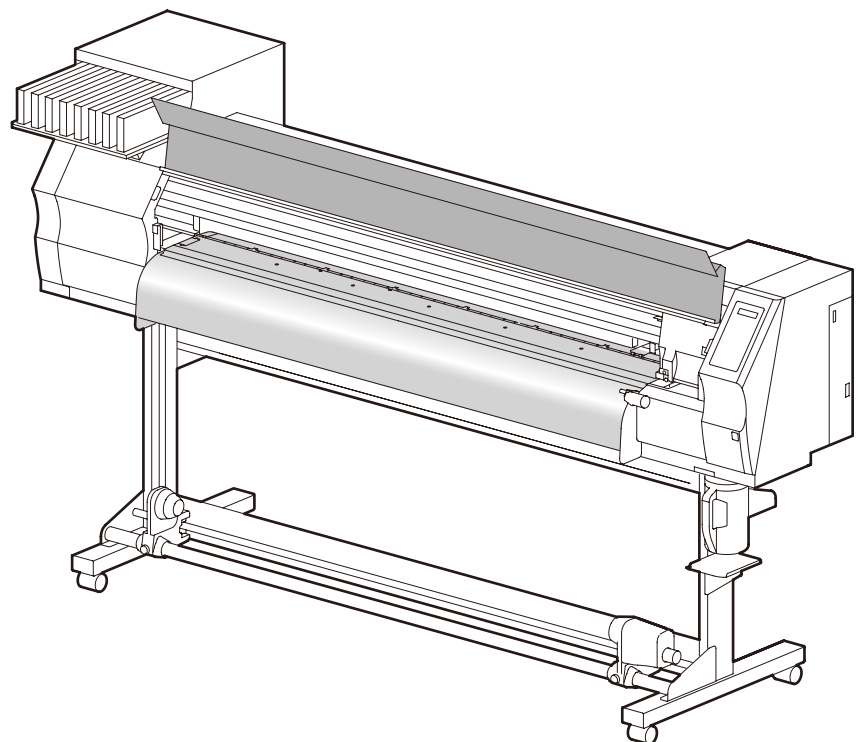


OPERATION MANUAL

COLOR INKJET PRINTER

JV33-130/160

OPERATION MANUAL



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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 plotter.

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 "JV33-130/160" .

The JV33-130/160 is a color ink-jet printer for high quality printing with solvent ink (4-color and 6-color) or aqueous ink (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 JV33-130/160" (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.

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Features

The features of the machine are described below.

Understanding them together with the operating instructions given in this manual will help you use the machine properly.

High image quality and High-speed printing realized by the new generation printer head.

Newly developed printer head, 1 head consisting of 1440 nozzles (180 nozzles x 8 lines), is adopted. High image quality and High-speed printing is enabled by adopting the variable dots technology.

Double cartridge automatic change function (In case of the 4-colors mode)

Long-run printing is enabled by the ink capacity of 880 cc /1 color by adopting the ink cartridge (2 cartridges /1 set) automatic change function.

ES3 ink of the ecological design friendly to human and SS21 suitable for outdoor signs are prepared. (In case of solvent ink used)

ES3 ink requires no special deodorizing equipment and has almost no irritating odor peculiar to a solvent, so that this ink is made by the ecological design friendly to human and environment, and suitable for a designer and operator who cares about odor.

SS21 is suitable for outdoor signs and superior to water resistance and weather resistance. No special handling nor license is required since an organic rule is not applied to this ink.

Sublimation dye ink and aqueous color pigment ink enabling High image quality and High-speed printing are usable.

Sublimation dye ink (Sb51) is used when drawn images are transferred to other medias.

Aqueous color pigment ink is superior to light resistance and suitable for outdoor prints such as large-sized sign displays. (Signboards)

Indication of the ink Remains

Since the amount of ink that remains can be checked even during operation of the machine, you can use the ink and media without waste.

Intelligent heater equipped

Heaters are arranged at 3 locations of the Pre-heater, Print heater and Post-heater and the temperature of each heater is independently adjustable.

Heating temperature is also adjustable to the temperature suitable for the media used since the intelligent function consisting of Standby mode and Auto shut-off is provided so that the temperature is controlled detecting the environmental temperature.

Easy maintenance

The automatic capping system for the heads eliminates the need of head cleaning before turning off the power. Ink discharge passage is automatically cleaned from the cap.

Nozzles can be unclogged by performing the cleaning function.

If the machine is not in use for a prolonged period of time, it automatically performs nozzle clogging preventive operation at fixed intervals. However, the main power must be left turned on.

The machine counts the time when not in use. When the power is turned on or when printing is started, the machine automatically performs head cleaning to prevent nozzle clogging.

Convenient direct keys

Use of the direct keys permits quick access to the respective various built-in functions.

Set of the drawing origin by LED pointer

For easy setting of the drawing origin changed, positioning can be done by a light point of the LED pointer equipped on the carriage.

Printing information can be checked

The print length can be displayed on the LCD panel during printing and the information of printing conditions can be checked by printing it.

High-speed interface

The "USB 2.0" interface allows for high-speed data reception from the computer.

Take-up Device permits printing over a long length

Even a long sheet of media can be used, since the take-up device interlocked with the machine winds up the printed part of the sheet during printing.

A media support bar newly provided

The machine is provided with a media support bar at the back. It is useful when a heavy roll of media, such as Tarpaulin, is set on the machine.

Adjustable to the height of Head (2 levels)

The height of Head is adjustable in 2mm/3mm by the adjusting lever.

Lifting of the media at its both ends is prevented

The use of the media press prevents the wide sheet of media from lifting at its both ends and coming in contact with the head unit.









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.
- Be sure to use the optional Drying ventilation unit when the machine is used 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 that no dust or dirt sticks to platen heaters. Dust and dirt sticking heaters can cause fire.












- The ink used for this machine contains organic solvent. Since the ink is flammable, never use flame in or around the place where this machine is used.



- **Hazardous Moving Parts**
Keep Fingers and Other Body Parts Away

Precautions in Use

| <div> CAUTION</div> | |
|---|---|
| Power supply | Handling of ink |
| <div><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.</div> | <div><ul style="list-style-type: none">• If you get ink in your eyes, immediately wash your eyes with a lot of clean water for at least 15 minutes. In doing so, also wash eyes to rinse ink away completely. Then, consult a doctor as soon as possible.• If anyone drinks ink by mistake, keep him or her quiet and see a doctor immediately. Do not allow him or her to swallow the vomit. After that, contact the Poison Control Center.• If you inhale a lot of vapor and feel bad, immediately move to a location of fresh air and then keep yourself warm and quiet. Then, consult a doctor as soon as possible.• The ink contains organic solvent. If ink settles on the skin or clothes, immediately wash it off with detergent and water.(only when solvent is used)</div> <div></div> |
| Heater | |
| <div><div><ul style="list-style-type: none">• Do not spill liquid on the platen as this may cause failure of the heater or firing.• Do not touch platen heaters with bare hand while it is hot; otherwise, you can get burned.</div><div><ul style="list-style-type: none">• When the machine is to be moved, wait until the heater temperature drops adequately. As a criterion, wait at least 30 minutes after you turn off the power to the heater. Moving the machine must be limited to on the same floor where there is no steps. When the machine is to be moved to any place other than on the same step-free floor, contact your distributor or a sales office of MIMAKI.</div></div> | |
| Note on maintenance | |
| <div><div></div><ul style="list-style-type: none">• When cleaning the ink-station or the heads, make sure to wear the attached gloves. Further, when the solvent ink is used, it is necessary to wear the attached goggles.</div> | |

CAUTIONS and NOTES

**Warning**

| Handling of ink cartridges | Front cover and lever |
|---|---|
| <ul style="list-style-type: none"> • Use the JV33 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 JV33 genuine ink. • Do not use the JV33 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. | Handling of media |
| | <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. <ul style="list-style-type: none"> • Use media recommended by MIMAKI to ensure reliable, high-quality printing. • Set the heater temperature to meet the characteristics of the media. Set the temperature of the Pre-heater, Print heater and Post-heater according to the type and characteristics of the media used. Automatic temperature setting can be made on the operation panel by setting the profile on the dedicated RIP. For setting on the RIP, refer to the instruction manual for your RIP. • Pay attention to the expansion and contraction of the media. Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract. The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked. • Do not use curled media. 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.3-29 "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.3-22 "Setting Auto cleaning")
- When cleaning the ink-station or the heads, make sure to wear the attached gloves. Further, when the solvent ink is used, it is necessary to wear the attached goggles.
- Perform wiping (removal of dust and paper powder) of the capping station and wiper frequently.

Periodic replacement parts

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

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 |
| | | |



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

Moving this machine 1-2

Where to install this machine 1-2

Working environmental

temperature 1-2

Moving this machine 1-3

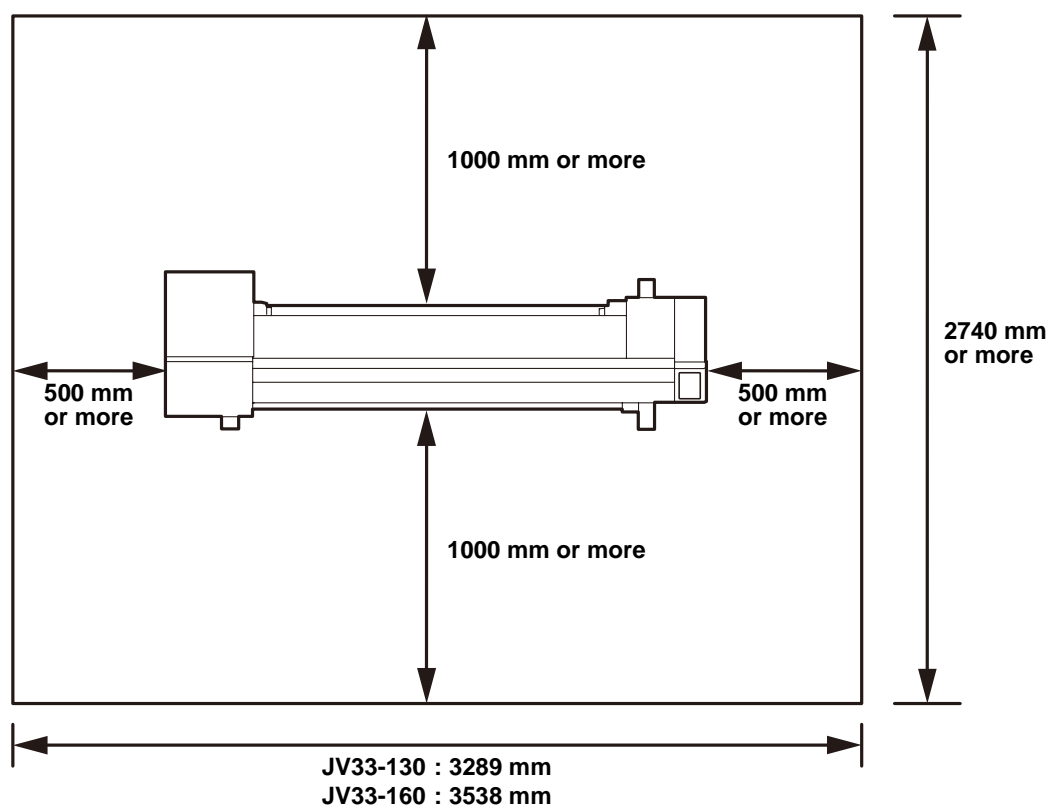
Moving this machine

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 |
|----------|--------|-------|--------|--------------|
| JV33-130 | 2289mm | 739mm | 1424mm | 145kg |
| JV33-160 | 2538mm | 739mm | 1424mm | 160kg |



Working environmental temperature

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

Depending on the ambient temperature, the heater temperature may not rise to the set value.

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!

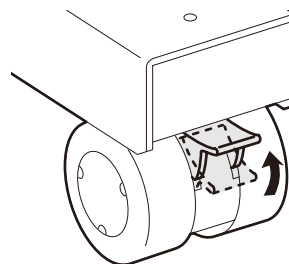
- When this machine is to be moved to any place other than on the same step-free floor, contact your distributor or a sales office of MIMAKI.
If you move it by yourself, failure or damage may occur.
Be sure to request your distributor or a sales office of MIMAKI to move this machine.



- 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

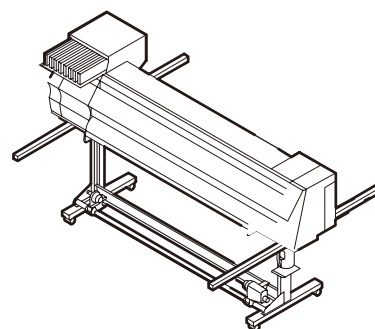
Release the lock of caster.



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

Automatically winds up the roll media printed.

Stand


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

Platen

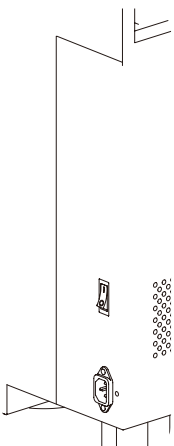
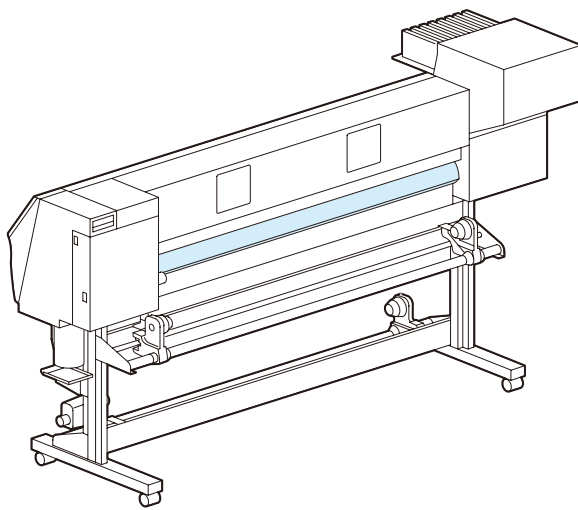
The printed media is sent out, sliding on the platen.
Three heaters are installed inside the platen.

Print heater/ Post-heater

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

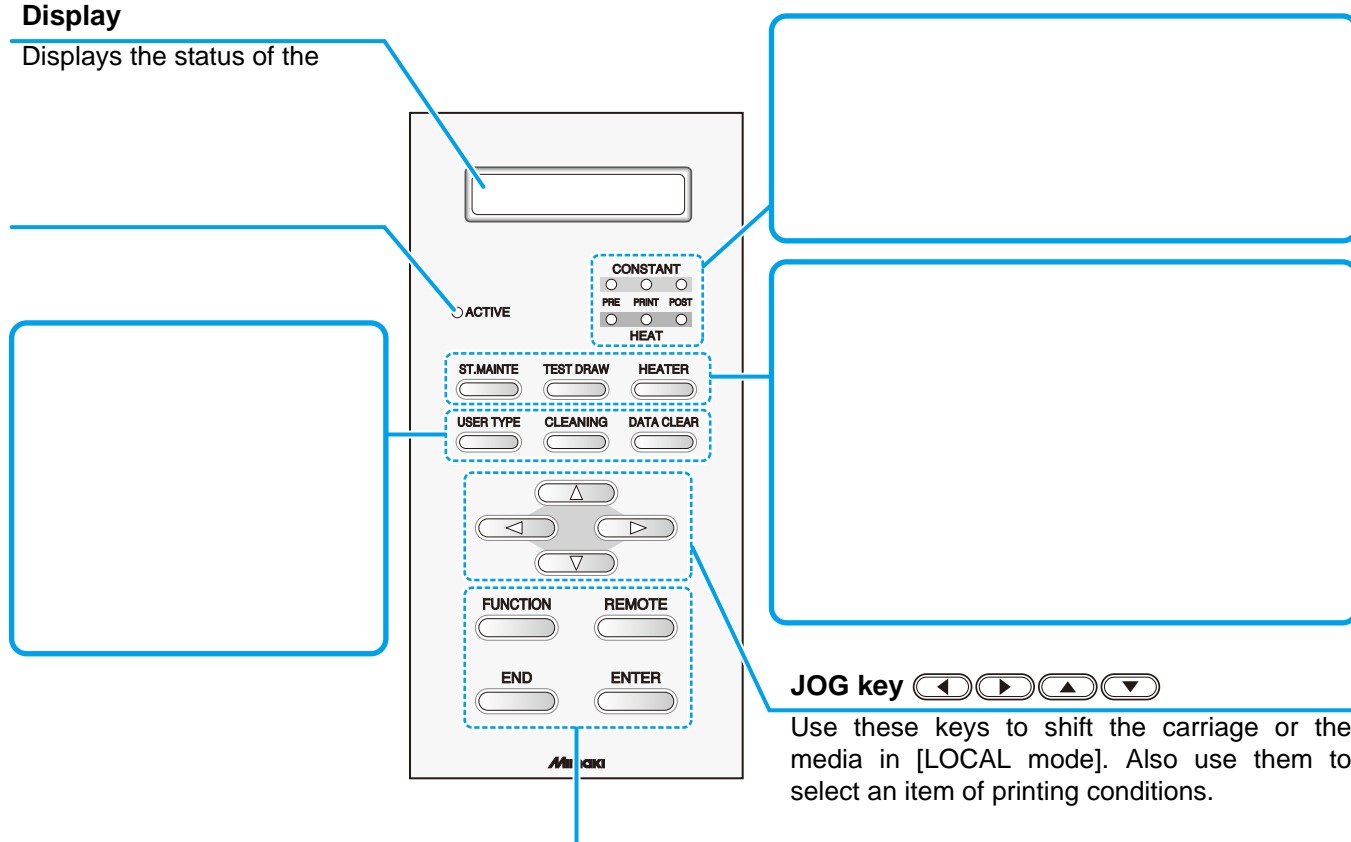
Before Use

Operation Panel

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

Display

Displays the status of the



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.

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. |

Heater

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

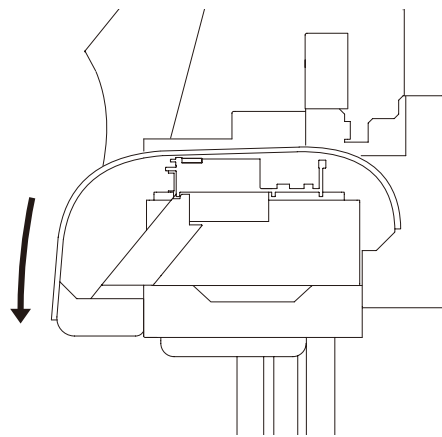
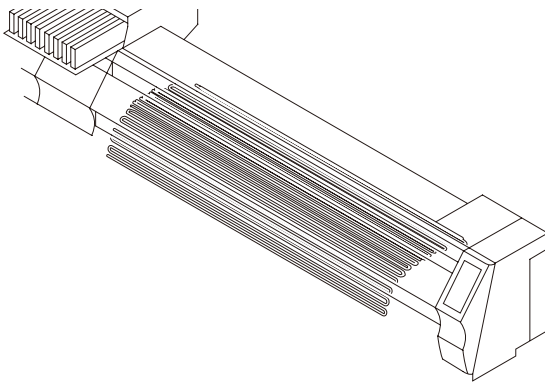
The Pre-heater is used for pre-heating of the media prior to printing to prevent rapid temperature changing.

The Print-heater improves the image quality in printing.

The Post-heater dries ink after printing.



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



Media sensor

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

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

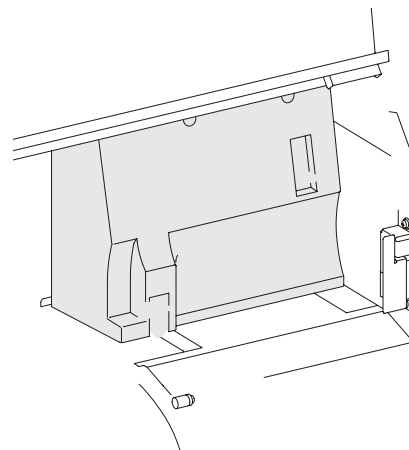


- Set the media so that the media sensor located in the rear of the platen is covered with the media without fail. The media can not be detected unless it is placed over the sensor.

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.2-8)



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.

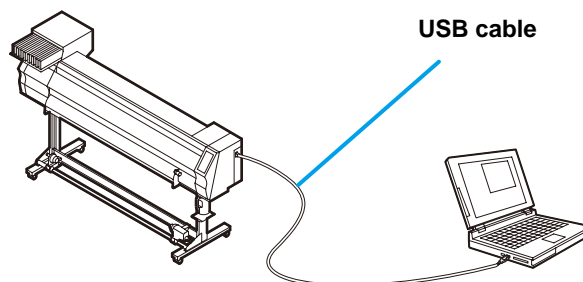
Connecting cables

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 JV33 machines are connected to one personal computer

When two or more JV33 machines are connected to one personal computer, the personal computer may not recognize all the JV33 machines normally.

Reconnect the unrecognized JV33 machine to another USB port, if available, and check to see if it is recognized. If the JV33 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 JV33 machine is connected to, the USB device may not be recognized.

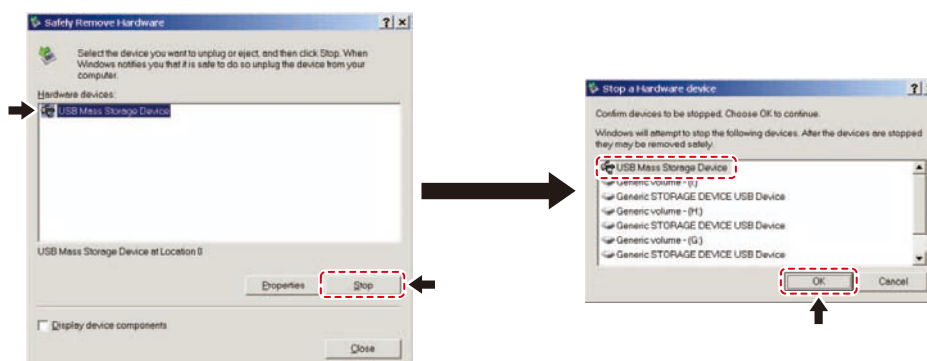
When a JV33 printer is connected to the personal computer to an externally installed USB hard disk drive, the data output speed to the JV33 machine may drop. That can cause the head unit to stop temporarily at the right or left end during printing.

● Removing USB memory

If a USB memory module is inserted in the personal computer to which a JV33 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.



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



- 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.

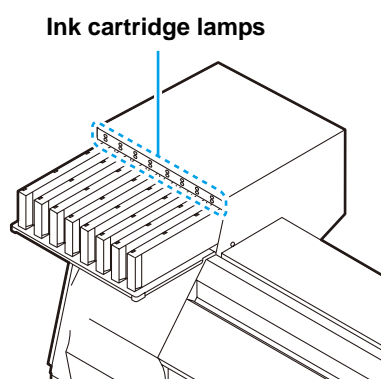
1

Shake the ink cartridge as shown on the right.



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 | |

1

Before Use

Caution in handling of ink cartridges



- An organic solvent is used in solvent ink. When ink sticks on skins, wash it with soapy water immediately then rinse it off with water fully. If you get ink in your eyes, immediately wash your eyes with a lot of clean running water for at least 15 minutes. In doing so, also wash the 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 | | JV33-130 | JV33-160 |
|---------------------------|-----------------------|---|----------|
| Type of Recommended media | | Tarpaulin/ FF(Flexible Face)/ Weatherproof PVC | |
| Maximum width | | 1371mm | 1620mm |
| Minimum width | | 210mm | 210mm |
| Maximum printing width | | 1361mm | 1610mm |
| 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.
- **Set the temperature of the Pre-heater, Print heater and Post-heater according to the type and characteristics of the media used.**
Automatic temperature setting can be made on the operation panel by setting the profile on the dedicated RIP. For setting on the RIP, refer to the instruction manual for your RIP.
- **Pay attention to the expansion and contraction of the media.**
Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract.
The media have to be left in the atmosphere in which they are to be used for 30 minutes or more after unpacked.
- **Do not use curled media.**
This may result in paper jamming.
If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.

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. 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 **HEATER** key to set the temperature of the heaters.
- Pressing the **ENTER** key to check the remaining amount of ink, the description of the cartridge error, the model name, the firmware version, and so on.
- Pressing the **REMOTE** key to switch between [REMOTE mode] and [LOCAL mode].
- Pressing the **DATA CLEAR** key to erase the printing data the machine has received.
- Pressing the **USER TYPE** key to change the user type.
- Pressing the **ST.MAINT** 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 | Preparing Heaters | 2-16 |
| Set items registrable to | | Changing temperature settings of | |
| User type | 2-2 | Heater | 2-16 |
| Using the registered user type | 2-2 | Confirming the Heater | |
| Workflow..... | 2-3 | temperature | 2-17 |
| Turning the power ON/OFF | 2-4 | Test plotting..... | 2-18 |
| Turning the power ON | 2-4 | Test plotting | 2-18 |
| Turning the power OFF | 2-5 | Head cleaning | 2-19 |
| Setting medias | 2-6 | Drawing data..... | 2-20 |
| Useable medias | 2-6 | Starting the print | 2-20 |
| Changing the printing origin | 2-6 | Stopping the print temporarily | 2-21 |
| Adjusting the head height | 2-8 | Erasing the received data | |
| Setting a roll media | 2-10 | (Data clear) | 2-21 |
| Take-up device | 2-13 | Cutting a media | 2-22 |
| Setting leaf media | 2-14 | | |

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.3-6 | Setting of Refreshing | P.3-28 |
| Changing the set value of Heater | P.3-8 | Setting of Adsorption | |
| Setting Print mode | P.3-12 | Setting of Feeding speed level | |
| Setting of the number of ink layers | P.3-28 | Setting of Priority | P.3-20 |
| Setting of Drying time | P.3-18 | Setting of Auto cleaning | P.3-22 |
| Setting of Auto cut | P.3-28 | Setting of In-printing cleaning | P.3-24 |
| Setting of Pre-feeding | | Setting of Media detection | P.3-26 |
| Setting of Margins | P.3-19 | Setting of Feed origin | P.3-28 |
| Setting of Color patterns | P.3-28 | | |



Using the registered user type

1



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

USER TYPE  <LOCAL . 1> [# 0 1]
width : * * * * mm

2


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

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

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

3

Press the **ENTER** key.



ENTER  <LOCAL . 2> [# 0 1]
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 Preparing Heaters

Referring to "Preparing Heaters" (☞ P.2-16).

4 Test plotting

Referring to "Test plotting" (☞ P.2-18).

5 Drawing data

Referring to "Drawing data" (☞ P.2-20).

Turning the power ON/OFF

Turning the power ON

The machine is provided with the following two power switches.

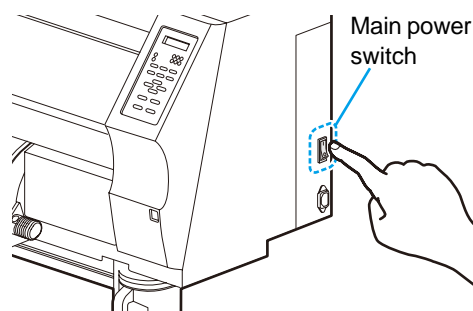
Main power switch : At the side of this machine. Keep it "ON" always.

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.

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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.5-9 "Error messages")



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=Hi SPEED

- (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

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

3

Convenient use

Setting scanning direction

1

Perform operations up to P.3-12 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: **U**ni-D

4

Select the scanning direction by pressing the   keys.



[1] PRINT MODE
SCAN DIRECTION: **B**i-D

• Set value : Uni-D, Bi-D

5

Press the  key.



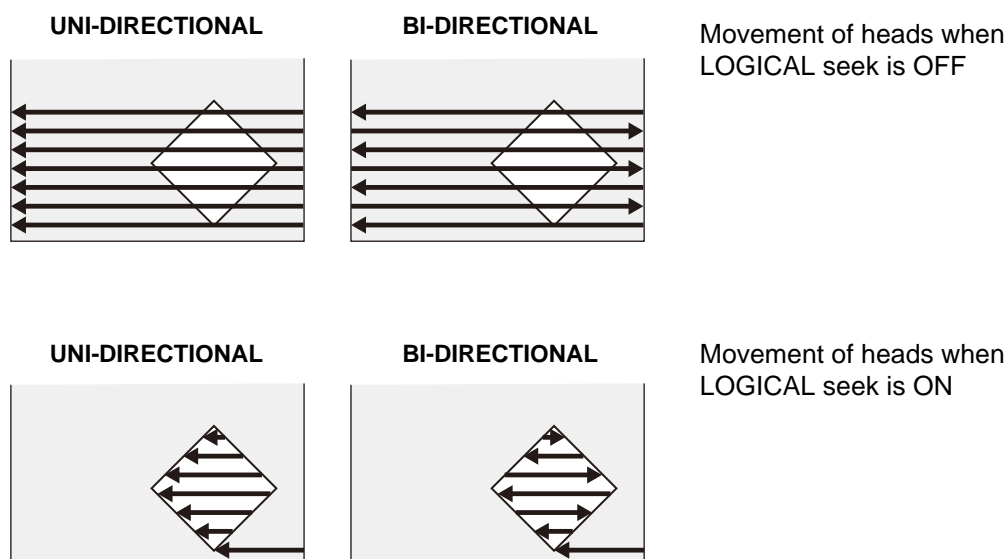
[1] PRINT MODE
SCAN DIRECTION <ent>

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.3-12 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 : 

4

Select ON/OFF by pressing the   keys.



[1] PRINT MODE
LOGICAL SEEK : 

5

Press the  key.



[1] PRINT MODE
LOGICAL SEEK <ent>

6

Press the  key several times to end.

3

Convenient use

Setting WhiteLay Print

When using SS21 white ink, you can print with other colors after printing with white ink, without returning the media.

In this page, set the printing method of white ink and other color ink.

| Set Value | Outline |
|------------------------------|---|
| OFF | Plotting the white ink and the color ink at the same time. |
| ON (LEVEL1~3 ^{*1}) | Plotting the color ink on the white ink after plotting with the white ink. <ul style="list-style-type: none"> • If a larger number is set for LEVEL 1 to 3, time interval between printing with white ink and printing with color ink becomes long. • If a large number is set for LEVEL, drying property of white ink goes up, but printing time becomes long. |

*1. This machine cannot set the order of synthesis.

Important!

- This function can be set only when SS21 ink (6 colors + white) is filled.
- Plotting time is about two times longer than normal plotting.
- When printing on the following condition, as usable number of nozzles is limited, printing speed slows.

| Setting of printing quality | Resolution | Printing width |
|-----------------------------|-----------------|--------------------------------------|
| DRAFT | 540 x 1080 dpi | 1541 mm or above |
| FINE | 720 x 1080 dpi | 1155 mm or above |
| | 720 x 1440 dpi | |
| | 1440 x 1440 dpi | 1155 mm or above (577mm for Vd data) |

1

Perform operations up to P.3-12 the step 5.

[1] PRINT MODE
DRAFT QUALITY <ent>

2

Select [WhiteLay Prt] by pressing the   keys.



[1] PRINT MODE
WhiteLay Prt <ent>

3

Press the  key.



[1] WhiteLay Prt
SEL. : OFF

4

Select set value by pressing the   keys.



[1] WhiteLay Prt
SEL. : ON (LEVEL3)

- Set value : OFF, ON (LEVEL 1 ~ 3)

5Press the **ENTER** key.

ENTER



| |
|-------------------------|
| [1] PRINT MODE |
| WhiteLay Prt <ent> |

6Press the **END** key several times to end.

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



FUNCTION
SETUP

<ENT>

2

Press the **ENTER** key.

ENTER



SETUP
SELECT

: TYPE . 1

3

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

4

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



[1]
DRYING TIME

<ent>

5

Press the **ENTER** key.

ENTER



SCAN : Draw . END
0 . 0 s : 0 s

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

Post-printing :

0 to 999 seconds

SCAN
0 . 0 s

Draw . END
0 s

7

Press the **ENTER** key.

ENTER



[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.



FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.



SETUP
SELECT : TYPE . 1

3

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

4

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



[1]
MARGIN <ent>

5

Press the **ENTER** key.



LEFT : RIGHT
0mm : 0mm

6

Set a right and left margin by pressing the **▲▼** keys.

Item selecting : by the **▲▼** keys
Margin setting : by the **▲▼** keys

LEFT : RIGHT
0mm : 0mm

7

Press the **ENTER** key.

8

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

3

Convenient use



- 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. / HEATER / 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



FUNCTION
SETUP

<ENT>

2

Press the **ENTER** key.

ENTER



SETUP
SELECT

: TYPE . 1

3

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

4

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



[1]
PRIORITY

<ent>

5

Press the **ENTER** key.

ENTER



[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.

ENTER



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

- The setting display for the media compensation is displayed.

8

Select either "HOST" or "PANEL" by pressing the   keys.






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

9

Press the  key.



- You can also press   keys to move between items. Be sure to press the  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

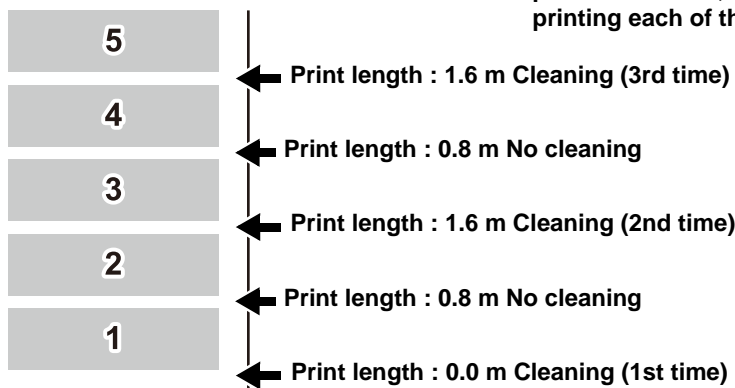
The machine is settable so that the head cleaning is automatically carried out when printing is completed for the set length.

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



FUNCTION
SETUP <ENT>

2

Press the **ENTER** key.

ENTER



SETUP
SELECT : TYPE . 1

3

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



4

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



[1]
AUTO CLEANING <ent>

5

Press the **ENTER** key.

ENTER




[1] AUTO CLEANING
SETUP : OFF

6

Select "ON" by pressing the   keys.

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



[1] AUTO CREAMING
SETUP : 





7





Press the  key.



INTERVAL : TYPE
1000mm : **N**ORMAL

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

Interval : 10 to 10000mm
Type : NORMAL
SOFT
HARD

INTERVAL : TYPE
1000mm : **N**ORMAL

9

Press the  key.



10

Press the  key several times to end.

3

Convenient use

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.

not.

ied out automatically.

FUNCTION
SETUP <ENT>

SETUP
SELECT : TYPE . 1

keys

[1]
Print.CLEANING <ent>

[1]Print.CLEANIN
SETUP : OFF

[1]Print.CLEANIN
SETUP : ON

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 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



FUNCTION
SETUP

<ENT>

2

Press the **ENTER** key.

ENTER



SETUP
SELECT

:TYPE.1

3

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

4

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



[1]
MEDIA DETECT

<ent>

5

Press the **ENTER** key.

ENTER



[1]MEDIA DETECT
DETECT METHOD

<ent>

6

Press the **ENTER** key.

ENTER



[1]MEDIA DETECT
DETECT METHOD: **S**SELECT

- The setting display for the media detection is displayed.

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.

ENTER



[1]MEDIA DETECT
DETECT METHOD

<ent>

9

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



[1]MEDIA DETECT
CUTTING DETECT

<ent>

10

Press the key.

11

Select the set value by pressing the keys.

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

12

Press the key.

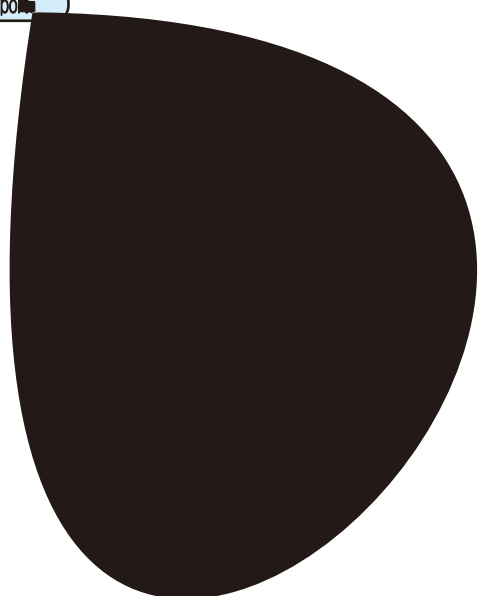
13

Press the key several times to end.

3

Convenient use

Important



Other settings

Change the setting according to the use.

1

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

FUNCTION



FUNCTION
SETUP

<ENT>

2

Press the **ENTER** key.

ENTER



SETUP
SELECT

: TYPE . 1

3

Select the type (1-4) by pressing the **▲** **▼** keys 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.3-6 |
| Setting of Heater | Setting Heater temperature | Refer to P.3-8 |
| | Setting Heater standby time and OFF time | |
| Setting of Printing mode | Setting Print quality | Refer to P.3-12 |
| | Setting Scanning direction | |
| | Setting Logical-seek | |
| | Setting WhiteLay Print | |
| 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.3-18 |
| | 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.3-19 |
| | 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.3-22 |
| Setting of In-printing cleaning | Setting the auto head cleaning operation performed during printing. | Refer to P.3-24 |
| Setting of Media detection | Setting the media detecting operation. | Refer to P.3-26 |
| | 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 the **▲** **▼** keys 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 | Outline |
|-----------------|-------------------|-----------|--------------------------------------|--|
| Machine Setup | DEODORIZE FAN *1 | STOP TIME | 0 ~ <u>120</u> ~ 240min/ CONTINUE | Setting the time until the rotation of the exhaust fan is interrupted after the completion of printing. |
| | | RENEW | ON / OFF | Switching the current operation of the exhaust fan. |
| | DRYNESS FEED | | ON / OFF | Setting whether feeding for drying a media is performed after the completion of printing or not. |
| | STAMP SETUP | | ON / OFF | Setting to output the output date and drawing conditions after the completion of printing. |
| | Waste Ink Warning | | ON / OFF | Setting whether a check message for the waste ink tank is displayed or not. |
| Machine Setup 2 | CONFIRM. FEED | | ON / OFF | The feeding set for checking the result after test printing is settable. [BACK FEED] for returning a media to the original position by pressing the FUNCTION key is settable when set to "ON". |
| | TIME SET | | | Setting the present date and time. |
| | UNIT SETUP | TEMP. | °C (Centigrade) /°F (Fahrenheit) | Setting a unit of temperature indications. |
| | | LENGTH | mm / inch | Setting a unit of length and area indications. |
| | MACHINE NAME | | <u>01</u> ~ 99 | Setting a machine name (machine No.) for recognizing each machine when plural machines are connected through USB2.0 interface. |
| | KEY BUZZER | | ON / OFF | Setting a buzzer sound of the time when a key is pressed. |

*1. DEODORIZE FAN is optional.

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  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  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  key.

**8**

Press the  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



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.

3

Convenient use

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



FUNCTION
SETUP

<ENT>

2

Select [MACHINE SETUP] by pressing the keys.



FUNCTION
MACHINE SETUP

<ENT>

3

Press the **ENTER** key.

ENTER



MACHINE SETUP
DEODORIZE FAN

<ent>

4

Select [STAMP SETUP] by pressing the keys.



MACHINE SETUP
STAMP SETUP

<ent>

5

Press the key.



6

Select ON/OFF by pressing the keys.

7

Press the key.

8

Press the key several times to end.

Examples of Output

```
JV33-130 Ver1.00
PRINT MODE : 540x1080 12PASS Uni-D Hi 1LAYER
MEDIA COMP. : -10(20,-50)
HEAD GAP : Thin
INK : ES3INK 4color
HEATER TEMP.: PRE :40°C PRINT:40°C POST :50°C
DATE : 07.05.05 17:24:28
```

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.



CONFIRMATION FEED
BACK FEED : **OFF**

- 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".

7

Press the **ENTER** key.



MACHINE SETUP2
CONFIRM. FEED <ent>

8

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

Setting time

1

Press the key in the local mode.

2

Select [MACHINE SETUP 2] by pressing the keys.

3

Press the key.

4

Select [TIME SET] by pressing the keys.

3

Convenient use

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



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
JV33-0**1** <ent>

6

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



MACHINE NAME
JV33-1**0** <ent>

7

Press the **ENTER** key.



MACHINE SETUP2
MACHINE NAME <ent>

8

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

3

Convenient use

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".

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. |
| MAINTEN. 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. |
| 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.

FUNCTION

FUNCTION
SETUP

<ENT>

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

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.

3

Convenient use

For the information displayed

This section describes the way to read the information displayed.

| | |
|--|--|
| ERROR HISTORY Displaying the occurrence date <div data-bbox="453 367 788 443"> ERROR HISTORY [01] 07.10.10 12:15 </div> <div data-bbox="523 465 718 497">◀ ◻ ◻ ▶</div> Displaying the contents of error <div data-bbox="453 519 788 595"> ***** ERROR 09 ***** HDC ERROR </div> | MAINT. HISTORY Displaying the contents of maintenance <div data-bbox="1098 367 1433 443"> [01] 07.10.10 12:15 CARRIAGE OUT </div> VERSION Displaying the version information such as F/W or the like. <div data-bbox="1098 519 1433 595"> JV33-160 V1.00 MRL-III V1.00 </div> |
| PRT.modeHISTORY Displaying the resolution, the length printed or the like. <div data-bbox="453 676 788 752"> [01] 720x1080 .12 Bd.Vd.x1.1L: 12.34m </div> <div data-bbox="523 775 718 806">◀ ◻ ◻ ▶</div> Displaying the date printed <div data-bbox="453 828 788 904"> PRINTmode HIST. [01] 07.10.10 12:15 </div> | Serial & Dealer No. Displaying Serial No./ Dealer No. <div data-bbox="1098 676 1433 752"> 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.







| | | | |
|---|-------------|---|-------------|
| Maintaining..... | 4-2 | Setting refreshing interval in | |
| Precautions in cleaning | 4-2 | Sleep mode | 4-25 |
| Notes on cleaning solution | 4-2 | Setting tube washing interval in | |
| Cleaning exterior surfaces | 4-3 | Sleep mode | 4-26 |
| Cleaning the platen | 4-3 | Setting cleaning interval in | |
| Cleaning the media sensor | 4-4 | Sleep mode | 4-27 |
| Cleaning the media press | 4-4 | Setting Routine operations..... | 4-28 |
| Maintaining Capping station..... | 4-5 | Setting Routine wiping operations in | |
| Cleaning the wiper and ink caps | 4-5 | Standby mode | 4-28 |
| Replacing the wiper | 4-7 | Setting Refreshing interval in | |
| Prior to Pump tube washing | 4-8 | Standby mode | 4-30 |
| Washing of Head nozzle | 4-10 | Setting Pump tube washing interval in | |
| Cleaning the ink discharge passage | | Standby mode | 4-31 |
| (PUMP TUBE WASH) | 4-12 | Setting Cleaning interval in | |
| When not using for a long term | | Standby mode | 4-32 |
| (CUSTODY WASH) | 4-14 | Other maintenance functions..... | 4-34 |
| Cleaning heads and surroundings | | Changing the warning time of wiper | |
| parts | 4-16 | replacement | 4-34 |
| When Nozzle clogged after | | Setting the media remaining display | 4-35 |
| cleaning | 4-18 | If Waste ink tank confirming | |
| Filling up ink | 4-18 | message is displayed | 4-36 |
| DISCHARGE & WASH | 4-19 | Replacing the cutter blade..... | 4-40 |
| Initial ink fill up | 4-21 | | |
| If dots misalign | 4-23 | | |
| Preventing nozzle clogging while | | | |
| power-off | 4-25 | | |

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">• The ink contains an organic solvent. When performing cleaning, be sure to wear gloves so that no ink will come in contact with your skin. |
|  | <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">• If organic solvent ink is mixed with water or alcohol, coagulation occurs. 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. |

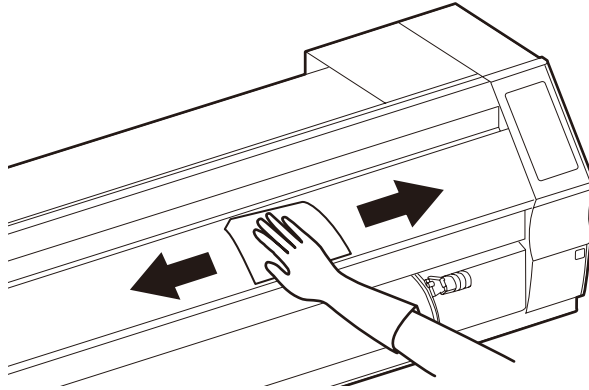
Notes on cleaning solution

Use the cleaning liquid dedicated for the ink being used.

| Type of Ink | Applicable maintenance washings |
|----------------------------|--|
| SS21 Solvent ink | Cleaning solution MS2/ES3/HS kit (SPC-0369) |
| ES3 Solvent ink | MILD SOLVENT WASHING LIQUID (SPC-0294)[Sold separately] |
| Aqueous pigment ink | Cleaning Liquid Bottle Kit A29 (SPC-0137) [Sold separately] |
| Sublimation dye ink (Sb51) | 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.

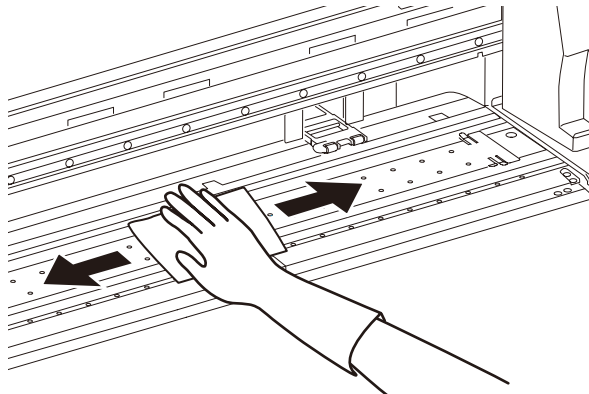


Cleaning the platen

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.

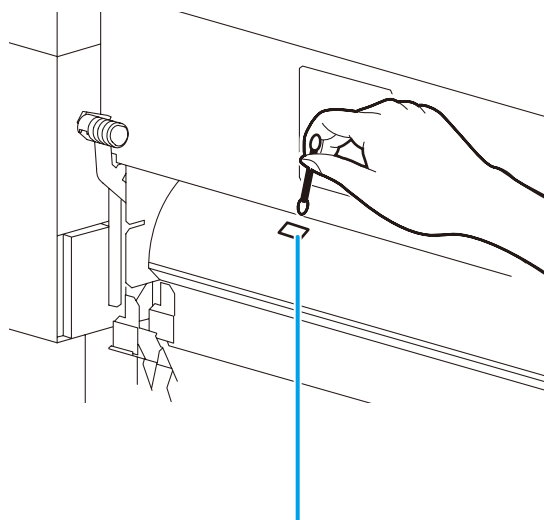
Cleaning the media sensor

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.

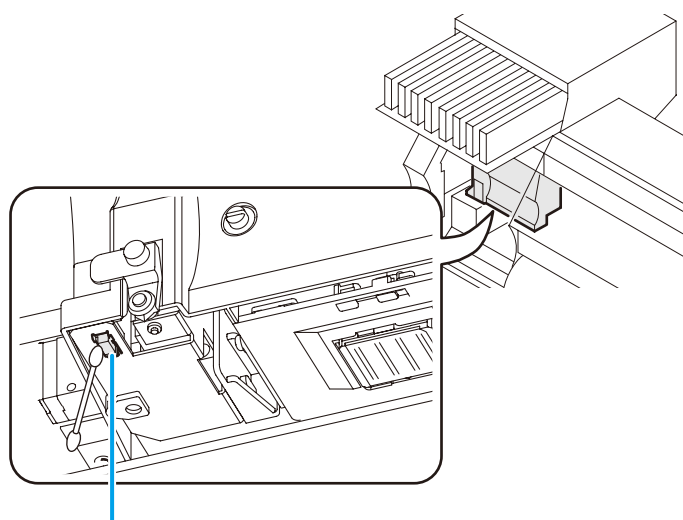
When cleaning the sensor on the lower surface of the head is cleaned, move the carriage to the left end by the operations of step 1 of P.4-16 "Cleaning the heads and their surrounding parts", and then clean it.

The backside of the machine



Media sensor

The lower surface of the head

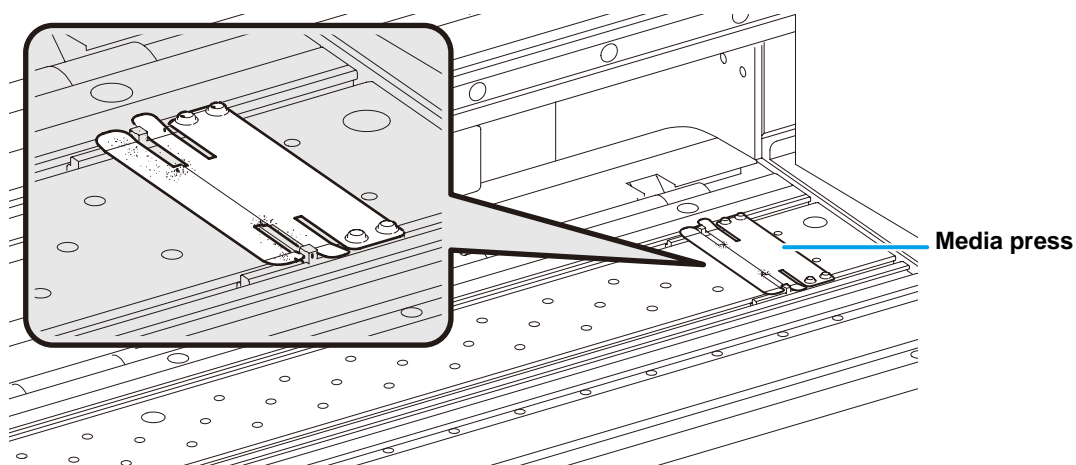


Media sensor

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.2-19) , use Cleaning kit and cotton swab.

| | | | |
|--------------------------------|---|----------|-----------|
| Tools required for Maintenance | • Cleaning solution When solvent ink is used: Cleaning solution MS2/ES3/HS kit (SPC-0369) When aqueos ink is used : Cleaning Liquid Bottle Kit A29 (SPC-0137) | | |
| | • Cotton swab | • 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.MAINT** 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.

Important!

- When SS21 ink is used, the ink sticks around the wiper easily. Clean the wiper and surroundings about twice in a week (it varies, depending on frequency of use of the machine.)
- 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 cotton swab. Lint may cause printing failure.

1

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

ST.MAINT



ST . MAINTENANCE

CARRIAGE OUT

<ent>

2

Press the **ENTER** key.

ENTER

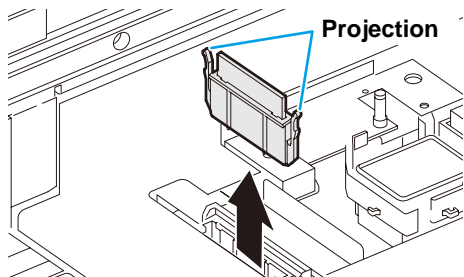


- The carriage moves onto the platen.

3

Open the front cover then remove the wiper.

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



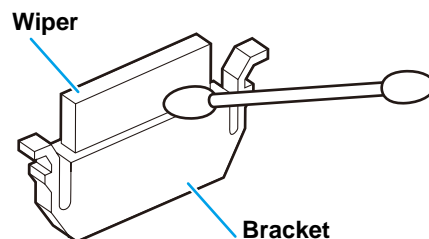
4

Routine Maintenance

4

Clean the wiper and bracket.

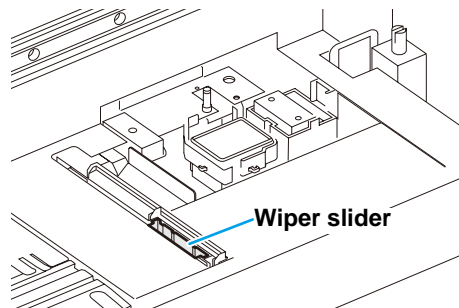
- Wipe ink sticking to the wiper and the bracket off with a cotton swab dipped in the cleaning solution.



5

Clean the wiper slider.

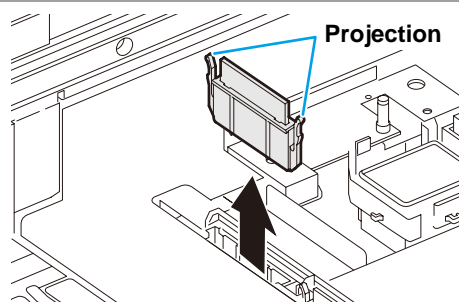
- Wipe ink sticking to the wiper slider off with a cotton swab dipped in the cleaning solution.



6

Set the wiper at the original position.

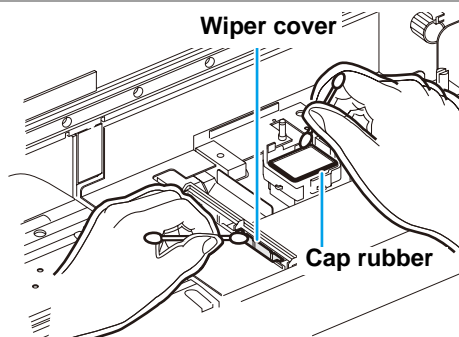
- Insert the wiper by holding both ends of the wiper.



7

Clean the cap rubber and wiper cover.

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

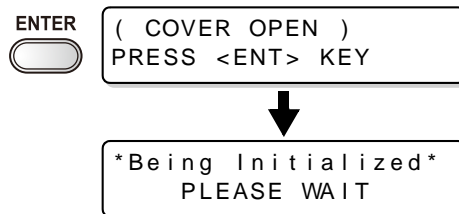


8

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

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.MAINT



ST . MAINTENANCE
CARRIAGE OUT <ent>

2

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



ST . MAINTENANCE
WIPER EXCHANGE <ent>

3

Press the **ENTER** key.



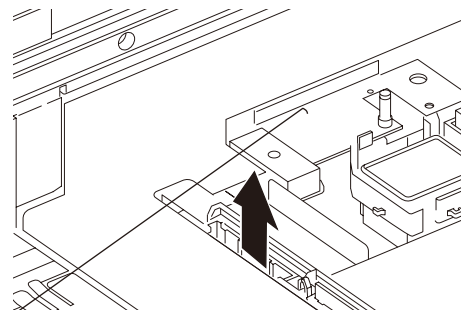
ST . MAINTENANCE
COMPLETED : ent

- The carriage moves onto the platen.

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 **key**.

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

4

Routine Maintenance

Prior to Pump tube washing

Prior to washing of the pump tube, it is required that the cleaning solution has been filled within the tube.

Filling Cleaning solution

1

Select [HD.MAINTENANCE] of the maintenance menu.

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

2

Select [MaintWashLiquid] by pressing the keys.

3

Press the key.



Discharging Cleaning solution

Perform the following operations to discharge the cleaning solution within the tube.

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 [MaintWashLiquid] by pressing the keys.



HD . MAINTENANCE
MaintWashLiquid<ent>

3

Press the key.

4

Select [DISCHARGE] by pressing the keys.

5

Press the key.

- Proceed to the step 7 when the cartridge has been removed.

6

Remove the cartridge.

7

Press the key.

- Discharging of the cleaning solution is started.

4

Routine Maintenance

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.4-36 "If Waste ink tank confirming message is displayed" according to the situation.

Confirm a waste tank
Continue< >Exchange

Confirm a waste tank
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.



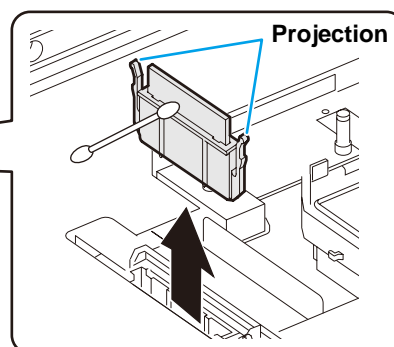
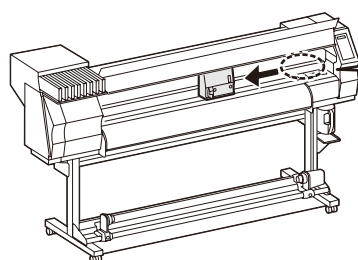
WIPER CLEANING
COMPLETED (NEXT) :ent

- The carriage moves onto the platen.

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 cotton swab dipped in the cleaning solution.
(Aqueos ink : SPC-0137, Solvent ink : SPC-0369)
- (3) Insert it in the original position by holding the projections at both ends of the wiper.



5

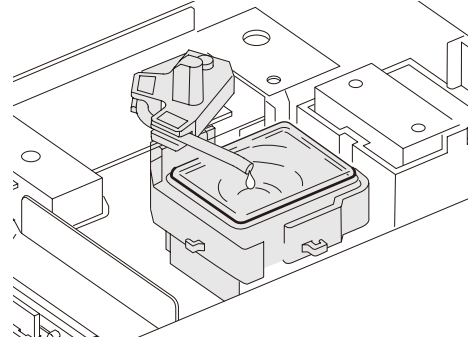
Press the **ENTER** key.

Fill the liquid
COMPLETED(NEXT) : ent

6

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

- The cleaning solution is applied by drops when the **FUNCTION** is pressed.
- When the **FUNCTION** is pressed again, drops stop.
- Repeat the drops several times to fill the cap with the cleaning solution just before the solution overflows 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.

ST.MAINTENANCE
LEAVING TIME : 2min

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

9

Press the **ENTER** key.

Being Initialized
PLEASE WAIT

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

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.

Being Initialized
PLEASE WAIT

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

<LOCAL.1>

4

Routine Maintenance

Cleaning heads and surroundings parts

Take great care, especially during cleaning, not to damage the heads, which employ very precise mechanisms. Using a cotton swab, 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

• Cotton swab

• 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.
- An organic solvent is used in ink. Wash your eyes and skins with plenty water immediately when you get ink on skins or in eyes.

1

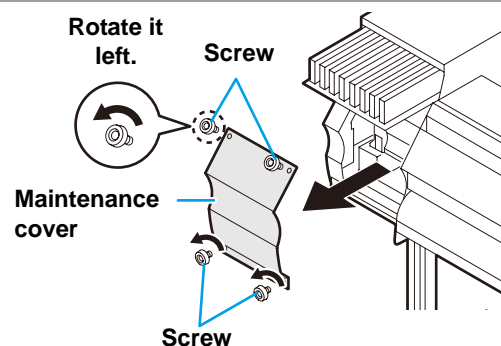
Select [CR.MAINTENANCE] of the maintenance menu.

- (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

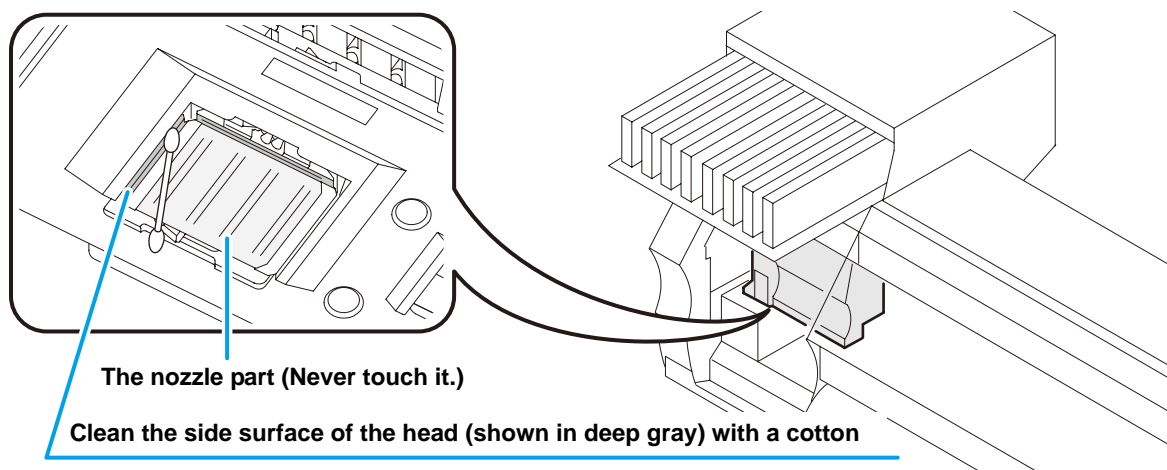
Open the maintenance cover.

- (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 cotton swab.



4

Press the  key after the cleaning.

ENTER


Close a cover

5

Close the maintenance cover then press the  key.

ENTER


(COVER OPEN)
PRESS <ENT> KEY



Being Initialized
PLEASE WAIT

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

Important!

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

When Nozzle clogged after cleaning

When the nozzle clogging is not improved even after the head cleaning (☞ P.2-19) or the head nozzle washing (☞ P.4-10), 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.4-19) |

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.

ENTER


FILLING UP
00:00



HD.MAINTENANCE
FILL UP INK <ent>

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!

- When the following messages are indicated, check the waste ink tank, and then operate it, referring to P.4-36 "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.

- Press the **FUNCTION** key in the local mode.
- Select [MAINTENANCE] by pressing the **▲** **▼** keys then press the **ENTER** key.
- Select [HD.MAINTENANCE] by pressing the **▲** **▼** keys.
- Press the **ENTER** key.

2

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



HD.MAINTENANCE
DISCHARGE&WASH <ent>

3

Press the **ENTER** key.



Remove: InkCartridges
MMCC 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.

* DISCHARGE *
00:00



Set:WashingCartridge
1234 5678

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.

* ABSORPTION *
00:00



Remove:Cartridges
1234 5678


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.

* DISCHARGE *
00:00



Maint.WashLiquid
END< >DISCHARGE

- 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


JV33 - 160

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
ES3 Sol

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.



ES3 INK SET
4 - Color (MMCCYYKK)

4

Press the key.



Set: ES3 - 4color Ink
.....

4

Routine Maintenance

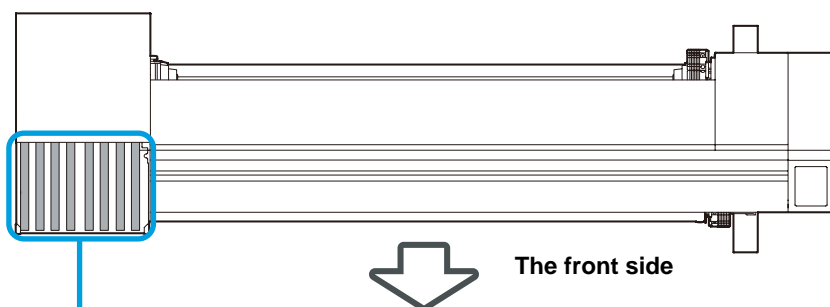
5

Set an ink cartridge to the ink station.

Set: ES3-4color Ink
--C- Y-KK

- 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.

FILLING UP NOW.
00:00



| | | | | | | | | |
|--|---|----|---------|---------|----|---------|---|----|
| 4 colors model: | M | M | C or BI | C or BI | Y | Y | K | K |
| 6 colors model: | M | Lm | C or BI | M | Lc | C or BI | K | Y |
| 6 colors + White model (SS21): (For firmware Ver.1.30 or later) | M | W | C or BI | W | Y | Lm | K | Lc |

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.2-19) or "Filling up ink" (☞ P.4-18) .

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.

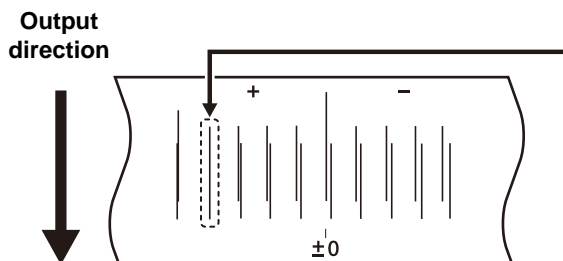
If ink filling is not started in step 5

- (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 dots misalign

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.**



4

Routine Maintenance

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.

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.

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 key in the local mode.

(2) Select [MAINTENANCE] by pressing the keys then press the key.

(3) Select [SLEEP SETUP] by pressing the keys.
- 2

Press the key.
- 3

Press the key.
-

Setting tube washing interval in Sleep mode

Set the interval at which cleaning of the caps and pump tubes is to be performed using the cleaning solution 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 [PUMP TUBE WASH] by pressing the **▲** **▼** keys.



SLEEP SETUP
PUMP TUBE WASH <ent>

3

Press the **ENTER** key.



SLEEP SETUP
WASH INTERVAL = 1h

4

Set the tube washing interval by pressing the **▲** **▼** keys.



SLEEP SETUP
WASH INTERVAL = 4h

- Set value : OFF, 1 - 168 hours

5

Press the **ENTER** key.



SLEEP SETUP
PUMP TUBE WASH <ent>

6

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



- When the cleaning solution has not been filled in the machine, the right display is displayed at the step 5. Fill the cleaning solution (☞ P.4-8) then redo the operations from the step 1.

** Washing Liquid **

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.



SLEEP SETUP
CLEAN. TYPE : NORMAL

- The selection display of the cleaning type is displayed.

6

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



SLEEP SETUP
CLEAN. TYPE : SOFT

- Set value : NORMAL, SOFT, HARD

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. |
| PUMP TUBE WASH | Set the interval at which cleaning of the pump tubes 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.4-37 if required.

<LOCAL . 1> [# 0 1]
! WASTE TANK

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

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 print heater has been set at high temperature.
- When the printing ink amount has been set plenty (High density, Double printing, etc.)

The cause of these phenomena is such that the ink of the print is heated by the print heater immediately after printing and evaporated solvent may condense on the nozzle face.

The greater the difference between the setting temperature of the print heater and the ambient temperature is, the more easily ink can condense.

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.**

ENTER


ROUTINE SETUP
ROUTINE WIPING <ent>

3

Press the **[ENTER] key.**

ENTER


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 heater is set at high temperature (around 50 °C) or the ink amount is plenty due to Double printing or the like, make 30 - 50 times is a standard.

6

Press the **ENTER** key.
 ROUTINE WIPING
 SCAN COUNT <ent>

7

Press the **▲▼** keys.
 ROUTINE WIPING
 TEMP.difference<ent>

- The set display of TEMP difference is displayed.

8

Press the **ENTER** key.
 ROUTINE WIPING
 TEMP.Difference=20° C

9

Set the temperature difference by pressing the **▲▼** keys.
 ROUTINE WIPING
 TEMP.Difference=20° C

- The ROUTINE WIPING function is activated when the setting temperature of the print heater is higher than the ambient temperature and the difference is larger than the value of "TEMP.difference".

10

Press the **ENTER** key.
 ROUTINE WIPING
 TEMP.difference<ent>

11

Press the **END** 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 key.

4

Set the refreshing interval by pressing
the keys.

- Set value : OFF, 1 - 168 hours

5

Press the key.

6

Press the key several times to end.

Setting Pump tube washing interval in Standby mode

Perform the pump tube washing periodically to prevent ink from clogging due to the coagulation of ink, which occurs within the tube.



- This function is operable only under the condition that the machine is left in the following displays.

<LOCAL . 1> [# 0 1]
LOCAL mode

REMOTE . 1 [# 0 1]
0 . 0 0 m
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 [PUMP TUBE WASH] by pressing the **▲▼** keys.



ROUTINE SETUP
PUMP TUBE WASH <ent>

3

Press the **ENTER** key.



ROUTINE SETUP
WASH INTERVAL = 1h

4

Set the tube washing interval by pressing the **▲▼** keys.



ROUTINE SETUP
WASH INTERVAL = 4h

- Set value : OFF, 1 - 168 hours

5

Press the **ENTER** key.



ROUTINE SETUP
PUMP TUBE WASH <ent>

6

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



- When the cleaning solution has not been filled in the machine, the right display is displayed at the step 5. Fill the cleaning solution (☞ P.4-8) then redo the operations from the step 1.

** Washing Liquid **

4

Routine Maintenance

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.2-19 "Head cleaning")
- This function operates only when the machine is left with the display as shown below:

<LOCAL . 1> [# 0 1]

LOCAL mode

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

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 = **1**h

4

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



ROUTINE SETUP
CLEAN . INTERVAL = **4**h

- Set value : OFF, 1 - 168 hours

5

Press the **[FUNCTION] key.**



ROUTINE SETUP
CLEAN . TYPE : **N**ORMAL

- The selection display of the cleaning type is displayed.

6

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



ROUTINE SETUP
CLEAN . TYPE : **S**OFT

- Set value : NORMAL, SOFT, HARD

7

Press the **[ENTER] key.**



ROUTINE SETUP
CLEAN . INTERVAL = **4**h

8

Press the  key several times to end.

Other maintenance functions

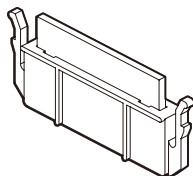
Changing the warning time of wiper replacement

The wiper is consumable. The heads are easily soiled in a dusty environment.

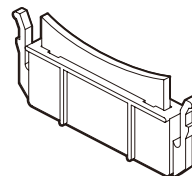
The heads cannot be cleaned adequately with a curled or worn wiper.

Setting the wiper level so that a warning for the wiper replacement period is indicated earlier than the standard depending on the operating environment.

Normal wiper



Deformed wiper



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

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

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.

Confirm a waste tank
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.4-38)
- (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.4-37 "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.

Confirm a waste tank
Exchange :ent

1

Replace the waste ink tank (☞ P.4-38) then press the **ENTER** key.

- The ink discharging amount is reset.

Important!

- Be sure to replace the waste ink tank (☞ P.4-38) 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]
!WASTE TANK

1

Check the waste ink tank, and then replace the waste ink tank (👉 P.4-38) 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.



- 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

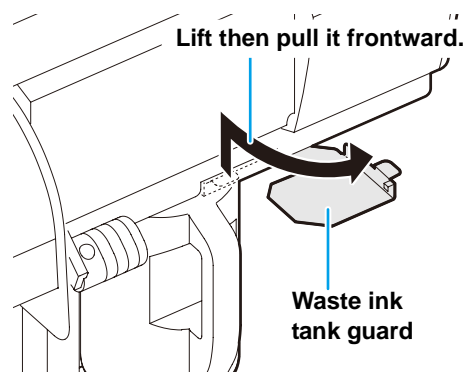
When the right message is displayed, check the waste ink tank immediately, and then replace it according to the condition.

<LOCAL . 1> [# 0 1]
!WASTE TANK

1

Remove the waste ink tank guard.

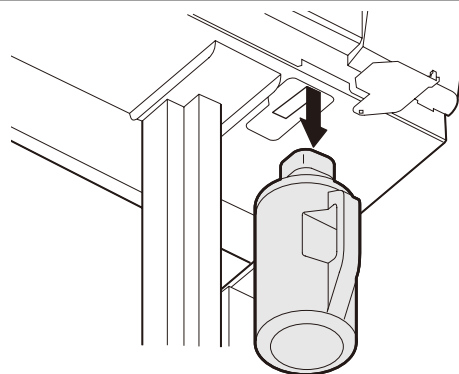
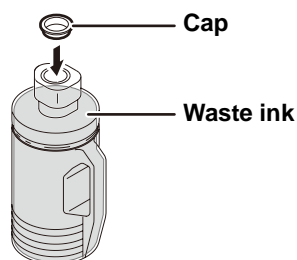
- (1) Lift the waste ink tank guard then release a lock.
- (2) Open the waste ink tank guard frontward.



2

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

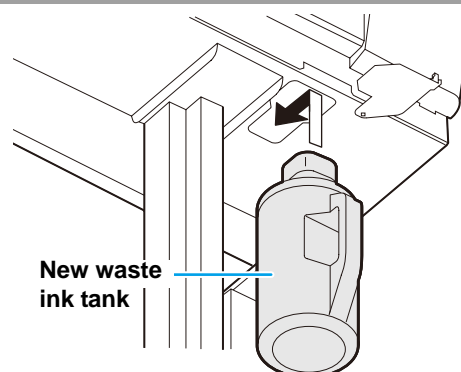
- Put a cap on the waste ink tank removed.



3

Replace the waste ink tank.

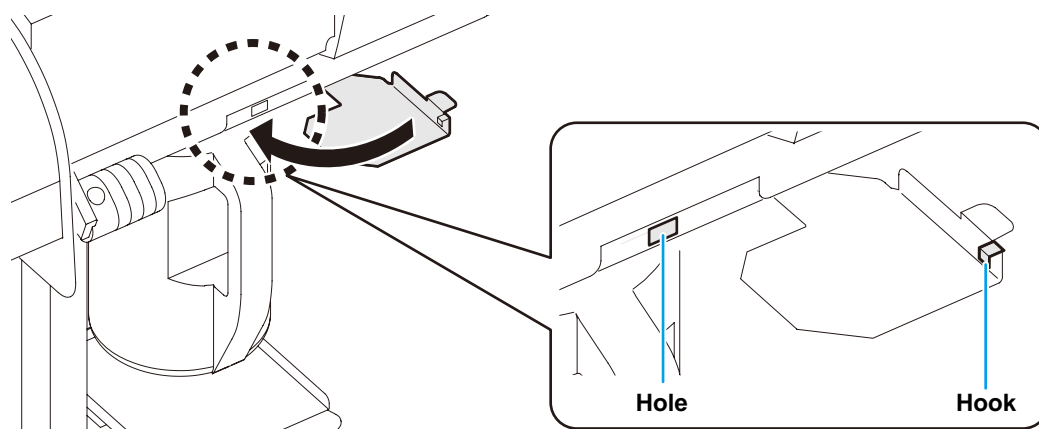
- (1) Prepare a new waste ink tank (SPC-0117).
- (2) Insert the waste ink tank by holding a handle of the tank.



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.

ENTER

| | |
|-----------------------------|------|
| InkTankExchange EXCHANGE | :ent |
|-----------------------------|------|

7

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

4

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.

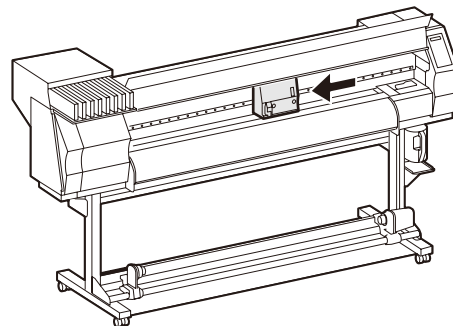


- When replacing the cutter blade, it is recommended to place a sheet of paper under the cutter blade. This will help pick up the cutter blade if it drops.

1

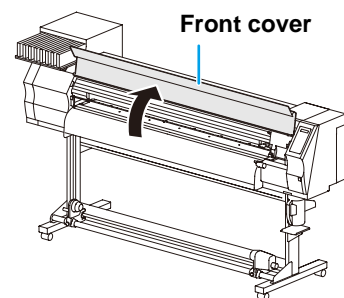
Press the **ST.MAINT** key then press the **ENTER** key.

- The carriage moves onto the platen.



2

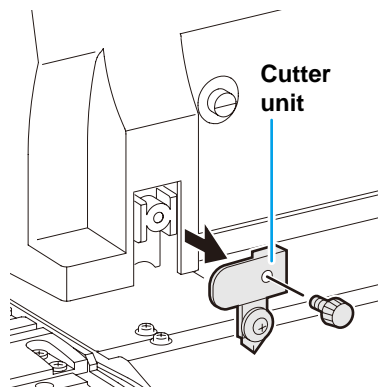
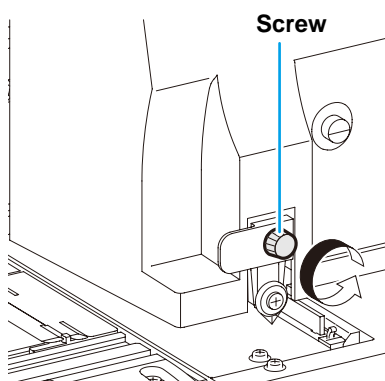
Open the front cover.



3

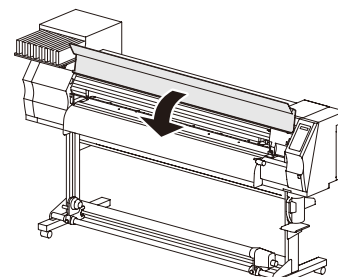
Replace the cutter unit by the carriage.

- (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.

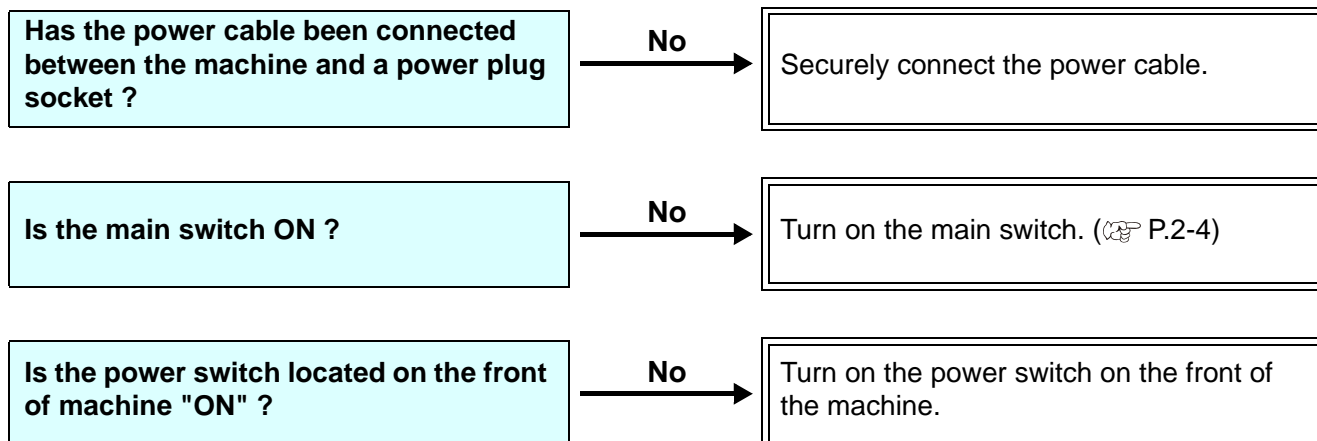
| | |
|--|------------|
| Troubleshooting | 5-2 |
| Power does not turn on | 5-2 |
| The machine does not start printing | 5-2 |
| Media get jammed / media is soiled | 5-3 |
| [HEAT] or [CONSTANT] LED does not light up | 5-3 |
| Image quality is poor | 5-4 |
| Nozzle is clogged | 5-4 |
| Ink cartridge warning appears | 5-5 |
| Warning / Error Messages | 5-6 |
| Warning messages | 5-6 |
| Error messages | 5-9 |

Troubleshooting

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

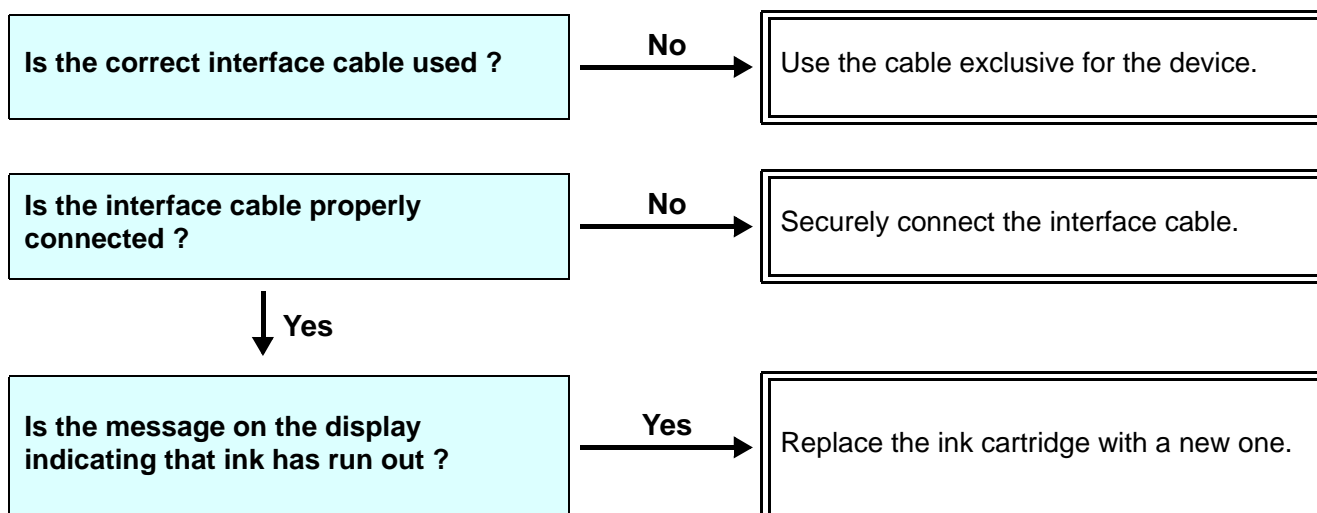
Power does not turn on

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



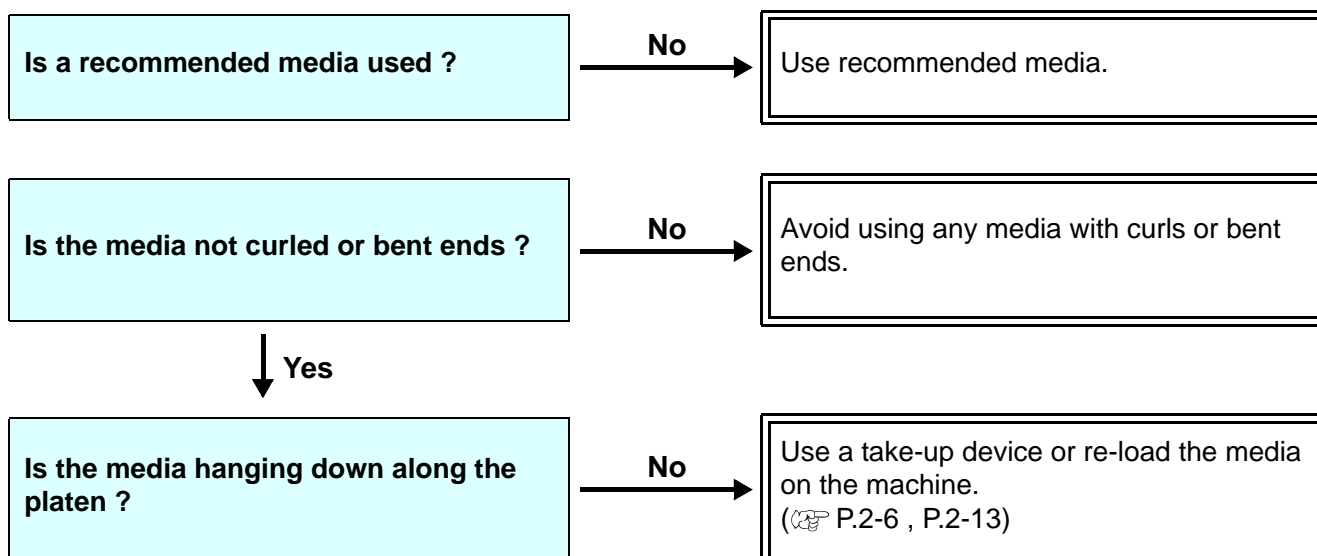
The machine does not start printing

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



Media get jammed / media is soiled

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



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

Check the basic operation.

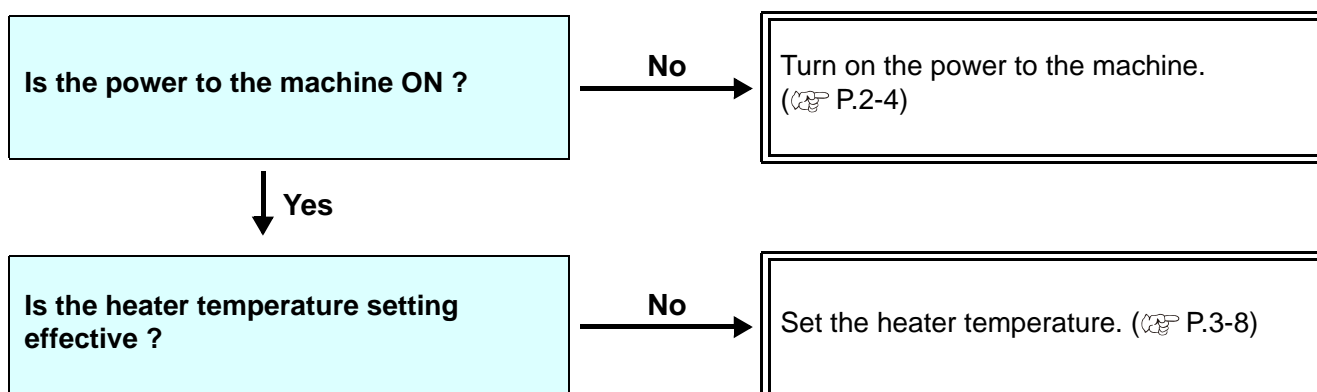


Image quality is poor

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

| Phenomenon | Measures |
|--|--|
| White lines / blur / dark stripes (in the direction of travel of the heads) | <ol style="list-style-type: none"> (1) Execute the head cleaning. (☞ P.2-19) (2) Perform maintenance of the inside of the station. (☞ P.4-5) (3) Execute the [MEDIA COMP.] function. (☞ P.3-6) (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.3-6) |
| Disagreement in print positions between outward trip and homeward trip | <ol style="list-style-type: none"> (1) Execute the [DROP POSITION] function. (☞ P.4-23) |
| 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.2-19) (4) When the phenomenon is not improved, execute the periodical wiping setting. (☞ P.4-28) |

Nozzle is clogged

When nozzle clogging is not dissolved even after the head cleaning referring to P.2-19, make sure the following operations.

- Fill ink by the operations of P.4-18.
- Replace ink by the operations of P.4-19.

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.



| | |
|---------|----------|
| ES3 INK | MMCCYYKK |
| REMA IN | 34567899 |

2

Press the **FUNCTION** key.



| |
|------------------|
| NON-ORIGINAL INK |
| ---C--- |

- 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.


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 | 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.2-19) In the case of significant nozzle clogging observed, perform the operations of P.4-10 "Washing of Head nozzle". |
| PRE PRT POST BREAK *** C *** C | A heater is disconnected. (This example shows that pre-heater is disconnected.) | Contact your local distributor to call for service. |
| PRE PRT POST THERM *** C *** C | The thermistor of a heater is defective. (This example shows that the thermistor of pre-heater is defective.) | |
| <LOCAL.1> [#01] NEAR END MMCC - - - - | 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 MMCC - - - - | | |
| <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 | There is a problem with installed ink cartridges. (In the case of overlapping with other warnings, the display turns to "<LOCAL.1> !CAR/WASH" and [#**] is erased.) | Check the content of the warning details in the guidance function. |
| *REMOTE.1* [#01] ! CAR | | |

| Message | Cause | Solution |
|-------------------------------|--|--|
| <LOCAL.1> !WASH [#01] | There is a problem with the installed cleaning solution cartridge. (In the case of overlapping with other warnings, the display turns to "<LOCAL.1> !CAR/WASH" and [#**] is erased.) | Check that the cleaning solution cartridge has been set properly. |
| *REMOTE.1* !WASH [#01] | | |
| INK NEAR END MMCC ---- | The ink of the ink cartridge has been nearly used up. | Replace the cartridge generating the warning with a new one. |
| INK END ---- YYKK | The ink of the ink cartridge has been completely used up. | Replace the cartridge generating the warning with a new one. |
| NON-ORIGINAL INK ---- YYKK | The ink cartridge is not MIMAKI genuine. | Replace the cartridge generating the warning with a MIMAKI genuine. |
| WRONG INK IC ---- YYKK | The IC chip of the ink cartridge 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. | Replace the cartridge generating the warning with a new one. |
| !WASTE TANK | The waste ink tank is nearly full. | Replace the waste ink tank then execute [MAINTENANCE]-[Ink Tank Exchange]. (P.4-38) |
| !Wash Liquid END | The cleaning liquid cartridge is empty. | Replace the cleaning solution cartridge with a new one. |

| Message | Cause | Solution |
|----------------------|---|---|
| !washLiquidCart.NON | The cleaning liquid cartridge has not been installed. | Install the cleaning solution cartridge. |
| !WRONG WASH CART. | There is trouble with cleaning liquid cartridge. | Check the cleaning solution cartridge. |
| ** Washing liquid ** | Cleaning solution has not been supplied. | Supply the cleaning solution. Execute [MAINTENANCE]-[HD.MAINTENANCE]-[FILL UP INK] .( P.4-18) |

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 ***** OPERATION ERROR | Improper operation was conducted on the operation panel. | Perform correct operations. |
| ***** 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 DETECT | 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 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 **** ENVIRONMENT TEMP (LO) | The ambient temperature is out of the usable temperature range (too low). | Adjust the ambient temperature of the machine. To continue operation without changing the ambient conditions, press the ENTER key. |
| **** ERROR 121 **** ENVIRONMENT TEMP (HI) | The ambient 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 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 211 **** HeaterTEMP (- - / - - / - -) | An abnormal temperature of the media heater was 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 211 **** HeadWARM.TEMP. (----) | An abnormal temperature of the head heater was detected. | |
| **** ERROR 211 **** HeadWARM.BREAK (----) | The head heater is disconnected. | |
| **** ERROR 211 **** HeadWARM.THERM (----) | Trouble has occurred with the thermistor of the head heater. | |
| **** ERROR 250 **** Y COORDINATES | An error was detected during scanning operation. | 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 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 | | JV33-130 | JV33-160 |
|----------------------------|------------------------|---|----------|
| 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 | Dedicated solvent ink. | Either ES3 ink or SS21 ink | |
| | Dedicated aqueous ink. | Either one of aqueos pigment ink or sublimation dye ink Aqueos pigment ink : 4 colors (Y,M,C,K) 6 colors (Y,M,C,K,Lc,Lm) Sublimation dye ink (Sb51) : 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 | Dedicated solvent ink | 6-color set of cartridges : 440cc 1 cartridge for each color, 440 cc/1 color (2 cartridges, 880cc only for magenta and cyanogen) 6 colors + white color installed: *1 White 2x220cc cartridges, 440cc / 1 color Other colors 1x440cc cartridge for each color, 440cc / 1 color 4-color set installed : 440cc 2 cartridges for each color, 880cc/1 color | |
| | Dedicated aqueous ink | 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 cyanogen) 4-color set installed : 440cc or 220cc 2 cartridges for each color, 880cc/1 color or 440cc/1 color | |
| Media type | Dedicated solvent ink | Tarpaulin, FF, PVC | |
| | Dedicated aqueous ink | Photo-paper , Synthetic paper , Duplex paper | |
| Max. printing width | | 1361mm | 1610mm |
| Roll Media size | Maximum | 1371mm | 1620mm |
| | Minimum | 210mm | |
| | Thickness | 1.0 mm or less | |
| | Roll outside diameter | φ 180mm or less | |
| | Roll weight *2 | 25kg or less | |
| | Roll inside diameter | 3 or 2 inches | |
| | Plotting surface | Side facing outward | |
| | Roll end treatment | The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal. | |

| Item | | JV33-130 | JV33-160 |
|---------------------------------|-------------------------------|---|----------|
| Leaf media size | Maximum | 1371mm | 1620mm |
| | 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. | |
| Media delivery | | Take-up device supplied as a standard accessory (switching possible between face in and face out). | |
| Waste ink tank | | Bottle type (2,000 cc) | |
| Interface | | USB 2.0 | |
| Command | | MRL- III | |
| 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 | |
| Power | | AC100 - 120 $\pm 10\%$, AC220 - 240 $\pm 10\%$, 50/60Hz ± 1 Hz , 15A or less | |
| Power consumption ^{*3} | | 1333 W or less | |
| Recomended 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 | 160 kg |
| Outside dimensions | Width | 2289 mm | 2538 mm |
| | Depth | 739 mm | |
| | Height | 1424 mm | |

*1. Usable on Firmware Ver. 1.30 or later.

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

*3. Main unit and heater included.

Ink specifications

| Item | | When solvent ink is used | When aqueos-color ink is used |
|---------------------|----------------|--|--|
| Supply | | Dedicated solvent ink cartridges | Dedicated aqueos pigment ink cartridge Dedicated sublimation dye ink cartridge (Sb51) |
| Color | | Black ink cartridge Cyan ink cartridge Magenta ink cartridge Yellow ink cartridge Light cyan ink cartridge Light magenta ink cartridge White ink cartridge ^{*1} | Black ink cartridge Cyan ink cartridge (Blue ink cartridge ^{*2}) Magenta ink cartridge Yellow ink cartridge Light cyan ink cartridge (Light blue ink cartridge ^{*1}) Light magenta ink cartridge |
| Ink capacity | | 220cc / 440cc per cartridge | |
| Shelf life | | <ul style="list-style-type: none"> SS21 Ink 1 year from the date of manufacture (at room temperature) ES3 Ink Two years from the date of manufacture (at room temperature) Within three months after opening the package | <ul style="list-style-type: none"> Aqueos pigment ink 1 year from the date of manufacture (at room temperature) Sublimation dye ink (Sb51) 1 year from the date of manufacture (at room temperature) |
| Storage temperature | Storage | 0 to 25°C (Average daily temperature) <ul style="list-style-type: none"> Be sure to keep a vessel in the airtight condition. | 10 to 35°C (Average daily temperature) <ul style="list-style-type: none"> 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 | -20 to 60°C <ul style="list-style-type: none"> Avoid the condition lower than -20 °C and higher than 60 °C. | 0 to 40°C <ul style="list-style-type: none"> Avoid the condition lower than -0 °C and higher than 40 °C. |

- *1. When SS21 ink cartridge is used.
(White ink cartridge can be used on firmware Ver.1.30 or later.)
- *2. When a dedicated sublimation dye ink cartridge (Sb51) is used.



● **Do not disassemble ink cartridges and do not refill them with ink.**

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

- When solvent ink is used, if the ink freezes, thaw it at room temperature (25°C) spending more than three hours before use.
- When aqueos ink is used, if the ink freezes, the quality is changed and the ink becomes unusable.
Store the ink in an environment that will not freeze the ink.

Sheet for inquiry

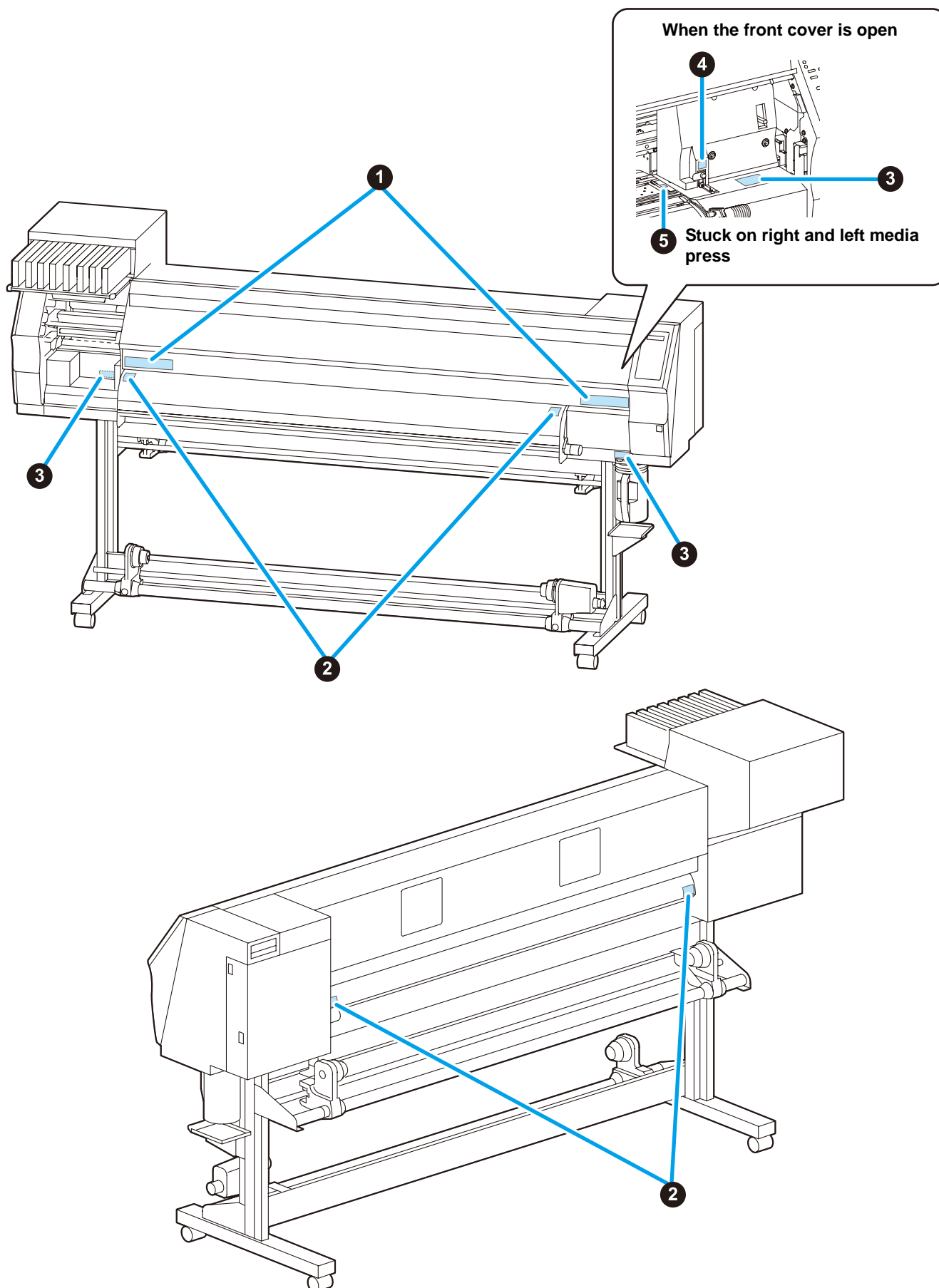
Use this sheet for troubles and abnormal functions of the machine.
Fill in the following necessary items, and then fax the sheet to our sales office.




















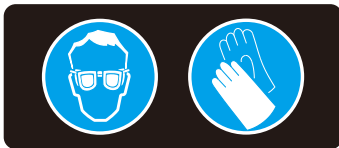


| | |
|-------------------------------|--|
| Company name | |
| Person in charge | |
| Telephone number | |
| machine model | |
| Operating OS | |
| Machine information *1 | |
| Error message | |
| Contents of inquiry | |

*1. Refer to "Confirming Machine information" of "Convenient using" then fill in necessary information.
(☞ P.3-41)

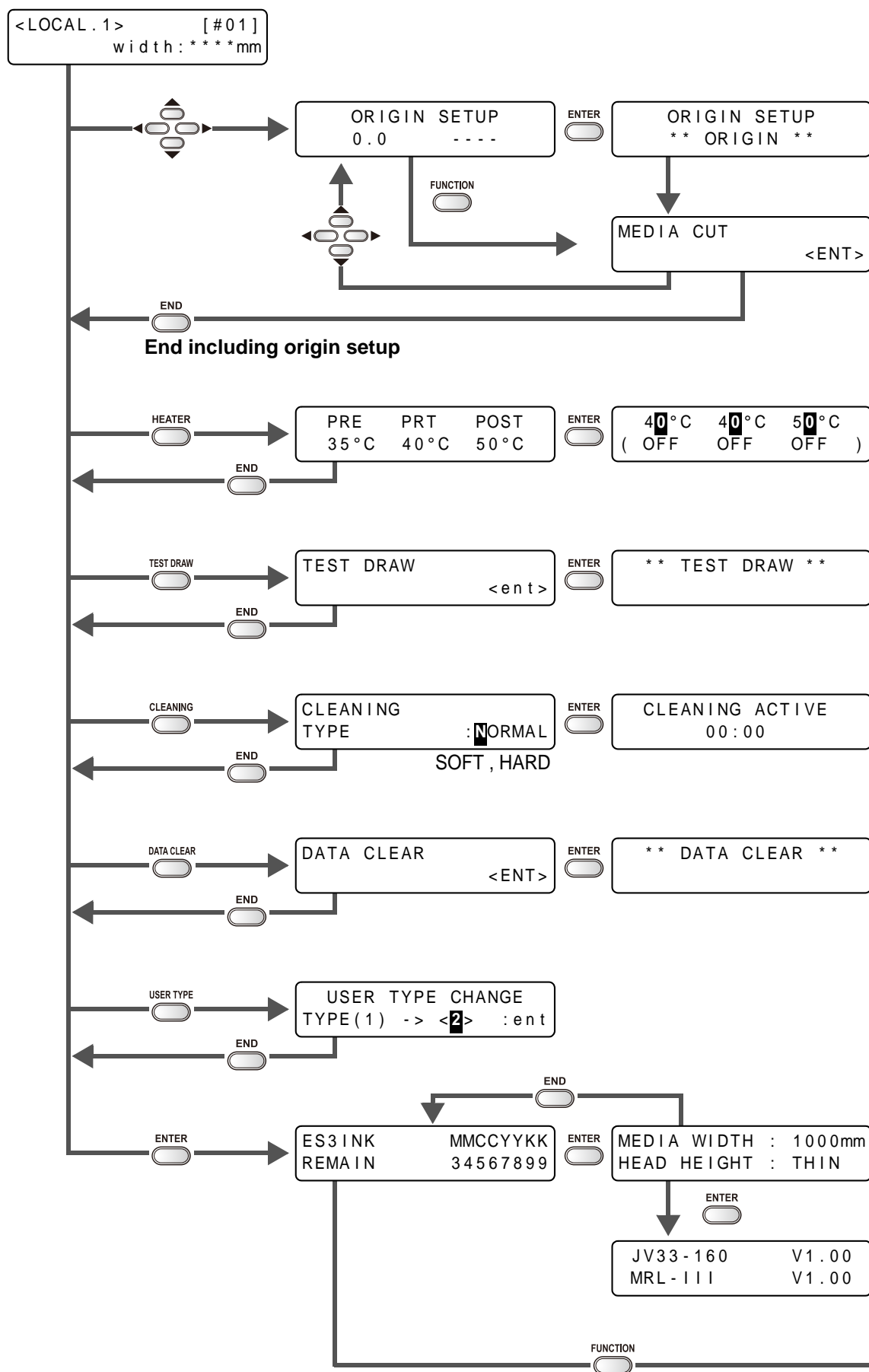
Warning labels

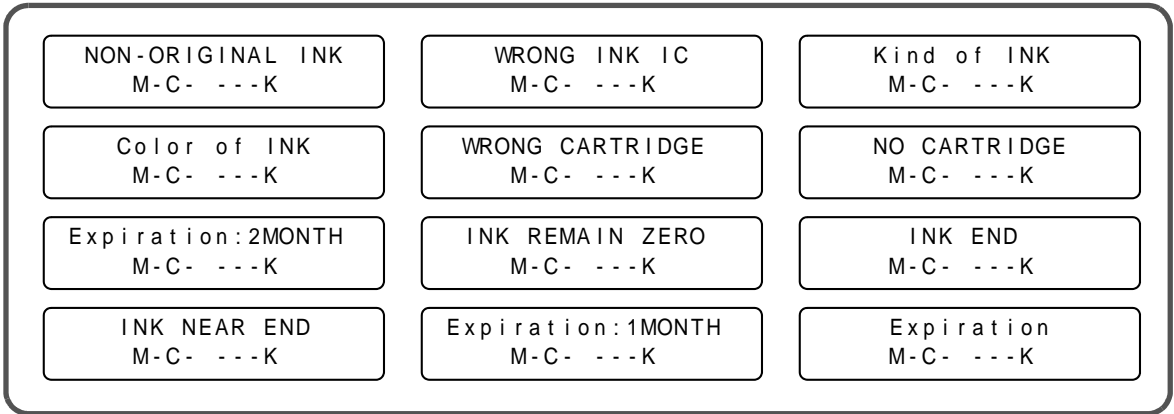
Warning labels are stuck on the machine. Be sure to fully understand the warning given on the labels. If a warning label is illegible due to stains or has come off, purchase a new one from a distributor or our sales office.

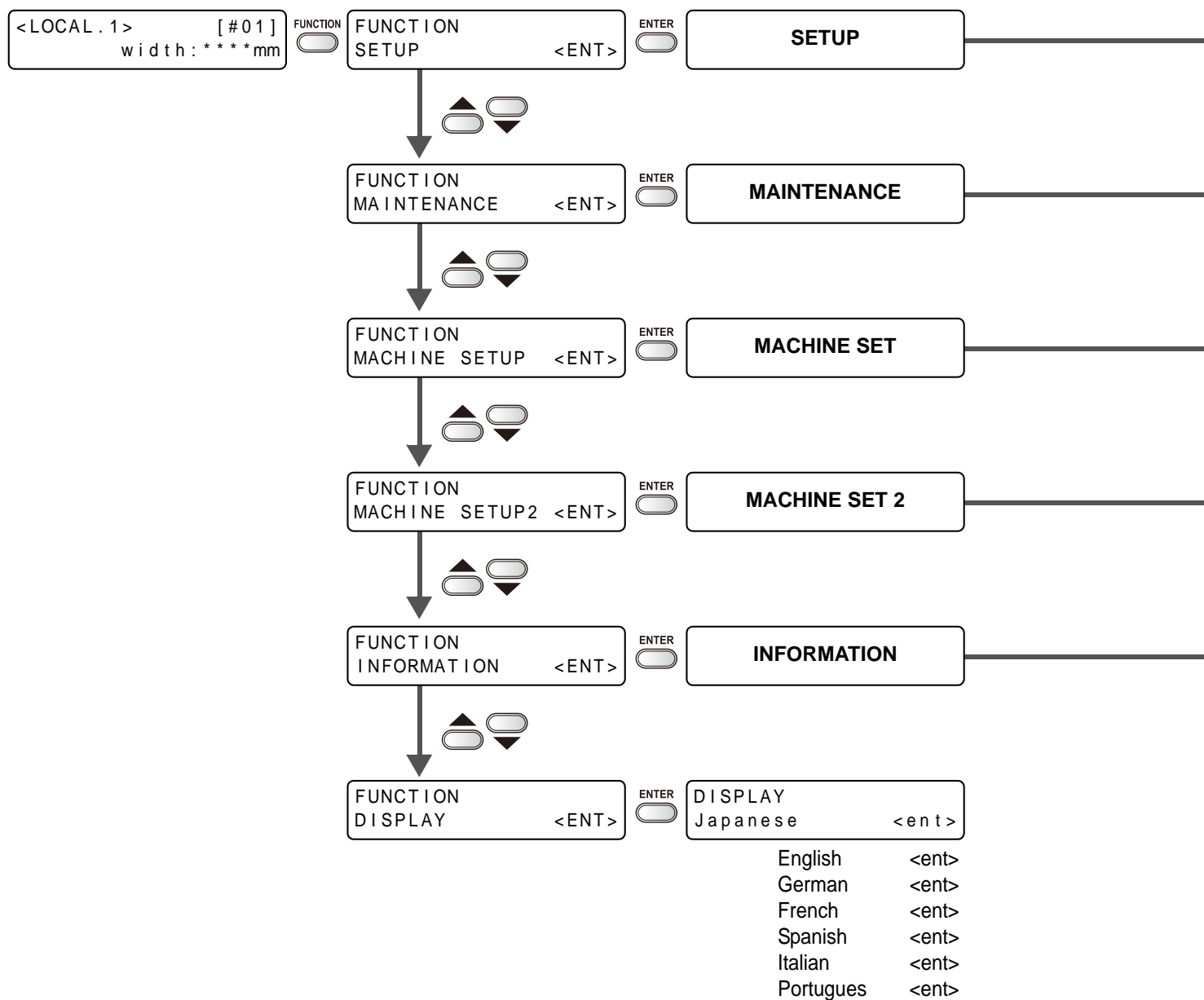


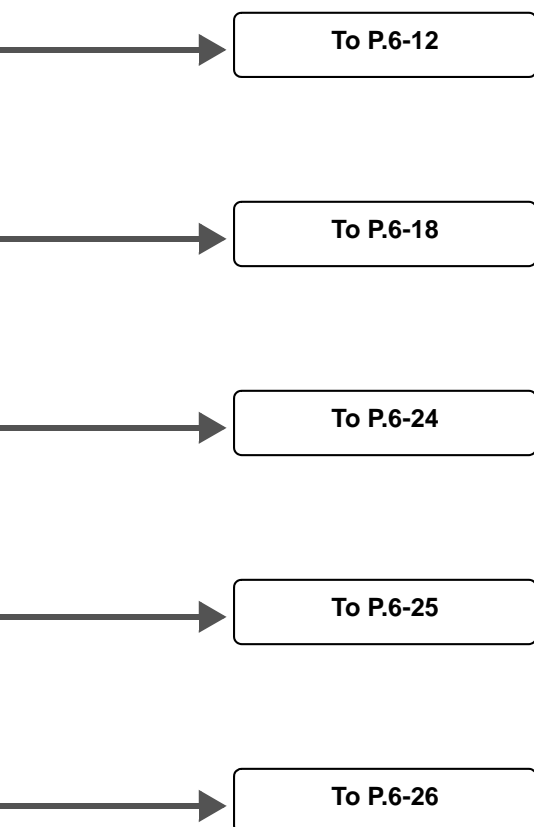
| No. | Reorder | Label | | | | | | | | | | |
|--|--|--|--|---|--|--|--|---------------------------|--|---|---|---|
| 1 | M901549 | <table><tr><td> 注 意</td><td> 注 意</td><td> CAUTION</td><td> ACHTUNG</td><td> ATTENTION</td></tr><tr><td>滚轮转动时, 请勿将手插入 前面外盖的内部。</td><td>キャリッジ動作中は、フロント カバーの中に指を入れない でください。</td><td>-MOVING CARRIAGE- Do not put fingers inside this area</td><td>-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.</td><td>-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone. </td></tr></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 | M903239 |  | | | | | | | | | | |
| 3 | M903330 |  | | | | | | | | | | |
| 4 | M903405 |  | | | | | | | | | | |
| 5 | M904810 |  | | | | | | | | | | |

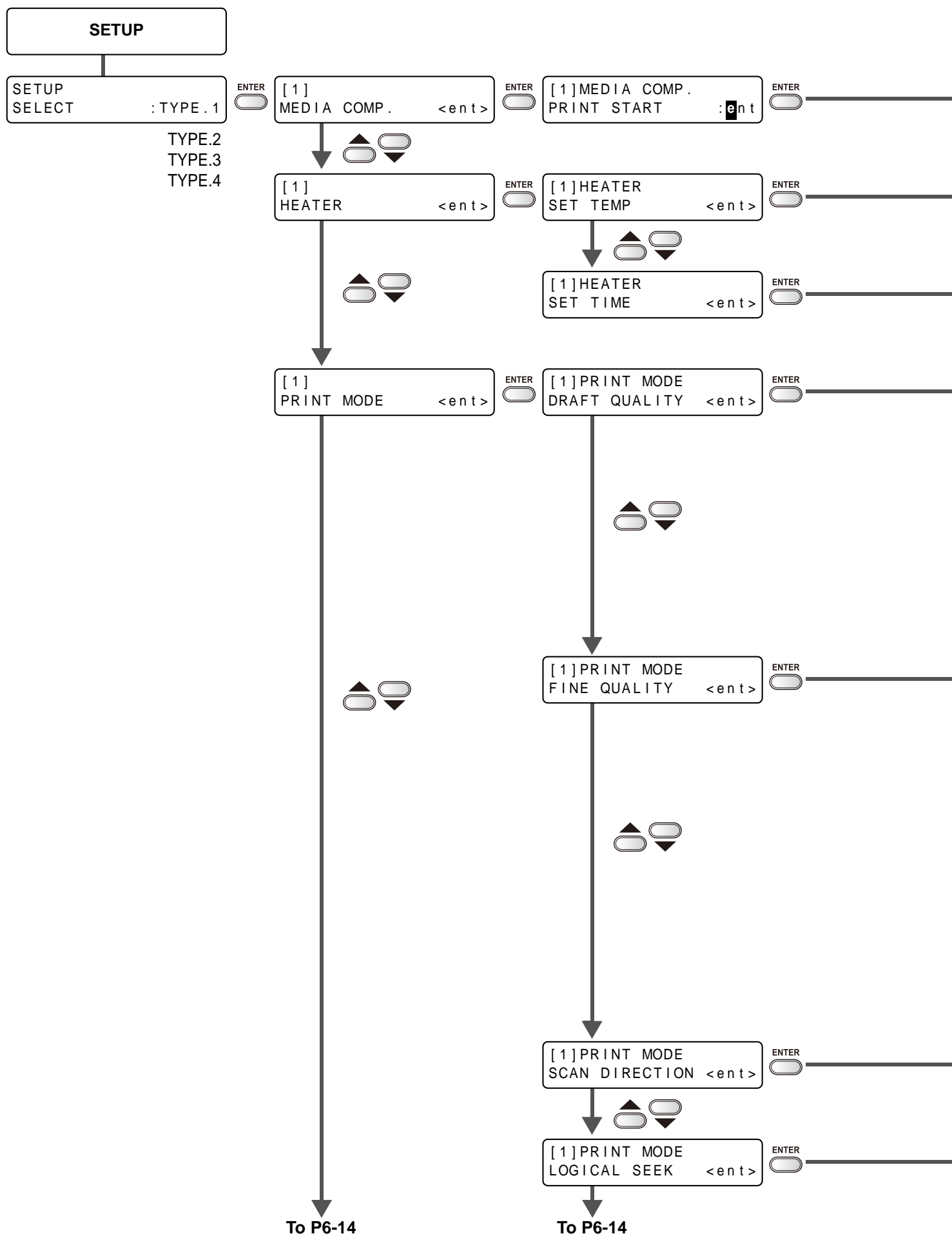
Function Flowchart

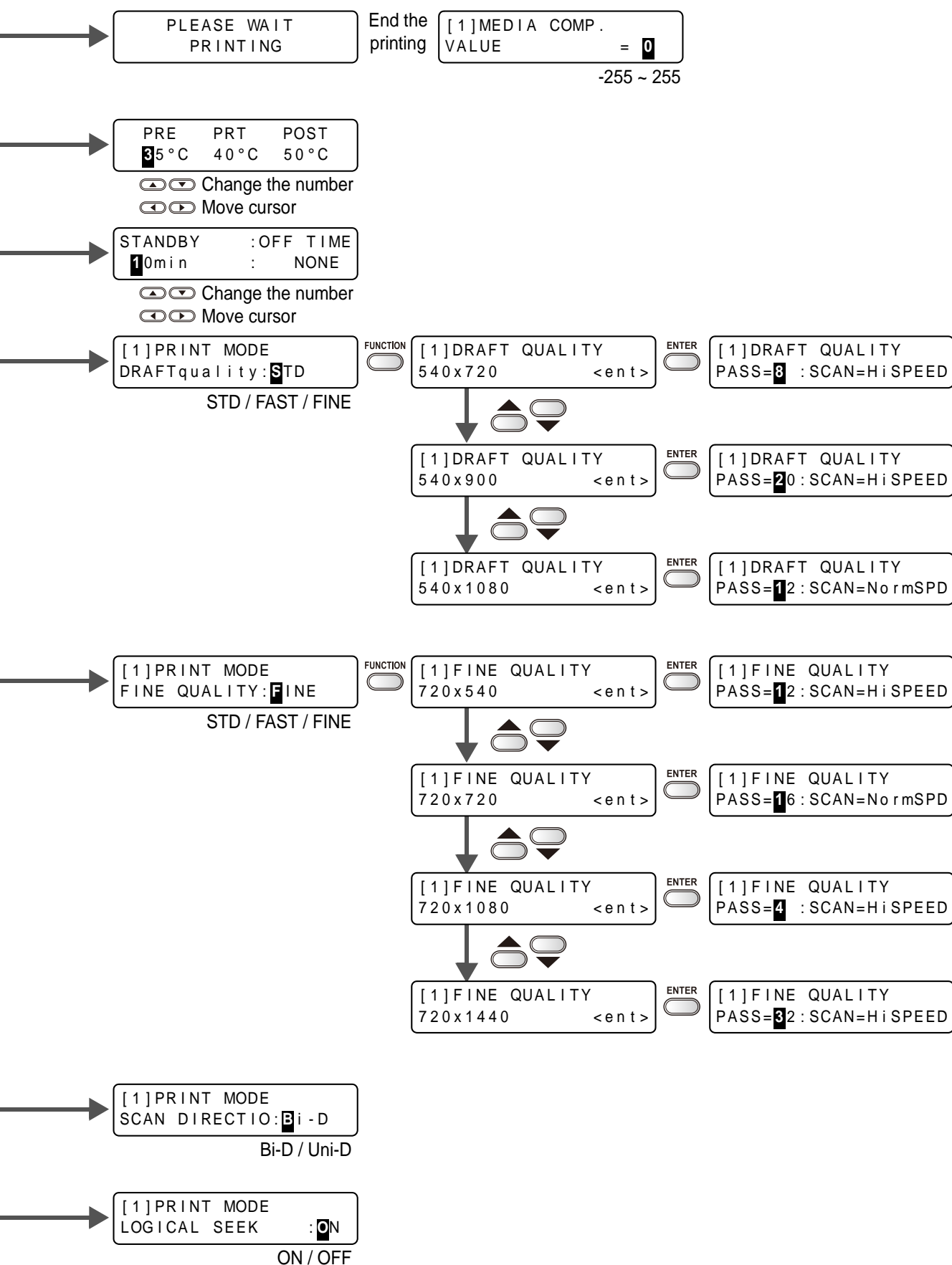


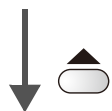


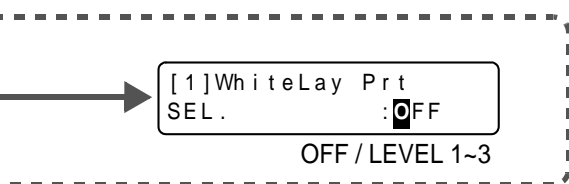




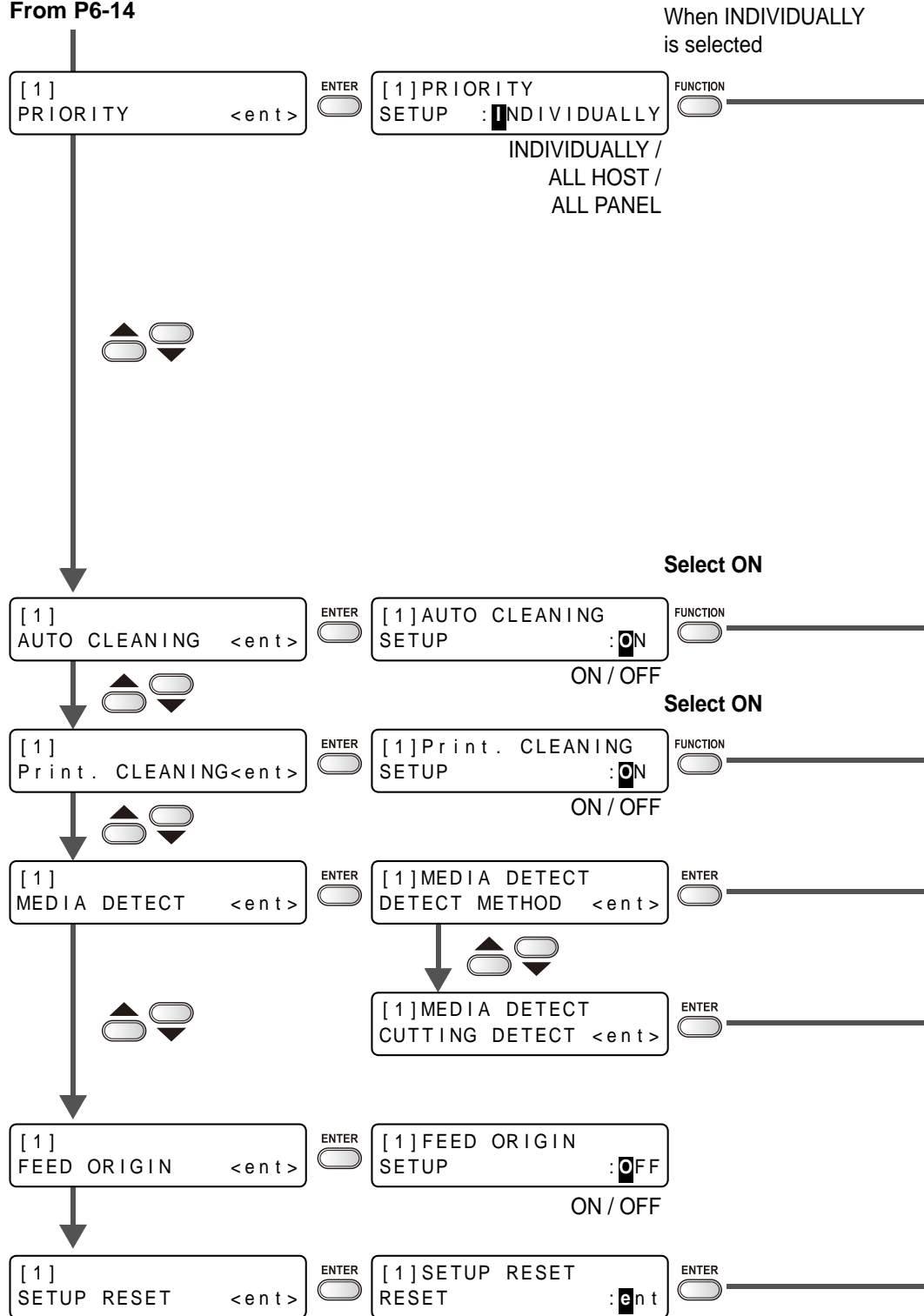


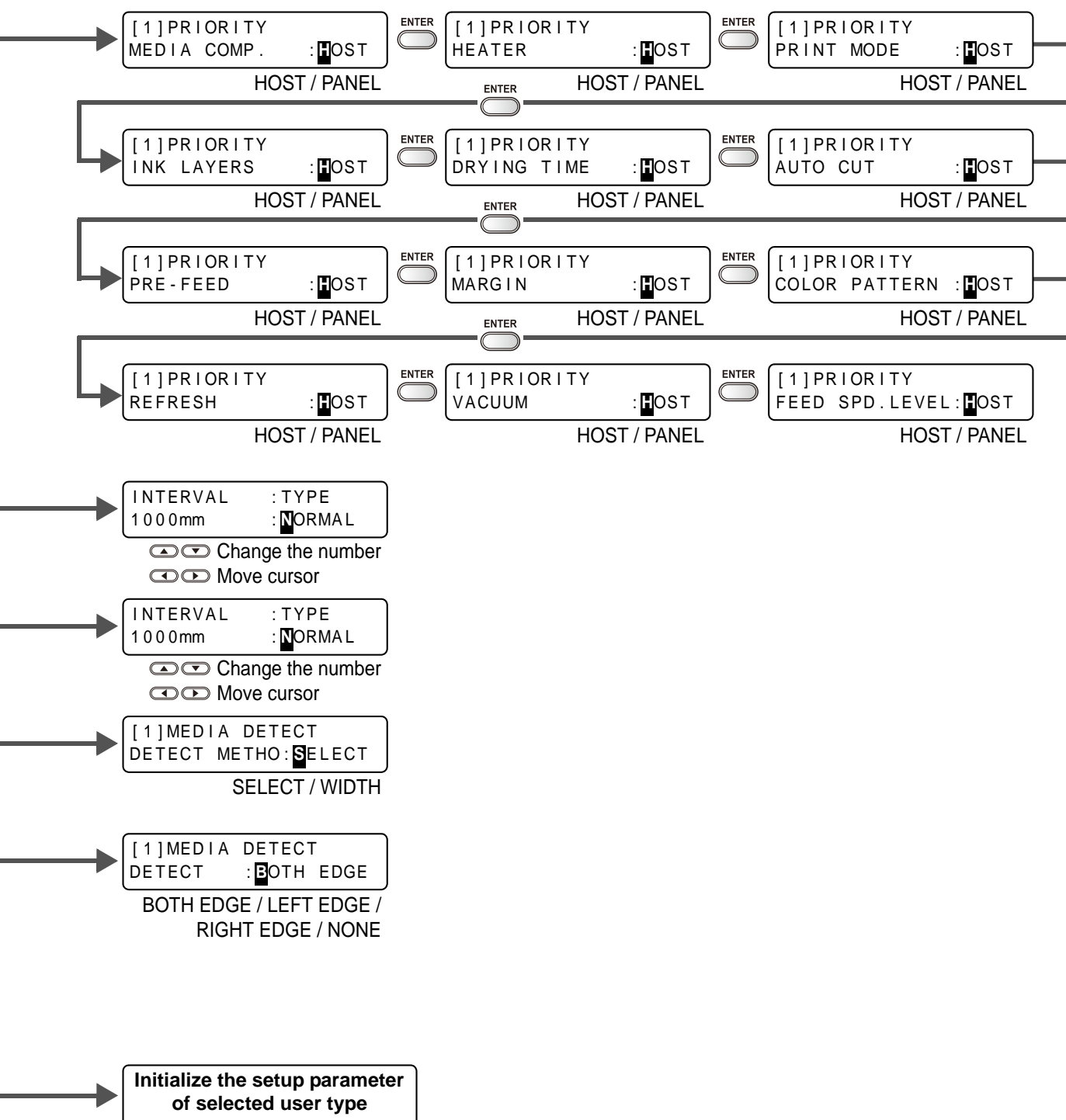


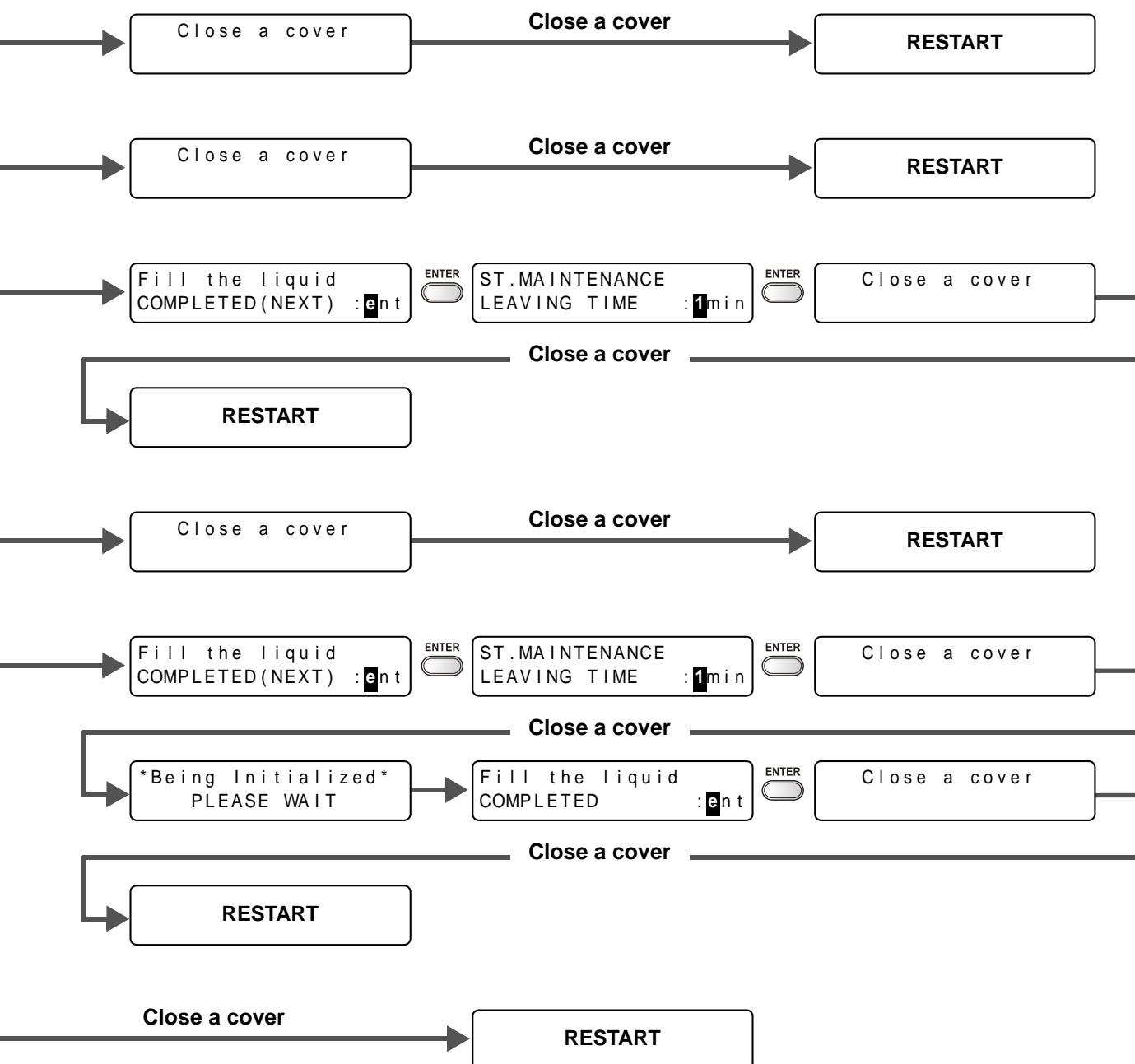




From P6-14







From P6-18

MAINTENANCE
HD.MAINTENANCE <ent> ENTER HD.MAINTENANCE
FILL UP INK <ent> ENTER FILLING UP NOW.
00:00

HD.MAINTENANCE
DISCHARGE&WASH <ent> ENTER Remove: Ink Cartridges
MMCC YYKK ENTER

HD.MAINTENANCE
MaintWashLiquid <ent> ENTER MaintWashLiquid
FILLING UP <ent> ENTER

MaintWashLiquid
DISCHARGE <ent> ENTER

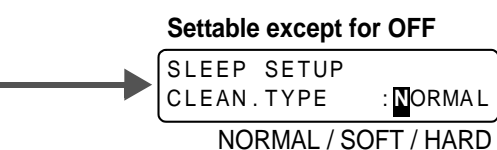
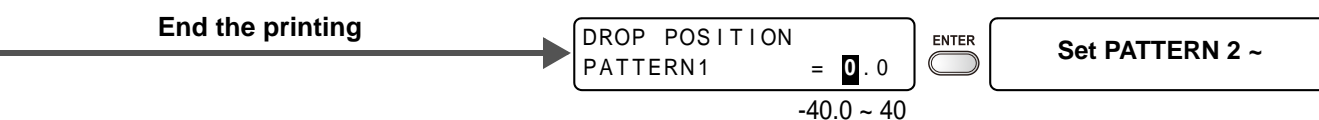
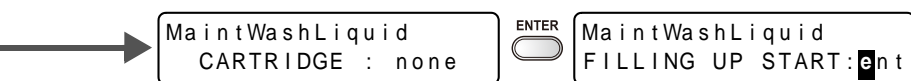
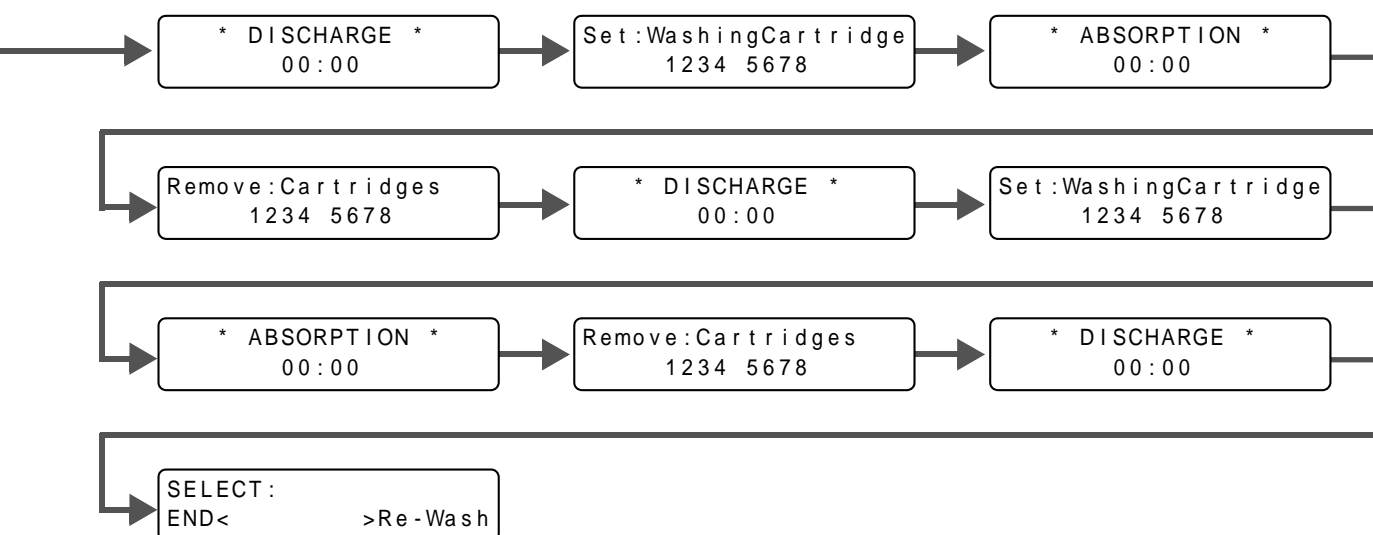
MAINTENANCE
DROP POSITION <ent> ENTER DROP POSITION
PRINT START :ent> ENTER PRINTING
PLEASE WAIT

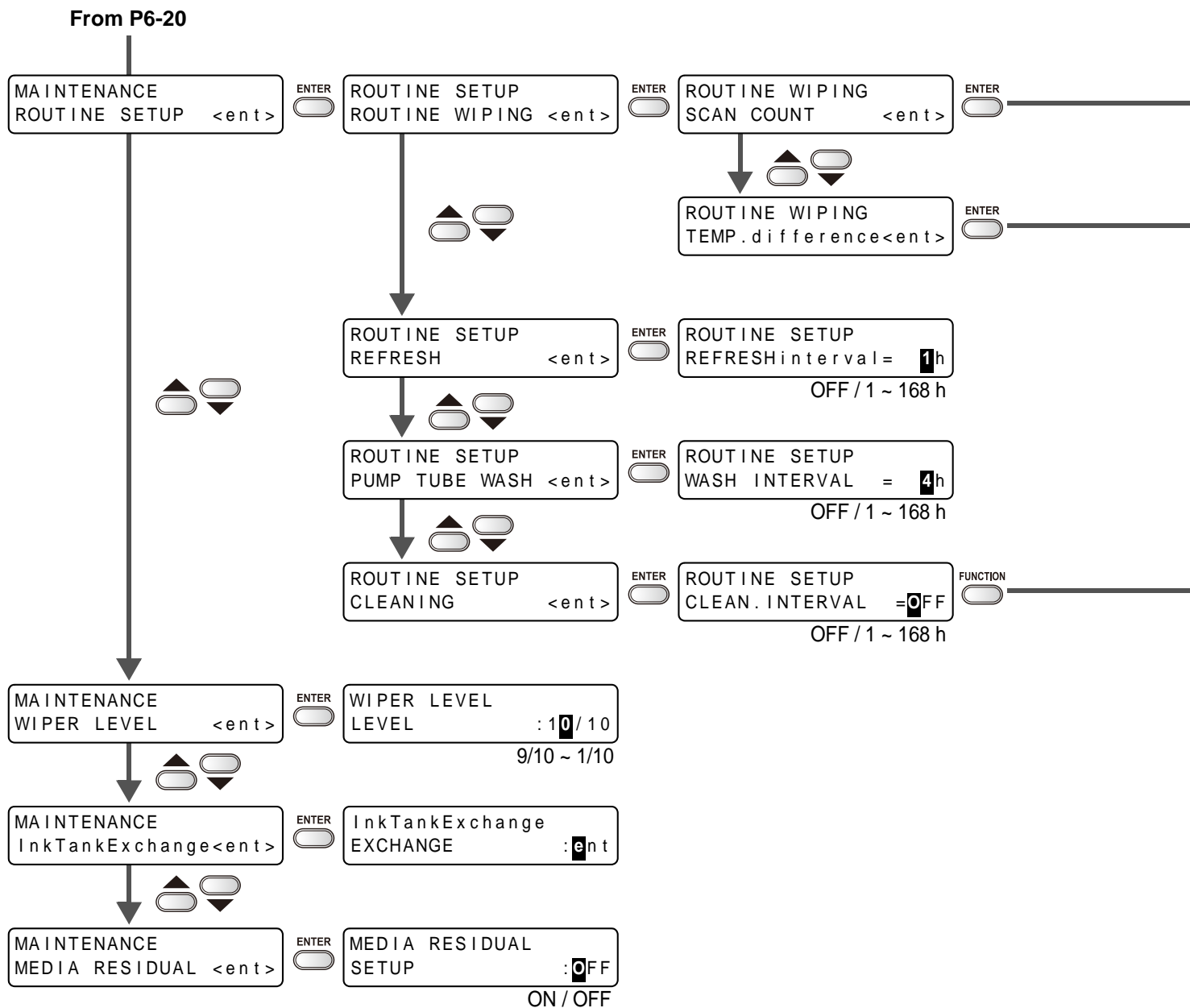
MAINTENANCE
SLEEP SETUP <ent> ENTER SLEEP SETUP
REFRESH <ent> ENTER SLEEP SETUP
REFRESH interval = 1h
OFF / 1 ~ 168 h

SLEEP SETUP
PUMP TUBE WASH <ent> ENTER SLEEP SETUP
WASH INTERVAL = 4h
OFF / 1 ~ 168 h

SLEEP SETUP
CLEANING <ent> ENTER SLEEP SETUP
CLEAN. INTERVAL = OFF
OFF / 1 ~ 168 h FUNCTION

To P6-22



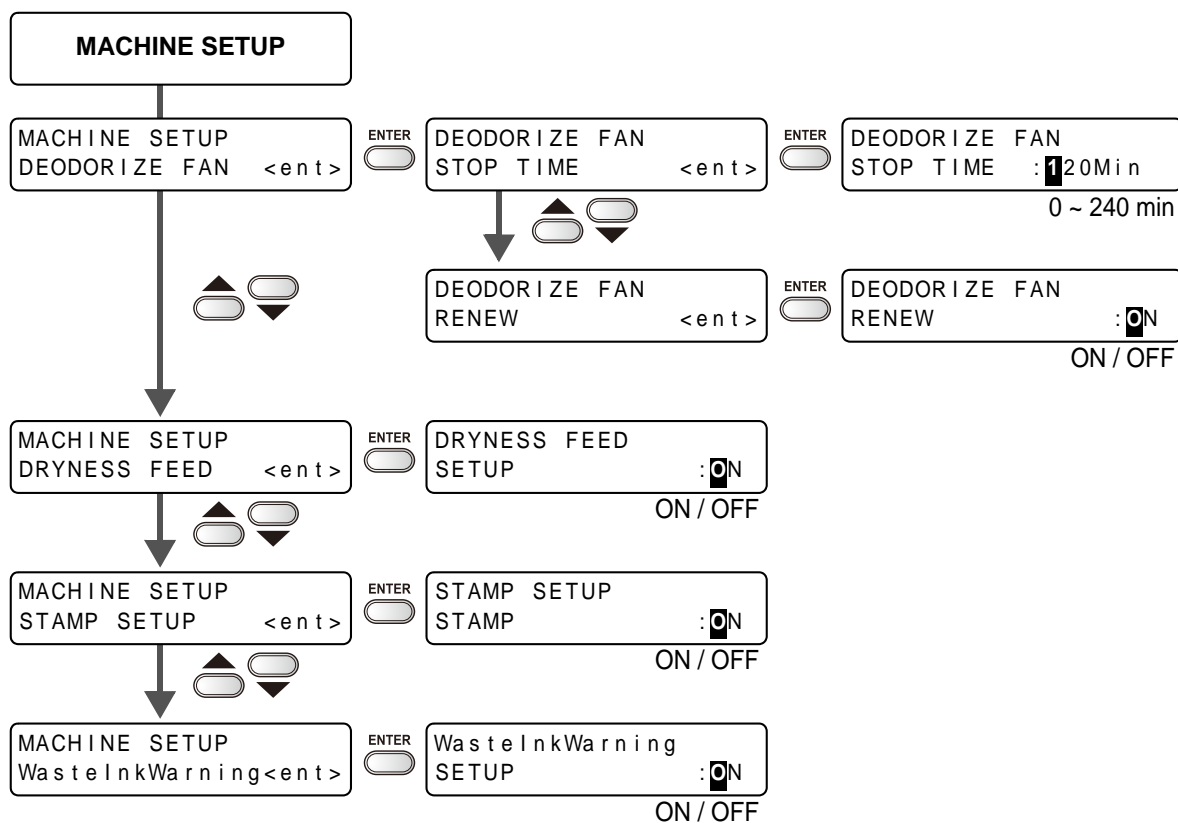


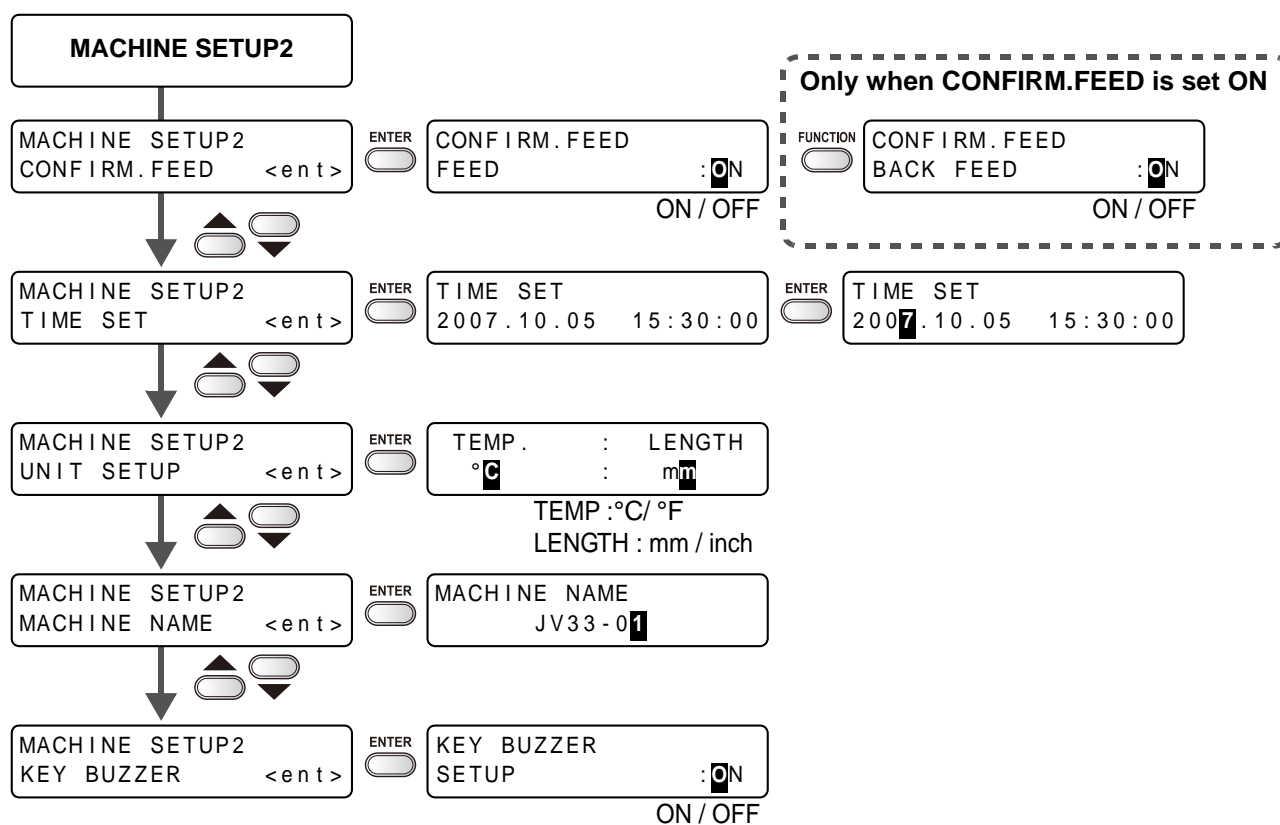
ROUTINE WIPING
SCAN COUNT = 50

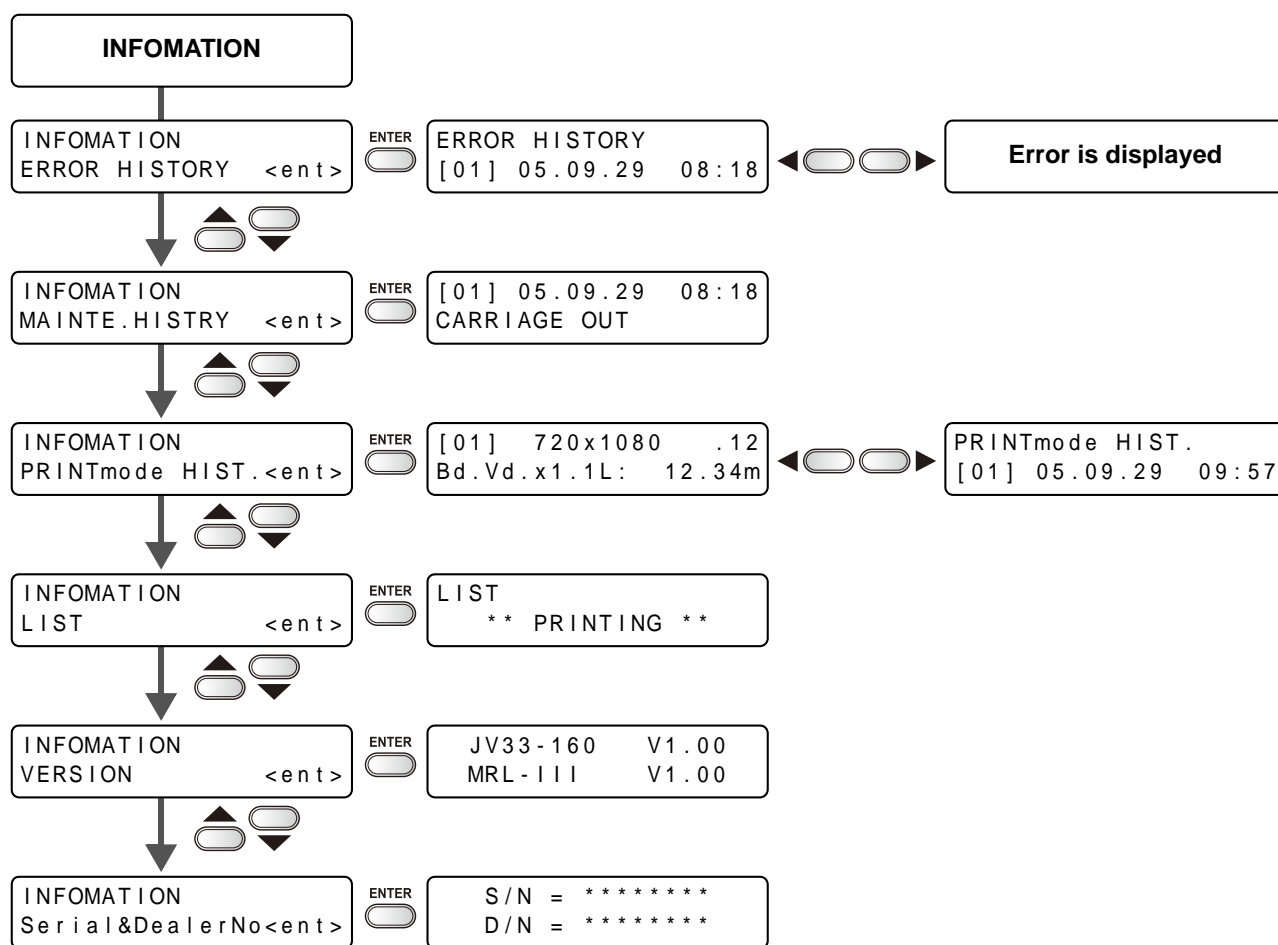
ROUTINE WIPING
TEMP.Difference=20 °C

Settable except for OFF

ROUTINE SETUP
CLEAN.TYPE : NORMAL
NORMAL / SOFT / HARD







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