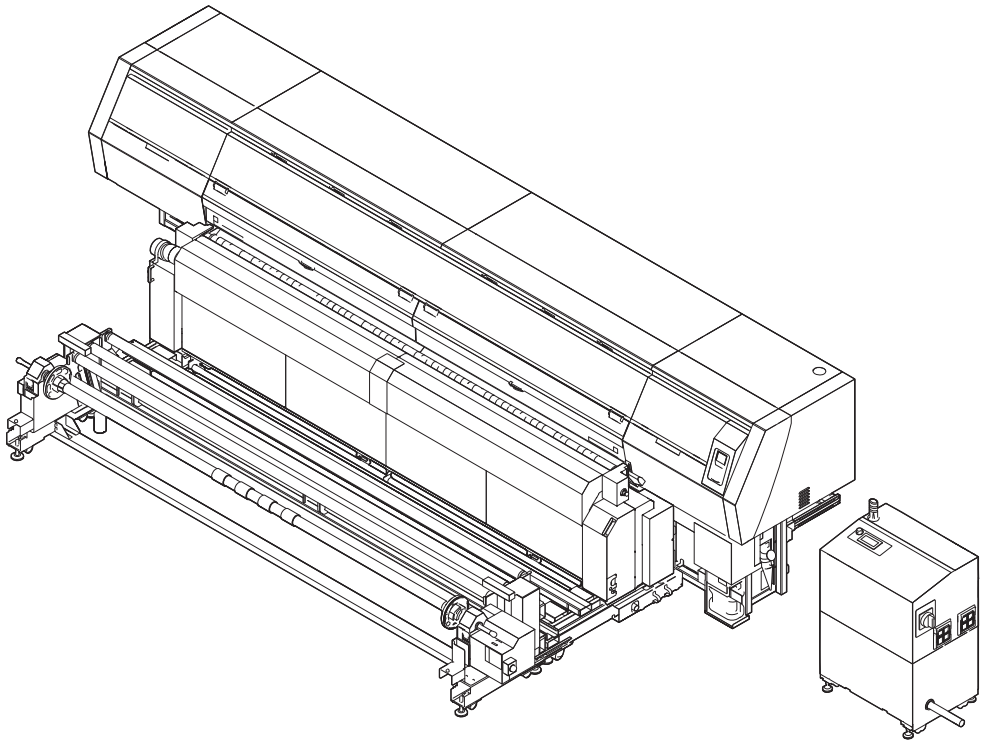
OPERATION MANUAL

Mimaki

INKJET PRINTER

TX500P-3200DS

OPERATION MANUAL



MIMAKI ENGINEERING CO., LTD.

URL: http://mimaki.com/

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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 can radiate radio frequency energy and, if not installed and used in accordance with the Operation manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
In the case where MIMAKI-recommended cable is not used for connection of this device, limits provided by FCC rules can be exceeded.
To prevent this, use of MIMAKI-recommended cable is essential for the connection of this printer.

Television/Radio Reception Interference

This machine described in this manual generates high frequency when operating. This machine can interfere with radios and televisions if set up or commissioned under improper conditions. This machine is not guaranteed against any damage to specific-purpose radio and televisions.

This machine's interference with your radio or television will be checked by turning on/off the power button of this machine. If the interference is removed when this machine is turned off, the interference is coming from this machine.
In the event that this machine 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 inkjet printer “Tx500P Series”.
“Tx500P 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 describes the operations and maintenance of “Color inkjet printer Tx500P Series” (hereafter, this machine)
- Read this Operation manual carefully and understand them thoroughly to use. It is also necessary to keep this Operation manual on hand.
- Make sure that this Operation manual is read by the operator of this machine.
- 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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Using this Machine Safely

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

Description	
	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. Understand the notes thoroughly 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.
- Use a power cable attached to this unit.
- 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.
- Use it with the displayed power supply specifications. The power supply voltage for the main printer unit is single phase AC200 to 240V 29A or less, and the power supply voltage for the color fix device/dryer is three phase AC200V 125A or less. (You cannot use this machine in the 100V system.)
- 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 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 the coloring/drying heater. Dust and dirt sticking heaters can cause fire.
- 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.
- Keep Fingers and Other Body Parts Away
- In case of ink leakage, please turn off the main power, unplug the power cable and contact your local distributor, our sales office, or service center.

Precautions in Use

CAUTION

Handling of the power cable

- Use the power cable attached to this machine.
- Take care not to damage, break or work upon 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.
- There is no power cable attached to the color fix device/dryer. The customer needs to provide a cable from the transformer or switch board to the breaker on the heater controller.

Power supply

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

Grounding work

- You need to ground this machine to prevent accidental electric shocks.

Note on maintenance

- When cleaning the External ink supply unit or the heads, make sure to wear the attached gloves.
- Pay close attention to ventilation and be sure to wear the included safety glasses and gloves.
- Gloves are consumables. Use commercially-available ones if you lose or use up the supplied gloves.

Power specifications for the coloring/drying heater

- For regions that use a power supply other than 200 to 240V, you need to use a step-down transformer. The customer needs to provide a cable from the transformer or switch board to the breaker on the heater controller.
  Transformer type: Three phase insulation transformer
  Transformer capacity: 55 KW
  Secondary connection (output): Three phase 4 wire system (Star connection, neutral grounding)
  Primary voltage (input voltage): Power supply voltage of the installation location (varies according to the country)
  Secondary voltage (output voltage): Three phase 200V

Protective gear

- Make sure you wear protective glasses and gloves before cleaning the nozzles as it is possible that ink or cleaning solution for maintenance may spray from the nozzles. Otherwise, ink or cleaning solution for maintenance may spray into your eyes. If ink or cleaning solution for maintenance gets on your hands, it could cause the skin to become irritated.

⚠ CAUTION

Handling of ink

- 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 breathe in too much steam and begin to feel nauseous, move to a well ventilated area immediately, and make sure you keep warm and rest. Then, consult a doctor as soon as possible.

Important points

⚠ WARNING

Note on maintenance

- 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.4-14 “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.

Front cover and lever

- 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

- 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.

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.
- Disposition of this machine

⚠ WARNING

Handling of ink bottles

- Use the Tx500P 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 Tx500P genuine ink.
- Do not use the Tx500P 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. This may cause damages on printed circuit boards.
- Waste ink is equivalent to waste oil of industrial waste. Request an industrial waste disposal company for disposal of waste ink.

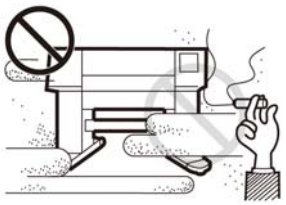
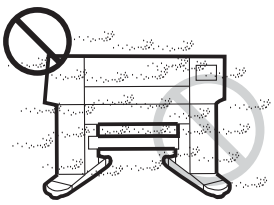
Handling of media

- Use the recommended media.
  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 day 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.

Periodic replacement parts

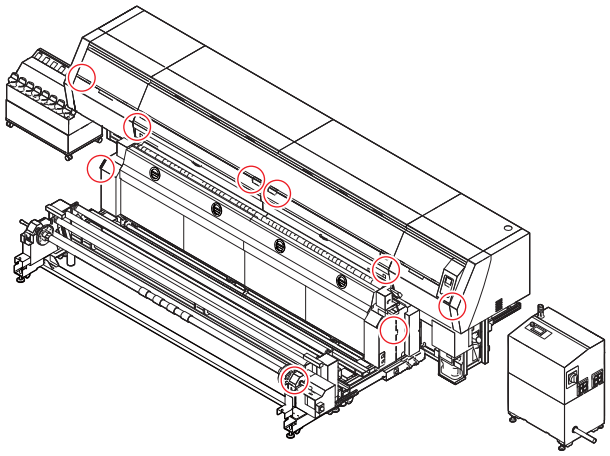
- Some parts of this machine must be replaced with a new one periodically by service personnel. Be sure to make a contract with your distributor or dealer for After sale service to ensure a long life of your machine.

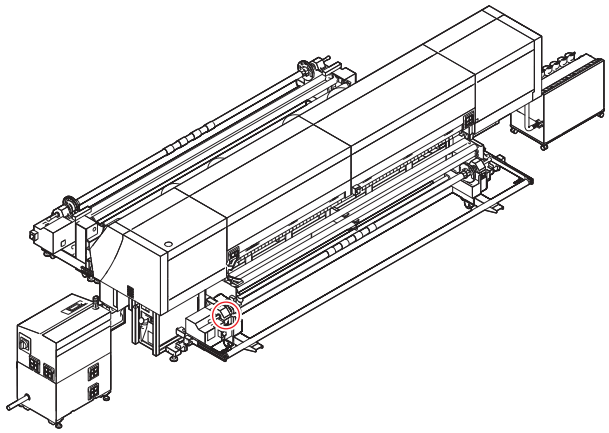
Cautions on Installation

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**
•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

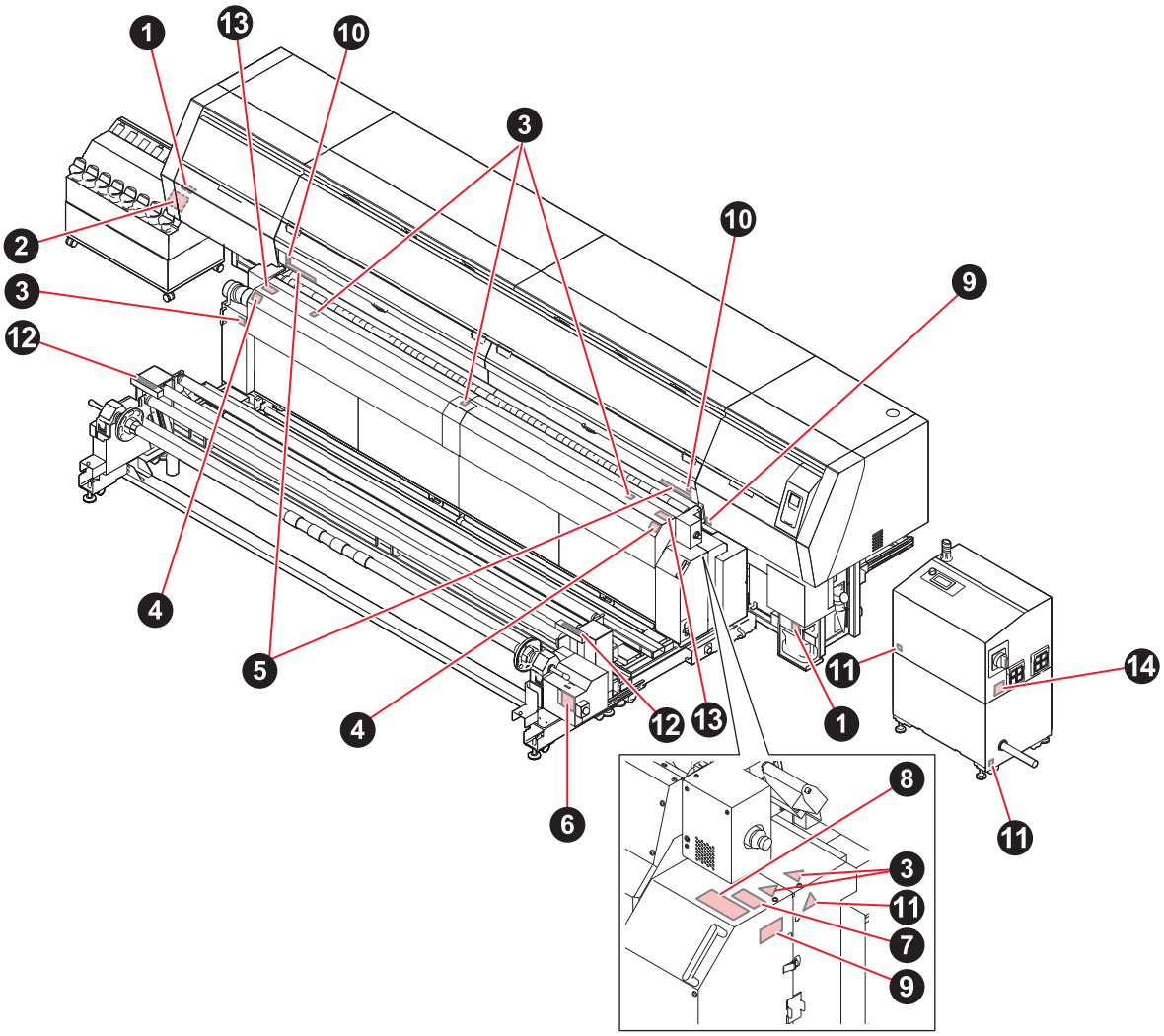
This machine is equipped with interlocks to terminate the operation for your safety when the cover opens during printing etc. (Red circled sections in the figure below)

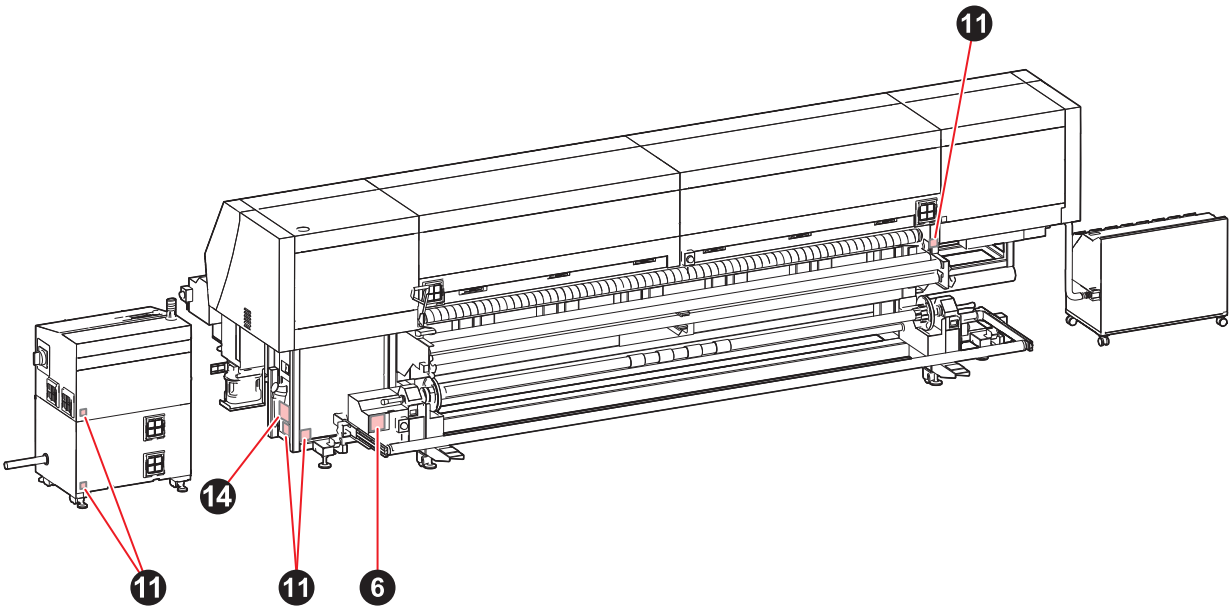


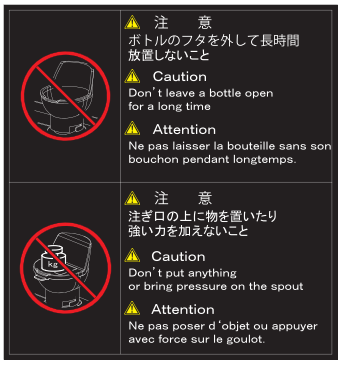
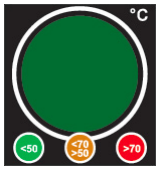
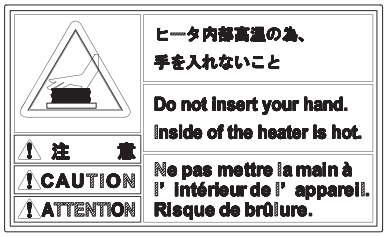


Warning labels

The following warning labels are attached to this machine. Make sure you understand the content of the warning labels. If the warning label becomes too dirty to read or wears off, make sure you purchase a new label from your dealer or an office of MIMAKI





No.	Order Number	Label
1	M903330	
2	M912560	
3	M903239	
4	TF50-70	
5	M901549	
6	M903404	
7	M912058	
8	M908553	

No.	Order Number	Label
9	M905982	
10	M907833	
11	M907935	
12	M906115	
13	M914192	
14	M914189	

EC DECLARATION OF CONFORMITY

We hereby declare that the following our products conform with the essential health and safety requirements of EC Directives.

Product	Color Inkjet Printer
Model No.	Tx500P-3200DS
Serial No. covered	AABCDEEE AA: W3, B: 0 to 9, C: any alpha-numeric, D: any alphabet, EEE: 001 to 999
Manufacturer	MIMAKI ENGINEERING CO.,LTD. 2182-3, Shigeno-otsu, Tomi, Nagano, 389-0512, JAPAN
Authorised Compiler in the Community	MIMAKI EUROPE B.V. Stammerdijk 7E 1112 AA Diemen, The Netherlands Managing Director Koji Shimizu
Directives	Machinery Directive 2006/42/EC Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU RoHS Directive 2011/65/EU

The above products have been evaluated for conformity with above directives using the following European standards. The technical construction file (TCF) for this product is retained at the above Manufacturer's location.

Machinery Directive / Low Voltage Directive	EN ISO12100:2010, EN60204-1:2006+A1, EN60950-1:2006+A11+A1+A12
EMC Directive	EN55022:2010, EN61000-3-2:2006+A1+A2, EN61000-3-3:2008, EN55024:2010
RoHS Directive	EN50581:2012

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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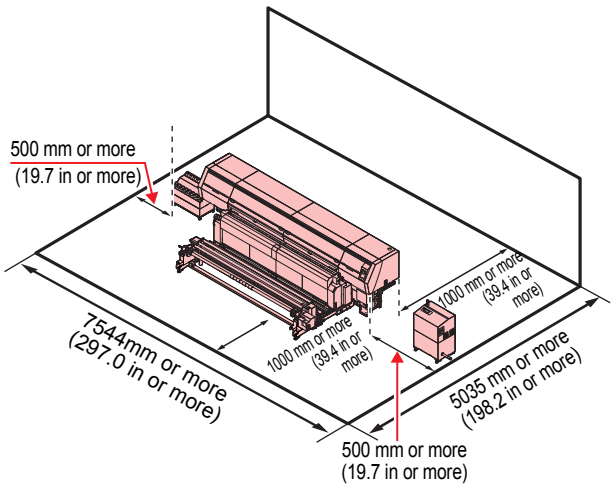
About installing this machine

Setup Location

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
Tx500P-3200DS	5620mm (221.3 in)	1800mm *1 (70.9 in)	1820mm (71.7 in)	1430kg (3,152.6 lb)
Color fix device/ dryer + VT take-up device	4300mm (169.3 in)	2000mm (78.7 in)	1040mm (40.9 in)	960kg (2,116.4 lb)
External ink supply unit	960mm (37.8 in)	510mm (20.1 in)	730mm (28.7 in)	30kg (66.1 lb)
Electrical unit of color fix device/ dryer	910mm (35.8 in)	600mm (23.6 in)	1240mm (48.8 in)	140kg (308.6 lb)

*1. When the tension bar is flat



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.

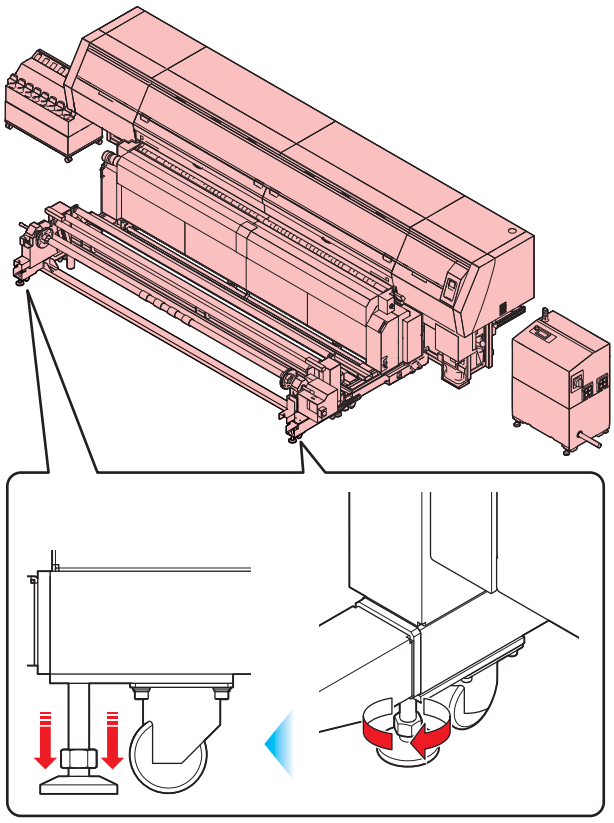
About Ventilation Equipment

Because color fix device/dryer of this machine produces the sublimation gas, please prepare a dust collector and a ventilation equipment.
[When using this machine as a color fix device]:
Dust collector + ventilation equipment.
[When using this machine as a dryer]:
Ventilation equipment.

Recommended specifications
Dust collector: Air volume 20 m^3/min
Ventilation equipment:
In case of a hood
Area: more than 0.8 m^2
Air volume: more than 40 m^3/min
In case of the whole room
Air volume: more than 25 m^3/min

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.

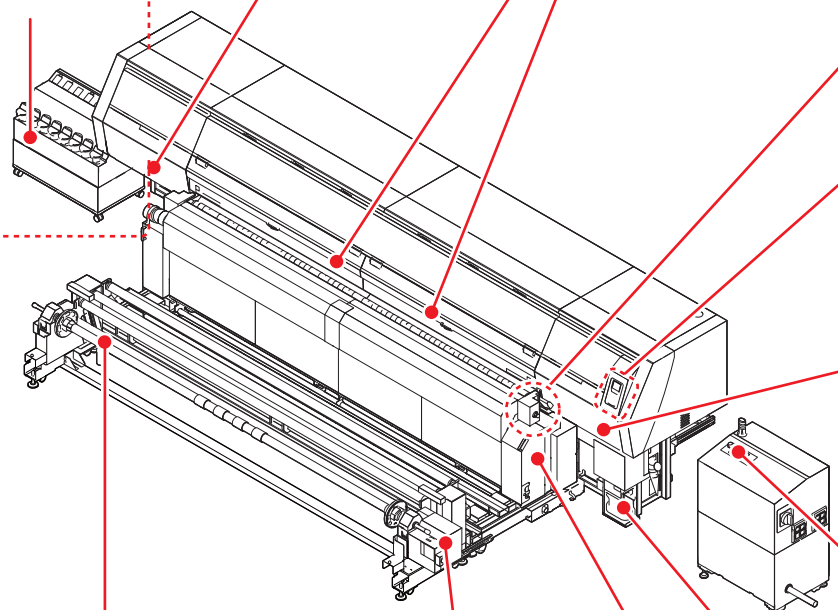
Moving This Machine

Important!

- 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.

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 all 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.

Operation panel of color fix device/dryer

This touch panel operates the color fix device/dryer and displays setting items.

Waste ink tank

Waste ink gathers in this tank.

Tension-bar

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

Color fix device/dryer

Applies heat to the printed media to fix the coloring/drying.

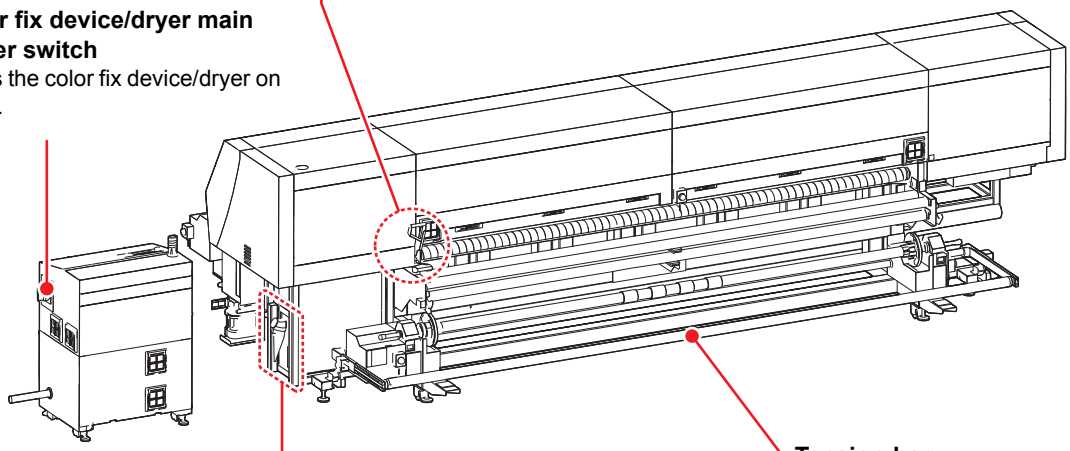
Take-up device

Take up the output drawn with a roll medium automatically.

Rear Side and Right Side of the Machine

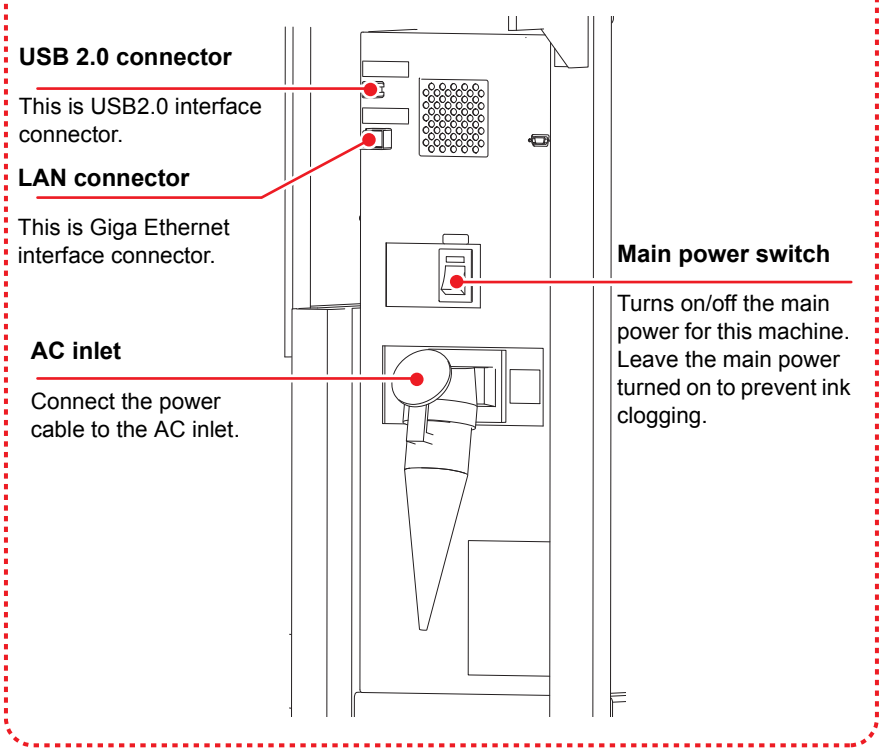
Clamp lever (rear)
Interlocks with the clamp lever in the font of this machine.

Color fix device/dryer main power switch
Turns the color fix device/dryer on or off.



Tension-bar

Brings tension to the media.



USB 2.0 connector

This is USB2.0 interface connector.

LAN connector

This is Giga Ethernet interface connector.

Main power switch

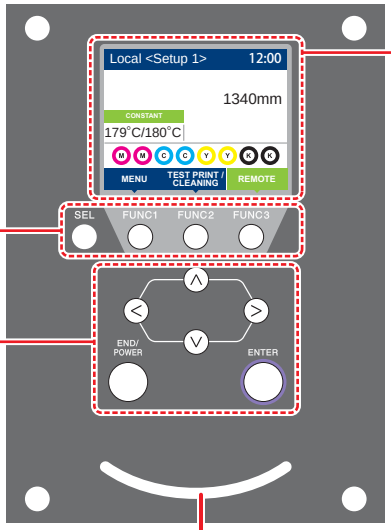
Turns on/off the main power for this machine. Leave the main power turned on to prevent ink clogging.

AC inlet

Connect the power cable to the AC inlet.

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 (☞ P.1-4) is ON.(Auto maintenance function)

*1 : Ink Status

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

Icon	Contents
M	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.
⛔	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.

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

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

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

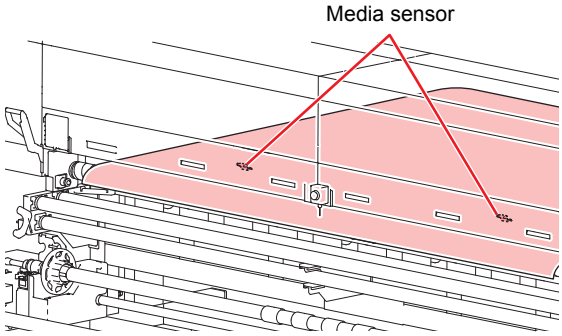
Icon	Contents
MENU	Displays “MENU” for setting functions.
TEST PRINT CLEANING	Displays maintenance functions such as test print, cleaning, etc.
REMOTE	Shifts to Remote from LOCAL and starts printing.
ADJUST	Displays adjustment functions such as Feed Comp, DROP.POScorrect, etc.
HEATER	Sets the heater temperature.
DATA CLEAR	Executes data clear.
MEDIA	Used for adjusting the head height or cutting the media.
MAINT	The Station menu appears.
CHARGE	Displays the ink charge menu.
LOCAL	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.
OK	Used for completing confirmation when warning message has been displayed and so on.
OFF	Used for turning functions OFF or canceling 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.

Media sensor

The media sensor detects the presence of the media and the media length.
There are two media sensors on the platen (on the back).

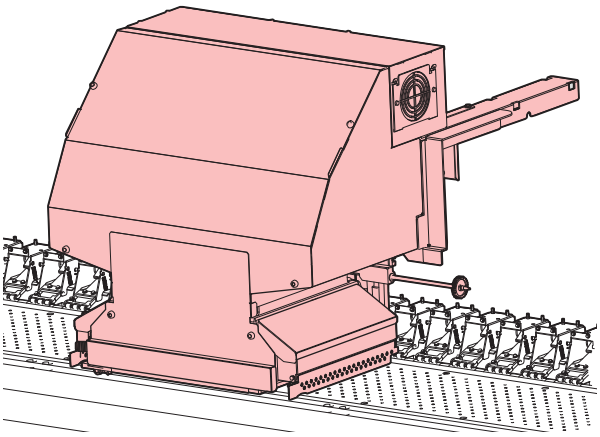
The backside of the machine



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.

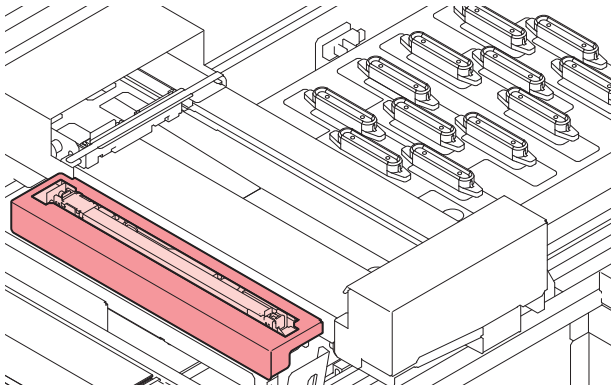
Carriage

The carriage contains the ink heads for printing etc.



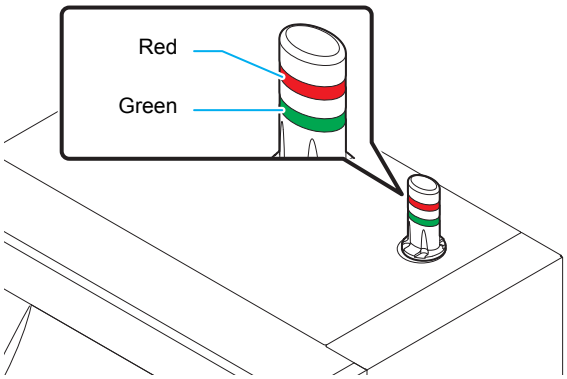
Nozzle Check Unit (NCU)

Nozzle check unit is checking the nozzle missing during printing.
If NCU detect a nozzle missing, automatically performs a nozzle restoration operation. (☞ P.3-28)



Indicator

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

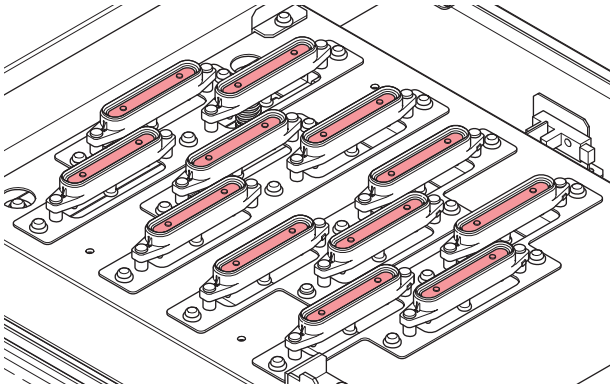


Color of lamp	State	State of machine
Green	Lighting	REMOTE
	Blinking	REMOTE (printing)
	OFF	LOCAL
Red	Lighting	Error has occurred (system down)
	Blinking	Error or warning has occurred
	OFF	Normal

Capping station

- Be sure to wear the attached safety glasses 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. (☞ P.4-24)

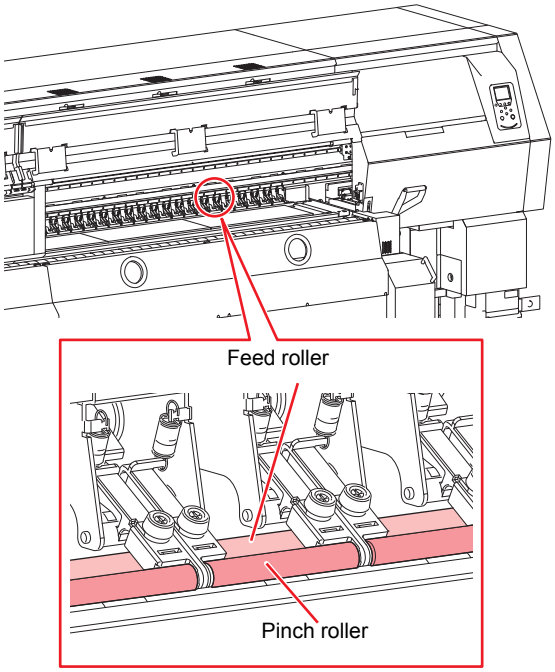


Pinch rollers and Feed rollers

Important!

- 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.



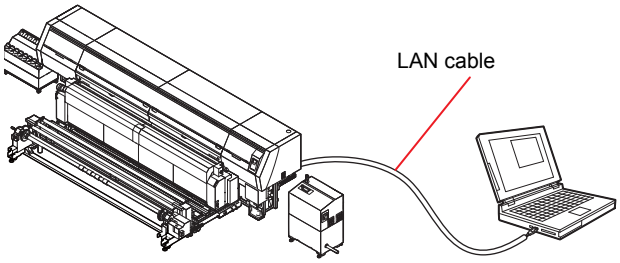
Connecting Cables

Connecting the LAN cable

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

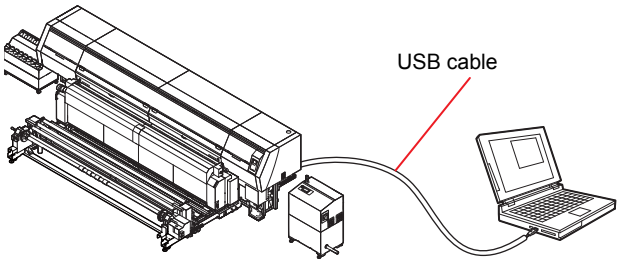
Important!

- 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 USB2.0interface cable.



Caution

- 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!

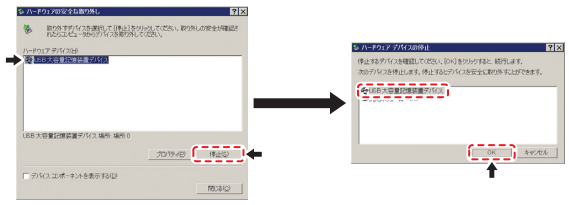
- Since the connection to a LAN cable is recommended in this machine, the USB2.0 connection may not satisfy the specification of some print mode.
- Your RIP must be compatible with USB 2.0.

● 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 Tx500P machine is connected to, the USB device may not be recognized.
When a Tx500P is connected to the personal computer to which an external HDD is connected via USB, the speed of data output to the Tx500P 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 Tx500P 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.

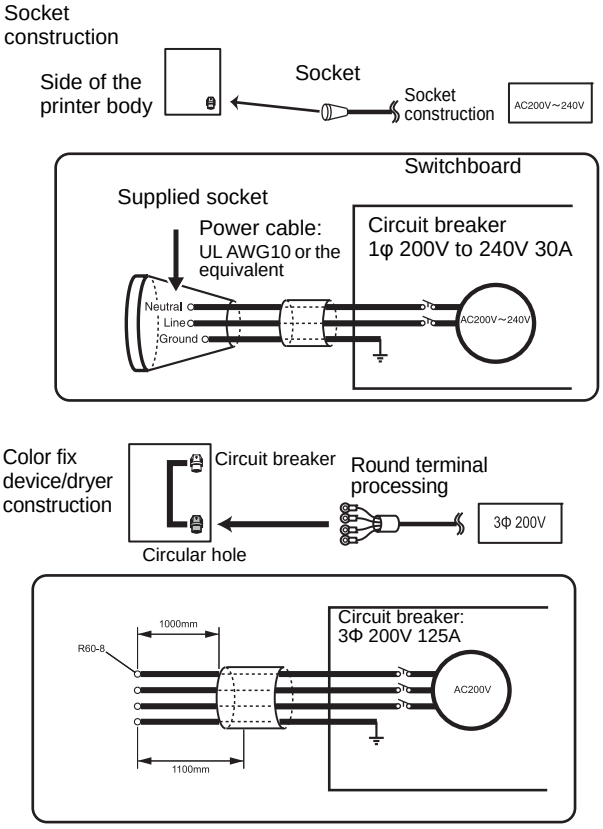
Warning

- The power supply voltage for the main printer unit is single phase AC200 to 240V 29A or less, and the power supply voltage for the color fix device/dryer is three phase AC200V 125A or less. (You cannot use this machine in the 100V 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.

Caution

- 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 m^2 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.



Fill ink in the ink tank and charging

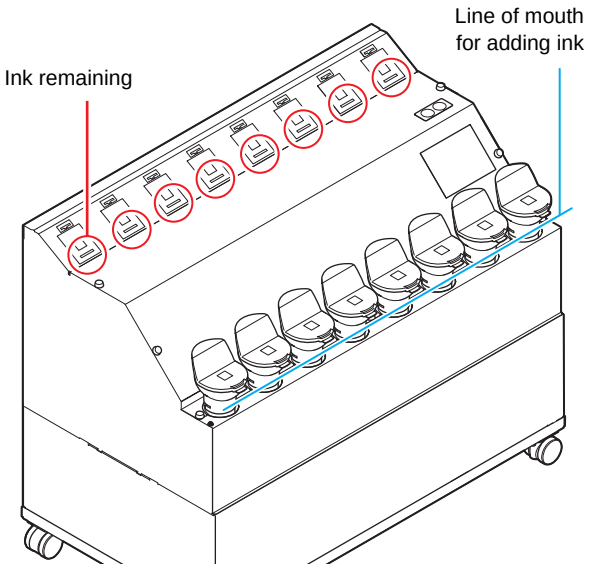
Fill ink in the ink tank of this machine.

Caution

- Be sure to wear the attached safety glasses and gloves to perform the work. Otherwise, you may get ink in your eyes.

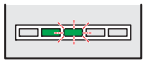
Rough standard for adding ink

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.



Caution

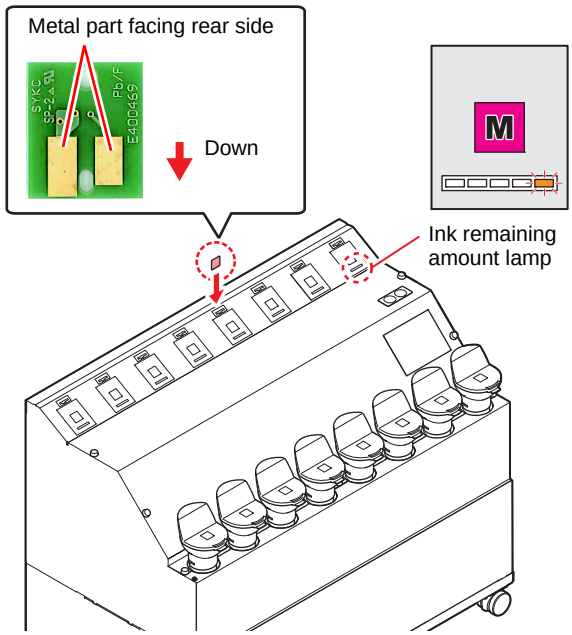
- **Notes before adding ink**
  Check the following before adding ink. Failure to do so could require all of the ink inside the ink supply unit to be discarded.
- Type of Ink
- Color of ink
- Expiration date of ink
  Check both expiration dates of the ink contained in the ink bottle for refilling and 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.

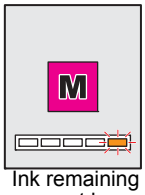
1 Insert the IC chip included with the 2 liter ink bottle.

- 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 startsautomatically.

- 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.

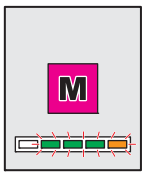


Ink remaining amount lamp

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.



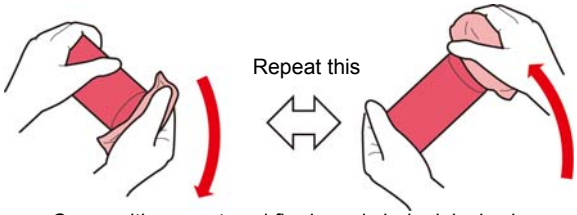
Ink remaining amount lamp

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.4-20)

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.

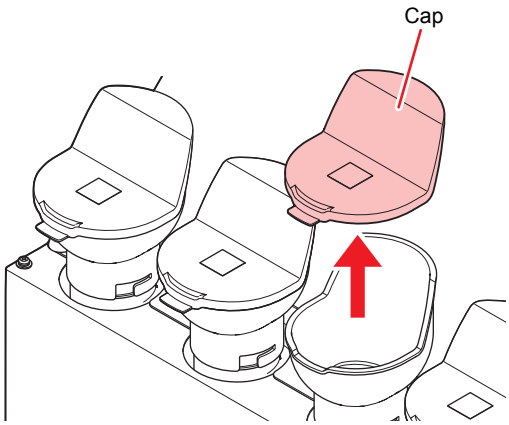
Caution
- Before shaking it, check that the cap is firmly closed.
- If you shake it too strong, it may cause ink leakage. Therefore, perform this carefully.
- If the remaining amount of ink is less, ink in the bottle cannot be beaten enough. Tilt the ink bottle until it becomes vertical.



Cover with paper towel firmly and shake ink slowly

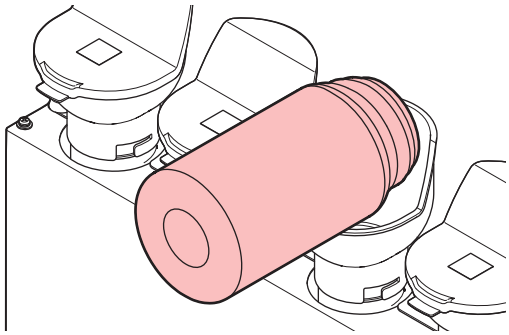
5 Remove the cap of the ink tank.

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

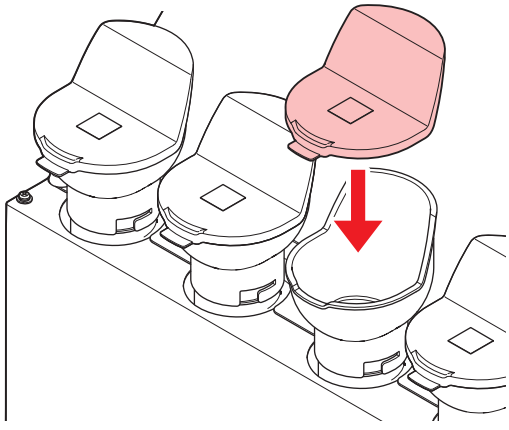


6 While checking the ink remaining amount indicator, add ink.

- 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.1-10 “Rough standard for adding ink”.



7 Attach the ink tank cap firmly.

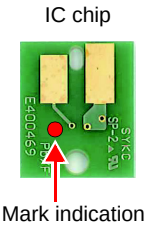


Important!
- Attach the cap firmly.

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)



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 October
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)

Important!
- 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.4-25) 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 [MAINTE] key, browse to the "Ink charge" Maintenance function (☞ P.4-20) 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		Tx500P-3200DS
Type of Recommended media		Preprocessed polyester material
Maximum		3300 mm (129.9 in)
Minimum		297 mm (11.7 in)
Max. printing width		3290 mm (129.5 in)
Roll media	Thickness	1.0 mm or less (0.039 in or less)
	Roll outside diameter	Φ300 mm or less (Φ11.8 in or less)
	Roll weight *1	When using feeding unit: 130 kg or less(286.6 lb or less)
	Roll inside diameter	When using take-up unit and feeding unit 3 inches
	Printing surface	Either face in or face out
	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 the recommended media.**
  Use media recommended by MIMAKI to ensure reliable, high-quality printing.
- **Set the heater temperature to meet the characteristics of the media.**
  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.
- When setting fabric, make sure you adjust the height of the heads according to the thickness of the fabric. Otherwise, the print fabric or heads could be damaged.

Restrictions on Using Media

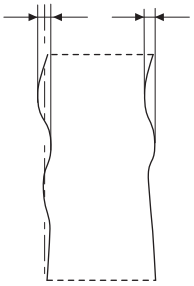
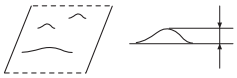
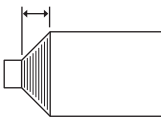
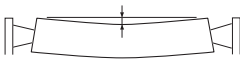
It is hard to correct the following media on the printer side. When using any of the following media, we recommend performing a test print to check if the quality is acceptable.

- Large, elasticated material (material that stretches, knitted fabric that expands or contracts, etc.)
- Material that expands or contracts to a large degree when it gets wet during printing
- Material with a large unevenness in the width
- Material that wrinkles or becomes slack when it is stretched out flat, or that tends to becomes wavy
- Material that becomes skewed to a large extent when winding on the roll

- Material that bends when installed on the feeding device because the paper core being used is not strong enough

Important!
- When using media other than the above, make sure you perform a test print.
- Check the print results to determine if the media is suitable.

Requirements for printing on fabric

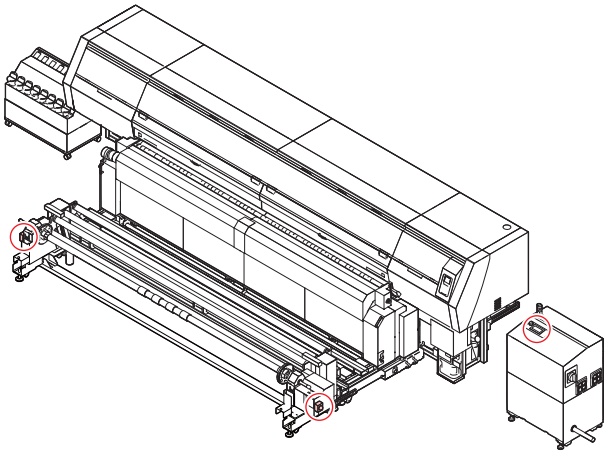
Item	Requirements	Notes
Uneven width	±5 mm or less from one side to the other	
Curls when spread out	No one-direction curls	
Height of wrinkles (slack) when spread out on a flat surface	1 mm or less	
Differences in the roll edges	±15 mm, fabric (with a width of 500 mm or less) ±2 mm	
Internal roll diameter	3 inches	
Paper core strength	Roll curve of 5 mm or less when set (Paper core thickness of 5 mm or more)	
Paper core extending beyond the edge of the fabric	20 mm or more	
Fixing the paper core	Tape in 3 points or less or secure with a weak adhesive	
Roll outside diameter	Φ300 mm or less	
Roll weight	60 kg or less	
Printing surface	Involuted/ Revoluted N/A	
Winding wrinkles	None	

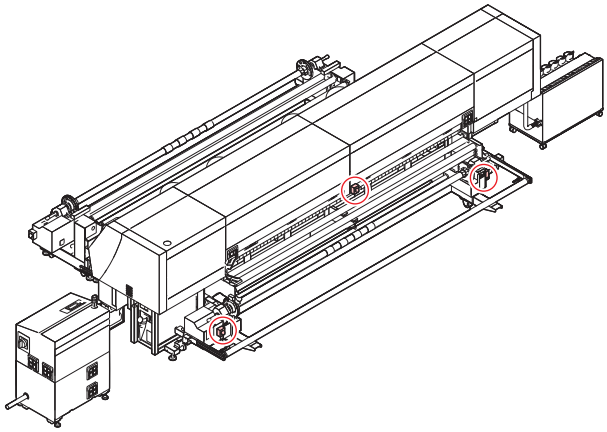
About the emergency switch

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

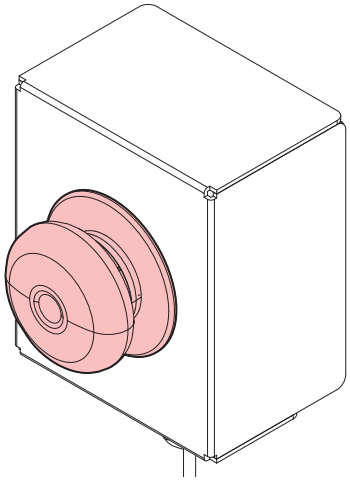
1 **Press the emergency switch.**

- Buzzer sounds inform you that you have an emergency stop.
- The display will show the 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.

- The color fix device/dryer also becomes the error state when pushing the emergency stop switch. Cancel the error of the color fix device/dryer, too.

Chapter 2
Basic Operations

This chapter

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

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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 the color fix device/ dryer	Referring to “Preparing the color fix device/ dryer” (☞ P.2-19).
Test Printing	Referring to “Test Printing” (☞ P.2-36).
Head Cleaning	Referring to “Head Cleaning” (☞ P.2-37).
Setting of Media Correction	Referring to “Setting of Media Correction” (☞ P.2-37).
Correct the ink drop position for bidirectional printing	Referring to “Correct the ink drop position for bidirectional printing” (☞ P.2-38).
Printing Data	Referring to “Printing Data” (☞ P.2-39).

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.

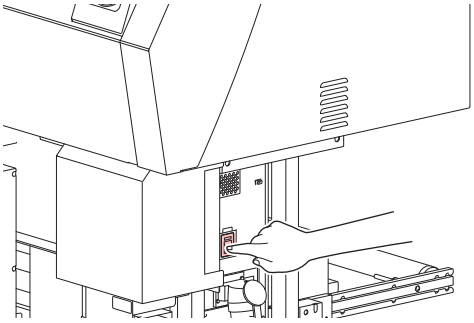
The nozzle missing prevention function periodically operates even with the [END/POWER] key turned OFF when the main power switch is turned ON.

Important!

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

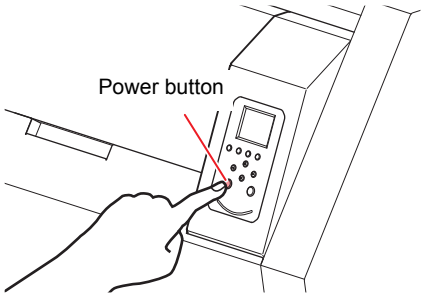
1 **Turn the main power switch ON.**

- 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.

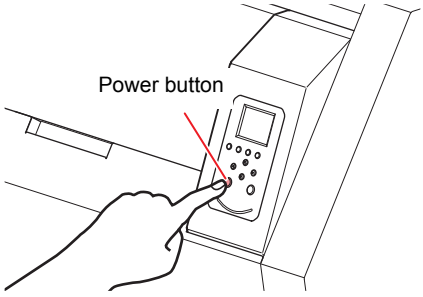
Check the following items when turning the power OFF.

- 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
- f any error has occurred
  (☞ P.5-12 “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.

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”.

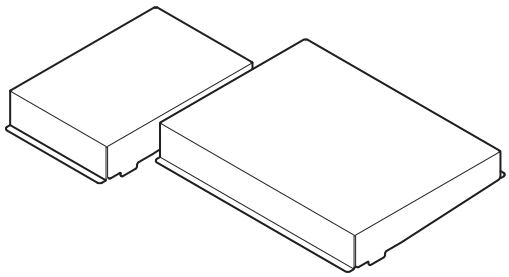
Checking the Spacers

Attach the type (you can attach 3 types) of spacer you need to use according to the media and print method being used.

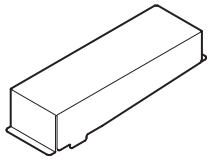
About the different spacers

You can attach 3 types of spacers to the machine.

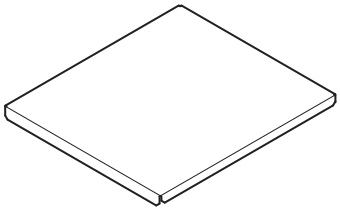
Ink receiving spacer (Large/Small)



Fabric edge spacer



Adjusting spacer



- **When printing on fabric (When not using overprint)**

  Use the ink receiving spacer.

- **When printing on fabric (When using overprint)**

  Use the ink receiving spacer and the fabric edge spacer.

- **When printing on cloth (when a print quality on a thick media is unstable)**

  Please use an adjustment spacer after having tested by drawing data whether the ink does not bleed to the back of the cloth.

If printing on a media of which the ink bleeds to the back, bled ink attaches to other points. As this causes that the printer becomes dirty and a picture quality turns worse, do not use such a media.

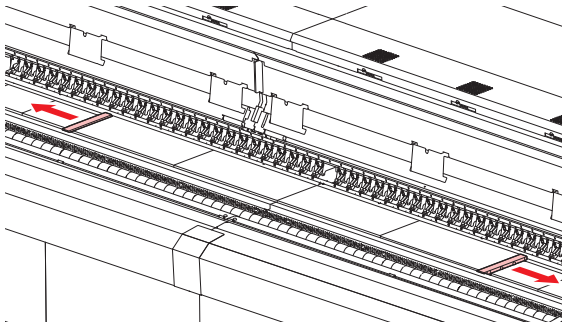
- **When correcting drop position**

  Use the adjusting spacer.

Installing and removing the ink receiving spacer and the fabric edge spacer

Make sure you install spacers to prevent media being soiled by ink mist when printing and to apply the ink correctly.

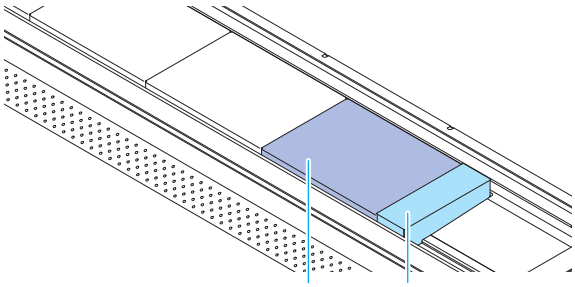
1 **Apply fabric retainers on the left and right.**



2 **Installing the ink receiving spacer and the fabric edge spacer.**

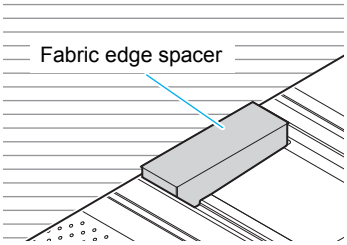
- The ink receiving spacer is 250 mm (W) x 177 mm (D).

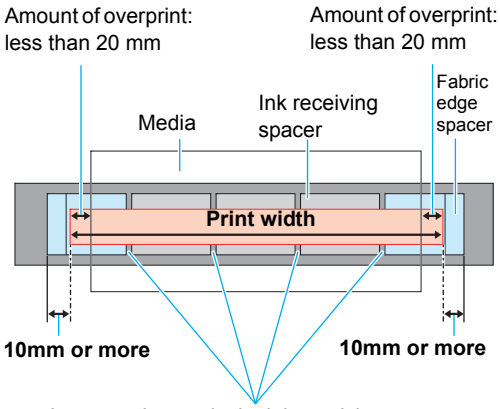
Adjust the number of ink receiving spacers installed according to the width of the image being printed.



Standards for installing the ink receiving spacer and the fabric edge spacer

- Makes sure that the width of the ink receiving spacer and the fabric edge spacer combined is not less than the width of the image being printed.
- Adjust the number of spacers so that there is a gap of at least 10 mm to the edge of the image on the left and right.
- Move the edge of the fabric edge spacer as close as possible to the edge of the media.





Increase the gap in the ink receiving spacer according to the margins in the media, and adjust so that the gap is equal.

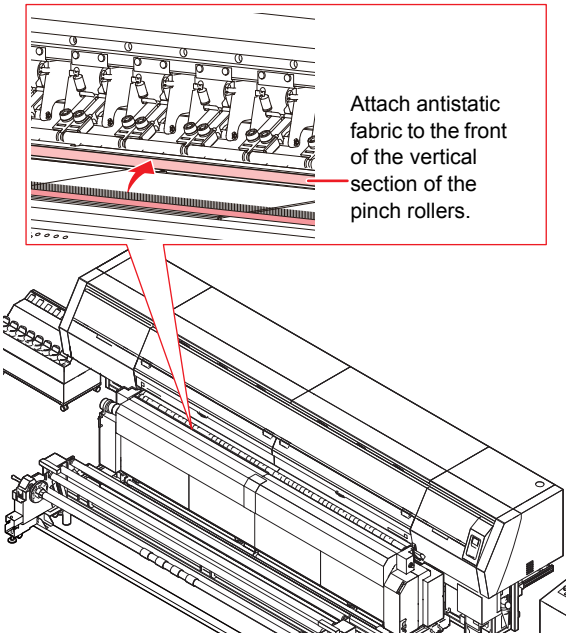
Installing the Antistatic Fabric

Some types of media have a tendency to generate static electricity.
We recommend attaching the antistatic fabric to prevent a decline in print quality caused by static electricity.

Note that the antistatic fabric does not completely eliminate static electricity.

- The antistatic fabric reduces the influence of static electricity. Therefore, attaching the antistatic fabric does not completely prevent any decline in print quality caused by static electricity.
- You can also reduce the generation of static electricity by using humidifiers in combination with the antistatic fabric.

Installation position of the antistatic fabric



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 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 select the Head Gap value, and press the ENTER key.**

- **Set value** : 1.5 to 7.0mm

4 **Press ENTER key.**

5 **Press 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

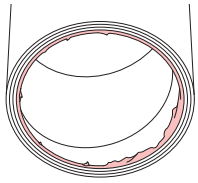
When setting media, read the following notes carefully.

Caution

- 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.)

Important!

- In the following cases, the media may not be detected correctly.
- When setting a transparent media / when a media is exposed to direct sunshine.
- Do not use a printed media. Otherwise, ink can adhere to the pinch rollers and media may be stained or may not be detected.
- Straighten the significantly or internally curled media to be fed along the platen.
- 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.2-18)
- Set the media based on the center of the machine.
- 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.



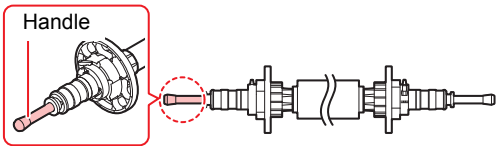
Setting a roll media

Prepare for the take-up device first

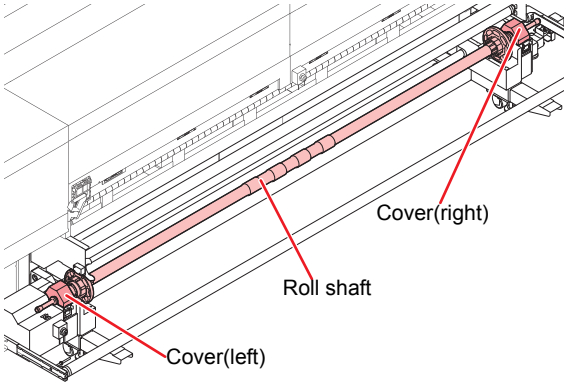
Prepare for the take-up device before setting the roll media.

Caution

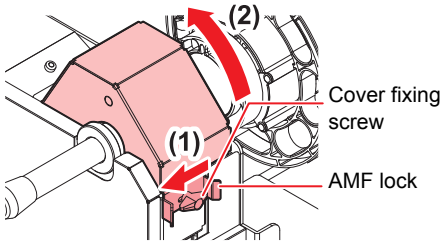
- Handle the roll shaft with care, since it is very heavy with media. To avoid an accident or injury, be sure to grip the handles on both ends.



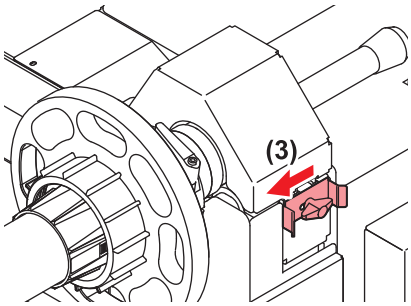
1 Remove the roll shaft on the take-up device at the front of this machine.

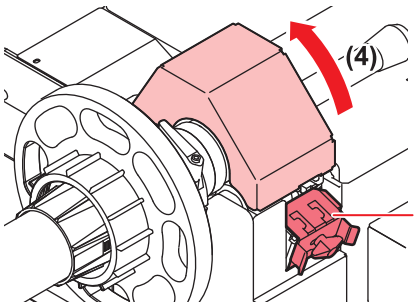


(1) Loosen the cover fixing screw attached to the cover of left of take-up device and unlock the AMF lock by sliding it.
(2) Open the covers.



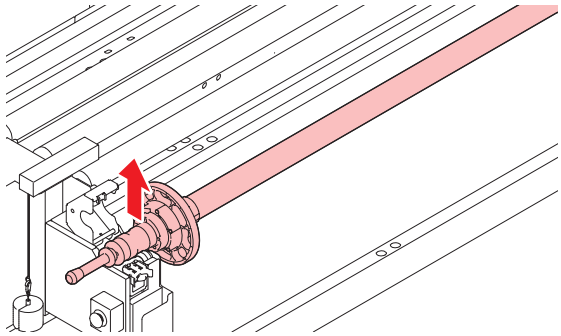
(3) Loosen the cover fixing screw attached to the cover of left of take-up device and unlock the AMF lock by sliding it.
(4) Open the covers.





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

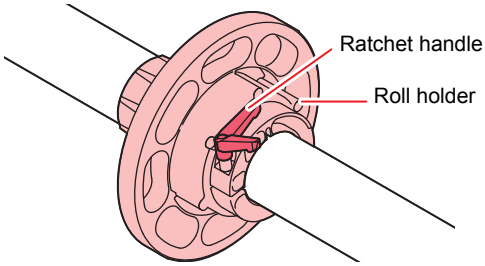
(5) Remove the roll shaft.



2 Remove the roll holders.

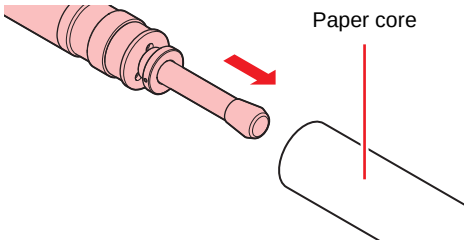
- The roll holders are on both for the right and left of the roll holder. Remove both with the procedures below:

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



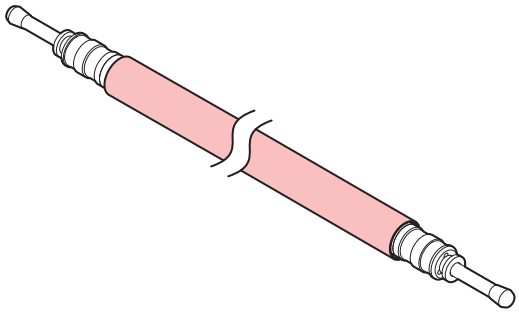
3 Attach the paper core.

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

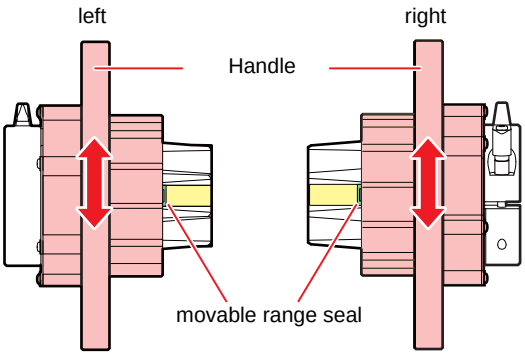


Important! • Please be careful not to pinch your hand between the paper tube and the roll shaft.

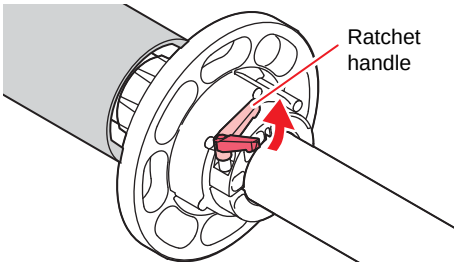
(2) Adjust the paper core so that it comes to the center of the roll shaft.



(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.

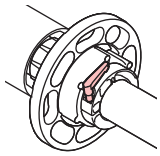


(4) Push both sides of the roll holders into the paper core, and tighten screws with supplied ratchet handle to fix.

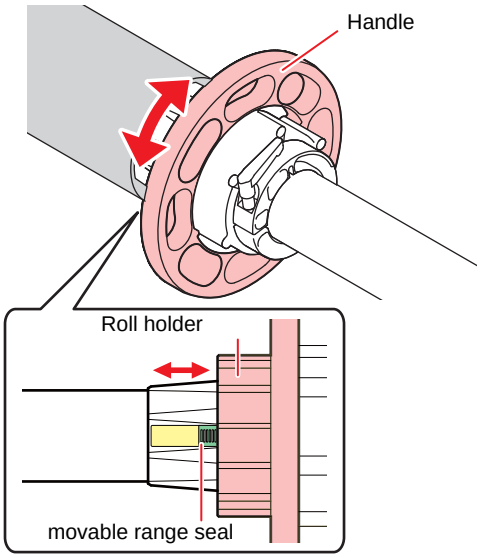


Important! **When you fix the roll holder, please do not lift the lever of the fixing screws.**
- When the entire fixing screws are raised above, screws idle and can not be fixed.

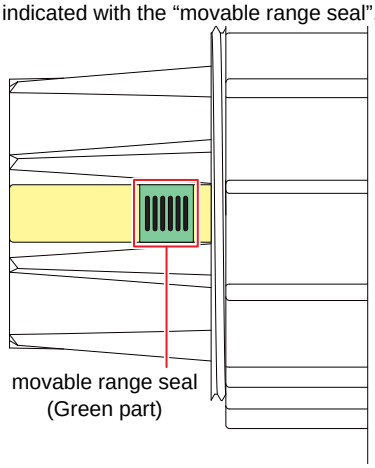
Please note the orientation of the ratchet handle at the time of fixing.
- If the ratchet handle is turned sideways, hit the roll shaft during the unit is in operation, and may not be able to rotate smoothly. After tightening the screw, turn the ratchet handle in toward the roll holder.



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

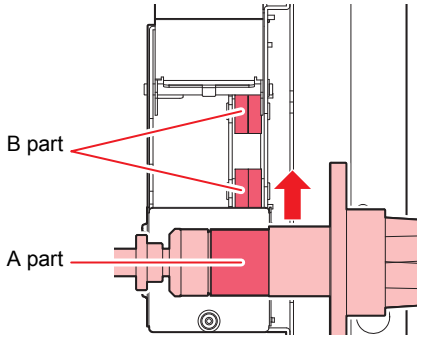


Important! • As the paper core is not idling in the middle of taking up the media, please tightly secure the paper core.
- When you fix the paper core, keep it within the range indicated with the “movable range seal”.



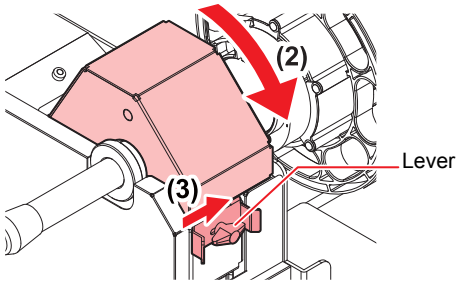
4 **Set the roll shaft with the paper core on the take-up device, and close the covers on the right and left sides of the roll shaft.**

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

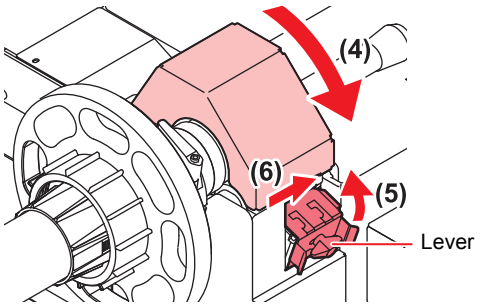


Caution
- Carefully set A part so as not to hit near frame. Scratches can cause malfunction.

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



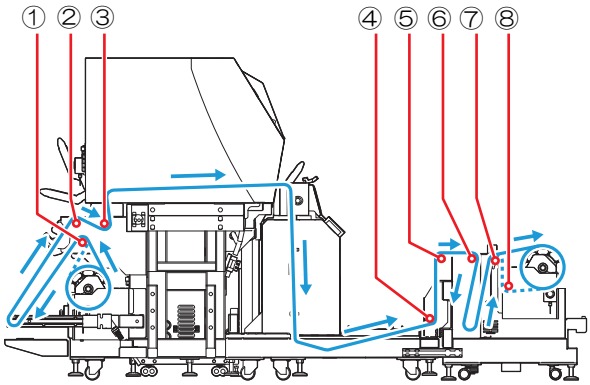
(4) Close the right cover.
(5) Lifting the AMF bottom cover.
(6) Slide the lever to lock.



Caution
- 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”.
Fabric media that is set in the machine is fed along the route shown in the figure below.
Understanding the route the media will take beforehand allows you to set the media smoothly and efficiently.



① Lapel bar 1
② Lapel bar 2
③ Lapel bar 3
④ Lapel bar 4
⑤ Lapel bar 5
⑥ Lapel bar 6
⑦ Lapel bar 7
⑧ Lapel bar 8

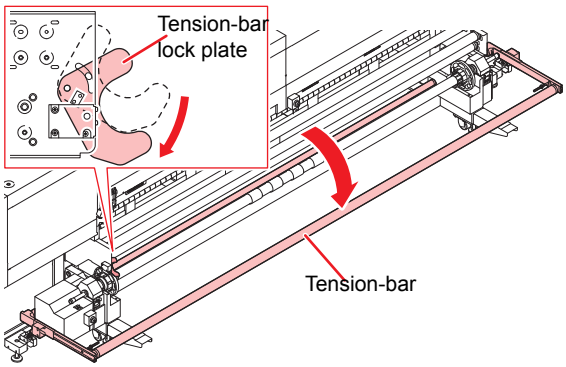
Caution
- Take care not to drop the media on your foot when setting the media.
- Handle clamp levers carefully.
  Do not push the lever up when tension-bar is lifted. Be sure to fix the tension-bar with the tension-bar lock plate and push up / down the lever.

Important!
- When using the media take-up machine, be careful about the points below:
  At the feeding side, make sure you set the media so that the the print surface for the media being used matches the route.
  At the take-up side, set the printed surface to “Revoluted”.
- When feeding fabric through the machine, make sure you pull the fabric straight out from the roll to avoid getting wrinkles in the fabric.
- Make sure that the grit roller and ink landing plate are clean before setting the fabric media. If the areas are soiled, see P.4-4 to clean them.

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

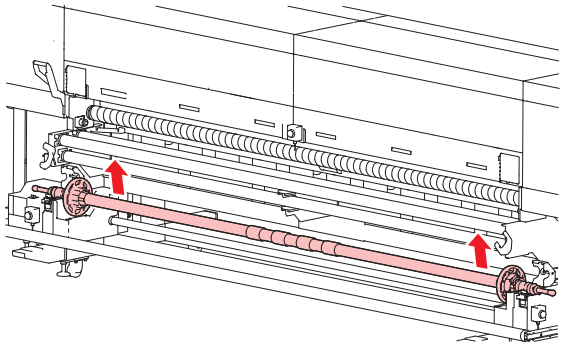
2 Slowly lower the tension bar at the rear of the machine

• Unlock the tension-bar, and then lower it.



3 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.



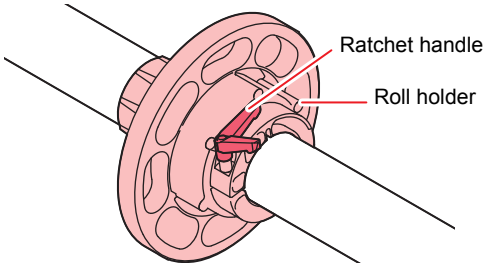
Caution
• When carrying the roll shaft, be sure to grip handles on the both ends. Gripping other parts, your hand may get stuck in the printer.

• 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.

4 Remove the roll holders.

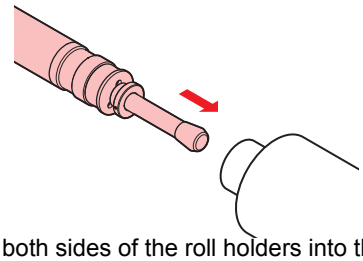
• The roll holders are on both for the right and left of the roll holder. Remove both with the procedures below:

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



5 Set a media on the roll shaft.

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

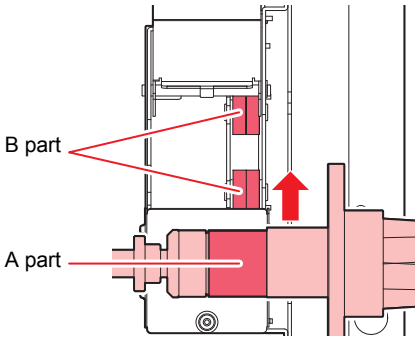


(2) Push both sides of the roll holders into the paper core, and tighten screws with supplied ratchet handle to secure.

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

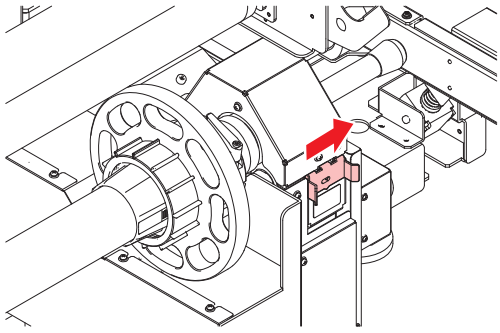
6 Put the roll shaft with the media on the feeding device.

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



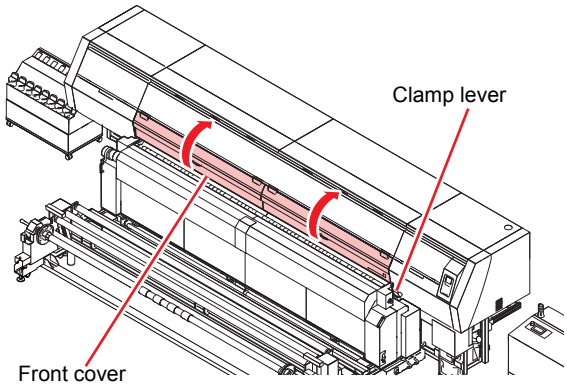
Caution
• Carefully set A part so as not to hit near frame. Scratches can cause malfunction.

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



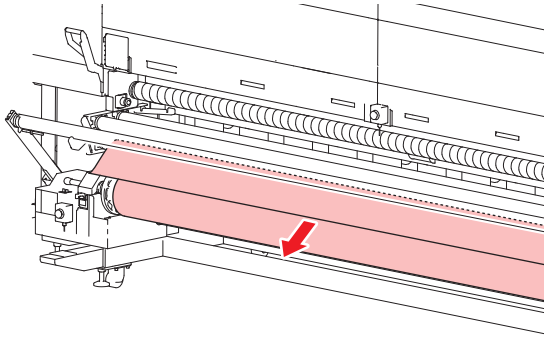
Caution
• Put the shaft on gently, not roughly.

7 **Open the front cover and raise the clamp lever at the front of this machine.**

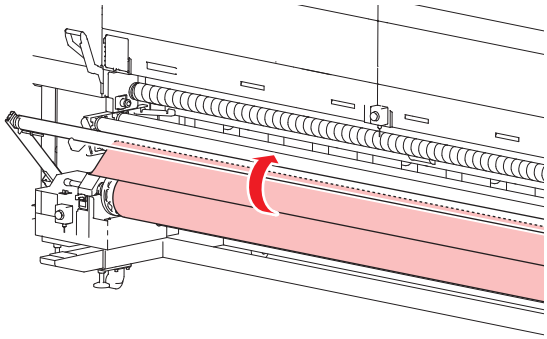


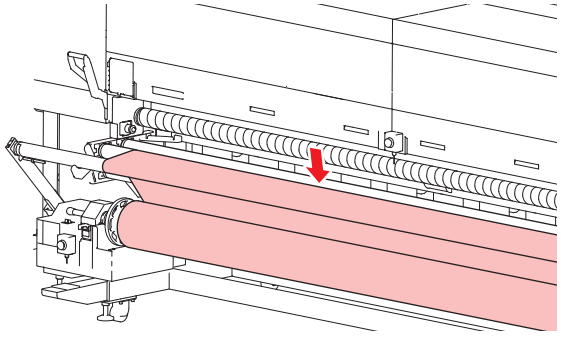
8 **Lift the tension-bars at the front and rear of the machine, and fix them with the tension-bar lock plates.**

9 **Feed the media through lapel bar 1.**



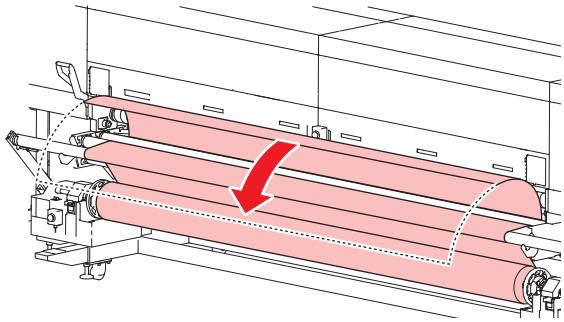
10 **Feed the media from outside the feeding tension bar to lapel bar 2.**



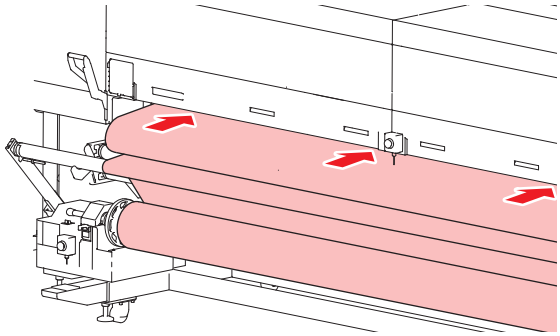


11 **Feed enough of the media under lapel bar 3.**

- At this point, remove any wrinkles from the surface of the media.

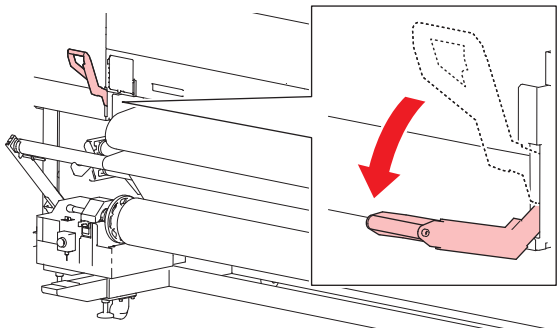


12 **Insert the edge of the media between the grit roller and the pinch roller, and slide it to the front of the machine.**



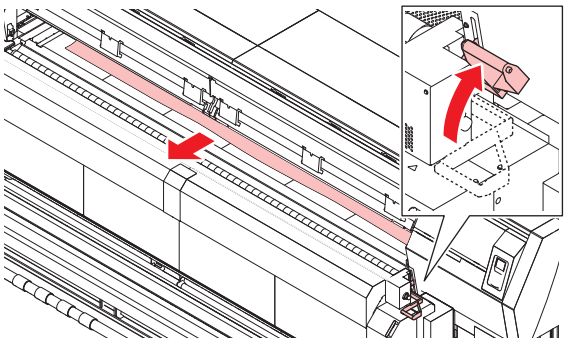
13 **Lower the clamp lever at the rear of this machine.**

- The media is held.



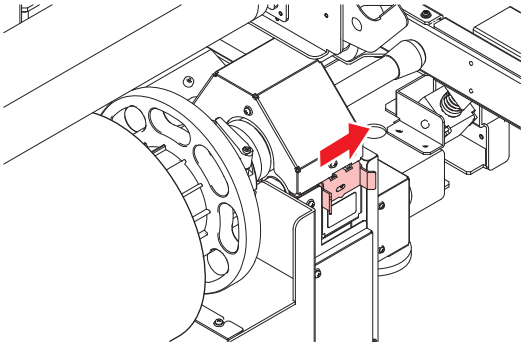
14 Go to the front of the machine, raise the clamp lever while holding the edge of the media in your hand, and pull out the media.

- Make sure that there are no wrinkles at the front or back of the machine.

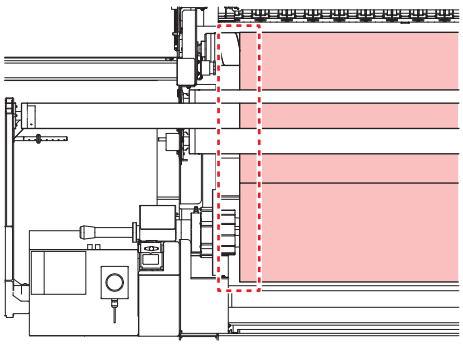


15 Close the cover on the left of the feeding device at the back of this machine.

- Close the covers and rock the cover.
- Lock the roll shaft rotation.



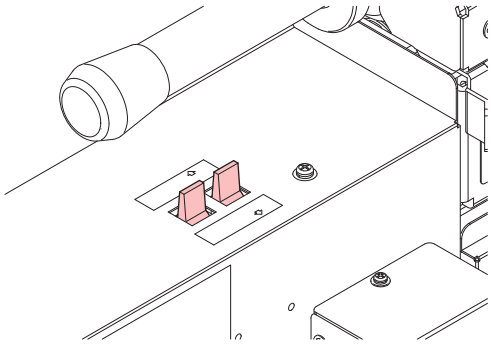
Important! • Make sure that the media is fed straight to the brake roller.



16 Go to the front of the machine, and lower the clamp lever while stretching the media.

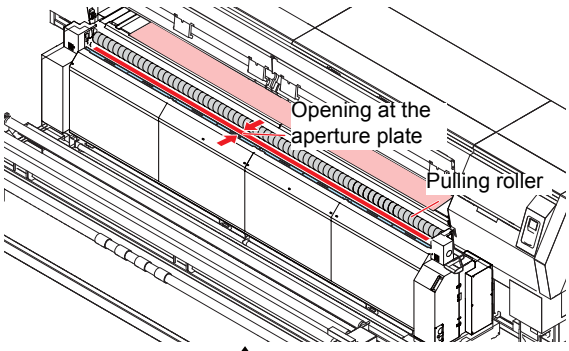
17 Adjust the position of the tension-bar with the switches on the left of the feeding device.

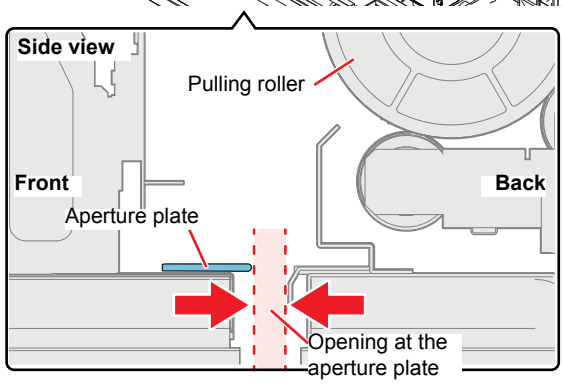
(1) Set the rotation direction switch to the bottom arrow.
(2) While pulling the pin on the outside of the tension-bar lock plate, set the left side switch to [Manual].
(3) The tension-bar lowers a little. Switch back and forth between [Manual] and [Auto] until the tension bar is almost parallel to the floor. When the tension bar is almost parallel to the floor, switch back to [Auto].



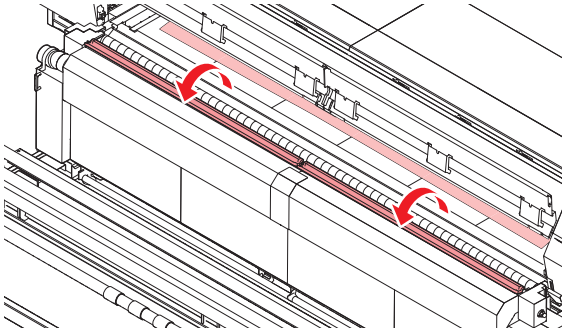
18 Confirm that the opening at the aperture plate on the color fix device/dryer is large enough.

Caution • Exercise caution when setting the media on a hot color fix device/dryer, as its extremely high temperature may cause you to sustain burns.





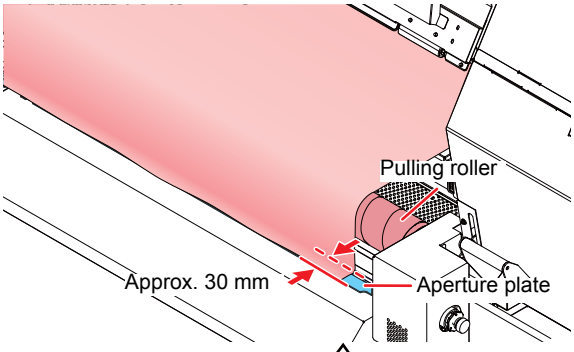
19 Open the hood cover of the coloring/ drying heater.

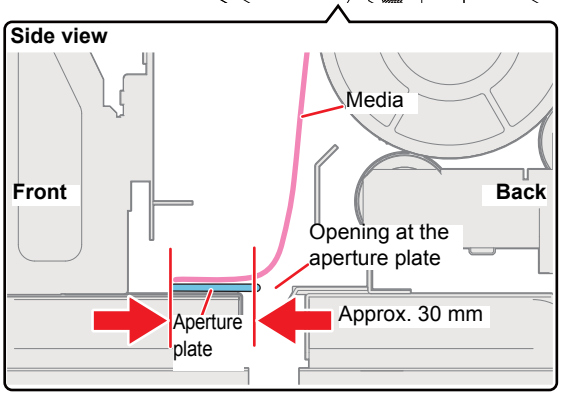


20 Pull out the edge of the media until it reaches the top part of the color fix device/ dryer.

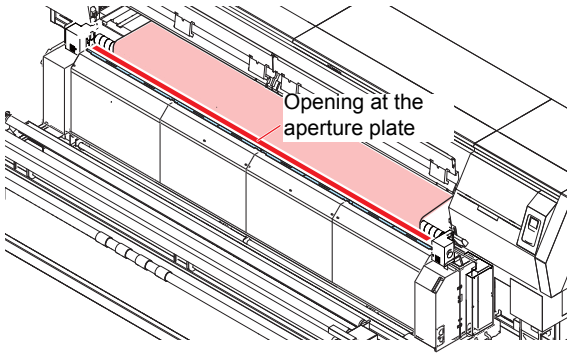
Pull out the edge of the media to cover a length of approximately 30 mm, and place it on top of the aperture plate on the color fix device/dryer.

- If you pull the edge of the media too far out, it will not fit into the color fix device/dryer, and you will not be able to guide the media.
  If you pull the edge too far out, use the back feed function or a similar method to adjust the amount of media.

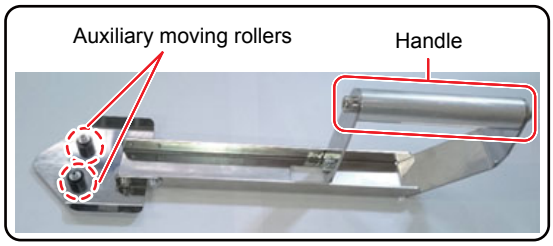




21 Use the jig to pass the media through the opening at the aperture plate.

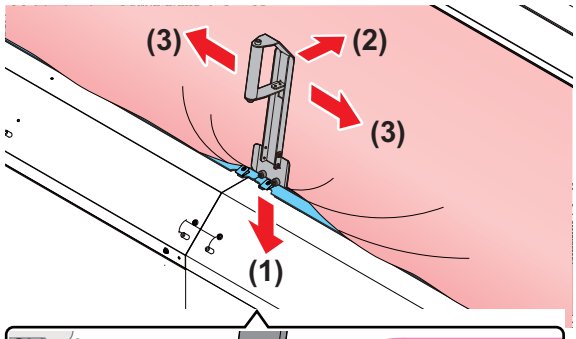


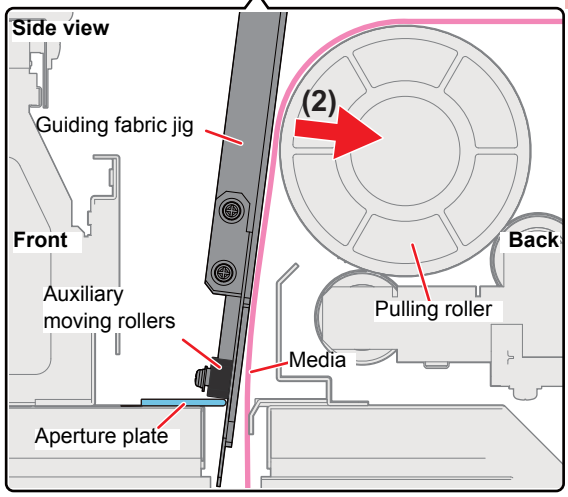
- Use the following jig: Guiding fabric jig (accessory box 1)



(1) Insert the jig into the central part of the color fix device/dryer until the auxiliary moving rollers touch the surface.
(2) Press the jig gently against the pulling roller.
(3) Move the jig to the right and left, and slowly insert the edge of the media into the color fix device/dryer. Move the jig gradually, and completely insert the media into the opening at the aperture plate.

- If the jig hits the screws or some other parts, do not push the jig inside by force, but rather pull it out first, move it, and then try to reinsert it.

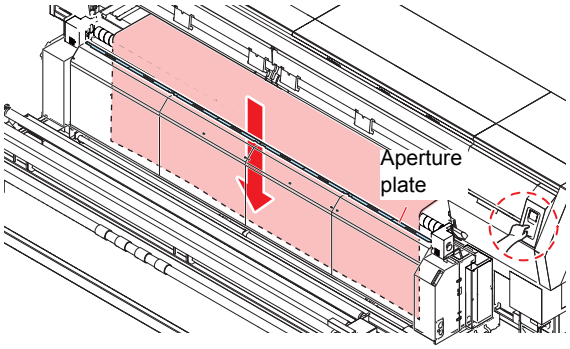




22 **Use the jog keys on the main printer unit to feed the media until its edge comes out of the bottom part of the color fix device/ dryer.**

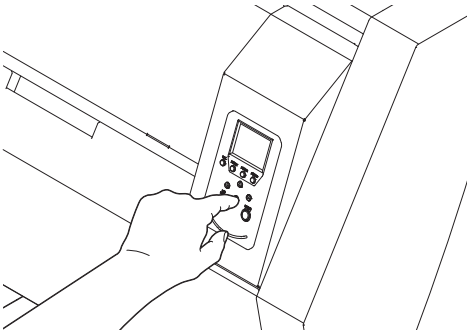
When feeding the media, pay attention to the following.

- Make sure the media does not get stuck.
- Make sure the media does not get wrapped around the pulling roller.
- Make sure the media does not accumulate on top of the aperture plate of the color fix device/dryer. (If the media accumulates on the aperture plate, use the jig to adjust any accumulated or loose media.)



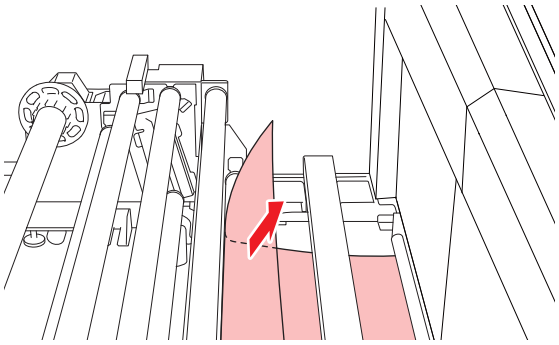
23 **Press ▲ ▼ to loosen the media.**

- Loosen the media until it reaches to the floor.



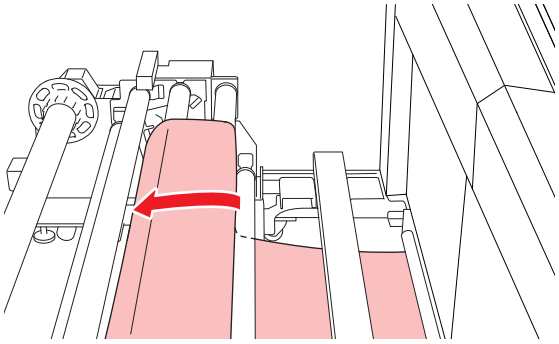
24 **Feed the media to the base of lapel bar 4.**

- Use [▲][▼] to loosen the media as much as necessary.



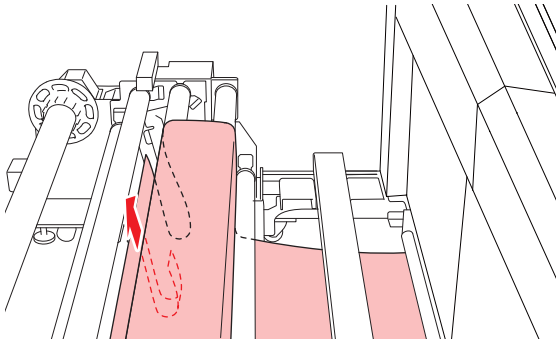
25 **Feed the media to the top of lapel bar 5 and label bar 6.**

- Use [▲][▼] to loosen the media as much as necessary.

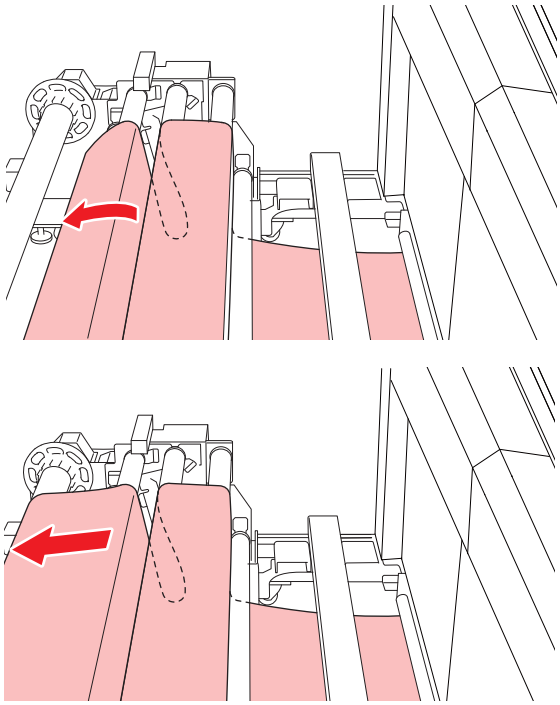


26 **Feed the media under the tension bar.**

- Use [▲][▼] to loosen the media as much as necessary.



27 Feed the media through the top of lapel bar 7 until it reaches the take-up device.

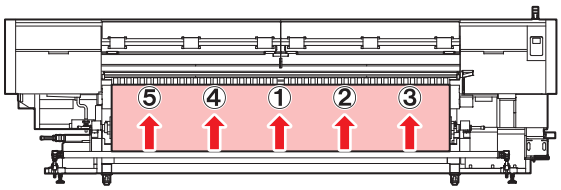


- Make sure that the media is fed straight.
- Check that neither end of the media is curling and wrapping around the lapel bars. Pay particular attention to the lapel bar for the coloring/drying heater as it is difficult to check.

28 Secure the media on the take-up device.

(1) As indicated, fix the media on the paper core with tape so that the printed surface is “revoluted”.

- Secure 5 or more places with strong adhesive tape in the order shown in the figure while keeping the media along the paper core so that the media will 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.
- When fixing with tape, please make sure that the media on the platen surface is stretched without slack.

29 Press ▲ ▼ to loosen the media.

- Loosen the media until it reaches to the floor.

30 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.

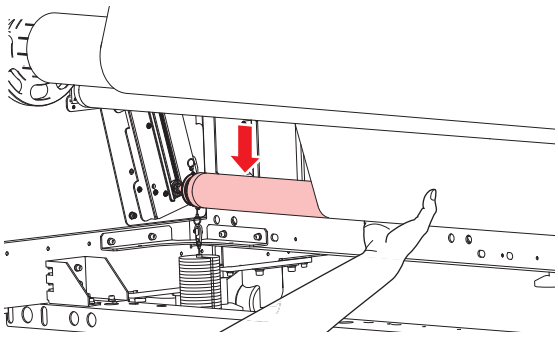
- Rolling up the media too tight, covers of take-up device opens and an error [Cover Open] appears. In this case, open the right cover of the take-up device, and loosen the tension of the media.

31 Press ▲ ▼ to loosen the media.

- Loosen the media until it reaches to the floor.

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

- Remove the stopper, and then while holding the tension bar, unlock it, and then lower it.



33 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.

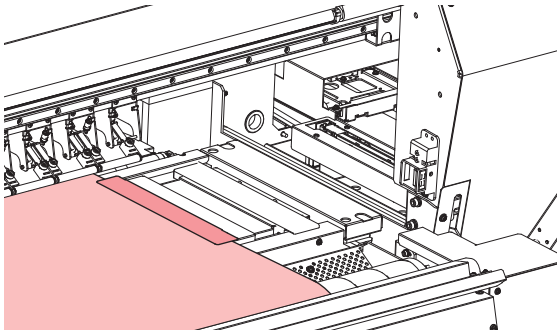
- When the tension bar does not move upward even if you press the [▲][▼] switch, stretch the slack media by operating the switch.
  (1) Set the ↑ ↓ switch to the take-up direction of the media, and turn the switch to [MANUAL]. (The tension-bar is lifted.)
  - When the media is fed and the tension-bar is not lifted, turn the ↑↓ switch to the other side.

  (2) When the tension bar rises, tension is applied to the media, so 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.

34 **Holding the media on both sides, lift it carefully.**



35 **Open the hood cover for the coloring/ drying heater.**

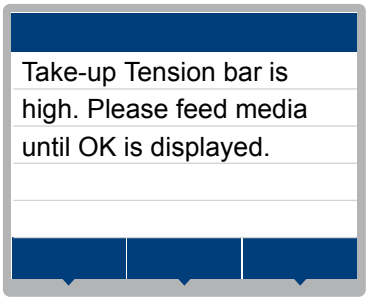
Entering the media width and remaining amount

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

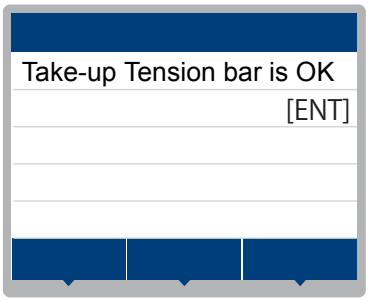
1 **Display the screen for entering media width.**

- When you set the to “AUTO” in the “Setting the Media Detect/Width” of the machine setting, this screen is not displayed. (☞ P.3-20)

- When the tension bar of media take-up device locates at a high position, the following message is displayed.
  Press [▼] to take the media out.



When Tension bar goes down to a certain height, the screen is switched into the following.
Press [ENTER] key to switch into the next screen.



2 **Press ▲ ▼ to enter the media width.**

3 **Press 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 ENTER key.**

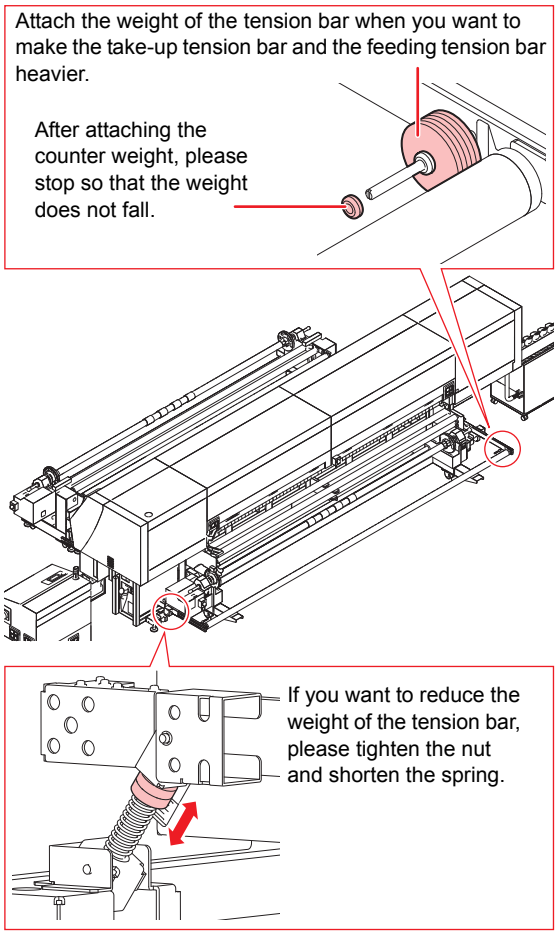
Installing the counter weight for adjusting the take-up/ feeding tension-bar weight

Install the proper number of counter weights depending on the media condition.
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 weight of the tension bar.
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 weight of the tension bar.
The media floats on the platen.	

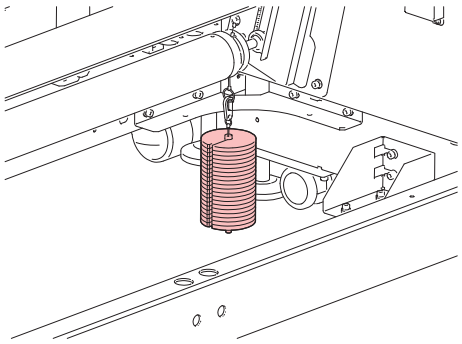
For the feeding tension bar

Attach weights to the tension bar when you want to make the feeding tension bar heavier.
After attaching the counter weight, stop so that the weights do not fall.
If you want to reduce the weight of the tension bar, tighten the nut and shorten the spring.

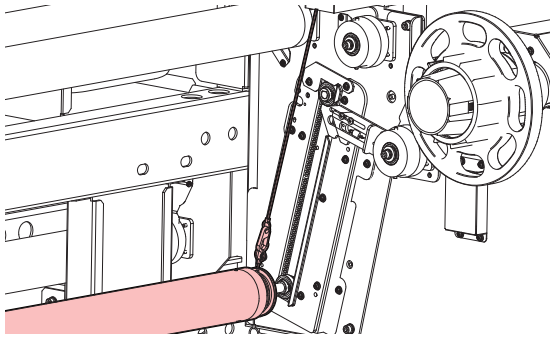


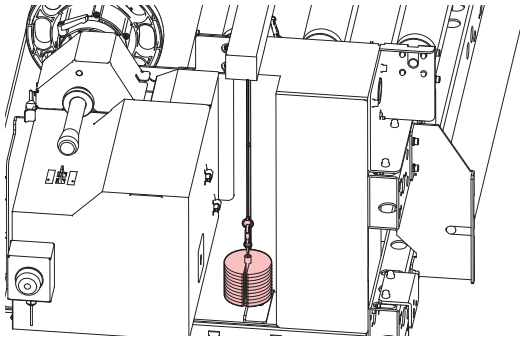
For the take-up tension bar

Attach weights to the carabiner on the base of the tension bar when you want to make the take-up tension bar heavier.
Adjust the number of weights according to your needs.



If you want to reduce the weight of the take-up tension bar, connect the carabiner on the base of the tension bar to the carabiner at the top, and attach weights to the machine's carabiner.
Adjust the number of weights according to your needs.





Caution

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

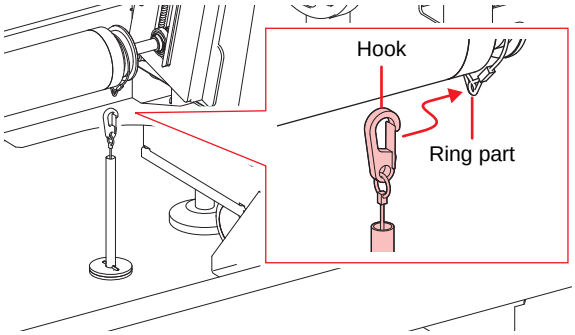
Important!

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

Preparation to install Take-up tension bar weight

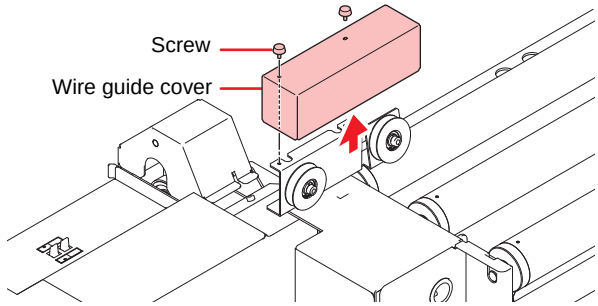
In case of using Tension bar by making it heavy

Stack the ring parts of CW wire both ends and hitch the hook.

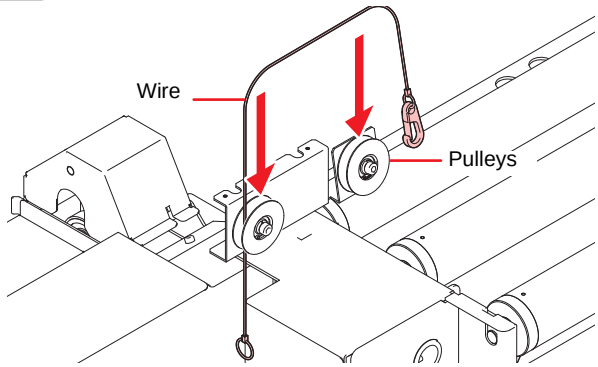


In case of using Tension bar by making it light

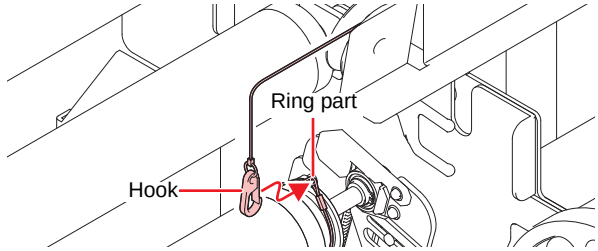
1 **Remove the wire guide cover.**



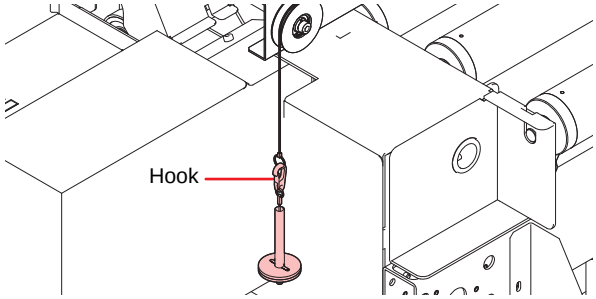
2 **Hitch the wire to two pulleys.**



3 **Stack the ring parts of CW wire both ends and hitch the hook.**



4 **Hitch the hook of the weight to the rings of CW wire both ends.**



Changing the printing origin

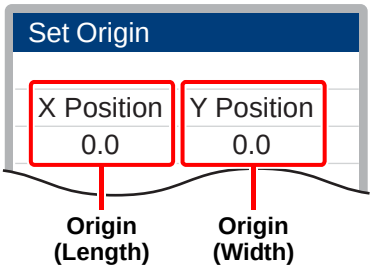
The position of the printing origin can be changed.

1 **In Local, Press [▲][▼][◀][▶].**

- It enters into the origin setting mode.

2 **Press [▲][▼][◀][▶] to set the temperature of heater.**

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

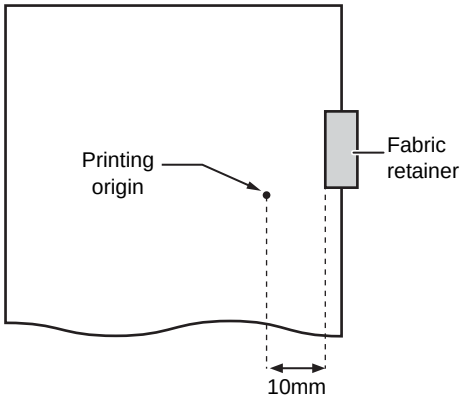


3 **After determining the origin, press the [ENTER] key.**

- The printing origin is changed.

Changing the printing origin

When media is automatically detected, the printing start point (origin) is set at the position shown in the figure below.
You can change the printing origin according to your needs.



Preparing the color fix device/dryer

This machine performs a consistent dry to color fixation process for after printing. Additionally, make sure you perform a test for each media type (fabric) in advance to realize optimum color/dryer quality.
You need to set the heater temperature for the color fix device/dryer before printing.

Name and Function of Each Part of The color fix device/dryer

Pilot lamp

Displays the state of the color fix device/dryer.
Off: Main power OFF / Heater OFF.
Green blinking: Heater is warming up (HEATING).
Green lit: Ready for coloring/drying (READY).
Red blinking: Cover is open.
Red lit: Error.

Heater ON/OFF switch

Turn on / off heater on local control.
LED blinking: Heater is waiting (WAITING). Turn the switch to the right to turn on the heater.
LED lit: Heater is ON. Turn the switch to the left to turn off the heater.

Emergency switch

Emergency stop the heater and printer by pressing the switch in case of emergency.
To cancel, please turn to the right to release the switch and reset from the touch panel.

Operation panel

Perform various operations of the heater.

Filter

Main power switch

Turn ON / OFF the main power supply of color fix device/dryer.

Punching section

Turn on/off the color fix device/dryer

Caution

- When turning on the main power supply, please do not touch the heater part.
- When performing maintenance, be sure to turn off the main power.

Important!

- When turning on the main power supply, please do not block the filter part and the punching part.

1 **Turn on the main power switch**

- Turn the main power switch to the "ON" position.

Emergency stop

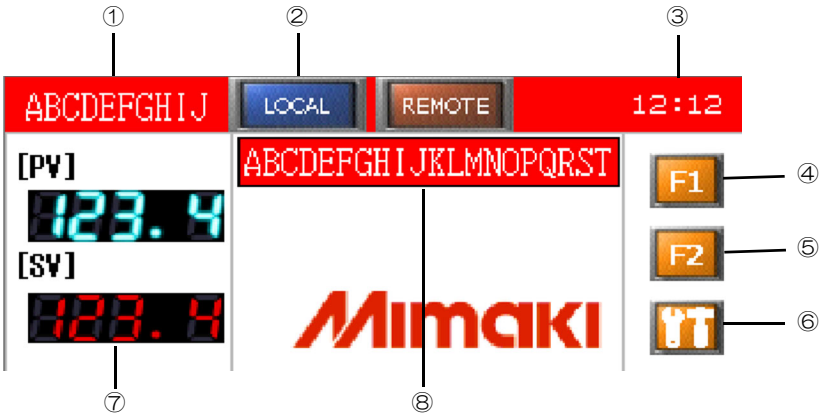
The emergency stop switch is attached to the heater (1 point) and the printer side (5 points).
The emergency stop switch on the printer side is effective only when the printer is activated.
If you feel danger, please push the switch near you.
For details, refer to☞ P.1-14 "About the emergency switch"

Prepare color fix device/dryer

Control Panel

Operation of the color fix device/dryer is performed on the operation panel of the color fix device/dryer.
The operation panel adopts a touch panel.
Please tap the screen and operate.

TOP screen



① Status indication
The following eight types of status are displayed.
- OFF
- WAITING (Waiting)
- READY (Reached Coloring/drying temperature)
- STAND BY (Standby temperature)
- HEATING (Heating)
- COOLING (Cooling)
- ERROR (Error occurring)
- MAINTE (Turning on the power, during maintenance)

② Interlock control display
The following two interlocking control modes are displayed.
- LOCAL
- REMOTE

Tap to switch.
However, it can not be used when the ERROR is shown on the display.

③ Time Display
The current time is displayed.

④ Screen transition 1
Tap to move to the motion setting screen.

⑤ Screen transition 2
Tap to switch to the temperature chart screen.

⑥ Setting menu
Various setting screen is displayed.

⑦ Temperature display
The following two types of temperature are displayed.
- Current temperature
- Set temperature

By tapping, the set temperature can be changed.

⑧ Model display
- Color Fixation model (color fixation model)
- Dryer model (dryer model)
- Model not selected (model not selected)

Operation Menu of Color fixation Device

[Status]

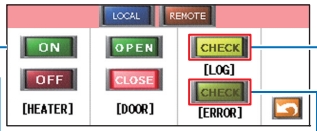
WAITING	Displayed in the waiting mode.
HEATING	Displayed while the device is heating up to the color fixation temperature.
READY	Displayed when the color fixation temperature has been reached.
COOLING	Displayed until the temperature in the furnace drops after you switch off the heater.
HEATING:S	Displayed while the device is heating up to the standby temperature.
STANDBY	Displayed when the standby temperature has been reached.
ERROR	Displayed when an error occurs.
MAINTE	Displayed when the power supply is switched on.

[LOCAL]
Select this when turning the heater on or off on the heater side.

[REMOTE]
Select this when turning the heater on or off on the printer side.

[PV]
Current temperature

[SV]
Set temperature

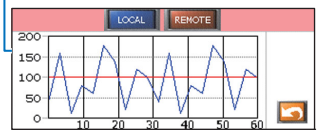


[HEATER]
Switches the heater on or off in the LOCAL control mode.
Only the OFF setting is available in the REMOTE control mode.

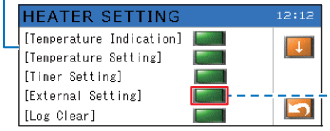
[DOOR]
This button releases the door lock.
You can release the lock when the temperature inside the furnace does not exceed 50°C in the MAINTE mode (when LOCAL or REMOTE is switched off).

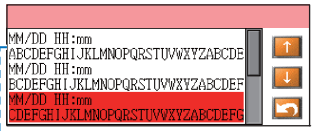
[LOG]
Displays a list of the operation and error logs of the heater.
Refer to the error list for error descriptions.

[ERROR]
Opens a window with simple error descriptions.



Displays the changes in the temperature inside the furnace.

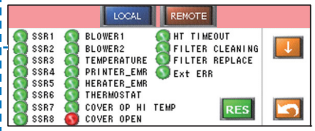




[Log window (2 lines per log)]
Line 1: Date and time of occurrence
Line 2: Event code/error code

[↑ / ↓]
Log scroll
* This function is disabled if the log window is not selected.

[Clearing the log]
To clear the log, go to the setting menu and select [Log Clear].



[SSR 1~8]
Lights up when a power controller, heater or SSR error occurs.
* To reset the warning lamps, turn the main power supply off.

[BLOWER1]
Lights up when an error occurs in the inverter.

[BLOWER2]
Lights up if the blower stops when the command for its operation is active.

[TEMPERATUBE]
Lights up when a control temperature error occurs.

[PRINTER_EMR]
Lights up when the emergency button is pressed on the printer side.

[HEATER_EMR]
Lights up when the emergency button is pressed on the color fixation device side.

[THERMOSTAT]
Lights up when an error in the internal temperature of the furnace occurs.
* This warning lamp cannot be reset until the temperature inside the furnace drops.

[COVER OP HI TEMP]
Lights up if you open the cover when the temperature inside the furnace is high.

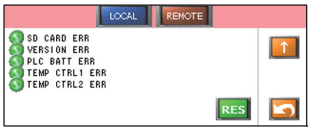
[COVER OPEN]
Lights up when the cover is opened.

[HT TIMEOUT]
Lights up when the heater is left on.

[FILTER CLEANING]
Lights up when the cleaning alarm for the filter of the heater electric components is activated.

[FILTER REPLACE]
Lights up when the replacement alert for the filter of the heater electric components is activated.

[Ext ERR]
Lights up when an external input signal stops the heater.

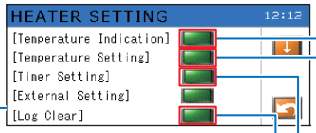


[SD CARD ERR]
Lights up when the SD card is missing, broken, or when its cover is opened.

[VERSION ERR]
Lights up when the main PLC unit and touch panel versions do not match.

[PLC BATT ERR]
Lights up when an internal battery error occurs in the main PLC unit.
* You need to reconfigure the parameters, as they are reset after you replace the battery.

[TEMP CTRL1/2 ERR]
Lights up when an error occurs in the temperature control unit.



HEATER SETTING 1

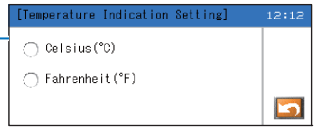
[Temperature Indication]
Changes the displayed temperature units.

[Temperature Setting]
Sets the temperature.

[Timer Setting]
Configures the timer or clears the filter time.

[External Setting]
Sets the external input and output.

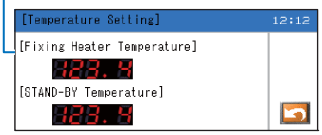
[Log Clear]
Clears the log.



Changes the displayed temperature units.

[Celsius]
Displays the temperature in Celsius.

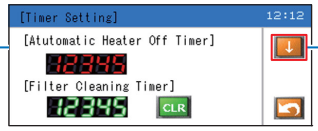
[Fehrenheit]
Displays the temperature in Fahrenheit.



Temperature Setting

[Fixing Heater Temperature]
Displays the temperature set for color fixation.
* Displays the temperature when the heater is on in the LOCAL mode, or when the printer sends the command to turn the heater on.

[STAND-BY Temperature]
Displays the temperature set for the standby mode.
* The transition to the standby temperature is available only with the printer command.



Timer Setting

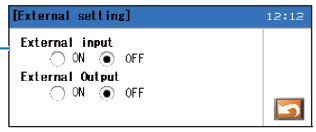
[Automatic Heater Off Timer]
Displays the time required for the status to change from “Ready” to “OFF”.
* The timer is disabled during printing.

[Filter Cleaning Timer]
Displays the time elapsed after the filter is cleaned.

[CLR]
Clears the time elapsed after the filter is cleaned.

[Filter Replace Timer]
Displays the time elapsed after the filter is replaced.

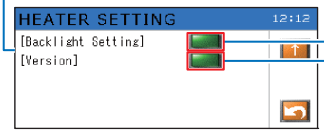
[CLR]
Clears the time elapsed after the filter is replaced.



External setting

[External Input]
The heater is switched off after the signal input.

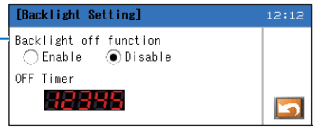
[External Output]
Activates the non-voltage output mode when the heater is on.



HEATER SETTING 2

[Backlight Setting]
Backlight Setting

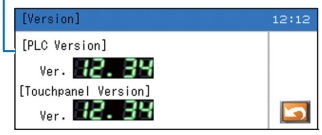
[Version]
Displays the version.



Backlight setting

[Backlight off function]
Backlight ON / OFF at heater OFF

[OFF Timer]
Time to turn off at Enable setting (minutes)



Displays the version.

[PLC Version]
Displays the version of the main PLC unit.

[Touchpanel Version]
Displays the touch panel version.

Setting Menu List

• Some of the following setting items can also be set from the printer side.

Function name	Set value	Set from printer	Overview
Coloring/Drying temperature setting	Coloring:150.0~180.0~200.0 Drying:40.0~60.0~80.0	Yes	Set the temperature at coloring/drying.
Standby temperature setting	100.0~120.0~150.0	Yes	16/5000 Set the temperature at standby.*1
Temperature display setting	● Celsius(°C)		Select the display of current temperature and set temperature of heater from Celsius, Fahrenheit.
	○ Fahrenheit(°F)		
Automatic OFF time setting	1~5~60(min)	Yes	Local :Set the time to turn off the heater after transition to Ready. * 2 Remote:Set the time from the end of printing to turning OFF.
Time after filter cleaning	300(H)		Set the time until the alert is issued after cleaning the filter. * 3
Time after filter replacement	2000(H)		Time until alert comes out after filter exchange * 3
External input setting	○ ON		External input setting Set whether or not to turn off the heater from external input.
	● OFF		
External output setting	○ ON		External output setting Set whether to output no-voltage contact during heater ON.
	● OFF		
Clear log	–		Clear event and error log.
Backlight setting	○ Enable		Set backlight auto OFF. Set whether to turn the backlight OFF or not when the heater is off.
	● Disable		
	1~10~60		Set the time for turning OFF.

*1 Transition to standby is only from the printer. In case of using with dryer, there is no setting of standby temperature.
*2 Heater is not turned off while printing locally.
*3 Value can not be set, only time can be cleared

Setting color/dry fixing temperature

Estimation of coloring/drying temperature setting

The color fixing temperature is based on 180 °C and should be adjusted according to the nature of the media to be used.

	Set higher temp	Set lower temp	Remarks
Color development	Uncolored (dull color)		
Stain		Many stains	
Media shrinkage		Shrinking is large	Depending on the media characteristics, media may shrink by 2% when coloring.
Resolution (pass)	Low pass mode	High pass mode	When the high pass is set, the time in the furnace becomes long, so set the set temperature low.
Media thickness	Thick media	Thin media	Please set the temperature high for thick (high density) media.

The drying temperature is based on 60 ° C and should be adjusted according to the nature of the media to be used.

	Set higher temp	Set lower temp	Remarks
Dryability	Undried (show-through)		
Media shrinkage		Shrinking is large	Depending on the media characteristics, media may shrink by 1% when dry
Resolution (pass)	Low pass mode	High pass mode	
Media thickness	Thick media	Thin media	Please set the temperature high for thick (high density) media.

Set the color/dry fixing temperature

1 **Touch the display temperature of [SV] on the top screen.**

2 **Set the color/dry fixing temperature**

- Color fixing temperature setting range: 150.0 to 200.0 °C
- Color fixing temperature setting range: 40.0 to 80.0 °C

Set the color/dry fixing temperature and standby temperature

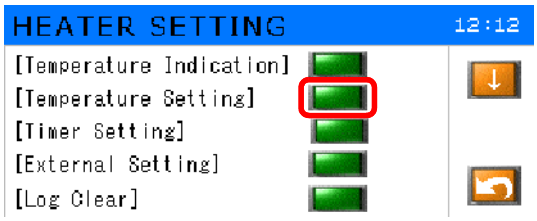
Set the color/dry fixing temperature and stand by temperature when heater is ON from LOCAL mode and the printer.

- Standby temperature is the holding temperature for shortening heating time of the heater and reducing damage to the media.
- The transition to the standby temperature is only possible from the printer.

1 **Touch the button on the top screen.**

- The setting menu will be displayed.

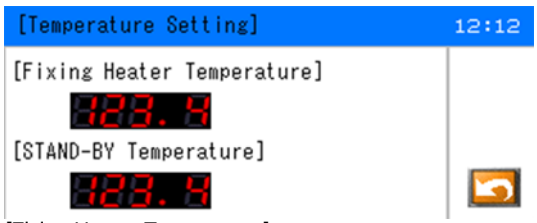
2 **Touch the [Temperature Setting] button.**



- The temperature setting screen will be displayed.

3 **Set color/dry fixing temperature and standby temperature.**

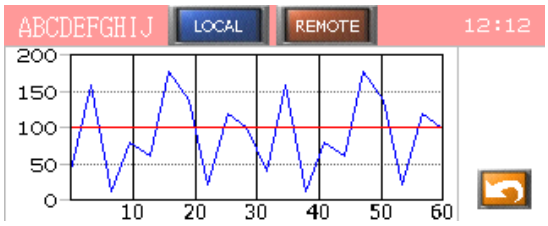
- Touch the display temperature to set the temperature.



- [Fixing Heater Temperature]
  Color fixing temperature setting range:150.0 to 200.0 °C
  Color fixing temperature setting range:40.0 to 80.0 °C
  Setting unit: 0.1 °C
- [STAND-BY Temperature]
  Setting range: 100.0 ~ 150.0 °C
  Setting unit: 0.1 °C

Temperature chart screen

Displayed when you tap [F2] (Screen transition 2).
Changes in the set temperature and current temperature are displayed in the temperature chart.
Displays changes in temperature for the last 60 minutes.



Returns you to the TOP screen, when you tap .

Set off timer

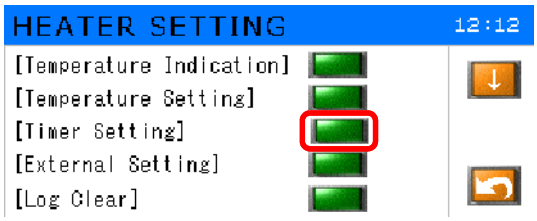
Set the time until the heater turns off automatically.
Depending on the mode, the operation of the off timer varies.

Mode	Operation
LOCAL	When leaving in the Ready state, the heater automatically turns off after the set time has elapsed. When printing etc., it turns OFF after the set time has elapsed from the end of printing etc.
REMOTE	After completion of printing, the heater automatically turns OFF after the set time has elapsed.

1 **Touch the button on the top screen.**

- The setting menu will be displayed.

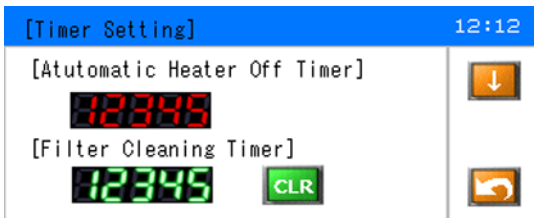
2 **Touch the [Timer Setting] button.**



- The timer setting screen is displayed.

3 **Set off timer time.**

- Touch the value of [Automatic Heater Off Timer] and set the time. (1 to 60 minutes).



- The setting time of [Automatic Heater Off Timer] is linked with the setting time of [Heater OFF] on the printer side.

Flow of color/dry fixation device/ dryer operation

When you control the color/dry fixation device/dryer from the printer

1 **Turn on the main power supply of color fix device/dryer.**

2 **Start REMOTE mode.**

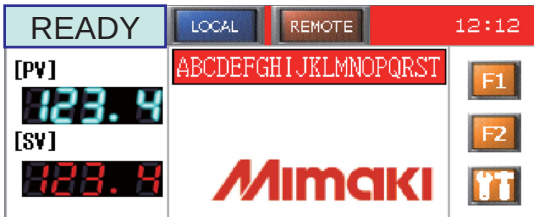
(1) Touch the REMOTE button.
The status changes from [MAINTE] to [WAITING].

3 **Send print data from computer to printer.**

- For the method of sending data, please read the operation manual of the output software.
- The heater turns ON and the status changes from [WAITING] to [HEATING].

4 **Start printing.**

- When the furnace temperature stabilizes at the set temperature, the status changes from [HEATING] to [READY], and printing starts automatically.
- If you have not adjusted the opening at the aperture plate (☞ P.2-27), follow the procedure described in "When you do not control the color fix device/dryer from the printer (☞ P.2-26)"".
  The automatic printing function is available when all of the three conditions below are fulfilled.
  - •You have adjusted the opening at the aperture plate(☞ P.2-27).
  - •You have not replaced the media since the last printing operation.
  - •You have not changed the temperature settings since the last printing operation



5 **Finish printing.**

- When printing is finished, the heater turns off automatically and the status changes from [HEATING] to [COOLING].
  If the standby time is set in the printer setting, the status changes to [HEATING: S].

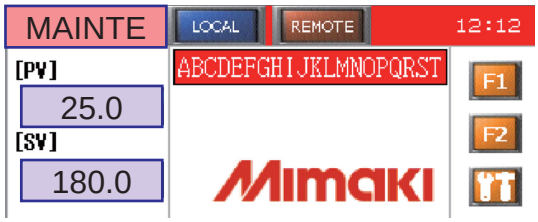
- When the furnace temperature falls below 60 degree C, the status changes from [COOLING] to [WAITING].

6 **Exit REMOTE mode.**

(1) Touch the REMOTE button.
The status changes from [WAITING] to [MAINTE].

When you do not control the color fix device/dryer from the printer

1 Turn on the main power supply of color fix device/dryer.



2 Start LOCAL mode.

(1) Touch the LOCAL button.
The status changes from [MAINTE] to [WAITING].

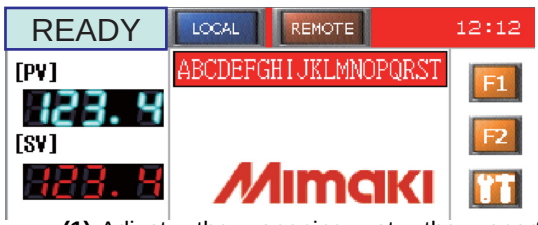
3 Turn on heater.

(1) Touch the F1 button.
The operation screen is displayed.
(2) Touch the ON of the [HEATER].
The heater turns ON and the status changes from [WAITING] to [HEATING].

You can go back to the previous screen by pressing button.

4 Start printing.

- When the furnace temperature stabilizes at the set temperature, the status changes from [HEATING] to [READY].



(1) Adjust the opening at the aperture plate.(☞ P.2-27)
(2) Send print data from computer to printer.
Printing will start.

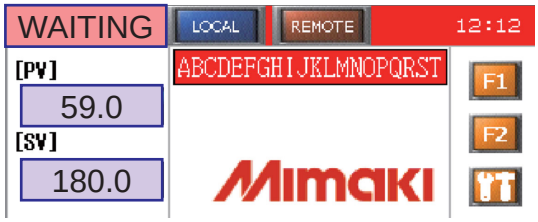
- If you leave the heater on without starting printing, the heater will turn off automatically.
- For the time to turn off the heater, refer to ☞ P.2-24 "Set off timer"

5 Turn OFF heater.

(1) When printing is completed, touch the F1 button.
The operation screen is displayed.
(2) Touch the OFF of the [HEATER].
The heater turns off and the status changes from [READY] to [COOLING].

You can go back to the previous screen by pressing button.

- When the furnace temperature falls below 60 degree C, the status changes to [COOLING] → [WAITING].



6 Exit LOCAL mode.

(1) Touch the LOCAL button.
The status changes from [WAITING] to [MAINTE].

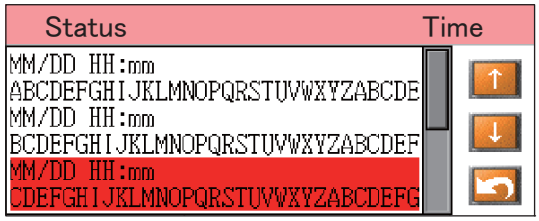
Checking the Logs

1 Tap [F1] (Screen transition 1).

- Displays the various settings screens.

2 Tap [LOG].

- The Check Logs screen is displayed.



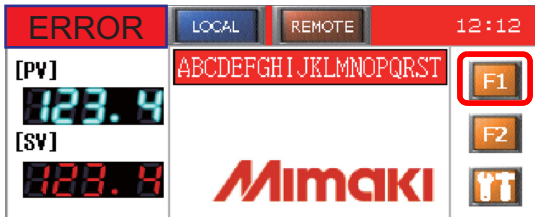
- Use the up and down keys to switch between logs.
The up key moves you backwards through the logs.
The down key moves you forwards through the logs.

About a cancellation of ERROR of the color fix device/dryer

When the status of the color fix device/dryer becomes [ERROR], its error status can be can celled by canceling the error status.

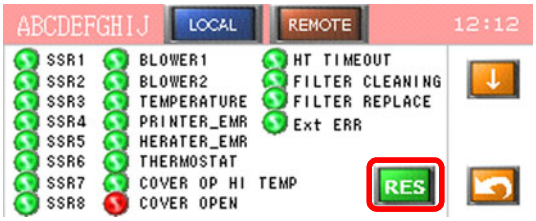
Cancellation of ERROR

1 **Tap [F1] key.**



2 **Tap [CHECK] key.**

3 **Tap [RES] key.**



- If it cannot be cancelled even by pushing [RES], turn off the main power once.
- In case of THERMALSTAT error, it cannot be cancelled until the inside temperature decreases.

Warming Up

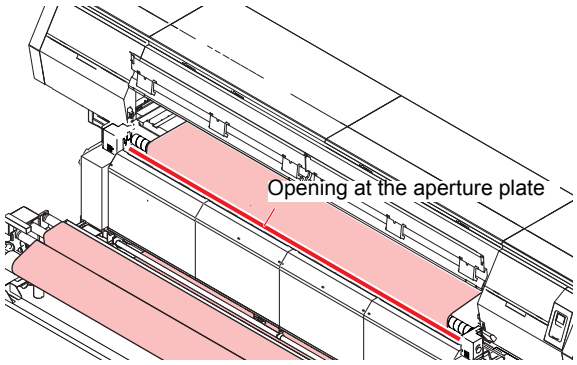
- It takes about 40 minutes from when turning on the heater until coloring becomes possible.
- It takes about 25 minutes from when turn on the heater until dryable.
- You can warm the color fix device/dryer by turning on the heater in local mode in advance.
- You can change to control from the printer by changing from local to remote in the middle.

Media Setting

Set media according to the procedure of Chapter 2
☞ P.2-4 "Setting a Media"

Adjusting the opening at the aperture plate

This adjustment allows you to set the opening to the ideal size in order to maintain a constant temperature inside the furnace of the color fix device/dryer, and ensure high quality colors/dry.



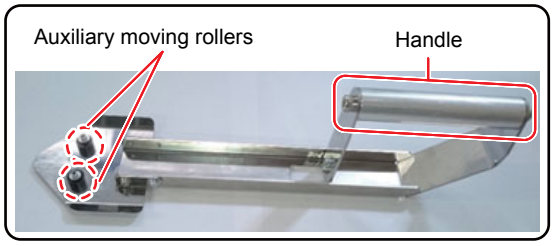
Be sure to adjust the opening after setting the media or changing the temperature settings.

Adjust the opening when the following conditions are fulfilled.

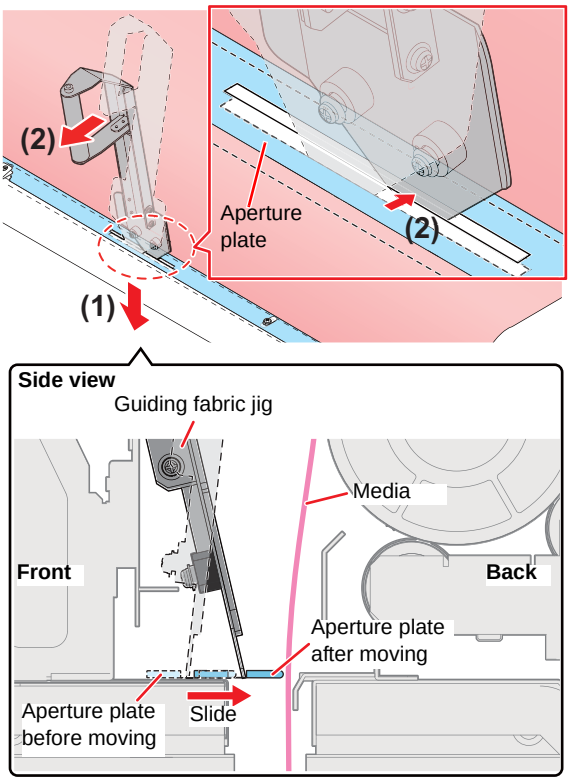
- The temperature inside the furnace has stabilized at the set temperature, and the status on the operation panel has changed from [H] to [R].
- The media has been set.

1 **Use the guiding fabric jig to close the opening at the aperture plate (8 locations).**

- Use the following jig: Guiding fabric jig (accessory box 1)



(1) Insert the guiding fabric jig into the square hole of the aperture plate.
(2) Move the aperture plate to the back to close the opening. (8 locations)



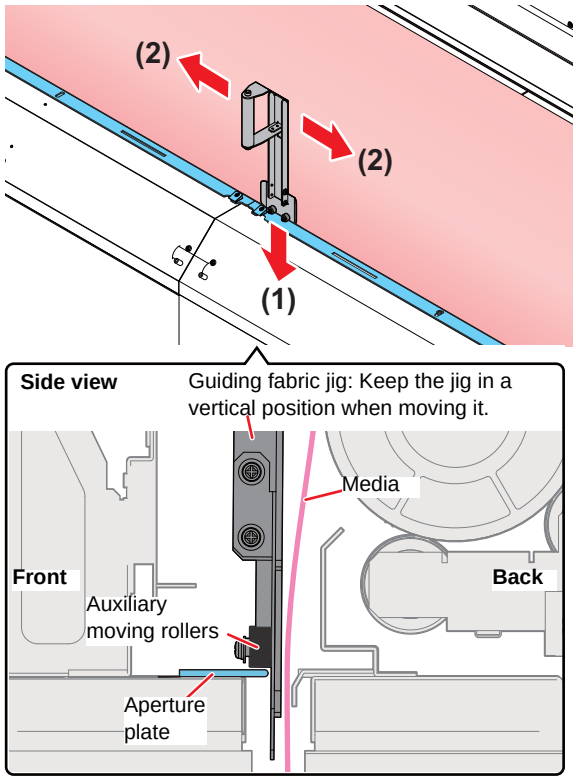
2 **Adjust the size of the opening at the aperture plate.**

(1) Insert the guiding fabric jig vertically between the aperture plate in the center of the color fix device/dryer and media in order to increase the opening at the aperture plate.

- Insert the jig until the auxiliary moving rollers touch the surface.

(2) Move the guiding fabric jig to the right and left to adjust the opening size (all aperture plates).

- Use the thick part under the auxiliary moving rollers of the guiding fabric jig to adjust the opening size.
- Do not slant the jig when you move it.
- If the jig hits the screws or some other parts, do not push the jig inside by force, but rather pull it out first, move it, and then try to reinsert it.



Processing when media is terminated

1 **Retract the feeding side tension bar.**

2 **Retract the take-up side tension bar.**

3 **Open both right and left AMF covers on the feeding side.**

4 **Remove the used media from the paper tube on the feeding side.**

5 **Remove the roll shaft on the feeding side and remove the paper pipe.**

6 **Set a new roll media on the roll shaft.**

7 **Set the roll shaft on the feeding side AMF.**

Important!

- Do not close the cover of the feeding side AMF yet at this point.

8 **Use safety pin to hold new media on used media.**

- In the case of full-width media, keep it even at about 5 places.

Important!

- Be careful not to wrinkle the joined media. If wrinkles are contained in the media, there is a possibility that safety pins and media get caught in the color fix device/dryer frontage and inside.

9 **Raise the clamp.**

10 **Switch the take-up side AMF to "manual" and wind up the new media connected to the used media.**

Important!

- During winding, check that the media does not get caught on the upper part of the grid roller or the upper part of the color fix device/dryer.

11 **When new media is wound up to the winding roll shaft, change the switch on the take-up side AMF to "AUTO" and stop winding.**

12 **Close both right and left AMF covers on the feeding side.**

13 **Remove the safety pin holding the media.**

14 **Keep the media tension evenly and lower the clamp.**

15 **Remove the used roll media from the take-up roll shaft and set the paper tube removed from the feed roll shaft.**

16 **For the subsequent media setting procedure, refer to the manual 2 and the following "Set role media" manual 18. (Tension bar position adjustment)**

- ☞ P.2-12 "Adjust the position of the tension-bar with the switches on the left of the feeding device."

Resetting the proper temperature

Estimation of coloring/drying temperature setting

The color fixing temperature is based on 180 °C and should be adjusted according to the nature of the media to be used.

	Set higher temp	Set lower temp	Remarks
Color development	Uncolored (dull color)		
Stain		Many stains	
Media shrinkage		Shrinking is large	Depending on the media characteristics, media may shrink by 2% when coloring.
Resolution (pass)	Low pass mode	High pass mode	When the high pass is set, the time in the furnace becomes long, so set the set temperature low.
Media thickness	Thick media	Thin media	Please set the temperature high for thick (high density) media.

The drying temperature is based on 60 ° C and should be adjusted according to the nature of the media to be used.

	Set higher temp	Set lower temp	Remarks
Dryability	Undried (show-through)		
Media shrinkage		Shrinking is large	Depending on the media characteristics, media may shrink by 1% when dry
Resolution (pass)	Low pass mode	High pass mode	
Media thickness	Thick media	Thin media	Please set the temperature high for thick (high density) media.

Other Settings

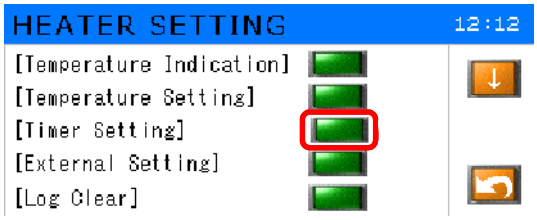
Reset timer for filter cleaning, filter change

Filter cleaning alerts are displayed every 300 H, filter exchange alerts are displayed every 2000 H.
Clean the filter or replace the filter, then reset the timer with the following procedure.

1 **Touch the button on the top screen.**

- The setting menu will be displayed.

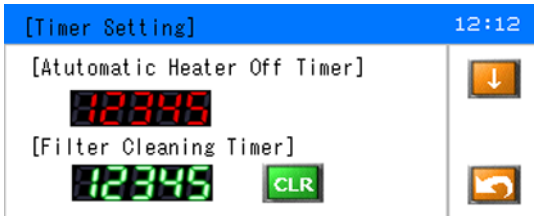
2 **Touch the [Timer Setting] button.**



- The filter time clear screen is displayed.

3 **Reset the timer.**

- [Filter Cleaning Timer]
  Touch the CLR button to reset the timer.



- [Filter Replace Timer]
  Touch the button to switch the screen.
  Touch the CLR button to reset the timer.

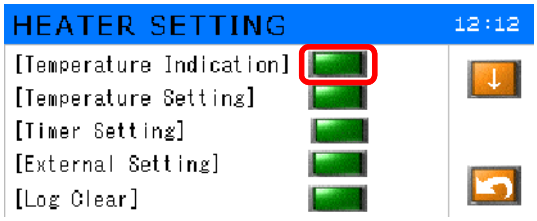
Change the temperature notation

Select the display of current temperature and set temperature of heater from Celsius, Fahrenheit.

1 **Touch the button on the top screen.**

- The setting menu will be displayed.

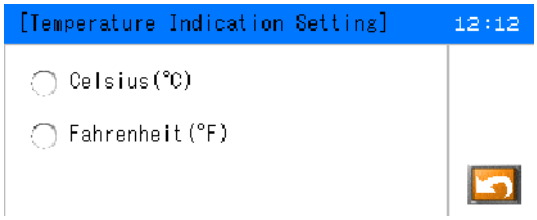
2 **Touch the [Temperature Indication] button.**



- The temperature display setting screen is displayed.

3 **Select temperature notation.**

- Please select the notation unit of current temperature of the heater and coloring/drying temperature.



- [Celsius]
  Displays the temperature of the heater in degrees Celsius.
- [Fehrenheit]
  Displays the temperature of the heater in degrees Fahrenheit.

Configure external input / output

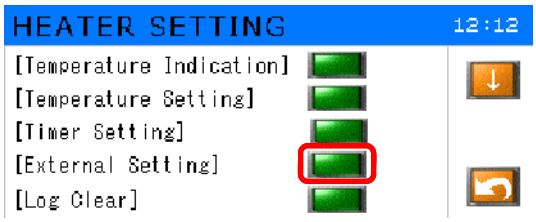
Set ON / OFF of external input / output. Please set it when using external stop switch function, no voltage contact output.

- Function
  External output: No-voltage contact output is performed in conjunction with heater ON.
  External input: Stop the heater from the outside. (External stop switch function)

1 **Touch the button on the top screen.**

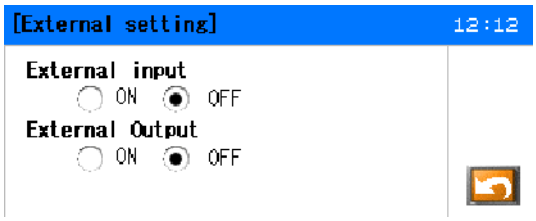
- The setting menu will be displayed.

2 **Touch the [External Setting] button.**



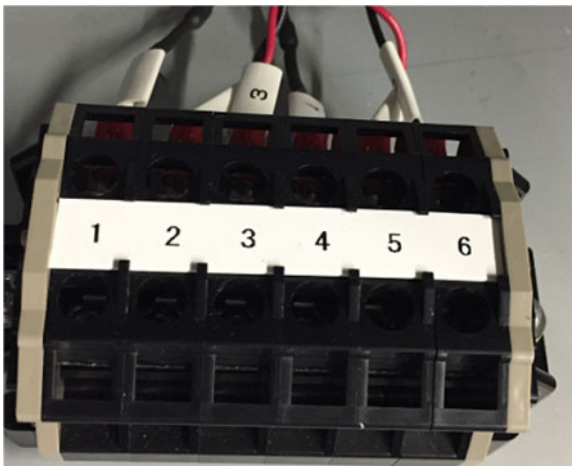
• The external input / output setting screen is displayed.

3 **Select ON / OFF of external input / output.**



- [External Input]
  When ON, the heater turns OFF when a signal is input.
- [External Output]
  When ON, no voltage output is performed when the heater is ON.

Specification of terminal block for external input connection



Terminal number	Signal name	Spec
1	+24V	24V output Max 500mA
2	IN+	External input plus side
3	IN-	External output minus side
4	GND	GND
5	OUT+	Non-voltage contact output 24 V 3A or less
6	OUT-	

Connection example
The external input sensor is NPN connected
: Short the terminal numbers 1 and 2, and connect the sensor output 3 and GND to 4.
The external input sensor is PNP connected
: Short the terminal numbers 3 and 4, and connect 1 to the sensor power supply and 2 to the output.

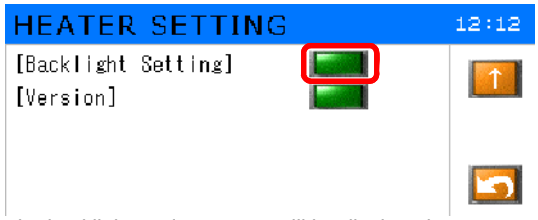
Set backlight of the touch panel

It sets whether to turn off the backlight of the touch panel when heater is off.

1 **Touch the button on the top screen.**
• The setting menu will be displayed.

2 **Touch the button.**
• The backlight setting screen will be displayed.

3 **Touch the [Backlight Setting] button.**



• The backlight setting screen will be displayed.

4 **Set the backlight.**

- [Backlight off function]
  [Enable] : Turn off the backlight when the heater is off.
  [Disable] : Always on.
- [OFF Timer]
  [Enable] : Set the time (minutes) until the backlight is turned off.

Setting the color fix device/dryer from the Printer

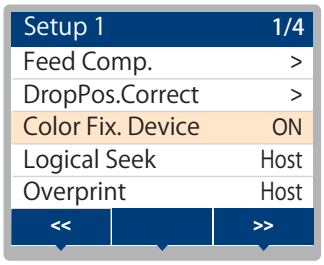
You can turn the color fix device/dryer on/off, as well as set the temperature and the timer from the printer's Setup menu.

Setting the color fix device/dryer

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

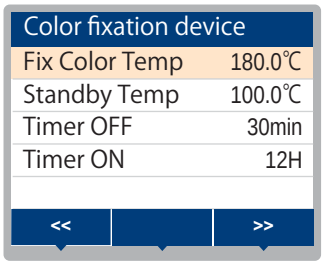
2 **Press ▲ ▼ to select SETUP 1 to 4, and press the ENTER key.**

3 **Press ▲ ▼ to select [Color Fix Device/Dryer], and press the ENTER key.**

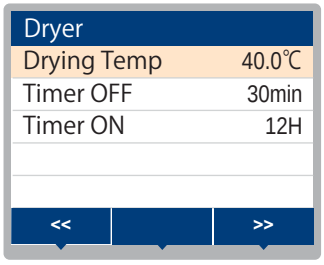


- In the dryer model it is indicated as a dryer.

- Set the [Color Fix Device/Dryer] to [ON] to display a variety of settings.



- Fix Color Temp
  Set the temperature when fixing the color.
  Setting range: 150.0 to 200.0 ℃
  Setting unit: Increments of 0.1 ℃
- Standby Temp
  Set the temperature when standing by.
  Setting range: OFF, 100.0 to 150.0 ℃
  Setting unit: Increments of 0.1 ℃
- Timer OFF
  Set the time before the heater turns off automatically.
  Setting range: OFF, 1 to 60 min
- Timer ON
  Set the time before the heater turns on automatically.
  Setting range: OFF, 1 to 12H

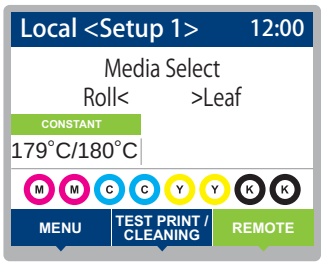


- Drying Temp
  Set the temperature when fixing the color.
  Setting range: 40.0 to 80.0 ℃
  Setting unit: Increments of 0.1 ℃
- Timer OFF
  Set the time before the heater turns off automatically.
  Setting range: OFF, 1 to 60 min
- Timer ON
  Set the time before the heater turns on automatically.
  Setting range: OFF, 1 to 12H

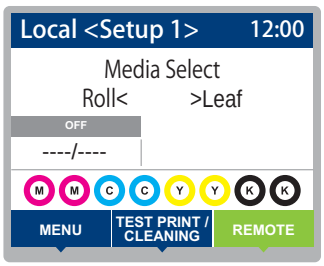
Displaying the status of the color fix device/dryer

The color and the letter of the icon on the local TOP screen change depending on the status of the color fix device/dryer.

Example 1) Stable



Example 2) OFF



Status Table

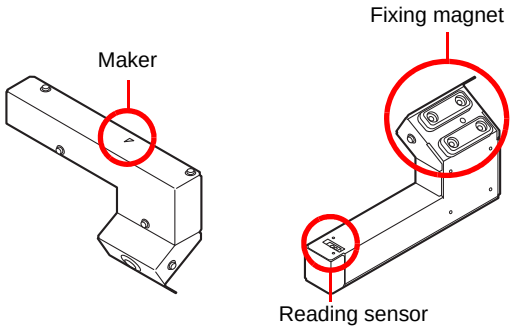
NO.	State	Icon	Descriptions
1	Stable	CONSTANT	The machine has arrived at the coloring / drying temperature and is stable.
2	OFF	OFF	Just after starting up, or door OPEN.
3	Waiting	WAITING	Heater OFF
4	Cooling down	COOLING	Lowering the temperature in the heater.
5	Standing by	STAND-BY	Maintaining the stand-by temperature.
6	Heating up	HEATING	Raising the temperature in the heater.
7	Error Event	ERROR	Error has been generated.

Reduce media shrinkage

This function reduces the amount of media shrinkage in the color fix device during warming of the color fix device. It is possible to suppress the occurrence of wrinkles due to media shrinkage.

- To enable this function, you need to use "backfeed correction sensor".
- When this function is used, since the drawing operation does not perform drawing on the media that passed through the color fix device, the waste media will increase by about 1 m.
- This function improves contraction during warming, shrinkage during drawing depends on printing mode.
- Regardless of whether this function is enabled or disabled, be sure to turn on the dust collector when turning on the coloring heater.

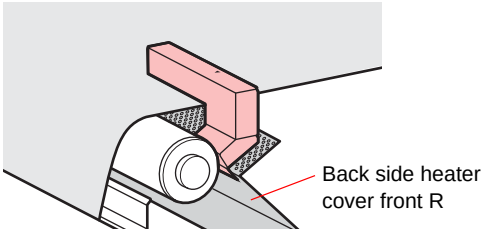
Shrinkage countermeasure jig :
backfeed correction sensor



1 **In the same procedure as the ordinary media set, guide to the take-up shaft and set the media.**

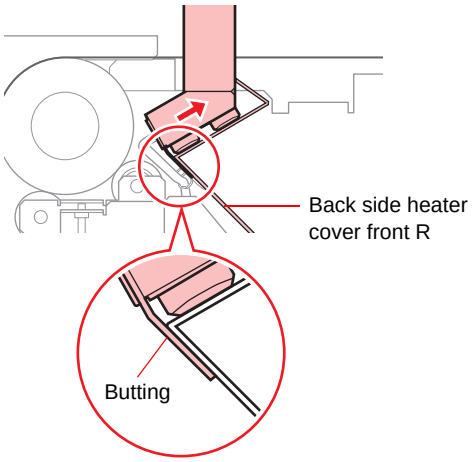
2 **Temporarily place the backfeed correction sensor on the right end of the media with the fixing magnet.**

- Install the sensor at a height where the bottom of the sensor does not hit the media.



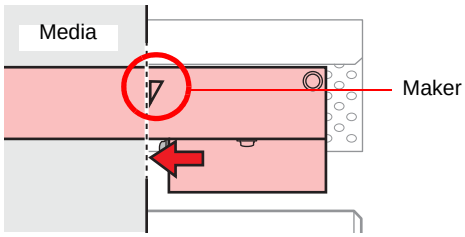
3 **Slide the bending of the sensor to the platen side so that the front R of the back heater cover strikes.**

- Slide the back heater cover along the front R.



4 **Move the backfeed correction sensor and align the left edge of the marker with the right edge of the media.**

- Keep abutting the back seater cover against the front R.

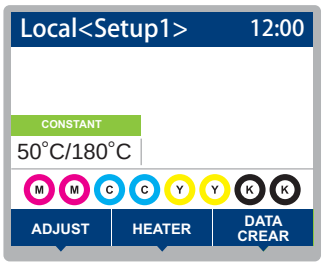


5 **Detect media.**

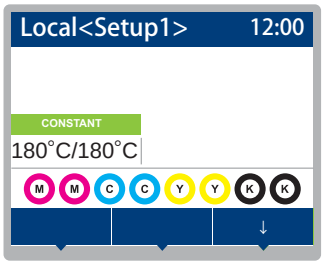
6 **Press (FUNC3)(↓) on heater temperature input screen.**

- If media is not detected, an operation error occurs and the screen does not change to the standby screen.

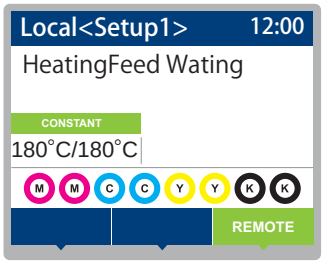
7 **Press (FUNC2) (HEATER).**



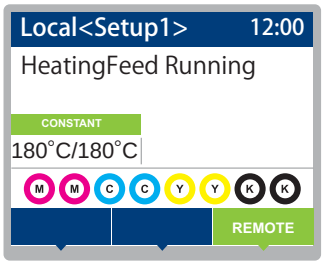
8 **Press (FUNC3) (↓) .**



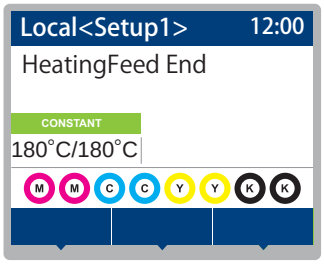
• Waiting



• In action



• Stopped



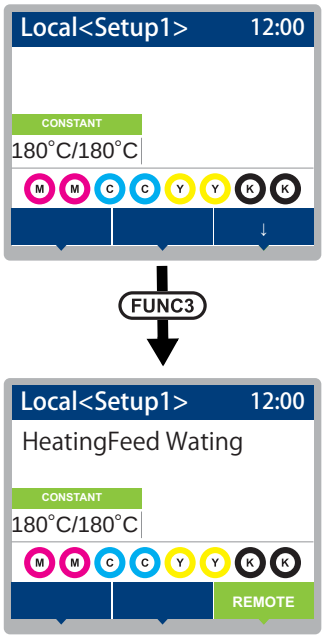
Transition to standby of shrinkage reduction function

1 **Press (FUNC2) (HEATER) on the local screen (possible on remote screen).**

2 **Press (FUNC3) (↓) on the heater temperature input screen.**

Operation of Shrinkage Reduction Function (Heating feed)

Keep the shrinkage reduction feed standby state, and when the temperature of the color fix device reaches 90 °C or higher, feed operation starts.
During feed operation, press the (END/POWER) key or when the temperature of the color fix device falls below 90 °C, the operation stops.
It is possible to receive printing data even during feed operation.
Further, when printing becomes possible, the feed operation stops and the printing starts.

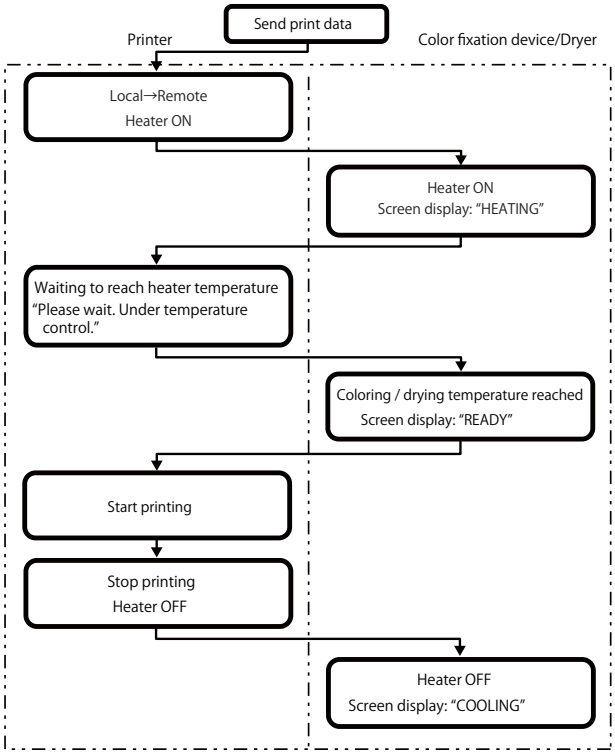


Usage notes of shrinkage reduction function

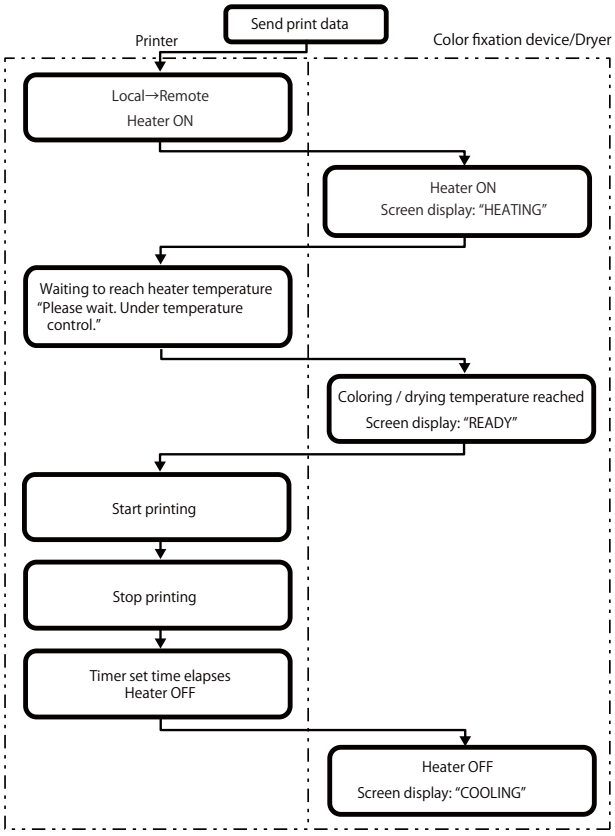
When this function is used, waste media will be output because the feed operation does not perform printing on the media that passed through the device.
When using the shrinkage reduction function, activate the function by the above operation every time.
If media is not detected, an operation error occurs and the screen does not change to the standby screen.
If an error occurs when the feed function is enabled, the feed operation is stopped and the screen returns to the local screen.

Printing Workflow

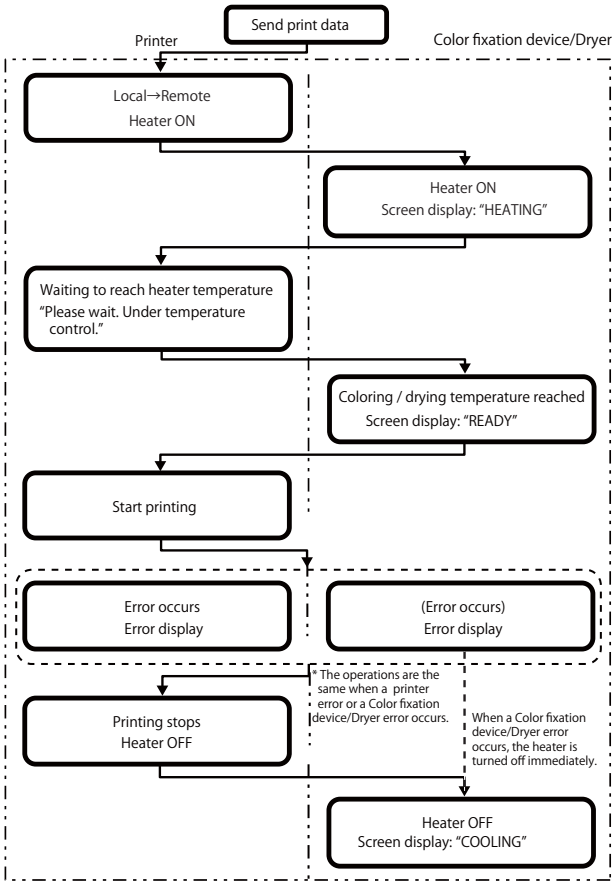
Print flow when timer function is OFF



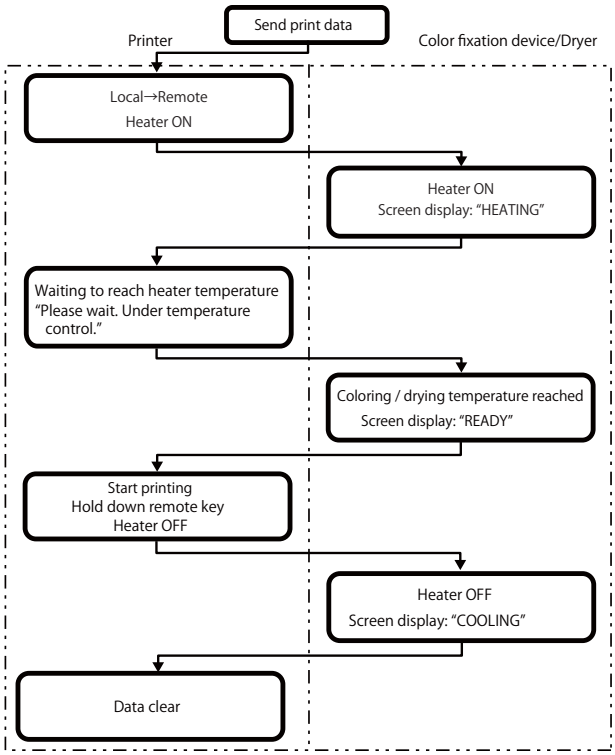
Print flow when timer function is ON



Error while printing



Printing stopped



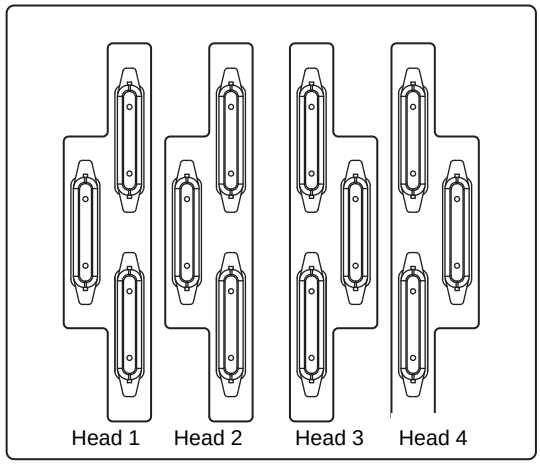
Test Printing

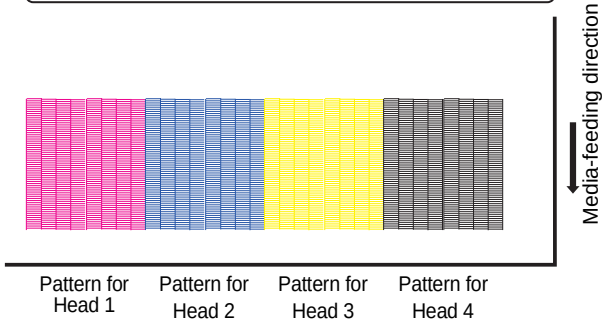
Print a test pattern to check that there are no discharging defects such as nozzle missing (slight touching of ink or nozzle missing).

Relationship between head row and test pattern

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

Overhead view





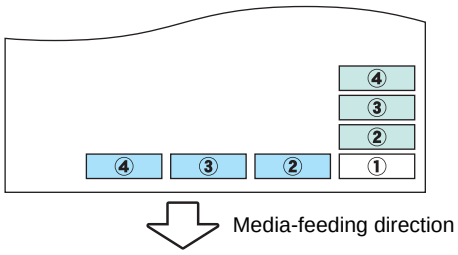
Note on test printing

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.
- When performing a test print, be sure to close all the covers (front 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.



: When the set value is "FEED DIR."

: When the set value is "SCAN DIR."

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.2-6

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.

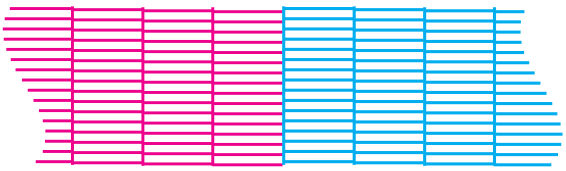
2 Press ENTER key.

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

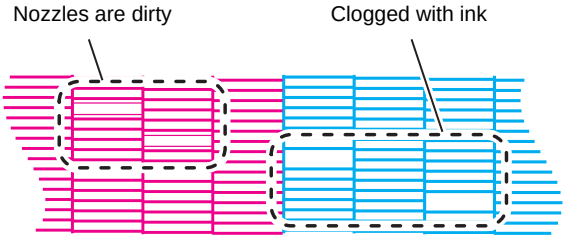
3 Check the printed test pattern.

- When the result is normal, end the operation.
- When the result is abnormal, perform head cleaning. (☞ P.2-37)

Normal pattern



Abnormal pattern



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 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 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 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.4-10)
- Wash the head nozzle. (☞ P.4-15)

Setting of Media Correction

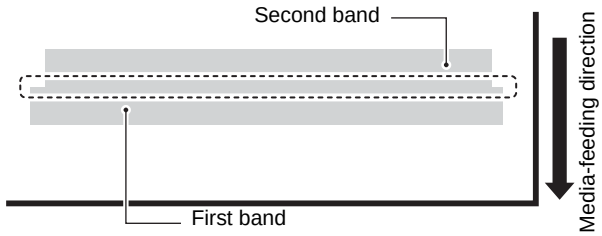
Correct the media feed amount to match the type of media you are using.
If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.

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.

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 **Setting a Media (☞ P.2-4)**

2 **Press the SEL key and press FUNC1 (ADJUST) in LOCAL.**

- Adjust menu appears.

3 **Press 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.

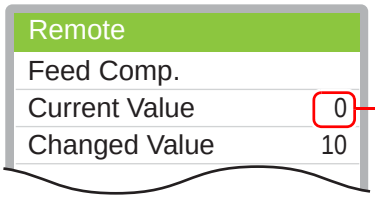
6 **Press END/POWER key several times to end the setting.**

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

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

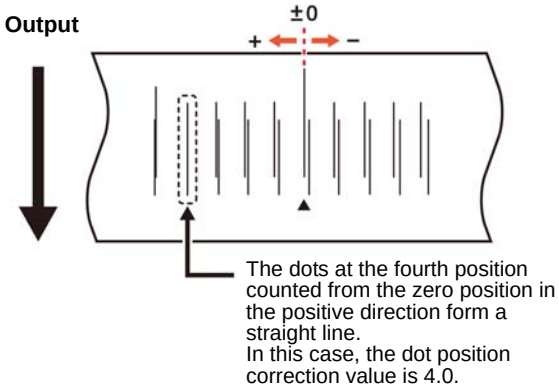
Correct the ink drop position for bidirectional printing

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.

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 FUNC1 (ADJUST) in LOCAL.**

- Adjust menu appears.

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

4 **Press 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 the correction value for 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 in 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 step 5, enter the correction value for patterns 2 to 5, and press the ENTER key.**

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

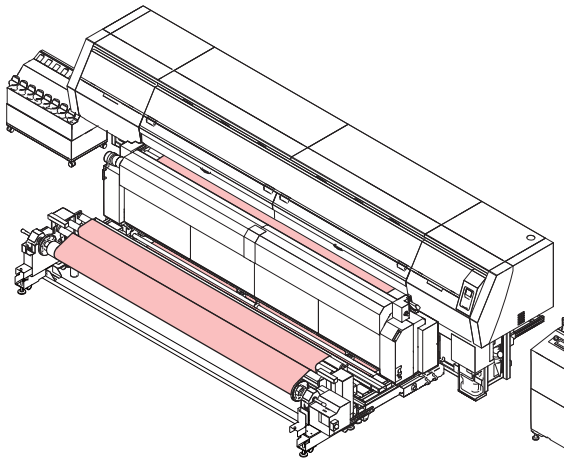
- You can select “DROP.POScorrect” by using the [FUNC1](MENU) in the Local without pressing the [FUNC2] (ADJUST) key. (☞ P.3-7)

Printing Data

Starting a Printing Operation

Important!
- When 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)**



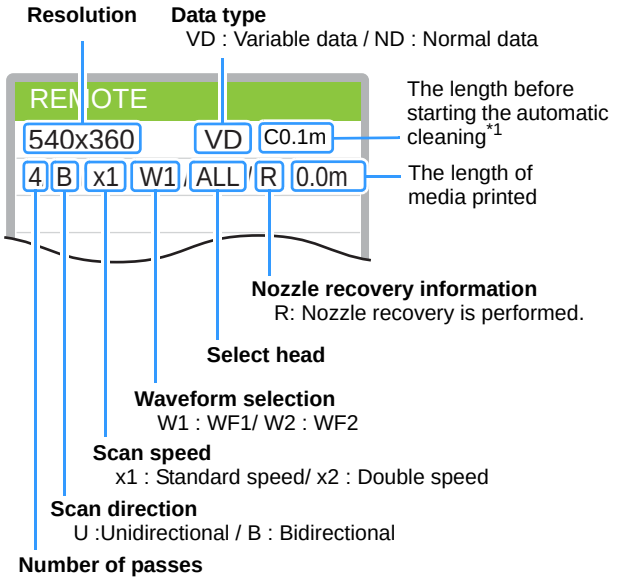
2 **Checking the Heater Temperature**

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.



*1 This is indicated when turning on the automatic cleaning and the RIP separation.
If executing the manual cleaning when this is in a state displaying, there is a blank in the timing of the RIP end.

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) key, and press (FUNC3) (DATA CLEAR) in LOCAL.**

2 **Press (ENTER) key.**

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

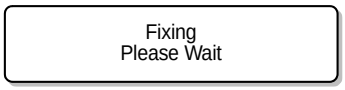
Behavior after printing has been completed

Fixing Feed

When printing has been completed, the feeding operation is performed to fix the color to the printed surface with the color fix device/dryer.

- 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.

Screen display during fixing feeding



Chapter 3
Setup

This chapter

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

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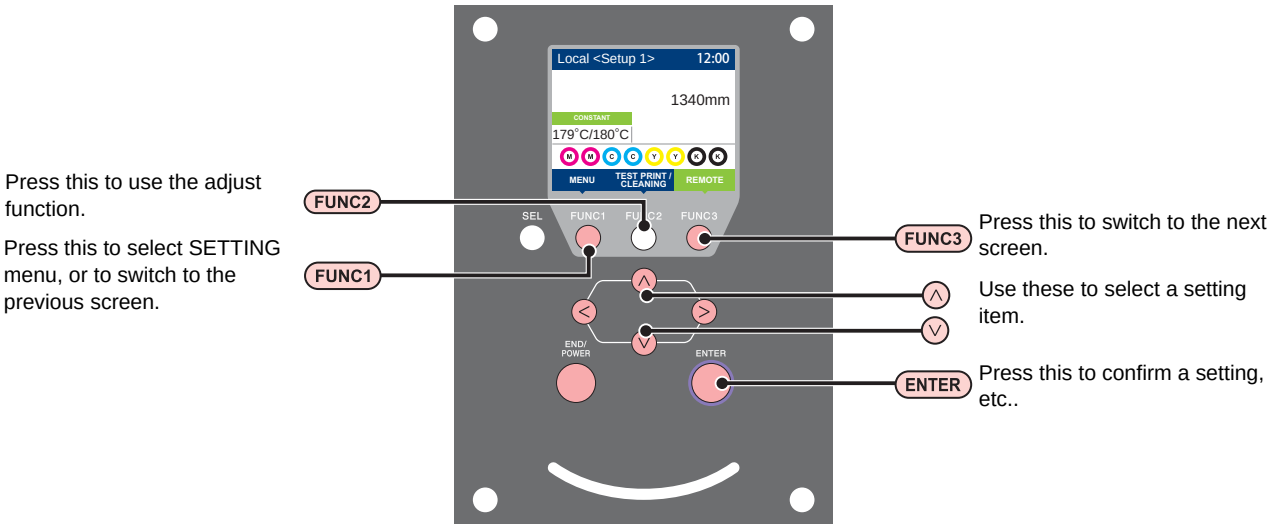
About Setup menu

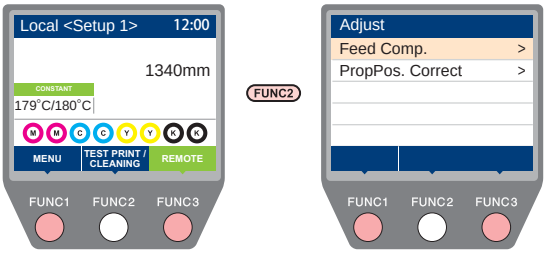
On Setup menu, you can set the print conditions to match the media you usually use.



◆ Setup menus at-a-glance

◆ FUNC1 Screen transition when (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

Important!

- For each setting item below, you can set it so that the machine may operate according to the value specified when you printed from your RIP software in the connected host PC.
- **Set Item** : 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 0 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 0 to 40.0	———	Used to adjust the dot position in go and return printing.
Color fix device/dryer (☞ P.3-8)	EXTERNAL HEATER		ON/OFF	———	Sets ON/OFF of the external heater.
Logical Seek (☞ P.3-8)			Host / ON/OFF	———	Sets the scan movable area during printing.
Overprint (☞ P.3-9)			Host / 1 to 9	1	Sets the number of layers in which ink is to be applied.
Drying Time (☞ P.3-9)	Scan		Host /0.0 ~ 9.9 sec	0 sec	Sets the drying time of ink per scan.
Margin/L (☞ P.3-9)			Host /-10 to 0 to 85mm	———	Sets a non-printing area along the right and left edges of the media.
Margin/R (☞ P.3-9)				———	
Refresh (☞ P.3-9)			Host / Lv.0 to Lv.3	Lv.3	Sets the interval of refresh performed during printing.
Refresh Left (☞ P.3-10)			ON/OFF	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.
Drying fan (☞ P.3-10)			Host / 10 to 200% (in increments of 10%)	Normal speed	Sets the power for the drying fan.
Feed Speed (☞ P.3-10)			Host / 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 25 to 100%		

Function name			Set value *1	When no instruction from RIP exists *2	Outline
Auto Nozzle Maintenance (☞ P.3-11)	Auto Cleaning		ON / OFF	———	Sets the automatic cleaning operation for the head performed before or during printing.
		Cleaning Interval Length	0.1 to 20.0 to 100.0 m		Performs cleaning at intervals of the set length.
		Cleaning Interval File	1 to 10 to 1000		Performs cleaning whenever the set number of files has been processed.
		Cleaning Interval Time	10 to 120 min		Performs cleaning at intervals of the set time.
		Type	Soft, Normal, Hard		Sets the type of cleaning to be performed.
		Cln.BeforePrint	10 to 720 min/ OFF		Performs cleaning before printing start if the specified time has passed since the previous printing completion time.
		Separation	OFF / RIP Separation	According to the instruction from the RIP, the cleaning is performed at the separation of the image.	
	Nozzle Check		ON / OFF	———	Set it to ON to perform nozzle check automatically.
		Check Interval Length	0.1 to 30.0 to 100.0 m		Performs nozzle check at intervals of the set length.
		Check Interval File	1 to 30 to 1000		Performs nozzle check whenever the set number of files has been processed.
		Check Interval Time	10 to 30 to 120 min		Performs nozzle check at intervals of the set time.
		Cleaning Type	Soft, 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	0 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 10 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	OFF / RIP Separation	According to the instruction from the RIP, the nozzle check is performed at the separation of the image.	
	Feeding Set		ON / OFF	———	Set whether or not feed during the maintenance.
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 2 to 7.0mm	———	Sets the head gap.
Setup Reset (☞ P.3-26)			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 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 copy source (Setup 1 to 4), and press ENTER key.**
- Confirmation screen of the copy will be displayed.

7 **Press ENTER key.**
- Settings selected in step 6 is copied to Temporary.

8 **Press ▲ ▼ to change the setting item, 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 save location (Setup 1 to 4), and press ENTER key.**

- Save confirmation screen will be displayed.

6 **Press ENTER key.**

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

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

Setting of Media Correction

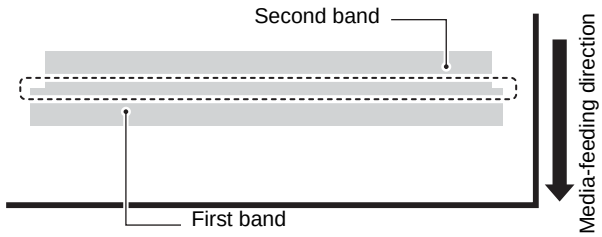
Correct the media feed amount to match the type of media you are using.
If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.

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 **Setting a Media (☞ P.2-4)**

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

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

- Setup menu will be displayed.

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 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 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.

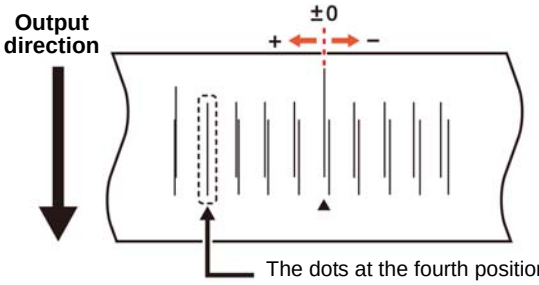
3 **Press ENTER key.**

- 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



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

1 **Setting 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 ENTER key.**

- Setup menu will be displayed.

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

5 **Press 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 the correction value for 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 in 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 step 6, enter the correction value for patterns 2 to 5, and press the ENTER key.**

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

Setting the color fix device/dryer

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

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

- Setup menu will be displayed.

3 **Press ▲ ▼ to select "color fix device/dryer" and press the ENTER key.**

4 **Press ▲ ▼ to select the color fix device/dryer and press the ENTER key.**

- **Heater**: Print-heater, Post-heater (1L/1R/2L/2R)

5 **Press ▲ ▼ to set ON/OFF, and press the ENTER key.**

Select [ON] to display each setting.

- **Fix Color Temp**
  Set the temperature when fixing the color.
  Setting range: 150.0 to 200.0 °C
  Setting unit: Increments of 0.1 °C
- **Drying Temp**
  Set the temperature when fixing the dryer.
  Setting range: 40.0 to 80.0 °C
  Setting unit: Increments of 0.1 °C
- **Standby Temp**
  Set the temperature when standing by.
  Setting range: OFF, 100.0 to 150.0 °C
  Setting unit: Increments of 0.1 °C
- **Timer OFF**
  Set the time before the heater turns off automatically.
  Setting range: OFF, 1 to 60min
- **Timer ON**
  Set the time before the heater turns on automatically.
  Setting range: OFF, 1 to 12H

6 **Press ▲ ▼ to select setting item, and press the ENTER key.**

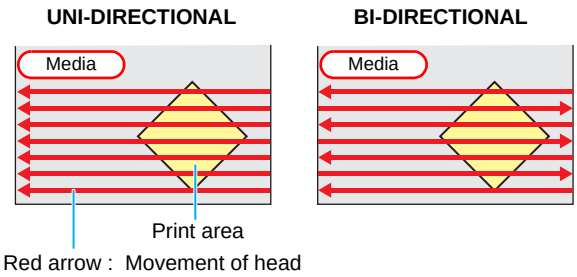
7 **Press ▲ ▼ to select a set value, and press the ENTER key.**

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

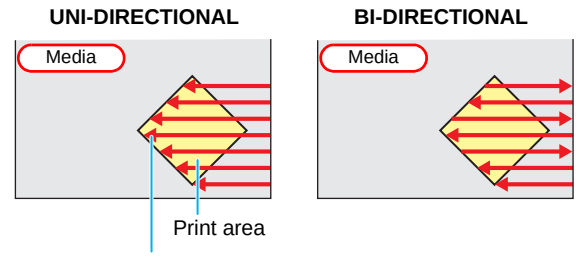
Setting of Logical Seek

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 ENTER key.**

- Setup menu will be displayed.

3 **Press ▲ ▼ to select "Logical Seek", and press the ENTER key.**

4 **Press ▲ ▼ to select the setting value, and press the ENTER key.**

- **Set value** : Host / ON / OFF

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

Important! • When color fix device/dryer is set to ON, Logical Seek becomes invalid to prevent color/dry irregularities.

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 (ENTER) key.**
   - Setup menu will be displayed.
3. **Press (▲)(▼) to select “Overprint”, and press the (ENTER) key.**
4. **Press (▲)(▼) to set the number of Overprint, and press the (ENTER) key.**
   - **Setting value :** Host/ 0 to 9 times
5. **Press (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.)

Important!
- 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 (ENTER) key.**
   - Setup menu will be displayed.
3. **Press the(FUNC3) (>>) .**
4. **Press (▲)(▼) to select “Drying Time”, and press the (ENTER) key.**
5. **Press (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 (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 (ENTER) key.**
   - Setup menu will be displayed.
3. **Press the (FUNC3) (>>) .**
4. **Press (▲)(▼) to select “Margin/L” or “Margin/R” , and press the (ENTER) key.**
5. **Press (▲)(▼) to select the setting value, and press the (ENTER) key.**
   - **Set value** : Host/ -10 to 85 mm
6. **Press (END/POWER) key several times to end the setting.**

Caution
- 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 (ENTER) key.**
   - Setup menu will be displayed.
3. **Press the(FUNC3) (>>) .**
4. **Press (▲)(▼) to select “Refresh” and press the (ENTER) key.**
5. **Press (▲)(▼) to select the setting value, and press the (ENTER) key.**
   - **Set value** : Host/Lv.0 to Lv.3.
6. **Press (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 ENTER key.**
   • Setup menu will be displayed.
3. **Press the FUNC3 (>>) .**
4. **Press ▲ ▼ to select “Refresh Left” and press the ENTER key.**
5. **Press ▲ ▼ to select the setting value, and press the ENTER key.**
   • **Set Value** : ON/ OFF
6. **Press END/POWER key several times to end the setting.**

Setting of Drying Fan

Set the airflow for the fan for drying media.
You can set the airflow for the drying fan to dry the media effectively.

1. **Press the FUNC1 (MENU) ➡ ENTER key in Local.**
2. **Press ▲ ▼ to select SETUP 1 to 4, and press ENTER key.**
   • Setup menu will be displayed.
3. **Press the FUNC3 (>>) twice.**
4. **Press ▲ ▼ to select “Drying Fan” and press the ENTER key.**
5. **Press ▲ ▼ to select the setting value, and press the ENTER key.**
   • **Setting value**: Host/10 to 200% (in increments of 10%)
6. **Press 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 ENTER key.**
   • Setup menu will be displayed.
3. **Press the FUNC3 (>>) twice.**
4. **Press ▲ ▼ to select “Feed Speed” and press the ENTER key.**
5. **Press ▲ ▼ to select the setting value, and press the ENTER key.**
   • **Set value** : Host/ 10 to 200%
6. **Press 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 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. Check the effects before use.

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
540 x 360	2 pass	High speed	Manual (Speed: 100%)
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 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 [ENTER] key.**

- Setup menu will be displayed.

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 [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.

Feeding Set

- 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 fix device/dryer 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 fix device/dryer 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 the [FUNC1] (MENU) ➡[ENTER] key in Local.**

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

- Setup menu will be displayed.

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

4 **Press ▲ ▼ to select “Auto Nozzle Maint.”, and press ENTER key.**

5 **Press ▲ ▼ to select “Auto Cleaning”, and press ENTER key.**

6 **Select “ON”, and press ENTER key.**

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

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

10 **Press ENTER key, 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 key, and press ▲ ▼ to select “Separation”.**

- When “RIP Separation” is selected, cleaning is performed at the break between the images specified by the RIP.

12 **Press ENTER key.**

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

Important!

- 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.

Important!
- 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. • If the “RETRY COUNT” setting is configured to 1 or more, this becomes effective.
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.

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 key in LOCAL.**

- Nozzle Check menu will be displayed.

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

- Setup menu will be displayed.

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 key.**

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 the 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 END/POWER key.**

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

- **Setting value**: Soft/ Normal/ Hard / Auto
- When Auto is selected, the most suitable cleaning is performed automatically depending on the condition of the nozzles.

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 the 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.

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 ENTER key.**
- Setup menu will be displayed.

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 selecting 3~255 min, execute the feed setting.
- When turning it ON, it feeds the media until the media passes color fix device/dryer.
- When [OFF] is set, periodical wiping is not executed.

6 **Press ENTER key.**

7 **Press 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 ENTER key.**
- Setup menu will be displayed.

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

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

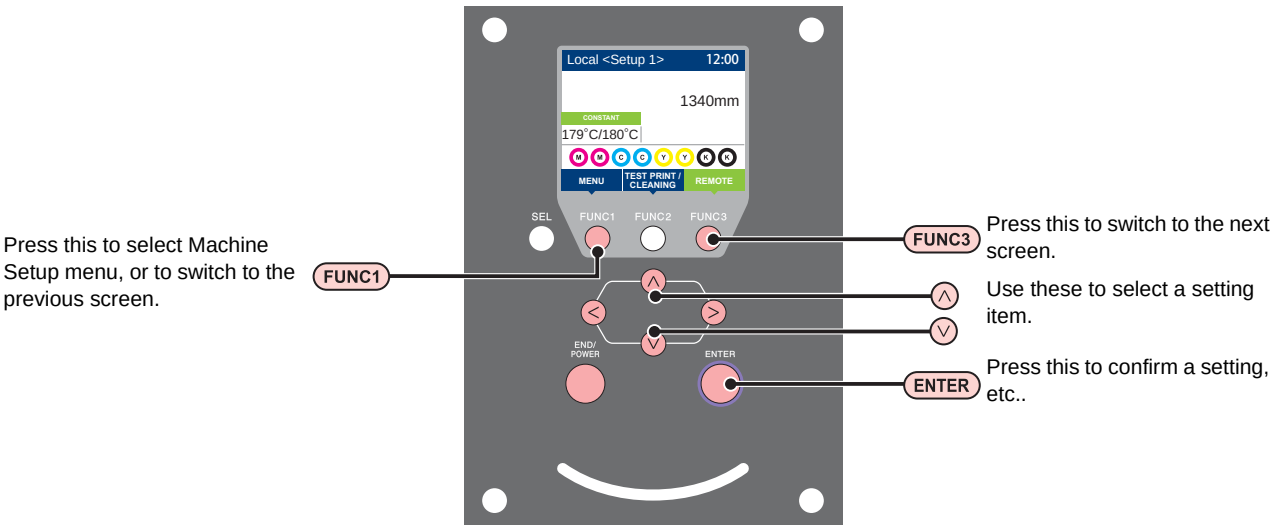
5 **Press ▲ ▼ to select the Head Gap value, and press the ENTER key.**
- **Set value** : 1.5 to 7.0mm

6 **Press ENTER key.**

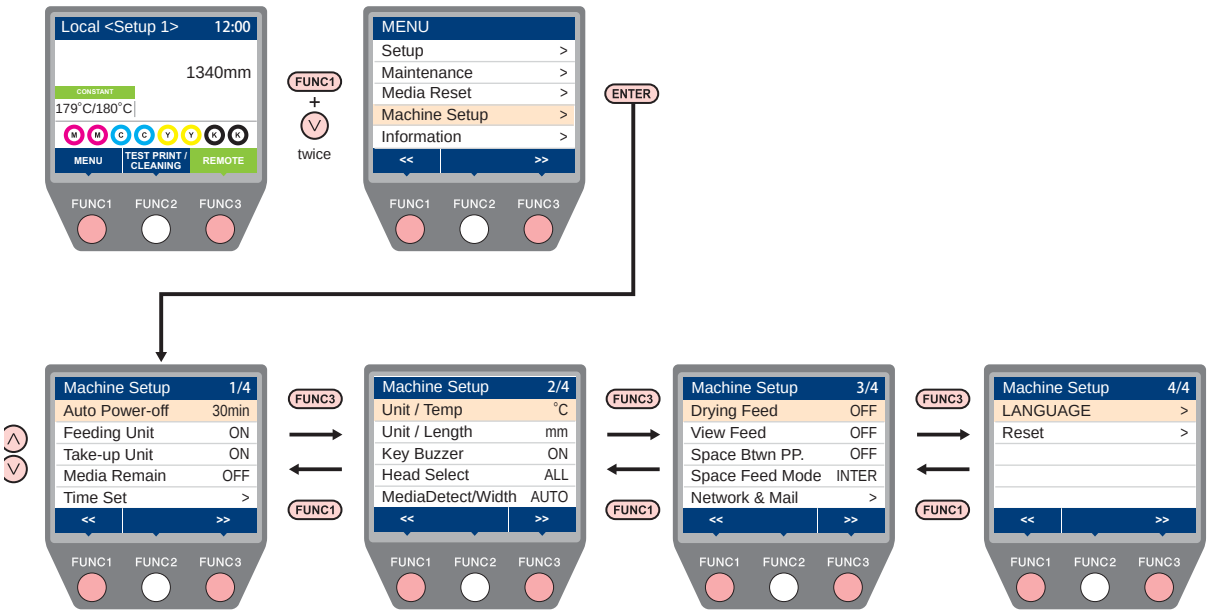
7 **Press END/POWER key several times to end the setting.**

About Machine Setup menu

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



◆Machine Setup menus at-a-glance



Machine Setup menu table

Function name	Set value	Default	Description
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 device missing(☞ P.3-18)	ON/ OFF	ON	You can set the operation method when the ON/ OFF button for the take-up device 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)	Hours/Minutes/Seconds		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.
Select head (☞ P.3-20)	All/ Head Line 1/ Head Line 2/ Head Line 3/ Head Line 1&2/ Head Line 2&3	All	If troubles such as the nozzle clogging is not solved, you can print with another head which has no error.
Media Detect/ Width (☞ P.3-20)	Auto/ Manual	Auto	When you want to enter the optional media width when setting media and there is a problem with the media width sensor, use "MANUAL" to set the width.
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.
CONFIRM. FEED (☞ P.3-21)	ON/ OFF	OFF	Set whether media feeding is performed for checking the result of the test printing etc. or not.
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	INTERMITTENT	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 MAC address currently used by this machine is displayed.			
		DHCP	OFF / ON			When it is ON, the IP address given by the DHCP server is used.
		AutoIP	OFF / ON			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	Description
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 “AUTO Power-off” and press the ENTER key.**

4 **Press ▲▼ to select the setting value, and press the ENTER key.**

- **Set Value** : none, 10 to 600min

5 **Press 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.
- In case of using the automatic power off function, turn off the power of color fix device/dryer.

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 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 (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.2-16)
- 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 (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 the time, and press the (ENTER) key.**
   - **Time/ Minute/ Second selecting**: by the [◀][▶] keys.
   - **Time/ Minute/ Second inputting**: by the [▲][▼] keys.
6. **Press (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 the setting value, and press the (ENTER) key.**
   - **Set value of temperature**: °C / °F
   - **Set value of length**: mm / inch
6. **Press (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 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 "Use head", 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 END/POWER key several times to end the setting.**

Setting the Media Detect/Width

When you want to enter the optional media width when setting media and there is a problem with the media width sensor, use "MANUAL" to set the width.

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/ Width", and press the ENTER key.**
5. **Press ▲▼ , select "Auto" or "Manual", and press the ENTER key.**
6. **Press 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 length you want to feed, and press the ENTER key.**
   - **Set value** : OFF / 100 to 1000mm
6. **Press END/POWER key several times to end the setting.**

Important!

- When the color fix device/dryer is ON, you cannot make dry feed settings.

Setting the Confirm.

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 "View Feed", and press the ENTER key.**
5. **Press ▲▼ to select ON/ OFF, and press the ENTER key.**
6. **Press END/POWER key several times to end the setting.**

Important! • In case of checking the print result after the confirmation feed, check with the upper lid of color fix device/dryer open.

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 "Space 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 END/POWER key several times to end the setting.**

Important! • 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 select the space feeding 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 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 & Mail”, and press the [ENTER] key.**

6 **Press [▲][▼] to select “Check MAC 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 next items, 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] key to confirm the value.**

13 **Press [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 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/).

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 [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 an event, and press (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	Set whether you send/ do not send the e-mail at the start of printing.
Print End	Set whether you send/ do not send the e-mail at the end of printing.
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	Set whether you send/ do not send the e-mail when an event other than the above occurs.

8. **Press the (ENTER) key.**
9. **Press (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 (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 (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 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 select “Authentication”, and press the (ENTER) key.**

- Set the SMTP server authentication method (SMTP authentication).
- When you select [OFF], 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 the 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 (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.**

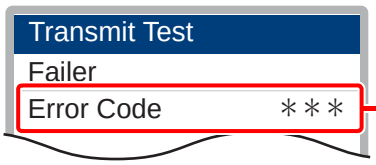
3 **Press the FUNC3 (>>) twice.**

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 ENTER key.**
- The sent result is displayed.
- If sending test e-mail has failed, an error code is displayed.



8 **Press 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 cause	Measures
10	Network connection error	• 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.	• Enter the correct e-mail address.
11003 **11004**	The POP server cannot be found. Or cannot access DNS server.	• Check the POP server address. • Check that the machine is in the environment where DNS is available.
11021	Cannot connect with the POP server.	• Check the POP server setting. • Check the firewall setting.
12010	An error returns from the POP server.	• Check the POP server setting.
13000	The POP authentication has failed.	• 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.	• Check the SMTP server address. • Check that the machine is in the environment where DNS is available.
10021	Cannot connect with the SMTP server.	• 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.	• 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.	• 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.	• 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	• Confirm the authentication method.
23* **24*** **25***	The SMTP authentication has failed.	• 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 password (four digits) and press the (ENTER) key.**
   - A notification that setting has started is briefly displayed.
7. **Press (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.**
   - **When releasing is successful**
     The message "Release Success" is displayed.
   - **When releasing fails**
     The message "Release failure" is displayed.
7. **Press (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

Displayed language is changed.

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 (END/POWER) key several times to end the setting.**

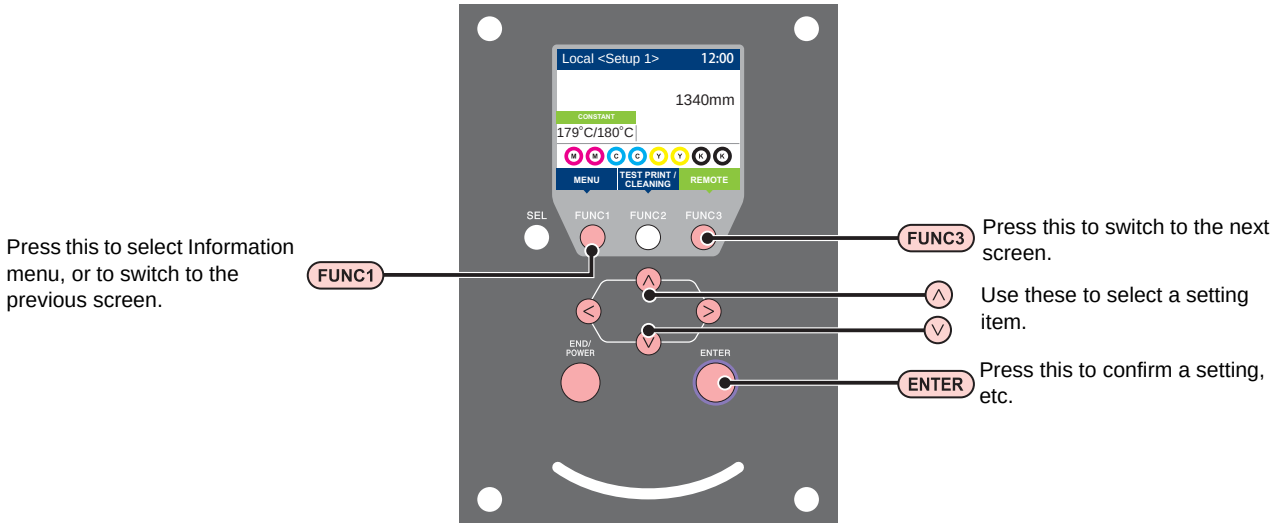
Initializing the Settings

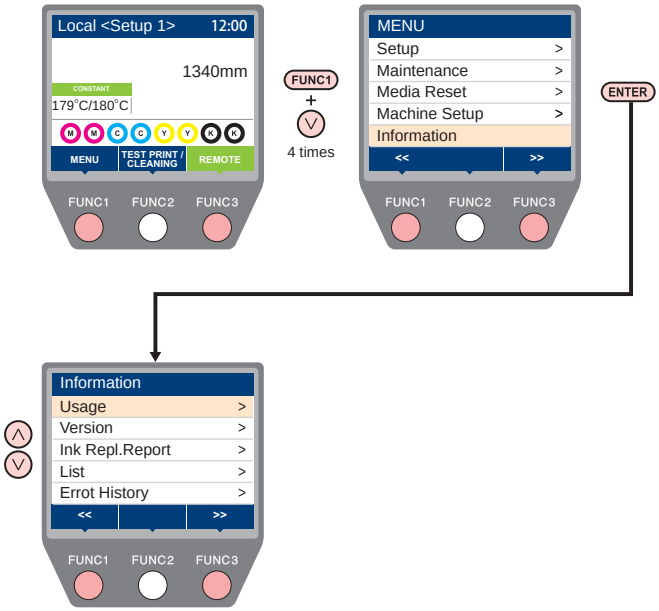
You can return the setting of "SETUP", "Maintenance" and"Machine Setup" to the status before shipment.

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 "Setup Reset", and press the (ENTER) key.**
5. **Press the (ENTER) key.**
   - The already configured settings are initialized.
6. **Press (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.





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	It indicates the length of last printing of the file.
	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.
List		This allows you to print the settings of this machine.
Ink Repl. Report		This prints ink history 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 (ENTER) key.**

- If you selected [List] in step 2, the machine’s settings will be printed.

5 **Press (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) (✔) key.**

- 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.

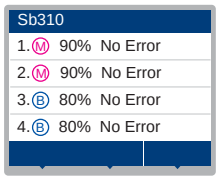
Displaying the Information of this machine

1 **Press the (ENTER) key in Local.**

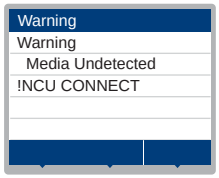
2 **The information is displayed sequentially with the (ENTER) key .**

- The information shown on the below appear.

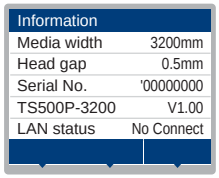
Ink information



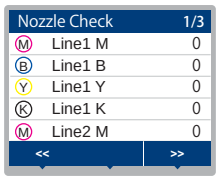
Error/ Warning (Only at the time of occurrence)



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



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



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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Maintenance

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

Precautions for Maintenance

Pay attention to the following items when maintaining this machine.

	• When using cleaning solution for maintenance, be sure to wear the supplied glove and protective glasses.
	• 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.
	• Prevent moisture from entering the machine. Moisture inside the machine can cause electric shock hazards or damage to the machine.
	• 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. • 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.

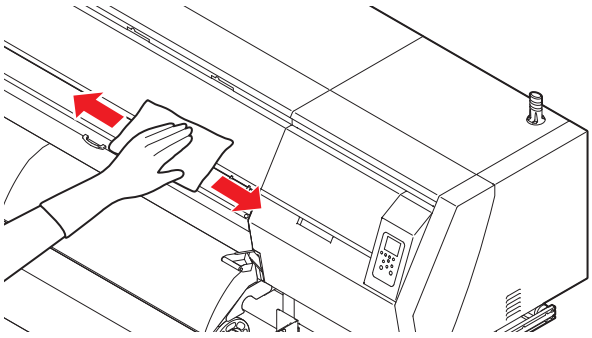
About Cleaning Solution

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

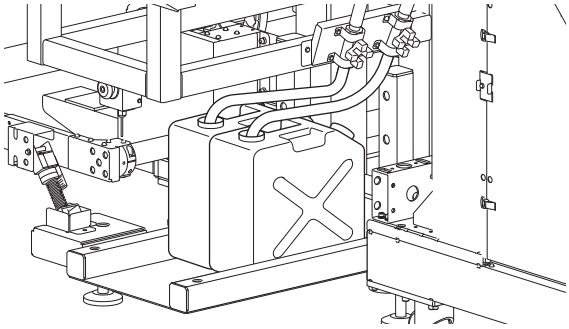
When printing on coarse fabric, some ink may miss the fabric and stick to the platen.
If you are concerned about ink soiling the platen, follow the steps below to wash ink off the platen in water.
(Approximately once a week)

Important!

• When cleaning the platen, you need a tank to collect the dirty water. Since a polyethylene tank for holding dirty water is not supplied with this machine, the user needs to prepare one in advance.

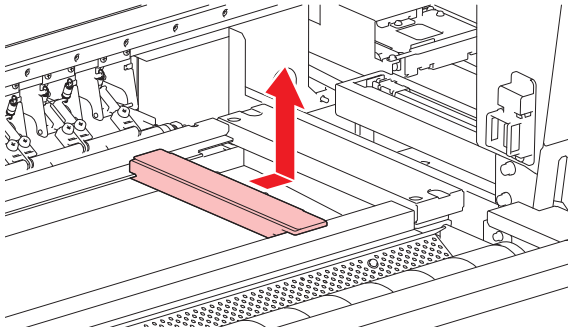
1 Install the tank for collecting dirty water.

• The hose for discharging dirty water is on the right of the machine. Attach the polyethylene tank to the end of the hose.

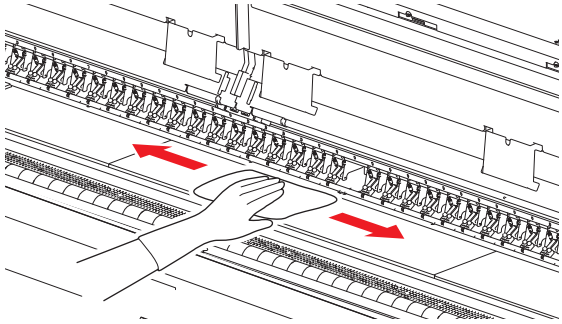


2 Remove the fabric retainer

• Slide the fabric retainer to the end of the platen to remove it.

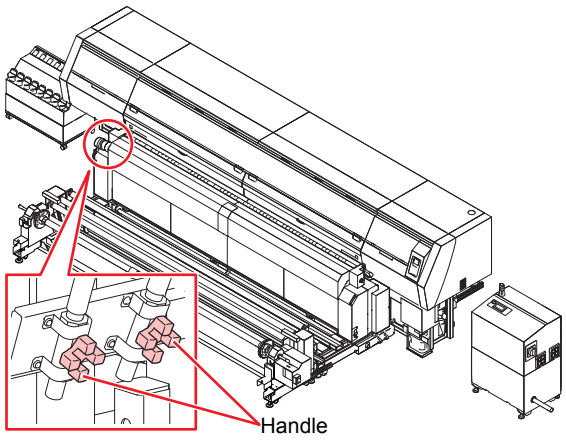


3 **Wash the platen in water.**

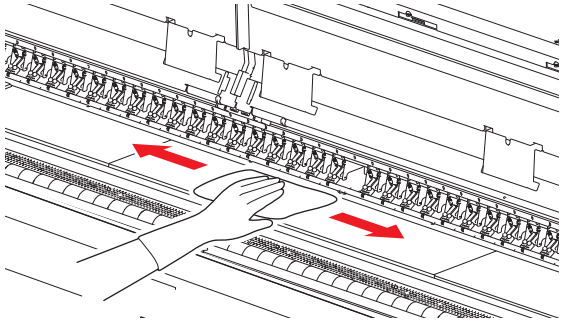


4 **Discharge the dirty water that collects on the platen.**

- Turn the handle on the hose for discharging dirty water clockwise to discharge the water from the platen.



5 **Wipe away any dirty water that remains on the platen with a waste cloth etc.**



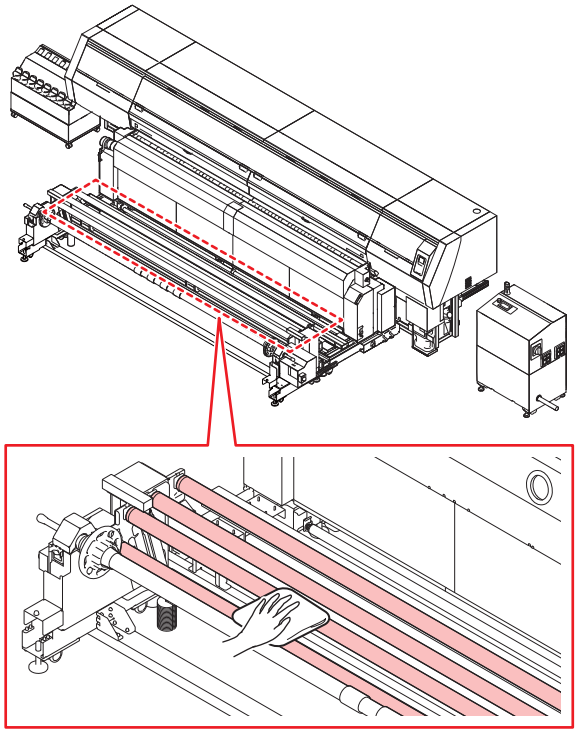
6 **Tighten the handle for discharging dirty water, and then remove the tank.**

- Dispose of the dirty water collected in the tank according to your local rules and regulations.

7 **Attach the fabric retainer.**

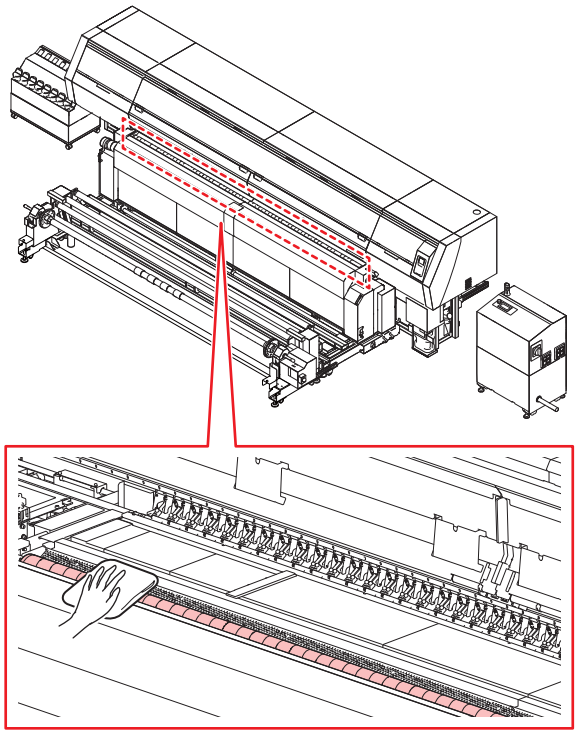
Cleaning the Lapel Bar (Take-up Side)

From the front of the machine, wipe away any dirt, such as ink, attached to the lapel bar used during media take-up.
Soak a soft cloth in water or diluted mild detergent, wring it out thoroughly, and then wipe away any dirt.



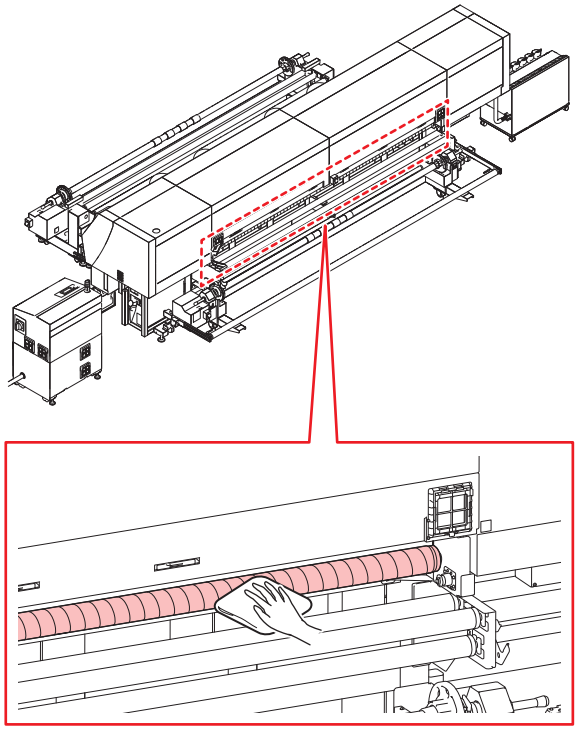
Cleaning the Tension Roller

From the front of the machine, wipe away any dirt, such as ink, attached to the tension roller.
Soak a soft cloth in water or diluted mild detergent, wring it out thoroughly, and then wipe away any dirt.



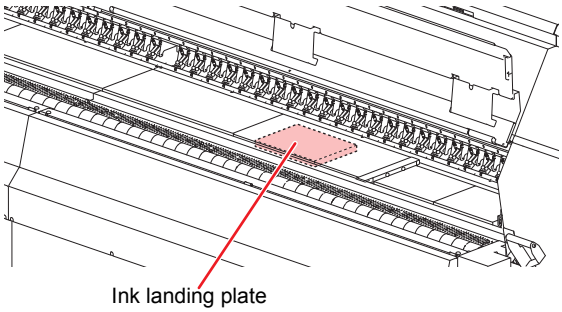
Cleaning the Brake Roller

From the front of the machine, wipe away any dirt, such as lint, attached to the brake roller.
Use adhesive tape to clean any lint that is stuck to the surface of the brake roller.



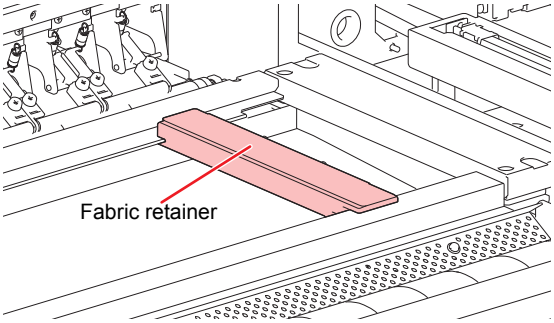
Cleaning the Ink Landing Plate

Since media can become soiled when setting it, use a cloth etc. soaked in cleaning solution to clean any ink stains.



Cleaning the Fabric Retainer

To clean any dirt such as ink stains on the fabric retainer, remove the retainer to clean it.



Maintaining the Grit Roller

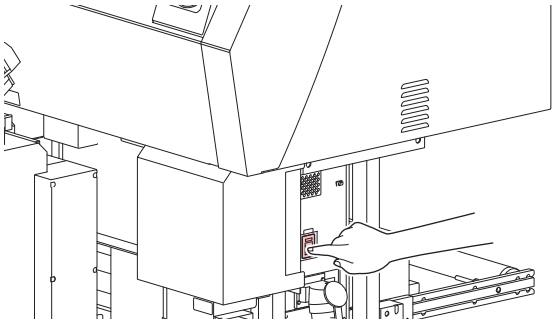
Use a resin brush to periodically remove any preprocessing solution or lint that is attached to the grit roller.

Important!

- Make sure you clean the grit roller periodically.
- If the grit roller is left with preprocessing solution for the media being used, it could lead to rusting.
- If the grit roller rusts, it may become impossible to feed the media.

1 **Turn off the machine.**

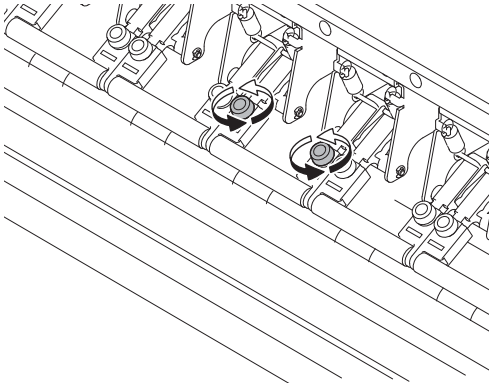
- Set the main power switch of this machine to the “O” side.



2 **Open the front cover and raise the clamp lever.**

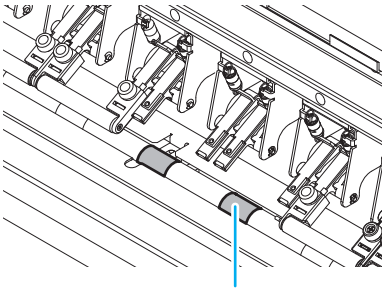
3 **Remove the pinch roller.**

- Loosen the knob screws (2 points) and pull them towards you.



4 **Wipe the surface of the grit roller using a brush to remove any dirt.**

- Lightly brush the surface of the grit roller several times.
- Rotate the grit roller with your hand to make sure you brush the entire circumference of the roller.
- If the brush gets dirty, wipe it with a dry cloth.



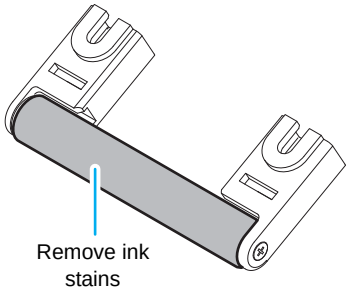
Grit roller

Important!

- Make sure you use a resin brush to clean the grit roller. If you wipe it with a cloth or paper, lint sticks to the uneven sections. Also, using a hard, metallic brush can damage the surface of the grit roller.
- Do not use water or cleaning solution when brushing the roller. This can cause rusting.

5 **Remove dirt from the surface of the pinch roller.**

- Wipe the surface of the pinch roller with a cloth to remove any ink stains.



Remove ink stains

6 **Install the pinch roller.**

- When installing the pinch roller, align the convex section on the installation side, and then install.

7 **Turn on the machine and check that it is operating correctly.**

(1) Press the ST.MAINTE key in Local mode.
(2) Press ▼ ▲, and select [Carriage Out].
(3) Press the ENTER key.
- The carriage moves onto the platen.

(4) Open the front cover.
(5) Push the carriage with your hand to move it to the left edge, and then check that the carriage and the pinch roller do not obstruct each other.
- If the carriage and the pinch roller obstruct each other, re-install the pinch roller, and then check that there is no obstruction.

(6) If there are no problems, close the front cover.
(7) Press the ENTER key.
- After the initial operations, the media selection screen is displayed.

Cleaning the color fix device/dryer

Mist soiling occurs around the sublimation gas collection hood on the top of the color fix device/dryer, and on the partitioning board inside the hood. Make sure you clean this section daily to prevent mist soiling from accumulating.

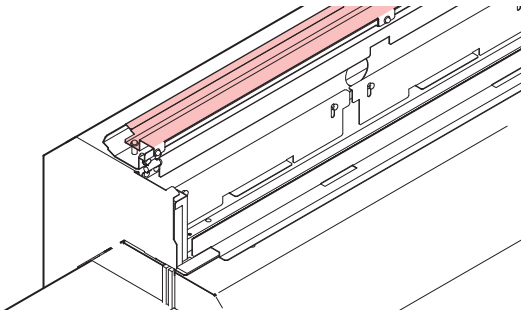
Caution

- Before cleaning, make sure you turn off the main power supply, and make sure the color fix device/dryer has cooled down.

1 **Turn off the main power on the machine.**

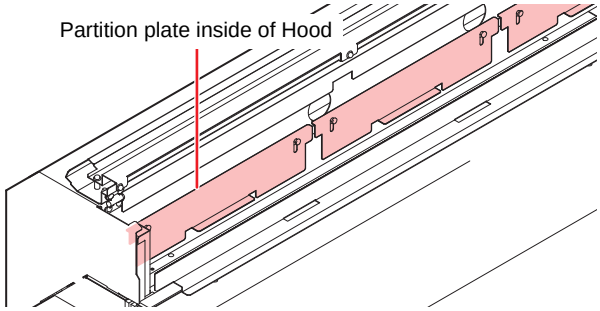
2 **Open the color fix device/dryer hood.**

3 **Wipe off an adhesion dirt inside of Hood cover of color fix device/dryer with a paper towel putting alcohol on.**

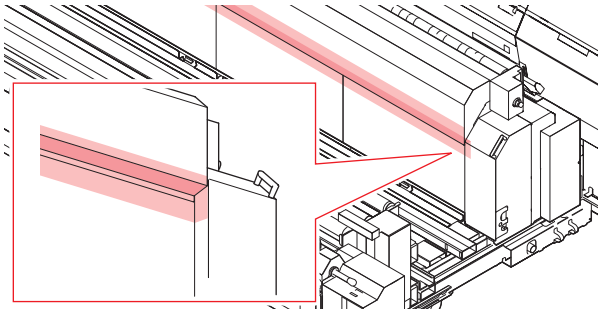


4 **Wipe off an adhesion dirt on the partition plate inside of Hood cover with a paper towel putting alcohol on.**

- After wipe the dirt off, check whether the partition plate inside of Hood cover can slide up and down.



Important! • When around a lower part of Hood duct is dirty, wipe off with a paper towel putting alcohol on.



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	• Gloves
• safety glasses	

Caution
- Be sure to wear the attached safety glasses 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.

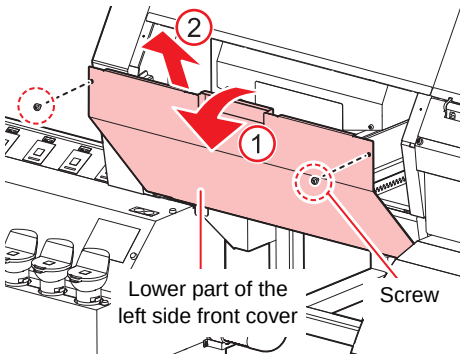
Cleaning the Flushing BOX Sensor

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

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

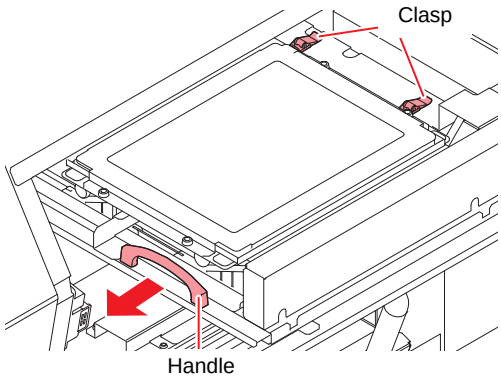
(1) Remove the screws (for two positions) of the lower part of the left side front cover.
(2) Pull the lower part of the left side front cover in front , lift it above, and remove the lower part of the left side front cover.

- Remove the screws use the supplied screwdriver.

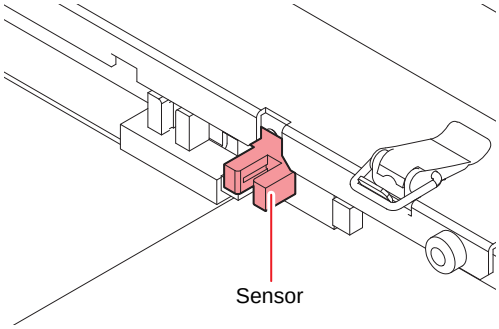


2 **Shift the flushing unit to the left.**

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

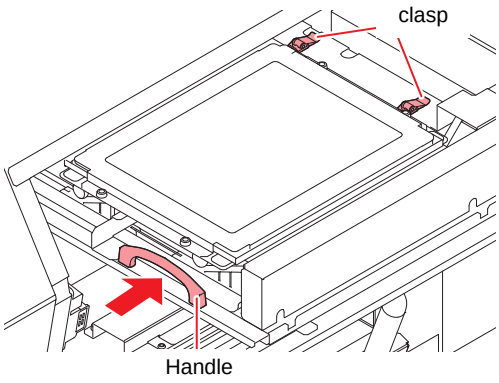


3 **Clean the part of the sensor with a clean stick.**



4 **Return the flushing unit to the original position.**

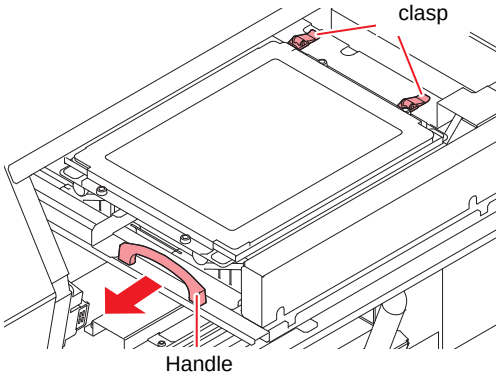
(1) Hold The Handle And Shift The Flushing Unit.
(2) Fasten the clasp.



Cleaning the ink receiving sponge

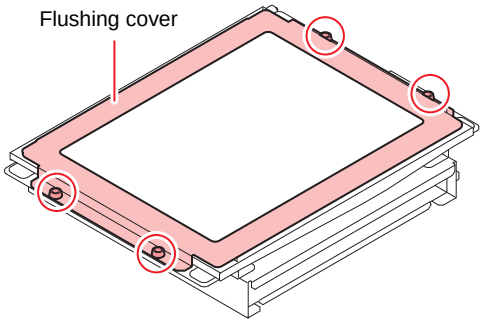
1 **Shift the flushing unit to the left.**

• Please conduct the operation up to P.4-6 “Cleaning the Flushing BOX Sensor” step 2.

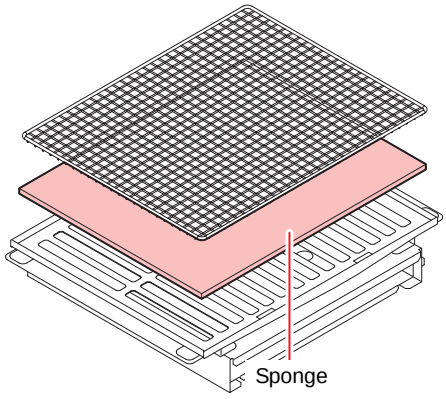


2 **Remove the flushing cover, and take out the ink receiving sponge.**

(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.

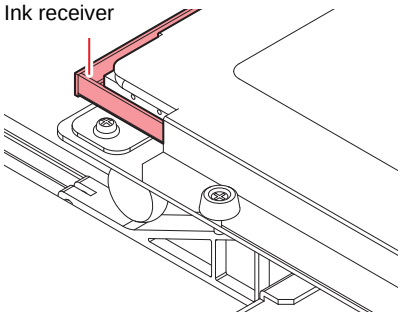


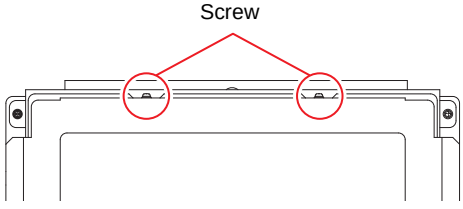
3 **Soak the ink receiving sponge in tap water, and lightly rubbing wash.**

• 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.**

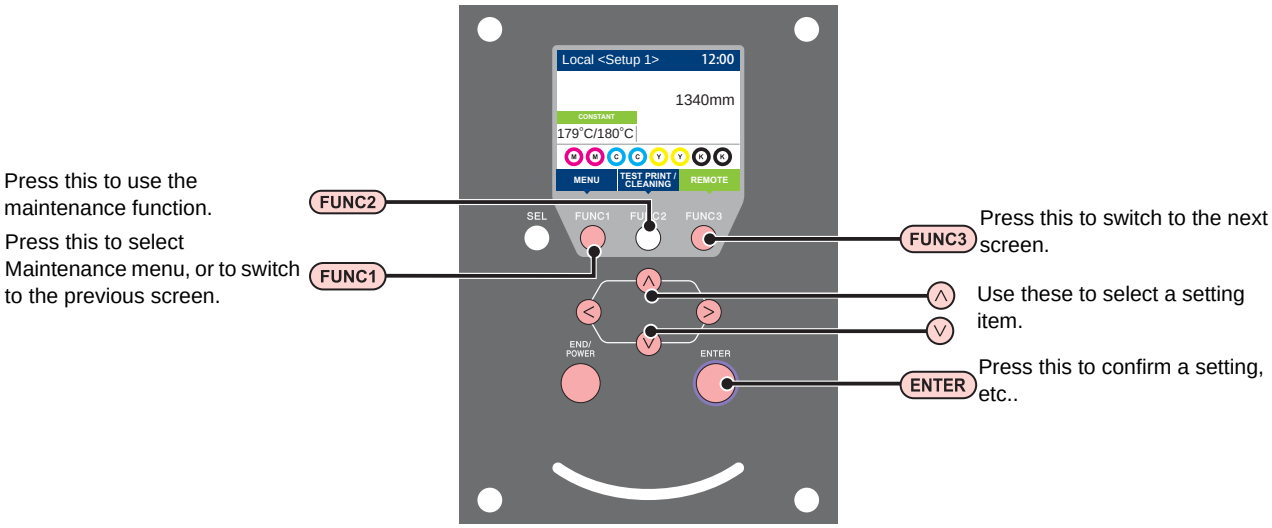
• Install the flushing cover with the screw on the back side.
• Please make sure that ink receiving sponge, ink sponge holder, and flushing cover are seated in the ink receiver.



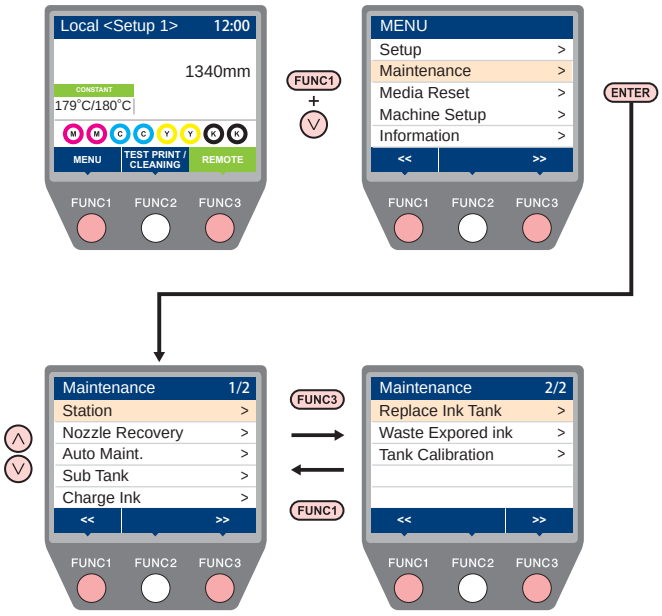


About Maintenance Menu

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

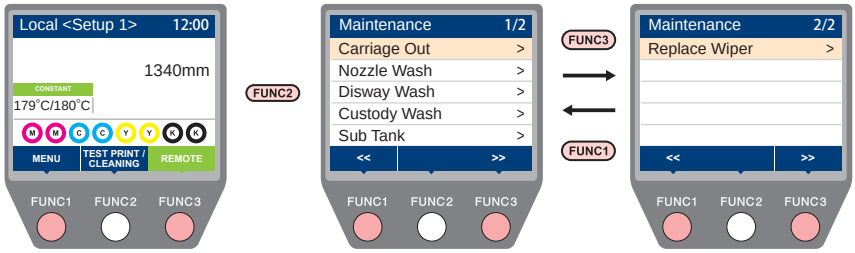


◆ Maintenance menus at-a-glance



◆ 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	Description
Maintenance cover	For carrying out maintenance on the carriage and station periphery.		
	Carriage Out (☞ P.4-10)		Moves the carriage out, for carrying out cleaning of the cap periphery, head, wipers, etc.
	Nozzle Wash (☞ P.4-15)	1 to 15min	Soaks the nozzle surfaces in maintenance cleaning fluid, for carrying out recovery from nozzle missing or bent.
	Pump Tube Wash (☞ P.4-12)		Executes washing of the suction pump tubes.
	Custody Wash (☞ P.4-12)	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.4-24)		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.4-16)	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.4-19)	For having the various maintenance functions executed automatically. Set the execution interval for each maintenance function.		
	Refresh	OFF/Lv.1/Lv.2/Lv.3	For setting the activation interval for refresh.
	Cleaning	OFF/Lv.1/Lv.2/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.4-20)			Used when ink cannot be automatically charged, or if you want to charge ink after confirming the contents of the IC ship.
Replace Ink Tank (☞ P.4-26)			Used to replace a expired ink tank and to reset the ink charge information.
Waste Expired Ink (☞)P.4-25			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.

s 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.2-37) 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	• Safety glasses

Caution

- Be sure to wear the supplied safety glasses 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.4-10 Steps 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!

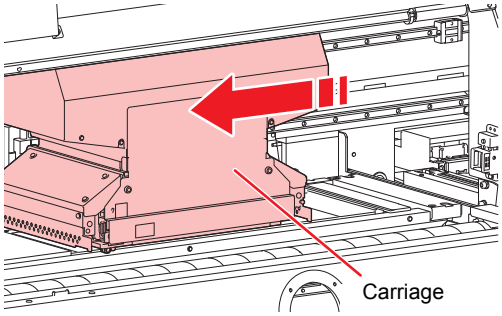
- When work is complete at the end of the day, clean the wipers and surrounding areas.
- Replace the wiper with a new one when it is extremely dirty or bent. (☞ P.4-24)
- When cleaning the wiper, be careful that lint from the clean stick does not get left on the wiper. Remaining lint may cause image quality to deteriorate.

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

- The Maintenance menu appears.

2 **Press ▲ ▼, select [Carriage Out], and press the ENTER key twice.**

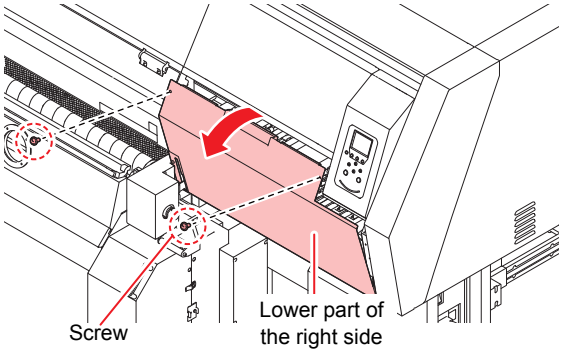
- The carriage moves onto the platen.



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

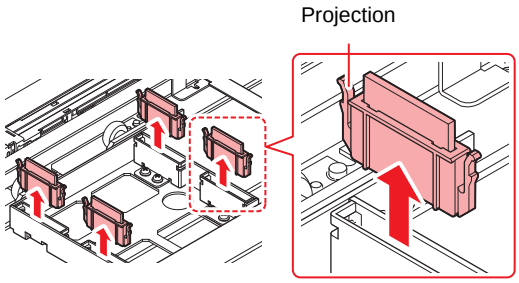
(1) Remove the screws of the right side front cover (for two positions).
(2) Hold the upper of the lower part of the right side front cover and pull it to the front.

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



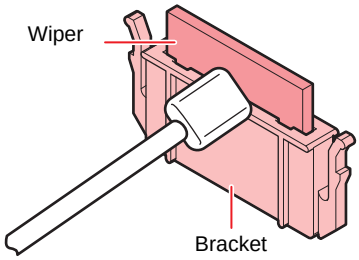
4 **Remove the wiper.**

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



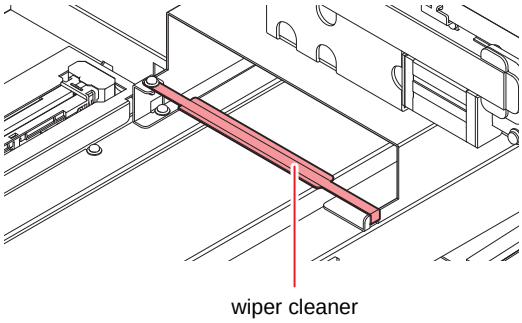
5 **Clean the wiper and bracket.**

- 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.



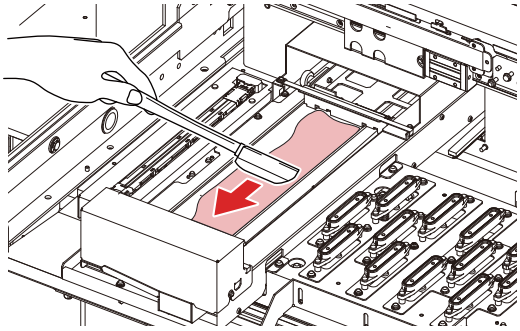
6 **Clean the wiper cleaner.**

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



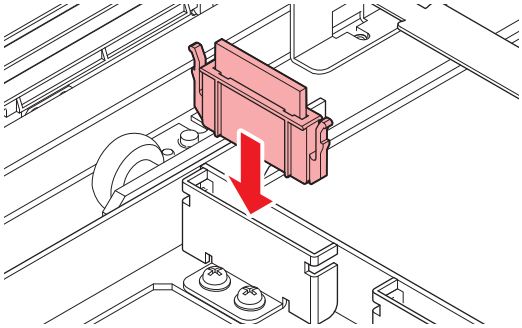
7 **Clean the wiper ink pan.**

- Water-based ink does not flow easily. Ink dries, gets stuck, and accumulates. Use a rubber spatula or the like to frequently push the ink that piles up in the ink pan beneath the wiper towards the waste route.



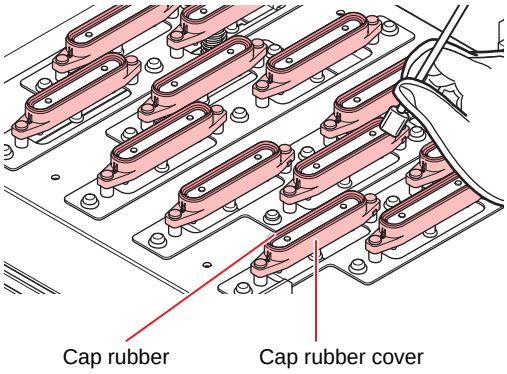
8 **Set the wiper at the original position.**

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



9 **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.



10 **Close the lower part of the right side front cover, and 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

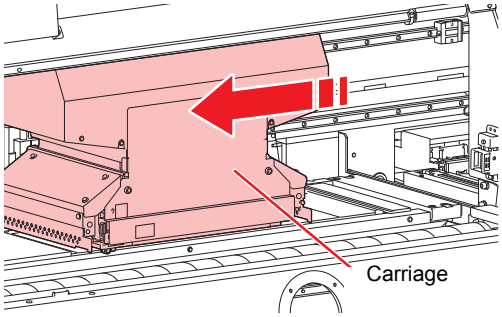
Wash the ink discharge passage on a regular basis (once every 2 - 3 months) to prevent ink coagulation from clogging the passage.

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

- The Maintenance menu appears.

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

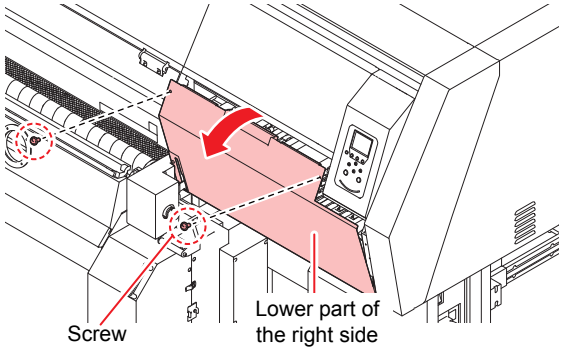
- The carriage moves onto the platen.
- Dry suction operation is performed repeatedly until the washing work is completed.



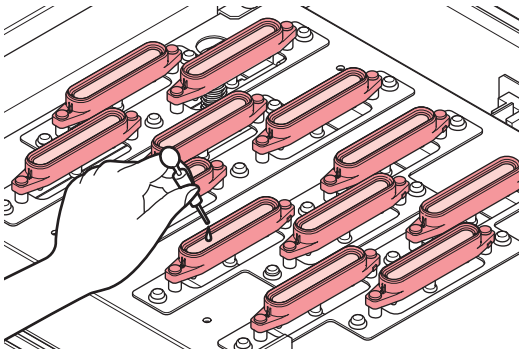
3 **Open the lower part of the right side front cover.**

(1) Remove the screws of the 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 step1.

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.

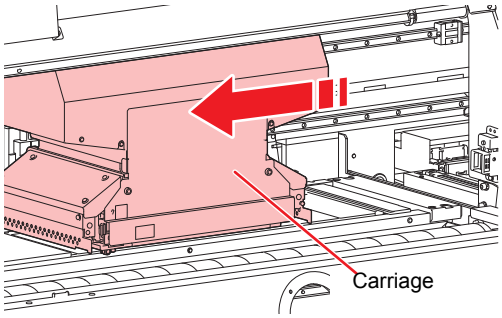
Important! • Be sure to use the dedicated cleaning Liquid 03 MAINTENANCE KIT (ML003-Z-K1).

1 **Press the SEL key and press 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.

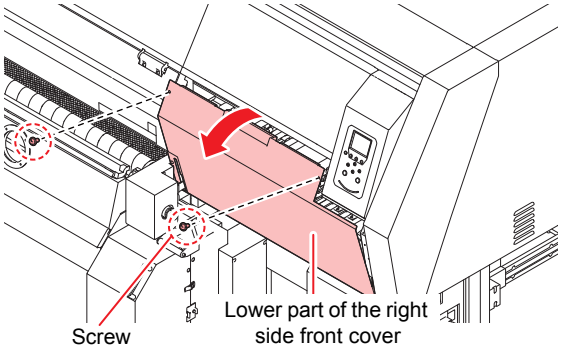


Important! • Until wiper/ bracket cleaning is competed, “Please clean the wiper.” is displayed on the screen. After the work up to the step 5 is completed, press the [ENTER] key.

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

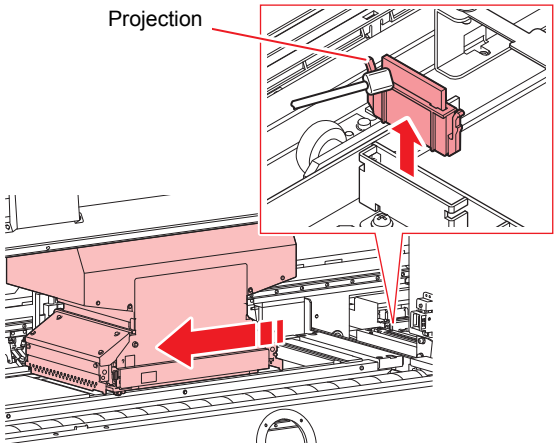
(1) Remove the screws of the right side front cover (for two positions).
(2) Hold the upper of the lower part of the right side front cover and pull it to the front.

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



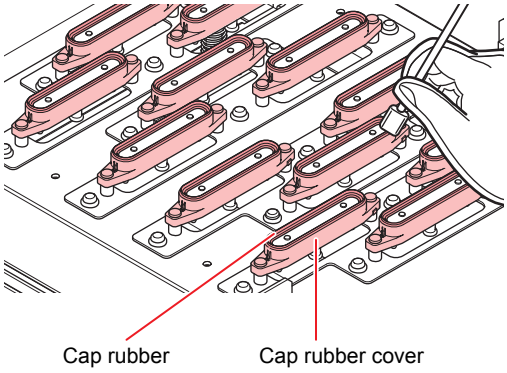
4 Clean the wiper and the bracket, and press the ENTER key.

(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.

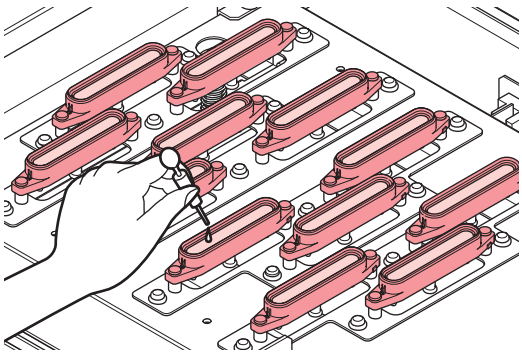


6 Press ENTER key.

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.



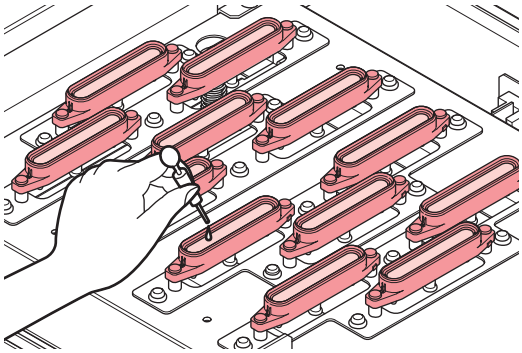
8 Close the lower part of the right side front cover, and press the ENTER key.

• 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 step1.

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	• Gloves
• Safety glasses	

Caution

- Be sure to wear the attached safety glasses 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 press FUNC2 (MAINT) in LOCAL.**

- The Maintenance menu appears.

2 **Press ▲▼, select [Carriage Out], and press the ENTER key.**

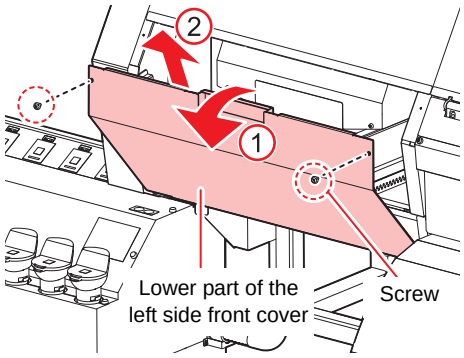
3 **Press ▲▼ to select “Head Maint.”, and press the ENTER key.**

- The carriage will move to the left end of this machine.

4 **Remove the lower part of the left side front cover.**

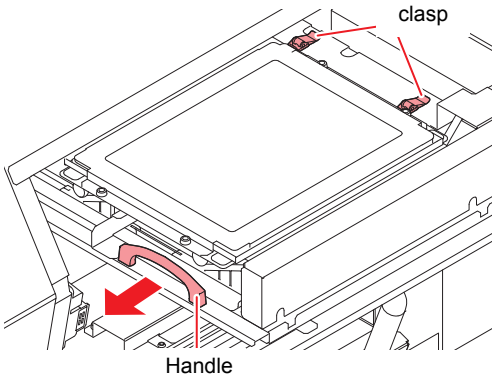
(1) Remove the screws (for two positions) of the lower part of the left side front cover.
(2) Pull the lower part of the left side front cover in front , lift it above, and remove the lower part of the left side front cover.

- Remove the screws use the supplied screwdriver.



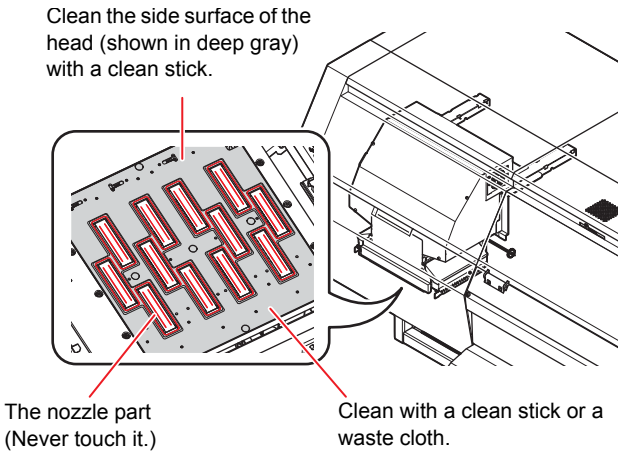
5 **Shift the flushing unit to the left.**

(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.**

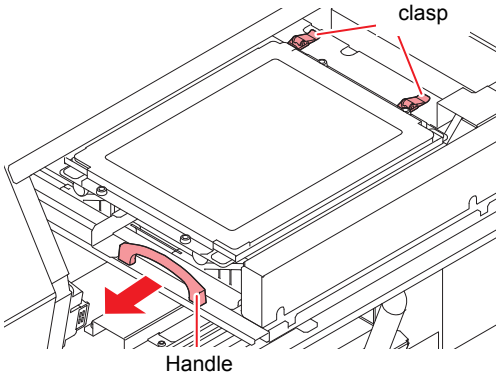
• Never rub the nozzles.



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.2-37) has been done, perform the following three functions:

Nozzle Wash	• Wash the head nozzle. (☞ P.4-15)
Nozzle Recovery	• Alternative nozzles for printing, when nozzles missing can not be improved. (☞ P.4-16)
Sub Tank	• Fill the head with ink. (☞ P.5-4)

Washing the Head Nozzle

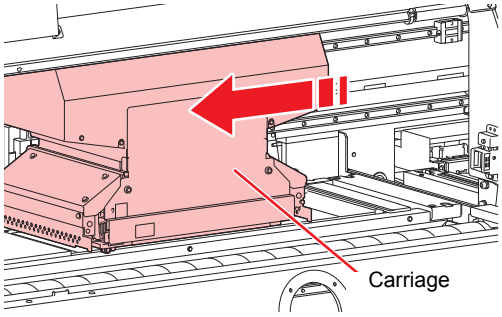
Perform cleaning of the nozzles in the heads to prevent them being clogged with coagulated ink.

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

• The Maintenance menu appears.

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

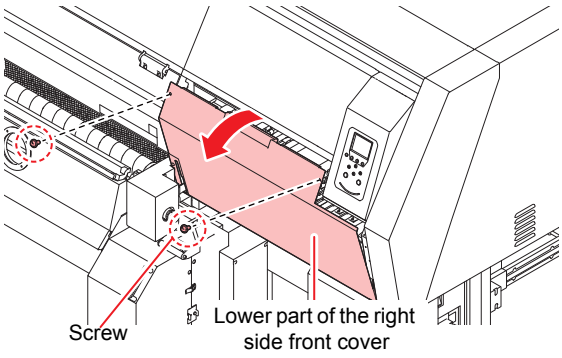
• The carriage moves onto the platen.



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

(1) Remove the screws of the 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.



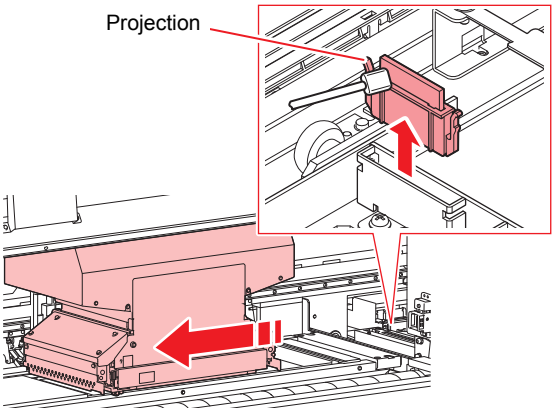
4 **Clean the wiper and the bracket, and press the ENTER key.**

(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.

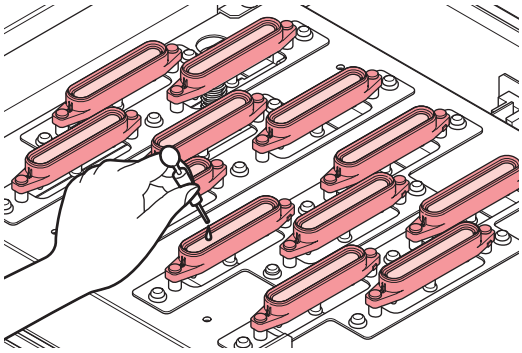


5 **Clean the cap rubber , and press the ENTER key.**

- Wipe off the ink sticking to the cap rubber with a clean stick dipped in maintenance washing liquid for maintenance.
- Wipe off so that cleaning solution 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.**

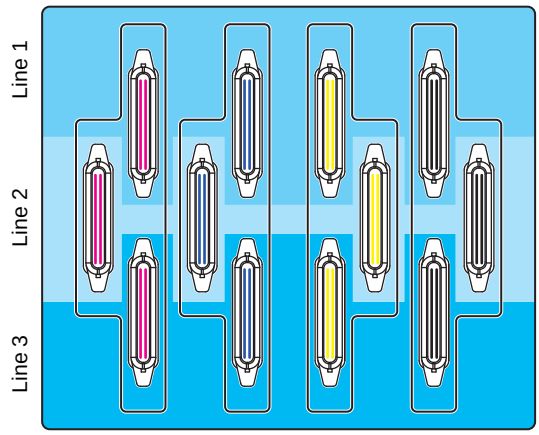
4 **Press ENTER key.**

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

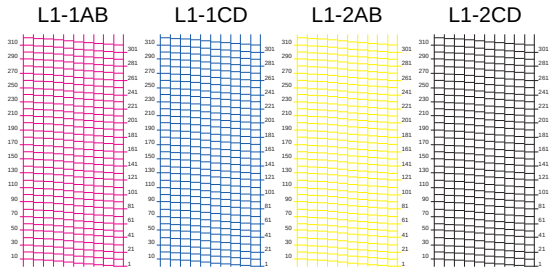
6 Press ENTER key.

- 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

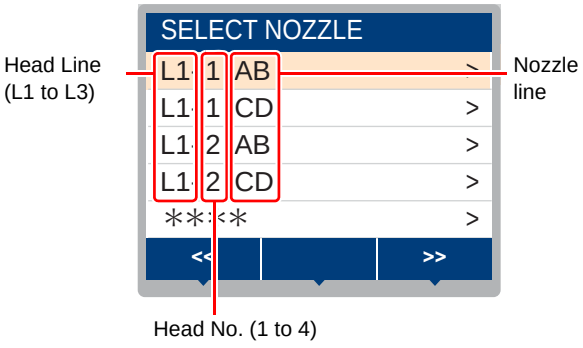


Nozzle pattern



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.

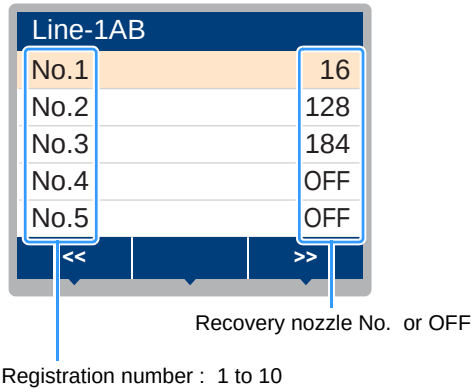
7 Select the Nozzle line that needs Nozzle Recovery by pressing ▲▼, and press ENTER key.



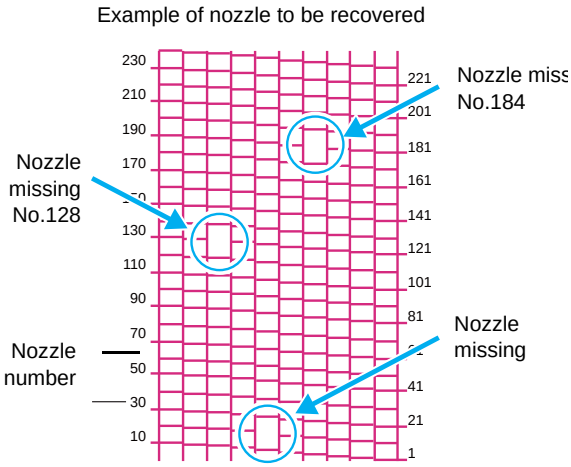
8 Register the Nozzle number that needs Nozzle Recovery and then press ENTER key.

(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 (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 reflected if printing is performed under the following conditions:

4-colors ink set

Resolution	Pass	Scan 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 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 (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 “Setup 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 needs to be reset, and press the (ENTER) key.**
- A reset confirmation message appears.

7 **Press (ENTER) key.**

8 **Press (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 problems such as ink clogging by performing automatic maintenance periodically (automatic maintenance function).
(Auto 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.5-12)
• 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.4-21)

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

Setting the Cleaning level

Sets the head cleaning level.

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 “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 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 ENTER key.**

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

```
Expiration
CHARGEANYWAY?
```

Displayed alternately

```
Expiration
NO <                    > YES
```

```
Expiration:1MONTH
CHARGEANYWAY?
```

Displayed alternately

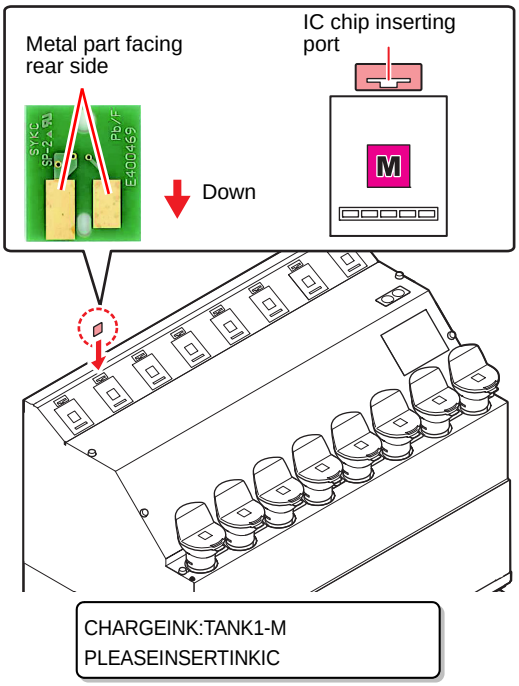
```
Expiration:1MONTH
NO <                    > YES
```

Important!

- The selected tank cannot be charged an 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
CHARGEANYWAY?
```

Displayed alternately

```
Expiration
NO <                    > YES
```

```
Expiration:1MONTH
CHARGEANYWAY?
```

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 key.**

- 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)

Replacing the Waste Ink Tank

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”

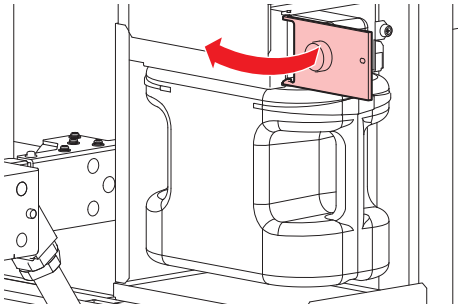
2 **Check the state of the waste ink tank**

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

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.

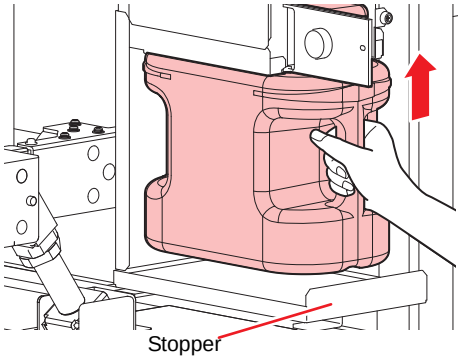
1 **Open the waste ink tank cover.**

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



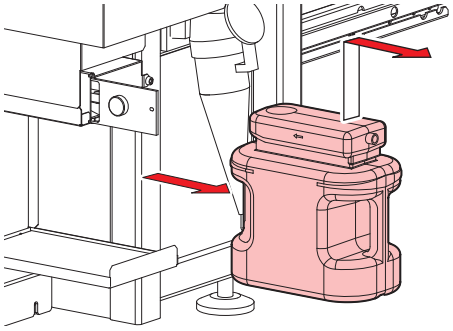
2 Lift the waste ink tank a little.

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

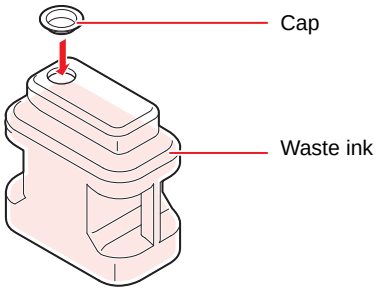


3 Take out the waste ink tank.

(1) Hold the handle of the waste ink tank and pull it out to the front.
(2) Raise the waste ink tank and take it out.



• Put a cap on the waste ink tank removed.

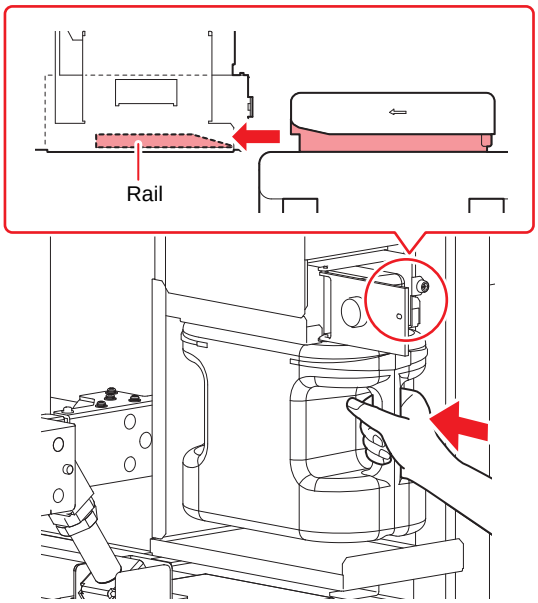


4 Replace the waste ink tank.

(1) Prepare a waste ink tank (SPC-0197) or discard waste ink from current waste ink tank.
• Prepare a new tank, or use the same waste ink tank after you have disposed of the waste ink inside.
(2) Hold the handle of the waste ink tank and insert it along the rail.
(3) Raise the waste ink tank.

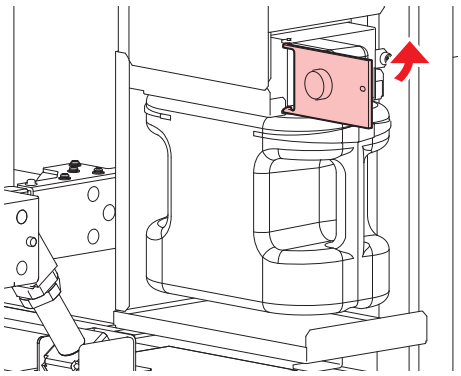
Caution

• Request that an industrial waste disposal company process the disposal ink.



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

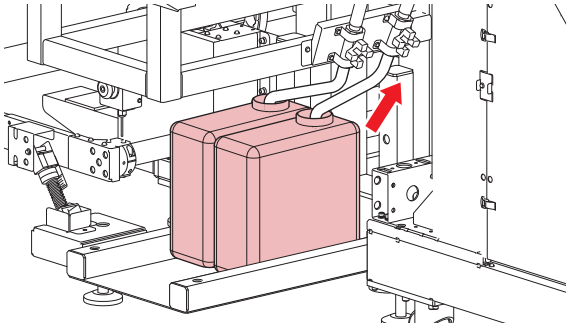
In the waste ink tank on the left side of the machine, the ink and cleaning solution discharged at the flushing will be accumulated.
When discarding the waste ink tank, please perform the following tasks.

Caution
- 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 safety glasses 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.

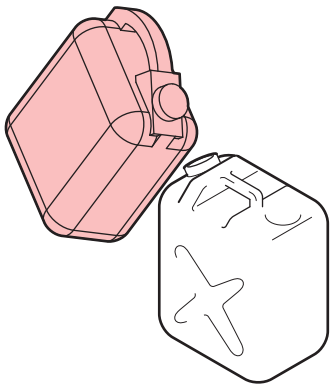
- Pull out the tube inserted into the waste ink tank, and take out the waste ink tank.

Important!
- 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.

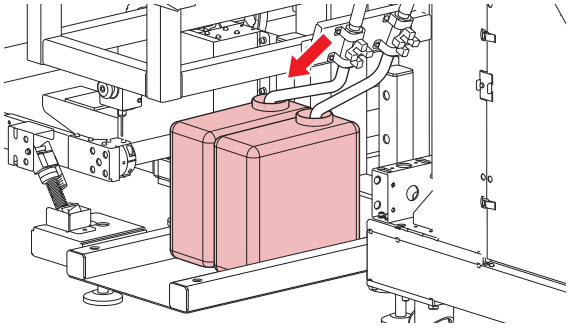
- Move waste ink pooled in the waste ink tank to another polyethylene tank.



Caution
- 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. • Operation using ink • Print • Remote transition • If occurs during printing, transit to local after printing completion
Measures	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 waste ink tank referring to "Replacing the Waste Ink Tank" 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 press FUNC2 (MAINT) in LOCAL.**

• The Maintenance menu appears.

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

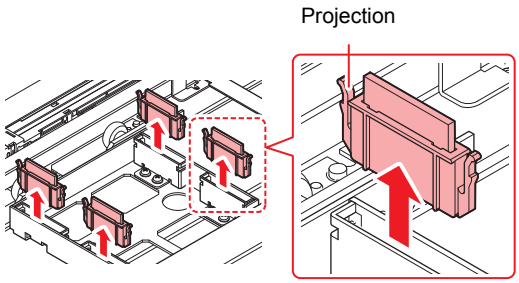
3 **Press ENTER key.**

• 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.

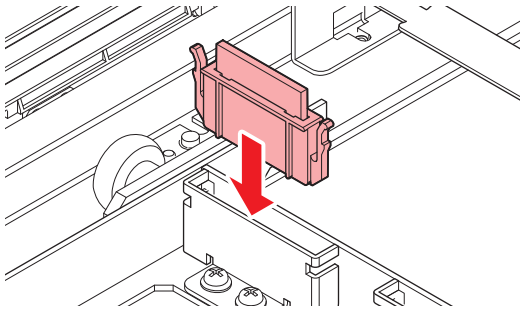
4 **Open the right maintenance cover then remove the wiper.**

• 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 HF filter

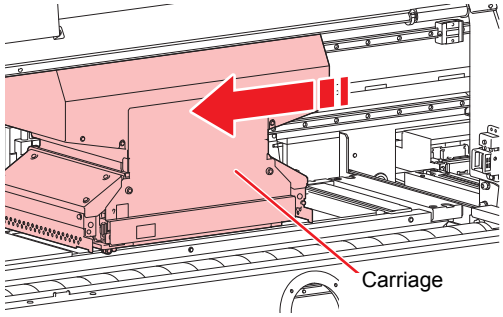
Replace it once a month.

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

• The Maintenance menu appears.

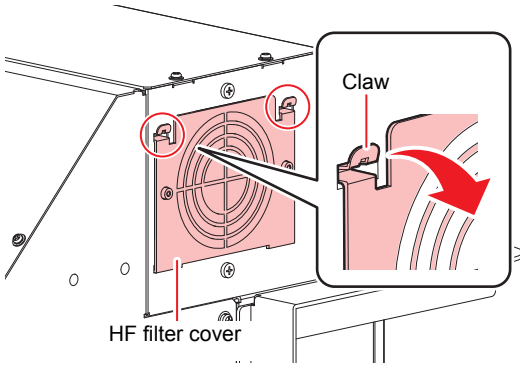
2 **Press ▲ ▼, select [Carriage Out], and press the ENTER key twice.**

• The carriage moves onto the platen.

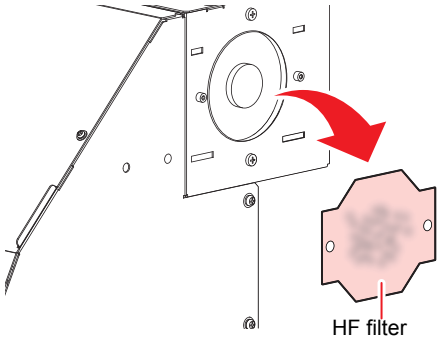


3 **Remove the HF filter cover at the left and right of the carriage.**

(1) Remove the HF filter cover of right and left of the carriage.
(2) Pinch the claw attached to the upper part of the HF filter cover and pull it to the front.



4 **Remove the used HF filter.**

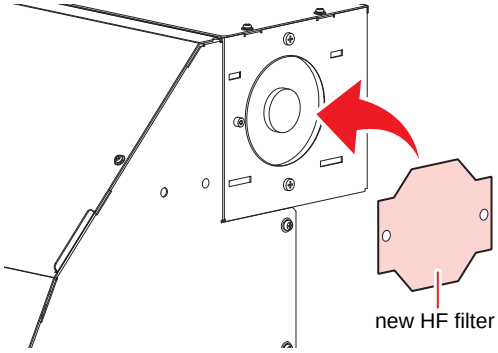


5 **Mount a new HF filter (SPA-0189).**

- Insert the holes of right and left of the HF filter into the convex part of the carriage.

Important!

- The HF filter is located at right and left of the carriage.
  Replace both filters at the same time.



6 **Return the HF filter cover to the original status.**

7 **When replacement has been completed, press the ENTER key.**

Important!

- Ink at printing adheres to the HF 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.

Caution

- Be sure to wear the accompanying gloves and protective safety glasses before working. Otherwise, you may get ink 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 Expired 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.

Caution

- 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.

Replacing 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 safety glasses before working. Otherwise, you may get ink 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.**

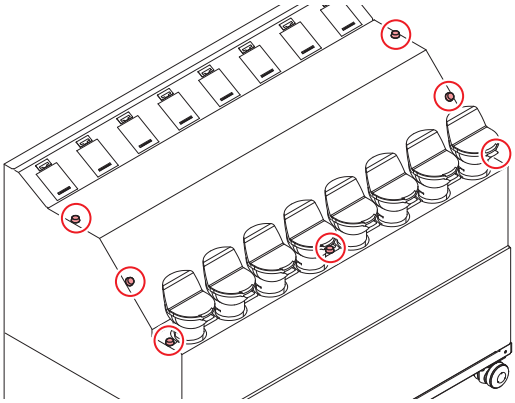
- The display it will display a confirmation screen of ink tank replacement. Also, ink type and date (month and year) will display.

6 **If there is no problem on the confirmation screen, press the ENTER key.**

- This resets the ink charge information embedded in this machine.

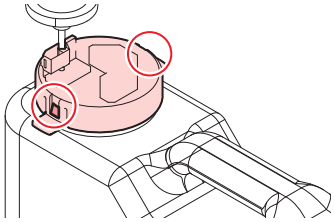
7 **Remove the ink tank cover.**

- remove the screws (7 places) that is attached to the ink tank cover, and remove the cover.



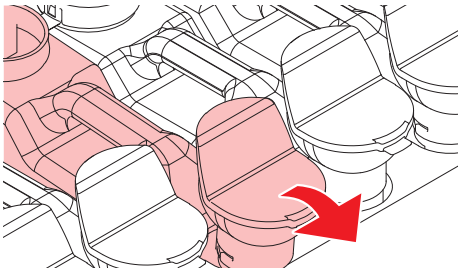
8 **Remove the ink tank of the selected slot and press the ENTER key.**

(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

Caution

- 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 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	
• Clean stick (SPC-0527)	
• Gloves	• Safety glasses

Caution

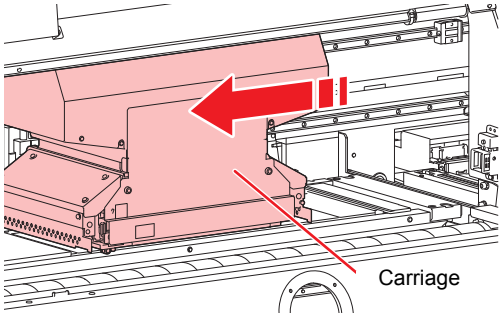
- Be sure to wear the attached safety glasses and gloves when replacing the ink absorber. Otherwise, you may get ink in your eyes.
- The ink contains organic solvent. If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.

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

- The Maintenance menu appears.

2 **Press ▲ ▼, select [Carriage Out], and press the ENTER key twice.**

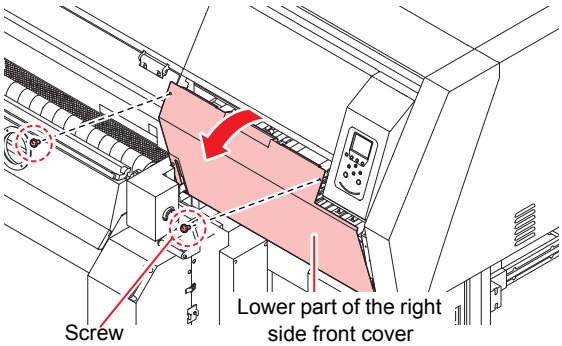
- The carriage moves onto the platen.



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

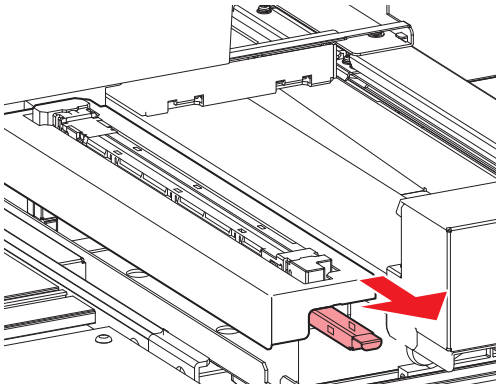
(1) Remove the screws of the right side front cover (for two positions).
(2) Hold the upper of the lower part of the right side front cover and pull it to the front.

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



4 **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 ENTER key.**

- The screen returns to step1.

7 **Press 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 (>>).**

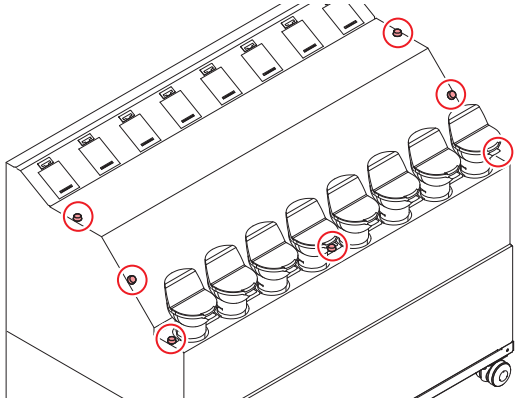
4 **Press ▲ ▼ to select “Tank Calibration”, and press the ENTER key.**

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.**

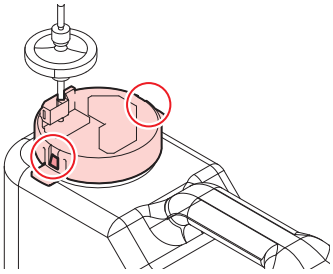
7 **Remove the ink tank cover.**

- remove the screws (7 places) that is attached to the ink tank cover, and remove the cover.



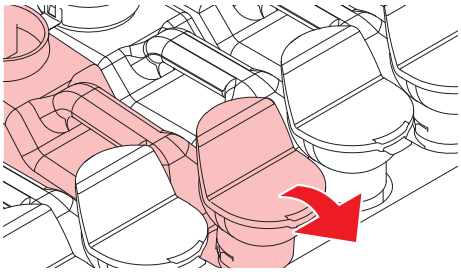
8 **Remove the ink tank of the selected slot and press the ENTER key.**

(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.

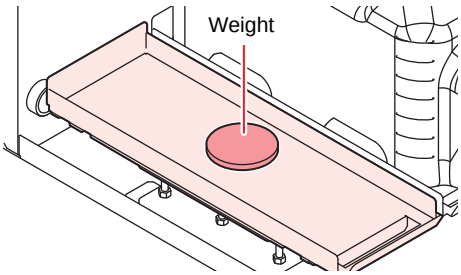
- Please be careful not to bend the tube by tilting a tank too far.



(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.

Has the power cable been connected between the machine and a power plug socket?	**No** →	Securely connect the power cable.
Is the main switch ON?	**No** →	Turn on the main switch. (☞ P.2-3)
Is the power button located on the front of machine "ON"?	**No** →	Turn on the power button on the front of the machine.(☞ P.2-3)

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.

Is the correct interface cable used?	**No** →	Use the cable exclusive for the device.
Is the interface cable properly connected?	**No** →	Securely connect the interface cable.
↓ **Yes**		
Is the message on the display indicating that INKEND?	**Yes** →	Add ink to the ink tank, and perform ink charge. (☞ P.1-10)

The temperature of the heater does not rise to the set value

Did you set the heater temperature?	**No** →	Set the heater temperature. (☞ P.3-8)
↓ **Yes**		
Is "Remote" or "Local" set to "ON" in the color fix device/dryer?	**No** →	Set the heater temperature from the operation panel of the color fix device/dryer. (☞ P.2-20)

Media gets 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.

Is a recommended media used? — No → Use recommended media.

Is the media not curled or bent ends? — No → Avoid using any media with curls or bent ends.

Yes ↓

Is the height of the head proper? — No → Adjust the distance between the media and the head will be 1.5 mm to 2 mm. (☞ P.2-6)

Yes ↓

Is the media hanging down along the platen? — No → Use a take-up device (☞ P.2-7) or re-load the media on the machine. (☞ P.2-9)

● **If the media gets clogged, perform the work below:**

Open the front cover and raise the clamp lever. → **Remove the clogged media.** → **Close the front cover.**

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.2-37 **(2)** Perform maintenance of the inside of the station.☞ P.4-10 **(3)** Execute the [MEDIA COMP.] function. ☞ P.2-37 **(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.2-37)
Disagreement in print positions between outward trip and homeward trip	**(1)** Execute the [DROP POSITION] function. (☞ P.2-38)
Ink drops falling on media during printing	**(1)** Execute the wiper cleaning. (☞ P.4-10) **(2)** Execute the ink cap cleaning. (☞ P.4-10) **(3)** Clean around the head. (☞ P.4-14) **(4)** Execute the head cleaning [Normal]. (☞ P.2-37) **(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.2-37, 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.4-15.**
- **Recovery the nozzle by the operations of P.4-16.**

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.

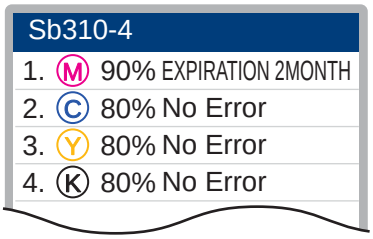
重要!

- 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.**



In case of ink leakage

In case of ink leakage, please turn off the main power switch, unplug the power plug, and contact our service office or distributor.

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 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.
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	Measures
ERROR 901 INVALID OPERATION	Operation error	• 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.	• Execute the data clear function. (☞ P.2-40)
ERROR 90d NO HEAD SELECT	Executed the processing without selecting a head.	• Select the head. (☞ P.3-20)
ERROR 90f PRINT AREA SHORT	The media is not wide or long enough for printing.	• 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. • 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.	• 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	Measures
Close the cover.	The cover is open.	• Close the cover. (☞ P.ix) • 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.	• 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	Measures
Release the emergency switch.	The emergency switch has been pressed.	• 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.	• Close the cover. (☞ P.ix) • 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.	• 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	Measures
INK IC Expiration CHARGE ANYWAY? NO < > YES	The expiration date for the inserted IC chip has passed.	• 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 INVALID INK CHARGE	The expiration date of the inserted IC chip has passed (two months have passed after the specified expiration date).	• 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 INVALID INK CHARGE	The IC chip cannot be read normally.	• Remove the IC chip generating the warning once and install it again. • When displaying again, contact your local distributor, our sales office, or service center.
INK TYPE INVALID INK CHARGE	An IC chip that has already been charged was inserted.	• Install the new IC chip.

Message	Cause	Measures
INK TYPE INVALID INK CHARGE	The type of ink on the inserted IC chip is different from the ink in the bottle.	• Check the type of ink on both the IC chip and the ink bottle. • Check the color of the ink bottle.
Ink color INVALID INK CHARGE	The color of ink on the inserted IC chip is different from the ink in the bottle.	• Check the type 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.	• P.4-25After discarding the ink in the tank in “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 for the ink has passed. (1 month from the expiration date)	
Expiration:2MONTH INVALID INK CHARGE	The expiration date for the ink has passed. (2 month from the expiration date)	• It cannot be used as it is. P.4-25After discarding the ink in the tank in “Discard the expired ink”, please charge ink. (☞ P.1-10)
FULL CHARGE INK INVALID INK CHARGE	The charged ink amount remains more than a 3 litter. Ink charging is impossible.	• Try again after consuming the ink.
Replace Ink Tank CHARGE ANYWAY? NO < > YES	Exceeded the expiration date of the ink tank which is intended to charge.	• Please discard the ink in the tank in the first P.4-25 “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	Measures
INK ERROR	An ink error occurred.	• Check the ink bottle for the supply path corresponding to the indicated color.
InkOverflow : MMBBYYKK	Ink has entered the air tank.	• Perform “SUBTANK” of the maintenance. (☞ P.5-4) Even if you perform, it may be displayed, contact your local distributor, our sales office, or service center.
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 subtank.	• 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, our sales office, or service center.
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.)	• Perform “Replace Ink Tank” of the maintenance. (☞ P.4-26) • 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.	• Close the cover.
Take-UP WRONG	An abnormality occurred in the take-up status of the media take-up machine.	• 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.2-15) • 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.	• 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.	• 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	Measures
Feeding LimitDETECT	The control limit sensor of the media feeding machine was detected.	• 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.	• 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.	• Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-37) 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.	• Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-37) 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 ADJST 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.	• 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.	• 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.	• 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.	• Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-37) 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.)	• Perform [Replace Wiper] in [Station], and replace the wiper. (☞ P.4-24)
** NO MEDIA **	Media is not set, or failure of the media sensor.	• 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	Measures
DATA REMAIN	Data was received.	• Execute the data clear function. (☞ P.2-40) Restart if the error message remains after the execution of the data clear.
MACHINE TEMP./H ***°C	The machine is hot.	• 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.	• 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.
MACHINE TEMP./H ***°C	The heads are hot.	• 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.
Flushing BOX Power [Z]	Failed to detect the origin for the flushing BOX.	• 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.
Flushing BOX Power [Y]	The flushing BOX is not set in the correct position.	• Set the flushing BOX is in the correct position, and fasten the clasp.
Color fix device - Abnormal connection	The color fix device/dryer is not connected.	• Check that the color fix device is turned on. • Check the connection for the color fix device. • 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.
Dryer - Abnormal connection	The dryer is not connected.	• Check that the dryer is turned on. • Check the connection for the dryer. • 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.

Ink Error

Ink error is displayed also in the local guidance. (☞ P.3-28)

Message	Cause	Measures
Ink tank - Unavailable	The ink tank is not set on the external ink supply unit.	• Set the ink tank on the ink slot with the warning.
Ink End	No ink that can be used.	• Since the available ink has run out, it will not be able to use such as a print or cleaning. • P.3-28Check the ink that has occurred warning in the "Displaying the Information of this machine", and remove the cause.
Ink Near END	The ink in the ink tank is low.	• 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 "Displaying the Information of this machine (P.3-28)", and remove the cause.
Expiration	The expiration date for the ink has passed.	• 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 "Discard the expired ink (P.4-25)".
Expiration: 1 MONTH	The expiration date for the ink has passed. (1 month from the expiration date)	• 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 "Discard the expired ink (P.4-25)".
Expiration: 2 MONTH	The expiration date for the ink has passed. (2 month from the expiration date)	• Two months have passed after the expiration date. • If you want to replace it with a new ink, please perform the "Discard the expired ink (P.4-25)".
Tank End	The ink in the ink tank has run out. (remaining less than 300cc)	• Please shirttail 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.	• 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.	• Ink tank problems Please make sure that the weight is set correctly to the ink tank, do not apply shocks, and do not place heavy objects on the ink tank.. • Please execute the "Tank Calibration (P.4-28)". • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.

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	Measures
ERROR 04 PARAM ROM	The PCB is defective.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR d0b HD CONNECT [23456789ABC]	Abnormal connection of the print head	
ERROR d0c HD THERMIS [23456789ABC]	Abnormal connection of the print head	
ERROR d1b B MEMORY [123456789ABC]	The print head has been broken.	
ERROR 108 HD TYPE [123]		
ERROR 122 CHECK : SDRAM [123]	Not found PRAM board.	
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 [123]	Ink discharge control error	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
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 15F HEAD DRIVE HOT	The temperature abnormality of control circuit board has been detected.	
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	Measures
ERROR 186 HDC OVERFLOW [123]	Ink discharge control error	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 186 HDC UNDERFLOW [123]		
ERROR 187 HDC SLEW RATE [123]		
ERROR 188 HDC MEMORY [123]		
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 [123]		
ERROR 19d HDC V36 [12]	Abnormal ink discharge voltage was detected.	
ERROR 201 COMMAND	Abnormal communication between PC and printer Media end	• 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		• 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.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
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	• 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.	• 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	Measures
ERROR 425 Take-UP WRONG	An abnormality occurred in the take-up status of the media take-up machine.	• 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 is set on the media take-up machine correctly. • Check that the paper core used for media take-up is not rotating freely. • 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 abnormality occurred in the feeding status of the media feeding machine.	• 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. • Check that the paper core used for media feeding is not rotating freely. • 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.	• Close the cover.
ERROR 428 Feeding Cover OPEN	The cover open of feeding device was detected.	
ERROR 429 Take-UP LimitDETECT	The control limit sensor of the media take-up machine was detected.	• Check if the media can be fed correctly in the jog operation. • Lower the position of the tension bar at the take-up side.
ERROR 42A Feeding LimitDETECT	The control limit sensor of the media feeding machine was detected.	• Check if the media can be fed correctly in the jog operation. • Lower the position of the tension bar at the feeding side.
ERROR 42b Take-UP Bar Shelter	The take-up tension bar has been retracted.	• Please lower the take-up tension bar.
	The tension bar has not been retracted when media cut or etc.	• Please retract the take-up tension bar.
ERROR 42b Feeding Bar Shelter	The feeding tension bar has been retracted.	• Please lower the feeding tension bar.
ERROR 432 Take-UP Connect	Take-up device connection destination error	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
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	

Message	Cause	Measures
ERROR 44d STATION POS ERR	An abnormality occurred in the station position.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
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).	• Please make the face-in winding direction of the media.
ERROR 468 Feed MTR ERR	An abnormality occurred in the feeding motor.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 469 Take MTR ERR	An abnormality occurred in the take-up motor.	
ERROR 505 MEDIA JAM	A media jam is occurred.	• Remove the jammed media, please re-set the media.
ERROR 50a Y ORIGIN	Y-origin could not be detected.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 50c MEDIA WIDTH SENSOR	The media width has not been detected correctly.	• Check the media set position.
ERROR 50f L-SCALE BLACK	Abnormal linear scale.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 516 MEDIA SET POSITION R	The media is set outside the proper area.	• Check the media set position.
ERROR 516 MEDIA SET POSITION L		
ERROR 531 INK TNK SENS :12345678	Abnormality has occurred in the balance of the ink supply unit.	• Please make sure that the weight is set correctly to the ink tank, do not apply shocks, and do not place heavy objects on the ink tank.. • Please execute the “Tank Calibration (P.4-28)”. • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 539 Calibration :12345678	Abnormality has occurred in the data of the weight balance of the ink supply unit.	• Please execute the “Tank Calibration (P.4-28)”. • Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 53a Flushing BOX Flushing [Z]	Failed to detect the origin for the flushing BOX.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 53b Flushing BOX Origin [Y]	The flushing BOX is not set in the correct position.	• Set the flushing BOX is in the correct position, and fasten the clasp.
ERROR 607 CAP CLEANING	Time to clean the cap	• Perform the station maintenance, and clean the cap.

Message	Cause	Measures
ERROR 617 Subtank Sens :12345678	Detect the abnormality in the liquid level sensor of the sub-tank.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 618 TANKlevelH :12345678	The sub tank sensor High does not change though a certain amount of ink has been consumed.	• 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 619 TANKlevelL :12345678	The sub tank sensor Low does not change though a certain amount of ink has been consumed.	
ERROR 61a InkOverflow :12345678	Subtank sensor Limit detected.	
ERROR 61b SUPPLY INK :12345678	Ink could not be supplied to the subtank.	• 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.	• Set the ink tank.
ERROR 637 INK LEAK [12345]	Detected an ink leakage in the ink supply path.	• Turn off the power on the machine and turn it on after a while. • If the same error message appears again, turn off the main power, disconnect the power cable, and then contact your local distributor to call for service.
ERROR 647 WRONG CHARGE DATA[12345]	Abnormality occurs in the data of the ink information being charged.	• Cannot print. Contact your local distributor to call for service.
ERROR 64b Nozzle Missing	The automatic nozzle check judged nozzles “No good ”.	• Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-37) • If the same error message appears, contact our service desk or your local distributor to call for service.
ERROR 64c NCU ERROR	Printing stopped because an error occurred during the nozzle check.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 652 NCU NZK CHK (HW)	The NCU cannot correctly recognize the ink discharge, because there are frequent nozzle missing and ink droplet misalignment.	• Check the nozzle condition. If there is plenty of deflection and/or nozzle missing, clean and restore the affected nozzles. (☞ P.2-37) • 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	Adjustment of the discharge position to the NCU has failed.	
ERROR 655 NCU FLUSH POS		
ERROR 657 REPLACE NCU INK PAD	The NCU ink pat is full.	• Contact our service desk or your local distributor to call for service.
ERROR 658 NCU SENSOR LV LOW	The NCU sensor sensitivity is falling.	• Replacement of the NCU is recommended. • Contact our service desk or your local distributor to call for service.

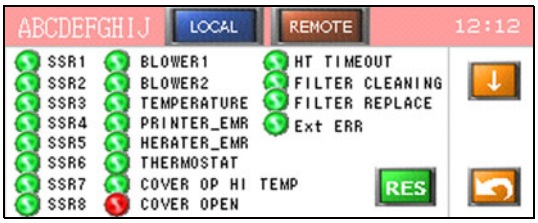
Message	Cause	Measures
ERROR 65d Overflow tank: 12	Ink has entered the air tank.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 702 THERMISTOR	The thermistor sensor of a heater is defective.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 707 !HD HEATER BREAK	A head heater is disconnected.	
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 731 Fixing Machine ERROR	An error has occurred in the color fix device/dryer.	• Clear the error that has occurred in the color fix device/dryer. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 732 E.HEATER CONNECT	Cannot confirm that the color fix device/ dryer is connected.	• Disconnect and then reconnect the cables between the printer and the color fix device/dryer. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 743 Drying Machine ERROR	An error occurred in the dryer.	• Clear the error that has occurred in the dryer. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 744 Dry Machine SetTime	Time does not match between printer and dryer.	• Both dryer and printer should be restarted. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR 745 Fix Machine SetTime	Time does not match between printer and coloring machine.	
ERROR d01 HCB POWER [123456789ABC]	An error occurred in the power supply of the HCB PCB.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR d02 HCB COMMON [123456789ABC]	An error was detected in the HCB PCB.	
ERROR d03 HCB HARD [123456789ABC]		
ERROR d04 HCB CMD [123456789ABC]	Operation instructions to the HCB PCB failed.	
ERROR d05 HCB WFM [123456789ABC]	An error was detected in the waveform being printed.	
ERROR d06 HCB VUP [123456789ABC]	A failure to update the HCB PCB was detected.	
ERROR d0b HD CONNECT[123456789ABC]	Print head connection error.	
ERROR d0c HD THERMIS[123456789ABC]	Print head temperature error.	
ERROR d14 HCB FAN[123456789ABC]	Function error of HCB2 fan	
ERROR d15 HD MEMORY[123456789ABC]	Abnormal data in the head memory	
ERROR d16 HCB UKNWN[123456789ABC]	Undefined error code occurs.	

Message	Cause	Measures
ERROR d17 HCB BUSY[123456789ABC]	No reply from HCB2	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
ERROR d19 High head temperature	The head temperature has exceeded 38℃.	• Use cooling equipment to lower the room temperature to a specified range. • 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.
ERROR E01 Communication Error	Failed to communicate with the color fix device/dryer.	• Disconnect and then reconnect the cables between the printer and the color fix device/dryer. • When displaying again, contact your local distributor, our sales office, or service center.

SYSTEM HALT

Message	Measures
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.)

Reason and corrective measure for the error of color fix device/dryer



Message	Cause	Measures
SSR 1~8	It lights in red with the AC input error.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
BLOWER1	It lights in red with the inverter error.	• Press the [RES] key to remove the error.
BLOWER2	It lights in red when stopped during the blower movement order.	• Press the [RES] key to remove the error.
TEMPERATUBE	It lights in red with the temperature error.	• Check if the media got loose in the heater furnace or it works correctly. • Press down the [RES] key to cancel the error after a while and turn the heater on.
PRINTER_EMR	When the emergency switch on the printer side is pressed, It turns red on when the heater emergency switch is pressed in [MAINTE].	• Release the emergency switch after avoiding a danger and press the [RES] key.
HEATER_EMR	It lights in red when the heater emergency switch is pressed.(Except in [MAINTE])	• Release the emergency switch after avoiding a danger and press the [RES] key.

Message	Cause	Measures
THERMOSTAT	It lights in red with the temperature error.	• Check if the media got loose in the heater furnace or it works correctly. • Press down the [RES] key to cancel the error after a while and turn the heater on.
COVER OP HI TEMP	It lights in red when the heater furnace is open in the state of high temperature.	• Accessing the heater furnace must be done when it is cooled down. • Press the [RES] key to remove the error.
COVER OPEN	It lights in red when the heater furnace is open.	• Close the heater furnace.
HT TIMEOUT	It lights in red when the heater is left with being turned on.	• Turn it off when not using the heater.
FILTER CLEANING	It lights in red at the time of filter cleaning.	• Set the [Filter Cleaning Timer] to [CLR] after completing the filter cleaning.
FILTER REPLACE	It lights in red at the time of filter replacing.	• Set the [Filter Replace Timer] to [CLR] after completing the filter replacement.
Ext ERR	It lights in red when stopped by external input.	• Cancel the cause that stopped by external input. • Press the [RES] key to remove the error.
SD CARD ERR	It lights in red with the SD card error.	• Turn off the power on the machine and turn it on after a while. • When displaying again, contact your local distributor, our sales office, or service center.
VERSION ERR	It lights in red when a version of touch panel is incongruous with the main body.	
PLC BATT ERR	It lights in red with the abnormality of the PLC backup battery.	
TEMP CTRL1/2 ERR	It lights in red with the abnormality of the temperature adjuster.	

List of PLC error messages for color fix device/dryer - HW error

Message	Cause	Measures
–	Earth leakage.	• Use a tester to measure the resistance between the heater and body.
–	Abnormal current on the drive side of the heater.	• Use a tester to measure the interphase resistance of the heater.
“TimeOutError” is displayed every 15 seconds at the lower left	Communication between the touch panel and main PLC unit cannot be established.	1. Make sure that the communication wiring between the PLC and touch panel is connected. 2. Check for any errors in the LCD of the PLC.

List of PLC error messages for color fix device/dryer - FW error

Message	Cause	Measures
733:HT[E101]HT1_DISCONNECT	Wiring disconnection detected in heater1	1. Use a tester to confirm that the input voltage is not too low. 2. Check the interphase resistance of the SSR to confirm that the heater wiring is disconnected. 3. Check the wiring between the SSR and heater to confirm that the heater wiring is disconnected. • Be sure to turn the main power off before checking the components as described in steps 1 and 2. • To reset any errors, turn the main power off first, and then turn it back on.
733:HT[E102]HT2_DISCONNECT	Wiring disconnection detected in heater2	
733:HT[E103]HT3_DISCONNECT	Wiring disconnection detected in heater3	
733:HT[E104]HT4_DISCONNECT	Wiring disconnection detected in heater4	
733:HT[E105]HT5_DISCONNECT	Wiring disconnection detected in heater5	
733:HT[E106]HT6_DISCONNECT	Wiring disconnection detected in heater6	
733:HT[E107]HT7_DISCONNECT	Wiring disconnection detected in heater7	
733:HT[E108]HT8_DISCONNECT	Wiring disconnection detected in heater8	
733:HT[E111]HT1_OVERCURRENT	Overcurrent detected in heater1	1. Use a tester to confirm that the input voltage is not too high. 2. Check the interphase resistance of the SSR to confirm the short circuit in the heater. 3. Check the wiring between the SSR and heater to confirm the short circuit in the heater. • Be sure to turn the main power off before checking the components as described in steps 2 and 3. • To reset any errors, turn the main power off first, and then turn it back on.
733:HT[E112]HT2_OVERCURRENT	Overcurrent detected in heater2	
733:HT[E113]HT3_OVERCURRENT	Overcurrent detected in heater3	
733:HT[E114]HT4_OVERCURRENT	Overcurrent detected in heater4	
733:HT[E115]HT5_OVERCURRENT	Overcurrent detected in heater5	
733:HT[E116]HT6_OVERCURRENT	Overcurrent detected in heater6	
733:HT[E117]HT7_OVERCURRENT	Overcurrent detected in heater7	
733:HT[E118]HT8_OVERCURRENT	Overcurrent detected in heater8	
733:HT[E121]SSR1_SHORT	Short circuit detected in SSR1	1. Use a tester to check the input and output of the SSR. 2. If the resistance value between the input and output indicates a short circuit, the SSR is malfunctioning and needs to be replaced. • Be sure to turn the main power off before checking the components as described in steps 1 and 2. • To reset any errors, turn the main power off first, and then turn it back on.
733:HT[E122]SSR2_SHORT	Short circuit detected in SSR2	
733:HT[E123]SSR3_SHORT	Short circuit detected in SSR3	
733:HT[E124]SSR4_SHORT	Short circuit detected in SSR4	
733:HT[E125]SSR5_SHORT	Short circuit detected in SSR5	
733:HT[E126]SSR6_SHORT	Short circuit detected in SSR6	
733:HT[E127]SSR7_SHORT	Short circuit detected in SSR7	
733:HT[E128]SSR8_SHORT	Short circuit detected in SSR8	
733:HT[E128]POWER_CT_ERR	Power controller error	• Use the methods for confirming heater wiring disconnections, heater overcurrent, and short circuits in the SSR to search for any abnormalities.
733:HT[E128]ZERO_CROS_ERR	Zero cross error detected in G3ZA	Pinpoint the cause of the error. 1. Check for any SSR errors, emergency stops, or thermostat errors. 2. Check for any momentary power cuts or similar problems. • If you did not discover any errors following the steps described above, check the wiring and replace the G3ZA. • In case of any errors, turn the main power off first, and then turn it back on.

List of PLC error messages for color fix device/dryer - Warning

Message	Cause	Measures
73C:FIL[D001]FILTER_REPLASE	The filter has been used for more than 2000 hours since it was replaced.	• Reset the filter time after replacing the filter.
73C:FIL[D002]FILTER_CLEANING	The filter has been used for more than 300 hours since it was cleaned.	• Reset the time after cleaning the filter.
734:INV[E131]RESPONSE_ERR	The inverter did not respond to the operation command.	• Check the wiring between the PLC and inverter.
734:INV[E132]OPERATION_ERR	Inverter error	• Check for any errors in the blower operation, and make sure nothing is blocking the rotation of the blower.
734:INV[E133]BROWER_STOP	The blower stopped while the heater was in operation.	
735:EMR[E141]PRINTER_EMR	• The emergency button on the printer side was pressed. • The emergency button was pressed while the MC was switched off.	• Remove the cause of the emergency stop, release the emergency button, and then press the reset button on the touch panel.
735:EMR[E142]HEATER_EMR	The emergency button was pressed while the MC was switched on.	
736:COV[E151]COVER_OPEN	The cover was opened or is still open.	• Close the cover.
736:COV[E152]COVER_ERR	The cover was opened when the temperature inside the furnace was high, or is still open.	1. Close the cover. 2. Press the reset button on the touch panel.
737:TMP[E161]THERMOSTAT_ERR	Temperature error	1. Make sure that the sensor is connected correctly. 2. Check the operation of the external exhaust blower.
737:TMP[E162]TEMP_ABNL	• The temperature inside the furnace or the temperature on the media surface rose abnormally (220°C or higher). • There is a large disparity between the thermocouple and non-contact thermometer (100°C or more).	1. Make sure that the connector of the sensor is properly attached. 2. Make sure that the sensor is not dirty or damaged. 3. Make sure that the sensor is connected correctly.
738:TIM[E171]HEATER_TIMOUT	The heater was left on.	• Turn the heater on again.
739:PLC[E181]PLC_BATT_ERR	The backup battery of the PLC is depleted.	• Replace the PLC battery.
739:PLC[E182]PLC_SD_ERR	No SD card is inserted into the PLC, or there is a problem with the SD card.	1. Confirm that the cover of the SD card is not open. 2. Make sure that the SD card is inserted. 3. Replace the SD card (SDHC 32GB).
739:PLC[E183]PLC_VER_ERR	The program versions of the PLC and touch panel do not match.	• Update the program versions of the touch panel and main PLC unit simultaneously.
73A:COM[E191]CNT_COM_ERR	A communication error has occurred between the PLC and temperature controller.	• Make sure that the connection wiring is properly connected.
73A:COM[E192]PNT_COM_ERR	The communication from the printer was interrupted in the remote control mode.	• Make sure that the printer communication cable is not disconnected.
73A:COM[E193]CNT_COM_ERR2	A communication error has occurred between the PLC and temperature controller.	• Make sure that the connection wiring is properly connected.
73B:CNT[E200]CNT_ERR1	Unit 1 device error A	• Make sure that the temperature controller and G3ZA are properly connected.
73B:CNT[E220]CNT_ERR2	Unit 2 device error A	

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 6-4
Sheet for inquiry 6-5

Specifications

Machine specifications

Item		Specifications
Print head	Method	Drop-on-demand piezoelectric print heads
	Specifications	12 heads: In line head x 3-layered staggered arrangement
Drawing mode (scan x feed)		**4-color ink set** [*1] 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		Sb320 ink (M,B,Y,K,Lm,Lb), Non-deaeration, 2 liter bottle
Ink tank supply		Expansion system
Capacity of ink tank		3L/1 tank (UISS connection for Lb and Lm only for 4 colors or 6 colors, on carriage deaeration)
Media type		Preprocessed polyester material
Max. printing width		3290 mm (129.5 in)
Roll Media size	Maximum	3300 mm (129.9 in)
	Minimum	297 mm (11.7 in) [*2]
	Thickness	1.0 mm or less (0.039 in or less)
	Roll outside diameter	When using take-up unit and feeding unit : Φ300 mm or less (Φ11.8 in or less)
	Roll weight [*3]	When using feeding unit: 130 kg or less (286 lb or less)
	Roll inside diameter	When using take-up unit and feeding unit: 3 inches
	Printing surface	Involuted and revoluted
	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	297 mm (11.7 in)
Margin	Leaf media	Left end and right end : 15.0 mm (Default) Front : 150 mm Rear : 400 mm [*4 *5 *6] Left end and right end : 0.59 in (Default) Front : 5.9 in Rear : 15.7 in [*4 *5 *6]
	Roll media	Left end and right end : 15.0 mm (Default) Front : 150 mm Rear : 0 mm [*4 *5 *6] Left end and right end : 0.59 in (Default) Front : 5.9 in Rear : 0 in [*4 *5 *6]
Distance accuracy	Reproducibility	Whichever the larger one of ± 0.2 mm (0.007 in) or ± 0.1 % of the designated [*4 *7 *8]
Perpendicularity		± 0.5 mm / 1000 mm [*4 *7] (± 0.01 in / 39.4 in) [*4 *7]
Media skew		5 mm or less / 10 m [*4 *7] (0.19 in or less / 393.7 in) [*4 *7]
Head height adjustment		1.5 to 7.0 mm (0.06 in to 0.28 in) pitch user settings (media thickness auto measured)
Media delivery		Take-up device supplied as a standard accessory (switching possible between face in and face out [*9]).
Waste ink tank		Tank type (3.6 liters), FULL detection, bottle installation detection
Interface		USB 2.0, Ethernet 1000BASE-T [*10]
Command		MRL-IV
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 77 dB [*11]
Power		Main printer unit: Single phase AC200 - 240V ±10%, 50/60Hz ±1Hz, 29A or less In line color fix device/dryer: Three phase AC200V ±10%, 50/60 Hz ±1 Hz, 125A or less

Item		Specifications
Power consumption		Main printer unit: 7 kW or less In line color fix device/dryer: 50 kW or less (at 200V)
Recommended Environment	Available temp.	20 °C~30 °C (68°F~86°F)
	Humidity	35 to 65% Rh (No condensation)
	Guaranteed temp.	20 °C~ 25 °C (68°F~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	2,000 m (6,561.7 ft)
Weight		- Machine: 1430 kg (3,152.6 lb) - Color fix device/dryer + VT take-up device: 960 kg (2116 lb) - External supply: 30 kg (66.1 lb) - Electrical unit of color fix device/dryer: 140 kg (308.6 lb)
Outside dimensions		- Combined: 5620 mm (W) x 3050 mm (D) x 1820 mm (H) (221.3 in x 120.1 in x 71.7 in) Machine: 5620 mm (W) x 1800mm (D) x 1820 mm (H) (221.3 in x 70.9 in x 71.7 in) Color fix device/dryer + VT take-up device: 4300 mm (W) x 2000 mm (D) x 1040 mm (H) (169.3 in x 78.7 in x 40.9 in) - External supply: 960 mm (W) x 510 mm (D) x 730 mm (H) (37.8 in x 20.1 in x 28.7 in) - Electrical unit of color fix device/dryer: 910mm (W) x 600 mm (D) x 1240 mm (H) (35.8 in x 23.6 in x 48.8 in)

*1. Bold is the recommended pass.
*2. Print speed may decrease depending on the conditions.
*3. Without deflection of the roll when it is retained at both ends.
*4. The initial meandering of the media which is just set is excluded.
*5. Left and right margins can be changed.
*6. Error of ±2 mm
*7. The expansion and/or contraction of media is excluded.
*8. 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.
Roll media is used. One roll media is used. (except for twin rolls)
*9. “Involuted” for the media take-up direction is recommended.
*10. Directly connect the machine to a PC with a LAN cable.
*11. 76.9dB(A) operation conditions: Fast scan (in accordance with paragraph 1.7.4.2 of the Machinery Directive 2006/42/EC)

Ink specifications

Item		Specifications
Supply		2L Ink bottle
Color		Black ink Blue ink Magenta ink Yellow ink Light blue ink Light magenta ink
Ink capacity		2 liter
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 to 30˚C (41 to 86˚F)
	Transportation	1 to 60˚C (33.8 to 140˚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.)

Important!

- 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
SPA-0188	Maintenance kit
SPA-0189	HF filter replacement kit
SPA-0190	Mist airflow fan filter replacement kit
SPA-0193	Wiper kit
SPA-0196	Ink supply filter replacement kit
SPA-0197	Waste ink tank SL (Package)
ML003-Z-K1	Cleaning Liquid 03 MAINTENANCE KIT
SPC-0813	Flushing box absorber replacement kit
SPC-0814	NCU ink absorber replacement kit
SPC-0284	3L ink tank cap
SPC-0285	3L ink tank

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)

Tx500P-3200DS Operation Manual

April, 2018

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FW : 2.40