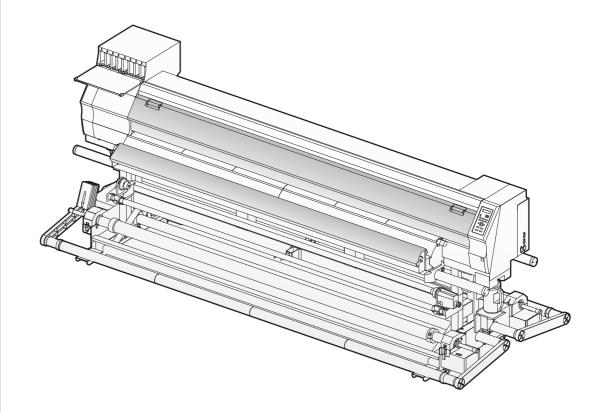


# **COLOR INKJET PRINTER**

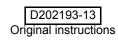
*JV34-260* 

# **OPERATION MANUAL**



# MIMAKI ENGINEERING CO., LTD.

URL: http://eng.mimaki.co.jp/



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# CAUTION

# **DISCLAIMER OF WARRANTY**

THIS LIMITED WARRANTY OF MIMAKI SHALL BE THE SOLE AND EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND MIMAKI NEITHER ASSUMES NOR AUTHORIZES DEALER TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY OR MAKE ANY OTHER WARRANTY OR MAKE ANY OTHER WARRANTY IN CONNECTION WITH ANY PRODUCT WITHOUT MIMAKI'S PRIOR WRITTEN CONSENT.

IN NO EVENT SHALL MIMAKI BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOSS OF PROFITS OF DEALER OR CUSTOMERS OF ANY PRODUCT.

### Requests

- This Operation manual has been carefully prepared for your easy understanding.
- However, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Description contained in this Operation manual are subject to change without notice for improvement.

# FCC Statement (USA)

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 Operation 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.

In the case where MIMAKI-recommended cable is not used for connection of this device, limits provided by FCC rules can be exceeded.

To prevent this, use of MIMAKI-recommended cable is essential for the connection of this printer.

### Interference to televisions and radios

The product described in this manual generates high frequency when operating.

The product can interfere with radios and televisions if set up or commissioned under improper conditions.

The product is not guaranteed against any damage to specific-purpose radio and televisions.

The product's interference with your radio or television will be checked by turning on/off the power switch of the product.

In the event that the product is the cause of interference, try to eliminate it by taking one of the following corrective measures or taking some of them in combination.

- Change the orientation of the antenna of the television set or radio to find a position without reception difficulty.
- · Separate the television set or radio from this product.
- Plug the power cord of this product into an outlet which is isolated from power circuits connected to the television set or radio.

# Foreword

Congratulations on your purchase of MIMAKI color ink jet printer "JV34-260" .

"JV34-260" is a color inkjet printer that can print on 2.6m-width media (tarpaulin/FF/polyvinyl chloride film etc.) with solvent ink (4-color) or aqueous ink (4-color and 6-color) realizing high image quality.

### About usable ink

Usable ink for this machine is SS21 ink (four-color model).

You can use SS21 ink (four-color model) and Sb52 ink (four-color/ six-color model) for this machine. SS21 ink of four-color and Sb52 ink of four-color/ six-color are available.

- 4-colors version: 2 each of Cyan, Magenta, Yellow and Black color ink cartridge are useable.
- 6-colors version: 1 each of Cyan, Magenta, Yellow, Black, Light cyan and Light magenta color ink cartridge (2 each of Cyan and Magenta only) are usable.



• Six-color model can be used when you use Sb52 ink.



 The recommended values of the heater temperature setting etc. differ depending on the ink type to be used. Depending on the ink type, use this machine under the best conditions.
 (@ P.7-4 "Setting orders depending on ink type")

### **On This Operation manual**

- This Operation manual is describing the operations and maintenance of "Color inkjet printer JV34-260" (called as this machine hereafter)
- Read this Operation manual carefully and understand them thoroughly to use.
- It is also necessary to keep this Operation manual on hand.
- This Operation manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Descriptions contained in this Operation manual are subject to change without any notice for improvement.
- In the case when this Operation manual should be illegible due to destruction or lost by fire or breakage, purchase another copy of the Operation manual from our office.
- You can also download the latest manual from our website.

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# **Safety Precautions**

# Symbols

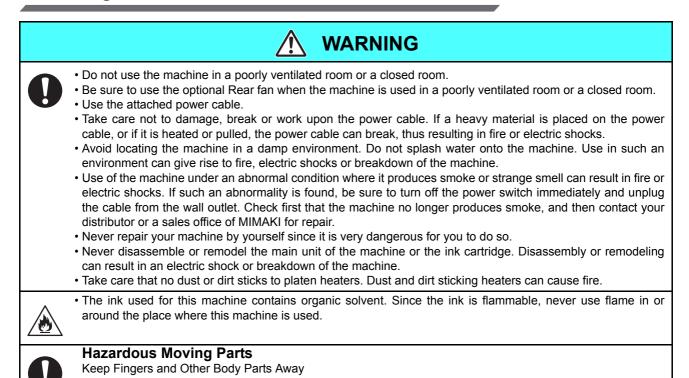
Symbols are used in this Operation Manual for safe operation and for prevention of damage to the machine. The indicated sign is different depending on the content of caution.

Symbols and their meanings are given below. Please follow these instructions as you read this manual.

### Examples of symbols

	Meaning
Warning	Failure to observe the instructions given with this symbol can result in death or serious injuries to personnel. Be sure to read it carefully and use it properly.
Caution	Failure to observe the instructions given with this symbol can result in injuries to personnel or damage to property.
(Important!)	Important notes in use of this machine are given with this symbol. Understand the notes thoroughly to operate the machine properly.
	Useful information is given with this symbol. Refer to the information to operate the machine properly.
(A)	Indicates the reference page for related contents.
Â	The symbol " $\triangle$ " indicates that the instructions must be observed as strictly as the CAUTION instructions (including DANGER and WARNING instructions). A sign representing a precaution (the sign shown at left warns of hazardous voltage) is shown in the triangle.
	The symbol " () " indicates that the action shown is prohibited. A sign representing a prohibited action (the sign shown at left prohibits disassembly) is shown in or around the circle.
8	The symbol "   "indicates that the action shown must be taken without fail or the instructions must be observed without fail. A sign representing a particular instruction (the sign shown at left instructs to unplug the cable from the wall outlet) is shown in the circle.

#### Warning for Use



#### **Precautions in Use**

C )

Power supply	Handling of ink
<ul> <li>Leave the breaker turned ON.</li> <li>Do not turn off the main power switch on the right side of this machine.</li> </ul>	<ul> <li>If you get ink in your eyes, immediately was your eyes with a lot of clean water for at least 1 minutes. In doing so, also wash eyes to rinse in away completely. Then, consult a doctor a soon as possible.</li> </ul>
<ul> <li>Do not spill liquid on the platen as this may cause failure of the heater or firing.</li> <li>Do not touch platen heaters with bare hand while it is hot; otherwise, you can get burned.</li> </ul>	<ul> <li>If anyone drinks ink by mistake, keep him or he quiet and see a doctor immediately. Do not allo him or her to swallow the vomit. After tha contact the Poison Control Center.</li> </ul>
<ul> <li>When the machine is to be moved, wait until the heater temperature drops adequately. As a criterion, wait at least 30 minutes after you turn off the power to the heater. Moving the machine must be limited to on the same floor where there is no steps. When the machine is to be moved to any place other than on the same step-free floor, contact your distributor or a sales office of MIMAKI.</li> </ul>	<ul> <li>If you inhale a lot of vapor and feel ba immediately move to a location of fresh air ar then keep yourself warm and quiet. The consult a doctor as soon as possible.</li> <li>The ink contains organic solvent. If ink settles of the skin or clothes, immediately wash it off wi detergent and water.(only when solvent is used</li> </ul>
•	

#### **CAUTIONS and NOTES**

🔬 Warning			
Handling of ink cartridges	Front cover and lever		
• Use the JV34 genuine ink. Remember that the user shall be filled for a repair to correct any damage resulting from the use of ink other than the exclusive type.	• Never open the front cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.		
• The machine does not operate with any ink other than the	Handling of media		
<ul> <li>JV34 genuine ink.</li> <li>Do not use the JV34 genuine ink with other printers, as doing so may cause damage to such machines.</li> <li>Never refill the ink cartridge with ink. Refilled ink cartridge can cause a trouble. Remember that MIMAKI assumes no responsibility for any damage caused by the use of the ink cartridge replenished with ink.</li> <li>If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.</li> <li>Open the ink cartridge just before installing it in the machine. If it is opened and left for an extended period of time, normal printing performance of the machine may not be ensured.</li> <li>Make sure to store ink cartridges in a cool and dark place.</li> <li>Store ink cartridges and waste ink tank in a place that is out of the reach of children.</li> <li>Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within three months. If an extended period of time has passed away after opening the cartridge tank, printing quality would be poor.</li> <li>Neither pound the ink cartridge nor shake it violently, as doing so can cause leakage of ink.</li> <li>Do not touch or stain the contacts of the ink cartridge, as doing so may cause damage to the print circuit board.</li> <li>Waste ink is equivalent to waste oil of industrial waste.</li> </ul>	<ul> <li>Use media recommended by MIMAKI to ensure reliable, high-quality printing.</li> <li>Set the heater temperature to meet the characteristics of the media. Set the temperature of the Pre-heater, Print heater and Post-heater according to the type and characteristics of the media used. Automatic temperature setting can be made on the operation panel by setting the profile on the dedicated RIP. For setting on the RIP, refer to the instruction manual for your RIP.</li> <li>Pay attention to the expansion and contraction of the media can be affected by the room temperature and humidity, and thus it may expand and contract. The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked.</li> <li>Do not use curled media. The use of curled media can not only cause a media jam but also affect print quality. Straighten the sheet of media, if significantly curled, before using it for printing. If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.</li> </ul>		
Request an industrial waste disposal company for	Store media in a bag. Wiping off dust accumulated on		
disposal of waste ink.	<ul> <li>Store media in a bag. Wiping on dust accumulated on media will adversely affect the media due to static electricity.</li> <li>When leaving the workshop after the working hours, do not leave any media on the roll hanger. If any media is left on the roll hanger, it can get dusty.</li> </ul>		

🕂 Warning

#### Notes on maintenance

- It is strongly recommended to use the machine in a room that is not dusty. Set the Refresh level 2 or 3 when the machine is to be used in an unfavorable environment. (P.3-28 "Other Settings")
- Keep the front cover closed even when the machine is not printing. If not, dust can accumulate on the nozzles in the heads.
- Dust in the heads can also cause drops of ink to fall suddenly down on the media during printing. In such a case, be sure to clean up the heads. (P.3-20 "Setting Automatic Cleaning")
- When cleaning the ink-station or the heads, make sure to wear the attached gloves. Further, when the solvent ink is used, it is necessary to wear the attached goggles.
- Perform wiping (removal of dust and paper powder) of the capping station and wiper frequently.

#### Periodic replacement parts

• Some parts of this machine must be replaced with a new one periodically by service personnel. Be sure to make a contract with your distributor or dealer for After sale service to ensure a long life of your machine.

#### **Disposition of this machine**

When discarding this machine, request the treatment of it for an industrial waste disposal contractor.

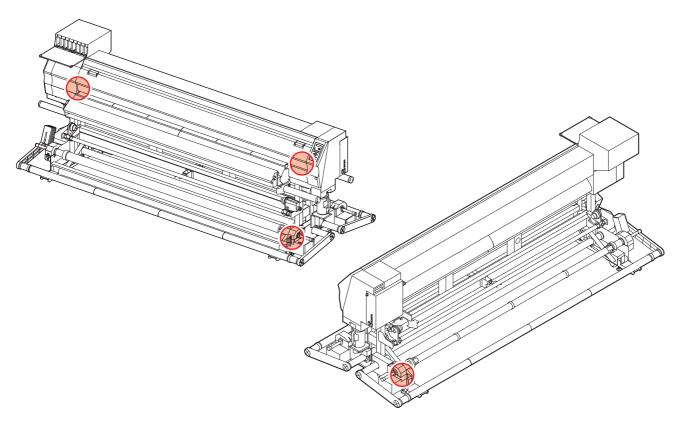
Treat it properly in compliance with regulation in the local area.

### **Cautions on Installation**

CAUTION					
A place exposed to direct sunlight On an inclined surface		A place where temperature or humidity varies significantly			
		<ul> <li>Use the machine under the following environmental conditions:</li> <li>Operating environment: 20 to 35 °C (68 to 95 °F) 35 to 65 % (Rh)</li> </ul>			
A place that vibrates	A place exposed to direct air flow from an air conditioner or the like.	Around a place where fire is used			

# Safety interlock

This machine is equipped with interlocks to terminate the operation for your safety when the cover opens during printing etc. (red circle parts in the figure below).



### xi

# Chapter 1 Before Use



#### This chapter

describes the items required to understand before use, such as the name of each part of the machine or the installation procedures.

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Media sensor	1-7
Carriage	1-8
Cutter blade and slot for cutting	1-8
Capping station	1-9
Pinch rollers and Feed rollers	1-9

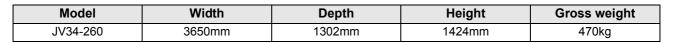
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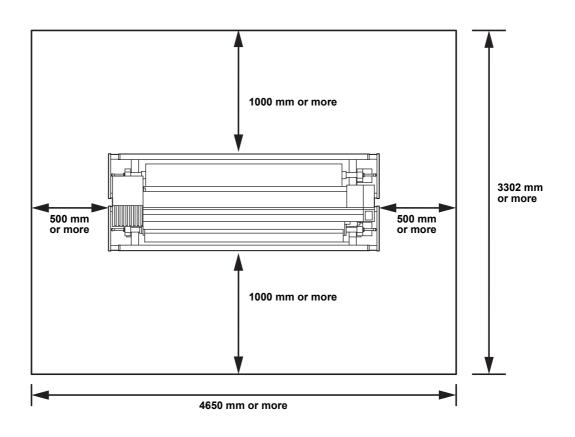
# **Moving This Machine**

#### Where to Install This Machine

Secure a suitable installation space before assembling this machine.

The place of installation must have enough space for not only this machine itself, but also for the printing operation.





## Working Environmental Temperature

Use this machine in an environment of 20 to  $35^{\circ}$ C to ensure reliable printing. The heater temperature may not reach the set value, depending on the ambient temperature. Use this machine in an environment of 20 to  $35^{\circ}$ C to ensure reliable printing.

## **Moving This Machine**

Move this machine according to the following steps when this machine needs to be moved on the same stepfree floor.



Ц

Caution

When the machine is moved to any place other than on the same step-free floor, contact your distributor or our service office.

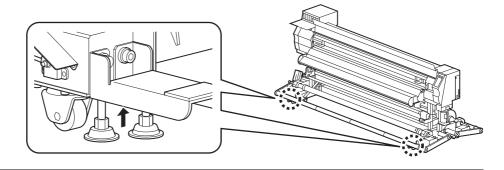
If you move it by yourself, failure or damage may occur. Be sure to request your distributor or our service office to move this machine.

• When moving this machine, take care that it does not receive a significant impact.

Be sure to fix the level feet after moving of this machine. If you start to print with the level foot not being fixed, the device may start to move.



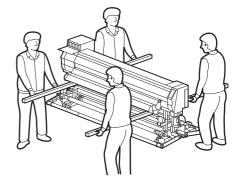
Raise the level feet.





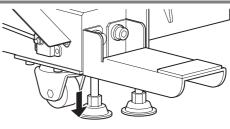
#### Move this machine as shown in the figure.

- For safety, be sure to operate it with 4 people or more.
- Do not push the cover to move this machine since the cover may be broken.





Move the level feet down to fix the device.



# Names of Parts and Functions

#### Front Side of the Machine

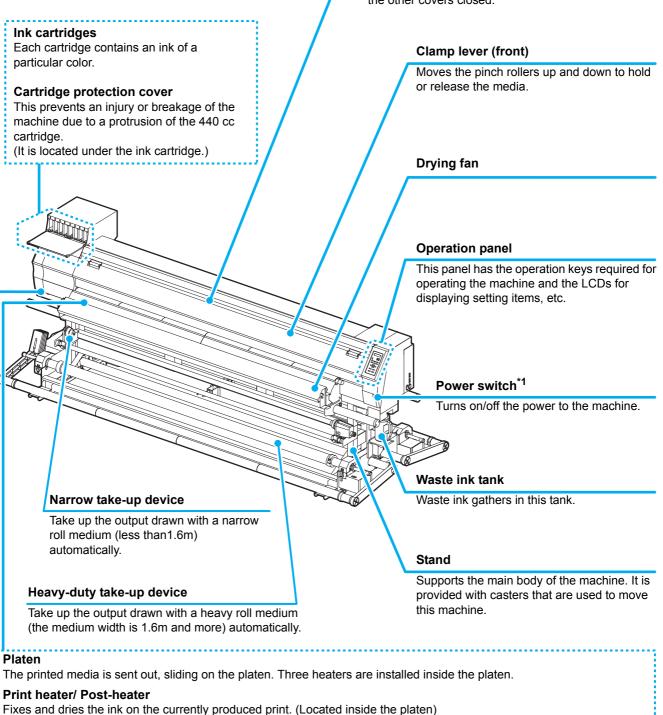
#### Maintenance cover

Open the cover in maintenance. Even when the power switch is off, keep all covers closed.

Each cartridge contains an ink of a particular color.

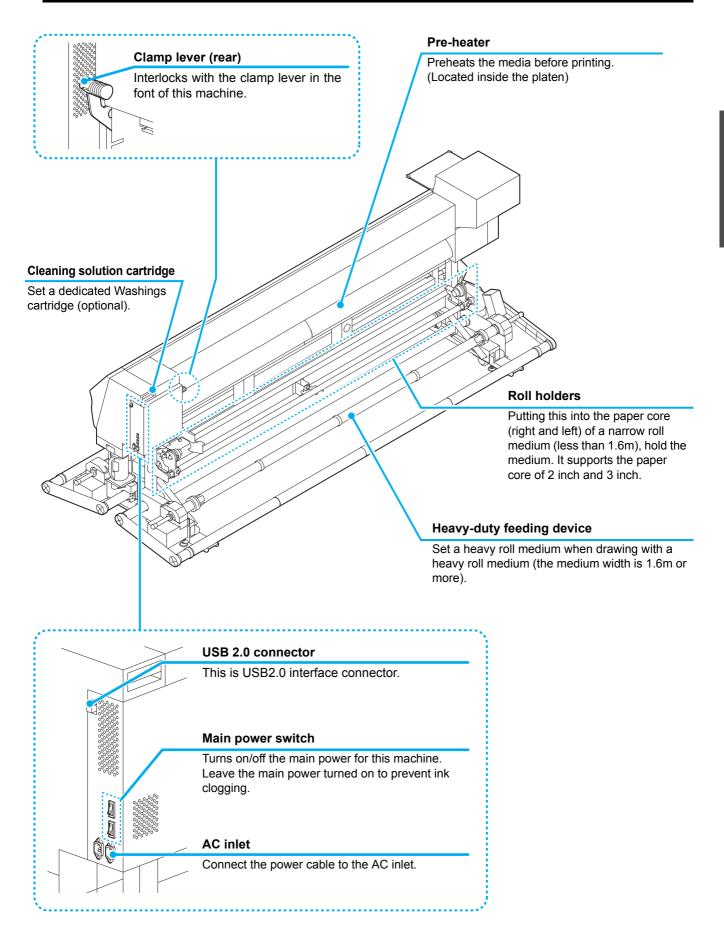
#### Front cover

Open the cover in setting of medias, taking of measures against jamming of medias or in maintenance inside the station. Even when the power switch is off, keep this cover and the other covers closed.



\*1: The power switch under the operation panel lights in green when the power is turned on, and blinks when the power switch is turned off. The ink clogging prevention function is periodically operated even when the power switch is OFF if the main power switch keeps being ON. (Auto maintenance function) (27 P.1-5

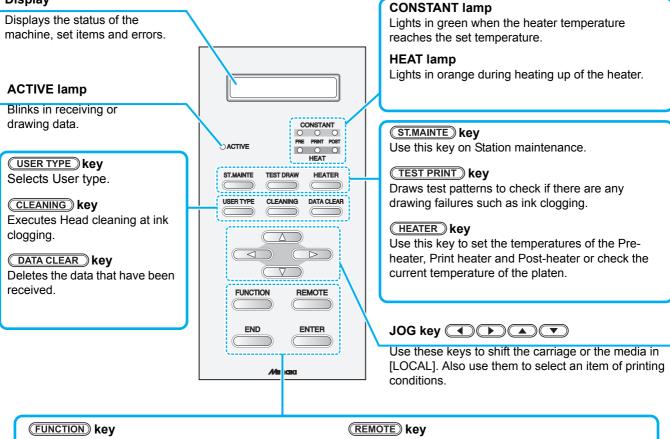
## Rear Side and Right Side of the Machine



### **Operation Panel**

Use the operation panel to make settings for printing or operate this machine.

#### Display



Use this key to display function setting menu.

#### END key

Cancels the last input value or returns the setting menu to the immediate higher level of the hierarchy.

Use this key to switch between [REMOTE] and [LOCAL].

#### ENTER key

Registers the last input value as the setting value or goes to the immediate lower level of the hierarchy.

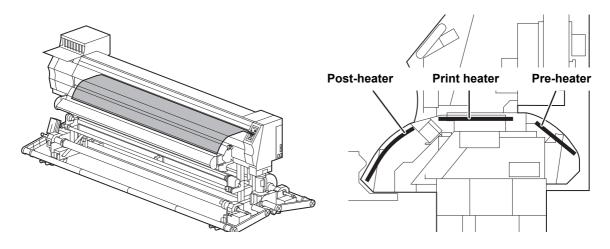
#### Heater

Pre-heater/Print heater/Post-heater are equipped on the platen.

The Pre-heater is used for pre-heating of the media prior to printing to prevent rapid changes in temperature. The Print-heater improves the image quality in printing. The Post-heater dries ink after printing.

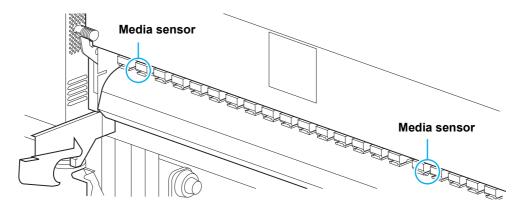


- While the heater is on, the platen is very hot. When the front cover is to be opened or media is to be replaced, lower the heater temperatures and wait until the platen temperature drops; otherwise, you can get burned.
- When the media is to be replaced with a thin one, lower the heater temperatures and wait until the platen temperature drops adequately. Setting a thin sheet of media while the platen is hot may cause the media to stick to the platen or cause wrinkling or curling of the media.



### Media sensor

The media sensor detects the presence of the media and the media length. This machine has two media sensors on the platen (in the rear).



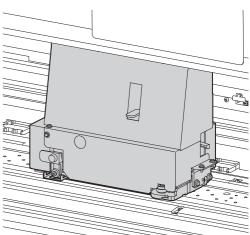
(Important!)

• When setting a medium, be sure to cover either of the medium sensors located on the rear of the platen. The media cannot be detected unless it is placed over the sensor.

# Carriage

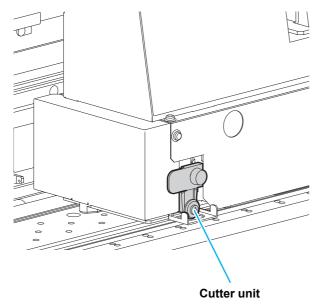
The carriage is provided with the ink heads for printing, the cutter unit for cutting off the sheet of media, etc.

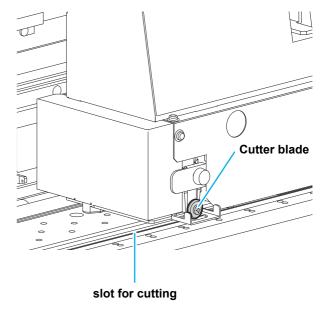
A lever is also provided to adjust the height of Head in 2 stages according to the thickness of media. ( $\bigcirc P.2-6$ )



## Cutter blade and slot for cutting

The carriage is provided with a cutter unit for cutting off the media that has been printed on. The cutter cuts off the sheet of media along the slot for cutting on the platen.





## **Capping station**



• Be sure to wear the attached goggles in cleaning within the capping station to protect your eyes against ink. Otherwise, you may get ink in your eyes.

The capping station consists of the ink caps, the wiper for cleaning the heads, etc.

The ink caps prevent the nozzles in the ink heads from drying up. The wiper cleans the nozzles in the heads.

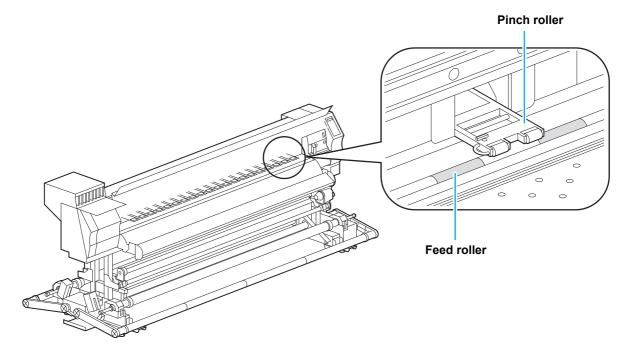
The wiper is consumable. If the wiper is deformed or the media is stained, replace the wiper with a new one.

### **Pinch rollers and Feed rollers**



• Keep the pinch rollers lifted up when this machine is not in use. If the pinch rollers are left lowered for an extended period of time, they can be deformed and fail to securely retain the media.

This machine retains the media with the pinch rollers and feed rollers. During printing operation, the feed rollers feed the media forward.

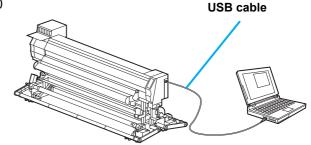


# **Connecting Cables**

#### **Connecting USB2.0 Interface Cable**

Connect the PC and this machine with the USB2.0 interface cable.

- Caution
- Your RIP must be compatible with USB 2.0.
  Contact a RIP maker near your location or
- Contact a RIP maker near your location or our office when the USB2.0 interface is not attached to the PC.



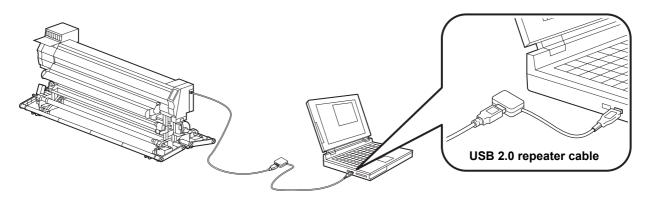
#### Notes on USB 2.0 Interface

(mportant!) • Your RIP must be compatible with USB 2.0.

#### • When two or more JV34 machines are connected to one personal computer

When two or more JV34 machines are connected to one personal computer, the personal computer may not recognize all the JV34 machines normally.

Reconnect the unrecognized JV34 machine to another USB port, if available, and check to see if it is recognized. If the JV34 machine is not recognized by the newly connected USB port, use USB 2.0 repeater cables available on the market.



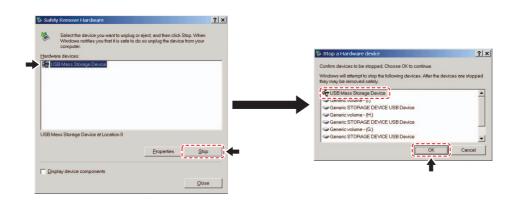
#### • Notes on peripheral devices in USB high speed mode

When a peripheral device (USB memory or USB HDD) to be operated in USB high speed mode is connected to the same personal computer that a JV34 machine is connected to, the USB device may not be recognized. When JV34 is connected to the personal computer to which an external HDD is connected via USB, the speed of data output to JV34 may drop. That can cause the head unit to stop temporarily at the right or left end during printing.

#### • Removing USB memory

If a USB memory module is inserted in the personal computer to which a JV34 machine is connected, click "Stop" in the "Safely Remove Hardware" window by following the instructions given there first and then remove the module.

Leaving a USB memory module inserted can cause [ERROR 10 COMMAND ERROR]. Copy the data onto the hard disk before outputting it for printing.



#### Connecting the power cable

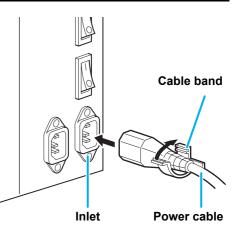


Insert the power cable into an inlet of the machine.



#### Secure a cable band.

• Secure the cable with the cable band attached to this machine.





Insert the power plug into a plug socket.



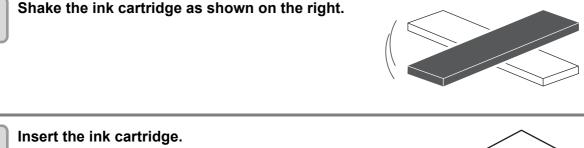
• Do not use any power cables other than the attached power cable.

(Important!)

- Be sure to connect the power cable to the outlet near this machine, and make sure that the power cable can be easily removed.
- Connect the power cable to the grounded outlet. Otherwise, it may result in fire or an electric shock.

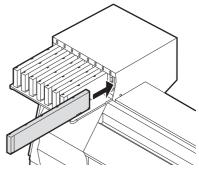
# **Inserting ink cartridges**

Insert an ink cartridges.





- Insert the ink cartridge lengthwise with the surface having IC chips pointing to the left side.
- Colors are displayed on the display as follows. Black: K, Cyan: C, Magenta: M, Yellow: Y, Blue: B, Light blue: b, Light magenta: m



#### Changing an ink cartridge

Perform as follows when [INK END] or [INK NEAR END] is displayed on the display.

#### • When [INK END] is displayed

- (1) Pull out an ink cartridge to be replaced.
- (2) Insert a new ink cartridge, paying attention to the direction of IC chip.

#### • When [INK NEAR END] is displayed

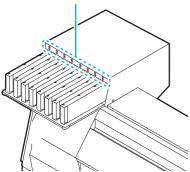
There is a little of ink left. It is recommended to replace the ink cartridge soon since ink may become empty in printing while printing is continuously enabled.

- (Important!)
- During [INK NEAR END] is displayed, the setting of In-printing cleaning is disabled. (@ P.3-20)
- If solvent ink is selected when the machine is installed, it is not possible to change from the solvent ink to Sublimation dye ink.

### For Ink cartridge lamps

The condition of the ink cartridges set in the machine is confirmable with lamps located over the ink cartridges.

#### Ink cartridge lamps



Condition of Lamp		Description		
	OFF	No error		
Upper row Red lamp	Blinking	<ul> <li>One of the following errors occurs.</li> <li>Ink near-end</li> <li>Ink end</li> <li>Expiration of a term of ink validity (one month)</li> </ul>		
ON		<ul> <li>One of the following errors occurs.</li> <li>No ink left</li> <li>No ink cartridge inserted</li> <li>Other ink errors ( P.6-5)</li> </ul>		
	OFF	No error		
Lower row Green lamp ON		When used with 4-color ink set, the machine supplies ink from the ink cartridge with lower ink. ((2017 P.3-44)) In this case, the cartridge being used lights in green.		

#### Caution in handling of ink cartridges



- An organic solvent is used in solvent ink. When ink sticks on skins, wash it with soapy water immediately then rinse it off with water fully. If you get ink in your eyes, immediately wash your eyes with a lot of clean running water for at least 15 minutes. In doing so, also wash the eyess to rinse ink away completely. Then, consult a doctor as soon as possible.
- Use genuine ink cartridges for this machine. This machine functions by recognizing the genuine ink cartridges. In case of troubles caused by modified ink cartridges or the like, it shall be out of the warranty even within the warranty period.
- If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within three months. If an extended period of time has passed away after opening the cartridge tank, printing quality would be poor.
- Make sure to store ink cartridges in a cool and dark place.
- Store ink cartridges and waste ink tank in a place that is out of the reach of children.
- Request an industrial waste processor for processing of empty ink cartridges.
- Do not shake ink cartridges violently. This may result in ink leakage from the ink cartridges.
- Never refill the ink cartridges with ink. This may result in troubles.
- MIMAKI will not bear any responsibility for any damage caused by the use of the ink cartridges refilled with ink.
- Do not touch or stain the contacts of the ink cartridge. This may cause damages on printed circuit boards.
- Do not disassemble the ink cartridges.



Usable media sizes and notes for handling are described.

### Usable sizes of media

	Model	JV34-260			
Type of Recommended media         Tarpaulin/         FF(Flexible         Face)/         Photo         paper/PET/Artificit           Weatherproof PVC         Transfer paper					
Ma	aximum width	2642mm			
Mi	inimum width	210mm			
Ma	aximum printing width	2632mm			
	Thickness	1.0mm or less			
	Roll outside diameter	φ250mm and less (for small-size media holder, φ180mm and less)			
media	Roll weight	100kg and less (for small-size media holder, 25kg and less)			
Roll inside diameter 3 or 2 inches					
Roll	Side printed	Side facing outward			
	Roll end treatment	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.			

#### Caution in handling of medias

Pay attention to the followings for handling of medias.

(Important!)

- Use media recommended by MIMAKI to ensure reliable, high-quality printing. Set the heater temperature to meet the characteristics of the media.
- Set the temperature of the Pre-heater, Print heater and Post-heater according to the type and characteristics of the media used.

Automatic temperature setting can be made on the operation panel by setting the profile on the dedicated RIP. For setting on the RIP, refer to the instruction manual for your RIP.

• Pay attention to the expansion and contraction of the media. Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract. The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked.

Do not use curled media.

This may result in paper jamming.

If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.

• Be careful to dusts on the edge face of the medium.

Some rolls have dusts contained in the package gathered on the edge surface of the roll. If you use as it is, the drawing quality may be degraded due to nozzle missing or ink drops. Be sure to set the roll after removing dusts adhering on the edge face of the roll.

# Menu mode

This machine has 4 modes. Each menu mode is described below.

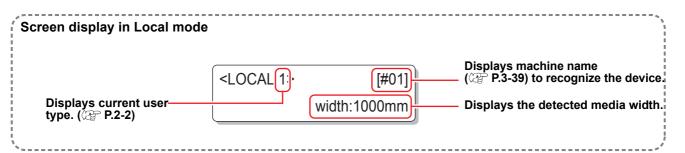
#### NOT-READY mode

This is the mode in which the media has not been detected yet. The keys other than the (REMOTE) key and the /(TEST PRINT) key are effective.

#### LOCAL mode

Local mode is the mode for the drawing preparation state. All the keys are effective.

The machine can receive data from the computer. However, it does not perform printing.



This mode permits the following operations:

- Pressing the JOG keys to set up a drawing origin and drawing area.
- Pressing the TEST PRINT) key to perform [TEST DRAW].
- Pressing the CLEANING key to execute the cleaning of the heads.
- Pressing the **FUNCTION** key to set functions.
- Pressing the (HEATER) key to set the temperature of the heaters.
- Pressing the **ENTER** key to check the remaining amount of ink, the description of the cartridge error, the model name, the firmware version, and so on.
- Pressing the **REMOTE** key to switch between [REMOTE mode] and [LOCAL mode].
- Pressing the DATA CLEAR key to erase the printing data the machine has received.
- Pressing the USER TYPE key to change the user type.
- Pressing the (ST.MAINTE) key to activate directly [ST.MAINTENANCE], one of the [MAINTENANCE] functions.

#### **FUNCTION mode**

To set FUNCTION mode, press the **FUNCTION** key when this machine is in LOCAL mode. In this mode, printing conditions can be set.

#### **REMOTE** mode

This machine prints the data it receives. During drawing, the drawing is interrupted by pressing the **(REMOTE)** key.

### 1-16

# Chapter 2 Basic Operations



This chapter

describes procedures and setting methods for ink and media preparation, and printing.

About User Types	
Settings That Can Be Registered in	
User Types	2-2
Using the Registered User Types	2-2
Workflow	2-3
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Turning the Power ON	2-4
Turning the Power OFF	2-5
Setting a Media	2-6
Adjusting the Head Height	2-6
Note for media setting	2-8
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Setting a narrow roll media	2-20
Narrow take-up device	
Setting leaf media	2-26
Changing the printing origin	

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Deleting Received Data (Data Clear)	2-36
Cutting a media	
-	

# **About User Types**

Printing of higher quality prints is available by making (setting of User type) the print set matching to the characteristics of media when this machine is used for printing. On this machine, 4 types of User type 1 to 4 are settable.

Reference

page

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P.3-28

P.3-20

P.3-22

P.3-25

P.3-28

P.3-26

#### Settings That Can Be Registered in User Types

Reference Set items Set items page Setting of Color patterns Setting Media compensation P.3-4 P.3-8 Changing the set value of Heater Setting of Refreshing Setting Print mode P.3-12 Setting of Adsorption Setting Drop position P.3-6 Setting of Feeding speed level Setting of the number of ink layers P.3-28 Setting of Auto cleaning P.3-16 Setting of In-printing cleaning Setting of Drying time Setting of Auto cut Setting of Media detection P.3-28 Setting of Pre-feeding Setting of Feed origin

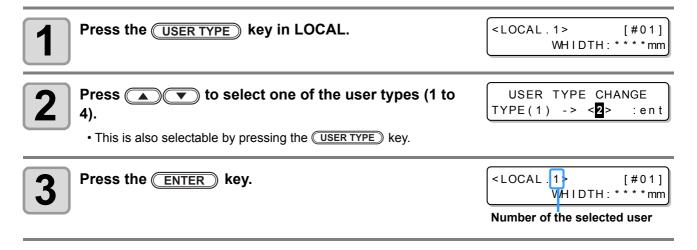
P.3-17

Setting of MAPS

For the method of registering settings in user types (1 to 4), see P.3-2.

#### **Using the Registered User Types**

Setting of Margins



#### For Selecting a User Type without Using USER TYPE key

You can select a user type by using the **FUNCTION** key in the local without pressing the **USER TYPE** key.



# Workflow

1	Turning the Power ON/OFF	Referring to "Turning the Power ON/OFF" (@ P.2-4).	
2	Setting a Media	Referring to "Setting a Media" ( (28 P.2-6).	
3	Preparing for the Heaters	Referring to "Preparing for the Heaters" (	
4	Test Printing	Referring to "Test Printing" (@ P.2-32).	
5	Printing Data	Referring to "Printing Data" ( 2 P.2-35).	

2

# **Turning the Power ON/OFF**

#### **Turning the Power ON**

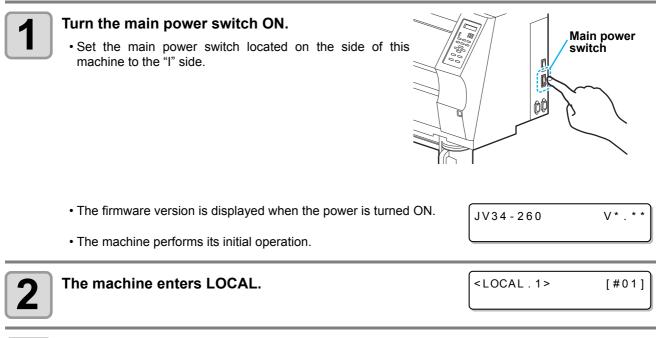
This machine is provided with the following two power switches:

Main power switch: It is located on the side of this machine. Keep this switch ON all the time.

Power switch : Normally, use this switch to turn the power ON/OFF.

The power switch lights in green when the power is ON and blinks in green when it is OFF.

The nozzle clogging prevention function periodically operates even with the power switch turned OFF when the main power switch is turned ON (the power switch blinks in green).





Turn ON the power of the connected PC.

(Important!)

• Turn the power ON after the front cover and maintenance cover are closed.

• The head nozzle may result in nozzle clogging if the main power switch is left OFF for a long time.

#### **Turning the Power OFF**

When having ended the operation of the machine, turn the power OFF by pressing the power switch located on the front side.

Check the following items when turning the power OFF.

- If the machine is receiving data from the PC or if there is any data that has not been output yet
- · If the head has returned to the capping station
- If any error has occurred ( ( P.6-10 "Error messages")

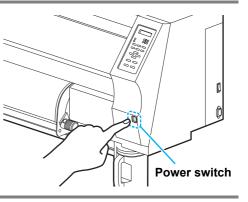


#### Turn OFF the power of the connected PC.



#### Press the power switch to turn the power OFF.

- The power switch blinks in green.
- Do not turn OFF the main power switch located on the side of the machine.
- To use this machine again, light the green lamp by pressing the power switch.



#### **Cautions about Turning the Power OFF**

#### Do not turn the main power switch OFF.

When the main power switch is ON, the power periodically turns ON and the nozzle clogging prevention function (flushing function) operates.

When the main power switch has been turned OFF, the auto maintenance functions, such as flushing, do not operate, and this may cause nozzle clogging.

#### Keep the front cover and the maintenance cover closed.

If the cover is opened, the auto maintenance function such as the flushing function does not work.

#### Turn the power OFF after having checked the position of the head.

If the power is turned OFF in a state where the head has not returned to the capping station, the ink head dries, which may cause nozzle clogging.

In this case, turn the power ON again and check that the head has returned to the capping station, and then turn the power OFF.

#### Do not turn the power OFF during printing.

The head may not return to the capping station.



#### After having turned the power switch OFF, turn the main power switch OFF.

When turning the main power switch off for moving the machine or for solving the error or the like, press the power switch on the front of the machine, check the display is turned off on the operation panel, and then turn the main power switch off.

# **Setting a Media**

This machine can be used with a roll media and leaf media. For usable medias, refer to P.1-14 "Usable sizes of media".

# Adjusting the Head Height

Adjust the head height according to the thickness of the media you use.

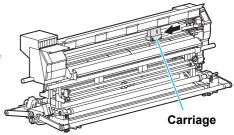


- Adjust the head height prior to setting the media. If the head height is adjusted after the media is set, this may cause a media jamming, deterioration of the print quality or head damage.
- The range of the initial head height is adjustable by 2 levels according to the purpose of use.
- The range of the printing height of JV34 is from L range (2 mm/3 mm) to H range (3 mm/4 mm). (Set to L range 2 mm at shipping)
- If the print quality is set to "Bi-D" ( P.3-14 ), perform "Dot position correction" of the type registration after the head height is adjusted. ( P.3-6)



#### Move the carriage to the platen.

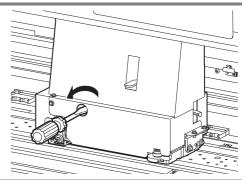
- When the device is turned ON :Execute [ST.MAINTENANCE - CARRIAGE OUT] of the Maintenance functions.(@P.5-5 Step1,2)
- When the device is turned off : Open the front cover, then move the carriage by hand.





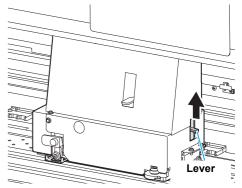
#### Loosen the screw in front.

• Loosen the screws, rotating each by one turn of a standard screwdriver.





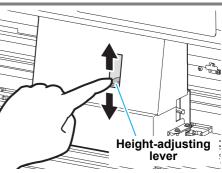
Raise the lever of the right side of the carriage.





# Adjust the height-adjusting lever according to the media.

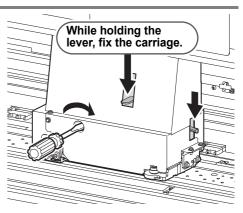
- Adjust the position of the lever, referring to "For the Adjusting Lever and the Range".
- Set the height-adjusting lever to the highest stage or the lowest stage.Setting it to the intermediate height, a printing fault can result.





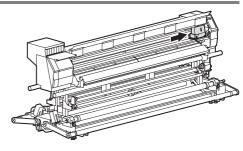
# Fix the carriage while holding the height-adjusting lever.

- By moving the lever of the right side of the carriage downward and fastening the screw in front, you can fix the carriage.
- Be sure to fix the carriage while holding the height-adjusting lever. Otherwise, you cannot fix the head at the proper position.
- Fasten the screw securely.





Return the carriage to the station position.



### For the Adjusting Lever and the Range

Range	Height-adjusting lever	Head height	Switching area	
L range (General printing)	Thin	2mm (The set position at shipping)		Contact our sales office
H range	Thick	3mm	Switch by user	for switching $L \leftrightarrow H$ by field person.
	Thin	3mm		$L \leftrightarrow \Pi$ by field person.
(Transfer type printing)	Thick	4mm		



• Set the lever to "Thick" when a thicker media such as tarpaulin or FF is used.

• Set the lever to "Thick" when the media is prone to gather dust in the head or is often stained with ink traces.



• If solvent ink is selected, do not use with H range. It adversely affects the image quality.

• When using the media of 1mm thickness or below and SS21 ink, be sure to set the head height to "Thin".

If using with the head height "Thick", as the head gap (between the media and the height of head nozzle surface) can be too large and ink drops may be splashed, the image quality cannot be assured.

# Note for media setting

When setting media, read the following notes carefully.



- Take care not to drop the media on your foot when setting the media. It may cause an injury due to the media.
- When setting a heavy roll media, work by two or more people. Otherwise, you may hurt your back by the weight of the roll media.
- Handle the clamp lever carefully. It is dangerous to push the lever up when the tension-bar is lifted. Be sure to fix the tension-bar with the lock and push up / down the lever.

#### (Important!)

- In the following cases, the media may not be detected correctly.
- When setting a transparent media / when a media is exposed to direct sunshine.
- Do not use a printed media. Otherwise, ink can adhere to the pinch rollers and media may be stained or may not be detected.
- Straighten the significantly or internally curled media to be fed along the platen.
- Set a media in the center of the machine. This machine can print on the media set on the right side, however, some types of media may be fed on a skew or stick on the platen. By setting media in the center of this machine, it stably feeds the media.

## Setting a heavy-duty roll media

There are two types of roll media; with 1.6m or more wide called "heavy-duty roll media" and with less than 1.6m called "narrow roll media".

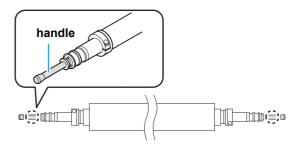
This section explains how to set "heavy-duty roll media" with 1.6m or more wide.

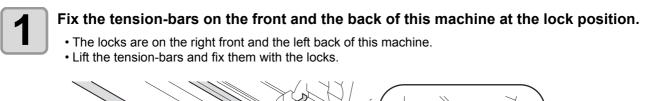
## Prepare for the heavy-duty take-up device first

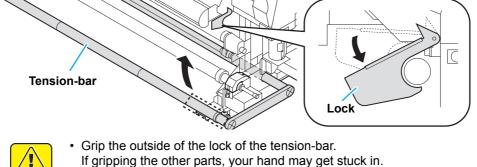
Prepare for the take-up device before setting the heavy roll media.



 Handle the roll shaft with care, since it is very heavy with media.
 To avoid an accident or injury, be sure to grip the handles on both ends.





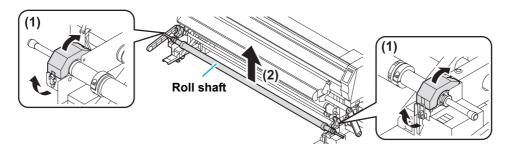




Caution

Remove the roll shaft on the heavy-duty take-up device at the front of this machine.

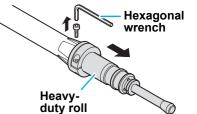
(1) Open the covers on the right and the left of the take-up device.(2) Remove the roll shaft.

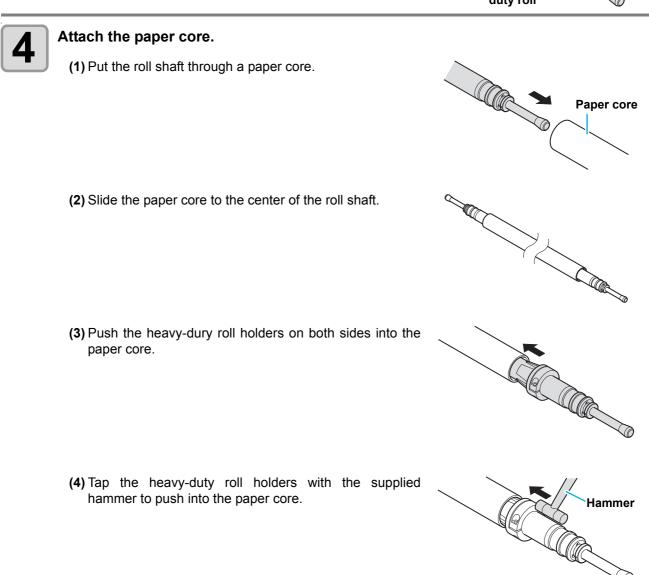




#### Remove the heavy-duty roll holders.

The heavy-duty roll holders are on both sides of the shaft. Remove them with the following procedures.
(1) Loosen the screws with the supplied hexagonal wrench.
(2) Remove the heavy-duty roll holders.







Set the roll shaft with the paper core on the heavy-duty take-up device, and close the covers on both sides of the roll shaft.

## Set a heavy-duty roll media

Set a heavy-duty roll media to the heavy-duty feeding device on the back of this machine. When setting a heavy-duty roll media, set "ON" on [Feeding/TakeUP] of MACHINE SETUP.



• Since the roll media is heavy, set it by two or more people. Take care not to drop it on the foot, and not to hurt your back.

• Handle the clamp lever carefully.

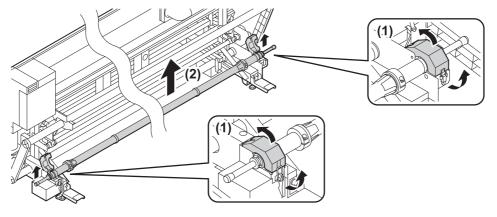
It is dangerous to push the lever up when the tension-bar is lifted. Be sure to fix the tension-bar with the lock and push up / down the lever.





#### Remove the roll shaft on the heavy-duty feeding device at the back of this machine.

(1) Open the covers on the right and the left of the heavy-duty feeding device.(2) Remove the roll shaft.





Grip the handles on both ends of the roll shaft.
 If gripping the other parts, your hand may get stuck in.
 Be careful not to hurt your back.

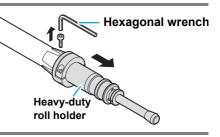
• To prevent dust, set the paper core or media to the roll shaft on the table or sheet. Dust on the paper core or on the media may cause defective print.

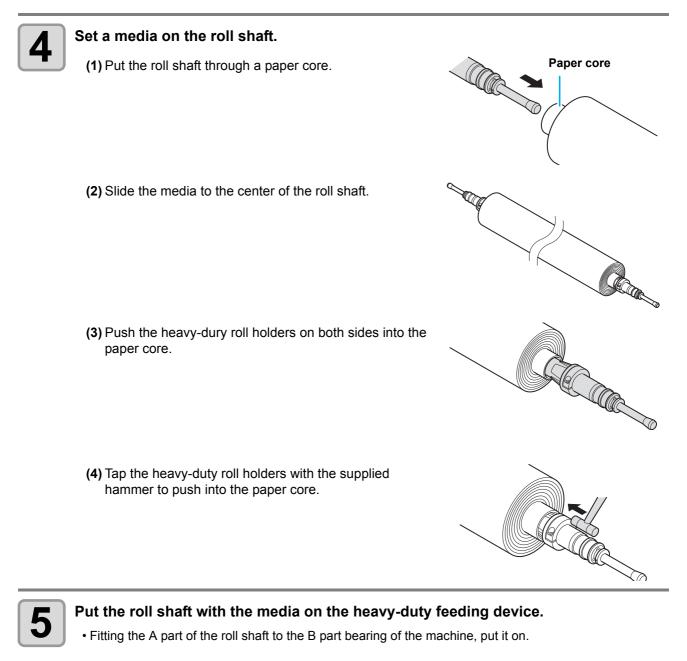


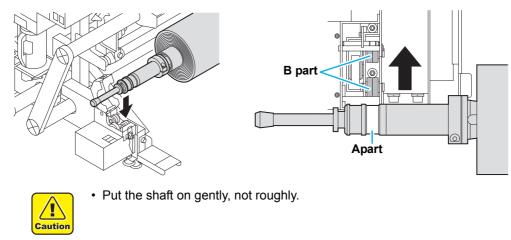
#### Remove the heavy-duty roll holders.

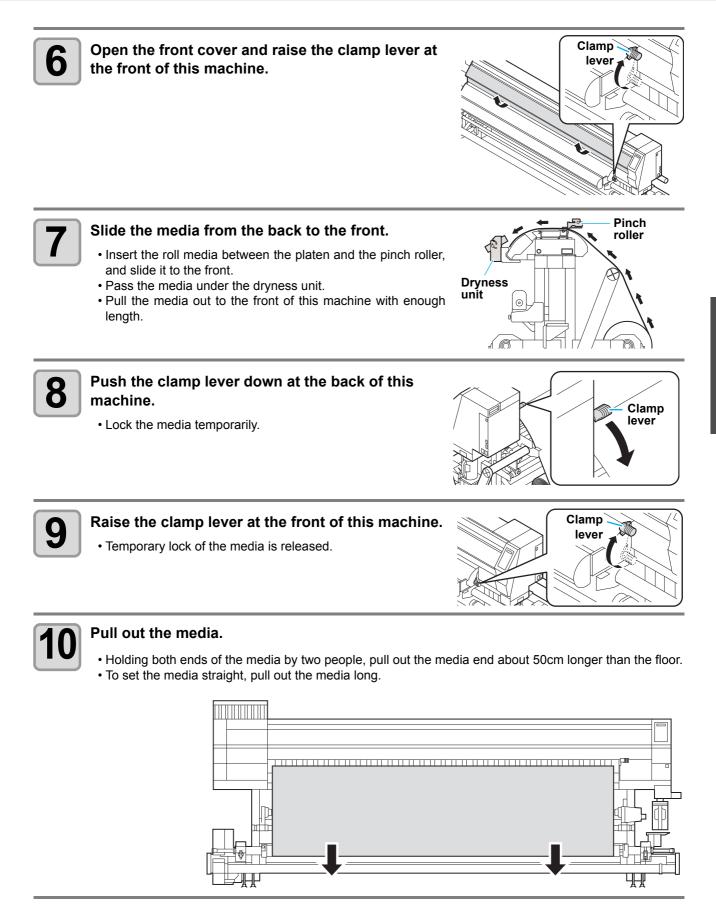
The heavy-duty roll holders are on both sides of the shaft. Remove them with the following procedures.
(1) Loosen the screws with the supplied hexagonal wrench.

(1) Loosen the screws with the supplied nexagonal wrench.(2) Remove the heavy-duty roll holders.



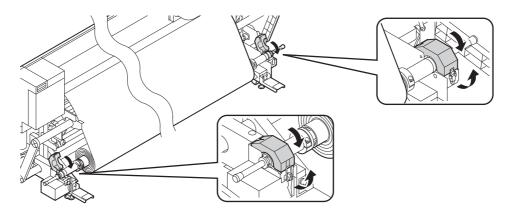






# 11

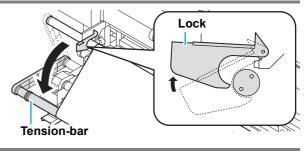
Close the covers on the right and the left sides of the heavy-duty feeding device at the back of this machine.





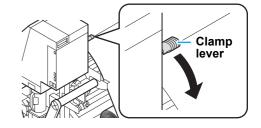
Lift the back tension-bar down to the stopper slowly to tighten the media.

• Unlock the tension-bar, and then lift it down.



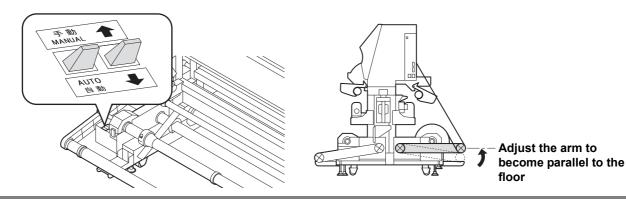


Push the clamp lever down.



# Adjust the position of the tension-bar with the switches on the left of the heavy-duty feeding device.

- (1) Set the  $\uparrow\downarrow$  switches to the take-up direction of the media.
- (2) Turn the left switch to [MANUAL].
  - The tension-bar is lifted, reeling the media. When the media is fed and the tension-bar is not lifted, turn the ↑↓ switch to the other side.
- (3) When the tension-bar arm becomes parallel to the floor, turn the left switch to AUTO to stop the tension-bar.
- (4) Turn the  $\uparrow\downarrow$  switch to the feeding direction of the media.



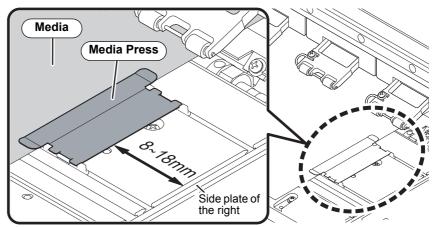


#### Hold the media lightly with the media press.

- Set the media not to get out of the right of the pinch roller on the right end.
- When using a thick media, remove the media press from the media before printing.



- Do not set media at the position which the media press touches the side plate on the right. As media may tilt and be lifted, it could break the head.
- If a media is misaligned to the right more than fixed position, a warning is displayed. Set the media again.
- \*\*\*\*\* ERROR 50 \*\*\*\*\* MEDIA SET POSITION



Media press position : 8 to 18 mm from the side plate on the right. (For the variation of the inside diameter of media roll, it ranges as above.)





#### Press the ( key to select "ROLL" .

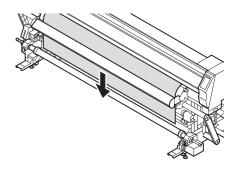


- Detects the media width.
- When [MEDIA RESIDUAL] of the maintenance function is "ON" (@ P.5-25), the screen for entering media remaining amount is displayed after detecting the media width. @ P.2-24)

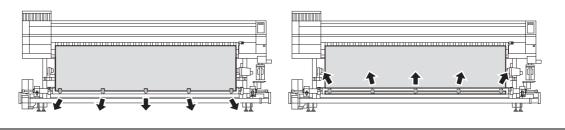


#### Secure the media on the take-up device. ((2 P.2-25)

(1) Feed the media up to the core of the roll media of the take-up device by pressing the key.



(2) Secure the media as shown below.





#### Press the **A v** key to loosen the media.

Loosen the media until it reaches to the floor.



#### Roll up the media around the paper core about once with the switch of the heavyduty take-up device.

- (1) Turn the left switch to [MANUAL], and turn the right ↑↓ switch to the take-up direction of the media to roll up the media.
- (2) Just before the media is stretched, turn the left switch to [AUTO] to stop.



- Rolling up the media too tight, the right and the left covers of the take-up device may open and an error [Cover Open] may be displayed.
   In this case, open the right cover of the take-up device, and loosen the tension of the
  - In this case, open the right cover of the take-up device, and loosen the tension of the media.



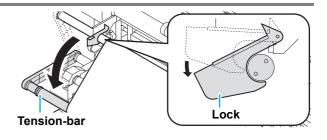
#### Press the jog key ( ) again to loose the media.

· Loosen the media until it reaches to the floor.



#### Lift the front tension-bar down slowly.

• Unlock the tension-bar, and then lift it down.





Press the **() (v)** key to lift the tension-bar up and to stretch the loosened media.

• Turn the switch to AUTO. The tension-bar is lifted, taking up the media, and automatically stops at the proper position.



- If the tension-bar is not lifted with key, stretch the loosened media with the switch.
  - (1) Set the ↑↓ switch to the take-up direction of the media, and turn the switch to [MANUAL]. (The tension-bar is lifted.)
    - •When the media is fed and the tension-bar is not lifted, turn the  $\uparrow\downarrow$  switch to the other side.
  - (2) When the tension-bar arm becoms parallel to the floor, turn the switch to [AUTO] to stop the tension-bar.
  - (3) Turn the  $\uparrow\downarrow$  switch to the take-up direction of the media.
  - It cannot print on the media between the take-up device and the carriage.

## Confirmation message of the take-up/feeding tension-bar

To make use of the heavy-duty take-up/feeding device safer, a confirmation message appears on the display for the tension-bar position when operating the printer with the tension-bar lifted higher than usual.

Take-UP	Tension-Bar
check	:ent
Feeding	Tension-Bar
check	: ent



#### When the message appears, check the tension-bar position and the $\uparrow\downarrow$ switch.

• Both the tension-bar position and the  $\uparrow \downarrow$  switch are properly set, you do not need to perform the step 2. Press the **ENTER** key to continue the operation.



#### Press the END key.

• The next operation is cancelled. Set the tension-bar position and the  $\uparrow\downarrow$  switch properly, and perform the operation again.



• Once the tension-bar is checked, the confirmation message is not displayed from the next time. (Once the power is turned off, the message is displayed again.)



 When "HIGH" is set for the tension-bar moving position on "Perform setting of feeding and take up" of MACHINE SETUP (
 P.3-32), press the 
 <u>ENTER</u> key to continue the operation even if the message above appears. Setting the tension-bar higher than the current moving position may become load for the device and

Setting the tension-bar higher than the current moving position may become load for the device and break the machine.

## Adjust the take-up/ feeding tension-bar

To take-up stably for the various media, adjust the take-up/ feeding tension-bar.

#### Setting the active position of the take-up tension-bar (For the setting, see P.3-33)

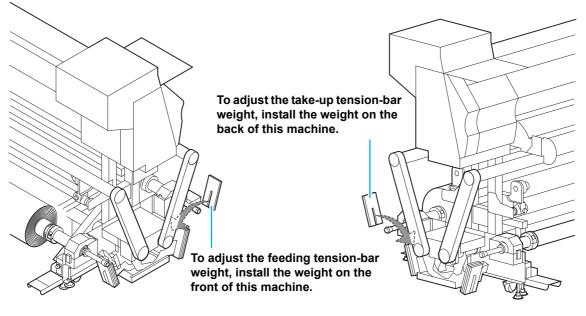
Change the settings depending on the media type. For the stretchy media, it is better to set the active position of the tension-bar to [HIGH].

Media Type	Setting	Description					
FF	Set proper	Set properly depending on the media.					
Tarpaulin / Mesh Tarpaulin	[HIGH]	Ink-absorbable media may expand and affect feeding and take-up of the media. Setting HIGH may loosen the media turning angle at the tension-bar, and it may feed / take up smoothly.					
PVC	Set proper	ly depending on the media.					
Sublimation transfer paper	[LOW]	To fix the cockling made by ink, it is necessary to secure the feeding length to the take-up device. Setting LOW may secure the enough feeding length to fix the cockling.					

#### Installing the counter weight for adjusting the take-up/ feeding tension-bar weight

Install the proper number of the counter weight depending on the media type. The counter weight can be installed up to 14 pieces.

Media condition	Solution
For the strong tension to the media, the media wrinkles to the feeding direction of the media.	Increase the number of the counter weight to be installed, depending on the media used.
For the weak tension to the media, the media loosens and is not taken up finely.	Decrease the number of the counter weight to be installed, depending on the media used.





• The counter weight is very heavy. Handle it with care. If your finger or foot is stuck in the weight, you may be injured.



- If the tension-bar is highly lifted, the tension-bar becomes heavy. (The actual weight of the tension bar is weighted.)
- Not to lose the unused counter weight, put it in the storage box.

## Setting a narrow roll media



• Set the media with less than 1.6m wide on the narrow roll holder.



#### Fix the tension-bars on the front and the back of this machine at the lock position.

- The locks are on the right front and the left back of this machine.
- · Lift the tension-bars and fix them with the locks



- Grip the outside of the lock of the tension-bar.
- If gripping the other parts, your hand may get stuck in.

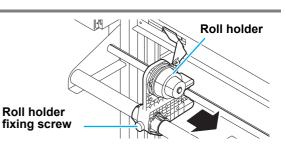


Set "OFF" on [UNIT SELECT] of [Feeding/TakeUP] in MACHINE SETUP. (CP P.3-32)



# Move the roll holder on the back of this machine.

Loosen the roll holder fixing screw and then move it.
Move the roll holder to set the media in the center of this machine.





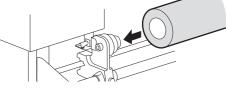
#### Tighten the roll holder fixing screw.

Check the Step 2 to 3 again.



# Set the left end of the core of the roll media on the let roll holder.

• Push the roll media onto the roll holder until the roll core is all the way seated.

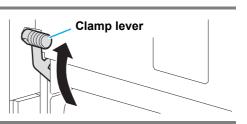




Loosen the screw of the right side roll holder then insert the holder into the core of the roll media.

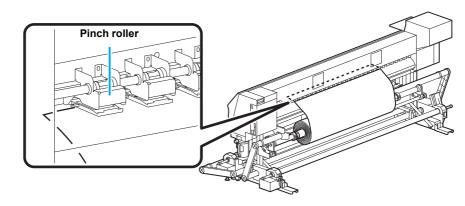


Raise the clamp lever in the front of this machine.





Insert the roll media in this machine.

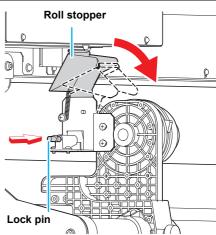


- The roll media can be smoothly inserted by slanting the media.
- (1) Pull the media out of the roll to the head of the platen.
- (2) Insert the media between the platen and the pinch roller.
  - Pull the media out of the roll so that the media can be grasped from the front of the machine.
- (3) Push down the clamp lever from the back of this machine.
  - The media is held.



#### Lock the roll stopper.

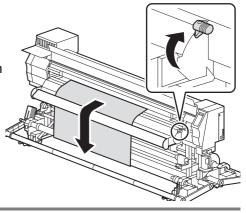
- (1) Turn the roll stopper to the arrow direction shown on the right.
- (2) Push the lock pin and fix it.





#### Pull out the roll media out.

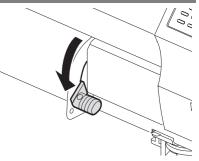
- (1) Open the front cover.
- (2) Raise the clamp lever from the back of this machine.
- (3) Pull out the roll media gently and then stop pulling when locked lightly.





# Make the roll media even then lower the clamp lever.

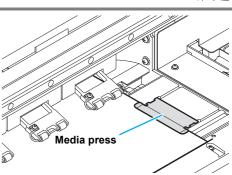
• Pulling several positions of the media lightly, Lower the clamp lever after confirming that the amount of the roll media pulled out is almost even.





#### Hold the media with the media press gently.

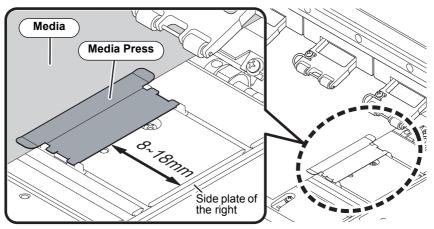
- Set the media so that no media sticks out from the right end pinch roller to the right side.
- When using a thick media, remove the media press from the media before printing.





- Do not set media at the position which the media press touches the side plate on the right. As media may tilt and be lifted, it could break the head.
- If a media is misaligned to the right more than fixed position, a warning is displayed. Set the media again.

*	*	*	*	*		Е	R	R	0	R		5	0		*	*	*	*	*	
	Μ	IE	D	I	A		S	E	Т		Ρ	5 0	S	I	Т	I	0	N	I	

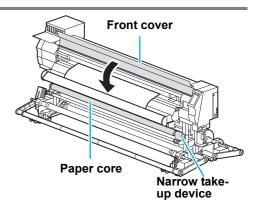


Media press position : 8 to 18 mm from the side plate on the right. (For the variation of the inside diameter of media roll, it ranges as above.)



#### Prepare for the narrow take-up device.

- (1) Set an empty core of the roll media on the take-up device.
- (2) Close the front cover.





- Use the narrow take-up device to set the media with less than 1.6m wide.
- When setting a long paper core, the supporter of the roll holder may be stuck in the center of the guide rail.
  - In this case, follow the procedures below.
  - (1) Loosen the fixing screw of the supporter, and push the arm down.
  - (2) Slide the roll holder.
  - (3) Raise the arm, and tighten the fixing screw of the supporter.



#### Press the ( key to select "ROLL" .

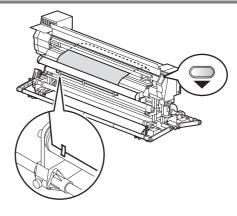
- Detects the media width.
- When [MEDIA RESIDUAL] of the maintenance function is "ON"

(( P.5-25), the screen for entering media remaining amount is displayed after detecting the media width.( P.2-24)



## Fix the media on the narrow take-up device. (( P.2-25)

- Feed the media up to the core of the roll media of the take-up device by pressing the key.
  - Check the media end is not caught into the slot on the post-heater, and then feed the media.
- (2) Fix the middle of the media with adhesive tape.
- (3) In the same manner, fix the left side and right side of the media.
  - Make sure that the there is no slack or wrinkle on the media in such condition that the roll media is pulled to right and left evenly, and then stick the tape.



MEDIA SELECT

>LEAF

ROLL <

## Entering the media remaining amount

When [MEDIA RESIDUAL] of the maintenance function is "ON" (@P.5-25), the screen for entering media remaining amount is displayed after detecting the media width.

1		Input of MediaLength MEDIA LENGHT = x x x . xm
2	Press 🗻 and 💌 key to enter the media remaining amount.	Input of MediaLength MEDIA LENGHT = 50.0m



Press the <u>ENTER</u> key.

## Narrow take-up device

With the switch of the narrow take-up device, select the take-up direction of the media or others.

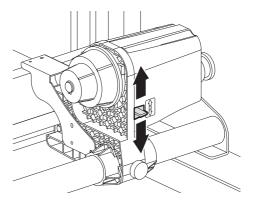
Lever in top position (REVERSE) :

The take-up device winds the media with the printed side facing in. Lever in middle position (OFF) :

The take-up device does not wind the media.

Lever in bottom position (FORWARD) :

The take-up device winds the media with the printed side facing out.



## Setting the torque limiter

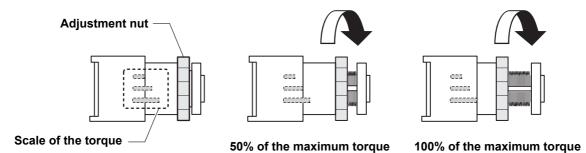
The take-up device is provided with a torque limiter.

The take-up torque can be adjusted with the torque limiter.

(The torque limiter is set at the maximum value when shipped from the factory.)

If the tension is too strong to use a thin sheet of media, lower the take-up torque with the torque limiter.

- Clockwise turn :
- Increases torque (a heavy and thicker media such as tarpaulin or the like)
- Counterclockwise turn : Decreases torque (For light media)



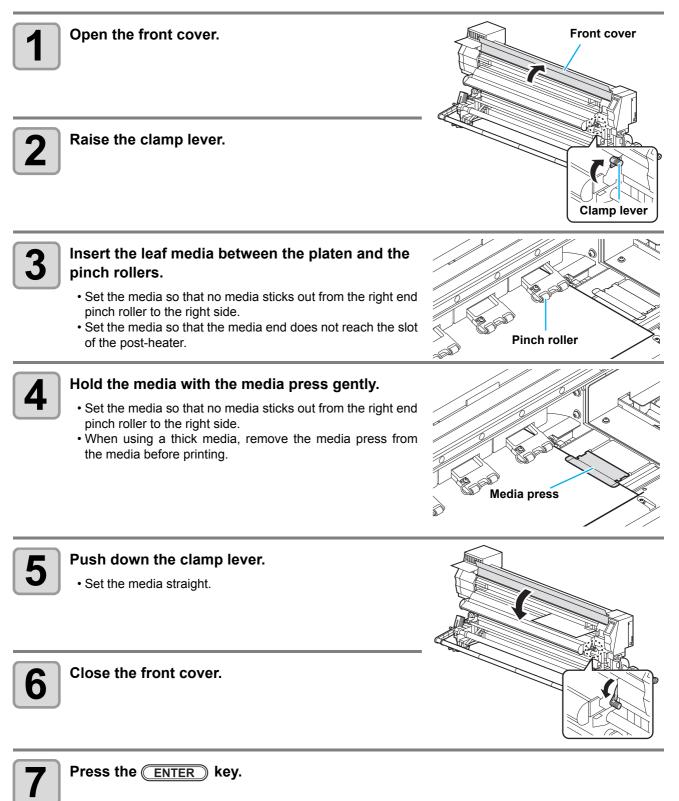


• When the torque limiter is adjusted too weak ; The media can not be taken up firmly.

When the torque limiter is adjusted too strong ; The slack may occur depending on the media and cause influence on the image quality.

## Setting leaf media

Unlike roll media, leaf media does not need to be retained with the roll holders.



Press the key to select "LEAF" .

MEDIA SELECT ROLL< >LEAF

8



#### The media detection is started.

(1) The media width is detected.(2) The media is fed then the rear end of media is detected.(3) It returns to the local mode when the detection is completed.

## Notes when using media press

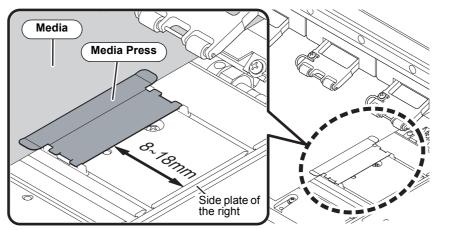


- Do not set media at the position which the media press touches the side plate on the right. As media may tilt and be lifted, it could break the head.
- If a media is misaligned to the right more than fixed position, a warning is displayed. Set the media again.



DETECTING MEDIA NOW

PLEASE WAIT



Media press position : 8 to 18 mm from the side plate on the right. (For the variation of the inside diameter of media roll, it ranges as above.)

## Changing the printing origin

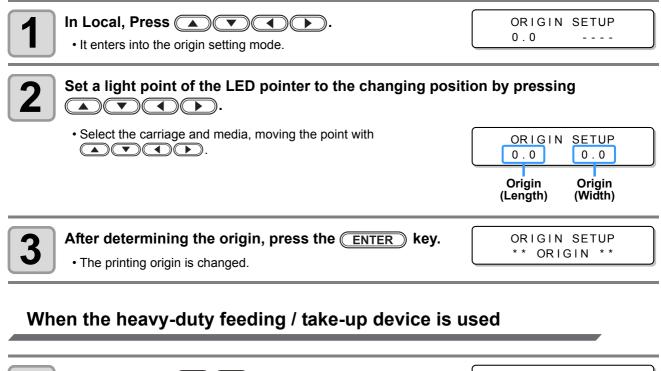
The position of the printing origin can be changed.

Moving the LED pointer to the changing position and deciding the position.

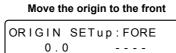


- The origin position set above misaligns with the feeding direction of a media by a few centimeters.
- Turn [FEED ORIGIN] "ON" in setup mode to fit the origin to the correct light position of LED pointer. (@ P.3-3)

## When the heavy-duty feeding / take-up device is not used



1	In Local, Press (). • It enters into the origin setting mod	de.	ORIGIN SETUP 0.0
2	<ul> <li>Press  to determine</li> <li>To move to the front of the current</li> <li>To move to the back of the current</li> </ul>	• =	ə origin.
		Move the origin to the front	Move the origin to the back
		FEED DIRECTION SET [FORE FEED]	FEED DIRECTION SET [BACK FEED]
3		termine the origin of the feed eys determined on Step 2. If differen hout changing the origin.	•



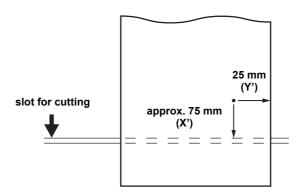
Move the origin to the back

ORIGIN SETup:BACK 0.0 ----

# Press to determine the origin of the width direction. After determining the origin, press the ENTER key. The origin is changed.

## Typical setting position of printing origin

The printing origin in the depth direction (X') is positioned at about 75 mm rearward from the slot for cutting on the platen. The printing origin in the scanning direction (Y') is positioned at 25 mm from the right end of the media. The value in the scanning direction (Y') can be changed using [MARGIN] in FUNCTION mode. ((@P P.3-3) This can be changed by using the Jog key.



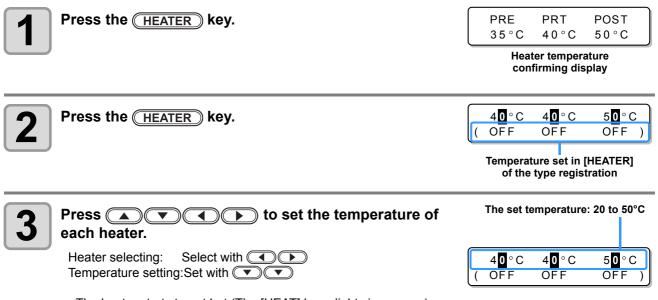
# **Preparing for the Heaters**

## **Changing the Temperature Settings for the Heaters**

You can change/save the temperature settings for the heaters with "Heater" of the setting mode. ((2) P.3-8) Here, changing method of the temperature set in the setting mode is explained.

- Set the heater temperature according to the characteristics of the media you use.
  - The temperature of the heaters has been set to "OFF" as default.
  - Appropriate temperature adjustment can be made because the temperature can be adjusted even during printing.
  - It may take several minutes to tens of minutes for the set temperature to be reached, depending on the ambient temperature.

• The optimal values of the heater setting differ depending on the ink type to be used. For details, refer to P.7-4 "Rough standard of heater temperature setting value".



The heater starts to get hot.(The [HEAT] lamp lights in orange.)



#### The heating of the heater stops.

• When the heater temperature reaches the set temperature, the [HEAT] lamp goes off and the [CONSTANT] lamp lights in green.



#### Press the **ENTER** key to stop heating.

• The screen returns to LOCAL.



- The Heater temperature is registrable beforehand according to the media to be used.
- P.3-2 "Registering All Printing Conditions Together (Type Registration)"
- The temperature set by the operations above does not reflect the Heater set temperature of the type registration. The set continues until the power is turned off or the temperature is newly set according to the following conditions.
  - (1) Change the type of the setup mode.
  - (2) Change the Heater temperature of the setup mode.
- (3) Designate the Heater temperature from the PC.
- The Heater temperature is controllable at the RIP side if the RIP in use has a function controllable. (For the setting procedures, refer to the instruction manual of the RIP in use.)
- Use this machine under 20 to 35°C. The temperature may not reach the set value due to the environmental temperature condition.

PRT

 $40 \circ C$ 

POST

50°C

PRE

35°C

## **Checking the Heater Temperature**



#### Press the HEATER key.

• The current heater temperature is displayed.



#### Press the **END** key at the end of confirmation.

• The screen returns to LOCAL.

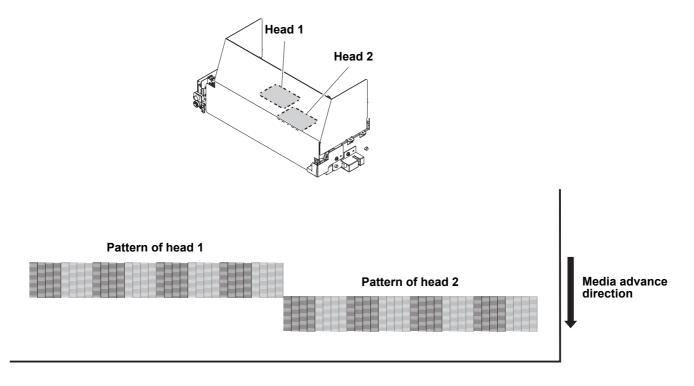
7	Ζ

# **Test Printing**

Print a test pattern to check that there are no discharging defects such as nozzle clogging (slight touching of ink or nozzle missing).

## Relationship between head row and test pattern

The relations between head row and test pattern print position are as follow.



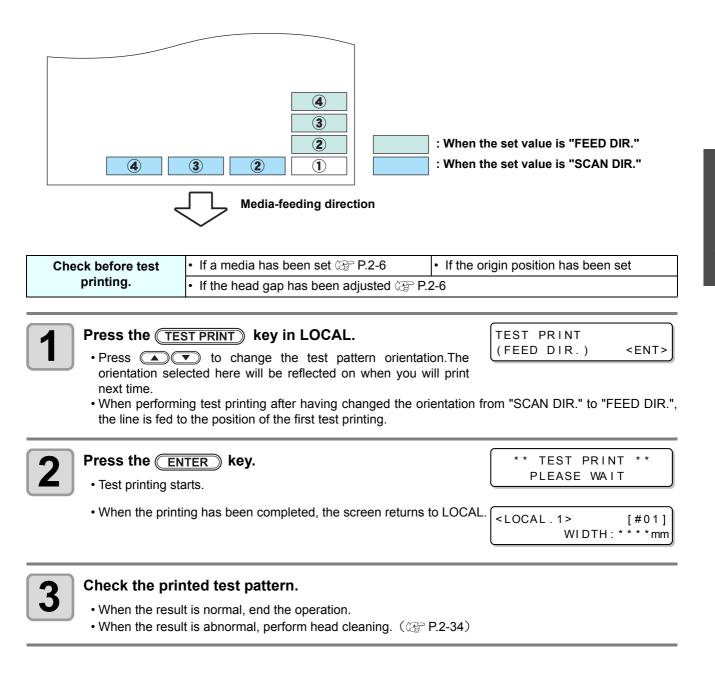
## Note on test printing

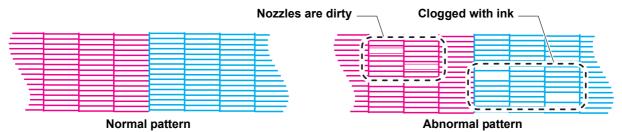
- When using a leaf medium, set one that is larger than an A4-size medium in the longitudinal direction.
  - When using a roll medium, rewind the medium by hand before printing so that it is not loose. When the roll medium has not been rewound tightly, it may cause image quality to deteriorate.

## **Test Printing**

Print a test pattern to check that there are no discharging defects such as nozzle clogging (slight touching of ink or nozzle missing).

In addition, you can select the orientation of the test pattern to print from two types in order to perform test printing repeatedly. Select one depending on your use.





# **Head Cleaning**

## About head cleaning

Check the printed test pattern result and perform cleaning depending on the status. Select one from the three types below:

- NORMAL : When any line is missing
- **SOFT** : When only head wiping is needed (when lines are bent)
- HARD : When poor image quality cannot be improved even by NORMAL or SOFT cleaning

## Perform head cleaning depending on the test printing result

There are three types of head cleaning. Use one by checking the test pattern.

In Local, Press the	CLEANING key.	CLEANING TYPE	: NORMAL
NORMAL : Select SOFT : When	o select the cleaning type. this if any line is missing. only head wiping is desirable. (in case of this if inferior printing cannot be improved	,	: HARD
<b>B</b> Press the ENTER • The rest of the clear display.	<b>key.</b> aning time is indicated at the lower of	the CLEANING 00:00	-

• On completion of cleaning, this machine returns to LOCAL.



#### Perform test printing again, and check the result.

• Repeat the cleaning and the test printing until the drawing result becomes in normal.



#### When the image quality is not improved after the head cleaning.

- Clean the wiper and ink cap. (@ P.5-5)
- Wash the head nozzle. (@P.5-8)
- Solve the failure of the image quality, referring to When Nozzle Clogging Cannot Be Solved. (@P P.5-16)

# **Printing Data**

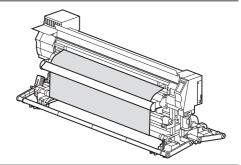
## **Starting a Printing Operation**

(Important!)

• When using a roll media, rewind the media by hand before printing so that it is not loose. When the roll media has not been rewound tightly, it may cause the image quality to deteriorate.



Setting a Media (CPP P.2-6)





#### **Checking the Heater Temperature**

• Check the CONSTANT lamp lights in [PRE], [PRINT], and [POST] below the display.





#### Press the (REMOTE) key in LOCAL.

• The screen changes to REMOTE, and data can be received from the PC.

TEMPERATURE CONTROL! PLEASE WAIT



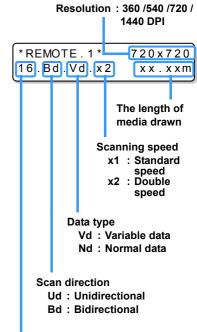
#### Transmit data to be printed from the PC.

- The ACTIVE lamp blinks and the printing conditions are displayed.
- For the method of data transmission, see the instruction manual for the output software.



#### Start printing.

• The printing speed may change, depending on the width of the set medium or the position of the print origin even when the same data is printed. This is because of a difference in resolution.



Number of passes

2

## Stopping a Printing Operation

Perform the following operation when stopping a printing operation halfway.



#### Press the **REMOTE** key during printing.

- The printing operation stops.
- Interrupt data sending at the PC side during the data is sent from the PC.
- Printing restarts from the interrupted data by repressing the **(REMOTE)** key.

## **Deleting Received Data (Data Clear)**

When you want to stop printing, delete the already received data.

Press the <u>DATA CLEAR</u> key in LOCAL.	DATA CLEAR <ent></ent>
Press the ENTER key. • The ACTIVE lamp goes out.	** DATA CLEAR **
• The received data is erased then it returns to the local mode.	

<LOCAL.1>

[#01]

width:1272mm

## Cutting a media

For a roll media, two ways are available to cut the media after printing is completed, as follows.



• When a media is cut, be careful that the printed side does not touch the floor or the printed side of other already cut media.

- When using the narrow take-up device, take up a cut medium using the switch of the take-up device.
- When using the tension bar of the heavy-duty take-up device, the cut function cannot be used because of safety.

## Auto cut

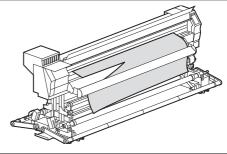
A media is automatically cut after printing is completed.



- In order to activate the automatic cutting function, the setting for it needs to be configured.(For the detailed setting method, refer to P.3-28. The automatic cutting function is set to "HOST" as default.)
- When the automatic cutting function is "OFF", perform the operation in "Manual cut" described later to cut a media.



When printing has been completed, the media is cut automatically.



## Manual cut

By using the keys on the operation panel, you can cut the media at any position.

<ul> <li>In LOCAL, Press </li> <li>LOCAL changes to the origin setting mode.</li> <li>By pressing </li> <li>, feed the medium to the cutting position.</li> </ul>	ORIGIN SETUP 0.0
Press the FUNCTION key.	MEDIA CUT <ent></ent>
Bress the ENTER key. • The media is cut.	MEDIA CUTTING PLEASE WAIT

• When the cutting has been completed, the current mode returns to LOCAL.

## 2-38

# Chapter 3 Extended Functions



#### This chapter

describes the operation procedures for using the machine more conveniently and each setting procedure.

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# **About User Types**

## **Registering All Printing Conditions Together (Type Registration)**

This machine allows you to register printing conditions in each of the user types (1 to 4). Register a printing condition according to each media that you use in a user type beforehand. When you replace one medium to another, you can set the optimum printing condition only by changing one user type to another.

## **Example of Type Registration**

	When solvent ink is used.	When aqueous ink is used.
Туре 1	For Tarpaulin 1	Photo-paper
Туре 2	For Tarpaulin 2	For PET 1
Туре 3	FF (Flexible Face)	For PET 2
Туре 4	PVC	Synthetic paper

## How to Register User Types

1	Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
2	Press the ENTER key.	SETUP SELECT	: TYPE . 1

3

Press to select one of the types (1 to 4) and press the ENTER key.



#### Select and set each item of "List of Functions".

• For details on how to set each function, see the reference page contained in "List of Functions".

## **List of Functions**

This section describes the overview of each function to be set and set values that can be registered in user types.

The underlined has been set as default.

(Important!)

- For each setting item below, you can set it so that the machine may operate according to the value specified when you printed from your RIP software in the connected host PC.
   Set Item : PRINT MODE (INK LAYERS (DRVING TIME (AUTO CUT (DRE EEED (MARCIN)))
  - Set Item : PRINT MODE / INK LAYERS / DRYING TIME / AUTO CUT/ PRE-FEED / MARGIN / COLOR PATTERN / REFRESH / VACUUM / Feed SPEED LEVEL
  - When you operate the machine according to the contents specified with the RIP software, set each item to "Host" when registering this machine type. When you set it other than "Host", the machine operates according to the machine setting.
  - For the specifying method with the RIP software, refer to the operation manual of the RIP software.

Function name	Set value	When no instruction from RIP exists *1	Outline	
MEDIA COMP. (@P.3-4)	-255 ~ <u>0</u> ~ 255		Used to print a pattern for correcting a media-feeding rate and correct it.	
DROP. POS CORRECT	-40.0 ~ <u>0</u> ~ 40.0		Used to adjust the dot position in go and return printing.	

Function name				Set value	When no instruction from RIP exists <sup>*1</sup>	Outline	
HEATER (ﷺ P.3-8)			Pre- Heater	OFF/ 20 ~ 50°C (OFF/ 68 ~ 122?F)			
	SET	F	Print	OFF/ 20 ~ 50°C			
	TEMP		Heater	(OFF/ 68 ~ 122°F)		Sets heater conditions.	
			Post	OFF/20~50°C			
	<b>SET</b>		Heater STANDBY	(OFF/ 68 ~ 122°F) <u>NONE</u> / 0 ~ 90 min (10min unit)			
	SET TIME		OFF TIME	<u>NONE</u> / 0 ~ 90 min (10min unit)			
	PASS			HOST / STD / FAST / FINE	STD		
PRINT	SCAN DPEED			HOST / STD / FAST	FAST	Sets a print quality level and	
MODE ( P.3-12)	SCAN DIRECTION			HOST / Bi-D / Uni-D	Uni-D	printing direction.	
(\(\Cg 1.3-12)	LOGICAL SEEK			HOST / ON / OFF	ON		
INK LAYERS (@P.3-28)				<u>HOST</u> /1 ~ 9	1	Sets the number of layers in which ink is to be applied.	
DRYING TIME	TIME			<u>HOST</u> /0.0 ~ 19.9 sec	0 sec	Sets the time to wait for ink	
(ఊ P.3-12)				<u>HOST</u> /0 ~ 999 sec	0 sec	drying.	
AUTO CUT (	æ P.3-2	8)		HOST /ON / OFF	OFF	Cuts the media automatically after printing.	
PRE-FEED ((2) P.3-28)				HOST /ON / OFF	OFF	Feeds the media back and forth before printing. When sticky media is used, select ON.	
MARGIN	LEFT			HOST / -20 ~ 75mm (1mm unit)	0 mm	Sets a non-printing area along the right and left edges of the	
(ᢙ P.3-17)	RIGHT			HOST / -20 ~ 75mm (1mm unit)	0 mm	media.	
COLOR	LEFT			HOST / ON / OFF	OFF	Prints the color pattern on the	
PATTERN	RIGHT			HOST / ONx1 ~ ONx5 / OFF		media right edge (when Sb52 is filled, on the both edges). Refreshes the print heads during	
(@PP.3-18)	_			(When Sb52 is filled)			
REFRESH (Ca	₽ P.3-28	3)		HOST / Level 0 (Refresh interval long) ~ 3 (Refresh interval short)	Level 3	printing.	
VACUUM (@	P P.3-28)			HOST / STANDARD / WEAK / Little WEAK / STRONG / OFF	STANDARD	Sets the absorbability of the media.	
FeedSPEED LEVEL (@P.3-28) *2				HOST / 10 ~ 200% 10%6mm/sec 100%60mm/sec 200%120mm/sec	100	Changes the media feeding speed in printing.	
AUTO	ON	INTERVAL TYPE		10 ~ <u>1000</u> ~ 30000 mm		Sets the auto cleaning of the print	
CLEANING				NORMAL / SOFT / HARD		head every completion of printing.	
(ఊ P.3-20)	<u>OFF</u>			40 4000 00000			
	CLEAN ING WIPING	ON OFF	INTERVAL TYPE	10 ~ <u>1000</u> ~ 30000 mm NORMAL / SOFT / HARD		Sets the auto cleaning of the print	
Print.				NORMAL / SOFT / HARD		head in printing.	
CLEANING				0 ~ 9990			
(ᢙᢧ P.3-22)		TEMP. difference		0 ~ 60		Sets the wiping operation during printing.	
MEDIA	DETECT METHOD			SELECT / WIDTH			
DETECT (@P P.3-25)				NONE / BOTH EDGE /		Sets the method for detecting the	
	CUTTING DETECT			LEFT EDGE / RIGHT EDGE		media.	
FEED ORIGIN ((2) P.3-28)				ON / <u>OFF</u>		Setting the media feeding direction to LED pointer when changing the printing origin position.	
MAPS	ON / <u>OFF</u>					Perform setting to reduce stripes	
(@P P.3-26)	PRINT SPEED ADJUST			-50 ~ <u>0</u> ~ +50%		between passes.	

\*1. This is the setting value to be used for printing when setting value is not specified at the RIP software (host) side, or, you give priority to the setting value at the machine side, even if you set "Host" to the type registration of this machine.

\*2. When "ON" is set to "Select device" in "Setting of feeding and take up" of the machine setting, the feeding speed is limited on max.150%.

# **Setting Media Correction**

Correct the feeding rate of media after the type of media is replaced or the temperature of Heater is changed. If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.

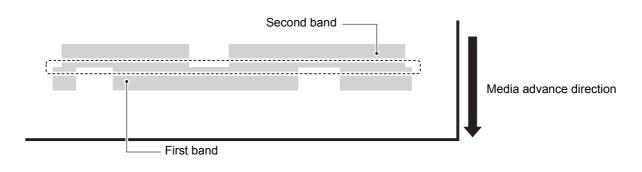


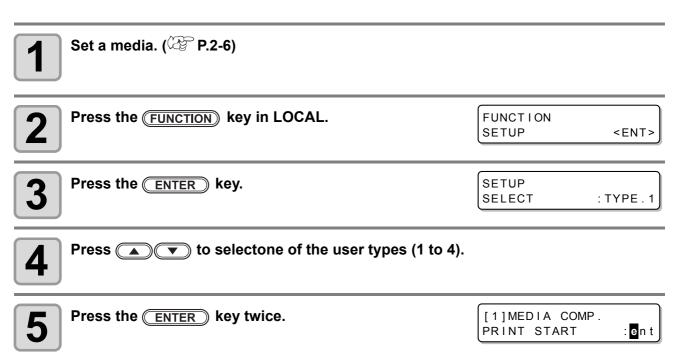
- When you have changed the temperature of the heaters, make sure that the [CONSTANT] lamp lights up and that the preset temperature is reached, and then start the correction.
- On completion of [MEDIA COMP.] during use of a roll media, the media returns to the printing origin. Then the roll media in the rear of this machine will slacken.
   Before printing, take up the slack in the roll media by hand; a loose roll media can result in an inferior image guality.
- When printing with a take-up device, set the media first and then perform media correction.

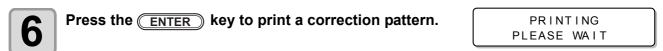
## **Setting Media Correction**

A pattern for media correction is printed and a media-feeding rate is corrected.

- 掌
- Two bands are printed in the correction pattern.
- Make adjustment so that an even color density is obtained in the boundary between the two bands.







# Check the correction pattern and enter a correction value.

[1]MEDIA COMP. VALUE = 0

Enter a correction value in "+" : The boundary between the two bands is widened.

- Enter a correction value in "-" : The boundary between the two bands is narrowed.
- When you change the correction value by "10", the width of the boundary changes by about 0.1 mm.



### Press the ENTER key.

- Print a correction pattern again and check it.
- When media correction is needed, perform the operation in Step 7 to make correction.

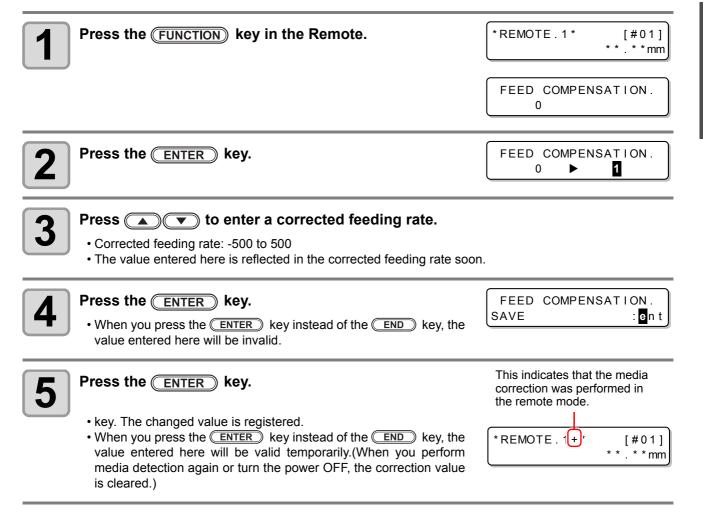




Press the **END** key several times to end the setting.

## **Correcting Media-feeding during Printing**

A media-feeding rate can be corrected even in the remote mode or when image data is printed.

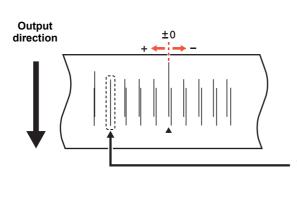


5

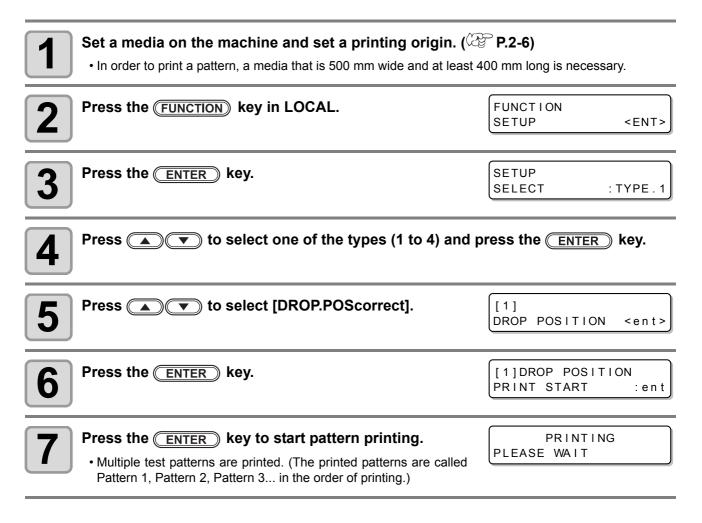
# If the Positions of Dots Shift...

When the condition for printing (media thickness/ink type/etc.) has been changed, perform the following operation to correct the ink drop position for bidirectional (Bi) printing and obtain the proper printing result.

## **Example of a Printed Pattern**



The dots at the fourth position counted from the zero position in the positive direction form a straight line. In this case, the dot position correction value is 4.0.





# Press rest to correct the dot position of Pattern 1.

- Corrected feeding rate: -40 to 40
- Check the test patterns. The position where an outward feeding line and a return feeding line become one straight line is the correction value.
- When the correction value in not between -40 and 40, adjust the height of the printing heads and then perform the operations in Step 2 and later.
- 2 types of the correction value is available depending on the head height.



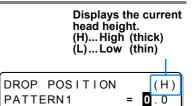
Press the ENTER key.



In the same way as in Step 8, correct the dot position in Pattern 2 and subsequent patterns and press the <u>ENTER</u> key.



Press the <u>END</u> key several times to end the setting.



# **Changing the Set Values of the Heaters**

The optimal values of the heater setting differ depending on the ink type to be used. For details, refer to P.7-4 "Rough standard of heater temperature setting value".

### **Changing the Temperature Settings for the Heaters**

Here, each item of "SET TEMP." and "SET TIME" is set.

SET TEMP		Used to change the set temperature of the pre-heater, print heater, and post-heater inside the platen.	
	STANDBY	<ul> <li>Used to set the time it takes until the temperature of the heaters falls to reach the preheat temperature after printing has been complete.</li> <li>Set Value:NONE, 0 to 90 min (by the unit of 10 min)</li> <li>The preheat temperature has been preset and cannot be changed.</li> <li>If the machine receives data with the preheat temperature reached, the heaters automatically raise their temperature up to the set temperature, and then the machine starts printing.</li> <li>When the set value has been set to "NONE", the heaters do not lower their temperature to the preheat one.</li> </ul>	
SET TIME	OFF TIME	<ul> <li>The heaters are turned off in the following cases:</li> <li>When printing is not performed longer than the preset time in the standby mode</li> <li>When printing is not performed longer than the preset time after printing has been completed with "NONE" being selected for the set value of "STANDBY"</li> <li>Set Value:NONE, 0 to 90 min (by the unit of 10 min)</li> <li>If the machine receives data with the heaters turned off, the heaters are automatically turned on to raise their temperatures up to the preset levels and then the machine starts printing.</li> <li>When "NONE" is selected for the set value, the heaters are not turned off.</li> <li>When "0 min" is set for the set value, the heaters are turned off after printing has been complete.</li> </ul>	

1	Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
2	Press the ENTER key.	SETUP SELECT	: TYPE . 1
3	Press (1 to 4).		

Press the <u>ENTER</u> key.	[1] MEDIA COMP. <ent></ent>	
<b>5</b> Press the <b>• •</b> key to select "HEATER".	[1] HEATER <ent></ent>	
<ul> <li>6 Press the <u>ENTER</u> key twice.</li> <li>• The heater temperature setting screen appears.</li> </ul>	PRE PRT POST 25°C 25°C 35°C	

Press A T to set the temperature of each heater. Heater selecting : by the Keys Temperature setting : by the Keys	PRE PRT POST 35°C 40°C 50°C Set temperature : OFF, 20 ~ 50°C
<b>8</b> Press the <u>ENTER</u> key.	[1]HEATER SET TEMP <ent></ent>
<b>9</b> Press the velocity key to select "SET TIME".	[1]HEATER SET TIME <ent></ent>
<b>10</b> Press the ENTER key.	STANDBY : OFF TIME Omin : NONE
Press The selecting : by the to set time. keys Time setting : by the keys	STANDBY : OFF TIME Omin : NONE Set value : NONE , 0 to 90min (10min unit)
<b>12</b> Press the ENTER key.	
Press the END key several times to end the setting. • The screen returns to LOCAL.	

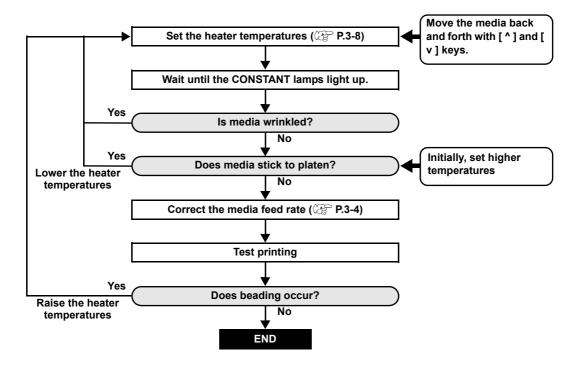
(Important!)

• Use this machine at a temperature between 20 to 35°C. The temperature may not reach the set value, depending on the ambient temperature conditions.

### Adjusting suitable temperature adjustment (When solvent ink is used)

This section describes the procedure for setting the heater temperatures properly.

The proper heater temperatures depend on the media type and ambient temperature. Set temperatures that are appropriate to the media. For non-coated media or media on which ink is slow to dry, set the heater temperatures so that the ink fixing and drying characteristics will be improved.



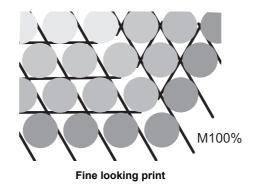
### In case the heater temperature is too low

When solvent ink is used, this may result in printing failures such as beading or banding if the heater temperature or the ink acceptable amount (the ink limit) is too low.

Beading is a phenomenon that adjacent dots attract each other and join. Beading causes speckled patterns or stripes along printing passes (banding.)

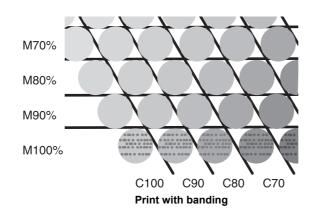
### Example of beading

The area in 100% magenta looks fine. Generally, the area in 70-100% single color is easily affected by the unevenness of media feed rate. The print shown here, free from unevenness of color in the vicinity of 100% magenta area, signifies that media feeding has been adjusted properly.



In the blue area (100% magenta + 100% cyan), however, speckled patterns and banding occur. This banding is a result of beading. If heater temperatures are low or the ink capacity (ink limit) of the media is low, the first dot does not solidify before the second dot lands on the media. As a result, dots bond to each other and unevenness or banding occurs.

In order to avoid beading, it is recommended to raise the heater temperatures, to raise the ink capacity (ink limit) of the media, to adjust the ink volume per dot for the media, to increase the number of printing passes and decrease the ink amount for one shot, and/or to gain time by scan wait. Change media if none of the above-mentioned measures works to prevent beading.



# **Setting the Printing Method**

#### In the printing method setting, the following items are set:

- PASS
- : The pass (printing quality) for printing is set.
- Scanning speed : The scanning speed for printing is set.
- Scanning direction : A printing direction is set.
- Logical seek
   : ON/OFF of Logical seek is set.
- (Important!)
- You can set the printing method setting so that the machine may operate according to the value specified when you printed from your RIP software (RasterLinkPro) in the connected host PC.
- When you give priority to the setting at the RasterLinkPro side, make the setting value "Host".
- "PASS / SCAN DPEED / SCAN DIRECTION" set in this machine are displayed as "Pass / Fast Print / Print Direction" respectively in the RasterLinkPro.
- You cannot specify the logical seek at the RasterLinkPro side. When you set this machine to "Host", printing will be performed in "LOGICAL SEEK=ON" status.

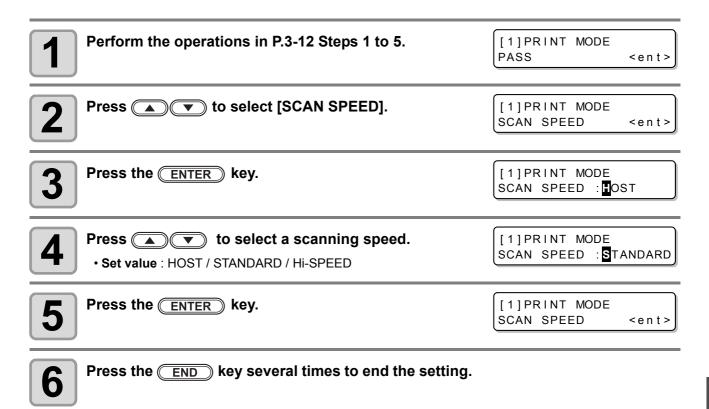
### Setting of the PASS (print quality)

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press the ENTER key.	SETUP SELECT : TYPE . 1
Press (1 to 4) and p	press the <u>ENTER</u> key.
Press ( T) to select [PRINT MODE].	[1] PRINT MODE <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	[1]PRINT MODE PASS <ent></ent>
6 Press the ENTER key.	[1]PRINT MODE PASS : OST
Press  to select a PASS (printing quality). • Set Value : HOST /FAST/STANDARD/FINE	[1]PRINT MODE PASS : STANDARD
• Press the END key several times to end the setting.	

### Settable number of passes depending on resolution

Resolution (dpi) Set Value	540 x 720 dpi	540 x 1080 dpi	720 x 1440 dpi
FAST	4 pass	6 pass	8 pass
STD.	7 pass	12 pass	16 pass
FINE	16 pass	24 pass	32 pass

## Setting a Scanning Speed



Convenient use

# Setting a Scanning Direction

Perform the operations in P.3-12 Steps 1 to 5.	[1]PRINT MODE PASS <ent></ent>
Press ( To select [SCAN DIRECTION].	[1]PRINT MODE SCAN DIRECTION <ent></ent>
<b>3</b> Press the ENTER key.	[1]PRINT MODE ScanDIRECTION : HOST
Press To select a scanning direction. • Set value : HOST / Uni-D / Bi-D	[1]PRINT MODE ScanDIRECTION : Bi-D
<b>5</b> Press the <u>ENTER</u> key.	[1]PRINT MODE SCAN DIRECTION <ent></ent>
<b>6</b> Press the <u>END</u> key several times to end the setting.	

## Setting Logical Seek

The motion of Head varies depending on the set of Logical-seek.

	UNI-DIRECTIONAL	BI-DIRECTIONAL	Movement of heads when LOGICAL seek is OFF	
		BI-DIRECTIONAL	Movement of heads when LOGICAL seek is ON	
1	Perform the operations i	n P.3-12 Steps 1 to 5.	[1]PRINT MODE PASS	< e n t >
2	Press ( ) To sele	ct [LOGICAL SEEK].	[1]PRINT MODE LOGICAL SEEK	< e n t >
3	Press the <u>ENTER</u> key.		[1]PRINT MODE LOGICAL SEEK	: HOST
4	Press To sele		[1]PRINT MODE LOGICAL SEEK	: <b>0</b> N
5	Press the <u>ENTER</u> key.		[1]PRINT MODE LOGICAL SEEK	<ent></ent>
6	Press the <u>END</u> key se	everal times to end the s	setting.	

# **Setting Drying Time**

In the drying time setting, the following items for ink drying time are set.

- SCAN : Ink drying time for each scanning is set. (During bidirectional printing, the machine stops for a certain period of time specified for each of the outward and return scanning.)
- PRINT END : Ink drying time after printing has been complete is set.

(mportant!) • When you give priority to the setting at the RasterLinkPro side, make the setting value "Host".

"SCAN" set in this machine is displayed as "Pause Time per Scan" in the RasterLinkPro.
You cannot specify the print end at the RasterLinkPro side. When you set this machine to "Host", printing will be performed in "PRINT END= 0 sec." status.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press the ENTER key.	SETUP SELECT : TYPE . 1
<b>B</b> Press <b>C</b> to select one of the types (1 to 4) and p	press the <u>ENTER</u> key.
Press To select [DRYING TIME].	[1] DRYING TIME <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	SCAN : PRINT END HOST : HOST
Press A T to set drying time.	Drying time after printing is completed
<ul> <li>Set the drying time for canning and after printing is completed. To enable the drying time specified in your RIP, select "Host".</li> <li>Scanning setting value : Host or 0.0 sec. to 19.9 sec.</li> <li>Print end setting value : Host or 0 sec. to 999 sec.</li> <li>Item selecting: by the </li> <li>keys</li> <li>Time setting: by the </li> <li>keys</li> </ul>	Drying time for scanning SCAN : FRINT END OST : OST
<b>7</b> Press the <u>ENTER</u> key.	[1] DRYING TIME <ent></ent>
<b>8</b> Press the <u>END</u> key several times to end the setting.	

# **Setting Margins**

off set value= 0 mm" status.

Set a non-printing area along the right and left edges of the media. The offset value against the standard margin 15mm is set hereupon.

(Important!)

When you give priority to the setting at the RIP software side, make the setting value "Host".
You cannot specify the margins at the attached RIP software (RasterLinkPro). When you use the RasterLinkPro, if you set this machine to "Host", printing will be performed in "Margins for right and left

Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
Press the ENTER key.	SETUP SELECT	: TYPE . 1
<b>B</b> Press <b>Press T</b> to select one of the types (1 to 4) and	press the <u>EN</u>	TER) key.
Press ( ) To select [MARGIN].	[1] MARGIN	< e n t >
<b>5</b> Press the <u>ENTER</u> key.	LEFT Omm	: RIGHT : Omm
Press region to set the left and right margins. • Set the margins for the left and the right of the media. To enable the margins specified in your RIP, select "Host". Set Value :HOST or -20 to 75mm (in 1mm increment) Item selecting : by the keys Margin setting : by the keys	Left margin setting LEFT CST	Right margin setting : RIGHT : OST
<b>7</b> Press the ENTER key.	[1] MARGIN	< e n t >
Press the <u>END</u> key several times to end the setting.		



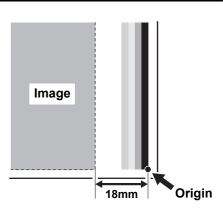
O

• Pay attention to that printing may start on the media press if a right and left margin is set to 5 mm or less when the media press is used in printing.

# **Setting Color Pattern**

### When you use ink other than Sublimation dye ink

It is set whether a color pattern is printed on the right edge of a media.

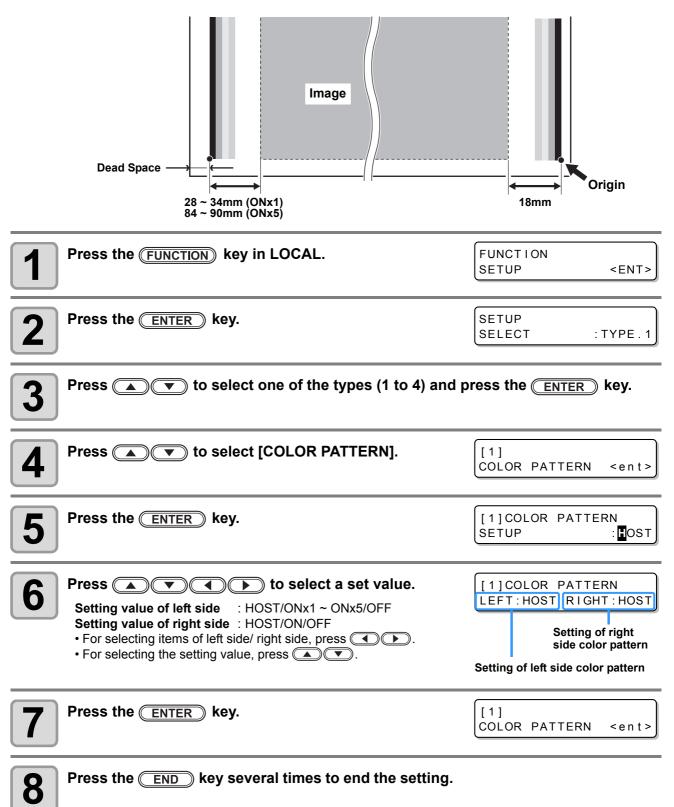


(Important!) • When you give priority to the setting at the RIP software side, make the setting value "Host".

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press the ENTER key.	SETUP SELECT : TYPE . 1
Press (1 to 4) and Press (1 to 4) and	press the <u>ENTER</u> key.
Press ( To select [COLOR PATTERN].	[1] COLOR PATTERN <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	[1]COLOR PATTERN SETUP : HOST
6 Press To select a set value. • Set Value : HOST or ON, OFF	[1]COLOR PATTERN SETUP : ON
Press the ENTER key.	[1] COLOR PATTERN <ent></ent>
<b>8</b> Press the <u>END</u> key several times to end the setting.	

### When you use Sublimation dye ink

Set whether the color pattern will be drawn on both edges of the medium.



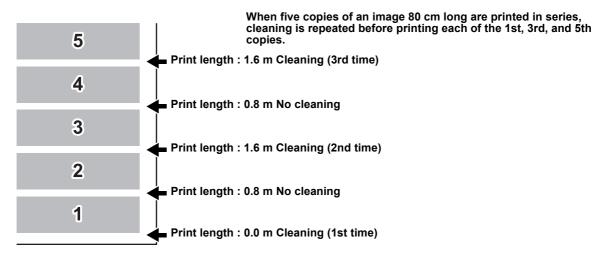
# **Setting Automatic Cleaning**

You can set items so that the head cleaning is automatically performed when printing has been completed for the set length.

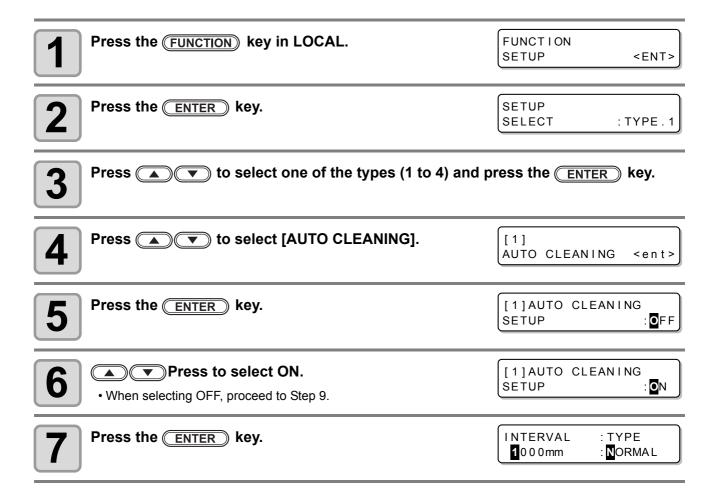
When printing has been completed, the machine measures the length of a medium printed after the previous head cleaning and performs the cleaning automatically if necessary.

The machine can perform a stable printing operation with its heads always kept clean.

The first cleaning is performed immediately before the first printing after the machine is started. Then subsequent cleaning is performed every printing on the specified length of media.



When operation interval is 1000 mm (example)



8	Press A V A and a cleaning type. Item selecting Interval and Type setting	to set a cleaning interval     by the      keys     by the      keys	Interval : 10 to 30000mm INTERVAL 1000mm	Type : NORMAL SOFT HARD : TYPE : NORMAL
9	Press the <u>ENTER</u> ke	у.		
10	Press the <u>END</u> key	several times to end the setting.		
(Important!)	This function does not op     solve the ink peer and	perate when ink near-end occurs. See P.1-	12 "Changing an	ink cartridge" to

solve the ink near-end.
Depending on the state of the heads, etc., the image quality deterioration may not be improved even with this function performed. In this case, contact our service office or the distributor in your region.

# **Setting Cleaning during Printing**

There are two cleaning types during printing.

 $\label{eq:cleaning} \textbf{CLEANING} : \mbox{Automatic head cleaning conducted during printing is set}.$ 

**WIPING** : Automatic wiping during printing is set.

### Setting the CLEANING

It is set whether head cleaning is performed automatically during printing.

In cleaning during printing, a cleaning interval is set according to the length of a printed medium.

Printing is interrupted each time a medium is printed for the set length, and head cleaning is performed automatically during the interval.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press the ENTER key.	SETUP SELECT : TYPE . 1
<b>B</b> Press <b>T</b> to select one of the types (1 to 4) and	press the <u>ENTER</u> key.
Press ( To select [Print.CLEANING].	[1] Print.CLEANING <ent></ent>
<b>5</b> Press the <u>ENTER</u> key twice.	[1]Print.CLEANIN SETUP: OFF
<ul> <li>Press  To select ON.</li> <li>When selecting OFF, proceed to Step 9.</li> </ul>	[1]Print.CLEANIN SETUP : ON
<b>7</b> Press the <u>ENTER</u> key.	INTERVAL : TYPE 1000mm : NORMAL
Press A T b to set a cleaning interval and a cleaning type and press the ENTER key. Item selecting : by the keys Interval and Type setting : by the Keys	Interval : 10 to 30000mm INTERVAL 10 0 0 mm Type : NORMAL SOFT HARD TYPE TYPE MORMAL
<b>9</b> Press the <u>END</u> key several times to end the setting.	

• This function does not operate when ink near-end occurs. See P.1-12 "Changing an ink cartridge" to solve the ink near-end.

• Depending on the state of the heads, etc., the image quality deterioration may not be improved even with this function performed. In this case, contact our service office or the distributor in your region.

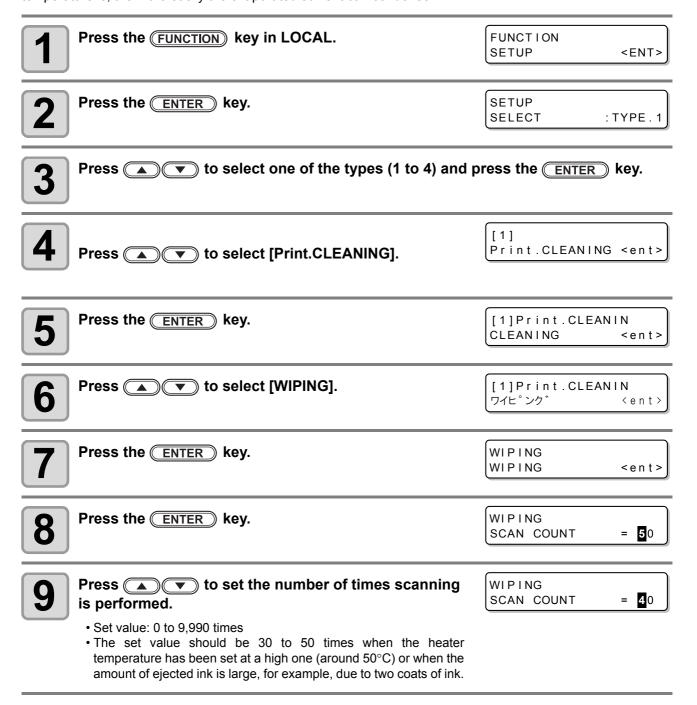
### Setting the WIPING

When the set number of times scanning is performed has been reached during a printing operation, a wiping operation is performed automatically to prevent ink dew condensation on the nozzle face.

In the following cases, ink splashing, ink dripping or nozzle missing may occur during a printing operation. It is recommended that the regular wiping operation be set to always maintain a good printing state.

- When the print heater has been set at a high temperature
- When a relatively large value (high density, two coats of ink, etc.) has been set to the amount of ejected ink

The cause of the ink splashing, ink dripping or nozzle missing is that the ink printed immediately after ink ejection is heated by the print heater, which causes evaporated solvent to condense on the nozzle face. In addition, the larger the difference between the set temperature of the print heater and the ambient temperature is, the more easily the evaporated solvent can condense.



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Convenient use

10	Press the ENTER key.	WIPING SCAN COUNT <ent></ent>
11	<ul> <li>Press the  keys.</li> <li>• The set display of TEMP difference is displayed.</li> </ul>	WIPING TEMP.difference <ent></ent>
12	Press the ENTER key.	$\begin{array}{c} WIPING \\ TEMP.Difference=20^{\circ}C \end{array}$
13	<ul> <li>Press  to set temperature difference.</li> <li>When the set temperature of the print heater is higher than the ambient temperature and the difference between the two exceeds a specified temperature, the regular wiping function is activated.</li> <li>When setting "0" to the temperature difference, regardless of the set temperature of the print heater, fixed period wiping operation is performed when it reaches the specified number of scan.</li> </ul>	WIPING TEMP.Difference=20°C
14	Press the ENTER key.	WIPING TEMP.difference <ent></ent>
15	Press the <u>END</u> key several times to end the setting.	

# **Setting Media Detection**

Set the method for detecting a media when the media is set and the detecting type when the media is cut.

1	Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
2	Press the ENTER key.	SETUP SELECT : TYPE. 1
3	Press (1 to 4) and p	press the <u>ENTER</u> key.
4	Press ( The select [MEDIA DETECT].	[1] MEDIA DETECT <ent></ent>
5	Press the ENTER key.	[1]MEDIA DETECT DETECT METHOD <ent></ent>
6	<ul><li>Press the ENTER key.</li><li>The setting screen of media detection appears.</li></ul>	[1]MEDIA DETECT DETECT METHOD:SELECT
7	<ul> <li>Press  to select a set value.</li> <li>SELECT : Select either a roll media or leaf media by pressing </li> <li>WIDTH : The width of media is only detected without any key input (Detecting is started automatically by lowering the clamp)</li> </ul>	t when the media is detected.
8	Press the ENTER key.	[1]MEDIA DETECT DETECT METHOD <ent></ent>
9	Press <b>v</b> to select [CUTTING DETECT].	[1]MEDIA DETECT CUTTING DETECT <ent></ent>
10	Press the ENTER key.	[1]MEDIA DETECT DETECT : OTH EDGE
11	Press To select a set value. • Set Value: BOTH EDGE / LEFT EDGE / RIGHT EDGE / NONE	
12	Press the ENTER key.	
13	Press the <u>END</u> key several times to end the setting.	

• If the set value is set to others than "BOTH EDGE" in [CUTTING DETECT], although the cutting time is shortened, cutting remainders may happen due to the media skew.

(Important!)

# **Perform setting to reduce stripes between passes**

In case that feeding stripes cannot be resolved even though media correction (*P*.3-4) is performed, make "MAPS (Mimaki Advanced Pass System) valid. Feeding stripes become less visible by distributing the pass boundary.



- MAPS effect differs depending on the set value of the printing speed. Use it after checking effect in advance.
- When you speed up the printing speed, it takes shorter time to print. However, MAPS effect becomes weak.
- When you slow down the printing speed, it takes longer time to print. However, MAPS effect becomes strong and feeding stripes become less visible.
- The resolutions and passes for which MAPS is enabled are shown in the following table.
- For conditions when MAPS is disabled, the printer operates with MAPS-OFF and print speed settings disabled (±0%).
- MAPS may not be effective depending on image to be printed.
- Slight color change may be found.

Resolution			Pa	ISS		
(dpi)		4 colors			6 colors	
(api)	Δ	0	Ø	Δ	0	0
540x720	2	4	8, 16		8	16, 32
540x1080		6	12, 24		12	24, 48
720x720		4	8, 16		8	16, 32
720x1080		6	12, 24		12	24, 48
720x1440		8	16, 32		16	32, 64

© : MAPS can be used when the print speed setting is within a range of ±50%, for both high speed and standard speed.

 $\bigcirc$ : At high speed, print speed is within the range of -50% to -1%. At standard speed, MAPS can be used when the print speed is within a range of ±50%.

 $\triangle$  : MAPS can be used when the print speed setting is within the range of -50% to -1% at standard speed only.

1	Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
2	Press the <u>ENTER</u> key.	SETUP SELECT	: TYPE . 1
3	Press the <u>ENTER</u> key.	[1] MEDIA COMP.	< e n t >
4	Press ( The select [MAPS].	[1] MAPS	< e n t >
5	Press the <u>ENTER</u> key.	[1]MAPS SETUP	: OF F
6	Press ( To set ON/OFF. • Set Value : OFF, ON	[1]MAPS SETUP	: ON
7	Press the ENTER key.     When you select OFF, proceed to the Step 9.	[1]MAPS PRINT SPEED	: 0%



#### Press ( ) to change print speed.

[1]MAPS PRINT SPEED : 10%

#### • Set Value : -50 ~ +50% (If +20% is entered, the print speed increases by approximately 20%. If -20% is entered, the print speed decreases by approximately 20%.)



Press the ENTER key.

[	1	]			
M	A	P٥	3		

<ent>

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Press the **END** key several times to end the setting.

# **Other Settings**

Change the settings according to the types of use.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
Press the ENTER key.	SETUP SELECT	: TYPE . 1
<b>B</b> Press <b>Press T</b> to select one of the types (1 to 4) a	nd press the <u>ENTE</u>	R key.
<ul> <li>Press  to select an item for setting.</li> <li>Select it, referring to P.3-2 "List of Functions".</li> </ul>		
<b>5</b> Press the ENTER key.		
<ul> <li>Press  To select the setting value.</li> <li>Select it, referring to P.3-2 "List of Functions".</li> </ul>		
<b>7</b> Press the ENTER key.		
<b>8</b> Press the <u>END</u> key several times to end the settin	ıg.	
(mportant!) • The set value is retained even when the power is turned "OFF	".	

# **Initializing the Settings**

The already configured settings are initialized. (Resetting) The set resetting can be executed per type.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press the ENTER key.	SETUP SELECT : TYPE.1
Press (1 to 4) a	and press the <u>ENTER</u> key.
Press ( To select [SETUP RESET].	[1] SETUP RESET <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	[1]SETUP RESET RESET : In t
<ul> <li>6 Press the ENTER key.</li> <li>• The already configured settings are initialized.</li> </ul>	
<b>7</b> Press the <u>END</u> key several times to end the setting	ng.

Convenient use

# **Machine Settings**

Common settings are functions for using this machine easily. The following items can be set in Machine settings.

lte	em	Set value *1	Meaning	
DRY FAN *2	STOP TIME	0 ~ <u>10</u> ~ 240min/ CONTINUE	The time until the rotation of the drying fan stops after printing has been completed is set.	
	RENEW	ON / <u>OFF</u>	The present operating state of the drying fan is switched.	
Feeding/		FEEDING : ON / OFF TAKE-UP : ON / OFF	When using a heavy roll medium (the width is 1.6m or more), set "ON" to "FEEDING" and "TAKE-UP".	
Take UP	TensionBar- POS.	LOW / HIGH	Set the operating position of the tension bar for the heavy-duty take-up device.	
	Print Of Back Side	ON / OFF		
Double Side Mode	INK LAYERS	1 ~ <u>2</u> ~ 9	Perform setting related to double-faced printing. P.4-2For details, refer to .	
	MEDIA DETECT	OFF/ 10 ~ 10000mm		
DRYNESS FEE	D	ON / <u>OFF</u>	It is set whether a medium is fed for it to be dried after printing has been completed.	
CONFIRM. FEED		<u>ON</u> / OFF	A feeding method for confirming the result of test printin can be set. When this is turned ON, the screen changes to "BAC FEED" for returning a medium to the original position pressing <u>ENTER</u> key.	
TIME SET			The present date and time are set.	
UNIT SETUP	TEMP.	°C (Centigrade) /°F (Fahrenheit)	A unit for displaying temperature is set.	
32101	LENGTH	<u>mm</u> / inch	A unit for displaying length and area is set.	
STAMP SETUP		ON / <u>OFF</u>	The setting for the output date and printing conditions to be output after printing has been completed is configured.	
Waste Ink Warn	ing	<u>ON</u> / OFF	It is set whether the confirmation message of the waste ink tank is displayed.((RP P.3-41)	
CART.PRIORITY *3		INK LEVEL EXP. DATE	Condition of the ink cartridge to be used first by the double-cartridge automatic switching function can be selected. ((TP P.3-41)	
MACHINE NAME		<u>01</u> ~ 99	The names of machines (machine No.) are set for recognizing them when they are connected to one another with a USB 2.0 interface used.	
KEY BUZZER		<u>ON</u> / OFF	A buzzer sound when keys are pressed is set.	
ENV. TEMP.		Not wait ARR. <u>Wait arrival</u>	Sets the operation when an error indicating that the ambient temperature is out of the usable temperature range occurs. ( $\textcircled{P}$ P.3-41)	

\*1. The setting at the time of purchase is indicated with the underline.

\*2. DEODORIZE FAN is optional.

\*3. This setting is only available for 4-color set.

## Setting the DRYING FAN

The exhaust fan operates during printing. After printing has been complete, it operates according to the setting of "Stop timer".

The following two items can be set for the drying fan.

- STOP TIME : The time until the exhaust fan stops after printing has been completed is set.
- RENEW : When this is set to "ON", the exhaust fan can operate while printing is not performed.

(Important!)

- The exhaust fan is an option contained in the exhaust unit.
  - When this machine is equipped with a exhaust fan, the fan operates in cooperation with the settings configured here.

Press th	e (FUNCTION) key in LOCAL.	FUNCTION SETUP <ent></ent>
2 Press	▲	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press th	e ENTER key twice.	DRY FAN STOP TIME <ent></ent>
4 Press C STOP RENEV	<b>TIME</b> : The time until the exhaust fan stops after p	•
<b>5</b> Press th	e Enter key.	
6 Press C STOP RENEW	TIME : 0 to 240 seconds or continuous running.	'ON". When you stop the fan, select "OFF".
<b>7</b> Press th	e Enter key.	
Press th	e <u>END</u> key several times to end the se	etting.

## Perform setting of feeding and take up

For setting of feeding and take up, there are "Setting of UNIT SELECT" to set whether to use the heavy media take-up unit/feeding unit or not and "Setting of Tension Bar Position" to set the tension bar operation position for the heavy media feeding unit.

### Setting of UNIT SELECT

This is used to set whether the heavy duty take-up device/the heavy-duty feeding device is used or not.

• For setting of UNIT SELECT, when you set "OFF" to the heavy duty take-up device/the heavy -duty feeding device, be sure to fix tension bars of each device at the lock position before performing setting. Especially, if the tension bar for the take-up device is not locked, the take up setting cannot be switched to "OFF".

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [Feeding/TakeUP].	MACHINE SETUP Feeding/TakeUP <ent></ent>
<b>5</b> Press the ENTER key.	Feeding/TakeUP UNIT SELECT <ent></ent>
<b>6</b> Press the <u>ENTER</u> key.	FEEDING : TAKE-UP ON ON
Press A T A b to change the setting. Item selecting : by the keys Unit setting : by the keys	
<ul> <li>Press the ENTER key.</li> <li>If you perform setting of the tension bar continuously, operate the procedures from Step 6 of "Setting of Tension Bar Position".</li> </ul>	e E E E E E E E E E E E E E E E E E E E
<b>9</b> Press the <u>END</u> key several times to end the setting.	

### **Setting of Tension Bar Position**

Set the operating position of the tension bar for the heavy duty take-up device while printing.

• When changing the setting, be sure to understand the setting contents referring to P.2-18 "Setting the active position of the take-up tension-bar" before change it.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the <u>ENTER</u> key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [Feeding/TakeUP].	MACHINE SETUP Feeding/TakeUP <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	Feeding/TakeUP UNIT SELECT <ent></ent>
Press ( TensionBar-POS. ].	Feeding/TakeUP TensionBar-POS. <ent></ent>
Press the ENTER key.	Feeding/TakeUP TensionBar-POS.:LOW
Press ( To select setting.	
<b>9</b> Press the <u>ENTER</u> key.	
<b>10</b> Press the <u>END</u> key several times to end the setting	

## Setting the DRYNESS FEED

It is set whether a media is fed for it to be dried after printing has been completed.



- When the same data will be printed several times, the dryness feed is performed differently depending on the specified method in the RasterLinkPro5.
- When "Number of printings" was set on the main screen of the RasterlinkPro5 ⇒ When each printing is completed, the dryness feed is performed.
- When "Number of copies" was set in the job editor of the RasterLinkPro5
   ⇒ After the specified copies are printed, the dryness feed is performed.
   The media waste becomes less compared with when specifying in "Number of printings".

Press the FUNCTION key in LOCAL.	FUNCTION SETUP	<ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP	<ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN	<ent></ent>
Press ( To select [DRYNESS FEED].	MACHINE SETUP DRYNESS FEED	<ent></ent>
<b>5</b> Press the ENTER key.	DRYNESS FEED SETUP	: <b>O</b> N
6 Press ( To select ON/OFF.		
<b>7</b> Press the ENTER key.		
<b>8</b> Press the <u>END</u> key several times to end the setting.		

## Setting CONFIRM. FEED

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Set whether media feeding is performed for checking the result after test printing or not.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press To select [CONFIRM. FEED].	MACHINE SETUP CONFIRM. FEED <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	CONFIRM. FEED FEED : OFF
<ul> <li>Press  to select ON.</li> <li>When selecting OFF, proceed to Step 9.</li> </ul>	
<b>7</b> Press the <u>ENTER</u> key to set [BACK FEED].	CONFIRM.FEED BACK FEED : ON
<ul> <li>Press  to select ON/OFF.</li> <li>When the media return feeding is set "ON", the media fed by the confirmation feeding is slightly returned.</li> <li>If it is not desirable to return the media, set it to "OFF".</li> </ul>	CONFIRMATION FEED BACK FEED : OFF
<b>9</b> Press the ENTER key.	MACHINE SETUP CONFIRM. FEED <ent></ent>
<b>Press the <b>END</b> key several times to end the setting.</b>	

Convenient use

## **Setting Time**

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press ( T to select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press To select [TIME SET].	MACHINE SETUP TIME SET <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	TIME SET           201         .10.05         15:30:00
6 Press A T to enter time. Year/Month/Day/Time selecting:by the keys. Year/Month/Day/Time inputting:by the keys.	
Press the ENTER key. • The entered date is displayed.	TIME SET 2011.10.05 15:30:00
<b>8</b> Press the <u>END</u> key several times to end the setting.	
<ul> <li>The time set in the past can be changed until only eight hours before.</li> <li>When a future time after the present one has been set by mistake,</li> </ul>	

- When a future time after the present one has been set by mistake, performing the following operations in Step 6 enables the already set future time to be restored to the previously set time.
   (1) Press the FUNCTION key in Step 7. (The entered time and the previously set time are displayed.)
   (2) Press the ENTER key.
- If you have made several changes in time setting, only the last time to be set can be restored to the previously set time. In addition, the time before change is ahead by the time that has elapsed.

## Setting Units

Units used by this machine are set.

Press the key (FUNCTION) in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [UNIT SETUP].	MACHINE SETUP UNIT SETUP <ent></ent>
<b>5</b> Press the ENTER key.	TEMP : LENGTH °C : mm
6 Press A T A b to select a unit. Item selecting : by the keys Unit setting : by the keys	
<b>7</b> Press the ENTER key.	MACHINE SETUP UNIT SETUP <ent></ent>
<b>8</b> Press the <u>END</u> key several times to end the setting.	

## Stamp Setting

It is set whether information, such as printing conditions and a printing date, is output after printing has been completed.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the <u>ENTER</u> key.	MACHINE SETUP DRY FAN <ent></ent>
<b>4</b> Press <b>• •</b> to select [STAMP SETUP].	MACHINE SETUP STAMP SETUP <ent></ent>
<b>5</b> Press the ENTER key.	STAMP SETUP STAMP : OFF
6 Press To select ON/OFF.	
<b>7</b> Press the ENTER key.	
<b>8</b> Press the END key several times to end the setting	
Output Example	
Resolution/ Pass/ Scan	ype/ Printing date and time direction/ Speed/ Number of t/ Media correction value

Output image

## Setting the MACHINE NAME

The names of machines (machine No.) are set for recognizing them when they are connected to one another with a USB 2.0 interface used.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <ent></ent>
Press ( To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [MACHINE NAME].	MACHINE SETUP MACHINE NAME <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	MACHINE NAME JV34-0 <b>1</b> <ent></ent>
<b>6</b> Press <b>• •</b> to select a machine name (01 to 99).	MACHINE NAME JV34-10 <ent></ent>
Press the ENTER key.	MACHINE SETUP MACHINE NAME <ent></ent>
<b>8</b> Press the <u>END</u> key several times to end the setting.	

## Setting a KEY BUZZER

A buzzer sound when keys are pressed is set.

Press the FUNCTION key in LOCAL.	FUNCTION SETUP <e< th=""><th>ENT&gt;</th></e<>	ENT>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <e< th=""><th>ENT&gt;</th></e<>	ENT>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <6	ent>
Press To select [KEY BUZZER].	MACHINE SETUP KEY BUZZER <6	ent>
<b>5</b> Press the <u>ENTER</u> key.	KEY BUZZER SETUP	: <b>O</b> N
6 Press To select ON/OFF.	KEY BUZZER SETUP	: <b>0</b> F F
<b>7</b> Press the <u>ENTER</u> key.	MACHINE SETUP KEY BUZZER <6	ent>
<b>8</b> Press the <u>END</u> key several times to end the setting.		

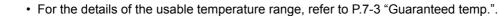
賞

• When the key buzzer is set to "OFF", the buzzer sound for errors, warnings, operation completion, etc. cannot be shut off.

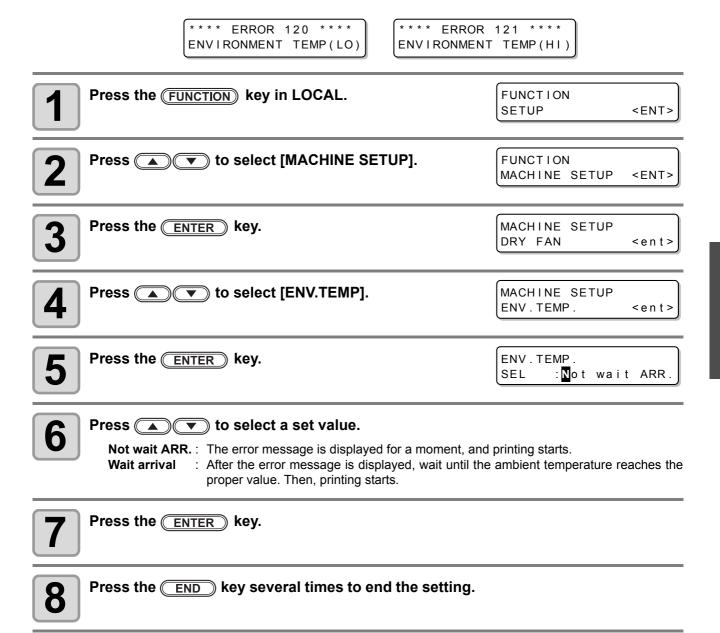
### Change the operation condition of the ambient temperature

If you print in the status that the temperature of the place in which the machine has installed (ambient temperature) is out of the usable temperature range, ink discharging defect or changing color may occur, and it adversely affects the printing quality.

Here, select the operation if the ambient temperature is out of the usable temperature range when printing.



• If the ambient temperature is out of the usable temperature range at the start of printing, the error message below is displayed to inform you of it.



# **Extension of Ink Expiry Month**

Ink expiry month can be extended for six months from the expired month. When used without extension, ink becomes unusable after two months of the expiry month.

### **Extension of Ink Expiry Month**

The following setting or confirmation screen appears when the power of this machine is turned on, or when expired ink cartridge is set.

(Important!)

- An ink cartridge that is once set [YES] for extension cannot be changed the setting.
- To extend multiple inks' expiry month at a time, set the expired ink cartridges, and then set the extension.
- Extension of ink expiry month may lower the print image quality or print quality such as color difference or banding. Please understand them when extending ink expiry month.
- When initial filling, the ink expired more than two months ago cannot be used.



When a screen shown on the right appears, go to the next step.



NOT RECOMMENDED!! YES< >NO



#### Press the To select [YES].

• When the ink expiry month is not extended, select [NO]. In this case, the ink will be disabled after two months of the expiry month.

EXPIRE DATE EXTENDED PRESS[ENT]

# 3

#### Press the ENTER key.

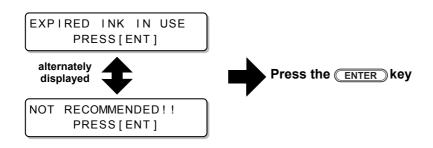
· Ink expiry month is extended.



- When extended six months (six months from the ink expired month) have passed, a message "COMPLETELY EXPIRED" appears and the ink becomes unusable. Immediately replace the ink cartridge with a new one.
- If ink expiry month is extended, the cartridge LED blinks in green while supplying ink from the extended cartridge.

### When a cartridge extended the expiry month is set

When a cartridge extended the expiry month is set and the power is turned on, or when a cartridge extended the expiry month is set to this machine, the following screen appears.



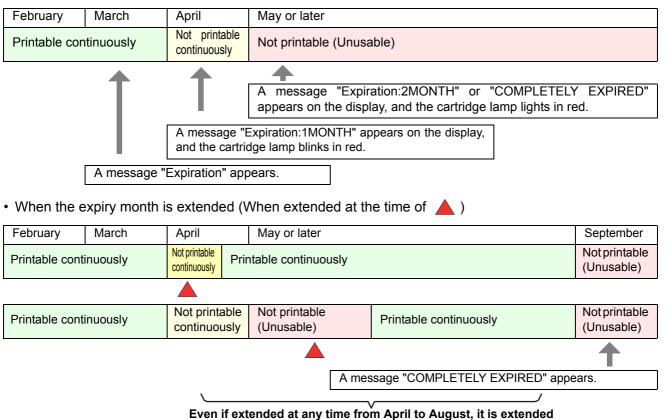
誉

• To check expired ink, press the **FUNCTION** key while displaying the screens above alternately.

### When an ink expiry month is extended

Example: If expiry month of your ink cartridge is February 2011.

· When the expiry month is not extended



ren if extended at any time from April to August, it is extend for six months from the expiry month

# **Switch Setting of Ink Supply Path**

For the ink supply, condition of the ink cartridge to be used first by the double-cartridge automatic switching function can be selected.

This setting is only available for 4-color set.

- (mportant!)
  When expired ink cartridge is set, the expired cartridge is used first regardless of the setting below.
  When the optional bulk ink system (MBIS1) is used and the MBIS1 is set in both slots, the setting
  - below is effective.
    When both an ink cartridge and the bulk ink system (MBIS1) are set in the supply paths of the same color, see the next page.

Press the (FUNCTION) key in LOCAL.	FUNCTION SETUP <ent></ent>
Press To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the ENTER key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [CART.PRIORITY].	MACHINE SETUP CART.PRIORITY <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	
6 Select the condition of ink to be used first by pressing the keys. INK LEVEL : Low ink cartridge is used first EXP. DATE : Close-to-date ink cartridge is used first	CART.PRIORITY SELECT :INK LEVEL
<b>7</b> Press the <u>ENTER</u> key.	
<b>8</b> Press the <u>END</u> key several times to end the setting.	

### When both ink cartridge and MBIS1 are used

When both an ink cartridge and the optional bulk ink system (MBIS1) are set in the supply paths of the same color for 4-color ink set, you can select the ink to be used first.



• Usually, when both an ink cartridge and the bulk ink system (MBIS1) are set in the supply path of the same color, the ink in the bulk ink system (MBIS1) is used first.

- (Important!)
- This setting is only available for 4-color set.
- If supply path does not have both ink cartridge and the bulk ink system (MBIS1), this function cannot be set.
- Pull out the ink cartridge selected on this function or turn the power on again to disable the setting.

Press the <u>ENTER</u> key in LOCAL or REMOTE	SS21-INK MMCCYYKK REMAIN 34567899
Press the <u>REMOTE</u> key.	BULK/CART_SELECT - B B Displays the currently supplying ink. B : Bulk ink system (MBIS1) C : Ink cartridge - : Only one type is set
<b>3</b> Press the A V A Key to set the path and the ink to be used first. Select the supply path : Press the A V	_ <u>С</u> в в
Press the ENTER key.     It enters in LOCAL or REMOTE.	

# **Confirming Machine Information**

The information of this machine can be confirmed. The following items can be confirmed as machine information.

Item	Description
ERROR HISTORY	This displays the history of errors and warnings to date. When you press, the date of occurrence (year/month/day/hour/minute) and the error/warning information are displayed alternately in the order of occurrence.
MAINTE. HISTORY	This displays the date and time when the maintenance function was used. The maintenance history mainly describes the manual and automatic (regular or sleep mode) cleaning functions.
PRT.modeHISTORY	This displays the information of online printing (printing conditions) that has been performed to date since the machine's power-on.(Up to 50 pieces of information)
LIST	This allows you to print the settings of the machine.
Ink REPL. Report	This prints ink history of this machine.
VERSION	This displays the version information of the machine.
Serial & Dealer No.	This displays serial numbers.

## **Displaying the Information**

<ul> <li>Press the FUNCTION key in LOCAL.</li> <li>When you want to print the list of settings of this machine, set a medium. ( P.2-6)</li> </ul>	FUNCTION SETUP	<ent></ent>
Press ( To select [INFORMATION].	FUNCTION INFORMATION	<ent></ent>
<b>3</b> Press the ENTER key.	INFORMATION ERROR HISTORY	< e n t >
Press ( To select a type of information.		
Press the ENTER key.		

• The Information you need is displayed.

• When [List] is selected, the setting contents of the machine are printed.

## About Displayed Information

This section describes how to read displayed information.

ERROR HISTORY		MAINTE. HISTORY	
Displaying the occurrence date	ERROR HISTORY [01] 11.10.10 12:15	Displaying the contents of maintenance	[01] 11.10.10 12:15 CARRIAGE OUT
		VERSION	
Displaying the contents of error	***** ERROR 09 ***** HDC ERROR	Displaying the version information such as F/W or the like.	JV34-260         V3.00           MRL-III         V1.40
PRT.modeHISTORY			
Displaying the resolution, the length printed or the like.	[01] 720x1080 .12 Bd.Vd.x1.1L: 12.34m	Serial & Dealer No. Displaying Serial No./ Dealer No.	S/N = ******* D/N = *******
Displaying the date printed	PRINTmode HIST. [01] 11.10.10 12:15		

**Convenient use** 

### 3-48

## Chapter 4 Double Sided Printing

This chapter

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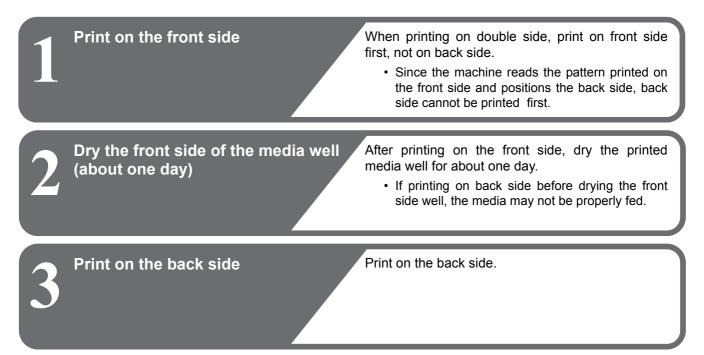
describes settings and procedures for double sided printing.

Printing on Double Side	4-2
Workflow of double sided printing	4-2
Printing Area for double sided printing	
Printing on Front Side	4-5
Setting the Double Side Mode	4-8
Printing on Back Side	4-10

## **Printing on Double Side**

## Workflow of double sided printing

Print on double side with the following workflow.



## Printing Area for double sided printing

(20mm) are automatically added.

cutting line of the media.

(Important!)

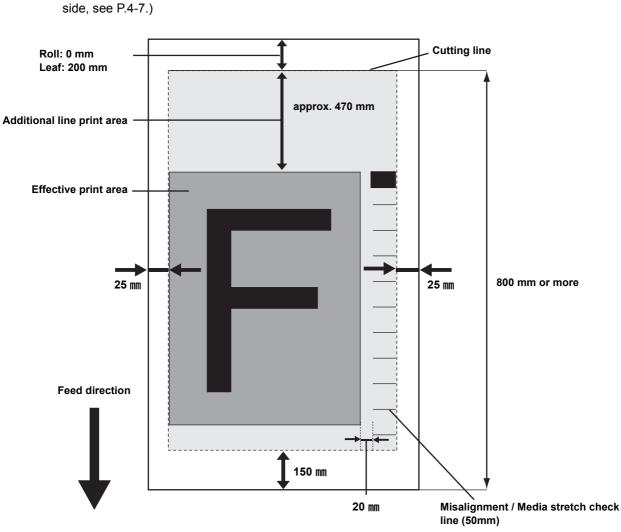
The following is the effective printing area (data printing area) for double sided printing with this unit. In the area enclosed in dotted line, several lines are printed to align the printing position of the front and the back.

Therefore, the printable width of data is the area less the sum of the width above (70mm).

· When printing on the double side, Misalignment / Media stretch check lines (50mm) and a margin

• To print on the back side, a length of 800 mm or more is necessary from the front edge to the

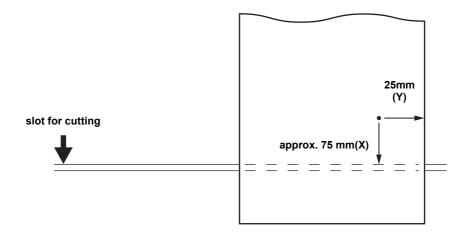
Be careful to use a cut sheet media. (For a necessary length to cut off the media after printing on front



Common for Roll/Leaf media

## Print Start Position for double sided printing

For feed direction (X), it is positioned approximately 75 mm on the back from the slot for cutting on the platen. For scan direction (Y), it is positioned on 25 mm from the right corner of media. With double sided printing function, the position of scan direction (Y) cannot be changed.



## Printing on Front Side

For operations and settings before printing, see P.2-6 "Setting a Media" to P.2-34 "Head Cleaning".



- Before printing on roll media, check the media is not slack on the back of the printer.
   If bowed, rewind the roll media manually to take up the slack. With a slack, it may cause defective printing.
- When using RIP software made by another company, refer to the operation manual of the software used.



Set media. (2 P.2-6)



### Check the heater temperature.

· Check CONSTANT lamp on the heater panel is lighting in green.



### Press the REMOTE key.

- Prints switches to REMOTE mode.
- You can check the selected type (print condition).

*REMOTE.1*	[#01]
	0.00m



### Start Raster Link Pro 5, and select data to print

• for details about image selection, see Reference Guide (Common features for every printer) of Raster Link Pro 5.



### Set the print condition on Raster Link Pro 5.

(1) Select [Front side] in Double sided printing.(2) Click [OK].



### Start printing on Raster Link Pro 5.

- Right-click the image to print, select [RIP and Print] or others, and start printing.
- When printing on the front side, the following settings are fixed.

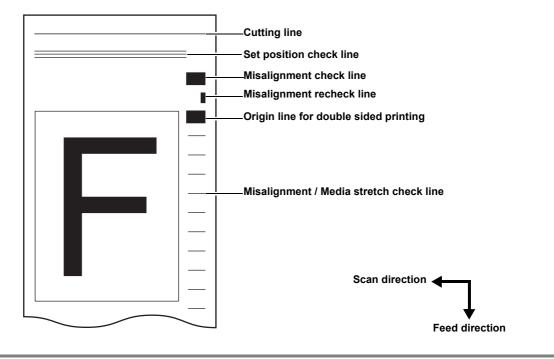
Setting	Fixed value	
Right and left margin (in the effective print area)	0mm	
Color pattern	OFF	
Setting of crosswise origin by jog key	invalid	
Stamp	OFF	



### Check the print.

• The following lines are automatically printed with images on the front side.

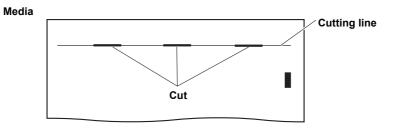
Line name	Description
Cutting line	When printing on the back side, align this line printed on media with the printer (platen).
Set position check line	When printing on the back side, check the setting position of media with this line.
Misalignment check line	Check misalignment of the front and the back side with this line.
Misalignment recheck line	Check misalignment of the front and the back side with this line before printing image data.
Origin line for double sided printing	This line is the origin of feed direction for printing on the back side. Printer automatically detects this line.
Misalignment / Media stretch check line	When printing on the back side, media stretch created at printing on front side is detected with this line. Media stretch is created by solvent.





### Cut several places of media along the cutting line.

• Along the printed cutting line, cut several places of media with a cutter.



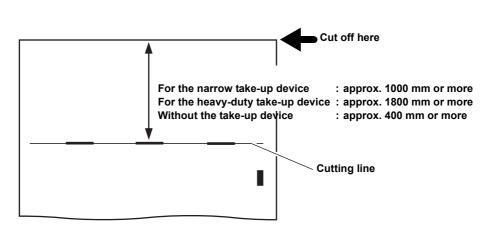
(Important!)

• Do not cut the edge of the media. The edge may be lifted and may scrape against the head.



### Cut off the media.

Cut off the media at the following position.
 When the narrow take-up device is used
 Cut off at a position of approximately 1000 mm or more from the cutting line.
 When the take-up device is not used
 Cut off at a position of approximately 1800 mm or more from the cutting line.
 Cut off at a position of approximately 400 mm or more from the cutting line.

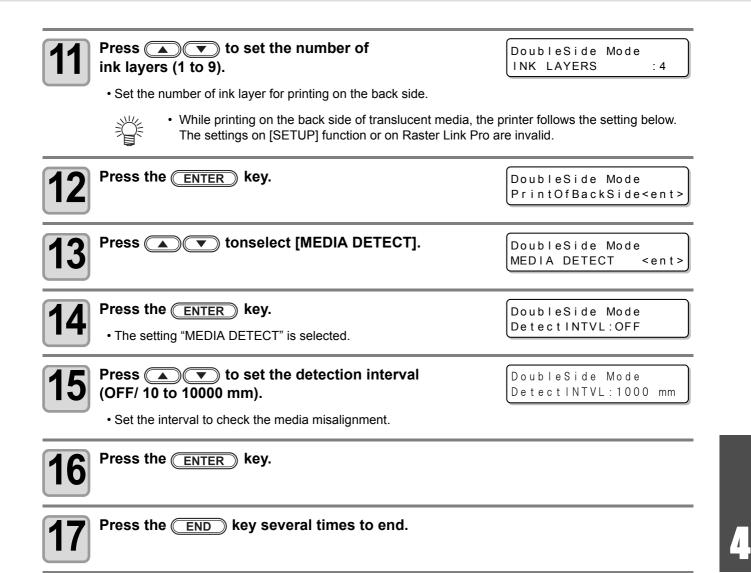


## Setting the Double Side Mode

Set for double sided printing.

Setting	Description
Print of Back Side	Select "ON" to print on the back side.
INK LAYERS	Set the number of ink layers to print on the back side.
MEDIA DETECT	When the printing media reaches the specified length, media is detected again to adjust the media misaligned position by skew or others.

Press FUNCTION key in Local.	FUNCTION SETUP <ent></ent>
Press ( To select [MACHINE SETUP].	FUNCTION MACHINE SETUP <ent></ent>
<b>3</b> Press the <u>ENTER</u> key.	MACHINE SETUP DRY FAN <ent></ent>
Press ( To select [Double Side Mode].	MACHINE SETUP DoubleSide Mode <ent></ent>
<b>5</b> Press the <u>ENTER</u> key.	DoubleSide Mode PrintOfBackSide <ent></ent>
<ul> <li>6 Press the ENTER key.</li> <li>• The setting "Print Of Back Side" is selected.</li> </ul>	DoubleSide Mode PrintOfBackSide :OFF
Press  to select "ON". • Select ON to print on double side.	DoubleSide Mode PrintOfBackSide :ON
Press the ENTER key.	DoubleSide Mode PrintOfBackSide <ent></ent>
<b>9</b> Press <b>• •</b> to select [INK LAYERS].	DoubleSide Mode INK LAYERS <ent></ent>
Press the <u>ENTER</u> key. • The setting "INK LAYERS" is selected.	DoubleSide Mode INK LAYERS : 2



### Printing on Back Side

After drying the front side of the media well, print on the back side. Put media on the machine facing the front side downward (on the platen).

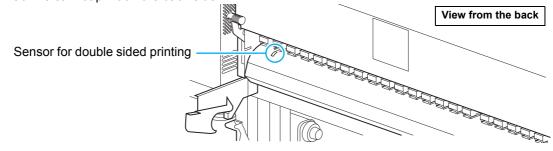


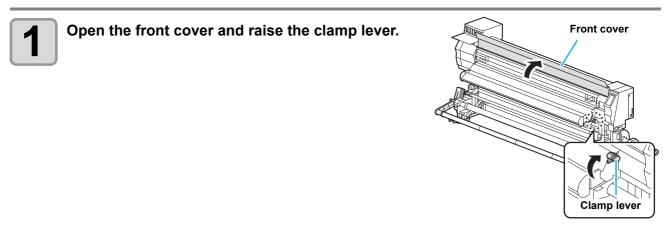
#### • Dry the media well.

When front side is printed, dry the printed media well (Drying time is about 1 day as a guide). If printing on back side before drying well, the media may not be properly fed.

- Be sure to set the Double Side Mode in the MACHINE SETUP before printing on back side.
- Before printing on the back side, adjust the media feed rate again. ((2) P.3-4) If feeding rate is not adjusted, feeding direction is not correctly positioned.
- When using the take-up device, check the front is parallel to the back with the following way, then set the media to the take-up device. If media is set to the take-up device before checking, setting the media again may be hard.
- When using the heavy-duty feeding device, check the front is parallel to the back, then lift the tensionbar down. If the tension-bar is lifted down before checking, setting the media again may be hard. In addition, if the media tension differs between right and left when stretching media with the tensionbar, the media cannot be fed correctly.
- In this case, do not use the heavy-duty feeding device.
- Set media on the position that passes the Misalignment / Media stretch check line above the sensor for double sided printing.

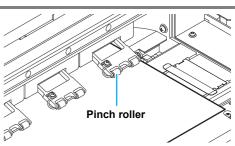
If the media stretch detection line does not pass above the sensor for double sided printing, the machine cannot print on the back side.







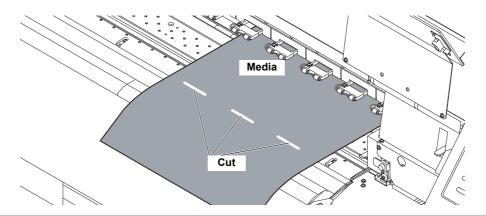
Insert the media between the platen and the pinch rollers.



## 3

## Set the media so that the cuts on the cutting line become parallel to the line of the platen.

• Set on the platen line, whichever is easier to check.





### Push down the clamp lever

- Media detection starts.
- When media detection is completed, media type selection screen appears.



#### Select the media type (translucent or opaque media).

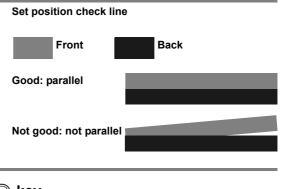
• After selecting media type, set position check line is automatically printed, and the lines are fed up to the LED light unit (option).





### Check the media is set parallel.

• Check the media is set parallel with the print on the front side.





### If the media is set parallel, press the ENTER key.

- If the media is not set parallel, raise the clamp lever and follow from the Step 3 again.
- The set position check line can be printed up to six times. When setting the media again, check the newly printed lines are parallel to the front side.
- When using the take-up device, check the lines are parallel, and set the media on the take-up device.



#### Start Raster Link Pro 5, and select an image to print.

• For details about image selection, see Reference Guide (Common features for every printer) of Raster Link Pro 5.



### Select the Image Edit tab of Raster Link Pro 5, and set the print condition.



• Set the print condition for the media type selected on the Step 5. When translucent media is selected on the Step 5 Select [Translucent Back side] on [Double sided printing] of Raster Link Pro 5.

When opaque media is selected on the Step 5

Select [Opaque Back side] on [Double sided printing] of Raster Link Pro 5.



• If the different media type from the selected one on the Step 5 is set and printed, an error appears on the printer and the printer does not print.

# Select the profile for backside on Print Condition tab, and click [OK].

### About profile to be selected for printing on back side

- When printing on the back side of translucent media, select the following profile. 4-color ink set: 360 x 360. 1 pass
- When Translucent Back side is selected on RasterLinkPro, selecting the mode other than above displays an error.
- · When printing on the back side of opaque media, select device profile that is used for normal printing.
- If a profile for translucent media (360 x 360 dpi) is selected while opaque media is selected, it cannot print with the specified size.(If a profile for translucent media is used, the printer starts printing by Raster Link Pro 5, then printer displays parameter error, and it prints the rest by fixed mode (720 x 720, 8pass).



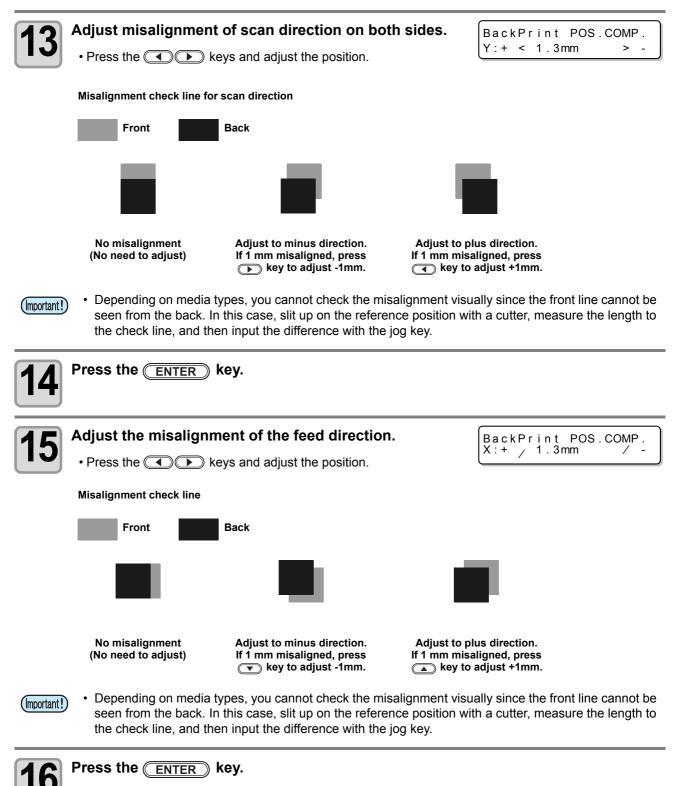
### Start printing on Raster Link Pro 5.

- Right-click the image to print, select [RIP and Print] or others, and start printing. For details, see Reference Guide (Common features for every printer) of Raster Link Pro 5.
- When printing on back side, the following settings are fixed.

Setting	Fixed value	Setting	Fixed value
Right and left margin	0mm	Stamp	OFF
(in the effective print area)		Pre-feed	OFF
Color pattern	OFF	Setting of crosswise origin by jog key	invalid



### When the printer receives the data for backside-print, it prints Misalignment check line for scan direction.



- Printing on the back side starts.
- When translucent media is selected, the Misalignment recheck line is printed before image data.
- If the scan direction is misaligned after checking the recheck line, press the **(REMOTE)** key to stop printing, and follow from the Step 1 again.

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**Double Sided Printing** 

### Adjust the misalignment during printing on back side (Only for translucent media)

If the print is misaligned in the scan direction or in the feed direction during printing image data on back side, adjust the misalignment as follows.

### How to check the misalignment of the print Check the misalignment during printing image data with the Misalignment / Media stretch check lines. \_\_\_\_ \_ Misalignment / Media \_\_\_\_ stretch check line \_\_\_\_ \_\_\_\_ \_\_\_\_ . . . . . . . . . . \_ How to adjust the misalignment of the print Press the **Sector** to adjust the misalignment, and press the **ENTER** key. To adjust the misalignment in the scan direction : Press the < To adjust the misalignment in the feeding direction : Press the Press the $\bigcirc$ $\bigcirc$ to adjust the feed direction (X). Press the $\hfill \hfill \hfi$ Press the ENTER key. X:+ 🔺 1.0mm ▼

- ا

Y:+ ◀ 1.3mm

## Chapter 5 Maintenance

This chapter

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describes the items required to use this machine more comfortably, which are the methods for the daily care, the maintenance of the ink unit etc.

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## **Maintenance**

Maintain the machine regularly or as necessary so that its accuracy will be maintained and it can continue to be used for a long time.

## **Precautions for Maintenance**

Pay attention to the following items when maintaining this machine.

	• When using cleaning solution for maintenance, be sure to wear the supplied protective glasses.
	• The ink contains organic solvent. When cleaning the machine, be sure to wear gloves so that no ink will make direct contact with your skin.
	<ul> <li>Never disassemble the machine.Disassembling it can result in electric shock hazards or damage to the machine.</li> <li>Before maintenance, be sure to turn off the power switch and unplug the power cable;otherwise, an unexpected accident may occur.</li> </ul>
	Prevent moisture from entering the machine.Moisture inside the machine can cause electric shock hazards or damage to the machine.
0	<ul> <li>To ensure stable ink jetting, it is necessary for the machine to eject a small amount of ink (flushing) regularly when a printing (outputting) operation has not been performed for a long time.</li> <li>When the machine is not to be used for a long time, turn off only the power switch on the front side, leave the main power switch at the rear turned ON (in the position of   ), and leave the power cable connected.</li> </ul>
_	<ul> <li>If organic solvent ink is mixed with water or alcohol, coagulation is generated.</li> <li>Do not wipe the nozzle face of the heads, wiper, caps, etc. with water or alcohol.Doing so can cause nozzle clogging or machine failure.</li> </ul>
$\bigcirc$	<ul> <li>Do not use benzene, thinner, or any chemical agent containing an abrasive.Such materials can deteriorate or deform the surface of the cover.</li> <li>Do not apply a lubricant, etc. to any parts inside the machine. Doing so can cause printing failure.</li> <li>Be careful that the cleaning solution, ink, etc. not to stick to the cover because this may cause the surface of the cover to deteriorate or deform.</li> </ul>

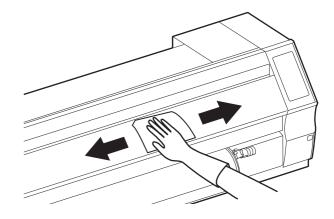
## **About Cleaning Solution**

Use the cleaning liquid dedicated for the ink being used.

Type of Ink	Applicable maintenance washings
SS21 Solvent ink	Cleaning Solution 200 for Solvent Ink kit (SPC-0369) MILD SOLVENT WASHING LIQUID (SPC-0294) [Sold separately]
Sublimation dye ink         Cleaning Liquid Bottle Kit A29 (SPC-0137) [Sold separately] aqueous Cleaning Liquid Cartridge (SPC-0259) [Sold separately]	

## **Cleaning the Exterior Surfaces**

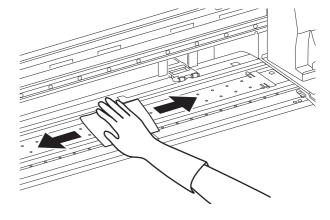
When the exterior surfaces of the machine are stained, dampen a soft cloth with water or a neutral detergent diluted with water, squeeze it, and wipe the surfaces with the cloth.



## **Cleaning the Platen**

The platen easily gets dirty with lint, paper dust, etc. generated when a media is cut.

Wipe off conspicuous stains with a soft-hair brush, a dry cloth, a paper towel, etc.



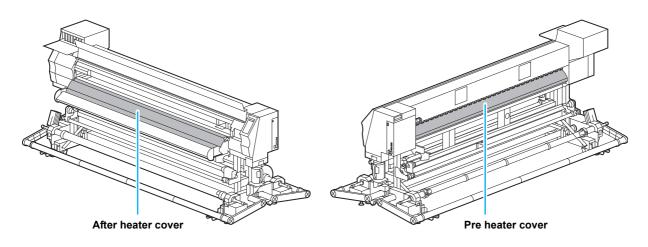


When the platen is stained with ink, wipe it off with a paper towel containing a small amount of cleaning solution for maintenance.

- (Important!)
- Before cleaning the platen, make sure that the platen has cooled adequately.
  Because dust and dirt are easily accumulated in the slots for holding a media and cutting paper (cutter line), be sure to clean these parts carefully.

## Cleaning of after heater cover and pre heater cover

The after heater cover and the pre heater cover are easy to be dirty because of the powder of the medium etc. If it shows dirt, wipe it with a soft cloth soaked in water or waterish mild detergent and wrung.



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### **Cleaning the Media Sensor**

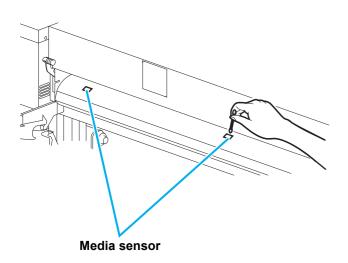
The media sensors are located on the platen in the backside and the bottom surface of the head. When the sensor is covered with dust, etc., it may cause false detection of media.

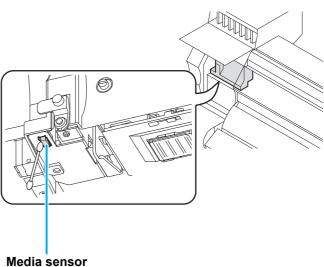
Using a cotton swab, remove the dust, etc. accumulated on the surface of the sensor.

When cleaning the sensor on the lower surface of the head is cleaned, move the carriage to the left end by the operations of step 1 of P.5-14 "Cleaning the Ink Head and the Area around It", and then clean it.

#### The backside of the machine

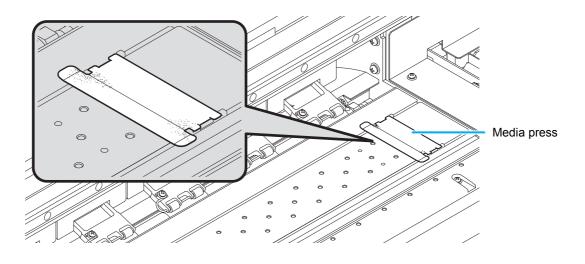
#### The lower surface of the head





## **Cleaning the Media Holder**

When the media holder is covered with lint, dust, etc., a media cannot be fed normally during printing or dust sticks to the nozzles, which may result in abnormal printing. Clean the media holder regularly.



# **Maintaining the Capping Station**

Maintain the ink cap, wiper, etc. located in the capping station. (ST.MAINTENANCE)

The ink cap and wiper function as follows.

- Wiper : It wipes off ink sticking to the head nozzles.
- Ink cap : It prevents the head nozzles from clogging due to dryness.

As the machine is used repeatedly, the wiper and ink cap gradually become dirty with ink, dust, etc. If nozzle missing cannot be corrected even after head cleaning (@ P.2-34) has been performed, use a cleaning kit and clean stick.

Tools required for Maintenance		Cleaning solution MS2/ES3/H I :Cleaning Liquid Bottle Kit A2	
	Clean stick (SPC-0527)	Gloves	• Goggles



• Be sure to wear the supplied goggles and gloves when maintaining the capping station. Otherwise, you may get ink in your eyes.

• Do not move the carriage out of the capping station by hand. When it is desirable to move the carriage, press the <u>ST.MAINTE</u> key to execute the carriage-out. (@P.5-5Steps 1 to 2)

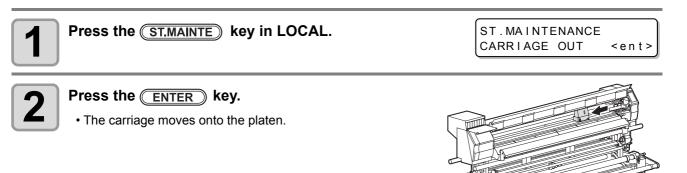
## **Cleaning the Wiper and Cap**

It is recommended that the wiper and cap be cleaned frequently in order to maintain the high image quality of the machine and keep the machine itself in good working order.



• When SS21 ink is used, the ink sticks around the wiper easily. Clean the wiper and the area around it about twice a week (it varies, depending on frequency in the use of the machine).

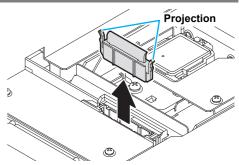
- Replace the wiper with a new one when it is extremely dirty or bent. (@ P.5-7)
- When cleaning the wiper, be careful that lint from the clean stick does not get left on the wiper.Remaining lint may cause image quality to deteriorate.





#### Open the front cover then remove the wiper.

• Pull out the wiper by holding the protrusions at its both ends.

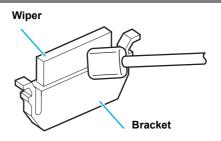


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### Clean the wiper and bracket.

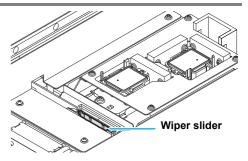
• Wipe off the ink sticking to the wiper and bracket with a clean stick dipped in cleaning solution for maintenance.

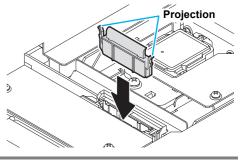




### Clean the wiper slider.

• Wipe off the ink sticking to the wiper slider with a clean stick dipped in cleaning solution for maintenance.







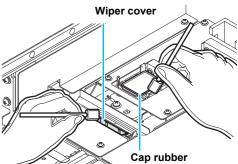
6

#### Clean the cap rubber and wiper cover.

Set the wiper at the original position.

• Insert the wiper by holding both ends of the wiper.

• Wipe off the ink sticking to the cap rubber and wiper cover with a clean stick dipped in cleaning solution for maintenance.





### Performing the station maintenance without (ST.MAINTE) key

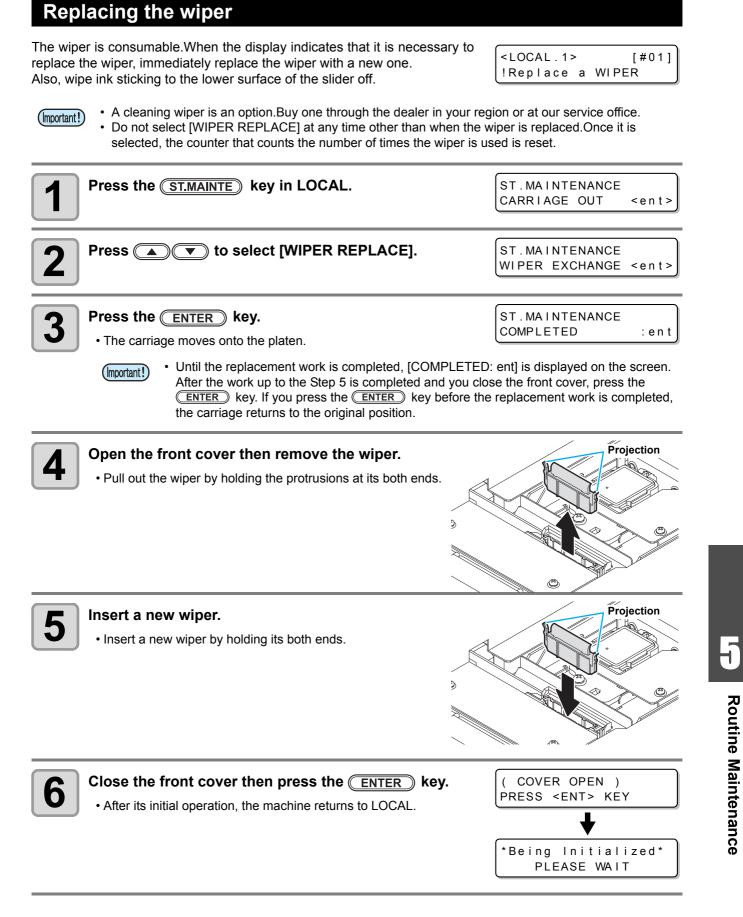
You can select station maintenance by using the **FUNCTION** key in the Local without pressing the **ST.MAINTE** key.

Press the FUNCTION key in Local.



Press the **ENTER** key twice.

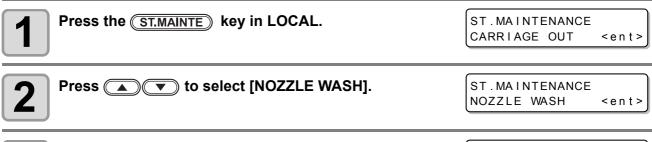
It becomes the same condition as the
 <u>ST.MAINTE</u> key is pressed from Local.



## Washing of Head nozzle

Perform cleaning of the nozzles in the heads to prevent them being clogged with coagulated ink.

Check the items on the	<ul> <li>Is [NEAR END] or [INK END] displayed?</li> <li>The cleaning solution or ink is absorbed when the nozzles are washed. At this time, if the state of "no ink" or "almost no ink" is detected, the nozzle</li> </ul>
right beforehand.	<ul><li>washing operation cannot start.</li><li>Replace the cartridge with another from which the state of "almost no ink" or "no ink" is not detected.</li></ul>





### Press the ENTER key.

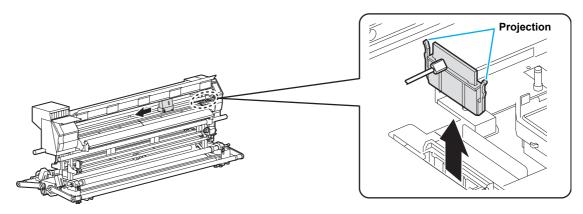
• The carriage moves onto the platen.

 Until wiper cleaning is competed, [COMPLETED (NEXT): ent] is displayed on the screen. After the work up to the step 4 is completed, press the <u>ENTER</u> key. If you press the <u>ENTER</u> key before cleaning is completed, the machine moves to the next washing procedure.



### Clean the wiper and the bracket.

- (1) Open the front cover then pull out it by holding projections at both ends of the wiper.
- (2) Clean the wiper and bracket with a clean stick dipped in cleaning solution for maintenance. (Sublimation dye ink: SPC-0137, Solvent ink: SPC-0369)
- (3) Insert it in the original position by holding the projections at both ends of the wiper.





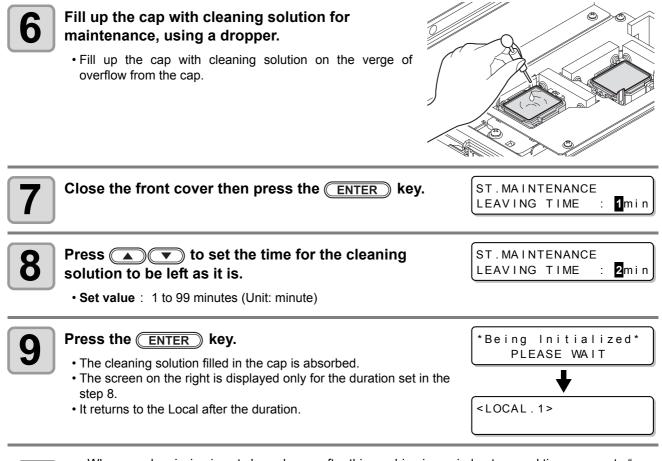
Fill the liquid COMPLETED(NEXT) :ent

WIPER CLEANING

COMPLETED(NEXT) : ent

(Important!

• Until washing liquid is filled, [COMPLETED (NEXT): ent] is displayed on the screen. After the work up to the Step 6 is completed and you close the front cover, press the <u>ENTER</u> key. If you press the <u>ENTER</u> key before washing liquid is filled, the carriage returns to the original position.



- When nozzle missing is not cleared even after this washing is carried out several times, execute " When Nozzle Clogging Cannot Be Solved" (P.5-16) and "DISCHARGE & WASH" (P.5-17). When the problem is not solved even after the operation above, contact the distributor in your region or our service office.
  - When this machine is not filled with cleaning solution for maintenance, do the following:
  - (1) Perform the operations in Steps 1 to 5.
  - (2) Fill up the cap with cleaning solution for maintenance, using a syringe.
  - (3) Perform the operations in Step 7 and later.

### Washing the Ink Discharge Passage (PUMP Tube Washing)

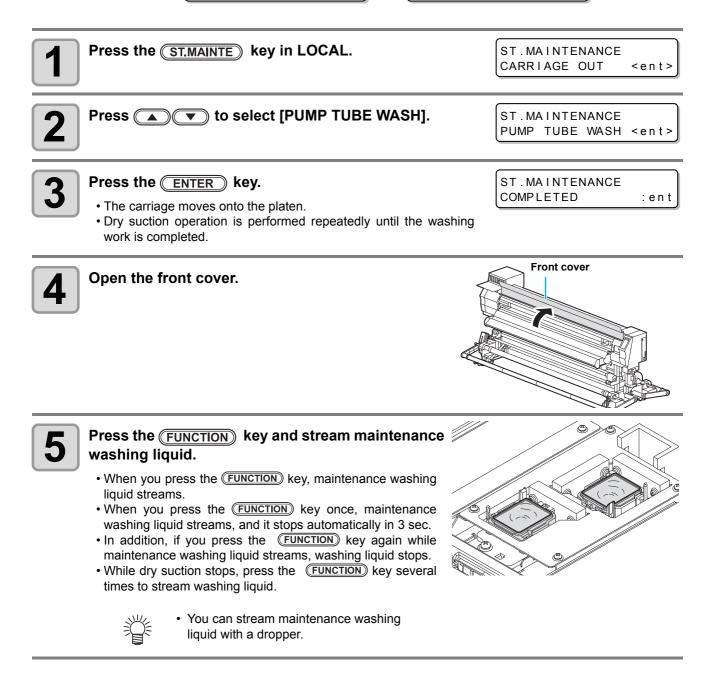
Wash the ink discharge passage regularly to prevent the head nozzles from clogging due to ink coagulation inside the passage.



• When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.5-27 "If a Waste Ink Tank Confirmation Message Appears" according to the situation.

Confirm a	wastetank >Exchange
Continue<	>Exchange

Confirm a	wastetank
Exchange	:ent



<b>6</b> Close the front cover and press	the <u>ENTER</u> key.	*Being Initialized* PLEASE WAIT
After the idle absorbing operation h seconds, the screen returns to LOCAL		<local.1></local.1>

Perform the followings unless the cleaning solution has been filled in the machine.
(1) Perform the operations until the step 4.
(2) Fill the cap with the cleaning solution by using a syringe.
(3) Perform the operations from the step 6.

## When the Machine Is Not Used for a Long Time (CUSTODY WASH)

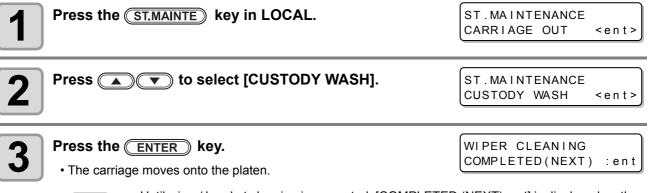
When the machine is not going to be used for a week or more, use the cleaning function for custody to clean the head nozzles and ink discharge passage. After this, keep the machine in custody.

Check the items on the right beforehand.	<ul> <li>Is [NEAR END] or [INK END] displayed?</li> <li>The cleaning solution or ink is absorbed when the nozzles are washed. At this time, if the state of "no ink" or "almost no ink" is detected, the nozzle washing operation cannot start.</li> <li>Replace the cartridge with another from which the state of "almost no ink" or "no ink" is not detected.</li> </ul>
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• When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.5-27 "If a Waste Ink Tank Confirmation Message Appears" according to the situation.

Confirm a	wastetank
Continue<	> E x c h a n g e

Confirm a	wastetank
Exchange	:ent

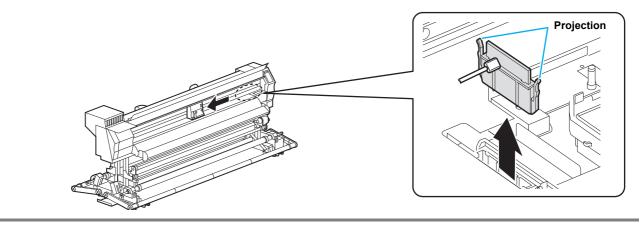


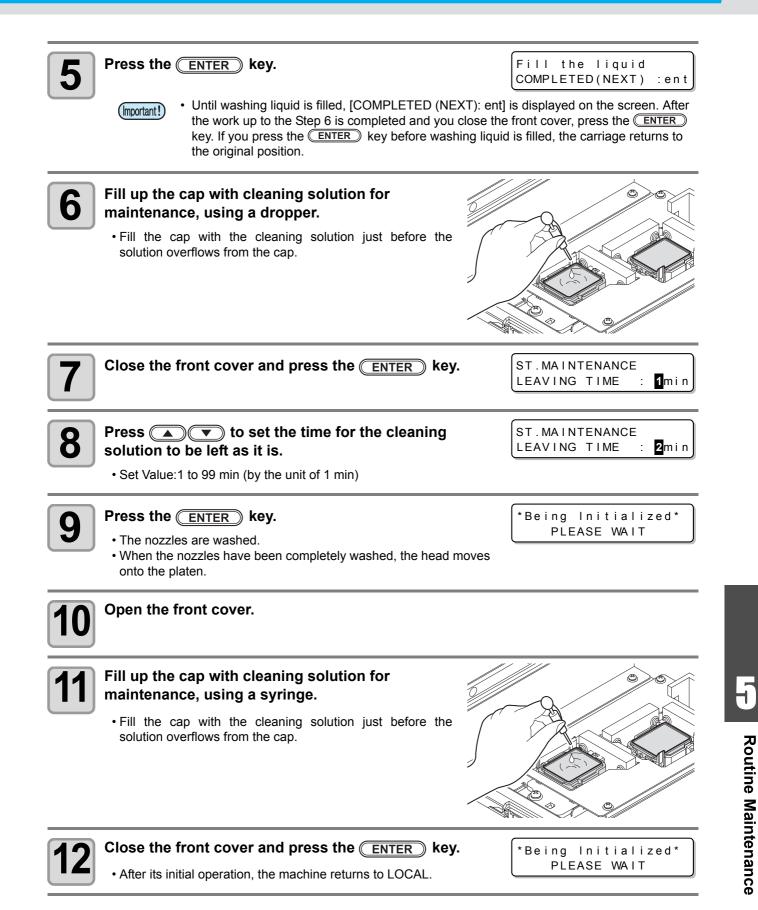
Until wiper/ bracket cleaning is competed, [COMPLETED (NEXT): ent] is displayed on the screen. After the work up to the step 4 is completed, press the <u>ENTER</u> key. If you press the <u>ENTER</u> key before cleaning is completed, the machine moves to the next washing procedure.



### Clean the wiper and the bracket.

- (1) Open the front cover then pull out it by holding projections at both ends of the wiper.
- (2) Clean the wiper and bracket with a clean stick dipped in cleaning solution for maintenance. (Sublimation dye ink : SPC-0137, Solvent ink : SPC-0369)
- (3) Insert it in the original position by holding the projections at both ends of the wiper.





## **Cleaning the Ink Head and the Area around It**

Because the ink head employs a very precise mechanism, due care needs to be taken when it is cleaned. Using a clean stick, etc., rub off gelatinous ink or dust that may stick to the lower part of the slider and the area around the ink head. In doing so, never rub the nozzles of the head.

Tools required for cleaning	Clean stick (SPC-0527)	• Gloves	• Goggles	
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- Be sure to wear the attached goggles and gloves when cleaning the area around the ink head.Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

## 1

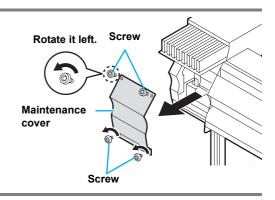
### Select [CR.MAINTENANCE] of the maintenance menu.

- (1) Press the FUNCTION key in LOCAL.
- (2) Press ( To select [MAINTENANCE] and press the ENTER key.
- (3) Press ( ) to select [ CR.MAINTENANCE ] and press the ENTER key.
- (4) Press the ENTER key.
  - Carriage will move to the left end of this device.



### Open the maintenance cover.

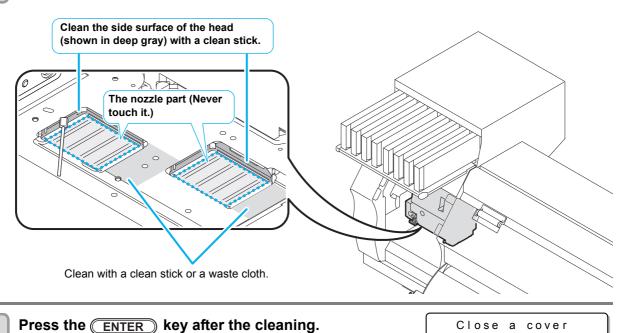
- (1) Turn four screws that fix the maintenance cover to the left, and remove them.(2) Demons the maintenance cover
- (2) Remove the maintenance cover.
- If the maintenance cover is hard to remove, use the supplied screwdriver.



### Wipe ink sticking to the side of the head off with a clean stick.



### Never rub the nozzles.



5	Close the maintenance cover then press the <u>ENTER</u> key.	( COVER OPEN ) PRESS <ent> KEY</ent>
	After its initial operation, the machine returns to LOCAL.	*Being Initialized* PLEASE WAIT

• When SS21 ink is used, the ink sticks around the head easily. Clean the area around the ink head (Important!) about twice a week (it varies, depending on the frequency the machine is used).



## When Nozzle Clogging Cannot Be Solved

When nozzle clogging cannot be solved even after the ink head cleaning ( $\mathbb{P}P.2-34$ ) or head nozzle washing ( $\mathbb{P}P.5-8$ ) has been done, perform the following two functions:

FILL UP INK	Supplies ink to correct nozzle clogging.	
NOZZLE WASH	• Wash the head nozzle. (CP P.5-8)	

## FILL UP INK

#### Select [HD.MAINTENANCE] of the maintenance menu.

(1) Press the (FUNCTION) key in LOCAL.

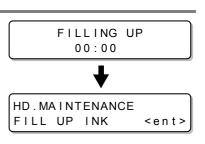
- (2) Press (A) To select [MAINTENANCE] and press the ENTER key.
- (3) Press (a) T to select [HD. MAINTENANCE].
- (4) Press the ENTER key.



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### Press the ENTER key.

- Ink is supplied automatically.
- When ink has been supplied completely, the screen returns to the shown on the right.



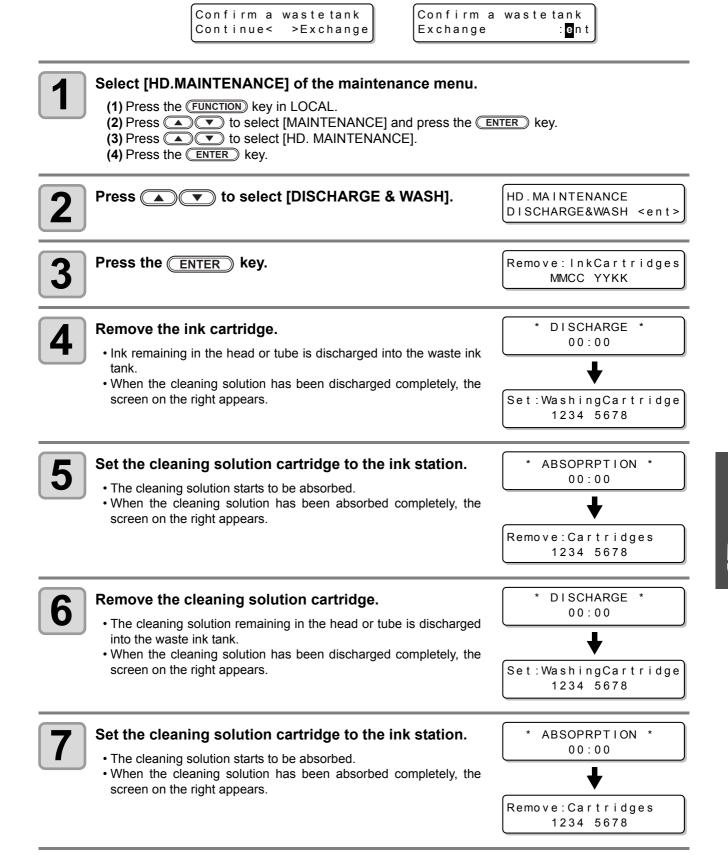


Press the **END** key several times to end the setting.

# **DISCHARGE & WASH**

Ink is discharged from the head, damper, and tube for them to be cleaned.

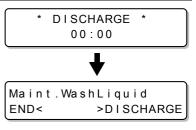
- To use this function, the dedicated cleaning solution ( P.5-2 "About Cleaning Solution") is required. In addition, before performing the work, check whether ink to be filled again remains or not.
  - When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.5-27 "If a Waste Ink Tank Confirmation Message Appears" according to the situation.



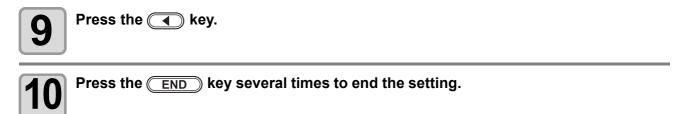


#### Remove the cleaning solution cartridge.

- The cleaning solution remaining in the head or tube is discharged into the waste ink tank.
- When the cleaning solution has been discharged completely, the screen on the right appears.



- Check the state of the waste ink tank and select whether to stop or resume cleaning.
- When you resume cleaning, press (D) to return to Step 5.



# **Supplying the Machine with Ink Anew**

Important! • If an ink cartridge extended the expiry month (@P P.3-42) is set, in Replace the ink cartridge with another one (neither extended nor e	•
<ul> <li>Turn the power of the machine on.</li> <li>When the power is turned on, the firmware version is displayed following [BOOT].</li> </ul>	BOOT JV34-260 V*.**
	Please Wait
<ul> <li>Check the ink type to fill, and then press the key.</li> <li>To check the state of the cartridge, press the REMOTE key. (Remote key. (Remot</li></ul>	INK TYPE SS21 Sol 6-5)
3 Check the ink set (the color) to fill, and then press the ( • You cannot change the current ink set to another by yourself. • If you want to change the ink set, contact our service office.	<b>SS21</b> INK SET 4-Color(MMCCYYKK)
<b>4</b> Press the ENTER key.	Set:SS21-4color Ink
<b>5</b> Set an ink cartridge to the ink station.	Set:SS21-4color Ink C-Y-KK
<ul> <li>When an ink cartridge has been set, the machine is supplied with ink automatically.</li> <li>The ink station has an insertion slot allocated to each ink color.Set the ink cartridge according to the cartridge label under the ink station.</li> </ul>	FILLING UP NOW. 00:00
• The setting orders of ink cartridges differ depending or refer to P.7-4 "Setting orders of ink cartridges".	on the ink set you use. For details,
6 When ink has been supplied to the machine completely, the screen returns to LOCAL.	<pre><local.1> [#01] width:***mm</local.1></pre>

• If blurring or missing of characters is found in printing after the machine has been supplied with ink anew, see "Performing Head Cleaning" ((2) P.2-34) or "FILL UP INK" ((2) P.5-16).

### When the Machine Cannot Be Supplied with Ink in Step 5

When various ink errors including "Almost no ink" and "No ink" occur, ink does not start to be supplied to the machine.

## When ink does not start to be supplied to the machine in "Supplying the Machine with Ink Anew" Step 5:

(1) Press the **END** key to return to the screen in Step 2.

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- (2) Press the **(REMOTE)** key to check the state of the ink cartridge.
- (3) Correct ink errors ( $\bigcirc$  P.6-5) and repeat the operations from Step 2.

## **Automatic Maintenance Function**

To use this machine comfortably, you can set various maintenances to be performed automatically. Here, set performing intervals of various automatic maintenances.

You can prevent troubles such as ink clogging by performing automatic maintenance periodically (automatic maintenance function).

For the auto maintenance functions, the following items can be set:

- The maintenance intervals (default value) differ depending on the ink type you use. For details, refer to P.7-4 "Maintenance intervals of automatic maintenance function".
  - When you perform maintenance manually, after manual maintenance is completed and when time set with the automatic maintenance function has passed, maintenance starts automatically.

Function name	Descriptions
REFRESH	The interval between each refreshing operation is set.
PUMP TUBE WASH	The interval between each PUMP tube washing operation is set.
CLEANING	The interval between each cleaning operation is set.

• During the right message is displayed, the operation set in the auto maintenance function is not carried out. Perform the operations of P.5-28 if required.

<pre><cur></cur></pre>	[#01]
!WASTE TANK	

When the power switch on the front of the machine is turned off, check the waste ink tank.

### Setting the Refreshing Intervals

The interval between each operation of ejecting a small amount of ink from the nozzles to prevent nozzle clogging is set.

#### Select [AUTO MAINT.] of the maintenance menu.

(1) Press the (FUNCTION) key in LOCAL.

(2) Press to select [MAINTENANCE] and press the ENTER key.
 (3) Press to select [AUTO MAINT.].

Press the ENTER key.	AUTO MAINT. REFRESH <ent></ent>
<b>3</b> Press the <u>ENTER</u> key.	AUTO MAINT. REFRESHinterval= 1
<ul> <li>Press  To set the refreshing interval.</li> <li>Set value : OFF or 1 to 168 hours</li> </ul>	AUTO MAINT. REFRESHinterval= 10h
<b>5</b> Press the <u>ENTER</u> key.	AUTO MAINT. REFRESH <ent></ent>
Press END the key several times to end the setting.	

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## Setting the Tube Washing Intervals

The interval between each operation of washing the cap and PUMP tube with cleaning solution for maintenance is set.

Select [AUTO MAINT.] of the maintenance menu. (1) Press the FUNCTION key in LOCAL. (2) Press I To select [MAINTENANCE] and press the (3) Press I To select [AUTO MAINT.]. (4) Press the ENTER key.	ENTER key.
Press To select [PUMP TUBE WASH].	AUTO MAINT. PUMP TUBE WASH <ent></ent>
<b>3</b> Press the ENTER key.	AUTO MAINT. WASH INTERVAL = 1
<ul> <li>Press  to set the interval between each</li> <li>PUMP tube washing operation.</li> <li>Set value : OFF or 1 to 168 hours</li> </ul>	AUTO MAINT. WASH INTERVAL = 4h
<b>5</b> Press the <u>ENTER</u> key.	AUTO MAINT. PUMP TUBE WASH <ent></ent>
<b>6</b> Press the <u>END</u> key several times to end the setting.	

## Setting the Cleaning Intervals

This is a function operated instead of the PUMP tube washing when the cleaning solution for maintenance has been used up.

The cleaning type and the interval between each cleaning operation are set.

<ul> <li>Select [AUTO MAINT.] of the maintenance menu.</li> <li>(1) Press the FUNCTION key in LOCAL.</li> <li>(2) Press          <ul> <li>(2) Press <ul> <li>(2) Press <ul> <li>(3) Press <ul> <li>(4) Press the ENTER key.</li> </ul> </li> </ul> </li> </ul></li></ul></li></ul>	ENTER key.
Press To select [CLEANING].	AUTO MAINT. CLEANING <ent></ent>
<b>3</b> Press the ENTER key.	AUTO MAINT. CLEAN.INTERVAL = 1
<ul> <li>Press  to set the interval between each cleaning operation.</li> <li>• Set value : OFF or 1 to 168 hours</li> </ul>	AUTO MAINT. CLEAN.INTERVAL = 4
<b>5</b> Press the ENTER key. • The cleaning type selection screen appears.	AUTO MAINT. CLEAN.TYPE : NORMAL
<b>Press T to select a cleaning type.</b> • Set value : NORMAL, SOFT, HARD	AUTO MAINT. CLEAN.TYPE : SOFT
Press the ENTER key.	AUTO MAINT. CLEAN.INTERVAL = 4
<b>8</b> Press the <u>END</u> key several times to end the setting.	

# **Other Maintenance Functions**

### Changing the Time When a Warning about Wiper Replacement Is Issued

The wiper is consumable. The head can easily become dirty in a dusty environment.

In addition, the head cannot be cleaned adequately with a bent or worn wiper used. Wiper levels can be set so that a warning about wiper replacement is issued earlier than the standard according to the operating environment.



**Deformed wiper** 

10/10	Displays the wiper replacement warning when wiping has been performed the standard number of times. (Initial value)	
9/10	Displays the wiper replacement warning when wiping has been performed nine tenths of the standard number of times.	
8/10	Displays the wiper replacement warning when wiping has been performed eight tenths of the standard number of times.	
1/10	Displays the wiper replacement warning when wiping has been performed one tenth of the standard number of times.	

#### Select [WIPER LEVEL] of the maintenance menu.

(1) Press the (FUNCTION) key in LOCAL.

(2) Press to select [MAINTENANCE] and press the ENTER key.
(3) Press to select [WIPER LEVEL].

Press the ENTER key.	WIPER LEVEL LEVEL : 10/10
<ul> <li>Press  to set a wiper level.</li> <li>Set value : 1/10 to 10/10</li> </ul>	WIPER LEVEL LEVEL : 9/10
Press the ENTER key.	MAINTENANCE WIPER LEVEL <ent></ent>

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END key several times to end the setting. Press the (

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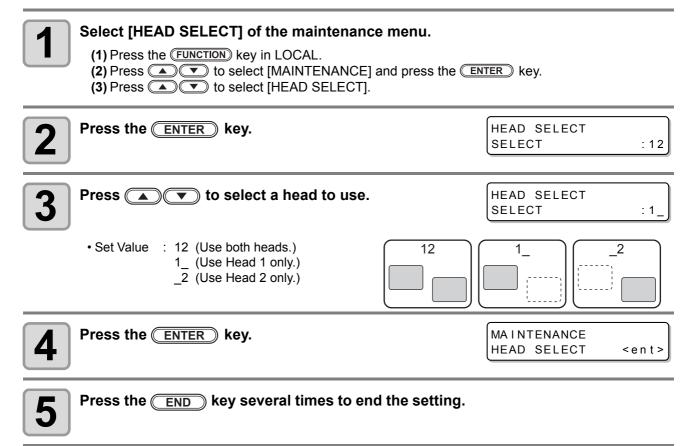
## **Setting the Head Selection**

You can select the head to use for printing.

When one head cannot be used because nozzle clogging has not been solved etc., you can set that the head with nozzle clogging will not be used.

(Important!)

- The scope of head selection is from printing (including test printing) to flushing. Filling function etc. targets all heads.
- When you print with only one head, the printing speed is dimidiated compared with when printing with two heads.



MEDIA RESIDUAL <ent>

## Setting the Display of Media Residual

Whether the screen displays the remaining amount of a media is set.

When the media remaining amount display is turned to "ON"	t the remaining amount of a media is displayed in Remote. (However, when a leaf media is used, the length of the media to printed is displayed.)	
When the media remaining amount display is turned to "OFF"	the remaining amount of a media is not displayed in the Remote.	

- The amount of a media that has been fed by the printing and jog keys is reflected in the remaining amount of a media.
- The length of a media (initial value of the remaining amount) is entered when a roll media is detected.(@P.2-24)
- The setting configured here does not become effective unless media detection is performed after the setting has been complete.



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#### Select [MEDIA RESIDUAL] of the maintenance menu.

(1) Press the FUNCTION key in LOCAL.

(2) Press ( ) to select [MAINTENANCE] and press the ENTER key.

(3) Press ( To select [MEDIA RESIDUAL].

(4) Press the ENTER key.

Press To select ON/OFF.	MEDIA RESIDUAL SETUP : OFF
Press the ENTER key	



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Press the **END** key several times to end the setting.

### Printing the Remaining Amount of a Media

The present remaining amount of a media can be printed.

- Set "Remaining amount of a media to display" to "ON".
- When you replace the media you use now with another, it is recommended that you print the remaining amount of the media on it. With the remaining amount of a media having been printed beforehand, when you use the replaced media again, you can enter an accurate value in the screen for entering the remaining amount of a media ((2) P.2-24) that appears after media detection.



LOCAL, Press 

 LOCAL changes to the origin setting mode.

▲ ▼ ● and proceed to Step 3.

ORIGIN SETUP 0.0 ----



## Press to set a light point of the LED pointer to the changing position.

Move the carriage and media with a and set the origin.
When you do not change the origin, do not press

ORIG	IN :	SET	UΡ	
0.0		0.	0	
Origin (Length)		Ori (Wi		

MEDIA RESIDUAL DRAW

<ENT>

• When you press the **ENTER** key here, the origin is changed, and the screen returns to LOCAL.



#### Press the **REMOTE** key.

- When you press ( ), the screen returns to Step 2.
- When you press the END key, the screen returns to LOCAL.



#### Press the ENTER key.

- The remaining amount of a media starts to be printed.
- When the printing has been completed, the screen returns to LOCAL.

• When the remaining amount of a media has been printed with the origin changed, the origin set here is effective even when subsequent data are printed.

### If a Waste Ink Tank Confirmation Message Appears

Ink used in head cleaning, etc. is stored in the waste ink tank on the lower right side of the machine. This machine counts the accumulated amount of discharged ink. When that reaches a specified amount, the machine displays a confirmation message. (When this message is displayed, consider the replacement of the waste ink tank.)

#### If a Message Is Displayed, for Example, When the Machine Is Supplied with Ink

When functions that use the waste ink tank, such as ink-supplying, head cleaning, and PUMP tube washing, are performed, a message that requests you to confirm the state of the waste ink tank may be displayed, depending on the state of the tank.

When the waste ink tank is almost full:

#### The message on the right is displayed.

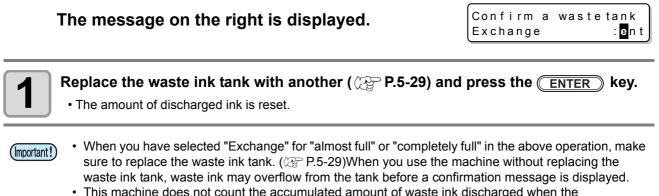
. Confirm a wastetank Continue< >Exchange



#### Check the state of the waste ink tank.

- When the waste ink tank is almost full:
- (1) Replace the waste ink tank with another. ((P. P.5-29)
- (2) ENTER Press the key to select "Exchange". (The ink discharging amount is reset.)
- When the waste ink tank still has a capacity for waste ink:
- (1) Press the ( key to select "Continue". (The ink discharging amount is not reset.)
- In this case, the message of P.5-28 "Confirmation Message in LOCAL" is displayed when it returns to Local.

When the waste ink tank is completely full:



• This machine does not count the accumulated amount of waste ink discharged when the ST.MAINTENANCE (NOZZLE WASH, PUMP TUBE WASH, and COSTODY WASH) are performed.Before performing these functions, make sure to check the state of the waste ink tank.

1

The message on the right is displayed. (LOCAL.1> [#01] !WASTE TANK

Check the state of the waste ink tank and replace it with another as necessary.
(②P P.5-29)

#### When You Do Not Want the Confirmation Message of the Waste Ink Tank to Be Displayed

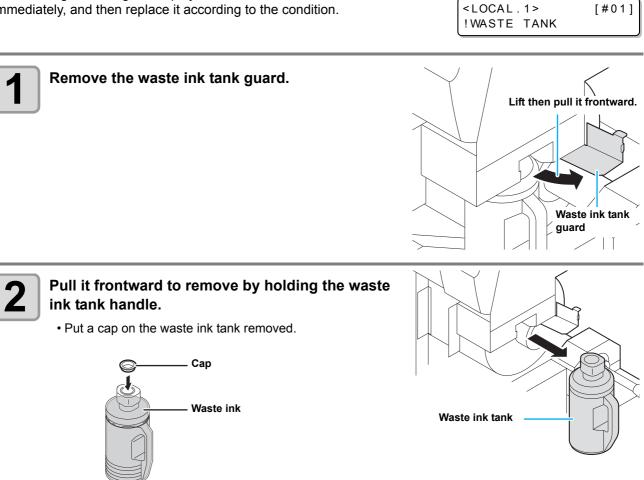
You can configure the setting so that the confirmation message of the waste ink tank is not displayed.

<ul> <li>Select [Waste Ink Warning] of the machine setup menu.</li> <li>(1) Press the FUNCTION key in LOCAL.</li> <li>(2) Press  <ul> <li>(2) Press</li> <li>(3) Press</li> <li>(4) Press the ENTER key.</li> </ul> </li> </ul>		
Press To select OFF.	WastelnkWarning SETUP : OPFF	
<b>3</b> Press the ENTER key.	MACHINE SETUP WastelnkWarning <ent></ent>	
Press the END key several times to end the setting.		
(mportant!) • When you set Waste ink warning to "OFF", the confirmation message is not displayed. Make sure to		

visually check the amount of ink remaining in the waste ink tank.

### Replace the waste ink tank with another

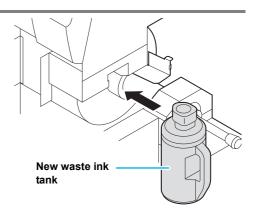
When the right message is displayed, check the waste ink tank immediately, and then replace it according to the condition.

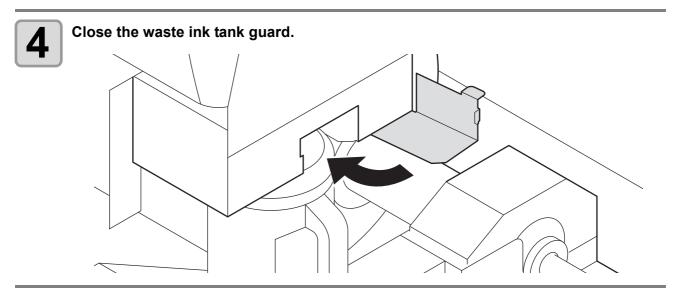




#### Replace the waste ink tank.

(1) Prepare a new waste ink tank (SPC-0117). (2) Insert the waste ink tank by holding a handle of the tank.







#### Select [Ink Tank Exchange] of the maintenance menu.

(1) Press the (FUNCTION) key in LOCAL.

(2) Press to select [MAINTENANCE] and press the ENTER key.
(3) Press to select [Ink Tank Replace].



#### Press the ENTER key.

• The ink discharging amount that is controlled by the machine is reset and the message is cancelled.





#### Press the **END** key several times to end the setting.

## To change Sb52 ink color

To change Sb52 ink color, perform the procedures below:



When you change the items below, the work by the service person is required. Contact a distributor in your district or our office to call for service.

- When you change the ink set from "four-color model" to "six-color model" etc.
- When you change the ink type from SS21 ink to Sb52 ink etc.



"Discharge" the remaining ink in the machine, and "Wash" the head or the tube.

See P.5-17 "DISCHARGE & WASH".



#### Fill ink.

• See P.5-19 "Supplying the Machine with Ink Anew".



• When washing, use eight special cleaning solution cartridges (sold separately). Wash with the proper cleaning solution cartridge for the used ink type.

Ink Type	Cleaning Solution Type
Solvent ink (SS21)	MILD SOLVENT Cleaning Solution Cartridge (SPC-0294)
Sublimation dye ink (Sb52)	Aqueous cleaning solution cartridge (SPC-0259)

## To use sublimation transfer ink with more stable quality

When you print with sublimation transfer ink after you have left this machine, color may change due to color material settling.

By shaking the ink cartridge or performing ink filling periodically, the status will be improved. (Before performing ink filling, it is necessary to shake the ink cartridge.)

In this machine, when the time to shake the ink cartridge or to perform ink filling has come, a message (warning preventing color material settling) is displayed to inform you of it.

#### When the time to shake the ink cartridge has come



#### When the time to perform ink filling



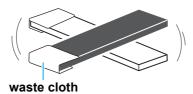


• This message is displayed when the machine is in the local mode or when you switch it from the remote mode to the local mode.

This does not terminate printing or interfere with continue printing, however, as this is not displayed during remote mode, it is recommended to switch to the local mode by pressing the **REMOTE** key between printings.

#### How to shake the ink cartridge

Holding the long side of the ink cartridge with both hands, tilt to right and left by turns to make ink flow, and repeat it about twenty times.



- If you shake the ink cartridge too strong, it may damage the inside pack and it may cause ink leakage. Be careful about it.
  - When the cartridge is new, shake it before taking it out of bag.
  - When the cartridge is in-use, be sure to wear the gloves, press waste close to the inserted side and shake it.
  - If the remaining amount of ink is less, tilt it until it becomes vertical, as you cannot shake it enough in some cases.

## Set the interval to display the warning message

Depending on the ambient temperature, set the interval to display the warning preventing color material settling.



• The display interval of the message is set to 72 hours in the initial condition.



#### Select [AUTO MAINT.] of the maintenance menu.

(1) Press the FUNCTION key in LOCAL.
(2) Press To select [MAINTENANCE] and press the ENTER key.
(3) Press To select [AUTO MAINT.].
(4) Press the ENTER key.

Press To select [Sub-INK WARNING].	AUTO MAINT. Sub-INK WARNING <ent></ent>
<b>3</b> Press the ENTER key.	AUTO MAINT. Sub-INK WARNING= 72h
<ul> <li>Press  to set the operation time.</li> <li>• Set value : OFF (disabled) or 1 to 120 hours</li> </ul>	AUTO MAINT. Sub-INK WARNING= 84h



Press the **END** key several times to end the setting.

# **Replacing the Cutter Blade**

The cutter blade is consumable. When the cutter blade gets dull, replace it with a new one (SPA-0107).



- The blade is sharp.Be careful not to hurt yourself or anyone else.
- Store the cutter blade in a place that is out of the reach of children. In addition, dispose of used cutter blades according to regional laws and regulations.

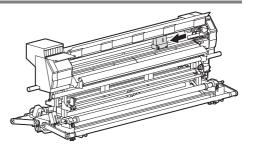


• When replacing the cutter blade, it is recommended to place a sheet of paper under the cutter blade. This will help pick up the cutter blade if it drops.



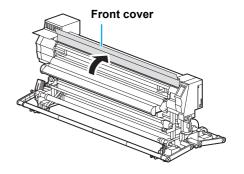
#### Press the <u>ST.MAINTE</u> key then press the <u>ENTER</u> key.

• The carriage moves onto the platen.





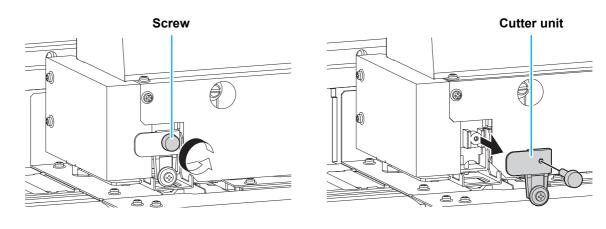
#### Open the front cover.



## 3

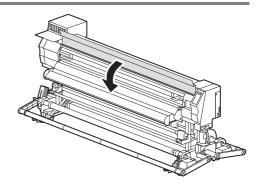
#### Replace the cutter unit by the carriage.

- (1) Loosen the screw of the cutter unit.
- (2) Remove the cutter unit.
- (3) Mount a new cutter unit.
- (4) Fasten the screw of the cutter unit to secure the cutter unit.





Close the front cover.





Press the ENTER key.

• The screen returns to LOCAL.

## 5-36

## Chapter 6 Troubleshooting



#### This chapter

describes the corrective measures to be taken for a phenomenon suspected to be trouble and the procedures to clear the error number displayed on the LCD.

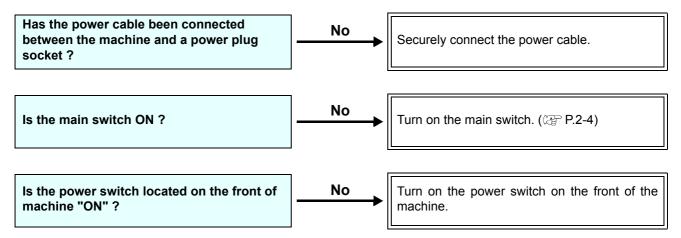
Troubleshooting	6-2
Power does not turn on	6-2
The machine does not start printing	6-2
Media get jammed / media is soiled	6-3
[HEAT] or [CONSTANT] LED does not light up	6-3
Image quality is poor	6-4
Nozzle is clogged	6-4
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Warning / Error Messages	6-6
Warning messages	6-6
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## Troubleshooting

Take appropriate actions as described below before taking the trouble as a failure. If still the problem is not solved after troubleshooting, contact your dealer or an office of MIMAKI.

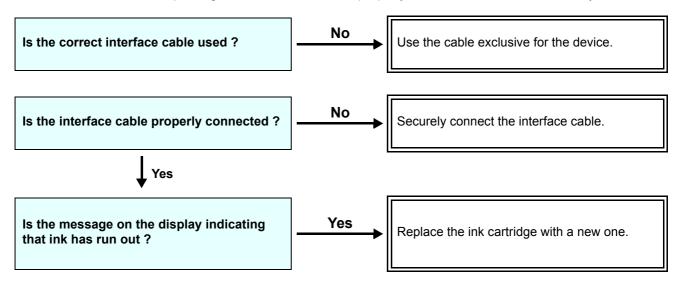
### Power does not turn on

In most cases, this is due to improper connection of the power cable for the machine or computer. Check that the power cable is connected properly.



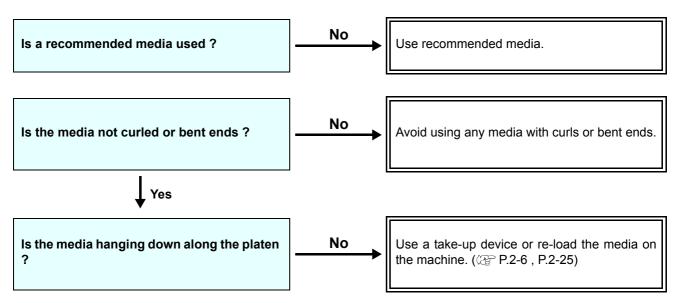
### The machine does not start printing

This occurs when the data is not being transmitted to the machine properly. It can also occur when the printing function does not work properly or the media is not set correctly.



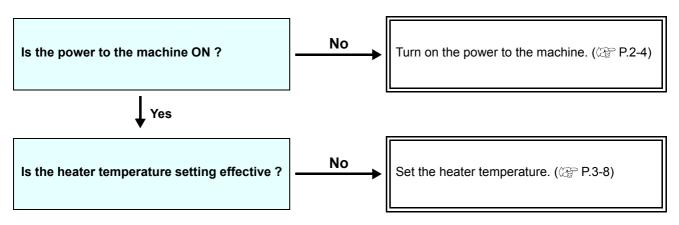
## Media get jammed / media is soiled

Media jamming or stained media is considered to be due to the use of an unsuitable media or improper setting of media.



## [HEAT] or [CONSTANT] LED does not light up

Check the basic operation.



## Image quality is poor

This section describes the corrective actions to be taken in case the image quality is not satisfactory. Take remedy for particular problems with image quality. If the remedy does not work, contact your dealer or an office of MIMAKI.

Phenomenon	Measures	
White lines / blur / dark stripes (in the direction of travel of the heads)	<ul> <li>(1) Execute the head cleaning. (IP P.2-34)</li> <li>(2) Perform maintenance of the inside of the station. (IP P.5-5)</li> <li>(3) Execute the [MEDIA COMP.] function. (IP P.3-4)</li> <li>(4) If any pieces of paper or dust is attached on the path of the heads such as media press, remove it.</li> </ul>	
Characters are double- or triple-printed in the media feed direction	(1) Execute the [MEDIA COMP.] function. (@ P.3-4)	
Disagreement in print positions between outward trip and homeward trip	(1) Execute the [DROP POSITION] function. (@ P.3-6)	
Ink drops falling on media during printing	<ul> <li>(1) Execute the wiper cleaning. ( P.5-5)</li> <li>(2) Execute the ink cap cleaning. ( P.5-5)</li> <li>(3) Clean around the head. ( P.5-14)</li> <li>(4) Execute the head cleaning [NORMAL]. ( P.2-34)</li> <li>(5) When the phenomenon is not improved, execute the periodical wiping setting. ( P.3-23)</li> </ul>	

### Nozzle is clogged

When nozzle clogging is not dissolved even after the head cleaning referring to P.2-34, make sure the following operations.

Fill ink by the operations of P.5-16.

Wash the head nozzle by the operations of P.5-8.

By performing the operations in P.5-24, select the head (when one of the two heads is normal).

## Ink cartridge warning appears

If an ink cartridge trouble is detected, a warning message appears and none of printing, cleaning and all the other operations that use ink is available.

In this case, replace the ink cartridge in question immediately.

• Once cartridge trouble is displayed, do not leave the ink cartridge without replacing it for a long time; otherwise, the machine will lose the nozzle clogging prevention function. If nozzles are clogged, the machine must be repaired by MIMAKI's service engineer.

### Displaying the description of ink cartridge trouble

The contents of cartridge error are confirmable by the following operations.

1	Press the ENTER key in LOCAL.	SS21INK REMAIN	MMCCYYKK 34567899
2	Press the ENTER key.	NON - OR I G	
	When multiple cartridge defects occur and if you press the ENTE displayed by turns.	R key or 🗨	( <b>)</b> , they are

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# Warning / Error Messages

If some trouble occurs, the buzzer sounds and the display shows a corresponding error message. Take an appropriate remedy for the displayed error.

## Warning messages

Message	Cause	Solution
Close a cover.	The front cover or the maintenance cover is opened.	Check the front cover and maintenance covers. If the same error message appears again even after closing all the covers, contact your local distributor to call for service.
** NO MEDIA **	A media has not been set.	Set media.
EXCHANGE BATTERY	The battery life end of the internal clock is detected.	Contact your local distributor to call for service.
<pre><local.1> [#01] !Replace a WIPER</local.1></pre>	Time to replace the wiper in the capping station with a new one has come. (The wiping count has reached the specified value.)	Replace the wiper with a new one. (颂 P.5-7)
<pre><local.1> [#01] !Do TEST DRAW</local.1></pre>	The nozzle recovery cannot be expected because the machine has been left standing for a prolonged period of time.	Perform test printing then check nozzle clogging. In the case of nozzle clogging observed, perform cleaning. (@ P.2-34) In the case of significant nozzle clogging observed, perform the operations of P.5-8 "Washing of Head nozzle".
PRE PRT POST BREAK **°C **°C	A heater is disconnected. (This example shows that pre- heater is disconnected.)	
PRE PRT POST THERM **°C **°C	The thermistor of a heater is defec- tive. (This example shows that the thermistor of pre-heater is defec- tive.)	Contact your local distributor to call for service.
<pre><local.1> [#01] NEAR END MMCC * REMOTE.1* [#01] NEAR END MMCC</local.1></pre>	Ink for one supply path has been nearly used up.	Replace the cartridge for the supply path corresponding to the indicated color. You can print without replacing the car- tridge (until INK END is displayed). However, the machine returns to local mode every completion of printing one file.
<pre><local.1> [#01] INK ENDYYKK *REMOTE.1* [#01] INK ENDYYKK</local.1></pre>	Ink for one supply path has been completely used up.	Replace the cartridge for the supply path corresponding to the indicated color.

Message	Cause	Solution
<pre><local.1> !CAR</local.1></pre>		
[#01]	Ink cannot be supplied due to the	Check the cartridge for the supply path
* REMOTE . 1 * ! CAR [ # 0 1 ]	cartridge per one supply path.	corresponding to the indicated color.
<pre><local.1> [#01] REINSERT CARTRIDGE</local.1></pre>	Ink near end was detected right after the cartridge with much remaining amount of ink has been inserted.	Pull out the inserted cartridge and insert it again. If the message will be displayed again, contact a distributor in your dis- trict or our office to call for service.
<pre><code color="block"><code color="block"></code></code></code></code></code></code></code></code></code></code></code></code><td>There is a problem with installed ink cartridges.</td><td></td></code></code></pre>	There is a problem with installed ink cartridges.	
	(In the case of overlapping with	Check the content of the warning details
* REMOTE . 1 * !CAR [#01]	other warnings, the display turns to "< LOCAL.1> !CAR/WASH" and [#**] is erased. )	in the guidance function.
<pre><local.1> !WASH [#01]</local.1></pre>	There is a problem with the installed cleaning solution cartridge. (In the case of overlapping with	Check that the cleaning solution car-
*REMOTE.1* !WASH [#01]	other warnings, the display turns to "< LOCAL.1> !CAR/WASH" and [#**] is erased. )	tridge has been set properly.
INK NEAR END MMCC	The ink of the ink cartridge has been nearly used up.	Replace the cartridge generating the warning with a new one.
INK END YYKK	The ink of the ink cartridge has been completely used up.	Replace the cartridge generating the warning with a new one.
NON-ORIGINAL INK YYKK	The ink cartridge is not MIMAKI genuine.	Replace the cartridge generating the warning with a MIMAKI genuine.
WRONG INK IC YYKK	The IC chip of the ink cartridge can- not be read normally.	Remove the cartridge generating the warning once and install it again. If the same warning message still appears, contact your local distributor to call for service.
Kind of INK	The ink of the ink cartridge is differ- ent in type from the ink currently supplied.	Check the ink type of the cartridge gen- erating the warning.
Color of INK	The ink of the ink cartridge is differ- ent in color from the ink currently supplied.	Check the ink color of the cartridge gen- erating the warning.
WRONG CARTRIDGE	There is trouble with an installed ink cartridge.	Check the cartridge generating the warning.
NO CARTRIDGE	An ink cartridge has not been installed in the slot.	Install an appropriate cartridge in the slot generating the warning.
Expiration	The specified expiration date of an ink cartridge has passed.	Replace the cartridge generating the warning with a new one. The cartridge may be used until one month passes after the specified expira- tion date.

Message	Cause	Solution
Expiration: 1MONTH	The expiration date of an ink car- tridge has passed (one month has passed after the specified expiration date).	The red LED blinks. Replace the car- tridge generating the warning with a new one. The cartridge may be used until two months pass after the specified expira- tion date.
Expiration:2MONTH	The expiration date of an ink car- tridge has passed (two months have passed after the specified expiration date).	Replace the cartridge generating the warning with a new one.
EXPIRED INK IN USE	The ink has been extended the expiry month and has been used.	Replace the ink cartridge. (@ P.1-12)
COMPLETELY EXPIRED	For the ink extended the expiry month, six months have passed since the expiry month shown on the cartridge.	Replace the ink cartridge. (@ P.1-12)
INK REMAIN ZERO	Remaining amount of ink in an ink cartridge is zero.	Replace the cartridge generating the warning with a new one.
!WASTE TANK	The waste ink tank is nearly full.	Replace the waste ink tank then execute [MAINTENANCE]-[Ink Tank Exchange]. (@ P.5-29)
!Wash Liquid END	The cleaning liquid cartridge is empty.	Replace the cleaning solution cartridge with a new one.
	The cleaning liquid cartridge has not been installed.	Install the cleaning solution cartridge.
WRONG WASH CART.	There is trouble with cleaning liquid cartridge.	Check the cleaning solution cartridge.
	The cover of the heavy-duty take-up	Close the cover of the heavy-duty take- up device.
!Take-UP CoverOPEN	device opens.	If the error message is displayed even if the cover is closed, contact our service and sales office.
!Take-UP LimitDETECT	The control limit sensor of the heavy-duty take-up device is detected.	Move down the position of the tension bar at the take up side. If the error mes- sage is displayed even if you move it down, contact our service and sales office.
	An abnormality occurs in the status	Conform whether the medium is taken up with the heavy-duty take-up device properly.
!Take-UP WRONG	of take up of the heavy-duty take-up – device.	Confirm whether the paper core take up the medium goes around in circles or not.

Message	Cause	Solution
	The cover of the heavy-duty feeding device opens.	Close the cover of the heavy-duty feeding device.
!Feeding CoverOPEN		If the error message is displayed even if the cover is closed, contact our ser- vice and sales office.
Feeding LimitDETECT	The control limit sensor of the heavy-duty feeding device is detected.	Move down the position of the tension bar at the drawn side. If the error mes- sage is displayed even if you move it down, contact our service and sales office.
!Feeding WRONG	of drawn of the heavy-duty feeding	Conform whether the medium is set on the heavy-duty feeding device properly.
		Confirm whether the medium goes around in circles or not.

## Error messages

When an error message is displayed, eliminate the error according to the chart below. If the same error message appears again, contact your dealer or an office of MIMAKI to call for service.

Message	Cause	Solution
(***** ERROR 01 ***** MAIN ROM	An error occurred in the circuit board system. (ROM)	
(***** ERROR 02 ***** MAIN RAM	An error occurred in the circuit board system. (RAM)	
(***** ERROR 03 ***** POWER +5V	An error occurred in the circuit board system. (POWER +5V)	
(* * * * * ERROR 03 * * * * * POWER + 24 V	An error occurred in the circuit board system. (POWER +24V)	
(* * * * * * ERROR 03 * * * * * POWER + 42V	An error occurred in the circuit board system. (POWER +42V)	
(* * * * * ERROR 04 * * * * * F - ROM	An error occurred in the circuit board system. (F-ROM)	
(***** ERROR 06 ***** SD-RAM	An error occurred in the circuit board system. (SD-RAM)	
(***** ERROR 07 ***** HEAD ()	An error in heads was detected. (Abnormal temperature was detected.)	
(***** ERROR 07 ***** VOLTAGE ()	An error in heads was detected. (Abnormal voltage was detected.)	Turn off the power to the machine and turn it on after a while. If the same error message appears
(* * * * * ERROR 08 * * * * * LinearENCODER : SENSOR	An error occurred in the linear encoder. (Counting was unable.)	again, contact your local distributor to call for service.
(* * * * * ERROR 08 * * * * * * LinearENCODER : DIR .	An error occurred in the linear encoder. (Error in the mounting direction.)	
(* * * * * ERROR 08 * * * * * LinearENCODER : COUNT	An error occurred in the linear encoder. (Read-out count error)	
(***** ERROR 09 ***** FPGA ERROR	An error occurred in the circuit board system. (FPGA PDC)	
(***** ERROR 09 ***** FPGA PRAM BUSY	An error occurred in the circuit board system. (FPGA PDC)	
(***** ERROR 09 ***** HDC ERROR ()	An error occurred in the circuit board system. (FPGA HDC)	
i     e g a             P T         x x x           x x x x x x x x x x x x x x x x x x x         x	CPU irregular interrupt has occurred.	
Prg Err TK=xxx ASSRT[xxxx] [xxxx] [xxxx]	A program error has been alerted.	

Message	Cause	Solution
(***** ERROR 10 ***** COMMAND ERROR	The machine received some data other than command data.	Securely connect the interface cable in position. Use an interface cable conforming to the specifications.
(***** ERROR 10 ***** CMD(DBL.Side:FRONT)	An error occurred when the machine cannot print on front side.	Check the machine.
(***** ERROR 10 ***** CMD(DBL.Side:REAR )	When ON is set for back side print- ing, the machine received some data other than back side printing data.	Check the setting of the printing data again.
(***** ERROR 11 ***** PARAMETER ERROR	Any parameter outside the range of acceptable numeric values was received.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
(***** ERROR 16 ***** MRL COMMAND	The received data does not follow the command system set by the machine.	Transmit data that is compatible with the command system supported by this machine.
(***** ERROR 25 ***** FULL-SPEED	An error occurred in communication between the host computer and the interface board for USB2.0 connec- tion.(Full-Speed mode connection)	Check that the host PC supports the USB2.0 interface. (Communication can be resumed with- out changing any setting. However, it is recommend to use the connection in High-Speed mode.)
(***** ERROR 34 ***** DATA REMAIN	It is being tried to change settings for functions though there remains received data that has not yet been printed.	Print all the received data or execute the data clear function. Then, change settings.
(***** ERROR 40 ***** MOTOR ALARM X	An excessive load was applied to the X motor.	
(***** ERROR 41 ***** MOTOR ALARM Y	An excessive load was applied to the Y motor.	Turn off the main power to the
X OVER CURRENT	An error due to an excessive cur- rent of the X motor was detected.	machine and turn it on after a while. If the same error message appears again, contact your local distributor to
(***** ERROR 43 ***** Y OVER CURRENT	An error due to an excessive cur- rent of the Y motor was detected.	call for service.
(***** ERROR 45 ***** CAPPING: PARAMETER	An error occurred in the capping control. (Improper parameter adjustment value)	
(***** ERROR 46 ***** WIPER	An error occurred in the wiper con- trol.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
(***** ERROR 50 ***** MEDIA SET POSITION	Paper could not be detected. The media set position or media itself is not proper.	If the same error message appears again even after setting the media properly, contact your local distributor to call for service.

Message	Cause	Solution	
(***** ERROR 50 ***** MEDIA DETECT	The set position of the media is not proper. The media detection has not completed.	Set the media to the proper position again. (@ P.2-9, P.2-20, P.2-26)	
(***** ERROR 51 ***** Y-ORIGIN	Y-origin could not be detected.	Turn off the main neuror to the	
(***** ERROR 64 ***** TAKE-UP VOLTAGE	An abnormality occurs in the control system of the heavy-duty take-up device.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to	
(***** ERROR 64 ***** FEEDER VOLTAGE	An abnormality occurs in the control system of the heavy-duty feeding device.	call for service.	
***** ERROR 65 ***** TAKE-UP TENSION-BAR	An abnormality occurs in the control system of the heavy-duty take-up device.	If the error message is displayed even if you set the medium properly, once turn OFF the power supply and after a	
*****       ERROR       6.6       *****         FEEDER       TENSION-BAR	An abnormality occurs in the control system of the heavy-duty feeding device.	while, turn it ON again. If the error message is displayed again, contact our service and sales office.	
(***** ERROR 67 ***** TAKE-UP UNIT 00	An abnormality occurs in the heavy- duty take-up device.	Confirm the connection of the heavy- duty take-up device.	
		If the error message is displayed even if you connect the device properly, once turn OFF the power supply and after a while, turn it ON again.	
		If the error message is displayed again, contact our service and sales office.	
(***** ERROR 67 ***** TAKE-UP UNIT 01	The heavy-duty take-up device is not connected.	Turn off the main power to the	
***** ERROR 67 ***** TAKE-UP UNIT 02	The heavy-duty take-up device is connected to a wrong position.	machine and turn it on after a while. If the same error message appears again, contact your local distributor to	
(***** ERROR 67 ***** TAKE-UP UNIT 04	An abnormality occurs in the heavy- duty take-up device.	call for service.	
		Confirm the connection of the heavy- duty feeding device.	
(***** ERROR 67 ***** FEEDER UNIT 00	An abnormality occurs in the heavy- duty feeding device.	If the error message is displayed even if you connect the device properly, once turn OFF the power supply and after a while, turn it ON again.	
		If the error message is displayed again, contact our service and sales office.	
(***** ERROR 67 ***** FEEDER UNIT 01	The heavy-duty feeding device is not connected.	Once turn OFF the power supply and after a while, turn it ON again. If the error message is displayed again, contact our service and sales office.	
***** ERROR 67 ***** FEEDER UNIT 02	The heavy-duty feeding device is connected to a wrong position.		

Message	Cause	Solution	
***** ERROR 67 ***** FEEDER UNIT 04	An abnormality occurs in the heavy- duty feeding device.	Once turn OFF the power supply and after a while, turn it ON again. If the error message is displayed again, contact our service and sales office.	
(**** ERROR 120 **** ENVIRONMENT TEMP(LO)	The ambient temperature is out of the usable temperature range (too low).	Adjust the ambient temperature of the	
(**** ERROR 121 **** ENVIRONMENT TEMP(HI)	The ambient temperature is out of the usable temperature range (too high).	installation place. (@ P.3-41)	
(**** ERROR 144 **** CARTRIDGE SET!	There is a slot where no cartridge has been inserted.	Set a cartridge.	
(**** ERROR 200 **** HEAD MEMORY ()	An error occurred on the head unit memory.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.	
(**** ERROR 202 **** DVEICE CONSTRUCTION	The head is not connected. An error occurred on the head slider board. The head is not MIMAKI genuine.		
(**** ERROR 203 **** SDRAM SIZE	A SD-RAM of the size required for the machine has not been equipped.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service. (When a usable SD-RAM is available, the machine can be started as is. However, a printing speed may be slow depending on resolution.)	
(**** ERROR 205 **** 42V HEAD Voltage	A SD-RAM of the size required for the machine has not been equipped.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.	
(**** ERROR 207 **** XXXXXXXXX	An error is detected on the wave- form printed on the lower line of the display.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to	
(**** ERROR 208 **** CHECK MAIN PCB ID XX	Model ID of main PCB is different. (XX is ID code.)		
(* * * * ERROR 211 * * * * HeaterTEMP(//)	An abnormal temperature of the media heater was detected.	call for service.	
(**** ERROR 250 **** Y COORDINATES	An error was detected during scan- ning operation.	Turn off the main power to the machine and turn it on after a while. If the same error message appears	
(**** ERROR 251 **** SYSTEM ERROR	A system error occurred.	again, contact your local distributor to call for service.	

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# Chapter 7 Appendix



This chapter

contains the lists of the specifications and functions of this machine.

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Machine specifications	
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# **Specifications**

## Machine specifications

	ltem	JV34-260	
	Method	Drop-on-demand piezoelectric print heads	
Print head	Specification	2 head	
	Specification	720 x 540dpi / 540 or 720 x 720dpi / 540 x 900dpi / 540 or 720 x 1080dpi /	
Drawing mode (scan x feed)		720 x 1440dpi / 1440 x 1440dpi	
Usable inks	Dedicated solvent ink.	SS21 ink : 4 colors (Y,M,C,K) 6 colors (Y,M,C,K,Lc,Lm)	
	Dedicated aqueous ink.	Sublimation dye ink : 4 colors (Y,M,B,K) 6 colors (Y,M,B,K,LBI,Lm) 6 colors (Y,M,BB,K,LBB,Lm)	
Ink supply		Supplying from ink cartridges through tubes. Ink cartridge replacement type : Only at 4 colors: Supplying by Toggle switchover with 2 cartridges/color	
Capacity of ink car- tridge	Dedicated solvent ink	6-color set of cartridges : 440cc 1 cartridge for each color (2 cartridges, 440cc only for magenta and cyan) 4-color set installed : 440cc 2 cartridges for each color	
	Dedicated aqueous ink	6-color set of cartridges : 440cc 1 cartridge for each color (2 cartridges, 440cc only for magenta and blue) 4-color set installed : 440cc 2 cartridges for each color	
Media type	Dedicated solvent ink	Tarpaulin, FF, PVC	
	Dedicated aqueous ink	Photo-paper, Synthetic paper, Duplex paper	
Max. printing	width	2632mm	
	Maximum	2642mm	
	Minimum	210mm	
	Thickness	1.0 mm or less	
Roll Media	Roll outside diameter	<ul> <li></li></ul>	
size	Roll weight *1	25kg or less (when using narrow take-up unit) 100kg or less (when using heavy media take-up unit)	
	Roll inside diameter	3 or 2 inches	
	Printing surface	Side facing outward	
	Roll end treatment	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.	
Leaf media	Maximum	2642mm	
size	Minimum	210mm	
Margin	Leaf media	Left end and right end : 25 mm (Default) Front : 40.0 mm Rear : 100 mm	
Margin	Roll media	Left end and right end : 25 mm (Default) Front : 40.0 mm Rear : 100 mm	
Distance	Absolute accuracy	Whichever the larger one of $\pm$ 0.3 mm or $\pm$ 0.3 % of the designated	
accuracy	Reproducibility	Whichever the larger one of $\pm$ 0.2 mm or $\pm$ 0.1 % of the designated	
Perpendicula	rity	± 0.5 mm / 1000 mm	
Media skew		5 mm or less / 10 m variable	
Head height adjustment		L range : 2.0mm / 3.0mm 2 levels adjustable H range : 3.0mm / 4.0mm 2 levels adjustable	
Cutting of media		Cutting of Y direction by the head cutter, Cutting accuracy (steps) : 0.5 mm or less.	
Media delivery		Take-up device supplied as a standard accessory (switching possible between face in and face out).	
Waste ink tank		Bottle type ( 2,000 cc)	
Interface		USB 2.0	
Command		MRL- III	
	during standby	Less than 58 dB (FAST-A, Front & Rear & Left & Right 1 m)	
Noise	during continuous printing	Less than 65 dB	
	during discontinuous printing	Less than 70 dB	
Safety Standard		VCCI-Class A, FCC-Class A, UL 60950, CE Marking (EMC,Low Voltage Direc- tive,Machinery Directive), CB Report, RoHS	

	ltem	JV34-260
Power		AC100 - 120 ± 10% , AC220 - 240 ± 10% , 50/60Hz ± 1Hz , 15A or less
Power consumption *2		1333 W or less
	Available temp.	20 °C to 35 °C
Reco-	Humidity	35 to 65% Rh (No condensation)
mended	Guaranteed temp.	20 °C to 25 °C
Environ-	Temperature change	± 10 °C / h or less
ment	Dust	Equivalent to normal office level
	Highest operation height	2000 m
Weight	•	470 kg
Outside dimensions		2289 mm(W) x 1302 mm(D) x 1425 mm(H)

\*1. Without deflection of the roll when it is retained at both ends.

\*2. Main unit and heater included.

#### Ink specifications

ltem		When solvent ink is used	When aqueous-color ink is used	
Supply		Dedicated solvent ink cartridges	Dedicated sublimation dye ink cartridge (Sb52)	
Color		Black ink cartridge Cyan ink cartridge Magenta ink cartridge Yellow ink cartridge Light cyan ink cartridge Light magenta ink cartridge	Black ink cartridge Blue ink cartridge Magenta ink cartridge Yellow ink cartridge Light blue ink cartridge Light magenta ink cartridge	
Ink capacity		220cc / 440cc per cartridge		
Shelf life		SS21 Ink 1 year from the date of manufacture (at room temperature)	Aqueous pigment ink 1 year from the date of manufacture (at room temperature) Sublimation dye ink 1 year from the date of manufacture (at room temperature)	
Storage tempera- ture	Storage	0 to 25°C (Average daily temperature) • Be sure to keep a vessel in the airtight condition.	<ul> <li>10 to 35°C (Average daily temperature)</li> <li>Be sure to keep a vessel in the airtight condition.</li> <li>Be sure to keep a vessel in a dry, well-ventilated, cool and dark location.</li> </ul>	
	Transpor- tation	<ul> <li>-20 to 60°C</li> <li>Avoid the condition lower than -20 °C and higher than 60 °C.</li> </ul>	0 to 40°C • Avoid the condition lower than -0 °C and higher than 40 °C.	



• Do not disassemble ink cartridges and do not refill them with ink.

Ink could freeze if kept in a cold place for an extended period.

• When solvent ink is used, if the ink freezes, thaw it at room temperature (25°C) spending more than three hours before use.

• When aqueous ink is used, if the ink freezes, the quality is changed and the ink becomes unusable.

Store the ink in an environment that will not freeze the ink.

## **Setting orders depending on ink type**

The setting value and the setting orders of the ink cartridges differ depending on the ink type you use.

#### Rough standard of heater temperature setting value

When you use solvent ink, the optimal values of Pre heater/ Print heater/ Post heater differ depending on the ink type you use.

Type of ink	SS21 ink
Type of media	All medias
Set of the Pre-heater	35°C
Set of the Print-heater	35°C
Set of the Post-heater	50°C



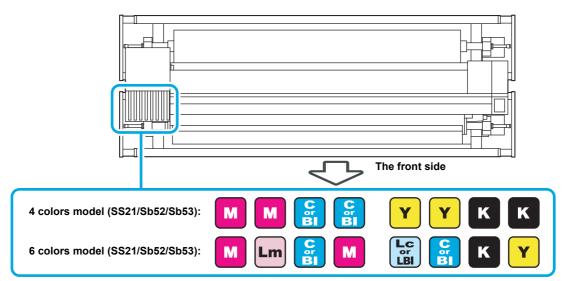
- Adjust it to suitable temperature depending on the media condition.
- When aqueous-color ink is used, no reference for the temperature set is required.

#### Setting orders of ink cartridges

The orders of ink cartridges set in the ink station differ depending on the ink set you use.



• Set the ink cartridge according to the cartridge label under the ink station.



#### Maintenance intervals of automatic maintenance function

The default values of the automatic maintenance functions set in the automatic function differ depending on the ink type you use.

Function name	Default value	Default value
Function name	SS21 ink	Sb52 / Sb53 ink
REFRESH maintenance intervals	4h	4h
PUMP TUBE WASH maintenance intervals	48h	48h
CLEANING maintenance intervals	OFF	OFF

# **Sheet for inquiry**

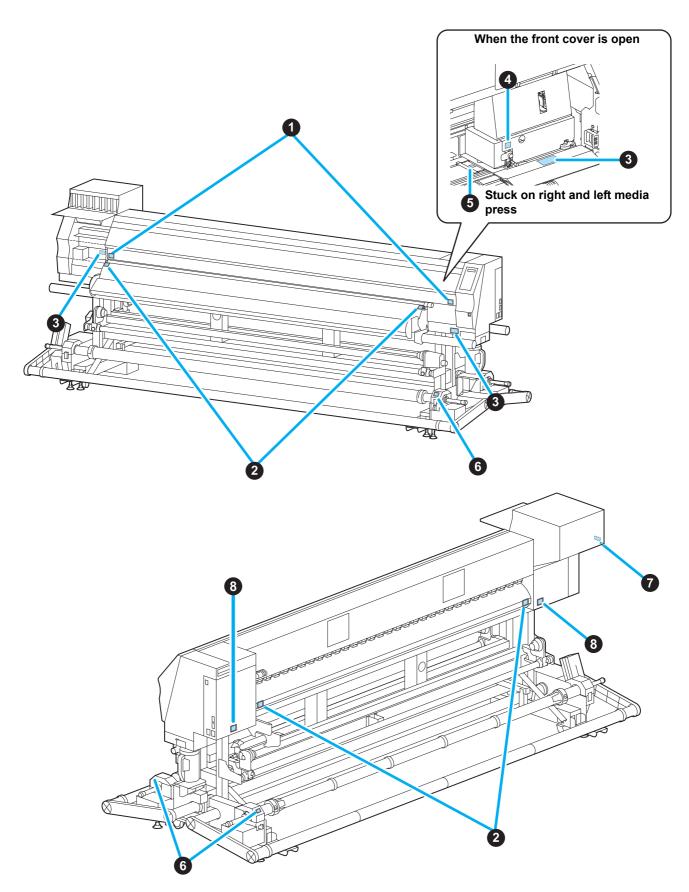
Use this sheet for troubles and abnormal functions of the machine. Fill in the following necessary items, and then fax the sheet to our sales office.

Company name	
Person in charge	
Telephone number	
machine model	
Operating OS	
Machine information *1	
Error message	
Contents of inquiry	

\*1. Refer to "Confirming Machine information" of "Convenient using" then fill in necessary information. (@ P.3-46)

# **Warning labels**

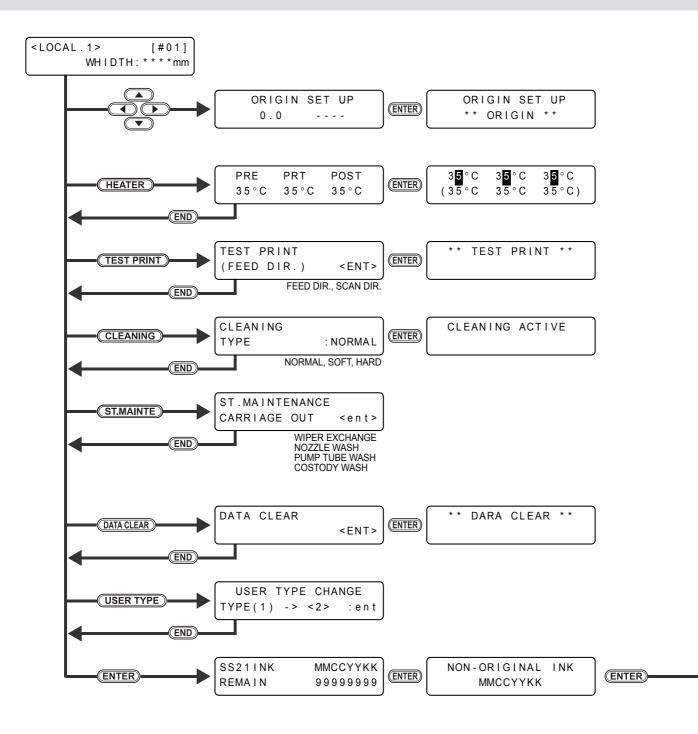
Warning labels are stuck on the machine. Be sure to fully understand the warning given on the labels. If a warning label is illegible due to stains or has come off, purchase a new one from a distributor or our sales office.



No.	Reorder	Label
1	M907833	
2	M903239	
3	M903330	
4	M903405	
5	M906144	
6	M907834	
7	M906222	
8	M907935	4

1

## **Function Flowchart**

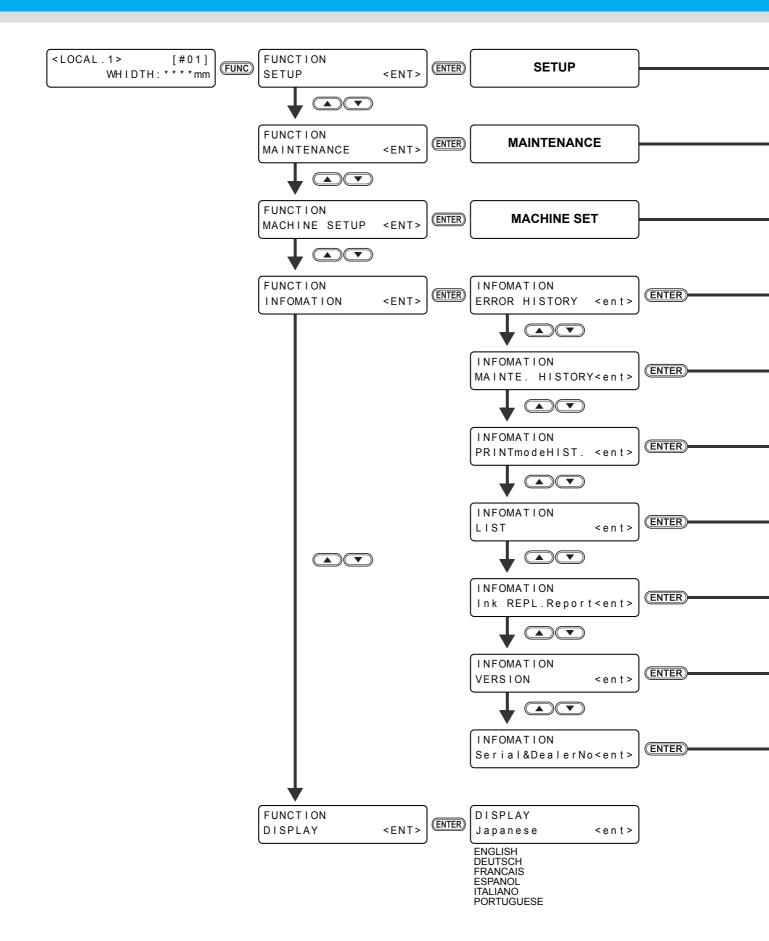


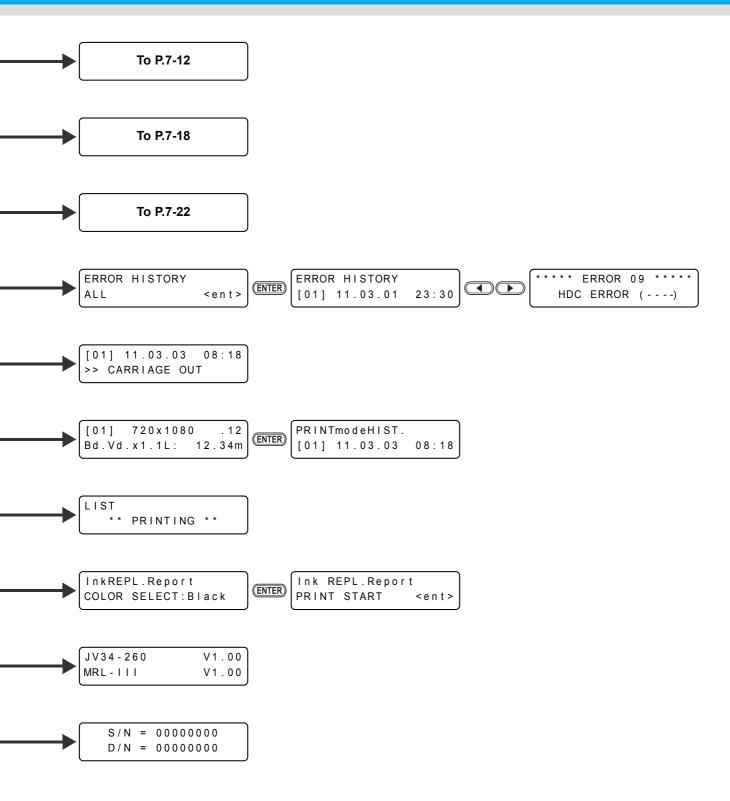
HEAD HEIGHT : Thin MEDIA WIDTH : 1000mm JV34-260 MRL-111

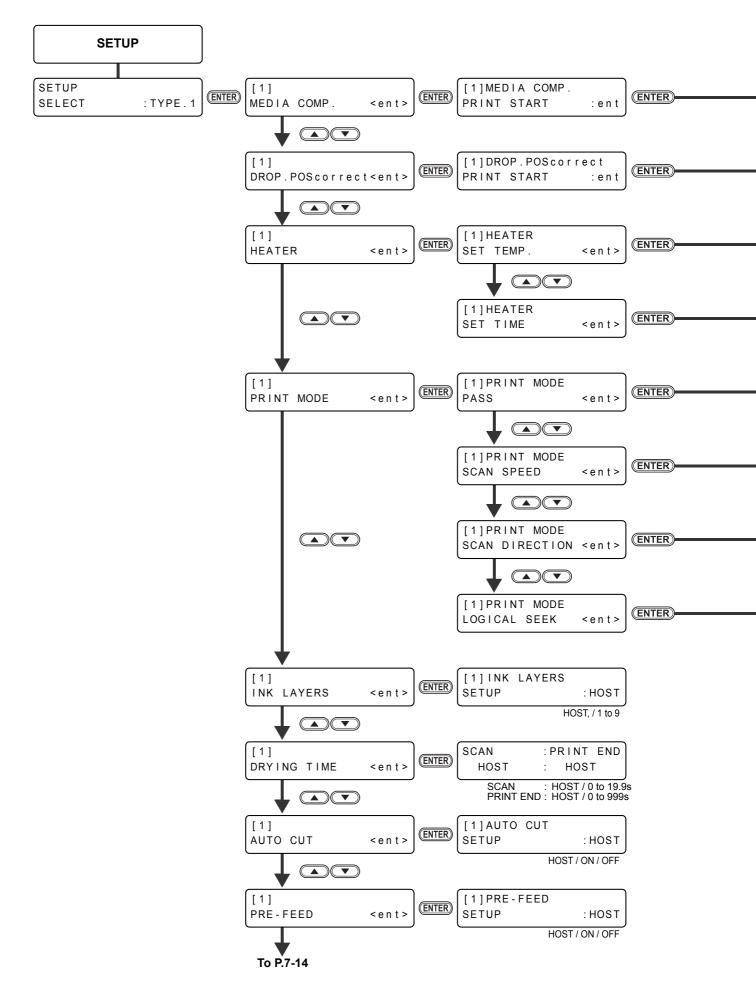
ENTER

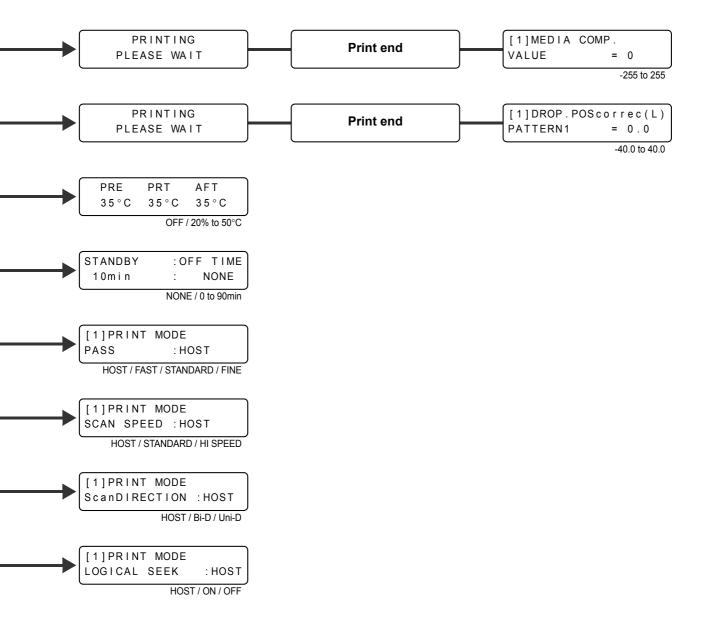
V1.00 V1.30

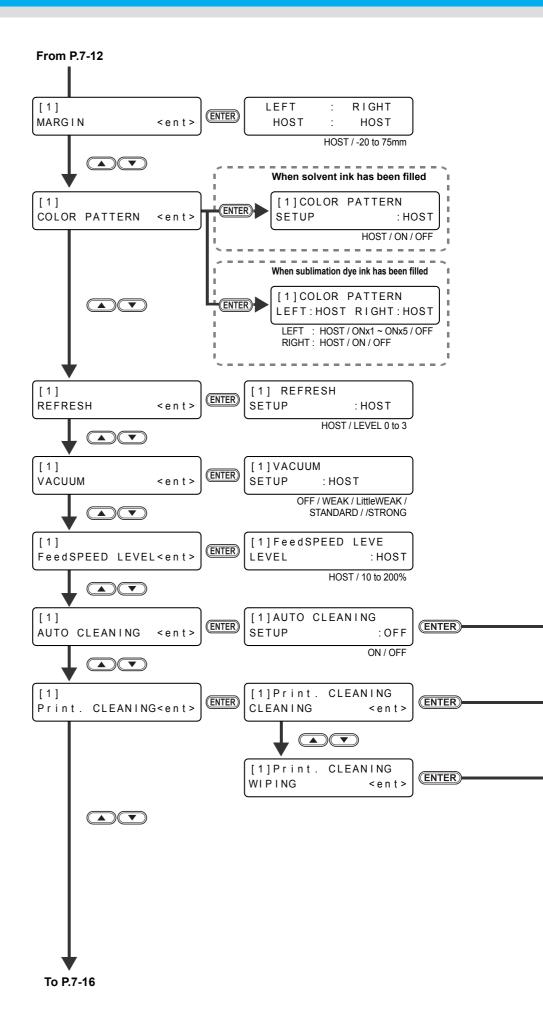
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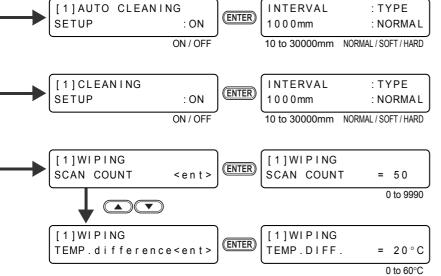


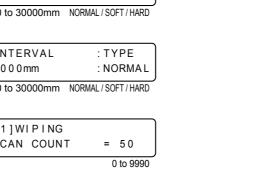




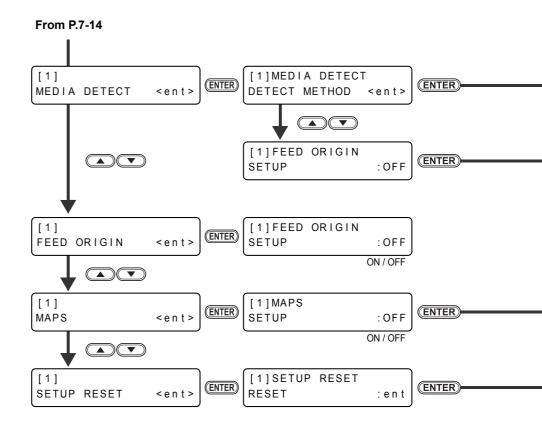




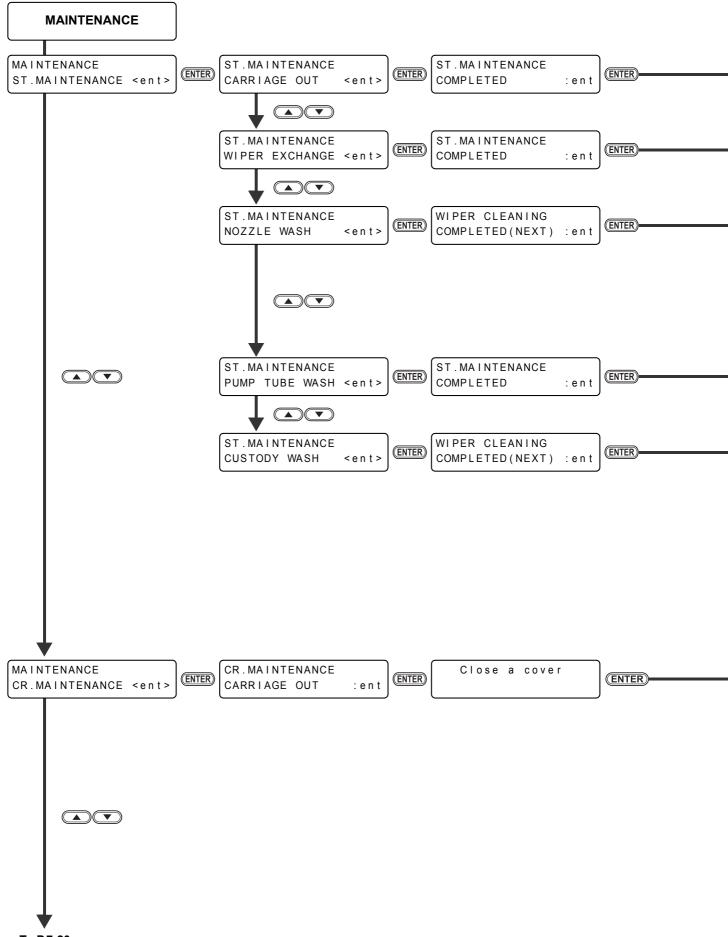




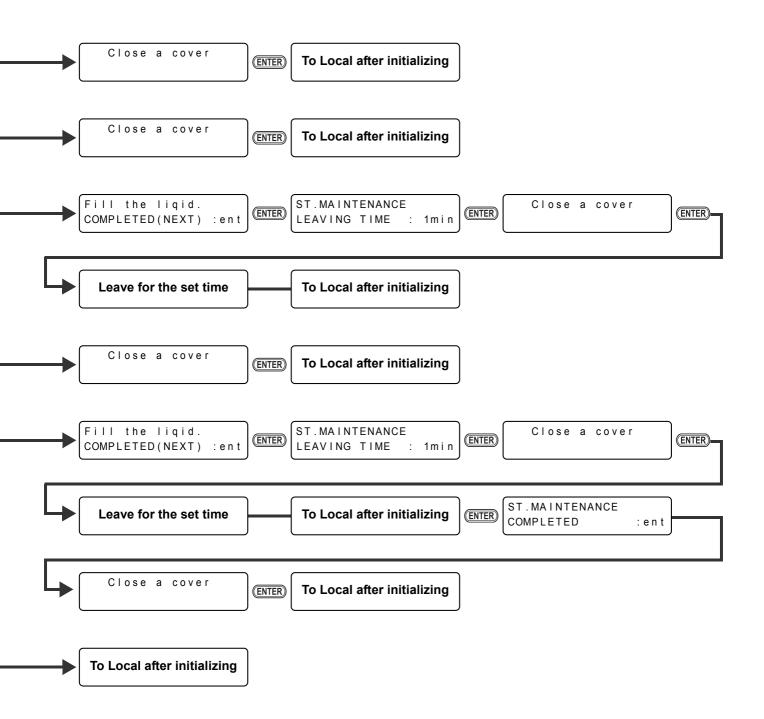
**Function Flowchart** 

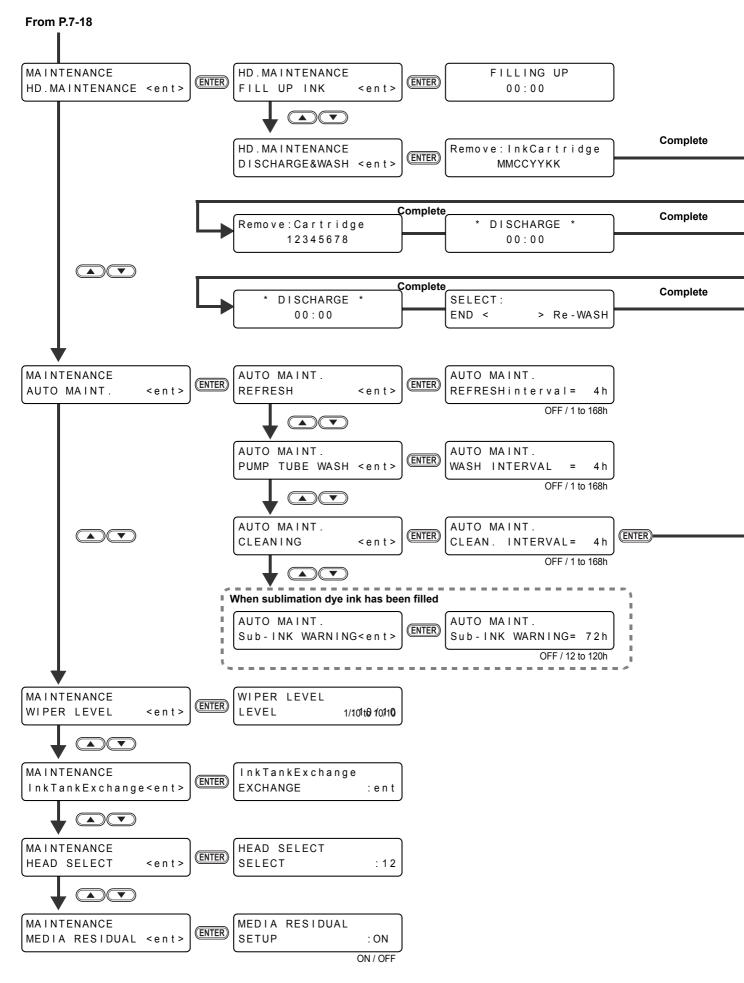


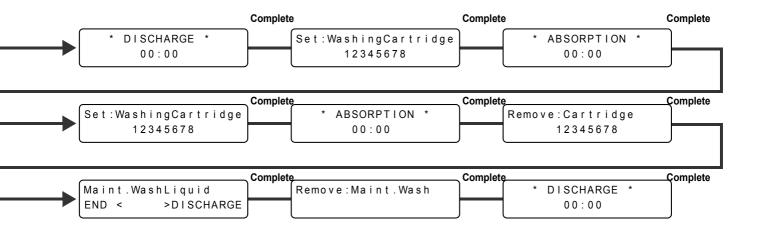
[1]MEDIA DETECT DETECT METHOD:SELECT SELECT/WIDTH
[1]MEDIA DETECT DETECT : BOTH EDGE BOHT EDGE / LEFT EDGE / RIGHT EDGE / NONE
[1]MAPS DETECT METHOD:SELECT
-50 ~ +50 %
Initialize the setup parameter of selected user type



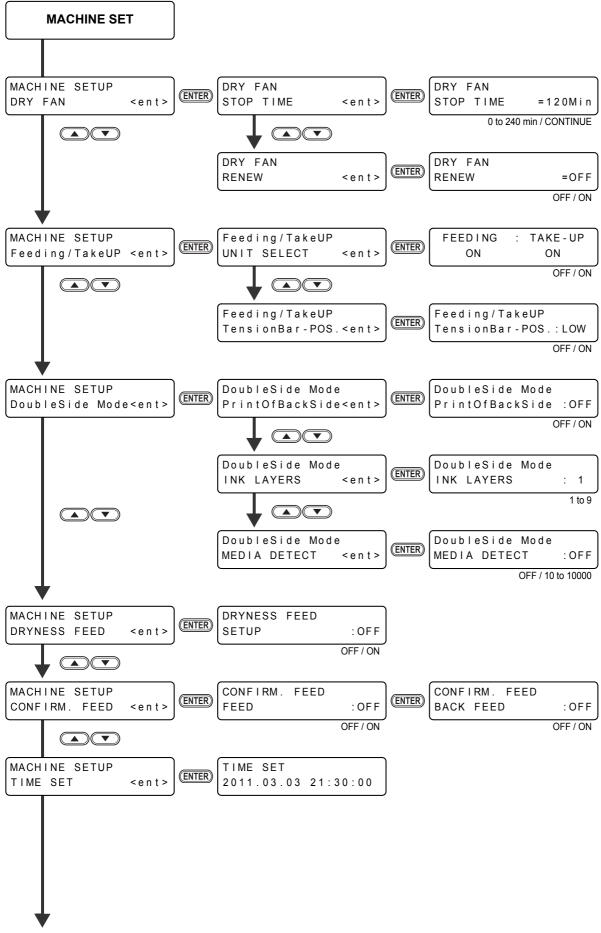




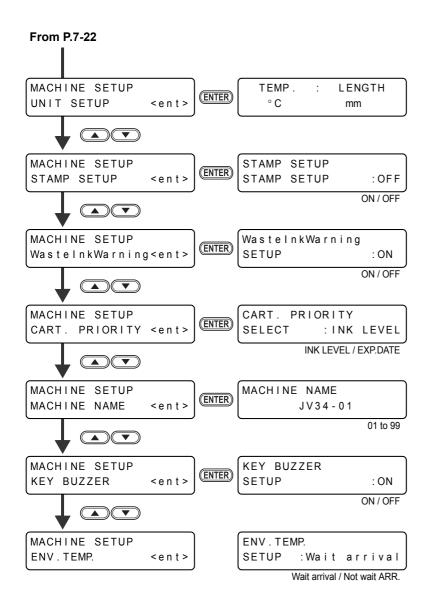








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## JV34-260 Operation Manual

August, 2013

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