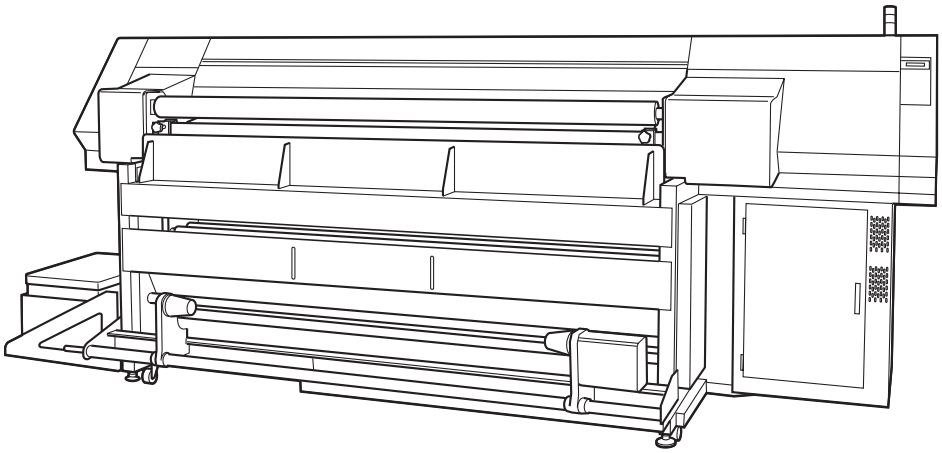
Mimaki

Textile Jet Tx3-1600

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 MIMAKIÅfS 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 Manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district if you have any inquiry.
- Description contained in this Manual are subject to change without notice for improvement.

- Generally, names and designations referred to in this Manual are trade marks or registered trade marks of the manufacturers or suppliers.

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 instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which cause the user will be required to correct the interference at his own expense.

CAUTION

- 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 device.

INTERFERENCE TO TELEVISIONS AND RADIOS

The product covered by this Instruction Manual produces low radio waves while it is in operation. 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 direction of the receiving antenna or the feeder of your radio/television.
- Change the installing direction of the product.
- Move the receiver away from the product.
- Use a power line for the receiver that is not shared with the product.

LASER SAFETY

This Model is certified as a Class I laser product under the U.S. Department of Health and Human Services Radiation Performance standard according to the Radiation Control for Health and Safety Act of 1968. This means that this Model does not produce hazardous laser radiation.

CDRH REGULATION

The Center for Devices and Radiological Health for the U.S. Food and Drug Administration Implement regulations for laser products. The Label shown below indicates compliance with the CDRH regulations and is labeled on the product when marketed in the United States. This Model is equivalent to Class I laser device according to CDRH Regulation.

This product complies with 21 CFR chapter I and subchapter J.

Foreward

Thank you for purchasing MIMAKI Tx3-1600 color inkjet plotter for textile.
Model Tx3-1600 is a color inkjet plotter for printing on fabric with eight different colors at high speeds.
Read this manual carefully and make the most effective use of your plotter.

- Tx3-1600 is equipped with a high speed print head and other high performance part that may be dangerous. Please be sure to read this manual carefully before starting this plotter operation in order to prevent the injuries or damages.

- Use of controls, adjustments or performance of procedures other than those specified in this manual may results in hazardous radiation exposure.

On this Operation Manual

- This operation manual describes the operation and maintenance of Model Tx3-1600 Color InkJet Plotter (hereinafter referred to as the plotter).
- Please read and fully understand this Operation Manual before putting the machine into service. It is also necessary to keep this Operation Manual on hand.
- Make arrangements to deliver this Operation Manual to the person in charge of the operation of this plotter.
- This Operation Manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district if you have any inquiry.
- Description contained in this Operation Manual are subject to change without notice for improvement.
- In the case where this Operation Manual should be illegible due to destruction by fire or breakage, purchase another copy of the Operation Manual from our distributor.

Features

The features and methods of operation are explained in this manual for you to understand how to use the device properly.

Various textile printing ink can be used

MIMAKI genuine ink is shown below.

Acid dye ink	:	Suitable for wool, silk, and other animal fibers and nylon.
Reactive dye ink	:	Suitable for wool, silk in addition to cotton, rayon, etc.
Disperse dye ink	:	Suitable for fibers such as polyester, acrylic etc.
Printing pigment ink	:	Use with cotton. Fixing with hot pressing is possible in postprocessing.

CAUTION

- When using any type of ink, be sure to perform the pre-processing and post-processing recommended by MIMAKI for the fabric used.
- Use the printing pigment in an environment with humidity of 40% or more.

Automatic nozzle check function

Checks the print head condition automatically even during printing.
If a failure is detected, this function performs recovery operation, recheck, etc. according to the setting. This function enables unattended print operation.

Applicability of fabric up to 7 mm in thickness

Even thick fabric, such as boards, can be used.
The plotter accepts fabric whose thickness is in the range of 0.1mm to 7.0mm.

Applicable to wide fabric

Fabric with up to 1650mm width can be set and printing for up to 1620mm width is possible.

Remaining ink management system with Ink IC tip

The IC chip mounted on the ink cartridge allows monitoring of the amount of remaining ink even after it is removed and remounted.
This avoids INK END during unattended operation, allowing efficient use of ink and fabric.

LCD display

The LCD panel displays the device setting menu in two lines.
Since the LCD panel is provided with a backlight, the display can be seen clearly even in a dark place. The LCD panel is capable of displaying seven different languages, including English and Spanish.

Large capacity Ink (2 Liters) can be set

Two one-liter ink toggles can be set for each color.
If one toggle runs out, the other toggle is selected automatically to prevent interruption of printing caused by ink replacement.

Display of information for confirmation

It is possible to have the printing length displayed on the LCD panel and the printing conditions to be plotted for confirmation during operation of the plotter.

High-speed interface

The "IEEE 1394" interface allows for high-speed data reception from the computer.

Take-Up device for printing on a long fabric

Since the take-up device winds up the plotted fabric, along fabric is also available.

Fabric retainer

If the edge of the fabric is curled or raised, the fabric retainer can be used to avoid contact of the fabric and ink head.

Ditch for penetrated ink

Even with printing to a coarse-textured fabric, the backing fabric is not stained by penetrated ink. Removable platen boards are prepared for fabric without ink penetration.

Dryer provided

After printing, the dryer dries the fabric on the path up to the take-up device.

Applicable to large rolls

Up to 200m rolls (cotton, t=0.25, approx 38kg) can be set, fed, and rolled up.

Printing on a stretch materials

Enable to print on a stretchy material by sticking the fabric on the belt with a pressure roller.

Cleaning the belt during printing

Enables to print as removing inks or dusts adhered on the belt.

Feed Comp. function has been newly added.

Correcting the medium feed rate during printing.

Support for 4-color plotting

4 colors are allocated to 8 heads to enable plotting.
Plotting using 4 colors takes only half the time as with the 8-color set.

For Safe Operation

Pictorial Signs

Pictorial signs are used in this Instruction Manual for safe operation of and in prevention of damages to the device. Pictorial signs and their meanings are given below. Read and fully understand before reading the text.

- Indicates the case where it is assumed that misuse of the machine, ignoring this sign, can expose the operator to danger of injury or death.

- Indicates the case where it is assumed that misuse of the machine, ignoring this sign, can cause damage only to property.

- The symbol "  " indicates helpful information that will facilitate the use of the device.

Example of Pictorial Signs

- The symbol "△" indicates the case where some phenomenon that requires a CAUTION sign (including "DANGER" and "WARNING" signs) exists. A concrete precaution (precaution against an electric shock in the case of the sketch given on the left) is shown in the illustration.

- The symbol "⃠" indicates a prohibited behavior. A concrete illustration of prohibition (disassembly is prohibited in the sketch given on the left) is shown in or next to the illustration.

- The symbol "●" indicates a thing that is forced to be done and instruction that is forced to be followed. A concrete illustration of instruction (the removal of a plug from the receptacle is instructed in the sketch given on the left) is drawn in the illustration.

Never Do the Following

⚠WARNING

During installation

- The device is as heavy as approximately 1100 kg. Perform the installation work by at least six persons.

Do not disassemble or remodel the device.

- Never disassemble or remodel the main unit of the printer and the ink cartridge. Disassembling/remodeling any of them will result in electric shocks or breakdown of the device.

Do not use the device in damp places.

- Avoid damp environments when putting the device into service. Do not splash water onto the device. High-humidity or water will give rise to fire, electric shocks or breakdown of the device.

Abnormal event occurs.

- If the device is used under an abnormal condition where the device produces smoke or unpleasant smell, fire or electric shocks can result. Be sure to turn off the power switch imfabrictely and detach the plug from the receptacle. Check first to be sure that the device no longer produces smoke, and contact a distributor in your district for repair.
  Never repair your device by yourself since it is very dangerous for you to do so.

Power supply and voltage

- Be sure to use the device with the power supply specifications indicated.

- Be sure to connect the plug of the power cable to a grounded receptacle.
  If not, fire or electric shocks can result.

Roll fabric

- Roll fabric is heavy. Be careful not to drop it. If you drop it on your foot, or any other part of your body, personal injury can result.

Handling of ink cartridges

- Store ink cartridges and waste ink tank in a place that is out of the reach of children.
  If ink settles on the skin or fabric, immediately wash it off with detergent or water.
  In the event that ink gets in eyes, immediately rinse it off with water and consult a medical doctor.

- Neither pound the ink cartridge nor shake it violently so as to prevent leakage of ink.

- Never refill the ink cartridge with ink. MIMAKI assumes no responsibility for malfunction caused by using the device after replenishment of ink.

Never Do the Following

⚠WARNING

Handling of the power cable

- Take care not to damage, break or work on the power cable.
  If a heavy matter is placed on the power cable, heated or drawn, the power cable can break to cause fire or electric shocks.
- Connecting the power cable cannot be installed by the customer.
  Contact your local distributor to call for service to connect the power cable as well as moving installation of the device.
  We should take no responsibility for any troubles caused through the power cable connection by the customer without calling for service.

Laser Sensor

- This device is equivalent to Class I laser device according to CDRH Regulation. LASER CAUTION Label for CDRH regulation shown below is provided with the device.

  Also, the device is equivalent to a Class I laser device according to JIS/IEC standard. The label according to these standards shown below is provided with the device.

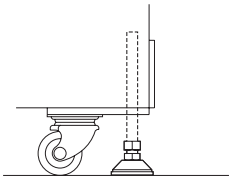
  To avoid causing pain in your eyes or visual impairment, do not review the laser beam through a lens or the other optical observation system.

Precautions in use

⚠CAUTION

Securing the device with level foot

- Be sure to use the product with the level foot lowered.
  The device can move out of position.



Protection against dust, waste paper and flocks

- Keep the front cover held closed also when the device is not engaged in printing. If not, dust can accumulate on the head nozzle.
- When leaving the workshop after the working hours, be sure to remove any fabric from the roll hanger. If any fabric is left on the roll hanger, dust can gather on it.
- Store fabric in a bag. Wiping off dust, waste paper and flocks accumulated on a fabric will adversely affect the fabric due to static electricity.
- Frequently wipe the capping station clean to eliminate dust and paper chips. Wiping with a fluffy wiper only rubs dust over the capping station. Replace the fluffy wiper immediately with a new one.
- Dust, waste paper and flocks in the head will also cause drops of ink to fall abruptly down on the fabric during printing. If this phenomenon takes place, be sure to clean up the head. (See "Cleaning ink heads" in chapter 2)

Periodic exchange parts

- There are some parts which must be replaced by service men after Tx3-1600 are in use for 5000 hours from 3000 hours.
  Therefore, we would like to suggest that you make a contract with distributors or dealers for after-sale service.

Fabric

- Use specific fabric designated fabric exclusive to Tx3-1600. Mimaki assumes no responsibility for any damage caused by the use of any fabric other than the afore-mentioned one.
- If fabric that is likely to tightly curl, flatten first the fabric before using it for printing. Heavily-curled fabric affect the plotted picture quality.

Warning labels

- This device is adhered with a warning label at two locations. Be sure to fully understand the warnings given on the labels. In the case where any of the warning label has become so soiled that the warning message is illegible or has come off, purchase a new one from your local distribu-tor or our office. Refer to Appendix for the label adhering locations.

Cover

- Never open the front cover, station cover and maintenance cover during printing. Opening the cover will abort printing.

Heater

- Do not touch the heater to avoid burn injury during use.

⚠CAUTION

Ink cartridges

- 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 printer. If it is opened and left for an extended period of time, normal printing performance of the printer may not be ensured.

- Be sure to thoroughly consume the ink in the ink cartridge, once it is opened, within six months. If an extended period of time has passed after opening the cartridge tank, printing quality would be poor.

- Be sure to store ink cartridges in a cold and dark place.

- Never replenishes the ink cartridge with ink.

- Using any ink type other than the exclusive one can cause a trouble. Remember that the user shall be charged for a repair to correct any damage resulting from the use of ink other than the exclusive type.

- Do not touch or stain the contact of the cartridge PCB, as this may cause failure of the PCB.

Interface cable

- Not available to use the IEEE1394 cable of 3.05 meter or more.

- This device is not Limited Power Sources.

- Only use UL approval cable as IEEE 1394 cable.

Applying adhesive

- In case using adhesive, comply strictly with the Ordinance on the Prevention of Organic Solvent Poisoning.
  Applying adhesive under the supervision from a director who has a license for Organic solvent poisoning or the person who had completed the technical qualification program as a superviser for Organic solvent poisoning.

Precautions in installation

⚠CAUTION

A place exposed to direct sunlight

- Do not expose the device to direct sunlight, or the work may be discolored.

A place where the temperature and humidity fluctuate greatly

Use the device under the following environment.
Operating environment
15 to 30 °C (59 to 86 °F)
35 to 65 % (Rh)

A place exposed to direct air blow from air conditioner, etc

- Do not install the device to direct air blow from air conditioner, etc, or you may get spattered with the ink.

A place that is out of the horizontal

- Do not place the device where the device cannot be horizontally installed, or you may not secure the stabilized plot work.

A place that vibrates

- Do not install the device at the place that vibrates, or you may not secure the stabilized plot work.

A place full of dust or cigarette smoke

- Do not install the device where is full of dust or cigarette smoke, or the dust may adheres to the device and cause the deflection phenomena of ink drops.

A place where has a drain or a drainage facilities

- Connect a hose in the place near the water supply facilities when using direct piping for belt cleaning.
  Make sure to install this device at the place where has a drain or a drainage facilities.

- This device may cause water leakage by clogged filter in the cleaning liquid tank. Make sure to install this device at the place where has a drain or a drainage facilities.

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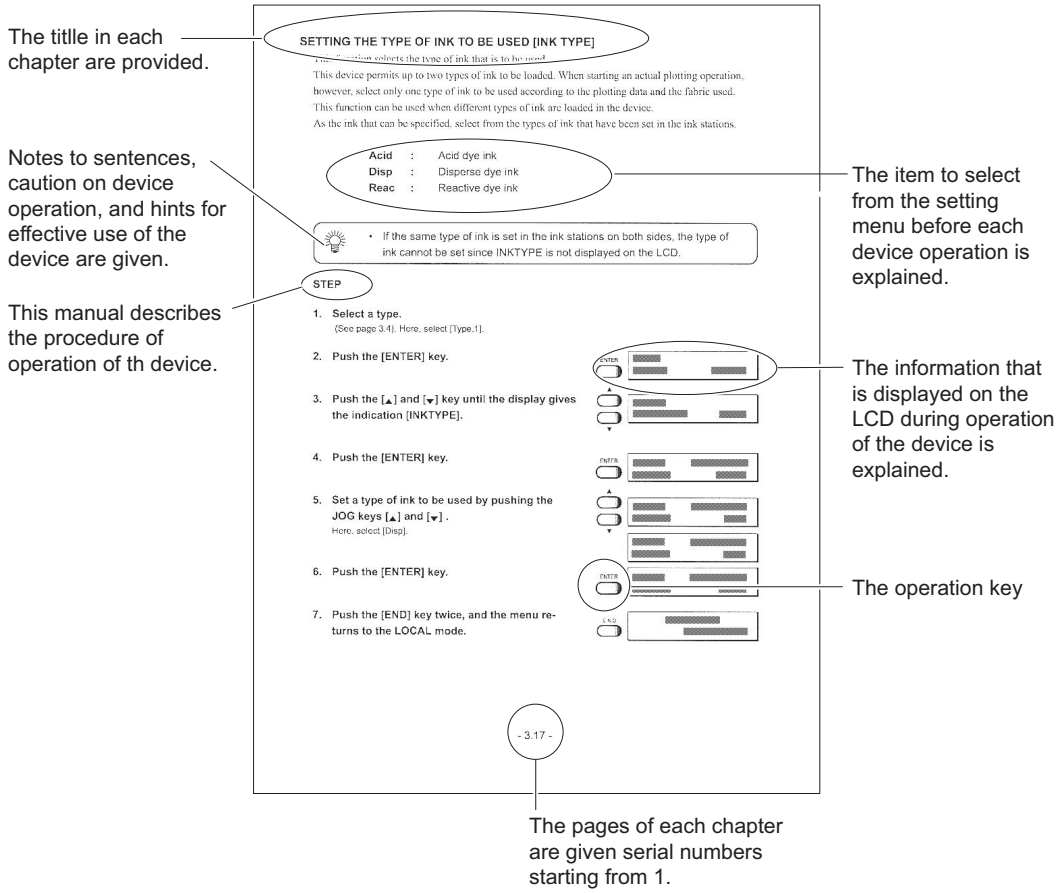
CHAPTER 6 When Abnormal Conditions are Encountered

Appendix

How to Read this Operation Manual

How to Read this Operation Manual



Display on the LCD and Indication of the Keys

In this instruction manual, the characters displayed on the LCD of the operation panel and the keys used to operate the device are explained, together with the operation procedure. (see page 1.15) Operate the device while confirming the display on the LCD.

Display on the LCD

The content of display is shown in characters in a box as shown at right.
Operate the device according to the explanation of the operation procedure and the content of display on the LCD.
In this instruction manual, each setting and messages displayed on the LCD is enclosed in [ ], like [TYPE.1], [Acid], [EXTEND], [PLEASE WAIT], etc.

```
FUNCTION
SET UP                < ENT >
```

```
SET UP
SELECT      :      TYPE.1
```

Operation keys

In the text of this instruction manual, the operation keys are shown enclosed in brackets.
[▲]and [▼] indicate JOG keys.
The other operation keys are enclosed in brackets, as [FUNCTION]. (See page 1.15)

Structure of this Manual

CHAPTER 1 Set-Up

This chapter describes the procedures for unpacking and assembling the device, and for setting up the device such as setting inks and fabric.

CHAPTER 2 How to Use the Basic Functions

This chapter describes the basic operations of the device, from the beginning to the end of printing.

In order to use the application functions, it is indispensable to understand the basic functions of the device explained in this chapter.

CHAPTER 3 Daily care

This chapter describes the recovery procedure for ink clogging and the cleaning procedure for each section.

CHAPTER 4 How to Use the Application Functions

This chapter describes the application functions of the device, such as the function menu for setting printing conditions.

CHAPTER 5 Maintenance Functions

This chapter describes functions intended to correct adverse influences on picture quality and to check abnormal conditions.

CHAPTER 6 When Abnormal Conditions are Encountered

This chapter describes how to correct troubles after the occurrence of an abnormal condition on the device.

Appendix

This appendix describes the specifications of the device, function menu structure and output samples and introduces separately-available consumable.

CHAPTER 1
Set-Up

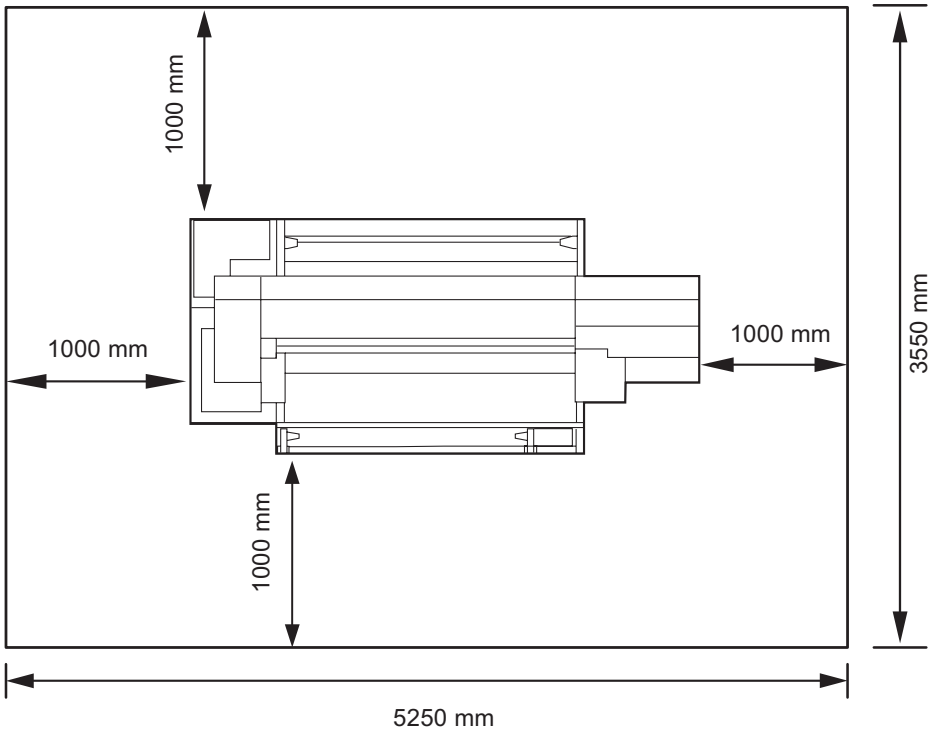
This chapter describes the name and function of each section of the device as well as ink and fabric.

Table of contents

Where To Install The Device

Secure a suitable installation space before assembling the device.
The place of installation must have space required not only for the device itself but also for printing operation.

Length	Width	Height	Gross weight
3250 mm	1550 mm	1400 mm	approx 1100 Kg (2425lbs)



Moving The Device

This section explains to carry the device to e.g., an instruction location after assembled.
Raise the level feet before moving the device to a new location.

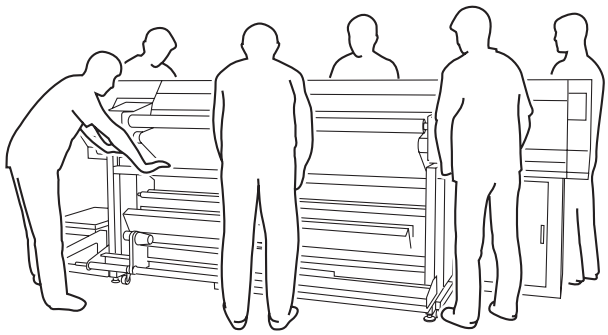
WARNING
- When moving the device, take care not to apply excessive shock to it.
- Be sure to adjust the level feet to level the device at the new location.

WARNING
- Connecting the power cable
  Connecting the power cable cannot be installed by the customer.
  Contact your local distributor to call for service to connect the power cable as well as moving installation of the device.
  We should take no responsibility for any troubles caused through the power cable connection by the customer without calling for service.

Method of moving the device

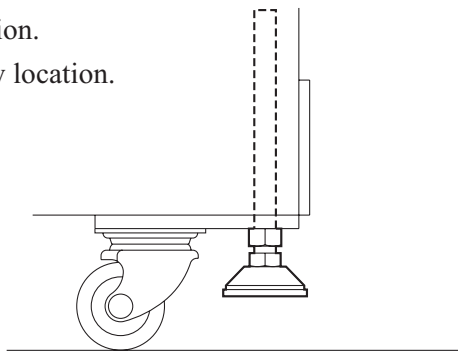
When moving the device, it must be held up by at least six persons as illustrated at right.

CAUTION
- Move the Press roller to the evacuation position.
- Do not push the covers.
- Make sure no water in the cleaning fluid tank. In case water in the tank, pump the water into other container using attached hand pump.



Level feet

Raise the level feet before moving the device to a new location.
Lower and adjust the level feet to level the device at the new location.

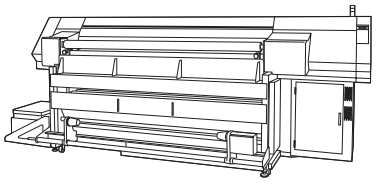


Accessories

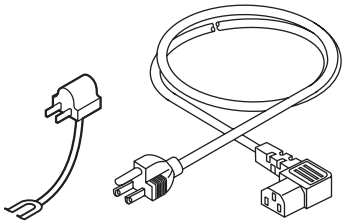
Open the packing box and check the components in it.
If you find any missing accessory or damaged one, please contact your local dealer.

CAUTION

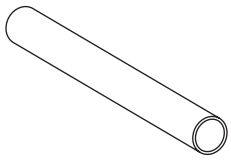
- It varies according to your order.



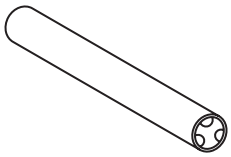
Main unit



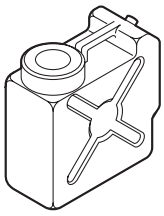
Power cable x 3
Grounding adapter x 3



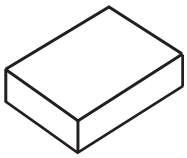
Empty fabric core
(with Main unit)



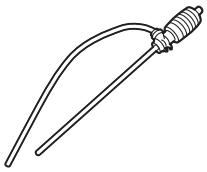
Fabric core support pipe x 2



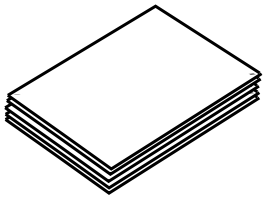
Waste ink tank



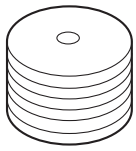
Adjuster foot lower plate x 4



Hand pump

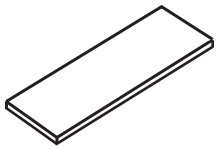


Bemcot

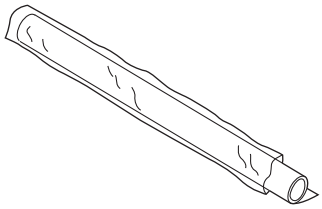


Tension bar weight

Fabric setting bar



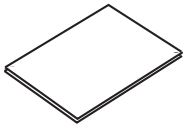
Fabric setting board



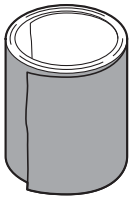
Printing film
(for adjustment of the device)

Crescent wrench

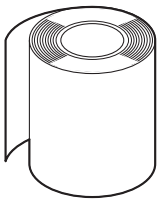
Hexagonal wrench (L)
5, 6, 10 mm



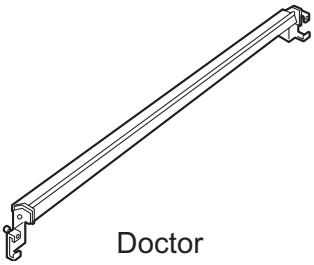
Mist filter x 2



Emery cloth #150

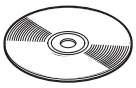


ANRS check media

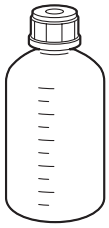


Doctor

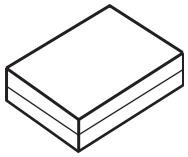
Goggle



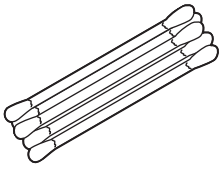
TxLink & 1394
Device driver (CD-ROM)



Maintenance oil

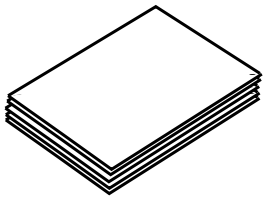


Wiper cleaning kit
(Wiper, Gloves)



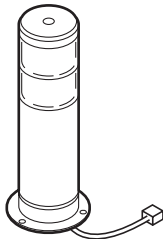
Cotton swab x 10

Filter for
Flushing box

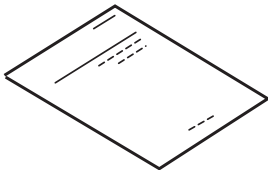


Cleaning tank filter x 20

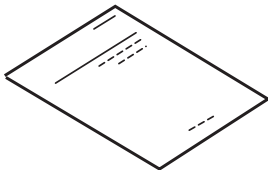
Rubber glove



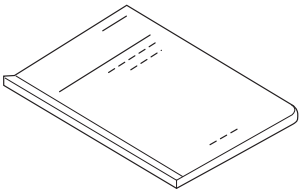
Indicator



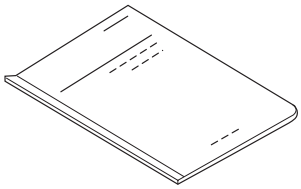
Guide of Printable
Fabric and Handling



Textile Dye ink
Guide



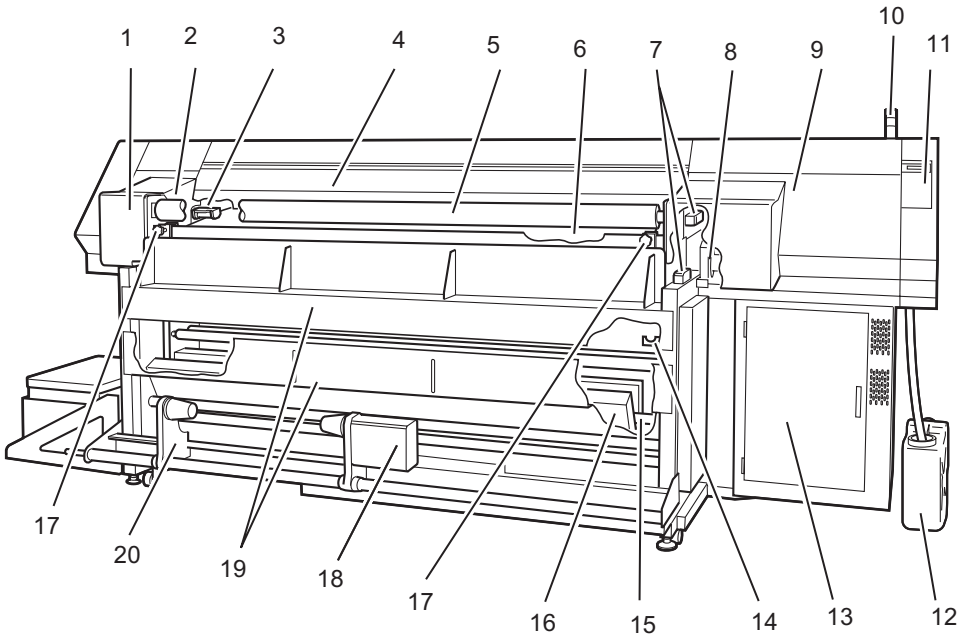
Operation manual
(This manual)



Setup guide

Configuration And Function

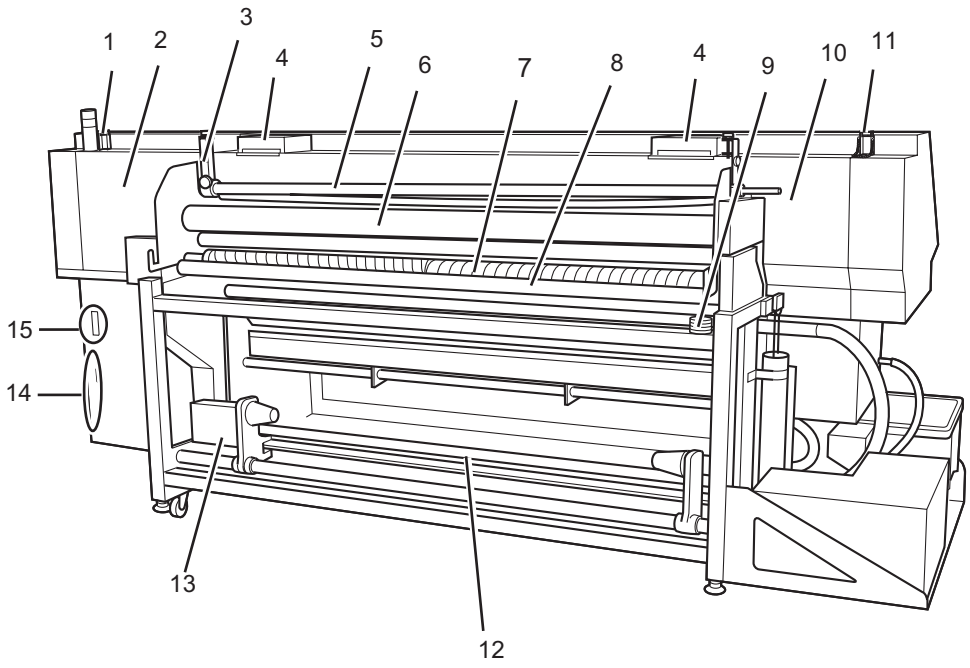
Front face



	Name	Function
1.	Station cover L	It is opened when maintenance of the back side of carriage.
2.	Peeling sensor	Monitors the peeling position of the fabric.
3.	Belt encoder roller	Checks the amount of belt movement.
4.	Front cover	It is opened when setting fabric or maintenance internal of the station.
5.	Peeling roller	Peels off the fabric from the belt.
6.	Belt	Transports the fabric.
7.	Peeling sensor amp	Control the peeling sensor.
8	ANR unit	Check the ink clogging or deflection during printing.
9.	Station cover R	It is opened when maintenance of the station. (Refer to Page 1.10)
10.	Indicator	Green: Data receiving, printing, Red: Error (stop printing) Red is blinking: warning error
11.	Operation panel	This panel has the operation keys required for operating the printer and the LCD for displaying set items, etc.
12.	Waste ink tank	Collects waste ink that has been used for cleaning.
13.	Ink station	Loads ink cartridges or ink pack for ink supply to each head.
14.	Take-up tension bar stopper	The tension bar is hooked to this stopper when leading the fabric. *1
15.	Take-up tension bar	Applies proper tension to the fabric to control operation of the take-up device.
16.	Heater	Dries the fabric after printing.
17.	Fabric edge guide	The fabric peeling operation enables to perform more properly.
18.	Take-up device	It supports to wind up the roll fabric printed, and have the operation named FORWARD / OFF / REVERSE.
19.	Heater cover	Protect the heat from the heater
20.	Roll holder	Light weight roll holder is inserted in the right and left core of roll fabric to hold the roll fabric. The roll holder is applicable to diameter of fabric cores with1.35 to 3 inches.

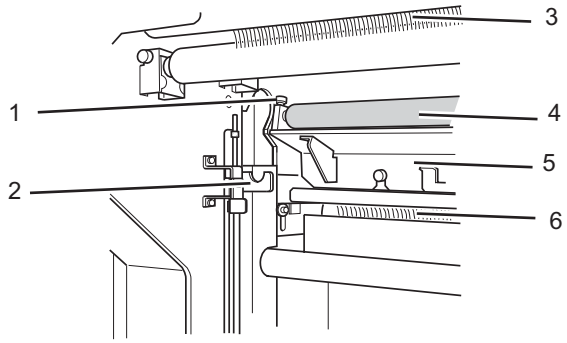
*1: Depending on the plotter, this may be attached on the outside of the device.

Rear face



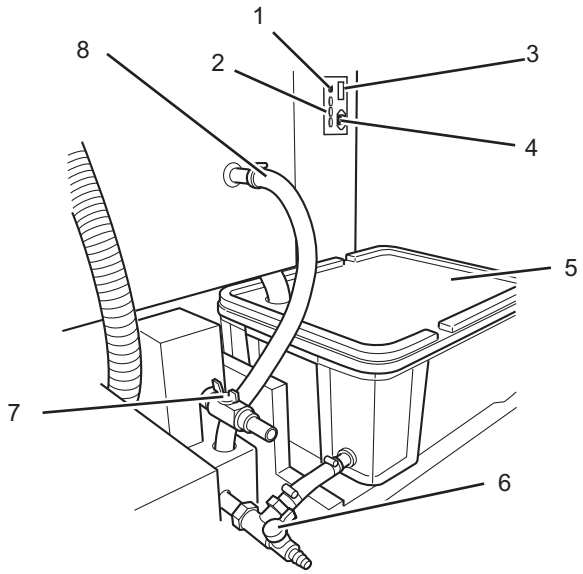
	Name	Function
1.	Chain for Station cover R	Chain holds the cover for maintenance inside the station.
2.	Right station cover R	Remove the cover when the belt meandering confirmation. (Setup guide)
3.	Curved bar inclination adjustment screw	Located on both sides to adjust the angle of the curved bar.
4.	Mist fan filter	Absorbing ink mists.
5.	Curved bar	Removes slacks on the fabric.
6.	Pressure roller	Applies pressure to fix the fabric to the belt.
7.	Spiral roller	Removes wrinkles of the fabric.
8.	Lapel bar (4 pieces)	Feeding belt is stabilized by through the fabric and attaching lapels.
9.	Feeding tension bar weight	Used to adjust the weight of the feeding tension bar.
10.	Left station cover R	Remove the cover when the belt meandering confirmation. (Setup guide)
11.	Chain for Station cover L	Chain holds the cover for cleaning undersurface of the carriage.
12.	Feeding tension bar	Applies proper tension to the fabric to control operation of the feeding unit.
13.	Feeding device	Loads the fabric roll automatically.
14.	Interface connector	The IEEE1394 and IEEE1284 compatible interface connector.
15.	Power switch and inlet	The power cable is connected to the AC inlet. The power cable is connected to the AC inlet.

Inside of rear face



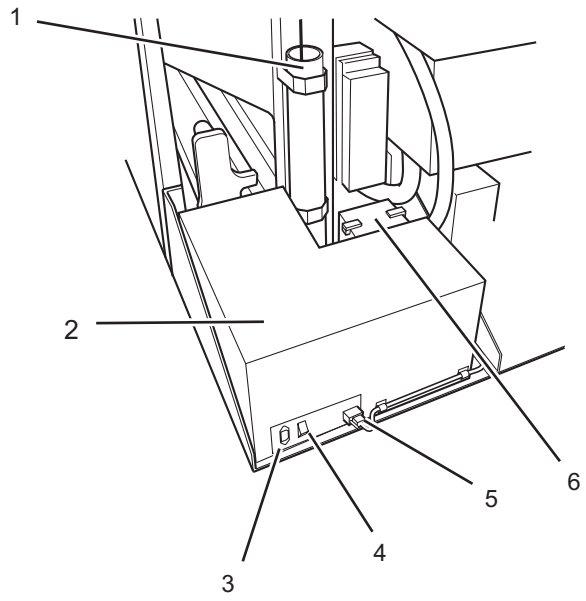
	Name	Function
1.	Screw for Absorption roller	This screw secures the Absorption roller.
2.	Feeding tension bar stopper	Used to lead the fabric.
3.	Antistatic brush	Prevents dust and lint on the fabric, as well as static electricity.
4.	Water absorption roller	Removes water during belt cleaning.
5.	Belt wiper unit	Removes water during belt cleaning.
6.	Brush roller	Removes dirt of the belt. (Roller is located inside.)

Side face of main unit



	Name	Function
1.	Heater indicator	Indicates operating state of heater. Lighting : The setting temperature has been reached. Blinking : Temperature has not been reached to the setting value.
2.	Heater voltage selector	Used for setting of Heater power voltage.
3.	Heater power switch	Turns the power of the heater ON or OFF.
4.	Heater power inlet	Connects the power cable of the heater.
5.	Cleaning liquid tank unit	Pools water for cleaning the belt.
6.	Sewer valve for Cleaning tank water	The sewer valve for the cleaning liquid tank. Supply the tank of water.
7.	Electromagnetic valve	Used for direct piping.
8.	Cleaning water hose	Used to supply cleaning water to this device.

The blower unit and its vincity

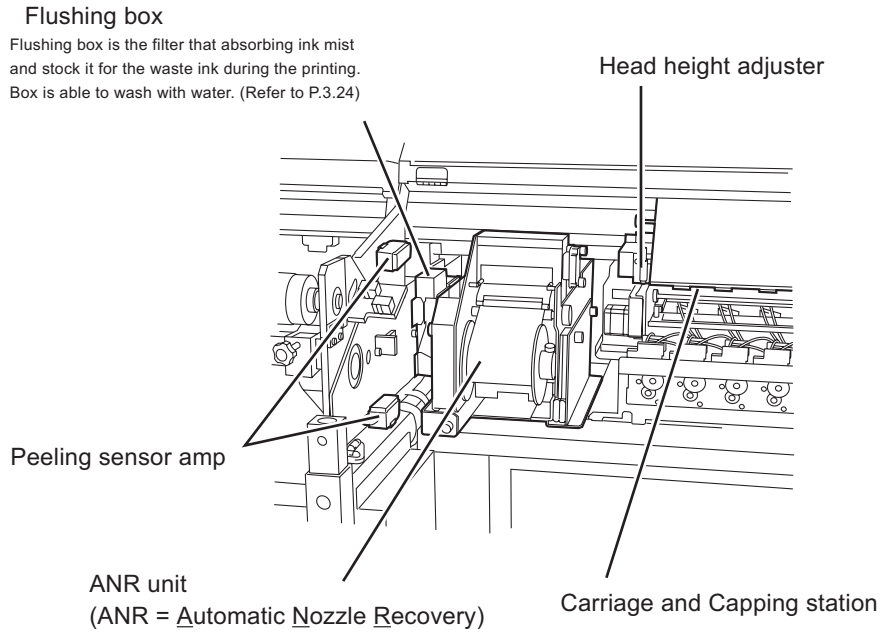


	Name	Function
1.	Feeding tension bar weight unit	Adjusts the tension applied to the fabric by changing the weight.
2.	Blower unit	Prevent the ink mist by inhaling air inside of the flushing box.
3.	Blower inlet	Connect the power cable for blower.
4.	Blower power switch	Power switch for blower.
5.	Blower control cable*	Cable connects to blower.
6.	Blower filter	Prevents ink adhering to the inside of the blower, and clogging.

*Depending on the plotter, the blower control cable is located inside.

Names And Functions Of The Parts Under The Front Cover

Under the front cover, there are the carriage, capping station, etc. necessary for printing operation. The mechanisms provided under the front cover are explained below.



CAUTION

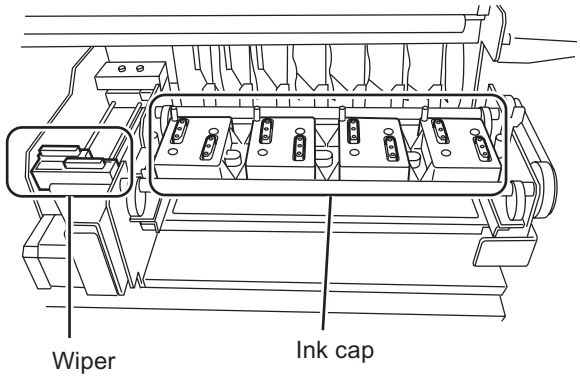
- Keep hands away from the sensor amp switches except service man to avoid acting it up.

Capping station

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

Ink Cap : It covers the nozzles of print head to prevent from drying up.

Wiper : It is used to clean the head nozzles.



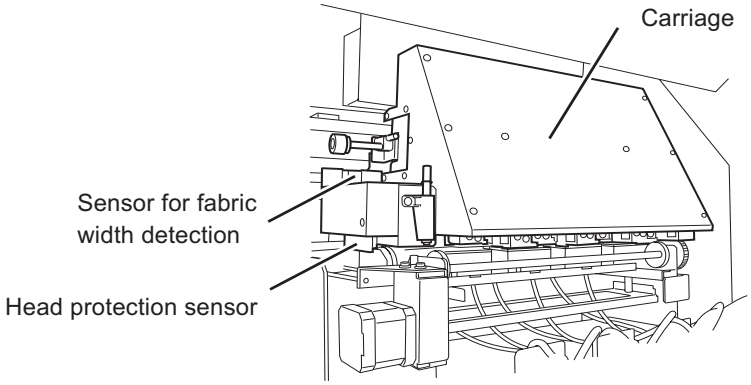
Carriage

The carriage is provided with print heads for printing, sensor for fabric width detection, Head protection sensor, and etc. It is also provided with a head height adjustment screw for adjusting the head height according to the thickness of the fabric used. The carriage moves during printing, and fabric detection.

When cleaning the capping station, execute the STATION MAINTENANCE function to move the carriage. (Refer to Page 3.11 “Cleaning the station interior”.)

CAUTION

- When setting a fabric in position for printing, be sure to adjust the cartridge height. (Refer to Page 2.33)
- Starting the printing operation without adjusting the carriage height can cause damage not only to the fabric but also to the device itself.

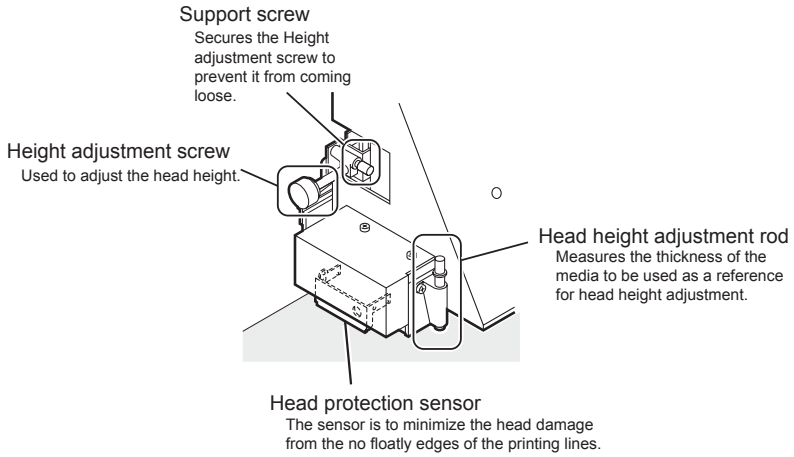


Head height adjustment rod, adjustment screw and Head protection sensor

When a fabric is set for the first time or replacing a fabric in different thickness, it is necessary to adjust the height of the head.

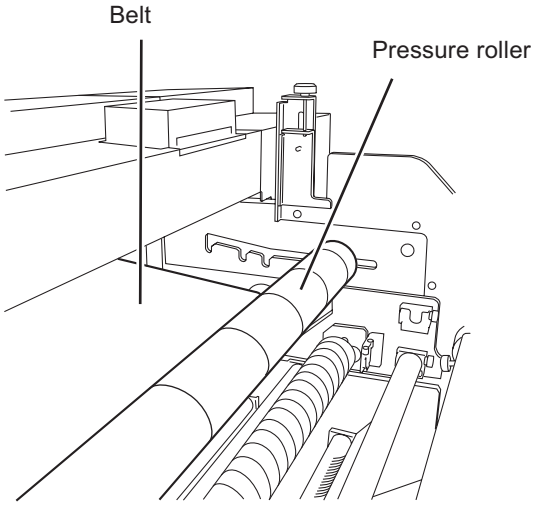
CAUTION

- If the plotter is operated without adjusting the head height, the head may get caught on the fabric, causing damage to the head.
- For the method of head height adjustment, see Adjusting the Head Height [Head Height] (Refer to Page 2.33) in this chapter.



Belt and pressure roller

With this device, the pressure roller fixes the fabric to the belt to which adhesive is applied, and the print fabric is fed toward the front side at the time of printing.



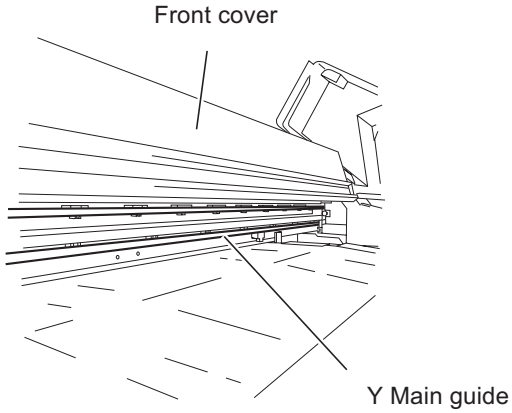
CAUTION

- While the printer is not being used, keep the pressure roller at the raised position.
- If the pressure roller is left on the belt, the roller and belt will adhere, making it difficult to separate them.

Y Main guide

Used to move the carriage to right or left.

Periodic cleaning is required because the carriage move frequently. (Refer to Page 3.22)

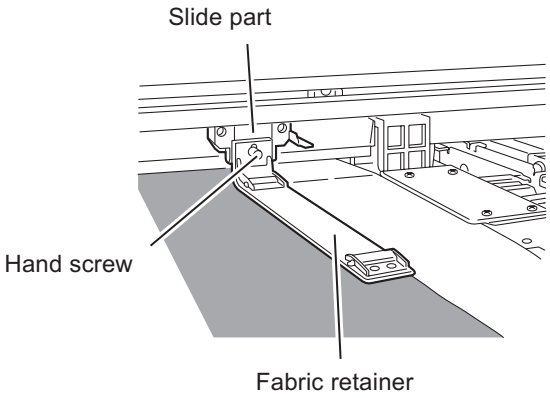


Fabric retainer

If the edge of the fabric is curled or it is raised, it may be caught by the head or inferior ink discharge may occur. To avoid this trouble, use the fabric pressers. (Refer to Page1.12)

- The fabric retainer slide part also act as a detection board which detects the printing width.
  Printing with the full width (up to 1620mm width) is possible by setting the fabric retainer to a position apart from the edge. (1620mm width or less)

- The fabric retainer is detachable for washing in case it's stained by ink.
  Remove the hand screw and then remove the fabric retainer.

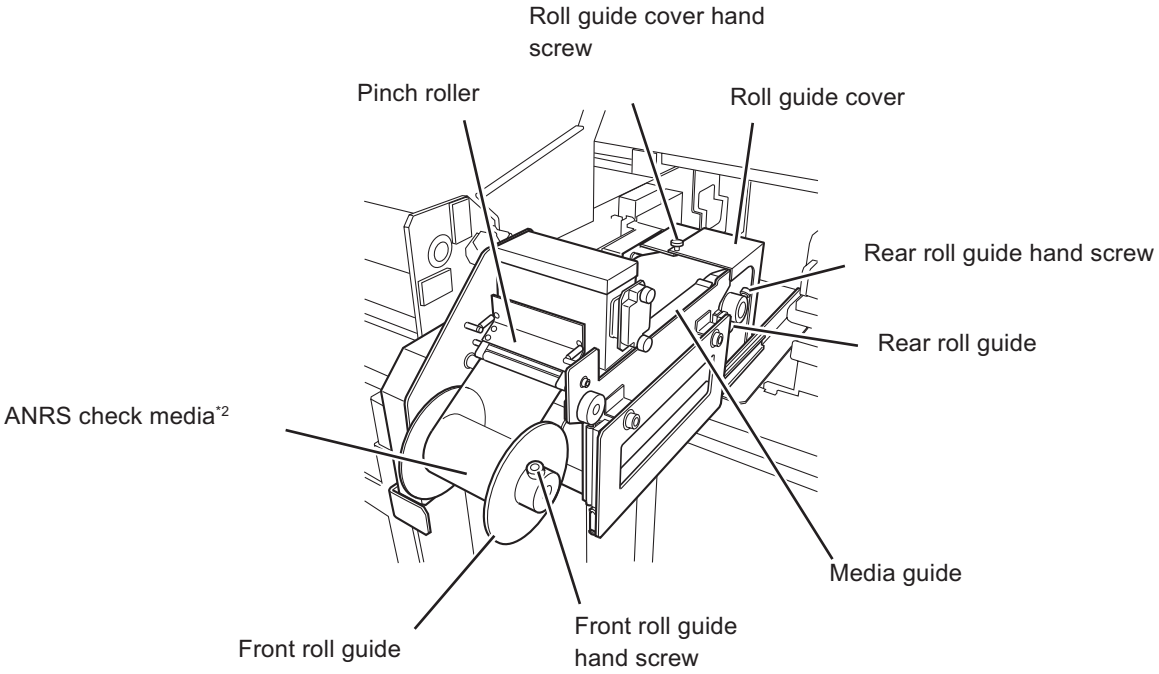


CAUTION

- When using fabric retainer, be sure to adjust the head height to 3mm or more. Using them with a low head height may cause damage.

ANR Unit *1

ANR unit can prevent inferior print by detecting nozzle clog during printing automatically.



∗1) ANR unit ..... Automatic Nozzle Recovery Unit. Here in after ANR unit.

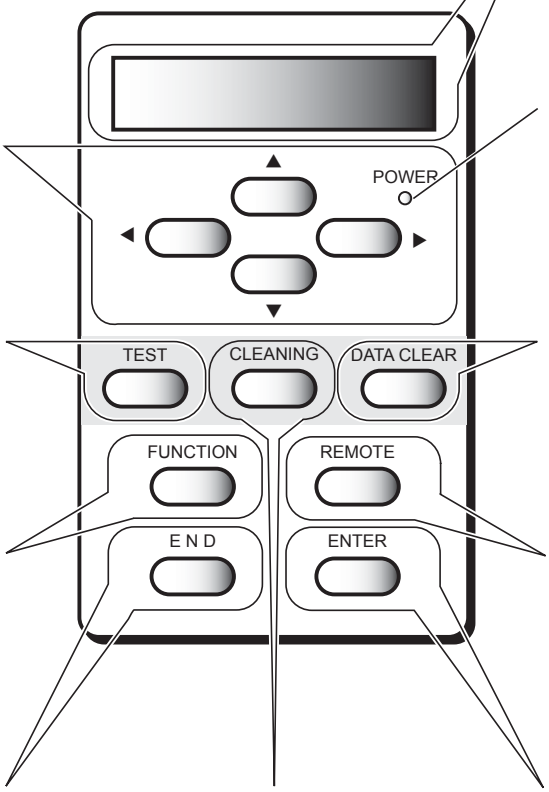
∗2) ANRS check media ..... Automatic Nozzle Recovery System check media. Here in after ANRS check media.

Operation

The operation panel that is used to operate the device.

Operation Panel

The operation panel that is used to operate the device and a maintenance method of the device after operation, etc. The operation panel must be used when operating the device.
Therefore, it is indispensable to understand how to use the operation panel.



Display
Displays a set itemº, a error guidance etc.

POWER lamp
It lights up (in green) when the power to the device is turned on.

JOG keys [▲] [▼] [◀] [▶]
They are used to shift the carriage and the medium under the LOCAL mode. In addition they are used to select a set value.

[TEST] key
Plots the test pattern for checking Nozzle cogging.

[DATA CLEAR] key
Used to erase the data that has been input to the device.

[FUNCTION] key
Used to set printing conditions.

[REMOTE] key
It is used to change the operation mode between the REMOTE mode and the LOCAL mode.

[END] key
Used to cancel the last set item that has been input or to return to the previous setting menu.

[CLEANING] key
Performs head cleaning.

[ENTER] key
Used to input set items, such as printing conditions.

Functions of the JOG keys

Each of the keys varies in function according to the time at which it is used.

	Before the fabric detection	After the fabric detection	When selecting a function	When inputting a choice selected among several alternatives
◀	————	Shifts the carriage to the left.	————	————
▶	————	Shifts the carriage to the right.	————	————
▲	Shifts the fabric away from you.	Shifts the fabric away from you.	Restores the last previous function.	Selects the next value.
▼	Moves the fabric toward you.	Moves the fabric toward you.	Moves to the next function.	Selects the last previous value.

CAUTION

- Attention when moving the fabric backward.
  The fabric may be caught by the belt and stained by set-off ink. Slack may occur at the run-out device and necessary tension may not be obtained when starting next printing. If you need to perform reverse feed, keep the above points in mind.

MENU mode

A list of setting items displayed on the LCD is called a menu.

A specific operation specified on the operation panel is displayed on the LCD in one of the following three modes.

Each of the three modes is explained below.

< LOCAL > mode

This is the mode in which the preparations for printing operation are made.When the power is switched on and the detection of a fabric is completed, the device enters the LOCAL mode. In this mode, it is possible to perform the following operations. (Refer to Page 1.20)

1. Pushing the appropriate [JOG] keys to detect a fabric and set up an origin.(**JOG mode**)
2. Pushing the [TEST] key to start test plotting.
3. Pushing the [CLEANING] key to start cleaning the head.
4. Pushing the [DATA CLEAR] key to erase the plotting data the device has received.
5. Pushing the [FUNCTION] key to set plotting conditions.
6. Pushing the [ENTER] key to display the guidance. (Refer to Page P.1.22)

CAUTION

- In the LOCAL mode, the device cannot plot data received from the computer. To put the device into operation, change the mode to the REMOTE mode by pushing the [REMOTE] key.

< REMOTE > mode

This is the mode in which the device plots an image from data it receives from the computer. If the device is in the LOCAL mode, push the [REMOTE] key to put the device into the REMOTE mode.

< FUNCTION > mode

This is the mode in which printing conditions can be set.

To set printing conditions, push the [FUNCTION] key while the device is in the LOCAL mode and switch to the FUNCTION mode (printing function setting mode).

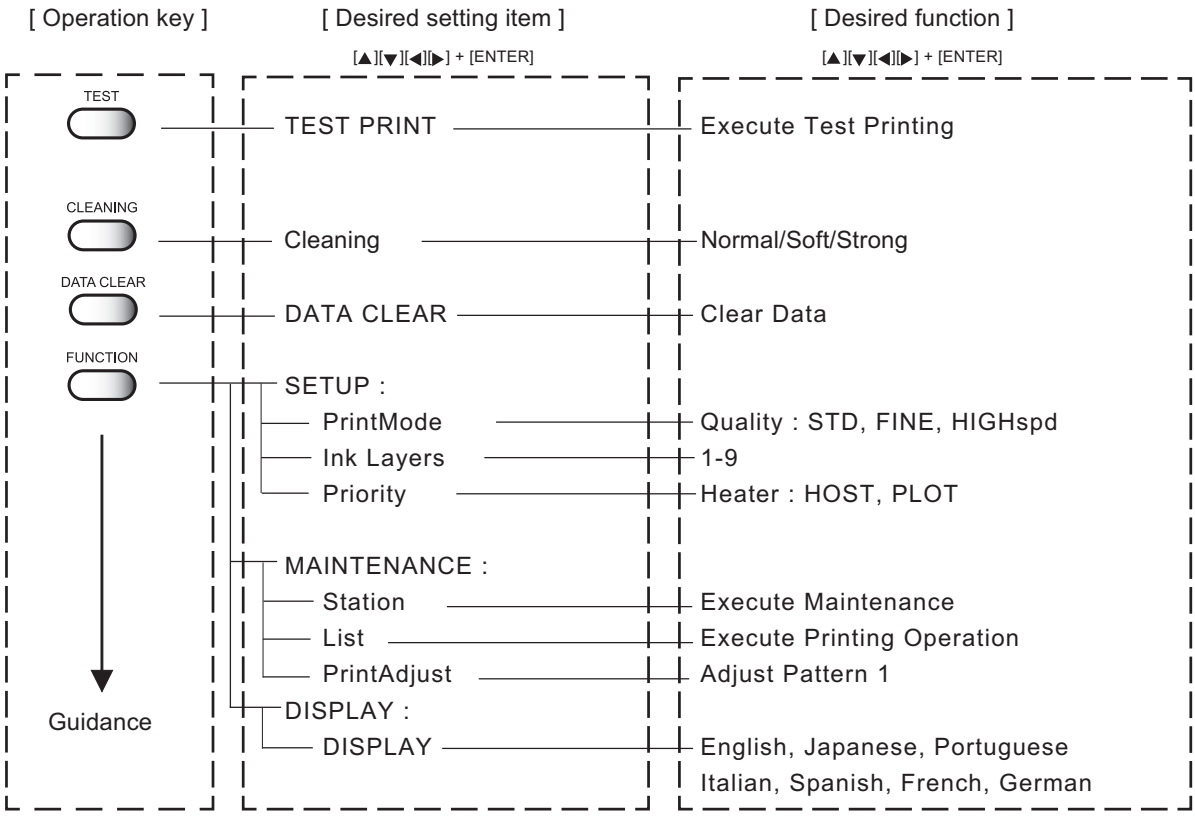
MENU tree

The operation of device and printing conditions are set by pushing the appropriate operation keys, selecting the desired setting item and setting detailed conditions.
In order to operate the device properly, it is necessary to understand the structure of the menu tree (Refer to Page Appendix.7). The menu tree shown below makes plain the relationships between the operation keys on the operation panel and the functions that can be set by using them.

CAUTION

- To set any of the functions, the device must be in the LOCAL mode.

(1) POWER ON Turning the power on. (Refer to Page 1.20)
(2) << LOCAL >> Invoke the local mode on the LCD.
(3) To set up a specific function from the operation panel, follow the procedure shown below.
   1. Push the appropriate operation key on the operation panel.
   2. Select the desired setting item.
   3. Set up the desired function.



CAUTION

- The above shows menu trees in part. For details, refer to Page Appendix.7.

Changing the display language

With this device, it is possible to change the language in which characters are displayed on the LCD. For the method of changing the display language, see Chapter 3 “How to Use the Application Functions.” (Refer to Page 4.2)

Connecting The Cables

Connecting the interface cable

Connect the plotter to the computer with the appropriate interface cable.
Two types of interface cables are available. Select the interface cable appropriate to the computer and output software.

CAUTION

- Not available to use the IEEE1394 cable of 3.05 meter or more.
- This device is not Limited Power Sources.
- Only use UL approval cable as IEEE 1394 cable.
- Turn off the power switch of the plotter (the switch has to be tilted toward the “O” side) in prior to the connection of the interface cable and the power cable.

IEEE 1394 interface is used

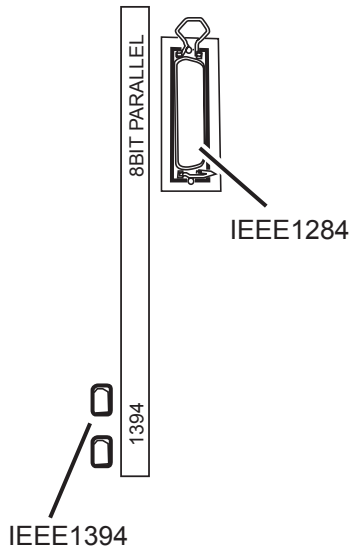
Use an IEEE 1394 interface cable to connect the computer and the device together if the computer has IEEE1394 interface.

CAUTION

- The RIP used must be applicable to IEEE 1394.
- Either of the two IEEE 1394 connectors can be used.
- The computer is not provided with an IEEE 1394 board, contact your nearest RIP provider or MIMAKI sales office.

IEEE 1284 interface is used

Use an IEEE 1284 interface cable to connect the computer and the device together. It is possible to use an IEEE 1284 interface cable for connection between the computer and the device. In this case, however, the data transmission speed decreases.



Connecting the power cable

WARNING

- Connecting the power cable
  Connecting the power cable cannot be installed by the customer.
  Contact your local distributor to call for service to connect the power cable as well as moving installation of the device.
  We should take no responsibility for any troubles caused through the power cable connection by the customer without calling for service.

Heater setting

CAUTION

- The plotter may be damaged if it is plugged to a 200-240V source while the voltage selector is set to 110V.
- The heater temperature will not rise to the set temperature if it is plugged to a 100-120V source while the voltage selector is set to 220V.

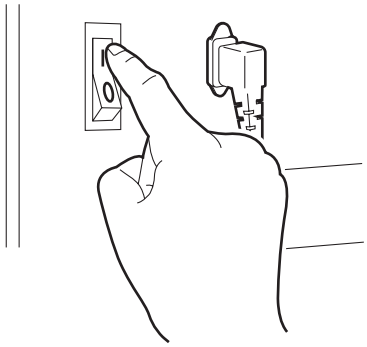
Switching ON / OFF The Power Supply

After setting up the device, switch on and off the power as described below.

Turning the power on

STEP

1. **Turn on the power to the blower.**
2. **Turn on the power to the heater.**
3. **Turn on the power to the device.**

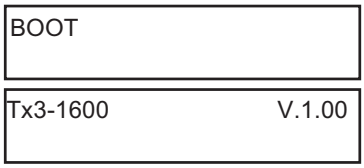


4. **Turn on the power to the computer, etc. that are connected to the device.**

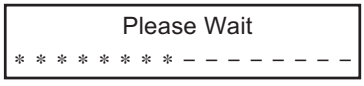
CAUTION

- At this time, the front cover and station cover L,R must be closed.
  With the front cover kept open, the carriage does not move even when the power is switched on.
- Since the heater indicator displays the operating status, it may not light on even if the power is turned ON.

When the power is turned on, [BOOT] is displayed, then the model name and firmware version is shown.



The message “Please Wait” appears flashing on the LCD.
The initialization process is displayed.



The device enters the fabric width detection.

CAUTION

- When the power is switched on for the first time, the prompt for installation of ink cartridges is displayed on the LCD.
  Install the ink cartridges (Refer to Page 1.29).

```
Ink Type
Type                    : Acid
```

CAUTION

- If a fabric has been set on the device, the prompt [Media Select] is displayed on the LCD when the power is switched on.
  After selecting fabric , the device detects the fabric and returns to the LOCAL mode.

```
MEDIA SET
ROLL <          > LEAF
```

```
<< LOCAL >>
width  : 1620mm
```

Installing IEEE1394 output driver

When connecting the device using the host computer and IEEE1394 interface, it may be necessary to install the IEEE1394 output driver and TxLink V3.

CAUTION

- For the installation procedure of TxLink, refer the TXLink V3 CD-ROM supplied with the device.

Turning the power off

To turn the power off, check first whether there is received data or remaining un-output data. Also be sure that the head rests at the capping station.

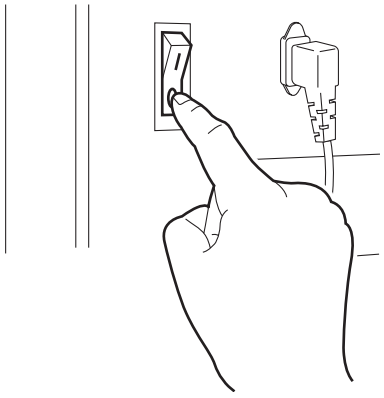
CAUTION

- If the power is turned off while the plotter is engaged in printing, the head may fail to be retracted in the capping station. If the head is left without capped for an extended period of time, the nozzle will be clogged with dust. If the power to the device is turned off without the head capped, re-turn on the power to the device.

If the power is turned OFF during printing, the head may not be stored in the capping station. Leaving the head without capping for a prolonged period of time may cause clogged nozzle.

STEP

1. **Turn off the power to the computer, etc. that are connected to the device.**
2. **Turn off the power to the device.**
3. **Turn off the power to the heater.**
4. **Turn off the power to the blower.**



Displaying The Information

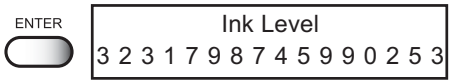
Display the device informations. The following explains the procedure for displaying information in the local mode.

- Even in the REMOTE mode and the fabric width detection, you can display information by pushing the [ENTER] key.
- Only in the REMOTE mode, when 60 seconds have elapsed or an error occurs, the remote mode is restored automatically.

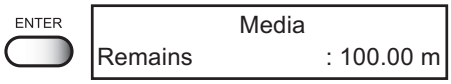
STEP

1. Make sure that the Local mode is displayed.

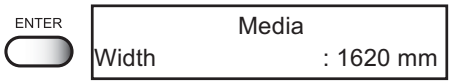
2. Push the [ENTER] key, and display the Ink Level.



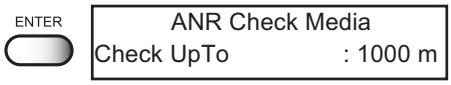
3. Push the [ENTER] key, and display the Remaining Fabric length.



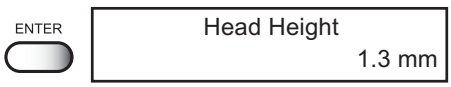
4. Push the [ENTER] key, and display the fabric width.



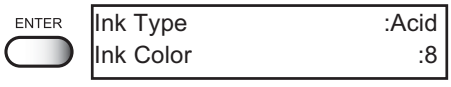
5. Push the [ENTER] key, and display the remaining ANRS check media.



6. Push the [ENTER] key, and display the Head Height.



7. Pressing the [ENTER] key displays the ink type and number of colors during filling.



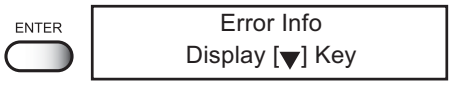
8. Push the [ENTER] key, and display the firm ware version, used command and ANR unit version.

9. Push the [ENTER] key, and display the currently SETUP condition.

Press the [▼] key to display all currently SETUP condition.

10. Push the [ENTER] key, and display the error information guidance.

Press the [▼] key to display all currently occurred Error.



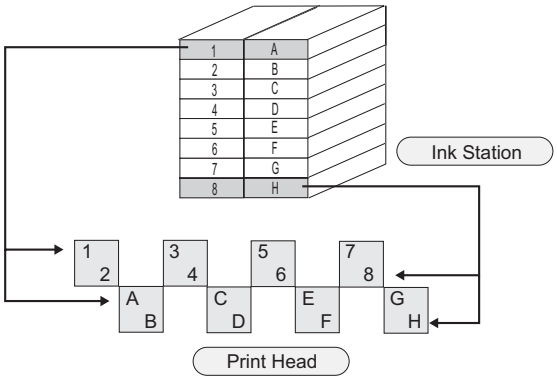
11. Push the [ENTER] key, and display the Log guidance.

Press the [▼] key to display the counter log of Adhesive, BeltWiper and Absorption roller.

12. Push the [END] key, the menu returns to the LOCAL mode.

Ink Cartridges

This device toggles two 1-liter ink cartridges allowing continuous printing with up to 2 liters for each color. (220cc cartridges can also be used.) The toggle device can switch one side of ink cartridge automatically after the other side of ink cartridge runs out.
This device supports 8-color and 4-color plotting.



Setting position for 220 cc cartridges with the 8-color set

Set the ink cartridge referencing the following table.

NO.		Acid dye ink		Reactive dye ink (For transfer)		Disperse dye ink	
1	A	GRAY	(SPC-0355GR)	GRAY	(SPC-0357GR)	GRAY	(SPC-0356GR)
2	B	BLACK	(SPC-0355K)	BLACK	(SPC-0357K)	BLACK	(SPC-0356K)
3	C	CYAN	(SPC-0355C)	CYAN	(SPC-0357C)	CYAN	(SPC-0356C)
4	D	LIGHT CYAN	(SPC-0355LC)	LIGHT CYAN	(SPC-0357LC)	LIGHT CYAN	(SPC-0356LC)
5	E	MAGENTA	(SPC-0355M)	MAGENTA	(SPC-0357M)	MAGENTA	(SPC-0356M)
6	F	LIGHT MAGENTA	(SPC-0355LM)	LIGHT MAGENTA	(SPC-0357LM)	LIGHT MAGENTA	(SPC-0356LM)
7	G	YELLOW	(SPC-0355Y)	YELLOW	(SPC-0357Y)	YELLOW	(SPC-0356Y)
8	H	BLUE RED	(SPC-0355BL) or (SPC-0355R)	BLUE ORANGE RED GOLDEN YELLOW	(SPC-0355BL) or (SPC-0355OR) or (SPC-0355R) or (SPC-0355GY)	BLUE LIGHT BLUE	(SPC-0356BL) or (SPC-0356LBL)

Setting position for 1000 cc cartridges with the 8-color set

Set the ink cartridge referencing the following table.

NO.		Acid dye ink		Reactive dye ink (For transfer)	
1	A	GRAY	(SPC-0392GR)	GRAY	(SPC-0393GR)
2	B	BLACK	(SPC-0392K)	BLACK	(SPC-0393K)
3	C	CYAN	(SPC-0392C)	CYAN	(SPC-0393C)
4	D	LIGHT CYAN	(SPC-0392LC)	LIGHT CYAN	(SPC-0393LC)
5	E	MAGENTA	(SPC-0392M)	MAGENTA	(SPC-0393M)
6	F	LIGHT MAGENTA	(SPC-0392LM)	LIGHT MAGENTA	(SPC-0393LM)
7	G	YELLOW	(SPC-0392Y)	YELLOW	(SPC-0393Y)
8	H	BLUE RED	(SPC-0392BL) or (SPC-0392R)	BLUE ORANGE RED GOLDEN YELLOW	(SPC-0393BL) or (SPC-0393OR) or (SPC-0393R) or (SPC-0393GY)

Setting position for 220cc cartridges with the 4-color set

Set the ink cartridge referencing the following table.

NO.		Acid dye ink		Reactive dye ink (For transfer)	
1/2	A/B	BLACK	(SPC-0355K)	BLACK	(SPC-0357K)
3/4	C/D	CYAN	(SPC-0355C)	CYAN	(SPC-0357C)
5/6	E/F	MAGENTA	(SPC-0355M)	MAGENTA	(SPC-0357M)
7/8	G/H	YELLOW	(SPC-0355Y)	YELLOW	(SPC-0357Y)
NO.		**Disperse dye ink**		**Printing pigment ink**	
1/2	A/B	BLACK	(SPC-0356K)	BLACK	(SPC-0350K)
3/4	C/D	CYAN	(SPC-0356C)	CYAN	(SPC-0350C)
5/6	E/F	MAGENTA	(SPC-0356M)	MAGENTA	(SPC-0350M)
7/8	G/H	YELLOW	(SPC-0356Y)	YELLOW	(SPC-0350Y)

Setting position for 1000cc cartridges with the 4-color set

Set the ink cartridge referencing the following table.

NO.		Acid dye ink		Reactive dye ink (For transfer)	
1/2	A/B	BLACK	(SPC-0392K)	BLACK	(SPC-0393K)
3/4	C/D	CYAN	(SPC-0392C)	CYAN	(SPC-0393C)
5/6	E/F	MAGENTA	(SPC-0392M)	MAGENTA	(SPC-0393M)
7/8	G/H	YELLOW	(SPC-0392Y)	YELLOW	(SPC-0393Y)

Types of ink

4 types of ink are available for this plotter at the moment.
The characteristics of each ink type are described below.

CAUTION

- Be sure to use MIMAKI Genuine Ink cartridges.
  Even during the warranty period, failures occurring through the use of non-MIMAKI genuine ink will be handled on a fee basis.

Ink	Available ink colors	Suitable fabric
Acid dye ink [Acid]	Black, Cyan, Magenta, Yellow, Light cyan, Light magenta, Gray, Blue, Red	Wool, Silk, and other animal fibers Nylon, etc.
Reactive dye ink [Reac]	Black, Cyan, Magenta, Yellow, Light cyan, Light magenta, Gray, Blue, Orange, Red, Golden yellow	Wool, Silk, and other animal fibers Cotton, Rayon, etc.
Disperse dye ink [Disp]	Black, Cyan, Magenta, Yellow, Light cyan, Light magenta, Gray, Blue, Right blue	Polyester, Polyurethane, Nylon, Acetate, vinylons, and other synthetic material
Printing pigment ink [TPig]	Black, Cyan, Magenta, Yellow	Cotton

IC chip in Ink cartridge and Ink pack

Ink cartridges and ink packs for this plotter are provided with IC chip.
Ink cartridges and ink packs without IC chip is disable to use.
The IC chip offers the information about the amount of remaining ink to the plotter.

CAUTION

- Ink cartridges and ink packs without IC chip is disable to use.
- Do not touch or stain the contact of the cartridge and ink packs PCB, as this may cause failure of the PCB.
- Printing pigment (TPig) ink dries easily, and if it dries on the nozzle surface or the wiper cap, it leads to nozzle clogging and bending. To prevent this, use it in an environment with humidity of 40% or more.

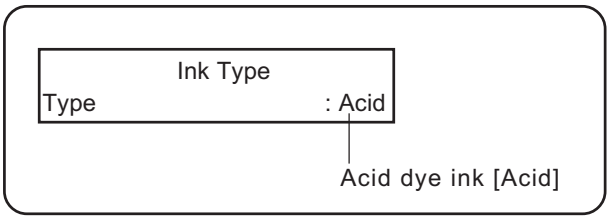
Precautions in handling the ink cartridge

CAUTION

- Be sure to use MIMAKI Genuine Ink cartridges and ink packs.
- Never dismantle the ink cartridge.
- The ink is not toxic. However, avoid direct contact with the ink. If ink contacts the skin, immediately wash it off with detergent or water. In the event that ink gets in eyes, immediately rinse it off with a plenty of running water and consult a medical doctor.
- Do not shake the ink cartridge and ink packs violently. Shaking or turning it roughly can cause leakage of ink.
- Never refill the ink cartridge and ink packs with ink. This might cause a trouble. Mimaki assumes no responsibility for any damage caused by using replenished ink cartridges.
- Using third-party ink or ink cartridges and ink packs may cause a trouble. The user shall be charged for a repair to correct any damage resulting from these inks or ink cartridges even if under warranty period.
- If the ink cartridge and ink packs is moved from a cold place to a warm place, leave it in the room temperature for three hours or more before using.
- Make sure to thoroughly consume the ink in the ink cartridge and ink packs, once it is opened, within six months. If an extended period of time has passed after opening the cartridge tank, printing quality would be poor.
- Store ink cartridges and ink packs in a place that is out of the reach of children.
- Dispose empty ink cartridges, ink packs and waste ink in accordance with national and local ordinances effective in your area.
- Do not use expired ink cartridges and ink packs. The expiration date is printed on the ink cartridge.
- Do not touch or stain the contact of the ink cartridge and ink pack PCB, as this may cause failure of the PCB.
- Store the uninstalled ink cartridge and ink pack in a cold and dark place.

Display of ink type

Ink type is displayed when an ink cartridge is newly set, an ink cartridge of different type is set.



Initial Setting Of Inks

When using the plotter for the first time , it is necessary to set ink type.
With this device, you can set 1-liter ink cartridges (SPC-0392,0393) and 220cc ink cartridges (SPC-0350,0356).

> CAUTION
> • When using a 220cc ink cartridge, the supplied 220cc cartridge adapter is required.

STEP

1. Turn the power on.

After the initial operation, the device displays the type of ink set in each ink station.

2. Press the JOG key [▲] or [▼] to select the ink type for filling.

[Acid] Acid dye ink
[Reac] Reactive dye ink
[Disp] Disperse dye ink
[TPig] Printing pigment ink

Ink Type
Type : Acid

3. Press the [ENTER] key.

Ink Type
Type : Reac

4. Press the JOG key [▲] or [▼] to select the number of colors of ink.

[8 set] 8 colors
[4 set] 4 colors

Ink Color [Reac]
Select :8 colors

> CAUTION
> • When [TPig] is selected, only 4 set is possible.

5. Press the [ENTER] key.

Ink Color [Reac]
Select :8 colors

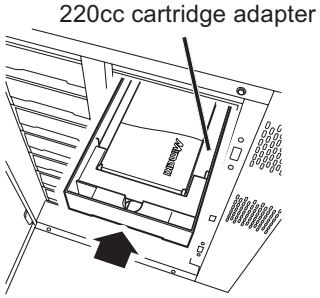
> CAUTION
> • In case of ink-filling, make sure to use the ink cartridge which have enough ink in the cartridge.

If ink cartridge is not set, the number for an unset cartridge is displayed.

Cartridge [Reac]
– – – – – – – – A B C D E F G H

6. Open the station cover and pull out the tray.

In the image ink cartridges at right, the 220cc cartridge adapter is set.



> CAUTION
> • To avoid hand injury, keep your hands away from the space where ink tray was inserted.

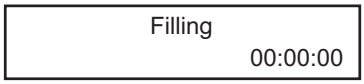
7. Set the cartridge and insert the tray to the ink station.

(Refer to the "Setting the ink cartridge" P.1-30)

8. Close the ink station cover.

9. Push the [ENTER] key.

The print head is automatically filled with ink. The remaining filling time is displayed in seconds.



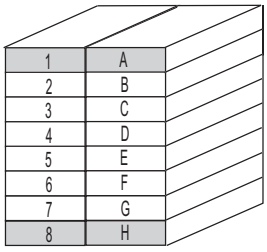
CAUTION

- Do not open the station cover or pull the cartridge from the ink station while ink-filling.

10. Once the ink-filling procedure completes, the device returns to the fabric width detection. (fabric width undetected mode)

Setting Ink Cartridges

The following introduces the procedure for arranging ink cartridges and ink packs.
Set the same types and same color ink cartridges into ink cartridge cases.



CAUTION

- Set ink cartridges and ink packs of the same type and same color to 1 and A, 2 and B, 3 and C, 4 and D, 5 and E, 6 and F, 7 and G, and 8 and H, respectively.

With 4 colors

- Set the ink cartridges and ink packs [1 and 2 and A and B], [3 and 4 and C and D], [5 and 6 and E and F], or [7 and 8 and G and H] so that the inks are the same types and same colors.

- During initial ink setting or ink change, register the appropriate ink type for each ink station (Refer to Page 1.23).
  The registered ink type is necessary when checking the printing information and changing the heads used.

The Fabric And Handling Which Can Be Used

This section describes the types of fabric that can be used with the device and the precautions.

Types of fabric that can be used

The types of fabric that can be used with this plotter is “Roll” and “Leaf (Cut)” fabric. However, because leaf fabric is handled in the same manner as roll fabric, be careful about the setting position of leaf fabric.

CAUTION

- When using the Leaf, the following functions are disabled.
  [Feeding], [Take-Up], [Spiral Rlr]

Sizes of fabric that can be used

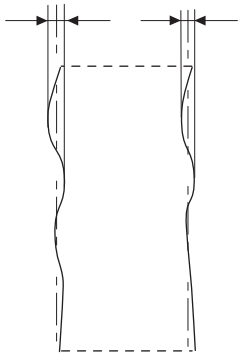
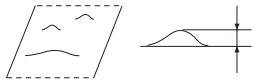
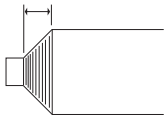
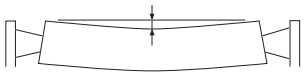
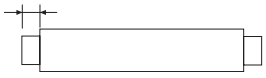
Fabric	Maximum	1650 mm
	Minimum	200 mm
	printing width	1620 mm
	Thickness	7 mm or less
	Roll outside diameter	Ø 270 mm or less
	Roll weight	38 Kg or less
	Roll inside diameter *	Between 3 to 2 (1.35) inches
	Printing surface	Rolled outward or inward
	Take-up direction	Faces OUT, printing side rolled inward
	Roll end treatment	Light-adhesive tape, which can be removed from the core with ease.

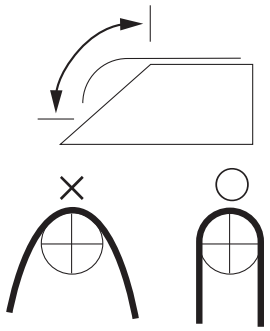
* In case of roll weight more than 5 kg, the diameter shall be 2 inches or more.

Precautions in Handling the Fabric

The following explains how to handle applicable fabric. Observe the following conditions to use this device according to the type and characteristic of the fabric used.

Fabric conditions which enable to print

Item	Condition	Remarks
Width variation	less than ±5mm / one side edge	
Curve when expanded	One-direction curve not allowed	
Slack height when expanded on a flat surface	2mm or less	
Displacement of roll edge	±20mm, ±2mm for less than 50 mm width fabric	
Inner diameter of roll	2~3 inchs	
Fabric core strength	Roll bend of 5mm or less when set (with a fabric core thickness of 5mm or more)	
Length of fabric core exposure from fabric edge	20mm or more	

Item	Condition	Remarks
Fixation with fabric core	Tape at up to 3 points or weak adhesion	
Roll outer diameter	Ø270mm or less	
Roll weight	38kg or less	
Print side	Not specified	
Fabric wrinkle	Not allowed	
Hardness	The fabric is twine around the upper part of the peeling roller, not greater than 100mm in JISL1096 cantilever method.	

Carefully observe the following when handling the fabric.

CAUTION

- Pre-processing of fabric
  Use pre-processing fabric recommended by MIMAKI.

- Fabric thickness
  When setting the fabric, be sure to adjust the head height. Other wise, the fabric and/or the head can be damaged.

- Curled fabric
  Do not use fabric with curled edges.
  Use of such a fabric may cause contact with the print head nozzle, resulting in inferior ink discharge.

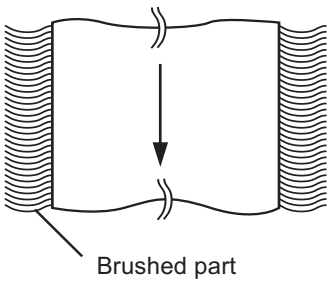
- Do not use fabric whose edges are remarkably loose in comparison with the center. Crease occurs at the fixing section, which may come into contact with the head nozzle face.
  It is necessary to use the curved bar for the fabric which gumming edges are remarkably short in comparison with the center (extended fabric or the fabric which has slack when the fabric is spread out) .However, the curved bar cannot be used on the fabric which the pre-processing is too hard as the fabric wrinkles even use the curved bar.

- Thick hard fabric cannot be used for unattended operation. When using a denim-like fabric, skew check must be performed by the operator. Once skew starts, the self-restoration action of the fabric itself is disabled. If the fabric is neglected, skew advances to the right or left end of the belt which may cause head jam.

- In case pre-processing of fabric is too hard, it is unable to wind with the peeling roller. Therefore the fabric will slip on the roller and not transfer on the belt properly.

- Brushed fabric is unavailable for Fabric edge guide. The peeling sensor react to the brushed part, and not able to feed fabric properly.

Example of brushed fabric



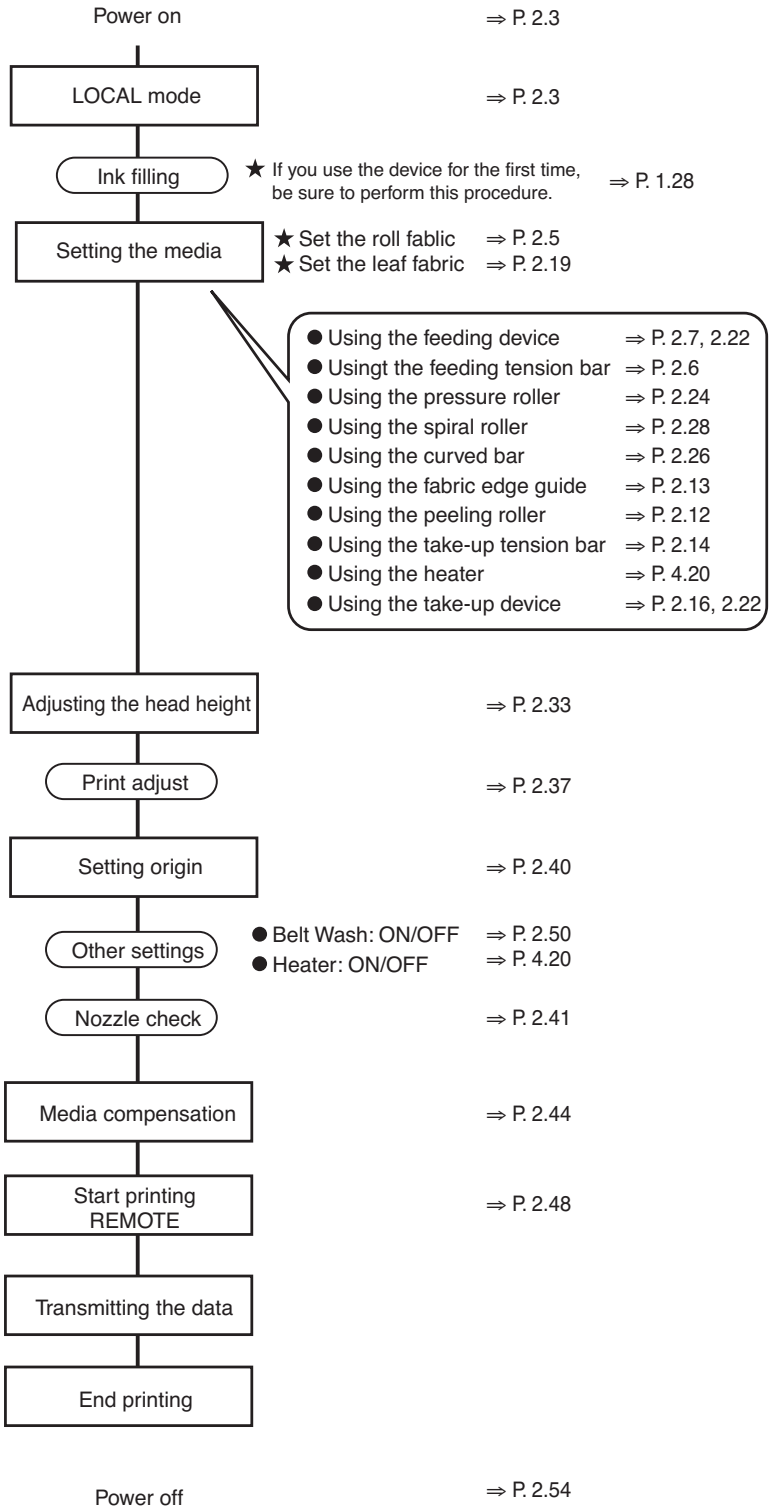
CHAPTER 2
How to Use the Basic Functions

This chapter describes the basic operations of the device, from the beginning to the end of printing.
Before using the application functions, understand how to use the basic functions of the keys on the operation panel and the modes in which the menus are displayed on the LCD.

Table of contents

Work Flow

The following explains the workflow from the power-on sequence up to the end of printing.
For details on each procedure, refer to the reference page.

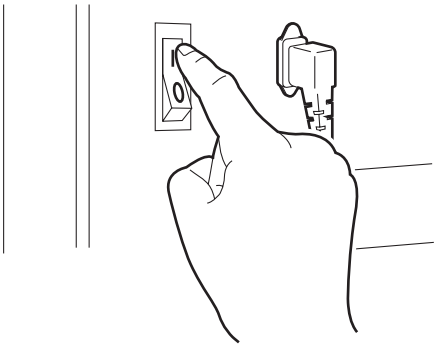


Switching ON/OFF The Power Supply

After setting up the device, switch on and off the power as described below.

Turning the power on

STEP



1. **Turn on the power to the blower.**
2. **Turn on the power to the heater.**
3. **Turn on the power to the device.**
4. **Turn on the power to the computer, etc. that are connected to the device.**

CAUTION

- At this time, the front cover and station cover L,R must be closed.
  With the front cover kept open, the carriage does not move even when the power is switched on.
- Since the heater indicator displays the operating status, it may not light on even if the power is turned ON.

When the power is turned on, [BOOT] is displayed, then the model name and firmware version is shown.

BOOT

Tx3-1600	V.1.00

The message “Please Wait” appears flashing on the LCD.The initialization process is displayed.

Please Wait
* * * * * * * * – – – – – – – –

The device enters the fabric width detection.

MEDIA SET	
ROLL<	> LEAF

Front Cover, Left And Right Station Cover

Opening/closing the front cover, left and right station cover

Do not open the cover while the device is in operation.

If you open the cover during printing, the carriage will stop for safety, resulting in abortion of printing.

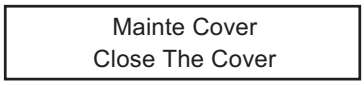
CAUTION

- Keep the cover closed during printing operation. Otherwise, the printing data is lost.

Cautions during operation

STEP

1. **When opening the cover during printing, the message will be displayed on the LCD.**



2. **After the completion of data transmission from the computer, close the front cover, then push the [ENTER] key.**

CAUTION

- If the data transmission from the computer cannot be stopped, first switch off the power supply of the computer then switch it on to restart the computer.

3. **The carriage starts to move.**

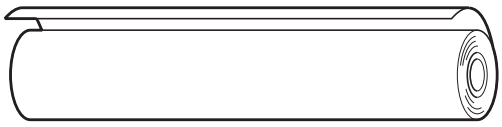
The carriage carry out as the plotter switchs on. (Refer to Page P.2.3)

Setting The Fabric To The Plotter

The fabric that can be used roll or leaf.
Leaf fabric is handled in the same manner as roll fabric for printing.
In case of using leaf paper for setup list printing, be careful about the setting position.

Setting a roll fablic

The procedure for setting roll fabric is described below. The following is an example, the printing side is rolled inward.



CAUTION

- The roll is heavy in weight. Take care not to drop it on your foot.
- In case setting the heavy fabric the roll must be set more than 2 people.
- After setting the fabric, make sure to check that the head height has been properly adjusted. (Refer to Page 2.33)

STEP

1. Confirm the operation panel on the LCD as the right.

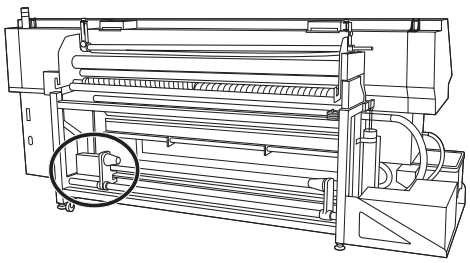
MEDIA
ROLL < > LEAF

- **When the fabric set is not displayed**
  Push the [END]key and perform the fabric reset. (Refer to Page 2.21)

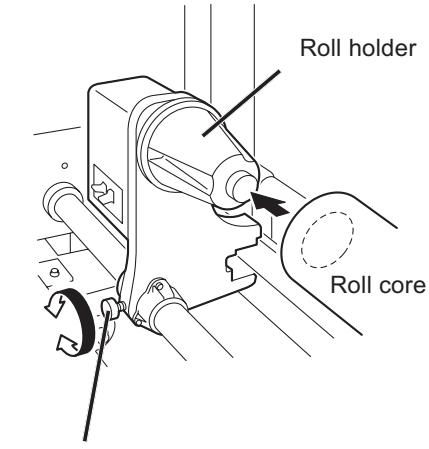
2. Insert the roll holder into the core of the left-hand roll fabric by loosening the screw of the left-hand roll holder at the rear side.

CAUTION

- If the roll exceeds 5kg, use a fabric core more than 2 inches.
- A thin fabric core is easy to bend by the weight of roll.



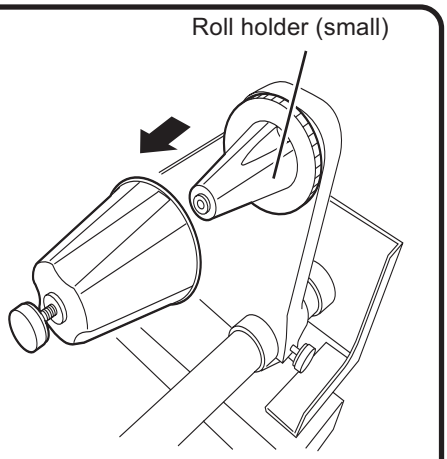
<The rear side of the device>



- The roll holder has dual structure. The inner diameter of the fabric core corresponds to 1.35 to 3 inches. Use a roll holder corresponding to the inner diameter of the fabric core.

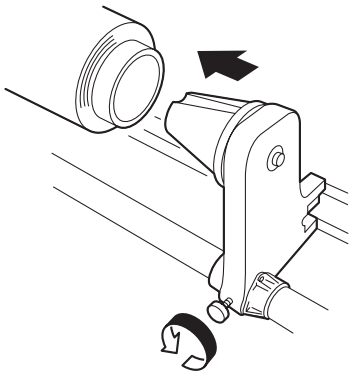
CAUTION

- If 3 inches fabric core isn't strong enough therefore folds in a V shape, use the supplied fabric core support pipe. In that case use the roll holder (small).
(Refer to Page 2.32 "Using the fabric core support pipe")



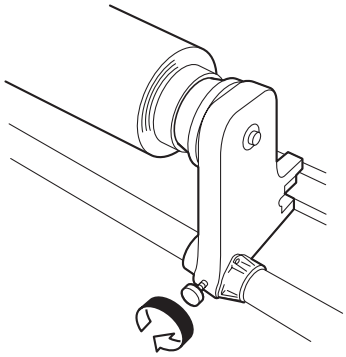
3. Loosen the screw of the right-hand roll holder.

Adjust the roll holder position to the width of the roll fabric.



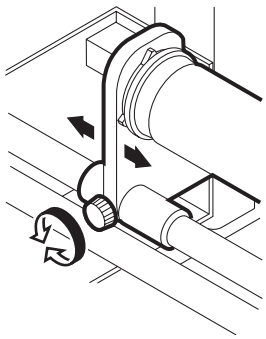
4. Insert the right-hand roll holder into the core of the roll fabric.

When the roll holder have been inserted up to the edge of the fabric core, secure it with the screw.



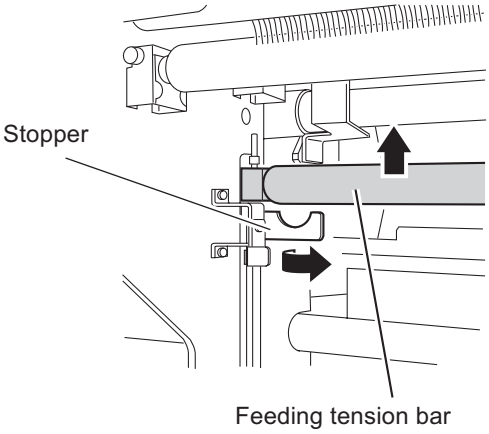
5. Viewing from the rear side of the plotter, make sure that both edges of the roll have been set almost at the center.

If not, loosen the screw of the roll holder and then shift the roll to the left and right, together with the roll holder.
When the roll position has been settled at the center, secure the screw of the left and right roll holders.



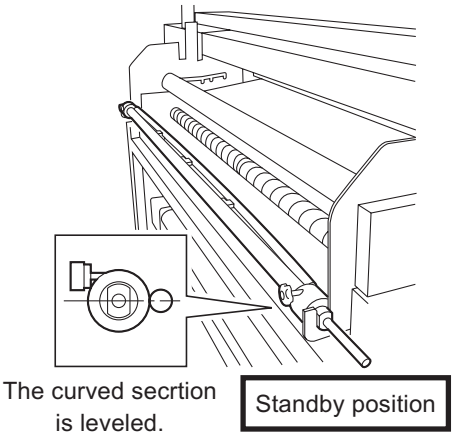
- **Using the fabric edge as a guide, fix the center and set roll. The measure of the roll guide is useful.**

6. Raise the feeding tension bar and then hook it to the stopper.



- Tension bar weight adjustment is available.
  (Refer to Page 2.25)

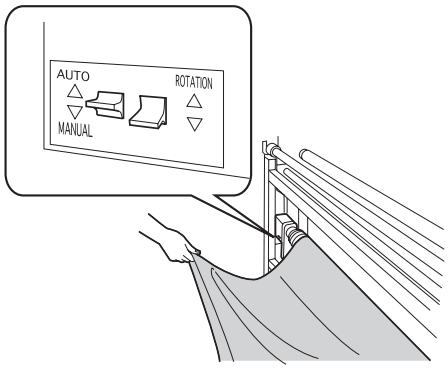
7. Set the curved bar at the standby position. Be sure that curved section is facing the plotter and set horizontally.



- The usage of the curved bar is “Adjusting the curved bar angle” (Refer to Page 2.26)

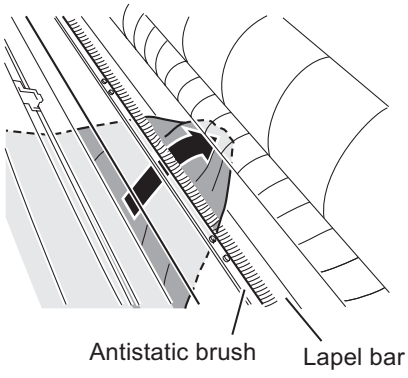
8. Winding the fabric down by the feeding device and then pull it out approximately 3 meters.

Check the rotational direction depending on whether the printing side is rolled inward or outward, and release the roll.



9. Pinch only the center of fabric to lead it.

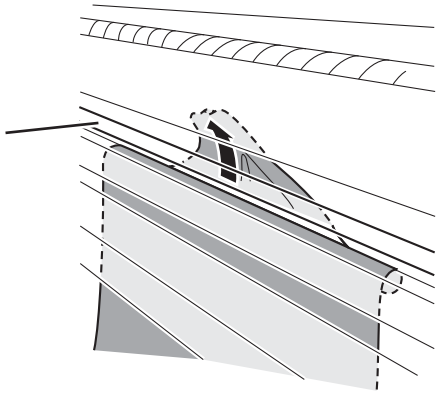
Change the fabric lead position according on the fabric type.



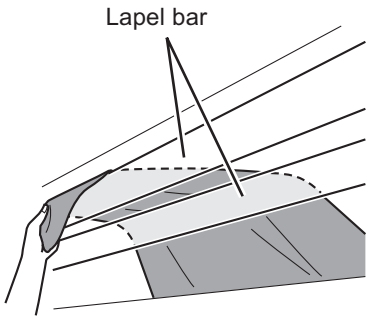
- Pinch the center of fabric to lead it, it can lead it smoothly.

a. Lead the fabric through between the antistatic brush and lapel bar.

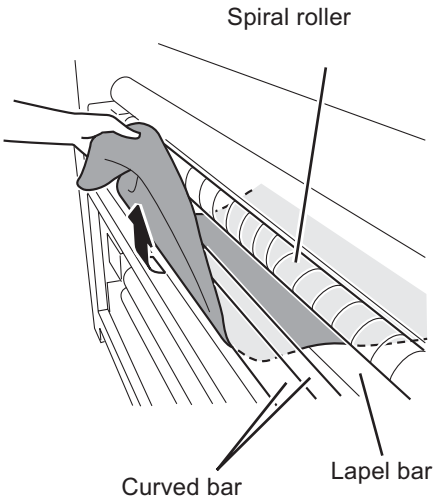
b. Lead the fabric through the feeding tension bar.



c. Lead the fabric through the two Lapel bars.



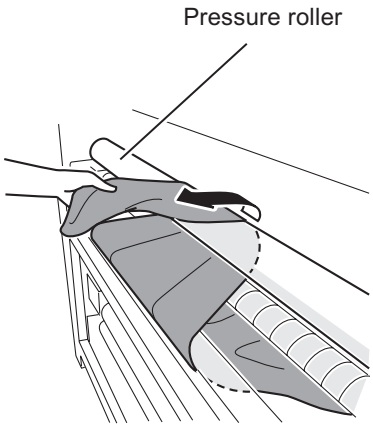
d. Lead the fabric through the spiral roller and the curved bar.

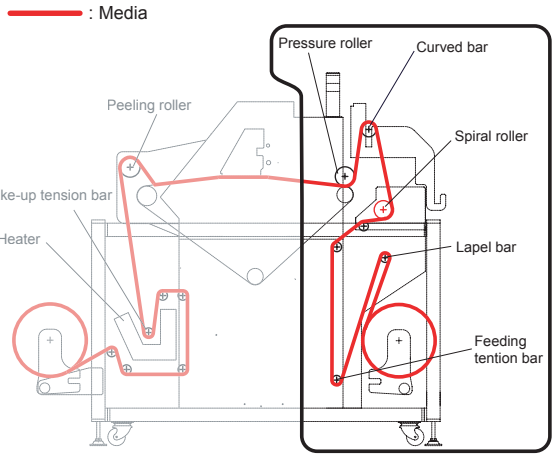


CAUTION

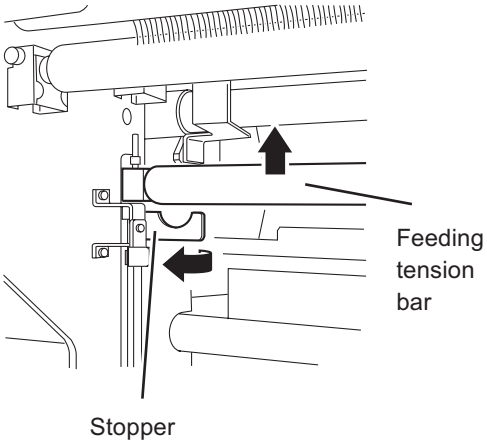
- Keep away from the spiral roller during rotating to avoid getting your hands or belongings caught in it.
- When using the wide fabric, ravels or threads of the fabric edges may cause getting caught into the fixed knob of the spiral roller. In case setting those fabric, cut the edges and then set it onto the device.

e. Lead the fabric through the pressure roller.





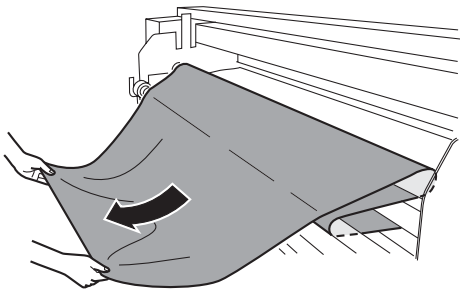
10. Remove the feeding tension bar from the stopper.



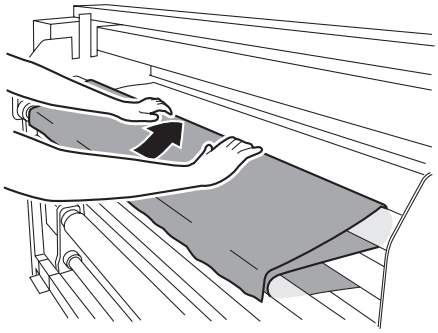
11. Pull out the fabric until the fabric width passes the pressure roller.

CAUTION

- Pull the fabric out with checking another roller whether fabric folded.

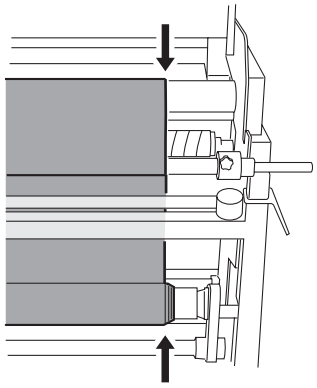


12. Return the fabric about 200 to 300mm from the pressure roller.



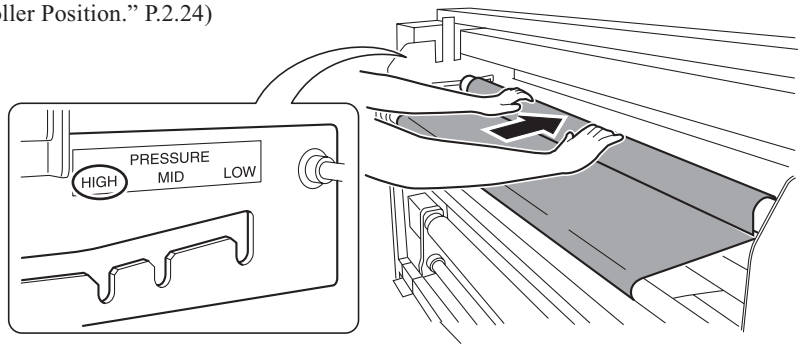
CAUTION

- Make sure that the edge side of the fabric is straight. If not, straighten it. Failure to do so may cause shift of the fabric at the time of taking-up.
- In case the fabric is slack on the feeding tension bar, it rewind the fabric no slack.

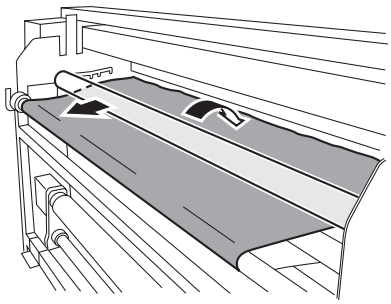


13. Press the pressure roller holding on the central part with the fabric, and set it on the PRESSURE High position.

(Refer to “Adjusting the Pressure Roller Position.” P.2.24)

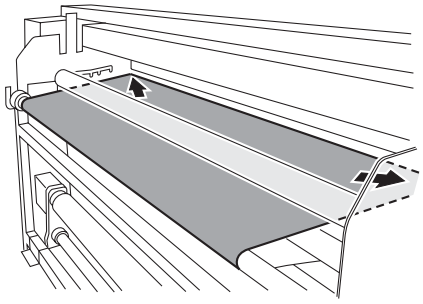


14. Flip the fabric which folded around the pressure roller to the belt and then once put aside the pressure roller.



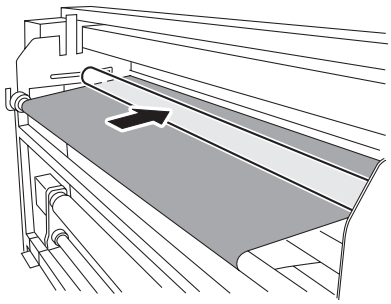
15. Put the fabric on the belt with tension by adjusting loose position (outside of right- and left-hand sides) to the tight position (center).

Check the tensional condition of the fabric, and put it on the belt toward an outside, lengthening wrinkles.



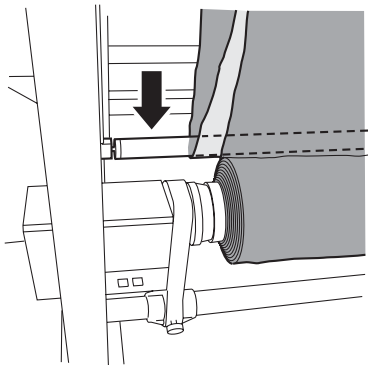
16. Set the pressure roller again.

(Refer to “Adjusting the Pressure Roller Position.” P.2.22)



17. Feed and slacken the fabric 200 ~ 300 mm to the feeding device.

As the tension bar is lowered, it is slacked the fabric.

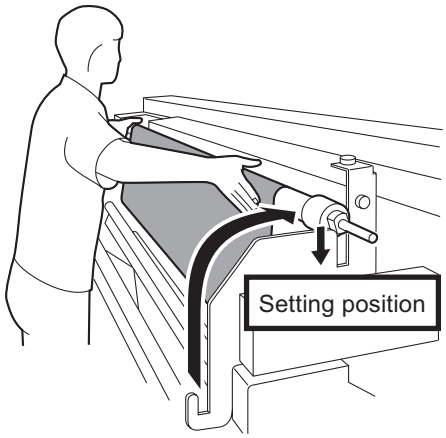


18. Set the curved bar to the setting position.

(Refer to “Adjusting the curved bar angle” on page 2.26)

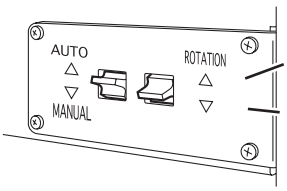
CAUTION

- Set by making the curved part of the curved bar into right under.



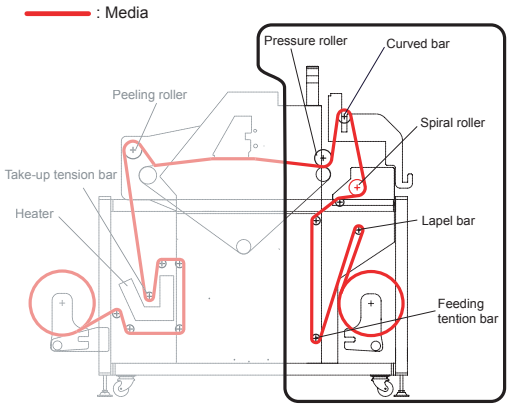
19. Rewind the fabric until the feeding tension bar goes up by 100 mm to the feeding device.

20. Select the rotational direction of the feeding device as the fabric will be wound.

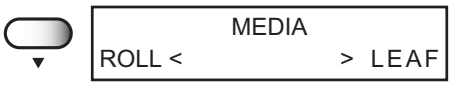


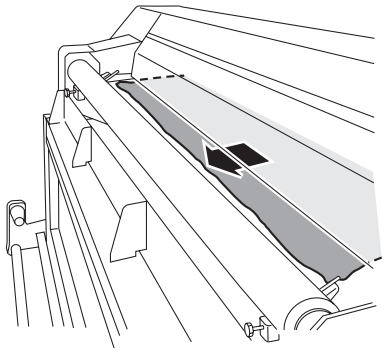
Printing side is rolled outward

Printing side is rolled inward

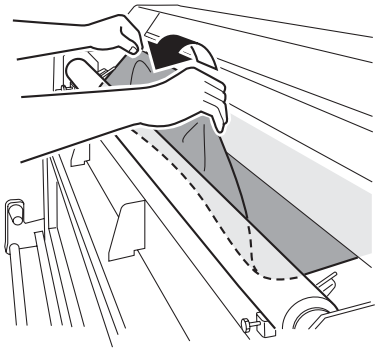


21. Push the JOG key [▼] to peel off the leading edge of the fabric and then feed the fabric until it passes the roller by 200 to 300mm.

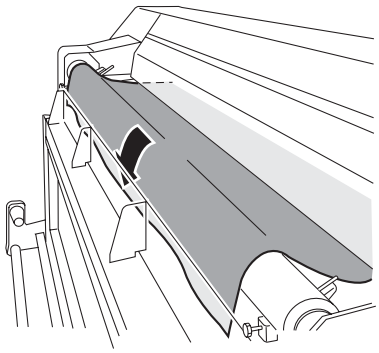




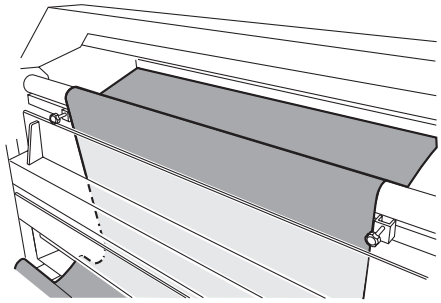
During the above operation, peel off the fabric by hand.



Put the fabric on the Peeling roller and then, push the JOG key [▼] to feed the fabric until it gets under the peeling roller.



22. Set the fabric edge guide at the both side.



- This enables to remove any types of fabric from the belt.

CAUTION

- The fabric that brushed at both edges is not able to use edge guide. The peeling sensor react to the brushed part, and not able to feed fabric properly. If the fabric edge is extremely displaced, be sure to align when use it.

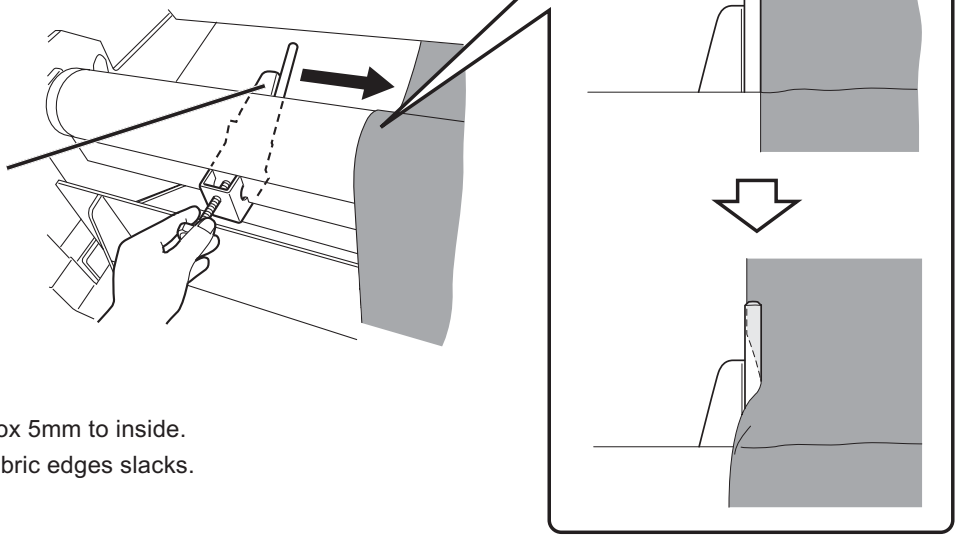
- Using the fabric edge guide allows the fabric peeling operation more properly.

* Make sure to use the fabric edge guide when using the narrow width fabric (less than 900 mm width)

* It is not necessary to use the fabric edge guide when using the wide width fabric.

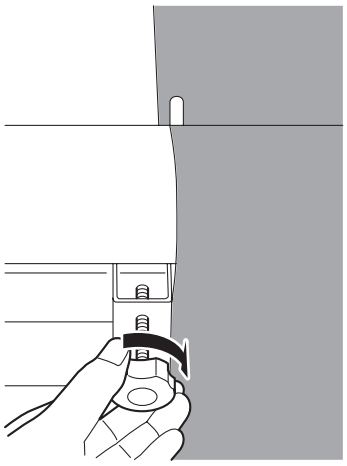
a.Slide the fabric edge guide to the fabric edge.

Fabric edge guide



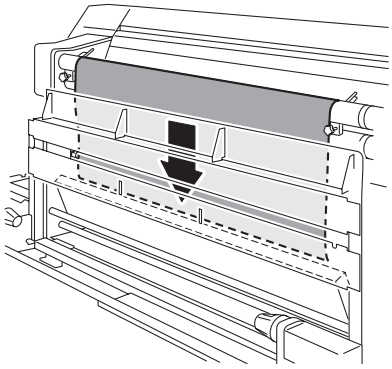
b.Slide again approx 5mm to inside.
Make sure that fabric edges slacks.

c.Fix the hand screw.

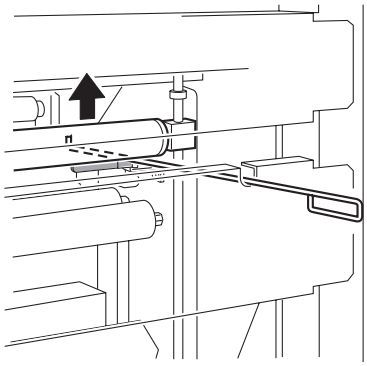


23. Hung the fabric down by pushing the JOG key [▼].

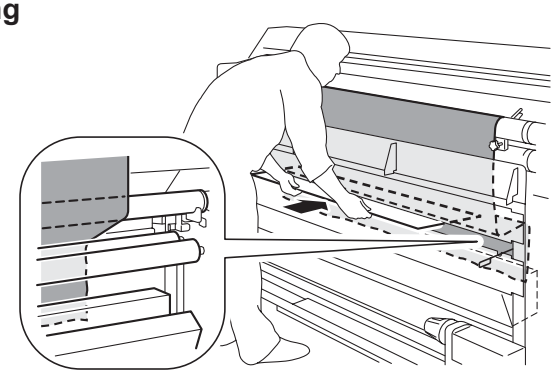
Hung the fabric down between peeling roller and heater guard, and feed the front edge of the fabric on to the heater.
Hung the fabric down until it pass over the hole half under the heater guard.



24. Lift the take-up tension bar by using the fabric setting bar, and hook the fabric setting bar on the stopper.



25. Feed the fabric inside the Lapel bar by using the fabric setting board.

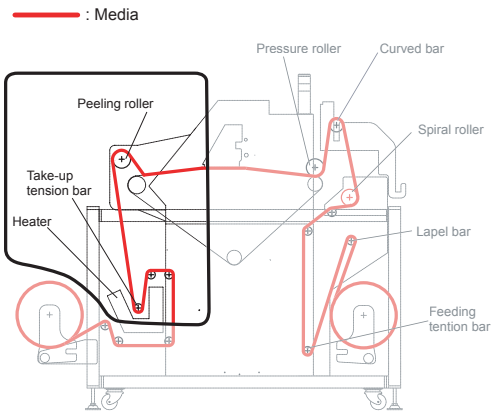


CAUTION

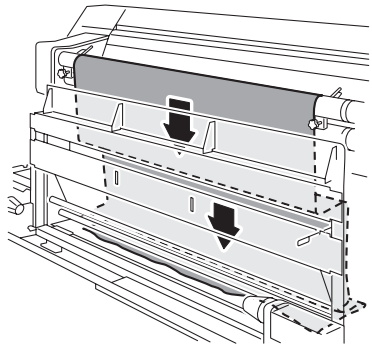
- "Take-Up Limit" error has occurred take-up tension bar left in stopper for a while.

Release method when causing an error

1. Fabric set bar is removed from tension bar stopper
2. Tension bar is lowered having a fabric setting bar.
3. Hung the stopper again, release the error.

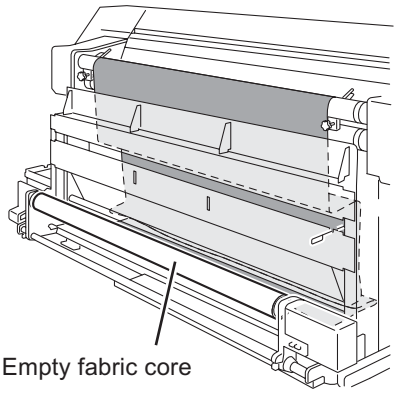


26. Confirm the fabric feed back to the lapel bar, feed the fabric about 1 meter by push the JOG key [▼].



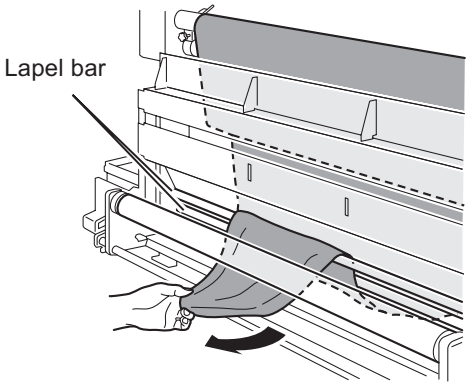
27. Attach the empty fabric core.

- **Attaching empty fabric core for taking up**
  To take up the fabric after printing, attach an empty fabric core to the take-up device.
- If it is expected that the weight of the roll increases after taking up the entire roll (when the fabric core support pipe is used on the loading side), use an empty fabric core with a tube wall thickness of 10mm or more or a fabric core support pipe on the take-up side.



28. Pull out the fabric from under the heater and then lead it between the empty fabric core and the lapel bar.

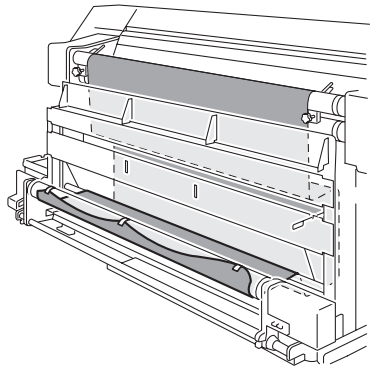
- In case printing inward, fabric leads under the paper core as illust at right.

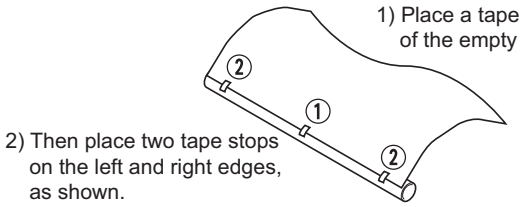


29. Using an adhesive tape, secure the leading edge of the fabric to the empty fabric core.

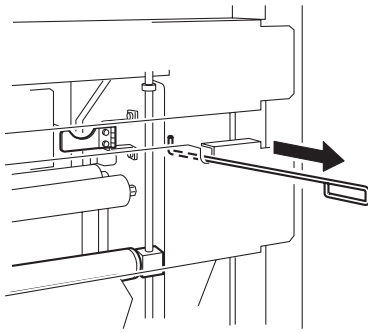
CAUTION

- When applying an adhesive tape, be sure to secure the center of the fabric first and then both edges. In this case, gently pull the fabric to prevent it from being slack.

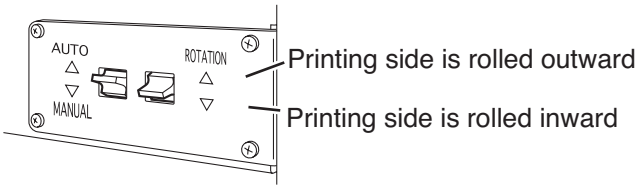




30. Remove the fabric set bar from the tension bar stopper.

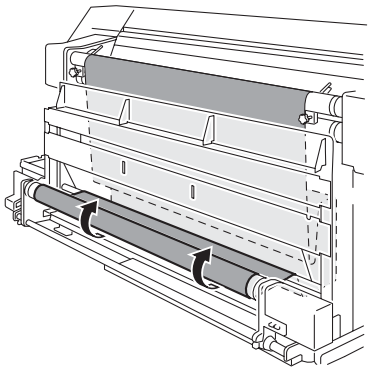


31. Select the rotational direction of the Take-up device as the fabric will be wound.



32. Push the JOG key [▼] to allow the empty fabric core to make a roll of fabric.

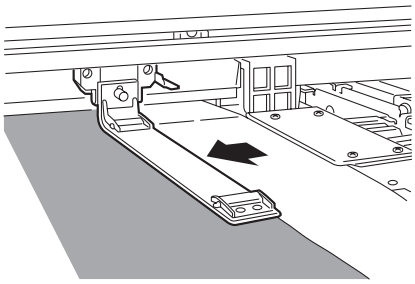
This completes fabric setting.



CAUTION

- If you start printing before the leading edge of the fabric reaches the take-up device, “Peeling Error” error or “Take-Up Check Tension” error occurs.
  If “Peeling Error” error occurs, printing is interrupted.
- To use the fabric effectively from near the leading edge, use the guiding fabric.

33. Open the front cover and then set the fabric retainer.



- Adjust the positioning of fabric retainer depend on the fabric width.

34. Close the front cover and push the [ENTER] key.

ENTER

MEDIA
ROLL < > LEAF

35. Push the JOG key [◀] to detect the roll fabric width.

Choose [ROLL].

◀

MEDIA
ROLL < > LEAF

36. Push the [ENTER] key.

ENTER

MEDIA
Capacity = 110 m

If the length of the roll is known, push the JOG key [▼] [▲] to set it. This allows you to check the remaining amount of roll.

▲
▼

MEDIA
Capacity = 650 m

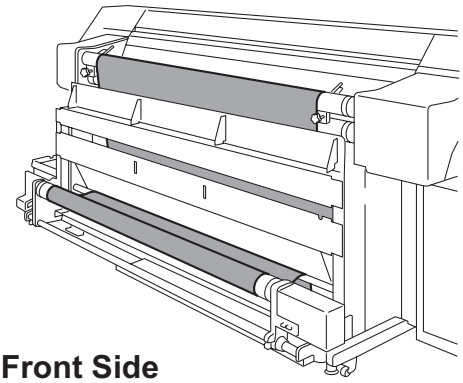
37. Start fabric width detection.

Detecting Media Please Wait

ENTER

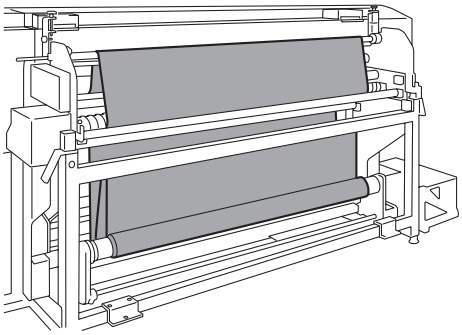
<< LOCAL >> width : 1620mm

Example of fabric setting completion

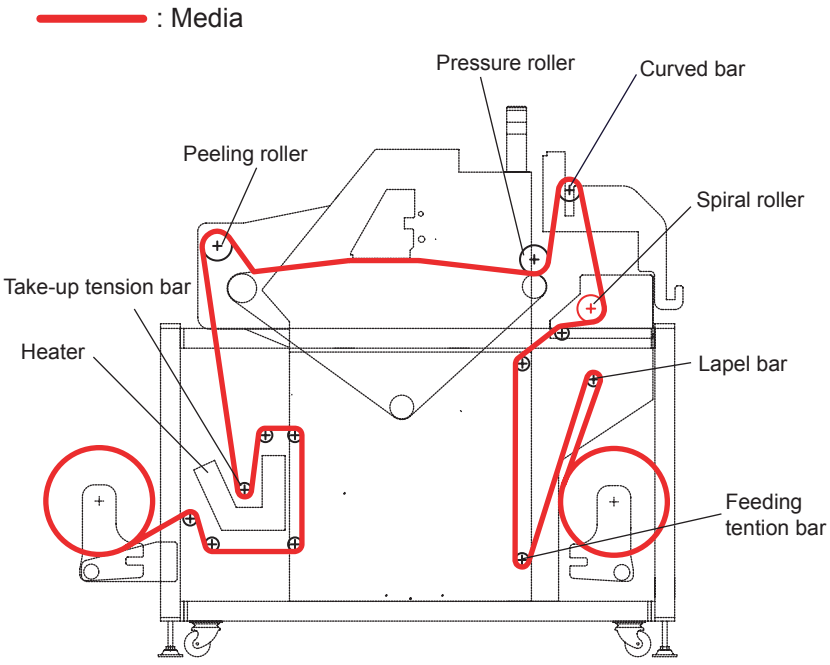


Front Side

Back Side



Example of fabric setting path



Setting Leaf (Cut) Fabric

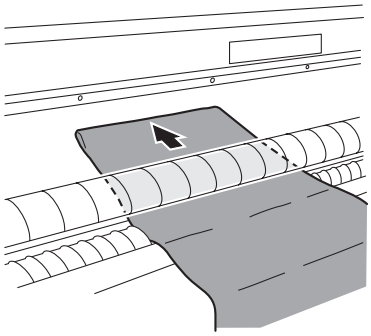
With leaf, tension cannot be put at feeding side. Set leaf so that no wrinkle occurs when setting the pressure roller.

It the fabric already have creases, it unable to feed the belt normally. Creases may cause head attached or fabric jam. Do not use such a fabric or, if it is used, apply your hand until feeding is completed.

CAUTION

- END of fabric is not detected when LEAF is selected. Specify the data size within the leaf length.
- When LEAF is selected, it is necessary to monitor the fabric until the leading edge of the fabric passes the peeling roller by 300mm or more to prevent the fabric from being caught by the head. Be sure to make sure this point. Since the heater cannot be used effectively, be careful of stain of the fabric after printing.
- When setting the fabric, make sure to check that the head height has been properly adjusted. (Refer to Page 2.33)

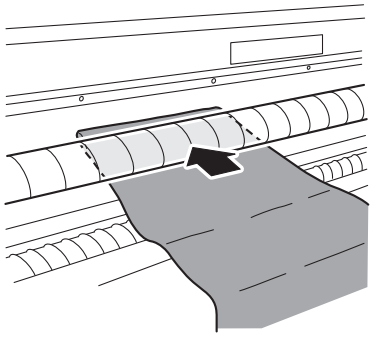
1. Stick the leading edge of the leaf lightly between the belt and the pressure roller.

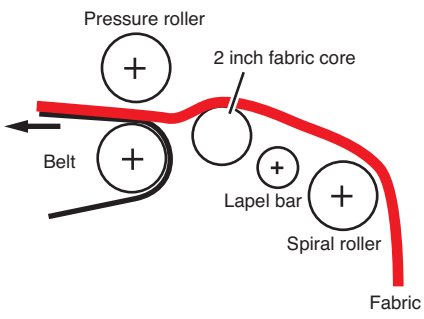


2. Make sure that there are no wrinkles or slacks at the backside of the drooping leaf. If necessary, perform step (1) again.

3. Set the pressure roller.

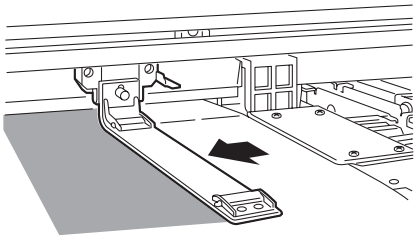
- If the 2 inch fabric core is set under the fabric at the backside of the pressure roller along with the pressure roller, wrinkles less able to occur on the belt. (Refer to the following illustration)





4. Make sure that the backside of the drooping leaf is not deflected to either side. If necessary, maintain the balance of the leaf.

5. Feed the leaf fabric until the fabric pass the fabric retainer by pressing jog key [▼] at jog panel.



6. Perform the fabric width detection. (In case that the "MEDIA SET" is not displayed.)

1. Press [FUNCTION] key.

FUNCTION
SETUP < ENT >

2. Select [MEDIA SET] by pressing the JOG keys [▲] and [▼].

FUNCTION
MEDIA SET < ENT >

3. Press [ENTER] key.

MEDIA SET
Media : RESET

4. Press [ENTER] key to reset.

5. Perform the leaf fabric width detection.
   Press JOG key [▶] to select [LEAF].

MEDIA SET
ROLL < > LEAF

Feeding Dev. OFF
Take-Up Dev. OFF

Spiral Rlr. OFF

Detecting Media
Please Wait

** MEDIA **
X=**** Y=****

<< LOCAL >>
width : 1620mm

CAUTION

- When using the Leaf, the following functions are disabled.
  [Feeding], [Take-Up], [Spiral Rlr]

Setting New fabric (Media Set)

In case perform the fabric width detection again or re-select the fabric kinds (Roll or Leaf) when setting new fabric or re-setting fabric.

Steps

1. **Set a new fabric (Roll or Leaf fabric).**

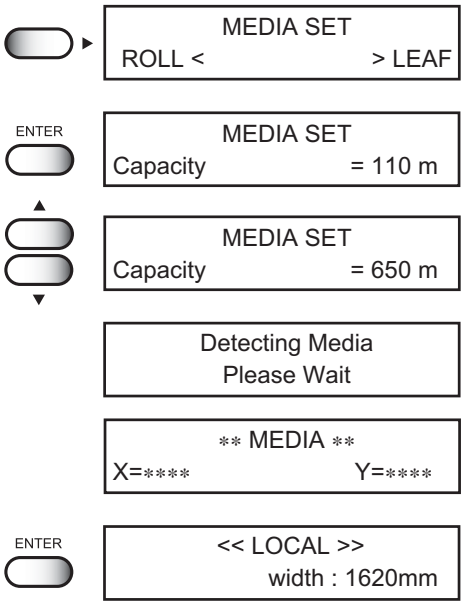
2. **Press [FUNCTION] key.**

3. **Select [MEDIA SET] by pressing the JOG keys [▲] and [▼].**

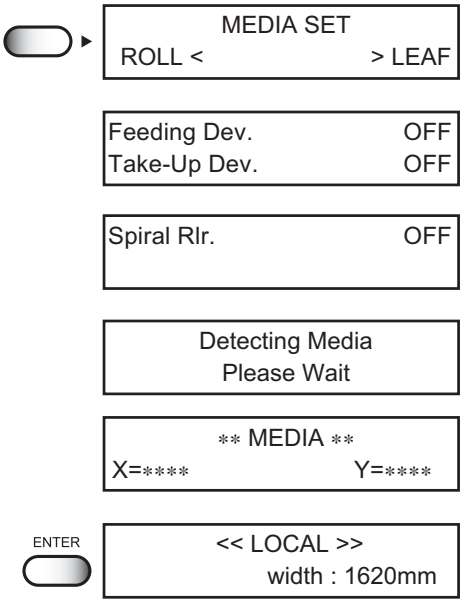
4. **Press [ENTER] key.**

5. **Press [ENTER] key to reset then, perform the leaf fabric width detection.**

Select ROLL



Select LEAF



- In case the roll length has known when the fabric of the roll is set, set the value. This allows you to check the remaining amount of roll.

Setting the Feeding, Take-Up device switches

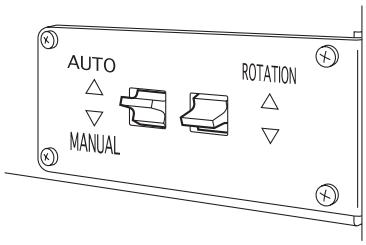
The Feeding-Take-Up device is provided with the switches for setting the take-up direction and take-up rotation. When using the Feeding, Take-Up device, refer to “Enabling the Feeding Device” on page 4.16 or “Enabling the Take-Up Device” on page 4.17.

- **AUTO**

Rotates or stops the roll automatically depending on the position of the tension bar.
(Available jog operation and printing)

- **MANUAL**

Rotates the roll constantly.



- **Take-Up side**

ROTATION ▲ (up):
Takes up the fabric with the printing side rolled inward.
ROTATION ▼ (down):
Takes up the fabric with the printing side rolled outward.

- **Feeding side**

ROTATION ▲ (up):
Feeding the fabric with the printing side rolled outward.
ROTATION ▼ (down):
Feeding the fabric with the printing side rolled inward.

Using the fabric retainer

The fabric retainer can be separated into the slider and the presser by removing the hand screw. Fabric width detection is possible only with the slider.

- In case the following patterns, use the fabric retainer
  - The fabric edges is fluffed
  - Even using the pressure roller on the belt, the fabric may rise up.

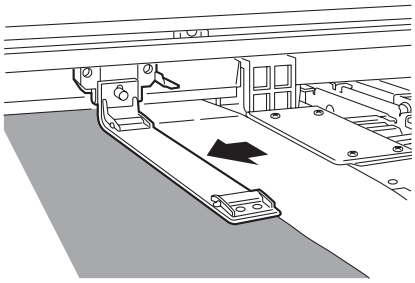
CAUTION

- In case the pressure part is removed from the fabric retainer, make sure to move the central part of the slider onto the fabric edge to detect fabric width properly.

STEP

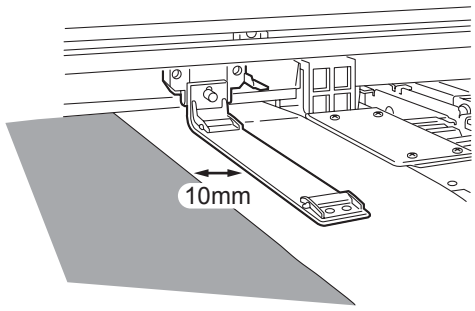
1. **Set the fabric.**

2. **Move the right fabric retainer to the right end of the fabric.**



3. **Move the left fabric retainer to the left end of the fabric.**

- When performing rimless printing, move the fabric retainer 10mm or more outward from the fabric edge pressers.



- Rimless printing -

Adjusting the Pressure Roller Position

Apply pressure to make the fabric adhere to the belt. There are three different pressure levels.

Pressure level of the pressure roller

Low : Use this pressure level immediately when adhesive is applied again.

Middle : Since a stretch material expands at the time of peeling, high tension may cause the fabric to be caught by the belt. While the adhesive force is strong, use the Low or Middle position.

High : In case the adhesive force has decreased and using a silk material, use the High position.

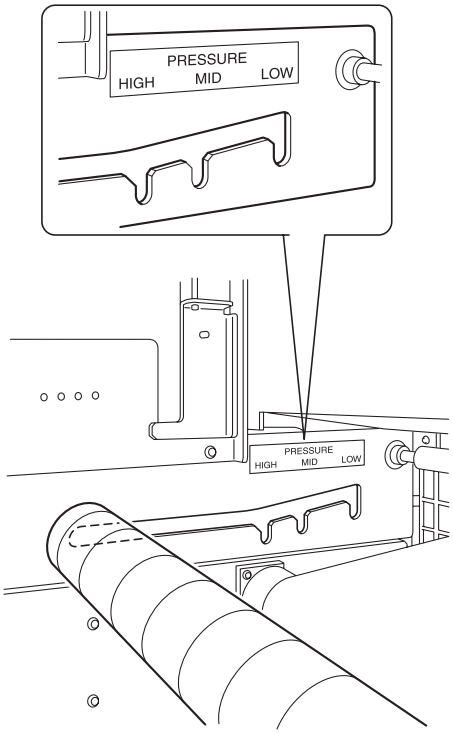
- The above is merely a rough standard. Be sure to check the sticking condition before setting the position.

WARNING

- Since the pressure roller is very heavy, be careful not to get your finger caught by the roller when setting or putting aside the roller.

CAUTION

- If the pressure roller is left on the belt without fabric setting for a prolonged period of time, the roller will stick to the belt, making it difficult to remove the roller. If you do not set the fabric, put aside the pressure roller from the belt.
- If it is left for a long time, feeding it slightly with JOG makes it easier to remove.



Adjusting the Feeding Tension Bar Weight

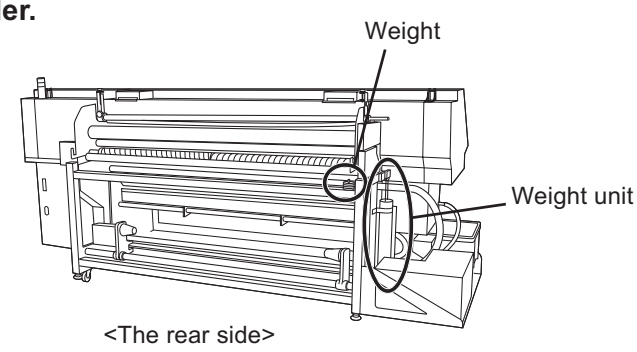
The tension bar gets heavy as the number of weights decreases; it lightens as the number of weights increases. When using the stretch material or loosely-woven thin fabric, it is necessary to lighten the feeding tension bar weight. According to the fabric, adjust the tension bar weight.

CAUTION

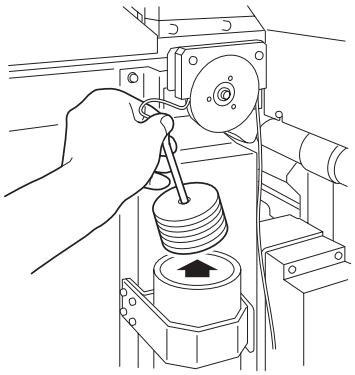
- For knit and stretch fabric, lighten the tension bar.
- For non-stretch fabric, no weight is required.
- Adjustment is required for such non-stretch fabric that cause vertical wrinkles when weights are removed to apply tension, such as thin chiffon and voile. Add some weights. It is recommended that this type of fabric be not led through the spiral roller.
- If the tension bar weight is too light, feeding does not operate normally. Adjust the tension bar weight as it falls by it's own weight.

STEP

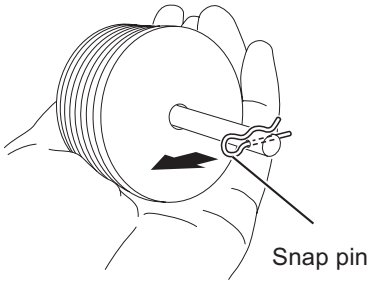
1. **Pull out the tension bar weight from the cylinder.**



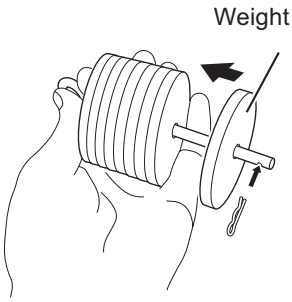
<The rear side>



2. **Pull the snap pin out.**



3. **Add or remove weights as required.**



4. **Attach the snap pin to restore the previous condition.**

Removing slacks using the curved bar

If both edges of the fabric with gumming processing is extremely short with respect to the center of the fabric (the center of the fabric is remarkably loose when the fabric is extended on the floor), use of the curved bar is required. (Refer to "Fabric conditions which enable to print" on page 1.31.)

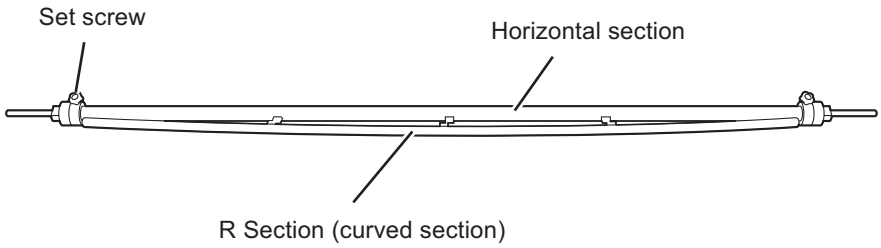
- The position (angle) of the curved section needs to be adjusted according to the fabric condition.
- The rough standard position is the position at the curved bar where both edges of the fabric slightly become loose after setting the fabric.

CAUTION
- Adjust the angle of R position for the vertical direction.
- The R peak position cannot be changed.

Adjusting the curved bar angle

Change the angle of the curved bar according to slacks of the fabric.

Curved bar Horizontal section: Regularly used.
R section (curved section): Used for loosen fabric in the center.



Angle adjustment

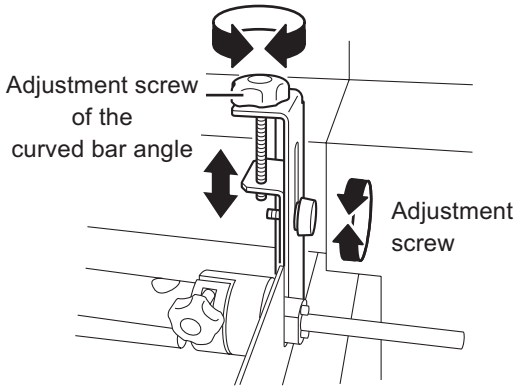
1. Use the inclination adjustment screw of the curved bar to adjust the angle into the vertical direction.

a. Loosen the adjustment screw

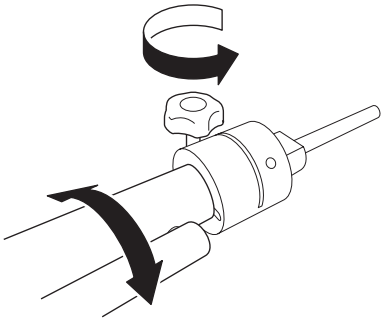
b. Turn it until the angle is gained.

- Adjust the both side of angle, with holding the curved bar.

c. Fix it using the setscrew

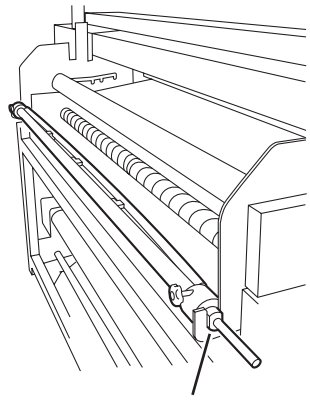


2. Use the setscrew of the curved bar to adjust the angle of the curved bar.

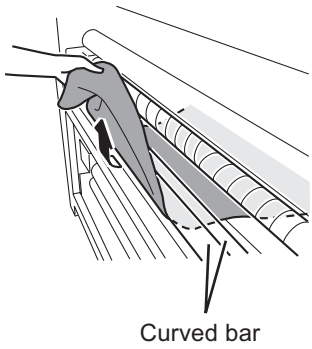


Using the curved bar

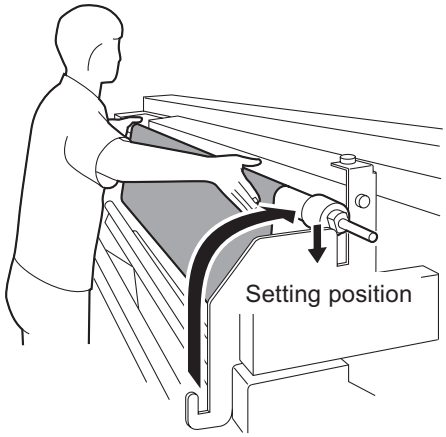
1. **Make sure that the curved bar is located at the standby position.**



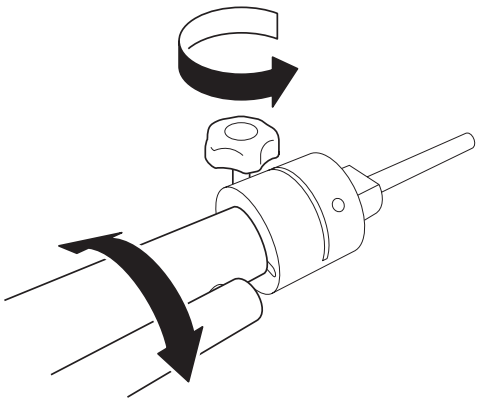
2. **Lead the fabric.**



3. **Move the curved bar to the setting position.**



4. **Loosen the setscrew and then set up the R peak position according to the fabric condition.**



Adjusting the number of pieces of the spiral roller

The set position of the fabric is based on the center. If the fabric is not set at the center, wrinkles are likely to occur. In order to prevent occurrence of wrinkles during printing, use the spiral roller. The number of pieces of the spiral roller can be adjusted according to the fabric width.

- Keep away from the spiral roller during rotating to avoid getting your hands or belongings caught in it.

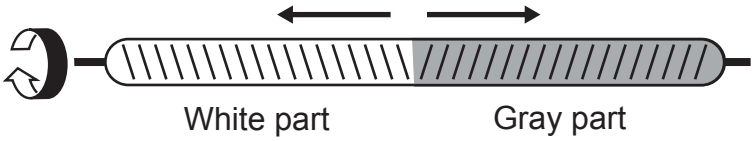
CAUTION

- When using the wide fabric, ravels or threads of the fabric edges may get caught into the fixed knob of the spiral roller. In case setting those fabric, cut the edges and then set it onto the device.

With narrow fabric, be sure to set the fabric at the center of the belt.
In the following cases, however, the center position can be changed.

- Setting the fabric with right-justification to shorten the printing time
- Keeping the life expectancy of adhesive with right- or left-justification using a fabric with a width of 800mm or less

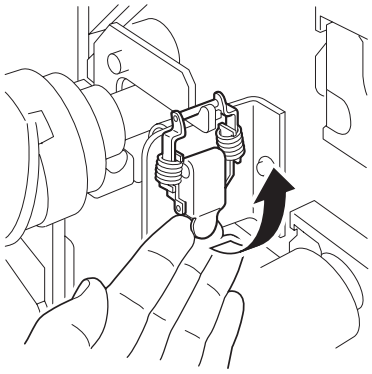
The pieces of the spiral roller are painted in two colors according to the rotational direction.

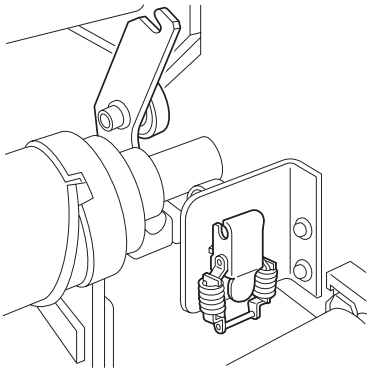


1. Remove the snap lock of the spiral roller on the right-hand side of the rear face of this device.

CAUTION

- When releasing the snap lock, put your hand from under the roller. There is a risk that the detached stopper may hit your hand resulting in injury.

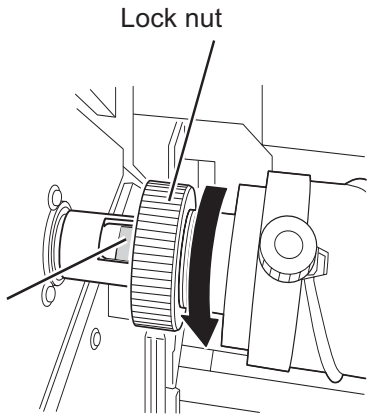


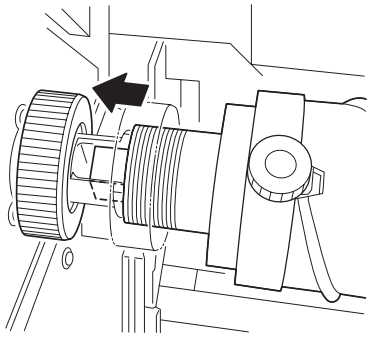


2. Loosen the lock nut on the left-hand side and then remove the spiral roller.

CAUTION

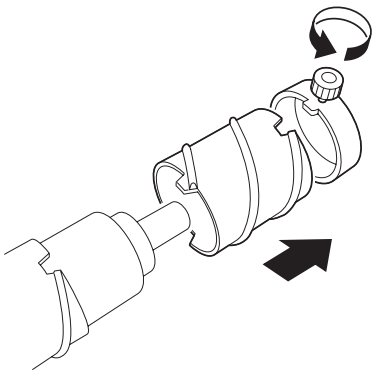
- Turn the spiral roller shaft up and then remove the roller to avoid falling it down and breaking the device.





3. Loosen the hand screw of the both side and then, shift the number of piece.

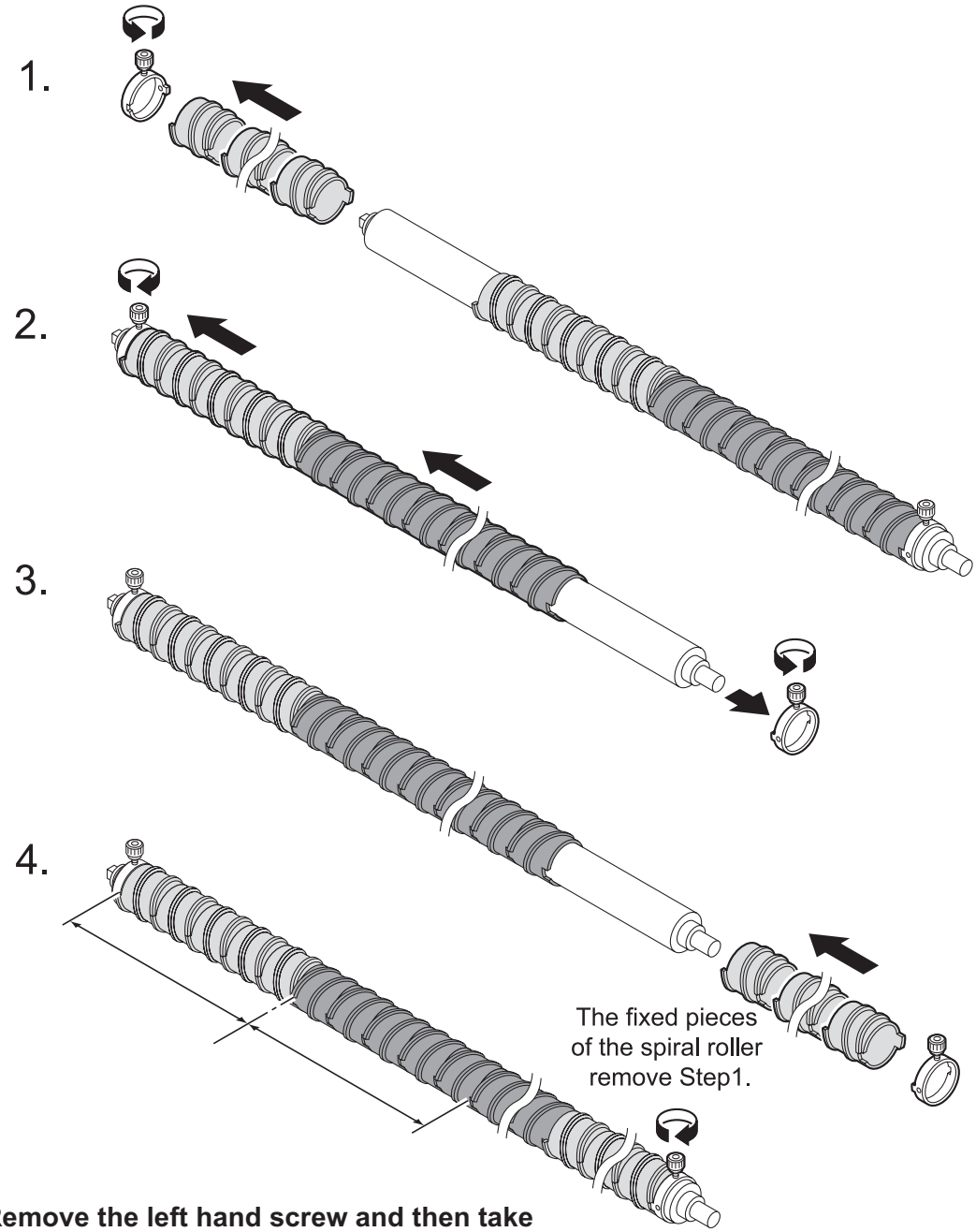
Refer to the next page for shifting procedure.



4. Restore the spiral roller at previous condition.

Replacing the number of pieces of the spiral roller

Replace the number of pieces of the spiral roller below:



1. **Remove the left hand screw and then take some “fixed pieces” out from the bar according to the fabric center position.**

2. **Shift the rest pieces to the left side and then, tighten with the hand screw. After that, remove the right hand screw.**

3. **Add the “fixed pieces” taken from the left side on the procedure 1.**

4. **Tighten the right hand screw. The center position has been changed.**

Using the guiding fabric to start printing from the leading edge of the fabric (Roll, Leaf)

When making printing with the leading edge of the fabric set in the take-up device, a dead space of about 2 meter is formed on the fabric. Use the guiding fabric for efficient use of the fabric.
Guiding fabric width should be same as the printing fabric considering the aftertreatment.
By attaching the guiding fabric easily with handheld sewing machine etc, printing fabric can be used effectively.

- If using the guiding fabric temporarily, until set to the take-up device, it is not necessary to match the width. In addition it is not necessary to attach with a handheld sewing machine etc, just use the roughly 100mm width fabric attach with a paper clip instead.

- When performing printing from the leading edge of the fabric without using the guiding fabric, observe the following points:
  - ＊ Since the leading edge may not be completely fixed, the fabric may be jammed. Start printing from the portion which is sufficiently fixed.
  - ＊ If printing is started when the leading edge of the fabric has not reached the roller, “Peeling error” occurs. In this case, recover the error by blocking or passing by hand the optical-axis line of the peeling sensor located at the backside of the peeling roller.

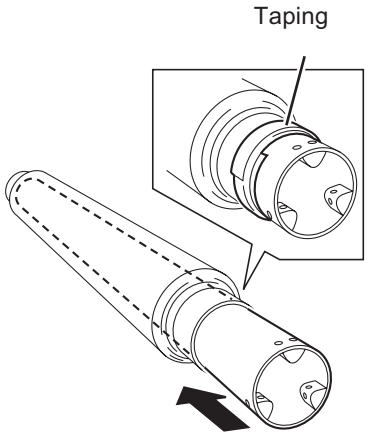
Using The Fabric Core Support Pipe

In case the fabric core with 3 inch specification is thin and therefore folds in a V shape, use the supplied fabric core support pipe with the small roll holder.

Steps;

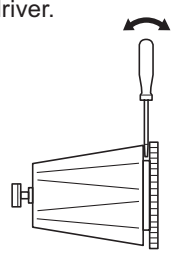
1. **Lead the fabric core support pipe into the 3 inch pipe.**

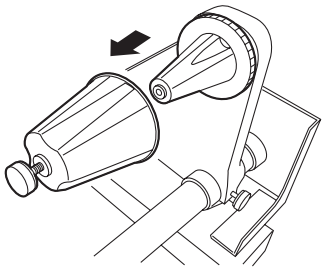
2. **Fix the core and support pipe with tape.**



3. **Loosen the hand screws of the both side of the roll holders and then remove the large holders with hand screws.**

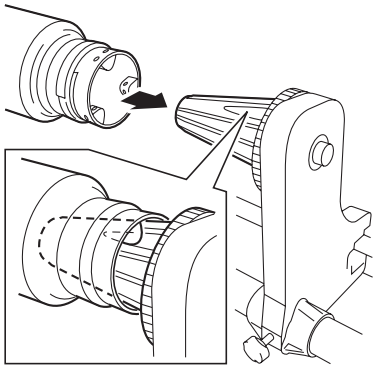
- The space is tight between roll holders (Large and Small). Remove the Big one with making some room using the flat head screw driver.

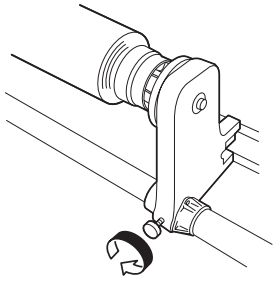




4. **Insert the small roll holder into the support pipe and fix it with hand screws.**

When the roll holder have been inserted all the way into the pipe, secure it with the screw.





After Setting The Fabric On The Device

Adjusting the head height when changing fabric [Head Height]

When changing to the fabric of other kinds, it is necessary to adjust the head height according to the thickness of the new fabric.
Operating without adjusting the head height is very dangerous: it can damage the fabric and the printer. When a new fabric different in thickness from the current fabric is to be used, be sure to make proper adjustment of the head height.

- [Head Height] is a function to set the distance between the fabric surface and head to 3mm.

STEP

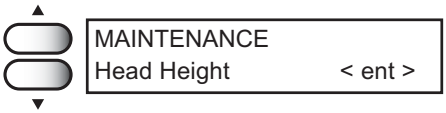
1. Confirm the device is the LOCAL mode.

2. Press [FUNCTION] key.

3. Press JOG keys[▲] and [▼] until the LCD gives the indication [MAINTENANCE].

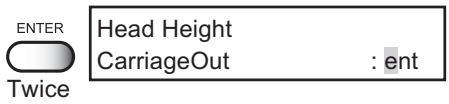
4. Press [ENTER] key.

5. Press JOG keys[▲] and [▼] until the LCD gives the indication [Head Height].



6. Press [ENTER] key twice.

The carriage will come out of the capping station.

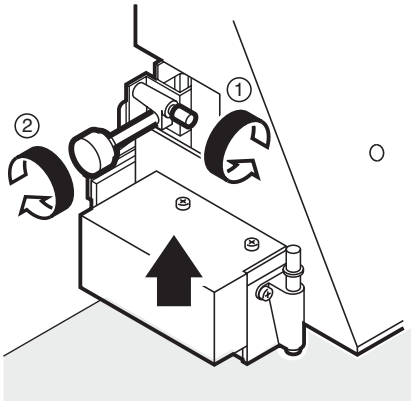


7. Open the station cover and the front cover.

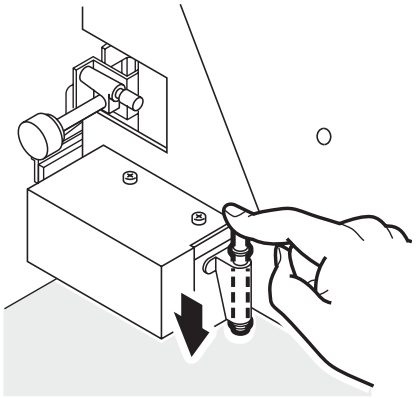
8. Move the carriage manually to a position where adjustment is easy.

9. Adjust the head height.

a. Loosen the support screw (1), turn the height adjustment screw (2) in the direction shown, and move the head upward.

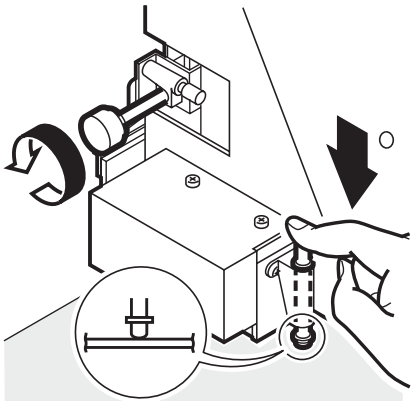


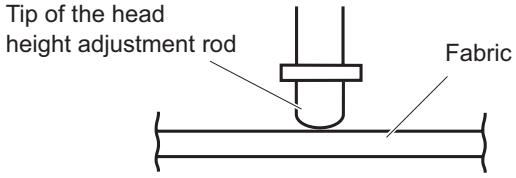
b. Push down the head height adjustment rod by the right hand.
Push down the head height adjustment rod till it stops moving anymore.



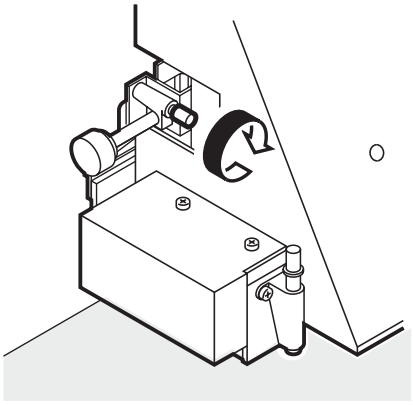
> CAUTION
> • If the tip of the head height adjustment rod makes contact with the surface of the fabric, repeat step 9-a to raise the head.

c. Turn the head height adjustment screw in the direction shown and move the head downward.
With the head height adjustment rod kept pushed, lower the head till the tip of the rod makes contact with the surface of the fabric.





d. Retighten the support screw after completing the head height adjustment.



10. Close the front cover.

Close the station cover too.

11. Press [ENTER] key.

The carriage will come back to the capping station.

Head Height
Completed : ent

The initialization is executed. The initialization process is displayed.

Initialize
* * * * * * * * – – – – – – – –

12. The device enters the fabric width detection after initialization.

Select the fabric by using jog keys according to the fabric has been set.

MEDIA SET	
ROLL<	>LEAF

13. The device enters the LOCAL mode after detection.

<< LOCAL >>
width : 1620mm

14. Perform the [PrintAdjust].

(Refer to Page 2.37)

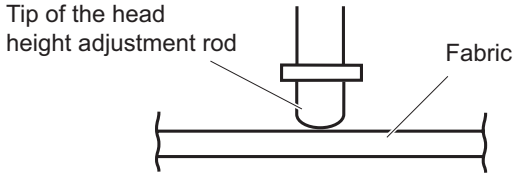
CAUTION

- When the head gap which is between head and the fabric has changed, the printing points shift in position in the BI printing direction. After head height adjustment, be sure to correct the dot positions. (Refer to Page 2.37)

Points in head height adjustment

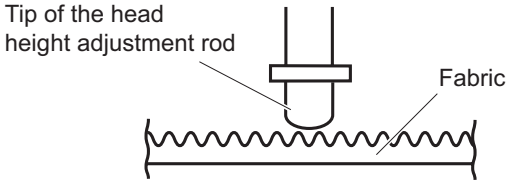
- When the head height is so adjusted that the tip of the head height adjustment rod just makes contact with the surface of the fabric, the distance between the head and the printing surface of the fabric becomes optimum.
- As long as the head height is so adjusted that the tip of the head height adjustment rod just makes contact with the surface of the fabric, the distance between the head and the printing surface of the fabric remains unchanged even when the head is raised.
- To avoid fluffing of the fabric surface, warp of the fabric edge, or waving of the fabric during printing, the distance between the head and the printing surface of the fabric can be increased.
- When the distance between the head and the printing surface of the fabric is increased, the print quality deteriorates.

Optimum distance



Distance increased

When a fabric having fluffy surface, warp, or irregular surface is used



CAUTION

- When the head gap which is between head and the fabric has changed, the printing points shift in position in the BI printing direction. After head height adjustment, be sure to correct the dot positions. (Refer to Page 2.37)

Correcting the dot positions after adjusting the head height [PrintAdjust]

When the head height is adjusted, be sure to correct the dot positions.
Since the adjustment of head height is done by hand, the head will slightly deviate from the correct position (Refer to Page 2.36). This function corrects the dot positions to ensure that the accurate printing result is obtained.
The dot positions are corrected by comparing the ink dropping positions on each of the seven test patterns between the two printing directions.

STEP

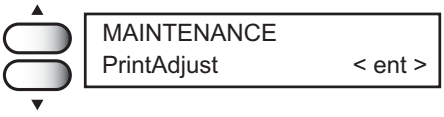
1. Make sure that the device is the LOCAL mode.

2. Press [FUNCTION] key.

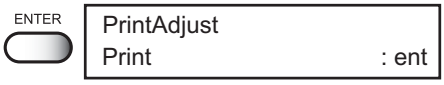
3. Press [▲] and [▼] key until the display gives the indication [MAINTENANCE].

4. Press [ENTER] key.

5. Press [▲] and [▼] key until the display gives the indication [PrintAdjust].

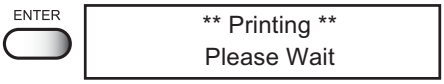


6. Press [ENTER] key.



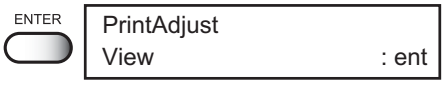
7. Press [ENTER] key again.

Printing of the test patterns for the correction of dot position starts.
There are seven types of test patterns that are plotted.



8. When plotting finishes, the screen for selecting view operation execution appears.

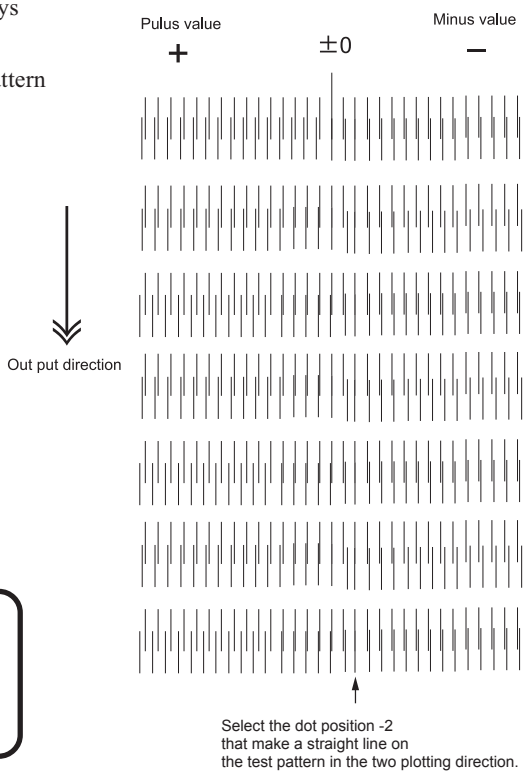
Pressing the [ENTER] key moves the media to a position where it is easy to see.
Pressing the [END] key does not execute view and moves to the next step.



9. Press JOG keys [▲] and [▼] to correct the dot position of pattern 1.

The seven test patterns that are output are sequentially named [Pattern 1] to [Pattern 7].
Select the correct dot positions on Pattern 1 using the JOG keys [▲] and [▼].
Select the dot positions that make a straight line on the test pattern in the two printing directions.

PrintAdjust
Pattern1 = 0.0



CAUTION

- If the pattern correction value for straight lines is not within -15 through +15, adjust the head height and then correct it again with [PrintAdjust].

- The dot position enables to correct again after entering the correction value once.

9. Press [ENTER] key.

ENTER

PrintAdjust
Pattern2 = 0.0

10. Repeat Steps 8 and 9 to correct the dot positions on Patterns 2 to 7.

Select the correct dot positions on each of the patterns.

PrintAdjust
Pattern3 = 0.0

PrintAdjust
Pattern4 = 0.0

PrintAdjust
Pattern5 = 0.0

PrintAdjust
Pattern6 = 0.0

PrintAdjust
Pattern7 = 0.0

11. Press [END] key twice, and the menu returns to the LOCAL mode.

END

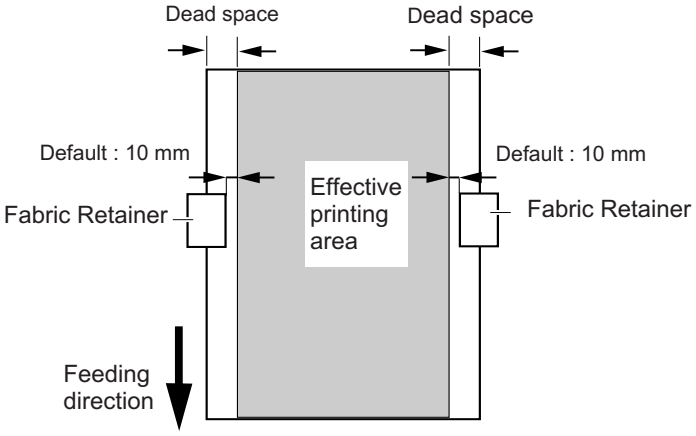
PrintAdjust
Print : ent

MAINTENANCE
PrintAdjust < ent >

<< LOCAL >>
width : 1620mm

Specifying The Scope Of Printing On The Fabric Used (Effective Printing Area)

The plotter has an area which cannot perform printing, due to mechanical reasons. This area is called “dead space.”
The effective printing area is obtained by excluding the dead space from the printing fabric.



Roll Fabric

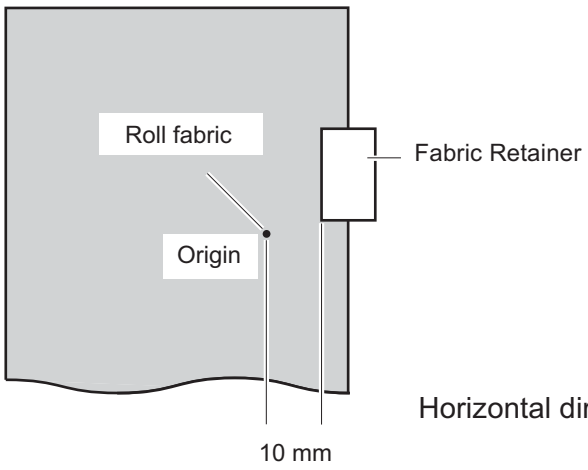
- The dead space at the front and rear edges of the fabric can be reduced using a guiding fabric.

Changing the dead space

The dead space is resizeable area.
The effective printing area can be changed by changing the dead space.
For the method of setting a dead space, refer to Page 4.10.

Origin Setting

Set an origin of data on fabric loaded on the plotter. Place the fabric and perform the fabric width detection, the origin is automatically set at the location shown in the illustration given below.



Horizontal direction : Position 10mm apart from the left edge of the fabric Retainer from the right side.

Setting of an origin

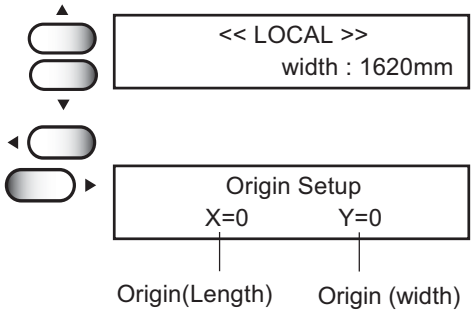
If you want to perform printing at another location of a roll fabric that provides a wider printing area, it is necessary to re-establish another origin.

CAUTION

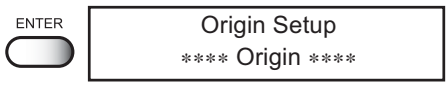
- When Belt Wash in [Setup] is ON, Belt Wash is executed when jogging in the X direction is performed. In this case, if a belt cleaning error occurs, jogging cannot e performed.

STEP

1. **After the fabric width detection is completed, move the carriage to the position at which to set an origin by pressing the JOG keys [▲], [▼], [◀], and [▶].**
   As the carriage is moved, the origin shifts in position. The origin that changes with the movement of the carriage is displayed on the LCD.



2. **After deciding the origin, press [ENTER] key.**
   The origin has been changed.
   When the device starts printing the next time, it uses the origin that has been set unless the origin is changed.



Check Faint Or Nozzle Clogging In Ink Flashing Condition

Executing the test draw [TEST PRINT]

In prior to the actual printing, execution of the cleaning function, and a test pattern are printed to check whether the finished test pattern has blurred and missing lines on test pattern)

CAUTION

- If the test pattern shows any sign of abnormal conditions, carry out the cleaning function. (Refer to Page 2.43)
- Make sure to use the fabric which width is more than 200mm when executing the test draw.

STEP

1. Make sure the device enters the LOCAL mode.

```
<< LOCAL >>
width : 1620mm
```

2. Make sure the fabric has set on the belt.


```
TEST PRINT
< ENT >
```

3. Press [TEST] key.


```
** PRINT **
```

4. Press [ENTER] key.

The device prints the test pattern.

```
TEST PRINT
View                    :ent
```

5. When plotting finishes, pressing the [ENTER] key moves the belt to a position where it is easy to check the results.

Pressing the [END] key finishes the operation.


```
TEST PRINT
Completed               :ent
```

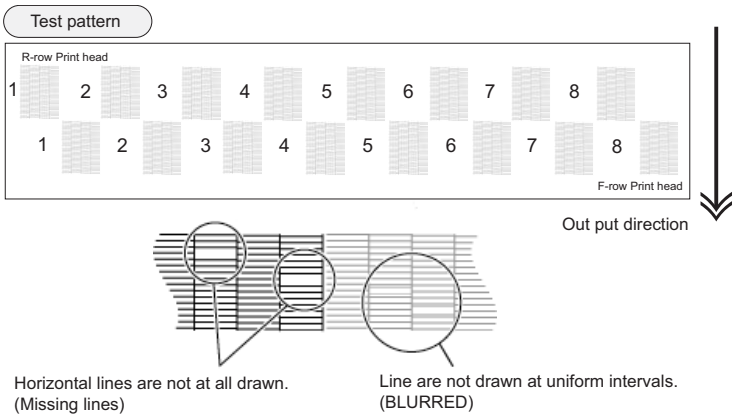
6. Press [ENTER] key after confirm the test pattern.

Feed the belt to the printing termination position.

```
<< LOCAL >>
width : 1620mm
```

Checking the test patterns

The device prints a test pattern for each of the ink head. Check the test pattern to determine whether head need cleaning.



Horizontal lines are not at all drawn.
(Missing lines)

Line are not drawn at uniform intervals.
(BLURRED)

Cleaning ink heads

If a test pattern plotted is failed, execute the cleaning function to clean the associated print head. After cleaning the ink head, execute a test pattern again. If the test pattern is failed too, re-clean the ink head. Continue executing the cleaning function till a normal test pattern is obtained.

Normal : Select this if any line is bent. Cleaning is carried out for a long period of time and a large amount of ink is consumed.

Soft : Select this if there is any missing line. Cleaning is carried out for a short period of time.

Strong : Select this if there are many missing portions.

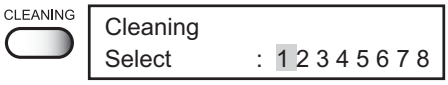
CAUTION

- If a normal test pattern cannot be obtained even after the cleaning function is executed many times, clean the ink station interior (Refer to Page 3.12).

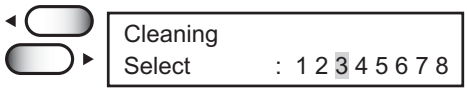
STEP

1. Make sure the device enters the LOCAL mode.

2. Press [CLEANING] key.

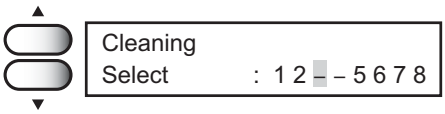


3. Select the ink head to be cleaned by pressing the JOG keys [◀] and [▶].

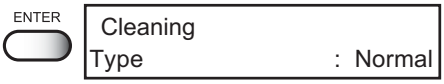


4. Display the ink head to be cleaned by pressing the JOG keys [▲] and [▼].

If cleaning is not to be performed, select "-".



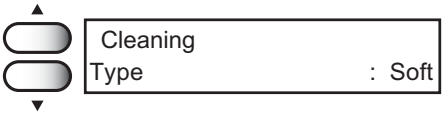
5. Press [ENTER] key.



6. Select the method of cleaning by pressing the JOG keys [▲] and [▼].

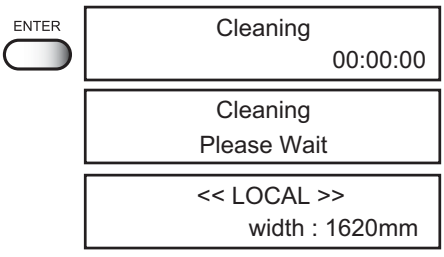
[Normal], [Soft], and [Strong]

Here, select [Soft]



7. Press [ENTER] key.

Cleaning starts. As the cleaning proceeds, asterisks (*) are displayed in succession on the LCD. At the end of the cleaning, the two lines of the LCD panel are filled with asterisks.



8. The device enters the LOCAL mode.

9. Perform the test drawings and then, make sure to the head condition.

After Setting The Fabric

Correcting amount of feed depending on fabric [Media Comp.]

The device prints an image on the fabric while feeding it forward little by little.
When the thickness of the fabric changes, the optimum feed rate changes accordingly. If this occurs, the device may not plot a clear image (e.g., unwanted stripes may appear on the image). To correct the fabric feed rate according to the fabric thickness, execute this function and make a printing test.

STEP

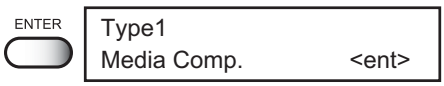
1. Make sure that the device is the LOCAL mode.

2. Press [FUNCTION] key.

3. Press [ENTER] key.

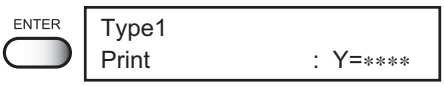
4. Select [Media Comp.] and press [ENTER] key.

The print standby screen appears.



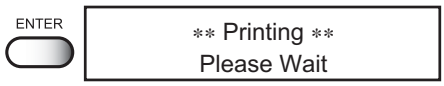
5. Press [ENTER] key.

Enter the printing width by pressing the JOG keys [▲] and [▼].



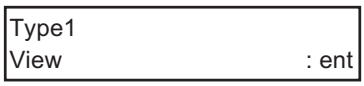
6. Press [ENTER] key.

Test printing for correction of the fabric feed rate starts.

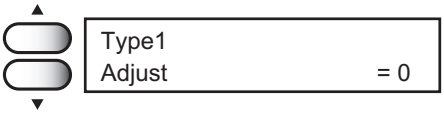


7. When plotting finishes, the screen for selecting view operation execution appears.

Pressing the [ENTER] key moves the media to a position where it is easy to see.
Pressing the [END] key does not execute view and moves to the next step.



8. Enter a correction value from the output pattern by pressing the JOG keys [▲] and [▼].



*If the printed pattern has a gap between lines
→ Ener the minus value.

*If lines of the printed pattern overlap
→ Enter the plus value.

Optimum pattern

Gap between lines

Overlap

9. Press [ENTER] key.

Type1
Print : Y=****

10. Press [END] key twice, and the menu returns to the LOCAL mode.

<< LOCAL >>
width : 1620mm

- Even after starting actual printing, the correction value can be changed during printing (Refer to Page 2.46).

Correcting the Medium Feed Rate During Printing [Feed Comp.]

Even for fabric of the same type, if the thread size or texture is slightly different, the proper value of the feeding amount changes.
In this case, correct the feeding amount of the fabric while checking the printing condition.

CAUTION

- To change the fabric type or print data, be sure to perform [Feed Comp.].
- This function can be operated even during data printing.
  Correction values can be entered while checking the fabric condition and data printing condition.

STEP

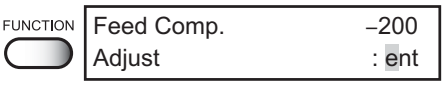
CAUTION

- During [Feed Comp.] printing, does not print correction patterns. Perform only correction value input operation while checking print data.

1. Make sure that the device is the REMOTE mode.

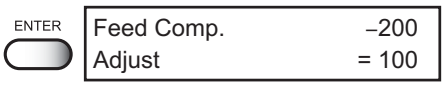
2. Press [FUNCTION] key to confirm the current setting value.

Press the [END] key when an appropriate value is set or to abort the operation.



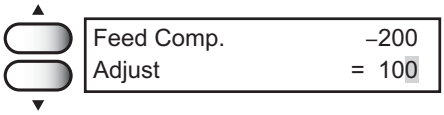
3. Press [ENTER] key.

Available to alter the fabric feed rate.



4. Press jog key [▲] or [▼] as needed to set the amount of correction.

Setting value is available from -500 to +500. Press [END] key to return to the REMOTE display. The altered value ceases to be in effect, and returns to the previous value.



- A new value takes effect in real time. The best effect can be obtained while checking the result.

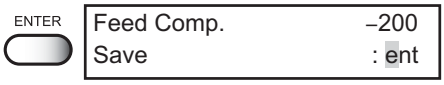
- Make judgment from the result obtained after 4 scans (for 4-pass printing) or 8 scans (for 8-pass printing).

- The unit of the correction value is the same as in “Media Comp.” in the LOCAL mode.
  (Refer to Page 2.44)

- Setting value is to be Reset as follow,
  *Perform the “Media Comp.” .
  *Perform the “SetupReset”

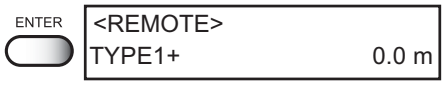
5. Press [ENTER] key.

Confirm the fabric feed rate before saving it.



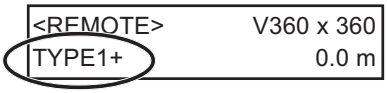
6. Press [ENTER] key to return to the REMOTE display.

The changed setting value is saved. The value is to be in effect performing till the turning off.
Press [END] key to return to the REMOTE display. The changed setting value is to be in effect performing till the turning off.



7. In case the setting value has changed before, the indicate gives [+] mark beside of the TYPE.

In the same way, the indicate gives [-] mark beside of the TYPE when the setting value has changed.



Printing an Image from Source Data

Setting the plotter operation

This section describes the basic operation of the device.
Printing conditions can be set on the device side. In this section, however, the method of printing an image from data that has been set on the computer side and transmitted to the device is explained.
For the method of setting printing conditions on the device side, see Chapter 4 “How to Use the Application Functions”.

STEP

1. Turning the power on.

2. Set the fabric in position. (Refer to Page 2.5)
Make sure that the device enters the LOCAL mode.

<< LOCAL >>
width : 1620mm

3. Press [REMOTE] key.
The device enters the REMOTE mode.

REMOTE

<REMOTE> V360 x 360
TYPE1 0.0 m

4. Receive data from the computer.
The printing conditions that have been set for the data are displayed.
For the method of data transmission, see the manual for the output attached to the software.

5. During the printing.
During the printing operation, the length of the fabric plotted on is displayed.

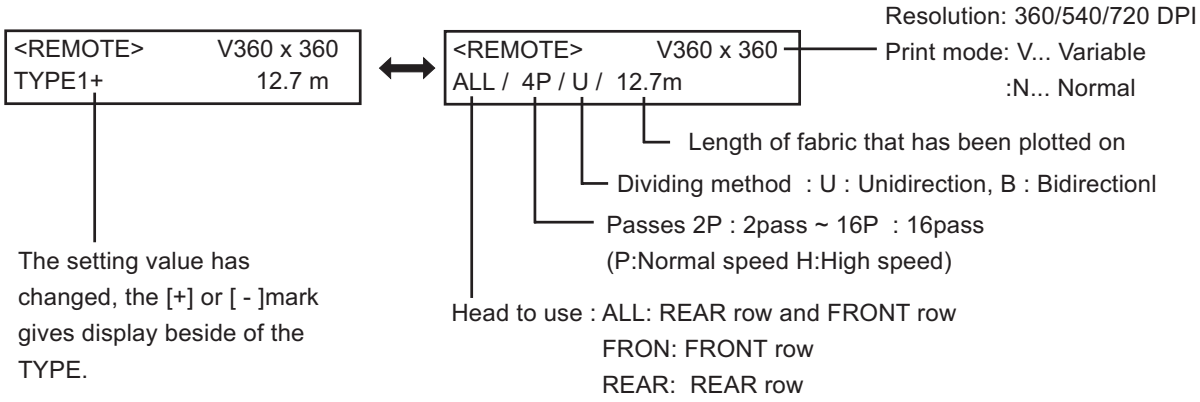
6. After the printing operation is completed, press [REMOTE] key to put the device back into the LOCAL mode.

REMOTE

<REMOTE> V360 x 360
ALL / 4P / U / 12.7m

<< LOCAL >>
width : 1620mm

***Information on drawing data.**



Interrupting the printing operation

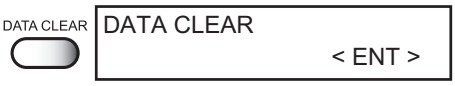
To interrupt the printing operation that has been started, stop the carriage and erase (the receive data) from the device.

STEP

1. **If data is being transmitted from the computer to the device, stop the data transmission.**

2. **Press [REMOTE] key to stop the printing operation.**

3. **Press [CLEAR] key.**
   The data that has been received is erased.



4. **Press [ENTER] key.**
   The device enters the LOCAL mode.

CAUTION

- When turn the device off still receiving the data or non printing data has remains, the absorption roller has been risen. Make sure to delete the data before turning off.

After completing the printing operation

The operation to be performed by the operator at the end of the printing operation (switching off the power) is explained below.

STEP

1. **Put the device back into the LOCAL mode.**

2. **Turn off the power to the device.**

Other Settings

Cleaning the belt during printing

Ink penetrates thin fabric of chiffon (georgette), voile, organdy, etc., resulting in adhesion on the belt. The ink adhered belt will not be dried when moved to the fixing position, then the clean stretched fabric may be stained. To avoid this, clean the belt.

There are the following two different belt cleaning methods:

• Belt cleaning by circulating water from the cleaning liquid tank:	⇨ Fabric with a little ink penetration
• Belt cleaning by circulating water through connection to service water:	⇨ Fabric with much ink penetration

CAUTION

- Supplying the circulating water from the cleaning liquid tank at factory setting. The connection to service water directly cannot be installed by the customer. In case changing needs to the connection to service water directly, contact your local distributor to call for a service.

- In case spots appear on the fabric during belt cleaning, the belt wiper unit which has reached the serves life replace with a new one, or clean the absorption roller. (Refer to Page 3.6, 3.7~ and Appendix “Supply Parts”)

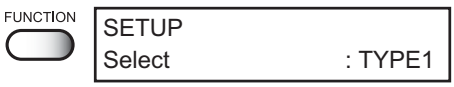
Belt cleaning by circulating water from the cleaning liquid tank

CAUTION

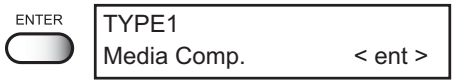
- When belt cleaning is performed by circulating cleaning water, cleaning water becomes dirty immediately. Be sure to change cleaning water on a daily basis. Dirt cleaning water or high content of ink, dust, or garbage may cause damage to the circulation pump or clogging in the filling port of the cleaning pipe, etc. resulting in degraded cleaning effect.
- Dispose of polluted cleaning water according to the local regulations in the same manner as waste ink.

1. **Make sure that the device is in the LOCAL mode.**

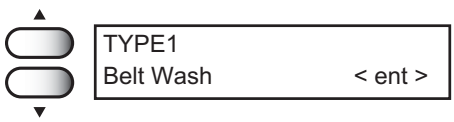
2. **Press [FUNCTION] key.**



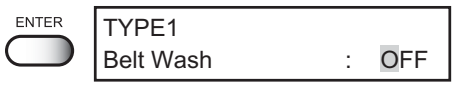
3. **Press [ENTER] key twice.**



4. **Select [Belt Wash] by pressing the JOG keys [▲] and [▼].**



5. **Press [ENTER] key.**



6. **Set a [Belt Wash] by pressing the JOG keys [▲] and [▼].**
   Here, select [ON].

TYPE1
Belt Wash : ON

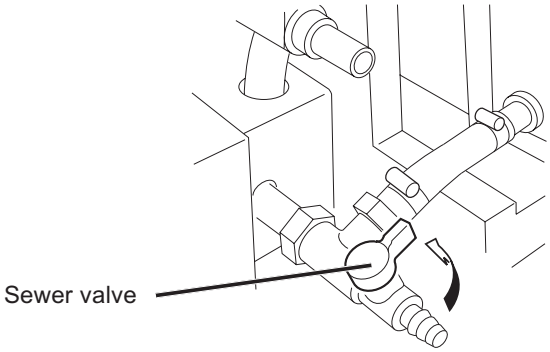
7. **Press [ENTER] key.**

TYPE1
Belt Wash < ent >

8. **Press [END] key twice, and the menu returns to the LOCAL mode.**

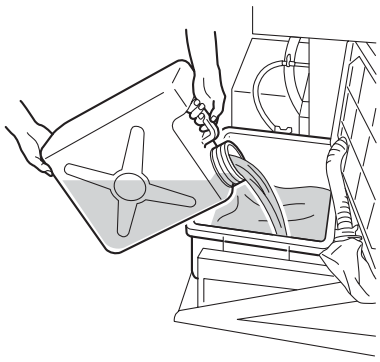
<< LOCAL >>
width : 1620mm

9. **Close the sewer valve of the tank.**



10. **Fill the cleaning liquid tank with about 20 liters of water.**

> **CAUTION**
> - When the belt cleaning is performed with water circulation, change cleaning water every day.

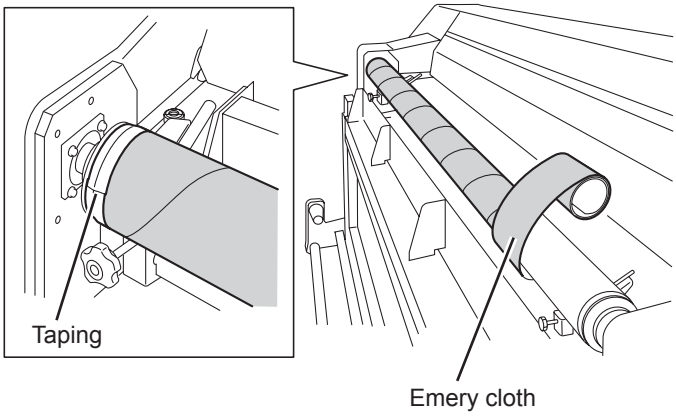


The fabric cannot be peeled off properly from the belt

Fabric with dense silk texture and organdy may cause slip on the surface of the peeling roller. If the printing rate is high and ink penetrates to the reverse side of the fabric, the reverse side may be stained.
In this case, wind the supplied emery cloth #150 in a spiral configuration around the surface of the peeling roller and then fix both edges with an adhesive tape before printing.

CAUTION

- If emery cloth #150 is wound around the peeling roller, some types of fabric may be caught, resulting in damage to the reverse side. Check the type of the fabric in advance.



To Set a New Ink Cartridge In the Ink Station

Set to repleuish ink, a new ink cartridge in the ink station.
In case without replacing the ink cartridge, the carriage stops during the printing operation when the ink runs out. When the message [Ink Near End] is displayed on the LCD, install a new ink cartridge without delay.

1. When the amount of ink completely runs out in ink cartridge.

The amount of the indicated ink cartridge has completely run out. Install a new ink cartridge into the ink station. This is displayed even during plotting, and ink can be replenished.

Cartridge InkEnd
– – – 4 – – – – – B – – – – – –

2. When the amount of ink becomes small during printing.

The amount of ink of the cartridge number indicated is running out. Load a new ink cartridge with the displayed new cartridge number into the ink station.

Ink Near End
– – – – – 6 – 8 – – – – – F – H

3. When the amount of ink completely runs out during printing.

The amount of indicated ink has completely run out. Install a new ink cartridge into the ink station. This is displayed even during printing. Without replacing, the printing may stopped.

Ink End
1 2 – – 5 6 – – A B – – E F – –

STEP

1. Either of the messages shown above is displayed on the LCD during printing.

The printing operation is not interrupted even when [Ink Near End] and [Cartridge End] is displayed. Proceed to Step 2 after printing operation has completed.
In case [Ink End] is displayed, the carriage stops during the printing operation and then, the device enters the LOCAL mode. Follow the step 2.

2. Install a new ink cartridge.

Pull out the ink cartridge of the indicated cartridge number and then set a new ink cartridge.
Close the ink station cover and then, printing is started.

Turning the power off

To turn the power off, check first whether there is data received and there remains data that has not yet been output. Also be sure that the head rests at the capping station.
When you turn the power OFF during printing, the head may not be stored in the capping station or the absorption roller can not be lower.
Leaving the head without capping for a prolonged period of time may cause clogged nozzle. And also leaving the absorption roller without lower for a prolonged period of time, it may cause stick to the belt and break the roller surface and belt surface.

CAUTION

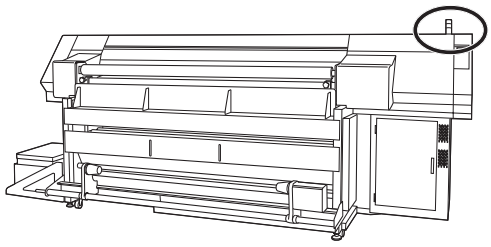
- When the jog mode is displayed on the LCD (Refer to Page 1.16, 2.40), change to [LOCAL] mode then, turn the device off.
- If the power is turned off while the plotter is engaged in printing, the head may fail to be stored in the capping station. If the head is left without capped for an extended period of time, the nozzle will be clogged with dust. If the power to the device is turned off without the head capped, re-turn on the power to the device.
- When turn the device off still receiving the data or non printing data has remains, the absorption roller has been risen. Make sure to delete the data before turning off.

Steps

1. Make sure not to receive data or remaining data in the system.

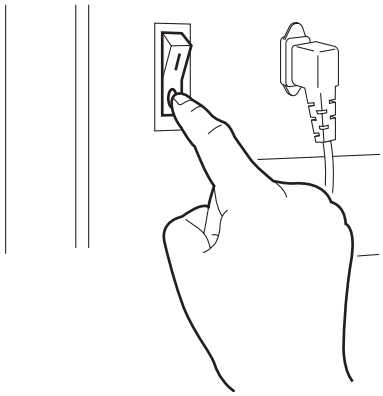
CAUTION

- When the jog mode is displayed on the LCD (Refer to Page 1.16,2.40), change to [LOCAL] mode.



2. Make sure that the indicator green light is off.

- In case the green light is on, perform Data clear. (Refer to Page 2.49)



3. Turn off the power to the computer, etc. that are connected to the device.

4. Turn off the power to the device.

5. Turn off the power to the heater.

6. Turn off the power to the blower.

CHAPTER 3
Daily Care

Be sure to conduct maintenance works for the device when necessary or periodically so as to use the device for a long time while keeping its printing accuracy.

Table of contents

Routine Maintenance

Be sure to conduct maintenance works for the device when necessary or periodically so as to use the device for a long time while keeping its printing accuracy.

When the device is left unused for a long period of time

CAUTION

- Turn off the power to the device. (Refer to Page 2.54)
- When performing belt cleaning with “Circulate”, change dirty water in the cleaning tank with new water, clean the inside of the pipe, and turn the power OFF.

Notes on cleaning

CAUTION

- Never disassemble the device. Disassembling the device can result in electric shock hazards and breakage of the device.
- Prevent moisture from entering inside the device. If the inner part of the device becomes wet, electric shock hazards and breakage of the device can result.
- Conduct maintenance works after turning off the power switch and detaching the power cable. If not, unexpected troubles can arise.
- Do not use benzine, thinner and chemical agents containing abrasives. Such materials can deteriorate or deform the surface of the cover.
- Do not apply lubricating oil or the like inside the device. Such materials can cause the plotter mechanism to fail.
- Frequent care and cleaning is required when using printing pigment (TPig) ink.

Maintenance for frame components

If the frame components of the device have stained, dampen a piece of soft cloth with water or neutral detergent diluted with water, squeeze it and wipe the frame components clean.

Cleaning inside of the cleaning water tank

Clean inside of the cleaning water tank regularly.

After a certain period of time using the cleaning water , it may fine away by natural evaporation, etc. The cleaning water volume may become less, the warning message shows on the LCD as below.

Wash Tank Check The Water

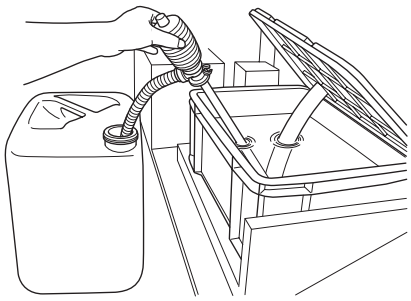
Replacing the water of the tank

It is necessary to change water every day when belt cleaning is being performed with water circulation. The dirty water is pumped up with attached hand pump and then pour clean water into the tank.

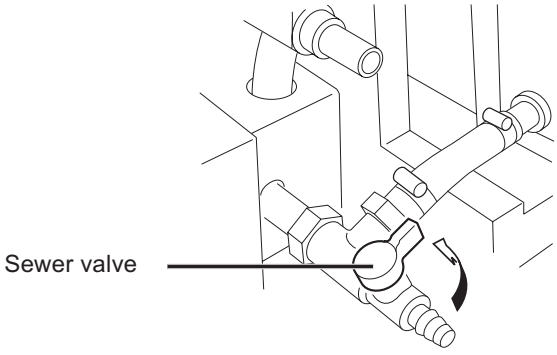
CAUTION

- When belt cleaning is being performed with water circulation, change cleaning water every day.
- Dispose of waste cleaning water according to the local regulations.

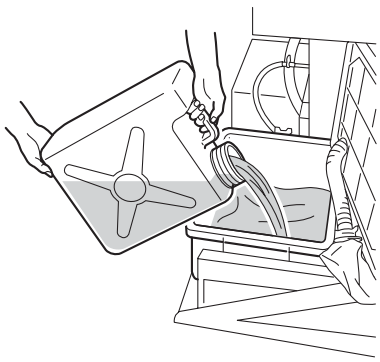
1. Pump up the dirty water from the tank to another polyethylene tank by hand pump.



2. Make sure to close the sewer valve.



3. Fill the tank with about 20 liters of water.



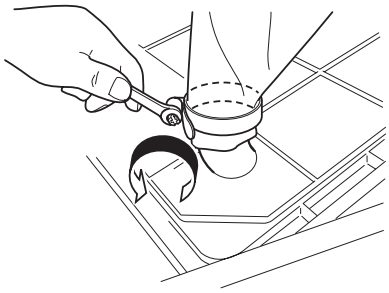
Replacing and cleaning the water cleaning filter

When the filter is clogged, make sure to replace or clean it. After a certain period of time, the message shows as below LCD.

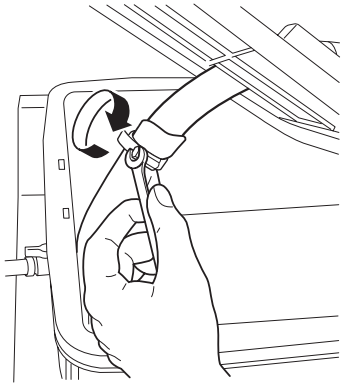
• Release the warning by executing Count Reset: Wash Filter on P.5-20.

Wash Tank Check The Filter

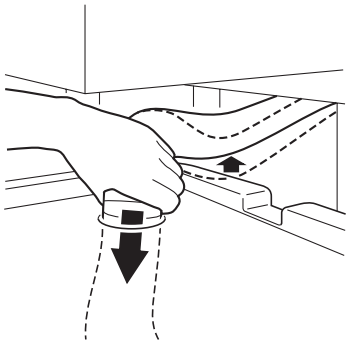
1. Open the tank and then loosen the setscrew.



2. Replace the filter with a new one and then, tighten the setscrew.



3. Insert the hose in the tank without slacks.



4. In case “Replace Filter” messages has given, the counter resetting should be needed for the cleaning filter.

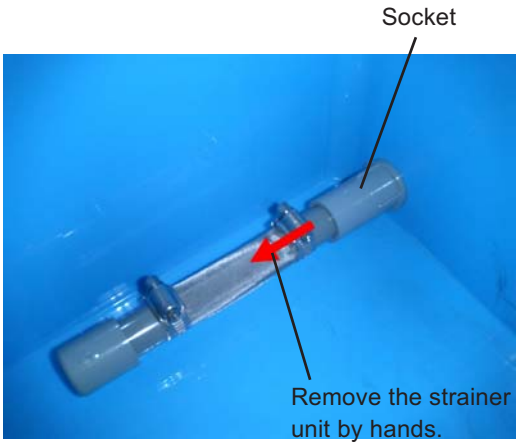
Refer to Page 5.20 “Resetting the counters for each type”

Cleaning the cleaning water strainer (mesh filter)

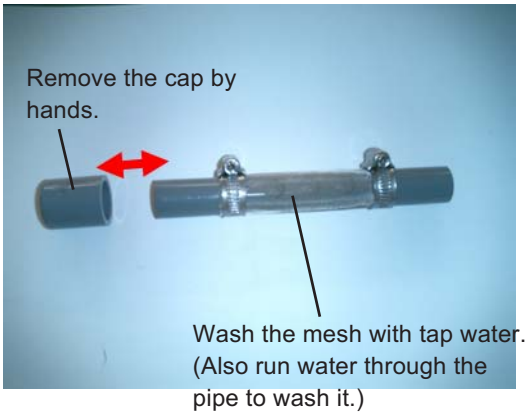
Clean the strainer (mesh filter) when replacing the cleaning water filter.

1. **Open the tank and if it contains cleaning water, remove it all.**

2. **Remove the strainer unit from the socket.**



3. **Remove the cap of the strainer unit.**



4. **Wash the mesh filter with tap water until the mesh is no longer clogged. (Also run water through the pipe to wash it.)**

   * It is not necessary to disassemble the whole mesh filter for cleaning.

5. **Attach the strainer unit to the tank in the reverse order of disassembly.**

In case spots appear on the fabric during printing

In case spots appear on the fabric during printing, it may cause remaining cleaning water. Replace the belt wiper unit with a new one or clean the water absorption roller.

CAUTION

- The irregular surface has occurred on the belt in case some following condition has appeared. Make sure to apply new adhesive immediately. (Refer to Page 5.4)
  - * The adhesive was applied unevenly.
  - * Dust, thread and tiny fleck are not able to remove from the belt even if Washing belt function has performed.

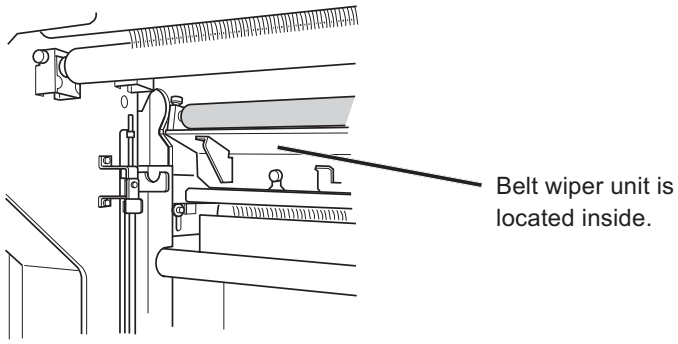
- Make sure to wear rubber gloves for replacement.

Replacement for the belt wiper unit

In case spots appear on the fabric during printing, it may cause remaining cleaning water.

CAUTION

- In case replacing the belt wiper unit, contact your distributor or Mimaki sales office to call for service.



Cleaning for the water absorption roller

After a certain period time with belt washing, the water absorption roller unable to absorb the water. Remove the water occasionally and clean the water absorption roller to keep good printing condition.

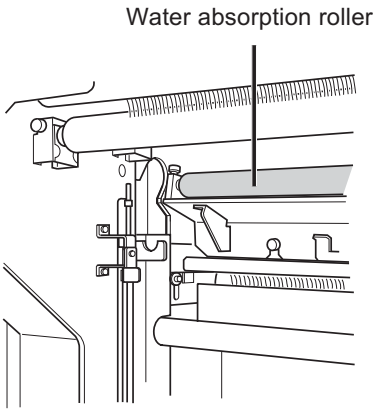
- In case the indication period of cleaning the water absorption roller has set before printing, you can print without worrying about maintenance period. (Refer to Page 4.12 [Setting the indication period for maintenance])
- Release the warning by executing Count Reset: Absorb Rlr. on P.5-20.

Water Absorption Check The Roller

1. Turn off the power to the device.

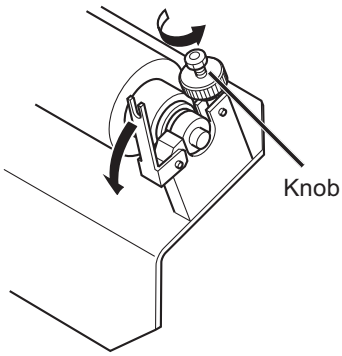
CAUTION

- Before cleaning the water absorption roller, put a fabric like waste cloth, etc. on the floor to avoid being stained with washing water.
- Make sure to wear rubber gloves for cleaning.



2. Loosen knobs at the both ends of the water absorption roller and then, open the shaft cover.

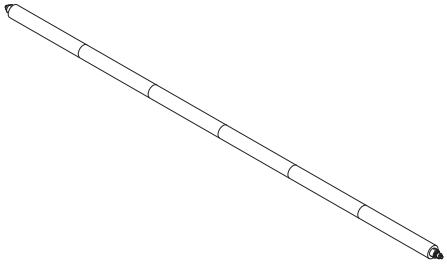
Water absorption roller is locates in the inside of the rear.



3. Remove the water absorption roller from the device.

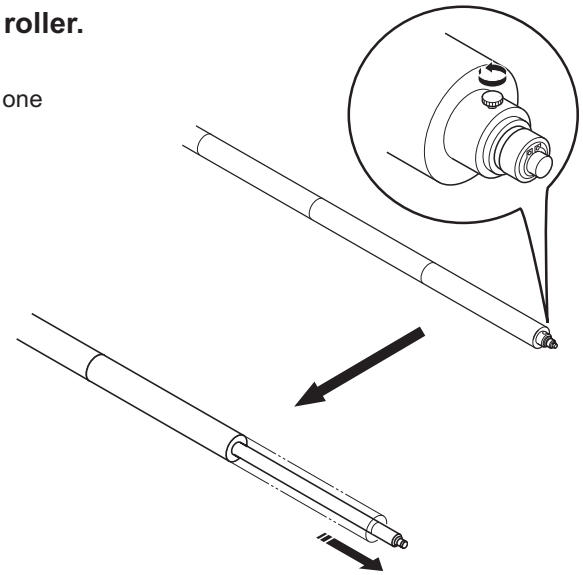
CAUTION

- Remove the roller with more than one person.
- In case the feeding tension bar is hooked to the stopper, remove it from the stopper.



4. Remove water from the water absorption roller.

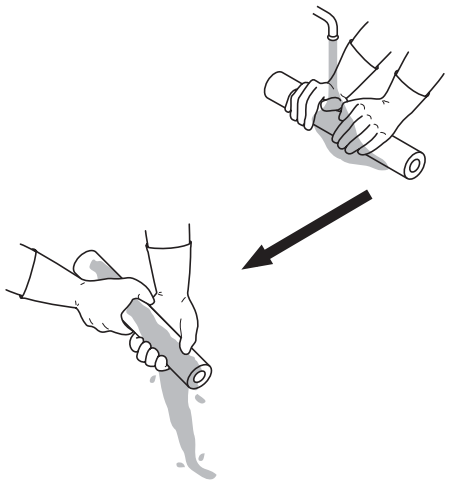
a. This roller is available to divide one by one to remove water.



b. Dip the roller into the running water to wash the dirt away from it.

CAUTION

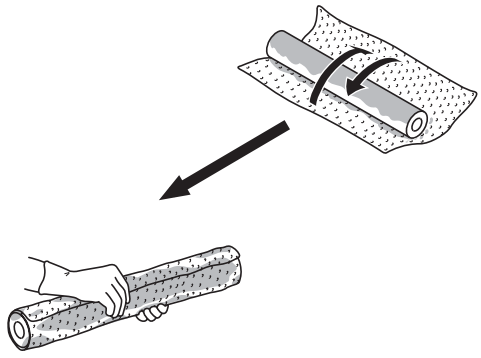
- Do not twist the roller to avoid break the sponge.



c. Sponge the water off from the roller with Bemcot after cleaning.

CAUTION

- Do not twist the roller to avoid break the sponge.



d. Dry the roller out well.

5. Fix the water absorption roller into the device.

6. In case “Check the roller” messages has given, the counter resetting should be needed for the water absorption roller.

Refer to Page 5.20 “Resetting the counters for each type”

When the waste ink tank becomes full

Ink used for cleaning of the head is collected in the waste ink tank.
If the waste ink tank becomes full, dispose of it promptly.

- For purchase of a spare waste ink tank, contact your distributor or Mimaki sales office to call for service.
- Prepare a polyethylene tank to which waste ink is to be transferred.

- If ink is dripping, wait until it stops dripping.
- Make sure to wear rubber gloves for replacement.

STEP

1. Pull out the hose from the waste ink tank.

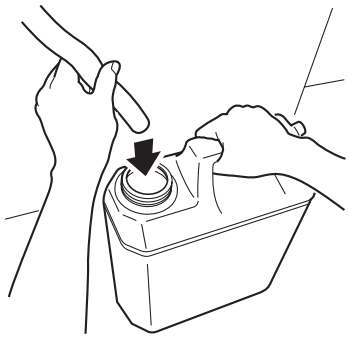
CAUTION

- When pulling out the waste ink tank, hold the opening of the waste ink tank with paper and then slowly pull it out to prevent waste ink from spattering.
- Before replacing ink, put paper on the floor to prevent it from being stained with ink.

2. Transfer waste ink to another polyethylene tank.

- Discard the waste ink according to the local regulations of the area this unit is used.

3. Set the emptied waste ink tank again.



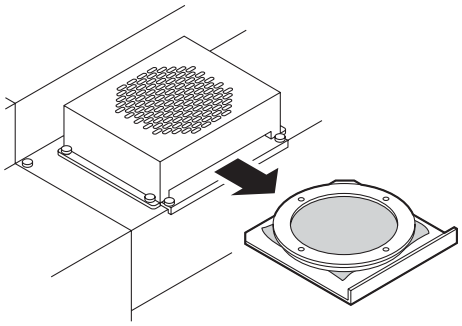
Replacing the Mist fan filter

This device is provided with two mist fan filter units on the rear top side.
In case the filter is clogged by ink or dust adhesion, replace the mist fan filter.
Wash the replaced filter, then reuse the filter.

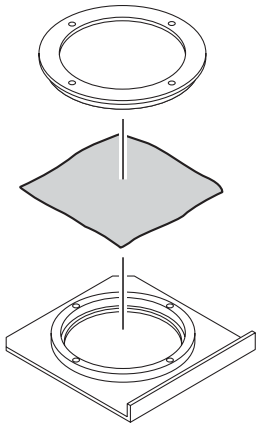
- The mist fan filter is sold separately.
  When changing the filter, contact your dealer or Mimaki sales office.

STEP

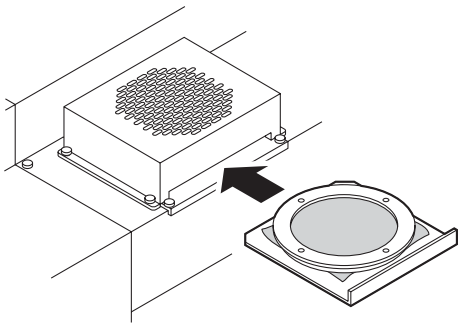
1. **Pull the mist fan filter holder out of the mist fan filter units which located at the both sides on the main unit.**



2. **Replace a mist fan filter with a new one.**
   Cover the all circumference with filter to fix it.



3. **Set the filter holder to the filter unit.**



Cleaning The Station Interior

This function two kind of moving the carriage for maintenance of the ink station.
Use the functions according to your applications.
The interior of the station needs maintenance when a blurred test pattern is not corrected even after the cleaning function (Page 2.43) is executed or when a consumable part is to be replaced.

CAUTION

- Do not move the carriage out of the capping station by hand. Use the appropriate operation key to move the carriage.

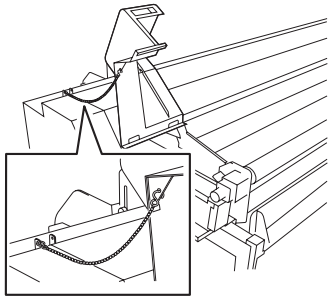
- Make sure to wear rubber gloves for cleaning.
- When using printing pigment (TPig) ink it is liable to dry easily causing nozzle clogging and bending. We recommend frequent cleaning.

Types of carriage cleaning		
Station	Carriage Out	Cleaning around the wiper, wiper shaft and ink caps.
	WiperExchange	Exchange the wiper. This device notifies the period of wiper exchange. Exchange the wiper when display this message.
	Flushing Box exchange	Discard the waste ink. Wash the flushing box and filter.
Nozzle Clean		Executed when cleaning and Ink Filling cannot fix nozzle clogging.
Drain Wash		Washes out dirt accumulated in the drain below the capping or solidified ink.
Storage Wash		When the device is to be kept unused in storage for a long time, carry out Nozzle Clean and Drain Wash first.
Carriage		• Check dirt of the head. • Clean the nozzle face. • Clean under the carriage using a brush.

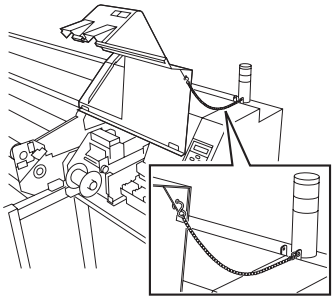
Open and close the station cover

CAUTION

- Make sure to chain the station cover when performing maintenance with the cover opened, or it may cause an unexpected hurt by the shutting cover.



Station cover L



Station cover R

Periodical cleaning of the wiper

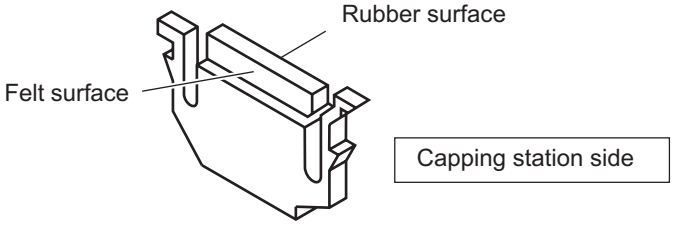
Cleaning the wiper

The wipers are provided for cleaning the heads. As the device is used to plot images, the wipers gradually become stained with ink and dust. Clean stained wipers.
The wiper is separately available from your local distributor or our office.

Notes on handling the wipers

CAUTION

- Don't touch the rubber part of the new wiper. It will result in clogged nozzle.
- Clean the two wipers at a time.
- The front side of each wiper is made of felt, and the rear side is made of rubber.
  Do not rub the felt side with a swab. Instead, press the swab against the felt side surface to remove dirt. Rubbing the felt side surface will make it fluffy and result in clogged nozzle. Wipe ink off the rubber side surface with a swab.
- When executing this function, the carriage will come out of the capping station. If the carriage is left in the aforementioned state for an extended period of time, the nozzles can be clogged. Once the replacement of the wiper and the cleaning of the caps have been completed, immediately press [ENTER] key to allow the carriage to return to the capping station.



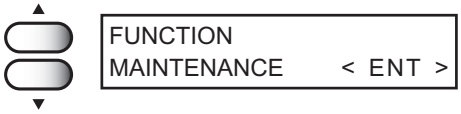
- Prepare two sets of wipers. When printing for one day is completed, exchange the wiper on a daily basis. This stabilizes the printing quality and ensures a long operating life of wipers.
- When you remove the wiper, soak it in water and then press it lightly to extract soaked ink. After cleaning, leave the wiper for air-drying. It can be used on the following day.

STEP

1. Confirm the device the LOCAL mode.

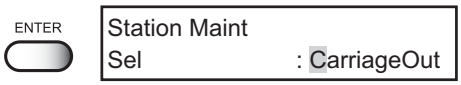
2. Press [FUNCTION] key.

3. Press [▲] and [▼] key until the display gives the indication [MAINTENANCE].



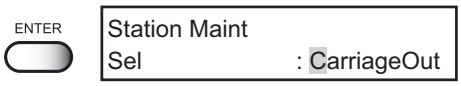
4. Press [ENTER] key.

5. Press [ENTER] key to select [Station].



6. Press [ENTER] key to select [CarriageOut].

The carriage come out to the belt.



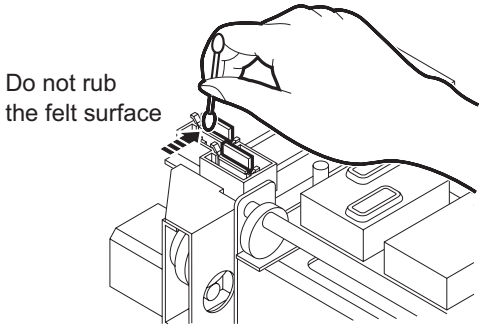
7. Open the station cover R.

CAUTION

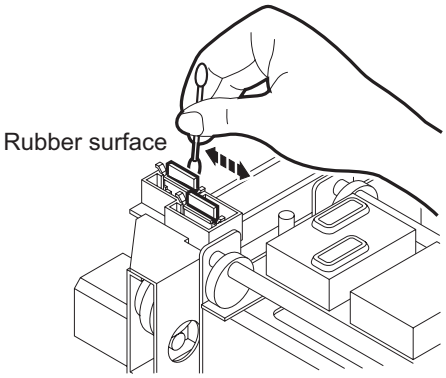
- Chain the station cover.
  (Refer to Page 3.12)

8. Clean up the wiper as described below.

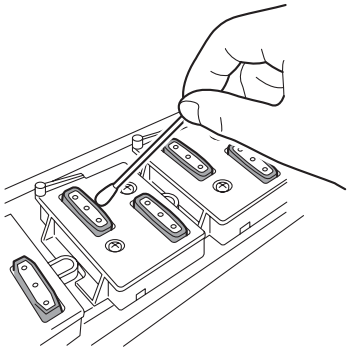
Felt surface :



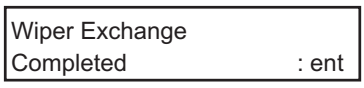
Rubber surface :

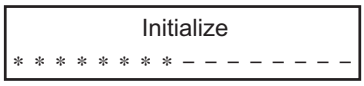


9. Remove stains with a swab from the rubber mounted around the cap.



10. Press [ENTER] key after taking the chain off from the cover and closing the station cover R.





11. The device enters the fabric width detection.

When the message [Clean WiperShaft] is displayed [CarriageOut]

[Clean WiperShaft] message is displayed after several numbers of wiping.
Please clean the wiper shaft at once if this message is displayed.

Wiper
Clean WiperShaft

Extremely dirty wiper shaft may cause wiper malfunction and resulting an error display.
The wiper is functioning only during the head cleaning, and the number of wiping vary according to the cleaning type.

CAUTION
- When replacing the wiper, also clean the wiper shaft.

STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

FUNCTION
MAINTENANCE < ENT >

2. Press [ENTER] key.

ENTER

MAINTENANCE
Station < ent >

3. Press [ENTER] key to select [Station].

ENTER

Station Maint
Sel : CarriageOut

4. Press [ENTER] key to select [CarriageOut].

The carriage come out to the belt.

ENTER

Station Maint
Sel : CarriageOut

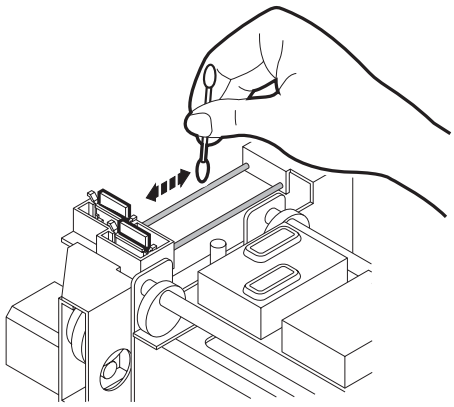
5. Open the station cover R.

CAUTION
- Chain the station cover. (Refer to Page 3.12)

6. Clean the wiper guide shaft using a swab or cloth.

(If dirt is hard to remove, use a swab of cloth dampened with water.)

CAUTION
- Extremely dirty wiper guide shaft may cause wiper malfunction, resulting an error display.



7. **Take the chain off from the cover and close the station cover R, then press [ENTER] key.**

Station Maint	
Completed	: ent

Initialize
* * * * * * * * – – – – – – – –

8. **The device enters the fabric width detection.**

MEDIA SET	
ROLL<	>LEAF

When the message [Replace Wiper] is displayed [WiperExchng]

The wipers are consumable parts. As the wiper continues cleaning the head, it gets stained with ink and dust. When the message [Replace Wiper] is displayed, replace the wiper with a new one without delay. When replacing the wiper, remove ink adhered at the bottom surface of the slider.

- The wiper is separately available from your local distributor or our office.

The message [Replace Wiper]

The device counts the number of times the wipers are cleaned and tells when to replace them. When the message [Replace Wiper] is displayed on the LCD, replace the wipers with new ones.

CAUTION

- The message [Replace Wiper] is displayed while the device is in operation or when the device power is switched on.
  When the message is displayed, replace the wipers with new ones.

Wiper
Replace Wiper

- Do not select [Replace Wiper] unless the wiper is to be really changed.
  The number of wiper operations that is counted in the Device will be reset.

STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

FUNCTION	
MAINTENANCE	< ENT >

2. Press [ENTER] key.

ENTER

MAINTENANCE	
Station	< ent >

3. Press [ENTER] key to select [Station].

ENTER

Station Maint	
Sel	: CarriageOut

4. Press [▲] and [▼] key until the display gives the indication [WiperExchng].

Station Maint	
Sel	: WiperExchng

5. Press [ENTER] key.

The carriage come out on the belt.

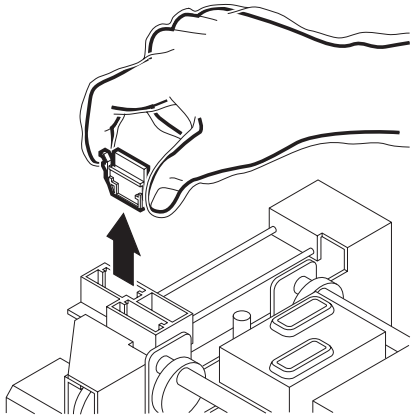
ENTER

6. Open the station cover R, then changing the wiper.

CAUTION
- Chain the station cover. (Refer to Page 3.12)

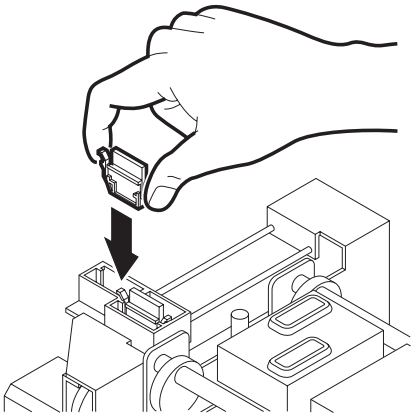
7. Holding the projections at both ends, draw out the wiper.

Use the gloves that are supplied with the cleaning wiper kit to protect your hands from stains.



8. Holding the projections at both ends, insert a new wiper into place.

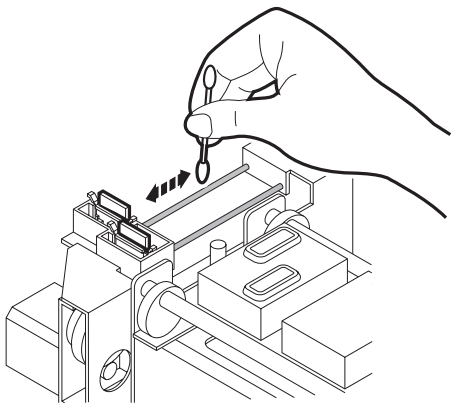
CAUTION
- Don't touch the rubber parts of a new wiper. It can cause the nozzle clogged.
- Insert the wiper so that its felt side surface is placed on the left as viewed from your position.



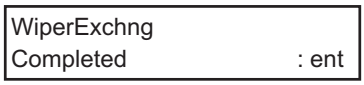
9. Clean the wiper guide shaft using a swab or cloth.

(If dirt is hard to remove, use a swab of cloth dampened with water.)

CAUTION
- Extremely dirty wiper guide shaft may cause operation failure of the wiper, resulting in error display.



10. Take the chain off from the cover and close the station cover R, then press [ENTER] key.



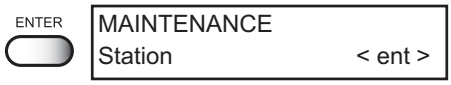
11. The device enters the fabric width detection.

When the nozzle cannot be unclogged [Nozzle Clean]

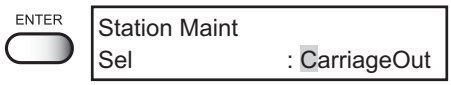
Procedure

1. Put the device into the MAINTENANCE mode.

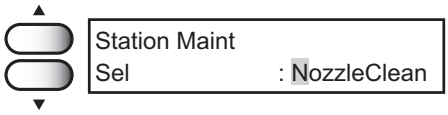
2. Press the [ENTER] key.



3. Select [Station], and press the [ENTER] key.

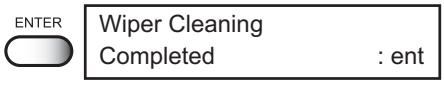


4. Press the JOG key [▲] or [▼] to select [Nozzle Clean].

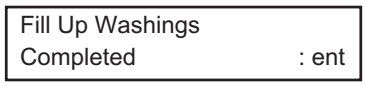


5. Press the [ENTER] key to start the operation.

The Y bar moves to the highest position and the table moves to the back.
The wiper moves to the front, and the carriage moves to the maintenance position.



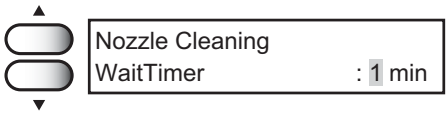
6. Fill the cap with cleaning liquid using a dropper.



7. Press the [ENTER] key and set the waiting time.

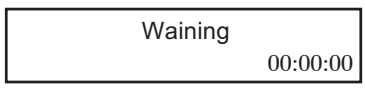
8. Press the JOG key [▲] or [▼] to set the exposure time. (1 - 99 minutes)

Set the time to expose the head to the cleaning liquid during capping.



9. Press the [ENTER] key to perform initialization.

Initialization is performed and the head is capped.
The progress of exposure is displayed.



10. Pressing the [END] key finishes the operation.

When the time set elapses, exposure finishes.

11. Perform the cleaning operation.

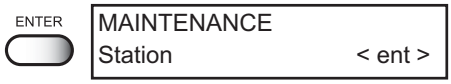
The progress of cleaning is displayed.
The device enters the LOCAL mode.

Washing the drain below the capping [Drain Wash]

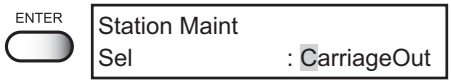
Procedure

1. **Put the device into the MAINTENANCE mode.**

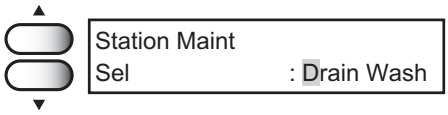
2. **Press the [ENTER] key.**



3. **Select [Station], and press the [ENTER] key.**



4. **Press the JOG key [▲] or [▼] to select [Drain Wash].**



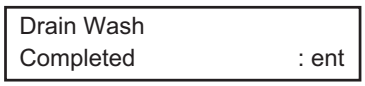
5. **Press the [ENTER] key to start the operation.**

   The Y bar moves to the highest position and the table moves to the back.
   The wiper moves to the front, and the carriage moves to the maintenance position.
   Suction starts.
   Suction for 10 seconds and a rest for 10 seconds continues successively.

6. **Fill the cap with cleaning liquid using a dropper.**

   Repeat until the ink drain is clean.

7. **Pressing the [END] key finishes the operation and performs suction for 30 seconds.**



8. **Initialize the device.**

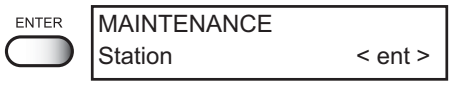
   The device enters the LOCAL mode.

When the device will not be used for a long time [Storage Wash]

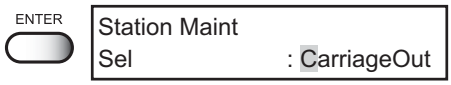
Procedure

1. Put the device into the MAINTENANCE mode.

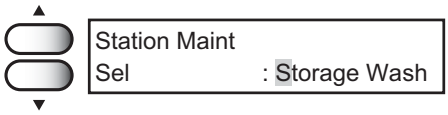
2. Press the [ENTER] key.



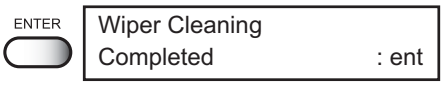
3. Select [Station], and press the [ENTER] key.



4. Press the JOG key [▲] or [▼] to select [Storage Wash].

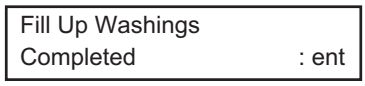


5. Press the [ENTER] key to start the operation.



Nozzle cleaning starts.
The Y bar moves to the highest position and the table moves to the back.
The wiper moves to the front, and the carriage moves to the maintenance position.

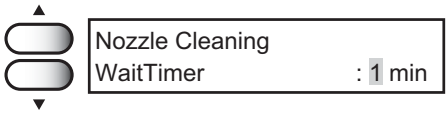
6. Fill the cap with cleaning liquid using a dropper.



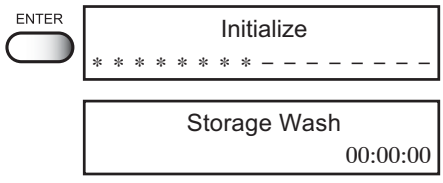
7. Press the [ENTER] key and set the exposure time.

Set the time to expose the head to the cleaning liquid during capping.

8. Press the JOG key [▲] or [▼] to set the exposure time. (1 - 99 minutes)



9. Press the [ENTER] key to perform initialization.

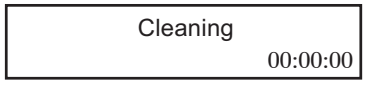


Initialization is performed and the head is capped.
The progress of exposure is displayed.

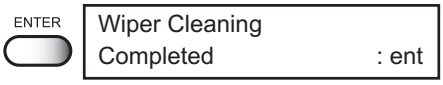
10. Pressing the [END] key finishes the operation.

When the time set elapses, exposure finishes.

11. Perform the cleaning operation.



The progress of cleaning is displayed.
When cleaning finishes, ink drain washing starts.
The Y bar moves to the highest position and the wiper moves to the front.
The carriage moves to the maintenance position.
Suction starts.
Suction for 10 seconds and a rest for 10 seconds continues successively.



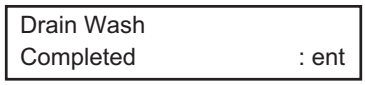
12. Remove the wiper and clean it.

14. Fill the cap with cleaning liquid using a dropper.

Repeat until the ink drain is clean.

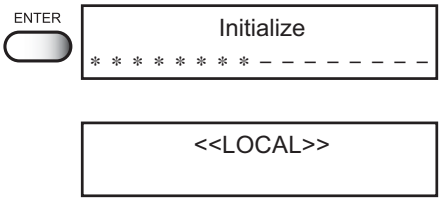
15. Pressing the [END] key finishes the operation and performs

suction for 30 seconds.



16. Initialize the device.

The device enters the LOCAL mode.



Cleaning the bottom surface of the carriage

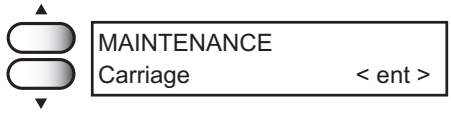
Check the head condition. Clean the bottom surface of the carriage using the supplied swab.

STEP

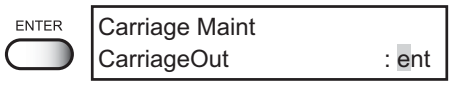
1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

2. Press [ENTER] key.

3. Press [▲] and [▼] key until the display gives the indication [Carriage].



4. Press [ENTER] key.



5. Press [ENTER] key.

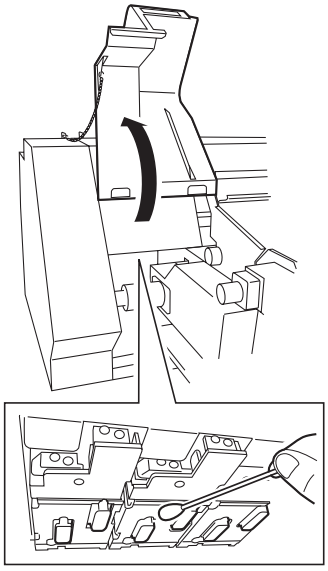
The carriage will move toward left of the device.

6. Open the station cover L.

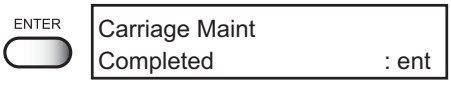
> CAUTION
> • Chain the station cover. (Refer to Page 3.12)

7. Using the supplied swab with water, remove ink adhered at the bottom surface of the carriage around the head.

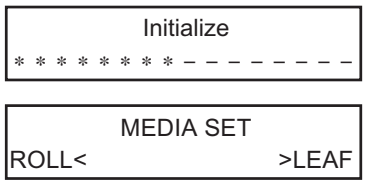
> CAUTION
> • Never rub the surface of the nozzle, as this may cause discharge failure.



8. Take the chain off from the cover and close the station cover L, then press [ENTER] key.



9. The device enters the fabric width detection.



Cleaning the flushing box and blower filter

When the message [Flushing Box] is displayed, clean the flushing box and blower filter immediately or replace it with a new one. This message appears on the regular basis. Make sure to clean the blower filter along with clearing flushing box.

Flushing Box Empty The Ink

- The flushing box is designated as supply parts. In case it is necessary, call your local distributor or Mimaki sales office.

CAUTION

- Do not select [Flushing Box] unless the flushing box is to be really changed. The number of operations that is counted in the Device will be reset.

Cleaning the flushing box

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

FUNCTION MAINTENANCE < ENT >

2. Press [ENTER] key.

ENTER

MAINTENANCE Station < ent >

3. Press [ENTER] key to select [Station].

ENTER

Station Maint Sel : CarriageOut

4. Press [▲] and [▼] key until the display gives the indication [Flushing Box].

Station Maint Sel : FlushingBox

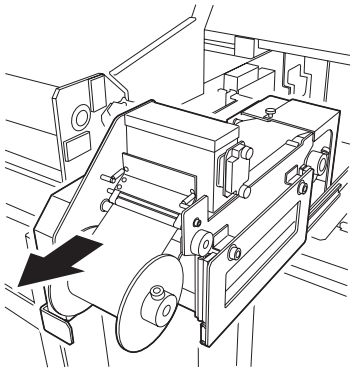
5. Press [ENTER] key.

ENTER

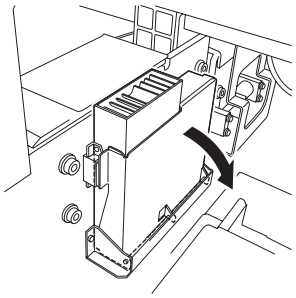
6. Open the station cover R, remove the hand screw and then pull out the ANR unit.

CAUTION

- Chain the station cover. (Refer to Page 3.12)



7. Open the flushing box cover, remove the flushing box.

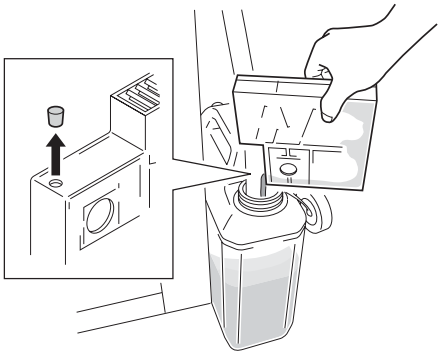


CAUTION

- The flushing box contains ink. Remove it being careful not to put the opening downward.

8. Dump the waste ink in the flushing box into the waste ink tank.

Get the plug out of the flushing box and then, discard the waste ink tank.



- Wash the flushing box with water after discarding the waste ink. In case using the box after washing shortly, dry the box out well.

CAUTION

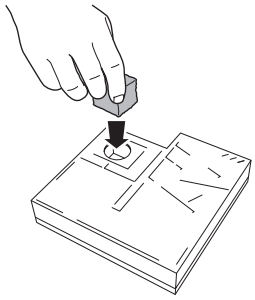
- If the device is not used more than one day, discard waste ink in the flushing box and wash the flushing box and filter.

CAUTION

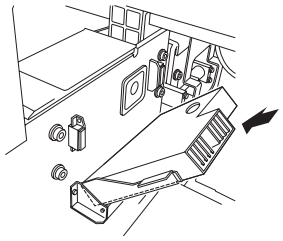
- When the Ink blot of sponge is heavy, the flushing box get weaker of absorption. In case when you find the waste ink on the belt retainer, make sure to confirm the flushing box and then wash the sponge.

When the Ink blot of sponge is heavy

1. Pull the sponge out from the flushing box and then wash it with water.
2. Dry the washed filter out.
3. Set the supplied filter.
4. Keep the dried filter for the next changing.



9. Set flushing box.



10. Put the ANR unit back, take the chain off from the cover and close the station cover R, then press [ENTER] key.

ENTER

Flashing Box
Completed :ent

Initialize
* * * * * * * * – – – – – – – –

11. The device enters the fabric width.

MEDIA SET
ROLL< >LEAF

Cleaning the blower filter

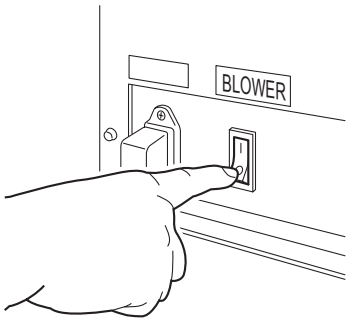
This device is provided with a blower unit. Check dirt or ink adhesion by clogging of the filter, make sure to clean the blower filter or replace it with a new one after cleaning the flushing box.

- In case using the box after washing shortly, dry the box out well.
- The filter is an option. When changing the filter, contact your dealer or Mimaki sales office.

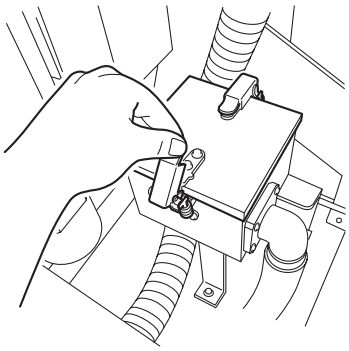
- Make sure to wear rubber gloves for replacement.

STEP

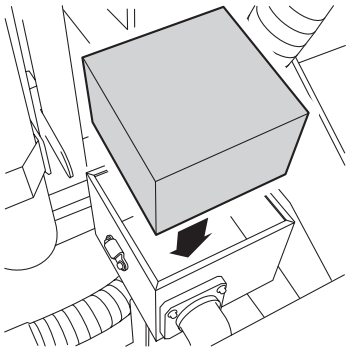
1. Turn OFF the power switch of the blower unit.



2. Remove the snap lock on both sides of the cover.



3. Replace the filter with a new one.



4. Close the cover.

- Make sure to put the filter back before using the device. It may cause the main unit to malfunction.

Cleaning The Y Main Guide [Main Guide]

The cleaning message of the Y main guide appears when the head slider has performed scanning a certain number of times. If the main guide is extremely dirty, malfunction may occur during printing, a stop of printing. If a message appears, clean the Y main guide immediately.

Y Main Guide
Clean Main Guide

- Use the supplied special oil to clean the guide. If the oil runs out, get it from your local distributor.
- Clean the Y main guide once a week or every other week.

CAUTION

- Do not select [Main Guide] unless the wiper is to be really changed. The number of wiper operations that is counted in the Device will be reset.

STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

FUNCTION
MAINTENANCE < ENT >

2. Press [ENTER] key.

ENTER

MAINTENANCE
Station < ent >

3. Press [▲] and [▼] key until the display gives the indication [Station].

MAINTENANCE
Main Guide < ent >

4. Press [ENTER] key.

ENTER

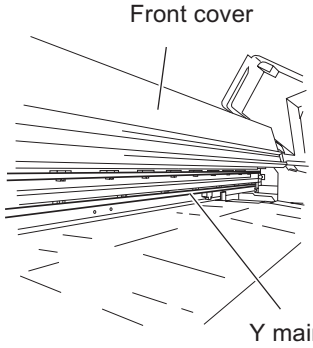
Main Guide Maint
CarriageOut : ent

5. Press [ENTER] key.

ENTER

The carriage will come out of the station.

6. Open the front cover, station cover R and L then cleaning the Y main guide.



7. Close covers, then press [ENTER] key.

ENTER

The device enters the fabric width detection.

Main Guide Maint
Completed : ent

Initialize
* * * * * * * * – – – – – – – –

MEDIA SET
ROLL< >LEAF

Replacing ANRS Media [ANR Unit]

Attachment of the ANRS media enables automatic nozzle recovery. If the media runs out, replace it with a new media.

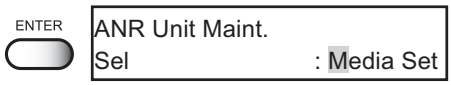
STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

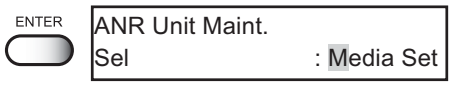
2. Press [ENTER] key.

3. Press [▲] and [▼] key until the display gives the indication [ANR Unit].

4. Press [ENTER] key.



5. Select [Media Set], then press [ENTER] key.

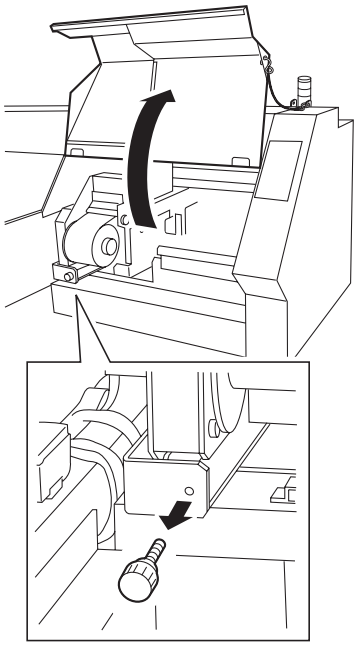


6. Replace the media.

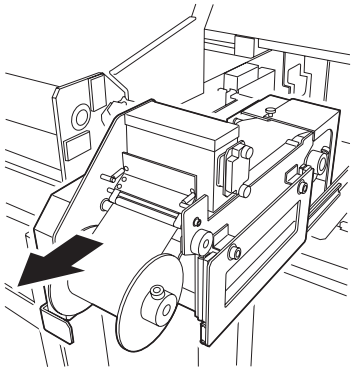
a. Open the right station cover and then remove the knob screw of the ANR unit.

CAUTION

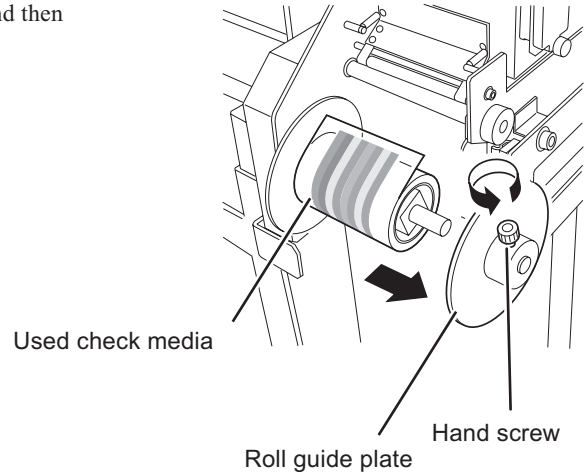
- Chain the station cover. (Refer to Page 3.12)
- If using the non-Mimaki genuine ANRS check media, we can not guarantee the normal operation. Be sure to use the genuine ANRS check media.



b. Pull out the ANR unit.

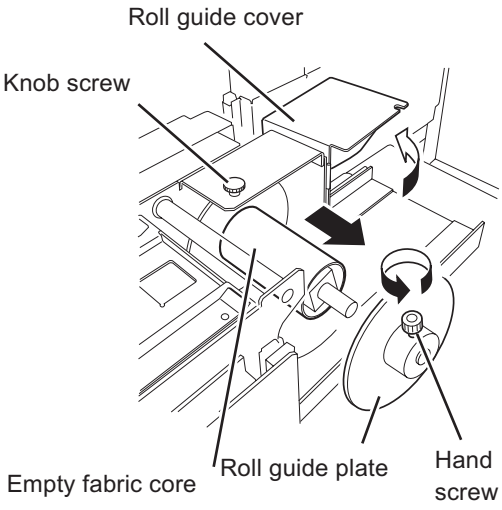


c. Loosen the hand screw, remove the Roll guide plate and then remove used media.



d. Loosen the knob screw and then remove the rear roll guide cover.

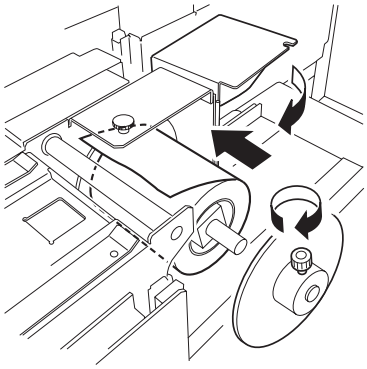
e. Loosen the hand screw, remove the Roll guide plate and then remove empty fabric core.



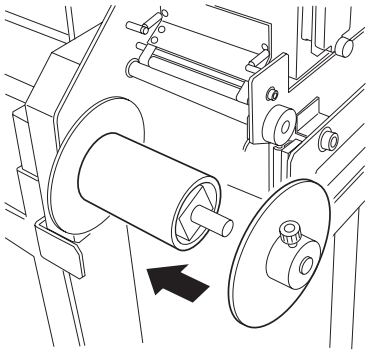
f. Set a new ANRS check media.

- Outside is the printing side of the ANRS checkmedia.

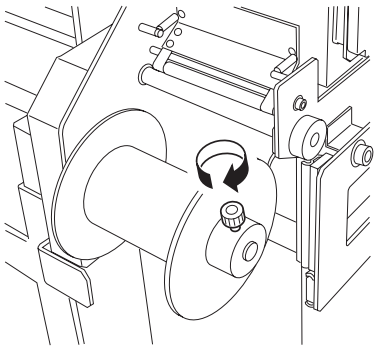
g. Attach the roll guide plate again and then fix the knob screw. Close the roll guide cover, then fix the knob screw.



h. Attach the suppled empty fabric core for the front as well.



i. Attach the roll guide plate again and then fix the knob screw.

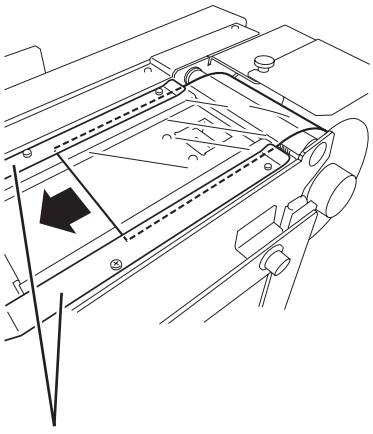


j. Pull out the leading edge of the media, lead it through the media guide, pinch roller, and drive roller, then fix it to the empty fabric core using an adhesive tape.

Set the media so that flatly without slack or wrinkle on the print side of the media.

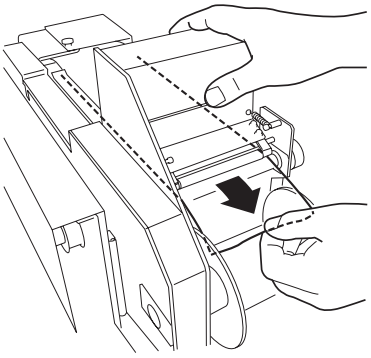
CAUTION

1. If there is a slack or wrinkle, set it again. It may cause check media jam and broken the head.
2. Feed the check media by rotating the drive roller in anti clockwise direction in case surface of media is not flat.

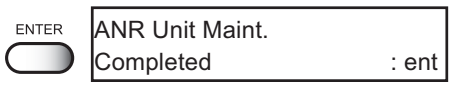


Media guide

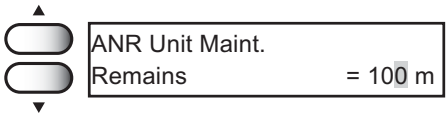
k. Replace the ANR unit, attach the knob screw, and close the station cover after taking the chain off.



7. Press [ENTER] key.



8. Press [▲] and [▼] key to enter the length of the attached media.



- ANRS check media length is 100 meter (SPC-0383).

9. Press [ENTER] key and the device enters the fabric width detection.

Cleaning The Belt [Belt Clean]

This function cleans and dries the belt.

CAUTION

- Be sure to remove the fabric from the belt before cleaning the belt.
- When the cleaning liquid tank is used, check whether the tank is filled with water.

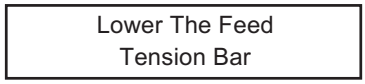
STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 3.13)

2. Press [ENTER] key.

3. Press [▲] and [▼] key until the display gives the indication [Belt Clean].

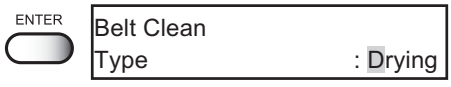
4. Displayed if there is fabric, or if the Feed Tension Bar is locked.



5. Remove fabric in case its on the belt.

6. Make sure to be the tension bar at the lowest position and press the [ENTER] key.

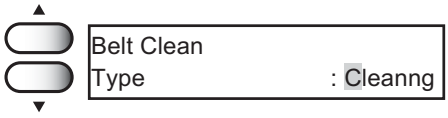
7. Make sure that there is no fabric on the belt and then press the [ENTER] key



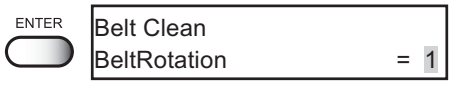
8. Press [▲] and [▼] key, and select the cleaning type.

[Cleaning] or [Drying].

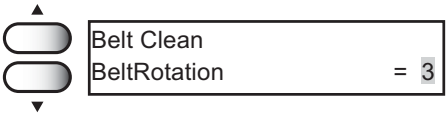
Select [Cleaning] here.



9. Press [ENTER] key.



10. Enter the number of the belt rotation by pressing jog keys [▲] and [▼].



11. Press [ENTER] key.

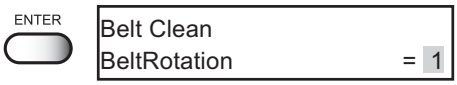
Cleaning of the belt starts.

The remaining number of rotations is displayed.

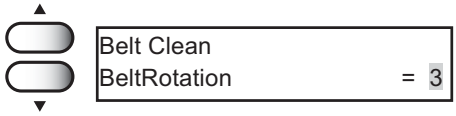
12. After cleaning is completed, dry the belt.

After cleaning, “Drying” is displayed on the LCD.

13. Press [ENTER] key.



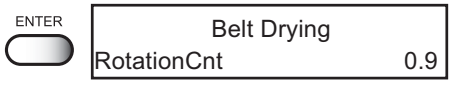
14. Enter the number of the belt rotation by pressing jog keys [▲] and [▼].



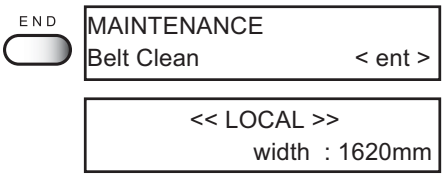
15. Press [ENTER] key.

Drying of the belt starts.

The remaining number of rotations is displayed.



16. Press [END] key twice and the device enters the LOCAL mode.



CHAPTER 4
How to Use the Application Functions

After you have mastered the operations described in Chapter 2 “How to Use the Basic Functions,” you should learn how to use the application functions whereby you can set printing conditions on the device side and put the device into operation.
By using the application functions, you can set printing conditions appropriate to data that is provided for the printing operation.

Table of contents

Aplication Functions

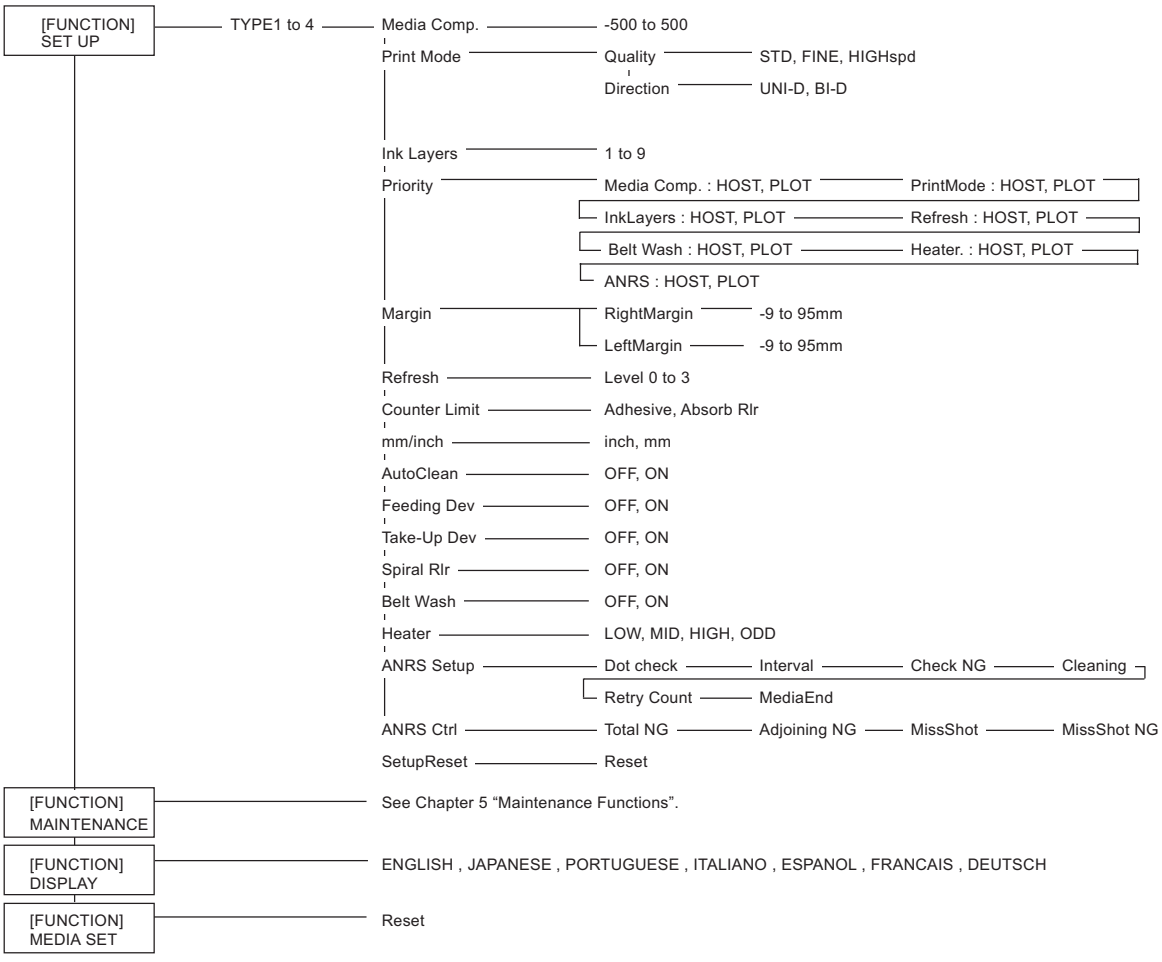
The application functions make it possible to modify the printing conditions that have been set for source data received from the computer. The [FUNCTION] key is used to set up the application functions.

FUNCTION MENU

Of the menus that are provided for setting printing conditions for the device, the menu for setting up the device functions is called the function menu. In order to set printing conditions properly, it is necessary to understand the structure and operation of the function menu.
The function menu consists of four major items - [Set-up], [Maintenance], [Display] and [Media set]. In this chapter, [Set-up] and [Display] of the function menu are explained. (For “Maintenance” of the function menu, see Chapter 5 “Maintenance Functions.”)

[SET UP] • [DISPLAY]

The table, below, shows the tree structure of the function menu.
In order to use the application functions of the device, it is necessary to understand the proper sequence of key operations.
In Set-up of the function menu, allocate printing methods to be set to Types 1 to 4 before detailed setting of the individual printing conditions so that you can use the printing conditions registered by type.



Before Setting Printing Conditions In The Function Menu

The basic operation of the function menu for setting individual printing conditions is explained below. Set the individual printing conditions in the function menu after performing the following three operations.

1. Check that the menu mode is the LOCAL mode.
2. Check that the language in which to display characters on the LCD has been selected.
3. Select a Type to register the sequence of set printing conditions.

Before setting the printing conditions in the function menu, confirm the basic operations and then set the individual printing conditions described on the pages that follow.

Checking the menu mode

Check the menu mode before setting the printing conditions.
The menu mode must be either the LOCAL mode or the FUNCTION mode.
Check also that the mode displayed on the LCD is either <<LOCAL>> or <<FUNCTION>>.
(Refer to Page 1.16)

Setting the display language

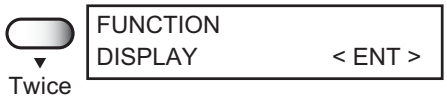
Set the language in which to display characters on the LCD. “English” has been set as the initial display language of the device. Try to change the display language to “Japanese” here.

STEP

1. Make sure that the device enters the LOCAL mode.

2. Press [FUNCTION] key.

3. Press JOG key [▼] twice.



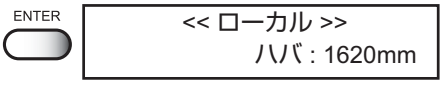
4. Press [ENTER] key.

5. Select the language to be used for the indication on the display using the [▲] and [▼] key.

There are seven different languages from which you can select one as the display language.
[[ENGLISH], [JAPANESE], [PORTUGUESE], [ITALIANO], [ESPANOL], [FRANCAIS], [DEUTSCH]

6. After you have selected the desired display language, press [ENTER] key.

The device enters the LOCAL mode.



Registering Two or More Printing Conditions at a Time (Selecting a Type)

Register a sequence of printing conditions set in the FUNCTION mode in the memory of the device. By allocating the sequence of printing conditions to any of Types 1 through 4, it is possible to reuse the same printing conditions registered by type. It is, therefore, convenient to allocate different printing conditions to different types according to the fabric and printing method used.
The procedure for allocating a specific sequence of printing conditions to a type is described below. Here, the method of registration by allocating printing conditions to a particular type is explained.

STEP

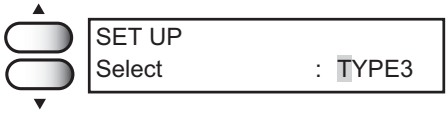
1. Make sure that the mode is LOCAL mode.

2. Press [FUNCTION] key.

3. Press [ENTER] key.

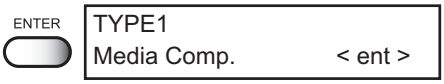
4. Select any of Types 1 through 4 by pressing the JOG keys [▲] and [▼].

There are four types which you can select.
[Type.1]
[Type.2]
[Type.3]
[Type.4]



5. Press [ENTER] key.

Setting Printing Conditions.



Changing the type

To change the type during plotter operation, first stop the device (Refer to Page 2.49) and then select the desired type in the LOCAL mode .
Note that the current type cannot be changed while the device is in operation.

CAUTION

- Only the setting of the following items can be changed during printing.
  [mm/inch], [AutoClean], [Media Comp.], [Take-Up Dev], [ANRS Setup], [ANRS Ctrl], [Feeding Dev], [Spiral Rlr], [Belt Wash], [Heater]

  If you attempt to change the setting of other items during printing, the following error message appears.

  ERROR 34
  DATA REMAIN

Setting Printing Conditions

Changing printing conditions on the device side

Set up the printing method that determines the quality of image.
For the printing method, there are three setting items - “quality of image”, “extension of resolution”, and “direction of printing”.

• Quality of image [Quality]

For the quality of image, there are three setting items - [STD], [FINE], and [HIGHspd].
The operating conditions for [STD], [FINE], and [HIGHspd] differ in the 8-color mode and 4-color mode.

STANDARD	:	Standard image quality
FINE	:	High image quality and low printing speed
HIGHspd	:	High printing speed and slightly inferior image quality

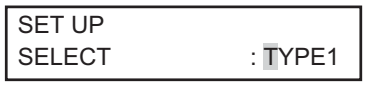
• Printing direction [Direction]

This function sets the direction of printing.
The device prints an image while moving the carriage right and left. By setting the direction of printing, it is possible to adjust the image quality and the printing speed.

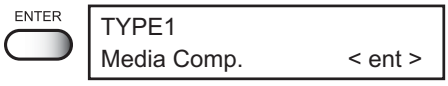
UNI-D	:	The image is printed only in one direction during movement of the carriage. Image quality is better than when BIDIRECTIONAL is specified.
BI-D	:	The image is printed in both directions during movement of the carriage. Image quality slightly deteriorates since emphasis is placed on printing carriage.

STEP

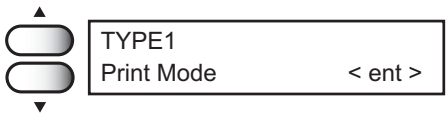
1. Select a type. (Refer to Page 4.4).
Here, select TYPE1.



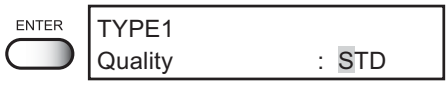
2. Press [ENTER] key.



3. Select [PrintMode] by pressing the JOG keys [▲] and [▼].

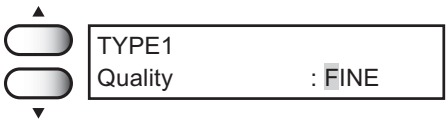


4. Press [ENTER] key.
Display type quality menu.

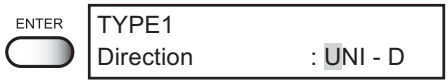


5. Select [PrintMode] by pressing the JOG keys [▲] and [▼].

There are three quality types from which you can select one.
[STD], [FINE], [HIGHspd.]

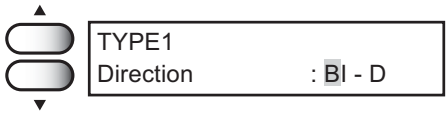


6. Press [ENTER] key.

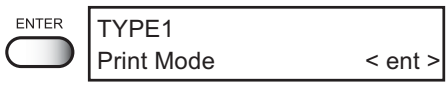


7. Set a printing direction by pressing the JOG keys [▲] and [▼].

There are two printing direction from which you can select one.
[UNI-D], [BI-D]



8. Press [ENTER] key.



9. Press [END] key twice, and the menu returns to the LOCAL mode.

Improving the density of ink color [Ink Layers]

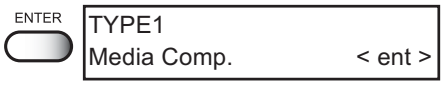
This function sprays the ink in two or more layers (wet-on-wet coating) to improve the density of ink color.
If a coarse-surfaced fabric (e.g., canvas) is used, the color of ink might be weak. In this case, execute this function (wet-on-wet coating).

> CAUTION
>
> • When using a silk or other cloths with high moisture-elasticity, do not perform Ink Layers. If the fabric adhesive force (fixation force) is weakened, expansion and contraction may cause a rise.

STEP

1. Select a type.
(Refer to Page 4.4). Here, select [Type.1].

2. Press [ENTER] key.

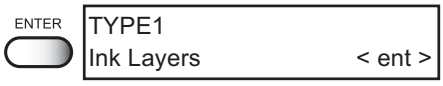


3. Set a [Ink Layers] by pressing the JOG keys [▲] and [▼].

4. Press [ENTER] key.

5. Select the number of ink layers using the [▲] and [▼].
A number 1 to 9 can be selected as the number of times of reprinting.
Here, select [3] times.

6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

Deciding the priority of settings by the computer OR the device [Priority]

This function gives priority on printing conditions set either on the computer or on the device. Printing conditions can be set on data of the device and on data received from the computer using the output software. If these printing conditions differ, priority is given to either of them at the time when the printing operation is started.

HOST : The printing operation is performed with priority given to the computer.

PLOT : The printing operation is performed with priority given the device.

Priority needs to be specified for each of the following items:

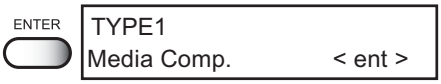
- Media Comp
- Print Mode
- Ink Layers
- Refresh
- Belt Wash
- Heater
- ANRS

STEP

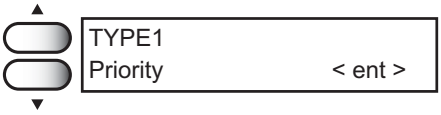
1. Select a type.

(Refer to Page 4.4). Here, select [Type.1].

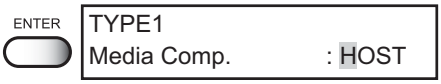
2. Press [ENTER] key.



3. Press [▲] and [▼] key until the display gives the indication [Priority].

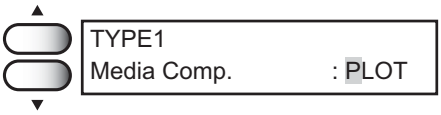


4. Press [ENTER] key.

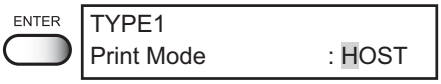


5. Select the [Media Comp.] that is given a priority using the [▲] and [▼] key.

Here, select [PLOT].

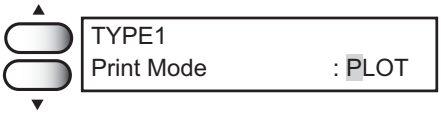


6. Press [ENTER] key.



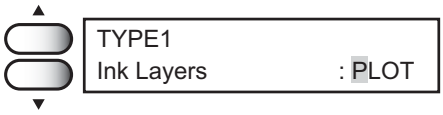
7. Select the [PrintMode] that is given a priority using the [▲] and [▼] key.

Here, select [PLOT].

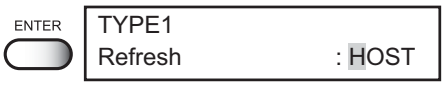


8. Press [ENTER] key.

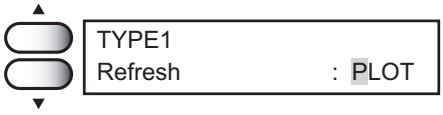
9. **Select the [Ink Layers] that is given a priority using the [▲] and [▼] key.**
   Here, select [PLOT].



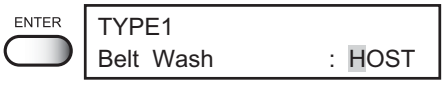
10. **Press [ENTER] key.**



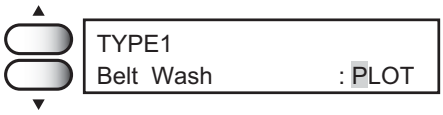
11. **Select the [Refresh] that is given a priority using the [▲] and [▼] key.**
    Here, select [PLOT].



12. **Press [ENTER] key.**

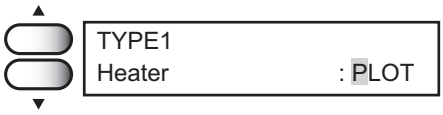


13. **Select the [Belt Wash] that is given a priority using the [▲] and [▼] key.**
    Here, select [PLOT].

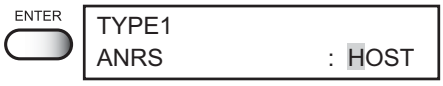


14. **Press [ENTER] key.**

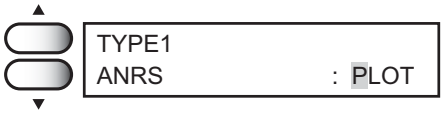
15. **Select the [Heater] that is given a priority using the [▲] and [▼] key.**
    Here, select [PLOT].



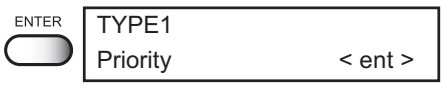
16. **Press [ENTER] key.**



17. **Select the [ANRS] that is given a priority using the [▲] and [▼] key.**
    Here, select [PLOT].



18. **Press [ENTER] key.**



19. **Press [END] key twice, and the menu returns to the LOCAL mode.**

Increasing (decreasing) the right and left margins of the fabric [Margin]

This function sets a dead space to increase/decrease the right and left margins of the fabric. The blank portion of the fabric is called dead space. (Refer to Page 2.39)
The function is used to increase the margin for binding.
You can set a dead space for each of the right and left margins of the fabric.

- This plotter sets the width of the printing area by detecting the position of the fabric retainer. The left and right margins can be changed by changing the position of the fabric retainer. Printing with the full width is possible by setting the fabric retainer apart from the edge of the fabric.

STEP

1. Select a type.
(Refer to Page 4.4).Here, select [Type.1].

SET UP
Select : TYPE1

2. Press [ENTER] key.

TYPE1
Media Comp. < ent >

3. Press [▲] and [▼] key until the display gives the indication [Margin].

TYPE1
Margin < ent >

4. Press [ENTER] key.

TYPE1
RightMargin = 0mm

5. Set a right margin by pressing the JOG keys [▲] and [▼].
You can set a dead space in the range -9 mm to 95 mm in increments of 1 mm.
Here, set [10] mm.

TYPE1
RightMargin =10mm

6. Press [ENTER] key.

TYPE1
LeftMargin = 0mm

7. Set the left margin as well as the right margin.

TYPE1
LeftMargin =10mm

8. Press [ENTER] key.

TYPE1
Margin < ent >

9. Press [END] key three times, and the menu returns to the LOCAL mode.

<< LOCAL >>
width : 1620mm

When using the device in an extremely dusty or dry place [Refresh]

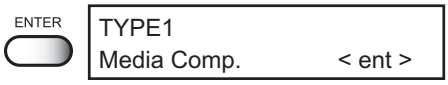
Solidification of ink can be prevented by refreshing the head during printing.
If the device is used in a dusty place or dry place, ink in the head will be likely to solidify. Execute the REFRESH function to enable the ink to be ejected properly from the print head. Concerning the frequency of refreshing of the ink nozzle, there are four levels—Level 0 to 3.

LEVEL 0 : Frequency of refreshing is low.
LEVEL 1 : Frequency of refreshing is normal.
LEVEL 2 : Frequency of refreshing is slightly high.
LEVEL 3 : Frequency of refreshing is high.

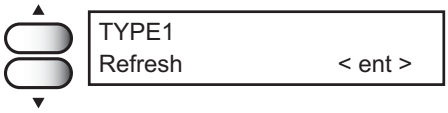
STEP

1. Select a type.
(Refer to Page 4.4). Here, select [Type.1].

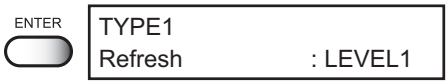
2. Press [ENTER] key.



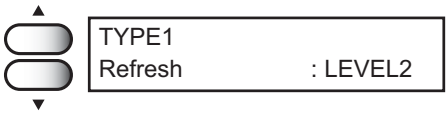
3. Press [▲] and [▼]key until the display gives the indication [Refresh].



4. Press [ENTER] key.



5. Set a refresh level by pressing the JOG keys [▲] and [▼].
There are four refresh levels from which you can select.
[LEVEL0], [LEVEL1], [LEVEL2], [LEVEL3]
Here, select [LEVEL2].



6. Press [ENTER] key.

7. Press [END] key twice, and the menu returns to the LOCAL mode.

Setting the indication period of maintenance [Count Limit]

This procedure gives the setting the indication period of maintenance for applying adhesive on the belt or cleaning the absorption roller.

Adhesive : Setting the indication period of maintenance for applying adhesive.
Absorb Rlr. : Setting the indication period of maintenance for cleaning the absorption roller.

- For the setting, the message is indicated before maintenance and then, you can print without worrying about maintenance period. In case it has not entered a value for the setting, the message won't be indicated.

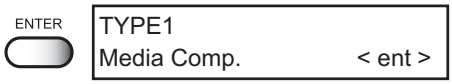
Belt Adhesive 300m To Go	Belt Adhesive Reapply Adhesive

Water Absorption Check The Roller

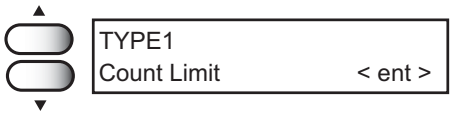
STEP

1. Select a type. (Refer to Page 4.4).
Here, select [Type.1].

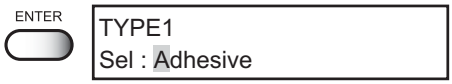
2. Press [ENTER] key.



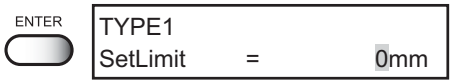
3. Press [▲] and [▼] key until the display gives the indication [Count Limit].



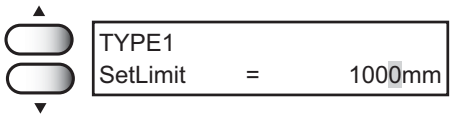
4. Press [ENTER] key.



5. Press [Enter] key to select [Adhesive].

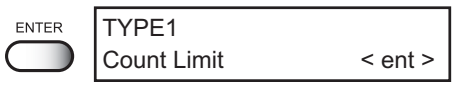


6. Set a Limit by pressing the JOG keys [▲] and [▼].
The setting for the range 0 to 30000 meter in increments of 1 meter unit is available. Initial value is [0] meter.



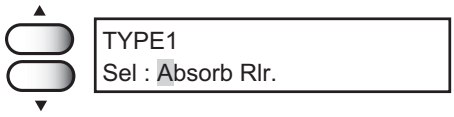
- The period limit is 1000 meter.
  In case it has not entered a value for the setting, the message won't be indicated.

7. Press [ENTER] key.

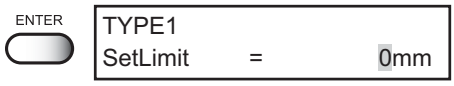


8. Press [ENTER] key again.

9. Press [▲] and [▼] key until the display gives the indication [Absorb Rlr].

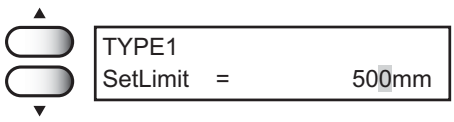


10. Press [ENTER] key.



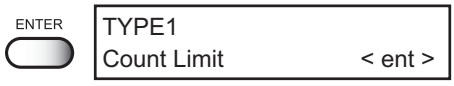
11. Set a Limit by pressing the JOG keys [▲] and [▼].

The setting for the range 0 to 30000 meter in increments of 1 meter unit is available. Initial value is [0] meter.



- The period limit is 500 meter.
  In case it has not entered a value for the setting, the message won't be indicated.

12. Press [ENTER] key.



13. Press [END] key twice, and the menu returns to the LOCAL mode.

Setting a unit of length displayed on the LCD [mm/inch]

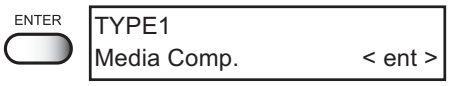
This function sets a unit of set values displayed on the LCD.
Use this function when displaying “width” and “length” of the fabric after setting of the origin or detection of the fabric. When the device is shipped from the factory, the unit of display is set to MM (millimeter).

mm	**:**	Numerics are expressed in millimeters.
inch	**:**	Numerics are expressed in inches.

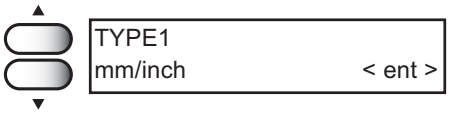
STEP

1. Select a type.
(Refer to Page 4.4). Here, select [Type.1].

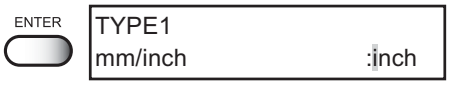
2. Press [ENTER] key.



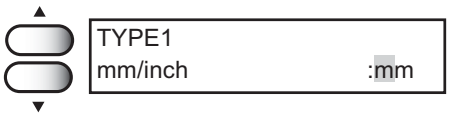
3. Press [▲] and [▼] key until the display gives the indication [mm/inch].



4. Press [ENTER] key.



5. Set a unit of length displayed on the LCD by pressing the JOG keys [▲] and [▼] .
Here, select [mm].



6. Press [ENTER] key.

7. Press [END] key twice, and the menu returns to the LOCAL mode.

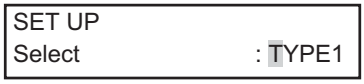
Setting up auto-cleaning function [AutoClean]

Set up the auto-cleaning function. Printing failures may be remarkable on dusty locations or locations with low temperature. Perform cleaning for each plot to prevent printing failures.

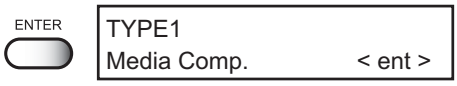
ON	**:**	The head is cleaned automatically.
OFF	**:**	The head is not cleaned automatically.

STEP

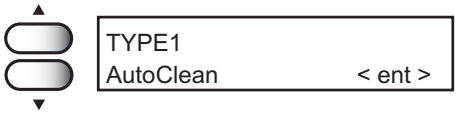
1. Select a type.
(Refer to Page 4.4). Here, select [Type.1].



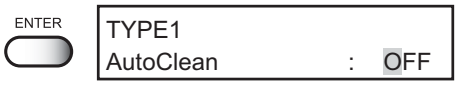
2. Press [ENTER] key.



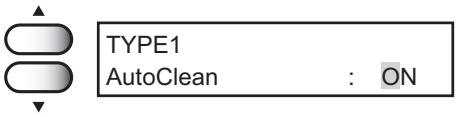
3. Press [▲] and [▼] key until the display gives the indication [AutoClean].



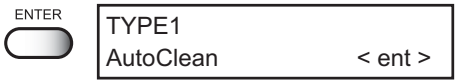
4. Press [ENTER] key.



5. Set a [AutoClean] by pressing the JOG keys [▲] and [▼].
Here, select [ON].



6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

Enabling the Feeding Device [Feeding]

This function enables the feeding unit.

ON : Feeds the fabric automatically.

OFF : Does not feed the fabric.

CAUTION

- Operates according to slack and limit sensor.
- In case Leaf is selected for the fabric used, the feeding unit is not enabled.

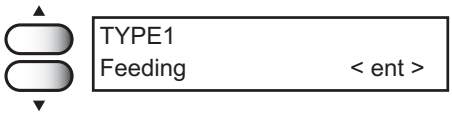
STEP

1. Select a type. (Refer to Page 4.4)

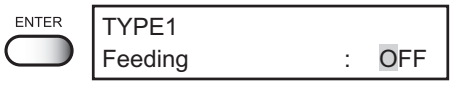
Here, select [Type.1].

2. Press [ENTER] key.

3. Press [▲] and [▼] key until the display gives the indication [Feeding].

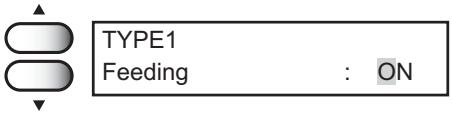


4. Press [ENTER] key.

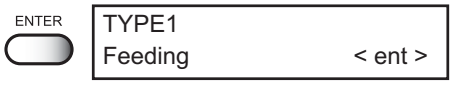


5. Set a [Feeding] by pressing the JOG keys [▲] and [▼].

Here, select [ON].



6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

Enabling the Take-Up Device [Take-Up]

This function enables the take-up device.

ON : Enables the take-up device automatically.

OFF : Does not enable the take-up device.

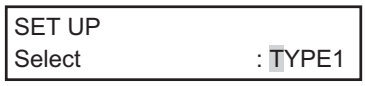
CAUTION

- Operates according to slack and limit sensor.
- In case Leaf is selected for the fabric used, the take-up device is not enabled.

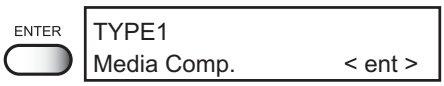
STEP

1. Select a type. (Refer to Page 4.4)

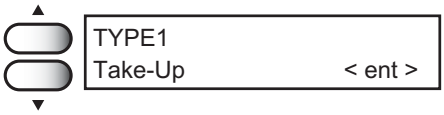
Here, select [Type.1].



2. Press [ENTER] key.



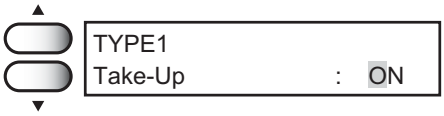
3. Press [▲] and [▼] key until the display gives the indication [Take-Up].



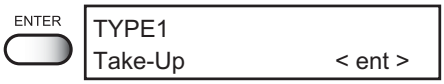
4. Press [ENTER] key.

5. Set a [Take-Up] by pressing the JOG keys [▲] and [▼].

Here, select [ON].



6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

Removing Wrinkles Using the Spiral Roller [Spiral Rlr]

This function makes setting for removing wrinkles of the fabric using the spiral roller.

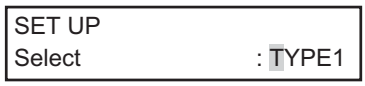
ON : Rotating spiral roller.
OFF : Does not rotating spiral roller.

CAUTION

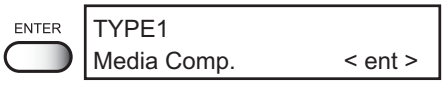
- In case Leaf is selected for the fabric used, the spiral roller is not enabled.

STEP

1. Select a type. (Refer to Page 4.4)
Here, select [Type.1].

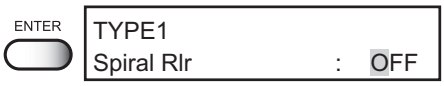


2. Press [ENTER] key.



3. Press [▲] and [▼] key until the display gives the indication [Spiral Rlr].

4. Press [ENTER] key.



5. Set a [Spiral Rlr] by pressing the JOG keys [▲] and [▼].
Here, select [ON].

6. Press [ENTER] key.

7. Press [END] key twice, and the menu returns to the LOCAL mode.

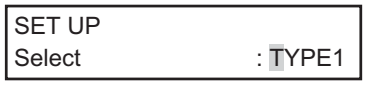
Enabling Belt Cleaning Operation during Printing [Belt Wash]

This function enables the belt cleaning operation during printing.
For details, refer to “Cleaning the Belt during printing” on Page 2.50.

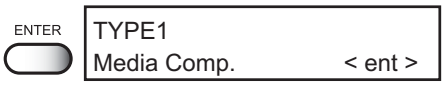
ON	**:**	Cleans the belt automatically.
OFF	**:**	Does not clean the belt.

STEP

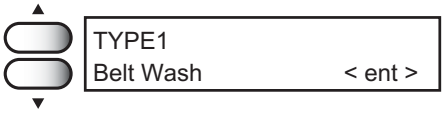
1. Select a type. (Refer to Page 4.4)
Here, select [Type.1].



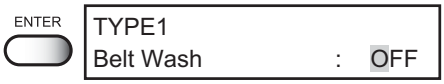
2. Press [ENTER] key.



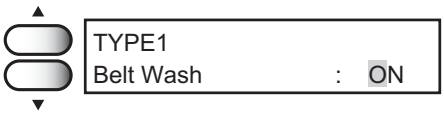
3. Press [▲] and [▼] key until the display gives the indication [Belt Wash].



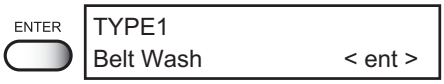
4. Press [ENTER] key.



5. Set a [Belt Wash] by pressing the JOG keys [▲] and [▼].
Here, select [ON].



6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

CAUTION

- When the device is receiving the data or the unprinted data remains in the dvice or the device is in the jog mode, the water absorption roller has been risen. Make sure to delete the data before turning off.

When Ink Dries Slowly (Temperature Adjustment of Heater) [Heater]

When the fabric printed with a high printing rate is taken up, ink is smudged on the back of the fabric. Use a heater to avoid it.
Set up ON/OFF and HIGH/MID/LOW of the heater. Set up the strength of the heater by means of the printing density and fabric type.

Heater surface temperature

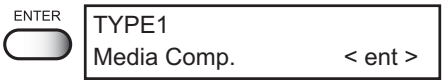
HIGH : about 145 °C (293 °F)
MID :about 110 °C (230 °F)
LOW : about 80 °C (176 °F)

CAUTION

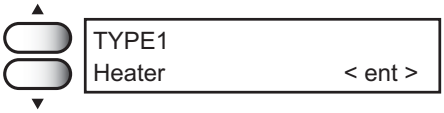
- The heater surface temperature reaches about 145C° with the “HIGH” setting. When setting the fabric to the take-up device, do not touch the heater to avoid burn injury.

1. Select a type. (Refer to Page 4.4)
Here, select [Type.1].

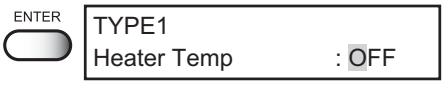
2. Press [ENTER] key.



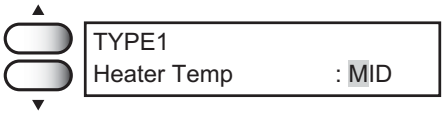
3. Select [Heater] by pressing the JOG keys [▲] and [▼].



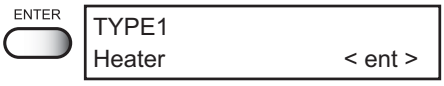
4. Press [ENTER] key.



5. Set [Heater Temp] by pressing the JOG keys [▲] and [▼].
[OFF], [LOW], [MID], HIGH]



6. Press [ENTER] key.



7. Press [END] key twice, and the menu returns to the LOCAL mode.

Using the ANR unit [ANRS Setup]

Checking for the operation details when using the ANR unit in this function.

ON : Checks nozzle clogging, missing shot dots, etc. of the head during printing using the ANR unit

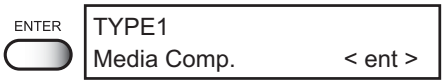
OFF : Does not use the ANR unit.

STEP

1. Select a type. (Refer to Page 4.4)

Here, select [Type.1].

2. Press [ENTER] key.

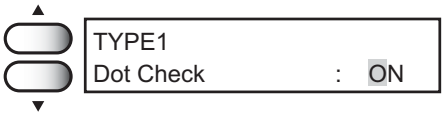


3. Press [▲] and [▼] key until the display gives the indication [ANRS Setup].

4. Press [ENTER] key.

5. Set a [Dot Check] by pressing the JOG keys [▲] and [▼].

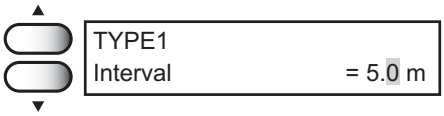
Here, select [ON].



6. Press [ENTER] key.

7. Set a [Interval] by pressing the JOG keys [▲] and [▼].

Set the unit (meter or inch) for the dot check interval.



8. Press [ENTER] key.

9. JOG keys [▲] and [▼] to select the measures in case that nozzle clogging or deflection is detected after starting ANRS.

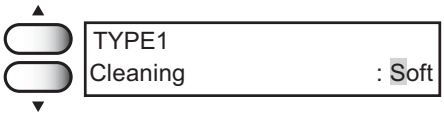
[CONT] ..... Continues printing. → Continue to Procedure No.14

[AUTO] ..... Interrupts printing to start Head cleaning automatically, and then start printing again. → Continue to Procedure No.10

[STOP] ..... Stops printing. → Continue to Procedure No.14

10. Press [ENTER] key.

11. Select the method of cleaning by pressing the JOG keys [▲] and [▼].



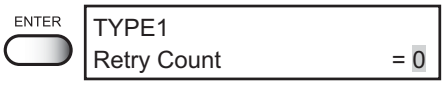
Normal : Select this if any line is bent. Cleaning is carried out for a long period of time and a large amount of ink is consumed.

Soft : Select this if there is any missing line. Cleaning is carried out for a short period of time.

Strong : Select this if there are many missing portions.

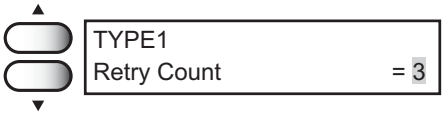
- Cleaning setting enable to change the method when Check NG setting is AUTO only.
  (Refer to Page 4.21, step 9)

12. Press [ENTER] key.



13. Enter the retry count value by pressing JOG key [▲] and [▼].

Enter the counting number for Retry cleaning when the ANR unit has found the nozzle clogging after cleaning.



- Cleaning setting enable to change the method when Check NG setting is AUTO only.
  (Refer to Page 4.21, step 9)

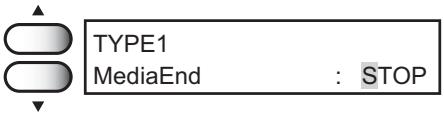
14. Press [ENTER] key.

15. JOG keys [▲] and [▼] to select the measures in case that the ANRS runs out during printing.

[CONT] ..... Continues printing.

[STOP] ..... Immediately stop printing when the ANRS check media has run out. Replace with a new one.

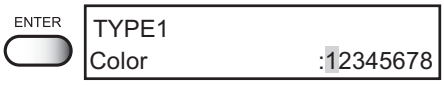
[1File] ..... Continues printing till present file is terminated. The next one cannot be printed.



CAUTION

- If using the non-Mimaki genuine ANRS check media, we can not guarantee the normal operation. Be sure to use the genuine ANRS check media.

16. Press [ENTER] key.



17. Press the JOG key [▲] or [▼] to set the ON/OFF check for each color.

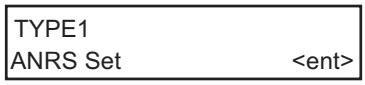
The color numbers start from the left facing the print head.

18. Press the JOG key [<] or [>] to select the color number to set.

With 4-color, select from 1 - 4.

19. Press the [ENTER] key.

Pressing the [END] key twice returns the menu to the LOCAL mode.



Using the ANR unit [ANRS Ctrl]

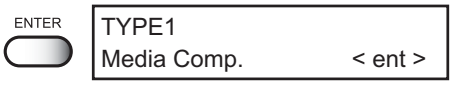
This function is setting for bad condition criteria for Nozzle clogging.

STEP

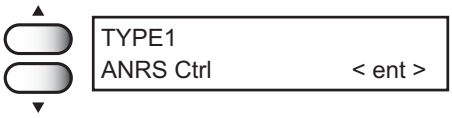
1. Select a type. (Refer to Page 4.4)

Here, select [Type.1].

2. Press [ENTER] key.



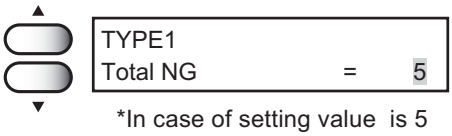
3. Press [▲] and [▼] key until the display gives the indication [ANRS Ctrl].



4. Press [ENTER] key.

5. Enter the setting value for the total NG number of each color by pressing JOG key [▲] and [▼].

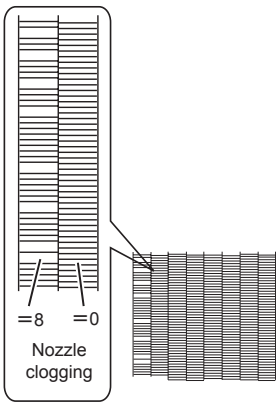
In case a nozzle clogging has detected and the total number exceeds the set value in a color, printing operation should be stopped or interrupted and starting head cleaning.



*In case of setting value is 5

*Concrete case

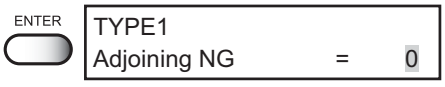
Totally 8 nozzle clogging has detected. The printing operation is to be stopped for the set value is “5”.



- Measures should be changed according to the settings in the step 9 of the “ANRS Setup” (Refer to Page P.4.21).

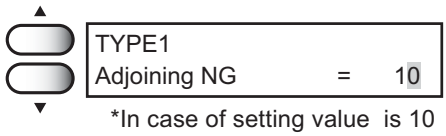
[CONT] ..... Continues printing.
[STOP] ..... Stops printing. Make sure to perform head cleaning after appearing the error message on the LCD. Press [CLEANING] key to perform Head cleaning. After cleaning, press on the [REMOTE] key to start printing again.
[AUTO] ..... Interrupts printing to start Head cleaning automatically, and then start printing again.

6. Press [ENTER] key.



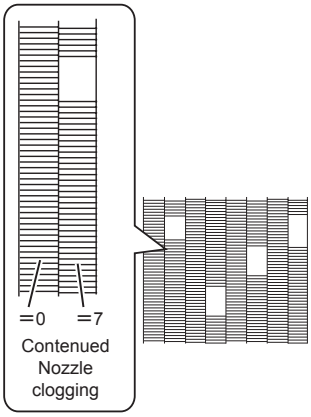
7. Enter the setting value for the adjoining NG number by pressing JOG key [▲] and [▼].

In case a nozzle clogging has detected continuously and the adjoining number exceeds the set value in a row, printing operation should be stopped or interrupted and starting head cleaning.



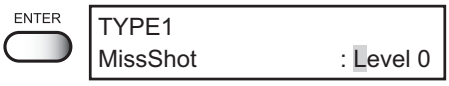
*In case of setting value is 10

*Concrete case
Continued 7 nozzle clogging has detected in the second row. The printing operation should be continued for the set value is “10”.



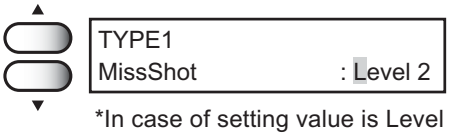
- Measures should be changed according to the settings in the step 9 of the “ANRS Setup” (Refer to Page P.4.21)

8. Press [ENTER] key.



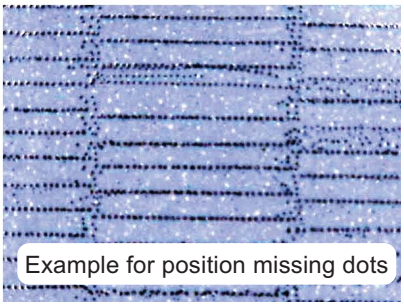
9. Select the tolerance level for the missing shot dots by pressing JOG key [▲] and [▼].

The good or bad range of the ink adherent position is set at level 0 to level 2. In case the setting judges the position as NG, this NG is added to Total NG at procedure 5.



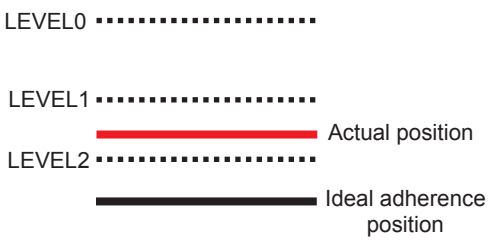
*In case of setting value is Level 2

[LEVEL0] ..... The setting judges as good even if large parts of dots deflected.
[LEVEL1] ..... The setting judges as good with some parts of dots deflected.
[LEVEL2] .... The setting judges as bad with slight position missing.

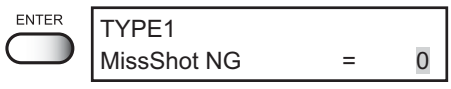


- Measures should be changed according to the settings in the step 9 of the “ANRS Setup” (Refer to Page P.4.21)

See an example of a printed result on the right.
This is indicated the ink adherent actual position between the Level 1 and Level 2 against an ideal adherent position.
In case the tolerance level has set LEVEL 2, this nozzle is judged as bad, and then it is added to Total NG.



10. Press [ENTER] key.

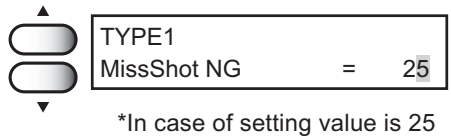


11. Select the tolerance level for the missing shot dots by pressing JOG key [▲] and [▼].

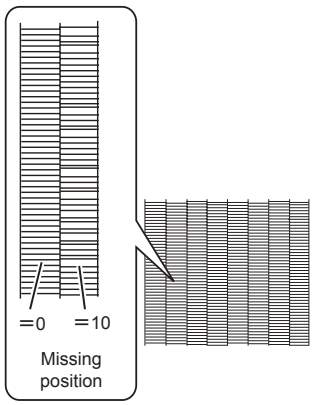
The good or bad range of the ink adherent position is set at level 0 to level 2. In case the setting judges the position as NG, this NG is added to Total NG at procedure 5.

In case nozzle clogging has detected or number of missing shot dots exceed the setting value that was set at the step 9 as a tolerance level, plotter stop the operating and execute the nozzle cleaning.

The illustration in the right is an example of 10 nozzle clogging has detected when tolerance level is set to "level 1".
At this time, "MissShot NG" is set to 25. Therefore plotter does not stop the operation or execute the nozzle cleaning

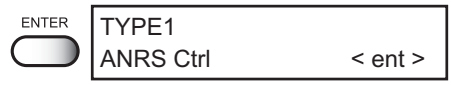


*In case of setting value is 25



- Measures should be changed according to the settings in the step 9 of the “ANRS Setup” (Refer to Page P.4.21)

11. Press [ENTER] key.



12. Press [END] key twice, and the menu returns to the LOCAL mode.

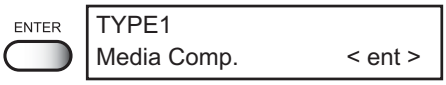
Resetting printing conditions by type [SetupReset]

This function resets the current printing conditions to the factory-set printing conditions.
Execute this function for each of the types of set printing conditions.

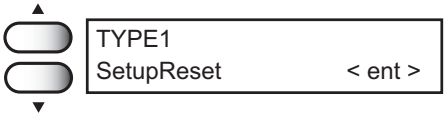
STEP

1. Select a type. (Refer to Page 4.4).
Here, select [Type.1].

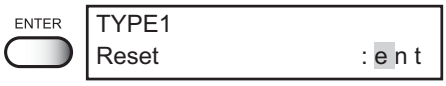
2. Press [ENTER] key.



3. Press [▲] and [▼] key until the display gives the indication [Setup Reset].



4. Press [ENTER] key.



5. Press [ENTER] key.
The current printing conditions are reset to the factory-set printing conditions.

6. Press [END] key twice, and the menu returns to the LOCAL mode.

CHAPTER 5
Maintenance Functions

In order to keep the plotter in good operating condition, it is necessary to carry out maintenance of the device periodically.
This chapter describes the functions that help solve the problem of deterioration in image quality and replace a waste ink tank.
The device needs maintenance when it is left out of operation for a long period of time.

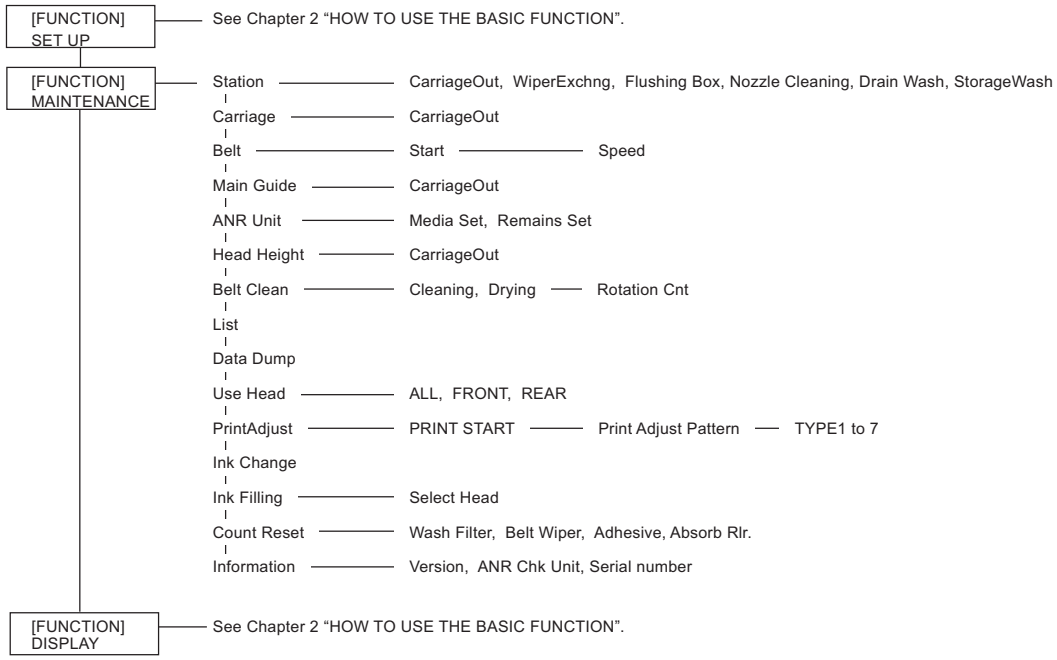
Table of contents

Maintenance Of The Device

The term “maintenance” as used herein refers to the operation that has to be performed to keep the device in good operating condition.
To carry out maintenance of the device, select [MAINTENANCE] from the function menu and make the necessary settings.

FUNCTION menu [MAINTENANCE]

The table, below, shows the tree structure of the function menu [MAINTENANCE].
In order to use the application functions of the device, it is necessary to understand the proper sequence of key operations.



Listing of the Maintenance function

Function name	Brief	Refer to Page
Station	Cleaning the carriage interior.	Page 3.11
Carriage	Cleaning the bottom surface of the carriage.	Page 3.11
Belt	Applying the adhesive again.	Page 5.4
Main Guide	Cleaning the Y main guide.	Page 3.27
ANR Unit	Replacing ANRS media.	Page 3.28
Head Height	Adjusting points in head height.	Page 2.33
Belt Clean	Cleaning the belt.	Page 3.32
List	Drawing set up conditions.	Page 5.13
Data Dump	Printing HEX code of printing command.	Page 5.14
Use Head	Selecting ink head.	Page 5.15
PrintAdjust	Correcting the dot positions after adjusting the head height.	Page 2.37
Ink Change	Changing the ink different from the one in use.	Page 5.16
Ink Filling	This function is not use normally.	Page 5.16
Count Reset	Resetting the counters for each type.	Page 5.20
Information	Displaying the information on this device.	Page 5.21

Before Starting Maintenance

Checking the menu mode

Before executing any of the maintenance functions, check the menu mode.
The menu mode must be the LOCAL mode or the FUNCTION mode before maintenance can be started.
Make sure that either <<LOCAL>> or <<FUNCTION>> is displayed on the LCD.

Invoking a maintenance function

In order to execute any of the maintenance functions, it is necessary to perform the following operation on the operation panel.
You have to understand how to invoke the desired maintenance function to carry out maintenance.

STEP

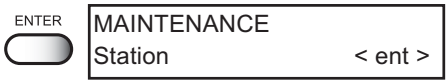
1. Make sure that the device is in the LOCAL mode.

When the [REMOTE] mode is displayed, press [REMOTE] key to turn to [LOCAL] mode.
[FUNCTION] mode is displayed on the LCD, follow the procedure No 2.

2. Press [FUNCTION] key.

3. Press [▲] and [▼] key until the display gives the indication [MAINTENANCE].

4. Press [ENTER] key.



5. Select the next operation.

Set up the desired maintenance function to carry out maintenance.

When The Fabric Adhesive Force Is Weakened [Belt]

If the fabric adhesive force is weakened, you need to apply adhesive again. With this device, adhesive was applied at the time of shipment, however, it is necessary to apply adhesive again if the adhesive force is degraded by ink, lint, or dust.

- Peeling off old adhesive
  (Peeling off adhesive whose adhesive force is degraded by ink, lint, or dust)
- Applying new adhesive (Applying adhesive again)

- **Rough standard of re-applying**
  Apply adhesive if a rise occurs in the printed fabric when it comes out from the front cover.

- In case the indication period of applying an adhesive has set before printing, you can print without worrying about maintenance period. (Refer to Page 4-12 [Setting the indication period for maintenance])

Belt Adhesive 300m To Go	Belt Adhesive Reapply Adhesive

- Our company genuine adhesive is solvent type. Be sure to wear the protection mask for organic solvent and the supplied goggle and gloves.

- Be sure to set up the appropriate air moving system in case of applying adhesive in the closed room or a room with bad ventilation.

- In case using adhesive, comply strictly with the Ordinance on the Prevention of Organic Solvent Poisoning.
  Applying adhesive under the supervision from a director who has a license for Organic solvent poisoning or the person who had completed the technical qualification program as a supervisor for Organic solvent poisoning.

- If a rise or slack occurs when the fabric is attached to the belt (through the pressure roller) because the fabric was loose before operation, adhesive is not the cause of rise or slack. In this case, the fabric cannot be used.

Peeling off weakened adhesive

The following are used to peel off adhesive:

Prepared	Arranged by a Customer
Doctor Gloves	Kerosene or diesel (about 500cc) Ethanol (about 200cc) Plate with about A4 size (metal or resin flat plate with t0.5 to t1.0) Waste cloth

- Kerosene or diesel and ethanol become easier to be handled if they are put in a container with a small mouth.

STEP

1. **Put the device into the MAINTENANCE mode. (Refer to Page 5.3)**

FUNCTION
MAINTENANCE < ENT >

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

ENTER

MAINTENANCE
Station < ent >

3. **Press [▲] and [▼] key until the display gives the indication [Carriage].**

MAINTENANCE
Belt < ent >

4. **Remove fabric in case its on the belt.**

5. **Check that the Feed Tension Bar is at its lowest position.**

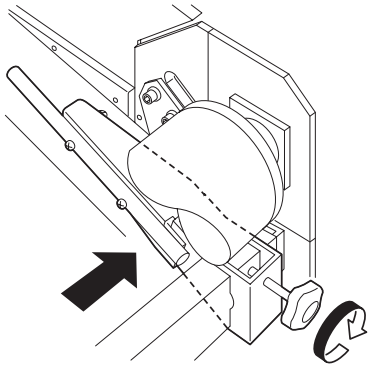
Lower The Feed
Tension Bar

6. **Make sure that there is no fabric on the belt and then press the [ENTER] key**

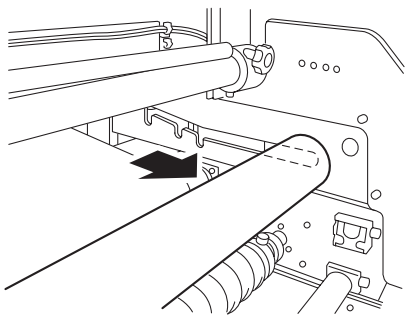
ENTER

Remove Media
Press [ENT] Key

7. **Move the fabric edge guide to both ends and fix it.**



8. **Put aside the pressure roller on the rear side.**



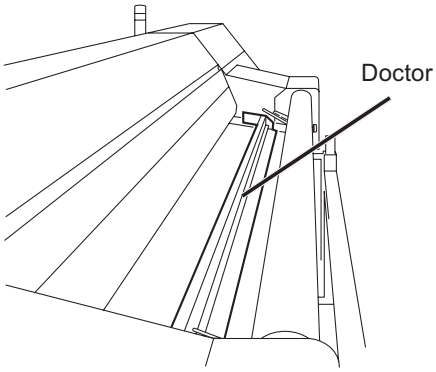
9. **Press [ENTER] key.**

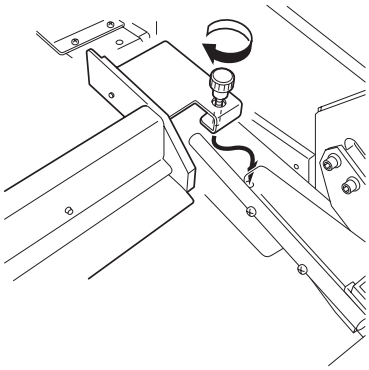
ENTER

Move PressRoller
Press [ENT] Key

10. Set the doctor on the front side to remove adhesive.

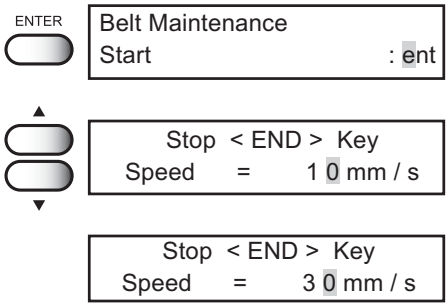
Set the doctor between the front cover and peeling roller. Tighten the mounting screw securely.



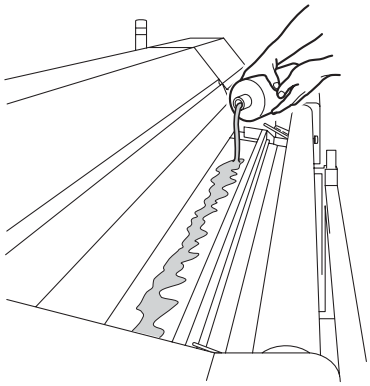


11. Press [ENTER] key, then rolling the belt.

Press [▲] and [▼] key to send out the belt while adjusting the belt speed up to about 30mm/s.



12. Drop kerosene or diesel on the backside of the doctor until it sinks sufficiently into adhesive on the belt surface.

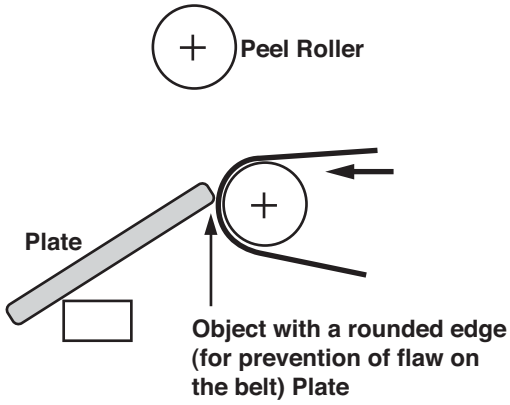


CAUTION

- If kerosene or diesel is applied too much, when removing the adhesive, extra kerosene or diesel leak out the side of doctor and drop into the Cleaning liquid tank unit through the belt. If kerosene or diesel mixed with cleaning liquid, it declines the adhesive force when printing with belt cleaning. Therefore if adhesive force suddenly declined after the adhesive replacement, there is a possibility of kerosene or diesel mixed into cleaning liquid.

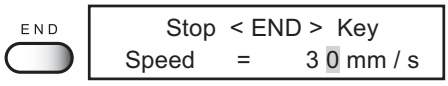
  Confirm the cleaning liquid every time after removing the adhesive or applying the kerosene or diesel. If kerosene or diesel is mixed, clean the belt with reference to the maintenance menu "Belt Cleaning" (P3.32) To perform the belt cleaning, put a little amount of mild detergent into the cleaning liquid tank and rotate the belt. After that, change the water in the cleaning liquid tank to the new one.

13. **Press the edge of the plate onto the R outside circumference shown at right.**

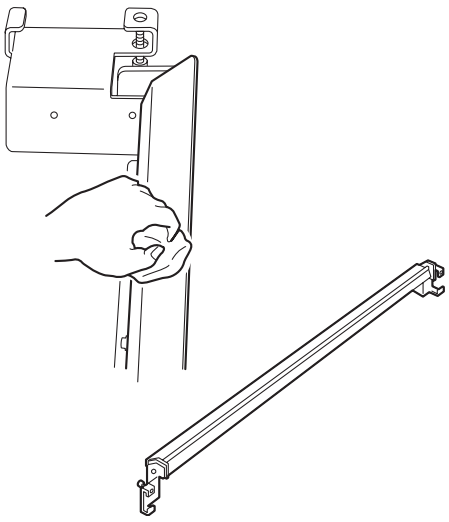


14. **As required, remove gelled adhesive using kerosene or diesel while adjusting the belt speed. Drop kerosene or diesel on the belt to prevent it from becoming dry.**

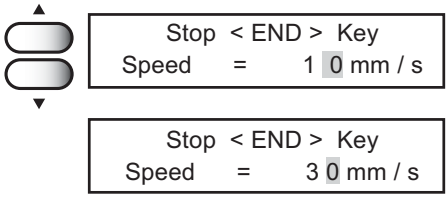
15. **Press [END] key to stop belt transport.**



16. **Remove the doctor and then clean adhesive, dust, etc. adhering to the rubber using Kerosene and cloths.**



17. **Press [▲] and [▼] key to send out the belt again while adjusting the belt speed.**



18. **When gelled adhesive has been removed, wipe off adhesive left on the belt using cloths. Drop kerosene or diesel as required.**

19. **Press [▲] and [▼] key to send out the belt again while adjusting the belt speed.**

Stop < END > Key
Speed = 1 0 mm / s

Stop < END > Key
Speed = 3 0 mm / s

20. **Wipe off kerosene or diesel on the belt surface as much as possible using cloths.**

21. **Wipe off the remaining oil and fat using cloths contained with ethanol to clean the belt surface.**

22. **Press [ENTER] key to reset the adhesive counter and be ended the operation.**

Or press [END] key not reset and perform end the operation.

Adhesive Counter
Reset :ent

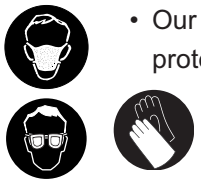
<<LOCAL>>
Width : 1620mm

CAUTION

- After ended operation, confirm the cleaning liquid every time after removing the adhesive or applying the kerosene or diesel.

Applying new adhesive

The following are used to apply new adhesive:
Doctor, adhesive (Polixresin SX 500cc, Option: Refer to page A.5), gloves

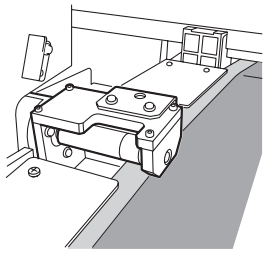


- Our company genuine adhesive is solvent type. Be sure to wear the protection mask for organic solvent and the supplied goggle and gloves.

- Be sure to set up the appropriate air moving system in case of applying adhesive in the closed room or a room with bad ventilation.
- In case using adhesive, comply strictly with the Ordinance on the Prevention of Organic Solvent Poisoning.
  Applying adhesive under the supervision from a director who has a license for Organic solvent poisoning or the person who had completed the technical qualification program as a supervisor for Organic solvent poisoning.

CAUTION

- When using commercial adhesive, be sure to check the compatibility of the solvent component with the material of the belt of this device. In this case, contact your dealer or Mimaki sales office nearby.
- Be careful not to allow adhesive to adhere to the contact area of the belt encoder roller on the left side of the front panel and around the ϕ6 hole. Adhesive may disturb normal operation of the device.



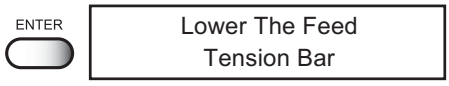
STEP

1. **Put the device into the MAINTENANCE mode. (Refer to Page 5.3)**

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

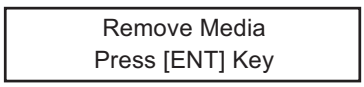
3. **Press [▲] and [▼] key until the display gives the indication [Carriage].**

4. **Press [ENTER] key.**

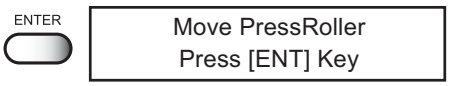


5. **Remove fabric in case its on the belt.**

6. **Make sure to be the tension bar at the lowest position.**

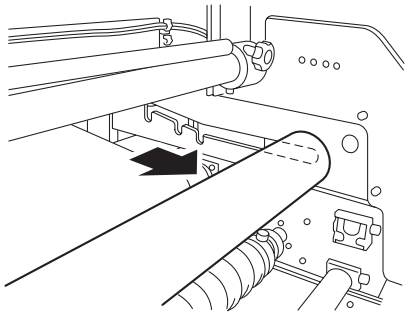


7. **Make sure that there is no fabric on the belt and then press the [ENTER] key.**



8. Put aside the pressure roller.

Refer to Page 5.5



9. Press [ENTER] key.

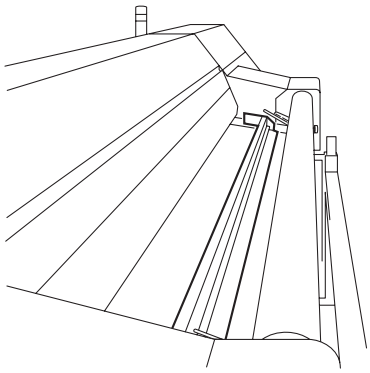
ENTER

Belt Maintenance
Start : ent

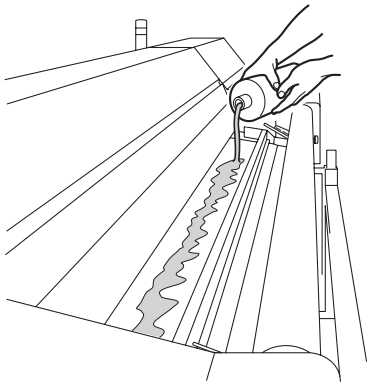
10. Set the doctor on the front side to remove adhesive.

CAUTION

- Make sure to move the fabric edge guide to both ends and fix it.



11. Drop adhesive (150 to 200cc) uniformly to the backside of the doctor.



12. Press [ENTER] key, then rolling the belt.

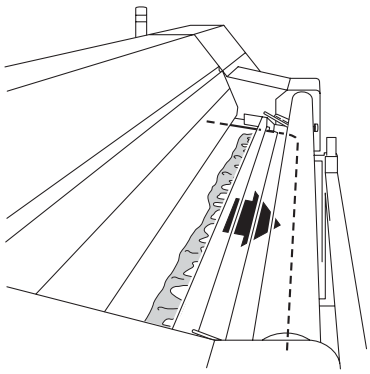
ENTER

Stop < END > Key
Speed = 1 0 mm / s

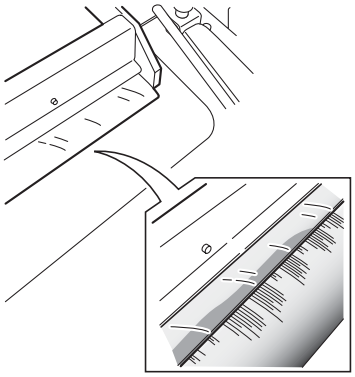
Press [▲] and [▼] key to send out the belt while adjusting the belt speed up to about 30mm/s.

Stop < END > Key
Speed = 3 0 mm / s

- Speed up the belt speed when the Adhesive is thicker.



- Since the doctor rubber section is half-transparent, you can check portions with small amount of adhesive. While refilling adhesive to such portions, apply it to the entire belt surface.

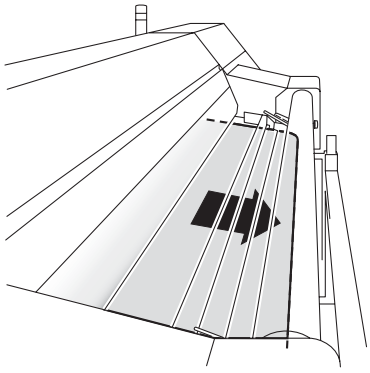


13. When adhesive has been applied to the entire belt surface, increase the belt speed.

Press [▲] and [▼] key to increase the belt speed up to about 50 to 60 mm/s.

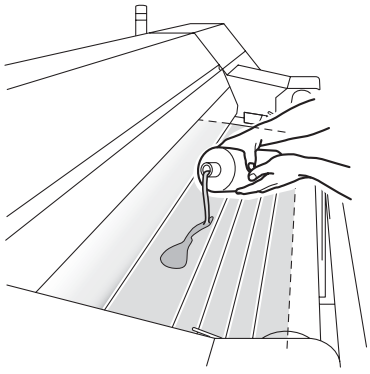
Stop < END > Key
Speed = 3 0 mm / s

Stop < END > Key
Speed = 6 0 mm / s



14. Drop all the remaining adhesive.

Make sure that adhesive dropped through the half-transparent doctor rubber have been applied to the entire belt surface and then stop belt transport.

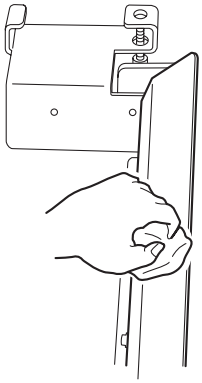


15. Press [END] key to stop the belt rotation.

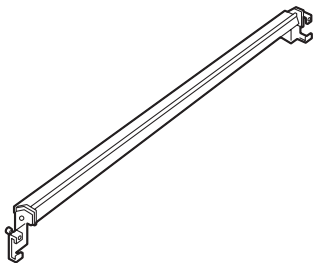
Stop < END > Key
Speed = 6 0 mm / s

16. Remove the doctor and then clean the doctor for use next time.

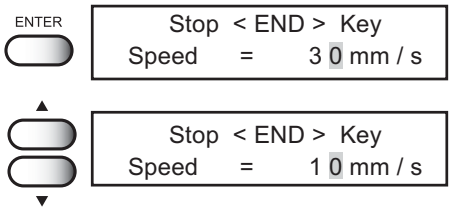
Remove adhesive adhering to the rubber using Kerosene or diesel and cloths.



After cleaning, leave the doctor to dry it.

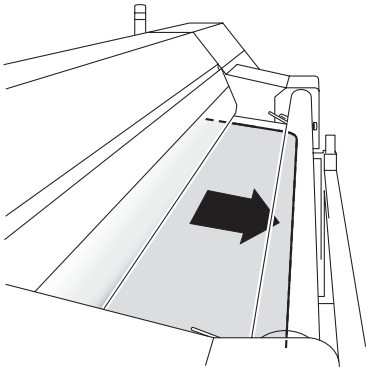


17. Press [ENTER] key and then operate the belt with a belt speed of about 10 mm/s.



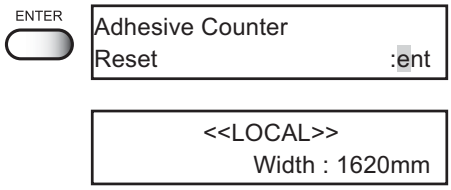
18. Leave the device while operating for 2 to 3 hours.

Make sure that adhesive has dried.



19. Press [ENTER] key to reset the adhesive counter and be ended the operation.

Or press [END] key not reset and perform end the operation.



Drawing Setup Conditions [List]

This function outputs the current settings of the device.
They are useful in carrying out maintenance of the device.

Explanation of the list

1. SET UP	:	Indicates a value that is specified with the FUNCTION.
2. PrintAdjust	:	Indicates a correction value for dot position.
3. REPLACE COUNTER	:	Indicates the number of times the ink cartridges are replaced.
4. VERSION	:	Indicates the version of the firmware and memory capacity of the device.
5. PARAMETER	:	Used for service persons for maintenance.

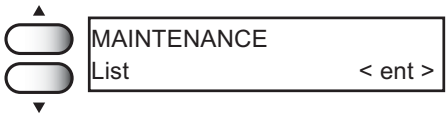
STEP

1. Make sure the fabric has set on the belt.

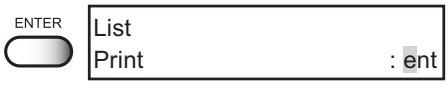
2. Put the device into the MAINTENANCE mode. (Refer to Page 5.3)

3. Press [ENTER] key.

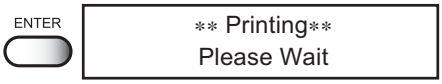
4. Press [▲] and [▼] key until the display gives the indication [List].



5. Press [ENTER] key.



6. Press [ENTER] key again.
Printing the LIST is started.



7. The device enters the LOCAL mode.

***LIST**

LIST (System Ver1.00 :I/F Ver1.00)

(1) SETUP	< TYPE1 >		TYPE2		TYPE3		TYPE4	
Media Comp.	0	[PLOT]	0	[HOST]	0	[HOST]	40	[HOST]
Print Mode		[PLOT]		[HOST]		[HOST]		[HOST]
Quality	STD		STD		STD		STD	
Direction	UNI-D		UNI-D		UNI-D		UNI-D	
Extend	OFF		OFF		OFF		OFF	
Ink Layers	1	[PLOT]	1	[HOST]	1	[HOST]	1	[HOST]
RightMargin	0mm		0mm		0mm		0mm	
LeftMargin	0mm		0mm		0mm		0mm	
Refresh	Level1	[PLOT]	Level1	[HOST]	Level1	[HOST]	Level1	[HOST]
mm/inch	mm		mm		mm		mm	
Auto Clean	OFF		OFF		OFF		OFF	

Printing HEX Code Of Printing Command [Data Dump]

This function plots data commands received from the computer, in HEX code.
The HEX code is an alphanumeric representation of printing commands.
By using this code, it is possible to check if there are any abnormal data commands.

- When this function is used to output data commands on a fabric, use A4 or larger size with the long side set horizontally.

CAUTION

- DATA DUMP automatically feeds line according to the size of fabric used.

STEP

1. **Make sure the fabric has set on the belt.**

2. **Put the device into the MAINTENANCE mode.**
   (Refer to Page 5.3)

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

4. **Press [▲] and [▼] key until the display gives the indication [Data Dump].**

5. **Press [ENTER] key.**

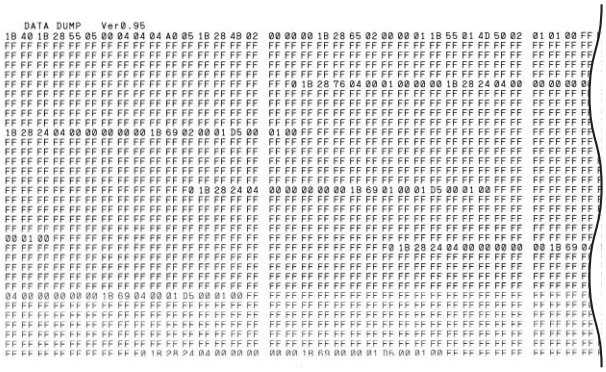
6. **The transfer data from the host computer.**
   Drawing the DATA DUMP is started.

7. **When printing is completed, press [REMOTE] key.**

8. **Perform the data clear operation.**
   (Refer to Page 2.49)

	FUNCTION MAINTENANCE < ENT >
ENTER	MAINTENANCE Station < ent >
▲ ▼	MAINTENANCE Data Dump < ent >
ENTER	Data Dump
ENTER	** Data Dump ** Please Wait
REMOTE	<< LOCAL >> width : 1620mm

***DATA DAMP**



Selecting Ink Head [Use Head]

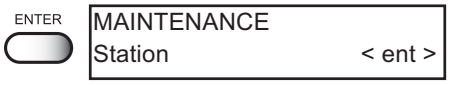
If nozzle trouble is not recovered, you should be set the ink head for the front or the back side to continue printing.

ALL	:	Uses both the Front and Rear rows.
REAR	:	Uses only the Rear row.
FRONT	:	Uses only the Front row.

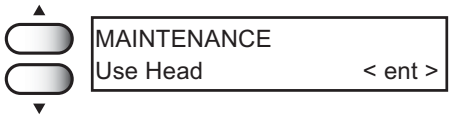
STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page 5.3)

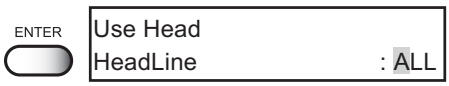
2. Press [ENTER] key.



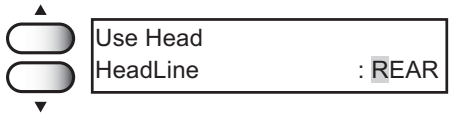
3. Press [▲] and [▼] key until the display gives the indication [USE HEAD].



4. Press [ENTER] key.



5. Press [▲] and [▼] JOG key to select the ink head used.
[ALL], [REAR], [FRONT]



6. Press [ENTER] key.

7. Press [END] key twice, the menu returns to the LOCAL mode.

Menu Displayed After The Ink Cartridge Is Installed [Ink Filling]

When the ink cartridge is replaced with a new one or a new ink cartridge is installed, this device charges ink automatically. Maintenance function have a menu of ink change, it is not used normally.

When Replacing Different Type Of Ink [Ink Change]

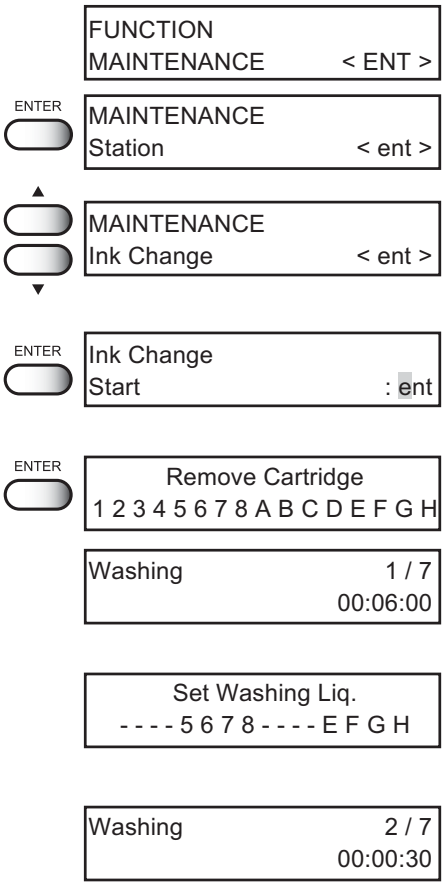
The INK CHANGE function charges ink different from the one currently in use. When the same type of ink as the ink station is to be used, it is unnecessary to execute this function.

CAUTION

- Be sure to use the Mimaki original ink. Please be noted that MIMAKI ENGINEERING CO., LTD. shall have no liability for any trouble that arises when using any ink other than the genuine MIMAKI brand ones.
- For ink replacement, head cleaning liquid is required.

STEP

1. **Put the device into the MAINTENANCE mode. (Refer to Page 5.3)**
2. **Press [ENTER] key.**
3. **Press [▲] and [▼] key until the display gives the indication [Ink Change].**
4. **Press [ENTER] key.**
5. **Remove the relevant ink cartridge, and go to the next step.**
6. **Eject the ink.**
   Ink is ejected from the tube, mid tank and damper.
7. **Set the cleaning liquid cartridge in the lower ink slot.**
   Check that there is no cleaning liquid cartridge error, and perform cleaning.
8. **Suction of the cleaning liquid starts.**
9. **Wash the tube, mid tank and damper with cleaning liquid.**



10. Remove the cleaning liquid cartridge from the lower ink slot.

Check the status, and go to the next step.

Remove Washings
- - - - 5 6 7 8 - - - - E F G H

11. Set the cleaning liquid cartridge in the upper ink slot.

Check that there is no cleaning liquid cartridge error, and perform cleaning.

Set Washing Liq.
1 2 3 4 - - - A B C D - - - -

12. Suction of the cleaning liquid starts.

Washing	3 / 7
	00:13:20

13. Wash the tube, mid tank and damper with cleaning liquid.

14. Remove the cleaning liquid cartridge from the upper ink slot.

Check the status, and go to the next step.

Remove Washings
1 2 3 4 - - - A B C D - - - -

15. Set the cleaning liquid cartridge in the lower ink slot.

Check that there is no cleaning liquid cartridge error, and perform cleaning.

Set Washing Liq.
- - - - 5 6 7 8 - - - - E F G H

16. Suction of the cleaning liquid starts.

Washing	4 / 7
	00:13:20

17. Wash the tube, mid tank and damper with cleaning liquid.

18. Remove the cleaning liquid cartridge from the lower ink slot.

Check the status, and go to the next step.

Remove Washings
- - - - 5 6 7 8 - - - - E F G H

19. Set the cleaning liquid cartridge in the upper ink slot.

Check that there is no cleaning liquid cartridge error, and perform cleaning.

Set Washing Liq.
1 2 3 4 - - - A B C D - - - -

20. Suction of the cleaning liquid starts.

Washing	5 / 7
	00:12:58

21. Wash the tube, mid tank and damper with cleaning liquid.

22. Remove the cleaning liquid cartridge from the upper ink slot.

Check the status, and go to the next step.

Remove Washings
1 2 3 4 - - - A B C D - - - -

23. Set the cleaning liquid cartridge in the lower ink slot.

Check that there is no cleaning liquid cartridge error, and perform cleaning.

Set Washing Liq.
- - - - 5 6 7 8 - - - - E F G H

24. Suction of the cleaning liquid starts.

Washing	6 / 7
	00:12:56

25. Wash the tube, mid tank and damper with cleaning liquid.

26. Remove the cleaning liquid cartridge from the lower ink slot.

Check the status, and go to the next step.

Remove Washings
- - - - 5 6 7 8 - - - - E F G H

27. Suction of air starts.

The tube, mid tank and damper are evacuated.
When cleaning finishes, the device enters the ink filling mode.

Washing	7 / 7
	00:14:00

28. Press the JOG key [up] or [down] to select the type of ink.

Ink Type	
Type	: Acid

Ink Type	
Type	: Reac

29. Press the [ENTER] key. The screen for selecting ink color mode appears.

30. Press the JOG key [up] or [down] to select the ink color mode for filling.

Ink Color	[Reac]
Select	: 8Color

Ink Color	[Reac]
Select	: 4Color

31. Press the [ENTER] key. The screen for monitoring cartridge filling appears.

32. Open the Ink Station Door.

Cartridge	[Reac]
- - - - - - - - A B C D E F G H	

33. Set the ink cartridge to fill.

When the cartridge is set, the filling standby screen appears.

Ink Filling	[Reac]
Start	:ent

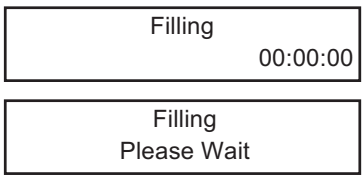
34. Close the Ink Station Door.

35. Press the [ENTER] key to start filling.

"Filling" is displayed.

Remaining filling time is shown in seconds.

When remaining filling time is less than 1[s], the display changes.



36. When filling finishes, the vacuum is released.

The device returns to the LOCAL mode.

CAUTION

- When cleaning finishes during ink replacement, filling is performed. Be careful of the amount of ink remaining in the cartridge.

Resetting The Counters For Each Type [Count Reset]

This function resets the counter for the cleaning filter, Wiper blade, Adhesive and Absorption roller. In case of showing up the following messages, you can reset these messages by this procedure.

Belt Adhesive 300m To Go	Belt Adhesive Reapply Adhesive
Water Absorption Check The Roller	Wash Tank Chech The Filter

STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page P.5.3)

FUNCTION
MAINTENANCE < ENT >

2. Press [ENTER] key.

MAINTENANCE
Station < ent >

3. Press [▲] and [▼] key until the display gives the indication [Count Reset].

MAINTENANCE
Count Reset < ent >

4. Press [ENTER] key.

Counter Reset
Sel : Washfilter

5. Press [▲] and [▼] key, and select the item to initialize.

[Washfilter], [Belt Wiper], [Adhesive] ,[Absorb Rlr.]

Counter Reset
Sel : Adhesive

6. Press [ENTER] key.

Count Reset
Reset : ent

7. Press [ENTER] key to execute the initialization.

After the initialization, the LCD returns to [Counter Reset].

MAINTENANCE
Count Reset < ent >

8. Press [END] key twice, the menu returns to the LOCAL mode.

<< LOCAL >>
width : 1620mm

- It is available to confirm the counter for “Belt wiper” and “ Adhesive” in the counter log display. (Refer to Page 1.22 “ Displaying the information”)

Displaying The Information On This Device [Information]

This function displays the firmware version, ANR unit version and serial number of this device. If trouble occurs, inform your dealer or Mimaki sales office of this information and details of trouble. The use of the attached inquiry sheet will help immediate solution.

STEP

1. Put the device into the MAINTENANCE mode. (Refer to Page P.5.3)

FUNCTION
MAINTENANCE < ENT >

2. Press [ENTER] key.

ENTER

MAINTENANCE
Station < ent >

3. Press [▲] and [▼] key until the display gives the indication [Information].

MAINTENANCE
Information < ent >

4. Press [ENTER] key.

ENTER

Information
View : Version

5. Press [ENTER] key to select [Version].

Firmware version is indicated.

ENTER

MAIN Ver 1.00
I/F Ver 1.00

- Firmware version is indicated when the ANR unit setting has been selected “ON”, it may gives ANR unit version as well. Press JOG key [▲] and [▼] it is indicated.

ANRS Ver 1.00

6. Press [END] key, turn back to the previous menu.

END

Information
View : Version

7. Select [Serial No.] by pressing the JOG key [▲] and [▼].

Information
View : Serial No.

8. Press [ENTER] key.

Serial number. is indicated.

ENTER

Serial No.
S / N ＊＊＊＊＊＊＊＊

9. Press [END] key four times, the menu returns to the LOCAL mode.

END

Information
View : Serial No.

<< LOCAL >>
width : 1620mm

CHAPTER 6
When Abnormal Conditions are Encountered

Chapter 6 describes corrective measures to be taken in the case where an abnormal phenomenon arises on the device and where an error message is given on the display.

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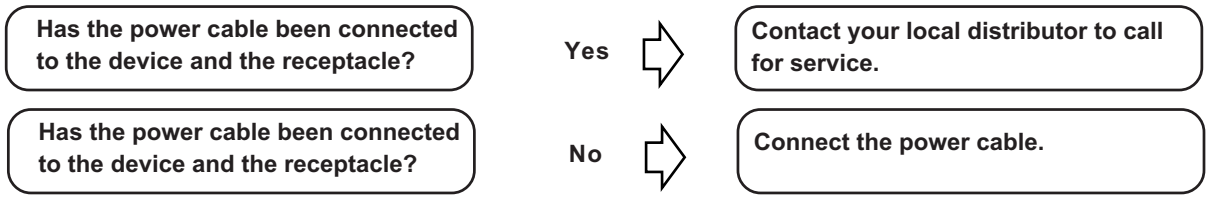
Before Taking A Phenomenon As A Sign Of Failue

In this section gives you corrective measures against troubles in the case where no error message is given on the LCD are described. Be sure to take the following measures before taking the trouble as a sign of failure. If the measures fail to restore the device to the normal state, contact your local MIMAKI distributor or MIMAKI office.

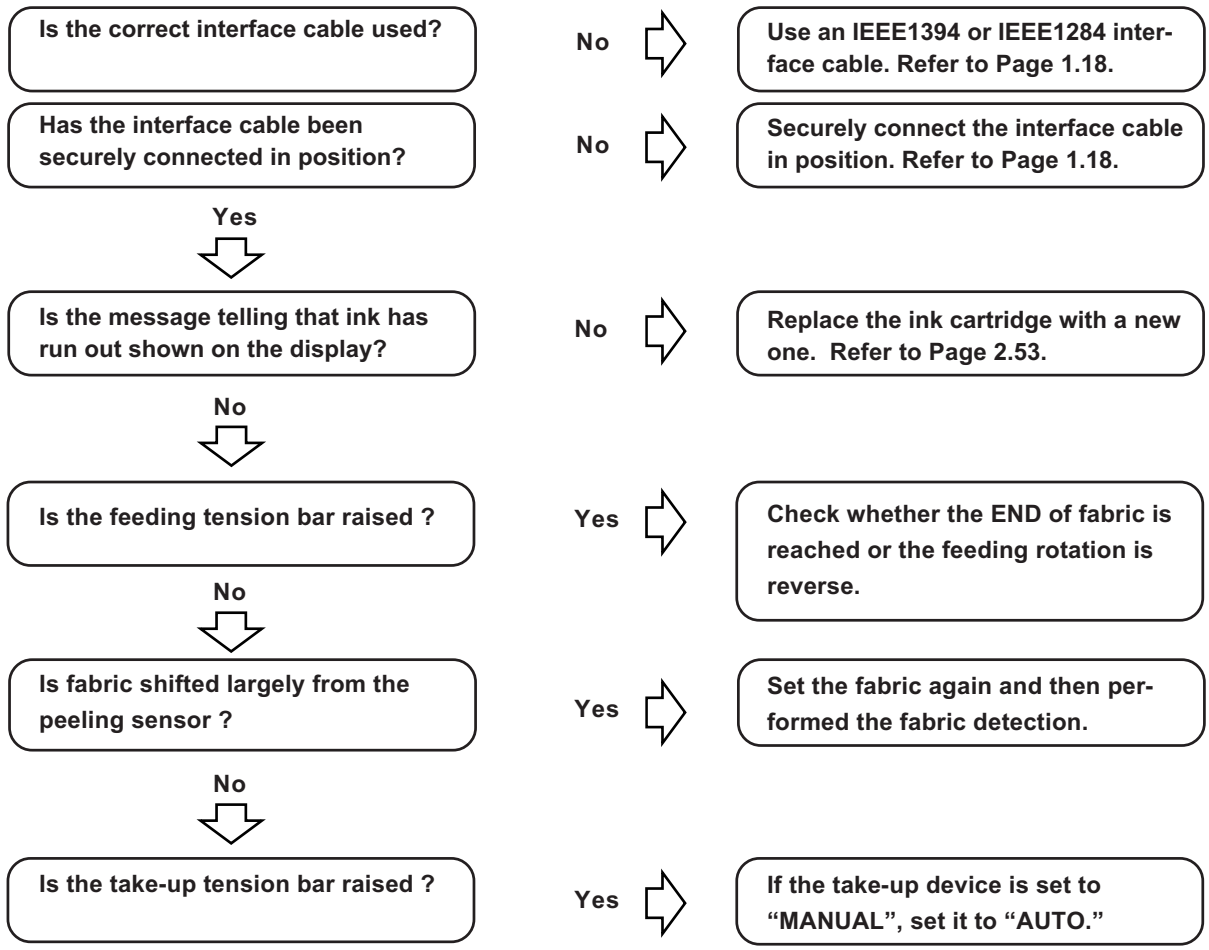
The device cannot be energized

The main cause of problems with turning on the power is failure to connect the power cable to the computer properly. Check that it is connected properly again.



The device cannot perform printing

This occurs when the data is not being transmitted to the device properly. It can also occur when any of the device functions fails or the fabric has been set improperly.



Fabric skew / wrinkle / stained

A jam of the fabric or a stained fabric is considered to occur when an unsuitable fabric is used or the fabric is set improperly.

Problem	Corrective measure
Is a pre-processed cloth which suits the ink used ?	Use a pre-processed cloth which suits the ink.
Is the cloth wrinkled or folded at both edges ?	Do not use cloths which are wrinkled or folded at both edges.
Is denim or other thick firm fabric used ?	Since denim is too firm, it cannot return once skew starts. Do not use it or use it while monitoring.
With the fabric used, is the center loose compared with the gumming portion at both edges ?	Use the curved bar.
With the fabric used, is the gumming portion at both edges loose ?	Fabric with extremely loose gumming portion at both edges cannot be used.
Is the paper core bending?	Set the fabric with using the fabric core support pipe.(P.2.32)

Fabric Problems And Solutions

Depending on the problem and fabric, some problems may not be resolved by the following solutions. If the problem cannot be resolved after performing printing with any desired test data, stop using the fabric.

Problem	Corrective measure	Remarks
Black lines occur.	1. Increase the media correction value. 2. Lighten the feeding tension bar or use weight.	This problem is seen in fabric that are apt to shrink when printing.
White lines occur. Thin spots are obvious. (In the direction of travel of the head)	1. Reduce the media correction value. 2. Execute the head cleaning.Refer to Page 2.43 3. Clean the interior of the station. Refer to Page 3.11 4. Execute the Media Comp. Refer to Page 2.44 5. Turn ON ANR unit. Refer to Page 4.21 6. Do not touch the fabric nor the belt during printing or pause.	
Wrinkles or slacks occur at the center of the fabric after the pressure roller is being used.	1. Use the curved bar. 2. Increase the weight of the feeding tension bar or remove weight.	This problem is seen in fabric that are bent or fabric whose center is loose compared with the gumming portion with local slacks.
Vertical wrinkles occur at the fixing section of the fabric.	1. Check whether the fabric core used is thin and does not have enough strength, or bent. => Change the fabric core. 2. Lighten the feeding tension bar or use weight. 3. Avoid using the spiral roller.	This problem is seen in materials that are thin and not firm and thin stretch materials.
Wrinkles occur at both edges of the fixing section of the fabric.	Wrinkles occur at both edges of the fixing section of the fabric. 1.Increase the weight of the feeding tension bar or remove weight.	This problem is seen in fabric whose gumming portion is loose compared with the center.
Displacement is observed between “from to right”and “from left to right” printing.	Adjust “Y (outward and inward)” in [PrintAdjust] function. See page 2.37.	
The respective color ink injected by the respective color heads do not properly overlap	Conduct the [PrintAdjust] function. Refer to Page 2.37.	
Cascade strips occures at the horizotanl direction by printing position	Grain is bending. You should advice to the pre-processing vender to adsjut pre-processing to the grain.	Cascade strips show up at the data which has open lined form.
The color changes after post-processing.	In addition to the storage condition of the fabric (temperature and humidity) and storage condition of the fabric after printing (temperature and humidity), when performing unattended operation in particular, pay attention to the temperature and humidity during printing and make them constant.	Coloring differs in spite of the same fabric and pre-processing data.

Problem	Corrective measure	Remarks
White horizontal line appears as different length depending on the place appeared	Grain is bending. You should advice to the pre-processing vender to adsjut pre-processing to the grain. Example of white horizontal line : 	Cascade strips show up at the open lined form data.

Troubles For Which Error Messages Are Given On The LCD

If something is wrong with the device, the buzzer sounds and a corresponding error message is given on the LCD. Take an appropriate corrective measure in accordance with the message.

Errors accompanied by warnings

These errors arise on the ink-related components.

Warning message	Cause	Corrective measure
Ink End 1 2 3 4 5 6 7 8 A B C D E F G H	Filled ink is end.	Replace the ink cartridge of which number is shown on the LCD with a new one. And close the ink station cover.
Ink Near End 1 2 3 4 5 6 7 8 A B C D E F G H	Filled ink is near end.	Printing can be continued in file-by-file basis. However, it is recommended to replace the ink cartridge of which number is shown on the LCD with a new one. And close the ink station cover.
Ink Cartridge 1 2 3 4 5 6 7 8 A B C D E F G H	Ink cartridge is not loaded on the ink station.	Attach the ink cartridge(s) corresponding with the number(s) shown on the display.
Cartridge InkEnd 1 2 3 4 5 6 7 8 A B C D E F G H	The inside of the ink cartridge is end.	Replace the ink cartridge of which number is shown on the LCD with a new one.
Ink Color Error 1 2 3 4 5 6 7 8 A B C D E F G H	The color of the ink cartridge loaded is different from the filled one previously.	Check the color of the ink cartridge with the number displayed.
Ink Type Error 1 2 3 4 5 6 7 8 A B C D E F G H	The type of the ink cartridge loaded is different from the filled one previously.	Check the type of the ink cartridge loaded.
Ink Limit 1 2 3 4 5 6 7 8 A B C D E F G H	The ink cartridge is expired or close to expire.	Check the validity of the loaded ink cartridge.
Ink IC Error 1 2 3 4 5 6 7 8 A B C D E F G H	The IC chip of the ink cartridge could not be read normally.	Insert an ink cartridge with the displayed number again. If the same error message appears again on the LCD, contact your local distributor to call for service.
Cartridge Error 1 2 3 4 5 6 7 8 A B C D E F G H	Abnormal information occurred in the ink IC.	Change an ink cartridge with the displayed number.
Unidentified Ink 1 2 3 4 5 6 7 8 A B C D E F G H	The set ink cartridge is not a genuine product.	Use the genuine ink cartridge with IC chip.
Ink Low 1 2 3 4 5 6 7 8 A B C D E F G H	Ink is not enough to perform ink filling.	Reinstall the ink cartridge which has ink left.

Warning message	Cause	Corrective measure
Head Unregistered ID	The head ID is not registered.	If this message appears again after the power has been restored, contact your dealer or Mimaki sales office.
Media End Print [REMOTE] Key	Fabric has been slacked by the feeding tension bar position.	1. Press REMOTE key to start printing. 2. Set the fabric again to remove slacks. (Refer to Page 2.19)
Mainte Cover Close The Cover	The front cover or station cover is open.	Close the front cover or station cover.
Please Close The Ink Station Door	The ink station cover is open.	Close the ink station cover.
Wiper Replace Wiper	Time to replace the wiper in the capping station with a new one. Time to remove ink adhered to the bottom surface of the slider.	Printing will be enabled by pushing the [REMOTE]. Then, the error message will not appear until the power is re-turned on. It is recommended, however, to replace the wiper with a new one as soon as possible. At the same time, clean the bottom surface of the slider. (Refer to Page 3.17)
Wiper Clean WiperShaft	Cleaning period of the ink on the wiper shaft of the capping station.	Perform the carriage-out function of the station maintenance (Refer to Page 3.15) to clean the wiper shaft of the capping station. When the carriage-out function is performed, the warning message disappears.
Take-Up Take-Up Limit	The take-up tension bar is located at the top position for a certain period of time or more.	Check the fabric and perform the fabric reset. (Refer to Page 2.19)
Take-Up Check Tension	The take-up tension bar is located at the bottom position for a certain period of time or more.	Check the fabric and take-up tension bar, or raise the tension bar.
Take-Up Take-Up Error	The tension bar is located at the bottom position for a prolonged time during heater setting is OFF.	Check the fabric and take-up tension bar, or raise the tension bar.
Feeding Feeding Limit	The feeding tension bar is located at the highest position for a certain period of time or more.	Lower the feeding tension bar and check the fabric and take-up tension bar.
Head Height Check HeadHeight	Head guard sensor was detected.	Check the condition of the fabric retainer and fabric surface (slacks, float).
Y Main Guide Clean Main Guide	Time to clean dirt from the main guide.	Execute Maintenance Function-Main Guide to clean the Y main guide axis. When Carriage Out is executed, this warning message disappears. (Refer to Page 3.27)

Warning message	Cause	Corrective measure
Peeling Error Press [ENT] Key  Peeling Error Check The Media	Something wrong with the peeling system.	Check the position of fabric. 1. If the fabric is peeled off up to the head position • Set the position of the pressure roller to HIGH. • Lower the printing rate and perform re-printing. • Adhesive has been degraded. Reapply adhesive. 2. If the fabric is transported adhering to the belt, move the pressure roller position to LOW. 3. In case the same error message appears again on the LCD, contact your local distributor to call for service.
Flushing Box No Flushing Box	Flushing box has not been set.	Attach the running flushing box.
Flushing Box Empty The Ink	Time to clean the flushing box.	Cleaning the running flushing box or draining the waste ink. In case the filter has been dirt, clean it . (Refer to Page 3.24)
Blower Operable Temperature	Temperature is below operable condition 5 degree or more.	Adjust the temperature of the peripheral environment to appropriate temperature.
REPLACE BATTERY	Time to replace the battery.	Contact your dealer or Mimaki sales office.
Wash Tank Check The Water Local mode Wash Tank Press [ENT] Key  Wash Tank Check The Water	Water in the wash tank is below level.	Add water to the cleaning liquid tank.
Wash Tank Check The Filter	Time to replace the washing filter.	Change the cleaning water filter with a new one. Then, execute Maintenance Function-Counter Reset to reset the counter of the cleaning filter. (Refer to Page 3.4, 5.20)

Warning message	Cause	Corrective measure
Belt Wash Tray Overflow	Water in the wash tray is overflowed.	The filter of the cleaning liquid tank is clogged or the hose is clogged by dust. Change the filter and clean the hose exit.
ANR Unit No Check Media	Check media is not available.	Prepares the new check media.
ANR Unit Head Clean [ENT]	ANR detected irregular nozzle.	Push the [ENTER] key to perform cleaning of the print head. (Refer to Page 2.43)
ANR Unit Media Near End	ANRS check media remains a few.	It prepares check media.
ANR Unit Print Stop	ANR Unit detected irregular nozzle.	Perform the head cleaning. (Refer to Page 2.43)
Belt Adhesive 300m To Go	Time to reapply adhesive to the belt.	Apply a new adhesive to the belt (Refer to Page 5.4, 5.20). Then, execute Maintenance Function-Counter Reset to reset the counter of “Adhesive”.
Belt Adhesive Reapply Adhesive	Time to reapply adhesive to the belt.	
Water Absorption Check The Roller	Time to check the water absorption roller.	Clean the absorption roller (Refer to Page 3.7, 5.20). Then, execute Maintenance Function-Counter Reset to reset the counter of “Absorb Rlr.”
Service Call 101	Time to change the rewinding motor.	The device can be used continuously. However, contact your dealer or Mimaki sales office.
Service Call 102	Time to change the winding motor.	
Service Call 111	Time to change the red LED.	
Service Call 112	Time to change the blue LED.	
Service Call 133	Peeling sensor light intensity have been decreased.	Peeling sensor needs to service maintenance.The device can be used continuously. However, contact your dealer or Mimaki sales office.

Error messages

Error messages indicates error numbers.
If any error message is given on the LCD, turn off the power to the device and turn it on after a while.
If the same error message appears again on the LCD, contact your local MIMAKI distributor or MIMAKI office to call for service.

Error message	Cause	Corrective measure
ERROR 01 MAIN ROM	Control ROM is defective.	Turn off the power to the device an turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 02 MAIN RAM	Control RAM is defective.	
ERROR 03 POWER +35V	Interior power voltage becomes abnormal.	
ERROR 04 F-ROM	Control ROM is defective.	
ERROR 07 TEMP (0000)	Abnormal temperature is detected.	
ERROR 08 LINEAR ENCODER	Trouble with detection of linear encoder.	
ERROR 09 FPGA ERROR 09 HDC	Control circuit board is defective.	
ERROR 10 COMMAND	The device has received data other than command data.	Securely connect the interface cable in position.
ERROR 11 PARAMETER	A parameter outside the range of acceptable numeric values is received.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 12 MAINTE COMMAND	The maintenance control command is faulty.	Inapplicable color specification data was received.
ERROR 13 RIP LINK	Check the output setting of the host computer.	
ERROR 14 COLOR COMMAND	A RIP from other than Mimaki was used.	

Error message	Cause	Corrective measure
ERROR 20 I/F BOARD	An error occurs in communication between I/F board and main board.	Check the output setting of the host computer.
ERROR 21 I / F NONE	The I/F board is not installed.	Install the I/F board.
ERROR 23 HOST I / F	HOST I/F Timeout error has arisen during communication between the host computer and interface board.	Check to be sure that the cable is securely connected to the host computer and interface board. Also, check to ascertain that no error has arisen on the host computer side.
ERROR 24 I / F INITIAL	Initial operation failure of the I/F board and control board.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 30 OPERATION	Improper operation has been conducted on the operation panel.	Perform a proper operation.
ERROR 34 DATA REMAIN	Settings for functions have been tried to be changed though there remains received data that has not yet been printed.	Print all pieces of received data or execute the data clear function. Then, change the settings.
ERROR 40 MOTOR X	The Xmotor has been overload.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 41 MOTOR Y	The Ymotor has been overload.	
ERROR 42 X OVER CURRENT	Overcurrent error on the Xmotor has been detected.	
ERROR 43 Y OVER CURRENT	Overcurrent error on the Ymotor has been detected.	
ERROR 45 CAPPING	Incorrect height of the capping station has been detected.	
ERROR 46 WIPING	The wiping device is defective.	
ERROR 50 MEDIA SENSE	The device has failed to detect the fabric.	Both edges of the set cloth are not positioned properly. If an error is displayed after setting it properly, contact your dealer or MIMAKI sales office.
ERROR 51 Y ORIGIN	The device has failed to detect the origin.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service. Check the connection.

Error message	Cause	Corrective measure
ERROR 60 TAKE-UP UNIT n	The take-up device is defective. n = 01 : Sensor malfunction error	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service. Check the connection.
ERROR 61 FEEDING UNIT n	The feeding device is defective. n = 01 : Sensor malfunction error	
ERROR 110 ANRU LED *	Belt origin scan error.	Disable ANR Unit Yes [ENT] No [END] • Press the [ENTER] key to disable the ANR unit function and then, the device gives into the LOCAL mode. After disabled, the ANR unit is not performed for this cause. Contact your dealer or Mimaki sales offices. • In case pressing the [END] key not to disable the ANR unit function, the error message indicated and then, turns the device off automatically (System shut down). Contact your dealer or Mimaki sales offices.
ERROR 110 ANRU LED *	LED of ANR unit is irregular. n=R :Red, n=B :Blue	
ERROR 111 ANRU ROM n	ANR unit F-ROM error. n = Content No.	
ERROR 112 ANRU RAM n	ANR unit S-RAM error. n = Content No.	
ERROR 113 ANRU PARAM n	Irregular in ANR unit parameter error.	
ERROR 115 ANRU Z ORIGIN	Unable to detect Z origin.	
ERROR 116 ANRU I / F 00H	Irregular occurred on main circuit.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service. Check the connection.
ERROR 117 ANRU FPGA	Irregular occurred in FPGA error.	Disable ANR Unit Yes [ENT] No [END] • Press the [ENTER] key to disable the ANR unit function and then, the device gives into the LOCAL mode. After disabled, the ANR unit is not performed for this cause. Contact your dealer or Mimaki sales offices. • In case pressing the [END] key not to disable the ANR unit function, the error message indicated and then, turns the device off automatically (System shut down). Contact your dealer or Mimaki sales offices.
ERROR 118 ANRU SHADING	Irregular occurred in shading data.	
ERROR 130 BELT ORIGIN	Belt origin scan error.	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service. Check the connection.
ERROR 131 BELT ENCODER	Belt encoder control error.	
ERROR 132 BELT WASH BRUSH	Belt wash brush P error.	

Error message	Cause	Corrective measure
ERROR 133 PEELING SENS 00	ERROR on amout of lazer recieved. System goes down.	Contact your dealer or Mimaki sales office.
ERROR 140 MID TANK nnH	The mid tank sensor is defective. (nn: Mid tank number)	Turn off the power to the device and turn it on after a while. If the same error message appears again on the LCD, contact your local distributor to call for service.
ERROR 141 INK SENSOR BOARD	Connectoin or error on ink sensor board has occurred.	
ERROR 142 INK SUPPLY nnH	An error occurred in the ink supply system. (nn: Ink supply path number)	Contact your local distributor to call for service.

Appendix

This appendix describes the specifications and components the device, function menu structure.

Table of contents

Basics Specifications

Item		Tx3-1600	
		8 color set	4 color set
Printing head	Method	Piezo-electric drop-on demand	
	Specification	Eight-heads (4 x 2 lines, Stagger arrangement)	
	Nozzle	360 nozzles for each color	720 nozzles for each color
Resolution		360 , 540, 720 dMpi	
Drawing mode		360 x 360 dpi : 2 / 4 / 8passes, Unidirection / bidirection 360 x 540 dpi : 3 / 6 / 12 passes, Unidirection / bidirection 360 x 720 dpi :4 / 8 / 16 passes, Unidirection / bidirection 720 x 720 dpi : 4 / 8 / 16 passes, Unidirection / bidirection	360 x 360 dpi : 1 / 2 / 4passes, Unidirection / bidirection 360 x 540 dpi : 3 / 6 / 12passes, Unidirection / bidirection 360 x 720 dpi :2 / 4 / 8passes, Unidirection / bidirection 720 x 720 dpi : 2 / 4 / 8 passes, Unidirection / bidirection
Ink type	Acid dye ink	Color (Gray, Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, Blue, Red)	
	Reactive dye ink	Color (Gray, Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, Blue, Orange, Red, Golden Yellow)	
	Disperse dye ink	Color (Gray, Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta, Blue, Light Blue)	
	Printing pigment	Color (Black, Cyan, Magenta, Yellow)	
Ink set		2 cartridges for each color Acid dye ink for 8-color printing Reactive dye ink for 8-color printing Disperse dye ink for 8-color printing	4 cartridges for each color Acid dye ink for 4-color printing Reactive dye ink for 4-color printing Disperse dye ink for 4-color printing Printing pigment ink for 4-color printing
Delivery system of ink		Proprietary system with low ink detection sensor Correction of the remaining amount of ink provided. INK END detection function is provided. Ink cartridge (Ink pack) replacement method.	
Capacity of ink cartridge		220 cc ± 10 cc per cartrige (x2) 1000 cc ± 30 cc per cartrige (x2)	220 cc ± 10 cc per cartrige (x4) 1000 cc ± 30 cc per cartrige (x4)
Fabric type		The following cloths are excluded. • Curled or folded cloths • Cloths with a low firing point (when the drying unit is used)	
Max. Printing width		Width 1620 mm	
Fabric size (Roll fabric)	Thickness	7.0 mm or less	
	Roll outside diameter	ϕ270 mm or less	
	Roll weight	38 Kg or less	
	Roll inside diameter	More than 2 Inchs	
	Plotting surface	Plotting can be made on either side.	
	Roll end treatment	Light-adhesive tape is used to allow the paper to be removed from the core with ease.	
Margin (Roll fabric)	Left and Right end	10 mm ± 0.5 mm	
	Front end	Approximately 2400 mm (When setting the take up device)	
	Back end	Approximately 800 mm / Approximately 2800 mm (When come away from feeding fabric core)	

Item		Tx3-1600
Distance accuracy	Absolute accuracy	Whichever the larger one of ± 0.5 mm or ±0.3 % of the designated
	Reoroducibility	Whichever the larger one of ± 0.5 mm or ±0.3% of the designated
Perpendicularity		± 0.5 mm / 1000 mm
Head height adjustment		1.3 mm to 10 mm variable from the platen surface
Cutting of fabric		Cutter function not provided
Fabric delivery		Take-up device as standard
Waste ink tank		Waste ink hose and Waste ink tank standard
Interface		IEEE1394, IEEE1284
Command		MRL-1F (ESC/PV.1 base) Mimaki original command
Safety Standard Laser sensor (Laser Sensor Unit)		FCC ClassA, CEmarking, CBreport, UL60950 Class I Laser Product Maximum output : 0.35mW Pulse Duration : 25μs Wave length : 650nm Laser medium : A/Ga/nP
Power	Main unit	AC 100 - 240 V ±10% (Auto voltage)
	Heater, Blower	AC 100 - 120 V ±10% (Auto voltage) In either case 50/60Hz ±1Hz AC 200 - 240 V ±10% (Auto voltage)
Power consumption	Main unit	800 W or less
	Heater	1500 W or less
	Blower	600 W or less
Recommended Environment	Temperature	15 - 30 °C (59 to 86 °F)
	Humidity	35 - 65 % Rh (No condensation)
	Accuracy-guaranteed temperature	18 - 25 °C (64 to 77 °F)
	Temperature change	± 10 °C / h or less (± 50 °F / h or less)
	Dust	Equivalent to normal office level
Outside dimensions (mm)		3250 x 1550 x 1400 (W) x (D) x (H)
Weight		1100 kg (2425lbs)

Specification For Ink

Item	Specifications		
Form	Ink cartridge exclusive to the device	220cc	1000cc
Color (Acid dye ink)	Black ink cartridge	SPC-0355K	SPC-0392K
	Cyan ink cartridge	SPC-0355C	SPC-0392C
	Magenta ink cartridge	SPC-0355M	SPC-0392M
	Yellow ink cartridge	SPC-0355Y	SPC-0392Y
	Lightd cyan ink cartridge	SPC-0355LC	SPC-0392LC
	Light magenta ink cartridge	SPC-0355LM	SPC-0392LM
	Gray ink cartridge	SPC-0355GR	SPC-0392GR
	Blue ink cartridge	SPC-0355BL	SPC-0392BL
	Red ink cartridge	SPC-0355R	SPC-0392R
Color (Reactive dye ink)	Black ink cartridge	SPC-0357K	SPC-0393K
	Cyan ink cartridge	SPC-0357C	SPC-0393C
	Magenta ink cartridge	SPC-0357M	SPC-0393M
	Yellow ink cartridge	SPC-0357Y	SPC-0393Y
	Lightd cyan ink cartridge	SPC-0357LC	SPC-0393LC
	Light magenta ink cartridge	SPC-0357LM	SPC-0393LM
	Gray ink cartridge	SPC-0357GR	SPC-0393GR
	Blue ink cartridge	SPC-0357BL	SPC-0393BL
	Orange ink cartridge	SPC-0357OR	SPC-0393OR
	Red ink cartridge	SPC-0357R	SPC-0393R
	Golden yellow ink cartridge	SPC-0357GY	SPC-0393GY
Color (Disperse dye ink)	Black ink cartridge	SPC-0356K	
	Cyan ink cartridge	SPC-0356C	
	Magenta ink cartridge	SPC-0356M	
	Yellow ink cartridge	SPC-0356Y	
	Lightd cyan ink cartridge	SPC-0356LC	
	Light magenta ink cartridge	SPC-0356LM	
	Gray ink cartridge	SPC-0356GR	
	Blue ink cartridge	SPC-0356BL	
	Light blue ink cartridge	SPC-0356LBL	
Color (Printing pigment ink)	Black ink cartridge	SPC-0350K	
	Cyan ink cartridge	SPC-0350C	
	Magenta ink cartridge	SPC-0350M	
	Yellow ink cartridge	SPC-0350Y	
Contents of inkcartridge	1000cc or 220 cc per cartridge		
Shelf life	Described on the cartridge.		
	Within six months after opening the package Within the expiration period described on the cartridge.		
Storage temperature During storage:	-30 to 40 °C (-22 to 104 °F) (Storage at temperature of 40°C is permitted within a month.)		
Storage temperature During shipment:	-30 to 60 °C (-22 to 140 °F) (Storage at temperature of 60°C (140 °F) is only permitted within 120 hours, and at temperature of 40°C (104 °F) is permitted within a month.)		

CAUTION

- The ink will freeze when it is left for a long time under temperature below -4°C(24.8 °F). Should it freeze, leave the ink cartridge at room temperature (at 25°C / 77°F) for three hours or more to allow the ink to melt.
- Refilling the ink shall be avoided.

Supply Parts

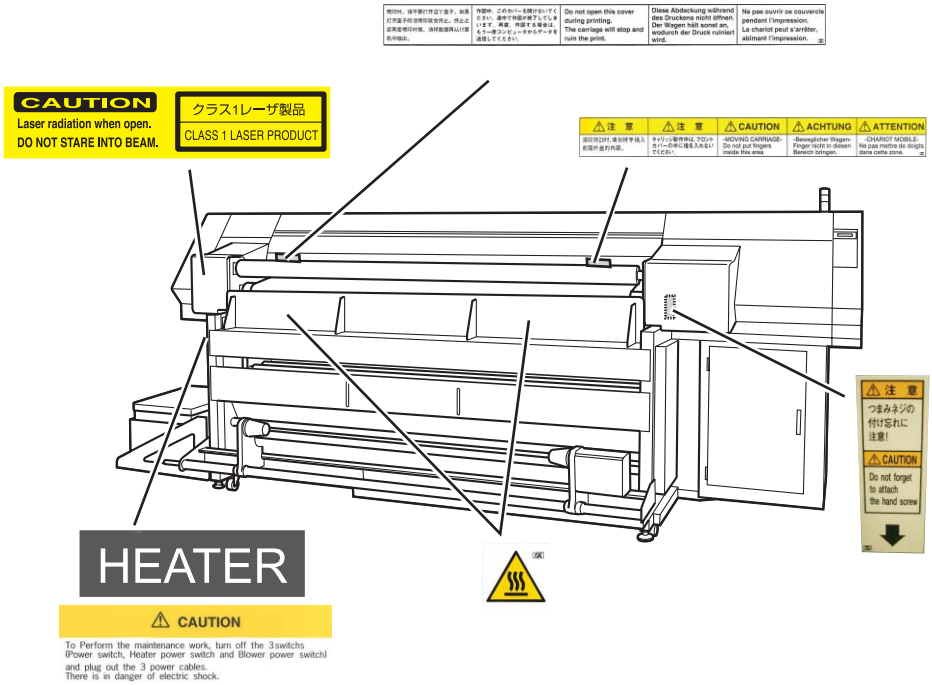
Item	Part Codes	Contents	Remarks
BEMCOT	BEMCOT M-3	100 pieces	
Absorbent cotton	Wooden axis (s) cotton swab 6”	10 pieces	
Acid dye ink	SPC-0392*	1 liter	(* = Colors) With spout holder
	SPC-0355*	220 cc	
Reactive dye ink	SPC-0393*	1 liter	(* = Colors) With spout holder
	SPC-0357*	220 cc	
Disperse dye ink	SPC-0356*	220cc	
Printing pigment ink	SPC-0350*	220c	
Belt wiper unit	SPC-0412	1 set	
Absorption roller	SPC-0413	6 pieces	
Check media	SPC-0383	100 m	For ANRS
Cleaning wiper	SPA-0105	4 pieces	
Cleaning liquid bottle kit	SPC-0137	1 set	For daily maintenance
Head cleaning liquid cartridge	SPC-0259	220cc	Cartridge
Flushing box	SPC-0390	1 piece	
Blower filter	SPC-0391	1 piece	Flushing mist blower filter
Mist filter	SPC-0419	4 pieces	Mist fan filter
Maintenance oil	SPC-0364	100 cc	Y main guide
Adhesive	SPC-0397	1 liter	Polixresin SX
	SPC-0398	4 liter	Polixresin SX
	SPC-0399	18 liter	Polixresin SX
Option			
Slip sheet holder kit *	OPT-J0079	1 set	Slip sheet roll holder
Slip sheet holder kit * (Fabric width guide kit) *	OPT-J0080	1 set	For attaching OPT-J0079 to models up to #C8405085
Metal doctor *	-----	1 set	

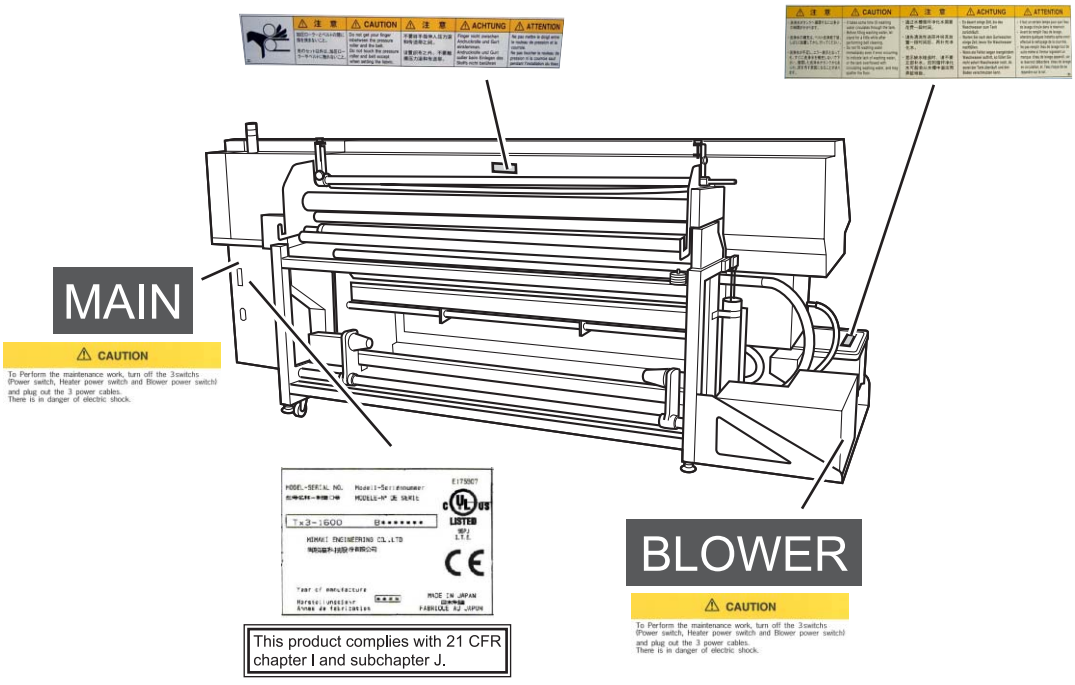
* For release soon

Position Of The Warning Label

This device is adhered with some warning labels. Be sure to fully understand the warning given on the labels. In the case where any of the warning label has become so soiled that the warning message is illegible or has come off, purchase a new one from your local distributor or our office.

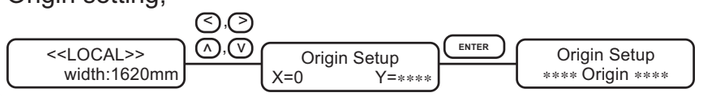
LABEL POSITION



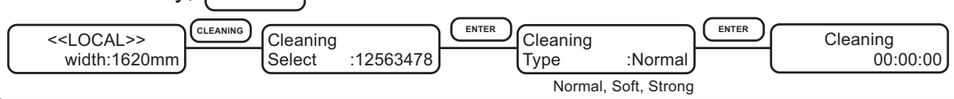


Function Flow Chart

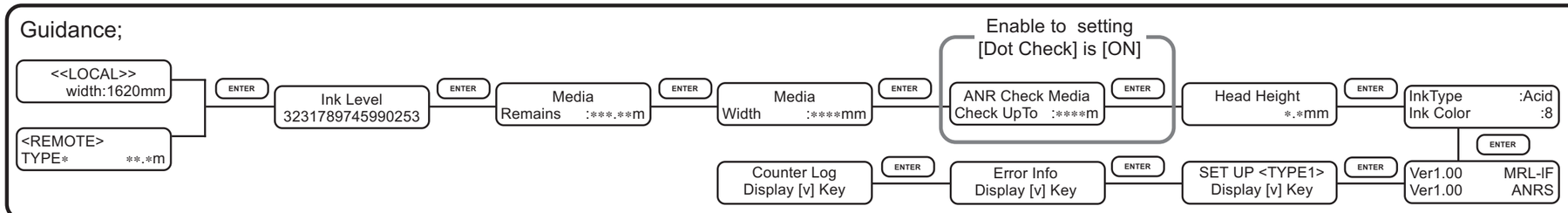
Origin setting;



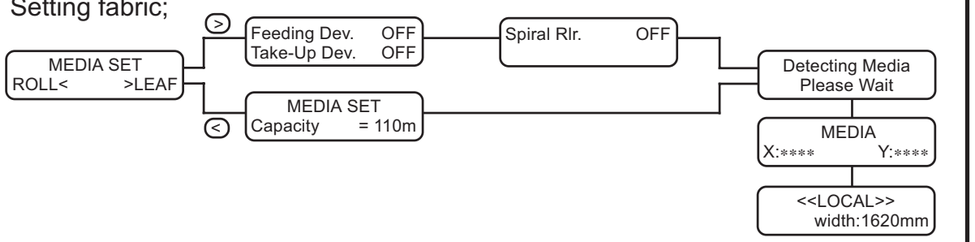
CLEANING key; CLEANING



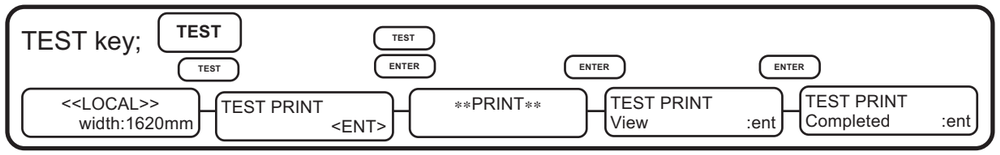
Guidance;



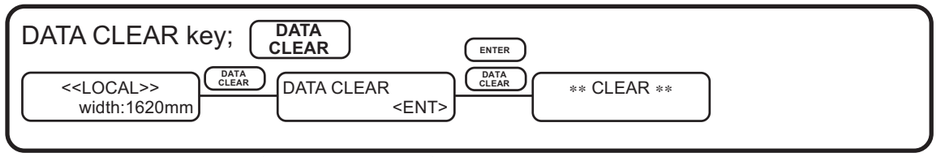
Setting fabric;



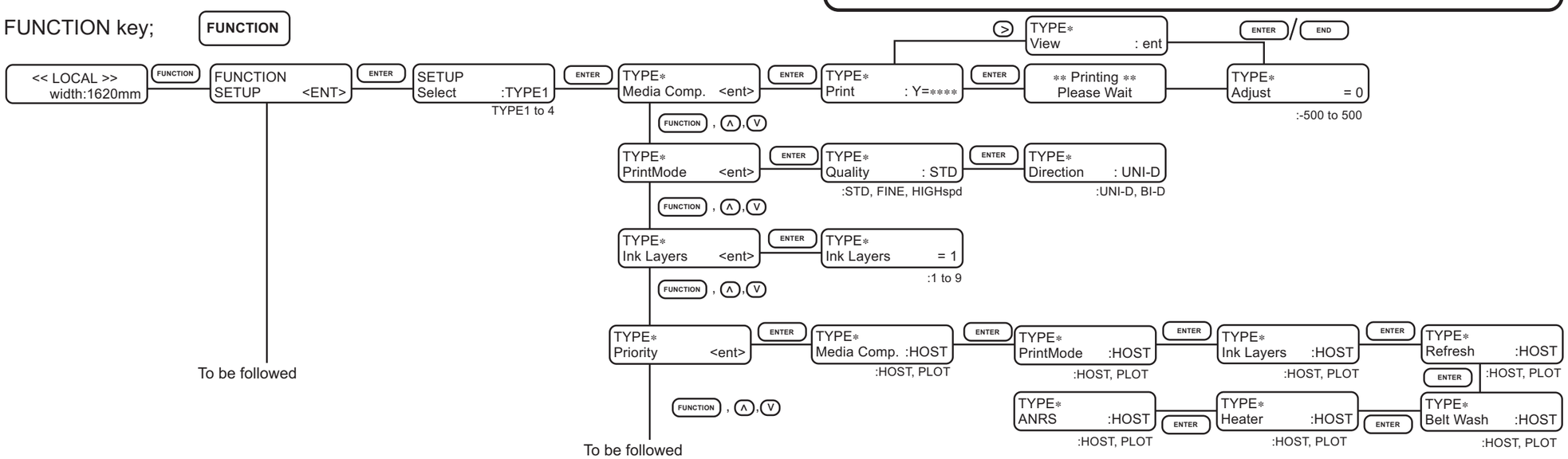
TEST key; TEST

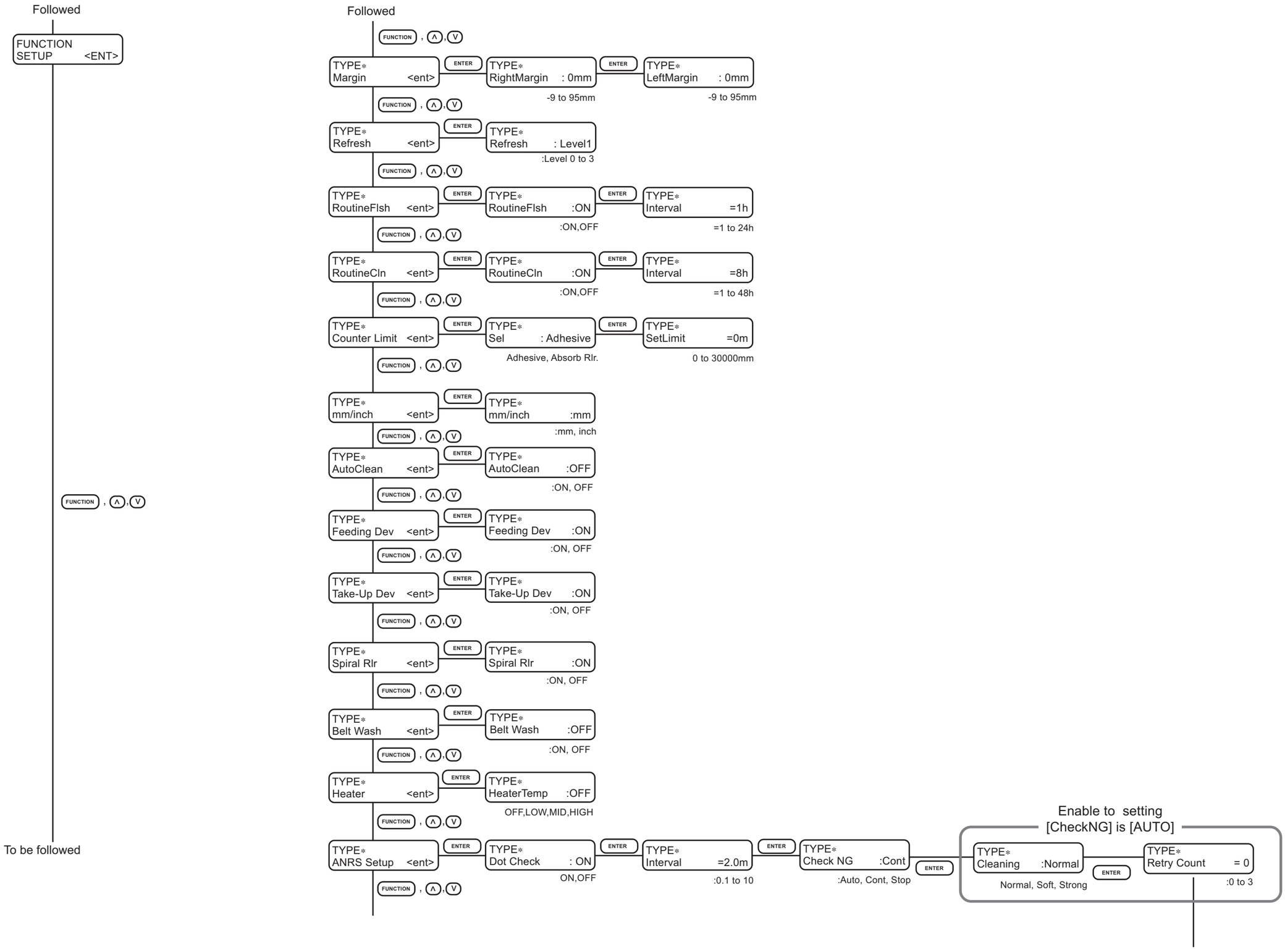


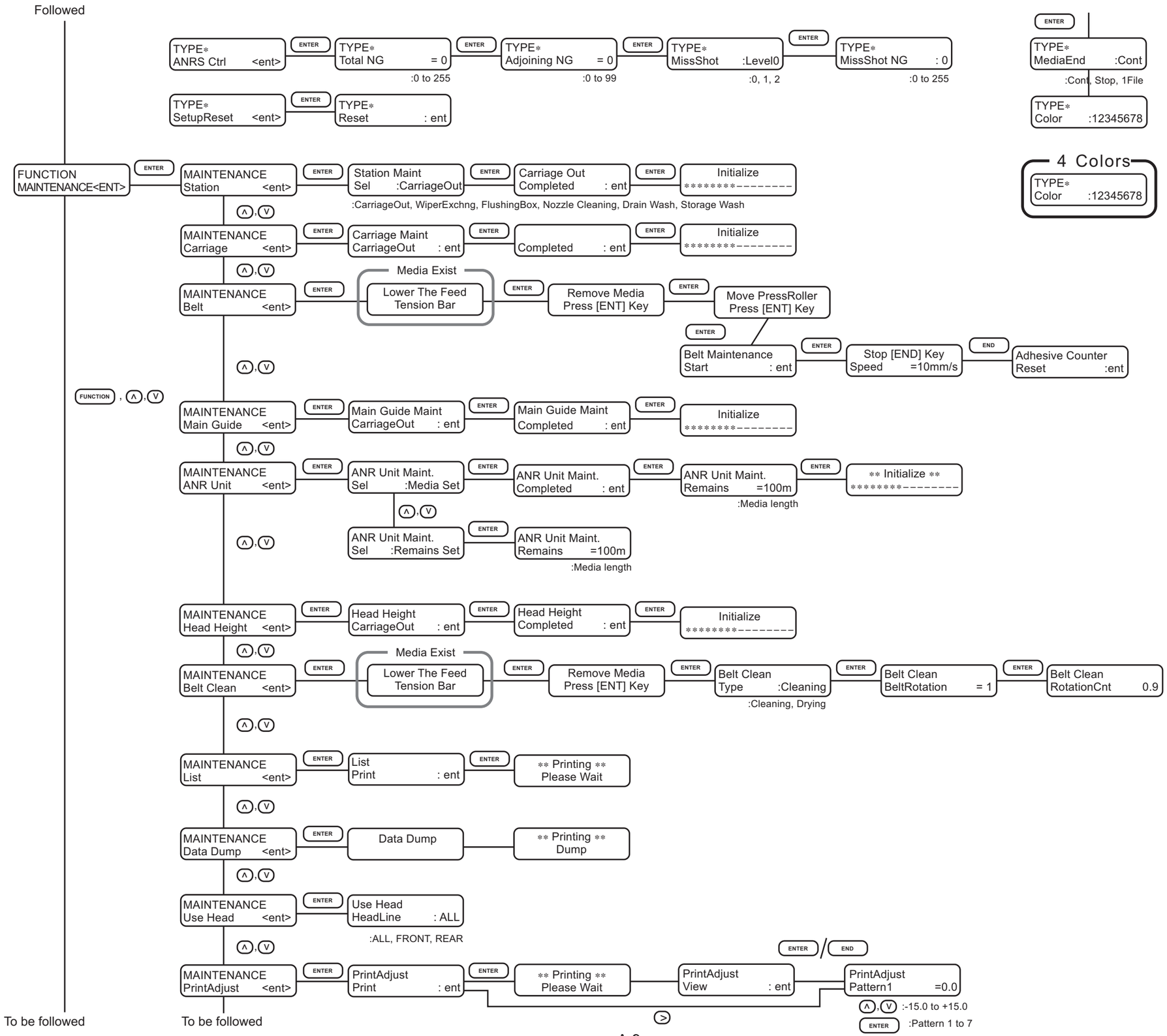
DATA CLEAR key; DATA CLEAR

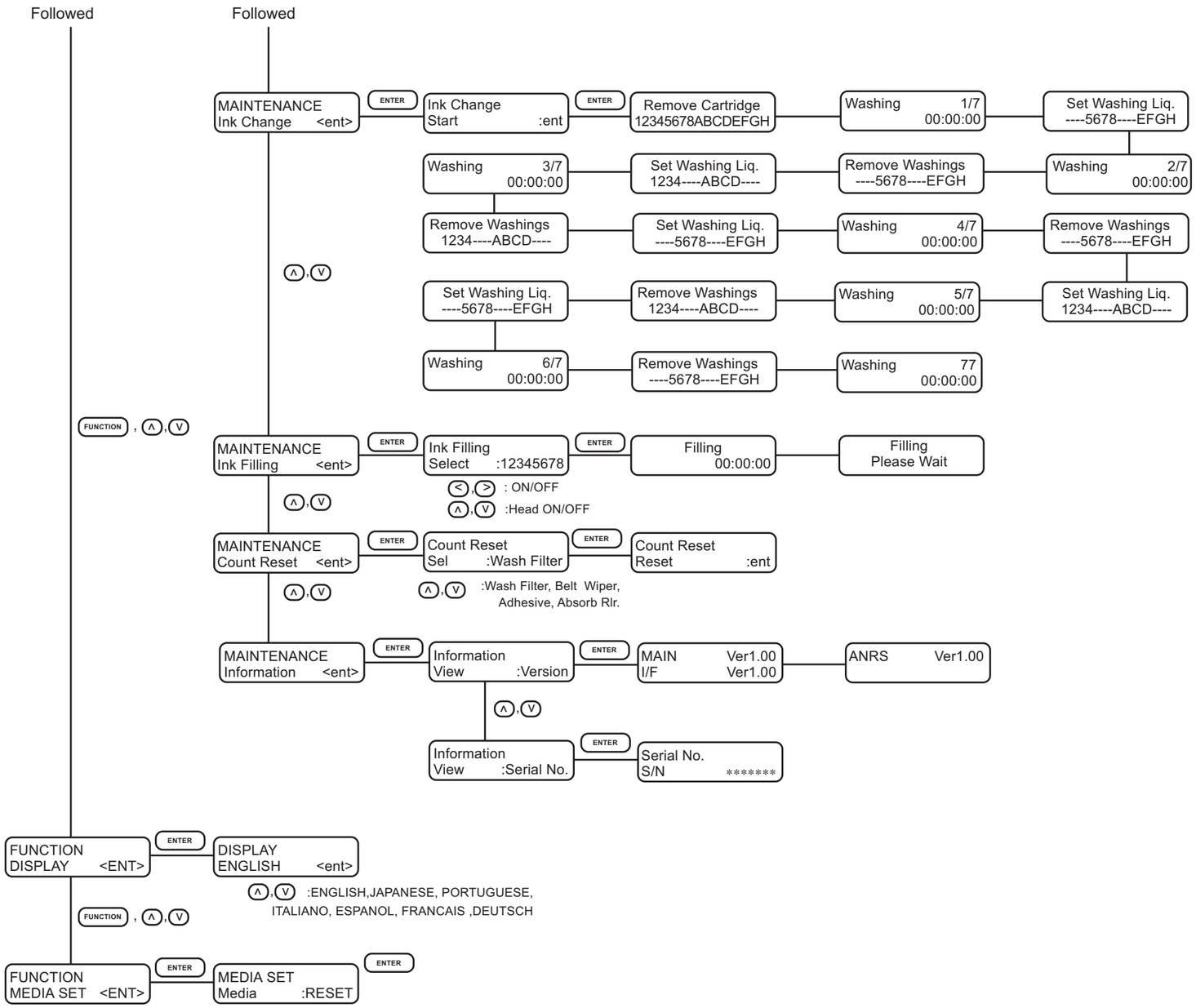


FUNCTION key; FUNCTION




Followed
FUNCTION SETUP <ENT>
FUNCTION , ∧ , ∨
To be followed
Followed
FUNCTION , ∧ , ∨
TYPE* Margin <ent>
ENTER
TYPE* RightMargin : 0mm
-9 to 95mm
ENTER
TYPE* LeftMargin : 0mm
-9 to 95mm
TYPE* Refresh <ent>
TYPE* Refresh : Level1
:Level 0 to 3
TYPE* RoutineFlsh <ent>
TYPE* RoutineFlsh :ON
:ON,OFF
TYPE* Interval =1h
=1 to 24h
TYPE* RoutineCln <ent>
TYPE* RoutineCln :ON
:ON,OFF
TYPE* Interval =8h
=1 to 48h
TYPE* Counter Limit <ent>
TYPE* Sel : Adhesive
Adhesive, Absorb Rlr.
TYPE* SetLimit =0m
0 to 30000mm
TYPE* mm/inch <ent>
TYPE* mm/inch :mm
:mm, inch
TYPE* AutoClean <ent>
TYPE* AutoClean :OFF
:ON, OFF
TYPE* Feeding Dev <ent>
TYPE* Feeding Dev :ON
:ON, OFF
TYPE* Take-Up Dev <ent>
TYPE* Take-Up Dev :ON
:ON, OFF
TYPE* Spiral Rlr <ent>
TYPE* Spiral Rlr :ON
:ON, OFF
TYPE* Belt Wash <ent>
TYPE* Belt Wash :OFF
:ON, OFF
TYPE* Heater <ent>
TYPE* HeaterTemp :OFF
OFF,LOW,MID,HIGH
TYPE* ANRS Setup <ent>
TYPE* Dot Check : ON
ON,OFF
TYPE* Interval =2.0m
:0.1 to 10
TYPE* Check NG :Cont
:Auto, Cont, Stop
Enable to setting
[CheckNG] is [AUTO]
TYPE* Cleaning :Normal
Normal, Soft, Strong
TYPE* Retry Count = 0
:0 to 3


Followed
FUNCTION MAINTENANCE<ENT>
ENTER
MAINTENANCE Station <ent>
Station Maint Sel :CarriageOut
:CarriageOut, WiperExchng, FlushingBox, Nozzle Cleaning, Drain Wash, Storage Wash
Carriage Out Completed : ent
Initialize ********--------
MAINTENANCE Carriage <ent>
Carriage Maint CarriageOut : ent
Completed : ent
MAINTENANCE Belt <ent>
Media Exist
Lower The Feed Tension Bar
Remove Media Press [ENT] Key
Move PressRoller Press [ENT] Key
Belt Maintenance Start : ent
Stop [END] Key Speed =10mm/s
Adhesive Counter Reset :ent
FUNCTION , ^,v
MAINTENANCE Main Guide <ent>
Main Guide Maint CarriageOut : ent
Main Guide Maint Completed : ent
MAINTENANCE ANR Unit <ent>
ANR Unit Maint. Sel :Media Set
ANR Unit Maint. Completed : ent
ANR Unit Maint. Remains =100m
:Media length
** Initialize **
ANR Unit Maint. Sel :Remains Set
MAINTENANCE Head Height <ent>
Head Height CarriageOut : ent
Head Height Completed : ent
Initialize
MAINTENANCE Belt Clean <ent>
Belt Clean Type :Cleaning
:Cleaning, Drying
Belt Clean BeltRotation = 1
Belt Clean RotationCnt 0.9
MAINTENANCE List <ent>
List Print : ent
** Printing ** Please Wait
MAINTENANCE Data Dump <ent>
Data Dump
** Printing ** Dump
MAINTENANCE Use Head <ent>
Use Head HeadLine : ALL
:ALL, FRONT, REAR
MAINTENANCE PrintAdjust <ent>
PrintAdjust Print : ent
PrintAdjust View : ent
PrintAdjust Pattern1 =0.0
^,v :-15.0 to +15.0
:Pattern 1 to 7
TYPE* ANRS Ctrl <ent>
TYPE* Total NG = 0
:0 to 255
TYPE* Adjoining NG = 0
:0 to 99
TYPE* MissShot :Level0
:0, 1, 2
TYPE* MissShot NG : 0
:0 to 255
TYPE* SetupReset <ent>
TYPE* Reset : ent
TYPE* MediaEnd :Cont
:Cont, Stop, 1File
TYPE* Color :12345678
4 Colors
TYPE* Color :12345678
To be followed
To be followed


Followed
Followed
MAINTENANCE
Ink Change <ent>
ENTER
Ink Change
Start :ent
ENTER
Remove Cartridge
12345678ABCDEFGH
Washing 1/7
00:00:00
Set Washing Liq.
----5678----EFGH
Washing 3/7
00:00:00
Set Washing Liq.
1234----ABCD----
Remove Washings
----5678----EFGH
Washing 2/7
00:00:00
Remove Washings
1234----ABCD----
Set Washing Liq.
----5678----EFGH
Washing 4/7
00:00:00
Remove Washings
----5678----EFGH
Set Washing Liq.
----5678----EFGH
Remove Washings
1234----ABCD----
Washing 5/7
00:00:00
Set Washing Liq.
1234----ABCD----
Washing 6/7
00:00:00
Remove Washings
----5678----EFGH
Washing 77
00:00:00
∧,∨
FUNCTION , ∧,∨
MAINTENANCE
Ink Filling <ent>
ENTER
Ink Filling
Select :12345678
ENTER
Filling
00:00:00
Filling
Please Wait
<,> : ON/OFF
∧,∨ :Head ON/OFF
∧,∨
MAINTENANCE
Count Reset <ent>
ENTER
Count Reset
Sel :Wash Filter
ENTER
Count Reset
Reset :ent
∧,∨ :Wash Filter, Belt Wiper,
Adhesive, Absorb Rlr.
∧,∨
MAINTENANCE
Information <ent>
ENTER
Information
View :Version
ENTER
MAIN Ver1.00
I/F Ver1.00
ANRS Ver1.00
∧,∨
Information
View :Serial No.
ENTER
Serial No.
S/N *******
FUNCTION
DISPLAY <ENT>
ENTER
DISPLAY
ENGLISH <ent>
∧,∨ :ENGLISH,JAPANESE, PORTUGUESE,
ITALIANO, ESPANOL, FRANCAIS ,DEUTSCH
FUNCTION , ∧,∨
FUNCTION
MEDIA SET <ENT>
ENTER
MEDIA SET
Media :RESET
ENTER

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