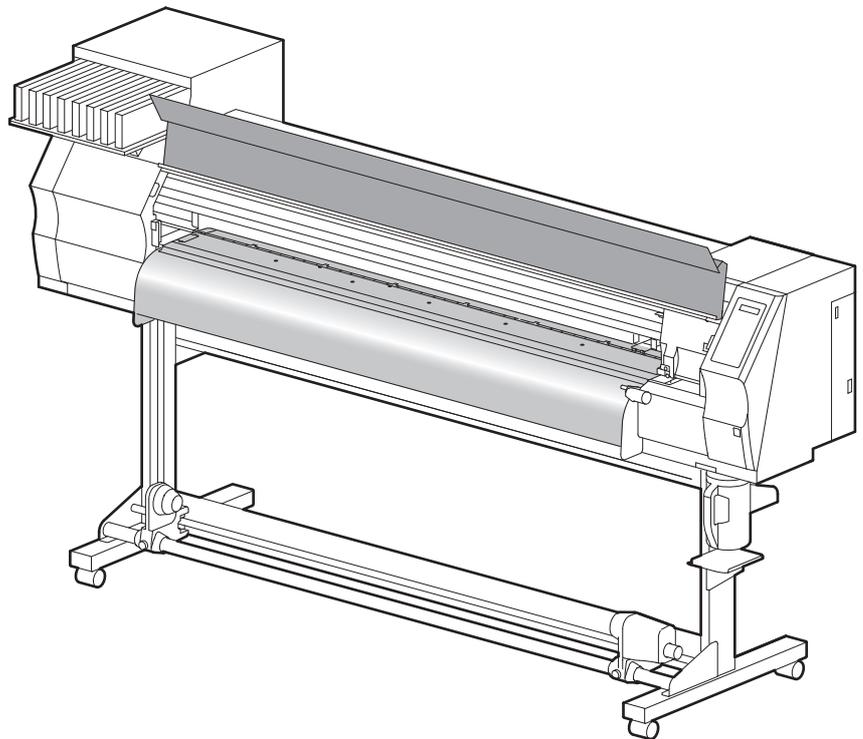


COLOR INKJET PRINTER

TS30-1300

OPERATION MANUAL



MIMAKI ENGINEERING CO., LTD.

URL: <http://www.mimaki.co.jp/>

D202977-10

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DISCLAIMER OF WARRANTY

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

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

Requests

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

FCC Statement (USA)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the Operation manual, may cause harmful interference to radio communications.

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

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

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

Interference to televisions and radios

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

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

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

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

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

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

Foreword

Congratulations on your purchase of MIMAKI color ink jet printer "TS30-1300" .

The TS30-1300 is a color ink-jet printer for high quality printing with sublimation dye ink Sb54 (4-color and 6-color).

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

On This Operation manual

- This Operation manual is describing the operations and maintenance of "Color inkjet printer TS30-1300" (called as this machine hereafter)
- Read this Operation manual carefully and understand them thoroughly to use.
- It is also necessary to keep this Operation manual on hand.
- This Operation manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Descriptions contained in this Operation manual are subject to change without any notice for improvement.
- In the case when this Operation manual should be illegible due to destruction or lost by fire or breakage, purchase another copy of the Operation manual from our office.

Safety Precautions

Symbols

Symbols are used in this Operation Manual for safe operation and for prevention of damage to the machine. The indicated sign is different depending on the content of caution. Symbols and their meanings are given below. Please follow these instructions as you read this manual.

Examples of symbols

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

Warning for Use



WARNING



- Do not use the machine in a poorly ventilated room or a closed room.
- Use the attached power cable.
- Take care not to damage, break or work upon the power cable. If a heavy material is placed on the power cable, or if it is heated or pulled, the power cable can break, thus resulting in fire or electric shocks.
- Avoid locating the machine in a damp environment. Do not splash water onto the machine. Use in such an environment can give rise to fire, electric shocks or breakdown of the machine.
- Use 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 switch 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 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 cartridge. Disassembly or remodeling can result in an electric shock or breakdown of the machine.
- Take care so that no dust or dirt sticks to the platen. Dust and dirt can cause fire.
- **Hazardous Moving Parts**
Keep Fingers and Other Body Parts Away

Precautions in Use



CAUTION

Power supply	Handling of ink
 <ul style="list-style-type: none"> • Leave the breaker turned ON. • Do not turn off the main power switch on the right side of this machine. 	 <ul style="list-style-type: none"> • If you get ink in your eyes, immediately wash your eyes with a lot of clean water for at least 15 minutes. In doing so, also wash eyes to rinse ink away completely. Then, consult a doctor as soon as possible. • If anyone drinks ink by mistake, keep him or her quiet and see a doctor immediately. Do not allow him or her to swallow the vomit. After that, contact the Poison Control Center.
<p>Note on maintenance</p>  <ul style="list-style-type: none"> • When cleaning the ink-station or the heads, make sure to wear the attached gloves. 	

CAUTIONS and NOTES



Warning

Handling of ink cartridges	Front cover and lever
<ul style="list-style-type: none"> • Use the TS30 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 TS30 genuine ink. • Do not use the TS30 genuine ink with other printers, as doing so may cause damage to such machines. • Never refill the ink cartridge with ink. Refilled ink cartridge can cause a trouble. Remember that MIMAKI assumes no responsibility for any damage caused by the use of the ink cartridge replenished with ink. • If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it. • Open the ink cartridge just before installing it in the machine. If it is opened and left for an extended period of time, normal printing performance of the machine may not be ensured. • Make sure to store ink cartridges in a cool and dark place. • Store ink cartridges and waste ink tank in a place that is out of the reach of children. • Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within three months. If an extended period of time has passed away after opening the cartridge tank, printing quality would be poor. • Neither pound the ink cartridge nor shake it violently, as doing so can cause leakage of ink. • Do not touch or stain the contacts of the ink cartridge, as doing so may cause damage to the print circuit board. • Waste ink is equivalent to waste oil of industrial waste. Request an industrial waste disposal company for disposal of waste ink. 	<ul style="list-style-type: none"> • Never open the front cover or raise the lever during printing. Opening the cover or raising the lever will abort printing.
	Handling of media
	<ul style="list-style-type: none"> • Use media recommended by MIMAKI to ensure reliable, high-quality printing. • Pay attention to the expansion and contraction of the media. Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract. The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked. • Do not use curled media. The use of curled media can not only cause a media jam but also affect print quality. Straighten the sheet of media, if significantly curled, before using it for printing. If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.
Protection of media from dust	
<ul style="list-style-type: none"> • Store media in a bag. Wiping off dust accumulated on media will adversely affect the media due to static electricity. • When leaving the workshop after the working hours, do not leave any media on the roll hanger. If any media is left on the roll hanger, it can get dusty. 	



Warning

Notes on maintenance

- It is strongly recommended to use the machine in a room that is not dusty. Set the Refresh level 2 or 3 when the machine is to be used in an unfavorable environment. (P.3-23 “Setting of Refreshing”)
- Keep the front cover closed even when the machine is not printing. If not, dust can accumulate on the nozzles in the heads.
- Dust in the heads can also cause drops of ink to fall suddenly down on the media during printing. In such a case, be sure to clean up the heads. (P.3-16 “Setting Auto cleaning”)
- When cleaning the ink-station or the heads, make sure to wear the attached gloves.
- Perform wiping (removal of dust and paper powder) of the capping station and wiper frequently.

Periodic replacement parts

- 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 where temperature or humidity varies significantly
		<ul style="list-style-type: none"> • Use the machine under the following environmental conditions: • Operating environment: 20 to 35 °C (68 to 95 °F) 35 to 65 % (Rh)
A place that vibrates	A place exposed to direct air flow from an air conditioner or the like.	Around a place where fire is used

CHAPTER 1

Before Use



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

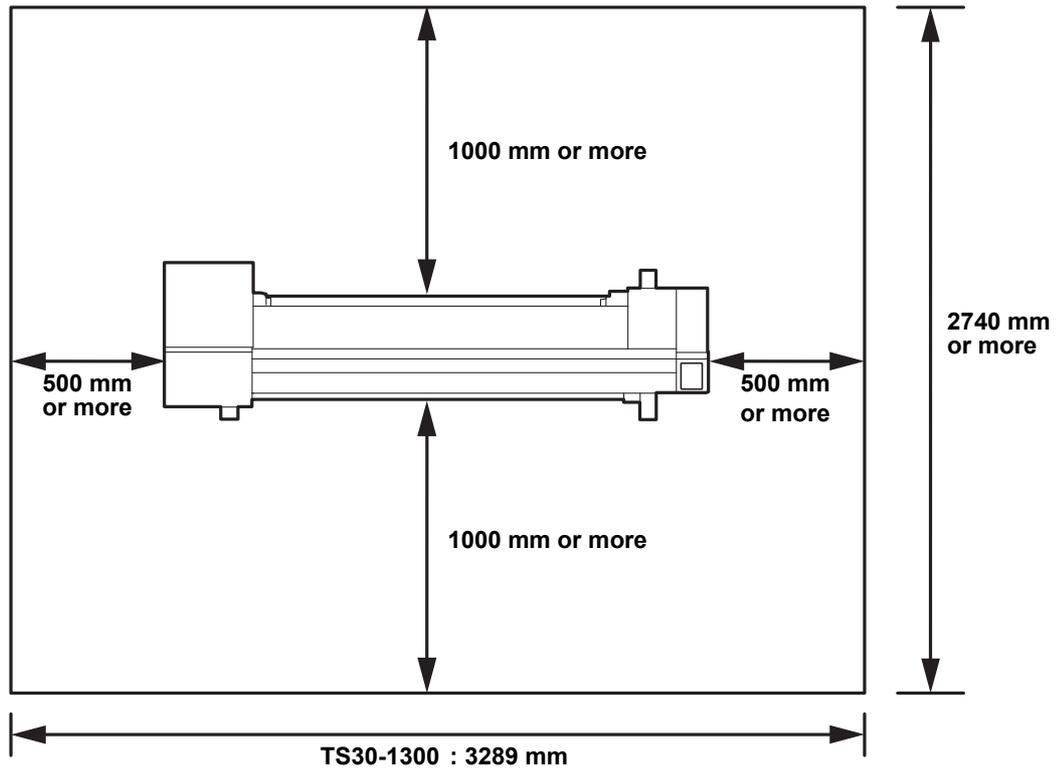
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Moving this machine

Where to install this machine

Secure a suitable installation space before assembling this machine. The place of installation must have enough space for not only this machine itself but also for printing operation.

Model	Width	Depth	Height	Gross weight
TS30-1300	2289mm	739mm	1424mm	145kg



Working environmental temperature

Use this machine in an environment of 20 to 35°C to ensure reliable printing.

Moving this machine

Move this machine according to the following steps when this machine is required to move on the step-free same floor.

Important!

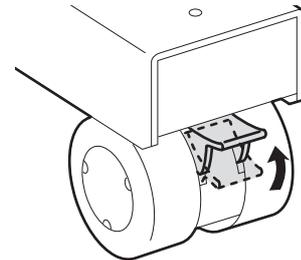
- When this machine is to be moved to any place other than on the same step-free floor, contact your distributor or a sales office of MIMAKI.
If you move it by yourself, failure or damage may occur.
Be sure to request your distributor or a sales office of MIMAKI to move this machine.



- When moving this machine, take care not to give a significant impact on it.
- Be sure to lock the caster after moving of this machine.

1

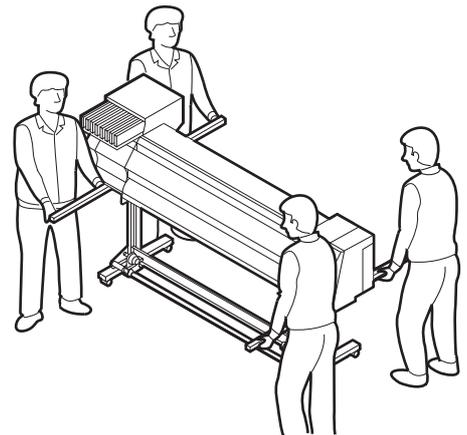
Release the lock of caster.



2

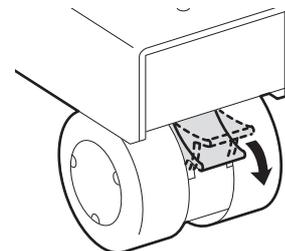
Move this machine as shown in the figure.

- For safety, be sure to work it with more than 2 persons.
- Do not push the cover to move this machine since the cover may be broken.



3

Lock the caster.



1

Before Use

Names of Parts and Functions

Front

Maintenance cover

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

Ink cartridges

Each cartridge contains an ink of a particular color.

Cartridge protection cover

This prevents an injury or breakage of the machine due to a protrusion of the 440 cc cartridge.
(It is located under the ink cartridge.)

Front cover

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

Clamp lever (front)

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

Carriage

Moves the print head unit from side to side.

Operation panel

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

Power switch^{*1}

Turns on/off the power to the machine.

Waste ink tank

Waste ink gathers in this tank.

Take-up device

This device is not installed to the TS30-1300.

Stand

Supports the main body of the machine. It is provided with casters that are used to move this machine.

Platen

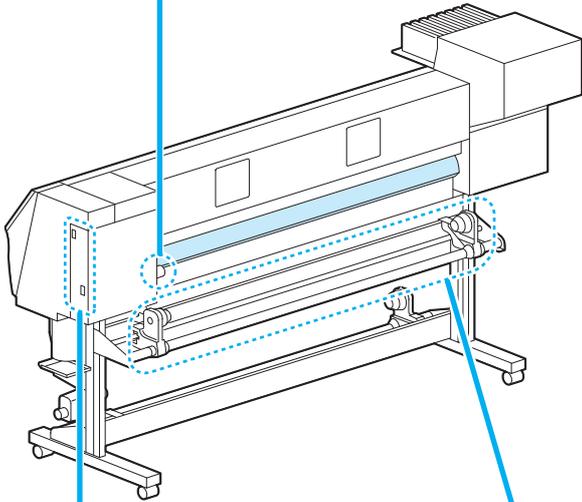
The printed media is sent out, sliding on the platen.

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

Rear / Sides

1
Before Use

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



Roll holders
Hold a media by inserting it into the right and left ends of the core of the roll media. Roll holders are available for the 2 inches and 3 inches core of the roll media.

USB 2.0 connector
This is USB2.0 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.

Display

Displays the status of the machine, set items and errors.

ACTIVE lamp

Blinks in receiving or drawing data.

USER TYPE key

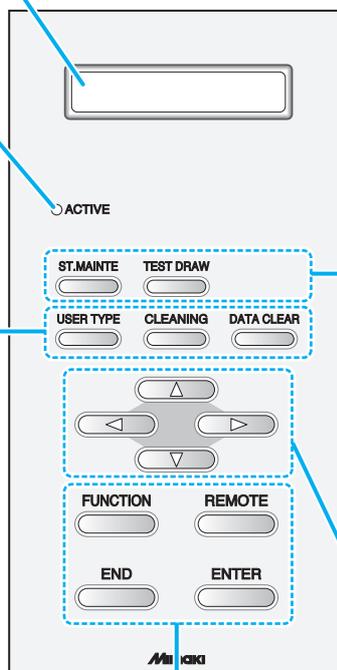
Selects User type.

CLEANING key

Executes Head cleaning at ink clogging.

DATA CLEAR key

Deletes the data that have been received.



ST.MAINT key

Use this key on Station maintenance.

TEST DRAW key

Draws test patterns to check if there are any drawing failures such as ink clogging.

JOG key

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

FUNCTION key

Use this key to display function setting menu.

END key

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

REMOTE key

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

ENTER key

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

Functions of the JOG keys

Each of the JOG keys varies in function according to the condition of the machine under which the key is used. The functions of the JOG keys are as follows:

	Before the detection of media	After the detection of media	When selecting a function	When selecting a setting value
	Detects the width of the media.	Shifts the carriage to the left.		
	Detects the width and length of the media.	Shifts the carriage to the right.		
		Moves the media inward.	Returns to the previously indicated function again.	Selects the previously indicated value again.
		Moves the media forward.	Goes to the next function.	Selects the next value.

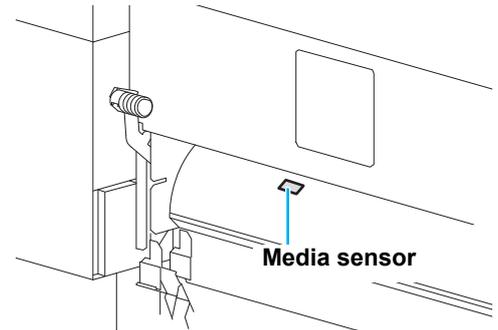
Media sensor

The media sensor detects the presence of the media and the media length.

This machine has a media sensor on the platen (in the rear).

Important!

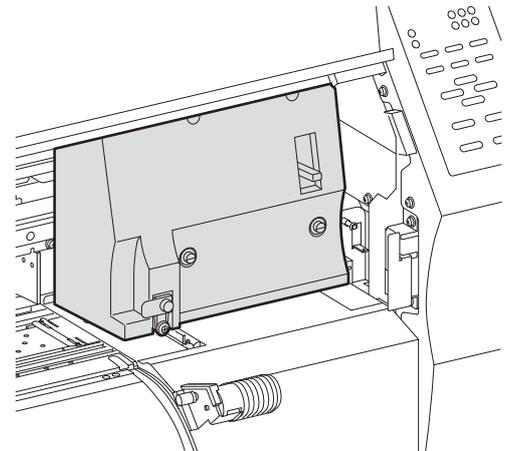
- Set the media so that the media sensor located in the rear of the platen is covered with the media without fail. The media can not be detected unless it is placed over the sensor.



Carriage

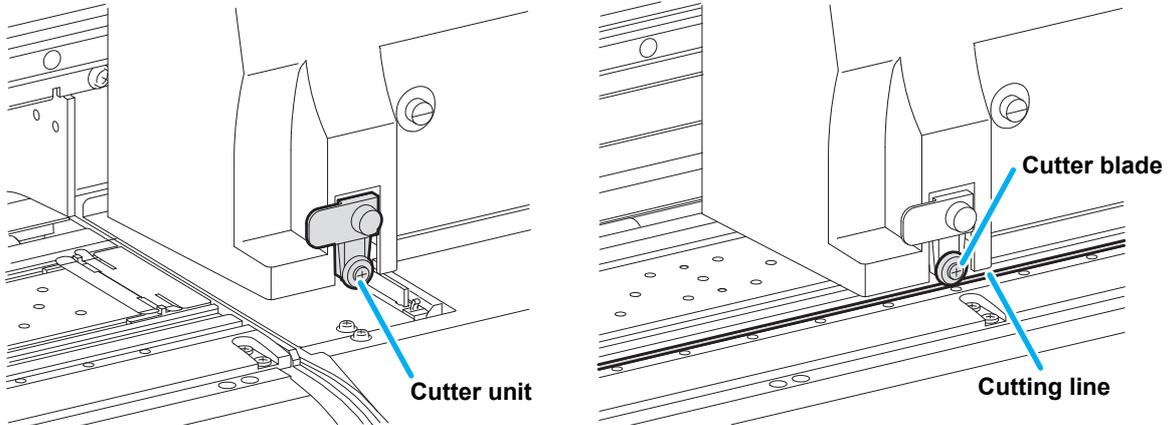
The carriage is provided with the ink heads for printing, the cutter unit for cutting off the sheet of media, etc.

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



Cutter blade and cutting line

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



Capping station

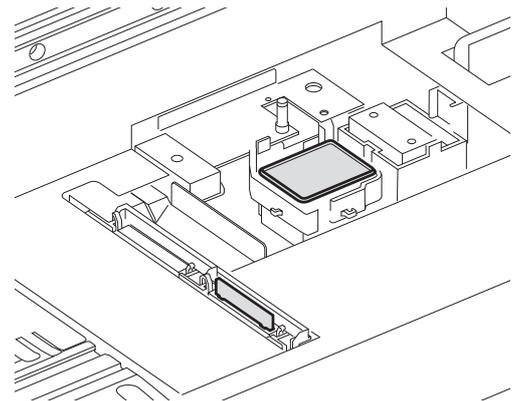


- Be sure to wear the attached goggles in cleaning within the capping station to protect your eyes against ink.

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

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

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

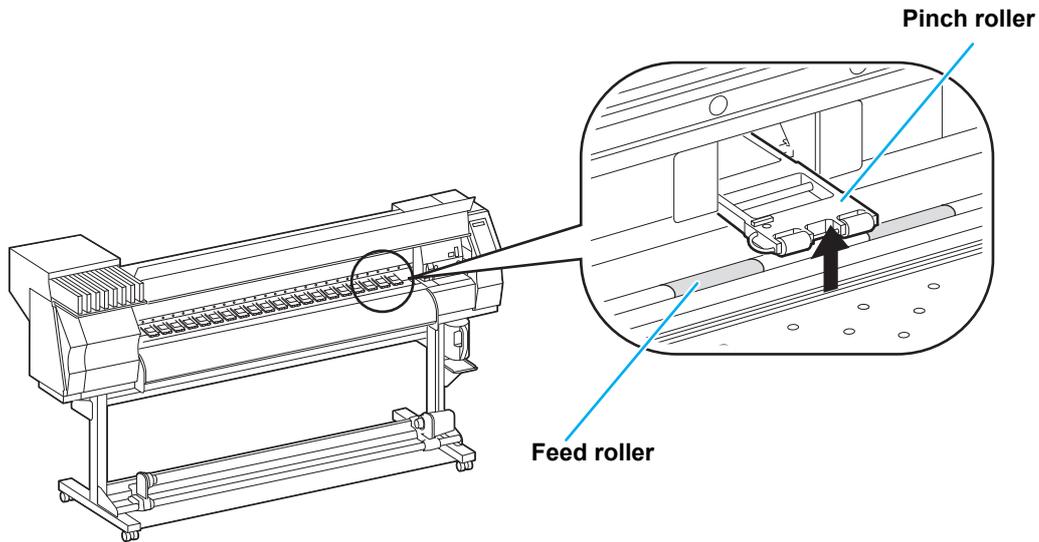


Pinch rollers and Feed rollers

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.



1

Before Use

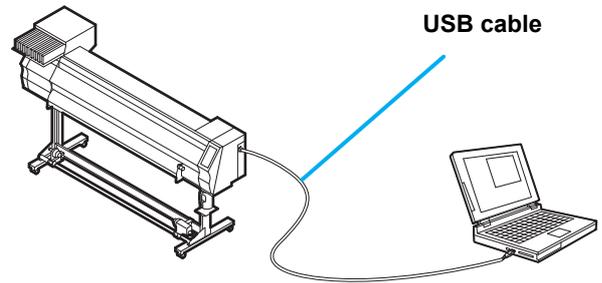
Connecting cables

Connecting USB2.0 interface cable

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



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



Notes on USB 2.0 Interface

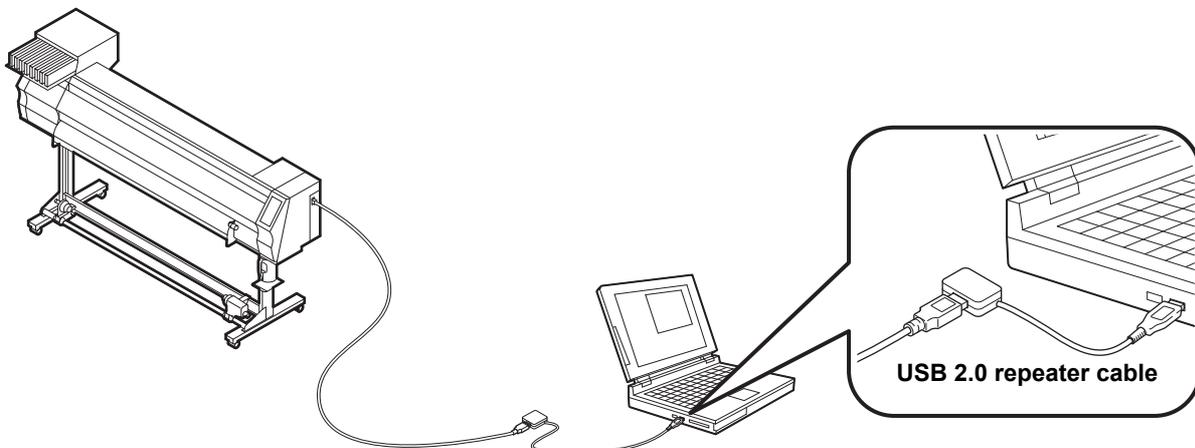


- Your RIP must be compatible with USB 2.0.

● When two or more TS30 machines are connected to one personal computer

When two or more TS30 machines are connected to one personal computer, the personal computer may not recognize all the TS30 machines normally.

Reconnect the unrecognized TS30 machine to another USB port, if available, and check to see if it is recognized. If the TS30 machine is not recognized by the newly connected USB port, use USB 2.0 repeater cables available on the market.



● Notes on peripheral devices in USB high speed mode

When a peripheral device (USB memory or USB HDD) to be operated in USB high speed mode is connected to the same personal computer that a TS30 machine is connected to, the USB device may not be recognized.

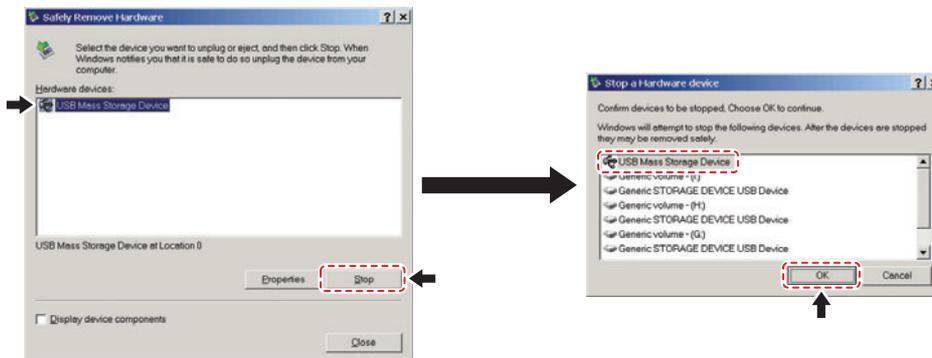
When a TS30 printer is connected to the personal computer to an externally installed USB hard disk drive, the data output speed to the TS30 machine may drop. That can cause the head unit to stop temporarily at the right or left end during printing.

● Removing USB memory

If a USB memory module is inserted in the personal computer to which a TS30 machine is connected, click "Stop" in the "Safely Remove Hardware" window by following the instructions given there first and then remove the module.

Leaving a USB memory module inserted can cause [ERROR 10 COMMAND ERROR].

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



1

Before Use

Connecting the power cable

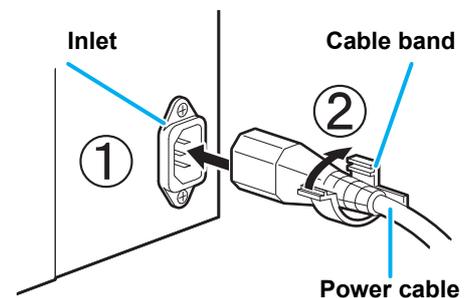
1

Insert the power cable into an inlet of the machine.

2

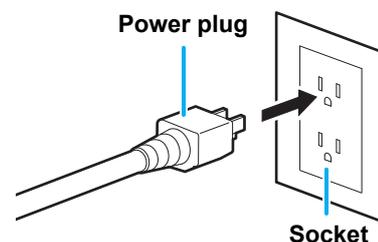
Secure a cable band.

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



3

Insert the power plug into a plug socket.



Warning

- Do not use other power cables than the attached power cable.



Important!

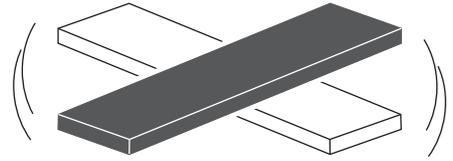
- Be sure to connect the power cable to the power plug socket near to this machine, and make sure that the power cable is easily removed.
- Connect the power cable to the grounded plug socket. Otherwise, it may result in fire or an electric shock.

Inserting ink cartridges

Insert an ink cartridges.

1

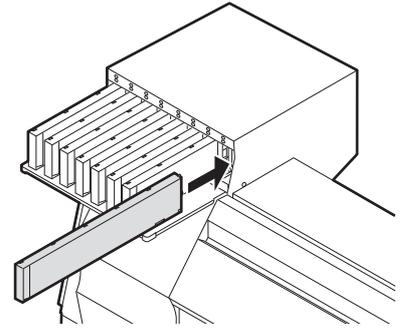
Shake the ink cartridge as shown on the right.



2

Insert the ink cartridge.

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



Changing an ink cartridge

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

● When [INK END] is displayed

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

● When [INK NEAR END] is displayed

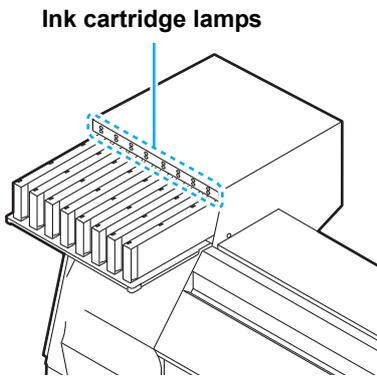
There is a little of ink left. It is recommended to replace the ink cartridge soon since ink may become empty in printing while printing is continuously enabled.

Important!

- During [INK NEAR END] is displayed, the setting of In-printing cleaning is disabled. (☞ P.3-18)

For Ink cartridge lamps

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



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

Caution in handling of ink cartridges



- 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 cartridges for this machine. This machine functions by recognizing the genuine ink cartridges. In case of troubles caused by modified ink cartridges or the like, it shall be out of the warranty even within the warranty period.
- If the ink cartridge is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using it.
- Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within three months. If an extended period of time has passed away after opening the cartridge tank, printing quality would be poor.
- Make sure to store ink cartridges in a cool and dark place.
- Store ink cartridges and waste ink tank in a place that is out of the reach of children.
- Request an industrial waste processor for processing of empty ink cartridges.
- Do not shake ink cartridges violently. This may result in ink leakage from the ink cartridges.
- Never refill the ink cartridges with ink. This may result in troubles.
MIMAKI will not bear any responsibility for any damage caused by the use of the ink cartridges refilled with ink.
- Do not touch or stain the contacts of the ink cartridge. This may cause damages on printed circuit boards.
- Do not disassemble the ink cartridges.



Useable media sizes and notes for handling are described.

Usable sizes of media

Model		TS30-1300
Maximum width		1371mm
Minimum width		210mm
Maximum printing width		1361mm
Roll media	Thickness	1.0mm or less
	Roll outside diameter	φ 180mm or less
	Roll weight	25kg or less
	Roll inside diameter	3 or 2 inches
	Side printed	Side facing outward
	Roll end treatment	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.

Caution in handling of medias

Pay attention to the followings for handling of medias.



- **Use media recommended by MIMAKI to ensure reliable, high-quality printing.**
Set the heater temperature to meet the characteristics of the media.
- **Pay attention to the expansion and contraction of the media.**
Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract.
The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked.
- **Do not use curled media.**
This may result in paper jamming.
If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.

Menu mode

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

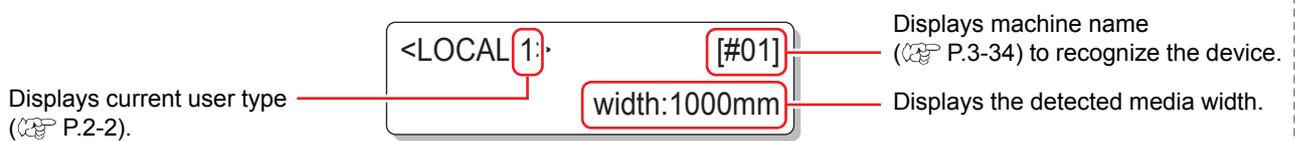
NOT-READY mode

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

LOCAL mode

Local mode is the mode for the drawing preparation state.
All the keys are effective.
The machine can receive data from the computer. However, it does not perform printing.

Screen display in Local mode



This mode permits the following operations:

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

FUNCTION mode

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

REMOTE mode

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

CHAPTER 2

Basic Operations



The procedures from the ink and media preparation to drawing and the setting procedures are described.

User type	2-2	Test printing	2-16
Set items registrable to User type	2-2	Test printing	2-16
Using the registered user type	2-2	Head cleaning	2-17
Workflow	2-3	Drawing data	2-18
Turning the power ON/OFF	2-4	Starting the print	2-18
Turning the power ON	2-4	Stopping the print temporarily	2-19
Turning the power OFF	2-5	Erasing the received data (Data clear) ..	2-19
Setting medias	2-6	Cutting a media	2-20
Useable medias	2-6		
Adjusting the head height	2-6		
Setting a roll media	2-8		
Setting leaf media	2-13		
Changing the printing origin	2-15		

User type

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

Set items registrable to User type

For the registering procedures to User type (1 to 4), refer to P.3-2 .

Set items	Reference page	Set items	Reference page
Setting Media compensation	P.3-5	Setting of Refreshing	P.3-22
Setting Print mode	P.3-8	Setting of Adsorption	
Setting of the number of ink layers	P.3-22	Setting of Feeding speed level	
Setting of Drying time	P.3-12	Setting of Priority	P.3-14
Setting of Auto cut	P.3-22	Setting of Auto cleaning	P.3-16
Setting of Pre-feeding		Setting of In-printing cleaning	P.3-18
Setting of Margins	P.3-13	Setting of Media detection	P.3-20
Setting of Color patterns	P.3-22	Setting of Feed origin	P.3-22

Using the registered user type

1

In the local mode, press the **USER TYPE** key.

```
<LOCAL . 1>      [#01]  
width:****mm
```

2

Select User type (1 to 4) by using the **▲** **▼** keys.

```
USER TYPE CHANGE  
TYPE(1) -> <2> :ent
```

• This is also selectable by pressing the **USER TYPE** key.

3

Press the **ENTER** key.

```
<LOCAL . 2>      [#01]  
width:****mm
```

Number of the selected user type

For selecting the user type without the **USER TYPE** key.

The user type is selectable from the local mode by pressing the **FUNCTION** key, not by pressing the **USER TYPE** key.

In the local mode,
press the
FUNCTION key.

Press the **ENTER**
key after [SET UP] is
confirmed.

Select User type (1
to 4) by pressing
the **▲** **▼** keys.

Press the
ENTER key.

1 Turning the power ON/OFF

Referring to “Turning the power ON/OFF” (☞ P.2-4).

2 Setting medias

Referring to “Setting medias” (☞ P.2-6).

3 Test printing

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

4 Drawing data

Referring to “Drawing data” (☞ P.2-18).

Turning the power ON/OFF

Turning the power ON

The machine is provided with the following two power switches.

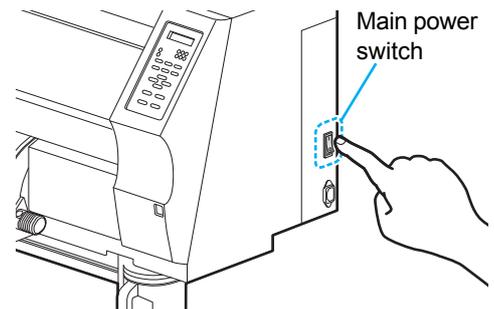
Main power switch : At the side of this machine. Keep it "ON" always.

Power switch : Normally, use this switch to turn the power ON/OFF. The power switch lights in green when the power is ON and blinks in green when it is OFF.
The power switch under the operation panel lights in green when the power is turned on, and blinks when the power switch is turned off.
The nozzle clogging prevention function is periodically operated even when the power switch is OFF if the main power switch keeps being ON. (The power switch blinks in green.)

1

Turn the main power switch ON.

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



- The firmware version is displayed when the power is turned on.
- This machine performs initial operation.

TS30 - 1300 V * . **

Please Wait

2

This machine enters the LOCAL mode.

<LOCAL . 1> [#01]

3

Turn the power of the connected PC ON.

Important!

- Turn the power ON after the front cover and maintenance cover are closed.
- The head nozzle may result in nozzle clogging if the main power switch is kept being "OFF" for a long time.

Turning the power OFF

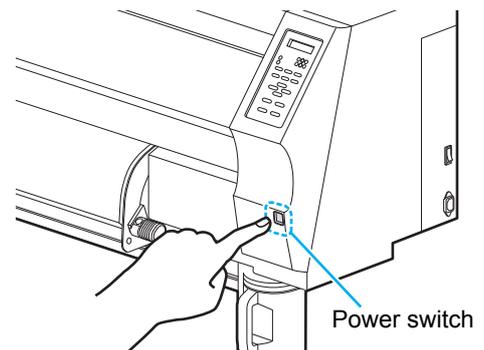
Turn the power OFF by pressing the power switch located on the side of after using.
Check the followings when the power is turned off.

- If it is in receiving of data from the PC, or there is any data un-output.
- If the head has returned to the capping station.
- If any error occurs. (☞ P.5-8 “Error messages”)

1 Turn the power of the connected PC OFF.

2 Turn the power OFF by pressing the power switch.

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



Cautions in turning the power OFF

● Do not turn the main power switch OFF.

If the main power switch is ON, the power periodically turns on and the nozzle clogging prevention function (Flushing function) is operated.

If the main power switch is OFF, the sleep function such as the flushing function does not work and this may cause nozzle clogging.

● Keep the front cover and the maintenance cover closed.

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

● Turn the power OFF after confirming of the head position.

If the power is turned off in such condition that the head does not return to the capping station, this may cause nozzle clogging due to drying of the head.

At this case, turn the power ON again, and then turn the power OFF after confirming of that the head has returned to the capping station.

● Do not turn the power OFF in drawing.

The head may not return to the capping station.

● Turn the power switch OFF then turn the main power switch OFF.

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

Setting medias

Useable medias

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

Adjusting the head height

Adjust the head height according to the thickness of the media used.

Important!

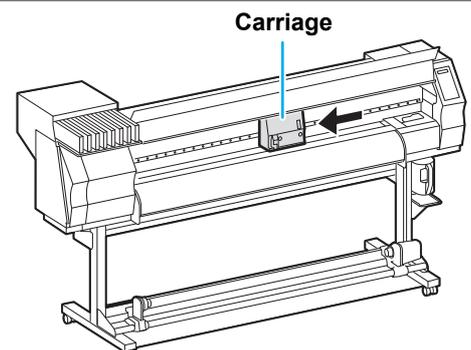
- Adjust the head height prior to setting of the media. If the head height is adjusted after the media is set, this may cause media jamming, deterioration of the drawing quality or head damage.
- The range of the initial head height is adjustable by 2 levels according to the purpose of use.
- The range of the printing height of TS30 is from the general printing (L range: 2 mm/3 mm) to the transfer printing (H range: 4 mm/5 mm) (Set to L range 2 mm at shipping)
- If the drawing quality is set to "Bi-D" (☞ P.3-10), perform "DROP POSITION" of the maintenance function after the head height is adjusted. (☞ P.4-21)

Adjusting the head height

1

Move the carriage to the platen.

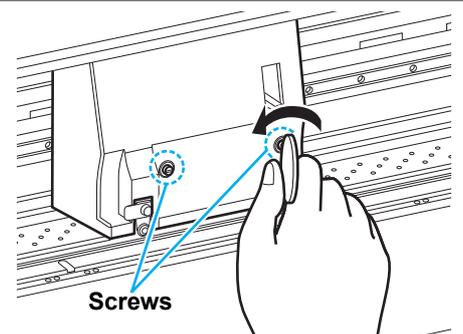
- When the device is turned on :
Execute [ST.MAINTENANCE] - [CARRIAGE OUT]
(☞ P.4-5 Step 1,2)
- When the device is turned off :
Open the front cover, then move the carriage with hand.



2

Loosen two screws located at the front.

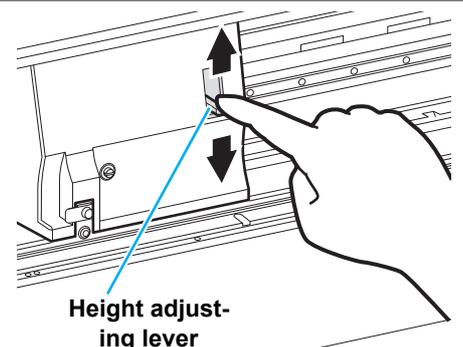
- Loosen the screws, rotating by one turn with a screwdriver.



3

Adjust the height-adjusting lever according to the media.

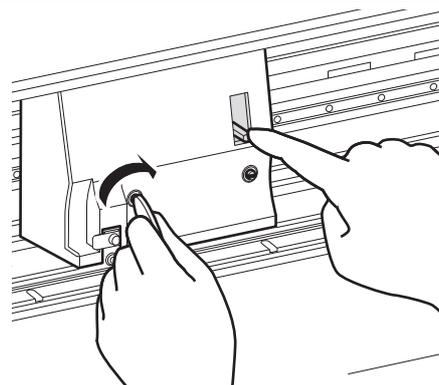
- Adjust the position of the lever, referring to "For the adjusting lever and the range".
- Set the height-adjusting lever to the highest stage or the lowest stage. Setting it to the intermediate height, a printing fault can result.



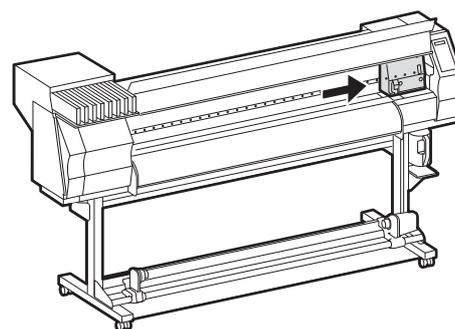
4

Keeping the height adjusting lever held at the aforementioned position, tighten the two screws.

- Be sure to fasten the screws, pressing the height-adjusting lever, otherwise the head can not be secured at the correct position.
- Fasten the screws securely.

**5**

Return the carriage to the station position.



For the adjusting lever and the range

Range	Height adjusting lever	Head height	Switching area	
L range (General printing)	Thin : light-weight	2mm (The set position at shipping)	Switch by user	Contact to our sales office for switching L <-> H by field person.
	Thick : heavy-weight	3mm		
H range (Transfer type printing)	Thin : light-weight	4mm		
	Thick : heavy-weight	5mm		



- Set the lever to "Thick" when a thicker media is used.
- Set the lever to the lower stage (Thick) if dust is likely to gather in the head or the head is likely to rub on the media to leave ink on it.



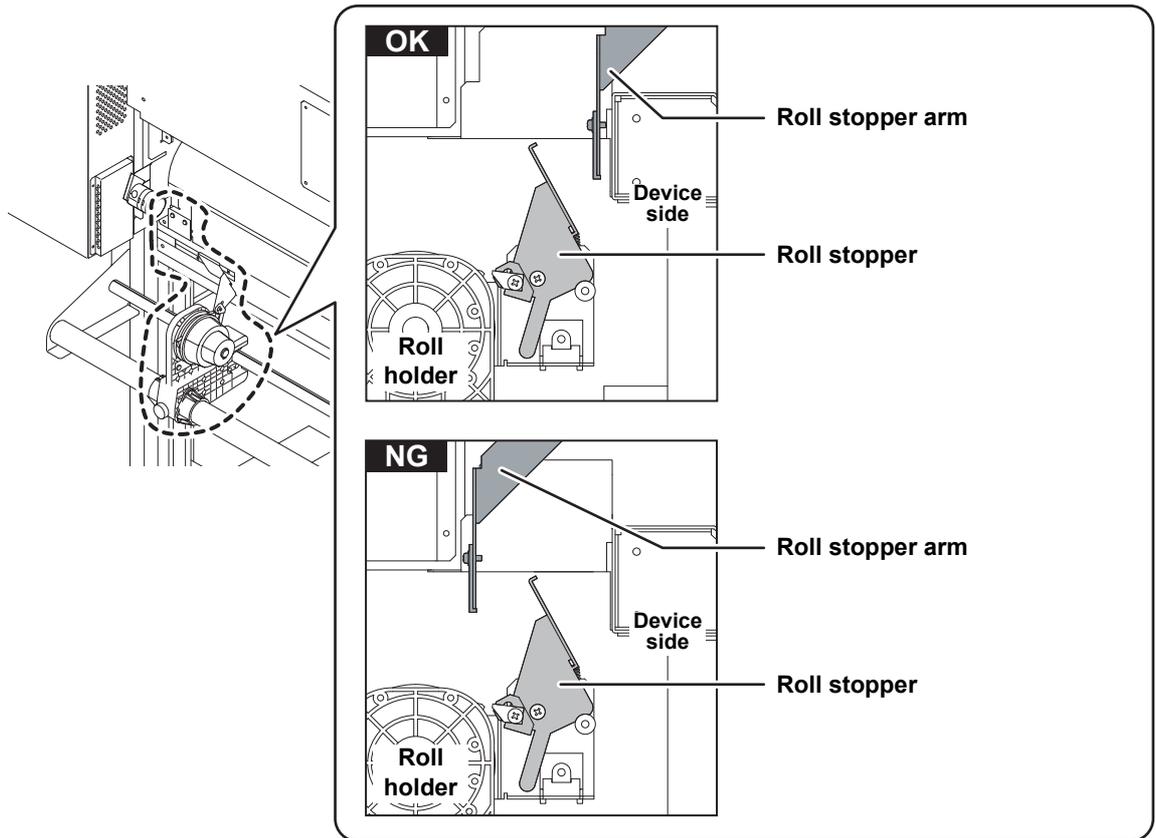
- When the ink is changed from dye ink to other aqueous ink, or on the contrary, after the machine is installed, the adjustment is required for the head initial height (H/L range). Consult with our sales office about it.

Setting a roll media

Set a roll media to the roll media hanger located on the back of this machine.



- Take care not to drop the media on a foot or so when the media is set. It may cause an injury due to the media.
- The roll stopper arm works with the clamp lever. Do not push the clamp lever down while roll stopper is caught between the roll stopper arm and this machine. The roll stopper arm might be broken and roll stopper function *1 might be disabled.

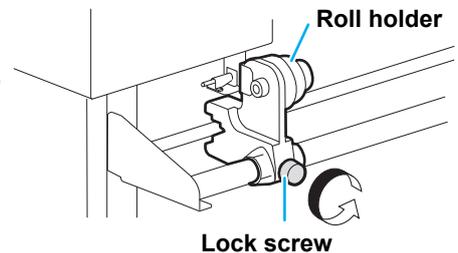


*1. The function that once pulled out a certain amount of media, media pullout is temporarily locked.

1

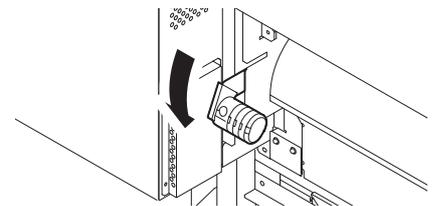
Move the roll holder located in the back of the device to the direction of the middle of the device.

- Loosen the roll holder fixing screw and then move it.



2

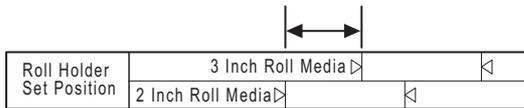
Check the clamp lever is lowered.



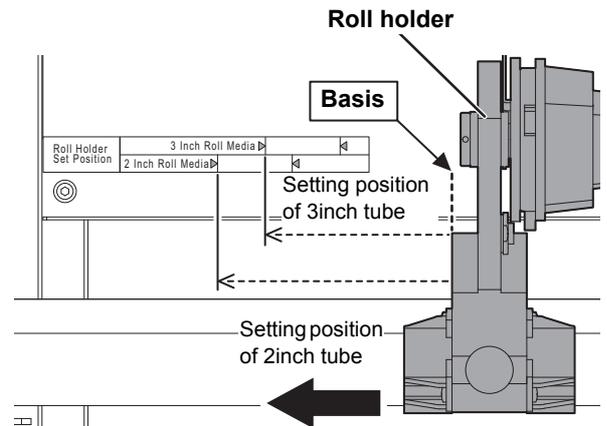
3

Move the roll holder to the roll setting position.

Set the base position of roll holder within this range.



- There are two types of the internal diameter of the roll media paper tube: 2 inch and 3 inch.



**Roll Holder Side
(The back of this machine)**

- Check the roll stopper is not caught between the roll stopper arm and this machine.

4

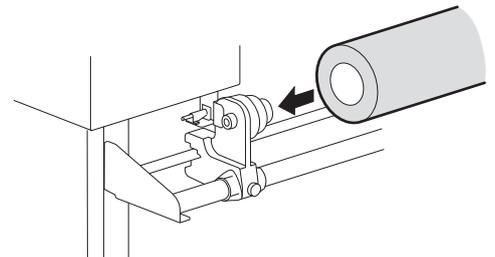
Tighten the roll holder fixing screw.

- Check the Step 2 to 3 again.

5

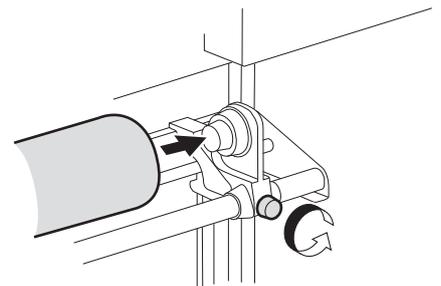
Set the left end of the core of the roll media on the let roll holder.

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



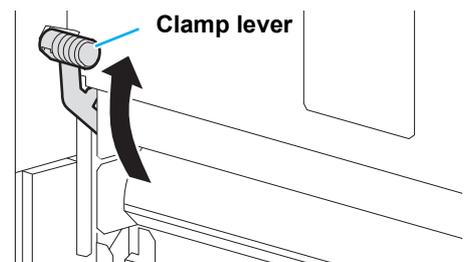
6

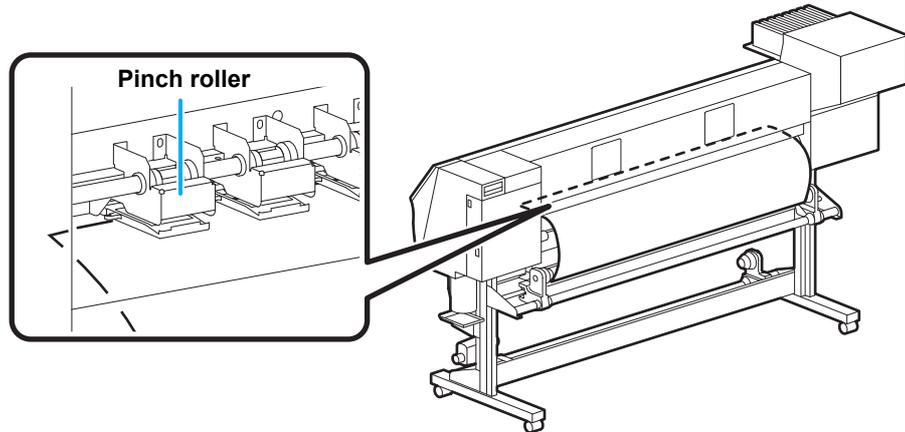
Loosen the screw of the right side roll holder then insert the holder into the core of the roll media.



7

Raise the clamp lever in the front of this machine.

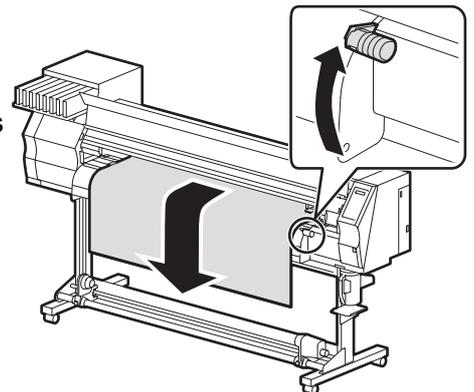


8**Insert the roll media in this machine.**

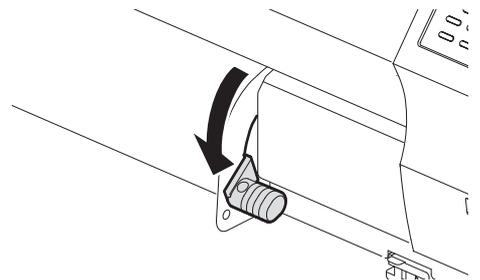
- The roll media can be smoothly inserted by slanting the media.
- (1) Pull the media out of the roll to the head of the platen.
 - (2) Insert the media between the platen and the pinch roller.
 - Pull the media out of the roll so that the media can be grasped from the front of the machine.
 - (3) Push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

9**Pull out the roll media out.**

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

**10****Make the roll media even then lower the clamp lever.**

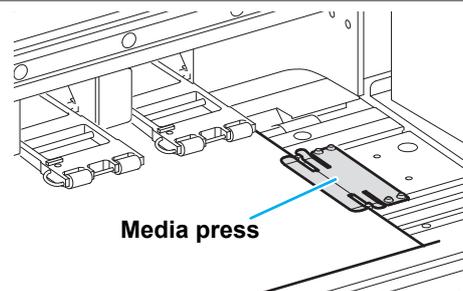
- Pulling several positions of the media lightly, Lower the clamp lever after confirming that the amount of the roll media pulled out is almost even.



11

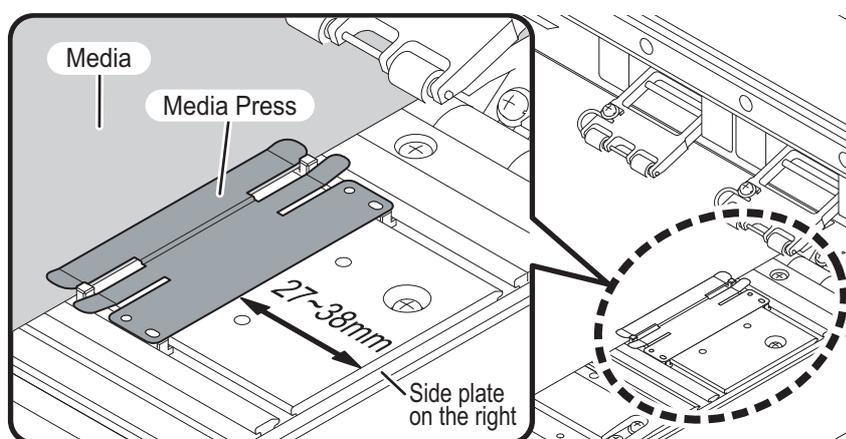
Hold the media with the media press gently.

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



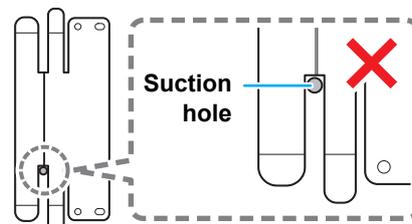
- Do not set media at the position which the media press touches the side plate on the right. As media may tilt and be lifted, it could break the head.
- If a media is misaligned to the right more than fixed position, a warning is displayed. Set the media again.

***** ERROR 50 *****
MEDIA SET POSITION R



Media press position: 27 to 38 mm from the side plate on the right.
(For the variation of the inside diameter of media roll, it ranges as above.)

- Do not locate the suction hole on the platen between the media and the media press. (It may stain the media.)



12

Press the key to select "ROLL" .

- Detects the media width.
- When [MEDIA RESIDUAL] of the maintenance function is "ON" (P.4-29), the screen for entering media remaining amount is displayed after detecting the media width.

MEDIA SELECT
ROLL < > LEAF

2

Basic Operations

Entering the media remaining amount

When [MEDIA RESIDUAL] of the maintenance function is "ON" (☞ P.4-29), the screen for entering media remaining amount is displayed after detecting the media width.

1

Display the screen for entering media remaining amount.

Input of MediaLength
MEDIA LENGTH =xxx.xm

2

Press  and  key to enter the media remaining amount.

Input of MediaLength
MEDIA LENGTH = 50.0m

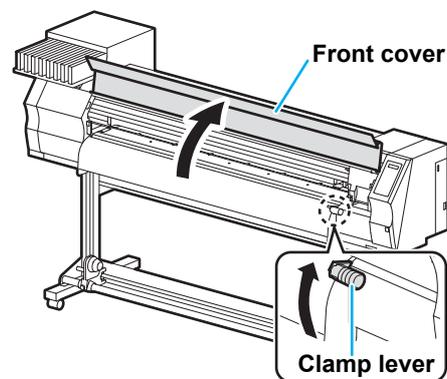
3

Press the  key.

Setting leaf media

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

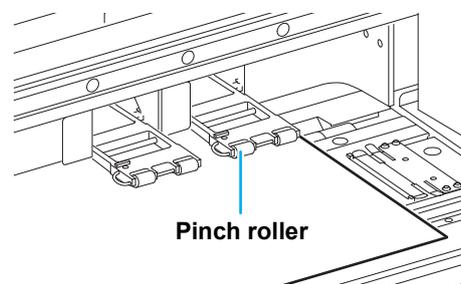
1 Open the front cover.



2 Raise the clamp lever.

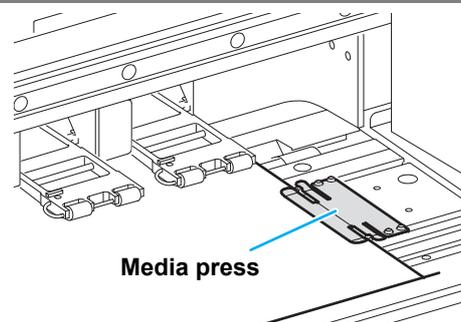
3 Insert the leaf media between the platen and the pinch rollers.

- Set the media so that no media sticks out from the right end pinch roller to the right side.



4 Hold the media with the media press gently.

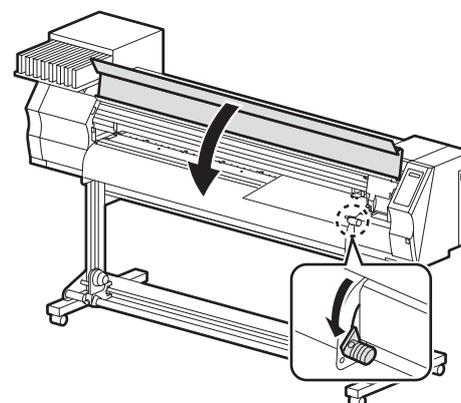
- Set the media so that no media sticks out from the right end pinch roller to the right side.
- When using a thick media, remove the media press from the media before printing.



5 Push down the clamp lever.

- Set the media straight.

6 Close the front cover.



2

Basic Operations

7 Press the **ENTER** key.

8 Press the **▶** key to select "LEAF".

MEDIA SELECT
ROLL < > LEAF

9 The media detection is started.

DETECTING MEDIA NOW
PLEASE WAIT

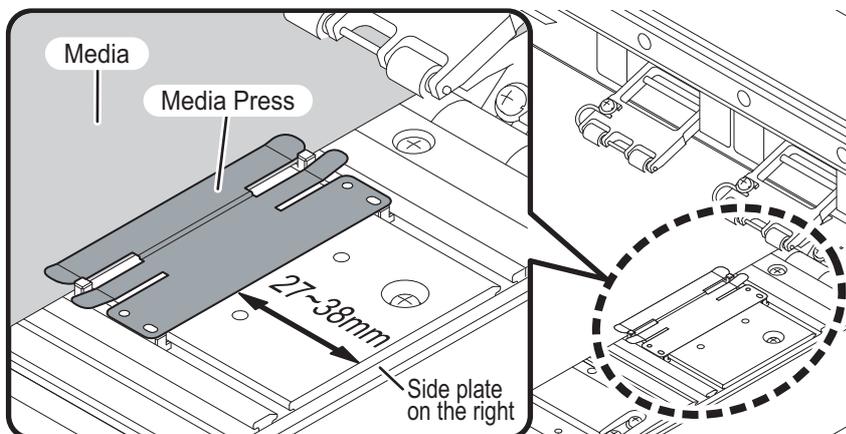
- (1) The media width is detected.
- (2) The media is fed then the rear end of media is detected.
- (3) It returns to the local mode when the detection is completed.

Notes when using media press



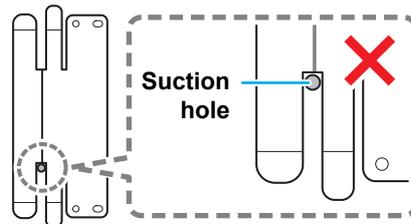
- Do not set media at the position which the media press touches the side plate on the right. As media may tilt and be lifted, it could break the head.
- If a media is misaligned to the right more than fixed position, a warning is displayed. Set the media again.

***** ERROR 50 *****
MEDIA SET POSITION R



Media press position: 27 to 38 mm from the side plate on the right.
(For the variation of the inside diameter of media roll, it ranges as above.)

- Do not locate the suction hole on the platen between the media and the media press. (It may stain the media.)



Changing the printing origin

The position of the printing origin can be changed.
Moving the LED pointer to the changing position and deciding the position.

1 In the local mode, press the keys.

- It enters into the origin setting mode.

```
ORIGIN SETUP
0.0      ----
```

2 Set a light point of the LED pointer to the changing position by pressing the keys.

- Select the carriage and media, moving the point with the     keys.

```
ORIGIN  SETUP
0.0     0.0
Origin  Origin
(Length) (Width)
```

3 After determining the origin, press the key.

- The printing origin is changed.

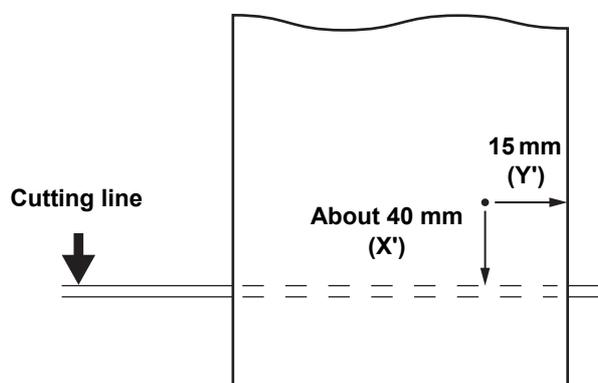
```
ORIGIN SETUP
** ORIGIN **
```



- The origin position set above misaligns with the feeding direction of a media by a few centimeters. Turn [FEED ORIGIN] "ON" in setup mode to fit the origin to the correct light position of LED pointer. (P.3-4)

Typical setting position of printing origin

The printing origin in the depth direction (X') is positioned at about 40 mm rearward from the cutting line. The printing origin in the scanning direction (Y') is positioned at 15 mm from the right end of the media. The value in the scanning direction (Y') can be changed using [MARGIN] in FUNCTION mode. This can be changed by using the Jog key.



Test printing

Perform the test printing to check if printing failures (blurring or missing) due to nozzle clogging or the like occur on the printed.

Test printing

Important!

- When a leaf media is used, set a larger media than the A4 size in longitudinal feeding.
- When a roll media is used, rewind the roll media by hands prior to printing so that it is set in the tightened condition. The loosened may result in failures of the image quality.

Check before the test printing	• If a media has been set. (P.2-6)	• If the origin position has been set.
	• If the head gap has been adjusted. (P.2-6)	

1

In the local mode, press the **TEST DRAW** key.

```
TEST DRAW  
(FEED DIR.) <ENT>
```

- Press and key to change the test pattern deployment direction.
The deployment direction changed here returns to the direction set in P.3-29 after test printing.
- When performing test printing after changing the deployment direction from "SCAN DIR." to "FEED DIR.", the line will be fed to the position of the first test printing.
- For the detail of the deployment direction of the test printing, see P.3-29.

2

Press the **ENTER** key.

- This machine starts printing the test pattern.
- After performing test printing, this machine returns to LOCAL mode.

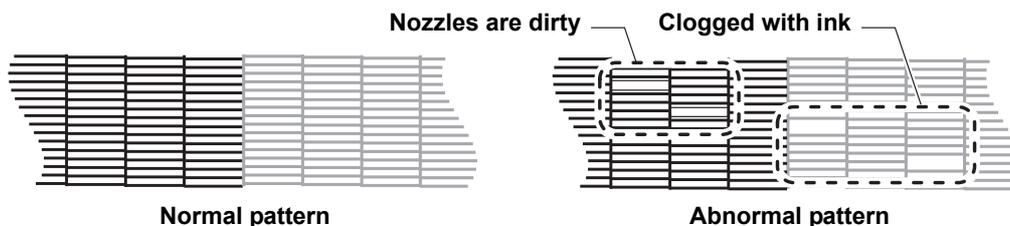
```
** TEST DRAW **
```

```
<LOCAL . 1> [#01]  
width:****mm
```

3

Check the printed test pattern.

- Finish the operations when it is in normal.
- Execute the head cleaning when it is in abnormal. (P.2-17)



Head cleaning

Three head cleaning types are available. Select it depending on the result of pattern drawings.

NORMAL : Select this if any line is missing.

SOFT : When only head wiping is desirable. (in case of bent lines)

HARD : Select this if inferior printing cannot be improved even by [NORMAL] or [SOFT] cleaning.

1

In the local mode, press the **CLEANING** key.

CLEANING
TYPE : NORMAL

2

Select the cleaning type by pressing the **▲** **▼** keys.

CLEANING
TYPE : HARD

3

Press the **ENTER** key.

CLEANING ACTIVE
00:00

- The rest of the cleaning time is indicated at the lower of the display.
- On completion of cleaning, this machine returns to LOCAL mode.

4

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.4-5)
- Wash the head nozzle. (☞ P.4-8)
- Solve the failure of the image quality, referring to “When Nozzle clogged after cleaning”. (☞ P.4-16)

2

Basic Operations

Drawing data

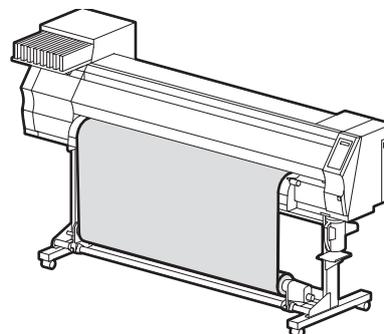
Starting the print

Important!

- When a roll media is used, rewind the roll media by hands prior to printing so that it is set in the tightened condition. The loosened may result in failures of the image quality.

1

Set the media. (☞ P.2-6)



2

Press the **REMOTE** key in the local mode.

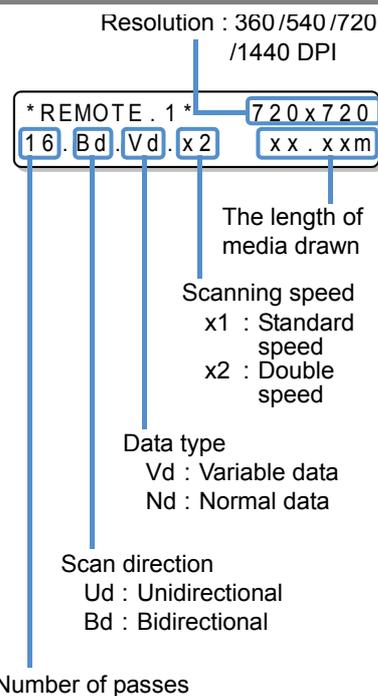
- It enters the remote mode and enables to receive the data from the PC.

* REMOTE . 1 * [# 0 1]
0 . 0 m

3

Send the drawing data from the PC.

- The ACTIVE lamp blinks and the drawing condition is displayed.
- For the method of data transmission, refer to the instruction manual for the output software.



4

This machine starts printing.

- The printing speed may vary due to the set media width or the position of print origin even when the same data is printed, depending on resolution.

Stopping the print temporarily

Perform the following operations when stopping the print halfway.

1

Press the **REMOTE** key in printing.

- The printing operation is interrupted.
- 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.

```
<LOCAL . 1>      [#01]
                width:1272mm
```

Erasing the received data (Data clear)

Erase only the received data to stop the printing.

1

Press the **DATA CLEAR** key in the local mode.

```
DATA CLEAR      <ENT>
```

2

Press the **ENTER** key.

- The ACTIVE lamp goes out.
- The received data is erased then it returns to the local mode.

```
** DATA CLEAR **
```

2

Basic Operations

CHAPTER 3

Convenient use



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

User type	3-2	Machine settings	3-27
Registering the drawing conditions together (Type registration)	3-2	Setting the deodorize fan	3-28
Registering Type	3-2	Setting Dryness feeding	3-29
Setting media compensation	3-5	Setting Stamp	3-30
Setting media compensation	3-5	Setting Test draw arrange	3-31
Setting print mode	3-8	Change the operation condition of the room temperature	3-32
Setting of the print quality	3-8	Setting confirmation feeding	3-33
Setting scanning direction	3-10	Setting time	3-34
Setting Logical-seek	3-11	Setting Unit	3-35
Setting drying time.....	3-12	Setting Machine name	3-36
Setting margins.....	3-13	Setting Key buzzer	3-37
Setting Priority	3-14	Extension of Ink Expiry Month.....	3-38
Setting Auto cleaning.....	3-16	Extension of Ink Expiry Month	3-38
Setting cleaning while printing.....	3-18	Switch Setting of Ink Supply Path	3-40
Setting media detection	3-20	Confirming machine information	3-42
Perform setting to reduce stripes between passes.....	3-22	Displaying Information	3-42
Other settings	3-24		
Initializing the settings	3-26		

Registering the drawing conditions together (Type registration)

The drawing conditions are registered in each type (1-4).

The most suitable drawing conditions are settable only by changing the type when replaced by a different type of media, if the drawing conditions that meet the media to be used have been registered in the type.

Example of type registration

Type 1	Photo-paper
Type 2	For PET 1
Type 3	For PET 2
Type 4	Synthetic paper

Registering Type

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Press the **ENTER** key.

```
SETUP
SELECT        :TYPE.1
```

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select and set each item of the list of **SET UP** functions.

- For the detailed setting procedures, refer to reference pages described in "List of functions".

List of functions

This section describes the outline of each SET UP function registerable to the user type and the setting value. The underlined has been set when purchased.

Function name		Set value	Outline
MEDIA COMP. (☞ P.3-5)		-255 ~ <u>0</u> ~ 255	Prints a pattern to correct the feeding rate of media and corrects it.
PRINT MODE (☞ P.3-8)	DRAFT Quality	<u>STD</u> / FAST / FINE	Sets a print quality level and printing direction.
	FINE Quality	<u>STD</u> / FAST / FINE	
	SCAN DIRECTION	<u>Bi-D</u> / Uni-D	
	LOGICAL SEEK	<u>ON</u> / OFF	
WhiteLay Print		<u>OFF</u> / ON (LEVEL 1~3)	
INK LAYERS (☞ P.3-22)		<u>1</u> ~ 9	Sets the number of layers in which ink is to be applied.
DRYING TIME (☞ P.3-12)	SCAN	<u>0.0</u> ~ 19.9 sec	Sets the time to wait for ink drying.
	Draw. END	<u>0</u> ~ 999 sec	
AUTO CUT (☞ P.3-22)		ON / <u>OFF</u>	Cuts the media automatically after printing.
PRE-FEED (☞ P.3-22)		ON / <u>OFF</u>	Feeds the media back and forth before printing. When sticky media is used, select ON.
MARGIN (☞ P.3-13)	LEFT	-10 ~ <u>0</u> ~ 85mm (1mm unit)	Sets a non-printing area along the right and left edges of the media.
	RIGHT	-10 ~ <u>0</u> ~ 85mm (1mm unit)	
COLOR PATTERN (☞ P.3-22)		ON / <u>OFF</u>	Prints a color pattern for nozzle missing check near the right edge of the media.
REFRESH (☞ P.3-22)		Level <u>0</u> (Refresh interval long) ~ 3 (Refresh interval short)	Refreshes the print heads during printing.
VACUUM (☞ P.3-22)		OFF / STANDARD / WEAK / Little WEAK / STRONG	Sets the absorbability of the media.
FeedSPEED LEVEL (☞ P.3-22)		10 ~ <u>100</u> ~ 200% 10%6mm/sec 100%60mm/sec 200%120mm/sec	Changes the media feeding speed in printing.

Function name		Set value		Outline
PRIORITY (☞ P.3-14)		INDIVIDUALLY/ <u>ALL HOST</u> / ALL PANEL		Sets the priority of settings (host / panel) Sets each item of the followings individually when the individual setting is selected. <ul style="list-style-type: none"> • MEDIA COMP. • PRINT MODE • INK LAYERS • DRYING TIME • AUTO CUT • PRE-FEED • MARGIN • COLOR PATTERN • REFRESH • VACUUM • FeedSPEED LEVEL
AUTO CLEANING (☞ P.3-16)	ON	INTERVAL	10 ~ <u>1000</u> ~ 10000 mm	Sets the auto cleaning of the print head every completion of printing.
		TYPE	<u>NORMAL</u> / SOFT / HARD	
	<u>OFF</u>			
Print. CLEANING (☞ P.3-18)	ON	INTERVAL	10 ~ <u>1000</u> ~ 10000 mm	Sets the auto cleaning of the print head in printing.
		TYPE	<u>NORMAL</u> / SOFT / HARD	
	<u>OFF</u>			
MEDIA DETECT (☞ P.3-20)	DETECT METHOD		<u>SELECT</u> / WIDTH	Sets the method for detecting the media.
	CUTTING DETECT		NONE / <u>BOTH EDGE</u> / LEFT EDGE / RIGHT EDGE	
FEED ORIGIN (☞ P.3-22)		ON / <u>OFF</u>		Setting the media feeding direction to LED pointer when changing the printing origin position.
MAPS (☞ P.3-22)	ON	-50 to <u>0</u> to +50		Reduce stripes between passes.
	OFF			

Setting media compensation

Correct the feeding rate of media after the type of media is replaced.
If the correction value is not appropriate, stripes may appear on the print, thus resulting in a poor print.

Important!

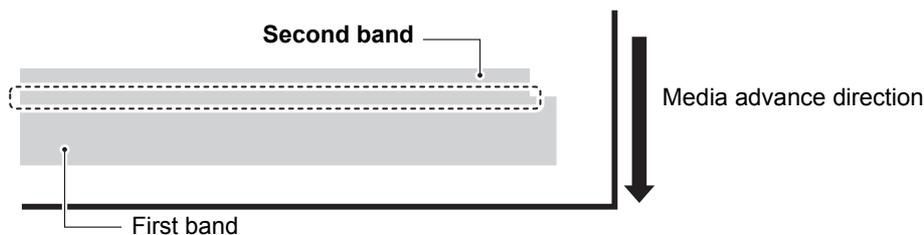
- On completion of [MEDIA COMP.] during use of a roll media, the media returns to the printing origin. Then the roll media in the rear of this machine will slacken. Before printing, take up the slack in the roll media by hand; a loose roll media can result in an inferior image quality.

Setting media compensation

Print the compensation pattern then correct the feeding rate of media.



- Print two bands as the compensation pattern.
- Adjust so that an even color density is obtained around the boundary between the two bands.



1

Set a media. (👉 P.2-6)

2

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

3

Press the **ENTER** key.

SETUP
SELECT :TYPE. 1

4

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

3

Convenient use

5

Press the **ENTER** key twice.

[1]MEDIA COMP.
PRINT START : **ent**

6

Print the compensation pattern by pressing the **ENTER** key.

PRINTING
PLEASE WAIT

7

Check the compensation pattern then input the compensative value.

[1]MEDIA COMP.
VALUE = **0**

Input to " + " : Move to such direction that a spacing between two lines is getting wider.

Input to " - " : Move to such direction that a spacing between two lines is getting closer.

- The band moves by approx. 0.1mm every when the compensative value is changed by "20".
-

8

Press the **ENTER** key.

[1]MEDIA COMP.
PRINT START : **ent**

- Print and check the compensation pattern once again.
 - Compensate it according to the operations of the step 7 if compensation is required.
-

9

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

When you need to correct the media feed during printing

The media feeding amount can be corrected even in the remote mode or when printing image data.

1

Press the **FUNCTION** key in the remote mode.

```
*REMOTE.1*      [#01]
                ** . **mm
```

```
FEED COMPENSATION.
0
```

2

Press the **ENTER** key.

```
FEED COMPENSATION.
0 ▶ 1
```

3

Enter the correction amount with **▲** and **▼** key.

- Correction amount : -500 to 500
- The value entered here will be reflected on the correction amount immediately.

4

Press the **ENTER** key.

- The value entered here will be invalid when pressing **END** key in stead of **ENTER** key.

```
FEED COMPENSATION.
SAVE :ent
```

5

Press the **ENTER** key.

- The changed value is registered.
- The value entered here will be valid temporarily when pressing **END** key in stead of **ENTER** key. (If performing media detection again or turning OFF the power supply, the correction value will be cleared.)

This indicates that the media correction was performed in the remote mode.

```
*REMOTE. +*      [#01]
                ** . **mm
```

3

Convenient use

Setting print mode

Upon the setting of the print mode, set each item for printing as follows.

- **Print quality (DRAFT)** : Setting the print quality in the DRAFT mode (Resolution in the scanning direction: 540dpi)
- **Print quality (FINE)** : Setting the print quality in the FINE mode (Resolution in the scanning direction: 720dpi)
- **Scanning direction** : Setting the printing direction
- **Logical-seek** : Setting "ON/OFF" of Logical-seek

Setting of the print quality

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Press the **ENTER** key.

```
SETUP
SELECT        :TYPE.1
```

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select [PRINT MODE] by pressing the **▲** **▼** keys.

```
[1]
PRINT MODE   <ent>
```

5

Press the **ENTER** key.

```
[1]PRINT MODE
DRAFT QUALITY <ent>
```

6

Select an item to be set.

- (1) Select [DRAFT QUALITY] or [FINE QUALITY] ([DRAFT QUALITY] is selected here.) by pressing the **▲** **▼** keys.
- (2) Press the **ENTER** key.

7

Select the print quality by pressing the **▲** **▼** keys.

```
[1]PRINT MODE
DRAFTquality:STD.
```

- **Set value** : STD / FAST / FINE
- Press the **ENTER** key to terminate the setting at this then proceed to the step10.

8

When changing the details of printing quality at each resolution.

Select the resolution by pressing the

FUNCTION key.

```
[ 1 ] DRAFT QUALITY
540x720 <ent>
```

- **Set value** : 540x720, 540x900, 540x1080 dpi (When "DRAFT" is selected)
720x540, 720x720, 720x1080, 720x1440 dpi (When "FINE" is selected)

(1) Select the resolution by pressing the key.

(2) Press the **ENTER** key.

9

Select the number of passes and printing speed.

```
[ 1 ] DRAFT QUALITY
PASS=8 : SCAN=HiSPEED
```

(1) Select the number of passes with the keys then press the key.

(2) Select the printing speed ("Hi-SPEED" or "Normal-SPEED") with the keys.

(3) Press the **ENTER** key.

- The set value of the number of passes is different depending on the content of ink set or the resolution selected at the step 8. Select the number of passes, referring to "Combinations of Settable factors".

10

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

Combinations of Settable factors

Resolution (dpi)	DRAFT quality		6 colors		Resolution (dpi)	FINE quality		6 colors	
	4 colors	Pass	Speed	Pass		Speed	Pass	Speed	Pass
540x720 dpi	2	Normal-SPEED	—	—	720x540	6	Hi-SPEED/ Normal-SPEED	6	Hi-SPEED/ Normal-SPEED
	4	Hi-SPEED/ Normal-SPEED	8	Hi-SPEED/ Normal-SPEED		12		12	
	8	Normal-SPEED	16	Normal-SPEED		24		24	
	16	Normal-SPEED	32	Normal-SPEED					
540x900 dpi	10	Hi-SPEED/ Normal-SPEED	10	Hi-SPEED/ Normal-SPEED	720x720	4	Hi-SPEED/ Normal-SPEED	8	Hi-SPEED/ Normal-SPEED
	20	Normal-SPEED	20	Normal-SPEED		16		32	
	40	Normal-SPEED	40	Normal-SPEED					
540x1080 dpi	6	Hi-SPEED/ Normal-SPEED	12	Hi-SPEED/ Normal-SPEED	720x1080	6	Hi-SPEED/ Normal-SPEED	12	Hi-SPEED/ Normal-SPEED
	12	Normal-SPEED	24	Normal-SPEED		24		48	
	24	Normal-SPEED	48	Normal-SPEED					
720x1440	8	Hi-SPEED/ Normal-SPEED	16	Hi-SPEED/ Normal-SPEED	720x1440	8	Hi-SPEED/ Normal-SPEED	16	Hi-SPEED/ Normal-SPEED
	16	Normal-SPEED	32	Normal-SPEED		32		64	
	32	Normal-SPEED	64	Normal-SPEED					

3

Convenient use

Setting scanning direction

1

Perform operations up to P.3-8 the step 5.

```
[1]PRINT MODE  
DRAFT QUALITY <ent>
```

2

Select [SCAN DIRECTION] by pressing the   keys.

```
[1]PRINT MODE  
SCAN DIRECTION <ent>
```

3

Press the  key.

```
[1]PRINT MODE  
SCAN DIRECTION:Uni-D
```

4

Select the scanning direction by pressing the   keys.

```
[1]PRINT MODE  
SCAN DIRECTION:Bi-D
```

• Set value : Uni-D, Bi-D

5

Press the  key.

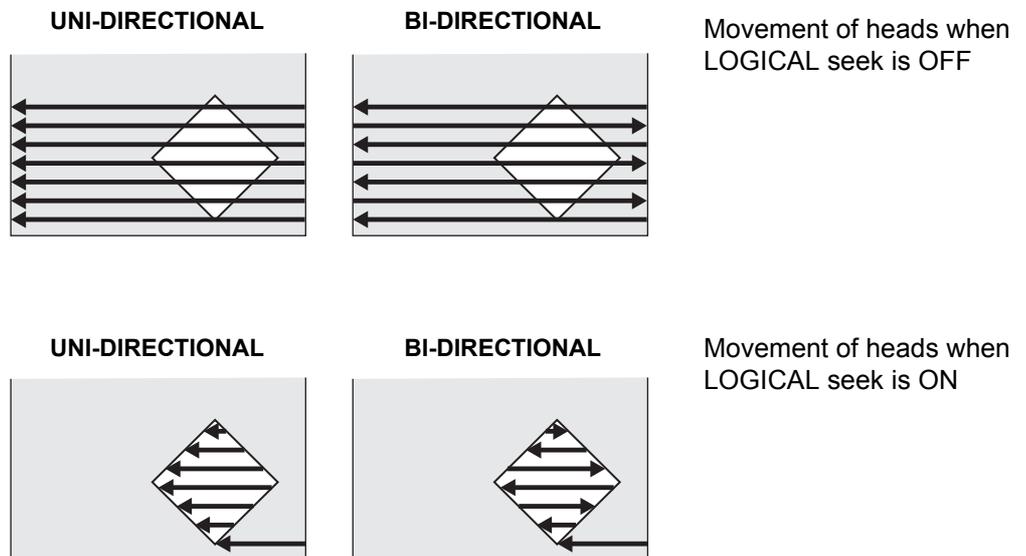
```
[1]PRINT MODE  
SCAN DIRECTION <ent>
```

6

Press the  key several times to end.

Setting Logical-seek

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



1

Perform operations up to P.3-8 the step 5.

```
[1]PRINT MODE
DRAFT QUALITY <ent>
```

2

Select [LOGICAL SEEK] by pressing the   keys.

```
[1]PRINT MODE
LOGICAL SEEK <ent>
```

3

Press the  key.

```
[1]PRINT MODE
LOGICAL SEEK :ON
```

4

Select ON/OFF by pressing the   keys.

```
[1]PRINT MODE
LOGICAL SEEK :OFF
```

5

Press the  key.

```
[1]PRINT MODE
LOGICAL SEEK <ent>
```

6

Press the  key several times to end.

Setting drying time

Upon the setting of drying time, set each item for ink drying as follows.

- **SCAN** : Set the time to wait for ink drying after each pass. During bidirectional printing, the machine stops temporarily after every scanning back and forth.
- **Draw. END** : Set the time to wait for ink drying after completion of printing.

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.

SETUP
SELECT :TYPE.1

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select [DRYING TIME] by pressing the **▲** **▼** keys.

[1]
DRYING TIME <ent>

5

Press the **ENTER** key.

SCAN : Draw.END
0.0s : 0s

6

Set the drying time by pressing the **▲** **▼** **◀** **▶** keys.

Item selecting : by the **◀** **▶** keys

Time setting : by the **▲** **▼** keys

Scanning :
0.0 to 19.9 seconds

SCAN : Draw.END
0.0s : 0s

Post-printing :
0 to 999 seconds

7

Press the **ENTER** key.

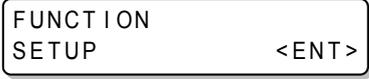
[1]
DRYING TIME <ent>

8

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

Setting margins

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

- 1** Press the **FUNCTION** key in the local mode. 
- 2** Press the **ENTER** key. 
- 3** Select the type (1-4) by pressing  then press the **ENTER** key.
- 4** Select [MARGIN] by pressing the  keys. 
- 5** Press the **ENTER** key. 
- 6** Set a right and left margin by pressing the  keys.
Item selecting : by the  keys
Margin setting : by the  keys

- 7** Press the **ENTER** key. 
- 8** Press the **END** key several times to end.



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

Setting Priority

For the following items, the priority is selected either the setting by the machine (by the panel) or the setting by the PC (by the host).

Items to be selected : MEDIA COMP. / PRINT MODE / INK LAYERS / DRYING TIME /
AUTO CUT / PRE-FEED / MARGIN / COLOR PATTERN / REFRESH / VACUUM /
FeedSPEED LEVEL

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.

SETUP
SELECT :TYPE.1

3

Select the type (1-4) by pressing **▲▼**
then press the **ENTER** key.

4

Select [PRIORITY] by pressing the **▲▼**
keys.

[1]
PRIORITY <ent>

5

Press the **ENTER** key.

[1]PRIORITY
SETUP :**A**LL PANEL

6

Select the set value by pressing the **▲▼** keys.

[1]PRIORITY
SETUP :**I**NDIVIDUALLY

- **Set value** : INDIVIDUALLY / ALL HOST / ALL PANEL
- Proceed to the step 7 when [INDIVIDUALLY] is selected. Press the **ENTER** key then proceed to the step 11 when either [ALL HOST] or [ALL PANEL] is selected.

7

Press the **FUNCTION** key.

- The setting display for the media compensation is displayed.

[1]PRIORITY
MEDIA COMP. :**H**OST

8

Select either "HOST" or "PANEL" by pressing the **▲▼** keys.

[1]PRIORITY
MEDIA COMP. :**P**ANEL

9

Press the **ENTER** key.

- You can also press **◀▶** keys to move between items. Be sure to press the **ENTER** key to register the setting.

10

Set other items by the same operations as the step 8 and 9.

11

Press the  key several times to end.



- Even when setting has been made to give priority to the host, the settings made on the machine become effective if there is no instruction from the host.

Setting Auto cleaning

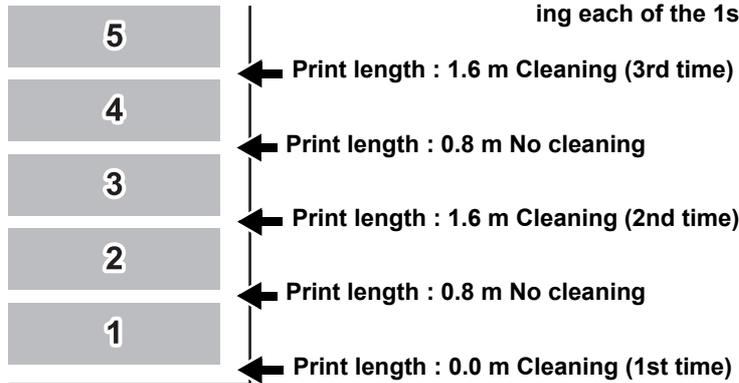
The machine is settable so that the head cleaning is automatically carried out when printing is completed for the set length.

At the completion of printing, the machine counts the length printed after the previous head cleaning and performs the cleaning automatically if required.

Reliable output results are always ensured if the heads are always kept clean.

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

When five copies of an image 80 cm long are printed in series, cleaning is repeated before printing each of the 1st, 3rd, and 5th copies.



When operation interval is 1000 mm (example)

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.

SETUP
SELECT :TYPE.1

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select **[AUTO CLEANING]** by pressing the **▲** **▼** keys.

[1]
AUTO CREANING <ent>

5

Press the **ENTER** key.

[1] AUTO CREANING
SETUP : OFF

6

Select "ON" by pressing the **▲** **▼** keys.

• Proceed to the step 9 when "OFF" is selected.

[1] AUTO CREANING
SETUP : ON

7

Press the **FUNCTION** key.

INTERVAL	:	TYPE
1000mm	:	NORMAL

8

Set an interval of cleaning and cleaning type by pressing **▲▼◀▶**.

Item selecting : by the **◀▶** keys
 Interval and Type setting : by the **▲▼** keys

Interval : 10 to 10000mm
 Type : NORMAL
 SOFT
 HARD

INTERVAL	:	TYPE
1000mm	:	NORMAL

9

Press the **ENTER** key.

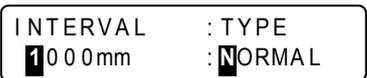
10

Press the **END** key several times to end.**Important!**

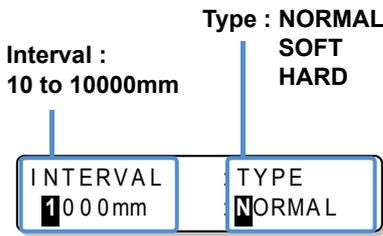
- This function does not operate when ink near-end occurs. Solve the ink near-end, referring to P.1-12.
- Depending on the conditions of the heads, etc., the defective printing could not be recovered even performing this function. In this case, contact our service office or distributor.

Setting cleaning while printing

Set it whether the head cleaning is carried out automatically during printing or not.
Upon cleaning during printing, set the cleaning interval to the length printed.
The printing is interrupted each in the set length and the head cleaning is carried out automatically.

- 1** Press the **FUNCTION** key in the local mode. 
- 2** Press the **ENTER** key. 
- 3** Select the type (1-4) by pressing   then press the **ENTER** key.
- 4** Select [Print.CLEANING] by pressing the   keys. 
- 5** Press the **ENTER** key. 
- 6** Select "ON" by pressing the   keys.
 - Proceed to the step 9 when "OFF" is selected.
- 7** Press the **FUNCTION** key. 
- 8** Set an interval of cleaning and cleaning type by pressing the     keys.

Item selecting : by the   keys
Interval and Type setting : by the   keys



9

Press the **ENTER** key.

10

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

Important!

- This function does not operate when ink near-end occurs. Solve the ink near-end, referring to P.1-12.
- Depending on the conditions of the heads, etc., the defective printing could not be recovered even performing this function. In this case, contact our service office or distributor.

Setting media detection

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

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Press the **ENTER** key.

```
SETUP
SELECT        :TYPE.1
```

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select **[MEDIA DETECT]** by pressing the **▲** **▼** keys.

```
[1]
MEDIA DETECT  <ent>
```

5

Press the **ENTER** key.

```
[1]MEDIA DETECT
DETECT METHOD  <ent>
```

6

Press the **ENTER** key.

- The setting display for the media detection is displayed.

```
[1]MEDIA DETECT
DETECT METHOD: SSELECT
```

7

Select the set value by pressing the **▲** **▼** keys.

SELECT : Select either a roll media or leaf media by pressing the **◀** **▶** keys when the media is detected.

WIDTH : The width of media is only detected without any key input when the media is detected.(Detecting is started automatically by lowering the clamp lever.)

8

Press the **ENTER** key.

```
[1]MEDIA DETECT
DETECT METHOD  <ent>
```

9

Select **[CUTTING DETECT]** by pressing the **▼** key.

```
[1]MEDIA DETECT
CUTTING DETECT <ent>
```

10

Press the **ENTER** key.

```
[1]MEDIA DETECT
DETECT        : BOTH EDGE
```

11

Select the set value by pressing the   keys.

- Set value : BOTH EDGE / LEFT EDGE / RIGHT EDGE / NONE

12

Press the  key.

13

Press the  key several times to end.

Important!

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

Other settings

Change the setting according to the use.

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.

SETUP
SELECT :TYPE.1

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select an item for setting by pressing the **▲** **▼** keys.

- Select it, referring to the list of settings.

5

Press the **ENTER** key.

6

Select the set value by pressing the **▲** **▼** keys.

- Select it, referring to the list of settings.

7

Press the **ENTER** key.

8

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

Important!

- The set value is maintained even when the power is tuned "OFF".

List of Settings

The underlined has been set when purchased.

Item	Outline	Set value
Setting of Media compensation	Corrects the feeding rate of media	Refer to P.3-5
Setting of Printing mode	Setting Print quality	Refer to P.3-8
	Setting Scanning direction	
	Setting Logical-seek	
Setting of the number of ink layers	Setting the number of layers in which ink is to be applied.	<u>1</u> ~ 9
Setting of Drying time	Setting the time for drying ink every scanning.	Refer to P.3-12
	Setting the time for drying ink after the completion of printing.	
Setting of Auto cut	Setting whether the media is cut automatically or not after printing.	ON / <u>OFF</u>
Setting of Pre-feeding	Setting whether the media is carried back and forth or not before printing.	ON / <u>OFF</u>
Setting of Margins	Setting a left margin on the media	Refer to P.3-13
	Setting a right margin on the media	
Setting of Color patterns	Setting whether color patterns are printed at the right end of media or not.	ON / <u>OFF</u>
Setting of Refreshing	Setting the refreshing level of head.	<u>0</u> ~ 3
Setting of Adsorption	Setting the force adsorbing a media	STRONG / <u>STANDARD</u> / Little WEAK / WEAK / OFF
Setting of Feeding speed level	Changing the media feeding speed in printing.	10 ~ <u>100</u> ~ 200%
Setting of Priority	Sets the priority of settings (host / panel)	INDIVIDUALLY / <u>ALL HOST</u> / ALL PANEL
Setting of Auto cleaning	Setting the auto head cleaning operation performed every printing.	Refer to P.3-16
Setting of In-printing cleaning	Setting the auto head cleaning operation performed during printing.	Refer to P.3-18
Setting of Media detection	Setting the media detecting operation.	Refer to P.3-20
	Setting the detection conditions at the cutting operation.	
Setting of Feed Origin	Setting the media feeding direction to LED pointer when changing the printing origin position.	ON / <u>OFF</u>

Initializing the settings

Initialize the settings to the conditions that have been set when purchased. (Set resetting)
The set resetting can be executed per type.

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP                <ENT>
```

2

Press the **ENTER** key.

```
SETUP
SELECT                :TYPE.1
```

3

Select the type (1-4) by pressing **▲** **▼** then press the **ENTER** key.

4

Select [SETUP RESET] by pressing the **▲** **▼** keys.

```
[ 1 ]
SETUP RESET          <ent>
```

5

Press the **ENTER** key.

```
[ 1 ]SETUP RESET
RESET                :ent
```

6

Press the **ENTER** key.

- The set is initialized.

7

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

Machine settings

It is each type of setting for using this machine more comfortably. [MACHINE SETUP] and [MACHINE SETUP2] are available in this machine.

The following items are settable in MACHINE SETUP 1, 2.

Item		Set value ^{*1}	Outline
Machine Setup	DEODORIZE FAN ^{*2}	STOP TIME	0 ~ <u>120</u> ~ 240min/ CONTINUE
		RENEW	ON / <u>OFF</u>
	DRYNESS FEED		ON / <u>OFF</u>
	STAMP SETUP		ON / <u>OFF</u>
	Waste Ink Warning		ON / <u>OFF</u>
	Test Draw Arrange		FEED DIR. / SCAN DIR.
	CART.PRIORITY ^{*3}		<u>INK LEVEL</u> EXP. DATE
ROOM TEMP		<u>Not wait ARR.</u> Wait arrival (☞ P.3-30)	
Machine Setup 2	CONFIRM. FEED		<u>ON</u> / OFF
	TIME SET		
	UNIT SETUP	TEMP.	°C (Centigrade) /°F (Fahrenheit)
		LENGTH	<u>mm</u> / inch
	MACHINE NAME		<u>01</u> ~ 99
KEY BUZZER		<u>ON</u> / OFF	

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

*2. DEODORIZE FAN is optional.

*3. This function is valid only when the 4-color ink set is used.

Setting the deodorize fan

The fan operates during printing, and operates according to the set of [STOP TIME] from the completion of printing.

Upon the setting of the deodorize fan, two items are settable as follows.

- **STOP TIME** : Setting the time from the completion of printing until the fan operation is interrupted.
- **RENEW** : The fan operation is executable even not in printing if it is set to "ON".

Important!

- The deodorize fan is an option included in the drying ventilation unit.
- When a drier fan is equipped, the drier fan operates in linkage with the contents set here.

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Select [MACHINE SETUP] by pressing the **▲▼** keys.

FUNCTION
MACHINE SETUP <ENT>

3

Press the **ENTER** key twice.

DEODORIZE FAN
STOP TIME <ent>

4

Select the item to be set by pressing the **▲▼** keys.

- STOP TIME** : Setting the time from the completion of printing until the exhaust fan is stopped.
- RENEW** : Select this to operate the fan.

5

Press the **ENTER** key.

6

Select the set value by pressing the **▲▼** keys.

- STOP TIME** : 0 - 240 seconds or continuous running
- RENEW** : Select "ON" to operate and "OFF" to stop the operation.

7

Press the **ENTER** key.

8

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

Setting Dryness feeding

Setting whether feeding for drying a media is performed after the completion of printing or not.

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select **[MACHINE SETUP]** by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP
DEODORIZE FAN <ent>
```

4

Select **[DRYNESS FEED]** by pressing the **▲** **▼** keys.

```
MACHINE SETUP
DRYNESS FEED <ent>
```

5

Press the **ENTER** key.

```
DRYNESS FEED
SETUP          :ON
```

6

Select **ON/OFF** by pressing the **▲** **▼** keys.

7

Press the **ENTER** key.

8

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

Setting Stamp

Set whether information such as the drawing conditions or the date printed is output after the completion of printing or not.

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select **[MACHINE SETUP]** by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP
DEODORIZE FAN <ent>
```

4

Select **[STAMP SETUP]** by pressing the **▲** **▼** keys.

```
MACHINE SETUP
STAMP SETUP  <ent>
```

5

Press the **ENTER** key.

```
STAMP SETUP
STAMP          : OFF
```

6

Select **ON/OFF** by pressing the **▲** **▼** keys.

7

Press the **ENTER** key.

8

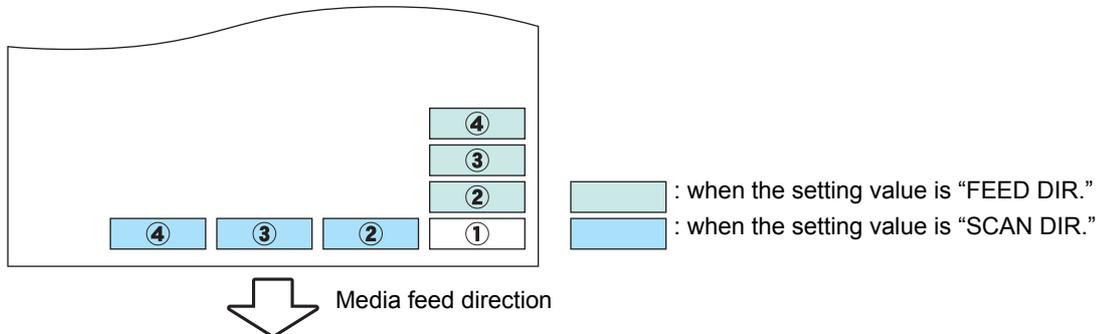
Press the **END** key several times to end.

Examples of Output

```
TS30-1300 Ver7.00
PRINT MODE   : 540x1080 6PASS Uni-D Hi      1LAYER
MEDIA COMP.  : 100(-100,0,200)
HEAD GAP     : Thin
INK          : Sb54INK 4color
DATE        : 16.05.05 17:24:31
```

Setting Test draw arrange

You can set the deployment direction of the test pattern to be printed when performing test printing repeatedly.



1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select [MACHINE SETUP] by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP
DEODORIZE FAN <ent>
```

4

Select [STAMP SETUP] by pressing the **▲** **▼** keys.

```
MACHINE SETUP
TestDrawArrange<ent>
```

5

Press the **ENTER** key.

```
TestDrawArrange.
SETUP          :FEED DIR.
```

6

Select the set value by pressing the **▲** **▼** keys.

FEED DIR. : Deployed in the feed (longitudinal) direction of the media (setting at the time of purchase).
SCAN DIR. : Deployed in the scan (crosswise) direction of the media.

7

Press the **ENTER** key.

8

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

Change the operation condition of the room temperature

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

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



- For the details of the usable temperature range, refer to P.6-3 “Available temp.”.
- If the room temperature is out of the usable temperature range at the start of printing, the error message below is displayed to inform you of it.

**** ERROR 120 ****
ROOM TEMP LOW (XX°C)

**** ERROR 121 ****
ROOM TEMP HIGH(XX°C)

* The temperature displayed in error message is the one of inside of the machine. Be careful that it is not actual room temperature.

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Select **[MACHINE SETUP]** by pressing the **▲** **▼** keys.

FUNCTION
MACHINE SETUP <ENT>

3

Press the **ENTER** key.

MACHINE SETUP
DEODRIZE FAN <ent>

4

Press **▲** **▼** to select **[ROOM TEMP.]**.

MACHINE SETUP
ROOM TEMP. <ent>

5

Press the **ENTER** key.

ROOM TEMP.
SEL : Not wait ARR.

6

Press **▲** **▼** to select a set value.

Not wait ARR. : The error message is displayed for a moment, and printing starts.

Wait arrival : After the error message is displayed, wait until the room temperature reaches the proper value. Then, printing starts.

7

Press the **ENTER** key.

8

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

Setting confirmation feeding

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

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP                <ENT>
```

2

Select [MACHINE SETUP 2] by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP2 <ENT>
```

3

Press the **ENTER** key twice.

```
CONFIRM. FEED
FEED                : ON
```

4

Select "ON" by pressing the **▲** **▼** keys.

- Proceed to the step 7 when "OFF" is selected.

5

Press the **FUNCTION** key to set [BACK FEED].

```
CONFIRM. FEED
BACK FEED          : ON
```

6

Select ON/OFF by pressing the **▲** **▼** keys.

- When the media return feeding is set "ON", the media fed by the confirmation feeding is slightly returned.
- If it is not desirable to return the media, set it to "OFF".

```
CONFIRMATION FEED
BACK FEED          : OFF
```

7

Press the **ENTER** key.

```
MACHINE SETUP2
CONFIRM. FEED     <ent>
```

8

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

Setting time

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select [MACHINE SETUP 2] by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP2 <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP2
CONFIRM.FEED  <ent>
```

4

Select [TIME SET] by pressing the **▲** **▼** keys.

```
MACHINE SETUP2
TIME SET      <ent>
```

5

Press the **ENTER** key twice.

```
TIME SET
2016.10.05  15:30:00
```

6

Input time by the pressing the **▲** **▼** **◀** **▶** keys.

Year/Month/Day/Time selecting : by the **◀** **▶** keys.
Year/Month/Day/Time inputting : by the **▲** **▼** keys.

7

Press the **ENTER** key.

- The input time is indicated.

```
TIME SET
2016.10.05  15:30:00
```

8

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

Important!

- The setting of past time is settable only for time up to 8 hours earlier than the presently indicated time.
- If future time is set by mistake, the previously set time can be set back by the following operations in step 7.

(1) Press the **FUNCTION** key in step 7. (The input time and the previously set time are indicated.)

(2) Press the **ENTER** key.

Only one change of previous setting can be set back. The time before changed is proceeding by the elapsed time.

Setting Unit

Set a unit of measurement to be used in the machine.

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select [MACHINE SETUP 2] by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP2 <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP2
CONFIRM.FEED  <ent>
```

4

Select [UNIT SETUP] by pressing the **▲** **▼** keys.

```
MACHINE SETUP2
UNIT SETUP    <ent>
```

5

Press the **ENTER** key.

```
TEMP      : LENGTH
°C        : mm
```

6

Select the unit by pressing the **▲** **▼** **◀** **▶** keys.

Item selecting : by the **◀** **▶** keys
Unit setting : by the **▲** **▼** keys

7

Press the **ENTER** key.

```
MACHINE SETUP2
UNIT SETUP    <ent>
```

8

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

Setting Machine name

Set a machine name (machine No.) for recognizing each machine when plural machines are connected through USB2.0 interface.

1

Press the **FUNCTION** key in the local mode.

```
FUNCTION
SETUP          <ENT>
```

2

Select [MACHINE SETUP 2] by pressing the **▲** **▼** keys.

```
FUNCTION
MACHINE SETUP2 <ENT>
```

3

Press the **ENTER** key.

```
MACHINE SETUP2
CONFIRM.FEED  <ent>
```

4

Select [MACHINE NAME] by pressing the **▲** **▼** keys.

```
MACHINE SETUP2
MACHINE NAME  <ent>
```

5

Press the **ENTER** key.

```
MACHINE NAME
  TS30-01  <ent>
```

6

Select the machine name (01 - 99) by pressing the **▲** **▼** keys.

```
MACHINE NAME
  TS30-10  <ent>
```

7

Press the **ENTER** key.

```
MACHINE SETUP2
MACHINE NAME  <ent>
```

8

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

Setting Key buzzer

Set a buzzer sound of the time when a key is pressed.

- 1** Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>
- 2** Select [MACHINE SETUP 2] by pressing the **▲** **▼** keys.

FUNCTION
MACHINE SETUP2 <ENT>
- 3** Press the **ENTER** key.

MACHINE SETUP2
CONFIRM.FEED <ent>
- 4** Select [KEY BUZZER] by pressing the **▲** **▼** keys.

MACHINE SETUP2
KEY BUZZER <ent>
- 5** Press the **ENTER** key.

KEY BUZZER
SETUP :ON
- 6** Select ON/OFF by pressing the **▲** **▼** keys.

KEY BUZZER
SETUP :OFF
- 7** Press the **ENTER** key.

MACHINE SETUP2
KEY BUZZER <ent>
- 8** Press the **END** key several times to end.



- A buzzer sound at Error/Warning/Operation completion cannot be cancelled even when the setting is turned to "OFF".

Extension of Ink Expiry Month

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

Extension of Ink Expiry Month

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



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

1

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

EXTEND EXPIRE DATE?
YES< >NO

alternately
displayed



NOT RECOMMENDED!!
YES< >NO

2

Press the to select [YES].

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

EXPIRE DATE EXTENDED
PRESS[ENT]

3

Press the key.

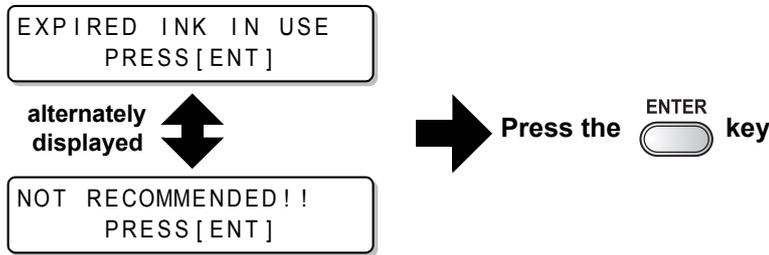
- Ink expiry month is extended.



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

When a cartridge extended the expiry month is set

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

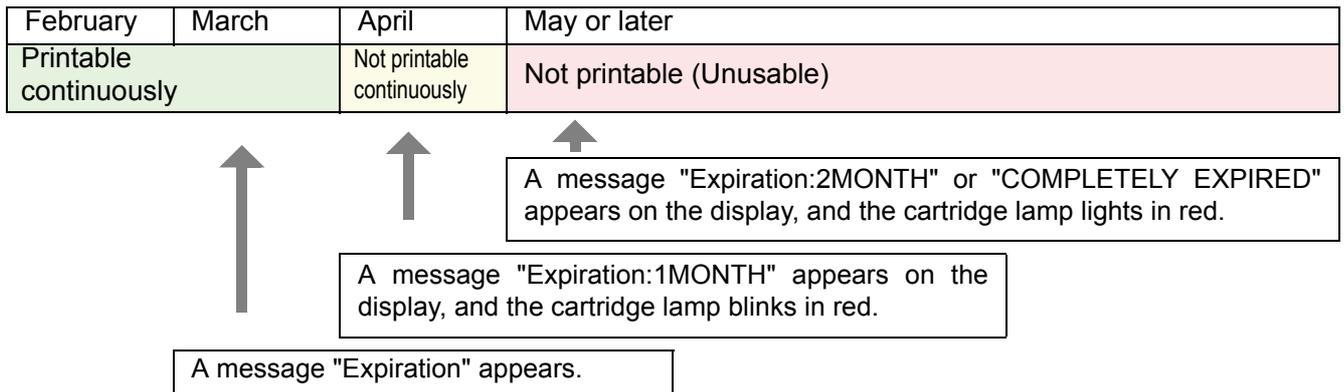


- To check expired ink, press the **FUNCTION** key while displaying the screens above alternately.

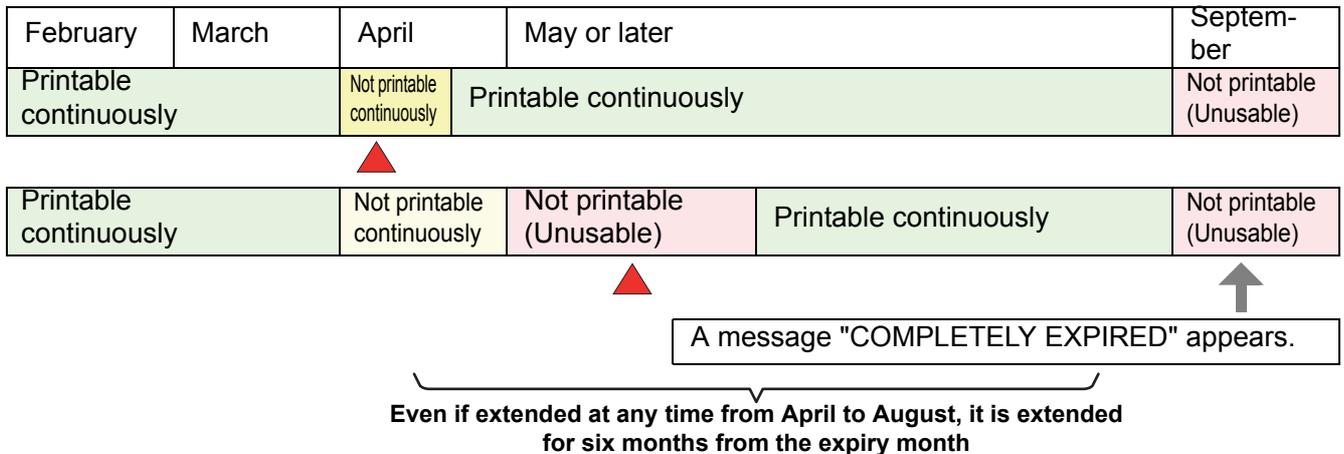
When an ink expiry month is extended

Example: If expiry month of your ink cartridge is February 2016.

- When the expiry month is not extended



- When the expiry month is extended (When extended at the time of ▲)



Switch Setting of Ink Supply Path

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

This setting is only available for 4-color set.

Important!

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

1

Press the **FUNCTION** key in the local mode.

FUNCTION
SETUP <ENT>

2

Select [MACHINE SETUP] by pressing the **▲▼** keys.

FUNCTION
MACHINE SETUP <ENT>

3

Press the **ENTER** key.

4

Select [CART.PRIORITY] by pressing the **▲▼** keys.

MACHINE SETUP
CART.PRIORITY <ent>

5

Press the **ENTER** key.

6

Select the condition of ink to be used first by pressing the **▲▼** keys.

CART.PRIORITY
SELECT : INK LEVEL

INK LEVEL : Low ink cartridge is used first

EXP. DATE : Close-to-date ink cartridge is used first

7

Press the **ENTER** key.

8

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

When both ink cartridge and MBIS are used

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



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

Important!

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

1

Press the **ENTER** key in the LOCAL or the REMOTE mode.

Sb - INK	MMBBYYKK
REMA IN	3 4 5 6 7 8 9 9

2

Press the **REMOTE** key.

BULK / CART SELECT	
-	C B B

Displays the currently supplying ink.
 B: Bulk ink system (MBIS)
 C: Ink cartridge
 -: Only one type is set

3

Press the **▲ ▼ ◀ ▶** key to set the supply path and the ink to be used first.

BULK / CART SELECT	
-	C B B

Select the supply path : Press the **◀ ▶** key.
 Select the ink to be used first : Press the **▲ ▼** key.

4

Press the **ENTER** key.

- It enters in the LOCAL or the REMOTE mode.

3

Convenient use

Confirming machine information

The machine information of the machine is confirmable.
Confirmable items of the machine information are as follows.

Item	Description
ERROR HISTORY	Displays the history of errors and warnings. Using the  or  key, the errors and warnings can be displayed one by one in the order of occurrence.
MAINTE. HISTORY	Displays the records of the date and time when maintenance functions were used. It displays chiefly manual cleaning functions or automatic cleaning functions (by ROUTINE SETUP or SLEEP SET UP).
PRT.modeHISTORY	Displays the information (printing conditions) of the online printing that has been performed up to now since power-on. (Max. 50) Using  or  key, the display can be changed in the order of printing.
LIST	Prints the settings of the machine.
Ink REPL. Report	Prints history of ink used on the machine.
VERSION	Displays version information of the machine.
Serial & Dealer No.	Displays serial No. and dealer No. of the machine.

Displaying Information

1

Press the  key in the local mode.

- When it is desirable to print the set list of the machine, set a media to the machine. (☞ P.2-6)

```
FUNCTION
SETUP          <ENT>
```

2

Select [INFORMATION] by pressing the   keys.

```
FUNCTION
INFORMATION    <ENT>
```

3

Press the  key.

```
INFORMATION
ERROR HISTORY  <ent>
```

4

Select the type of information by pressing the   keys.

5

Press the  key.

- The information is displayed.
- The set contents of the machine is printed when [LIST] is selected.

For the information displayed

This section describes the way to read the information displayed.

<p>ERROR HISTORY</p> <p>Displaying the occurrence date</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> ERROR HISTORY [01] 16.10.10 12:15 </div> <p style="text-align: center;">◀ ◯ ◯ ▶</p> <p>Displaying the contents of error</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> ***** ERROR 09 ***** HDC ERROR </div>	<p>MAINTE. HISTORY</p> <p>Displaying the contents of maintenance</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> [01] 16.10.10 12:15 CARRIAGE OUT </div>
<p>PRT.modeHISTORY</p> <p>Displaying the resolution, the length printed or the like.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> [01] 720x1080 .12 Bd.Vd.x1.1L: 12.34m </div> <p style="text-align: center;">◀ ◯ ◯ ▶</p> <p>Displaying the date printed</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> PRINTmode HIST. [01] 16.10.10 12:15 </div>	<p>VERSION</p> <p>Displaying the version information such as F/W or the like.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> TS30-1300 V7.00 MRL-III V1.20 </div> <p>Serial & Dealer No.</p> <p>Displaying Serial No./ Dealer No.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> S/N = ***** D/N = ***** </div>

CHAPTER 4

Routine Maintenance



This section describes the items required to use this machine more comfortably, which are the procedures of ink replacing, cleaning or the like.

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Maintaining

Be sure to perform maintenance of the machine periodically or whenever necessary so that the machine can be used with its inherent accuracy for a long time.

Precautions in cleaning

Pay attentions to the following items when the machine is maintained.

	<ul style="list-style-type: none"> • When using the cleaning solution, be sure to wear the supplied protective glasses.
	<ul style="list-style-type: none"> • Never disassemble the machine. Disassembling it can result in electric shock hazards or damage to the machine. • Before starting maintenance work, be sure to turn off the power switch and unplug the power cable; otherwise, an unexpected accident may occur.
	<ul style="list-style-type: none"> • Prevent moisture from entering the machine. Moisture inside the machine can cause electric shock hazards or damage to the machine.
	<ul style="list-style-type: none"> • To ensure reliable ink jetting, it is necessary to have the machine perform ejection of a fine amount of ink (flushing) periodically while printing (output) is suspended for an extended period of time. • When printing is to be suspended for a long time, turn off only the power switch in the front of the machine; leave the main power switch at the rear of the machine turned ON (in the position of) and leave the power cable connected.
	<ul style="list-style-type: none"> • Do not wipe the nozzle face of the heads, the wiper or caps with water or alcohol. Doing so can cause nozzle clogging or machine failure. • Do not use benzine, thinner, or any chemical agent containing abrasives. Such materials can deteriorate or deform the surface of covers. • Do not apply lubricating oil or the like to any part inside the machine. Doing so can cause printing failure. • Be careful not to allow the cleaning solution or ink to adhere to covers, as this may cause deterioration or discoloring of the surface of covers.

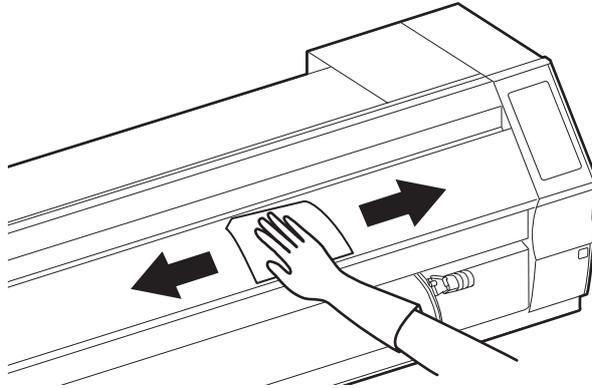
Notes on cleaning solution

Use the cleaning liquid dedicated for the ink being used.

Type of Ink	Applicable maintenance washings
Sublimation dye ink	Cleaning Liquid Bottle Kit A29 (SPC-0137) [Sold separately] Aqueous Cleaning Liquid Cartridge (SPC-0259) [Sold separately]

Cleaning exterior surfaces

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

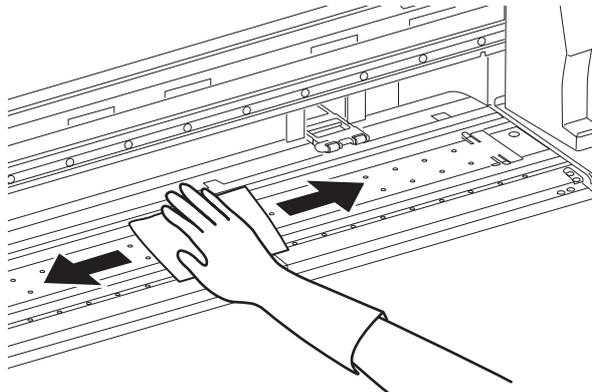


Cleaning the platen

On the platen, it is easy to become dirt due to lint, paper dust or the like caused by cutting medias. For a conspicuous stain, wipe it off with a soft-hair brush, a dry cloth, a paper towel or the like.



- If it is stained with ink, wipe it off with a paper towel containing a little amount of the cleaning solution.



Important!

- Before starting to clean the platen, make sure that the platen has cooled adequately.
- Be sure to clean the slot for media pressing, the slot for paper cutting (the cutter line) or the like since dust and dirt are easily accumulated in these parts.

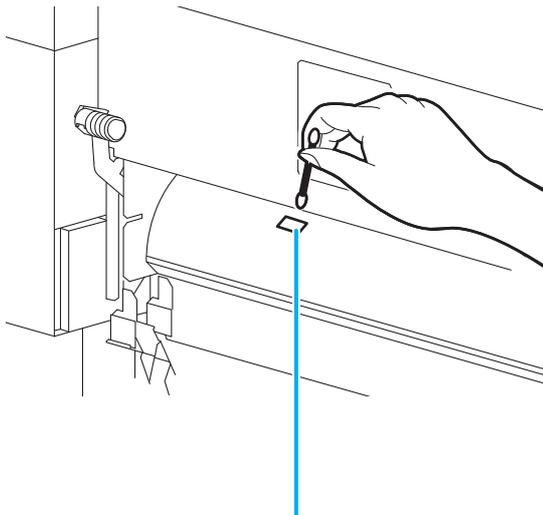
Cleaning the media sensor

A media sensor is located at the platen on the backside. It may cause misdetection of media when dust or the like is accumulated on the sensor.

Using a cotton swab, clean the surface of the sensor of dust and dirt.

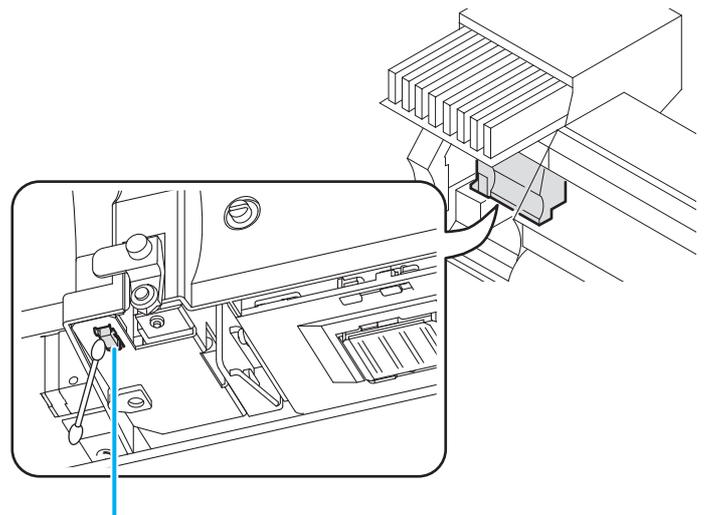
When cleaning the sensor on the lower surface of the head is cleaned, move the carriage to the left end by the operations of step 1 of P.4-16 "Cleaning the heads and their surrounding parts", and then clean it.

The backside of the machine



Media sensor

The lower surface of the head

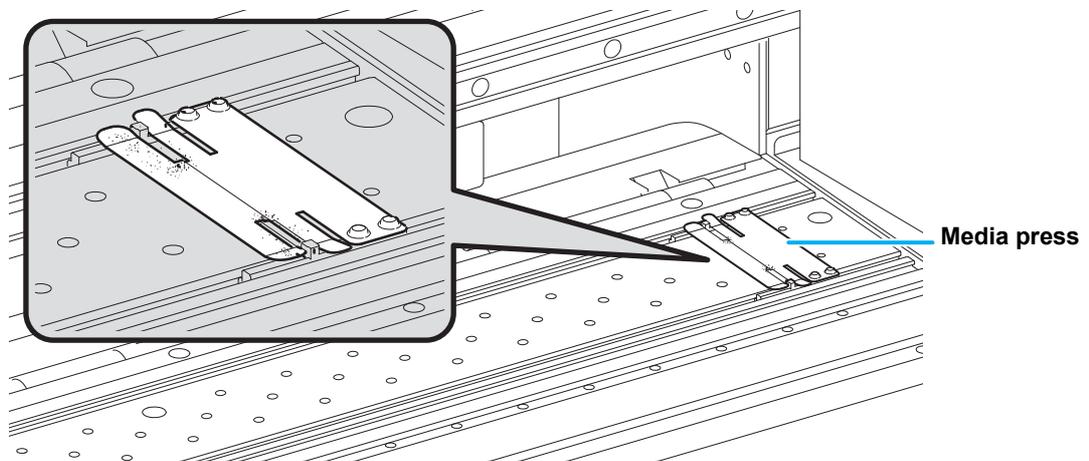


Media sensor

Cleaning the media press

Media feeding may not operate properly in printing if cutting waste, dust or the like is accumulated on the media press, nor may print properly if dust or the like sticks to the nozzle.

Clean the media press periodically.



Media press

Maintaining Capping station

Maintain Ink cap, Wiper or the like, which are located in the capping station. [ST.MAINTENANCE]

The ink cap and wiper function respectively as follows.

- **Wiper** : Wiping ink sticking to the head nozzle off.
- **Ink cap** : Preventing the head nozzle from clogging due to drying.

As the machine is used, the wiper and ink caps gradually become stained with ink and dust.

Clean it with the cleaning solution and a cotton swab unless nozzle missing is cleared even after the head cleaning.

If nozzle missing cannot be corrected even after executing the Head Cleaning (☞ P.2-17) , use Cleaning kit and clean stick.

Tools required for Maintenance	• Cleaning Liquid Bottle Kit A29 (SPC-0137)		
	• Clean stick	• Gloves	• Goggles



- Be sure to wear the attached goggles and gloves for works when the maintenance of the capping station is performed. If not, ink may be caught in your eyes during the works.
- Do not move the carriage out of the capping station by hand.
- When it is desirable to move the carriage, press the **ST.MAINTENANCE** key to execute the carriage-out. (☞ P.4-5 the step 1 - 2)

Cleaning the wiper and ink caps

It is recommended to perform cleaning frequently in order to maintain the high image quality and keep the machine in good condition.



- Replace the wiper with a new one if it is badly soiled or curled. (☞ P.4-7)
- Be careful not to leave lint of the clean stick. Lint may cause printing failure.

1

Press the **ST.MAINTENANCE** key in the local mode.

ST.MAINTENANCE
CARRIAGE OUT <ent>

2

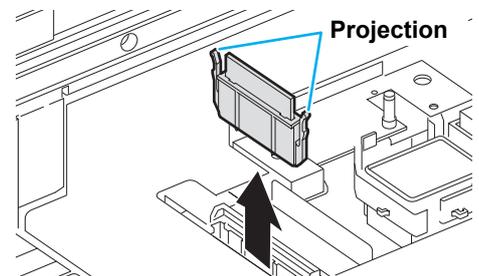
Press the **ENTER** key.

- The carriage moves onto the platen.

3

Open the front cover then remove the wiper.

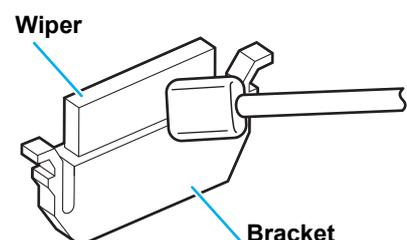
- Pull out the wiper by holding the projections at both ends.



4

Clean the wiper and bracket.

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



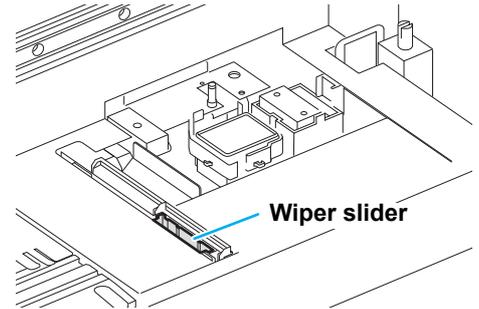
4

Routine Maintenance

5

Clean the wiper slider.

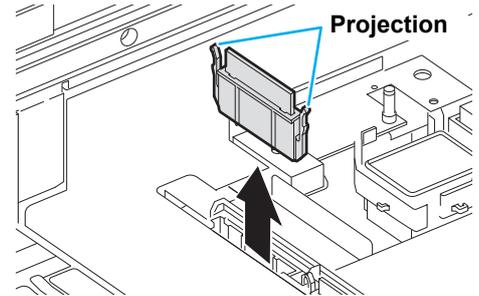
- Wipe ink sticking to the wiper slider off with a clean stick dipped in the cleaning solution.



6

Set the wiper at the original position.

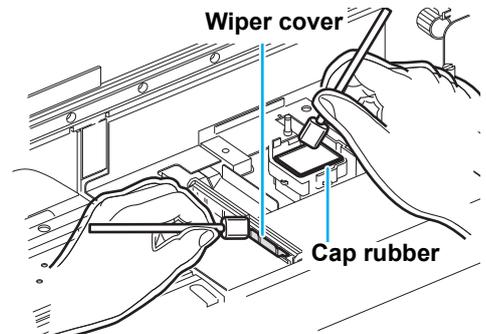
- Insert the wiper by holding both ends of the wiper.



7

Clean the cap rubber and wiper cover.

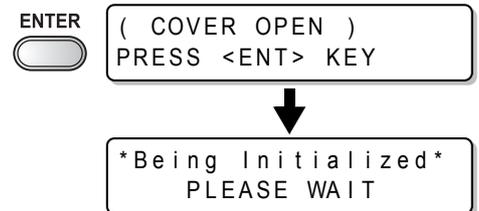
- Wipe ink sticking to the cap rubber and the wiper cover off with a clean stick dipped in the cleaning solution.



8

Close the front cover then press the **ENTER** key.

- After performing the initial operation, the machine returns to LOCAL mode.



Performing the station maintenance without **ST.MAINT** key

ST.MAINTENANCE is selectable from the local mode by using the **FUNCTION** key, not by pressing the **ST.MAINT** key.

Press the **FUNCTION** key in the local mode.

Select [MAINTENANCE] by pressing the **▲** **▼** keys.

Press the **ENTER** key twice.

- It becomes the same condition as the **ST.MAINT** key is pressed from the local mode.

Replacing the wiper

The wiper is consumable. When the display indicates that 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 slider off.

<LOCAL . 1> [#01]
Replace a WIPER <MNT>

Important!

- The wiper to be newly installed is available as an option. Order it from your dealer or a sales office of MIMAKI.
- Do not select [WIPER EXCHANGE] at any time other than when the wiper is to be replaced. Once it is selected, the number of wiper operations that is counted in the machine will be reset.

1

Press the **ST.MAINT** key in the local mode.

ST.MAINTENANCE
CARRIAGE OUT <ent>

2

Select [WIPER EXCHANGE] by pressing the **▲ ▼** keys.

ST.MAINTENANCE
WIPER EXCHANGE <ent>

3

Press the **ENTER** key.

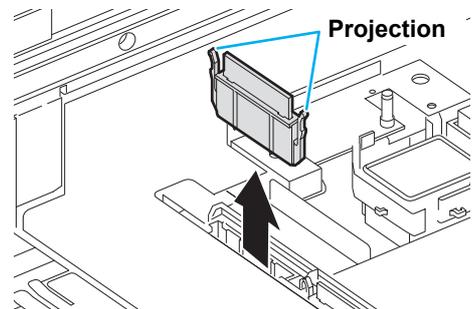
- The carriage moves onto the platen.

ST.MAINTENANCE
COMPLETED :ent

4

Open the front cover then remove the wiper.

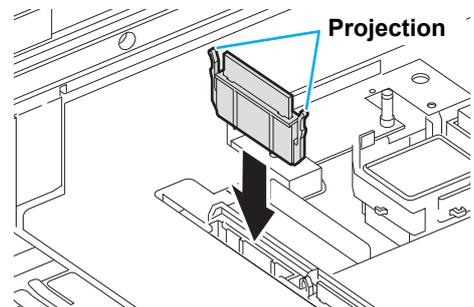
- Pull out the wiper by holding the projections at both ends.



5

Insert a new wiper.

- Install the wiper by holding the projections at both ends.



6

Close the front cover then press the **ENTER** key.

- After performing the initial operation, the machine returns to LOCAL mode.

(COVER OPEN)
PRESS <ENT> KEY

Being Initialized
PLEASE WAIT

4

Routine Maintenance

Washing of Head nozzle

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

Make sure the followings in advance.

Is [NEAR END] or [INK END] displayed ?

- The cleaning solution or ink is absorbed in washing.
At this time, washing is unable to operate if the ink end or near-end is detected.
- Replace it with a cartridge undetected for the ink end or the like.

1

Press the **ST.MAINT** key in the local mode.

```
ST.MAINTENANCE  
CARRIAGE OUT <ent>
```

2

Select [NOZZLE WASH] by pressing the **▲** **▼** keys.

```
ST.MAINTENANCE  
NOZZLE WASH <ent>
```

3

Press the **ENTER** key.

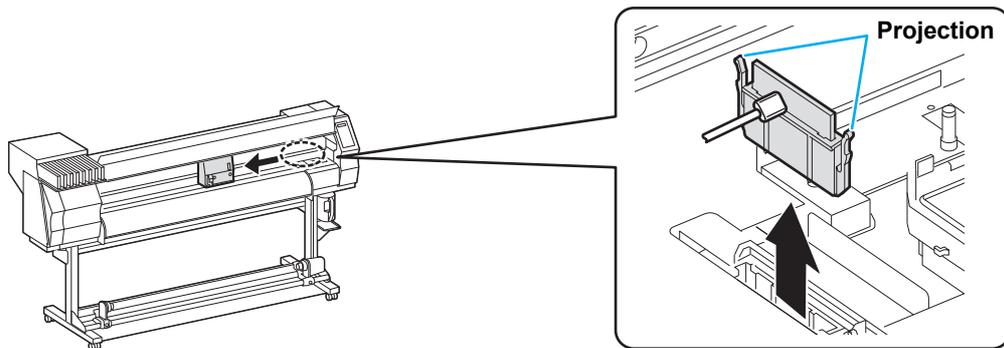
- The carriage moves onto the platen.

```
WIPER CLEANING  
COMPLETED(NEXT) :ent
```

4

Clean the wiper and the bracket.

- (1) Open the front cover then pull out it by holding projections at both ends of the wiper.
- (2) Clean it with a clean stick dipped in the cleaning solution. (SPC-0137)
- (3) Insert it in the original position by holding the projections at both ends of the wiper.



5

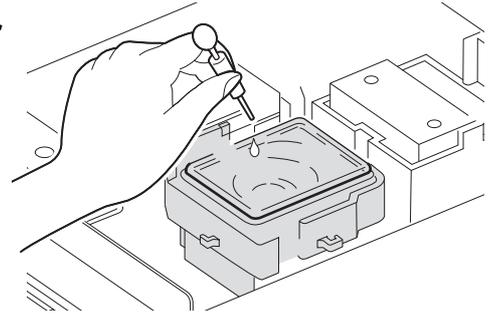
Press the **ENTER** key.

```
Fill the liquid  
COMPLETED(NEXT) :ent
```

6

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

- Fill up the cap with cleaning solution on the verge of overflow from the cap.



7

Close the front cover then press the **ENTER key.**

ST.MAINTENANCE
LEAVING TIME : 1min

8

Set the duration for leaving the cleaning solution by pressing the **▲ **▼** keys.**

- **Set value** : 1 to 99 minutes (Unit: minute)

ST.MAINTENANCE
LEAVING TIME : 2min

9

Press the **ENTER key.**

- The cleaning solution filled in the cap is absorbed.
- The screen on the right is displayed only for the duration set in the step 8.
- It returns to the local mode after the duration.

Being Initialized
PLEASE WAIT



<LOCAL . 1>

Important!

- When nozzle missing is not cleared even after this washing is carried out several times, execute "When Nozzle clogged after cleaning" (☞ P.4-16) and "DISCHARGE & WASH" (☞ P.4-17) . Contact a distributor or our sales office (a service call) unless the missing is cleared even after the above.
- Perform the followings unless the cleaning solution has been filled in the machine.
 - (1) Perform the operations up to the step 5.
 - (2) Fill the cap with the cleaning solution by using a syringe.
 - (3) Perform the operations from the step 7.

Cleaning the ink discharge passage (PUMP TUBE WASH)

Perform washing of the ink discharge passage (the pump tube) periodically to prevent ink from clogging due to the coagulation of ink within the ink discharge passage.



- When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.4-34 "If Waste ink tank confirming message is displayed" according to the situation.

```
Confirm a wastetank  
Continue< >Exchange
```

```
Confirm a wastetank  
Exchange :ent
```

1

Press the **ST.MAINT** key in the local mode.

```
ST.MAINTENANCE  
CARRIAGE OUT <ent>
```

2

Select **[PUMP TUBE WASH]** by pressing the **▲▼** keys.

```
ST.MAINTENANCE  
PUMP TUBE WASH <ent>
```

3

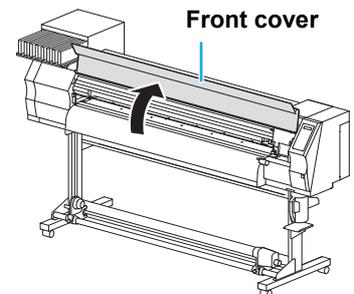
Press the **ENTER** key.

- The carriage moves onto the platen.
- Repeat the idle absorbing operation (Absorbing for 5 seconds and interrupting for 10 seconds) until washing works are completed.

```
ST.MAINTENANCE  
COMPLETED :ent
```

4

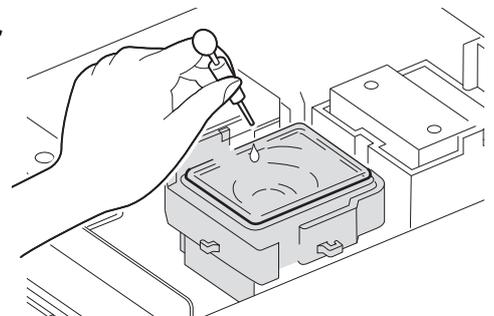
Open the front cover.



5

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

- Fill up the cap with cleaning solution on the verge of overflow from the cap.



6

Close the front cover and press the **ENTER** key.

Being Initialized
PLEASE WAIT



<LOCAL . 1>

- It returns to the local mode after the idle absorbing is performed for 30 seconds.

Important!

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

When not using for a long term (CUSTODY WASH)

When the operation of the machine is to be suspended for a week or more, use the [CUSTODY WASH] function to clean the nozzles in the heads and the ink discharge passage. After the cleaning, store the machine properly.

Check the followings in advance.

Is [NEAR END] or [NEAR END] displayed ?

- The cleaning solution or ink is absorbed in washing. At this time, washing is unable to operate if the ink end or near-end is detected.
- Replace it with a cartridge undetected for the ink end or the like.



- When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.4-34 "If Waste ink tank confirming message is displayed" according to the situation.

Confirm a wastetank
Continue< >Exchange

Confirm a wastetank
Exchange :ent

1

Press the **[ST.MAINT]** key in the local mode.

ST.MAINTENANCE
CARRIAGE OUT <ent>

2

Select [CUSTODY WASH] by pressing the **[▲]** **[▼]** keys.

ST.MAINTENANCE
CUSTODY WASH <ent>

3

Press the **[ENTER]** key.

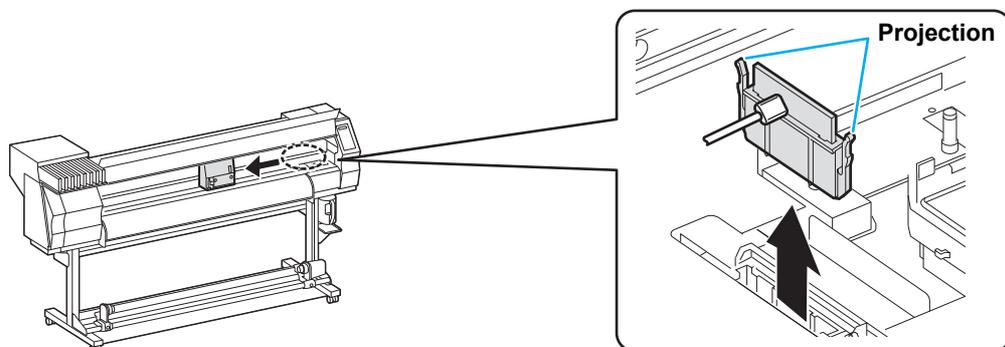
- The carriage moves onto the platen.

WIPER CLEANING
COMPLETED(NEXT) :ent

4

Clean the wiper and the bracket.

- (1) Open the front cover then pull out it by holding projections at both ends of the wiper.
- (2) Clean it with a clean stick dipped in the cleaning solution. (SPC-0137)
- (3) Insert it in the original position by holding the projections at both ends of the wiper.



5

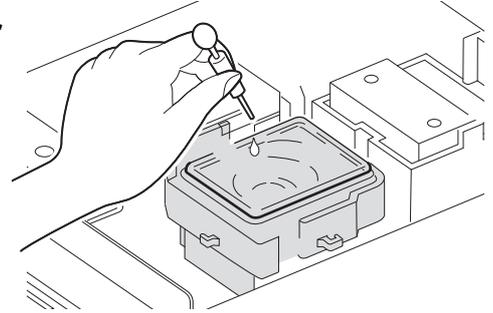
Press the **ENTER** key.

Fill the liquid
COMPLETED(NEXT) :ent

6

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

- Fill up the cap with cleaning solution on the verge of overflow from the cap.



7

Close the front cover and press the **ENTER** key.

ST.MAINTENANCE
LEAVING TIME : 1min

8

Set the duration for leaving the cleaning solution by pressing the **▲** **▼** keys.

- Set value : 1 to 99 minutes (Unit: minute)

ST.MAINTENANCE
LEAVING TIME : 2min

9

Press the **ENTER** key.

- Perform the nozzle cleaning.
- On completion of the nozzle cleaning, the head moves to above the platen.

Being Initialized
PLEASE WAIT

10

Open the front cover.

11

Press the **FUNCTION** key to fill the cap with the cleaning solution.

- The cleaning solution is applied to the cap by drops when the **FUNCTION** is pressed.
- When the **FUNCTION** is pressed again, drops stop.
- During the idle absorbing is interrupted, repeat the drops several times to fill the cap with the cleaning solution just before the solution overflows from the cap.

12

Close the front cover and press the **ENTER** key.

- It returns to the local mode after the initial operation.

Being Initialized
PLEASE WAIT



<LOCAL . 1>

Cleaning heads and surroundings parts

Take great care, especially during cleaning, not to damage the heads, which employ very precise mechanisms. Using a clean stick, rub off the gelatinous ink that may be adhering to the lower part of the slider and surrounding parts of the heads. In doing so, never rub the nozzle part of the heads.

Tools required for cleaning	• Clean stick	• Gloves	• Goggles
------------------------------------	---------------	----------	-----------



- Be sure to wear the attached goggles and gloves for works when cleaning is performed. If not, ink may be caught in your eyes during the works.

1

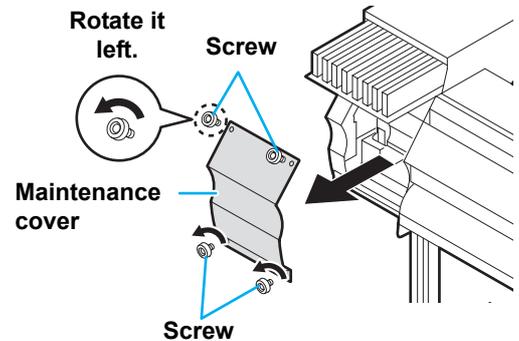
Select [CR.MAINTENANCE] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [CR.MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (4) Press the **ENTER** key.
 - The carriage moves to the left end of the machine body.

2

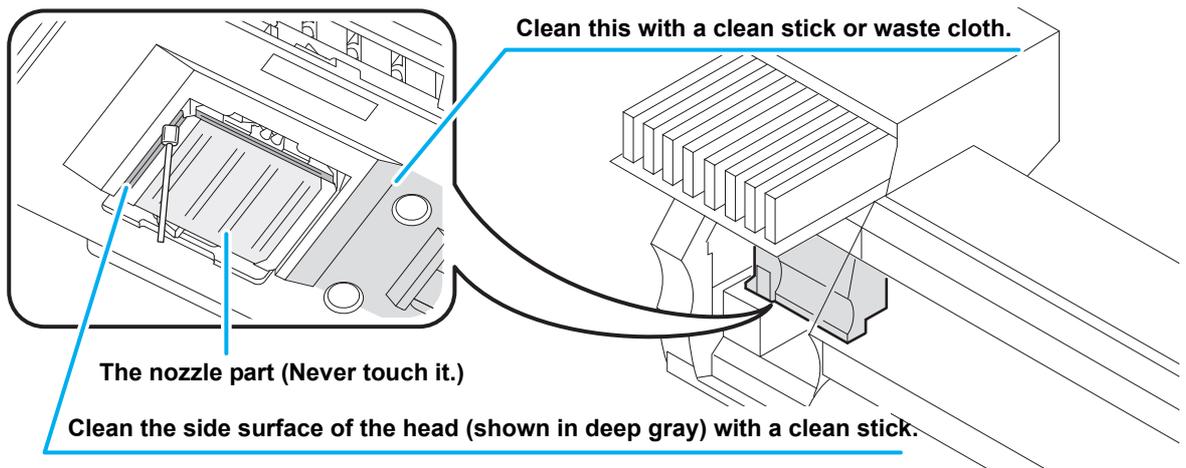
Open the maintenance cover.

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



3

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



4

Press the **ENTER** key after the cleaning.

Close a cover

5

Close the maintenance cover then press the **ENTER** key.

- It returns to the local mode after the initial operation.

(COVER OPEN)
PRESS <ENT> KEY



Being Initialized
PLEASE WAIT

When Nozzle clogged after cleaning

When the nozzle clogging is not improved even after the head cleaning (☞ P.2-17) or the head nozzle washing (☞ P.4-8), execute two functions as follows.

FILL UP INK	• Supplies ink to correct nozzle clogging.
DISCHARGE&WASH	• Washes the heads, dampers and ink tubes cleaning solution cartridge (option). (☞ P.4-17)

Filling up ink

1

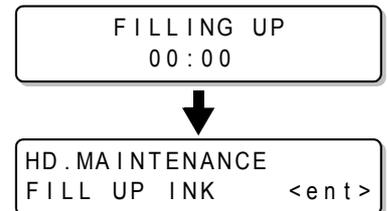
Select [HD.MAINTENANCE] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [HD.MAINTENANCE] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Press the **ENTER** key.

- Ink filling is automatically started.
- It returns to the display on the right when the ink filling is completed.



3

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

DISCHARGE & WASH

Discharge ink from the heads, dampers and ink tubes, and then wash them.

Important!

- To use this function, the dedicated cleaning solution (P.4-2 “Notes on cleaning solution”) is required. In addition, before performing the work, check whether ink to be filled again remains or not.
- When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.4-34 “If Waste ink tank confirming message is displayed” according to the situation.

Confirm a wastetank
Continue< >Exchange

Confirm a wastetank
Exchange :ent

1

Select [HD.MAINTENANCE] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [HD.MAINTENANCE] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Select [DISCHARGE&WASH] by pressing the **▲** **▼** keys.

HD.MAINTENANCE
DISCHARGE&WASH <ent>

3

Press the **ENTER** key.

Remove:InkCartridges
MMBB YYKK

4

Remove the ink cartridge.

- The ink left in the head or tube is discharged to the waste ink tank.
- The display on the right is displayed after discharging.

* DISCHARGE *
00:00



Set:WashingCartridge
1234 5678

5

Set the cleaning solution cartridge to the ink station.

- Absorbing of the cleaning solution is started.
- The display on the right is displayed after absorbing.

* ABSORPTION *
00:00



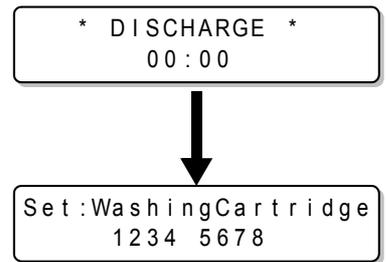
Remove:Cartridges
1234 5678

4

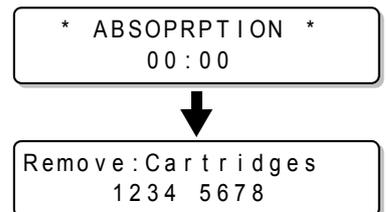
Routine Maintenance

6**Remove the cleaning solution cartridge.**

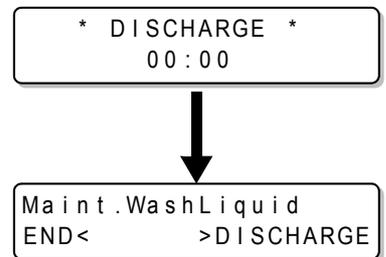
- The ink left in the head or tube is discharged to the waste ink tank.
- The right display on the right is displayed after discharging.

**7****Set the cleaning solution cartridge to the ink station.**

- Absorbing of the cleaning solution is started.
- The display on the right is displayed after absorbing.

**8****Remove the cleaning solution cartridge.**

- The ink left in the head or tube is discharged to the waste ink tank.
- The right display on the right is displayed after discharging.
- Check the condition of waste ink tank, and then select whether the washing is terminated or restarted.
- When the washing is restarted, return to the step 5 by pressing the  key.

**9****Press the  key.****10****Press the  key several times to end.**

Initial ink fill up

Perform the initial fill of ink by the following operations after [DISCHARGE & WASH].

1

Turn the power of the machine on.

- When the power is turned on, the firmware version is displayed following [BOOT].

BOOT

TS30-1300

V*. **

Please Wait

2

Select the ink type to be filled by pressing the keys.

- To check the state of the cartridge, press the  key. ( P.5-5)

INK TYPE

PIG

3

Select the ink set (a filling color) to be filled by pressing the keys.

- You cannot change the current ink set to other ink set yourselves.
- If you want to change the ink set, contact sales office of MIMAKI.

Sb INK SET

4-Color (MMCCYYKK)

4

Press the key.

Set:Sb-4color Ink

.....

4

Routine Maintenance

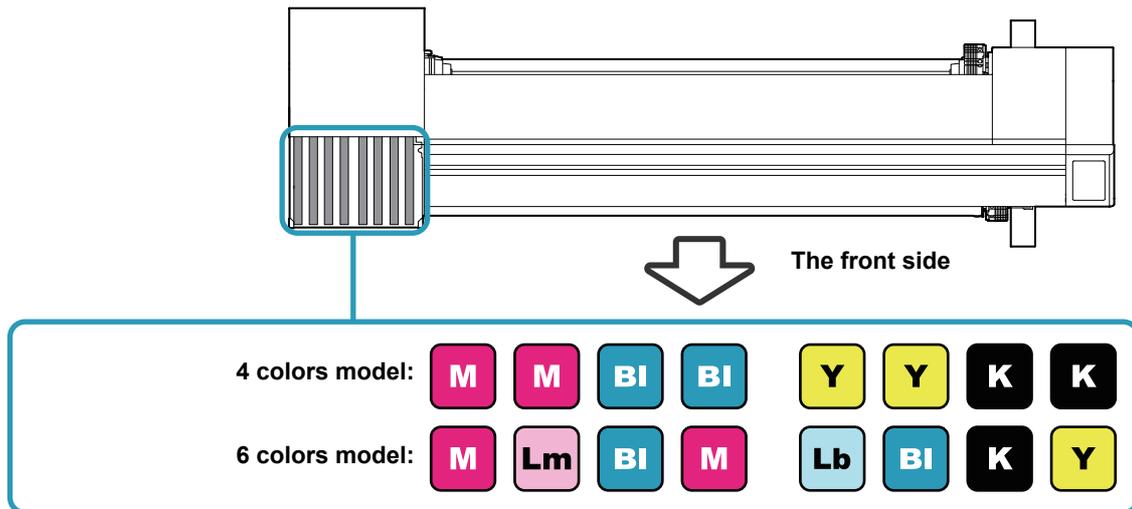
5

Set an ink cartridge to the ink station.

Set:Sb-4color Ink
--B- Y-KK

FILLING UP NOW.
00:00

- When the ink cartridge is set, filling is automatically started.
- Upon the ink station, the inserting location is allocated for each ink color. Set the ink cartridge according to the cartridge label under the ink station.



6

It returns to the local mode when the ink filling is completed.

<LOCAL.1> [#01]
width:****mm



- If blurring or missing is found in printing after initial fill of ink, “Head cleaning” (☞ P.2-17) or “Filling up ink” (☞ P.4-16) .

If ink is not filled in step 5

If [INK NEAR END], [INK END] or other ink errors occur, it does not start ink filling.

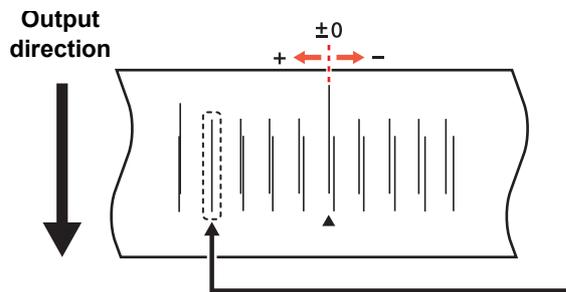
If ink filling is not started in step 5

- (1) Press the **END** key to go back to the display of step 2.
- (2) Press the **REMOTE** key to check the state of the ink cartridge.
- (3) Solve an ink error or others (☞ P.5-5), operate from step 2 again.

If the Positions of Dots Shift...

When the thickness of the media, the height of the head, or the type of the ink used is changed, follow the steps below and adjust the ink drop position for Bi-directional (Bi) printing to print properly.

Example of Pattern printing



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

Set a media, and then set the printing origin. (☞ P.2-6)

- For printing the pattern, a larger media than 500mm width x 400mm feeding is required.

2

Select [DROP POSITION] of the maintenance menu.

- (1) Press the **[FUNCTION]** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **[▲]** **[▼]** keys then press the **[ENTER]** key.
- (3) Select [DROP POSITION] by pressing the **[▲]** **[▼]** keys.
- (4) Press the **[ENTER]** key.

3

Press the **[ENTER] key to start the pattern printing.**

PRINTING
PLEASE WAIT

- Plural pattern types are printed. (in order of printed, called as Pattern 1, 2, 3...)

4

Correct the dot position of the pattern 1 by pressing the **[▲] **[▼]** keys.**

DROP POSITION
PATTERN1 = 0.0

- **Correction value** : -40 to 40
- Check the test pattern. A correction value is at the position where an outward way and a return way are on one line.
- If the correction value is not between -40 and 40, adjust the height of head then redo the operations from the step 2.

5

Press the **[ENTER] key.**

6

As the same as the step 4, correct the dot position of the from pattern 2 then press the **[ENTER] key.**

7

Press the **[END] key several times to end.**

4

Routine Maintenance

Preventing nozzle clogging while power-off

Even while the power switch is off, the machine starts periodically and executes various functions to prevent nozzle clogging. [SLEEP SETUP] includes the following functions.

Function name	Descriptions
REFRESH	Set the interval at which refreshing operation is to be performed periodically.
CLEANING	Set the cleaning type and the interval at which cleaning operation is to be performed periodically.

Important!

- During the right message is displayed, the operation set in the sleep setting is not carried out. Perform the operations of P.4-35 if required.
- When the power switch on the front of the machine is turned off, check the waste ink tank.

```
<LOCAL.1>          [#01]  
Check waste ink<MNT>
```

Setting refreshing interval in Sleep mode

Set the interval at which the nozzles will eject a little volume of ink to prevent nozzle clogging.

1

Select [SLEEP SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [SLEEP SETUP] by pressing the **▲** **▼** keys.

2

Press the **ENTER** key.

```
SLEEP SETUP  
REFRESH          <ent>
```

3

Press the **ENTER** key.

```
SLEEP SETUP  
REFRESHinterval= 1h
```

4

Set the refreshing interval by pressing the **▲** **▼** keys.

- Set value : OFF, 1 - 168 hours

```
SLEEP SETUP  
REFRESHinterval= 10h
```

5

Press the **ENTER** key.

```
SLEEP SETUP  
REFRESH          <ent>
```

6

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

Setting cleaning interval in Sleep mode

This function is to be executed instead of TUBE WASH after the cleaning solution has been used up. Set the cleaning type and the interval at which cleaning operation is to be performed during sleep mode.

1

Select [SLEEP SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [SLEEP SETUP] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Select [CLEANING] by pressing the **▲** **▼** keys.

SLEEP SETUP
CLEANING <ent>

3

Press the **ENTER** key.

SLEEP SETUP
CLEAN. INTERVAL = 1h

4

Set the cleaning interval by pressing the **▲** **▼** keys.

SLEEP SETUP
CLEAN. INTERVAL = 4h

- Set value : OFF, 1 - 168 hours

5

Press the **FUNCTION** key.

- The selection display of the cleaning type is displayed.

SLEEP SETUP
CLEAN. TYPE : NORMAL

6

Select the cleaning type by pressing the **▲** **▼** keys.

- Set value : NORMAL, SOFT, HARD

SLEEP SETUP
CLEAN. TYPE : SOFT

7

Press the **ENTER** key.

SLEEP SETUP
CLEAN. INTERVAL = 4h

8

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

4

Routine Maintenance

Setting Routine operations

Troubles such as ink clogging or the like are preventable by performing each periodical operation in the condition of the power ON. (Initial setting) The [ROUTINE SETUP] function is available for the following items :

Function name	Descriptions
ROUTINE WIPING	While printing, the nozzle surface is wiped with a certain interval to remove dew drops. It is possible to set [SCAN COUNT] and [TEMP difference].
REFRESH	Set the interval at which refreshing operation is to be performed periodically in Standby mode.
CLEANING	Set the cleaning type and the interval at which cleaning operation is to be performed periodically in Standby mode.

Important!

- During the right message is displayed, the operation set in the periodic setting is not carried out except [ROUTINE WIPING]. Perform the operations of P.4-35 if required.
- When the power switch on the front of the machine is turned off, check the waste ink tank.

```
<LOCAL . 1>      [#01]  
Check waste ink<MNT>
```

Setting Routine wiping operations in Standby mode

Ink dew condensation on the nozzle surface is preventable by performing the wiping operation automatically when the number of scans reaches the set value in printing.

In the following cases, ink splashing, ink dropping or nozzle missing may occur on printing. It is recommended to maintain the comfortable printing condition at all times by setting the periodic wiping.

- When the printing ink amount has been set plenty (High density, Double printing, etc.)

1

Select [ROUTINE SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [ROUTINE SETUP] by pressing the **▲** **▼** keys.

2

Press the **ENTER** key.

```
ROUTINE SETUP  
ROUTINE WIPING <ent>
```

3

Press the **ENTER** key.

```
ROUTINE WIPING  
SCAN COUNT      <ent>
```

4

Press the **ENTER** key.

```
ROUTINE WIPING  
SCAN COUNT      = 50
```

5

Set the number of scans by pressing the   keys.

```
ROUTINE WIPING
SCAN COUNT      = 40
```

- **Set value** : 0 to 9990 times
- When the ink amount is plenty due to Double printing or the like, make 30 - 50 times is a standard.

6

Press the  key.

```
ROUTINE WIPING
SCAN COUNT      <ent>
```

7

Press the   keys.

- The set display of TEMP difference is displayed.

```
ROUTINE WIPING
TEMP.difference<ent>
```

8

Press the  key.

```
ROUTINE WIPING
TEMP.Difference=20°C
```

9

Set the temperature difference by pressing the   keys.

```
ROUTINE WIPING
TEMP.Difference=20°C
```

10

Press the  key.

```
ROUTINE WIPING
TEMP.difference<ent>
```

11

Press the  key several times to end.

4

Routine Maintenance

Setting Refreshing interval in Standby mode

Set the interval at which refreshing operation is to be performed periodically.

1

Select [ROUTINE SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [ROUTINE SETUP] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Select [REFRESH] by pressing the **▲** **▼** keys.

```
ROUTINE SETUP  
REFRESH      <ent>
```

3

Press the **ENTER** key.

```
ROUTINE SETUP  
REFRESHinterval= 1h
```

4

Set the refreshing interval by pressing the **▲** **▼** keys.

```
ROUTINE SETUP  
REFRESHinterval= 10h
```

- Set value : OFF, 1 - 168 hours

5

Press the **ENTER** key.

```
ROUTINE SETUP  
REFRESH      <ent>
```

6

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

Setting Cleaning interval in Standby mode

This function is to be executed instead of TUBE WASH after the cleaning solution has been used up. Set the cleaning type and the intervals at which cleaning operation is to be performed.

Important!

- This function does not operate when the error message relating to ink, such as [NEAR END] or [INK END], is displayed.
- While this function is being executed, the display indicates the progress of head cleaning and no key operation is available. (P.2-17 "Head cleaning")
- This function operates only when the machine is left with the display as shown below:

<LOCAL . 1> [#01]

LOCAL mode

REMOTE . 1 [#01]
0 . 00m

REMOTE mode

1

Select [ROUTINE SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [ROUTINE SETUP] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Select [CLEANING] by pressing the **▲** **▼** keys.

ROUTINE SETUP
CLEANING <ent>

3

Press the **ENTER** key.

ROUTINE SETUP
CLEAN . INTERVAL = 1h

4

Set the cleaning interval by pressing the **▲** **▼** keys.

- Set value: OFF, 1 - 168 hours

ROUTINE SETUP
CLEAN . INTERVAL = 4h

5

Press the **FUNCTION** key.

- The selection display of the cleaning type is displayed.

ROUTINE SETUP
CLEAN . TYPE : NORMAL

6

Select the cleaning type by pressing the **▲** **▼** keys.

- Set value : NORMAL, SOFT, HARD

ROUTINE SETUP
CLEAN . TYPE : SOFT

7

Press the **ENTER** key.

ROUTINE SETUP
CLEAN . INTERVAL = 4h

8

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

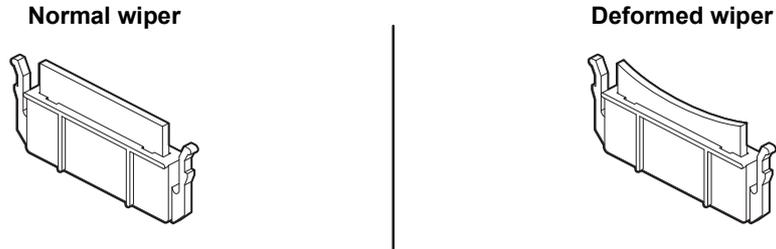
4

Routine Maintenance

Other maintenance functions

Changing the warning time of wiper replacement

The wiper is consumable. The heads are easily soiled in a dusty environment. The heads cannot be cleaned adequately with a curled or worn wiper. Setting the wiper level so that a warning for the wiper replacement period is indicated earlier than the standard depending on the operating environment.



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

1 Select [WIPER LEVEL] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [WIPER LEVEL] by pressing the **▲** **▼** keys.

2 Press the **ENTER** key.

```
WIPER LEVEL
LEVEL          : 10 / 10
```

3 Set the wiper level by pressing the **▲** **▼** keys.

```
WIPER LEVEL
LEVEL          : 9 / 10
```

- Set value : 1/10 - 10/10

4 Press the **ENTER** key.

```
MAINTENANCE
WIPER LEVEL    <ent>
```

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

Setting the media remaining display

Set the media remaining amount display.

When the media remaining amount display is turned to "ON"	The media remaining amount is displayed in the remote mode. (The print length is displayed when a leaf media is used.)
When the media remaining amount display is turned to "OFF"	The media remaining amount is not displayed in the remote mode.



- The media feed during printing or with any of the JOG keys is reflected on media remaining amount.
- Input the media length (initial value of remaining amount) when the roll media is detected.
- The setting performed in this section is not effective unless the media detection is performed after the setting.

1

Select [MEDIA RESIDUAL] of the maintenance menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [MEDIA RESIDUAL] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

2

Select ON/OFF by pressing the **▲** **▼** keys.

```
MEDIA RESIDUAL
SETUP : OFF
```

3

Press the **ENTER** key.

```
MAINTENANCE
MEDIA RESIDUAL <ent>
```

4

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

4

Routine Maintenance

Print the media remaining amount

You can print the current media remaining amount.



- Set [MEDIA RESIDUAL] to "ON". (☞ P.4-29)
- When changing the media, it is recommended to print the remaining amount to the currently used media. If you print the media remaining amount in advance, for using the changed media, you can enter the correct value in the screen for entering media remaining amount after detecting the media (☞ P.2-12).

1

In the local mode, press the     keys.



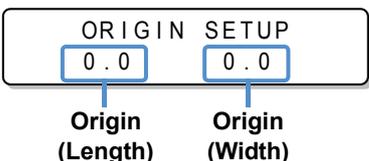
```
ORIGIN SETUP
0.0      ----
```

- It enters into the origin setting mode.

2

Set a light point of the LED pointer to the changing position by pressing the     keys.

- Select the carriage and media, moving the point with the     keys.
- When not changing the origin, proceed to the Step 3 without pressing    and  key.
- When pressing  key here, the origin will be changed and it will return to the local mode.



```
ORIGIN  SETUP
0.0     0.0
|       |
Origin  Origin
(Length) (Width)
```

3

Press the  key.

- When pressing    and  key, the screen will return to the Step 2 screen.
- When pressing  key, it will return to the local mode.



```
MEDIA RESIDUAL DRAW
<ENT>
```

4

Press the  key.

- Start printing of the media remaining amount.
- When the printing completes, it will return to the local mode.

Important!

- When printing after changing the origin, the origin set here will be valid when printing data subsequently.

To use sublimation transfer ink with more stable quality

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

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

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

● When the time to shake the ink cartridge has come (When you use MBIS, it is not displayed.)



● When the time to perform ink filling



When you use MBIS, this message is not displayed.



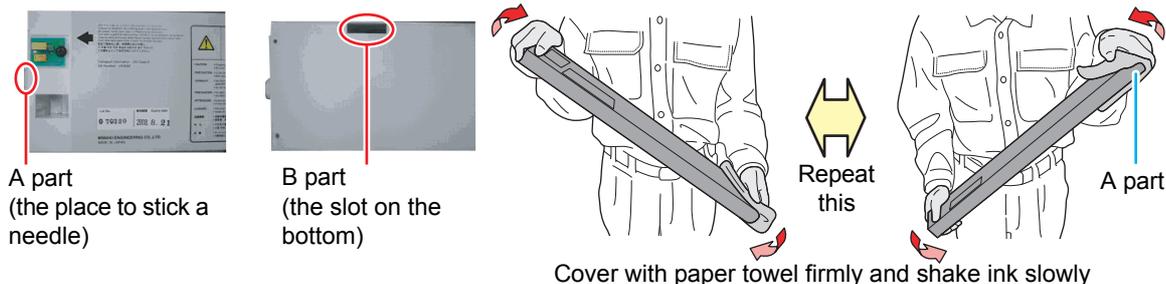
- This message is displayed when the machine is in the local mode or when you switch it from the remote mode to the local mode. This does not terminate printing or interfere with continue printing, however, as this is not displayed during remote mode, it is recommended to switch to the local mode by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

How to shake the ink cartridge

To prevent ink from leaking when you shake the cartridge, wear gloves and firmly cover the A part of the upper surface of the cartridge and the B part of the bottom surface of the cartridge with paper towels. Then, shake it more than twenty times right and left so that ink flows inside the cartridge.



- If you shake it too strong, the pack inside may be damaged and it may cause ink leakage. Therefore, perform this carefully.
- If the remaining amount of ink is less, ink in the cartridge cannot be beaten enough. Tilt the cartridge until it becomes vertical.



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



- When you use MBIS, do not shake the eco case and the intermediate cartridge.
- Do not insert and pull out the intermediate cartridge as much as possible. It may cause ink leakage.

Set the interval to display the warning message

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

1

Select [ROUTINE SETUP] of the maintenance menu.

- (1) Press the **FUNCTION** key in LOCAL.
- (2) Press **▲** **▼** to select [MAINTENANCE] and press the **ENTER** key.
- (3) Press **▲** **▼** to select [ROUTINE SETUP].
- (4) Press the **ENTER** key.

2

Press the **▲** **▼** key to select [Sub-INK WARNING].

ROUTINE SETUP
Sub-INK WARNING<ent>

3

Press the **ENTER** key.

```
ROUTINE SETUP
Sub - INK WARNING= 72 h
```

4

Press the **▲▼** key to set the operation time.

```
ROUTINE SETUP
Sub - INK WARNING= 84 h
```

- Set value : OFF (disabled) or 12 to 120 hours

5

Press the **ENTER** key.

```
ROUTINE SETUP
Sub - INK WARNING<ent>
```

6

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

Note on head height adjustment

When you use sublimation transfer ink, if you make the head height 5mm (H range/ thick), it may affect the drawing quality.

It is recommended to use with making head height 4mm (H range/ thin) or L range.



- If the head height is 5mm, the right message may be displayed at starting of drawing or at turning on the power supply.

```
NOT RECOMMENDED !!
CHK. HEAD HEIGHT:ent
```

When you press the **ENTER** key, the message goes out.

- You can check the current head height with the procedures below:

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

(2) Press the **ENTER** key several times to display "Head height" and then check.

"HEAD HEIGHT:Thin" = The head height is 2mm.

"HEAD HEIGHT:Thick" = The head height is 3mm.

"HEAD HEIGHT:Thin+" = The head height is 4mm.

"HEAD HEIGHT:Thick+" = The head height is 5mm.

- For the head height adjustment method, refer to Chapter 2 "Adjusting the head height" of the TS30 Series User Manual.
- Contact to our sales office for switching L range <-> H range by field person.

If Waste ink tank confirming message is displayed

Waste ink which was used for cleaning the heads and other parts, gathers in the waste ink tank. Upon the machine, the ink discharging amount is counted by accumulated counting then a message for suggesting the check is displayed when it reaches a certain amount.

If message is displayed when Ink filling or the like is executed

A message for suggesting to check the waste ink tank is displayed depending on the condition of the waste ink tank when the function such as ink filling, head cleaning, pump tube washing or the like is carried out.

● When the waste ink tank is "Near-full"

The right message is displayed.

```
* Check waste ink *  
Continue< >Exchange
```

1

Check the condition of the waste ink tank.

When the waste ink tank is almost full

- (1) Replace the waste ink tank. (👉 P.4-36)
- (2) Select "Exchange" by pressing the **ENTER** key. (The ink discharging amount is reset.)

When the waste ink tank has room

- (1) Select "Continue" by pressing the **◀** key. (The ink discharging amount is not reset.)
 - In this case, the message of P.4-35 "Check message in Local mode" is displayed when it returns to the local mode.

● When the waste ink tank is full

The right message is displayed.

```
* Check waste ink *  
Exchange :ent
```

1

Replace the waste ink tank (👉 P.4-36) then press the **ENTER** key.

- The ink discharging amount is reset.

Important!

- Be sure to replace the waste ink tank (👉 P.4-36) if "Exchange" is selected by the operations above when the waste ink tank is "Near-full" or "Full". Waste ink may overflow the tank before the check message is displayed if the tank is not replaced and continuously used.
- Waste ink, which is discharged when [NOZZLE WASH], [PUMP TUBE WASH] and [CUSTODY WASH] of [ST.MAINTENANCE] are performed, is not counted upon the machine. Be sure to check the condition of waste ink tank before or after the operations.

Check message in Local mode

The right message is displayed.

```
<LOCAL.1>      [#01]
Check waste ink<MNT>
```

- 1 Check the waste ink tank, and then replace the waste ink tank (👉 P.4-36) if required.

When waste ink tank check message is not needed

The waste ink tank check message can be set not to be displayed.

- 1 Select [Waste Ink Warning] of the machine setup menu.

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MACHINE SETUP] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [Waste Ink Warning] by pressing the **▲** **▼** keys.
- (4) Press the **ENTER** key.

- 2 Select "OFF " by pressing the **▲** **▼** keys.

```
WasteInkWarning
SETUP           : OFF
```

- 3 Press the **ENTER** key.

```
MACHINE SETUP
WasteInkWarning<ent>
```

- 4 Press the **END** key several times to end.

Important!

- The check message is not displayed when the waste ink tank warning is set to "OFF". Be sure to check the ink remaining amount within the waste ink tank visually.

Replacing waste ink tank

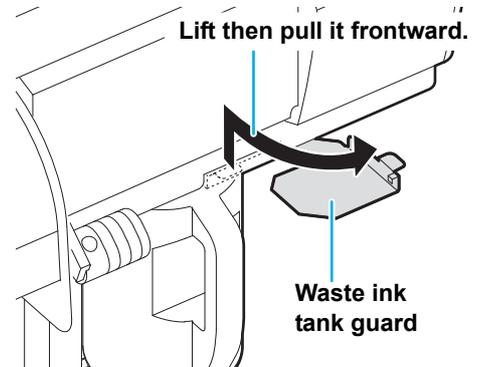
When the right message is displayed, check the waste ink tank immediately, and then replace it according to the condition.

<LOCAL . 1> [# 0 1]
Check waste ink<MNT>

1

Remove the waste ink tank guard.

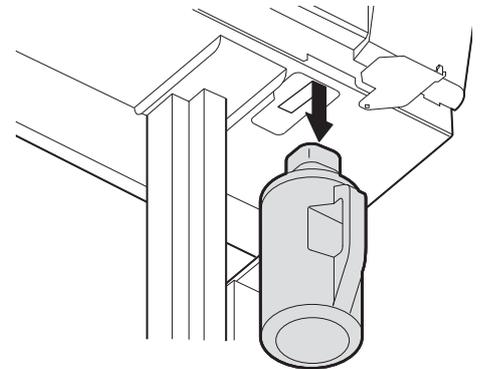
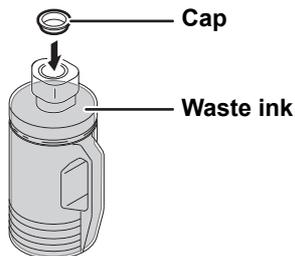
- (1) Lift the waste ink tank guard then release a lock.
- (2) Open the waste ink tank guard frontward.



2

Pull it frontward to remove by holding the waste ink tank handle.

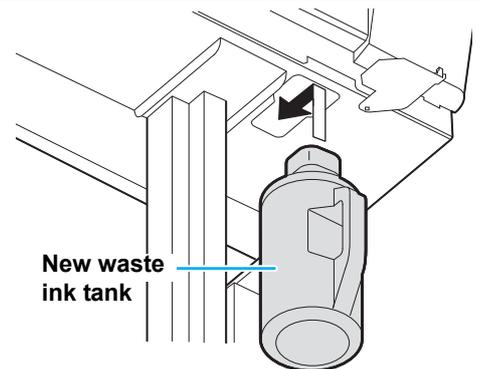
- Put a cap on the waste ink tank removed.



3

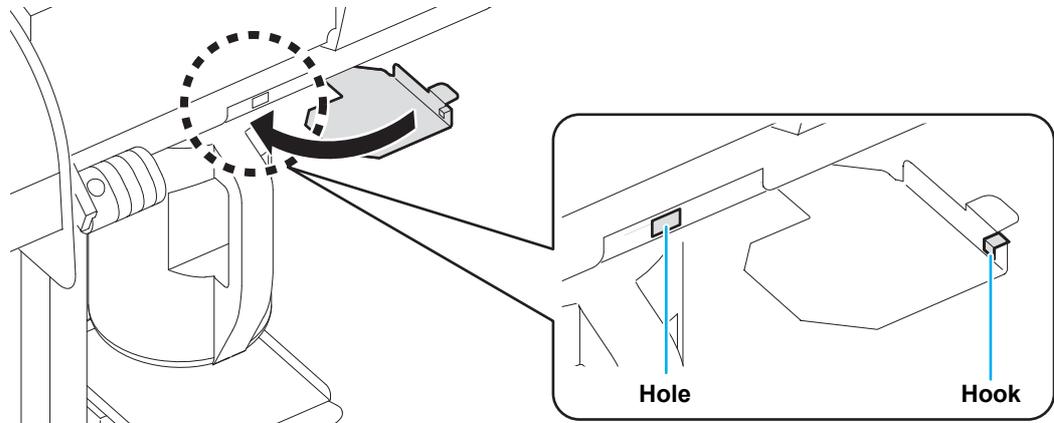
Replace the waste ink tank.

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



4**Close the waste ink tank guard.**

- Hook the waste ink tank guard in a hole of the machine then lock it.

**5****Select [Ink Tank Exchange] of the maintenance menu.**

- (1) Press the **FUNCTION** key in the local mode.
- (2) Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- (3) Select [Ink Tank Exchange] by pressing the **▲** **▼** keys.

6**Press the **ENTER** key.**

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

```
InkTankExchange
EXCHANGE      :ent
```

7**Press the **END** key several times to end.****Changing the ink set**

Ink set used can be changed.



- To change the ink set such as changing from “4-color model” to “6-color model”, the machine must be worked by our service engineer. Contact our service office or the distributor in your region.

Replacing the cutter blade

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



- The blade is sharp. Be careful not to hurt yourself or anyone else.
- Keep the cutter blades away from the reach of children. Be sure to dispose of the worn-out cutter blades according to the applicable national and local laws and regulations.

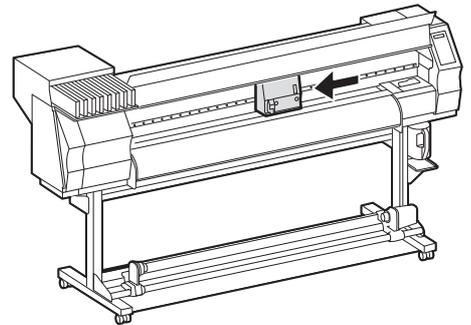


- When replacing the cutter blade, it is recommended to place a sheet of paper under the cutter blade. This will help pick up the cutter blade if it drops.

1

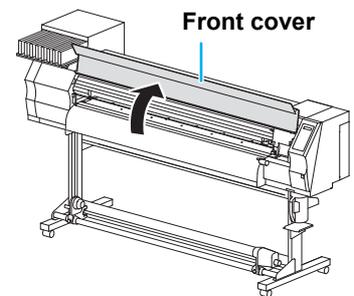
Press the **ST.MAINT** key then press the **ENTER** key.

- The carriage moves onto the platen.



2

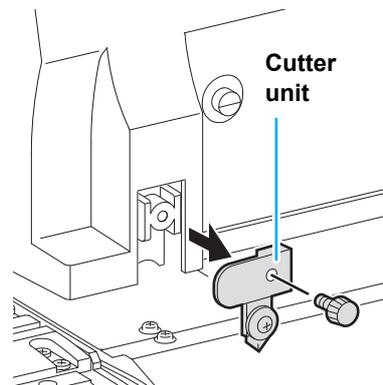
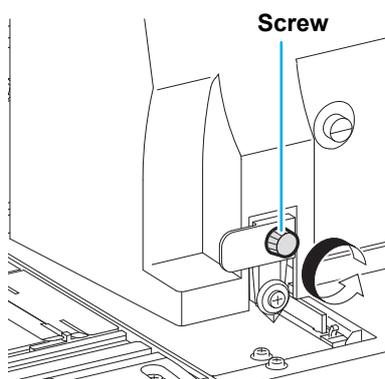
Open the front cover.



3

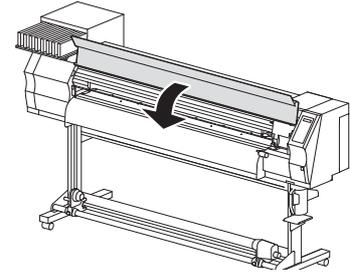
Replace the cutter unit by the carriage.

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



4

Close the front cover.



5

Press the **ENTER** key.

- The machine returns to LOCAL mode.

CHAPTER 5

Troubleshooting



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

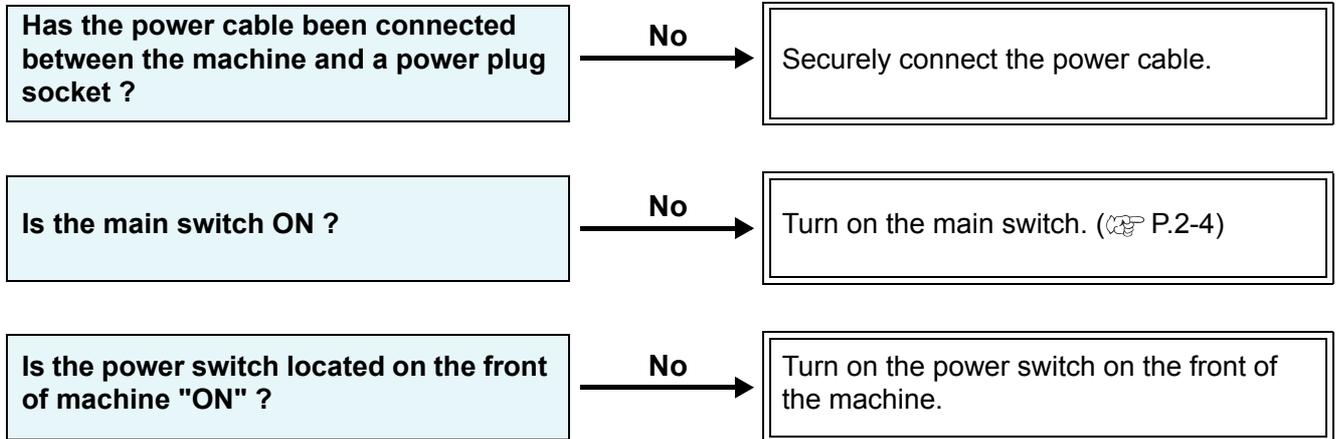
Troubleshooting	5-2
Power does not turn on	5-2
The machine does not start printing	5-2
Media get jammed / media is soiled	5-3
Image quality is poor	5-4
Nozzle is clogged	5-4
Ink cartridge warning appears	5-5
Warning / Error Messages	5-6
Warning messages	5-6
Error messages	5-8

Troubleshooting

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

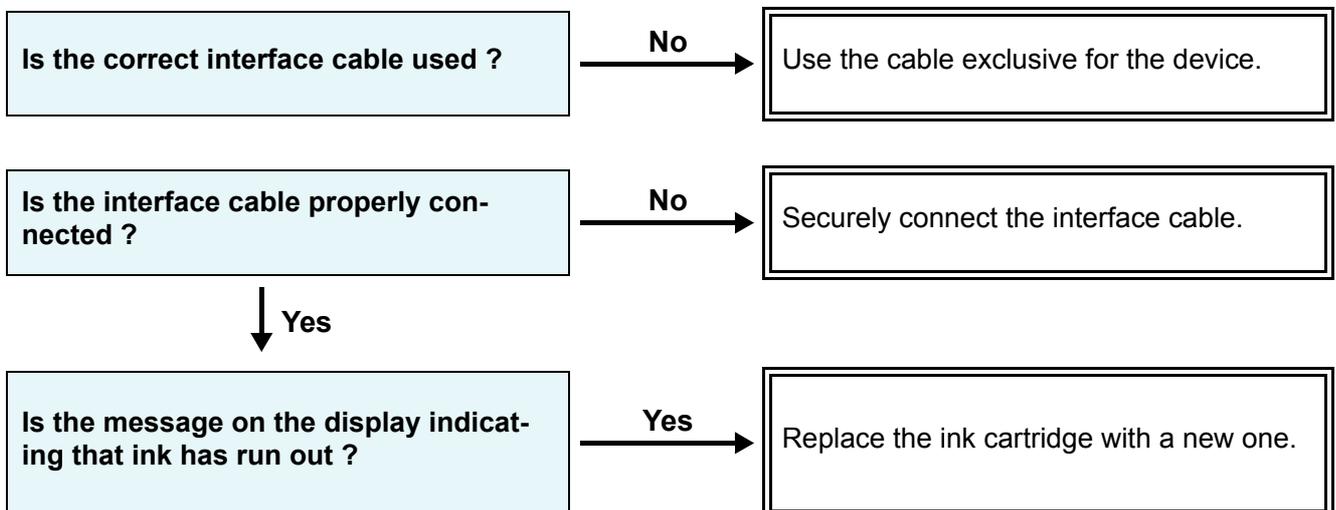
Power does not turn on

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



The machine does not start printing

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



Media get jammed / media is soiled

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

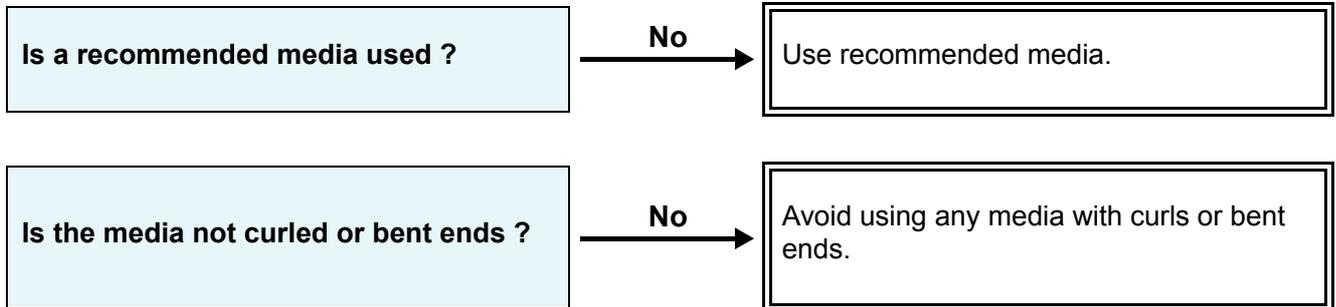


Image quality is poor

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)	<ol style="list-style-type: none"> (1) Execute the head cleaning. (☞ P.2-17) (2) Perform maintenance of the inside of the station. (☞ P.4-5) (3) Execute the [MEDIA COMP.] function. (☞ P.3-5) (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	<ol style="list-style-type: none"> (1) Execute the [MEDIA COMP.] function. (☞ P.3-5)
Disagreement in print positions between outward trip and homeward trip	<ol style="list-style-type: none"> (1) Execute the [DROP POSITION] function. (☞ P.4-21)
Ink drops falling on media during printing	<ol style="list-style-type: none"> (1) Execute the wiper cleaning. (☞ P.4-5) (2) Execute the ink cap cleaning. (☞ P.4-5) (3) Execute the head cleaning [NORMAL]. (☞ P.2-17) (4) When the phenomenon is not improved, execute the periodical wiping setting. (☞ P.4-24)

Nozzle is clogged

When nozzle clogging is not dissolved even after the head cleaning referring to P.2-17, make sure the following operations.

- Fill ink by the operations of P.4-16.
- Replace ink by the operations of P.4-17.

Ink cartridge warning appears

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

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

Important!

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

Displaying the description of ink cartridge trouble

The contents of cartridge error are confirmable by the following operations. (☞ P.5-7)

1

Press the **ENTER** key in the local mode.

S b	MMBBYYKK
REMA I N	3 4 5 6 7 8 9 9

2

Press the **FUNCTION** key.

- When two or more cartridge troubles occur, warnings can be displayed in turn by pressing the **▲** or **▼** key.
- Press the **FUNCTION** key or **END** key to return to the display of the remaining amount of ink.

NON-ORIGINAL INK
---B---

Warning / Error Messages

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

Warning messages

Message	Cause	Solution
Close a cover .	The front cover or the maintenance cover is opened.	Check the front cover and maintenance covers. If the same error message appears again even after closing all the covers, contact your local distributor to call for service.
** NO MEDIA **	A media has not been set.	Set media.
!EXCHANGE BATTERY	The battery life end of the internal clock is detected.	Contact your local distributor to call for service.
<LOCAL . 1> [#01] Replace a WIPER<MNT>	Time to replace the wiper in the capping station with a new one has come. (The wiping count has reached the specified value.)	Replace the wiper with a new one. (☞ P.4-7)
<LOCAL . 1> [#01] !Do TEST DRAW	The nozzle recovery cannot be expected because the machine has been left standing for a prolonged period of time.	Perform test printing then check nozzle clogging. In the case of nozzle clogging observed, perform cleaning. (☞ P.2-17) In the case of significant nozzle clogging observed, perform the operations of P.4-8 "Washing of Head nozzle".
<LOCAL . 1> [#01] NEAR END MMBB----	Ink for one supply path has been nearly used up.	Replace the cartridge for the supply path corresponding to the indicated color. You can print without replacing the cartridge (until INK END is displayed). However, the machine returns to local mode every completion of printing one file.
REMOTE . 1 [#01] NEAR END MMBB----		
<LOCAL . 1> [#01] INK END ----YYKK	Ink for one supply path has been completely used up.	Replace the cartridge for the supply path corresponding to the indicated color.
REMOTE . 1 [#01] INK END ----YYKK		
<LOCAL . 1> [#01] !CAR	Ink cannot be supplied due to the cartridge per one supply path.	Check the cartridge for the supply path corresponding to the indicated color.
REMOTE . 1 [#01] !CAR		
<LOCAL . 1> [#01] REINSERT CARTRIDGE	Ink near end was detected right after the cartridge with much remaining amount of ink has been inserted.	Pull out the inserted cartridge and insert it again. If the message will be displayed again, contact a distributor in your district or our office to call for service.

Message	Cause	Solution
<LOCAL.1> !CAR[#01]	There is a problem with installed ink cartridges.	Check the content of the warning details in the guidance function.
REMOTE.1 !CAR[#01]		
INK NEAR END MMBB - - - -	The ink of the ink cartridge has been nearly used up.	Replace the cartridge generating the warning with a new one.
INK END - - - - YYKK	The ink of the ink cartridge has been completely used up.	Replace the cartridge generating the warning with a new one.
NON-ORIGINAL INK - - - - YYKK	The ink cartridge is not MIMAKI genuine.	Replace the cartridge generating the warning with a MIMAKI genuine.
WRONG INK IC - - - - YYKK	The IC chip of the ink cartridge cannot be read normally.	Remove the cartridge generating the warning once and install it again. If the same warning message still appears, contact your local distributor to call for service.
Kind of INK - - - - - - - -	The ink of the ink cartridge is different in type from the ink currently supplied.	Check the ink type of the cartridge generating the warning.
Color of INK - - - - - - - -	The ink of the ink cartridge is different in color from the ink currently supplied.	Check the ink color of the cartridge generating the warning.
WRONG CARTRIDGE - - - - - - - -	There is trouble with an installed ink cartridge.	Check the cartridge generating the warning.
NO CARTRIDGE - - - - - - - -	An ink cartridge has not been installed in the slot.	Install an appropriate cartridge in the slot generating the warning.
Expiration - - - - - - - -	The specified expiration date of an ink cartridge has passed.	Replace the cartridge generating the warning with a new one. The cartridge may be used until one month passes after the specified expiration date.
Expiration:1MONTH - - - - - - - -	The expiration date of an ink cartridge has passed (one month has passed after the specified expiration date).	The red LED blinks. Replace the cartridge generating the warning with a new one. The cartridge may be used until two months pass after the specified expiration date.
Expiration:2MONTH - - - - - - - -	The expiration date of an ink cartridge has passed (two months have passed after the specified expiration date).	Replace the cartridge generating the warning with a new one.
INK REMAIN ZERO - - - - - - - -	Remaining amount of ink in an ink cartridge is zero.	
<LOCAL.1> [#01] Check waste ink<MNT>	The waste ink tank is nearly full.	Replace the waste ink tank then execute [MAINTENANCE]-[Ink Tank Exchange]. (P.4-36)

Error messages

When an error message is displayed, eliminate the error according to the chart below.

If the same error message appears again, contact your dealer or an office of MIMAKI to call for service.

Message	Cause	Solution	
***** ERROR 01 ***** MAIN ROM	An error occurred in the circuit board system. (ROM)	Turn off the power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.	
***** ERROR 02 ***** MAIN RAM	An error occurred in the circuit board system. (RAM)		
***** ERROR 03 ***** POWER +5V	An error occurred in the circuit board system. (POWER +5V)		
***** ERROR 03 ***** POWER +24V	An error occurred in the circuit board system. (POWER +24V)		
***** ERROR 03 ***** POWER +42V	An error occurred in the circuit board system. (POWER +42V)		
***** ERROR 04 ***** F-ROM	An error occurred in the circuit board system. (F-ROM)		
***** ERROR 06 ***** SD-RAM	An error occurred in the circuit board system. (SD-RAM)		
***** ERROR 07 ***** HEAD (----)	An error in heads was detected. (Abnormal temperature was detected.)		
***** ERROR 07 ***** VOLTAGE (----)	An error in heads was detected. (Abnormal voltage was detected.)		
***** ERROR 08 ***** LinearENCODER:SENSOR	An error occurred in the linear encoder. (Counting was unable.)		
***** ERROR 08 ***** LinearENCODER:DIR.	An error occurred in the linear encoder. (Error in the mounting direction.)		
***** ERROR 08 ***** LinearENCODER:COUNT	An error occurred in the linear encoder. (Read-out count error)		
***** ERROR 09 ***** FPGA ERROR	An error occurred in the circuit board system. (FPGA PDC)		
***** ERROR 09 ***** HDC ERROR (----)	An error occurred in the circuit board system. (FPGA HDC)		
***** ERROR 10 ***** COMMAND ERROR	The machine received some data other than command data.		Securely connect the interface cable in position. Use an interface cable conforming to the specifications.

Message	Cause	Solution
***** ERROR 11 ***** PARAMETER ERROR	Any parameter outside the range of acceptable numeric values was received.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
***** ERROR 16 ***** MRL COMMAND	The received data does not follow the command system set by the machine.	Transmit data that is compatible with the command system supported by this machine.
***** ERROR 25 ***** FULL - SPEED	An error occurred in communication between the host computer and the interface board for USB2.0 connection.(Full-Speed mode connection)	Check that the host PC supports the USB2.0 interface. (Communication can be resumed without changing any setting. However, it is recommend to use the connection in High-Speed mode.)
***** ERROR 25 ***** PACKET SIZE OVER	An error occurred in communication between the host computer and the interface board for USB2.0 connection.	Check that the cable is securely connected to the host computer and interface board. Also, check to see if any error has occurred on the host computer.
***** ERROR 25 ***** USB PROTOCOL	An error occurred in communication between the host computer and the interface board for USB2.0 connection.	
***** ERROR 25 ***** USB ENVIRONMENT	An error occurred in communication between the host computer and the interface board for USB2.0 connection.	
***** ERROR 25 ***** USB DATA	An error occurred in communication between the host computer and the machine for USB2.0 connection.	
***** ERROR 30 ***** CAN'T OPERATE	Improper operation was conducted on the operation panel.	
***** ERROR 34 ***** DATA REMAIN	It is being tried to change settings for functions though there remains received data that has not yet been printed.	Print all the received data or execute the data clear function. Then, change settings.
***** ERROR 40 ***** MOTOR ALARM X	An excessive load was applied to the X motor.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
***** ERROR 41 ***** MOTOR ALARM Y	An excessive load was applied to the Y motor.	
***** ERROR 42 ***** X OVER CURRENT	An error due to an excessive current of the X motor was detected.	
***** ERROR 43 ***** Y OVER CURRENT	An error due to an excessive current of the Y motor was detected.	
***** ERROR 45 ***** CAPPING: PARAMETER	An error occurred in the capping control. (Improper parameter adjustment value)	

Message	Cause	Solution
***** ERROR 46 ***** WIPER	An error occurred in the wiper control.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
***** ERROR 50 ***** MEDIA WIDTH SENSOR	Paper could not be detected. The media set position or media itself is not proper.	If the same error message appears again even after setting the media properly, contact your local distributor to call for service.
***** ERROR 50 ***** MEDIA SET POSITION L	The set position of the media is not proper. The media detection has not completed.	Set the media to the proper position again. (☞ P.2-8, P.2-13)
***** ERROR 50 ***** MEDIA SET POSITION R		
***** ERROR 51 ***** Y-ORIGIN	Y-origin could not be detected.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
**** ERROR 120 **** ROOM TEMP LOW (XX°C)	The room temperature is out of the usable temperature range (too low).	Adjust the room temperature. (Press the ENTER key to continue operation without changing the ambient conditions.)
**** ERROR 121 **** ROOM TEMP HIGH(XX°C)	The room temperature is out of the usable temperature range (too high).	
**** ERROR 144 **** CARTRIDGE SET!	There is a slot where no cartridge has been inserted.	Set a cartridge.
**** ERROR 200 **** HEAD MEMORY (----)	An error occurred on the head unit memory.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
**** ERROR 202 **** DVEICE CONSTRUCTION	The head is not connected. An error occurred on the head slider board. The head is not MIMAKI genuine.	
**** ERROR 203 **** SDRAM SIZE	A SD-RAM of the size required for the machine has not been equipped.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service. (When a usable SD-RAM is available, the machine can be started as is. However, a printing speed may be slow depending on resolution.)
**** ERROR 207 **** XXXXXXXXXX	An error is detected on the waveform printed on the lower line of the display.	Turn off the main power to the machine and turn it on after a while. If the same error message appears again, contact your local distributor to call for service.
**** ERROR 208 **** CHECK MAIN PCB ID XX	Model ID of main PCB is different. (XX is ID code.)	
**** ERROR 250 **** Y COORDINATES	An error was detected during scanning operation.	
**** ERROR 251 **** SYSTEM ERROR	A system error occurred.	

CHAPTER 6

Appendix



This section attaches a list of the specifications and a list of the functions of this printer.

- Machine specifications 6-2
- Ink specifications..... 6-4
- Sheet for inquiry 6-5
- Warning labels 6-6
- Function Flowchart..... 6-8

Machine specifications

Item		TS30-1300
Print head	Method	Drop-on-demand piezoelectric print heads
	Specification	1 head
Drawing mode (scan x feed)		720 x 540dpi 540 or 720 x 720dpi 540 x 900dpi 540 or 720 x 1080dpi 720 x 1440dpi 1440 x 1440dpi
Usable inks		Sublimation dye ink (Sb54) : 4 colors (Y,M,BI,K) 6 colors (Y,M,BI,K,LBI,Lm)
Ink supply		Supplying from ink cartridges through tubes. Ink cartridge replacement type : Only at 4 colors: Supplying by Toggle switchover with 2 cartridges/color
Capacity of ink cartridge		6-color set of cartridges : 440cc or 220cc 1 cartridge for each color, 440cc/1 color or 220cc/1 color (2 cartridges, 880cc or 440cc only for magenta and blue) 4-color set installed : 440cc or 220cc 2 cartridges for each color, 880cc/1 color or 440cc/1 color
Media type		Photo-paper , Synthetic paper , Duplex paper
Max. printing width		1361mm
Roll Media size	Maximum	1371mm
	Minimum	210mm
	Thickness	1.0 mm or less
	Roll outside diameter	φ 180mm or less
	Roll weight ^{*1}	25kg or less
	Roll inside diameter	3 or 2 inches
	Printing surface	Side facing outward
Leaf media size	Maximum	1371mm
	Minimum	210mm
Margin	Leaf media	Left end and right end : 15 mm (Default) Front : 40.0 mm Rear : 98.5 mm
	Roll media	Left end and right end: 15 mm (Default) Front : 40.0 mm Rear : 0.0 mm
Distance accuracy	Absolute accuracy	Whichever the larger one of ± 0.3 mm or ± 0.3 % of the designated
	Reproducibility	Whichever the larger one of ± 0.2 mm or ± 0.1 % of the designated
Perpendicularity		± 0.5 mm / 1000 mm
Media skew		5 mm or less / 10 m variable
Head height adjustment		2.0mm / 3.0mm (from the platen surface) 2 levels adjustable
Cutting of media		Cutting of Y direction by the head cutter, Cutting accuracy (steps) : 0.5 mm or less.
Waste ink tank		Bottle type (2,000 cc)
Interface		USB 2.0
Command		MRL- III
Noise	during standby	Less than 58 dB (FAST-A, Front & Rear & Left & Right 1 m)
	during continuous printing	Less than 65 dB
	during discontinuous printing	Less than 70 dB
Safety Standard		VCCI-Class A, FCC-Class A, UL 60950, CE Marking (EMC,Low Voltage Directive), CB Report, RoHS

Item		TS30-1300
Power		AC100 - 120 ± 10% , AC220 - 240 ± 10% , 50/60Hz ± 1Hz , 15A or less
Power consumption		300 W or less
Recommended Environment	Available temp.	20 °C to 35 °C
	Humidity	35 to 65% Rh (No condensation)
	Guaranteed temp.	20 °C to 25 °C
	Temperature change	± 10 °C / h or less
	Dust	Equivalent to normal office level
Weight		145 kg
Outside dimensions	Width	2289 mm
	Depth	739 mm
	Height	1424 mm

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

Ink specifications

Item		When aqueos-color ink is used
Supply		Dedicated sublimation dye ink cartridge
Color		Black ink cartridge Blue ink cartridge Magenta ink cartridge Yellow ink cartridge Light blue ink cartridge Light magenta ink cartridge
Ink capacity		220cc / 440cc per cartridge
Shelf life		The period is printed on the ink cartridge.
Storage temperature	Storage	10 to 35°C (Average daily temperature) • Be sure to keep a vessel in the airtight condition. • Be sure to keep a vessel in a dry, well-ventilated, cool and dark location.
	Transportation	0 to 40°C • Avoid the condition lower than -0 °C and higher than 40 °C.

Important!

- **Do not disassemble ink cartridges and do not refill them with ink.**
- **Ink could freeze if kept in a cold place for an extended period.**
If the ink freezes, the quality is changed and the ink becomes unusable.
Store the ink in an environment that will not freeze the ink.

Sheet for inquiry

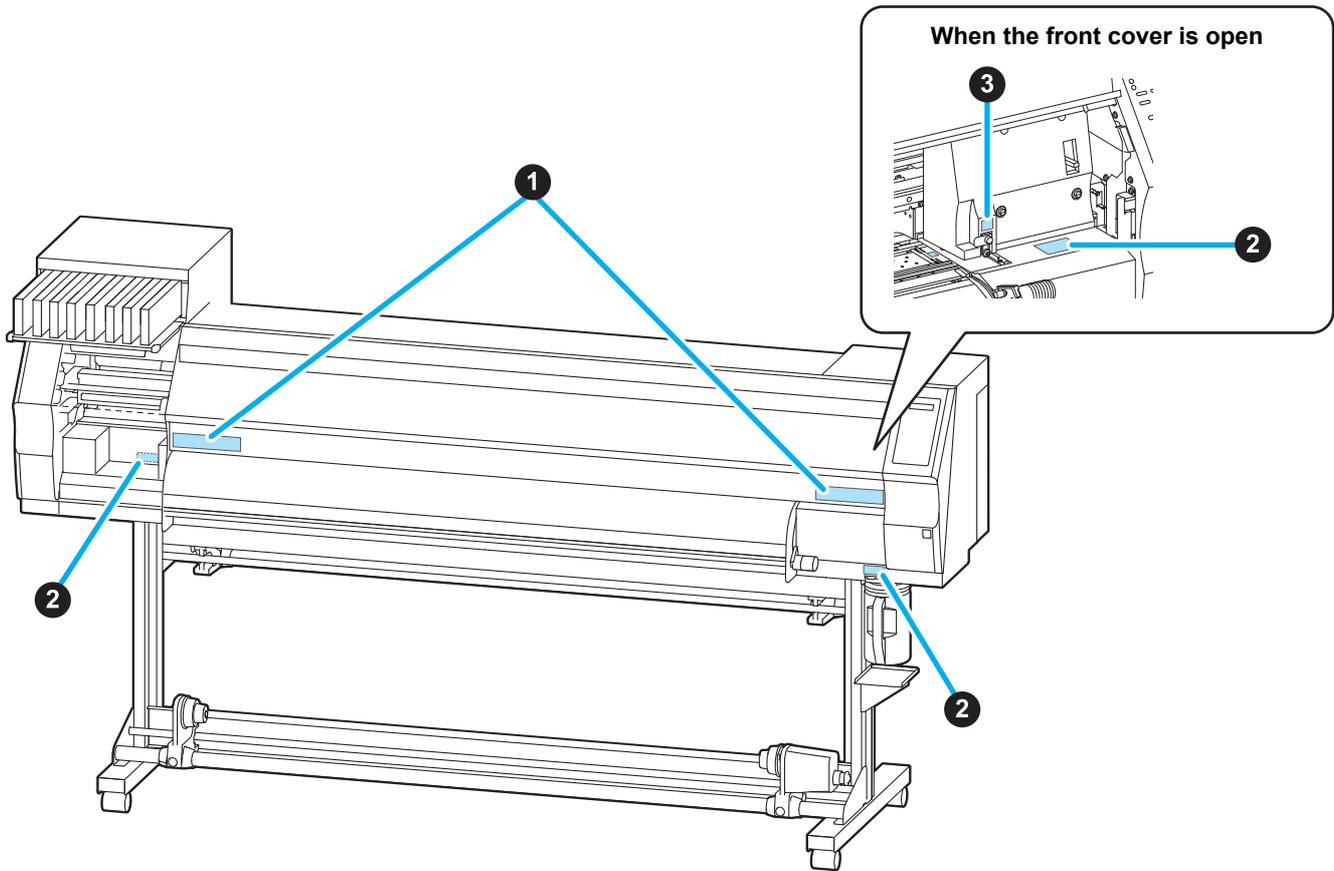
Use this sheet for troubles and abnormal functions of the machine.
Fill in the following necessary items, and then fax the sheet to our sales office.

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

*1. Refer to "Confirming Machine information" of "Convenient using" then fill in necessary information.
(☎ P.3-40)

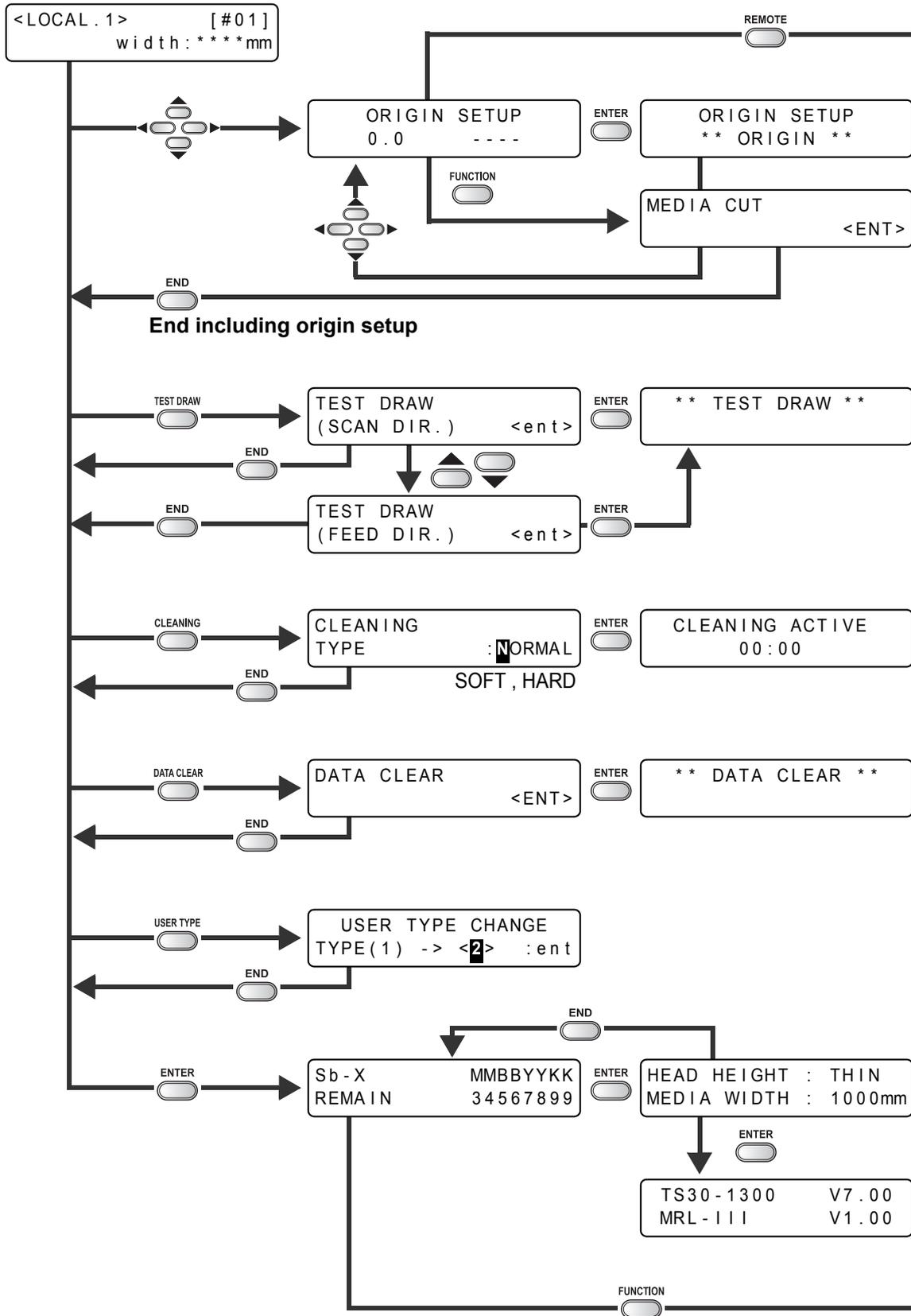
Warning labels

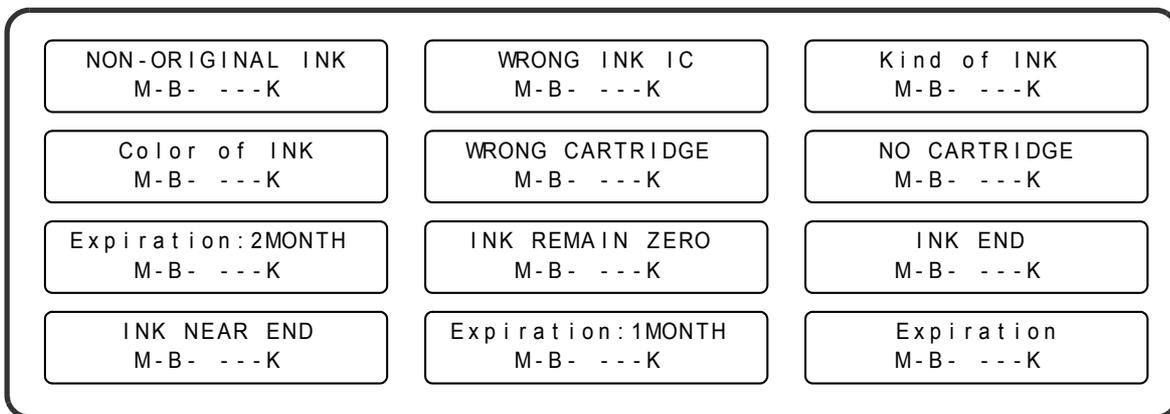
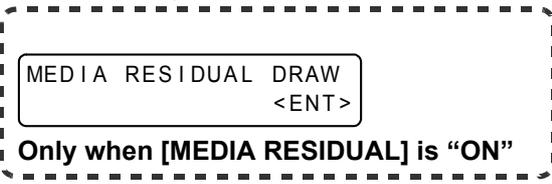
Warning labels are stuck on the machine. Be sure to fully understand the warning given on the labels. If a warning label is illegible due to stains or has come off, purchase a new one from a distributor or our sales office.



No.	Reorder	Label										
1	M901549	<table border="1"> <thead> <tr> <th data-bbox="403 286 611 331">⚠ 注意</th> <th data-bbox="616 286 823 331">⚠ 注意</th> <th data-bbox="828 286 1035 331">⚠ CAUTION</th> <th data-bbox="1040 286 1248 331">⚠ ACHTUNG</th> <th data-bbox="1252 286 1460 331">⚠ ATTENTION</th> </tr> </thead> <tbody> <tr> <td data-bbox="403 338 611 398">滚轮转动时, 请勿将手插入前面外盖的内部。</td> <td data-bbox="616 338 823 398">キャリッジ動作中は、フロントカバーの中に指を入れないでください。</td> <td data-bbox="828 338 1035 398">-MOVING CARRIAGE- Do not put fingers inside this area</td> <td data-bbox="1040 338 1248 398">-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.</td> <td data-bbox="1252 338 1460 398">-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone. </td> </tr> </tbody> </table>	⚠ 注意	⚠ 注意	⚠ CAUTION	⚠ ACHTUNG	⚠ ATTENTION	滚轮转动时, 请勿将手插入前面外盖的内部。	キャリッジ動作中は、フロントカバーの中に指を入れないでください。	-MOVING CARRIAGE- Do not put fingers inside this area	-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.	-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone. 
⚠ 注意	⚠ 注意	⚠ CAUTION	⚠ ACHTUNG	⚠ ATTENTION								
滚轮转动时, 请勿将手插入前面外盖的内部。	キャリッジ動作中は、フロントカバーの中に指を入れないでください。	-MOVING CARRIAGE- Do not put fingers inside this area	-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.	-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone. 								
2	M903330											
3	M903405											

Function Flowchart





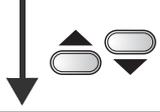
<LOCAL . 1> [#01]
width:****mm

FUNCTION 

FUNCTION
SETUP <ENT>

ENTER 

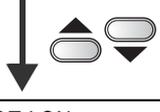
SETUP



FUNCTION
MAINTENANCE <ENT>

ENTER 

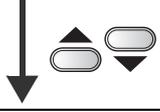
MAINTENANCE



FUNCTION
MACHINE SETUP <ENT>

ENTER 

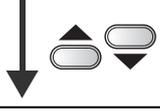
MACHINE SET



FUNCTION
MACHINE SETUP2 <ENT>

ENTER 

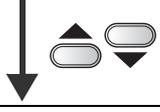
MACHINE SET 2



FUNCTION
INFORMATION <ENT>

ENTER 

INFORMATION

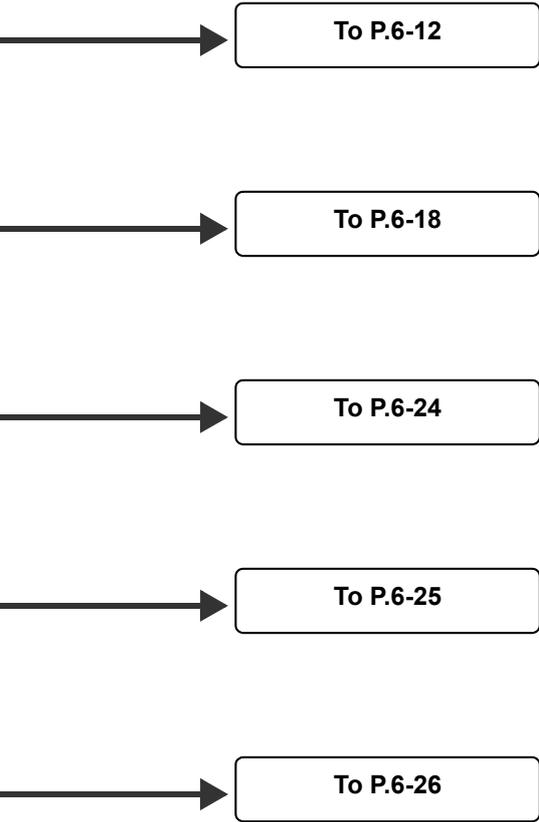


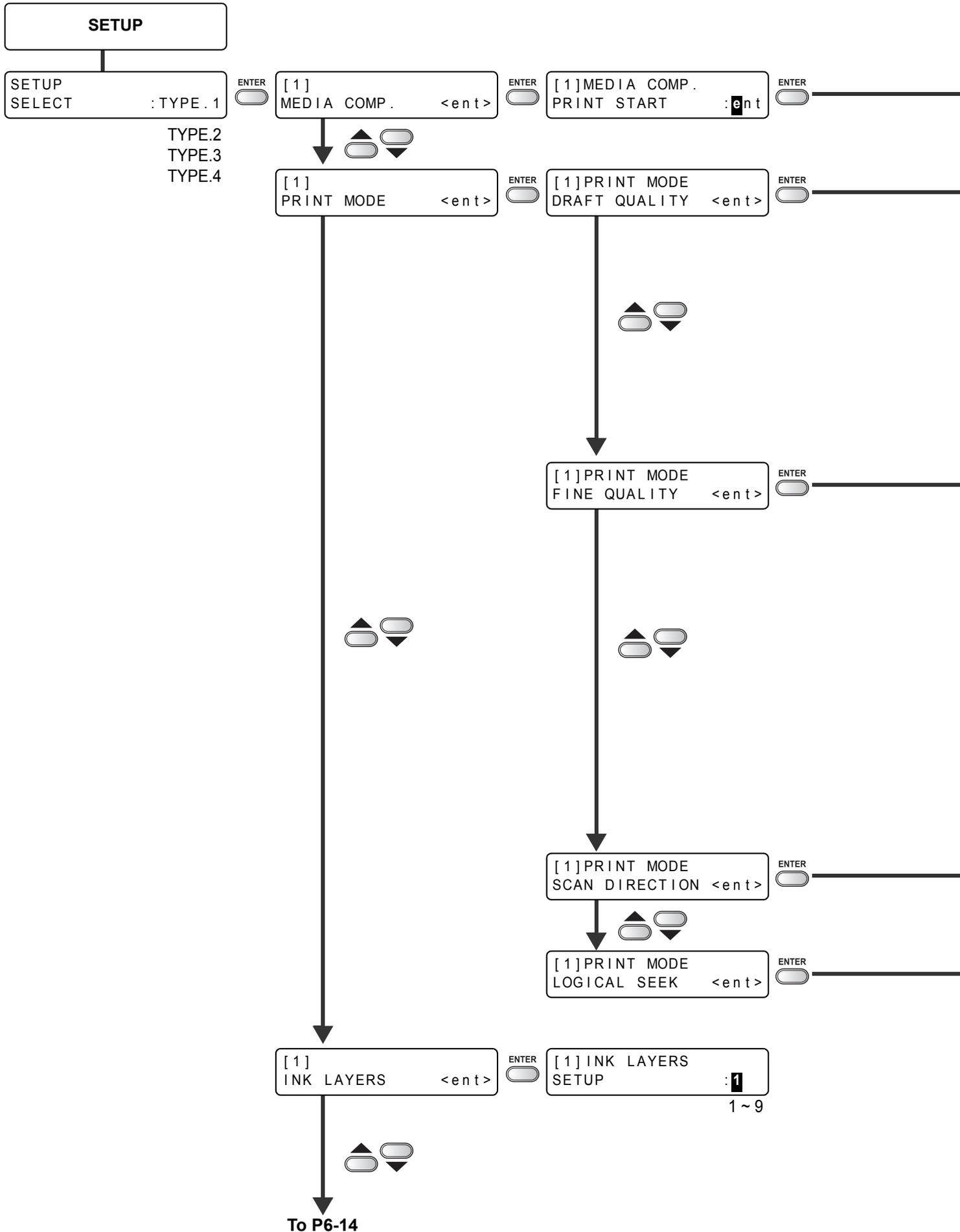
FUNCTION
DISPLAY <ENT>

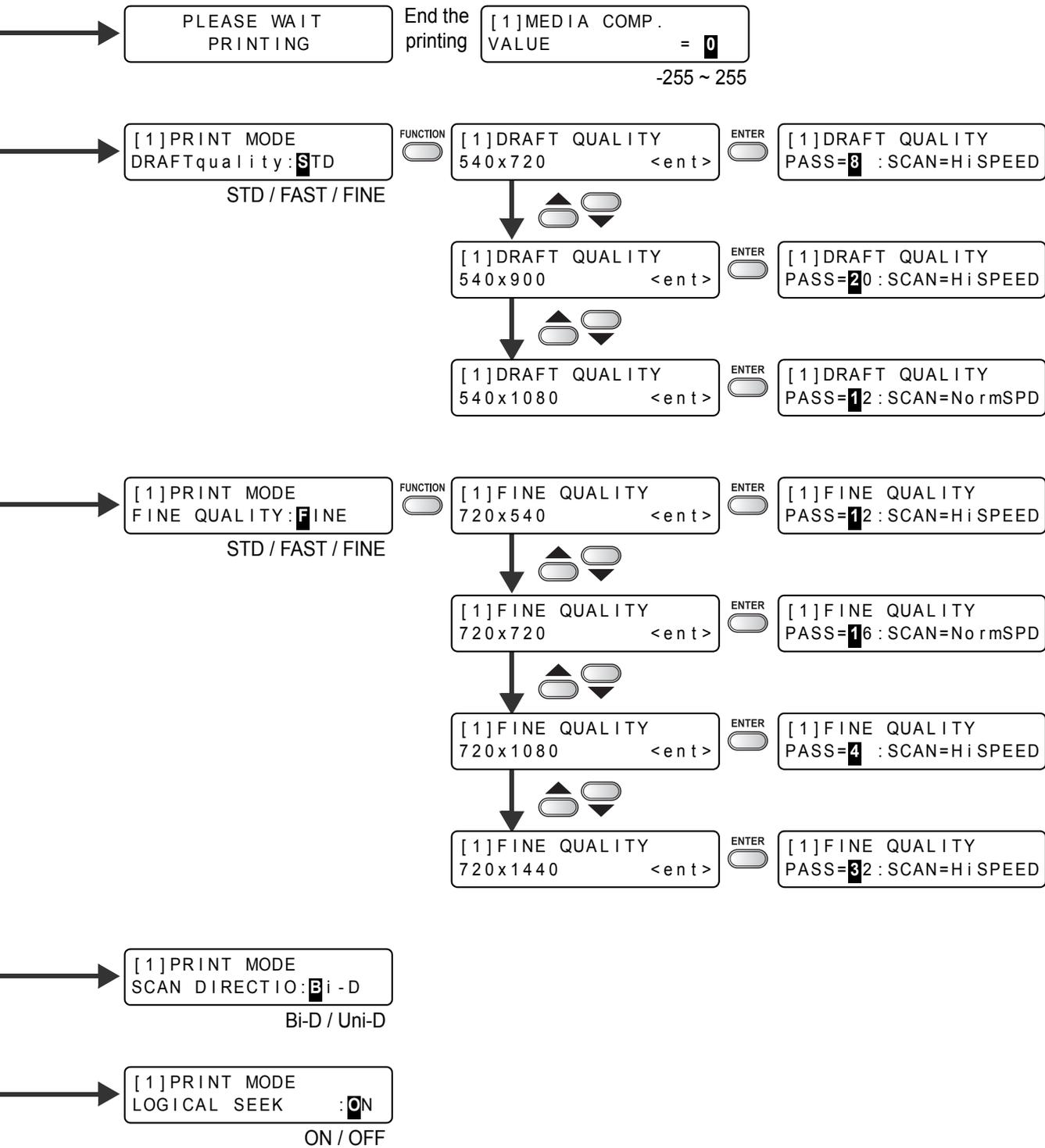
ENTER 

DISPLAY
Japanese <ent>

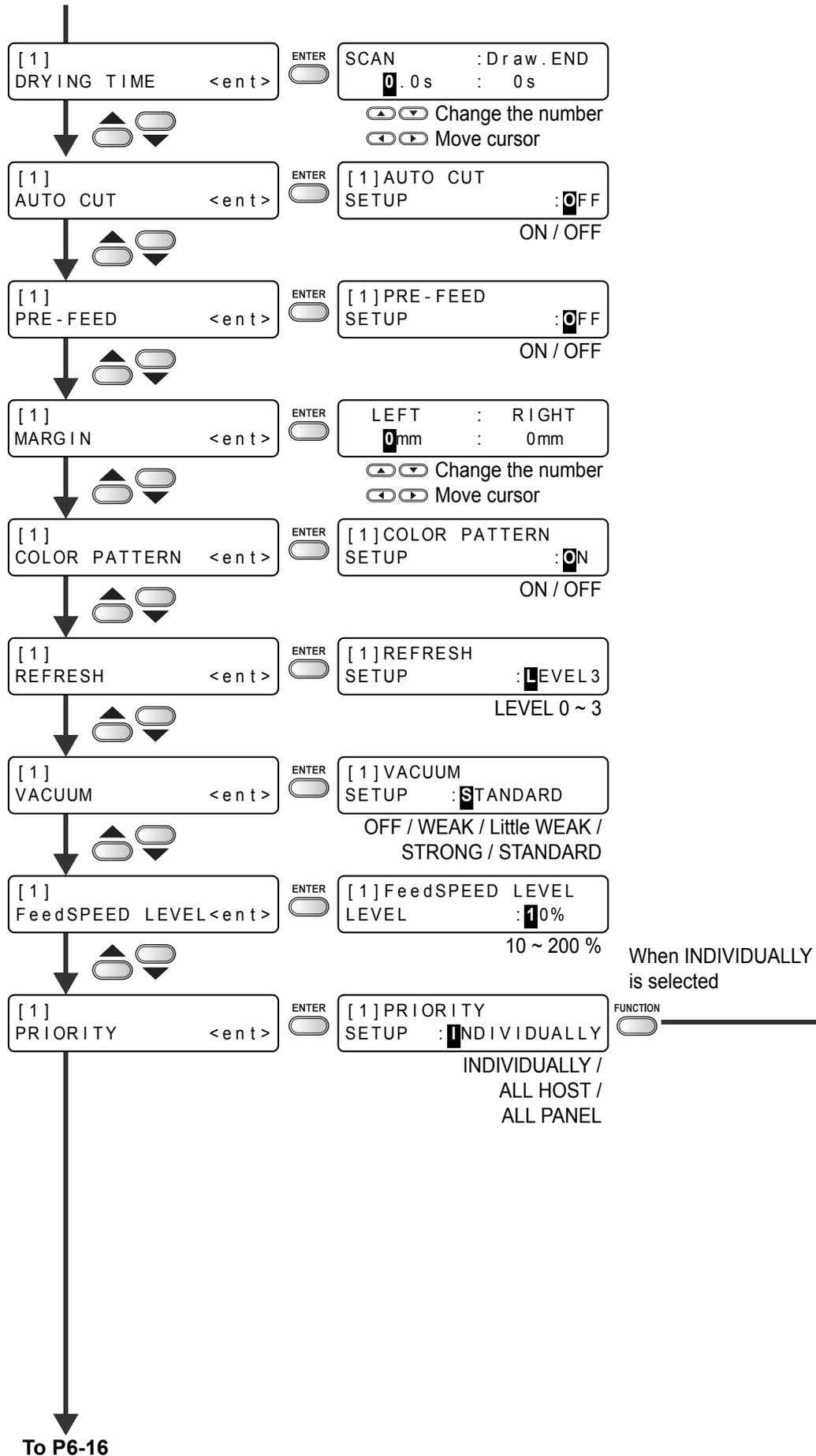
- English <ent>
- German <ent>
- French <ent>
- Spanish <ent>
- Italian <ent>
- Portugues <ent>



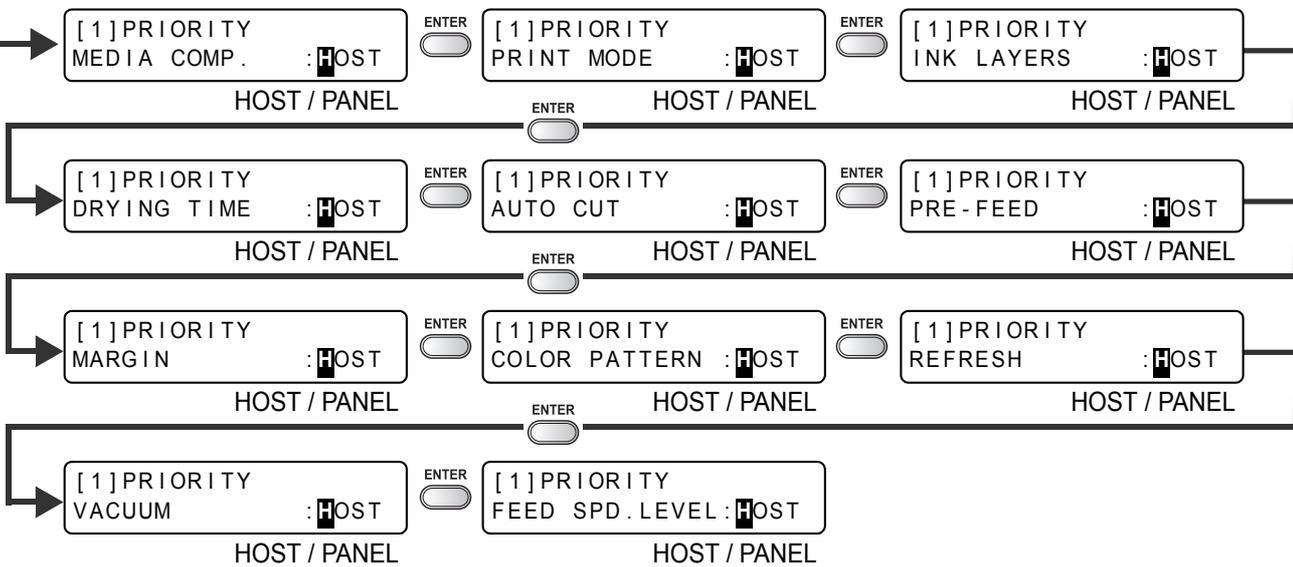




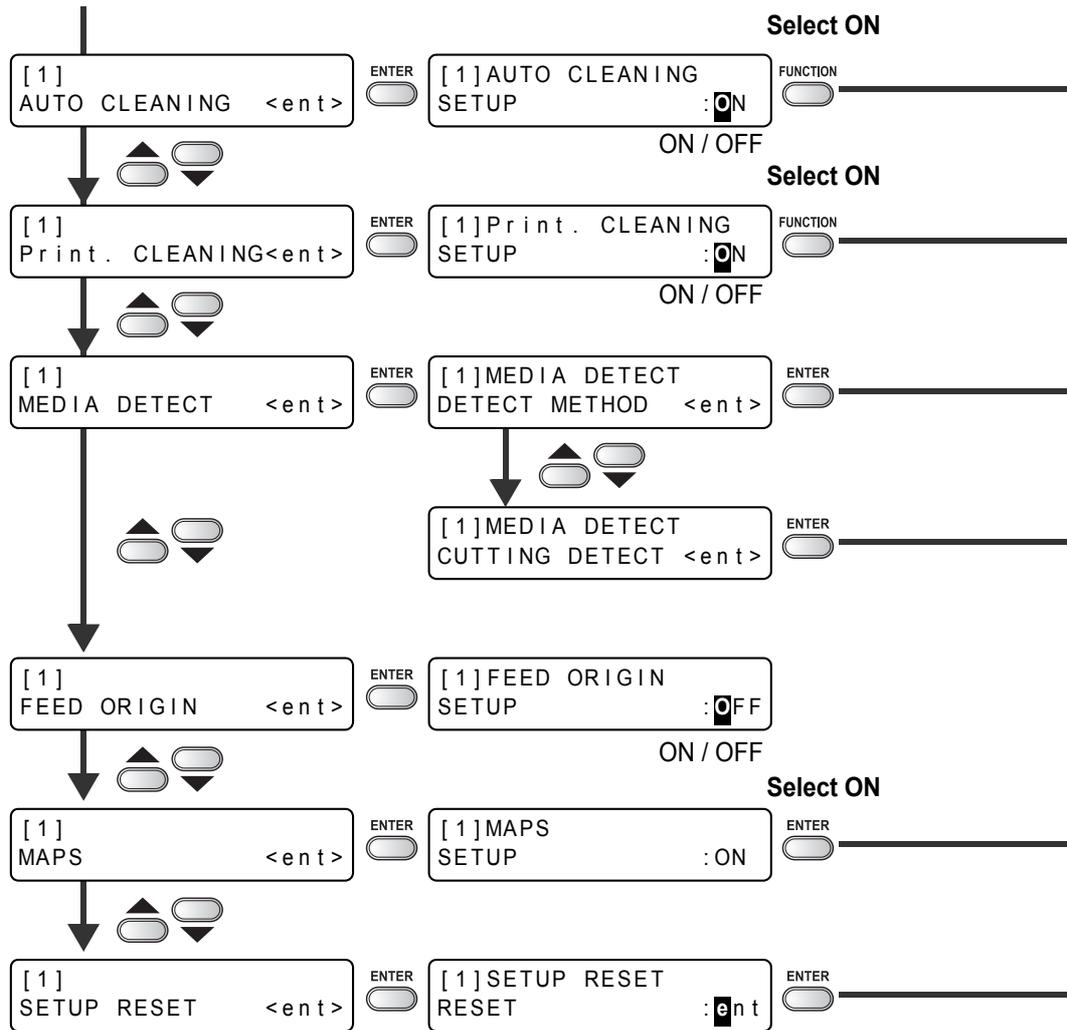
From P6-12

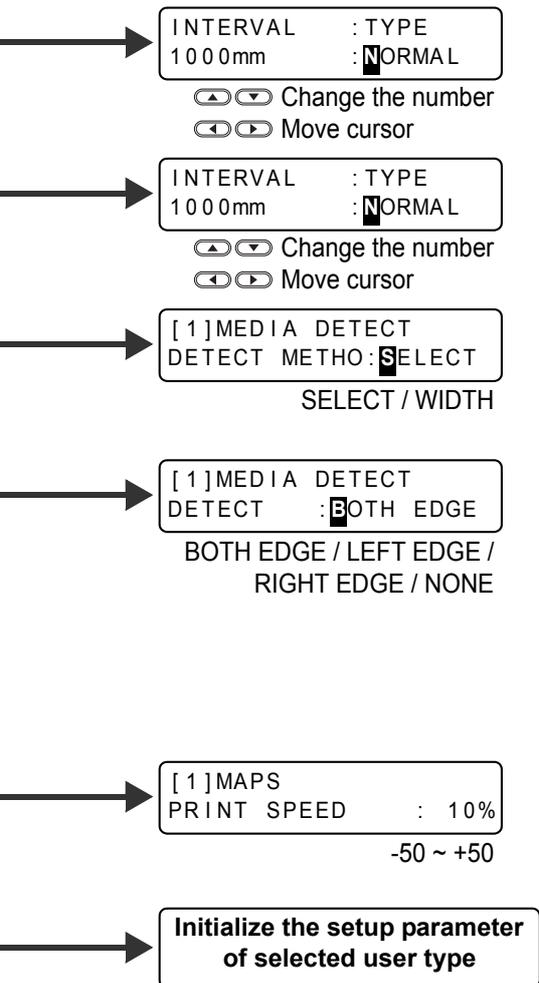


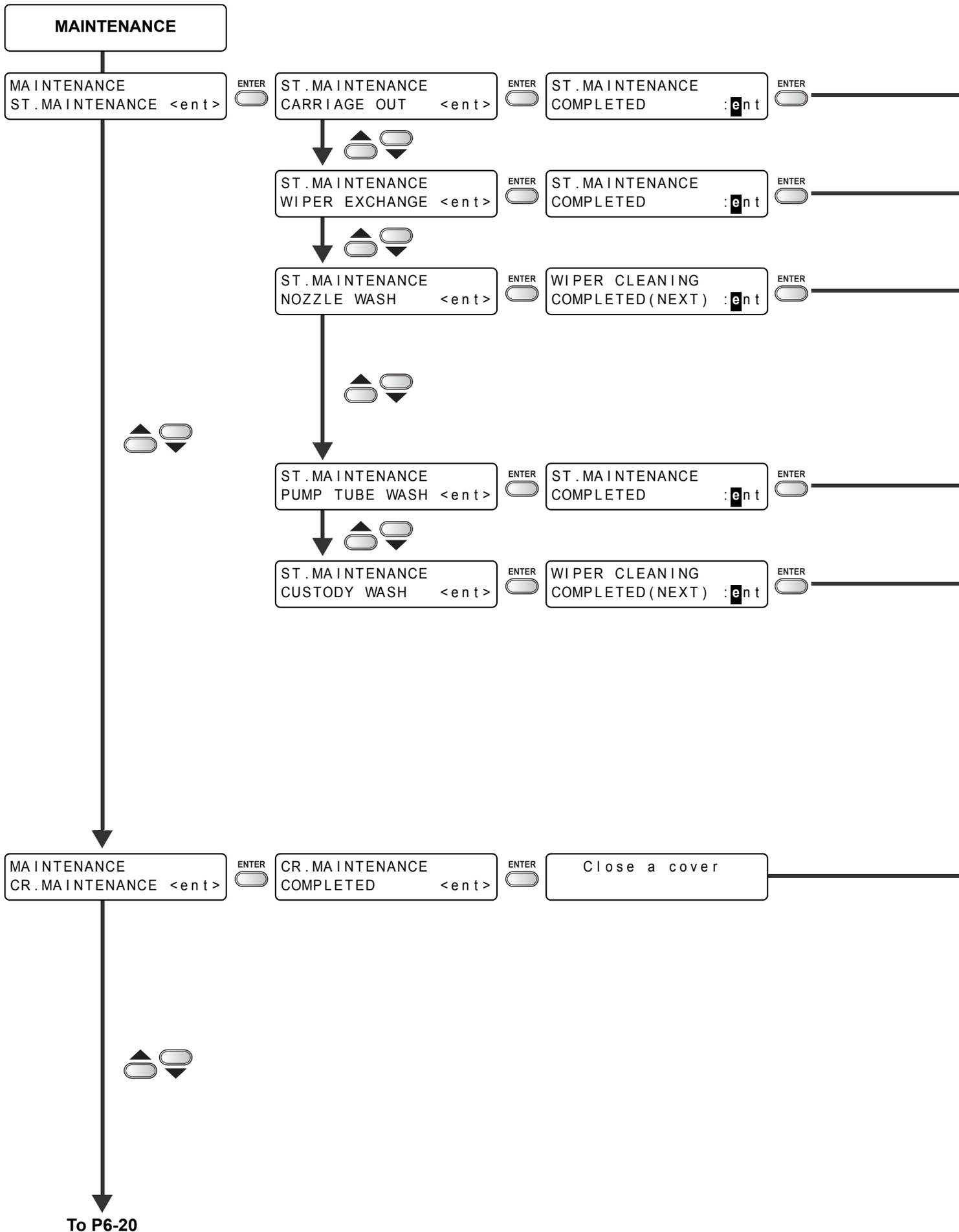
To P6-16

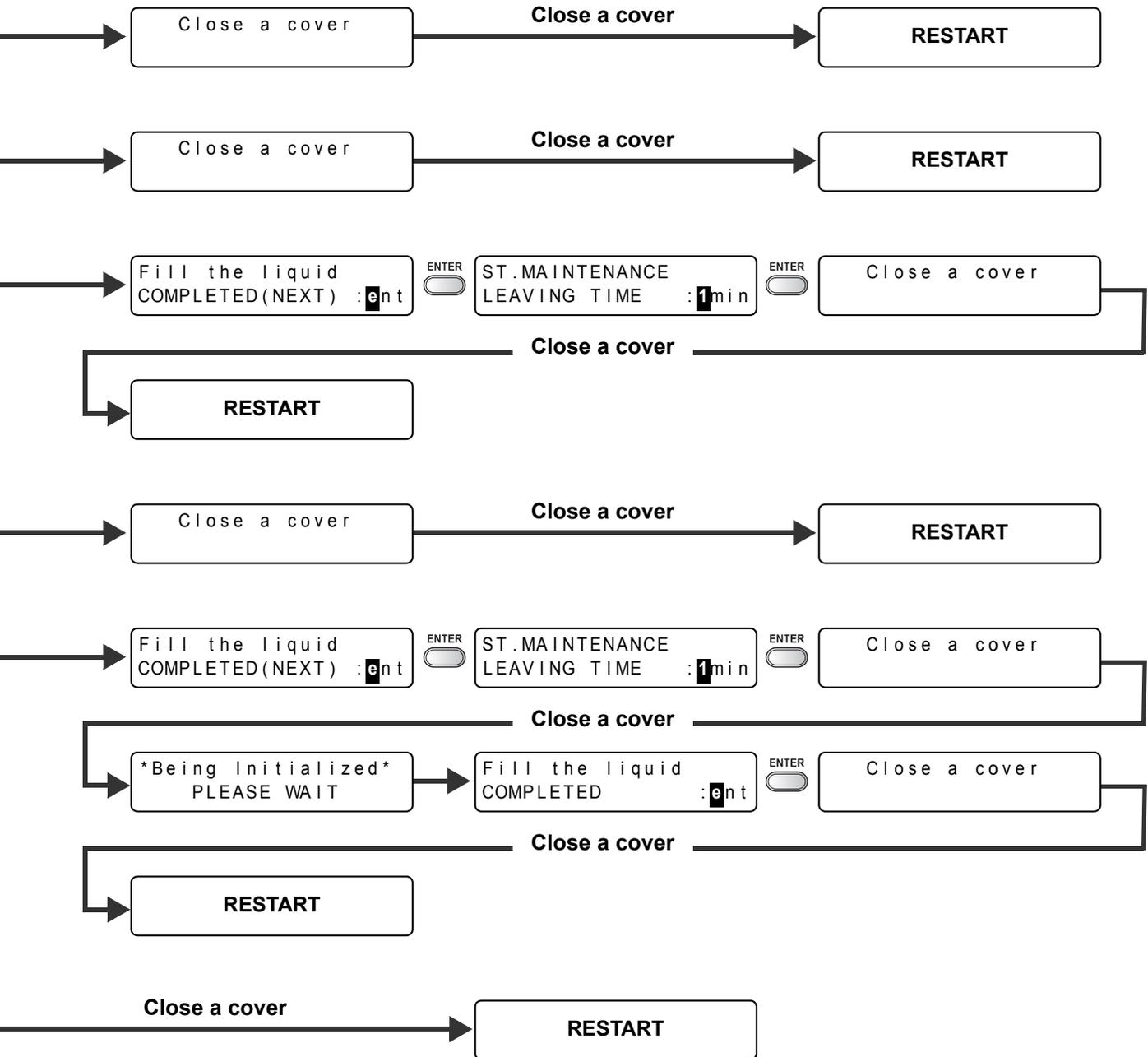


From P6-14









From P6-18

MAINTENANCE
HD.MAINTENANCE <ent>



HD.MAINTENANCE
FILL UP INK <ent>



FILLING UP NOW.
00:00

HD.MAINTENANCE
DISCHARGE&WASH <ent>



Remove: Ink Cartridges
MMBB YYKK



MAINTENANCE
DROP POSITION <ent>



DROP POSITION
PRINT START :ent



PRINTING
PLEASE WAIT

MAINTENANCE
SLEEP SETUP <ent>



SLEEP SETUP
REFRESH <ent>



SLEEP SETUP
REFRESH interval = 1h
OFF / 1 ~ 168 h

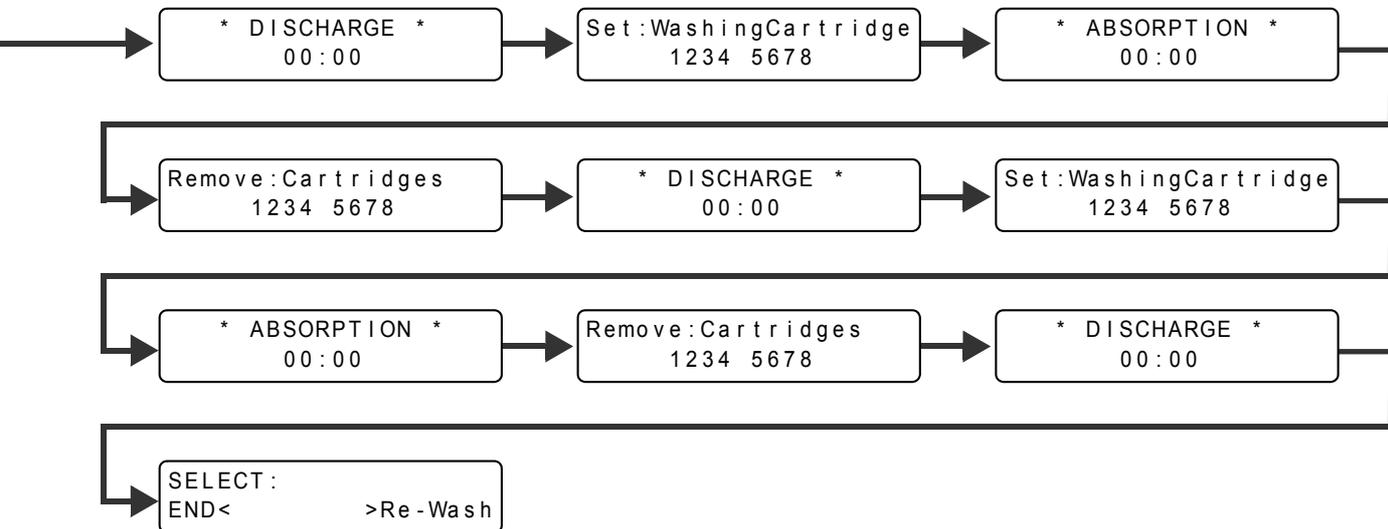
SLEEP SETUP
CLEANING <ent>



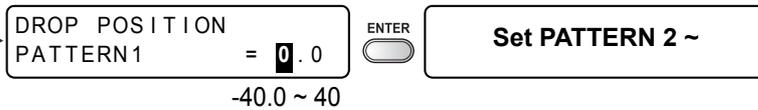
SLEEP SETUP
CLEAN. INTERVAL = OFF
OFF / 1 ~ 168 h



To P6-22



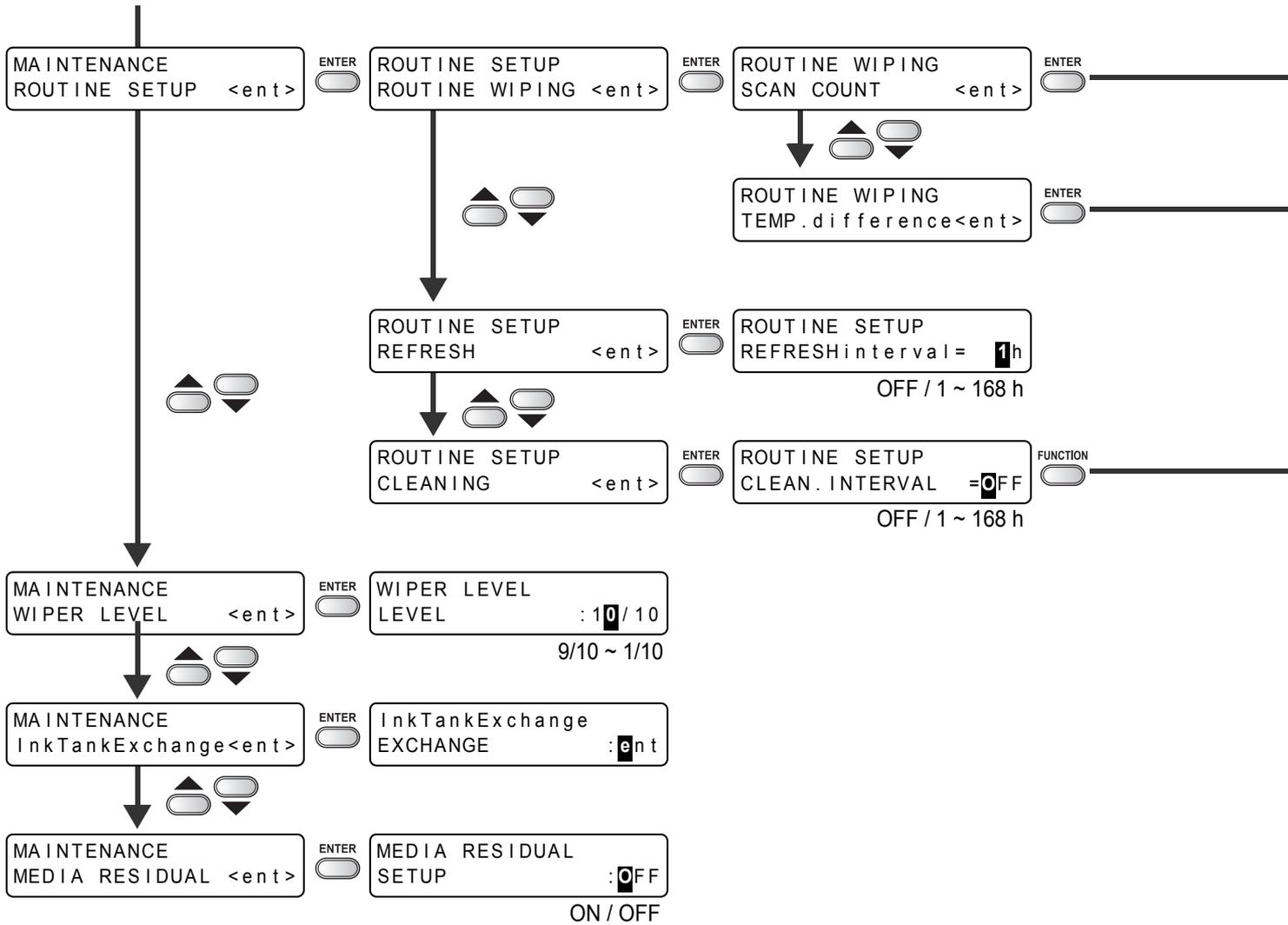
End the printing



Settable except for OFF



From P6-20



→ ROUTINE WIPING
SCAN COUNT = 50

→ ROUTINE WIPING
TEMP. Difference = 20 °C

→ **Settable except for OFF**
ROUTINE SETUP
CLEAN . TYPE : NORMAL
NORMAL / SOFT / HARD

