cable".
- For recommended cable specifications, refer to "8.2 Interface specification" in the Operation Manual.

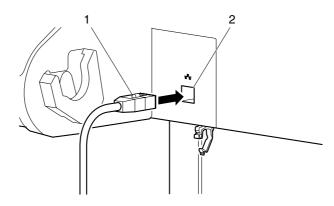
## 3.6.3 Connecting a network interface cable

This section explains how to connect a network interface cable.

Follow the procedure below to connect this printer to your PC.

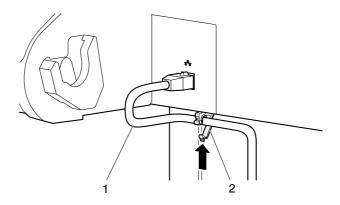
1. Turn OFF both the printer and PC.

2. Insert the network interface cable into the network interface connector located on the back of the printer.



No.	Name
1	Network interface cable
2	Network interface cable connector

3. Fix the network interface cable to the cable clamp.



No.	Name
1	Network interface cable
2	Cable clamp

4. Connect the other connector of the network interface cable to your PC.



- About connecting to your PC, refer to the operation manual included with the PC.
- For network setting on the side of the printer, refer to "3.8.2 Panel setup menu overview".

# 3.7 Operating from the operation panel

This section explains various functions that can be operated from the operation panel.



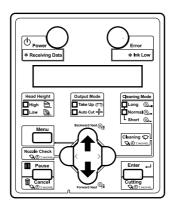
• For names and functions of each key, refer to "2.1.3 Operation panel".

## 3.7.1 Feeding media

You can feed the roll media at a position that you want.

Follow the procedure below to feed media.

- 1. Confirm that the operation panel is Normal.
- 2. Make sure that the media loading lever is lowered.
- 3. Press the [Forward $\downarrow$ ] key or the [Backward $\uparrow$ ] key on the operation panel.



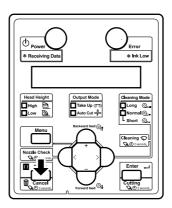
- Media is fed forward or backward.
- 4. Release the [Backward↑] key or [Forward↓] key on the operation panel after feeding media to the desired position.

## 3.7.2 Stopping printing operation

If you want to stop printing for some reason, operate as follows.

1. Stop sending printing data from the computer to the printer.

2. Press the [Cancel] key on the operation panel for two seconds.



• The printer operates as follows.

Printer status	Operation with the [Cancel] key pressed for two seconds
During printing	Terminates the printing, and deletes one data remaining in the printer.
Receiving data/analyzing data	Deletes the data already received and converted.



• If a large amount of data is saved on the printer, the operation panel may not return to Normal by a single [Cancel] key operation.

In such cases, wait for a few seconds and press the [Cancel] key again.

## 3.7.3 Cutting media

If Media ejection mode is set to "Cut", the printer cuts the media automatically after printing.

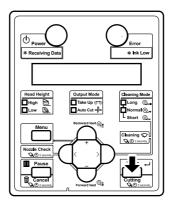
15.1.6 Output Mode menu" in the Operation Manual

If you press the [Cutting] key on the operation panel more than two seconds while the operation panel is Normal, you can cut the media at the desired position.

Follow the procedure below to cut the roll media.

1. Confirm that the operation panel is Normal.

2. Press the [Cutting] key on the operation panel for more than two seconds.



• The printer feeds the roll media to the length of the margin and cuts the media.



- When loading the new roll media, cut the front edge of the media if it is not straight.
- The cutter is a consumable component.
   Replace it periodically.
   LF 4.1.2 Replacing Cutter
- When the media detection is set to "Off", the media cannot be cut automatically.

## 3.7.4 Cutting media manually

This section explains how to cut the roll media manually.



Right after printing, the media guide becomes very hot.
 Allow the media guide to cool down before the next operation.

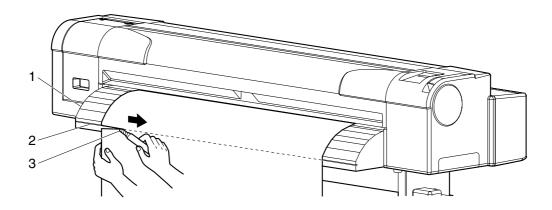
Follow the procedure below to cut the roll media.

- 1. Verify the following regarding the operational condition of the product.
  - Printing or other operations are not in progress.
  - The operation panel display is Normal.
- 2. To change the position to cut the roll media, refer to 13.7.1 Feeding media" and advance the roll media to the desired cut position.

3. Place a razor blade on the media cut groove on the media guide, and cut the roll media.



- Pay attention to the following points when cutting roll media.
   Mishandling the razor blade may cause a cut on your finger or hand.
  - When you hold media, do not place your finger on the media cut groove.
  - Move the razor blade along the media cut groove.



No.	Name
1	Media guide
2	Media cut groove
3	Razor blade

• The procedure for cutting the roll media is complete.



• When loading the new roll media, cut the front edge of the media if it is not straight.

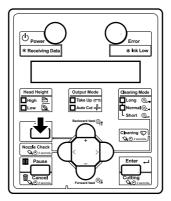
## 3.7.5 Changing and confirming settings while printing

While the printer is operating, you can change or confirm settings for the Panel setup menu.

#### 3.7.5.1 Procedure for changing and confirming settings while printing

Follow the procedure below to change or confirm settings for the Panel setup menu.

- 1. Confirm that the printer is in one of the following conditions.
  - Receiving data
  - Analyzing data
  - Printing data
- 2. Press the [Menu] key on the operation panel.



- "Menu5: Temperature" is displayed on the operation panel.
- 3. Press the [+] key or [-] key to change or confirm settings.



• For the setting items whose settings can be changed or confirmed, refer to "3.7.5.2 Settings that can be changed or confirmed while printing".

#### 3.7.5.2 Settings that can be changed or confirmed while printing

NOTE

• When you change a setting during operation, be sure to select "Backup" to save the setting that you changed.

If the printer returns to Normal without "Backup" being selected, the changed setting is not saved.

Setup item	Setting	Description
Temperature	Pre	Checks the current temperature of the pre-heater.
	Platen	Checks the current temperature of the platen heater.
	Dryer	Checks the current temperature of the dryer.
Pre heater	Off / 30 °C to 50 °C	Changes the temperature of the pre-heater.
Platen heater	Off / 30 °C to 50 °C	Changes the temperature of the platen heater.
Dryer	Off / 30 °C to 50 °C	Changes the temperature of the dryer.

Setup item	Setting	Description
PF Adjust	-5.00%~0.00~5.00%	Change the feed adjustment value.
Backup	_	• [Enter] key: Save the changed setting.
	_	[Cancel] key: The printer returns to Normal.

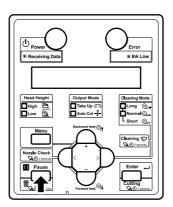
## 3.7.6 Pausing printing

It is possible to pause to print during printing.

Follow the procedure below to pause or restart printing.

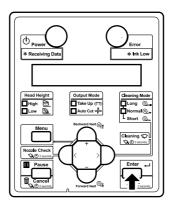


- If the printing is paused, the print quality will not be guaranteed.
- 1. Check that the printer is in operating.
- 2. Press the [Pause] key on the operation panel.



- The printer pauses printing.
- "PrintRestart -> ENTER" is displayed on the operation panel.

3. To restart printing, press the [Enter] key on the operation panel.



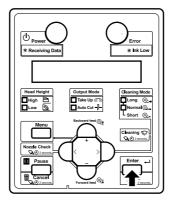
• The printer restarts printing.

#### 3.7.7 Start Printing during Warm up

You can start printing even when the heater temperature has not reached the preset value while the printer is being warmed up.



- Even when printing is started during warm up, the printer continues to be warmed up until the preset temperature has been reached.
- When printing is started during warm up, the print quality is not guaranteed.
- 1. Check if the printer is the printer is being warmed up.
  - "Warming Up" is displayed on the operation panel.
- 2. Send the data.
  - "Warming Up" "Skip -> ENTER" is displayed on the operation panel.
- 3. When printing during warm up, press the [Enter] key on the operation panel.



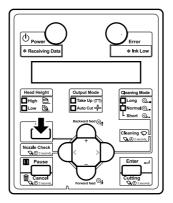
• The printer starts printing.

# 3.8 Menu setups on the operation panel

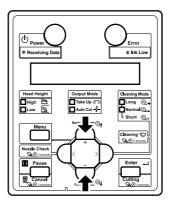
#### 3.8.1 Menu setup procedure

Follow the procedure below to configure each setup menu.

- 1. Confirm that the operation panel is Normal.
- 2. Press the [Menu] key on the operation panel.



- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.
- 3. Press the [+] key or [-] key on the operation panel to select a setup item and press the [Enter] key.

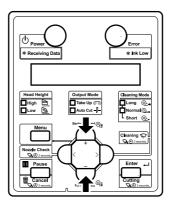


- The settings will be confirmed.
- When setup items have a submenu, the display shifts to the next menu.

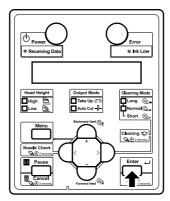


• When a setup item has a submenu, ">" is displayed on the right end of the LCD monitor of the operation panel.

4. The setting in the blinking part on the LCD monitor of the operation panel can be changed. Press the [+] key or [-] key to change the set value.



5. To save the changed setting, press the [Enter] key on the operation panel.

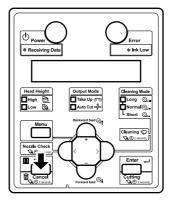


• The setting is saved and the next setup item is displayed.



• If you press the [Cancel] key, [+] key or [-] key without pressing [Enter] key after changing a setting, the change will not be saved.

6. Press the [Cancel] key on the operation panel to exit from the setup.



- The previous setup menu is displayed.
- When the main menu is displayed, the screen turns to Normal.

## 3.8.2 Panel setup menu overview

This section explains the Panel setup menu of the printer. There are the following items in the Panel setup menu.

Setup item	Description
Setup menu	Various settings of the printer are configured.
Test Print menu	Performs nozzle check of the print head and setup list.
Cleaning menu	Performs head cleaning.
Menu Option menu	Sets up the contents of the Setup menu.
Version menu	Displays the versions of the firmware.
Sleep Mode menu	Sleep mode settings are configured.
Display menu	Sets the language and unit displayed on the LCD monitor of the operation panel.



• For details regarding the Setup menu, refer to "5 Panel setup menu" in the Operation Manual.

# 3.9 Using spectrophotometer (SPECTROVUE VM-10)

The optional spectrophotometer (SPECTROVUE VM-10) can be attached to print and measure the color target. Performing color calibration or profiling of the printer by using RIP software compatible with SPECTROVUE VM-10 enables printing with more accurate colors.

For more information about the option, contact your local MUTOH dealer.

Follow the procedure below.

#### NOTE

- Do not install the printer in a place that is subject to strong light (sunlight, etc). Getting strong light on the color measurement may affect the measurement accuracy.
- To use SPECTROVUE VM-10, the printer setting must be as follows. Make sure the setting before use.
  - Media detection: Top & Width or Width
  - Output mode: Off or Auto Cut 译"5.1.6 Output Mode menu" in the Operation Manual
- When the color target is printed on the translucent or colored media, or the media with patterned indented surfaces, color measurement may not be accurate.
- For details on spectrophotometer (SPECTROVUE VM-10), refer to its operation manual as well.
- When measuring colors, make sure that the color target is dry. If it is not dry enough, the ink may adhere to the pressurizing rollers of the printer.
- 1. Connect the printer and computer. \$\sum\_3.6\$ Connecting the printer to PC
- 2. Turn the printer ON.
- 3. Set the media.

  \$\times 3.5 \text{ Loading media}\$
- 4. Set the user type setting.

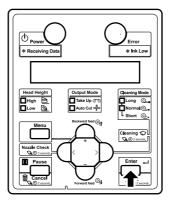
13.4.3 Setting the User Type Setting" in the Operation Manual

• When the user type setting and media initial operation are complete, "Ready to Print" is displayed on the operation panel.

5. Start RIP software to print and measure the color target.

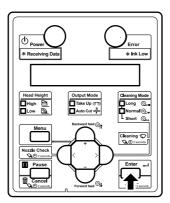


- For the setting and operations of the RIP software, refer to its operation manual.
- The printer starts printing the color target.
- "Printing" is displayed on the operation panel.
- After printing is complete, "Attaching instrument [ENTER]" is displayed on the operation panel.

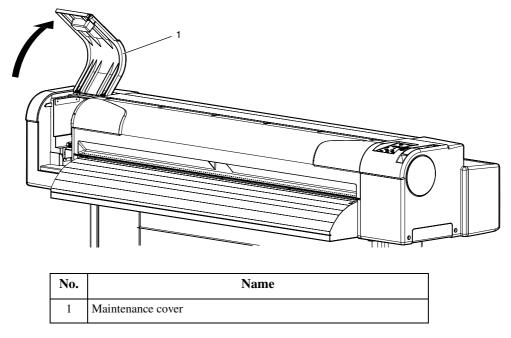


NOTE

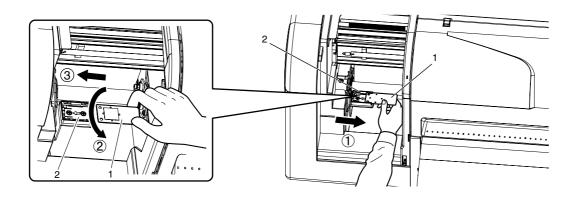
- Do not open the covers or move media loading lever during printing.
- 6. Press the [Enter] key.
  - "Open mainte. cover." is displayed on the operation panel.



- 7. Open the maintenance cover.
  - "Set white plate then close mainte. cover." is displayed on the operation panel.



8. Remove the while reference plate from the plate installation place, turn it over so that the white side faces up, and install it back to the original place.



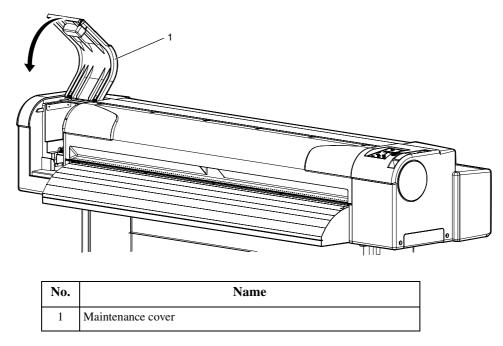
No.	Name
1	White reference plate
2	Plate installation place

NOTE

• Before measuring the color target, make sure that the white side of the white reference plate is facing up.

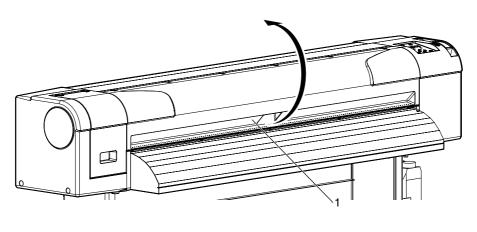
If the black side is facing up, it will not be measured accurately.

- 9. Close the maintenance cover.
  - "Open front cover." is displayed on the operation panel.



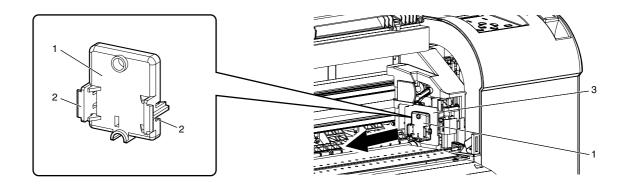
#### 10. Open the front cover.

• "Remove connector cap and attach instrument [ENTER]" is displayed on the operation panel.



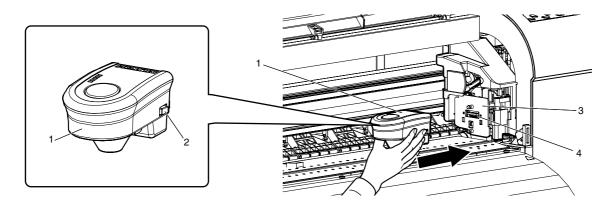
No.	Name
1	Front cover

11. Firmly pinch the tabs on both sides of the connector cap with your fingers, pull the connector cap forward to remove it from the print head.



No.	Name
1	Connector cap
2	Tabs
3	Print head section

12. Press the release buttons on both sides of spectrophotometer (SPECTROVUE VM-10), install it to the connector at the print head.



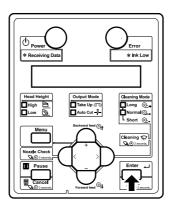
No.	Name
1	Spectrophotometer
2	Release buttons
3	Print head section
4	Connector

## NOTE

• Make sure that spectrophotometer is NOT installed at an angle, and that there in no gap between the connector and spectrophotometer.

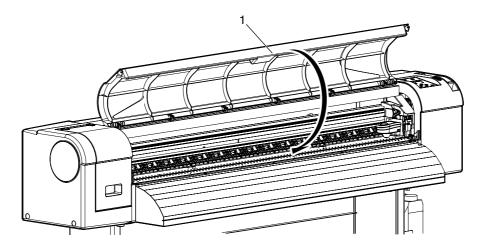
# 13. Press the [Enter] key.

- The printer checks the connection between the printer and spectrophotometer.
- "Close front cover" is displayed on the operation panel.



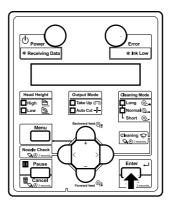
#### 14. Close the front cover.

- "Wait for a while..." is displayed on the operation panel.
- The printer starts white calibration.



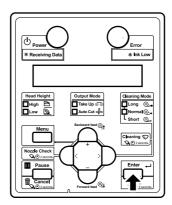
No.	Name
1	Front cover

- 15. When "Start measurement [ENTER]" is displayed on the operation panel, press the [Enter] key.
  - Spectrophotometer starts measuring the color target.
  - "Measuring..." is displayed on the operation panel.
  - After measuring is complete, "Detaching instrument [ENTER]" is displayed on the operation panel.



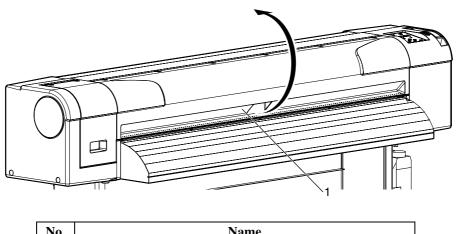
### NOTE

- Color measurement starts either automatically or manually, depending on the RIP software feature. The steps above are for manual measurement.
- When the measurement starts automatically, "Ink Drying xxxxxs" (xxxxx is a number) may be displayed on the operation panel.
- Do not open the covers or move media loading lever during measuring.
- 16. Press the [Enter] key.
  - "Open front cover" is displayed on the operation panel.



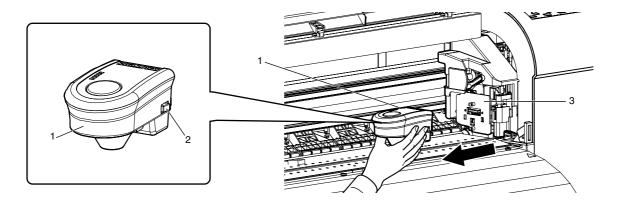
#### 17. Open the front cover.

• "Detach instrument and set connector cap. [ENTER]" is displayed on the operation panel.



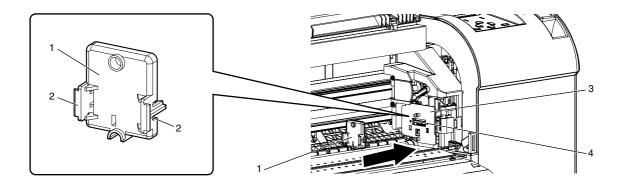
No.	Name
1	Front cover

18. While pressing the release buttons on both sides of spectrophotometer, pull it forward to remove it from the print head.



No.	Name
1	Spectrophotometer
2	Release buttons
3	Print head section

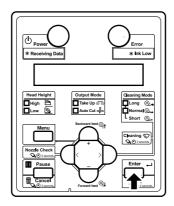
19. Firmly pinch the tabs on both sides of the connector cap with your fingers, and install it to the connector at the print head.



No.	Name
1	Connector cap
2	Tabs
3	Print head section
4	Connector

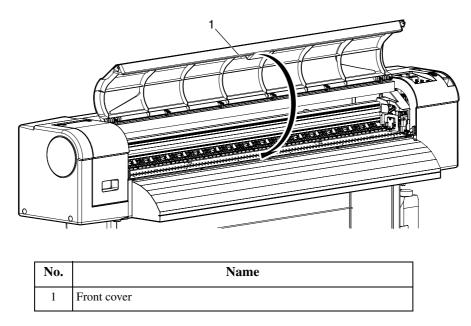
#### 20. Press the [Enter] key.

- "Wait for a while..." is displayed on the operation panel.
- Make sure that the connector cap is installed on the printer.
- "Close front cover" is displayed on the operation panel.



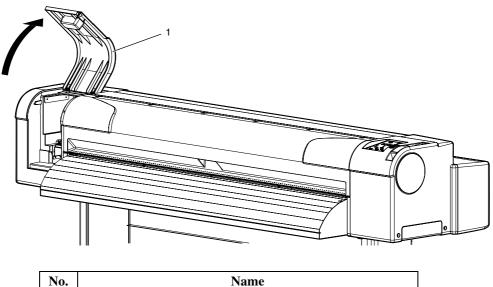
#### 21. Close the front cover.

• "Open mainte. cover." is displayed on the operation panel.



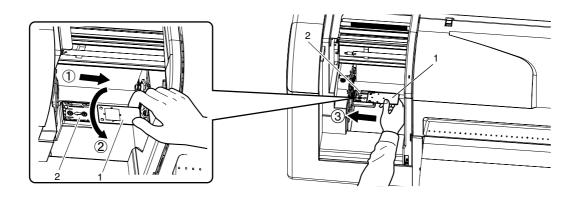
# 22. Open the maintenance cover.

• "Remove white plate then close mainte. cover." is displayed on the operation panel.



I	No.	Name
	1	Maintenance cover

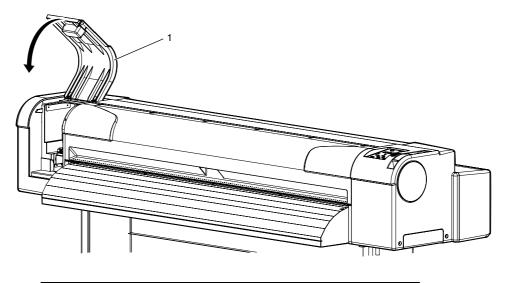
23. Remove the white reference plate from the plate installation place, turn it over so that the black side faces up, and install it back to the original place.



No.	Name
1	White reference plate
2	Plate installation place



- When the white reference plate is not in use, make sure that it is turned over facing down to avoid any contamination.
- 24. Close the maintenance cover.
  - "Ready to Print" is displayed on the operation panel.
  - For the subsequent operations, follow the instructions of the RIP software.



No.	Name
1	Maintenance cover

# 4 Daily maintenance

This chapter explains daily maintenance.

# 4.1 Replacing consumable components

This section describes the replacement time and steps of ink cartridge (or ink packs), roll media, razor blade.

### 4.1.1 Replacing ink cartridges

This section describes when to replace the ink cartridges.

#### (1) Replacement time

- a. When "[\*\*\*\*] Ink Low" is displayed on the operation panel
  - This message is displayed when there is a small amount of ink remaining in the ink cartridge.
  - The alarm buzzer sounds.

    To stop the buzzer, press the [Enter] key on the operation panel.
  - Replace with the new ink cartridge.
- b. When "[\*\*\*\*] Ink End" is displayed on the operation panel
  - This message is displayed when there is no ink remaining in the ink cartridge.
  - The alarm buzzer sounds.

    To stop the buzzer, press the [Enter] key on the operation panel.
  - Immediately replace it with the new ink cartridge.

#### NOTE

- [\*\*\*\*] in the messages for ink cartridge replacement indicates the color that is almost empty or runs out, using the following characters.
  - · K: Black
  - C: Cyan
  - M: Magenta
  - Y: Yellow
- Do not insert or remove the ink cartridge except at the time of replacement.
   Inserting or removing the ink cartridge mixes air into the ink tube, and failures such as nozzle clogging trouble may occur.
- If "Ink End" is displayed, the printing operation stops.
- If "Ink End" is displayed, you cannot print until inserting the new ink cartridge.
- If there is no cartridge for replacement at hand, leave the empty ink cartridge inserted in the printer. Leaving the printer with the ink cartridge removed may result in clogging of the print head.

#### (2) Type

Our genuine ink cartridges that are compatible with the printer are as follows.

Description	Model No.
Ink cartridge K (Black: 220 ml)	VJ-MSINK3A-BK220
Ink cartridge C (Cyan: 220 ml)	VJ-MSINK3A-CY220
Ink cartridge M (Magenta: 220 ml)	VJ-MSINK3A-MA220
Ink cartridge Y (Yellow: 220 ml)	VJ-MSINK3A-YE220
Ink cartridge K (Black: 1,000ml)	VJ-MSINK3-BK1000
Ink cartridge C (Cyan: 1,000ml)	VJ-MSINK3-CY1000
Ink cartridge M (Magenta: 1,000ml)	VJ-MSINK3-MA1000
Ink cartridge Y (Yellow: 1,000ml)	VJ-MSINK3-YE1000

#### NOTE

- To use 1000ml ink packs, high capacity pack adapters (option) are required. For details on high capacity pack adapters, contact your local MUTOH dealer.
- Use genuine ink cartridges for replacement.
   This printer is designed to use genuine ink cartridges.
   If you use an ink bag that is not a product of the original manufacturer,
  - Printing might become blurred, or the end of the ink in the pack might not be detected correctly.
  - Any problems caused by using an ink bag other than those recommended above will not be covered by the warranty, and repair expenses will be paid by the customer.

#### (3) Replacing steps

Follow the procedure below to replace the ink cartridges.



- Before operation, make sure to read the Material Safety Data Sheet (MSDS).
- When handling ink cartridges, pay attention so that ink does not get into your eyes or stick to your skin.

If ink gets into your eyes or sticks to your skin, immediately wash it off with water. Failing to do so might cause irritation or light inflammation of eyes. In case of any abnormality, consult a physician immediately.

Do not disassemble ink cartridges.
 If disassembled, there is a possibility that ink might come into contact with eyes or skin.

### NOTE

- Do not share the ink cartridge once installed with another printer. The cartridge will not be usable from that time onward.
- Do not give ink cartridges strong shakes. Doing so may cause ink leakage.
- Do not disassemble ink cartridges.
   A disassembled ink cartridge cannot be used.
- When an ink cartridge is moved from a cold place to warm place, keep the ink cartridge for three hours or more in the new printing environment before printing.
- Do not refill an ink cartridge with ink. It may result in abnormal printing.
- Insert or remove the ink cartridge at the time of replacement only.

  Inserting or removing the ink cartridge except at the time of replacement may result in incorrect printing.

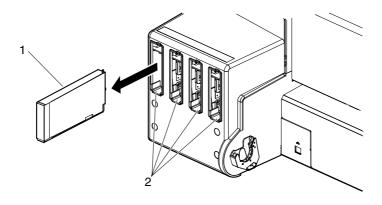
# (1) Replacing 220ml ink cartridges

1. Confirm that the printer is turned ON.



- Do not replace ink cartridges when the printer is turned OFF.

  The remaining ink may not be detected correctly, causing abnormal printing.
- 2. Remove the ink cartridge that you want to replace from the slot.



No.	Name
1	Ink cartridge
2	Ink cartridge slots

3. Take out the new ink cartridge from the bag.

#### NOTE

- Open the bag just before attaching the ink cartridge to the ink cartridge slot. Leaving the ink cartridge with the bag open for a long time may result in abnormal printing.
- Do not insert or remove the ink cartridge more than 10 times.

  If the ink cartridge has been removed/inserted more than 10 times, it cannot be used even though ink remains.
- 4. Install a new ink cartridge.
- 5. Confirm that the operation panel returns to Normal.



- If the ink cartridge is replaced during printing, printing resumes.
- Ink cartridge replacement is complete.

#### (2) Replacing high capacity pack adapter (option)

1. Confirm that the printer is turned ON.

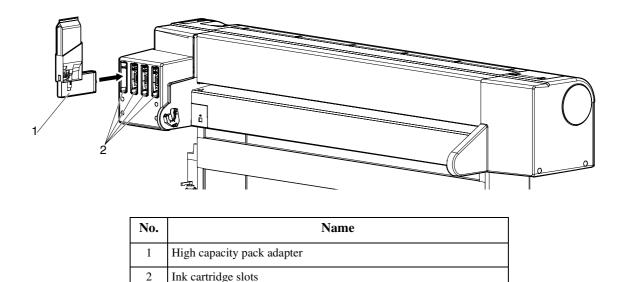


• Do not replace high capacity pack adapter when the printer is turned OFF. The remaining ink may not be detected correctly, causing abnormal printing.

2. Remove the high capacity pack adapter that you want to replace from the slot.

NOTE

• Used ink packs should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.



NOTE

- Do not remove only ink pack while high capacity pack adapter is installed on the printer. The information of the remaining smart chip card will be rewritten and the ink pack will not be usable.
- 3. Take out the new ink pack from the bag.

NOTE

- Open the bag just before attaching the ink pack to the high capacity pack adapter. Leaving the ink pack with the bag open for a long time may result in abnormal printing.
- 4. Install the ink pack and smart chip card to high capacity pack adapter.

NOTE

• To install or remove the high capacity pack adapter to/from the ink pack and smart chip card, refer to the operation manual included with high capacity pack adapter.

5. Shake the high capacity pack adapter gently two to three times and insert it to the slot.



- Make sure that the ink pack and smart chip are installed on the high capacity pack adapter before inserting it to the slot. If the high capacity pack adapter is inserted into the slot without the ink pack, the remaining information will be rewritten and the ink pack will not be usable.
- Insert the high capacity pack adapter all the way to the end of the slot.
- 6. Confirm that the operation panel returns to Normal.



- If the high capacity pack adapter is replaced during a print job, the printer resumes printing.
- Replacing the high capacity pack adapter is complete.

### 4.1.2 Replacing Cutter

This section describes when and how to replace the cutter.

#### (1) Replacement time

Replace the cutter when the following situation occurs.

- a. When the paper is not cut smoothly
- b. When the cut surface is feathered, etc

#### (2) Type

Our genuine cutter that is compatible with the printer is as follows.

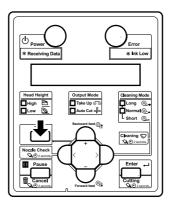
Description	Model No.
Cutter replacement blade	VJ-CB

#### (3) Replacing steps

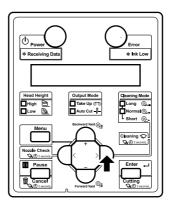
Follow the procedure below to replace the cutter.

- 1. If the printer is turned ON, make sure the following.
  - Printing or other operations are not in progress.
  - The operation panel display is Normal.

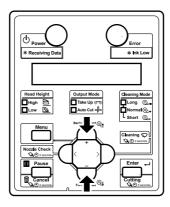
- 2. Display the CR Maintenance menu on the operation panel.
  - a. Press the [Menu] key on the operation panel.



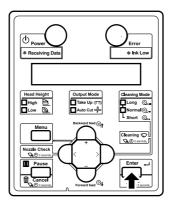
- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.
- b. Press the [>] key on the operation panel.



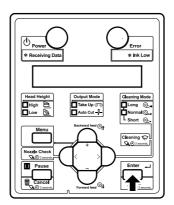
- "Set 1: User Type" is displayed on the operation panel.
- c. Press the [+] key or [-] key to select "Set20:CR Maintenance".



d. Press the [Enter] key on the operation panel.

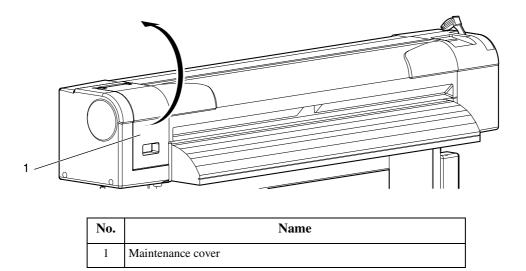


- "CR Mainte.: Start" is displayed on the operation panel.
- 3. Press the [Enter] key on the operation panel.



- Maintenance starts.
- The print head moves to the left of the printer (cutter replacement position).
- "CR Maintenance: End" is displayed on the operation panel.

#### 4. Open Maintenance cover.





• Replace the cutter in a short time.

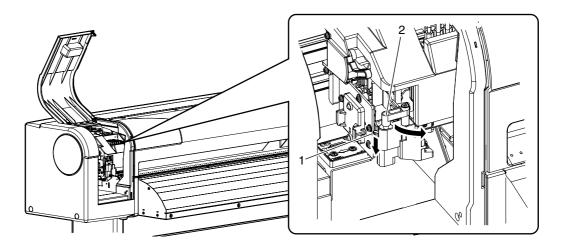
Leaving the print head at the cutter replacement position may result in clogging of the print head.

5. Press the tab of the cutter lightly, turn the cutter holder in the direction as illustrated below.

# NOTE

- Do not press the tab of the cutter strongly or suddenly let go of it. There is a spring in the cutter holder and it may fly out.
- Do not push the cutter all the way in.

  The cutter blade may damage the inside of the printer.



No.	Name
1	Cutter holder
2	Cutter holder lever

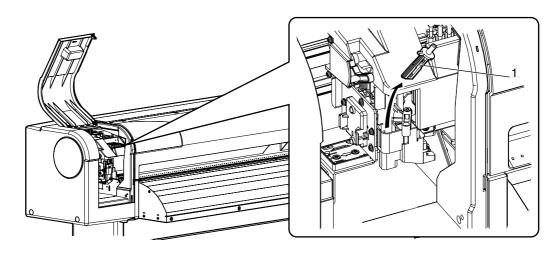
#### 6. Remove the cutter.



- Do not touch the blade edge. It may cause an injury.
- Do not touch the cutter blade edge with a hard substance or drop the cutter. The cutter blade may be damaged or chipped.

#### **NOTE**

• Used cutter should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

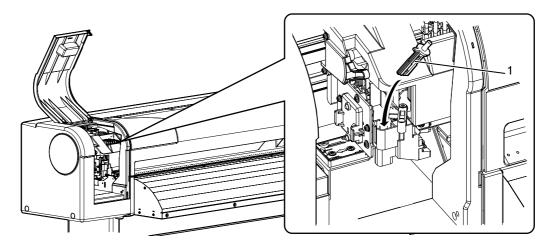


No.	Name
1	Razor blade

7. Install a new cutter as illustrated.



• Make sure that the spring in the cutter holder does not fly out while installing.



No.	Name
1	Razor blade

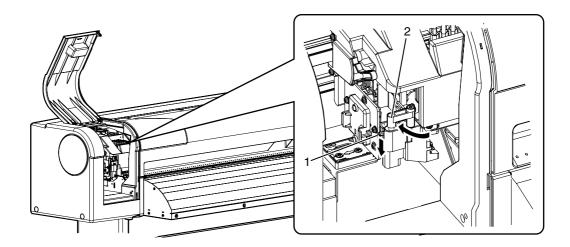
8. Press the tab of the cutter lightly, return the cutter holder to its initial position.

#### NOTE

- Do not press the tab of the cutter strongly or suddenly let go of it. There is a spring in the cutter holder and it may fly out.
- Do not push the cutter all the way in.

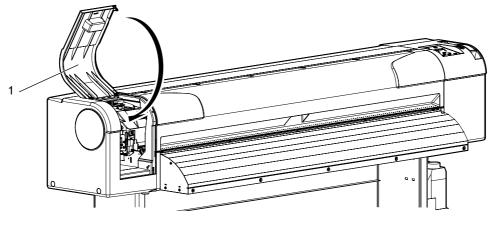
  The cutter blade may damage the inside of the printer.
- Refer to the illustrations below and install the cutter holder correctly. If it is not installed correctly, it may cause an error.

  If an error occurs, check if the cutter holder is installed correctly.



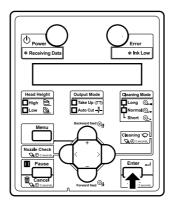
No.	Name
1	Cutter holder
2	Cutter holder lever

#### 9. Close Maintenance cover.



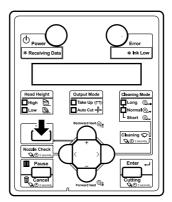
No.	Name
1	Maintenance cover

10. Press the [Enter] key on the operation panel.



- The print head returns to its original position.
- "CR Mainte.: Start" is displayed on the operation panel.

11. Press the [Menu] key on the operation panel.



- The printer enters Normal.
- Cutter replacement is complete.

# 4.2 Cleaning the printer

Periodic (every month) cleaning is necessary to use the printer in good condition.



 Do not insert or drop metal or flammable objects into the printer through openings such as a vent.

It could lead to an electric shock or fire.

• If foreign substances or liquids such as water entered the printer, do not use the printer as it is.

It could lead to an electric shock or fire.

Immediately turn OFF the power switch, disconnect the power plug from the electric socket, and contact your local MUTOH dealer.



- When cleaning the areas other than the wiper, make sure to turn OFF the power and unplug the power cable.
- Do not use volatile solvents such as thinner, benzene, or alcohol. These solvents could cause damage to the paint.
- Be careful that no moisture enters the printer.

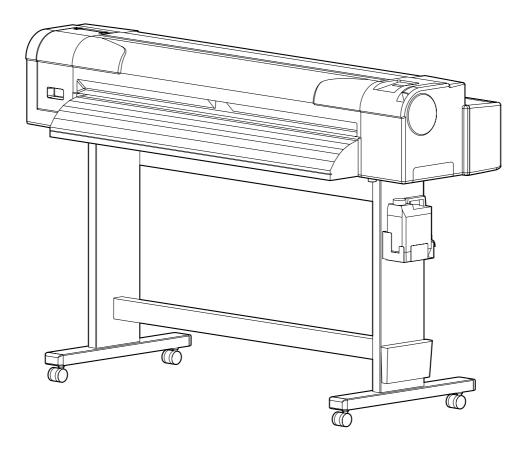
  There is a possibility that the electric circuit inside the printer is short circuited.
- Do not open covers attached using screws under any circumstances. This may cause an electric shock or a malfunction.

This section describes how to clean each part of the printer.

# 4.2.1 Cleaning the outer case

This section describes how to clean the outer case.

Wipe out dust and dirt attached to the outer case by using a soft cloth.

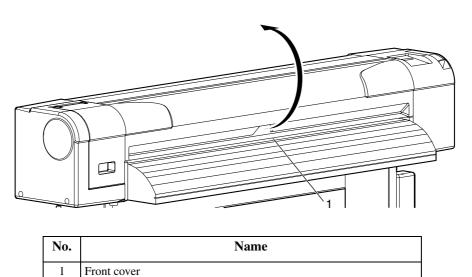


# 4.2.2 Cleaning the inside of the printer

This section describes how to clean the inside of the printer.

Follow the procedure below.

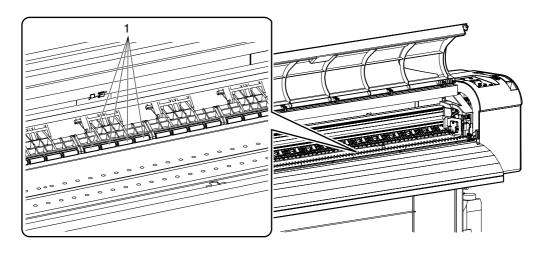
1. Open the front cover.



2. Remove paper powder and dust attached to the pressurizing rollers using a soft brush.

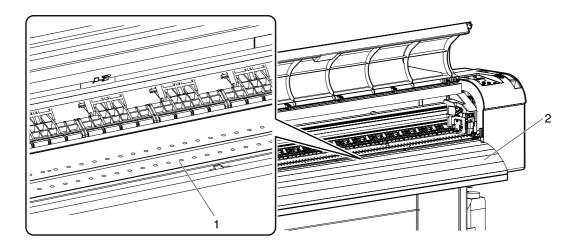
NOTE

• Do not blow paper powder inside the printer using tools such as an air duster. It may cause an abnormal noise from the inside of the printer.



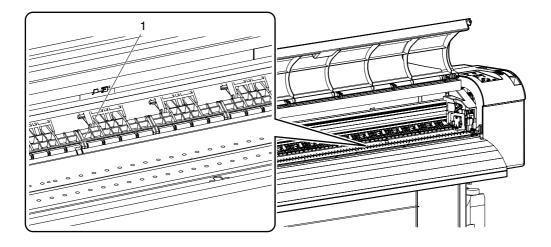
	No.	Name
Ī	1	Pressurizing rollers

3. Apply a damp and tightly squeezed soft cloth to wipe out paper powder and ink attached to the platen and media guide.



No.	Name
1	Platen
2	Media guide

4. Apply a damp and tightly squeezed soft cloth to wipe off the dirt of the unpainted (silver color) area in the center of the grid roller.



No.	Name
1	Grid roller

# 4.2.3 Head cleaning

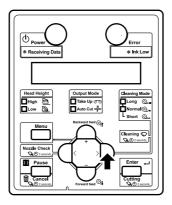
If printed data is blurred or lacks part of it, clean the print head surface and nozzle (Head cleaning). Follow the procedure below to perform Head cleaning.



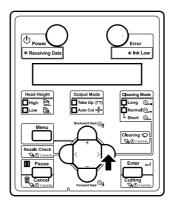
- When not using the printer for a long period (one week or more), perform Head cleaning once a
  week.
  - If not performing Head cleaning, the print head is clogged. Doing so will preserve print quality.
- Remove media when cleaning.

  Cleaning with media loaded may lead to contact between the print head and media.
- 1. Confirm that the operation panel is Normal.
- 2. Make sure that the media loading lever is lowered.

3. Press the [>] key on the operation panel to select the cleaning mode.



4. Press the [Cleaning] key on the operation panel for at least two seconds.



- "Cleaning \*\*%" is displayed on the operation panel.
- Start Head cleaning.
- After Head cleaning is complete, the operation panel shifts to Normal.



- If blurs or lacking parts in printed media do not disappear with one time of Head cleaning, perform Strong cleaning.
- If blurs or lacking parts in printed media do not disappear with several times of Head cleaning, refer to "5 Troubleshooting", and take appropriate measures.

# 4.2.4 Cleaning the cleaning wiper

This section describes how to clean the cleaning wiper.

#### (1) Time for cleaning

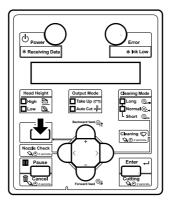
Once a week, or when blurs or lacking parts appear on printed media after Head cleaning.

# (2) Cleaning procedures

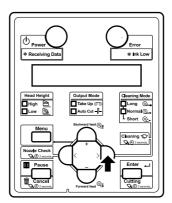
Follow the procedure below to clean the cleaning wiper.



- Use the cleaning stick to clean the cleaning wiper. For cleaning stick, refer to "8.3 Options/Supply list" in the Operation Manual.
- 1. If the printer is turned ON, make sure the following.
  - Printing or other operations are not in progress.
  - The operation panel display is Normal.
- 2. Display the CR Maintenance menu on the operation panel.
  - a. Press the [Menu] key on the operation panel.

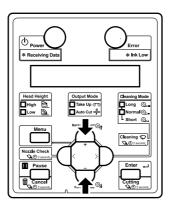


- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.
- b. Press the [>] key on the operation panel.

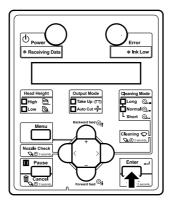


• "Set 1: User Type" is displayed on the operation panel.

c. Press the [+] key or [-] key to select "Set20:CR Maintenance".

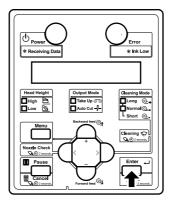


d. Press the [Enter] key on the operation panel.



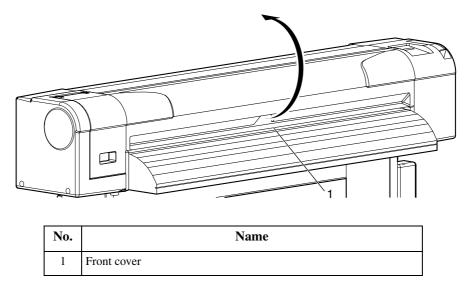
- "CR Mainte.: Start" is displayed on the operation panel.
- The display enters the CR Maintenance menu.

  138 "5.1.19 CR Maintenance menu" in the Operation Manual
- 3. Press the [Enter] key on the operation panel.



- Maintenance starts.
- The print head moves to the left.
- "CR Maintenance: End" is displayed on the operation panel.

#### 4. Open the front cover.

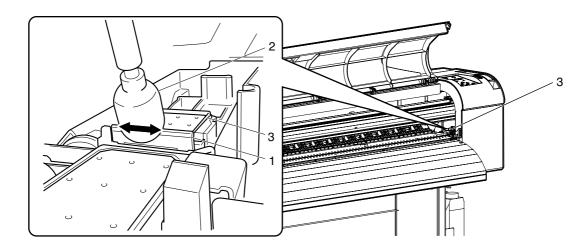




- When cleaning the cleaning wiper,
  - Do not touch the cleaning wiper and head cap unit.

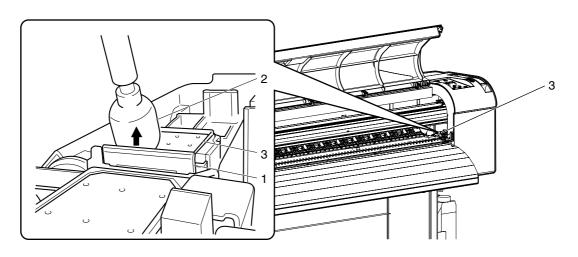
    Head cleaning may not be performed correctly because of oil from your hands.
  - Make sure to wipe the print head using the cleaning stick. A wet cleaning stick may cause the print head to clog.
  - Do not reuse the cleaning stick.
    The attached dust, etc may damage the print head.

- 5. Use the cleaning stick to remove the ink and dust on the cleaning wiper.
  - a. Front side of the cleaning wiper:Remove the ink and dust in the horizontal direction.



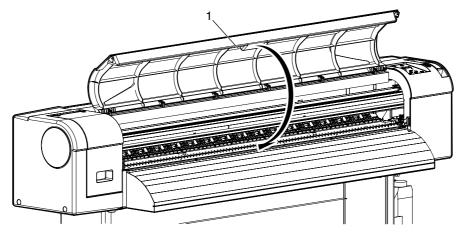
No.	Name
1	Cleaning wiper
2	Cleaning stick
3	Head cap unit

b. Cleaning wiper back side:Remove the ink and dust in the upper direction.



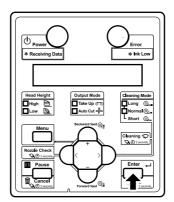
No.	Name
1	Cleaning wiper
2	Cleaning stick
3	Head cap unit

#### 6. Close the front cover.



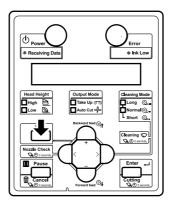
No.	Name
1	Front cover

7. Press the [Enter] key on the operation panel.



- The print head returns to its original position.
- "CR Mainte.: Start" is displayed on the operation panel.

8. Press the [Menu] key on the operation panel.



- The printer enters Normal.
- Cleaning the cleaning wiper is complete.

# 4.2.5 Cleaning around the print head

This section describes how to clean around the print head.

#### (1) Time for cleaning

When foreign substances such as dust or ink clump that can cause missing dots or ink leakage is attached around the print head

#### (2) Cleaning procedures

Follow the procedure below to clean around the print head.



- Before cleaning around the print head, read this procedure thoroughly to fully understand it, and clean promptly and correctly.
- While cleaning around the print head, the print head cap is removed, therefore cleaning must be done before the print head dries.

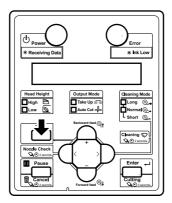
This operation should be done within 15 minutes.

If the operation lasts over 15 minutes, follow the Steps 8 and 9 to stop the operation and perform head cleaning, then resume cleaning.

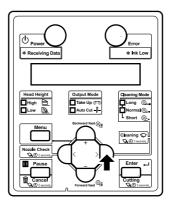
13 4.2.3 Head cleaning

- Use the cleaning stick to clean around the print head. For details of the cleaning stick, refer to "8.3 Options/Supply list" in the Operation Manual.
- 1. If the printer is turned ON, make sure the following.
  - Printing or other operations are not in progress.
  - The operation panel display is Normal.

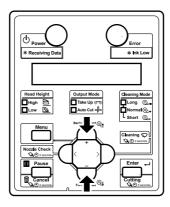
- 2. Display the CR Maintenance menu on the operation panel.
  - a. Press the [Menu] key on the operation panel.



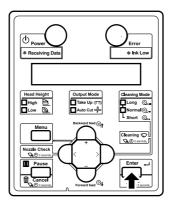
- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.
- b. Press the [>] key on the operation panel.



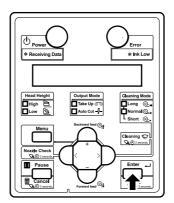
- "Set1: UserType" is displayed on the operation panel.
- c. Press the [+] key or [-] key to select "Set20: CR Maintenance".



d. Press the [Enter] key on the operation panel.

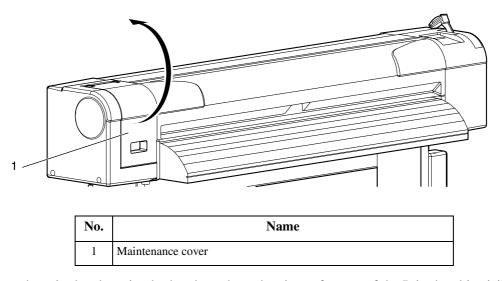


- "CR Maine.: Start" is displayed on the operation panel.
- 3. Press the [Enter] key on the operation panel.

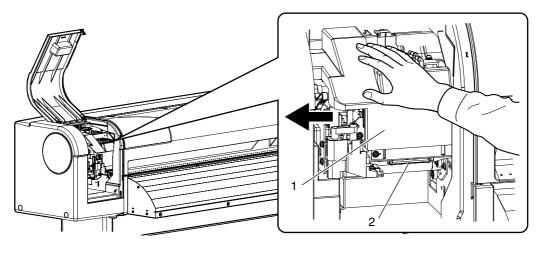


- Maintenance starts.
- The print head moves to the left.
- "CR Maintenance: End" is displayed on the operation panel.

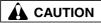
4. Open the maintenance cover on the left of the printer.



5. Move the print head section by hand to where the circumference of the Print head is visible.

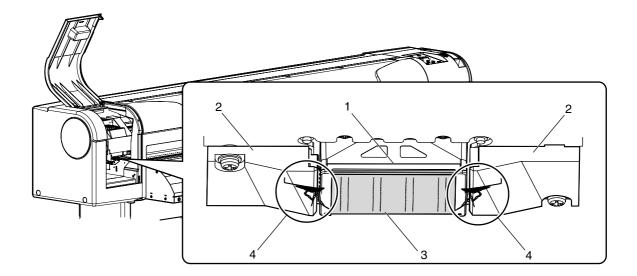


No.	Name
1	Print head section
2	Circumference of the Print head

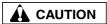


• Do not press the Print head section strongly. Doing so may cause damage or poor print results.

6. Use a penlight, etc to check if any foreign substance, such as dust or ink clump, is attached to the following places.



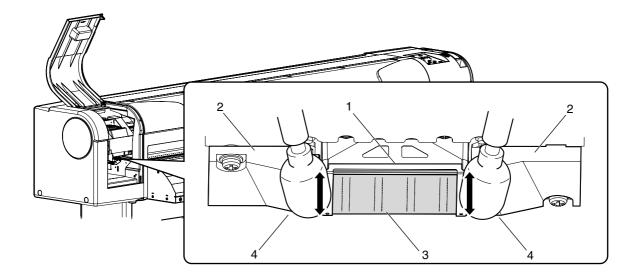
No.	Name	
1	Around the print head	
2	Head guide	
3	Nozzles	
4	Dust, ink clump, etc	



- · When cleaning around the print head,
  - do not touch the nozzles of the print head.
     Doing so may damage the print head.
  - Do not touch the tip of the cleaning stick.

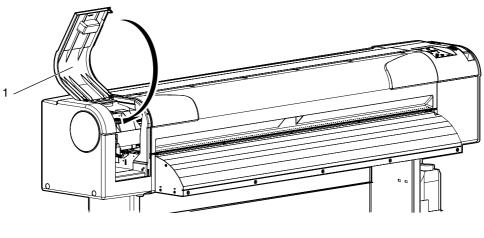
    The print head may be damaged because of oil from your hands.
  - Never put water, etc on the tip of the cleaning stick.
     Doing so may damage the print head.
  - Do not reuse the cleaning stick.
    The attached dust, etc may damage the print head.

7. When some foreign substance such as dust or ink clump is attached, use the cleaning stick to remove it.



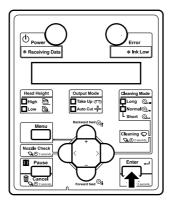
No.	Name		
1	Around the print head		
2	Head guide		
3	Nozzles		
4	Cleaning stick		

- 8. Close the left maintenance cover.
  - Close the cover firmly until it is locked.

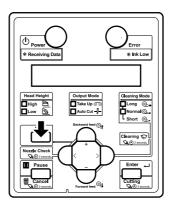


No.	Name
1	Maintenance cover

9. Press the [Enter] key on the operation panel.



- The print head returns to its original position.
- "CR Maine.: Start" is displayed on the operation panel.
- 10. Press the [Menu] key on the operation panel.



- The printer enters Normal.
- Cleaning around the print head is complete.

## 4.3 Disposal of waste fluids

The timing and method for the disposal of waste fluid are described below.

#### (1) Disposal timing

Dispose of waste fluids in the following cases:

- a. When the waste fluid tank is more than half full.
- b. When "Full WasteInkTank?" is displayed on the operation panel.

#### (2) Disposal method

Follow the procedure below to dispose of waste fluid.

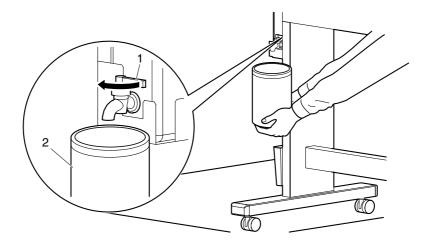


- The waste fluid from the printer falls under the category of waste oil (waste ink) of industrial waste (out of the 19 items of general waste from business activities).
   You are obligated to properly dispose of waste fluid in compliance with Wastes Disposal and Public Cleansing Act and local ordinances.
   Delegate disposal to an industrial waste disposal contractor.
- 1. Ready an empty container such as a supply waste fluid bottle, to contain the waste fluid.
- 2. Lay a protective material on the floor under the waste fluid tank.

3. Open the waste fluid valve, and transfer the waste fluid to the container.

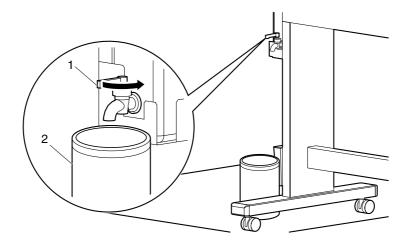
NOTE

• When transferring the waste fluid to the empty container, the waste fluid may spatter. Make sure to put the container close to the waste fluid valve.



No.	Name
1	Waste fluid valve
2	Empty container

4. After pouring the waste fluid to the empty container, close the waste fluid valve securely.



No.	Name
1	Waste fluid valve
2	Empty container

5. Wipe the opening of the waste fluid valve with a cloth, etc.

- 6. Dispose of the waste fluid as an industrial waste product.
  - Disposal of waste fluids is completed.

## 5 Troubleshooting

This chapter describes possible troubles during the use of this product and countermeasures.

If the error not included in any items of this section occurs, contact your local MUTOH dealer.



• If you want to receive product warranty, prepare the warranty certificate.

If the warranty certificate is not presented, the repair will not be covered by the warranty even if within the warranty period.

If you have signed a maintenance service contract, prepare that or a similar document.

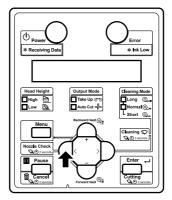
# 5.1 When you cannot generate graphics in the way you want

This section explains how to restore printing results that are blurred or have gaps and how to adjust print quality.

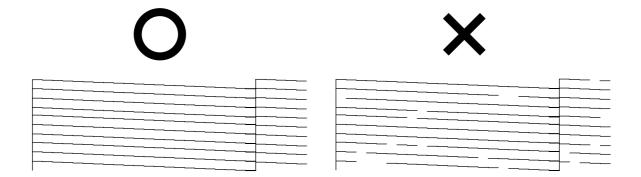
#### 5.1.1 Perform Head cleaning

If the nozzle check result indicates that the checked points are blurred or missing, clean the print head.

- 1. Turn ON the printer and load the media. 文字 3.5.2 Setting Roll Media
- 2. Confirm that the printer functions normally.
- 3. Press the [Nozzle Check] key on the operation panel for at least two seconds.



- Perform the nozzle check printing.
- 4. Check the print sample and confirm that the checked points are blurred or missing.



5. If the nozzle check result indicates that the checked points are blurred or missing, clean the head. 
\tilde{\mathbb{L}}\vec{\mathbb{E}}\vec{4.2.3} Head cleaning

#### 5.1.2 Adjust the print head

It is used for optimizing the quality of image prints. This printer has the following adjustment methods.

Adjustment method	Description	Reference
Standard	Adjusts only the print mode in the user type setting which is currently set.	飞了5.1.3 Standard Adjust Print
Custom	Adjusts all print modes.	5.1.4 Custom Adjustment Pattern



- This printer was adjusted at the factory shipment so that it obtains the optimum printing quality. Adjust the quality if the print quality changes after the installation environment or the media is changed.
- If you change the user type settings after performing Standard Adjust Print, make sure to perform Adjust Print.
- When performing Custom adjust print, the print modes are adjusted all at once. Therefore, you do not need to perform print adjustment even when the user type setting has been newly set or changed.
- When using RIP software, etc, and setting the resolution which is different from the setting in the user type setting, make sure to perform adjustment for all print modes by Custom Adjust Print.

## 5.1.3 Standard Adjust Print

Adjusts only the print mode in the user type setting which is currently set. This menu is made up with the following menus.

Menu Name	Description	Reference
Standard Confirmation Pattern	Print the confirmation pattern and check the amount of misalignment.	XF 5.1.3.1 Standard Confirmation Pattern
Standard Rough Adjustment Pattern	Perform this adjustment when the misalignment is big.	である。 Standard Rough Adjustment Pattern
Standard Micro Adjustment Pattern	Perform this adjustment when the misalignment is small.	下了5.1.3.3 Standard Micro Adjustment Pattern

Follow the procedure below to adjust print quality.

1. Print the confirmation pattern and check the amount of misalignment. \$\sum\_5.1.3.1\$ Standard Confirmation Pattern

2. Perform rough adjustment when the misalignment is big.

13.1.3.2 Standard Rough Adjustment Pattern

Perform micro adjustment when the misalignment is small.

₹5.1.3.3 Standard Micro Adjustment Pattern



- Perform rough adjustment first when the amount of misalignment cannot be judged.
- 3. Print the confirmation pattern and check if the printer is adjusted properly. L\$\mathbb{E}\$5.1.3.1 Standard Confirmation Pattern
- 4. If the printer is not adjusted, go back to Step 2.

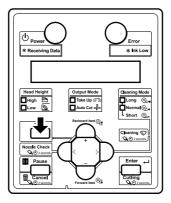


• When you are not satisfied with the result of rough adjustment, perform micro adjustment.

#### 5.1.3.1 Standard Confirmation Pattern

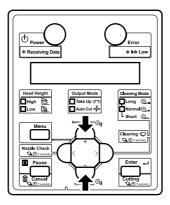
Print the confirmation pattern for the print mode in the user type setting which is currently set.

- 1. Turn ON the printer and load the roll media. 123.5.2 Setting Roll Media
- 2. Display the Adjust Print menu on the operation panel.
  - a. Press the [Menu] key on the operation panel.

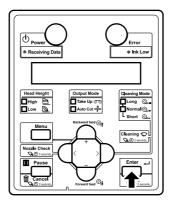


- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.

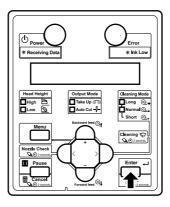
b. Press the [+] key or [-] key to select "Set 1: User Type".



c. Press the [Enter] key on the operation panel.

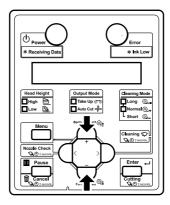


- "User: TypeXX" (XX is a number between 1 and 30) is displayed on the operation panel.
- d. Press the [+] key or [-] key to select the type of media to load.
- e. Press the [Enter] key on the operation panel.

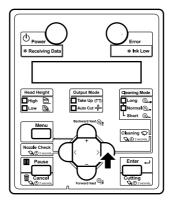


• "\*\*>1: Print Mode" is displayed on the operation panel.

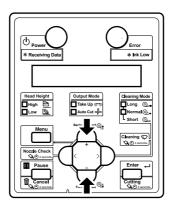
f. Press the [+] key or [-] key to select "\*\*>2: Adjust Print>".



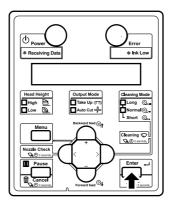
g. Press the [>] key on the operation panel.



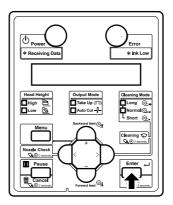
- "Adj.Print1: Standard" is displayed on the operation panel.
- h. Press the [+] key or [-] key to select "Adj.Print1: Standard>".



i. Press the [Enter] key on the operation panel.



- "Adj.1: Confirm Ptn." is displayed on the operation panel.
- The display enters the Adjust Print menu. 【管"5.1.1.1.3 Adjust Print menu" in the Operation Manual
- 3. Press the [Enter] key on the operation panel.



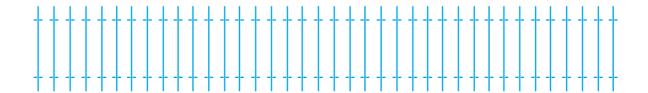
• "Warming Up", and then "Warming Up Skip -> E" are displayed.

#### NOTE

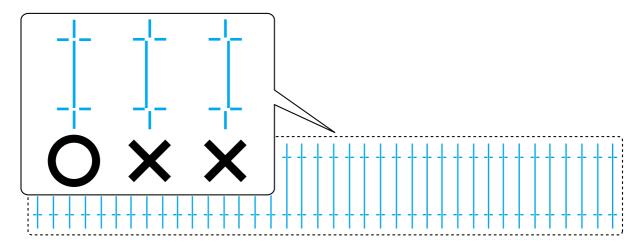
• To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.

图 3.7.7 Start Printing during Warm up

- A confirmation pattern for print quality adjustment is printed after warming up.
- A confirmation pattern is printed.



- After the confirmation pattern is printed, "Adj.1: Confirm Ptn." is displayed on the operation panel.
- 4. Confirm that the confirmation pattern printing result is as follows.



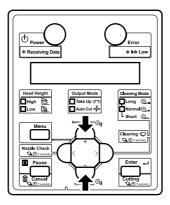
- a. When the printing result is OK;
   You do not need perform Adjust Print.
   The procedure for Adjustment is complete.
- b. When the printing result is ×: you need to perform Alignment.
  - Perform rough adjustment when the misalignment is big.
     工管5.1.3.2 Standard Rough Adjustment Pattern
  - Perform micro adjustment when the misalignment is small. \$\tilde{\mathbb{L}}\tilde{\mathbb{T}}\$5.1.3.3 Standard Micro Adjustment Pattern

#### 5.1.3.2 Standard Rough Adjustment Pattern

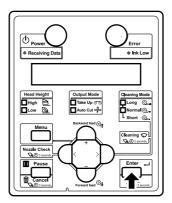
Check the confirmation pattern, and when the misalignment is big, perform rough adjustment. Print a rough adjustment pattern and register the setting value.

1. Display the Adjust Print menu on the operation panel in the same way as in step 2 of "5.1.3.1 Standard Confirmation Pattern"

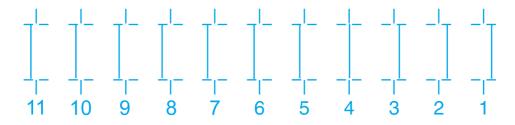
2. Press the [+] key or [-] key to select "Adj.2: Rough Pattern".



3. Press the [Enter] key on the operation panel.



- The printer starts printing a rough adjustment pattern.
- The pattern images are printed on both paper edges and the center of the media.
- 4. Check the both ends and the center of the print result that printed with Adjust pattern, and select the number from 1 to 11 that is not out of alignment.
  - "4" is selected in the next printing sample.



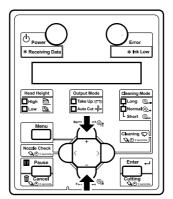
NOTE

• "6" is the current setting value.

- 5. "Pattern \*: 6" (\* indicates a pattern name as shown below) is displayed on the operation panel.
  - The pattern name (\*) differs depending on the set print mode. The print modes and their pattern names are as follows.

PrintMode	PatternName
Quality 1, 2	С
Quality 3, 4	В
Graphics 1, 2	Е
Graphics 3, 4	D
Banner 1, 2	A
Banner 3, 4	A

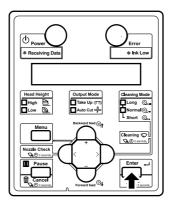
6. Press the [+] key or [-] key to enter the number that you selected in Step 4.



#### NOTE

• When you press the [Cancel] key, the input operation is not executed and "Adj.2: Rough Pattern" is displayed on the operation panel.

7. Press the [Enter] key on the operation panel.

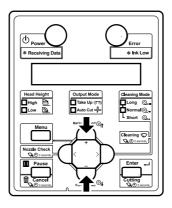


- The value is set in the "Adjustment: \*" (\* indicates a number from 1 to 11).
- The operation panel display returns to "Adj.2: Rough Pattern".

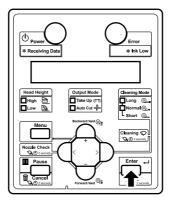
#### 5.1.3.3 Standard Micro Adjustment Pattern

Check the confirmation pattern, and when the misalignment is small, perform micro adjustment. Print a micro adjustment pattern and register the setting value.

- 1. Display the Adjust Print menu on the operation panel in the same way as in step 2 of "5.1.3.1 Standard Confirmation Pattern"
- 2. Press the [+] key or [-] key to select "Adj.3: Fine Pattern".



3. Press the [Enter] key on the operation panel.



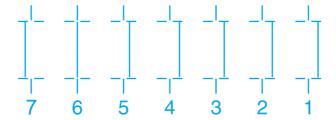
• "Warming Up", and then "Warming Up Skip -> E" are displayed.



• To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.

I 3.7.7 Start Printing during Warm up

- A confirmation pattern for print quality adjustment is printed after warming up.
- Regarding adjust print patterns, the same patterns are printed on both edges and the center of the paper.
- 4. Check the both ends and the center of the print result that printed with Adjust pattern, and select the number from 1 to 7 that is not out of alignment.
  - "6" is selected in the next printing sample.



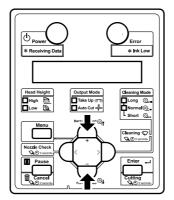
#### NOTE

• "4" is the current setting value.

- 5. "Pattern \*: 4" (\* indicates a pattern name as shown below) is displayed on the operation panel.
  - The pattern name (\*) differs depending on the set print mode. The print modes and their pattern names are as follows.

PrintMode	PatternName
Quality 1, 2	С
Quality 3, 4	В
Graphics 1, 2	Е
Graphics 3, 4	D
Banner 1, 2	A
Banner 3, 4	A

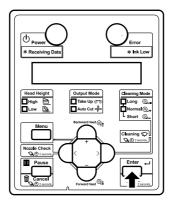
6. Press the [+] key or [-] key to enter the number that you selected in Step 4.



## NOTE

• When you press the [Cancel] key, the input operation is not executed and "Adj.3: Fine Pattern" is displayed on the operation panel.

7. Press the [Enter] key on the operation panel.



- The value is set in the "Pattern: \*" (\* indicates a number from 1 to 7).
- The operation panel display returns to "Adj.3: Fine Pattern".

## 5.1.4 Custom Adjustment Pattern

All patterns from A to F can be adjusted.

By performing this adjustment, all print modes will be adjusted.

This menu is made up with the following menus.

Menu Name		Description	Reference
Custom Confirmation Pattern		Print the confirmation patterns A to F and check the amount of misalignment.	に対している。 Confirmation Pattern
Custom Rough Adjustment Pattern		Perform this adjustment when the misalignment is big.Adjust all confirmation patterns A to F.	でである。 上記で 5.1.4.2 Custom Rough Adjustment Pattern
Custom Micro Adjustment Pattern	Adj. PatternALL	Perform this adjustment when the misalignment is small. Adjust all confirmation patterns A to F.	に置5.1.4.3.1 Adj. PatternALL
	Each Adjust Patterns	Perform this adjustment when the misalignment is small. Adjust all confirmation patterns A to F.	に置う.1.4.3.2 Each Adjust Patterns

Follow the procedure below to adjust print quality.

1. Print the confirmation pattern and check the amount of misalignment. LF 5.1.4.1 Custom Confirmation Pattern

2. Perform rough adjustment when the misalignment is big.

15.1.4.2 Custom Rough Adjustment Pattern

Perform micro adjustment when the misalignment is small.

₹5.1.4.3 Custom Micro Adjustment Pattern

## NOTE

- Perform rough adjustment first when the amount of misalignment cannot be judged.
- 3. Print the confirmation pattern and check if the printer is adjusted properly. \$\sum\_5.1.4.1\$ Custom Confirmation Pattern
- 4. If the printer is not adjusted, go back to Step 2.

NOTE

- When you are not satisfied with the result of rough adjustment, perform micro adjustment.
- For Micro Adjustment Pattern, select "Adjust pattern ALL" to adjust all patterns or "Each Adjust pattern" to adjust patterns A to F separately.

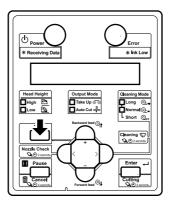
下5.1.4.3.1 Adj. PatternALL

135.1.4.3.2 Each Adjust Patterns

#### 5.1.4.1 Custom Confirmation Pattern

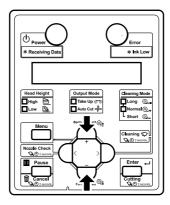
From this menu, you can print all confirmation patterns A to F to check the amount of misalignment.

- 1. Turn ON the printer and load the roll media. 13.5.2 Setting Roll Media
- 2. Display the Adjust Print menu on the operation panel.
  - a. Press the [Menu] key on the operation panel.

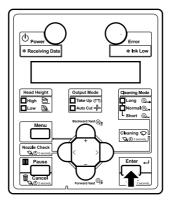


- "Menu1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.

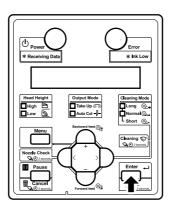
b. Press the [+] key or [-] key to select "Set 1: User Type".



c. Press the [Enter] key on the operation panel.

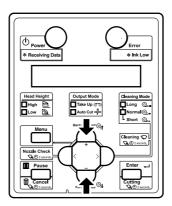


- "User: TypeXX" (XX is a number between 1 and 30) is displayed on the operation panel.
- d. Press the [+] key or [-] key to select the type of media to load.
- e. Press the [Enter] key on the operation panel.

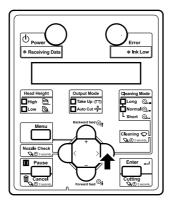


• "\*\*>1: Print Mode" is displayed on the operation panel.

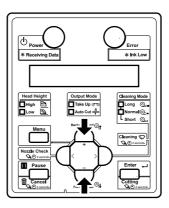
f. Press the [+] key or [-] key to select "\*\*>2: Adjust Print>".



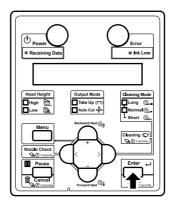
g. Press the [>] key on the operation panel.



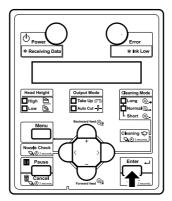
- "Adj.Print1: Standard" is displayed on the operation panel.
- h. Press the [+] key or [-] key to select "Adj.Print2: Custom>".



i. Press the [Enter] key on the operation panel.



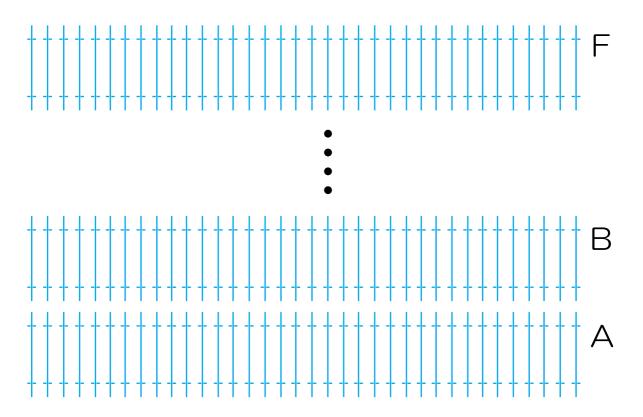
- "Adj.1: Confirm Ptn." is displayed on the operation panel.
- The display enters the Adjust Print menu. 下下5.1.1.1.3 Adjust Print menu" in the Operation Manual
- 3. Press the [Enter] key on the operation panel.



• "Warming Up", and then "Warming Up Skip -> E" are displayed.

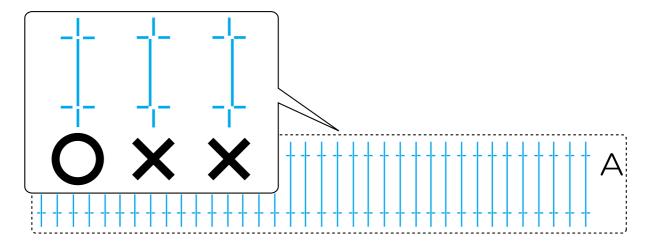


- To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.
  - I 3.7.7 Start Printing during Warm up
- A confirmation pattern for print quality adjustment is printed after warming up.
- Six confirmation patterns of A to F will be printed.



• After the confirmation pattern is printed, "Adj.1: Confirm Ptn." is displayed on the operation panel.

- 4. Confirm that the confirmation pattern printing result is as follows.
  - Check each of the confirmation patterns A to F.



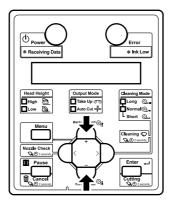
- a. When the printing result is OK;
   You do not need perform Adjust Print.
   The procedure for Adjustment is complete.
- b. When the printing result is ×: you need to perform Alignment.
  - Perform rough adjustment when the misalignment is big. 125.1.4.2 Custom Rough Adjustment Pattern
  - Perform micro adjustment when the misalignment is small.
    - When all patterns A to F require adjustment: \$\tilde{L}^2 5.1.4.3.1 Adj. PatternALL
    - When any pattern of A to F requires adjustment: \(\mathbb{F} 5.1.4.3.2\) Each Adjust Patterns

#### 5.1.4.2 Custom Rough Adjustment Pattern

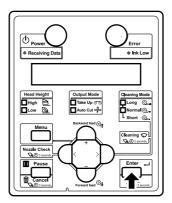
Check the confirmation pattern, and when the misalignment is big, perform rough adjustment. Print a rough adjustment pattern and register the setting value.

1. Display the Custom Adjust Print menu on the operation panel in the same way as in step 2 of "5.1.4.1 Custom Confirmation Pattern"

2. Press the [+] key or [-] key to select "Adj.2: Rough Pattern".



3. Press the [Enter] key on the operation panel.



• "Warming Up", and then "Warming Up Skip -> E" are displayed.

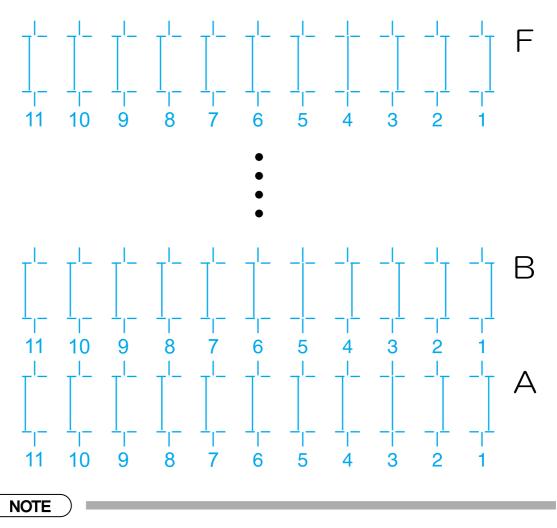


• To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.

13.7.7 Start Printing during Warm up

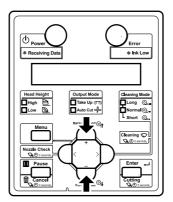
- A rough adjustment pattern for print quality adjustment is printed after warming up.
- The pattern images are printed on both paper edges and the center of the media.
- Six rough adjustment patterns will be printed. Input setting value for each pattern.

- 4. Check the both ends and the center of the print result that printed with Adjust pattern, and select the number from 1 to 11 that is not out of alignment.
  - "3" is selected in the next printing sample of "Micro Adjustment Pattern A".
  - "5" is selected in the next printing sample of "Micro Adjustment Pattern B".
  - "4" is selected in the next printing sample of "Micro Adjustment Pattern F".



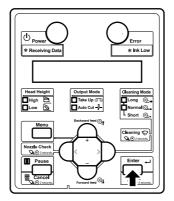
- "6" is the current setting value.
- 5. "PatternA: 6" is displayed on the operation panel.

6. Press the [+] key or [-] key to enter the number that you selected in Step 4.



#### NOTE

- When you press the [Cancel] key, the input operation is not executed and "Adj.2: Rough Pattern" is displayed on the operation panel.
- 7. Press the [Enter] key on the operation panel.



- The value is set in the "Pattern A: \*" (\* indicates a number from 1 to 11).
- 8. In the same way, enter the numbers for "Patterns B" to "Pattern F".
  - Press the [Enter] key to set the values.
  - Once all set values have been entered, press the [Enter] key to register the set values of "Pattern A" to "Pattern F" to the printer.
  - The operation panel display returns to "Adj.2: Rough Pattern".

## 5.1.4.3 Custom Micro Adjustment Pattern

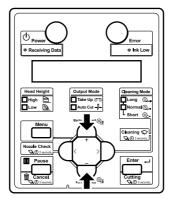
Check the confirmation pattern, and when the misalignment is small, perform micro adjustment. This menu is made up with the following menus.

Menu Name		Description	Reference
Custom Micro Adjustment	Adj. PatternALL	Adjust all confirmation patterns A to F.	TF 5.1.4.3.1 Adj. PatternALL
Pattern	Each Adjust Patterns	Adjust all confirmation patterns A to F.	で 5.1.4.3.2 Each Adjust Patterns

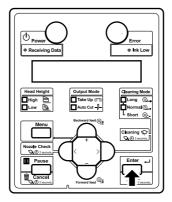
#### 5.1.4.3.1 Adj. PatternALL

Print a Micro Adjustment Pattern ALL and register the setting value.

- 1. Display the Custom Adjust Print menu on the operation panel in the same way as in step 2 of "5.1.4.1 Custom Confirmation Pattern"
- 2. Press the [+] key or [-] key to select "Adj.3: Fine Ptn. ALL".



3. Press the [Enter] key on the operation panel.



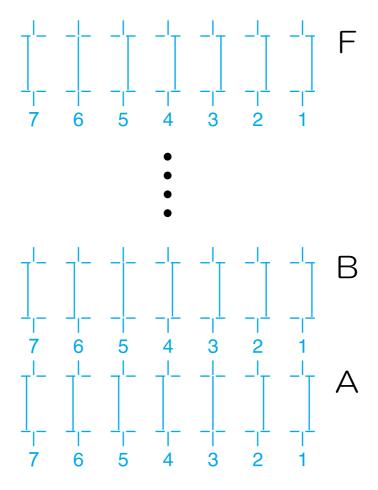
• "Warming Up", and then "Warming Up Skip -> E" are displayed.

#### NOTE

• To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.

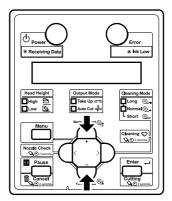
I 3.7.7 Start Printing during Warm up

- An Adjust print pattern for print quality adjustment is printed after warming up. Six micro adjustment patterns will be printed. Input setting value for each pattern.
- Regarding adjust print patterns, the same patterns are printed repeatedly on both edges and the center of the paper.
- 4. Check the both ends and the center of the print result that printed with Adjust pattern, and select the number from 1 to 7 that is not out of alignment.
  - "3" is selected in the next printing sample of "Micro Adjustment Pattern A".
  - "5" is selected in the next printing sample of "Micro Adjustment Pattern B".
  - "6" is selected in the next printing sample of "Micro Adjustment Pattern F".



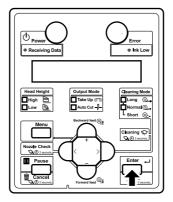


- "4" is the current setting value.
- 5. "PatternA: 4" is displayed on the operation panel.
- 6. Press the [+] key or [-] key to enter the number that you selected in Step 4.





- When you press the [Cancel] key, the input operation is not executed and "Adj.3: Fine Ptn. ALL" is displayed on the operation panel.
- 7. Press the [Enter] key on the operation panel.

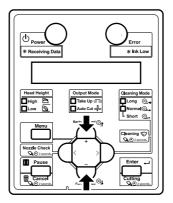


- The value is set in the "Pattern A: \*" (\* indicates a number from 1 to 7).
- 8. In the same way, enter the numbers for "Patterns B" to "Pattern F".
  - Press the [Enter] key to set the values.
  - Once all set values have been entered, press the [Enter] key to register the set values of "Adjust Pattern A" to "Adjust Pattern F" to the printer.
  - The operation panel display returns to "Adj.3: Fine Ptn. ALL".

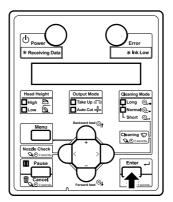
#### 5.1.4.3.2 Each Adjust Patterns

Select and print one of the adjust patterns A to F and register the set value. Follow the procedures below to adjust "Pattern A" only.

- 1. Display the Custom Adjust Print menu on the operation panel in the same way as in step 2 of "5.1.4.1 Custom Confirmation Pattern".
- 2. Press the [+] key or [-] key to select "Adj.4: Fine PatternA".



3. Press the [Enter] key on the operation panel.



• "Warming Up", and then "Warming Up Skip -> E" are displayed.

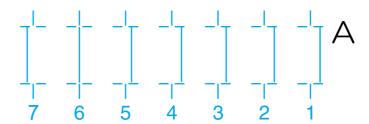


• To start printing during warming up, press the [Enter] key while "Warming Up Skip -> E" is displayed.

X 3.7.7 Start Printing during Warm up

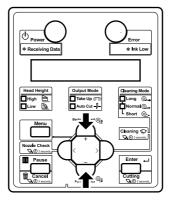
- An Adjust print pattern for print quality adjustment is printed after warming up.
- Regarding adjust print patterns, the same patterns are printed repeatedly on both edges and the center of the paper.

- 4. Check the both ends and the center of the print result that printed with Adjust pattern, and select the number from 1 to 7 that is not out of alignment.
  - "6" is selected in the next printing sample.





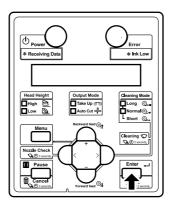
- "4" is the current setting value.
- 5. "PatternA: 4" is displayed on the operation panel.
- 6. Press the [+] key or [-] key to enter the number that you selected in Step 4.





• When you press the [Cancel] key, "Adj.4: Fine PatternA" is displayed on the operation panel.

7. Press the [Enter] key on the operation panel.

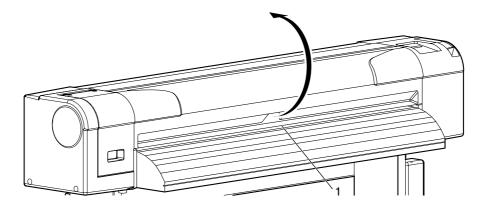


- The value is set in the "Pattern A: \*" (\* indicates a number from 1 to 7).
- Press the [Enter] key to register the setting value for "Fine PatternA" to the printer.
- The operation panel display returns to "Adj.4: Fine PatternA".

# 5.2 When media is jammed

When the set media is jammed, follow the procedure below to remove it.

- 1. Turn OFF the power of the printer. \(\mathbb{L}\mathbb{F}\)3.3.2 Turning the power OFF
- 2. Open the front cover.



No.	Name
1	Front cover

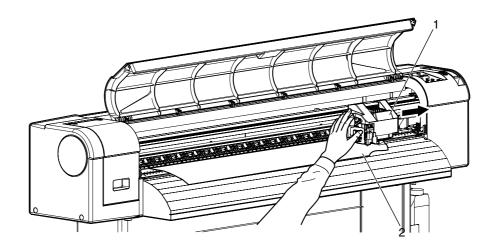
3. Move the print head section from the top of the media to the right.

NOTE

• When the head height is set to Low, switch it to High before moving the Head. Change the setting back to Low after moving the Head.

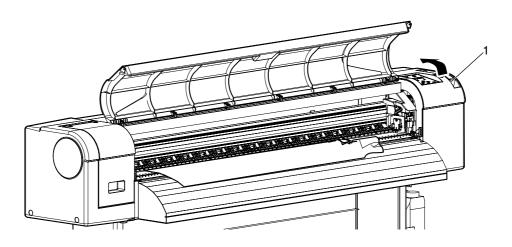
13"4.2.5.1 When raising the print head" in the Operation Manual

138"4.2.5.2 When returning the print head to the original position" in the Operation Manual



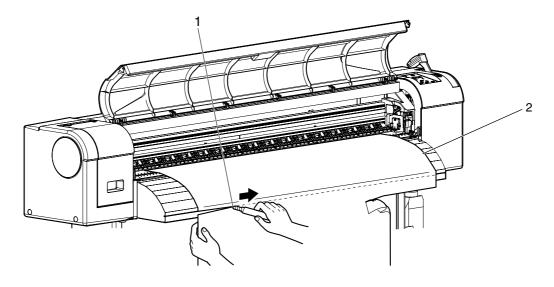
No.	Name
1	Print head section
2	Roll media

4. Raise the media loading lever.



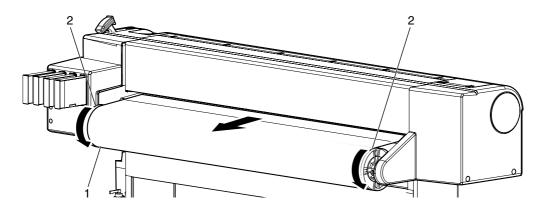
No.	Name
1	Media loading lever

5. Pull the media to your side, and cut the torn part with cutting tools such as a razor blade.



No.	Name
1	Razor blade
2	Roll media

6. Hold the both edges of the scroller to rewind the roll media by hands.



No.	Name
1	Roll media
2	Scroller

7. If paper dust or pieces of paper remain inside the printer, remove them.

# 5.3 Troubleshooting

This section describes undisplayed malfunctions and failures of the printer, possible causes and countermeasures.

### 5.3.1 Problems in installation and introduction

### (1) Cannot perform the initial ink charge

No.	Possible cause	Remedy	Reference
1	Is the front cover open or media loading lever raised?	Close the front cover, or lower the media loading lever.	工管 3.5 Loading media
2	Is the maintenance cover open?	Close the maintenance cover.	the cleaning wiper L 4.2.5 Cleaning around the print head
3	Are all four color ink cartridges fully inserted?	Fully insert all four color ink cartridges.	XF 3.4 Installing ink cartridges

### (2) Ink does not come out after initial ink charge

No.	Possible cause	Remedy	Reference
1	Is the ink cartridge cold and frozen?	Leave the ink bag at room temperature for at least three hours, and perform cleaning several times.	13 4.2.3 Head cleaning
2	Is the power turned OFF during initial ink charge?	Turn the power ON again and continue initial ink charge.	了3.4 Installing ink cartridges
3	Occasionally, normal printing cannot be performed after initial ink charge.	Perform cleaning several times, and check it every time.	【記4.2.3 Head cleaning

### 5.3.2 Cannot print at all

### (1) Does not work at all after power activation

No.	Possible cause	Remedy	Reference
1	Is the power cable connected to the plug?	Connect the power cable.	文章 3.2 Power cable connection
2	Does the AC power supply provide the specified voltage?	Connect the cable to another outlet.	文章 3.2 Power cable connection
3	Is the front cover open or media loading lever raised?	Close the front cover. Lower the media loading lever.	文章 3.5 Loading media
4	Is the maintenance cover open?	Close the maintenance cover.	the cleaning wiper L 4.2.5 Cleaning around the print head

### (2) Does not work after loading the media

No.	Possible cause	Remedy	Reference
1	Is the front cover open or media loading lever raised?	Close the front cover. Lower the media loading lever.	工管 3.5 Loading media
2	Is the maintenance cover open?	Close the maintenance cover.	the cleaning wiper  13 4.2.5 Cleaning around the print head
3	Is the media loaded at an angle?	Load the media straight.	文章 3.5 Loading media
4	Is the ink cartridge inserted?	Insert the ink cartridge.	工管 3.4 Installing ink cartridges
5	Are you using the recommended media?	Use the recommended media.	では、1.2.1 Media type" in the Operation Manual
6	Is the printer being used in an environment other than the one specified, such as in direct sunlight?	Only use the printer in an environment that is specified for use.	IF Installation manual

# (3) When data is sent from the computer, an error occurs at the printer and nothing is printed

No.	Possible cause	Remedy	Reference
1	Is the type of printer selected correctly at the computer?	Check that the printer type settings on the computer side and printer side are the same.	文章 3.6 Connecting the printer to PC
2	Are the interface requirements and command mode the same on the computer side and printer side?		

### (4) Cannot use the computer online using LAN

No.	Possible cause	Remedy	Reference
1	Is the network interface cable connected correctly?	Confirm the types of the cross and straight cables, and connect the network interface cable correctly.	XF 3.6.3 Connecting a network interface cable
2	Are the network settings configured correctly?	Configure the network settings correctly.	TF"5 Panel setup menu" in the Operation Manual
3	Match the printer's network settings with the computer side environment.	Match this product's network settings with the computer side environment.	工管 3.6.1 System requirements
4	Does the Power lamp on the operation panel turn on after sending printing data from the computer?	If the Power lamp does not turn on, contact the computer manufacturer.	_

### 5.3.3 Media-related troubleshooting

### (1) The media slips or is torn during initialization

NOTE

• If the media is jammed or torn, remove it according to "5.2 When media is jammed".

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	【章"4.2.1 Media type" in the Operation Manual
2	Is the loading position of the media correct?	Set the media correctly.	工置3.5 Loading media
3	Is the scroller set correctly?	Set the scroller correctly.	了3.5.1 Loading roll media
4	Are there any foreign materials such as paper attached to the pressurizing roller?	Clean the pressurizing roller.	上記 4.2.2 Cleaning the inside of the printer
5	Is the printer being used in an environment other than the one specified, such as in direct sunlight?	Only use the printer in an environment that is specified for use.	【智 Installation manual
6	Are you using folded, torn or rolled media?	Replace the media.	【管 "4.2.2 Cautions on handling media" in the Operation Manual
7	Does the media bend?	Use the recommended media. When using media other than the dedicated one, set the Vacuum Fan menu.	【管"4.2.1 Media type" in the Operation Manual 【管"5 Panel setup menu" in the Operation Manual

### (2) The media is crumpled during initialization



• If the media is jammed or torn, remove it according to "5.2 When media is jammed".

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	13"4.2.1 Media type" in the Operation Manual
2	Is the loading position of the media correct?	Set the media correctly.	工管 3.5 Loading media
3	Is the media loaded at an angle?	Set the media straight.	工管 3.5 Loading media
4	Are there any foreign materials such as paper attached to the pressurizing roller?	Clean the pressurizing roller.	至4.2.2 Cleaning the inside of the printer
5	Is the printer used in an environment other than the one specified, such as near an air conditioner?	Only use the printer in an environment that is specified for use.	LF Installation manual
6	Are you using folded, torn or rolled media?	Replace the media.	で、14.2.2 Cautions on handling media" in the Operation Manual

### (3) The wrong media size is set during initialization

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	译"4.2.1 Media type" in the Operation Manual
2	Is the media loaded at an angle?	Set the media straight.	工管 3.5 Loading media
3	When the media is set, does it curl upward?	Straighten the media or set a new media.	工管 3.5 Loading media
4	Is the printer used in an environment other than the one specified, such as near an air conditioner?	Only use the printer in an environment that is specified for use.	Installation manual
5	Are you using media that has been printed on already?	Use a new media.	工資"4.2.1 Media type" in the Operation Manual

### (4) Media jams frequently occur



• If media other than the recommended one is used, correct media feeding cannot be assured.

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	"4.2.1 Media type" in the Operation Manual
2	Is the media used in an environment other than the one specified?	Use the media in a dedicated environment.	では、1.2.2 Cautions on handling media" in the Operation Manual
3	Are you using the old media?	Replace it with new media.	13"6.1.2 Replacing
4	Are you using the folded or wrinkled media?		Roll Media" in the Operation Manual
5	Does the media bend?	Use the recommended media. When using media other than the dedicated one, set the Vacuum Fan menu.	は "4.2.1 Media type" in the Operation Manual で "5 Panel setup menu" in the Operation Manual

### (5) The media veers during printing

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	第"4.2.1 Media type" in the Operation Manual
2	Is the loading position of the media correct?	Set the media correctly.	文章 3.5 Loading media
3	Is the scroller set correctly?	Set the scroller correctly.	文章 3.5.1 Loading roll media

### 5.3.4 Printing-related troubleshooting

### (1) Printing is partially stained or incomplete



• Proper print quality may not be obtained with the media other than the recommended one.

No.	Possible cause	Remedy	Reference
2	Does the media include moisture?  Are you using the folded or wrinkled media?	Replace it with new media.	13"6.1.2 Replacing Roll Media" in the Operation Manual
3	Does the media bend?	Use the recommended media. When using media other than the dedicated one, set the Vacuum Fan menu.	は "4.2.1 Media type" in the Operation Manual に "5 Panel setup menu" in the Operation Manual

# (2) The printing position is incorrect (some parts of the media cannot be printed on)

No.	Possible cause	Remedy	Reference
1	Is the loading position of the media correct?	Set the media correctly.	工管 3.5 Loading media
2	Did you set up the origin and print position?	Cancel or reset the settings of the origin and print position.	でである。 Panel setup menu" in the Operation Manual

### (3) Printing is blurred

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	【記"4.2.1 Media type" in the Operation Manual
2	Are you using the thick or thin media?	Use the recommended media.	第"4.2.1 Media type" in the Operation Manual
3	Is the media printed on the printing surface?	Confirm the printing surface of the media and set it correctly.	工艺 3.5 Loading media
4	Did you perform Alignment?	Perform Alignment.	である。 1.2 Adjust the print head
5	Did you perform Media feed compensation?	Perform Media feed compensation.	管"4.2.6 Media feed compensation" in the Operation Manual
6	Is the temperature setting of each heater appropriate?	Set the temperature appropriately.	Preheater menu" to "5.1.1.1.7 Dryer menu" in the Operation Manual
7	Is the head height set to High?	Return the head height to "Low".	管"4.2.5 Head height adjustment" in the Operation Manual

### (4) White or black lines appear on printed media

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	文章 "4.2.1 Media type" in the Operation Manual
2	Is the scroller set correctly?	Set the scroller correctly.	图 3.5.1 Loading roll media
3	Is the nozzle in good condition?	Perform Head cleaning.	足 4.2.3 Head cleaning
4	Did you perform Alignment?	Perform Alignment.	5.1.2 Adjust the print head
5	Did you perform Media feed compensation?	Perform Media feed compensation.	128"4.2.6 Media feed compensation" in the Operation Manual
6	Is the temperature setting of each heater appropriate?	Set the temperature appropriately.	Preheater menu" to "5.1.1.1.7 Dryer menu" in the Operation Manual
7	Is the head height set to High?	Return the head height to "Low".	"4.2.5 Head height adjustment" in the Operation Manual

### (5) Printing lines are not straight

No.	Possible cause	Remedy	Reference
1	Is the ink cartridge within the validity period?	Use a new ink cartridge.	至4.1.1 Replacing ink cartridges
2	Are you using the recommended media?	Use the recommended media.	では、1.2.1 Media type" in the Operation Manual
3	Did you perform Alignment?	Perform Alignment.	入置 5.1.2 Adjust the print head
4	Did you perform Media feed compensation?	Perform Media feed compensation.	に関する。14.2.6 Media feed compensation in the Operation Manual

### (6) Printing lines are duplicated or patchy

No.	Possible cause	Remedy	Reference
1	Is the nozzle in good condition?	Perform Head cleaning.	工管 4.2.3 Head cleaning
2	Is the head height set to High?		上記"4.2.5 Head height adjustment" in the Operation Manual

### 5.4 Error messages

This section describes messages displayed during normal printer operation or when errors occur, and solutions to the messages.

### 5.4.1 Status messages

This section describes messages displayed during printer normal operation.

When the product is operating correctly, each operation status is displayed on the operation panel as below.

No.	Display	Description	Reference
1	Ready to Print	Standby (Media is loaded).	_
2	Media End	Standby (Media is not loaded).	图 3.5 Loading media
3	Receiving data	Receiving data.	_
4	Analyzing data	Analyzing data.	_
5	Printing	Under printing.	_
6	PrintRestart -> ENTER	Pausing printing. Press the [Enter] key.	
7	Warming Up	Warming up the heater.	_
8	Warming Up Skip – > ENTER	Received the print data while the heater is being heated.  To start printing before the heater is warmed up, press the [Enter] key.	了3.7.7 Start Printing during Warm up
9	Cleaning **%	Cleaning the head. Please wait a while.	译4.2.3 Head cleaning
10	Ink Refill **%	Filling the ink. Please wait a while.	13.4 Installing ink cartridges
11	During Washing	Washing the print head by the head washing operation. Please wait a while.	工管 3.4 Installing ink cartridges
12	Moving Origin Pos.	The print head is moving to the original printing position in the Origin menu. Please wait a while.	工管"5.1.8 Origin menu" in the Operation Manual
13	Confirm Position –>E	The print head is moving to the original printing position in the Origin menu.  Press the [Enter] key.	"5.1.8 Origin menu" in the Operation Manual
14	Head Cleaning	Cleaning Head. Wait for a moment.	工管"5.1.18 Longstore menu" in the Operation Manual
15	Remove Cartridges	Performs head cleaning. Remove cartridges.	下"5.1.18 Longstore menu" in the Operation Manual

No.	Display	Description	Reference
16	** Initialing **	Initializing the setting in the Initialization menu. Please wait a while.	「記事"5.1.20 Initialization menu" in the Operation Manual
17	Power Off	Turning the printer off. Please wait a while. Do not unplug the power cable till the operation panel is turned off.	了 3.3.2 Turning the power OFF
18	Change Head Gap Low	Turning the power off. Set the head height to Low.	T语"4.2.5.2 When returning the print head to the original position" in the Operation Manual
19	Insert CleaningCart.	Washing the head. Install the cleaning cartridge.	工管 3.4 Installing ink cartridges
20	Insert InkCartridges	Filling the ink. Insert the ink cartridge.	第3.4 Installing ink cartridges
21	User: Type ** OK?	Initializing the media.  Please wait a while.	では、13.4.3 Setting the
22	Media Initial	(** represents the setup media type. )	User Type Setting" in the Operation Manual

#### NOTE

• If any message that is not in the table above is displayed on this product, there is some operation malfunction.

Refer to "7.2.2 Message type error display and remedies" to "7.2.3 Error requiring restart" in the Operation Manual, and check the condition of the product and remedies.



• The value of the Authorization Code may be displayed for the display of the option function. For details, contact your local MUTOH dealer.

# 5.5 Using Quick Reference and Operation Manual CD

This section explains how to use the included Quick Reference and Operation Manual CD.

The Quick Reference and Operation Manual of the product is included in the CD-ROM.

### 5.5.1 System requirements

The requirements for viewing the Quick Reference and Operation Manual are as follows.

Computer	CD-ROM drive is loaded.
PDF file viewer	Adobe Acrobat Reader 5.0 or later
Browser	Compatible with SS, Java Script, Dynamic HTML, HTML3.2. (Above Internet Explorer 5.5 is recommended).

#### 5.5.2 How to view the file

Follow the procedures below to view the Quick Reference and Operation Manual on your PC.



- The screen shots used in the procedures are from Windows XP. The displays may vary depending on the OS.
- 1. Turn your PC ON.
- 2. Ensure that your PC boots up correctly, and insert the CD-ROM on which "QUICK REFERENCE & OPERATION MANUAL CD-ROM for VJ-1324" is written into the CD-ROM drive on your PC.
  - The browser runs automatically.



• If the browser is not started automatically after inserting the CD-ROM, open "CD-ROM" of "My Computer" and then double-click the "index.htm".

3. Click on [Quick Reference] or [Operation Manual] in the following screen to open the manual to browse.





- You will need Adobe Reader to view the PDF file.
   To install Adobe Reader, connect to the internet, and click the [Get Adobe Reader] icon at the bottom of the screen to download the latest Adobe Reader from Adobe's website.
- For details about how the Operation Manual works, refer to the Operation Manual help.

You can view the Operation Manual help by clicking icon on the top right of the screen.

• To browse another manual, use the [Back] button on your browser to go back to the "Select your manual" screen, or open "CD-ROM" in "My Computer", and double-click "index.htm" to select the appropriate manual.

#### 5.5.2.1 Setting Permissions for Active Content

When your computer environment — the OS and web browser — matches the criteria below, for security reasons the display of HTML files containing JavaScript (active content) is restricted by default.

- OS: Windows XP SP2 or higher
- Web browser: Internet Explorer 6 SP2 or higher

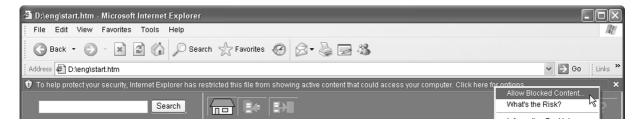
Since the HTML files of the Operation Manual uses active content, information bars including the following may appear and screens may not be displayed correctly when you use browsers like Internet Explorer to open the Operation Manual screen.



Follow the procedure below to display active content so that the Operation Manual is displayed correctly.

#### When allowing active content by clicking the information bar.

- 1. Click the information bar.
  - The following shortcut menu appears.
- 2. Click "Allow Blocked Content".



- The following screen appears.
- 3. Click "Yes".



- The Operation Manual screen is correctly displayed.
- 4. After that, repeat the Step 1 to 3 each time the information bar appears.
  - Setup procedure ends.

#### When allowing all the active content on the CD-ROM.

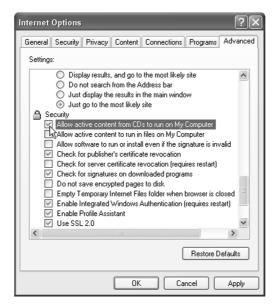
- 1. Click "Control panel" in the Start menu.
- 2. Click "Internet options".
- 3. Click "Advanced setup".

4. Click the check box of "Allow active content from CDs to run on My Computer".

#### NOTE

- The check is off in the default setting and the security control function is valid. By checking the box,
  - Active content from the Operation Manual CD is allowed to perform without the operation by the user.
  - Protection against malicious software is reduced.

Consult your network administrator regarding the possible consequences of lowering your security level before changing the settings.



- 5. Click "OK".
  - The Operation Manual screen is correctly displayed.
  - Setup procedure ends.

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#### 1 Safety instructions

This chapter explains about the printer installation, warning terms which the operator needs to know, caution items and warning labels stuck on the printer main unit.

### 2 Product overview

This chapter explains about the features of the printer along with the names and functions of each part.

#### 3 Basic usage

This chapter explains how to handle the printer.

#### 4 Daily maintenance

This chapter explains the step of the daily maintenance.

#### 5 Troubleshooting

This chapter describes possible troubles during the use of this product and countermeasures.

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