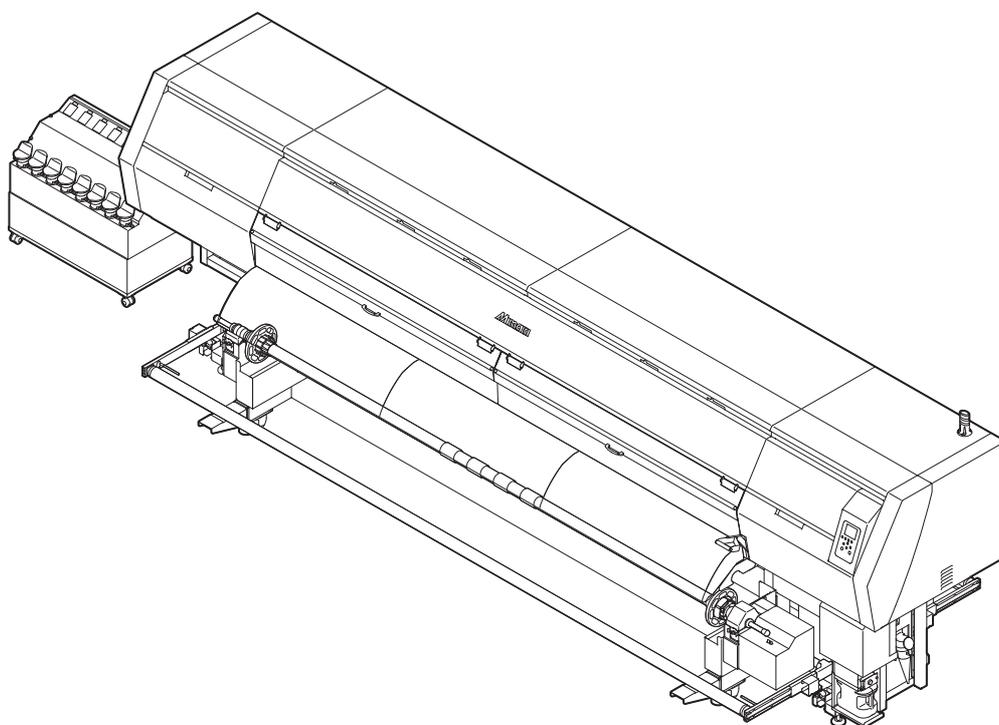


OPERATION MANUAL

COLOR INKJET PRINTER

TS500P-3200

OPERATION MANUAL



MIMAKI ENGINEERING CO., LTD.

URL: <http://mimaki.com>

D202951-13

Original instructions

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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 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 button 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 "TS500P Series" .

"TS500P Series" is a color inkjet printer that can print with Sublimation dye ink realizing high speed and high image quality.

About usable ink

Usable ink for this machine is Sublimation dye ink (four-color / six-color model).

- 4-colors version : 2 each of Blue, Magenta, Yellow and Black color ink bottle are use.
- 6-colors version : 1 each of Blue, Magenta, Yellow, Black, Light blue and Light magenta color ink bottle (2 each of Light blue and Light magenta only) are use.

On This Operation manual

- This Operation manual is describing the operations and maintenance of "Color inkjet printer TS500P Series" (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.
- 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	
	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.
	Failure to observe the instructions given with this symbol can result in injuries to personnel or damage to property.
	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.
	Indicates the reference page for related contents.
	The symbol "  " 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.
	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

 **WARNING**

-  Do not use the machine in a poorly ventilated room or a closed room.
-  Take care not to damage, break or work upon the power cable. If a heavy material is placed on the power cable, or if it is heated or pulled, the power cable can break, thus resulting in fire or electric shocks.
-  Avoid locating the machine in a damp environment. Do not splash water onto the machine. Use in such an environment can give rise to fire, electric shocks or breakdown of the machine.
-  Use it with the displayed power supply specifications. The power-supply voltage of this machine shall be single-phase 200 to 240 Vac 20 A and less. (You cannot use this machine in the 100V system.)
-  Use of the machine under an abnormal condition where it produces smoke or strange smell can result in fire or electric shocks. If such an abnormality is found, be sure to turn off the power button immediately and unplug the cable from the wall outlet. Check first that the machine no longer produces smoke, and then contact your distributor or a sales office of MIMAKI for repair. Never repair your machine and ink bottle by yourself since it is very dangerous for you to do so.
-  Never disassemble or remodel the main unit of the machine or the ink bottle. Disassembly or remodeling can result in an electric shock or breakdown of the machine.
-  Take care that no dust or dirt sticks to platen heaters. Dust and dirt sticking heaters can cause fire.
-  **Hazardous Moving Parts**
Keep Fingers and Other Body Parts Away
-  In case of ink leakage, please turn off the main power, unplug the power cable, and contact our service office or distributor.

Precautions in Use

 **CAUTION**

Handling of the power cable

-  Use a power cable attached to this unit.
-  Take care not to damage, break or work on the power cable. If a heavy matter is placed on the power cable, heated or drawn, the power cable can break to cause fire or electric shocks.
-  Connect to a socket-outlet with determinate polarity.

Power supply

-  Leave the breaker turned ON.
-  Do not turn off the main power switch on the right side of this machine.

Heater

-  Do not spill liquid on the platen as this may cause failure of the heater or firing.
-  Do not touch platen heaters with bare hand while it is hot; otherwise, you can get burned.

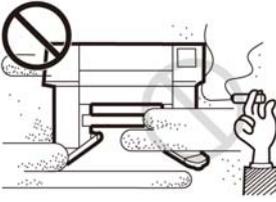
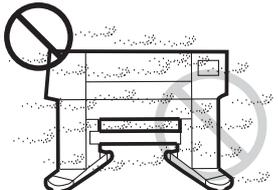
 CAUTION	
Note on maintenance	
 	<ul style="list-style-type: none"> When cleaning the External ink supply unit or the heads, make sure to wear the attached gloves.
Handling of ink	
	<ul style="list-style-type: none"> If you get ink in your eyes, immediately wash your eyes with a lot of clean water for at least 15 minutes. In doing so, also wash eyes to rinse ink away completely. Then, consult a doctor as soon as possible. If anyone drinks ink by mistake, keep him or her quiet and see a doctor immediately. Do not allow him or her to swallow the vomit. After that, contact the Poison Control Center. If you inhale a lot of vapor and feel bad, immediately move to a location of fresh air and then keep yourself warm and quiet. Then, consult a doctor as soon as possible.

CAUTIONS and NOTES

 Warning	
Handling of ink bottles	
<ul style="list-style-type: none"> Use the TS500P 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. The machine does not operate with any ink other than the TS500P genuine ink. Do not use the TS500P genuine ink with other printers, as doing so may cause damage to such machines. If the ink bottle is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it. Open the ink bottle 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. Make sure to store ink bottles in a cool and dark place. Store ink bottles and waste ink tank in a place that is out of the reach of children. Be sure to thoroughly consume the ink in the ink bottle, once it is opened, within three months. If an extended period of time has passed away after opening the ink bottle, printing quality would be poor. Neither pound the ink bottle nor shake it violently, as doing so can cause leakage of ink. Do not touch or stain the contacts of the IC chip, as doing so may cause damage to the print circuit board. Waste ink is equivalent to waste oil of industrial waste. Request an industrial waste disposal company for disposal of waste ink. 	
Front cover and lever	
<ul style="list-style-type: none"> Never open the front cover or raise the lever during printing. Opening the cover or raising the lever will abort printing. 	
Protection of media from dust	
<ul style="list-style-type: none"> Store media in a bag. Wiping off dust accumulated on media will adversely affect the media due to static electricity. 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. 	

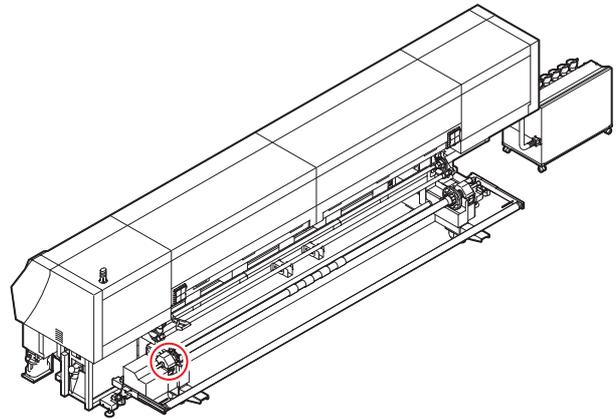
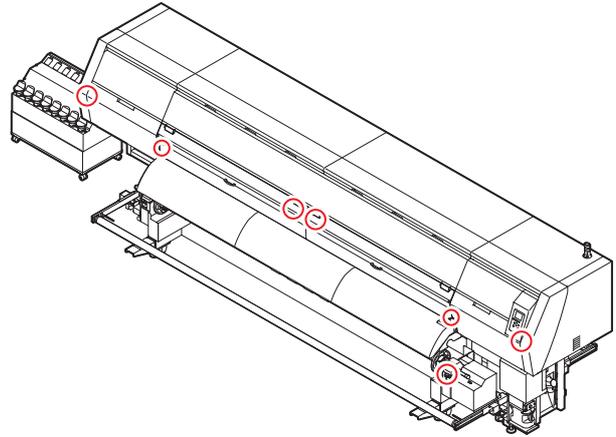
 Warning	
Handling of media	
<ul style="list-style-type: none"> Use media recommended by MIMAKI to ensure reliable, high-quality printing. Set the temperature of the Print heater and Post-heater according to the type and characteristics of the media used. Automatic temperature setting can be made on the 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. 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. Do not leave the media with the heater ON for a long time. 	
Notes on maintenance	
<ul style="list-style-type: none"> It is strongly recommended to use the machine in a room that is not dusty. 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.4-12 "Cleaning the Ink Head and the Area around It") When cleaning the ink-station or the heads, make sure to wear the attached gloves. Perform wiping (removal of dust and paper powder) of the capping station and wiper frequently. 	
Periodic replacement parts	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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 that vibrates	A place exposed to direct air flow from an air conditioner or the like.
	
A place where temperature or humidity varies significantly	Around a place where fire is used
 <ul style="list-style-type: none"> •Use the machine under the following environmental conditions: •Operating environment: 20 to 30 °C (68 to 86 °F) 35 to 65 % (Rh) 	
A place with much dust	A place with chemicals around
	

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).



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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Capping station	1-8		
Pinch rollers and Feed rollers	1-8		

About installing this machine

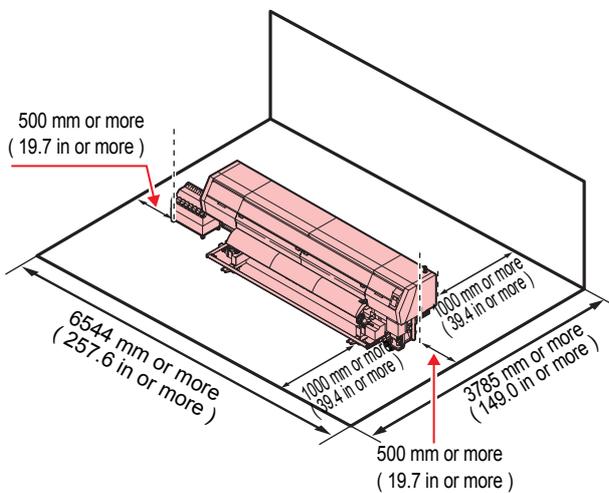
Where to Install This Machine

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.

Model	Width	Depth	Height	Gross weight
TS500P-3200	5620 mm (221.3 in)	1800 mm ^{*1} (70.9 in)	1820 mm (71.7 in)	1500 kg (306.9 lb)
External ink supply unit	950 mm (37.4 in)	510 mm (20.1 in)	730 mm (28.7 in)	30 kg (66.1 lb)

*1. When the tension bar is flat



- The external heater is not attached to this machine. It is necessary to prepare it separately.
- Install the external heater in the proper place considering the usage environment and the specifications of the external heater.

Working Environmental Temperature

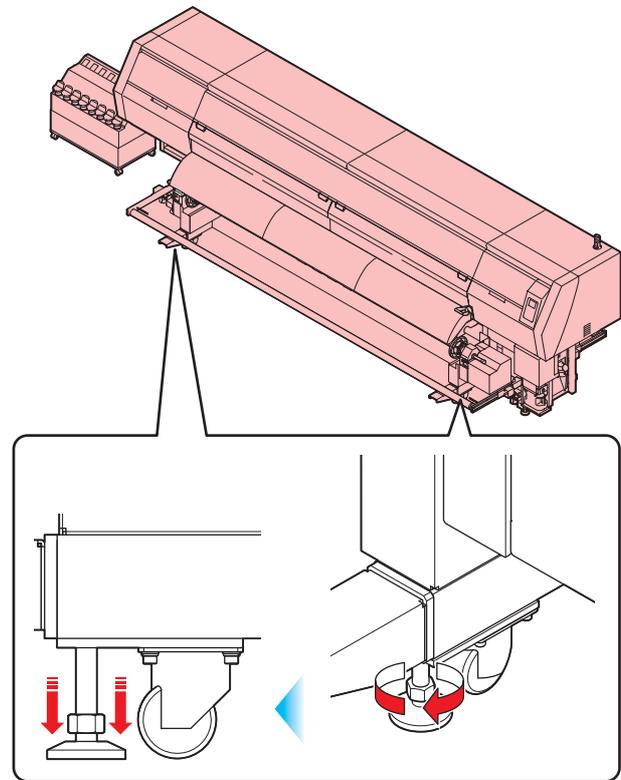
Use this machine in an environment of 20 to 30°C to ensure reliable printing.

The heater temperature may not reach the set value, depending on the ambient temperature.

About fixing machine

The leg of this machine has the level foot to fix the machine.

Before turning the power ON, make sure that the printer body is fixed with the leveling feet. The printer body may start moving during operation if it is not fixed with the leveling feet.



- Put the supplied iron base plate (black) between each leveling foot and the floor. To hold the weight of the printer, using plate is recommended.

Moving This Machine



- 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.

Names of Parts and Functions

Front Side of the Machine

Left maintenance cover

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

External ink supply unit

Put the ink in the ink tank.

Ink tank

Each tank contains an ink of a particular color.

Stand

Supports the main body of the machine.

Tension bar

It supports to stabilize the tension to wind up roll media.

Platen

The printed media is sent out, sliding on the platen. Five heaters are installed inside the platen.

Print heater/ Post 1L_2L-heater/ Post 1R_2R-heater

Fixes and dries the ink on the currently produced print.
(Located inside the platen)

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 button is off, keep this cover and the other covers closed.

Clamp lever (front)

Moves the pinch rollers up and down to hold or release the media.

Operation panel

This panel has the operation keys required for operating the machine and the LCDs for displaying setting items, etc.

Right maintenance cover

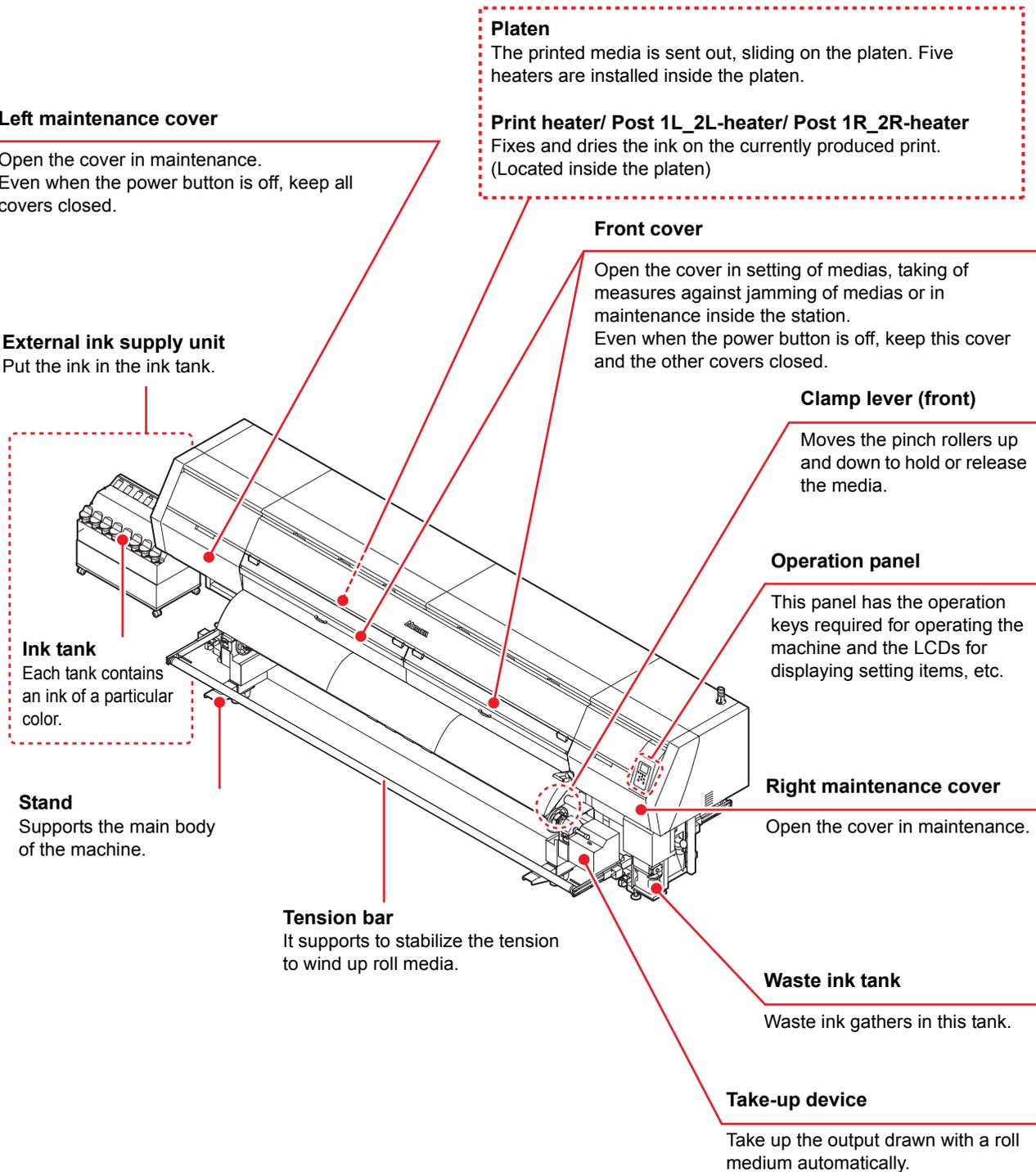
Open the cover in maintenance.

Waste ink tank

Waste ink gathers in this tank.

Take-up device

Take up the output drawn with a roll medium automatically.



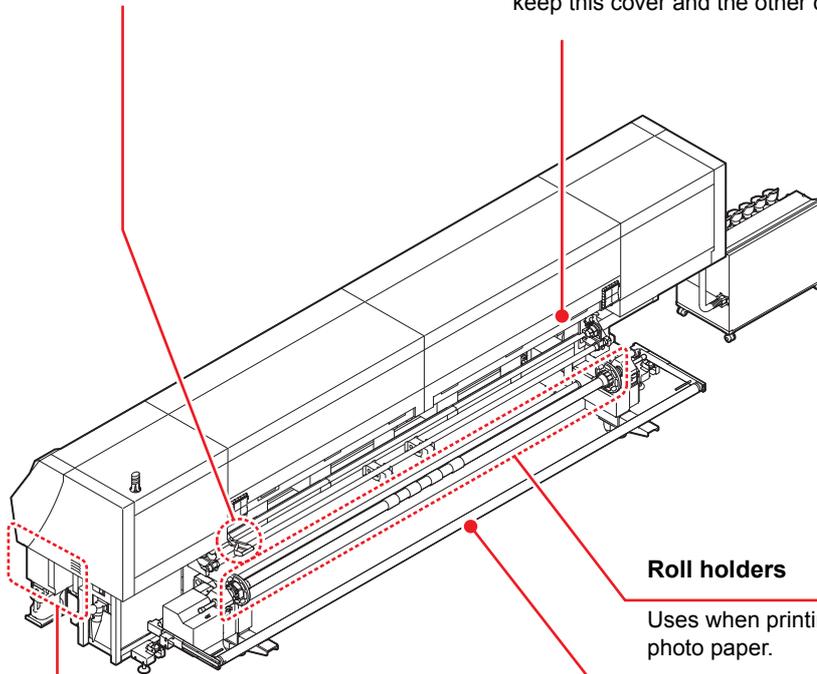
Rear Side and Right Side of the Machine

Clamp lever (rear)

Interlocks with the clamp lever in the front of this machine.

Rear cover

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

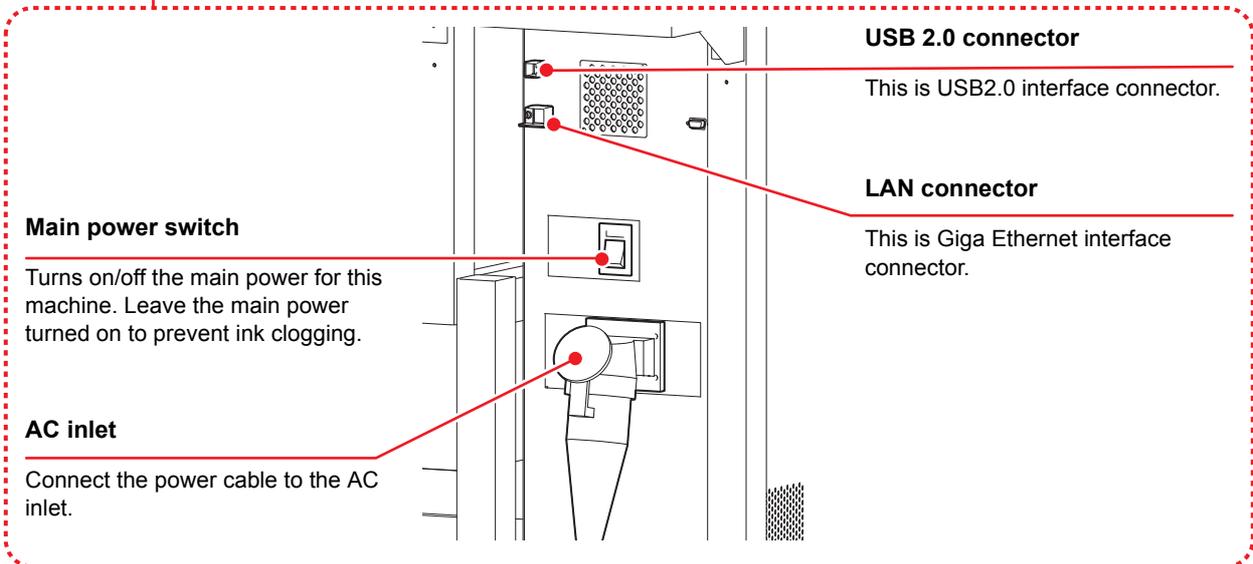


Roll holders

Uses when printing a media of vinyl chloride or photo paper.

Tension bar

Brings tension to the media.



Main power switch

Turns on/off the main power for this machine. Leave the main power turned on to prevent ink clogging.

AC inlet

Connect the power cable to the AC inlet.

USB 2.0 connector

This is USB2.0 interface connector.

LAN connector

This is Giga Ethernet interface connector.

Operation Panel

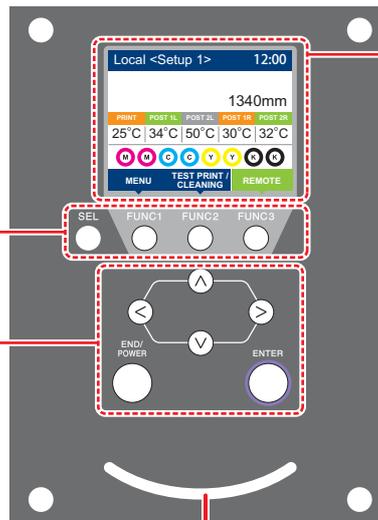
Use the operation panel to make settings for printing or operate this machine.

SEL key

Changes over the functions of the function keys ([FUNC1]–[FUNC3]).

[FUNC1] / [FUNC2] / [FUNC3] key

Press this to set various functions or to do test printing. The function keys' functions are changed each time [SEL] key is pressed.



Display

Displays the following items:

- Printer status
- Time Display
- Set media width
- Heater temperature (current temperature/set temperature)
- Ink status ^{*1}
- Functions assigned to [FUNC1] to [FUNC3] ^{*2}

JOG key

Use these keys to shift the carriage or the media in [LOCAL]. Also use them to select an item of printing conditions.

[END/POWER] key

Cancels the last input value or returns the setting menu to the immediate higher level of the hierarchy. Also, press this to turn the power on or off. (Give it a long press to turn the power off.)

[ENTER] key

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

Status indicator lamp

Indicates the machine's status (printing, error occurred, etc.).

Condition of Lamp	Condition of machine
OFF	Machine is in LOCAL mode, no print data has been received, and no errors have occurred.
Lit steady Light blue	Switched to Remote mode.
Flashing Light blue	Currently printing.
	In test printing: printing a pattern stored inside the machine.
Lit steady blue	Print data still remains in the machine.
Flashing red	Error has occurred.
Lit steady red	Error (SYSTEM HALT) has occurred.



- The [ENTER] key under the operation panel lights in blue when the power is turned on, and off 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) P.1-4

*1 : Ink Status

Status of the ink tank (remaining ink/error, etc.) is displayed using icons. Each icon is described below.

Icon	Contents																		
	<p>Displays the remaining ink amount in nine levels, in the order of the ink cartridge set in the slot. The remaining amount decreases moving to the right.</p> <table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>ink full</td> <td>Approximately 1/8 consumed</td> <td>Approximately 1/4 consumed.</td> <td>Approximately 3/8 consumed.</td> <td>Approximately 1/2 consumed.</td> <td>Approximately 5/8 consumed.</td> <td>Approximately 3/4 consumed.</td> <td>Approximately 7/8 consumed.</td> <td>near end</td> </tr> </table>										ink full	Approximately 1/8 consumed	Approximately 1/4 consumed.	Approximately 3/8 consumed.	Approximately 1/2 consumed.	Approximately 5/8 consumed.	Approximately 3/4 consumed.	Approximately 7/8 consumed.	near end
ink full	Approximately 1/8 consumed	Approximately 1/4 consumed.	Approximately 3/8 consumed.	Approximately 1/2 consumed.	Approximately 5/8 consumed.	Approximately 3/4 consumed.	Approximately 7/8 consumed.	near end											
	Indicates that the ink cannot be used due to ink end or ink error.																		
	Indicates that ink has expired or that one month has passed after the expiration date. Please use quickly. Ink can no longer be used if two months have passed after the expiration date.																		

*2 : Functions assigned to [FUNC1] to [FUNC3]

Contents of functions assigned to [FUNC1] to [FUNC3] are described below.

Icon	Contents
	Displays "MENU" for setting functions.
	Displays maintenance functions such as test print, cleaning, etc.
	Shifts to Remote from LOCAL and starts printing.
	Displays adjustment functions such as Feed Comp, DROP.POScorrect, etc.
	Sets the heater temperature.
	Executes data clear.
	Used for adjusting the head height or cutting the media.
	Displays the station maintenance menu.
	Displays the ink charge menu.
	Suspends printing in Remote and shifts to LOCAL.
	When there are multiple items on the MENU screen or other screens, it moves to the next page.
	When there are multiple items on the MENU screen or other screens, it moves to the previous page.
	Used for completing confirmation when warning message has been displayed and so on.
	Used for turning functions OFF or cancelling them, for example, when turning heater settings OFF and so on.
	Some kind of setting or function is assigned. Operate according to the description of each function.
	Switches between enable/disable when selecting multiple items, for example, when selecting target head for cleaning and so on.



- The color of icons changes according to the state of the printer.
 When the icon is green: The printer is in Remote mode.
 When the icon is dark blue: The printer is in LOCAL mode.

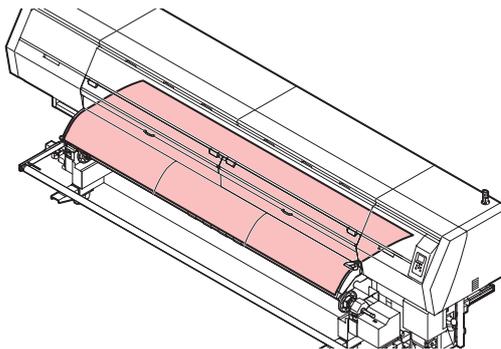
Heater

Print heater and Post-heater ①② are equipped on the platen.

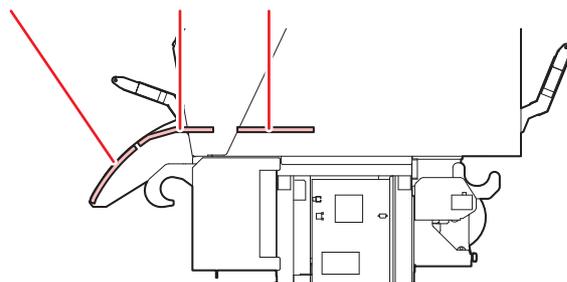
Print-heater	Improves the image quality in printing.
Post-heater 1L/1R	Dries ink after printing. When you control cockling, turn OFF the Post-heater 1L/1R) and use the Post-heater 2L/2R) only, or, set the temperature of the Post-heater 1L/1R) lower than that of the Post-heater 2L/2R).
Post-heater 2L/2R	If you put the priority on drying ink, turn ON both heaters and use.



- 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.
- Do not heat the media for a long time with the heater in the status not performing printing. The media surface may float as wave, and it may be the cause of the head rubbing the media.



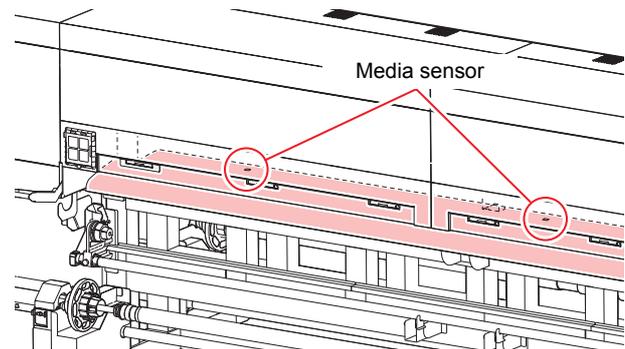
Post-heater 2L/2R Post-heater 2L/2R Print heater



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).

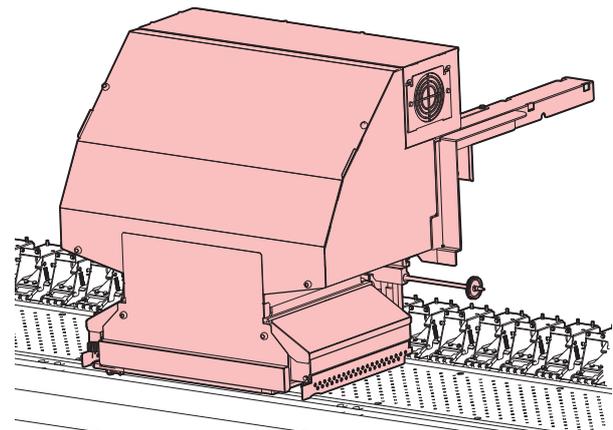


Important!

- 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

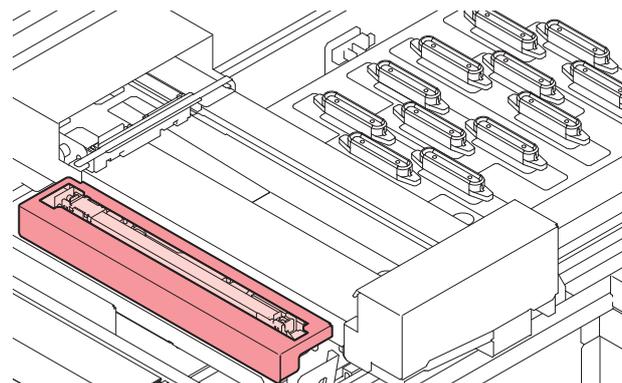
The carriage is provided with the heads for printing, the cutter unit for cutting off the sheet of media, etc.



Nozzle Check Unit (NCU)

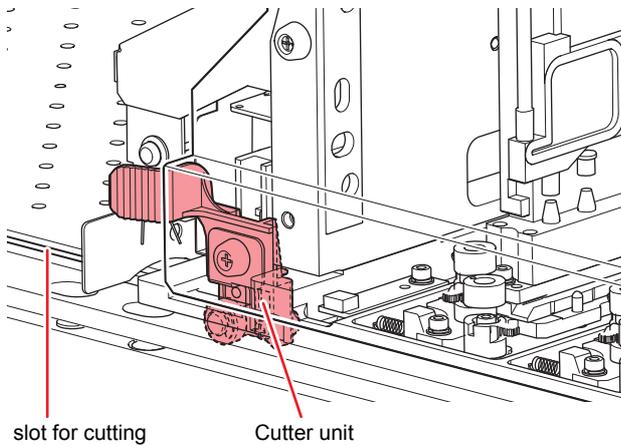
Nozzle check unit is checking the nozzle missing during printing.

If NCU detect a nozzle missing, automatically performs a nozzle restoration operation. (☞ P.3-31)



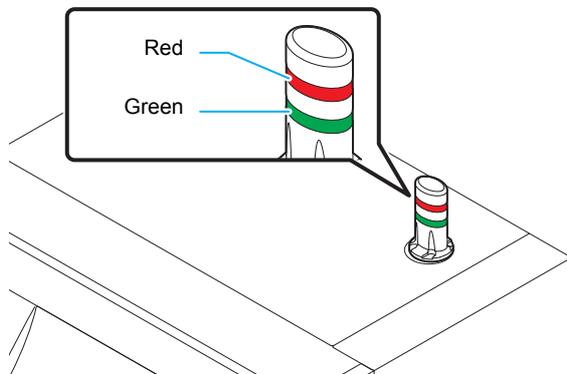
Cutter blade and slot for cutting

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. The cutter blade is consumables. If it gets dull, replace it with new one.



Indicator

Functions of the Indicator on the top right of this unit are described here. The indicator has a green and a red lamp.



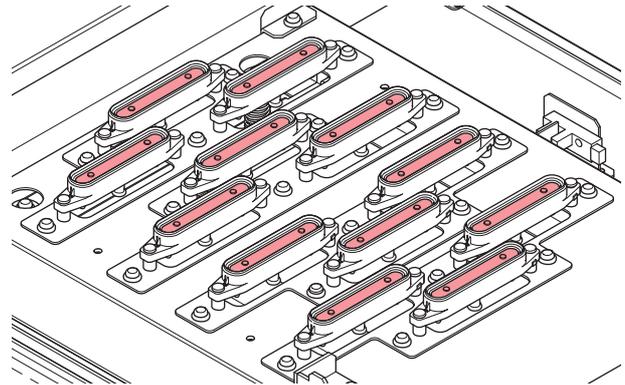
Color of lamp	State	State of machine
Green	Lighting	REMOTE
	Blinking	REMOTE (printing)
	Off	LOCAL
Red	Lighting	Error has occurred (system down)
	Blinking	Error or warning has occurred
	Off	Normal

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 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. (28P)

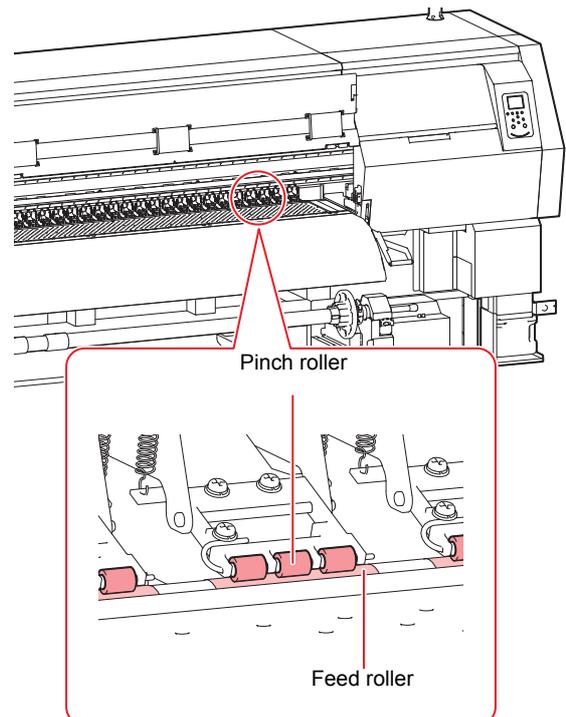


Pinch rollers and Feed rollers



- 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.

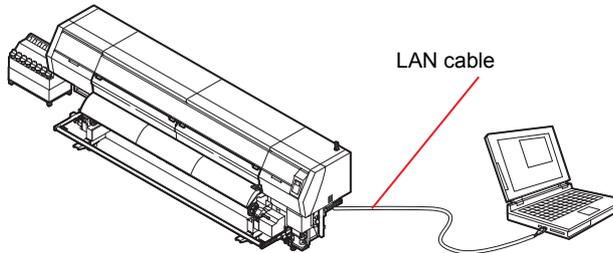


Connecting Cables

Connecting the LAN cable

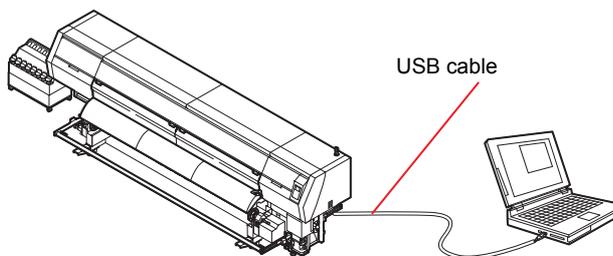
When connecting LAN cable, be sure to follow the note below:

- Important!**
- Directly connect the machine to a PC with a LAN cable.
 - Surely insert LAN cable until clicking noise sounds.
 - Do not plug in or unplug any cable during data transferring.



Connecting USB2.0 Interface Cable

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



- Your RIP must be compatible with USB 2.0.
- 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

- Important!**
- Since the connection to a LAN cable is recommended in this machine, the USB2.0 connection may not satisfy the specification of some print mode.
 - Your RIP must be compatible with USB 2.0.

● Notes on peripheral devices in USB high speed mode

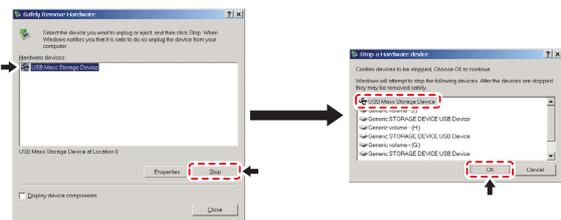
When a peripheral device (USB memory or USB HDD) to be operated in USB high speed mode is connected to the same personal computer that a TS500P machine is connected to, the USB device may not be recognized. When TS500P is connected to the personal computer to which an external HDD is connected via USB, the speed of data output to TS500P 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 TS500P 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 201 COMMAND ERROR].

Copy the data onto the hard disk before outputting it for printing.



Connecting Power Supply Cable

You are not allowed to install the printer by yourself. Be sure to request MIMAKI's service personnel and an electrician to install the printer.



- The power supply specifications of this machine is as below:
 - Single-phase 200 to 240 Vac 30 A or less (cannot be used with 100 V system)
- For the power supply to the main body of the printer, electrical work is required as described below. Request an electrician to perform electrical work.
- Socket installation onto the circuit breaker
- Grounding work
- Ensure that a wall outlet is available near the printer. Also ensure that the power cable can be easily unplugged whenever necessary.
- To prevent electrical shock hazard, it is prohibited for anyone other than electrician licensees to perform the electrical work for this printer.
- Take care not to miswire, which can result in a fire or an electric shock.

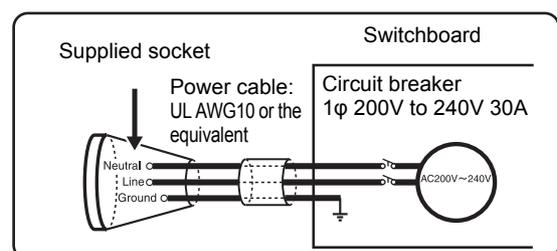
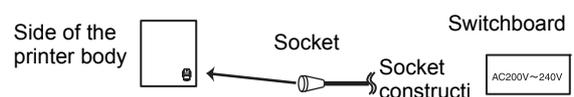


- When any power cable other than the supplied one is to be used, make sure that the cable is equivalent to one of the following types. Connect the cable as shown below.
 - VCT-5.5m m² x33 cores (600 V)
 - UL-AWG10x3C (600V)

For power supply connection, this printer uses the Type B plug and socket in compliance with IEC 60309.

When a socket construction meeting the plug of the power cable of this printer is required, use the supplied socket and perform construction between your switchboard and the socket.

Socket construction



Fill ink in the ink tank and charging

Fill ink in the ink tank of this machine.



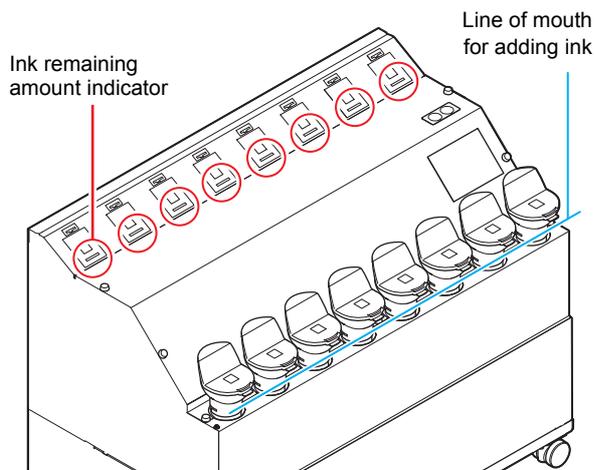
- Be sure to wear the attached goggles and gloves to perform the work. Ink may get in your eyes.

Rough standard for adding ink

You can check the current amount of ink in the ink tank of this machine (rough standard) with the ink remaining amount indicator below the ink tank.

The way to check the ink remaining amount indicator and the ink remaining amount are as below.

In addition, when this machine enters into the status of [Ink Near END] or [Ink End], the display indicate it.



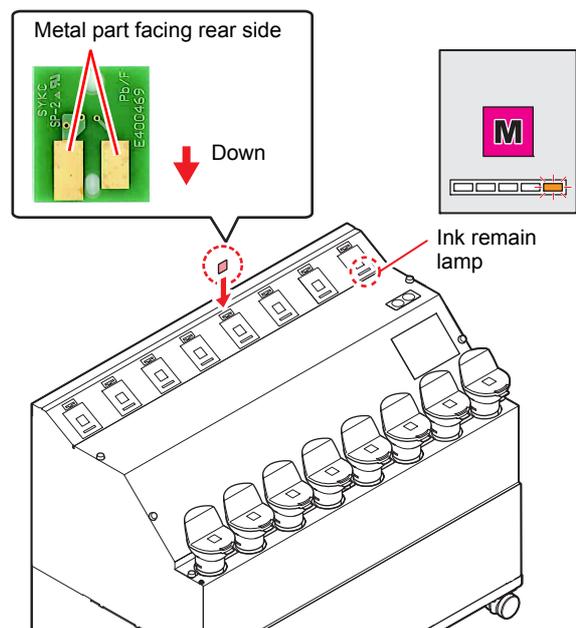
- Notes before adding ink
 - Check the following before adding ink. Failure to do so could require all of the ink inside the ink supply unit to be discarded.
 - Type of ink
 - Color of ink
 - Expiration date of ink
- Check both expiration dates of the ink contained in the ink bottle for refilling and the ink tank of this machine. Check the label for the expiration date of the ink bottle. Press the [ENTER] key to check the expiration date of the ink remaining in the ink tank of this machine. (P.3-28)

Status of ink remaining amount indicator	Status of ink amount and Current ink amount *1
	Ink end/Ink tank none Ink remain : 300cc less than
	Ink near end/ Ink remain : 400cc less than *2
	Ink remain : 400 to 1L and less than
	Ink remain : 1L to 1.5L and less than
	Ink remain : 1.5L to 2L and less than
	Ink remain : 2L to 2.5L and less than
	Ink full/ Ink remain : 2.5L to 3.2L and less than
	Ink over/ Ink remain : 3.2L or more *3

- *1. The ink remaining amount indicator is only rough standard. For ink filling, it is recommended to check the liquid level from the mouth for adding ink.
- *2. "INK NEAR END" at 400cc and "INK END" at 300cc.
- *3. The ink tank set in this unit can replenish the ink by up to 3.6L, but there is a possibility that ink would spill from the mouth for adding ink. When the orange lamp is lit, please do not replenish the ink.

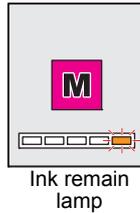
1 Insert the IC chip included with the 2 liter ink bottle.

- When you insert the IC chip, the ink remain lamp lights orange and a buzzer sounds.
- Insert the IC chip with the metal part facing rear side and down. If you insert the wrong side by accident, it causes faulty or damage of the IC chip.
- Do not touch the metal part of the IC chip. It may break the IC chip by static, or may cause read error by stain or flaw.



2 IC chip charging starts automatically.

- The information on the IC chip, such as ink volume and expiration date, is loaded and managed by the printer.
- The ink remain lamp flashes orange.

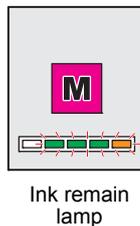


Important!

- Be sure to charge the IC chip whenever ink is added. Otherwise, the printer will be unable to manage the ink information.
- Do not remove the IC chip or turn off the printer during charging. Doing so will prevent the information on the IC chip from being charged correctly.

3 When charging is complete, remove the IC chip.

- When charging is complete, the ink remain lamp will flash orange and green, and a buzzer will sound.
- You can check the details of the charge by pressing the [ENTER] key in Local.



Important!

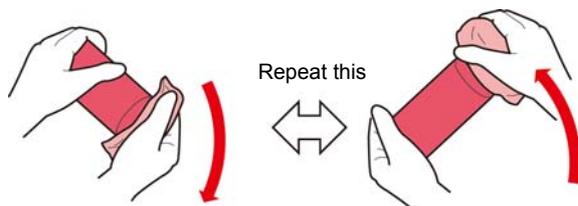
- After charging is complete, be sure to remove and dispose of the IC chip. Do not reuse IC chips.
- If the error message "INVALID INK CHARGE" appears on the display
- Charging was not possible for one or more of the following reasons:
 - (1) Faulty IC chip
 - (2) When the remaining charge amount, that is managed by the machine, is greater than or equal to three liters
 - (3) Attempting to charge ink that has passed its expiration date
- For more information about errors, press the [ENTER] key in Local. (☞ P.3-28)
- To retry charging, select the "Ink Charge" maintenance function. (☞ P.4-18)

4 Take out the ink bottle, and slowly shake it twenty times and more.

- To prevent ink from leaking when you shake it, wear gloves and cover the ink bottle cap with a paper towel etc. Being in that status, slowly shake it twenty times and more by flowing ink.



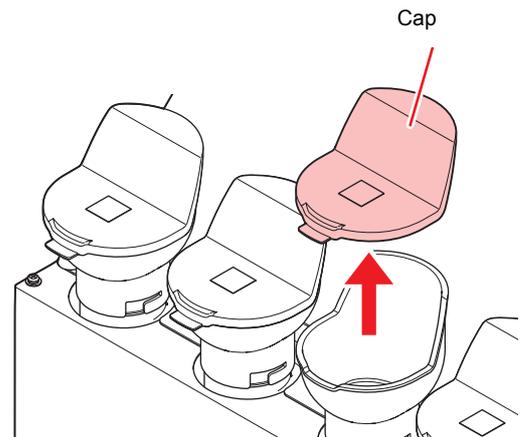
- Before shaking it, check that the cap is firmly closed.
- If you shake it too strong, it may cause ink leakage. Therefore, perform this carefully.
- If the remaining amount of ink is less, ink in the bottle cannot be beaten enough. Tilt the ink bottle until it becomes vertical.



Cover with paper towel firmly and shake ink slowly

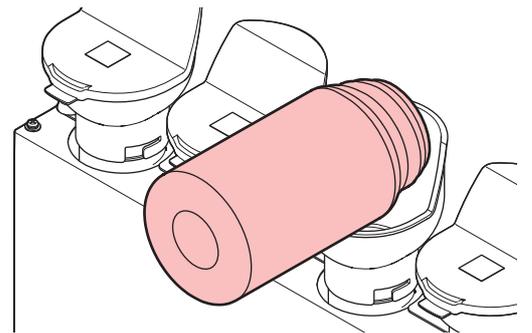
5 Remove the cap of the ink tank.

- First, cover the cap with a waste cloth etc. to prevent your hands from getting dirty and then remove it.

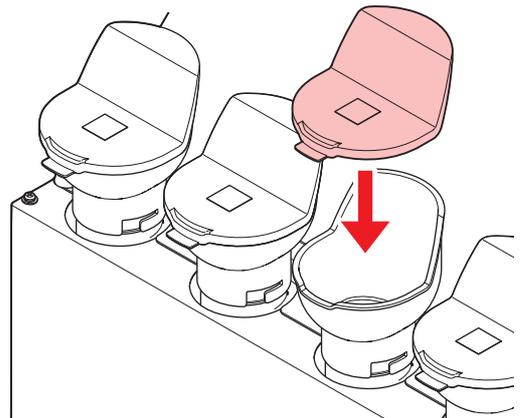


6 While checking the ink remaining amount indicator, add ink.

- Depending on the ink type, aluminum sheet adheres to the bottle top surface. In such a case, remove it with a cutter.
- While checking the ink remain lamp above the ink tank, add ink. For details, refer to P.1-25 "Rough standard for adding ink".



7 Attach the ink tank cap firmly.



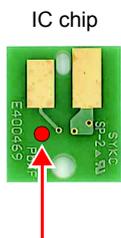
Important!

- Attach the cap firmly.

About IC chip

- The IC chip has information of ink color, remaining amount of ink, expiration data, etc.
When filling the ink, insert the IC chip packed with the ink bottle into the IC chip inserting port.
- If an IC chip that is not paired with the ink bottle is inserted, ink can not use.
- The mark indicating color information is pasted on the IC chip.

Ink color	Indication mark
Black	● (one black circle)
Blue	●● (Each red circle and blue circle)
Magenta	● (one red circle)
Yellow	● (one yellow circle)



Mark indication position

When [INK NEAR END] is displayed

There is a little of ink left. You can print continuously, however, ink may end during printing. It is recommended to add ink as soon as possible.

Press the [ENTER] key in Local to check the ink tank that requires refilling in Local Guidance. (☞ P.3-28)

When [INK END] is displayed

When it becomes Ink end (remaining amount of ink is none), the machine cannot print. Refill ink.

About ink expiration date

The ink has its expiration date.

You can use the ink up to two months after the expiration date listed on the ink bottle, but you cannot use it after three months. Try to use up any expired ink quickly.

The ink remain lamp's red status and the display will notify you when the ink is expired.

Ex.) When the expiration date is September 2014

October : Usable
("EXPIRATION" is displayed)

November: Usable
("EXPIRATION(1M)" is displayed and
Ink bottle lamp blinks in red.)

December: **Unusable**
("EXPIRATION(2M)" is displayed and
Ink bottle lamp blinks fast in red.)



- Press the [ENTER] key in Local to view the expiration date for the ink in Local Guidance. (☞ P.3-28)



- When "EXPIRATION (2M)" is displayed and you can no longer use the ink, you will no longer be able to perform prints, cleaning, or IC chip charges (☞ P.1-11). In that case, dispose of the ink inside the ink tank (☞ P.4-24) and refill with new ink (☞ P.1-10).

When "INK CHARGE" is displayed in Local

If you could not perform the auto-charge for the following reasons, the warning message "INK CHARGE" is displayed to notify you.

- The inserted IC chip has expired.
(excluding "EXPIRATION(2M)")
- The ink bottle to be charged has expired.
(excluding "EXPIRATION(2M)")

If the message is displayed, check the ink expiration date, then press the [MAINT] key, browse to the "Ink charge" Maintenance function (☞ P.4-18) and perform the ink charge.

Caution in handling of ink bottles



- 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 eyes to rinse ink away completely. Then, consult a doctor as soon as possible.
- If the ink bottle is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Make sure to store ink bottles in a cool and dark place.
- Store ink bottles 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 bottles.
- Be sure to thoroughly consume the ink in the ink bottle, once it is opened, within three months. If an extended period of time has passed away after opening the ink bottle, printing quality would be poor.



- Do not shake ink bottles violently. This may result in ink leakage from the ink bottles.
- Do not touch or stain the contacts of the IC chip. This may cause damages on printed circuit boards.

Media

Usable media sizes and notes for handling are described.

Usable sizes of media

Model	TS500P-3200	
Type of Recommended media	Photo paper	
Maximum width	3300mm	
Minimum width	210mm	
Maximum printing width	3290mm	
Roll media	Thickness	0.2mm or less
	Roll outside diameter	Φ300mm or less
	Roll weight*1	When using feeding unit : 130kg or less When using roll holder : 18kg or less
	Roll inside diameter	When using take-up unit and feeding unit 3 inches When using roll holder 2 or 3 inches
	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.

*1. When holding the right and left side of roll media and when there is no deflection on the roll

Caution in handling of medias

Pay attention to the followings for handling of medias.

Important!

- **When handling media, wear the gloves.**
If you touch the media with your bare hand, the media may be stained due to fingerprints or oil of your finger. Be careful about it.
- **Do not leave the media with the heater ON for a long time.**
Waviness may occur on the media and it may cause media clogging.
- **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 and Post-heater ①/② 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 1 day 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.
- **Please pay attention to the humidity of the media storage location.**
Due to the nature of the media, such as the sticking of the media may occur by the humidity of the place that stores the media. Please follow the contents specified in recommended environment in "Machine specifications" on P.6-2 for the usage environment of this machine and the media storage environment.

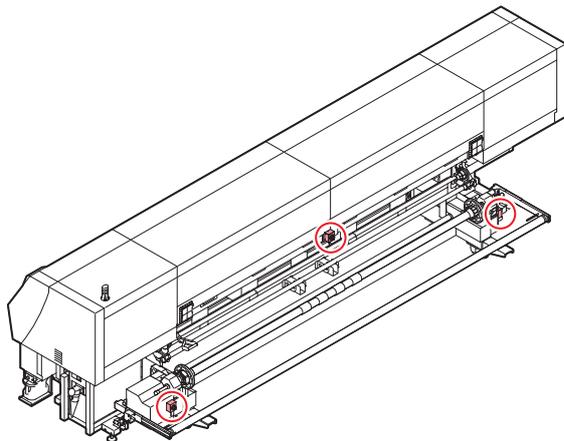
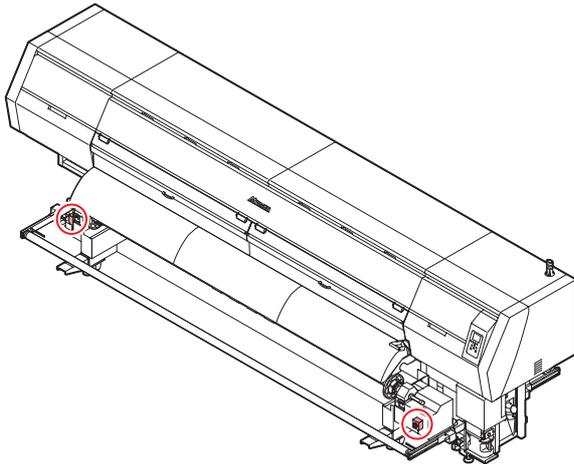
About emergency switch

Please press the emergency switch when you feel danger such as hand or hair is caught or the like during operating this machine.

The position of the emergency switch

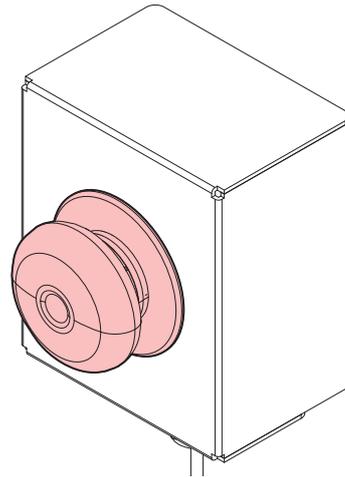
Emergency switch is attached to the position shown in the following figure.

If you feel the danger, please press near switch.



If you feel the danger

- 1 Press the emergency switch.**
 - Buzzer sounds inform you that you have an emergency stop.
 - The display will show the following message.
- 2 Remove the cause you press the emergency switch and confirm the safety.**
- 3 Cancel the emergency stop state.**
 - Emergency stop state is canceled by turning the emergency stop switch, or by pulling in front,



Important!

- When the cover such as the front cover is open, please close the cover. This machine will not return to the local.

Chapter 2

Basic Operations



This chapter

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

Workflow	2-2	Head Cleaning	2-17
Turning the Power ON/OFF	2-3	About head cleaning	2-17
Turning the Power ON	2-3	Perform head cleaning depending on the test	
Turning the Power OFF	2-3	printing result	2-17
Setting a Media	2-4	Setting of Media Correction	2-18
Setting the Head Gap	2-4	Setting of Media Correction	2-18
Note for media setting	2-4	Correct the ink drop position for bidirectional	
Setting a roll media	2-5	printing	2-19
Setting leaf media	2-14	Printing Data	2-20
Changing the printing origin	2-15	Starting a Printing Operation	2-20
Preparing for the Heaters	2-16	Stopping a Printing Operation	2-20
Changing the Temperature Settings for the		Deleting Received Data (Data Clear)	2-20
Heaters	2-16	Behavior after printing has been	
Test Printing	2-16	completed	2-20
Test Printing	2-17	Cutting a media	2-21

Workflow

Turning the Power ON/OFF

Referring to “Turning the Power ON/OFF” (☞ P.2-3).

Setting a Media

Referring to “Setting a Media” (☞ P.2-4).

Preparing for the Heaters

Referring to “Preparing for the Heaters” (☞ P.2-16).

Test Printing

Referring to “Test Printing” (☞ P.2-16).

Head Cleaning

Referring to “Head Cleaning” (☞ P.2-17).

Setting of Media Correction

Referring to “Setting of Media Correction” (☞ P.2-18).

Correct the ink drop position for bidirectional printing

Referring to “Correct the ink drop position for bidirectional printing” (☞ P.2-19).

Printing Data

Referring to “Printing Data” (☞ P.2-20).

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.

[END/POWER] key :

Normally, use this key to turn the power ON/OFF. The nozzle missing prevention function periodically operates even with the [END/POWER] key turned OFF when the main power switch is turned ON.

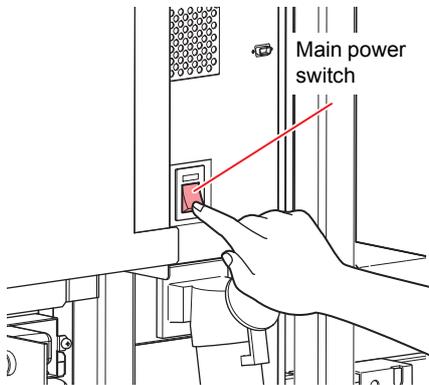


- Turn the power ON after the front cover and maintenance cover are closed.

1

Turn the main power switch ON.

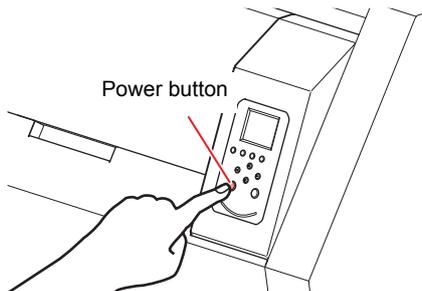
- Set the main power switches located on the side of this machine to the "I" side.



2

Turn the power on, by pressing the [END/POWER] key.

- The machine enters LOCAL.



- The firmware version is displayed when the power is turned ON, and the machine performs its initial operation.

3

The machine enters LOCAL.

4

Turn ON the power of the connected PC.



- Always make the main power switch ON. If you leave it OFF, it may cause nozzle missing of the head. In some cases, recovery may become difficult.

Turning the Power OFF

When having ended the operation of the machine, turn the power OFF by pressing the power button 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.5-13 "Error messages")

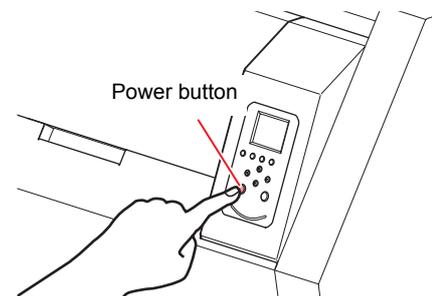
1

Turn OFF the power of the connected PC.

2

Turn the power off, by giving the [END/POWER] key a long press.

- Do not turn OFF the main power switch located on the side of the machine.
- To use this machine again, press the [END/POWER] key .



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 missing prevention function (flushing function) operate.

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

● Keep the front cover and the maintenance cover closed.

● 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 head dries, which may cause nozzle missing.

In this case, turn the power ON again and check that the head has returned to the capping station, and 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 by pressing [END/POWER] key, 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 [END/POWER] key a long time on the front of the machine, check the display is turned off on the operation panel, and turn the main power switch off.

2

Setting a Media

This machine can be used with a roll media and leaf media.

For usable medias, refer to P.1-13 "Usable sizes of media".

Setting the Head Gap

Set the head gap (height from the media to the nozzle plane of the heads).

When the carriage is to move above the platen for printing or maintenance, it moves while keeping the head gap at the preset value.

The upper limit of the head gap varies with media thickness.

Available setting values: [1.5 mm to 7.0 mm] (in units of 0.1 mm / Default : 2.0 mm)

1 Press the **SEL** key, and then press the **FUNC1 (MEDIA)** in LOCAL.

- Media setting menu will be displayed.

2 Press **▲ ▼** to select "Head Gap" and press the **ENTER** key.

3 Press **▲ ▼** to set a value of the head gap and press the **ENTER** key.

- Set value : 1.5 to 7.0mm

4 Press the **ENTER** key.

5 Press the **END/POWER** key several times to end the setting.

- Important!**
- Head gap value must be changed each time when the media to be used is changed.
 - In this machine you can register printing conditions (SETUP 1 to 4) in advance to match the media to be used. (P.3-5)
- If the head gap value is registered in the SETUP 1 to 4, you do not need to set the head gap value each time of changing the media.

How to check the value of the head gap

When you check the head gap value currently set, perform the following procedures:

1 Press the **ENTER** key in LOCAL.

2 Press the **ENTER** key several times to display [HEAD GAP].

- The head gap value currently set is displayed.

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 roll media, work by two or more people. Otherwise, you may hurt your back by the weight of the roll media.
- In the cases below, be sure to fix tension-bars on both sides of the printer. If you leave the tension-bars unfixed, the bars supported by media may fall down. Please be careful.
 - (1) When lifting up the clamp lever
 - (2) When cutting media manually
 - (3) When cutting media with tools you have (cutter, scissors, etc.)



- 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.
- If the media is left set on the machine for a long time, the media may form an irregular surface for the heat from the print-heater. If printing on such an irregular surface, the head may rub on the media. If an irregular surface is found on the media, feed the media with the **▼** key to avoid printing on the irregular surface, and set a new origin. (P.2-15)
- Set the media based on the right side of the main body.
- Periodically replace the paper core for taking up the media. If you use the one whose inner has been peeled due to long-term use as shown in the right photo, taking up the media cannot be performed normally in some cases.



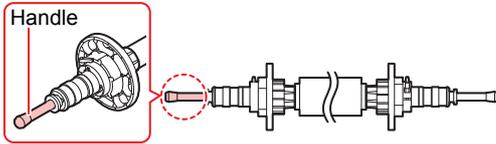
Setting a roll media

Prepare for the take-up device first

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



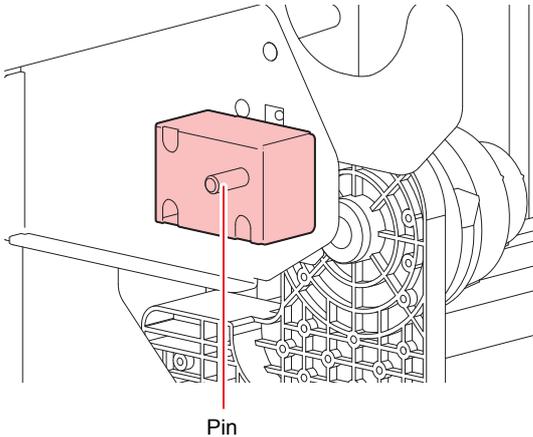
- Handle the roll shaft with care, since it is very heavy with media. To avoid an accident or injury, be sure to grip the handles on both ends.



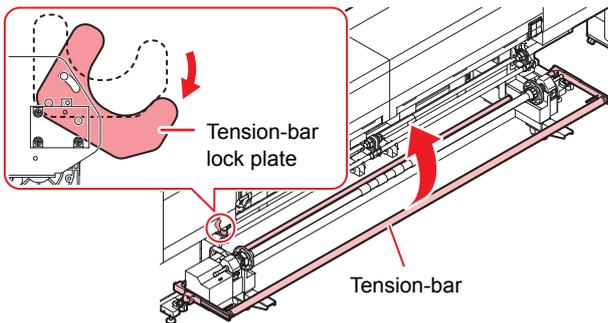
1 Fix the tension-bars on the front and the back of this machine at the tension-bar lock plate.

- The tension-bar lock plates are on the right front and the left back of this machine.

- (1) Pull the pin on the outside of the tension-bar lock plate to unlock.



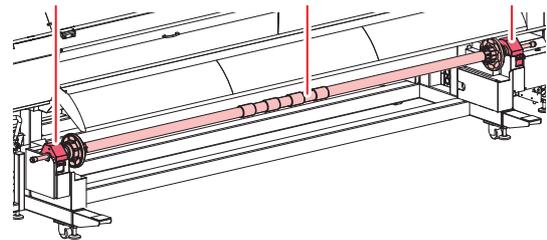
- (2) Lift the tension-bars and fix them with the tension-bar lock plate.



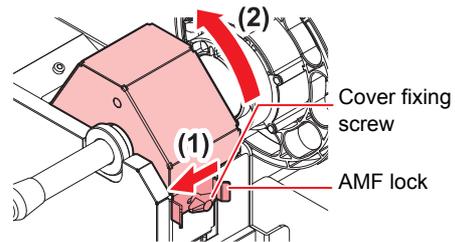
- Grip the outside of the tension-bar lock plate of the tension-bar. If gripping the other parts, your hand may get stuck in.

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

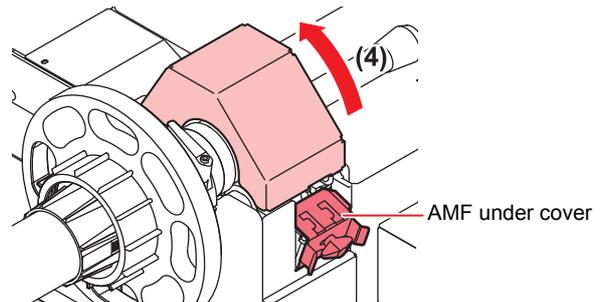
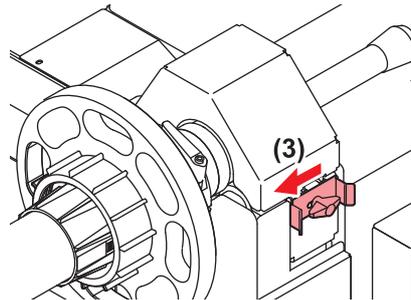
Cover(left) Roll shaft Cover(right)



- (1) Loosen the cover fixing screw attached to the cover of left of take-up device and unlock the AMF lock by sliding it.
- (2) Open the covers.

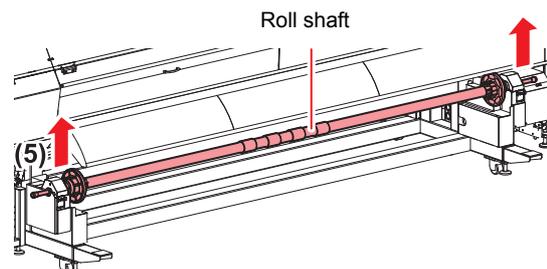


- (3) Loosen the cover fixing screw attached to the cover of right of take-up device and unlock the AMF lock by sliding it.
- (4) Open the covers.



- When remove the AMF lock, the bottom cover will be lowered.

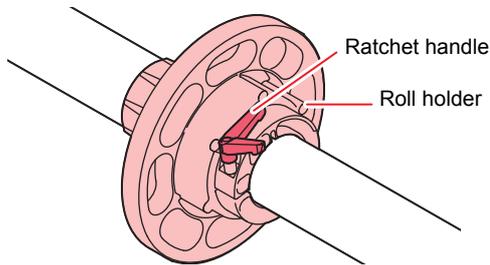
- (5) Remove the roll shaft.



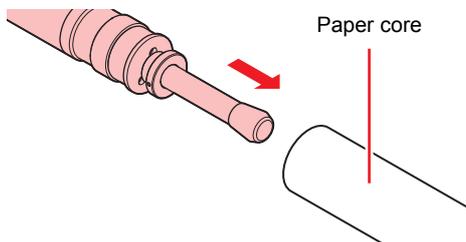
3**Remove the roll holders.**

• The roll holders are on both for the right and left of the roll holder. Remove both with the procedures below:

- (1) Loosen screws (1 each on the right and left) with supplied ratchet handle.
- (2) Remove the holders.

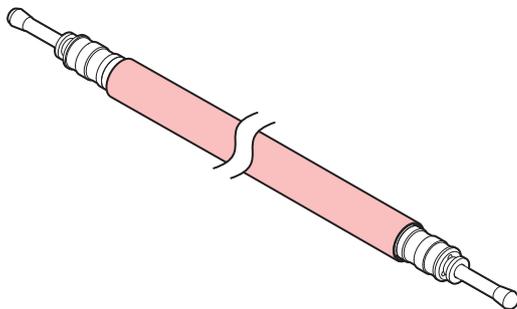
**4****Attach the paper core.**

- (1) Put the roll shaft through a paper core.

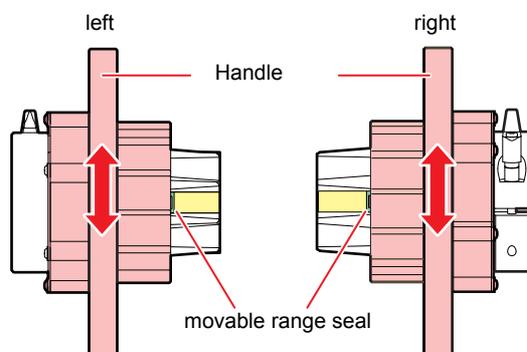
**Important!**

• Please be careful not to pinch your hand between the paper tube and the roll shaft.

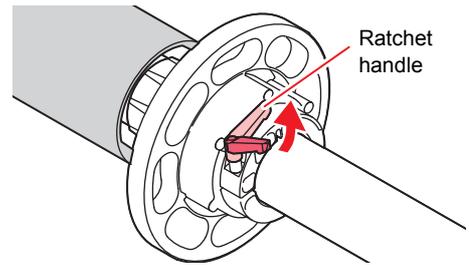
- (2) Adjust the paper core so that it comes to the center of the roll shaft.



- (3) Turn the handle of the right and left roll holder, and set to the innermost of the green part of the movable range seal.



- (4) Push both sides of the roll holders into the paper core, and tighten screws with supplied ratchet handle to fix.

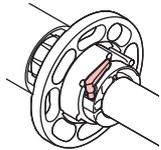
**Important!**

When you fix the roll holder, please do not lift the lever of the fixing screws.

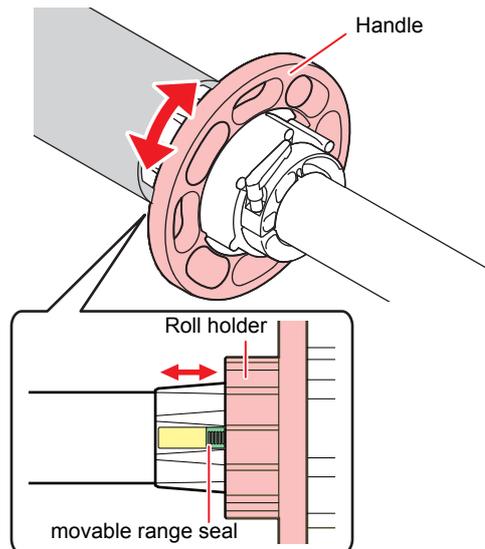
• When the entire fixing screws are raised above, screws idle and can not be fixed.

Please note the orientation of the ratchet handle at the time of fixing.

• If the ratchet handle is turned sideways, hit the roll shaft during the unit is in operation, and may not be able to rotate smoothly. After tightening the screw, turn the ratchet handle in toward the roll holder.

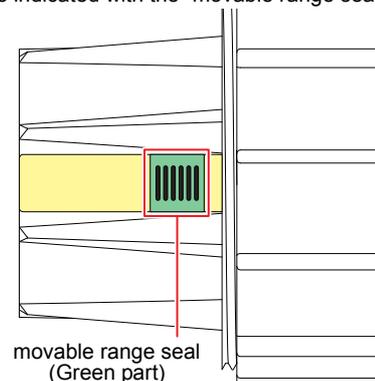


- (5) Turn the handle of the take-up roll holder to tightly secure the paper core.

**Important!**

• As the paper core is not idling in the middle of taking up the media, please tightly secure the paper core.

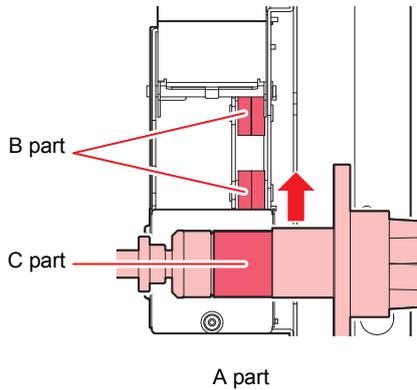
• When you fix the paper core, keep it within the range indicated with the "movable range seal".



5

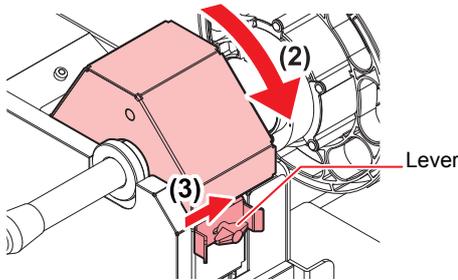
Set the roll shaft with the paper core on the take-up device, and close the covers on the right and left sides of the roll shaft.

- (1) Fitting the A part of the roll shaft to the B part bearing of the machine, put it on.

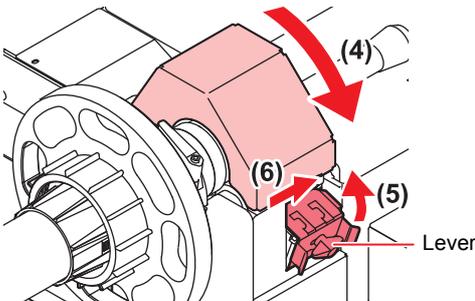


- Carefully set C part so as not to hit near frame. Scratches can cause malfunction.

- (2) Close the left cover.
(3) Slide the lever to lock.



- (4) Close the right cover.
(5) Lifting the AMF bottom cover.
(6) Slide the lever to lock.



- Put the shaft on gently, not roughly.

Setting a Roll Media

Set a roll media to the feeding device on the back. When setting a roll media, set “Feeding unit” and “Take-up unit” of the machine setting to “ON”.



- Take care not to drop the media on your foot when setting the media.
- Handle clamp levers carefully. Do not push the lever up when tension-bar is lifted. Be sure to fix the tension-bar with the tension-bar lock plate and push up / down the lever.



- When using the media take-up machine, be careful about the points below:
- At the feeding side, set the printed surface to “revoluted” (inside out).
- At the take-up side, set the printed surface to “involuted”. (If you set it to “revoluted”, it may adversely affect the media feeding.)

1

Set both of “Setting Feeding unit” and “Setting Take-up unit” of the machine setting to “ON”. (P.3-18, P.3-19)

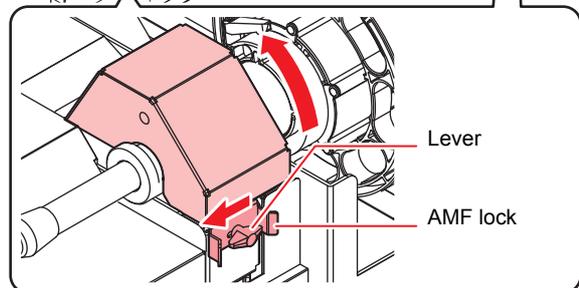
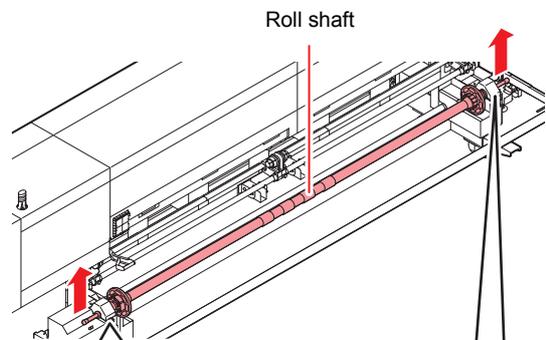


- When the media is set on the narrow roll holder, remove the media. In addition, move the narrow roll holder to the both edges of the machine. It may cause media feeding defect.

2

Remove the roll shaft on the feeding device at the back of this machine.

- (1) Lower the lever that is attached to the right and left of the cover of media feeding device and release the lock.
(2) Open the covers.
(3) Remove the roll shaft.



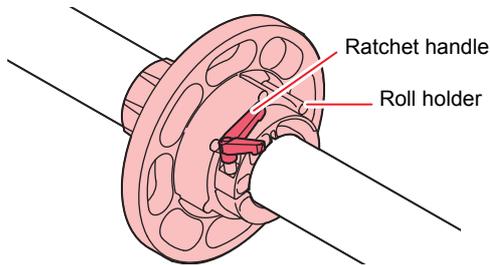
- When carrying the roll shaft, be sure to grip handles on the both ends. Gripping other parts, your hand may get stuck in the printer.
- To prevent dust, set paper core or media to the roll shaft on the table or sheet. Dust on the paper core or the media may cause defective print.

2

3**Remove the roll holders.**

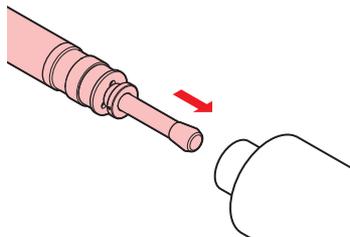
• The roll holders are on both for the right and left of the roll holder. Remove both with the procedures below:

- (1) Loosen screws (1 each on the right and left) with supplied ratchet handle.
- (2) Remove the holders.

**4****Set a media on the roll shaft.**

- (1) Put the roll shaft through the paper core of the media.

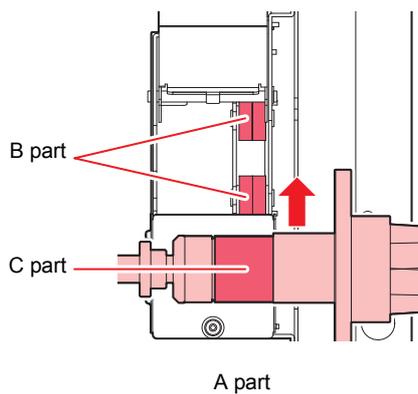
• Need to adjust the position of the paper core to come in the middle of the roll shaft. Set the media so as to align the scale of media set label and the center position of the paper core .

**Important!**

• Please be careful not to pinch your hand between the paper tube and the roll shaft.

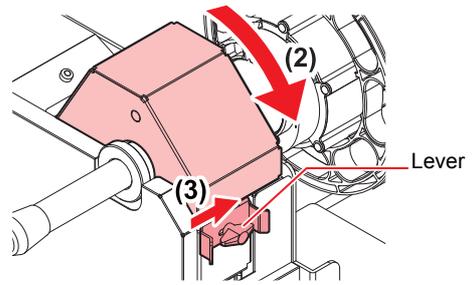
5**Put the roll shaft with the media on the feeding device.**

- (1) Fitting the A part of the roll shaft to the B part bearing of the machine, put it on.

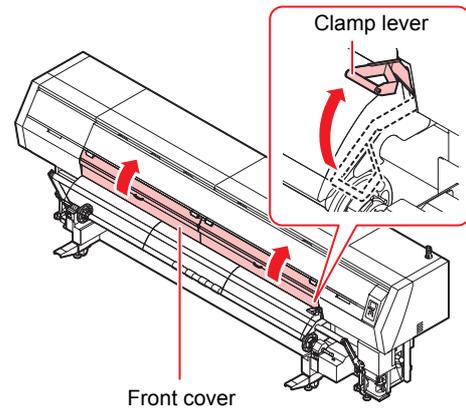
**Caution**

• Carefully set C part so as not to hit near frame. Scratches can cause malfunction.

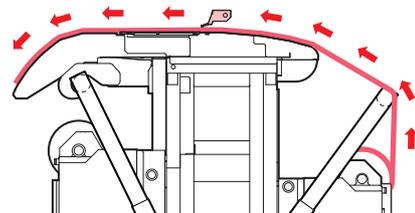
- (2) Close the cover.
- (3) レバーをスライドさせてロックする

**Caution**

• Put the shaft on gently, not roughly.

6**Open the front cover and raise the clamp lever at the front of this machine.****7****Slide the media from the back to the front.**

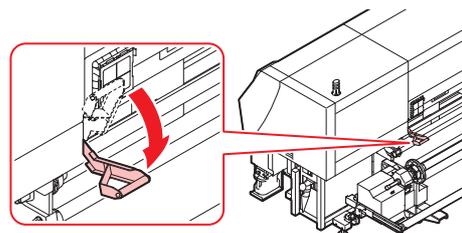
- Insert the roll media between the platen and the pinch roller, and slide it to the front.
- Pull the media out to the front of this machine with enough length.

**Caution**

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

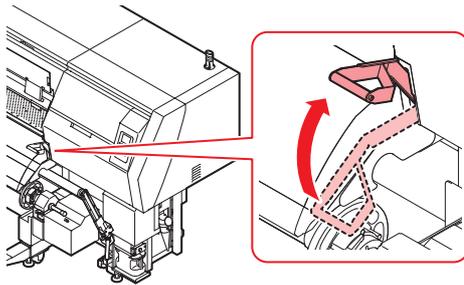
8**Push down the clamp lever from the back of this machine.**

- Lock the media temporarily.

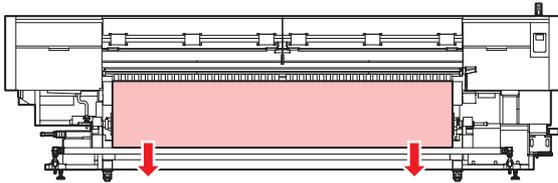


9**Raise the clamp lever at the front of this machine.**

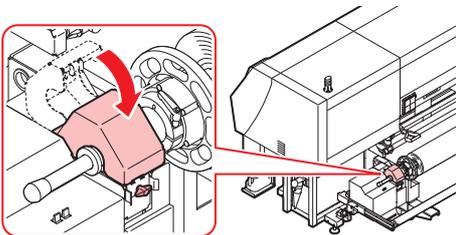
- Temporary lock of the media is released.

**10****Pull out the media.**

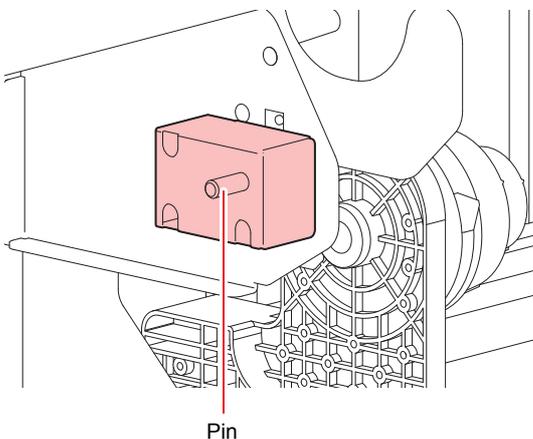
- Holding both sides of the media, pull it out so that the media top edge comes below the floor by about 50cm.
- To set the media straight, pull out the media long.

**11****Close the covers on the right and the left sides of the feeding device at the back of this machine.**

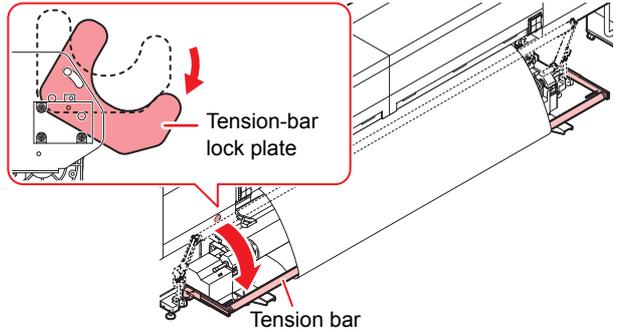
- Close the covers and rock the cover.

**12****At the back, lift the tension-bar down to the stopper slowly to tighten the media.**

- (1) Pull the pin on the outside of the tension-bar lock plate to unlock.



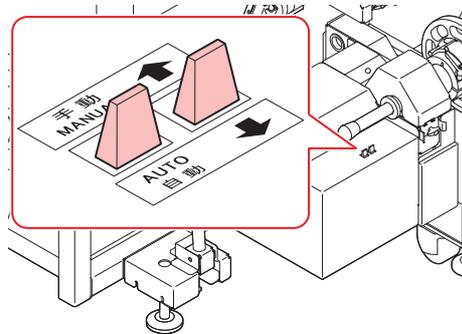
- (2) Unlock the tension-bar, and then lift it down.



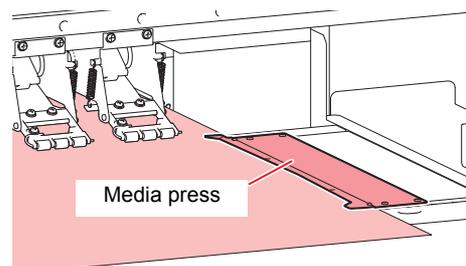
- Grip the outside of the tension-bar lock plate of the tension-bar.
- If gripping the other parts, your hand may get stuck in.

13**Push down the clamp lever.****14****Adjust the position of the tension-bar with the switches on the left of the feeding device.**

- (1) Set the $\uparrow\downarrow$ switches to the take-up direction of the media.
- (2) Turn the left switch to [MANUAL].
- (3) The tension-bar is lifted, reeling the media. At this time, when the tension bar does not move upward even if the media is fed, change the $\uparrow\downarrow$ switch.
- (4) When the tension-bar arm becomes parallel to the floor, turn the left switch to [AUTO] to stop the tension-bar.
- (5) Turn the $\uparrow\downarrow$ switch to the feeding direction of the media.

**15****Hold the media with the media press gently.**

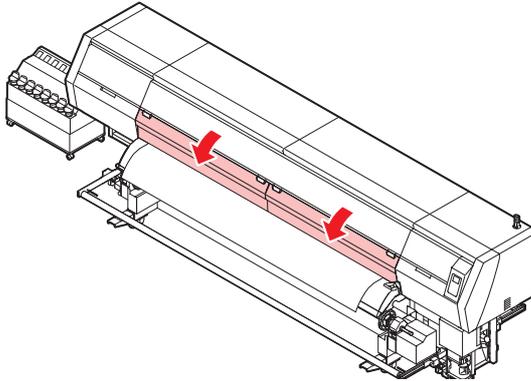
- Set the media so that no media sticks out from the right end pinch roller to the right side.
- When using a thick media, remove the media press from the media before printing.

**2**



- If the media gets near to the right side too much, the warning message "MEDIA SET POSITION R" is displayed after media detection. Set the media again.

16 Close the front cover.

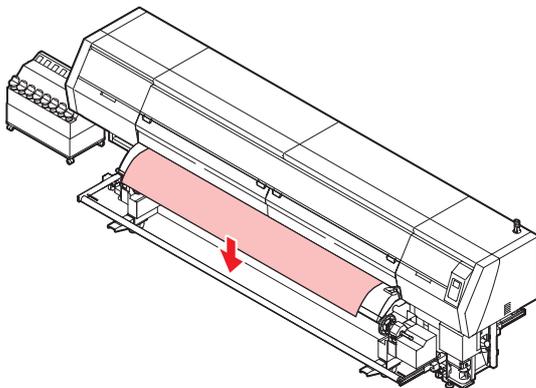


17 Press to select "ROLL" .

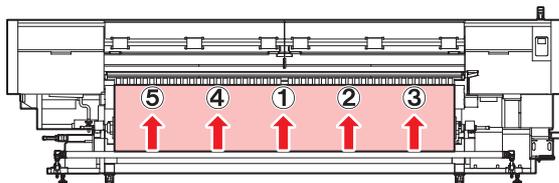
- Detects the media width and thickness.
- If the media thickness could not be detected, the error message is displayed. Enter the media thickness by referring to P.2-11 "When media thickness could not be detected".
- When you set "Media remaining amount display" and "Media detection" to "ON" and "MANUAL" (P.3-19,P.3-20) in the machine setting, input screen for the media thickness and the remaining amount is displayed after detecting the media width. (P.2-11)

18 Secure the media on the take-up device.

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



- (2) As indicated, fix the media on the paper core with tape so that the printed surface may be "involuted".
 - Along the paper core, fix the media on several positions with tape in the order in the figure so that the media may not wrinkle.



- Surface waviness or ruck may affect the quality of currently printed image. When fixing media with tape, align the media along the direction indicated with an arrow in the figure.
- If you pull the media too much when fixing with tape, the media tension may not be even. And, it may negatively affect the media feeding.

19 Press to loosen the media.

- Loosen the media until it reaches to the floor.

20 With switches of the take-up device, roll up the media about once.

- (1) Making the left switch to [MANUAL] and the right switch to the direction taking up the media, take up the media.
- (2) Just before the media stretched tight, turn the left switch to [AUTO] to stop.



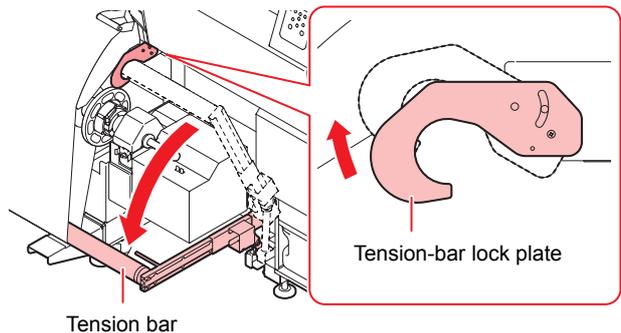
- Rolling up the media too tight, covers of take-up device opens and an error [Cover Open] appears. In this case, open the right cover of the take-up device, and loosen the tension of the media.

21 Press again to loose the media.

- Loosen the media until it reaches to the floor.

22 At the front, lift the tension- bar down slowly.

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



23 Press to lift the tension-bar up and to stretch the loosened media.

- Turn the switch to [AUTO]. Tension-bar lifts, taking up the media, and automatically stops at the proper position.



- When the tension bar does not move upward even if you press the [][] switch, stretch the slack media by operating 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 switch to the other side.
- (2) When the tension bar arm becomes parallel with the floor, turn the switch to [AUTO] to stop the tension bar.
- (3) Turn the switch to the take-up direction of the media.

- The media between the take-up device and carriage cannot be printed.

When media thickness could not be detected

There may be a case where the media thickness cannot be detected properly depending on the media. In such a case, the media thickness must be input manually.

- 1** An error is displayed, and the carriage returns to the station.
- 2** Press **▲▼** to enter the media thickness (0.0 to 1.0mm).
- 3** Press the **ENTER** key.
 - The media selection screen is displayed.
- 4** Press **◀▶** to select "ROLL" or "LEAF".
 - Detects the media width.
 - Thickness detection is also performed here if the [END/POWER] key is pressed at step 2 above.

About entering media thickness and remaining amount

When you set "Media remaining amount display" and "Media detection/ thickness" to "ON" and "MANUAL" (P.3-19, P.3-20), input screen for the media thickness and the remaining amount is displayed after detecting the media width.

- 1** Display the screen for entering media thickness.
 - When you set the Setting the Media detect/ thickness to "AUTO" in the "Media detection" of the machine setting, this screen is not displayed. (P.3-20)
- 2** Press **▲▼** to enter the media thickness (0.1 to 1.0mm).
- 3** Press the **ENTER** key.
- 4** Display the screen for entering media remaining amount.
 - When you set "Setting the Display of Media Remain" of the machine setting to "OFF", this screen is not displayed. (P.3-19)
- 5** Press **▲▼** to enter the media remaining amount.
- 6** Press the **ENTER** key.

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

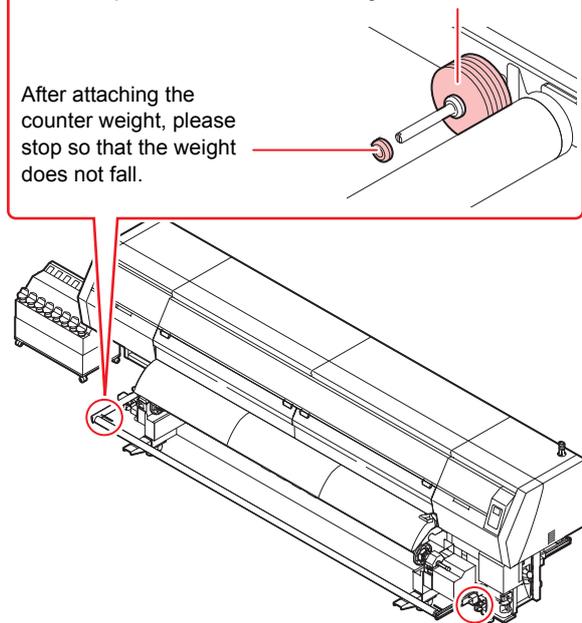
Install the proper number of the counter weight depending on the media type.

You can attach the counter weight up to 5 each for right and left.

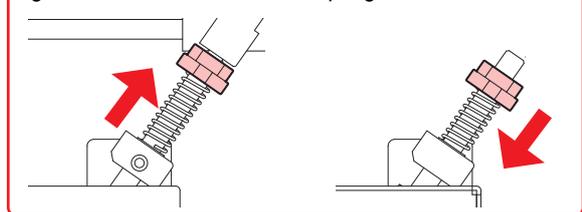
Media condition	Solution
Ruck is generated in the media feeding direction.	The tension applied on the media is too strong. According to your media, reduce the counter weight.
The media skews at printing.	
The media sags and the machine cannot take it up beautifully.	The tension applied on the media is too weak. According to your media, increase the counter weight.
The media floats on the platen.	

Attach the weight of the tension bar when you want to make the take-up tension bar and the feeding tension bar heavier.

After attaching the counter weight, please stop so that the weight does not fall.



If you want to reduce the weight of the tension bar, please tighten the nut and shorten the spring.



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



- Not to lose the unused counter weight, put it in the storage box.

Setting a narrow roll media

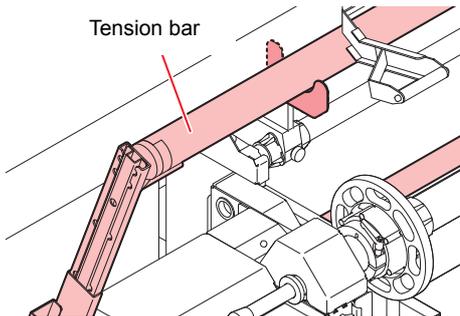
When you use narrow roll media (up to 1m), set the media on the narrow roll holder.

Important!

- When using the media take-up machine, be careful about the points below:
- At the feeding side, set the printed surface to “revoluted” (inside out).
- At the take-up side, set the printed surface to “involuted”. (If you set it to “revoluted”, it may adversely affect the media feeding.)

1 Fix the tension bar of the rear surface side on the tension-bar lock plate.

- The tension-bar lock plate is on the left side of the machine rear surface. Raise the tension bar and fix it with the tension-bar lock plate.

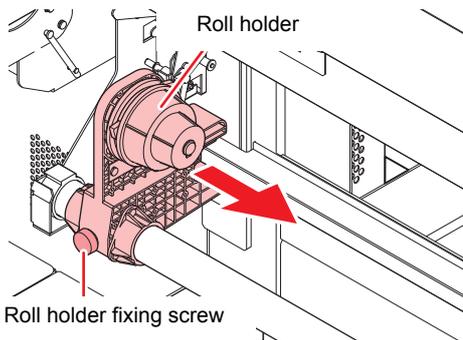


- Be sure to handle the tension-bar gripping outside of the tension-bar lock plate. Gripping other parts, your hand may get stuck in.

2 Set both of “Setting Feeding unit” and “Setting Take-up unit” of the machine setting to “OFF”. (P.3-18,P.3-19)

3 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 the position where the media may be right seen from the front of the machine.

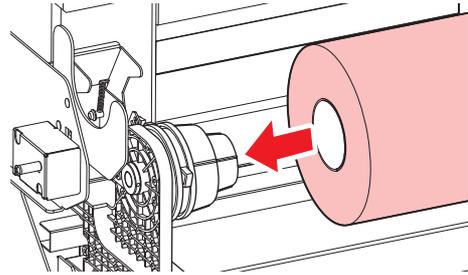


4 Tighten the roll holder fixing screw.

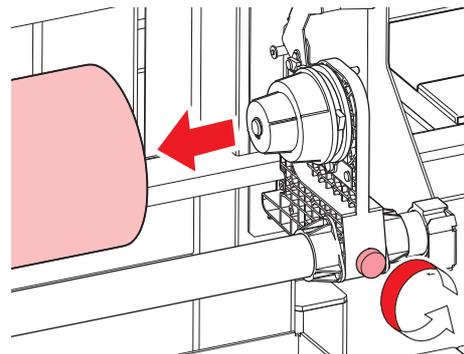
- Check the Steps 2 to 3 again.

5 Set the left end of the core of the roll media on the left roll holder.

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



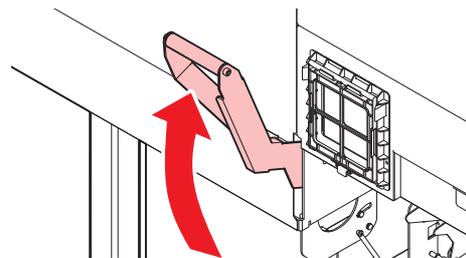
6 Loosen the screw of the right roll holder, and insert the holder into the paper core.



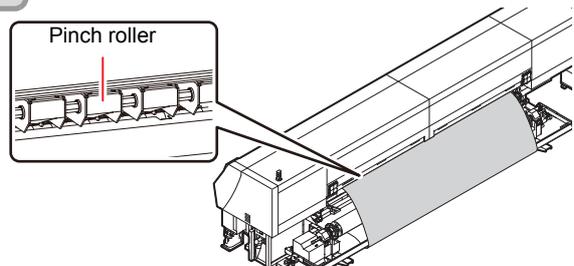
Important!

- When setting long media, the roll holder hits the rail supporter in the center of the holder. In this case, unhook a pin from the supporter while lifting media support bar, remove the rail supporter, and slide the roll holder. After that, set the rail supporter again.

7 Raise the clamp lever in the rear side of this machine.



8 Insert the roll media in this machine.



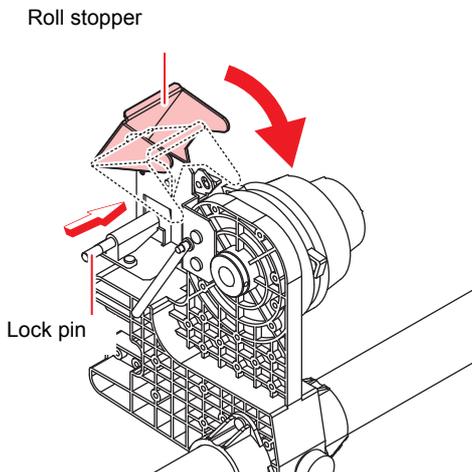
- The roll media can be smoothly inserted by slanting the media.

(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.

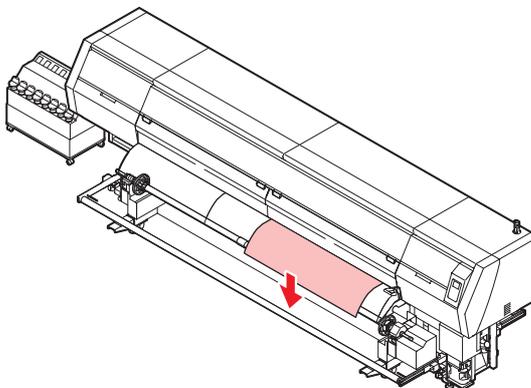
9 Locking the roll stopper.

- (1) Pull the roll stopper in the direction shown right.
- (2) Press the lock pin to hold the roll stopper.



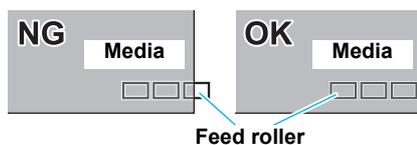
10 Pull out the roll media out.

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



Important!

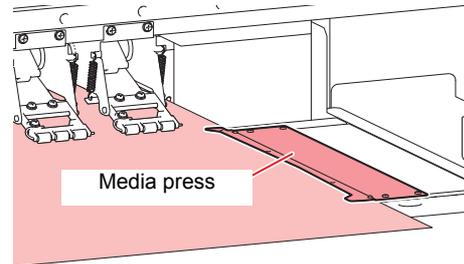
- Check the position of the media edge surface and the feed roller.
- When you clamp the media edge surface with the pinch roller and the feed roller, the quality of transferring media may be degraded. Before setting media, adjust the position of the roll holder fixing the media.



11 Push down the clamp lever from the front of this machine.

12 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.



13 Close the front cover.

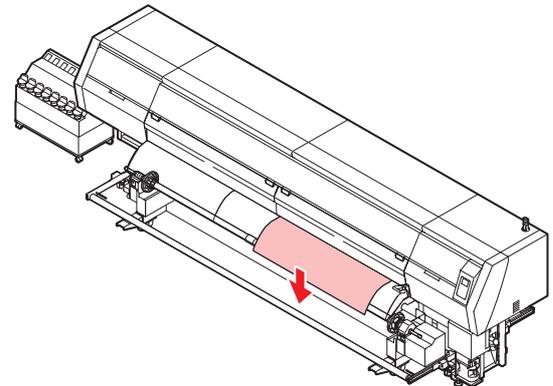
- The media selection screen is displayed.

14 Press the to select "ROLL" .

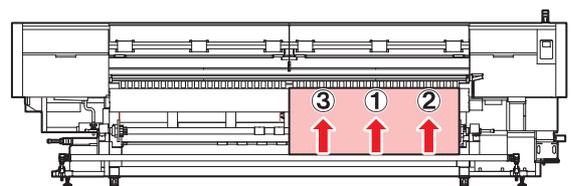
- Detects the media width.
- When "Setting the Display of Media Remain" of the machine setup is "ON" (☞ P.3-19), the screen for entering media remaining amount is displayed after detecting the media width. (☞ P.2-11)

15 Secure the media on the take-up device.

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



- (2) As indicated, fix the media on the paper core with tape so that the printed surface may be "involved".
 - Along the paper core, fix the media on several positions with tape in the order in the figure so that the media may not wrinkle.





- Surface waviness or ruck may affect the quality of currently printed image.
When fixing media with tape, align the media along the direction indicated with an arrow in the figure.
- If you pull the media too much when fixing with tape, the media tension may not be even. And, it may negatively affect the media feeding.

16 Press to loosen the media.

- Loosen the media until it reaches to the floor.

17 With switches of the take-up device, roll up the media about once.

- (1) Making the left switch to [MANUAL] and the right $\uparrow\downarrow$ switch to the direction taking up the media, take up the media.
- (2) Just before the media stretched tight, turn the left switch to [AUTO] to stop.



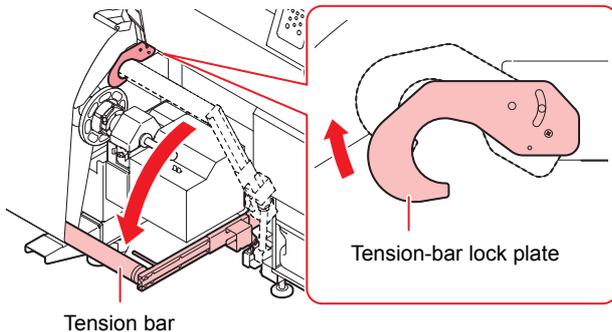
- Rolling up the media too tight, covers of take-up device opens and an error [Cover Open] appears. In this case, open the right cover of the take-up device, and loosen the tension of the media.

18 Press again to loose the media.

- Loosen the media until it reaches to the floor.

19 At the front, lift the tension- bar down slowly.

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



20 Press to lift the tension-bar up and to stretch the loosened media.

- Turn the switch to [AUTO]. Tension-bar lifts, taking up the media, and automatically stops at the proper position.



- When the tension bar does not move upward even if you press the \blacktriangle \blacktriangledown switch, stretch the slack media by operating the switch.

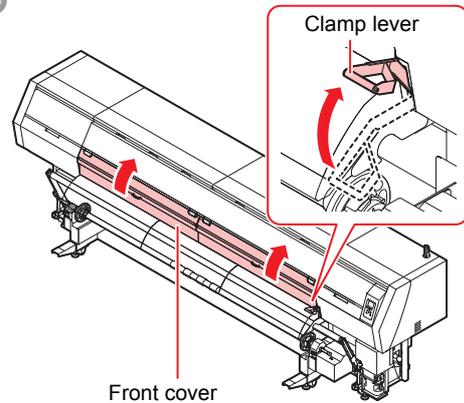
- (1) Set the $\uparrow\downarrow$ switch to the take-up direction of the media, and turn the switch to [MANUAL]. (The tension-bar is lifted.)
 - When the media is fed and the tension-bar is not lifted, turn the $\uparrow\downarrow$ switch to the other side.
- (2) When the tension bar arm becomes parallel with 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.

- The media between the take-up device and carriage cannot be printed.

Setting leaf media

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

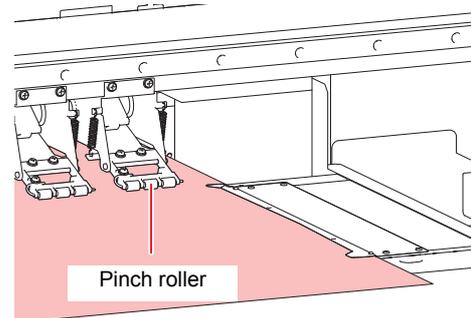
1 Open the front cover.



2 Raise the clamp lever.

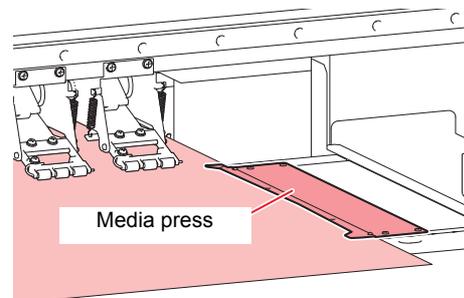
3 Insert the leaf media between the platen and the pinch rollers.

- Set the media so that no media sticks out from the right end pinch roller to the right side.
- Set the media so that the media end does not reach the slot of the post-heater.



4 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.

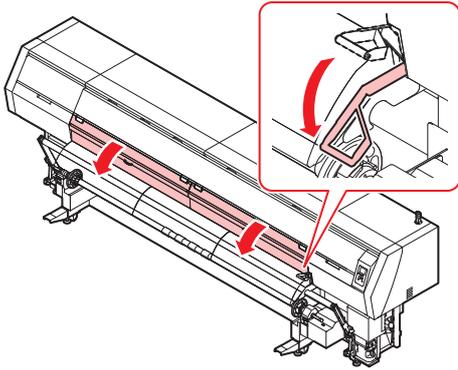


- If the media gets near to the right side too much, the warning message "MEDIA SET POSITION R" displayed after media detection. Set the media again.

5 Push down the clamp lever.

- Set the media straight.

6 Close the front cover.



7 Press the **ENTER** key.

- The media selection screen is displayed.

8 Press the **▶** to select "LEAF" .

9 The media detection is started.

- (1) The media width is detected.
- (2) It returns to the LOCAL when the detection is completed.

Changing the printing origin

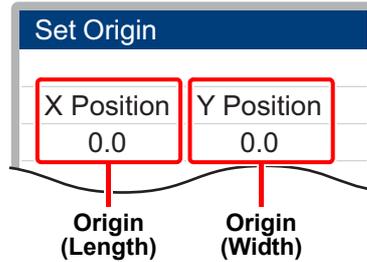
The position of the printing origin can be changed.

1 In Local, Press **▲▼◀▶**.

- It enters into the origin setting mode.

2 Press **▲▼◀▶** to set the origin to a desired position.

- Select the carriage and media, moving the point with **▲▼◀▶**.
- When you press **[FUNC2](CUT)** here, you can perform media cutting.



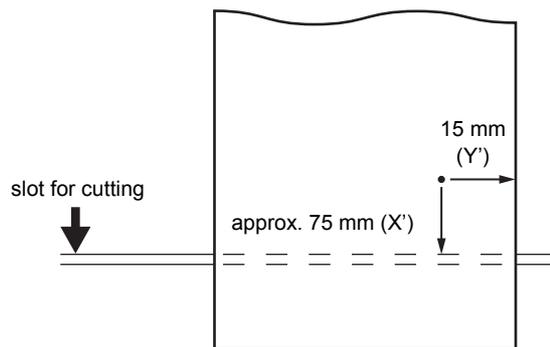
3 After determining the origin, press the **ENTER** key.

- The printing 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 15 mm from the right end of the media. The value in the scanning direction (Y') can be changed using **[MARGIN]** in Setup menu. (P.3-9)

This can be changed by using the Jog key.



Preparing for the Heaters

Changing the Temperature Settings for the Heaters

Set the heater temperature.

Depending on the media and the profile to use, set the heater temperature.

- It may take several minutes to tens of minutes for the set temperature to be reached, depending on the ambient temperature.



- You can change the temperature set here also in [Heater] of the Setup menu. (P.3-8)

1

Press the **SEL** key, and then press the **FUNC2 (Heater)** in LOCAL.

- The heater temperature adjustment screen appears.

2

Press **▲** **▼** to set the temperature of heater.

- **Temperature setting** : Set with **▲** **▼**
- The heater starts to get hot.

3

The heating of the heater stops.

- When the heater temperature reaches the set temperature, the heater icon lights in green.

4

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

- The screen returns to LOCAL.



- 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.)

Important!

- Use this machine under 20 to 30°C. The temperature may not reach the set value due to the environmental temperature condition.

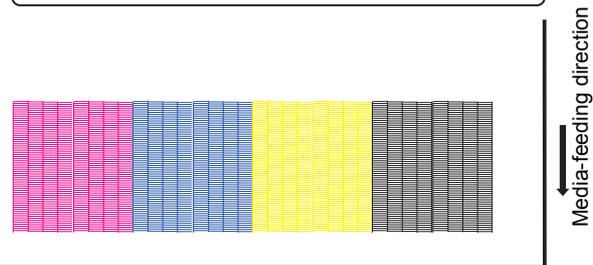
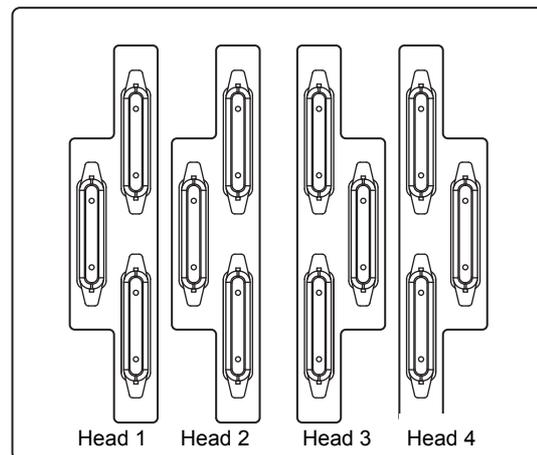
Test Printing

Print a test pattern to check that there are no discharging defects such as nozzle missing (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.

Overhead view



Pattern of Pattern of Pattern of Pattern of

Note on test printing

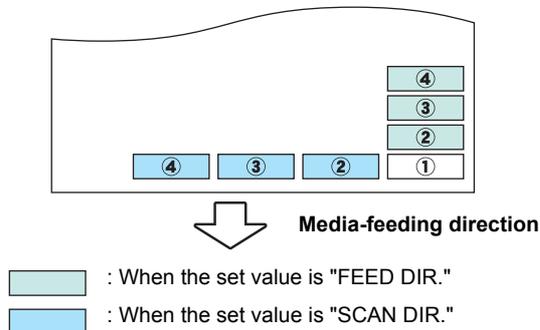
Important!

- When using leaf media, set a media of more than 210mm put horizontally. If a media with narrow width is set, printing will only be conducted to midway.
- If use by setting the media to Narrow roll holder, 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 image quality to deteriorate.
- When test print, be sure to close all the covers (front cover / rear cover).

Test Printing

Print a test pattern to check that there are no discharging defects such as nozzle missing (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.



Check before test printing.

- If a media has been set (☞ P.2-4)
- If the origin position has been set
- If the head gap has been adjusted (☞ P.2-4)

1 Press the **FUNC2** (TEST PRINT/CLEANING), and press the **ENTER** key in LOCAL.

- TEST PRINT menu appears.
- Press **[▲][▼]** to change the test pattern orientation. The orientation selected here will be reflected on when you will print next time.
- When performing test printing after having changed the orientation from "SCAN DIR." to "FEED DIR.", the line is fed to the position of the first test printing.

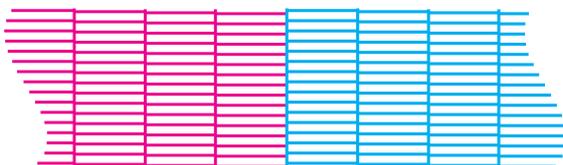
2 Press the **ENTER** key.

- Test printing starts.
- When the printing has been completed, the screen returns to LOCAL.

3 Check the printed test pattern.

- When the result is normal, end the operation.
- When the result is abnormal, perform head cleaning. (☞ P.2-17)

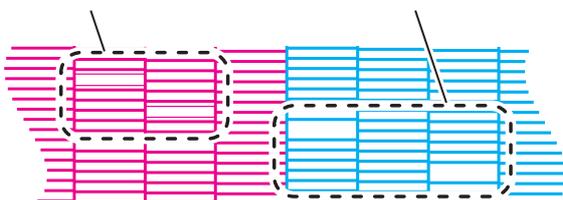
Normal pattern



Abnormal pattern

Nozzles are dirty

Clogged with ink



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:

- Soft** : When lines are bent, when any line is missing
- Normal** : When any line is missing, when colors are mixed
- 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.

1 Press the **FUNC2** (TEST PRINT/CLEANING) in LOCAL.

2 Press **▲▼** to select "CLEANING" and press the **ENTER** key.

- CLEANING menu appears.

3 Press **▲▼** to select the cleaning type.

- **Soft** : When lines are bent, when any line is missing
- **Normal** : When any line is missing, when colors are mixed
- **Hard** : When poor image quality cannot be improved even by Normal or Soft cleaning

4 Press the **ENTER** key.

5 Select the cleaning head by pressing **▲▼**, and put a check in the check box by pressing **FUNC2** (✓).

- After selecting the head, press the [FUNC2] and put a check in the check box. The head whose box has been checked will be cleaned.

6 Press the **ENTER** key.

7 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.4-8)
- Wash the head nozzle. (☞ P.4-14)

Setting of Media Correction

Correct the media feed amount to match the type of media you are using. If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.



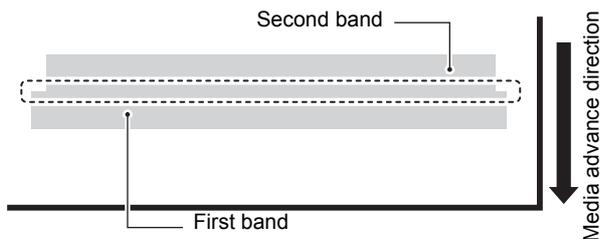
- Be sure to perform feed correction each time before printing. The media feed amount may vary, depending on the remaining amount of the roll media.
- If use by setting the media to Narrow roll holder, rewind the roll media by hand and set without slack. There may not be accurate to correct the feed amount.
- On completion of [MEDIA COMP.] during use of a roll media, the media returns to the printing origin. When a roll media is set on the narrow roll holder, Slack will occur in the roll media of the back side of this machine. Before printing, take up the slack in the roll media by hand; a loose roll media can result in an inferior image quality.
- When printing with a take-up device, set the media first and then perform media correction.
- If print without using the take-up device, please make the correction from sending media to reach the floor. There is a possibility that the fed amount can not be adjusted normally.

Setting of Media Correction

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



- 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.



- 1 Set a media.** (👉 P.2-4)
- 2 Press the **[SEL]** key and press the **[FUNC1]** (ADJUST) in LOCAL.**
 - Adjust menu appears.
- 3 Press the **[ENTER]** key.**

- 4 Press the **[ENTER]** key to print the correction pattern.**

- 5 Check the correction pattern and enter a correction value.**

- A screen for entering the correction value appears.
- **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 "30", the width of the boundary changes by about 0.1 mm.

- 6 Press the **[END/POWER]** key several times to end the setting.**

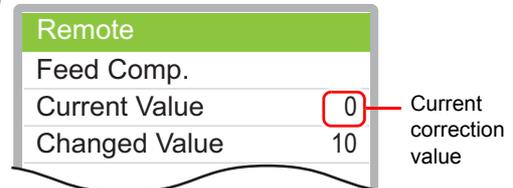


- You can select "Feed Comp." by using the [FUNC1](MENU) in the Local without pressing the [FUNC2] (ADJUST) key. (👉 P.3-6)

Correcting Media-feeding during Printing

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

- 1 Press the **[FUNC1]** (ADJUST) in the Remote.**



- 2 Press **[▲]** **[▼]** to enter a corrected feeding rate.**

- Corrected feeding rate: -255 to 255
- The value entered here is reflected in the corrected feeding rate soon.

- 3 Press the **[ENTER]** key.**

- The changed value is registered.
- When you press the [ENTER] key instead of the [END/POWER] key, the value entered here will be invalid.

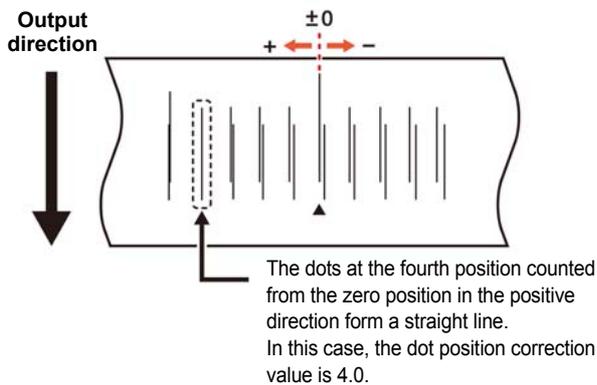
- 4 Press the **[END/POWER]** key several times to end the setting.**

Correct the ink drop position for bidirectional printing

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.

- Important!**
- When using leaf media, set a media of more than 210mm put horizontally. If a media with narrow width is set, printing will only be conducted to midway.

Example of a Printed Pattern



- 1** Set a media on the machine and set a printing origin. (☞ P.2-4)
- 2** Press the **SEL** key, and press the **FUNC1** (ADJUST) in LOCAL.
 - Adjust menu appears.
- 3** Press **▲▼** to select “DROP.POScorrect” and press the **ENTER** key.
- 4** Press the **ENTER** key.
 - Printing of the Drop position correct printed pattern will start.
 - Multiple test patterns are printed. (The printed patterns are called Pattern 1, Pattern 2 in the order of printing.)
- 5** Press **▲▼** to enter a correction value of Pattern 1 and press the **ENTER** key.
 - 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 is not between -40 and 40, adjust the height of the printing heads and then perform the operations in Step 2 and later.
- 6** In the same way as in Step 5, enter a correction value of Pattern 2 to 5 and press the **ENTER** key.

7 Press the **END/POWER** key several times to end the setting.



- You can select “DROP.POScorrect” by using the **FUNC1**(MENU) in the Local without pressing the **FUNC2** (ADJUST) key. (☞ P.3-7)

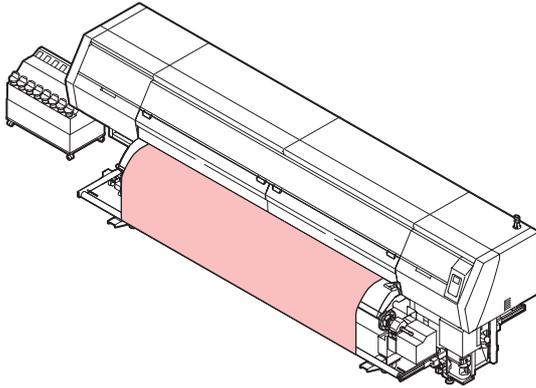
Printing Data

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.
- When the same data is printed, the color may differ if print conditions are changed, including the resolution, pass, scanning speed, and printing direction. Check the effects before printing.

1 Setting a Media (☞ P.2-4)



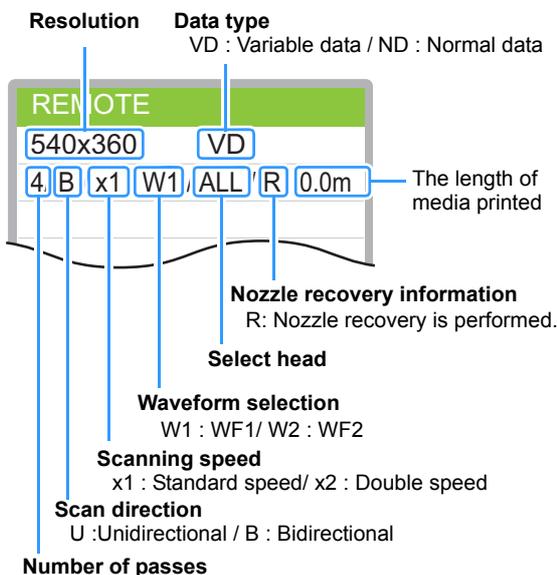
2 Checking the Heater Temperature

3 Press the **[FUNC3] (REMOTE)** key in LOCAL.

- If the heater temperature has not reached the setting value, the warning message "TEMPERATURE CONTROL" is displayed. Even if it has not reached, you can move to Remote when pressing the [ENTER] key.
- The screen changes to Remote, and data can be received from the PC.

4 Transmit data to be printed from the PC.

- For the method of data transmission, see the instruction manual for the output software.



5 Start printing.

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

Stopping a Printing Operation

Perform the following operation when stopping a printing operation halfway.

1 Press the **[FUNC3] (LOCAL)** 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.

1 Press the **[SEL] (LOCAL)** key, and press the **[FUNC3] (DATA CLEAR)** in LOCAL.

2 Press the **[ENTER]** key.

- The received data is erased then it returns to the Local.

Behavior after printing has been completed

Drying Feed

When printing has been completed, the feeding operation is performed to dry the printed surface with the drying heater.

- Perform the feeding operation until the back edge of printing passes the drying heater.
- When you press the [END/POWER] key, the operation is terminated.
- When the machine has been received next data continuously, it will operate after the last data is received.
- Depending on the position of your drying fan, set the feeding amount. (☞ P.3-20 "Setting a Drying Feed")

Screen display during drying feeding

Drying
Please Wait

Cutting a media

When you cut the media after printing of roll media has been completed, cut it with the key on the operation panel.



- 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 take-up device, take up a cut medium using the switch of the take-up device.
- Before performing cut, fix the tension bars on the front and the rear surfaces of the machine at the locking position.

1

Press the **SEL** key, and then press the **FUNC1 (MEDIA)** in LOCAL.

- Media setting menu will be displayed.

2

Press **▲▼** to select “Media Cut” and press the **ENTER** key.

3

Press **▲▼** to select “Cut Position” and press the **ENTER** key.

4

Press **▲▼** to adjust the cutting position and press the **ENTER** key.

- The media is cut.
- If there is no need to adjust the cut position, please press the [ENTER] key without pressing the [▲] [▼]. It will cut the media on the position.
- When the cutting has been completed, the current mode returns to LOCAL.



- During the origin setting with the jog keys, you can also perform media cutting by pressing the [FUNC2] (CUT).

Chapter 3

Extended Functions



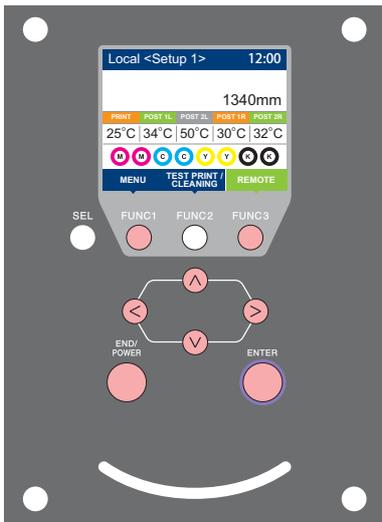
This chapter

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

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About Setup menu

On Setup menu, you can set the print conditions to match the media you usually use.



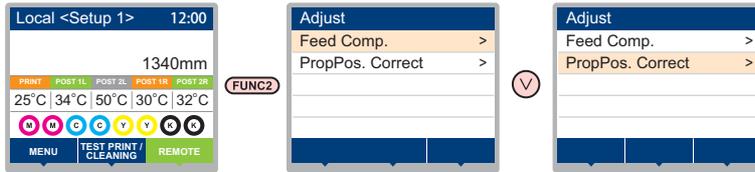
- FUNC1** : Press this to select SETTING menu, or to switch to the previous screen.
- FUNC2** : Press this to use the adjust function.
- FUNC3** : Press this to switch to the next screen.
- ▲ ▼** : Use these to select a setting item.
- ENTER** : Press this to confirm a setting, etc..

◆ Setup menus at-a-glance

Select "SETUP 1 to 4" or "Temporary", and then press the **ENTER** key.

◆ Screen transition when **[FUNC1] (ADJUST)** key is pressed

When adjustment functions (Feed Comp./ Prop Pos. Correct) are performed, the Adjust menu can be displayed easily without selecting [MENU]-[Setup] from Local. Press the [SEL] key to display "ADJUST" for [FUNC1], and then press the [FUNC1] key.



Setup menu table



- 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** : DRYING Time/ Vacuum Fan
- 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 *1	When no instruction from RIP exists *2	Outline
Feed Comp. (☞ P.3-6)		-9999 to <u>0</u> to 9999	_____	Used to print a pattern for correcting a media-feeding rate and correct it.
Drop Pos. Correct (☞ P.3-7)		-40.0 to <u>0</u> to 40.0	_____	Used to adjust the dot position in go and return printing.
Heater (☞ P.3-8)	PRINT	<u>OFF</u> / 20 to 60 °C (OFF/ 68 to 140°F)	_____	Sets the print-heater's temperature.
	POST 1L	<u>OFF</u> / 20 to 60 °C (OFF/ 68 to 140°F)		Set the temperature of the post heater (1/2) on the left side.
	POST 2L	<u>OFF</u> / 20 to 70 °C (OFF/ 68 to 158°F)		Set the temperature of the post heater (1/2) on the left side.
	POST 1R	<u>OFF</u> / 20 to 60 °C (OFF/ 68 to 140°F)		Set the temperature of the post heater (1/2) on the right side.
	POST 2R	<u>OFF</u> / 20 to 70 °C (OFF/ 68 to 158°F)		Set the temperature of the post heater (1/2) on the right side.
	EXTERNAL HEATER	ON/OFF		Sets ON/OFF of the external heater.
Logical Seek (☞ P.3-8)		<u>Host</u> / ON/OFF	_____	Sets the scan movable area during printing.
Overprint (☞ P.3-9)		<u>Host</u> / 1 to 9	1	Sets the number of layers in which ink is to be applied.
Drying Time (☞ P.3-9)	Scan	<u>Host</u> / 0.0 ~ 9.9 sec	0 sec	Sets the drying time of ink per scan.
Margin/L (☞ P.3-9)		<u>Host</u> / -10 to <u>0</u> to 85mm	_____	Sets a non-printing area along the right and left edges of the media.
Margin/R (☞ P.3-9)			_____	
Refresh (☞ P.3-10)		Host / Lv.0 to <u>Lv.3</u>	Lv.3	Sets the interval of refresh performed during printing.
Refresh Left (☞ P.3-9)		ON/ <u>OFF</u>	OFF	Depending on the type of ink to be used, if the flushing operation on the capping station can not fully refresh the head, you can also set to allow the flushing operation on the left side.
Vacuum Fan (☞ P.3-10)		Host / OFF/ Weak/ <u>Standard</u> / Strong	Standard	Sets the absorbability of the media.
Ceiling Fan (☞ P.3-10)		<u>Auto</u> / Weak/ Standard/ Strong / OFF	Standard	Set the volume of air to dry the media with the wind. (Only corresponding machines can be set)
Feed Speed (☞ P.3-10)		<u>Host</u> / 10 to 200 %	_____	Changes the media feeding speed in printing.
MAPS4 (☞ P.3-11)	Auto/ Manual		_____	Perform setting to reduce stripes between passes.
	Manual	Speed	50 to 100 %	
		Smoothing Lv.	0 to <u>25</u> to 100%	

Function name		Set value *1	When no instruction from RIP exists *2	Outline	
Auto Cleaning (☞ P.3-12)	Auto Cleaning		ON / OFF	Sets the automatic cleaning operation for the head performed before or during printing.	
	Cleaning Interval	Length	0.1 to <u>20.0</u> to 100.0 m	Performs cleaning at intervals of the set length.	
		File	1 to <u>10</u> to 1000	Performs cleaning whenever the set number of files has been processed.	
		Time	<u>10</u> to 120 min	Performs cleaning at intervals of the set time.	
	Type		<u>Soft</u> , Normal, Hard	Sets the type of cleaning to be performed.	
	Cln.BeforePrint		10 to 720 min/ <u>OFF</u>	Performs cleaning before printing start if the specified time has passed since the previous printing completion time.	
	Separation		<u>OFF</u> / RIP Separation	According to the instruction from the RIP, the cleaning is performed at the separation of the image.	
	Backward Feed		ON / OFF	Set whether to perform the backward feed after the maintenance operation. You can select when you set the [Separation] setting to the RIP separation.	
	Auto Nozzle Maint. (☞ P.3-12)	Nozzle Check		ON / OFF	Set it to ON to perform nozzle check automatically.
		Check Interval	Length	0.1 to <u>30.0</u> to 100.0 m	Performs nozzle check at intervals of the set length.
			File	1 to <u>30</u> to 1000	Performs nozzle check whenever the set number of files has been processed.
			Time	10 to <u>30</u> to 120 min	Performs nozzle check at intervals of the set time.
		Cleaning Type		<u>Soft</u> , Normal, Hard, Auto	Sets the type of cleaning to be performed when any nozzle missing error is detected. If "Auto" is selected, the machine performs an optimum cleaning according to the nozzle recovery state.
		RETRY COUNT		<u>0</u> to 3	Performs recovery operations for missing nozzles by the set number of times.
Auto Nozzle Recovery		ON / OFF	Set it to ON to perform nozzle recovery automatically.		
Judgement Condition		1 to <u>10</u> to 100 / OFF	Sets the number of detected missing nozzles in each head line and color that leads to determination of a "nozzle missing" error. When set to OFF, the machine performs no nozzle check.		
Separation		<u>OFF</u> / RIP Separation	According to the instruction from the RIP, the nozzle check is performed at the separation of the image.		
Backward Feed		ON / OFF	Set whether to perform the backward feed after the maintenance operation. You can select when you set the [Separation] setting to the RIP separation.		
Interval Wiping (☞ P.3-15)		3 to 255 min, OFF	Sets the wiping operation performed after printing is completed.		
Head Gap (☞ P.3-15)		1.5 to <u>2</u> to 7.0mm	Sets the head gap.		
Setup Reset (☞ P.3-15)		The configuration in the settings 1-4 can be reset individually.			

*1. The underlined has been set as default.

*2. 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.

Register the optimal print conditions to match the use

In this machine, you will be able to register print conditions, SETUP 1 to 4 individually to match the media in advance.

For example, after print on different types of media, return to the media always use. In such case you can set the optimum printing conditions by simply selecting the registered SETUP 1 to 4.



- Print conditions that can be pre-registered with the machine are the four types, "SETUP 1" to "SETUP 4".
- If you print with the print condition which do not often use, you will be able to set the print conditions by selecting "Temporary". If turn on the power again, settings in "Temporary" will return to the original state when it was purchased. Also if turn on the power again in "Temporary" state, it will be the state in selecting "SETUP 1".

Register the print conditions to SETUP 1 to 4

1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.

2 Press **▲▼** to select SETUP 1 to 4, and press the **ENTER** key.

- The item selected indicates ● and others show ○.
- Setup menu will be displayed.

3 Press **▲▼** to select and set each item in the setup menu list.

- Please see the reference page in the setup menu list for detailed configuration procedure.

How to use [Temporary]

[Temporary] is not only to set the print condition to be used only once, but also can be used for partial change of the registered SETUP "1 to 4", or for reflecting the print conditions set by the [Temporary] to SETUP 1 to 4.

● Register the print conditions in [Temporary]

Registration of the print conditions to [Temporary] can be done as the same method as to SETUP 1 to 4.

1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.

2 Press **▲▼** to select "Temporary", and press the **ENTER** key.

- Setup menu will be displayed.

3 Press **▲▼** to select and set each item in the setup menu list.

- Please see the reference page in the setup menu list for detailed configuration procedure.

● Copy the contents of SETUP 1 to 4 to [Temporary]

You can use it with changing the part of registration contents of Setup 1 to 4.

Select "copy" from the Setup Reset menu of Temporary, and specify the copy source (Setup 1 to 4).

1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.

2 Press **▲▼** to select "Temporary", and press the **ENTER** key.

- Setup menu will be displayed.

3 Press the **FUNC1** (<<).

4 Press **▲▼** to select "Setup Reset", and press the **ENTER** key.

- Selection screen of the copy source will be displayed.

5 Press **▲▼** to select "Copy", and press the **ENTER** key.

- Selection screen of the copy source will be displayed.

6 Press **▲▼** to SELECT the copy source (SETUP 1 to 4) and press the **ENTER** key.

- Confirmation screen of the copy will be displayed.

7 Press the **ENTER** key.

- Settings selected in step 6 is copied to Temporary.

8 Press **▲▼** to select the setting item to be changed, and press the **ENTER** key.

- Please see the reference page in the setup menu list for detailed configuration procedure.

● Reflect The Content Set In [Temporary] To Setup 1 To 4

1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.

2 Press **▲▼** to select "Temporary", and press the **ENTER** key.

- Setup menu will be displayed.

3 Press **▲▼** to select and set each item in the setup menu list.

- Please see the reference page in the setup menu list for detailed configuration procedure.

4 Display the last page of Temporary and select "SAVE SETTING", and press the **ENTER** key.

- Selection screen of the save location will be displayed.

5 Press **▲▼** to select the location selected (SETUP 1 to 4), and press the **ENTER** key.

- Save confirmation screen will be displayed.

6 Press the **ENTER** key.

- Settings of Temporary will be saved to the location selected in step 5.

7 Press the **END/POWER** key several times to end the setting.

Reset the registered contents

Reset the contents registered to SETUP 1 to 4.

1 Press the **FUNC1** (MENU) **➔** **ENTER** key in LOCAL.

2 Press **▲▼** to select SETUP 1 to 4 to be reset and press the **ENTER** key.

- Setup menu will be displayed.

3 Press the **FUNC1** (<<).

4 Press **▲▼** to select “Setup Reset”, and press the **ENTER** key.

- Confirmation screen of reset settings will be displayed.

5 Press the **END/POWER** key several times to end the setting.

Setting of Media Correction

Correct the media feed amount to match the type of media you are using.

If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.

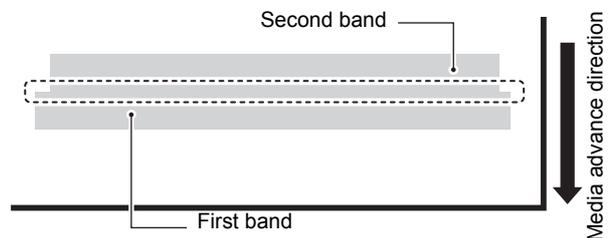
Important!

- Be sure to perform feed correction each time before printing. The media feed amount may vary, depending on the remaining amount of the roll media.
- If use by setting the media to Narrow roll holder, rewind the roll media by hand and set without slack. There may not be accurate to correct the feed amount.
- On completion of [MEDIA COMP.] during use of a roll media, the media returns to the printing origin. When a media is set on the narrow roll holder, slack occurs in the roll media on the backside of this machine. Before printing, take up the slack in the roll media by hand; a loose roll media can result in an inferior image quality.
- When printing with a take-up device, set the media first and then perform media correction.
- When printing without using the take-up device, feed the media until the media reaches the floor before performing the correction. Otherwise, the feed amount may not be adjusted normally.

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



- 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.



1 Set a media. (☞ P.2-4)

2 Press the **FUNC1** (MENU) **➔** **ENTER** key in Local.

3 Press **▲▼** to select SETUP 1 to 4, and press the **ENTER** key.

- Setup menu appears.

4 Press **▲▼** to select “Feed Comp.”, and press the **ENTER** key.

5 Press the **ENTER** key to print the correction pattern.

6 Check the correction pattern and enter a correction value.

- A screen for entering the correction value appears.
- **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 "25", the width of the boundary changes by about 0.1 mm.

7 Press the **ENTER** key.

- Print a correction pattern again and check it.
- When media correction is needed, perform the operation in Step 6 to make correction.

8 Press the **END/POWER** 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.

1 Press the **FUNC1** (ADJUST) in the Remote.

2 Press **▲▼** to enter a corrected feeding rate.

- Corrected feeding rate: -9999 to 9999
- The value entered here is reflected in the corrected feeding rate soon.

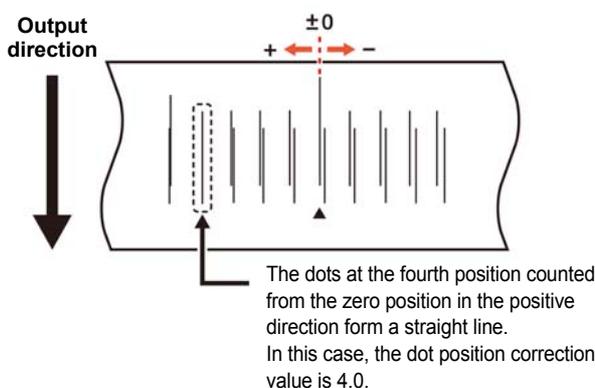
3 Press the **ENTER** key.

- key. The changed value is registered.

If the Positions of Dots Shift...

When the condition for printing (Distance of the platen and the head /media thickness/media 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



1 Set a media. (☞ P.2-4)

- In order to print a pattern, a media that is 500 mm wide at least is necessary.

2 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.

3 Press **▲▼** to select SETUP 1 to 4, and press the **ENTER** key.

- Setup menu appears.

4 Press **▲▼** to select "DropPos.Correct", and press the **ENTER** key.

5 Press the **ENTER** key.

- Printing of the Drop position correct printed pattern will start.
- Multiple test patterns are printed. (The printed patterns are called Pattern 1, Pattern 2 in the order of printing.)

6 Press **▲▼** to enter a correction value of Pattern 1, and press the **ENTER** key.

- 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 is not between -40 and 40, adjust the height of the printing heads and then perform the operations in Step 2 and later.

7 In the same way as in Step 6, enter a correction value of Pattern 2 to 5, and press the **ENTER** key.

8 Press the **END/POWER** key several times to end the setting.

Setting the Heater

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

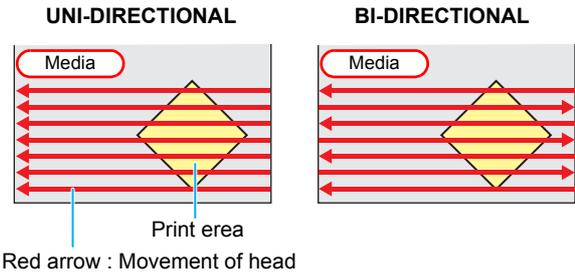
Type of HEATER	Function
Print-heater	Improves the image quality in printing.
Post-heater	Dries ink after printing. There are the left post heater (1/2) and right post heater (1/2) in accordance with the printing method on this machine.

- 1** Press the **FUNC1 (MENU)** ➔ **ENTER** key in Local.
- 2** Press **▲ ▼** to select **SETUP 1 to 4**, and press the **ENTER** key.
 - Setup menu appears.
- 3** Press **▲ ▼** to select **“Heater”**, and press the **ENTER** key.
- 4** Press **▲ ▼** to select heater, and press the **ENTER** key.
 - Heater : Print-heater, Post-heater (1L/1R/2L/2R)
- 5** Press **▲ ▼** to set the heater temperature, and press the **ENTER** key.
 - Print and Post-heater (1L/1R) temperature
OFF/ 20°C to 60°C
 - Print-heater and Post-heater (2L/2R) temperature
OFF/ 20°C to 70°C
- 6** Press **▲ ▼** to select **“EXTERNAL HEATER”** and press the **ENTER** key.
 - Heater : Print-heater, Post-heater (1L/1R/2L/2R)
- 7** Press **▲ ▼** to select **ON/OFF**, and press the **ENTER** key.
- 8** Press the **END/POWER** key several times to end the setting.

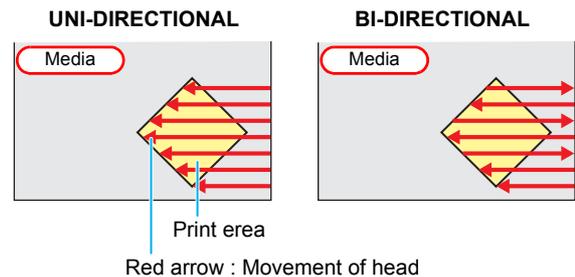
Setting of Logical Seek

The head's operation varies depending on the Logical Seek settings, as shown in the figure below.

Movement of heads when LOGICAL seek is OFF



Movement of heads when LOGICAL seek is ON



- 1** Press the **FUNC1 (MENU)** ➔ **ENTER** key in Local.
- 2** Press **▲ ▼** to select **SETUP 1 to 4**, and press the **ENTER** key.
 - Setup menu appears.
- 3** Press **▲ ▼** to select **“Logical Seek”**, and press the **ENTER** key.
- 4** Press **▲ ▼** to select a set value, and press the **ENTER** key.
 - Set value : Host / ON / OFF
- 5** Press the **END/POWER** key several times to end the setting.

Setting of Overprint

Sets the number of layers in which ink is to be applied.

- 1 Press the **FUNC1** (MENU) → **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press **▲** **▼** to select “Overprint”, and press the **ENTER** key.
- 4 Press **▲** **▼** to set number of Overprint, and press the **ENTER** key.
 - Setting value : Host/ 0 to 9 times
- 5 Press the **END/POWER** key several times to end the setting.

Setting of Drying Time

In the drying time setting, the 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.)



- When you give priority to the setting at the RasterLink side, make the setting value “Host”.
- “SCAN” set in this machine is displayed as “Pause Time per Scan” in the RasterLink.
- You cannot specify the print end at the RasterLink side. When you set this machine to “Host”, printing will be performed in “PRINT END= 0 sec.” status.

- 1 Press the **FUNC1** (MENU) → **ENTER** key in LOCAL.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu will be displayed.
- 3 Press the **FUNC3** (>>).
- 4 Press **▲** **▼** to select “Drying Time”, and press the **ENTER** key.
- 5 Press the **ENTER** key.
- 6 Press **▲** **▼** to set drying time, and press the **ENTER** key.
 - Set the drying time for scanning the media. To enable the drying time specified in your RIP, select “Host”.
 - Setting value : Host or 0.0 sec. to 9.9 sec.
- 7 Press the **END/POWER** key several times to end the setting.

Setting of Left and Right Margins

Set a non-printing area along the left and right edges of the media.

The offset value against the standard margin 15mm is set hereupon.

- 1 Press the **FUNC1** (MENU) → **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>).
- 4 Press **▲** **▼** to select “Margin/L” or “Margin/R”, and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Host/ -10 to 85 mm
- 6 Press the **END/POWER** key several times to end the setting.



- Pay attention to the settings of the right and left margins when printing with the media press. If any of the margins is set to a negative value, printing may start from a position on the media press.

Setting of Refresh

Sets the interval of refresh performed during printing.

- 1 Press the **FUNC1** (MENU) → **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>).
- 4 Press **▲** **▼** to select “Refresh” and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Host/Lv.0 to Lv.3.
- 6 Press the **END/POWER** key several times to end the setting.

Setting of Refresh Left

When you want to make a flushing operation at the left side of the machine, set to "ON".

- 1 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲** **▼** to select "Refresh Left" and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set Value : ON/ OFF
- 6 Press the **END/POWER** key several times to end the setting.

Setting of Vacuum Fan

Sets the absorbability of the media.

By setting the absorption power to match the media, you can prevent print errors due to media rise-up.

- 1 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲** **▼** to select "Vacuum Fan" and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Host/Weak /Standard/ Strong/ OFF
- 6 Press the **END/POWER** key several times to end the setting.

Setting of Feed Speed

Changes the media feeding speed in printing.

- 1 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲** **▼** to select "Feed Speed" and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Host/ 10 to 200%
- 6 Press the **END/POWER** key several times to end the setting.

Important!

- If you change the settings of the print speed, the color might change. After changing the feed speed, please check there is no change in the color in advance.
- After changing the settings, please perform the media correction (☞ P.3-6).

Setting of Ceiling Fan

(Only corresponding machines can be set)

Set the volume of air to dry the media with the wind.

By setting the air volume according to the amount of ink used, it is possible to prevent cockling etc. by suppressing media elongation.

- 1 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲** **▼** to select "Ceiling Fan" and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Auto/ Weak/ Standard/ Strong/ OFF
- 6 Press the **END/POWER** key several times to end the setting.

Setting of MAPS4

If performing media correction does not resolve feeding stripes, use the MAPS (Mimaki Advanced PassSystem) function to disperse the pass boundary to make the feeding stripes less visible.



- Changing the MAPS4 settings may change the color tone. Check the effects before use.
- MAPS may not be effective depending on image to be printed. Use it after checking effect in advance.

● Conditions which the effect of the MAPS function is not obtained

The MAPS function may be disabled under the following conditions. In addition, the MAPS is not effective, depending on the image to be printed.

4-colors ink set

Resolution	Pass	Scan speed	MAPS MODE
360 x 360HQ	2 pass	Normal speed	Manual (Speed: 100%)
540 x 360	2 pass	High speed	
540 x 720	4 pass	High speed	
720 x 720	4 pass	High speed	
720 x 1080	6 pass	High speed	

6-colors ink set

Resolution	Pass	Scan speed	MAPS MODE
540 x 360	4 pass	High speed	Manual (Speed: 100%)
540 x 540	6 pass	High speed	
720 x 720	8 pass	High speed	
720 x 1080	12 pass	High speed	

Setting MAPS4 Function

- 1 Press the **FUNC1** (MENU) ➔ **ENTER** key in Local.
- 2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲** **▼** to select "MAPS4" and press the **ENTER** key.
- 5 Press **▲** **▼** to select a set value, and press the **ENTER** key.
 - Set value : Auto/ Manual
 - If you have selected "Manual", proceed to step 5. Otherwise, proceed to step 10.
- 6 Press **▲** **▼** to select the "Speed", and press the **ENTER** key.
- 7 Press **▲** **▼** to select the speed, and press the **ENTER** key.
 - Set value : 50 to 100%
- 8 Press **▲** **▼** to select the "Smoothing Lv.", and press the **ENTER** key.

- 9 Press **▲** **▼** to change the smoothing level, and press the **ENTER** key.

- Set Value : 0 to 100% (set in units of 5%)
- The MAPS4 effect become strong as the set value increase, and become weak as the set value decrease.

- 10 Press the **END/POWER** key several times to end the setting.

Setting of Auto Nozzle Maint.

You can set the machine so that it automatically performs nozzle maintenance operations before and during printing. For the maintenance operation, you can set the head cleaning and the nozzle check using NCU. For the maintenance operation, you can set the head cleaning and the nozzle check using NCU.



- Set whether or not feed during the auto nozzle maintenance.
- When it is set ON, the feeding starts simultaneously with the auto nozzle maintenance operation and the image, which was being printed until just before the maintenance, is passed through the color fixation device to development colors.
- When it is OFF, the feeding during auto nozzle maintenance operation will not be performed. In this case, the image printed just before maintenance may become uneven coloring.
- Feed it when the color fixation device is ON.

Setting Auto Cleaning

You can set the machine so that it counts the number of printed files or the length or time after printing has been completed, and performs cleaning automatically if required.

You can select the auto cleaning setting from three types below:

File : Set the cleaning intervals by the number of printed files.

Length : Set the cleaning intervals by the printed length.

Time : Set the cleaning intervals by the printed time.

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

1 Press **FUNC1** (MENU) ➔ **ENTER** in LOCAL.

2 Press **▲▼** to select **SETUP 1** to **4**, and press **ENTER**.

- Setup menu will be displayed.

3 Press **FUNC3** (>>) twice.

4 Press **▲▼** to select "Auto Nozzle Maint.", and press **ENTER**.

5 Press **▲▼** to select "Auto Cleaning", and press **ENTER**.

6 Select "ON", and press **ENTER**.

7 Press **ENTER**, and press **▲▼** to select the type of auto cleaning.

- There are "PAGE", "LENGTH" and "TIME" for auto cleaning.

- **File** : When the set number of files has been completed, the machine performs head cleaning automatically.
- **Length** : When the set length has passed, the machine performs head cleaning automatically.
- **Time** : When the set time has passed, the machine performs head cleaning automatically.
- If you do not set auto cleaning, first select "OFF" and then proceed to the Step 9.

8 Press **ENTER**, and press **▲▼** to select the cleaning interval.

- Depending on the auto cleaning type selected in the Step 5, the setting value differs.
- **For File** : 1 to 1000 (in 1 file increment)
- **For Length** : 0.1 to 100.0m (in 0.1m increment)
- **For Time** : 10 to 120min (in 10min increment)

9 Press **ENTER**, and press **▲▼** to select the cleaning type.

- **Set Value** : Normal/ Soft/Hard

10 Press **ENTER**, and press **▲▼** to select "Cln.BeforePrint".

- The machine automatically performs cleaning at the time of printing start after the preset time has passed since the last printing. Select OFF if this function is not necessary.
- The time counter is reset when cleaning is performed manually or another maintenance operation is performed.

11 Press **ENTER**, and press **▲▼** to select "Separation".

- When "RIP Separation" is selected, cleaning is performed at the break between the images specified by the RIP.
- If you select the "RIP separation", you can select the backward feed. When turn on the backward feed, the printing will restart from the position before nozzle check.

12 Press **ENTER**.

13 Press **END/POWER** several times to end the setting.



- 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.

Nozzle Check Flow

Nozzle check is conducted according to the following flow.



- Turn the “Nozzle Check” setting ON to be enabled.
- Only perform RETRY COUNT and Printing Check settings when the settings are enabled.

1 nozzle check → Judgment

Detects missing nozzles.

2 Recovery operation → nozzle check → Judgment

If more missing nozzles than “Judgement Condition ” are detected after the nozzle check, cleaning is performed and nozzle check is conducted again.

3 Retry → Judgment

If more missing nozzles than “Judgement Condition ” are detected after the recovery operation, the recovery operation is conducted again.

4 Printing Check → Judgment

Nozzle recovery is automatically conducted following nozzle check and recovery operation.

- Turn the “Printing Check” setting ON to be enabled.

5 Nozzle Missing judgment

If more missing nozzles than A are eventually detected, continued printing will be deemed impossible and printing will stop.

3

Printing Operations at “Nozzle Missing” Judgment and Error Occurrence

- **When judged to be “Nozzle Missing”** →Printing is stopped.
- **When error occurs during nozzle check**→Printing is stopped and “Nozzle Check” is automatically turned OFF. After recovering from the error, set “Nozzle Check” once again.

Setting the Nozzle Check

Select ON when you want to conduct nozzle check during online printing.

- 1 Press **FUNC1 (MENU)** → **ENTER** in LOCAL.
 - Nozzle Check menu will be displayed.
- 2 Press **▲▼** to select **SETUP 1 to 4**, and press the **ENTER** key.
 - Setup menu appears.
- 3 Press the **FUNC3 (>>)** twice.
- 4 Press **▲▼** to select “Auto Nozzle Maint.” and press the **ENTER** key.
- 5 Press **▲▼** to select “Nozzle Check” and press the **ENTER** key.
- 6 Select “ON”, and press **ENTER** .
- 7 Press **▲▼** to select setting item, and press the **ENTER** key.
 - select the nozzle check interval from “LENGTH” or “FILE”.
 - **Length** : nozzle check is conducted when the printed length reaches the set length.
 - **File** : nozzle check is conducted when the number of printed files reaches the set number.
 - **Time** : When the print time reaches the time set, perform the nozzle check.
- 8 Press **▲▼** to select setting value, and press the **ENTER** key.
 - The set value will differ according to the setting selected in Step 5.
 - **Length** : 0.1 to 100.0m (in 0.1m increment)
 - **File** : 1 to 1000 (in 1 file increment)
 - **Time** : 10 to 120min (in 10min increment)
- 9 Press the **END/POWER** key.
- 10 Press **▲▼** to select cleaning type, and press the **ENTER** key.
 - **Setting value** : Soft/ Normal/ Hard / Auto
 - If "Auto" is selected, the machine automatically performs an optimum cleaning according to the nozzle recovery state.
- 11 Press **▲▼** to select “Retry Count”, and press the **ENTER** key.
- 12 Press **▲▼** to select retry count, and press the **ENTER** key.
 - **Setting value** : 0 to 3
- 13 Press **▲▼** to select “Auto Nozzle Recovery”, and press the **ENTER** key.
- 14 Press **▲▼** to select “Judgement Condition”, press **▲▼** to select head line and color, and press the **ENTER** key.
- 15 Press **▲▼** to set the number of nozzles for judgment, and press the **ENTER** key.
 - **Setting value** : 0 to 100 / OFF
 - When set to "OFF", the nozzle check is not performed.
- 16 Press **▲▼** to select “Separation”, and press the **ENTER** key.
- 17 Press **▲▼** to select setting value, and press the **ENTER** key.
 - When “RIP Separation” is selected, cleaning is performed at the break between the images specified by the RIP.
 - If you select the “RIP separation”, you can select the backward feed. When turn on the backward feed, the printing will restart from the position before nozzle check.
- 18 Press **END/POWER** key to end the setting.

Setting Interval wiping

When a set time has elapsed, the machine automatically wipes the nozzle surfaces of the head to remove any ink droplets attached to the surfaces.

In case that deflection, nozzle missing, or symptom which ink droplets fall down occurred, set the interval between each operation shorter.

1 Press the **FUNC1** (MENU) → **ENTER** key in Local.

2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.

- Setup menu appears.

3 Press the **FUNC3** (>>) twice.

4 Press **▲** **▼** to select “Interval Wiping”, and press the **ENTER** key.

5 Press **▲** **▼** to set intervals.

- Set Value : 3 to 255 min, OFF
- When [OFF] is set, periodical wiping is not executed.

6 Press the **ENTER** key.

7 Press the **END/POWER** key several times to end the setting.

Important!

- The color tone may change, depending on the timing when periodic wiping is performed. Check in advance that the color tone is not affected.

Setting Head Gap

Set the head gap (height from the media to the nozzle plane of the heads).

1 Press the **FUNC1** (MENU) → **ENTER** key in Local.

2 Press **▲** **▼** to select SETUP 1 to 4, and press the **ENTER** key.

- Setup menu appears.

3 Press the **FUNC1** (<<).

4 Press **▲** **▼** to select “Head Gap” and press the **ENTER** key.

5 Press **▲** **▼** to set a value of the head gap and press the **ENTER** key.

- Set value : 1.5 to 7.0mm

6 Press the **ENTER** key.

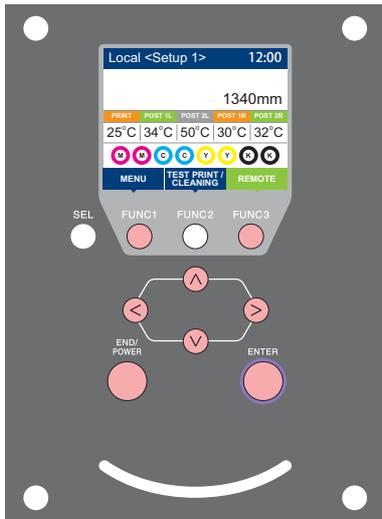
7 Press the **END/POWER** key several times to end the setting.

Important!

- The color tone may change, depending on the timing when periodic wiping is performed. Check in advance that the color tone is not affected.

About Machine Setup menu

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



(FUNC1) : Press this to select Machine Setup menu, or to switch to the previous screen.

(FUNC3) : Press this to switch to the next screen.

(▲) (▼) : Use these to select a setting item.

(ENTER) : Press this to confirm a setting, etc..

◆ Machine Setup menus at-a-glance

The following table summarizes the settings shown in the Machine Setup menu screenshots:

Screen	Setting	Value
MENU	Machine Setup	Selected
Machine Setup 1/4	Auto Power-off	30min
Machine Setup 1/4	Feeding Unit	ON
Machine Setup 1/4	Take-up Unit	ON
Machine Setup 1/4	Media Remain	OFF
Machine Setup 1/4	Time Set	>
Machine Setup 2/4	Unit / Temp	°C
Machine Setup 2/4	Unit / Length	mm
Machine Setup 2/4	Key Buzzer	ON
Machine Setup 2/4	Head Select	ALL
Machine Setup 2/4	Media Detect/Thick	AUTO
Machine Setup 3/4	Drying Feed	OFF
Machine Setup 3/4	View Feed	ON
Machine Setup 3/4	Space Btwn PP.	OFF
Machine Setup 3/4	Space Feed Mode	INTER
Machine Setup 3/4	Network & Mail	>
Machine Setup 4/4	Language	>
Machine Setup 4/4	Reset	>

Machine Setup menu table

Function name		Set value		Default	Meaning	
AUTO Power-off (P.3-18)		NONE/ 10 ~ 600min		30min	When no operation has been performed for the set time, the power supply is automatically turned "OFF".	
Feeding Unit (P.3-18)		ON/ OFF		ON	You can set the operation method when the ON/ OFF button on the take-up unit is pressed.	
Take-up Unit (P.3-19)		ON/ OFF		ON	You can set the operation method when the ON/ OFF button for the take-up device is pressed.	
Media Remain (P.3-19)		ON/ OFF		OFF	You can control the remaining amount of media.	
Time Set (P.3-19)		+4h ~ -20h			Time difference is corrected.	
Unit/ Temp. (P.3-19)		°C (Centigrade)/°F (Fahrenheit)		°C	A unit for displaying temperature is set.	
Unit/ Length (P.3-19)		mm / inch		mm	A unit for displaying length and area is set.	
Key Buzzer (P.3-20)		OFF / ON		ON	A buzzer sound when keys are pressed is set.	
Head Select (P.3-20)		All/ Head Line 1/ Head Line 2/ Head Line 3/ Head Line 1&2/ Head Line 2&3		All	If a trouble such as nozzle clogging cannot be solved, you can print only with the head without the trouble.	
Media Detect/ Thick (P.3-20)		Auto/ Manual		Auto	Set the media detection method.	
CONFIRM. FEED (P.3-21)		ON / OFF		ON	Set whether media feeding is performed for checking the result of the test printing etc. or not.	
Drying Feed (P.3-20)		OFF/100 to 1000mm		OFF	To dry evenly up to the back edge of the printing data, set the length to be fed after printing has been completed.	
	BACKWORD FEED	ON/OFF		ON		
CONFIRM. FEED (P.3-21)		ON/OFF		ON	Set whether media feeding is performed for checking the result of the test printing etc. or not.	
	Backward Feed	ON/OFF		ON		
Space Btwn PP. (P.3-21)		None/10 to 500mm		None	Sets the amount of blank space between printed lines.	
Space Feed Mode (P.3-21)		INTERMITTENT/ CONTINUOUS		INTERMIT TENT	Change the feed mode of the margin included in the image data.	
Network & Mail	Network (P.3-22)	Set the network.				
		Check IP Address	The IP address currently used by this machine is displayed.			
		Check MAC Address	The IP address currently used by this machine is displayed.			
		DHCP	ON / OFF		When it is ON, the IP address given by the DHCP server is used.	
		AutoIP	ON / OFF		When it is ON, the IP address is determined by the AutoIP protocol. However, DHCP is ON, DHCP has priority.	
		IP Address *1	Set the IP address used by this machine.			
		Def.Gateway *1	Set the default gateway used by this machine.			
		DNS Address *1	Set the DNS server address used by this machine.			
		SubNet Mask *1	Set the digit number of the subnet mask used by this machine.			
	Event Mail (P.3-22)	Mail Delivery	ON / OFF	OFF	Set whether you send/ do not send the e-mail when the set event occurs.	
		Select Event	Print Start	ON / OFF	OFF	Set whether you send/ do not send the e-mail at the start of printing.
			Print End	ON / OFF	OFF	Set whether you send/ do not send the e-mail at the end of printing.
			Error Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when an error occurs.
			Warning Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when a warning occurs.
			Other Event	ON / OFF	OFF	Set whether you send/ do not send the e-mail when an event other than the above occurs.
		Mail Address	Set the e-mail address to which you send the event mail.	Alphanumeric characters and symbols (within 96 characters)		
Message Subject	Set the characters to write in the subject of the event mail.	Alphanumeric characters and symbols (within 8 characters)				

Function name		Set value	Default	Meaning	
Network & Mail	Event Mail (P.3-22)	Server Setup	SMTP Address	Set the SMTP server.	
			SMTP PORT No.	Set the SMTP port number.	
			SENDER ADDRESS	Set the e-mail address to be used as the sender mail address.	
			Auth.	POP before SMTP	Set the SMTP server authentication method (SMTP authentication).
				SMTP Auth	
				OFF	
			USER NAME *2	Set the user name used for the authentication.	
			PASS WORD *2	Set the password used for the authentication.	
	POP3 ADDRESS *3	Set the POP server.			
	APOP *3	Set ON/ OFF of APOP.			
	Transmit Test	Send the test e-mail.			
Setting Lock (P.3-26)	Lock (Password is not set)	0000 to 9999	0000	You can freely specify a four digit password so that no one other than an administrator can perform network and mail settings.	
	Unlock (Password is set)				
Language (P.3-26)		日本語 English Deutsch Français Español Italiano Português	English	Displayed language is changed.	
Reset (P.3-26)				All setting values are returned to the status default.	

*1. Settable when both of DHCP and AutoIP are [OFF]

*2. Settable only when Auth. is not OFF

*3. Settable only when Auth. is POP before SMTP

Setting a AUTO Power-off

When no operation has been performed for the set time, the power supply is automatically turned "OFF".

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press **▲▼** to select "Aut Power-off" and press the **ENTER** key.
- 4 Press **▲▼** to select a set value, and press the **ENTER** key.
 - Set Value : none, 10 to 600min
- 5 Press the **END/POWER** key several times to end the setting.

Important!

- If the machine received data from the PC in the auto-power-off status, the power supply is turned ON, however, printing operation is not started automatically.

Setting Feeding unit

For setting whether the Feeding unit is used or not used.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press **▲▼** to select "Feeding Unit" and press the **ENTER** key.
- 4 Press **▲▼** to select ON/ OFF, and press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.

Setting Take-up unit

For setting whether the take-up unit is used or not used.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press **▲▼** to select "Take-up Unit" and press the **ENTER** key.
- 4 Press **▲▼** to select ON/ OFF, and press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.

Setting the Display of Media Remain

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

When the media remaining amount display is turned to "ON"	the remaining amount of a media is displayed in Remote. (However, when a leaf media is used, the length of the media to be 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.

Important!



- The displayed amount of a media is a rough indication. It may be different from the actual remaining amount.
- 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.2-11)
- The setting configured here does not become effective unless media detection is performed after the setting has been complete.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press **▲▼** to select "Media Remain" and press the **ENTER** key.
- 4 Press **▲▼** to select ON/ OFF, and press the **ENTER** key.
- 5 Press the **END/POWER** key several times to end the setting.

Setting Time

You can set time of your country (time difference).

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press **▲▼** to select "Time Set" and press the **ENTER** key.
 - The time that is currently set is displayed.
- 4 Press the **FUNC2** (✓) to shift to time input mode.
- 5 Press **▲▼◀▶** to enter time, and press the **ENTER** key.
 - Time/ Minute/ Second selecting: by the [**◀**][**▶**] keys.
 - Time/ Minute/ Second inputting: by the [**▲**][**▼**] keys.
- 6 Press the **END/POWER** key several times to end the setting.



- -20 hours to +4 hours can be set.

Setting Unit (Temperature/ Length)

Units used by this machine are set.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) .
- 4 Press **▲▼** to select "Unit/Temp" or "Unit/Length" and press the **ENTER** key.
- 5 Press **▲▼** to select a set value, and press the **ENTER** key.
 - Set value of tempature : °C / °F
 - Set value of length : mm / inch
- 6 Press the **END/POWER** key several times to end the setting.

Setting a Key Buzzer

You can turn off the buzzer sound when pressing the key.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) .
- 4 Press **▲▼** to select "Key Buzzer" and press the **ENTER** key.
- 5 Press **▲▼** to select ON/ OFF, and press the **ENTER** key.
- 6 Press the **END/POWER** key several times to end the setting.



- The buzzer sound is not disabled for errors, warnings and/or operation completion even if this setting is set to "OFF".

Selecting the head line to use

If troubles such as the nozzle clogging is not solved, you can print with another head which has no error.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) .
- 4 Press **▲▼** to select "Select Head" and press the **ENTER** key.
- 5 Press **▲▼** to select a head to use and press the **ENTER** key.
 - Set value : All/ Head Line 1/ Head Line 2/ Head Line 3/ Head Line 1 & 2/ Head Line 2 & 3
- 6 Press the **END/POWER** key several times to end the setting.

Setting the Media detect/ thickness

When you enter any media thickness at setting the media or when the media thickness sensor has an error, set this to "MANUAL".

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) .
- 4 Press **▲▼** to select "Media Detect/ Thick" and press the **ENTER** key.
- 5 Press **▲▼** to select "Auto" or "Manual" and press the **ENTER** key.
- 6 Press the **END/POWER** key several times to end the setting.

Setting a Drying Feed

To dry evenly up to the back edge of the printing data, set the length to be fed after printing has been completed. Depending to your external heater position, set it so that the data end may be fed until it passes the external heater.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select "Drying Feed" and press the **ENTER** key.
- 5 Press **▲▼** to select the feeding length and press the **ENTER** key.
 - Set value : OFF / 100 to 1000mm
 - When you select OFF, proceed to the Step 7.
- 6 Press **▲▼** to select whether you perform backward feed after dry feed or not and press the **ENTER** key.
 - Set value : ON/OFF
- 7 Press the **END/POWER** key several times to end the setting.

Setting the Confirm. Feed

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

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select "Confirm. Feed" and press the **ENTER** key.
- 5 Press **▲▼** to select ON/ OFF, and press the **ENTER** key.
 - When you select OFF, proceed to the Step 7.
- 6 Press **▲▼** to select whether you perform backward feed after confirm. feed or not and press the **ENTER** key.
 - Set value : ON/OFF
- 7 Press the **END/POWER** key several times to end the setting.

Setting the amount of blank space between printed lines

Sets the amount of blank space between printed lines.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select "Spase Btwn PP." and press the **ENTER** key.
- 5 Press **▲▼** to set the amount of blank space and press the **ENTER** key.
 - Set value : None / 10 to 500mm
- 6 Press the **END/POWER** key several times to end the setting.

Important!

- Back-feed operation is performed when printing ends if the amount of blank space is set in the decreasing direction.
Be careful of the following in such cases.
- If media is set in the roll holder without using the feeding device on the back of the printer, the media tension of the next printing will change due to back-feed, possibly causing the feed rate of the media of only the leading edge of the printed image to change. In such cases, manually rewind the media.
- This function is disabled if back-feed after drying feed is set to OFF in the machine settings "DRYING FEED" (P.3-20).
- If the printed data already has a blank space, using this function will result in "Blank space of the data + Amount of blank space set by using this function" being output as a blank space.

Setting the feed mode of the space of no data to be printed

Change the feed mode of the margin included in the image data (the space of no data to be printed). If print data with much margin, set to "Continuous", then the print time can be shorten.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select "Space Feed Mode" and press the **ENTER** key.
- 5 Press **▲▼** to set the feed mode and press the **ENTER** key.
 - Intermittent : Perform intermittent feed operation of the path division unit
 - Continuous : Feed the no data part at a time
- 6 Press the **END/POWER** key several times to end the setting.

Set the network

You can also perform network setting with "Network Configurator", the tool to perform network setting of Mimaki's product. To download the Network Configurator, check "Driver / Utility" on the download page at Mimaki Engineering (<http://mimaki.com/download/>).

1 Press the **FUNC1** (MENU) in Local.

2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.

3 Press the **FUNC3** (>>) twice.

4 Press **▲▼** to select "Network & Mail" and press the **ENTER** key.

5 Press **▲▼** to select "Network" and press the **ENTER** key.

6 Press **▲▼** to select "Check IP Address" and press the **ENTER** key.

- The IP address currently used by this machine is displayed.



- After connecting with the network, it takes time until the IP address is determined. If the IP address has not been determined, "0.0.0.0" is displayed.

7 Press **▲▼** to select "Check MAC Address" and press the **ENTER** key.

- The MAC address currently used by this machine is displayed.

8 Press **▲▼** to select "DHCP" and press the **ENTER** key.

- Press **▲▼** to set ON/ OFF.
- When it is ON, the IP address given by the DHCP server is used.

9 Press **▲▼** to select "AutoIP" and press the **ENTER** key.

- Press **▲▼** to set ON/ OFF.
- When it is ON, the IP address is determined by the AutoIP protocol. However, DHCP is ON, DHCP has priority.

10 Press **▲▼** to select the set values and press the **ENTER** key.

- Both of DHCP and AutoIP is OFF, you can set IP Address/ Default Gateway/ DNS Address/ Sub Net Mask. For other than above, proceed to the Step 13.

11 Press **▲▼◀▶** to select the set values.

12 Press **ENTER** to confirm the value.

13 Press the **END/POWER** key several times to end the setting.



- To reflect network setting, once turn off the power supply and then turn it on again.

Setting event mail function

Set the function to send e-mails to the set e-mail address when events such as cutting start/ end and stop due to an error.

You can also perform event mail function setting with "Network Configurator", the tool to perform network setting of Mimaki's product. To download the Network Configurator, check "Driver / Utility" on the download page at Mimaki Engineering (<http://mimaki.com/download/>).

Disclaimer

- The customer is responsible for the communication fee for Internet communication such as e-mail notification.
- The notification by the event mail function may not be delivered due to Internet environment, failure of the device/ the power supply, etc. Mimaki has absolutely no responsibility for any damages or loss resulting from non-delivery or delays.

Important!

- You can use event mail function by connecting LAN to this machine. Please prepare for LAN cable connection beforehand.
- Not compatible with SSL communication.

Enable the event mail function

1 Press the **FUNC1** (MENU) in Local.

2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.

3 Press the **FUNC3** (>>) twice.

4 Press **▲▼** to select "Network & Mail" and press the **ENTER** key.

5 Press **▲▼** to select "Event Mail" and press the **ENTER** key.

6 Press **▲▼** to select "Mail Delivery" and press the **ENTER** key.

7 Press **▲▼** to select "ON" and press the **ENTER** key.

8 Press the **END/POWER** key several times to end the setting.

Set the event to send an event mail

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5 Press **▲▼** to select “Event Mail” and press the **ENTER** key.
- 6 Press **▲▼** to select “Select Event” and press the **ENTER** key.
- 7 Press **▲▼** to select the event, and press the **FUNC2** (✓).
 - After selecting the event, press the [FUNC2] key and put a check in the check box. An email will be sent when the event whose box has been checked occurs.
 - To select multiple events, use [▲][▼] to put the cursor over the events you want, and put a check in their boxes by pressing [FUNC2].

Event name	Outline
Print Start	Sets sending/not sending of an email when printing starts.
Print End	Sets sending/not sending of an email when printing ends.
Error Event	Sets sending/not sending of an email when printing is stopped due to occurrence of an error.
Warning Event	Sets sending/not sending of an email when a warning occurs during printing.
Other Event	Sets sending/not sending of an email when an event other than the above occurs.

- 8 Press the **ENTER** key.
- 9 Press the **END/POWER** key several times to end the setting.

Set the e-mail address

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.

- 4 Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5 Press **▲▼** to select “Event Mail” and press the **ENTER** key.
- 6 Press **▲▼** to select “Mail Address” and press the **ENTER** key.
- 7 Press **▲▼◀▶** to set mail address and press the **ENTER** key.
 - Set the e-mail address to which you send the event mail.
 - Set it with alphanumeric characters and symbols within 96 characters.
- 8 Press the **END/POWER** key several times to end the setting.

Set the subject

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5 Press **▲▼** to select “Event Mail”, and press the **ENTER** key.
- 6 Press **▲▼** to select “Message Subject” and press the **ENTER** key.
- 7 Press **▲▼◀▶** to set subject, and press the **ENTER** key.
 - Set the characters to write in the subject of the event mail.
 - Set it with alphanumeric characters and symbols within 8 characters.
- 8 Press the **END/POWER** key several times to end the setting.

Set the server

- 1** Press the **FUNC1** (MENU) in Local.
- 2** Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3** Press the **FUNC3** (>>) twice.
- 4** Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5** Press **▲▼** to select “Event Mail”, and press the **ENTER** key.
- 6** Press **▲▼** to select “Server Setup” and press the **ENTER** key.
- 7** Press **▲▼** to select “SMTP Address” and press the **ENTER** key.
- 8** Press **▲▼◀▶** to set SMTP Address and press the **ENTER** key.
 - Press the jog key **▲▼◀▶** to set SMTP address.
 - Input the SMTP address name.
- 9** Press **▲▼** to select “SMTP Port No.”, and press the **ENTER** key.
- 10** Press **▲▼** to set SMTP Port No. and press the **ENTER** key.
 - Set the SMTP port number.
- 11** Press **▲▼** to select “Sender Mail Address” and press the **ENTER** key.
- 12** Press **▲▼◀▶** to set Sender Mail Address and press the **ENTER** key.
 - Press **▲▼◀▶** and set the e-mail address to be used as the sender mail address.
 - Set it with alphanumeric characters and symbols within 64 characters.

 • Depending on your server, if you do not set the e-mail address not supporting the account, sending/ receiving e-mails may be unavailable.
- 13** Press **▲▼** to select “Authentication” and press the **ENTER** key.

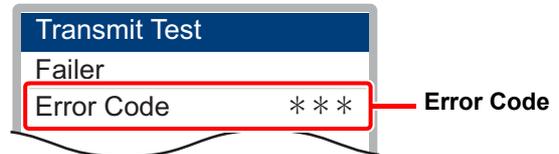
- 14** Press **▲▼** to set authentication method, and press the **ENTER** key.
 - Set the authentication method of the SMTP server.
 - When you select [POP before SMTP], proceed to the Step 15.
 - If you select [SMTP Authentication], after the operation of the steps 15-18, go to step 23.
 - When you select [OFF], proceed to the Step 23.
- 15** Press **▲▼** to select “User Name” and press the **ENTER** key.
- 16** Press **▲▼◀▶** to set User Name and press the **ENTER** key.
 - Press **▲▼◀▶** to set the user name to use for the authentication.
 - Set it with alphanumeric characters and symbols within 30 characters.
- 17** Press **▲▼** to select “Password” and press the **ENTER** key.
- 18** Press **▲▼◀▶** to set Password and press the **ENTER** key.
 - Press **▲▼◀▶** to set the password to use for the authentication.
 - Set it with alphanumeric characters and symbols within 15 characters.

 • On the password setting screen, you can only check the value that you are currently inputting.
- 19** Press **▲▼** to select “POP3 Address” and press the **ENTER** key.
- 20** Press **▲▼◀▶** to set POP3 Address and press the **ENTER** key.
 - Press **▲▼◀▶** to set POP server.
 - Input the POP server name.
- 21** Press **▲▼** to select “APOP” and press the **ENTER** key.
- 22** Press **▲▼** to set ON/ OFF and press the **ENTER** key.
- 23** Press the **END/POWER** key several times to end the setting.

Send a test e-mail

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Machine Setup" and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select "Network & Mail" and press the **ENTER** key.
- 5 Press **▲▼** to select "Event Mail" and press the **ENTER** key.

- 6 Press the **FUNC3** (>>) **→** **ENTER** key.
 - "Transmit Test" will be selected.
- 7 Press the **ENTER** key.
 - The sent result is displayed.
 - If sending test e-mail has failed, an error code is displayed.
 - Refer to the next page to solve the problem.



- 8 Press the **END/POWER** key several times to end the setting.

Important!

- The sent result of the test e-mail is the result of e-mail sending process performed by this machine to the e-mail server. It does not indicate that the e-mail was received at the address.
- If the spam e-mail filter etc. has been set in the terminal in which e-mails are received, even if "Sending has been completed" is displayed, the e-mail cannot be received in some cases.
- If sending test e-mail has failed, the error code below is displayed.
- If the error cannot be solved, try again after a while.
- For the server setting etc., contact with the network administrator or the provider.

Error Code	The expected casus	Remedy
10	Network connection error	<ul style="list-style-type: none"> • Check that the machine is connected with the network. • Check that the machine IP address is correct. • Check that the machine is in the environment where DNS is available.
20	No valid e-mail address.	<ul style="list-style-type: none"> • Enter the correct e-mail address.
11003 11004	The POP server cannot be found. Or cannot access DNS server.	<ul style="list-style-type: none"> • Check the POP server address. • Check that the machine is in the environment where DNS is available.
11021	Cannot connect with the POP server.	<ul style="list-style-type: none"> • Check the POP server setting. • Check the firewall setting.
12010	An error returns from the POP server.	<ul style="list-style-type: none"> • Check the POP server setting.
13000	The POP authentication has failed.	<ul style="list-style-type: none"> • Check the user name and the password. • Check the APOP setting. • Confirm the authentication method.
10013 10014	The SMTP server cannot be found. Or cannot access DNS server.	<ul style="list-style-type: none"> • Check the SMTP server address. • Check that the machine is in the environment where DNS is available.
10021	Cannot connect with the SMTP server.	<ul style="list-style-type: none"> • Check the SMTP server setting. • Check the SMTP port number. • Check the firewall setting.
10*** 11*** 20*** 21***	An error returns from the SMTP server.	<ul style="list-style-type: none"> • Check the SMTP server setting. • Cannot communicate with a server that requires mandatory SSL communication. • Check protocol filter settings.
12***	It is invalid sender address.	<ul style="list-style-type: none"> • Check that the e-mail address supporting the account entered in the user name/ the password is set in SENDER ADDRESS.
13***	The e-mail address cannot be found.	<ul style="list-style-type: none"> • Check the e-mail address. • Even if there is a mistake in the e-mail address, this error cannot be detected in some cases.
22000 22008	SMTP authentication error	<ul style="list-style-type: none"> • Confirm the authentication method.
23*** 24*** 25***	The SMTP authentication has failed.	<ul style="list-style-type: none"> • Check the user name and the password.

*** is the error code returned from the e-mail server.

Setting the Setting Lock function

You can freely specify a four digit password so that no one other than an administrator can perform network and mail settings.

Specifying the password for the network and event mail functions

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5 Press **▲▼** to select “Setting Lock” and press the **ENTER** key.
- 6 Specify a freely chosen password (four digits) and press the **ENTER** key.
 - A notification that setting has started is briefly displayed.
- 7 Press the **END/POWER** key several times to end the setting.

Releasing the password for the network and event mail functions

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC3** (>>) twice.
- 4 Press **▲▼** to select “Network & Mail” and press the **ENTER** key.
- 5 Press **▲▼** to select “Setting Lock” and press the **ENTER** key.
- 6 Enter a four-digit password and press the **ENTER** key.
 - **If releasing is a success**The screen is displayed a message “Release Success”.
 - **If releasing is a failure**The screen is displayed a message “Release failure”.

- 7 Press the **END/POWER** key several times to end the setting.

Important!

- If you forget the password, you can press the “[FUNC2] (✓)” key displayed in the screen of Step 7 to display the password forced release screen. Be careful as although you can press the [ENTER] key to forcibly release the password, items set for the network and event mail also return to their initial values, making it necessary to re-specify them.

Setting a LANGUAGE

You can change the displayed language.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC1** (<<).
- 4 Press **▲▼** to select “Language” and press the **ENTER** key.
- 5 Press **▲▼** to select language and press the **ENTER** key.
 - **Set Value** : 日本語 / English / Deutsch / Français / Español / Italiano / Português
- 6 Press the **END/POWER** key several times to end the setting.

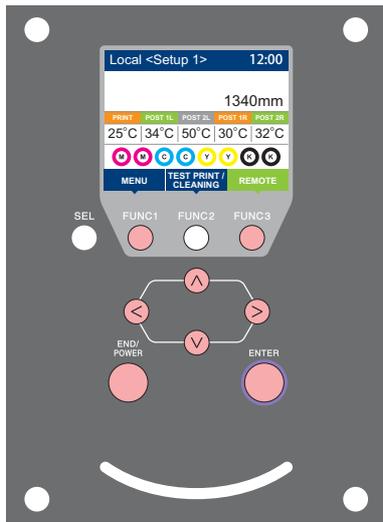
Initializing the Settings

You can return the setting of “SETUP”, “Maintenance” and “Machine Setup” to the status before shipment.

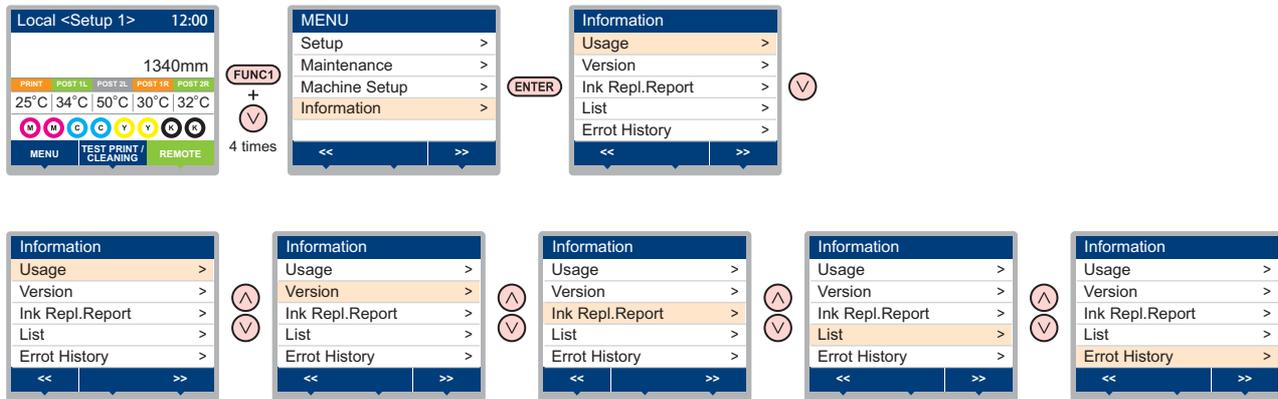
- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Machine Setup” and press the **ENTER** key.
- 3 Press the **FUNC1** (<<).
- 4 Press **▲▼** to select “Reset” and press the **ENTER** key.
- 5 Press the **ENTER** key.
 - The already configured settings are initialized.
- 6 Press the **END/POWER** key several times to end the setting.

About Information menu

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



- FUNC1** : Press this to select Information menu, or to switch to the previous screen.
- FUNC3** : Press this to switch to the next screen.
- ▲ ▼** : Use these to select a setting item.
- ENTER** : Press this to confirm a setting, etc..



Information menu table

Item	Description	
Usage	Wiping	This displays how many wipings have been done.
	Print Length	This displays the total length of the printing done to date.
	Latest Print Length	This displays the last printed length of the print.
	Print Area	This displays the total area of the printing done to date.
	Use Time	This displays the total time for which the machine has been used to date.
	Head Maint.	This displays the elapsed time after the last head maintenance.
	Station Maint.	This displays the elapsed time after the last station maintenance.
	Nozzle Wash	This displays the elapsed time after the last nozzle cleaning.
	Disway Wash	This displays the elapsed time after the last pump cleaning.
	Custody Wash	This displays the elapsed time after the last cleaning for storage.
Version	This displays the version information of this machine.	
Ink Repl. Report	This prints ink history of this machine.	
List	This allows you to print the settings of this machine.	
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.	

Displaying the Information

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Information”, and press the **ENTER** key.
 - Information menu appears.
- 3 Press **▲▼** to select a item.
 - Refer to the “Information menu”, and select the information to be displayed.
- 4 Press the **ENTER** key.
 - If you selected [List] in step 2, the machine’s settings will be printed.
- 5 Press the **END/POWER** key several times to end the setting.

Resetting wiper use count

- 1 “Usage” of Information menu is displayed.
 - (1) Press the [FUNC1] (MENU) in Local
 - (2) Press [**▲▼**] to select “Information”, and press the [ENTER] key twice.
- 2 Press **▲▼** to select “Wiping ” and press the **FUNC2** (✓).
 - A confirmation screen appears asking if you want to clear the use count of the wiper.
- 3 Press the **ENTER** key to clear the counter.
 - The use count of the wiper is cleared.

Displaying the Information of this machine

- 1 Press the **ENTER** key in Local.
- 2 The information is displayed sequentially with the **ENTER** key .
 - The information shown on the below appear.

Ink information

Sb310	
1. (M)	90% No Error
2. (M)	90% No Error
3. (B)	80% No Error
4. (B)	80% No Error

Error/ Warning (Only at the time of occurrence)

Warning	
Warning	
Media Undetected	
INCU CONNECT	

Machine information (Media width/ Serial No. /Version)

Information	
Media width	3200mm
Head gap	0.5mm
Serial No.	'00000000
TS500P-3200	V1.00
LAN status	No Connect

Nozzle check result (The number of missing nozzles detected by nozzle check)

Nozzle Check		1/3
(M)	Line1 M	0
(B)	Line1 B	0
(Y)	Line1 Y	0
(K)	Line1 K	0
(M)	Line2 M	0

- 3 Press the **ENTER** key to return to Local.

Chapter 4

Maintenance



This chapter

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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around It	4-12		

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.

	<ul style="list-style-type: none"> When using cleaning solution for maintenance, be sure to wear the supplied glove and protective glasses.
	<ul style="list-style-type: none"> Never disassemble the machine. Disassembling it can result in electric shock hazards or damage to the machine. Before maintenance, be sure to turn off the power button and main power switch, and unplug the power cable; otherwise, an unexpected accident may occur.
	<ul style="list-style-type: none"> Prevent moisture from entering the machine. Moisture inside the machine can cause electric shock hazards or damage to the machine.
	<ul style="list-style-type: none"> 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. When the machine is not to be used for a long time, turn off only the power button on the front side, leave the main power switch at the side turned ON (in the position of), and leave the power cable connected.
	<ul style="list-style-type: none"> Do not use benzene, thinner, or any chemical agent containing an abrasive. Such materials can deteriorate or deform the surface of the cover. Do not apply a lubricant, etc. to any parts inside the machine. Doing so can cause printing failure. 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.

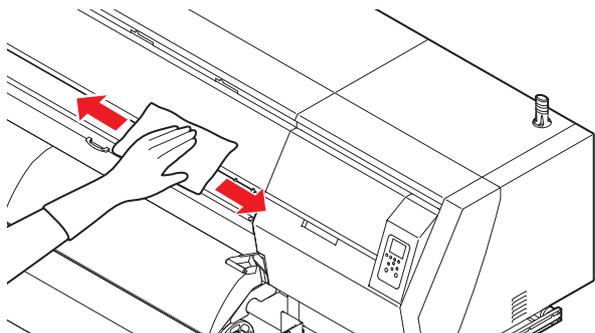
About Cleaning Solution

Use the cleaning liquid dedicated for the ink being used.

Type of Ink	Applicable maintenance washings
Sublimation dye ink	Cleaning Liquid 03 MAINTENANCE KIT(ML003-Z-K1)

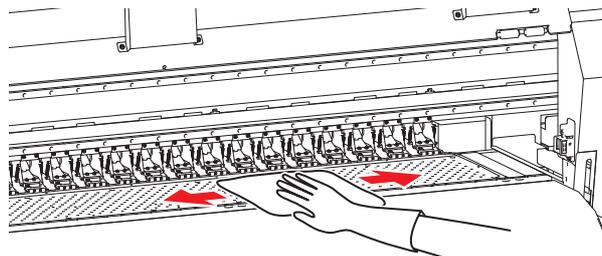
Cleaning the Exterior Surfaces

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.. 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.



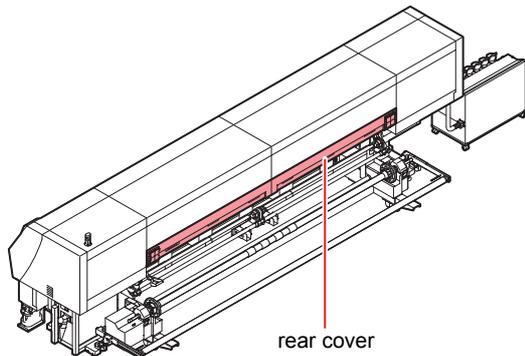
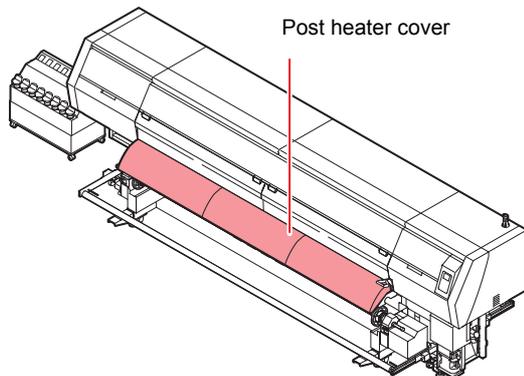
- Before cleaning the platen, make sure that the heater has cooled adequately.
- When cleaning the platen, do not apply strong force to the platen or wipe it with a hard cloth. Doing so may damage or deform the platen, causing poor printed image. If the deformed platen is used, the media may meander and the print head may be damaged.

Cleaning of rear cover and post heater cover

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



- Before cleaning the cover, be sure to check that the post-heater temperature is low enough.



Cleaning the Media Sensor

The media sensors are located on the platen in the backside (2 places) and the bottom surface of the head (1 place). When the sensor is covered with dust, etc., it may cause false detection of media.

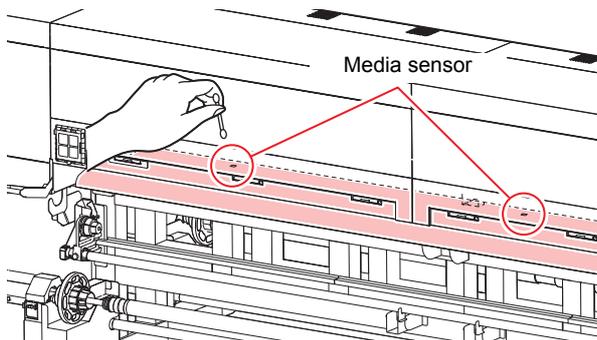
Using a cotton swab, remove the dust, etc. accumulated on the surface of the sensor.

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.4-12 "Cleaning the Ink Head and the Area around It", and clean it.

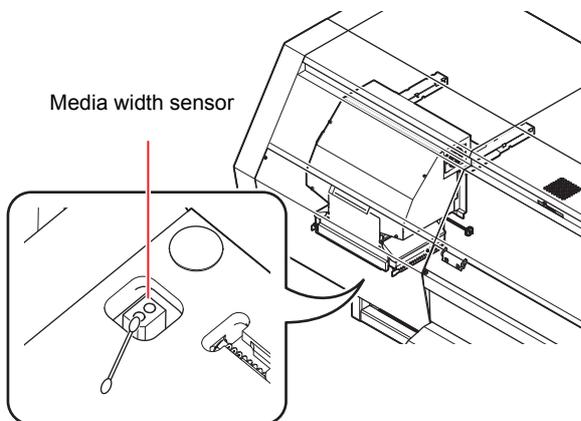


- Do not press against the sensor with the cotton swab. Doing so could damage the sensor.

The backside of the machine



The lower surface of the head



Cleaning the Media Press

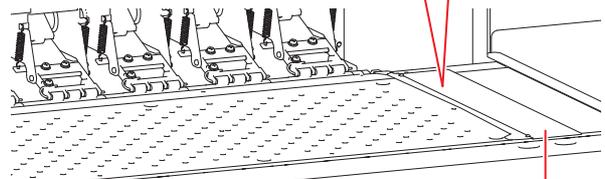
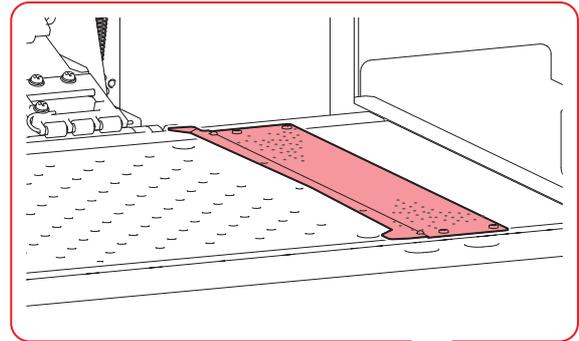
When the media press is covered with lint, dust, etc., a media cannot be fed normally during printing or dust sticks to the nozzles, which may result in abnormal printing.

Clean the media press regularly with a dry cloth or paper towel.

If there is ink on the media press, wipe it away with a clean stick dipped in washing liquid for maintenance.

Important!

- When using washing liquid for maintenance, be sure to wipe it away completely so that none remains on the media press.



Media press

Cleaning the Area around Flushing Unit

In order to prevent ink clogging of the head, this machine ejects ink regularly to flushing unit. To comfortably use this machine, please keep clean the peripheral of flushing unit.

Tools required for cleaning	
• Clean stick (SPC-0527)	• Gloves
• Goggles	



- 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.

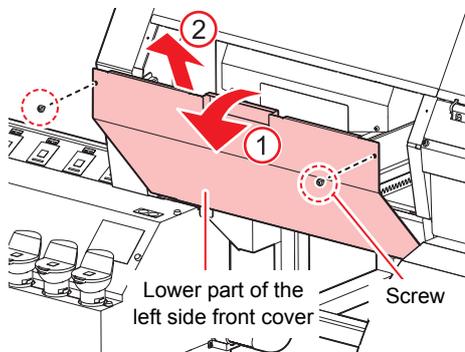
Cleaning the Flusing BOX Sensor

Please clean flushing BOX sensor regularly (about once a week).

1 Remove the lower part of the left side front cover.

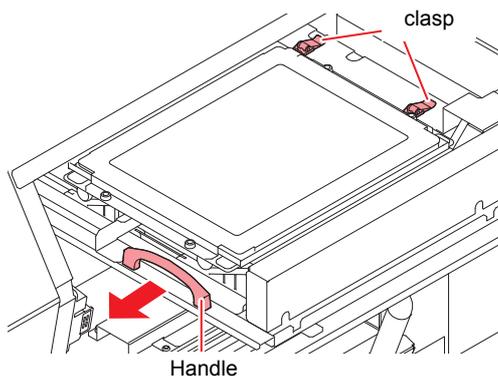
- (1) Remove the screws (for two positions) of the lower part of the left side front cover.
- (2) Pull the lower part of the left side front cover in front, lift it above, and remove the lower part of the left side front cover.

- Remove the screws use the supplied screwdriver.

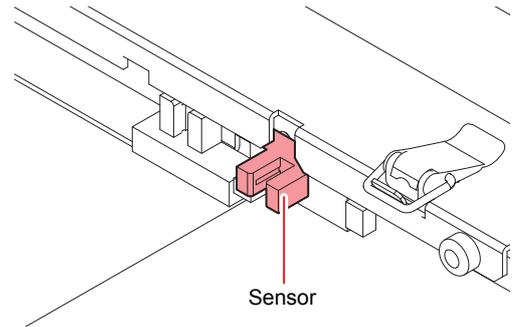


2 Shift the flushing unit to the left.

- (1) Remove the clasp.
- (2) Hold The Handle And Shift The Flushing Unit.

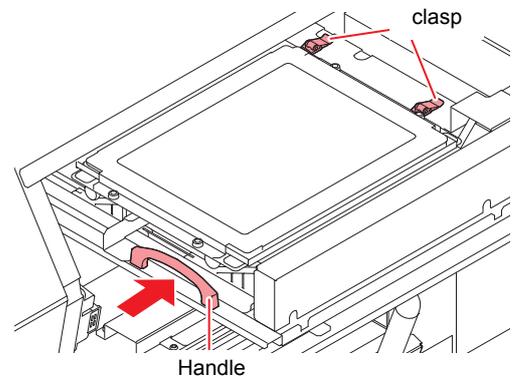


3 Clean the part of the sensor with a clean stick.



4 Return the flushing unit to the original position.

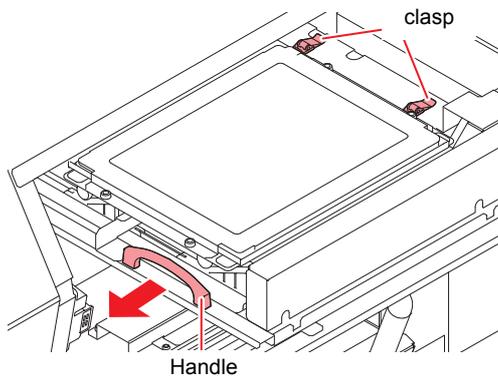
- (1) Hold The Handle And Shift The Flushing Unit.
- (2) Fasten the clasp.



Cleaning the ink receiving sponge

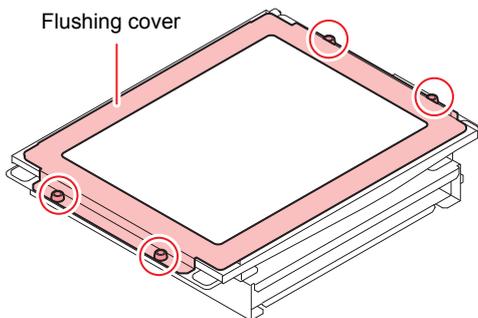
1 Shift the flushing unit to the left.

- Please conduct the operation up to P.4-4 "Cleaning the Flusing BOX Sensor" step 2.

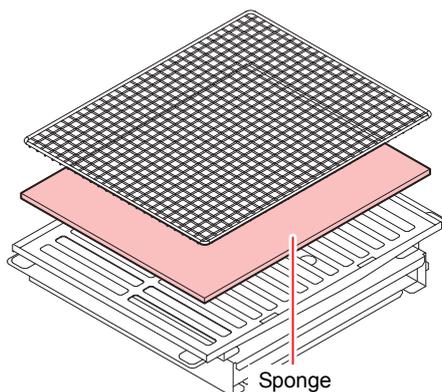


2 Remove the flushing cover, and take out the ink receiving sponge.

- (1) Remove the screws (4 locations) of flushing cover, and remove the cover.



- (2) Remove the ink receiving sponge holding, and take out the ink receiving sponge.

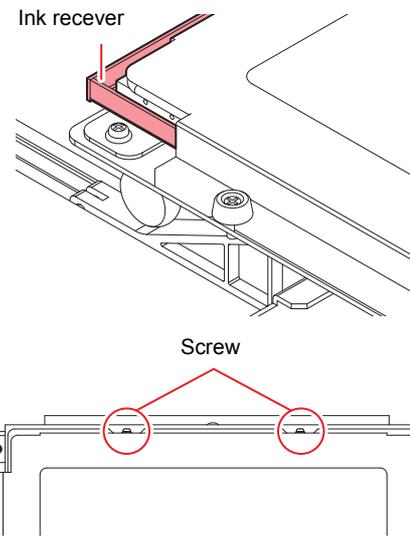


3 Soak the ink receiving sponge in tap water, and lightly rubbing wash.

- Please ask the industrial waste treatment company for the waste liquid treatment of the waste that washed the sponge.

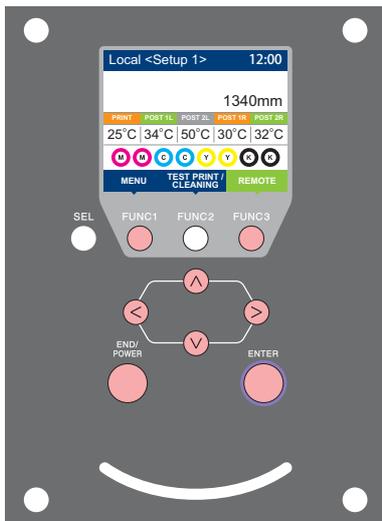
4 Return the flushing unit to its original state.

- Install the flushing cover with the screw on the back side.
- Please make sure that ink receiving sponge, ink sponge holder, and flushing cover are seated in the ink receiver.



About Maintenance menu

This provides various settings for doing maintenance on the machine.
The following items can be set in Maintenance settings.



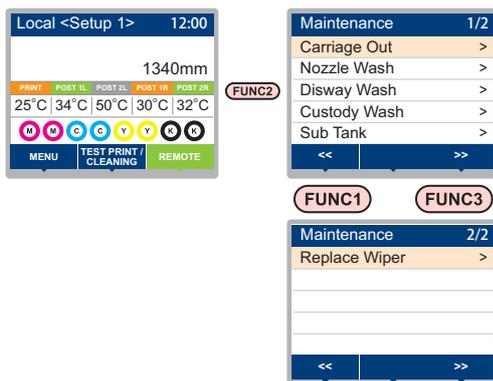
- (FUNC1)** : Press this to select Maintenance menu, or to switch to the previous screen.
- (FUNC2)** : Press this to use the maintenance function.
- (FUNC3)** : Press this to switch to the next screen.
- (^)** **(v)** : Use these to select a setting item.
- (ENTER)** : Press this to confirm a setting, etc..

◆ Maintenance menus at-a-glance



◆ Press the (FUNC2) key to perform “Station maintenance”.

The Station menu can be displayed easily without selecting [MENU]-[Maintenance] from Local.
Press the [SEL] key to display “MAINT” for [FUNC2], and then press the [FUNC2] key.



Maintenance menus at-a-glance

Item	Set value	Meaning	
Station	For carrying out maintenance on the carriage and station periphery.		
	Carriage Out (☞ P.4-8)	_____	Moves the carriage out, for carrying out cleaning of the cap periphery, head, wipers, etc.
	Nozzle Wash (☞ P.4-14)	1 to 15min	Soaks the nozzle surfaces in maintenance cleaning fluid, for carrying out recovery from nozzle missing or bent.
	Pump Tube Wash (☞ P.4-10)	_____	Executes washing of the suction pump tubes.
	Custody Wash (☞ P.4-11)	1 to 15min	Carried out when the machine is going to be out of use for an extended period. Washes the nozzles and tubes beforehand, to keep the machine in fine condition.
	Replace Wiper (☞ P.4-22)		Used when replacing the wiper. If the wiper is replaced, the number of times the wiper was used that is managed in this device is reset.
Nozzle Recovery (☞ P.4-15)	For printing using another nozzle, if nozzle wash and so forth fail to effect recovery from nozzle missing, etc.		
	Print		Used to print a pattern and to check and/or register clogged nozzles.
	Entry		Registers the faulty nozzle identified by "Print".
	Check		Checks recoverable printable conditions.
	Reset		Resets a registered faulty nozzle.
Auto Maint. (☞ P.4-17)	For having the various maintenance functions executed automatically. Set the execution interval for each maintenance function.		
	Refresh	OFF/Lv.1/ <u>Lv.2</u> / Lv.3	For setting the activation interval for refresh.
	Cleaning	OFF/Lv.1/ <u>Lv.2</u> / Lv.3	For setting the activation interval for head cleaning. When set to other than "OFF", you can set the cleaning type (Soft / Normal / Hard).
Sub Tank (☞ P.5-4)		Used to charge ink and to solve the problems including ink errors and nozzle missing .	
Charge Ink (☞ P.4-18)		Used when ink cannot be automatically charged, or if you want to charge ink after confirming the contents of the IC chip.	
Replace Ink Tank (☞ P.4-24)		Used to replace a expired ink tank and to reset the ink charge information.	
Waste Expored Ink (☞ P.4-24)		Discard the expired ink and reset charged information.	
Tank Calibration (☞ P.4-28)		Make the correction of the weight balance of the ink supply unit.	

Maintaining the Capping Station

Maintain the ink cap, wiper, etc. located in the capping station. (Station 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.2-17) has been performed, use a Cleaning Liquid 03 MAINTENANCE KIT and clean stick.

Tools required for Maintenance

• Cleaning Liquid 03 MAINTENANCE KIT (ML003-Z-K1)		
• Clean stick (SPC-0527)	• Gloves	• Goggles



Caution

- 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 [FUNC2] (TEST PRINT/CLEANING) key to execute the carriage-out. (P.4-8Steps 1 to 2)
- Be sure to perform maintenance for the ink cap and the wiper of capping station every day. If you leave it dirty, dirt may adhere to the nozzle surface, or, dust and dry ink may be rubbed against the nozzle. It may cause discharge defect.

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.

Important!

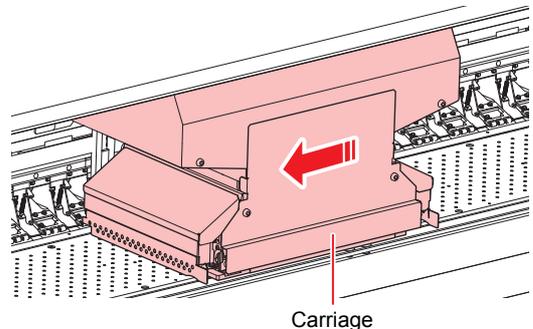
- When work is complete at the end of the day, clean the wipers and surrounding areas.
- Replace the wiper with a new one when it is extremely dirty or bent. (P.4-22)
- When cleaning the wiper, be careful that lint from the clean stick does not get left on the wiper. Remaining lint may cause image quality to deteriorate.

1 Press the **[SEL]** key, and then press the **[FUNC2]** (MAINT) in LOCAL.

- The Maintenance menu appears.

2 Press **[▲]** **[▼]** to select “CARIGE OUT”, and press the **[ENTER]** key twice.

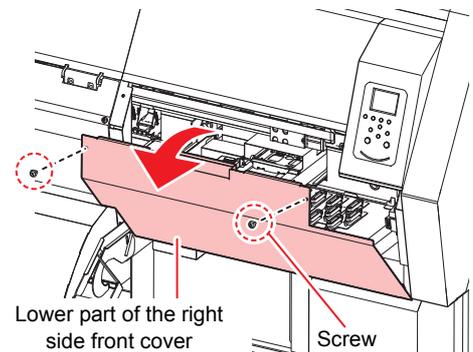
- The carriage moves onto the platen.



3 Open the lower part of the right side front cover.

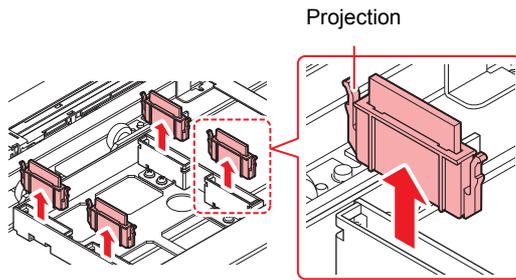
- (1) Remove the screws of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.

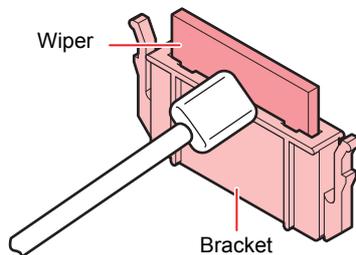


4 Remove the wiper.

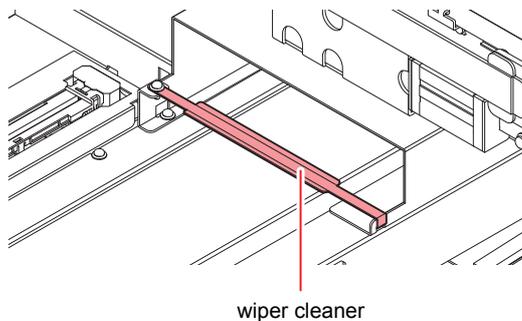
- Pull out the wiper by holding the protrusions at its both ends.

**5 Clean the wiper and bracket.**

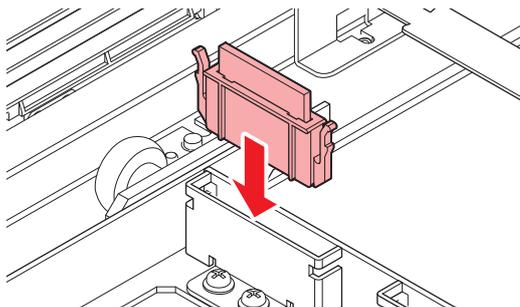
- Wipe off the ink sticking to the wiper and bracket with a clean stick dipped in cleaning solution for maintenance. Wipe off so that cleaning solution for maintenance will not remain.

**6 Clean the wiper cleaner.**

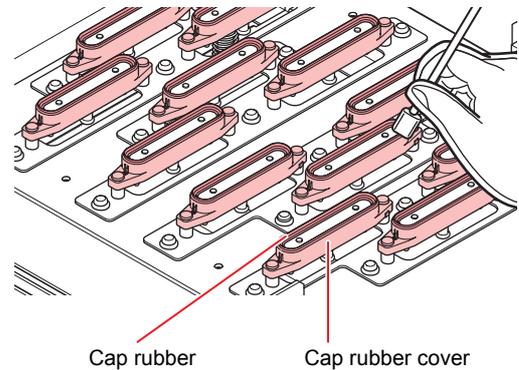
- Wipe off the ink sticking to the wiper cleaner with a clean stick dipped in cleaning solution for maintenance. Wipe off so that cleaning solution for maintenance will not remain.

**7 Set the wiper at the original position.**

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

**8 Clean the cap rubber and cap rubber cover.**

- Wipe off the ink sticking to the cap rubber and cap rubber cover with a clean stick dipped in cleaning solution for maintenance. Wipe off so that cleaning solution for maintenance will not remain.

**9 Close the lower part of the right side front cover then press the **ENTER** key.**

- After its initial operation, the machine returns to step1.

Performing the Station without [FUNC2] (MAINT)

You can select Station by using the [FUNC1] (MENU) in the Local without pressing the [FUNC2] (MAINT).

- (1) Press the [FUNC1] (MENU) in Local.
- (2) Press [▲][▼] to select "Maintenance", and press the [ENTER] key.
- (3) Press [▲][▼] to select "Station", and press the [ENTER] key.
 - The Station menu appears. Then proceed to step 2.

Washing the Ink Discharge Passage

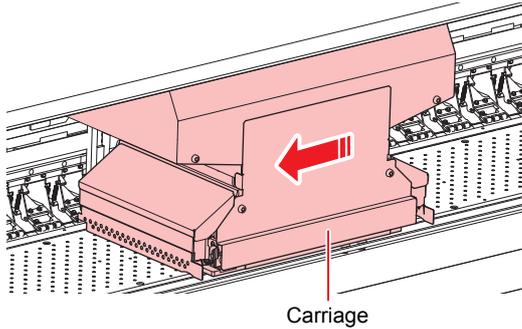
Wash the ink discharge passage on a regular basis (once every 2 - 3 months) to prevent ink coagulation from clogging the passage.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in **LOCAL**.

- The Maintenance menu appears.

2 Press **▲▼** to select “Disway Wash”, and press the **ENTER** key.

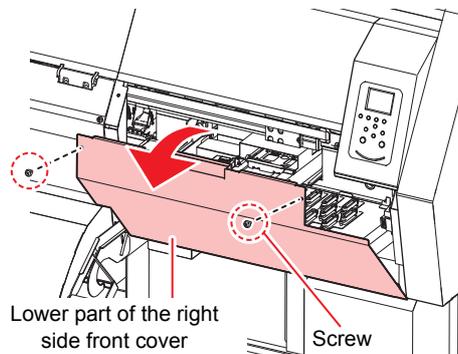
- The carriage moves onto the platen.
- Dry suction operation is performed repeatedly until the washing work is completed.



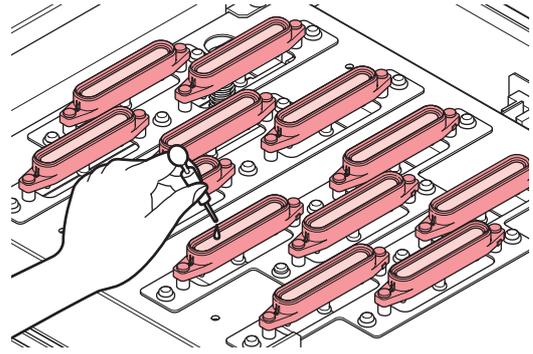
3 Open the lower part of the right side front cover.

- (1) Remove the screws of the lower part of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.



4 Suction the cleaning solution into a syringe and squirt about three syringes worth of solution into each cap.



5 Close the lower part of the right side front cover and press the **ENTER** key.

- After running a dry suction for a certain period of time, the screen returns to step 1.

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.

Is "NEAR END" or "INK END" displayed?

- 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.
- Refill ink.

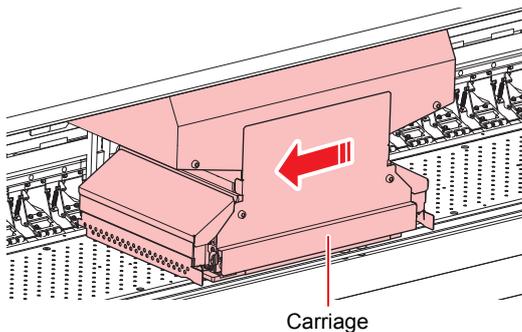
- Important!**
- Be sure to use the dedicated cleaning Liquid 03 MAINTENANCE KIT (ML003-Z-K1).

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in **LOCAL**.

- The Maintenance menu appears.

2 Press **▲▼** to select "Custody Wash", and press the **ENTER** key.

- The carriage moves onto the platen.

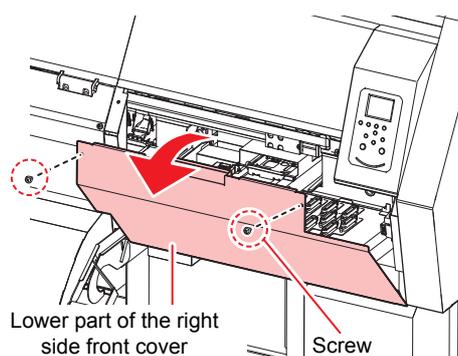


- Important!**
- Until wiper/ bracket cleaning is completed, "Please clean the wiper." is displayed on the screen. After the work up to the step 5 is completed, press the [ENTER] key.

3 Open the lower part of the right side front cover.

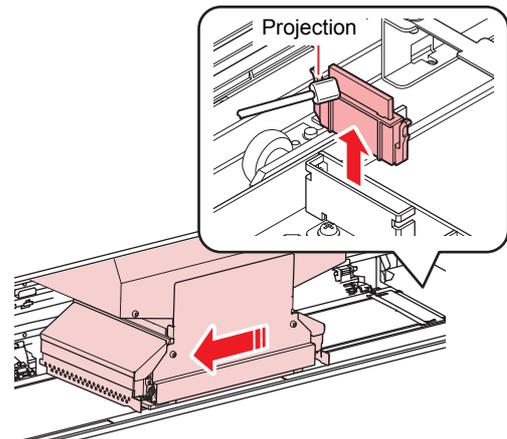
- (1) Remove the screws of the lower part of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.



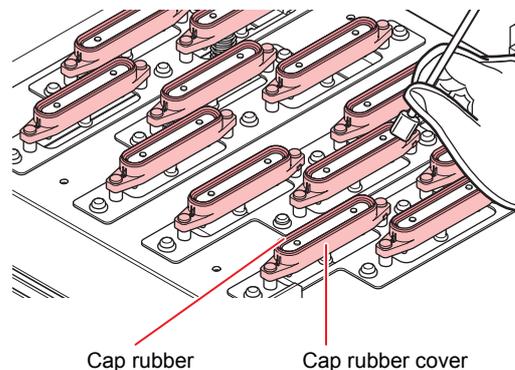
4 Clean the wiper and the bracket, and press the **ENTER** key.

- (1) Open the right maintenance 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 maintenance washing liquid for maintenance. (ML003-Z-K1: Cleaning Liquid 03 MAINTENANCE KIT)
 - Wipe off so that maintenance washing liquid for maintenance will not remain.
- (3) Insert it in the original position by holding the projections at both ends of the wiper.



5 Clean the cap rubber and cap rubber cover.

- Wipe off the ink sticking to the cap rubber and cap rubber cover with a clean stick dipped in cleaning solution for maintenance. Wipe off so that cleaning solution for maintenance will not remain.
- At this time, the discharge passage is cleaned automatically.

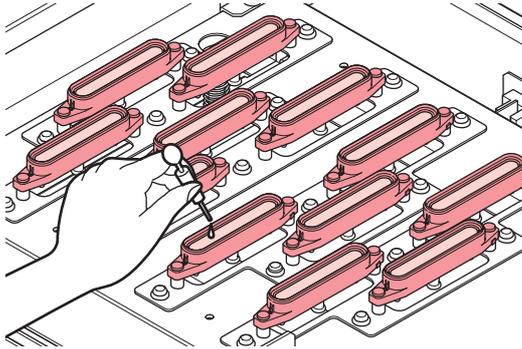


6 Press the **ENTER** key.

Important!

- Until washing liquid is filled, "Fill the liquid." is displayed on the screen. After the work up to the Step 8 is completed and you close the front cover, press the [ENTER] key.

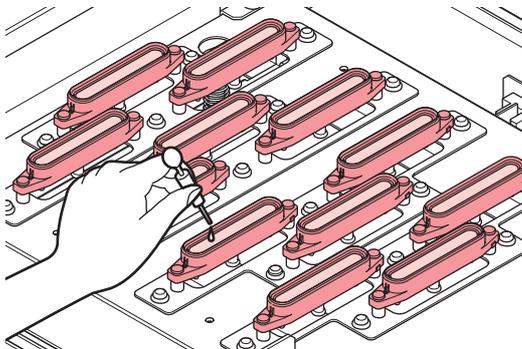
- 7** Fill up the cap with cleaning solution for maintenance, using a dropper.
- Fill the cap with the cleaning solution just before the solution overflows from the cap.



- 8** Close the lower part of the right side front cover, and press the **ENTER** key.
- The nozzles are washed.
 - When the nozzles have been completely washed, the head moves onto the platen.

- 9** Press **▲ ▼** to set the resting time, and press the **ENTER** key.
- The nozzles are washed.
 - When the nozzles have been completely washed, the head moves onto the platen.

- 10** Suction the cleaning solution into a syringe and squirt about three syringes worth of solution into each cap.



- 11** Close the lower part of the right side front cover and press the **ENTER** key.
- After the idle absorbing operation has been performed for 30 seconds, the screen returns to step 1.

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.

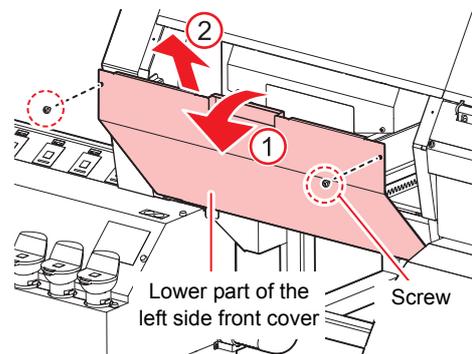
Using a clean stick, etc., rub off gelatinous ink or dust that may stick to the lower part of the slider and the area around the ink head. In doing so, never rub the nozzles of the head.

Tools required for cleaning	
• Clean stick (SPC-0527)	• Gloves
• Goggles	



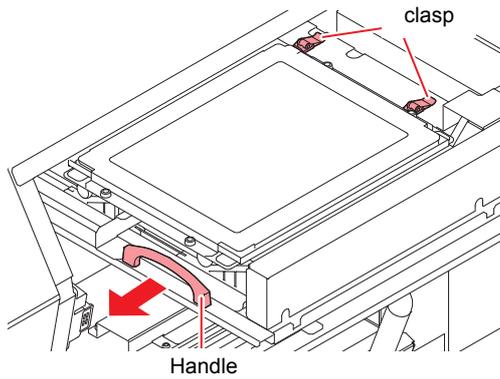
- Be sure to wear the attached goggles and gloves when cleaning the area around the ink head. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

- 1** Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.
- The Maintenance menu appears.
- 2** Press **▲ ▼** to select “Carriage Out”, and press the **ENTER** key.
- 3** Press **▲ ▼** to select “Head Maint.”, and press the **ENTER** key.
- The carriage will move to the left end of this machine.
- 4** Remove the lower part of the left side front cover.
- (1) Remove the screws (for two positions) of the lower part of the left side front cover.
 - (2) Pull the lower part of the left side front cover in front, lift it above, and remove the lower part of the left side front cover.
- Remove the screws use the supplied screwdriver.



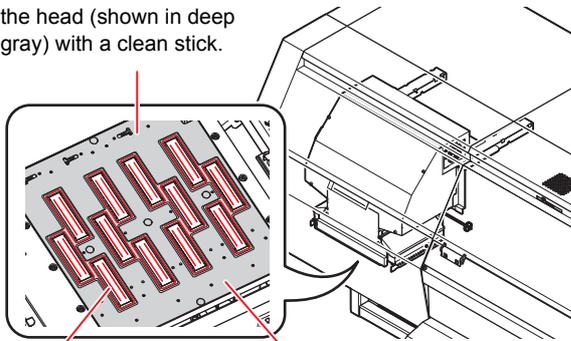
5 Shift the flushing unit to the left.

- (1) Remove the clasp.
- (2) Hold The Handle And Shift The Flushing Unit.

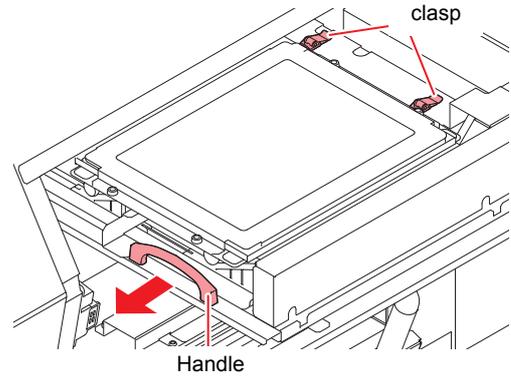
**6** Wipe ink sticking to the side of the head off with a clean stick.

- Never rub the nozzles.

Clean the side surface of the head (shown in deep gray) with a clean stick.

**7** Press the **ENTER** key after the cleaning.**8** Return the flushing unit to the original position.

- (1) Hold The Handle And Shift The Flushing Unit.
- (2) Fasten the clasp.

**9** Close the lower part of the left side front cover then press the **ENTER** key.

- After its initial operation, the machine returns to Local.

When nozzle missing Cannot Be Solved

When nozzle missing cannot be solved even after the head cleaning (☞ P.2-17) has been done, perform the following three functions:

Nozzle Wash	• Wash the head nozzle. (☞ P.4-14)
Nozzle Recovery	• Alternative nozzles for printing, when nozzles missing can not be improved. (☞ P.4-15)
Sub Tank	• Fill the head with ink. (☞ P.5-4)

Washing the Head Nozzle

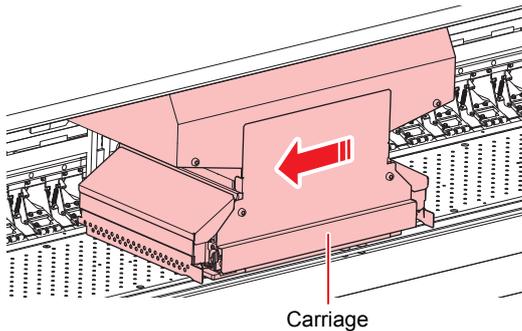
Perform cleaning of the nozzles in the heads to prevent them being clogged with coagulated ink.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.

- The Maintenance menu appears.

2 Press **▲ ▼** to select “Nozzle Wash”, and press the **ENTER** key.

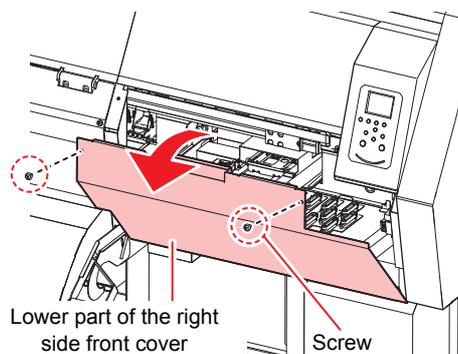
- The carriage moves onto the platen.



3 Open the lower part of the right side front cover.

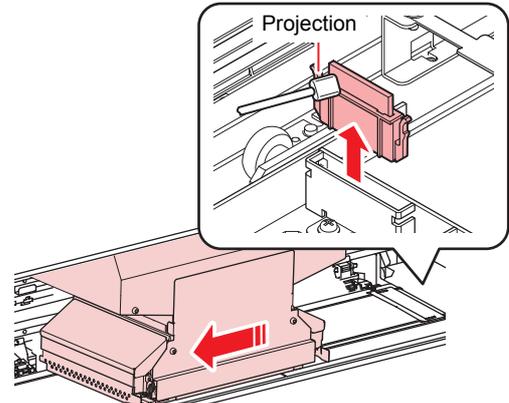
- (1) Remove the screws of the lower part of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.



4 Clean the wiper and the bracket, and press the **ENTER** key.

- (1) Pull out it by holding projections at both ends of the wiper.
- (2) Clean the wiper and bracket with a clean stick dipped in maintenance washing liquid for maintenance. (ML003-Z-K1: Cleaning Liquid 03 MAINTENANCE KIT)
 - Wipe off so that maintenance washing liquid for maintenance will not remain.
- (3) Insert it in the original position by holding the projections at both ends of the wiper.

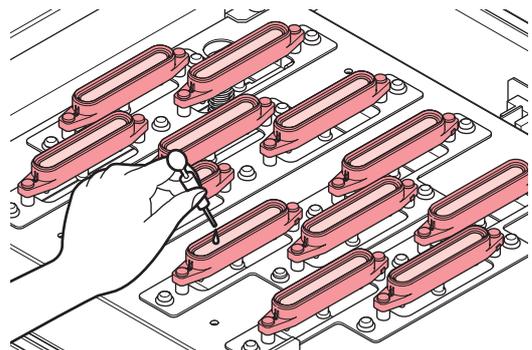


5 Clean the cap rubber, and press the **ENTER** key.

- Wipe off the ink sticking to the cap rubber with a clean stick dipped in maintenance washing liquid for maintenance.
- Wipe off so that maintenance washing liquid for maintenance will not remain.
- At this time, the discharge passage is cleaned automatically.

6 Fill up the cap with cleaning solution for maintenance, using a dropper.

- Fill the cap with the cleaning solution just before the solution overflows from the cap.



7 Close the lower part of the right side front cover and press the **ENTER** key.

8 Press **▲▼** to set the resting time and press the **ENTER** key.

- When the resting time has passed, the machine absorbs the cleaning solution filled in the cap, and performs cleaning. Then the machine returns to the display in step 1.

Important!

- When nozzle missing is not cleared even after this washing is carried out several times, contact the distributor in your region or our service office.

Nozzle Recovery Function

Nozzle Recovery: When nozzles missing can not be improved at specific points, other good nozzles can be used as alternatives for printing.

Print the nozzle pattern

Used to print a pattern and to check and/or register clogged nozzles.

1 Press the **FUNC1** (MENU) in Local.

2 Press **▲▼** to select “Maintenance”, and press the **ENTER** key.

- Maintenance menu appears.

3 Press **▲▼** to select “Nozzle Recovery”, and press the **ENTER** key.

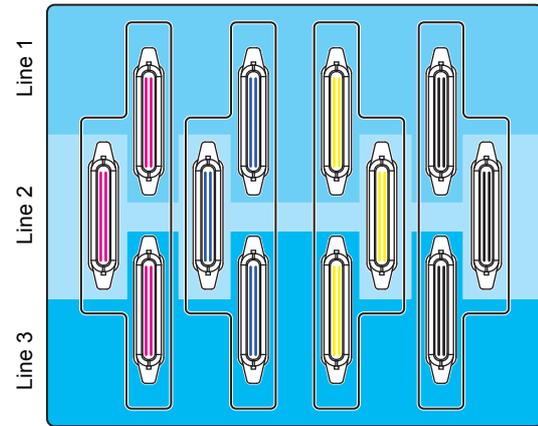
4 Press the **ENTER** key.

5 Press **▲▼** to select desired head(s) (Head Line 1 to 3), and press the **ENTER** key.

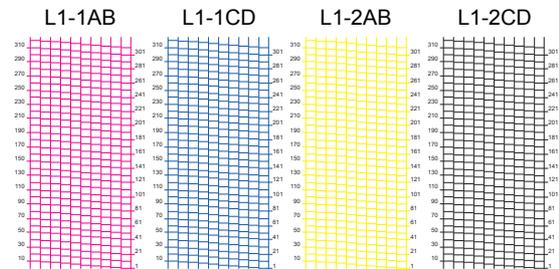
6 Press the **ENTER** key.

- Printing of the nozzle pattern will start.
- Select “ENTRY” then “Move to select of the Nozzle line (Step 5) without drawing a pattern”

Overhead view



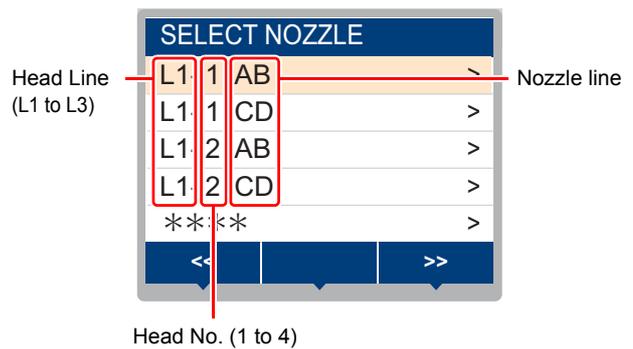
Nozzle pattern of Head 1 and 2



Important!

- Set a media of more than 210mm put horizontally. If a media with narrow width is set, printing will only be conducted to midway.

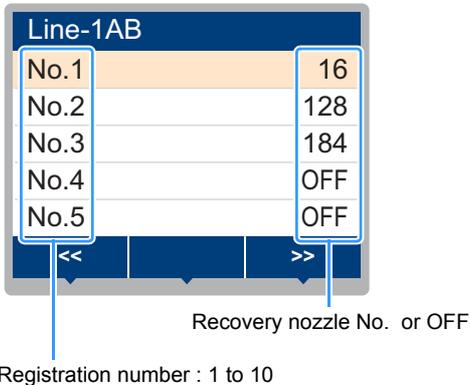
7 Select the Nozzle line that needs Nozzle Recovery by pressing **▲▼**, and press **ENTER** key.



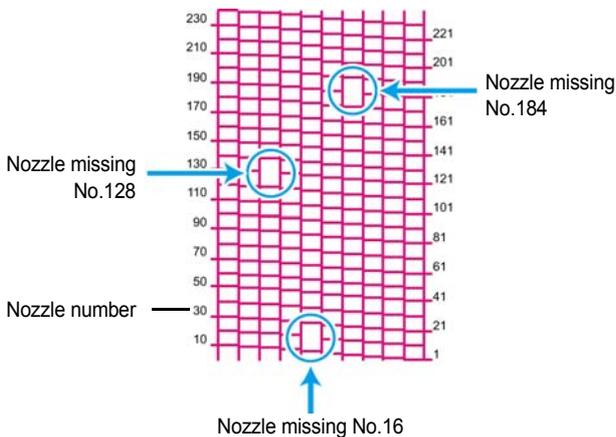
4

8 Register the Nozzle number that needs Nozzle Recovery and then press **ENTER** key.

- (1) Select the registration number from 1 to 10 by pressing **[▲][▼]** key and press the **[ENTER]** key.
- (2) Register the nozzle number that needs recovery by pressing **[▲][▼]** key and press the **[ENTER]** key.



Example of nozzle to be recovered



Registration number	Recovery Nozzle No.	State
1	16	Target for nozzle recovery
2	128	Target for nozzle recovery
3	184	Target for nozzle recovery
4	OFF	No registration
5	OFF	No registration

9 Press the **END/POWER** key several times to end the setting.

- Important!**
- Up to 10 nozzles can be registered per 1 nozzle line.
 - Even if you use this function, time required for drawing does not change.
 - The nozzle recovery may not be reflected if printing is performed under the following conditions:

4-colors ink set

Resolution	Pass	Scan speed
360 x 360HQ	2 pass	Normal speed
540 x 360	2 pass	High speed
720 x 720	4 pass	High speed
720 x 1080	6 pass	High speed

6-colors ink set

Resolution	Pass	Scan speed
540 x 360	4 pass	High speed
540 x 540	6 pass	High speed
720 x 720	8 pass	High speed
720 x 1080	12 pass	High speed

Check the print condition for which nozzle recovery cannot be performed

Depending on the nozzle registered, there is the mode not reflected by "RECOVERY". Check the unrecoverable print conditions with the check function.

- Important!**
- If there are many registered nozzles, it takes time to display the check result.

1 Press the **FUNC1 (MENU)** in Local.

2 Press **[▲][▼]** to select "Maintenance", and press the **ENTER** key.

- Maintenance menu appears.

3 Press **[▲][▼]** to select "Nozzle Recovery", and press the **ENTER** key.

4 Press **[▲][▼]** to select "CHECK", and press the **ENTER** key.

- The mode for which nozzle recovery is invalid is displayed.
- If there is no mode for which nozzle recovery is invalid, "NONE" is displayed.

5 Press the **END/POWER** key several times to end the setting.

Reset the set value

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Maintenance”, and press the **ENTER** key.
 - Maintenance menu appears.
- 3 Press **▲▼** to select “Nozzle Recovery”, and press the **ENTER** key.
- 4 Press **▲▼** to select “Reset”, and press the **ENTER** key.
- 5 Press **▲▼** to select desired head(s) (Head Line 1 to 3), and press the **ENTER** key.
- 6 Press **▲▼** and **FUNC1** (<<) **FUNC3** (>>) to select the Nozzle line that need reset, and press the **ENTER** key.
 - A reset confirmation message appears.
- 7 Press the **ENTER** key.
- 8 Press the **END/POWER** key several times to end the setting.

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 Maint. functions, the following items can be set:

- Important!**
- 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	Sets the refresh level.
Cleaning	Sets the head cleaning level.

- Important!**
- If an ink tank error occurs, the operation set by the Automatic Maintenance function is not performed. Release the error. (☞ P.5-13)
 - During the execution of automatic maintenance, ink flows into the waste ink tank. Check the amount of ink in the waste ink tank every day, and discard the ink if necessary. (☞ P.4-20)

Setting the Refreshing level

For nozzle clogging prevention, set the amount of some ink to be discharged from the nozzle.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select “Maintenance”, and press the **ENTER** key.
 - Maintenance menu appears.
- 3 Press **▲▼** to select “Auto Maint.”, and press the **ENTER** key.
- 4 Press the **ENTER** key.
 - “Refresh” will be selected.
- 5 Press **▲▼** to set the refresh level, and press the **ENTER** key.
 - Set value : OFF/Lv.1/Lv.2/Lv.3
- 6 Press the **END/POWER** key several times to end the setting.

Setting the Cleaning level

The head cleaning level is set.

- 1 Press the **FUNC1** (MENU) in Local.
- 2 Press **▲▼** to select "Maintenance", and press the **ENTER** key.
 - Maintenance menu appears.
- 3 Press **▲▼** to select "Auto Maint.", and press the **ENTER** key.
- 4 Press **▲▼** to select "Cleaning", and press the **ENTER** key.
- 5 Press **▲▼** to select the cleaning level, and press the **ENTER** key.
 - Set value : OFF/Lv.1/Lv.2/Lv.3
 - When you select OFF, proceed to the Step 7.
- 6 Press **▲▼** to select the cleaning type, and press the **ENTER** key.
 - Set value : Soft/ Normal/ Hard
- 7 Press the **END/POWER** key several times to end the setting.

Charging ink

If auto charging is not possible, or if you want to check the content of the IC chip before charging ink, perform the following operation.

- 1 Press the **FUNC1** (MENU) in LOCAL.
- 2 Press **▲▼** to select "Maintenance", and press the **ENTER** key.
- 3 Press **▲▼** to select "Charge Ink", and press the **ENTER** key.
- 4 Press **▲▼** to select the ink tank to be charged.
- 5 Press the **ENTER** key.



- If the selected ink tank is near its expiration date, a confirmation screen will appear. If OK, press **▶**.

```
Expiration
CHARGE ANYWAY ?
```

↕
Displayed alternately

```
Expiration
NO < > YES
```

```
Expiration: 1MONTH
CHARGE ANYWAY ?
```

↕
Displayed alternately

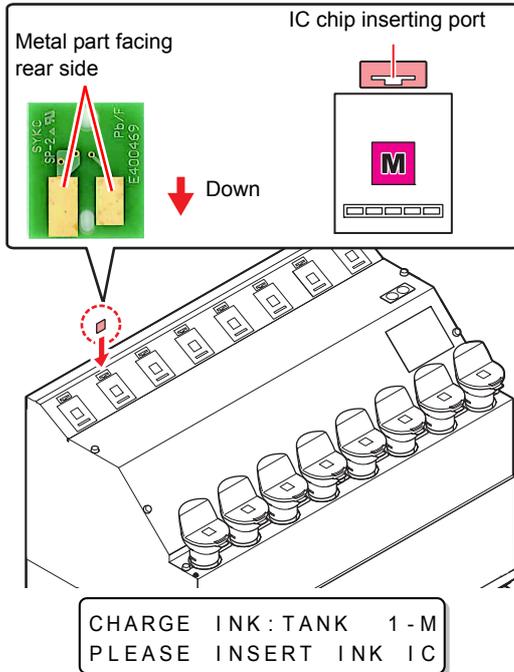
```
Expiration: 1MONTH
NO < > YES
```



- The selected tank cannot be charged in either of the following situations. (P.3-28)
 - (1) The volume of remaining ink managed by the printer is 100%.
 - (2) The ink expiration date has passed by 2 months or more.

6 Insert the IC chip included with the 2 liter ink bottle.

- When an IC chip is inserted into the printer and the information on the IC chip is loaded, the display will change as shown on the right.
- Insert the IC chip with the metal part facing rear side and down. If you insert the wrong side by accident, it causes faulty or damage of the IC chip.
- Do not touch the metal part of the IC chip. It may break the IC chip by static, or may cause read error by stain or flaw.



- If the inserted IC chip is near its expiration date, a confirmation screen will appear. If OK, press [▶].

Expiration
CHARGE ANYWAY ?

↕ Displayed alternately

Expiration
NO < > YES

Expiration: 1MONTH
CHARGE ANYWAY ?

↕ Displayed alternately

Expiration: 1MONTH
NO < > YES

Important!

- If there is a problem with the inserted IC chip and you can not charge, the display shows the reason.
- If there are multiple problems, use [▲][▼] to scroll through them.

7 When the “CHARGE START” confirmation screen appears, press [ENTER].

- Charging starts.
- The ink information on the IC chip appears in the display.



- While the ink is charging, the screen is displayed *Ink Charge*.
Do not remove the IC chip or turn the printer off.

8 When charging is complete, the buzzer will sound momentarily and then the screen will display the message “Complete Ink Charge”.



- To check the volume and expiration date of the ink that has been charged, press the [ENTER] key in Local. (P.3-28)

Replace the waste ink tank with new one

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. The sensor monitors the discharged amount of ink in this machine. 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.)

Confirmation Message in LOCAL

1 The confirmation message is displayed.

- The following message will be displayed.
 - "Waste ink near full"
 - "Waste ink full"
 - "Waste ink tank none"

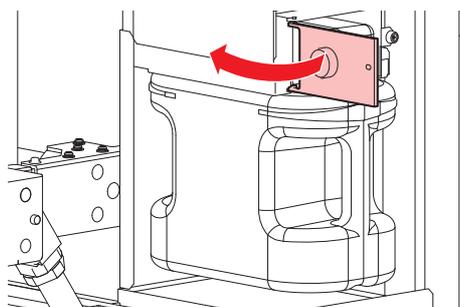
2 Check the state of the waste ink tank

Replace the waste ink tank on the right side of machine with another

In the waste ink tank of the right side of the machine, the ink and cleaning solution discharged around the head at the printing or head cleaning will be accumulated. When replacing the waste ink tank, please perform the following tasks.

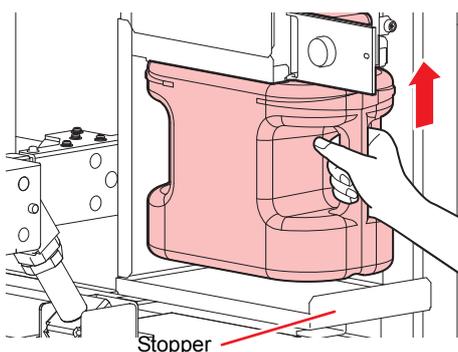
1 Open the waste ink tank cover.

- Remove the screw attaching to the waste ink tank cover and open the cover to the front.



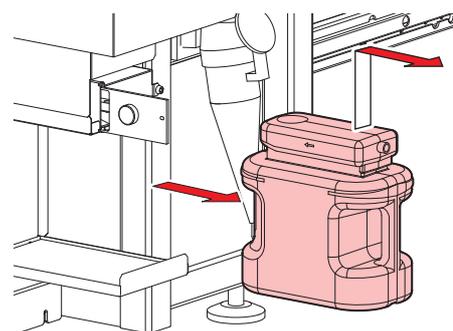
2 Lift the waste ink tank a little.

- Lift the waste ink tank up to the position where it does not hit the stopper.

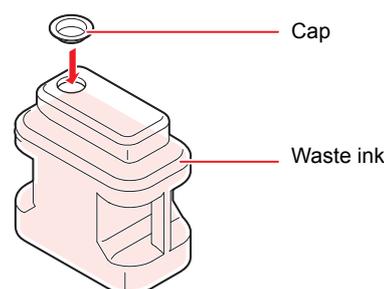


3 Take out the waste ink tank.

- Hold the handle of the waste ink tank and pull it out to the front.
- Raise the waste ink tank and take it out.

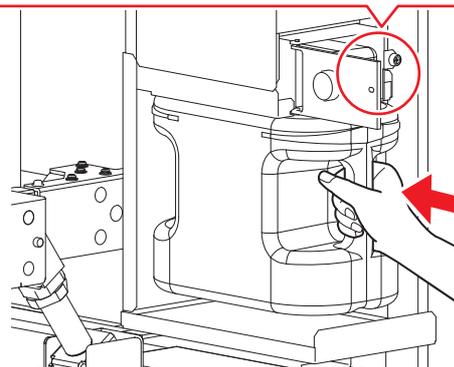
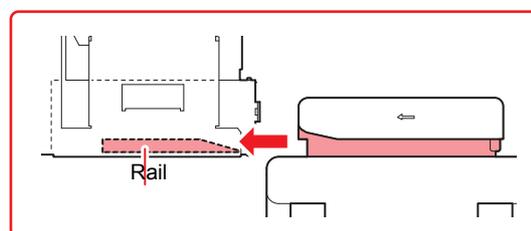


- Put a cap on the waste ink tank removed.



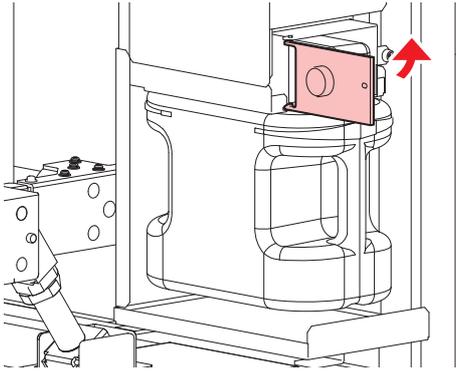
4 Replace the waste ink tank.

- Prepare a new waste ink tank (SPC-0197).
- Hold the handle of the waste ink tank and insert it along the rail.
- Raise the waste ink tank.



5 Close the waste ink tank cover.

- When the machine recognizes the new waste ink tank, the warning message is released.



Discarding the waste ink on the left side of machine

In the waste ink tank on the left side of the machine, the ink and cleaning solution discharged at the flushing will be accumulated.

When discarding the waste ink tank, please perform the following tasks.



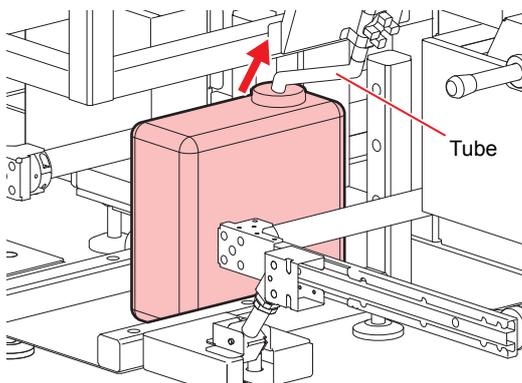
- Discard the waste ink in the waste ink tank every day. If left for a long time, the ink in the waste ink tank may be cured or overflow.
- When disposing of the waste ink, be sure to wear attached goggles and gloves to perform the work. Otherwise, you may get ink in your eyes.
- If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

1 Remove the waste ink tank.

- Pull out the tube inserted into the waste ink tank, and take out the waste ink tank.

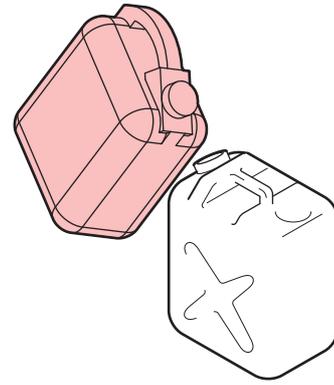


- When pulling out the tube, ink may drop from the tip of the tube. Wipe the tube with waste cloth and cover the tip before starting work.



2 Move waste ink to a polyethylene tank.

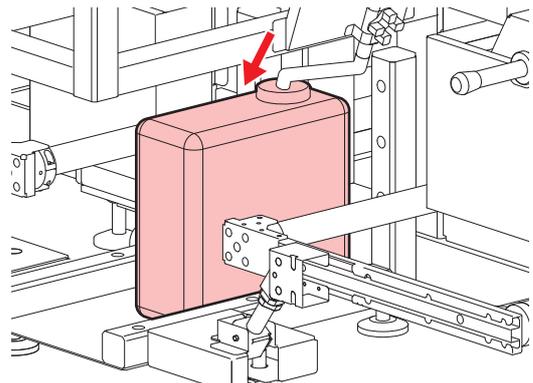
- Move waste ink pooled in the waste ink tank to another polyethylene tank.



- Request the treatment of waste ink you moved to a polyethylene tank for an industrial waste disposal contractor.
- A part of the ingredients (photo polymerization initiator) has toxicity against aquatic organisms. Please prevent leakage flow to natural water systems (river, etc.) and domestic sewages (toilet, road, etc.)
- Store the plastic container containing the waste ink out of the sun. Otherwise, the waste ink may cure.

3 Return the empty waste ink tank to the original position.

- Reinsert the tube pulled out.



For the operation limitation by the amount of waste ink

According to the amount of waste ink that has accumulated in the waste ink tank, there are items that will not be able to operate in this machine.

Discarding waste ink diligently is recommended.

Message	Waste ink near full	Waste ink full Waste ink tank none
Operation restriction	No	Following operations will not be activated. <ul style="list-style-type: none"> • Operation using ink • Print • Remote transition • If occurs during printing, transit to local after printing completion
Solution	It can be used as they are, but waste ink tank would be immediately full. Dispose the waste ink as soon as possible. Dispose of waste ink according to regional laws and regulations.	Emptying the waReplace the waste ink tank with new oneste ink tank referring to "Replace the waste ink tank with new one" Then, please reset the waste ink tank. Dispose of waste ink according to regional laws and regulations.

Replacing consumables

Replacing the wiper

The wiper is consumable. When the warning message "Replace a WIPER" is displayed, it is necessary to replace the wiper, immediately replace the wiper with a new one.

Also, wipe ink sticking to the lower surface of the wiper cleaner off.

Important!

- A cleaning wiper (SPA-0193) is an option. Buy one through the dealer in your region or at our service office.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.

- The Maintenance menu appears.

2 Press **▲▼** to select "Replace Wiper", and press the **ENTER** key.

3 Press the **ENTER** key.

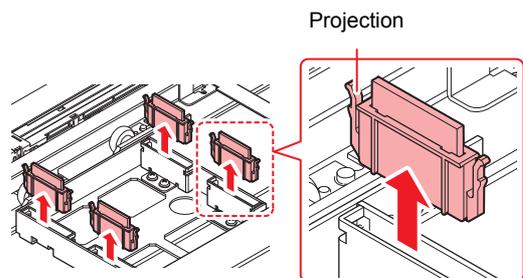
- The carriage moves onto the platen.
- The number of times when the wiper was used is reset.

Important!

- Until the replacement work is completed, [COMPLETED] is displayed on the screen. After the work up to the Step 3 is completed and you close the lower part of the right side front cover, press the [ENTER] key.

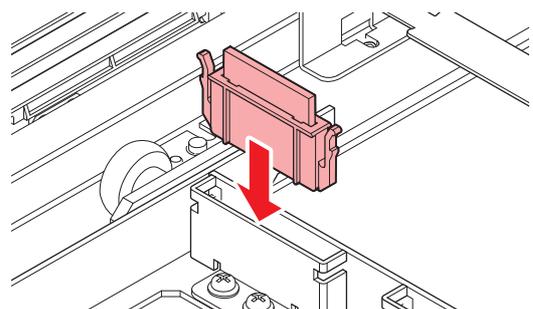
4 Open the right maintenance cover then remove the wiper.

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



5 Insert a new wiper.

- Insert a new wiper by holding its both ends.
- There is no direction to the wipers. They can be inserted with either side facing forward.



6 Close the lower part of the right side front cover and press the **ENTER** key.

- After its initial operation, the machine returns to Local.

Replacing the Mist Fan Filter (H fan filter)

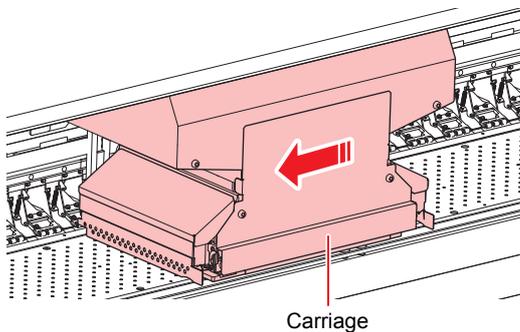
Replace it once a month.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.

- The Maintenance menu appears.

2 Press **▲▼** to select "CARIGE OUT", and press the **ENTER** key twice.

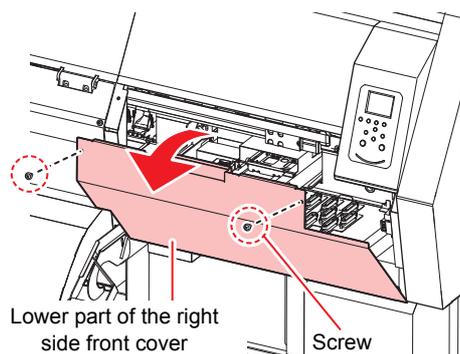
- The carriage moves onto the platen.



3 Open the lower part of the right side front cover.

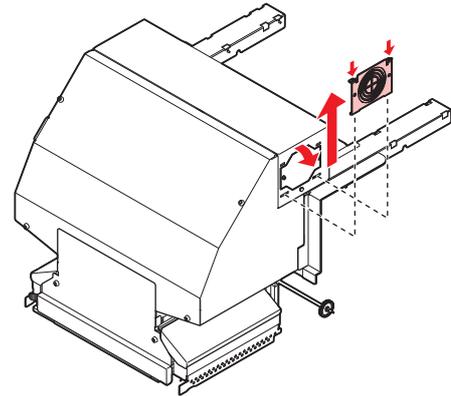
- (1) Remove the screws of the lower part of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.

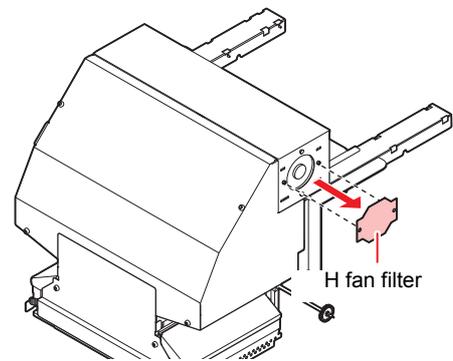


4 Remove the H fan filter cover at the right side of the carriage.

- Remove the screw on the H fan filter cover before removing the cover.

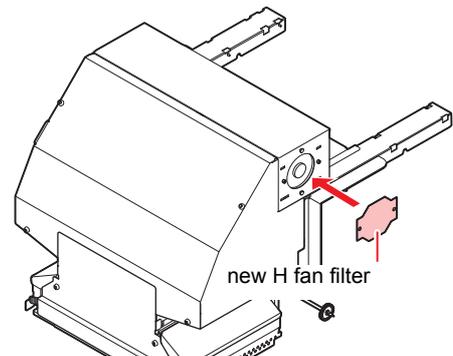


5 Remove the used H fan filter cover.



6 Mount a new H fan filter (SPC-0766).

- Align the hole in the H fan filter with the screw hole.



7 Return the H fan filter cover to the original status.

8 Close the lower part of the right side front cover, and press the **ENTER** key.

Important!

- Ink at printing adheres to the H fan filter ASSY. When replacing the filter, it is recommended to perform the work with a sheet of paper placed.

Discard the expired ink

If the expired ink is continued to use, it may cause a reduction of print quality and a failure of the machine. Once ink exceeds its expiration date, please promptly exchange it with the following procedure.



- Be sure to wear the accompanying gloves and protective goggles before working. The ink may get in your eyes.
- When disposing of ink, call for service from our company or our distributor.

1 Press the **FUNC1** (MENU) in LOCAL.

2 Press **▲▼** to select “Maintenance”, and press the **ENTER** key.

3 Press the **FUNC3** (>>).

4 Press **▲▼** to select “Waste Expored ink” and press the **ENTER** key.

5 Press **▲▼** to select a discard ink tank and press the **ENTER** key.

- The display it will display a confirmation screen of discard the expired ink. Also, ink type and date (month and year) will display.

6 If there is no problem on the confirmation screen, press the **ENTER** key.

- This resets the ink charge information embedded in this machine.

7 Discard the ink in the ink tank selected in step 4.

- When disposing of ink, call for service from our company or our distributor.



- Request that an industrial waste disposal company process the disposal ink.

8 Refer to “Fill ink in the ink tank and charging” on P.1-10, and refill with new ink.

Caution in handling of ink



- 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 eyes to rinse ink away completely. Then, consult a doctor as soon as possible.
- Use genuine ink tanks for this machine. This machine functions by recognizing the genuine ink tanks. In case of troubles caused by modified ink tanks or the like, it shall be out of the warranty even within the warranty period.
- If the ink bottle is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Make sure to store ink bottles in a cool and dark place.
- Store ink bottles 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 bottles.
- Be sure to thoroughly consume the ink in the ink bottle, once it is opened, within three months. If an extended period of time has passed away after opening the ink bottle, printing quality would be poor.
- Do not shake ink bottles violently. This may result in ink leakage from the ink bottles.
- Do not touch or stain the contacts of the IC chip. This may cause damages on printed circuit boards.

Replace the ink tank

To keep the ink in good quality in the ink tank, you need to replace the ink tank annually. When an appropriate warning message appears, be sure to replace tank in the following procedure:



- Be sure to wear the accompanying gloves and protective goggles before working. The ink may get in your eyes.
- When disposing of ink, call for service from our company or our distributor.

1 Press the **FUNC1** (MENU) in LOCAL.

2 Press **▲▼** to select “Maintenance”, and press the **ENTER** key.

3 Press the **FUNC3** (>>).

4 Press **▲▼** to select “Replace Ink Tank”, and press the **ENTER** key.

5 Press **▲▼** to select a desired ink tank, and press the **ENTER** key.

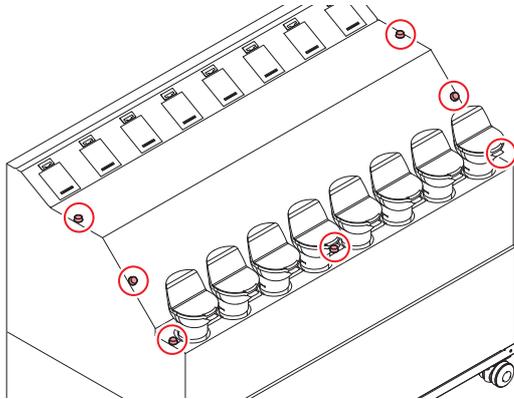
- The display it will display a confirmation screen of ink tank replacement. Also, ink type and date (month and year) will display.

6 If there is no problem on the confirmation screen, press the **ENTER** key.

- This resets the ink charge information embedded in this machine.

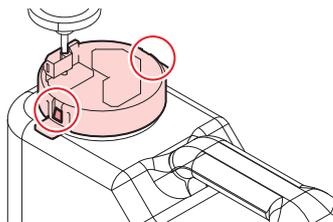
7 Remove the ink tank cover.

- remove the screws (7 places) that is attached to the ink tank cover, and remove the cover.

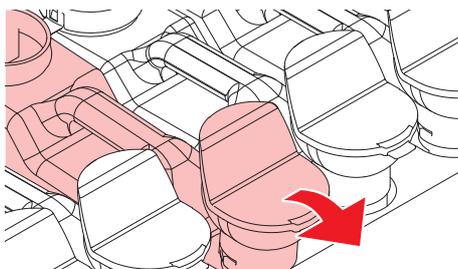


8 Remove the ink tank of the selected slot and press the **ENTER** key.

- (1) Press the protrusion on the lid of the ink tank and remove the lid.



- (2) Tilt the ink tank to the front and remove.
 - Please be careful not to bend the tube by tilting a tank too far.



- (3) Wipe the tube that is attached to the lid with the waste cloth etc., put the tube on the outside of the balance.

9 Discard the ink in the ink tank selected in step 4.

- When disposing of ink, call for service from our company or our distributor.



- Request that an industrial waste disposal company process the disposal ink.

10 Refer to P.4-28, and perform "Correct by the correction method "Normal"".

11 Replace the new ink tank.

- Cover the surrounding area with waste cloth for protection against dirt before changing the ink tank.

12 Refer to "Fill ink in the ink tank and charging" on P.1-10, and refill with new ink.

Caution in handling of ink



- 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 eyes to rinse ink away completely. Then, consult a doctor as soon as possible.
- Use genuine ink tanks for this machine. This machine functions by recognizing the genuine ink tanks. In case of troubles caused by modified ink tanks or the like, it shall be out of the warranty even within the warranty period.
- If the ink bottle is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Make sure to store ink bottles in a cool and dark place.
- Store ink bottles 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 bottles.
- Be sure to thoroughly consume the ink in the ink bottle, once it is opened, within three months. If an extended period of time has passed away after opening the ink bottle, printing quality would be poor.
- Do not shake ink bottles violently. This may result in ink leakage from the ink bottles.
- Do not touch or stain the contacts of the IC chip. This may cause damages on printed circuit boards.

Replacing the Cutter Blade

The cutter blade is consumable. When the cutter blade gets dull, replace it with a new one (SPA-0192).



- 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.



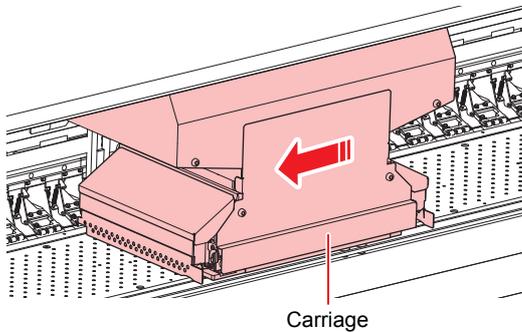
- When replacing the cutter blade, it is recommended to place a sheet of paper under the cutter blade. This will help pick up the cutter blade if it drops.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.

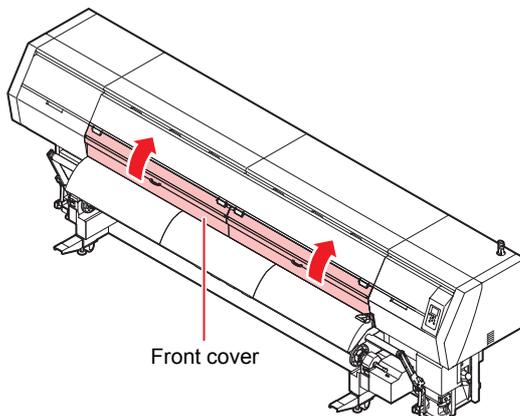
- The Maintenance menu appears.

2 Press **▲▼** to select “CARIGE OUT”, and press the **ENTER** key twice.

- The carriage moves onto the platen.

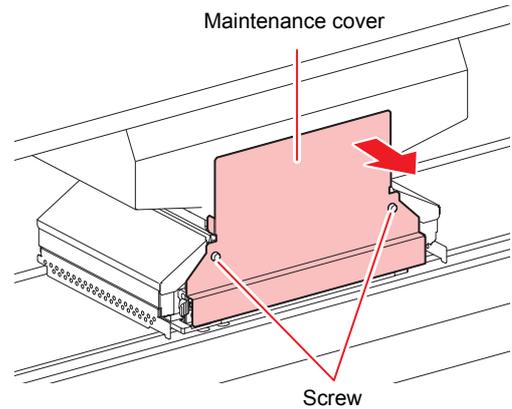


3 Open the front cover.



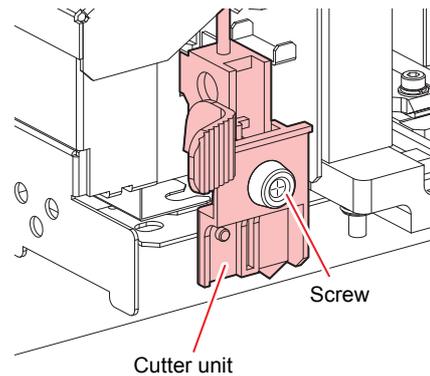
4 Remove the maintenance cover at the front of the carriage.

- Remove the screws of both edges of the maintenance cover, and remove the maintenance cover.



5 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.



6 Close the front cover.

7 Press the **ENTER** key.

- The screen returns to step 1.

8 Press the **END/POWER** key several times to end the setting.

Replacing the ink absorber

Ink absorber is set under the NCU (Nozzle Check Unit). Ink absorber absorbs the ink to be discharged at the time of nozzle check, please replace it periodically.

Tools required for Replacement

- | | | |
|---|----------|-----------|
| • Cleaning Liquid 03 MAINTENANCE KIT (ML003-Z-K1) | | |
| • Clean stick (SPC-0527) | • Gloves | • Goggles |



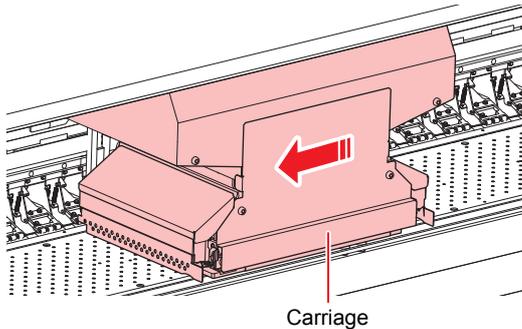
- Be sure to wear the attached goggles and gloves when replacing the ink absorber. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

1 Press the **SEL** key, and then press the **FUNC2 (MAINT)** in LOCAL.

- The Maintenance menu appears.

2 Press **▲** **▼** to select "CARIGE OUT", and press the **ENTER** key twice.

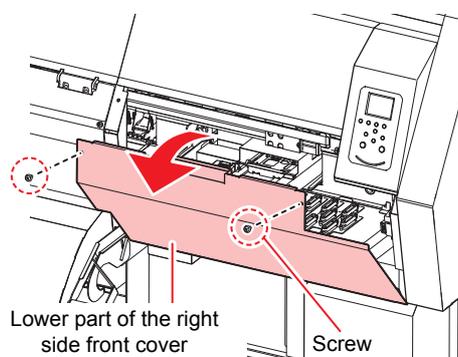
- The carriage moves onto the platen.



3 Open the lower part of the right side front cover.

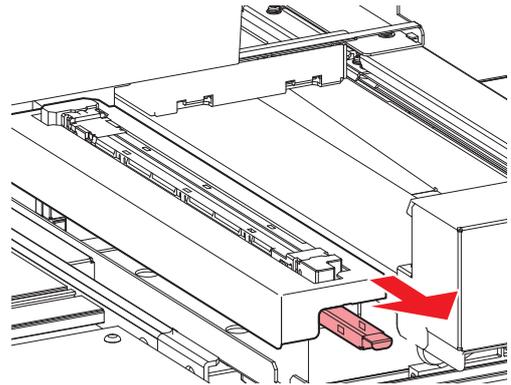
- (1) Remove the screws of the lower part of the right side front cover (for two positions).
- (2) Hold the upper of the lower part of the right side front cover and pull it to the front.

- Open the lower part of the right side front cover with the supplied screwdriver.



4 Replace the ink absorber.

- Pull out the knob at the bottom of the NCU, and replace the ink absorber.



5 Close the front cover.

6 Press the **ENTER** key.

- The screen returns to step 1.

7 Press the **END/POWER** key several times to end the setting.

Tank Calibration

This machine manages the remaining amount of ink with the weight balance that is built in the external ink supply unit.

If there is a difference between the remaining amount of ink displayed on the upper part of external ink supply unit and the actual ink remaining amount, or when the error message "INKTNK SENS" has occurred, please perform the following tasks.

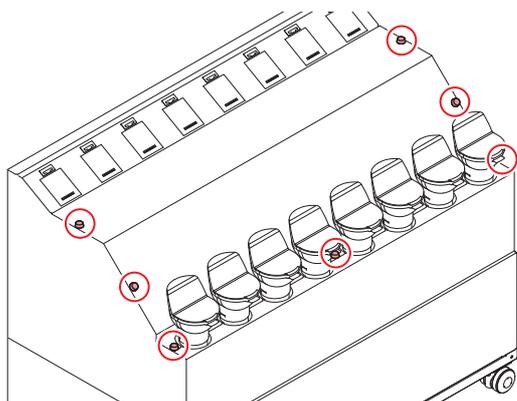
Method for correcting the weight balance

There are two types of correction method for the weight balance.

Normal	Using a 1kg wight, you can correct in high accuracy.
Adjust Zero Pos.	You can correct without using a weight. The correction work is carried out easily but less accurate than the adjustment in the "Normal".

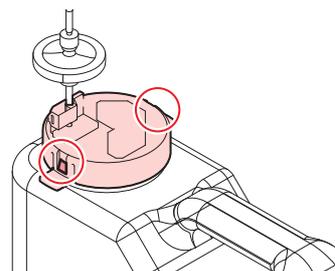
Correct by the correction method "Normal"

- 1** Press the **[FUNC1]** (MENU) in LOCAL.
- 2** Press **[▲]** **[▼]** to select "Maintenance" and press the **[ENTER]** key.
- 3** Press the **[FUNC3]** (>>).
- 4** Press **[▲]** **[▼]** to select "Tank Calibration", and press the **[ENTER]** key.
- 5** Press **[▲]** **[▼]** to select "Normal" and press the **[ENTER]** key.
- 6** Press **[▲]** **[▼]** to select an ink tank (slot 1 To 8) to be corrected, and press the **[ENTER]** key.
- 7** Remove the ink tank cover.
 - remove the screws (7 places) that is attached to the ink tank cover, and remove the cover.

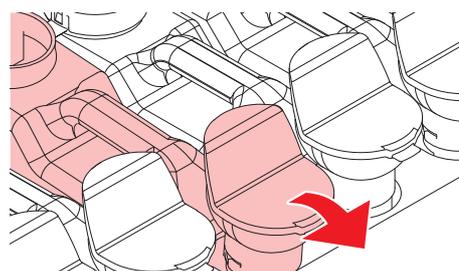


8 Remove the ink tank of the selected slot and press the **[ENTER]** key.

- (1) Press the protrusion on the lid of the ink tank and remove the lid.



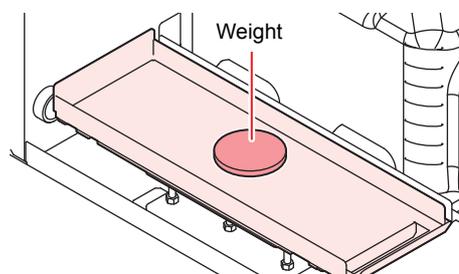
- (2) Tilt the ink tank to the front and remove.
 - Please be careful not to bend the tube by tilting a tank too far.



- (3) Wipe the tube that is attached to the lid with the waste cloth etc., put the tube on the outside of the balance.

9 Place the 1kg weight on the dish of the balance of selected slot and press the **[ENTER]** key.

- Process the correction.



Important!

- Please put the weight in the center of the dish of the balance. If you put weight on the edge of the dish, it will cause to increase the error of the remaining amount detection.
- During the correction process, please do not give vibration to the external ink supply unit. There is a possibility to fail the correction process.
- When the correction process fails, "Failed" will be shown on the display. Press the **[ENTER]** or **[END]** key, and change the position or the load of the weight.

10 When the correction processing is finished successfully, remove all the weights on the dish of the balance and press the **ENTER** key.

- Perform the correction processing without the weight on the balance.

Important!

- During the correction process, please do not give vibration to the external ink supply unit. There is a possibility to fail the correction process.
- When the correction process fails, "Failed" will be shown on the display. Press the [ENTER] or [END] key to clear the error display and press again the [ENTER] key. It will resume the correction processing.

11 When the correction processing is finished successfully, set the ink tank that was removed in step 8 and press the **ENTER** key.

Correct by the correction method "Adjust Zero Pos."

1 Press the **FUNC1** (MENU) in LOCAL.

2 Press **▲▼** to select "Maintenance", and press the **ENTER** key.

3 Press the **FUNC3** (>>).

4 Press **▲▼** to select "Tank Calibration", and press the **ENTER** key.

5 Press **▲▼** to select "Adjust Zero Pos." and press the **ENTER** key.

6 Press **▲▼** to select an ink tank (Slot 1 to 8) to be corrected, and press the **ENTER** key.

7 Remove the ink tank of the selected slot and press the **ENTER** key.

- Perform the correction processing without the weight on the balance.

Important!

- During the correction process, please do not give vibration to the external ink supply unit. There is a possibility to fail the correction process.
- When the correction process fails, "Failed" will be shown on the display. Press the [ENTER] or [END] key to clear the error display and press again the [ENTER] key. It will resume the correction processing.

8 When the correction processing is finished successfully, set the ink tank that was removed in step 7 and press the **ENTER** key.

Chapter 5

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.

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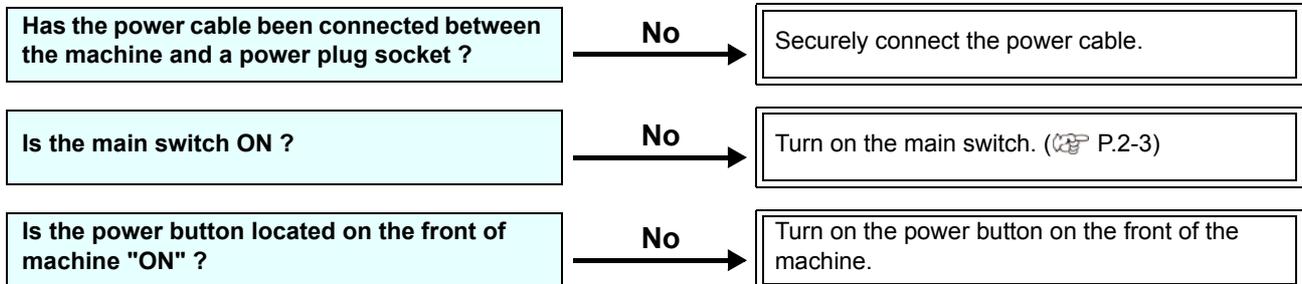
Troubleshooting

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

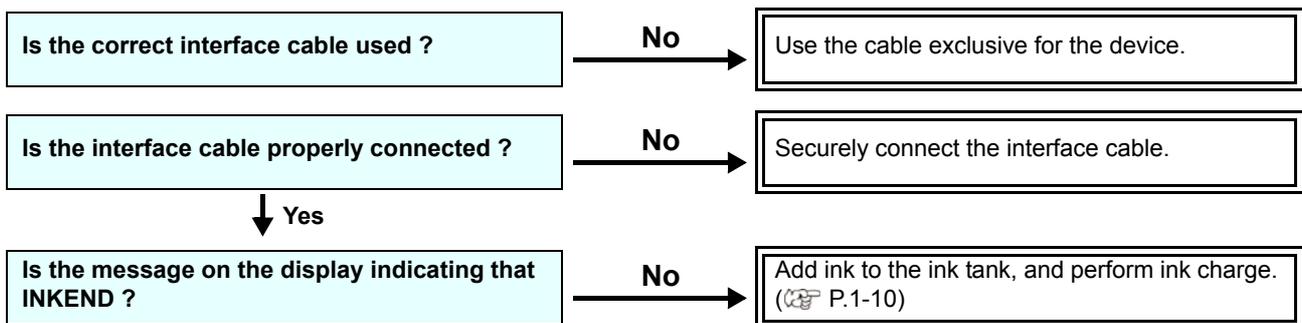
In most cases, this is due to improper connection of the power cable for the machine or computer. Check that the power cable is connected properly.



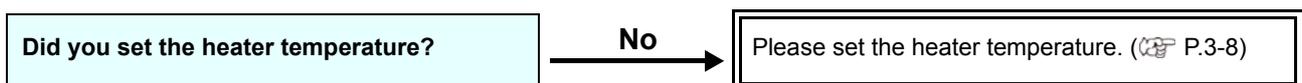
The machine does not start printing

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.

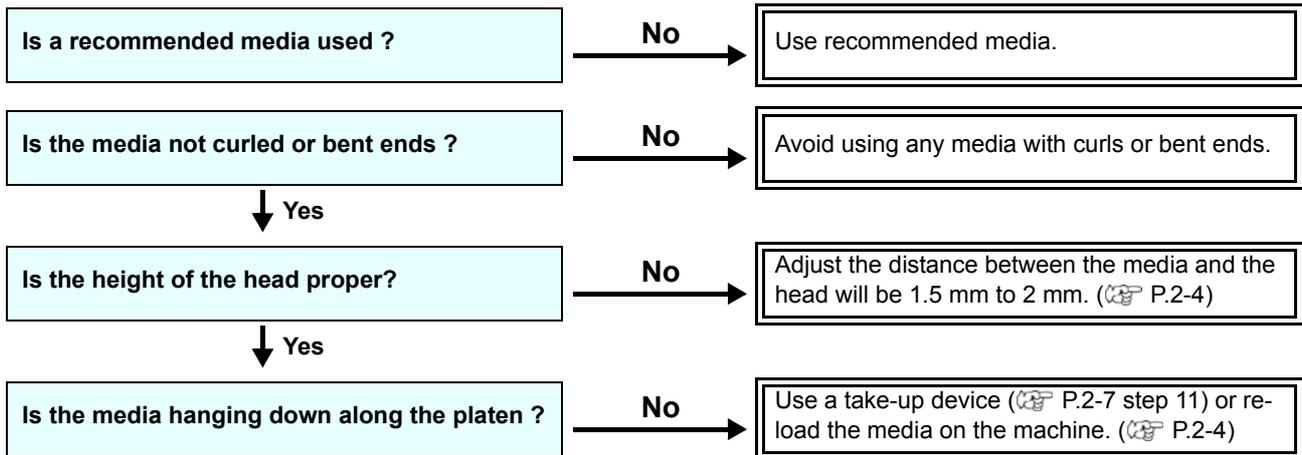


The temperature of the heater does not rise to the set value



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.



● If the media gets clogged, perform the work below:

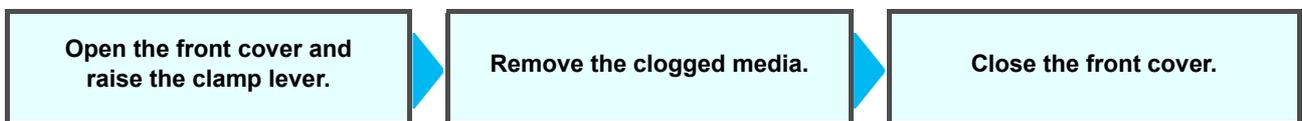


Image quality is poor

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)	(1) Execute the head cleaning. (☞ P.2-17) (2) Perform maintenance of the inside of the station. (☞ P.4-8) (3) Execute the [MEDIA COMP.] function. (☞ P.4-12) (4) If any pieces of paper or dust is attached on the path of the heads such as media press, remove it.
Characters are double- or triple-printed in the media feed direction	(1) Execute the [MEDIA COMP.] function. (☞ P.2-18)
Disagreement in print positions between outward trip and homeward trip	(1) Execute the [DROP POSITION] function. (☞ P.2-19)
Ink drops falling on media during printing	(1) Execute the wiper cleaning. (☞ P.4-8) (2) Execute the ink cap cleaning. (☞ P.4-8) (3) Clean around the head. (☞ P.4-12) (4) Execute the head cleaning [Normal]. (☞ P.2-17) (5) Set a shorter interval of Interval Wiping operation. (☞ P.3-15)

Nozzle is clogged

When nozzle missing is not dissolved even after the head cleaning referring to P.2-17, make sure the following operations.

- Maintenance the sub tank by the operations of P.5-4
- Wash the head nozzle by the operations of P.4-14.
- Recovery the nozzle by the operations of P.4-15.

Ink tank warning appears

If an ink tank trouble is detected, a warning message appears.

None of printing, cleaning and all the other operations that use ink is available.

If an abnormality occurs, perform the following procedures:

- Check the ink amount in the ink tank and if the ink amount is not enough, add ink.

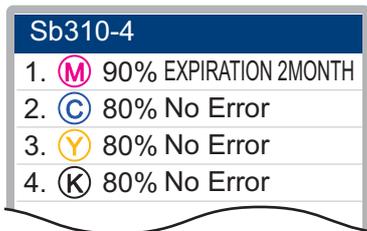
Important!

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

Displaying the description of ink bottle trouble

The contents of ink bottle error are confirmable by the following operations.

- 1 Press the **ENTER** key in Local.



If an error related to the Sub Tank occurs (Error 618 to 61b)

The Error 618 to 61b are related to the sub tank.

Execute following procedures when an error about sub tank occurs, or when the nozzle is not unclogged after cleaning.

- 1 Press the **FUNC1** (MENU) in Local.

- 2 Press **▲▼** to select "Maintenance", and press the **ENTER** key.

- Maintenance menu appears.

- 3 Press **▲▼** to select "Sub Tank", and press the **ENTER** key.

- 4 Press the **ENTER** key.

- Discharge the ink in the sub tank, and charge ink into the tank.

When media heaves up at feeding

We call the status of heaving media at feeding "cockling". When media cockling occurs, check the following items:

Note/ checking items	Measures
Checking media set status	(1) Check that the media is set straight and reset it.
Adjusting heater temperature	(1) Upper print-heaters' temperatures.
Media feeding	(1) For roll media, feed the media by about tens of centimeters to one meter. (2) For leaf media, press ▲▼ and perform feed/ back feed.
Do not leave the media in the heater warming status	(1) Do not start printing with the media cockled because it may cause media jam.
Heighten the head	(1) For the thick media, make the head gap higher before printing.

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

Errors when performing operations

Message	Cause	Solution
ERROR 901 INVALID OPERATION	Operation error	<ul style="list-style-type: none"> Return to the LOCAL screen, check the error status, and take appropriate actions.
ERROR 902 DATA REMAIN	There remains received data that has not yet been printed.	<ul style="list-style-type: none"> Execute the data clear function. (P.2-20)
ERROR 90d NO HEAD SELECT	Executed the processing without selecting a head.	<ul style="list-style-type: none"> Select the head. (P.3-20)
ERROR 90f PRINT AREA SHORT	The media is not wide or long enough for printing.	<ul style="list-style-type: none"> Replace the media with one having enough width or length. If the media width is decreased because the origin is moved, shift the origin to the right to increase the effective media width.
ERROR 912 INVALID INK CHARGE	Cannot ink charge by the following factors. <ul style="list-style-type: none"> Detected an abnormality of the information of the IC chip. The expiration date for the ink has passed. The charged ink level is nearly full, so ink cannot be charged. The expiration date for the ink tank has passed. 	<ul style="list-style-type: none"> Please run the ink charge (P.1-10) again. If you still cannot charge, please check the cause that cannot be charged with P.3-28 "Displaying the Information of this machine".

Errors when the printer stops due to an emergency

Message	Cause	Solution
Close the cover.	The cover is open.	<ul style="list-style-type: none"> Close the cover. (P.viii) When [ENTER] is displayed on the screen, press the ENTER key. Recovery operations begin. When the machine cannot recover, or the cover is already closed and the message is still displayed, turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.
MEDIA JAM	A media jam is occurred.	<ul style="list-style-type: none"> Remove the clogged media. (P.5-3) When [ENTER] is displayed on the screen, press the ENTER key. Recovery operations begin. When the machine cannot recover, or the cover is already closed and the message is still displayed, turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.

Message	Cause	Solution
Release the emergency switch.	The emergency switch has been pressed.	<ul style="list-style-type: none"> Release the emergency switch. (P.1-14) When [ENTER] is displayed on the screen, press the ENTER key. Recovery operations begin. When the machine cannot recover, or the cover is already closed and the message is still displayed, turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.
Close the cover. Release the emergency switch.	The cover is open. Or, the emergency switch has been pressed.	<ul style="list-style-type: none"> Close the cover. (P.viii) Release the emergency switch. (P.1-14) When [ENTER] is displayed on the screen, press the ENTER key. Recovery operations begin. When the machine cannot recover, or the cover is already closed and the message is still displayed, turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.
(Clamp lever OFF)	Clamp lever is raised.	<ul style="list-style-type: none"> Push down the clamp lever. (P.1-3) When [ENTER] is displayed on the screen, press the ENTER key. Recovery operations begin. When the machine cannot recover, or the cover is already closed and the message is still displayed, turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.

Errors when ink charging is performed

Message	Cause	Solution
INK IC Expiration Charge Anyway ? NO < > YES	The expiration date for the inserted IC chip has passed.	<ul style="list-style-type: none"> Change the ink bottle with a new one. Select [YES] to continue to use the ink.
IC Expiration:1MONTH Charge Anyway ? NO < > YES	The expiration date of the inserted IC chip has passed (one month has passed after the specified expiration date).	
IC Expiration:2MONTH CANNOT CHARGE	The expiration date of the inserted IC chip has passed (two months have passed after the specified expiration date).	<ul style="list-style-type: none"> Charging is impossible. Insert the IC chip of the ink bottle which has not passed its expiration date. If the error occurs on the ink which is still in its expiration date, check the time of this machine.
WRONG INK IC CANNOT CHARGE	The IC chip cannot be read normally.	<ul style="list-style-type: none"> Remove the IC chip generating the warning once and install it again. If the same warning message still appears, contact your local distributor to call for service.
INK TYPE CANNOT CHARGE	An IC chip that has already been charged was inserted.	<ul style="list-style-type: none"> Install the new IC chip.

Message	Cause	Solution
INK TYPE CANNOT CHARGE	The type of ink on the inserted IC chip is different from the ink in the bottle.	<ul style="list-style-type: none"> • Check the type of ink on both the IC chip and the ink bottle.
INK COLOR CANNOT CHARGE	The color of ink on the inserted IC chip is different from the ink in the bottle.	<ul style="list-style-type: none"> • Check the color of ink on both the IC chip and the ink bottle. • Check the color of the ink bottle.
Expiration Charge Anyway ? NO < > YES	The expiration date for the ink has passed.	<ul style="list-style-type: none"> • After discarding the ink in the tank in P.4-24 "Discard the expired ink", please charge ink. (☞ P.1-10) • Select [YES] to continue to use the ink.
Expiration:1MONTH Charge Anyway ? NO < > YES	The expiration date of the ink has passed (one month has passed after the specified expiration date).	
Expiration:2MONTH CANNOT CHARGE	The expiration date of the ink has passed (two months have passed after the specified expiration date).	<ul style="list-style-type: none"> • It cannot be used as it is. After discarding the ink in the tank in P.4-24 "Discard the expired ink", please charge ink. (☞ P.1-10)
FULL CHARGE INK CANNOT CHARGE	The charged ink amount remains more than a 3 liter. Ink charging is impossible.	<ul style="list-style-type: none"> • Try again after consuming the ink.
FULL CHARGE INK Charge Anyway ? NO < > YES	Exceeded the expiration date of the ink tank which is intended to charge.	<ul style="list-style-type: none"> • Please discard the ink in the tank in the first P.4-24 "Discard the expired ink". After that, replace it with a new ink tank, and charge ink. (☞ P.1-10) • Select [YES] to continue to use the ink.

Message displayed in LOCAL

Message	Cause	Solution
INK ERROR	An ink error occurred.	<ul style="list-style-type: none"> Check the ink bottle for the supply path corresponding to the indicated color.
InkOverflow : MMBBYYKK	Ink has entered the air tank.	<ul style="list-style-type: none"> Perform "SUBTANK" of the maintenance. (☞ P.5-4) Even if you perform, it may be displayed, contact your local distributor to call for service.
TANKlevelH : MMBBYYKK	The sub tank sensor High does not change though a certain amount of ink has been consumed.	
TANKlevelL : MMBBYYKK	The sub tank sensor Low does not change though a certain amount of ink has been consumed.	
SUPPLY INK : MMBBYYKK	Ink could not be supplied to the sub tank.	<ul style="list-style-type: none"> Perform "SUBTANK" of the maintenance. (☞ P.5-4) Also check the remaining amount of ink in the ink bottle. (☞ P.1-10) Even if you perform, it may be displayed, contact your local distributor to call for service.
REPLACE INKTANK : MMBBYYKK	Time to replace the ink tank of the displayed color (A certain period has passed since the start of use of the ink tank.)	<ul style="list-style-type: none"> Perform "Replace Ink Tank" (☞ P.4-24) of the maintenance. The ink charge information is also reset. After replacing the ink tank, charge the new IC chip and refill ink. (☞ P.1-10)
Take-UP CoverOPEN	Detected a cover open of the media take-up device.	<ul style="list-style-type: none"> Close the cover.
Take-UP WRONG	An abnormality occurred in the take-up status of the media take-up machine.	<ul style="list-style-type: none"> Check if the media setting is set to ROLL when the take-up device is not used. Check if the taking-up direction switch and the taking-up manual switch are set correctly. (☞ P.2-10) Check that the media is set on the media take-up machine correctly. Turn ON and OFF the manual switch, and raise the tension bar to a correct position. Feed the media in the jog operation in the direction reverse to that used at the time when the error occurred.
Take-UP LimitDETECT	The control limit sensor of the media take-up machine was detected.	<ul style="list-style-type: none"> Check if the media can be fed correctly in the jog operation. Lower the position of the tension bar at the take-up side. Even if you lower the position, if the same message is displayed, contact a distributor in your district, our office or our call center.
Feeding WRONG	An abnormality occurred in the feeding status of the media feeding machine.	<ul style="list-style-type: none"> Check if the media setting is set to ROLL when the feeding device is not used. Check if the taking-up direction switch and the feeding manual switch are set correctly. Check that the media is set on the media feeding machine correctly. Turn ON and OFF the manual switch, and raise the tension bar to a correct position. Feed the media in the jog operation in the direction reverse to that used at the time when the error occurred.

Message	Cause	Solution
Feeding LimitDETECT	The control limit sensor of the media feeding machine was detected.	<ul style="list-style-type: none"> • Check if the media can be fed correctly in the jog operation. • Lower the position of the tension bar at the feeding side. Even if you lower the position, if the same message is displayed, contact a distributor in your district, our office or our call center.
NCU SENSOR LEVEL LOW	The NCU sensor sensitivity is falling.	<ul style="list-style-type: none"> • Replacement of the NCU is recommended. • Contact our service desk or your local distributor to call for service.
Nozzle Missing Print Stopped	Because the nozzle check found nozzles missing, printing was stopped.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-17) If the same error message appears, contact our service desk or your local distributor to call for service. • The nozzle condition can be checked on the local guidance screen. (☞ P.3-28)
NCU FLUSH POS Nozzle check OFF	Because an NCU-related error occurred during nozzle check, printing was stopped and the nozzle check function was turned OFF.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-17) If the same error message appears, contact our service desk or your local distributor to call for service.
NCU CENTER POS Nozzle check OFF		
NCU SN ADJUST Nozzle check OFF		
NCU NZK CHK (HW) Nozzle check OFF		
NCU NZK CHK (MARK) Nozzle check OFF		
NCU CONNECT	The NCU unit is not connected. The nozzle check function cannot be used.	<ul style="list-style-type: none"> • Turn off the main power to the machine and turn it on after a while. If the same error message appears, contact our service desk or your local distributor to call for service.
REPLACE NCU	The NCU sensor sensitivity is too low to correctly judge nozzle missing. The nozzle check function cannot be used.	<ul style="list-style-type: none"> • NCU replacement is necessary. Contact our service desk or your local distributor to call for service.
REPLACE NCU INK PAD	The NCU ink pad is full.	<ul style="list-style-type: none"> • It is necessary to replace the NCU ink pad. Contact our service desk or your local distributor to call for service.
NCU ERROR Nozzle check OFF	Because an NCU-related error occurred during nozzle check, printing was stopped and the nozzle check function was turned OFF.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-17) If the same error message appears, contact our service desk or your local distributor to call for service.
REPLACE WIPER	Time to replace the wiper on the capping station (The number of times of wiping has reached a specified value.)	<ul style="list-style-type: none"> • Perform [Replace Wiper] in [Station], and replace the wiper. (☞ P.4-22)
** NO MEDIA **	Media is not set, or failure of the media sensor.	<ul style="list-style-type: none"> • After setting the media, please lower the clamp lever. If the same error message appears, contact our service desk or your local distributor to call for service.

Message	Cause	Solution
DATA REMAIN	Data was received.	<ul style="list-style-type: none"> Execute the data clear. (☞ P.2-20) Restart if the error message remains after the execution of the data clear.
MACHINE TEMP./H ***°C	The machine is hot.	<ul style="list-style-type: none"> Use cooling equipment to lower the room temperature to a specified range. Wait until the machine cools down. If the same error message remains after the machine is left at a specified room temperature for an enough time, contact our service desk or your local distributor to call for service.
MACHINE TEMP./L ***°C	The machine is cold.	<ul style="list-style-type: none"> Use a heating system to raise the room temperature to a specified range. Wait until the machine warms up. If the same error message remains after the machine is left at a specified room temperature for an enough time, contact our service desk or your local distributor to call for service.

Ink Error

Ink error is displayed also in the local guidance. (📖 P.3-27)

Message	Cause	Solution
WRONG INK IC	The inserted IC chip is not loaded correctly.	<ul style="list-style-type: none"> Remove the IC chip 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 type of ink on the inserted IC chip is different from the ink in the bottle.	<ul style="list-style-type: none"> Check the type of ink on both the IC chip and the ink bottle.
COLOR OF INK	The color of ink on the inserted IC chip is different from the ink in the bottle.	<ul style="list-style-type: none"> Check the color of ink on both the IC chip and the ink bottle. Check the color of the ink for the slot into which the IC chip was inserted.
INK IC ALREADY USED	An IC chip that has already been charged was inserted.	<ul style="list-style-type: none"> Insert an IC chip that has not yet been charged.
INK IC Expiration	The expiration date for the inserted IC chip has passed.	<ul style="list-style-type: none"> The expiration date for both the IC chip and the ink bottle has passed. This ink can still be used by performing ink charging with the maintenance function.
IC Expiration : 1MONTH	The expiration date for the inserted IC chip has passed. (1 month from the expiration date)	<ul style="list-style-type: none"> The expiration date for both the IC chip and the ink bottle has passed by 1 month or more. This ink can still be used by performing ink charging with the maintenance function.
IC Expiration : 2MONTH	The expiration date for the inserted IC chip has passed. (2 months from the expiration date)	<ul style="list-style-type: none"> The expiration date for both the IC chip and the ink bottle has passed by 2 months or more. Use a new ink IC and ink bottle.
NO INK TANK	The ink tank is not set on the external ink supply unit.	<ul style="list-style-type: none"> Set the ink tank on the ink slot with the warning.
Ink End	No ink that can be used.	<ul style="list-style-type: none"> Since the available ink has run out, it will not be able to use such as a print or cleaning. Check the ink that has occurred warning in the P.3-28 "Displaying the Information of this machine", and remove the cause.
Ink Near END	The ink in the ink tank is low.	<ul style="list-style-type: none"> Since the available ink has run out, it will not be able to use such as a print or cleaning soon. Check the ink that has occurred warning in the P.3-28 "Displaying the Information of this machine", and remove the cause.
Expiration	The expiration date on the ink has passed.	<ul style="list-style-type: none"> The expiration date has passed. However, you can use it until the end of the following month. If you want to replace it with a new ink, please perform the P.4-24 "Discard the expired ink".
Expiration (1MONTH)	The expiration date on the ink has passed. (1 month from the expiration date)	<ul style="list-style-type: none"> One month has passed after the expiration date. However, you can use it until the end of this month. (The ink bottle lamp blinks in red.) If you want to replace it with a new ink, please perform the P.4-24 "Discard the expired ink".

Message	Cause	Solution
Expiration (2MONTH)	The expiration date on the ink has passed. (2 months from the expiration date)	<ul style="list-style-type: none"> Two months have passed after the expiration date. Replace the ink bottle generating the warning with a new one. If you want to replace it with a new ink, please perform the P.4-24 "Discard the expired ink".
Tank End	The ink in the ink tank has run out. (remaining less than 300cc)	<ul style="list-style-type: none"> Please shirrtail the ink to the ink tank warning is occurring. (☞ P.1-10)
Tank Near End	The ink in the ink tank is low. (remaining less than 400cc)	
Charge Near End	The remaining amount of ink charged in this machine is low.	<ul style="list-style-type: none"> Charge the ink into the ink tank which the warning occurred. (☞ P.1-10)
Charge End	The ink remaining in the printer has reached zero.	
AD VAL Error	Abnormality occurs in the weight balance of the supply unit.	<ul style="list-style-type: none"> Please make sure if correctly set the weight to the ink tank, do not give a shock, or do not put the things that becomes a load. Please execute the P.4-28 "Tank Calibration". Please turn on the power again. After the above operation, if not resolved, please contact our service office or our distributor in your region.

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 04 PARAM ROM	The PCB is defective.	<ul style="list-style-type: none"> • Turn off the power button 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 108 HD CONNECT [1234]	Abnormal connection of the print head	
ERROR 122 CHECK : SDRAM [1234]	Not found PRAM board.	
ERROR 108 HD MEM EMP [1234]	The print head has been broken.	
ERROR 108 HD TYPE [1234]		
ERROR 128 HDC FIFO OVER	Control circuit board is defective.	
ERROR 128 HDC FIFO UNDER		
ERROR 128 BATTERY EXCHANGE	The battery life end of the internal clock is detected.	• Contact your local distributor to call for service.
ERROR 12a HDC SPEED [12]	Ink discharge control error	<ul style="list-style-type: none"> • Turn off the power button 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 12a HEAD ROM WR	Head control error	
ERROR 12e HeadFaild /HDC[**]	The print head has been broken.	
ERROR 130 HD DATA SEQ	Control circuit board is defective.	
ERROR 148 E-LOG SEQ		
ERROR 151 Main PCB V1R2	An error occurred in the main power.	
ERROR 152 Main PCB V2R5		
ERROR 153 Main PCB V3R3		
ERROR 154 Main PCB V05		
ERROR 155 Main PCB V36-1		
ERROR 156 Main PCB V5B		
ERROR 157 Main PCB VTT		
ERROR 158 Main PCB V36-2		
ERROR 158F HEAD DRIVE HOT	The temperature abnormality of control circuit board has been detected.	<ul style="list-style-type: none"> • Turn off the power button 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 16e Main PCB V3R3B	An error occurred in the main power.	
ERROR 171 NEW HEAD CONNECT	Connection of a new head was recognized.	

Message	Cause	Solution	
ERROR 186 HDC OVERFLOW [12]	Ink discharge control error	<ul style="list-style-type: none"> • Turn off the power button 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 186 HDC UNDERFLOW [12]			
ERROR 187 HDC SLEW RATE [12]			
ERROR 188 HDC MEMORY [12]			
ERROR 18a Main PCB V_CORE	An error occurred in the main power.		
ERROR 18b Main PCB V1R5B			
ERROR 18c Main PCB V12			
ERROR 18e FLS NOT COMP [12]	Ink discharge control error		
ERROR 18f OFFSET START [12]			
ERROR 18f OFFSET END [12]			
ERROR 19d HDC V36 [12]	Abnormal ink discharge voltage was detected.		
ERROR 201 COMMAND	Abnormal communication between PC and printer	<ul style="list-style-type: none"> • Check the USB cable/ LAN cable connection. Use a USB cable/ LAN cable conforming to the standard. 	
ERROR 202 PARAMETER			
ERROR 203 Ment Command			
ERROR 206 PRINTING MODE		<ul style="list-style-type: none"> • Check the USB cable/ LAN cable connection. Use a USB cable/ LAN cable conforming to the standard. • Check output conditions. 	
ERROR 304 USB INIT ERR	USB device error.	<ul style="list-style-type: none"> • Turn off the power button 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 305 USB TIME OUT			
ERROR 306 USB GET DESC			
ERROR 401 MOTOR X	An excessive load was applied to the X motor.		
ERROR 402 MOTOR Y	An excessive load was applied to the Y motor.		
ERROR 403 X CURRENT	An error due to an excessive current of the X motor was detected.		
ERROR 404 Y CURRENT	An error due to an excessive current of the Y motor was detected.		
ERROR 41B ** NO MEDIA **	Media end		<ul style="list-style-type: none"> • Set the media to cover over the media sensors.
ERROR 423 TAKE-UP TENSION-BAR	The media set check detected abnormality of the take-up tension bar at the start of printing.		<ul style="list-style-type: none"> • Check the media set condition, and remove any problem.
ERROR 424 FEEDING TENSION-BAR	The media set check detected abnormality of the feeding tension bar at the start of printing.		

Message	Cause	Solution
ERROR 425 Take-UP WRONG	An error occurred in the take-up status of the take-up device.	<ul style="list-style-type: none"> • Check if the media setting is set to ROLL when the take-up device is not used. • Check if the taking-up direction switch and the taking-up manual switch are set correctly. • Check that the media can be taken up to the take-up device. • Turn ON and OFF the manual switch, and raise the tension bar to a correct position. • Feed the media in the jog operation in the direction reverse to that used at the time when the error occurred.
ERROR 426 Feeding WRONG	An error occurred in the take-up status of the feeding device.	<ul style="list-style-type: none"> • Check if the media setting is set to ROLL when the feeding device is not used. • Check if the taking-up direction switch and the feeding manual switch are set correctly. • Check that the media can be taken up to the feeding device. • Turn ON and OFF the manual switch, and raise the tension bar to a correct position. • Feed the media in the jog operation in the direction reverse to that used at the time when the error occurred.
ERROR 427 Take-UP Cover OPEN	The cover open of take-up device was detected.	<ul style="list-style-type: none"> • Close the cover.
ERROR 428 Feeding Cover OPEN	The cover open of feeding device was detected.	
ERROR 429 Take-UP LimitDETECT	The take-up limit was detected.	<ul style="list-style-type: none"> • Check if the media can be fed correctly in the jog operation. • Lower the position of the tension bar on the take-up side by using the manual switch.
ERROR 42A Feeding LimitDETECT	The feeding limit was detected.	<ul style="list-style-type: none"> • Check if the media can be fed correctly in the jog operation. • Lower the position of the tension bar on the feeding side by using the manual switch.
ERROR 42b Take-UP Bar Shelter	The take-up tension bar has been retracted.	<ul style="list-style-type: none"> • Please lower the take-up tension bar.
	The tension bar has not been retracted when media cut or etc.	<ul style="list-style-type: none"> • Please retract the take-up tension bar.
ERROR 42b Feeding Bar Shelter	The feeding tension bar has been retracted.	<ul style="list-style-type: none"> • Please lower the feeding tension bar.

Message	Cause	Solution
ERROR 432 Take-UP Connect	Take-up device connection destination error	<ul style="list-style-type: none"> • Turn off the power button 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 433 Feeding Connect	Feeding device connection destination error	
ERROR 436 Take-UP Fuse Err	Take-up fuse blown	
ERROR 437 Feeding Fuse Err	Feeding fuse blown	
ERROR 442 Take-UP Unit None	Take-up device missing	
ERROR 443 Feeding Unit None	Feeding device missing	
ERROR 447 CUTTER ENCODER ERR	An abnormality occurred in the cutter encoder.	
ERROR 44d STATION POS ERR	An abnormality occurred in the station position.	
ERROR 468 Feed MTR ERR	An abnormality occurred in the feeding motor.	
ERROR 469 Take MTR ERR	An abnormality occurred in the take-up motor.	
ERROR 453 Take-UP Direction	The take-up direction of the media that has been set in the media take-up device is not made to the specifications recommended (face-out winding).	<ul style="list-style-type: none"> • Please make the face-in winding direction of the media.
ERROR 468 Feed MTR ERR	An abnormality occurred in the feeding motor.	<ul style="list-style-type: none"> • Turn off the power button 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 469 Take MTR ERR	An abnormality occurred in the take-up motor.	
ERROR 505 MEDIA JAM	A media jam is occurred.	<ul style="list-style-type: none"> • Remove the jammed media, please re-set the media.
ERROR 50a Y ORIGIN	Y-origin could not be detected.	<ul style="list-style-type: none"> • Turn off the power button 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 50c MEDIA WIDTH SENSOR	The media width has not been detected correctly.	<ul style="list-style-type: none"> • Check the media set position. • Clean the media sensor. (☞ P.4-3)
ERROR 50f L-SCALE BLACK	Abnormal linear scale.	<ul style="list-style-type: none"> • Turn off the power button 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 510 THICKNESS DETECT	A media thickness detection error is occurred.	<ul style="list-style-type: none"> • Entering the media thickness by manual operation (☞ P.2-11), and detect the media thickness again.
ERROR 516 MEDIA SET POSITION R	The media is set outside the proper area.	<ul style="list-style-type: none"> • Check the media set position.
ERROR 516 MEDIA SET POSITION L		

Message	Cause	Solution
ERROR 531 INK TNK SENS :12345678	Abnormality has occurred in the balance of the ink supply unit.	<ul style="list-style-type: none"> • Please make sure if correctly set the weight to the ink tank, do not give a shock, or do not put the things that becomes a load. • Please execute the P.4-28 "Tank Calibration". • Turn off the power button 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 539 Calibration :12345678	Abnormality has occurred in the data of the weight balance of the ink supply unit.	<ul style="list-style-type: none"> • Please execute the P.4-28 "Tank Calibration". • Turn off the power button 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 607 CAP CLEANING	Time to clean the cap	<ul style="list-style-type: none"> • Perform the station maintenance, and clean the cap.
ERROR 617 Subtank Sens :12345678	Detect the abnormality in the liquid level sensor of the sub-tank.	<ul style="list-style-type: none"> • Turn off the power button 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 618 TANKlevelH :12345678	The sub tank sensor High does not change though a certain amount of ink has been consumed.	<ul style="list-style-type: none"> • Perform "SUBTANK" of the maintenance. (☞ P.5-4) • Even if you perform, it may be displayed, contact your local distributor to call for service.
ERROR 618 TANKlevelL :12345678	The sub tank sensor Low does not change though a certain amount of ink has been consumed.	
ERROR 61a InkOverflow :1234	Ink has entered the air tank.	
ERROR 61b SUPPLY INK :1234	Ink could not be supplied to the subtank.	<ul style="list-style-type: none"> • Perform "SUBTANK" of the maintenance. (☞ P.5-4) • Also make sure the ink remaining in the ink bottle. (☞ P.1-10) • Even if you perform, it may be displayed, contact your local distributor to call for service.
ERROR 627 Ink Tank Set	There is a slot which is not set an ink tank in supply unit for more than certain period of time.	<ul style="list-style-type: none"> • Set the ink tank.
ERROR 637 INK LEAK [12345]	Detected an ink leakage in the ink supply path.	<ul style="list-style-type: none"> • Turn off the main power button to the machine and turn it on after a while. • If the same error message appears again, turn off the main power button to the machine, unplug the cable, and contact our service desk or your local distributor to call for service.
ERROR 647 WRONG CHARGE DATA[12345]	Abnormality occurs in the data of the ink information being charged.	<ul style="list-style-type: none"> • Cannot print. • Contact your local distributor to call for service.
ERROR 64b Nozzle Missing	The automatic nozzle check judged nozzles "No good".	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-17) • If the same error message appears, contact our service desk or your local distributor to call for service.

Message	Cause	Solution
ERROR 64c NCU ERROR	Printing stopped because an error occurred during the nozzle check.	<ul style="list-style-type: none"> • Turn off the power button 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 650 NCU CONNECT	The NCU unit is not connected.	
ERROR 651 REPLACE NCU	The NCU sensor sensitivity is too low to correctly judge nozzle missing. The nozzle check function cannot be used.	
ERROR 652 NCU NZK CHK (HW)	The NCU cannot correctly recognize the ink discharge, because there are frequent nozzle missing and ink droplet misalignment.	<ul style="list-style-type: none"> • Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-17) • If the same error message appears, contact our service desk or your local distributor to call for service.
ERROR 653 NCU NZK CHK (MARK)		
ERROR 654 NCU CENTER POS		
ERROR 655 NCU FLUSH POS	Adjustment of the discharge position to the NCU has failed.	
ERROR 657 REPLACE NCU INK PAD	The NCU ink pat is full.	<ul style="list-style-type: none"> • Contact our service desk or your local distributor to call for service.
ERROR 658 NCU SENSOR LV LOW	The NCU sensor sensitivity is falling.	<ul style="list-style-type: none"> • Replacement of the NCU is recommended. • Contact our service desk or your local distributor to call for service.
ERROR 702 THERMISTOR	The thermistor sensor of a heater is defective.	<ul style="list-style-type: none"> • Turn off the power button 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 703 ! PRE HEATER BRK	Pre-heater disconnection.	
ERROR 703 ! EXT HEATER BRK	External heater disconnection.	
ERROR 707 !HD HEATER BREAK	A head heater is disconnected.	<ul style="list-style-type: none"> • Turn off the power button 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 710 HEATER TEMP ERROR	An abnormal temperature of the heater was detected. If the problem is not resolved after the occurrence of this error, the power to the machine is forced OFF.	
ERROR d01 HCB POWER [1234]	An error occurred in the power supply of the HCB PCB.	<ul style="list-style-type: none"> • Turn off the power button 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 d02 HCB COMMON [1234]	An error was detected in the HCB PCB.	
ERROR d03 HCB HARD [1234]		
ERROR d04 HCB CMD [1234]	An error was detected in the HCB PCB communication.	
ERROR d05 HCB WFM [1234]	An error was detected in the waveform being printed.	
ERROR d06 HCB VUP [1234]	A failure to update the HCB PCB was detected.	

SYSTEM HALT

Message	Solution
SYSTEM HALT (*) 000 :MESSAGE	Turn off the main power to the machine and turn it on after a while. Check the number and contact your local distributor to call for service. ("000" is the error No.)

Chapter 6

Appendix



This chapter

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

Specifications	6-2
Machine specifications	6-2
Ink specifications	6-3
Supply item list	6-3
Sheet for inquiry	6-4

Specifications

Machine specifications

Item		Specifications
Print head	Method	Drop-on-demand piezoelectric print heads
	Specification	12 heads: In line head x 3-layered staggered arrangement
Drawing mode (scan x feed)		4-color ink set ^{*1} 360x360HQ : Bi/Uni 2/ 3/ 4 pass (only normal mode) 540x360 : Bi/Uni 2/ 3/ 4 pass 570x720 : Bi/Uni 4/ 6/ 9 pass 720x720 : Bi/Uni 4/ 6/ 9 pass 720x1080 : Bi/Uni 6/ 9/ 12 pass 6-color ink set 540x360 : Bi/Uni 4/ 6/ 9 pass (only normal mode) 540x540 : Bi/Uni 6/ 9/ 12 pass 720x720 : Bi/Uni 9/ 12/ 15 pass 720x1080 : Bi/Uni 12/ 15/ 18 pass
Usable inks		Sb310 ink (M,B,Y,K,Lm,Lb) 2 liter bottle
Ink tank supply		Supplying 3L x 8 tanks
Capacity of ink tank		3L-tank/ 1 tank (Only when four colors are used: Supplied by toggle switch-over with two tanks per color)
Media type		Sublimation transfer paper
Max. printing width		3290 mm (129.5 in)
Roll Media size	Maximum	3300 mm (129.9 in)
	Minimum	210 mm (8.3 in)
	Thickness	0.2 mm or less (0.01 in or less)
	Roll outside diameter	When using take-up unit and feeding unit : Φ 300mm or less
	Roll weight ^{*2}	When using feeding unit : 130kg or less (286.6 lb or less) When using roll holder : 18kg or less (39.7 lb or less)
	Roll inside diameter	When using take-up unit and feeding unit:3 inches When using roll holder:2 or 3 inches
	Printing surface	Outside
	Roll end treatment	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.
Leaf media size	Maximum	3290 mm (129.5 in)
	Minimum	210 mm (8.3 in)
Margin	Leaf media	Left end and right end : 15 mm (0.6 in) (Default) Front : 150 mm (5.9 in) Rear : 400 mm (15.7 in)
	Roll media	Left end and right end : 15 mm (0.6 in) (Default) Front : 150 mm (5.9 in) Rear : 0 mm
Distance accuracy	Reproducibility	Whichever the larger one of ± 0.2 mm (± 0.01 in) or ± 0.1 % of the designated ^{*3 *4 *5}
Perpendicularity		± 0.5 mm / 1000 mm (± 0.02 in / 39.4 in)
Media skew		5 mm or less / 10 m variable (0.2 in or less / 33 ft variable)
Head height adjustment		1.5 to 7.0 mm (0.06 to 0.28 in) (Automatic adjustment)
Media delivery		Take-up device supplied as a standard accessory (switching possible between face in and face out ^{*6}).
Waste ink tank		Tank type
Interface		USB 2.0, Ethernet 1000BASE-T ^{*7}
Command		MRL-V
Noise	during standby	Less than 58 dB (FAST-A, Front & Rear & Left & Right 1 m)
	during continuous printing	Less than 65 dB
	during discontinuous printing	Less than 70 dB
Power		AC200 - 240 $\pm 10\%$, 50/60Hz ± 1 Hz , 29A or less

Item		Specifications
Power consumption		6960 W or less
Recommended Environment	Available temp.	20 °C to 30 °C (68 °F to 86 °F)
	Humidity	35 to 65% Rh (No condensation)
	Guaranteed temp.	20 °C to 25 °C (68°F to 77°F)
	Temperature change	± 10 °C / h or less (± 50 °F / h or less)
	Dust	0.15mg/m ³ (Equivalent to normal office level)
	Highest operation height	2000 m (6561.7 ft)
Weight	Printer main unit	1500 kg (3306.9 lb)
Outside dimensions	Printer main unit	5620 mm(W) x 1800 mm(D) x 1820 mm(H) (221.3 in(W) x 70.9 in(D) x 71.7 in(H))

- *1. Bold is the recommended pass.
- *2. Without deflection of the roll when it is retained at both ends.
- *3. The expansion and/or contraction of media is excluded.
- *4. The initial meandering of the media which is just set is excluded.
- *5. Only if all the following conditions are met:
The media is set in the center of the machine.
When roll holders are used, printing is started on a roll having no deflection.
The take-up device is used.
One roll media is used (except for twin rolls).
- *6. "Involute" for the media take-up direction is recommended.
- *7. Directly connect the machine to a PC with a LAN cable.

Ink specifications

Item		Specifications
Supply		2L Ink bottle
Color		Black ink Blue ink Magenta ink Yellow ink
Ink capacity		2 L
Shelf life		The period is printed on the ink bottle. Within three months after opening the package even in the available period.
Storage temperature	Storage	5°C to 30°C (40°F to 86°F)
	Transportation	1°C to 60°C (33.8°F to 186.8°F) (Storage at temperature of 60°C(140°F) is only permitted within 120 hours, and at temperature of 40°C(104°F) is permitted within a month.)



- Do not disassemble the ink bottle.
- Ink could freeze if kept in a cold place for an extended period.
- If the ink freezes, thaw it at room temperature (25°C) spending more than three hours before use. However, when you use the frozen ink, the printing quality becomes degraded due to altered ink. Store ink in the environment where ink may not freeze.

Supply item list

Product No.	Name
SB310-BLT-BB	Sublimation dye ink bottle Blue (2 liter bottle)
SB310-MT-BB	Sublimation dye ink bottle Magenta (2 liter bottle)
SB310-YT-BB	Sublimation dye ink bottle Yellow (2 liter bottle)
SB310-KT-BB	Sublimation dye ink bottle Black (2 liter bottle)
SB310-LBT-BB	Sublimation dye ink bottle Light blue (2 liter bottle)
SB310-LMT-BB	Sublimation dye ink bottle Light magenta (2 liter bottle)
SPA-0189	HF filter
SPC-0527	Clean stick for the surroundings of the head 50pcs
SPA-0193	Wiper kit
SPA-0263	Cap ink absorber kit
SPA-0266	3L ink bottle

Product No.	Name
ML003-Z-K1	Cleaning Liquid 03 MAINTENANCE KIT

Sheet for inquiry

Use this sheet for troubles and abnormal functions of the machine.
Fill in the following necessary items, and 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 "About Information menu" then fill in necessary information. (☞ P.3-27)

TS500P-3200 Operation Manual

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