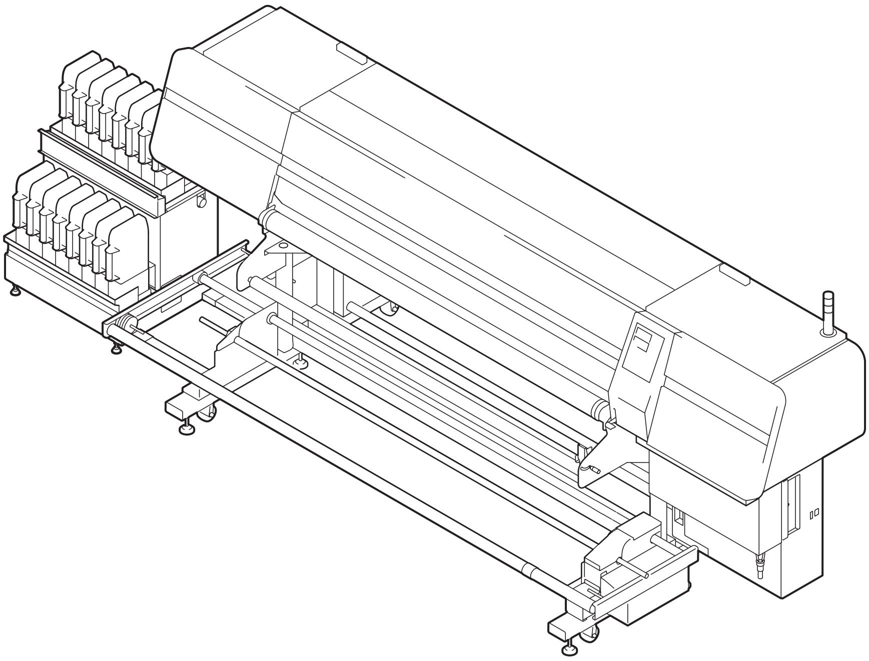
Mimaki

TextileJET

Tx400-1800D

OPERATION MANUAL

OPERATION MANUAL



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CAUTION

DISCLAIMER OF WARRANTY:
THIS LIMITED WARRANTY OF MIMAKI SHALL BE THE SOLE AND EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING , BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF
MERCHANTABILITY OR FITNESS, AND MIMAKI NEITHER ASSUMES NOR AUTHORIZES DEALER TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY OR MAKE ANY OTHER WARRANTY OR MAKE ANY OTHER WARRANTY IN CONNECTION WITH ANY PRODUCT WITHOUT MIMAKI'S PRIOR WRITTEN CONSENT. IN NO EVENT SHALL MIMAKI BE LIABLE FOR SPECIAL, INCIDNETAL OR CONSEQUENTIAL DAMAGES OR FOR LOSS OF PROFITS OF DEALER OR CUSTOMERS OF ANY PRODUCT.

Requests

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

CDRH REGULATION

The Center for Devices and Radiological Health for the U.S. Food and Drug Administration Implement regulations for laser products. The sentence of “This product complies with 21 CFR chapter I and subchapter J” indicates compliance with the CDRH regulations and is labeled on the product when marketed in the United States. This Model is equivalent to Class II laser device according to CDRH Regulation.

This product complies with 21 CFR chapter I and subchapter J

Warning

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

Foreword

Thank you for purchasing MIMAKI "Tx400-1800D" color inkjet plotter.
Tx400-1800D is a Color InkJet Printer for direct printing on fabric and transfer paper.
This operation manual describes the operation and maintenance of model Tx400-1800D Color InkJet Printer.
Read this manual carefully and make the most effective use of your printer.

On this operation manual

- This Operation Manual describes the operation and maintenance of Model Tx400-1800D Color Ink Jet Printer (hereinafter referred to as the device).
- 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 device.
- This Operation Manual has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Description contained in this Operation Manual are subject to change without notice for improvement.
- In the case where this Operation Manual should be illegible due to destruction or lost by fire or breakage, purchase another copy of the Operation Manual from our office.
- You can also download the latest operation manual from our website.

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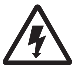
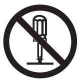
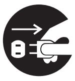
For safe operation

Pictorial signs

Pictorial signs are used in this Operation 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.

Example of pictorial signs

Warning	Indicates the case where it is assumed that misuse of the machine, ignoring this sign, as this may cause fire or poisoning. Be sure to read this manual for proper operation.
Caution	Indicates the case where it is assumed that misuse of the machine, ignoring this sign, can cause damage only to property.
Important!	This symbol indicates that the information is helpful in proper operation of the plotter.
💡	The symbol indicates helpful information that will facilitate the use of the device.
☞	Indicates the reference page for related contents.
	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.

Warning and Caution for Use

WARNING

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.Highhumidity or water will give rise to fire, electric shocks or breakdown of the device.

Occurrence of an Abnormality

- Use of the machine under an abnormal condition where it produces smoke or strange smell can result in fire or electric shocks. If such an abnormality is found, be sure to turn off the power switch immediately and unplug the cable from the wall outlet. Check first that the machine no longer produces smoke, and then contact your distributor or a sales office of MIMAKI for repair. Never repair your machine by yourself since it is very dangerous for you to do so.

Handling of ink cartridges

- Store ink cartridges and waste ink tank in a place that is out of the reach of children.

Power supply and power voltage

- This unit contains parts applied high voltage.Carrying out electrical work by those unauthorized for that work is prohibited.

- When you perform the maintenance works, make sure to do it after turning off the main power circuit breaker. If the maintenance is performed while the breaker is kept on, there is a risk of causing electrical shock.
  Some devices require one minute for discharging the electric charge from the condenser. It is suggested, therefore, to start the work 3 minutes after turning off the main power circuit breaker.
- Do not perform the turning on of the main power circuit breaker except by a person well acquainted with this equipment.
- For prevention of electric shock, make sure to perform grounding work.
- Be sure to use the printer 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.

CAUTION

How to Handle Media

- 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.

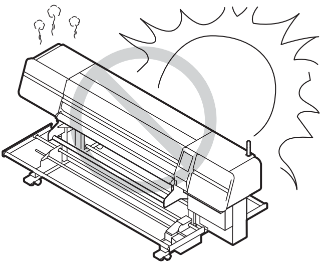
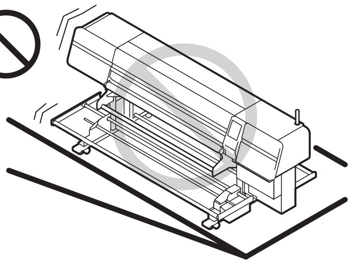
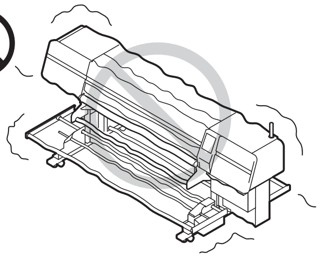
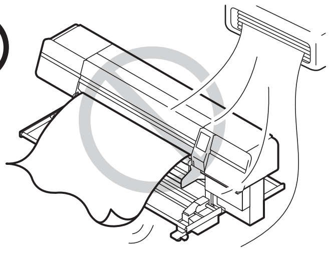
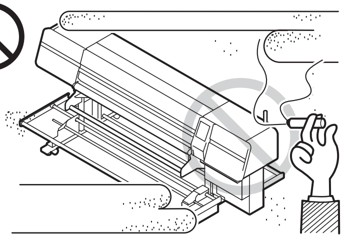
How to Handle Ink

- The ink is not toxic, however, avoid direct contact with the ink. If ink settles on the skin or fabrics, 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.

Cautions and Requests

CAUTION
Use the drying heater
• This is a printer performing the printing operation at a high speed. If you make the printing operation without using the drying heater, the wound-up fabric could be stained with color penetration to the back.

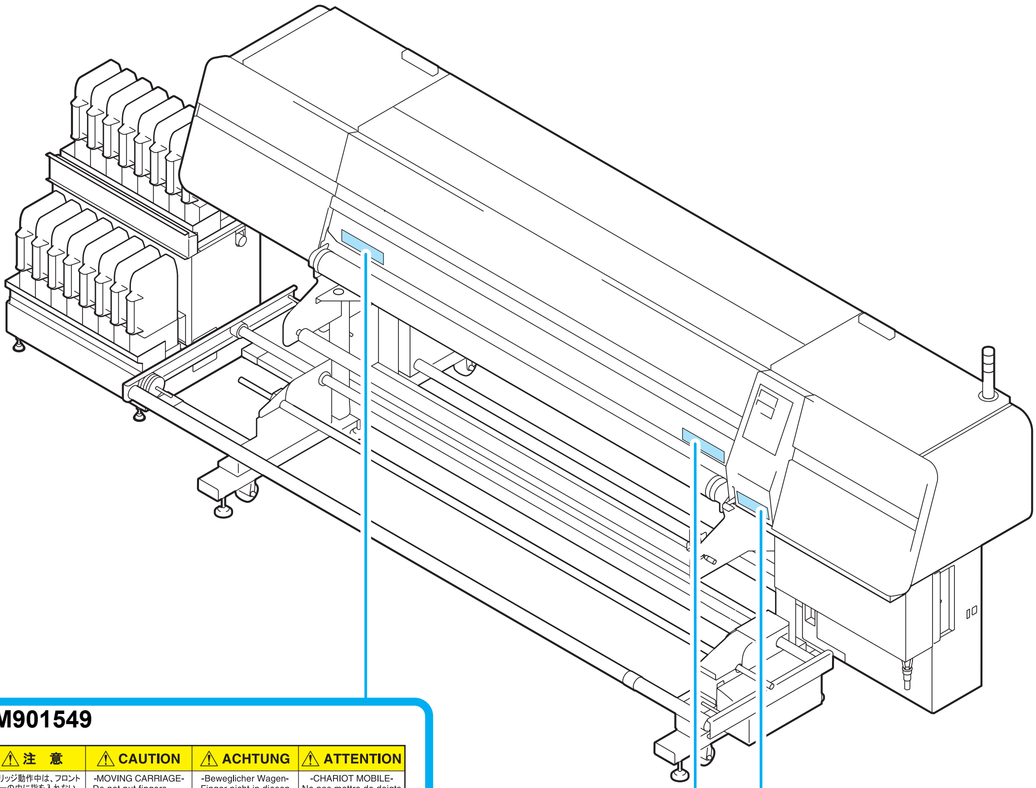
Cautions about Installation

CAUTION		
A place exposed to direct sunlight	**On an inclined surface**	**A place where the temperature or humidity changes significantly**
		• Use the machine under the following environmental conditions: • Operating environment: 15 ~ 30 ×C (59 ~ 86°F) 35 ~ 65 % (Rh) *1
A place that vibrates	**A place exposed to direct air flow from an air conditioner, etc.**	**Around a place where fire is used**
		

*1.40 to 60% (Rh) to use a TPink.

Position of the warning label

This device is adhered with the warning label. 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.



Order No.:M901549

⚠ 注　意	⚠ 注　意	⚠ CAUTION	⚠ ACHTUNG	⚠ ATTENTION
滚轮转动时，请勿将手插入前面外盖的内部。	キャリッジ動作中は、フロントカバーの中に指を入れないでください。	-MOVING CARRIAGE- Do not put fingers inside this area	-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.	-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone.

Order No.:M906637

打印时，请勿打开罩盖。否则，会导致打印中断。 连续打印时，请根据显示屏的指示操作。 一旦中断，此时的打印质量无法保证。	プリント中、このカバーを開けないでください。途中でプリントが中断します。 プリントを継続する場合、ディスプレイに従ってください。 ただし中断箇所のプリント品質は保証できません。	Keep this cover closed during printing to avoid halt. To continue printing when halting, follow the display. However, print quality of the halted part is not assured.	Abdeckung während des Druckvorgangs geschlossen halten, um Druckunterbrechungen zu vermeiden. Beachten Sie das Display, um den Druckvorgang fortzusetzen. Die Druckqualität kann im Falle einer Druckunterbrechung nicht gewährleistet werden.	Maintenez ce couvercle fermé pendant l'impression pour éviter tout arrêt. Pour continuer l'impression en cas d'arrêt, suivez l'affichage. Toutefois, la qualité d'impression de la partie imprimée pendant l'arrêt n'est pas assurée.

Order No.:M907092

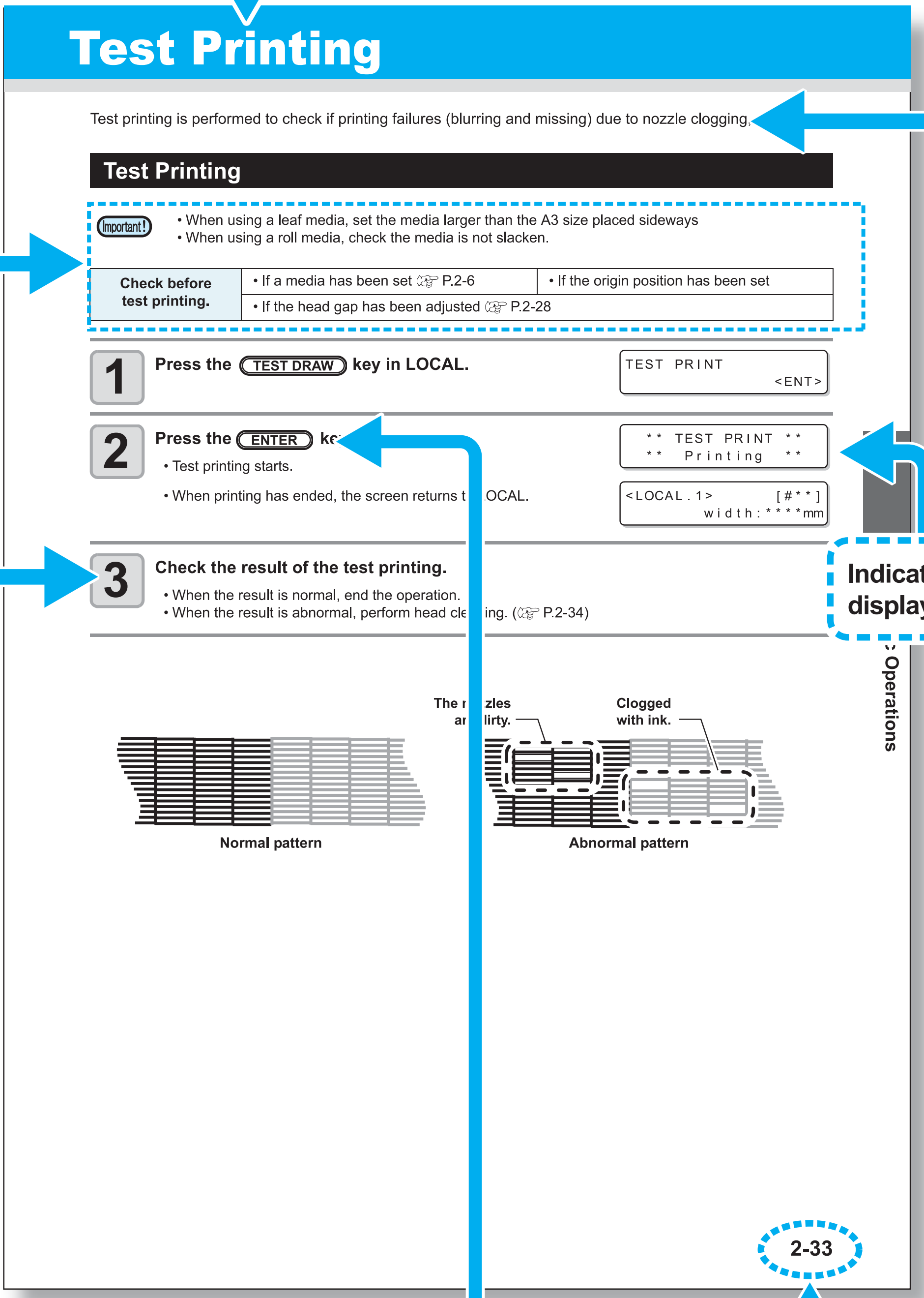
⚠ 注　意	⚠ CAUTION
ワイパークリーニングを行う際は、必ずワイパ下のワイパインク吸収材のクリーニングも同時に行って下さい。汚れたまま使用すると機械の損傷に繋がる恐れがあります。	When you execute wiper cleaning, please make sure to execute cleaning of wiper ink absorbent under the wiper too. if you use unwashed wiper ink absorbent, It may cause machine's damage.

How to Read This Operation Manual

Describes to know beforehand.

The page title.

This explains the outline of functions.



Test Printing

Test printing is performed to check if printing failures (blurring and missing) due to nozzle clogging.

Test Printing

Important!
- When using a leaf media, set the media larger than the A3 size placed sideways
- When using a roll media, check the media is not slacken.

Check before test printing.	• If a media has been set (☞ P.2-6)	• If the origin position has been set
	• If the head gap has been adjusted (☞ P.2-28)	

1 Press the (TEST DRAW) key in LOCAL.

```
TEST  PRINT
            <ENT>
```

2 Press the (ENTER) ke

- Test printing starts.
- When printing has ended, the screen returns t OCAL.

```
 **  TEST  PRINT  **
 **   Printing    **
```

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

3 Check the result of the test printing.

- When the result is normal, end the operation.
- When the result is abnormal, perform head cle ing. (☞ P.2-34)

Indicates a screen display.

Number of an operation sequence.

Shows buttons in text, surrounded by ⬭.

Page number (Chapter 2, Page 33)

Chapter 1
Before Use

This chapter

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

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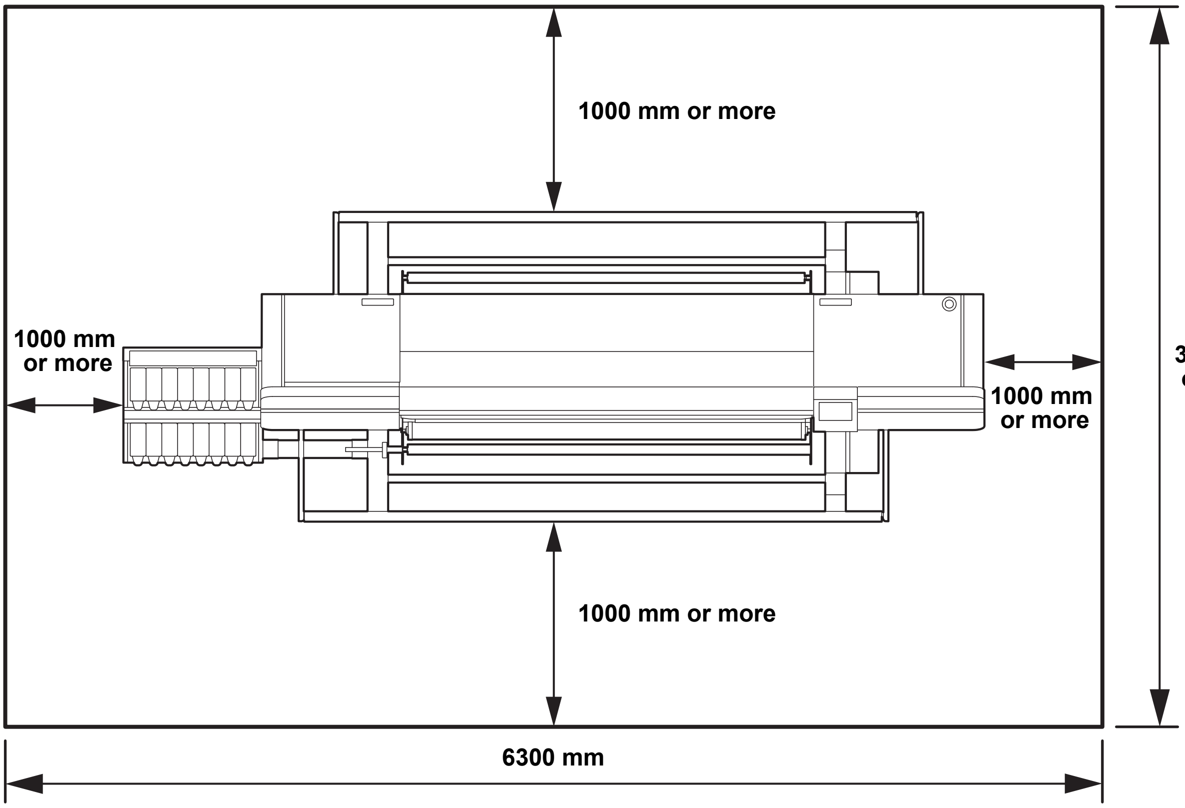
Installing the device

Where to install the device

Secure sufficient space for installation before assembling this unit.
Decide the place considering the size of the device and a space required for execution of printing.

Machine Type	Depth	Height	Total Weight
4300 mm	1550 mm	1600 mm	500 kg or less


1000 mm or more
1000 mm or more
1000 mm or more
1000 mm or more
3550 mm or more
6300 mm

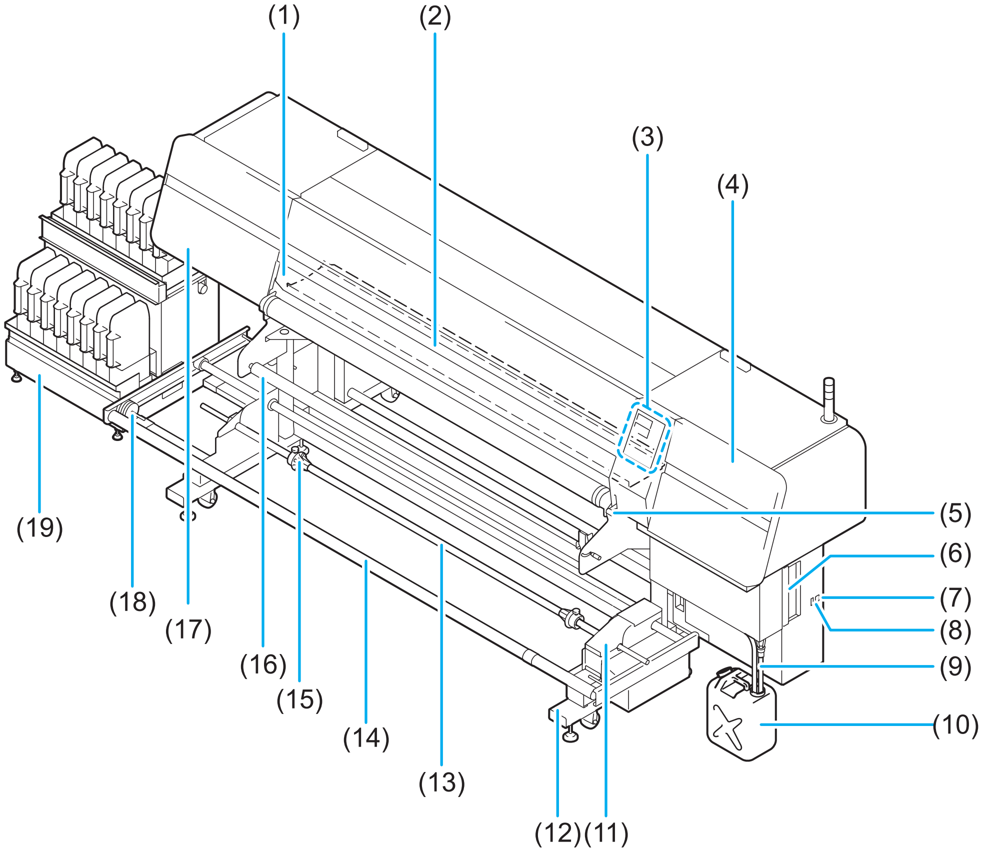
Moving This Machine

Important!

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

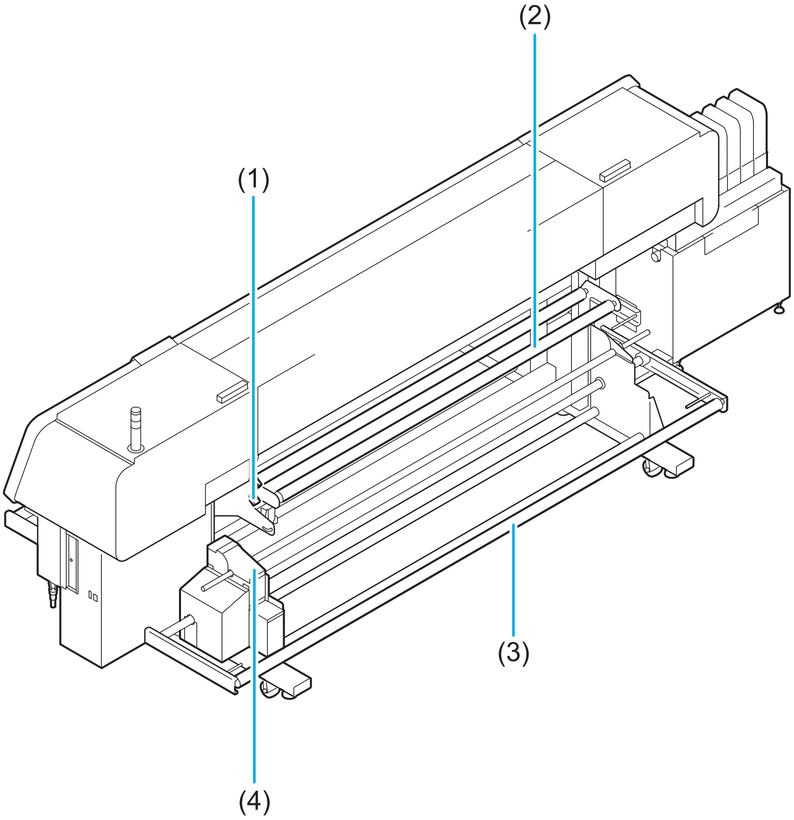
Configuration and Function

Front/Sides



	Name	Function
(1)	Front cover	It is opened when setting fabric or taking a corrective measure against a fabric jam.
(2)	Fabric retainer frame	The printed fabric is printed out, sliding on the fabric retainer frame.
(3)	Operation panel	This panel has operation keys for configuring the settings needed for this machine and a display for showing the items to operate.
(4)	Maintenance cover R	During maintenance of the station, open it by loosening the screws.
(5)	Clamp lever (front)	Moves the pinch rollers up and down to hold or release the fabric.
(6)	USB2.0 connector	This is USB2.0 interface connector.
(7)	AC inlet	Connect the power cable to the AC inlet.
(8)	Power switch	Turns ON/OFF the power for this machine.
(9)	Waste ink hose	It is the hose to discharge the waste ink.
(10)	Waste ink tank	Waste ink gathers in this tank.
(11)	Take-up unit	It supports to wind up the roll fabric printed.
(12)	Stand	Supports the main body of the machine. It is provided with casters that are used to move this machine.
(13)	Roll shaft	It is set to the feeding/take-up unit with roll fabric.
(14)	Take-up tension bar	It supports to adjust the tension to wind up roll fabric.
(15)	Roll holders	Inserted into both ends of the fabric core to retain the roll fabric.
(16)	Turning bar	It is used when using fabric as a media.
(17)	Maintenance cover L	It is the station cover at the left side. During maintenance of the carriage, open it by loosening the screws.
(18)	Counter weight	It adjust the fliction of the tension bar.
(19)	Ink supply unit	It has slots to set the ink pack or the ink IC, and lamps to indicate the condition of the ink pack.

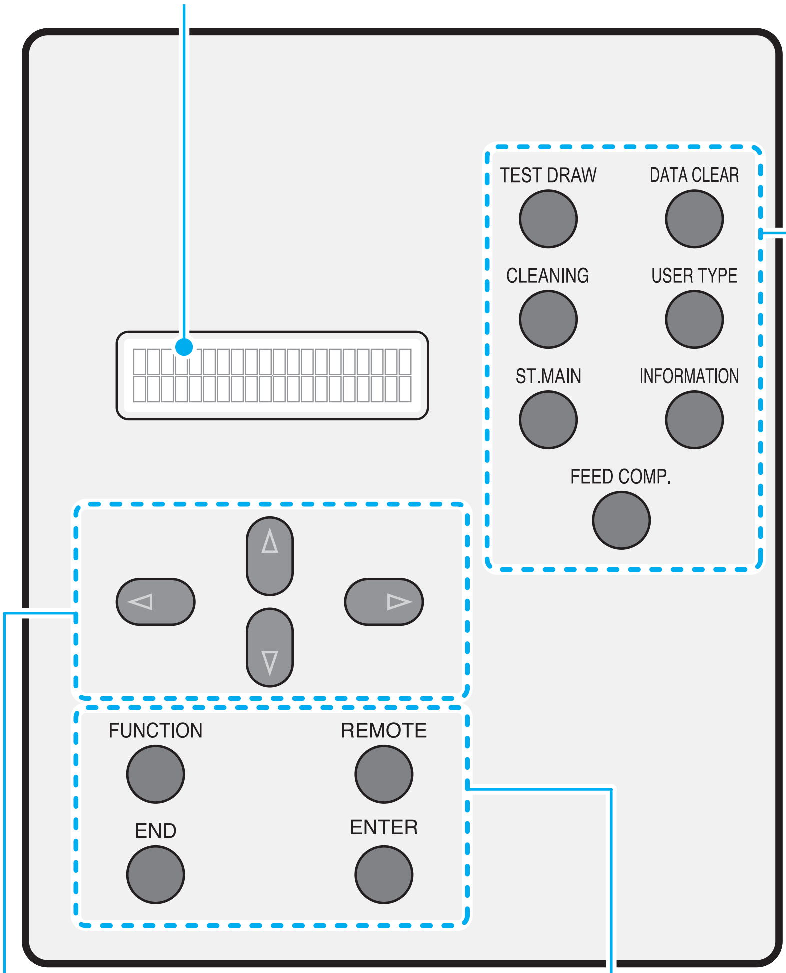
Rear



	Name	Function
(1)	Clamp lever (rear)	Interlocks with the clamp lever in the front of this machine.
(2)	Turning bar	Use when a fabric media is used and you wish to make the media tension of the roll feeding side stable.
(3)	Feeding tension bar	It supports to adjust the tension to feed the roll fabric.
(4)	Feeding unit	It supports to feed the fabric.

Operation Panel

Display
Displaying state of the unit, setting items, errors, and so on.



TEST DRAW key
Press to start the test printing.

DATA CLEAR key
Press to erase received data.

CLEANING key
Press to start the head cleaning.

USER TYPE key
Press to change the user type.

ST.MAIN key
Performs maintenance of the capping station.
You can start the “Station Maintenance” of the maintenance function directly.

INFORMATION key
You can start the “Machine Information” of the maintenance function directly.

FEED COMP. key
Press to perform the media correction to the user type currently selected.
When setting a media, additional menu is displayed.

JOG key
Used for moving of the Y-bar and for each setting.

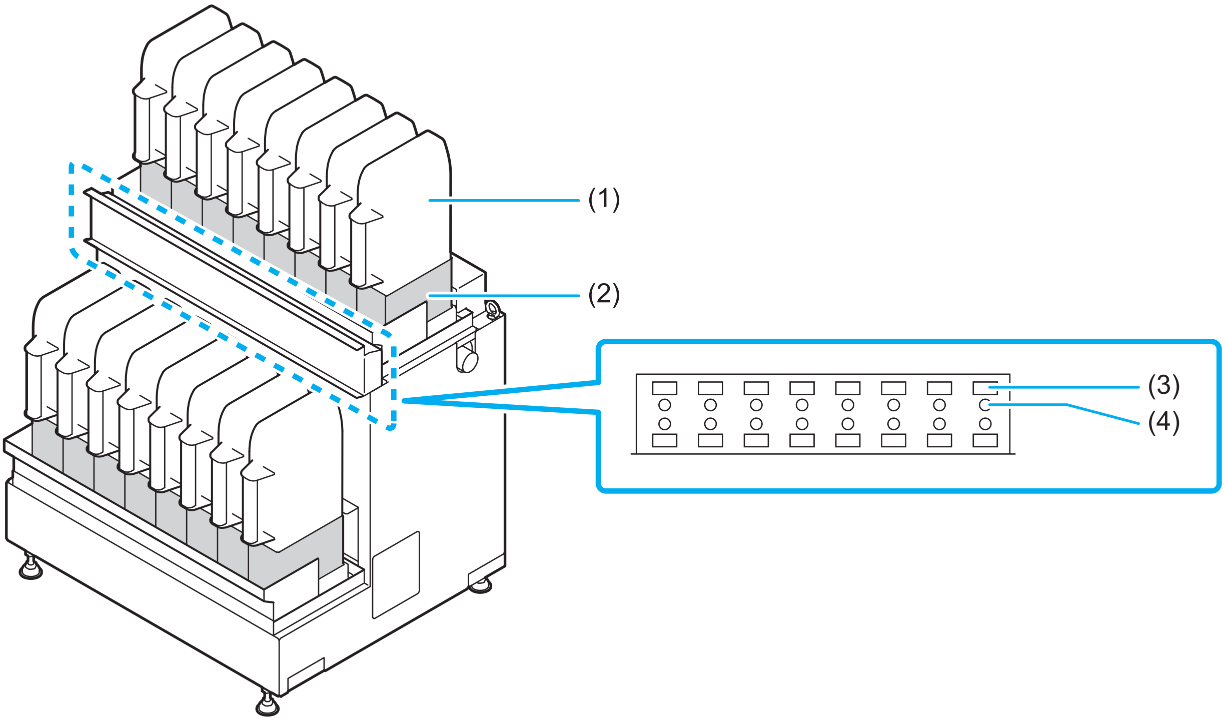
FUNCTION key
Use when perform various settings.

END key
Press to complete setting or suspend the operation.

REMOTE key
Press to switch <Local> and <Remote>.

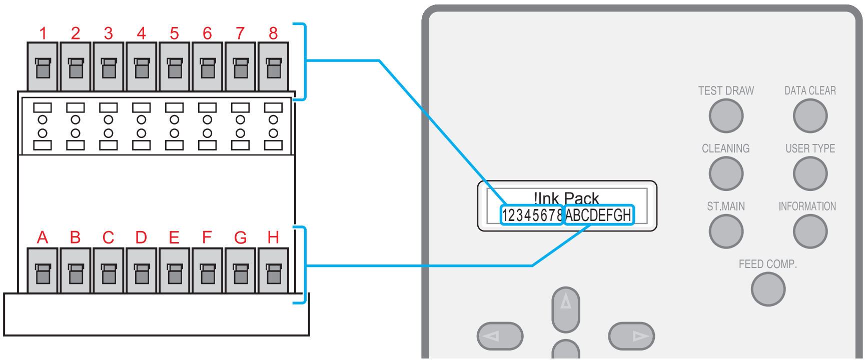
ENTER key
Press to register the setting or the operation.

Ink supply unit



	Name	Function
(1)	2L Eco case	Set a dedicated ink pack.
(2)	Ink pack slot	Set an eco case with the ink pack of each color.
(3)	Ink IC slot	Set an ink IC provided with the ink pack.
(4)	Ink slot lamp	Indicates the condition of the ink pack.

- The slot No. on the display shows the slot of the figure below.

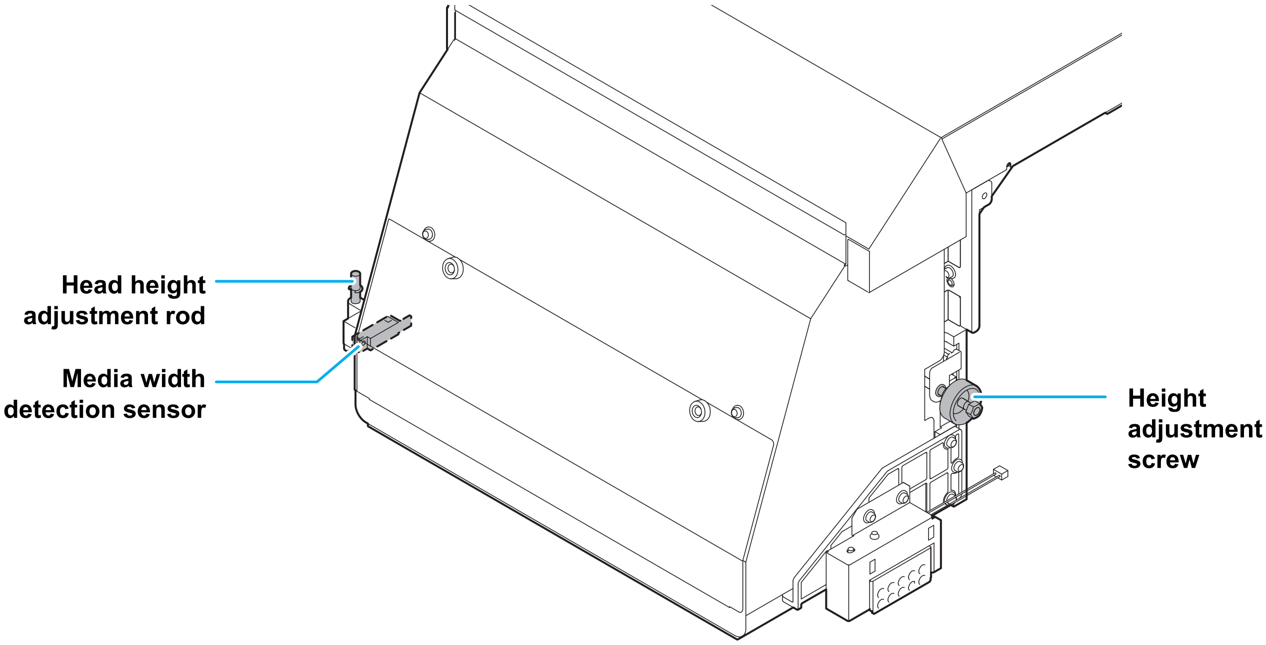

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
TEST DRAW
DATA CLEAR
CLEANING
USER TYPE
!Ink Pack
12345678ABCDEFGH
ST.MAIN
INFORMATION
FEED COMP.

Names and function 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 cover are explained below.

Carriage

The carriage is provided with print heads for plotting, 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 plotting, and fabric detection.
When cleaning the capping station, execute the STATION MAINTENANCE function to move the carriage. (☞ P.4-7)



Caution

- Starting the plotting operation without adjusting the carriage height can cause damage not only to the fabric but also to the plotter itself.

Important!

- When setting a fabric in position for plotting, be sure to adjust the head height. (☞ P.2-28)

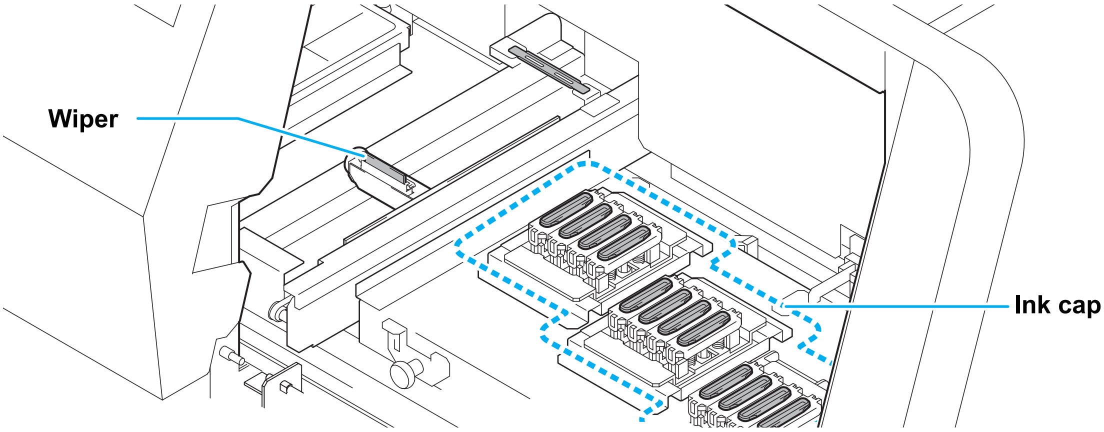
Capping Station

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

Ink cap : Prevent the nozzles in the ink heads from drying up.
Wiper : Cleans the nozzles in the heads.

Important!

- Clean the capping station frequently to keep the capping station clean.
- Clean the ink cap periodically to remove the adhered ink. Leaving it with ink adhered may cause discharging defect due to clotted ink.



Head height adjustment rod and adjustment screw

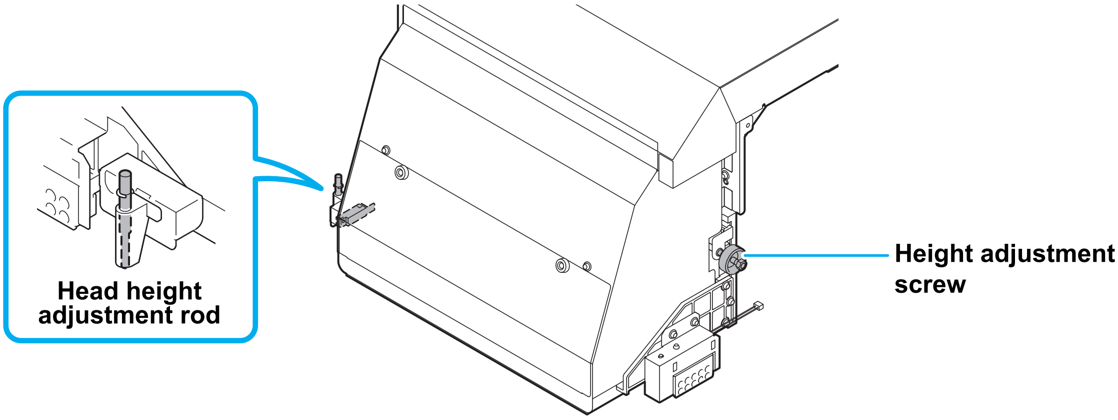
After setting a fabric, adjust the head height according to the thickness of the fabric. (☞ P.2-28)

Caution

- After setting a fabric, be sure to adjust the head height. If an operation such as printing etc. is performed without adjusting the height, the head may hit the fabric and it may cause the damage of the head.

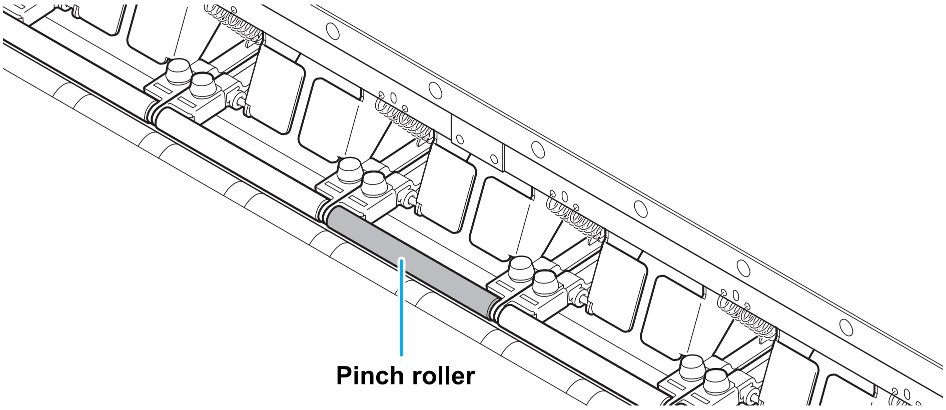
Important!

- It is recommended to use the equipment keeping the head height 3mm or more. When using the equipment with the head height of 3mm or less, the blurring of the printed images, changes in color while printing or nozzle missing due to ink mist could be caused.
- Please be aware that we shall not be held ourselves responsible for the printing quality caused by the use of this equipment with the head height of 3 mm or above.



Pinch Rollers

This printer retains a fabric with the pinch roller. During printing operation, the pinch roller feeds the fabric forward.

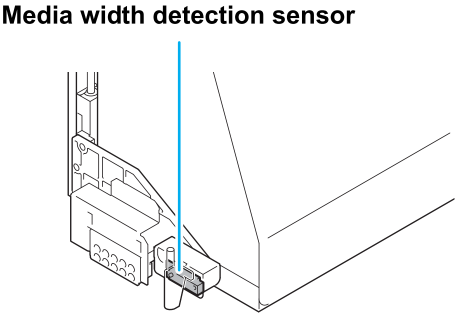


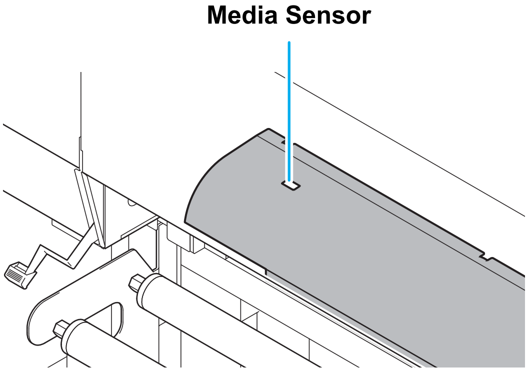
Important!

- While the printer is not being used, keep the pinch roller in the raised position. If the pinch roller is left lowered for an extended period of time, it can deform and fail to securely retain the fabric.

Sensor

This machine has “Media width detection sensor” to detect the media width and “Media sensor” to detect whether a media exists or not.





Important!

- When setting a roll fabric, it is not required to cover the media sensor of the rear part of the platen.
- When setting a leaf media, be sure to cover the media sensor of the rear part of the platen. If a media is not on the sensor of the rear part of the platen, media detection is not performed.
- When setting a clear leaf fabric or a leaf fabric with black rear surface, fabric cannot be detected in some cases. (“ERROR50” is displayed on the screen.)

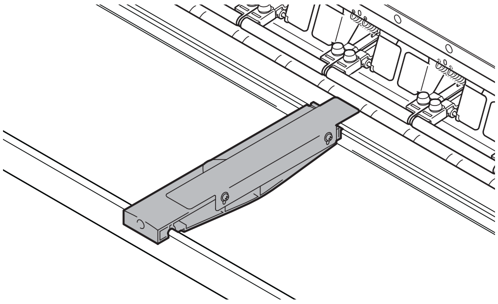
Fabric retainer

If the edge of the fabric has curling or fuzz, the following defect may occur:

- The fabric may be misaligned because the head catches the fabric.
- The fabric may be clogged because the fabric gathers in one position.
- Ink discharge occur.

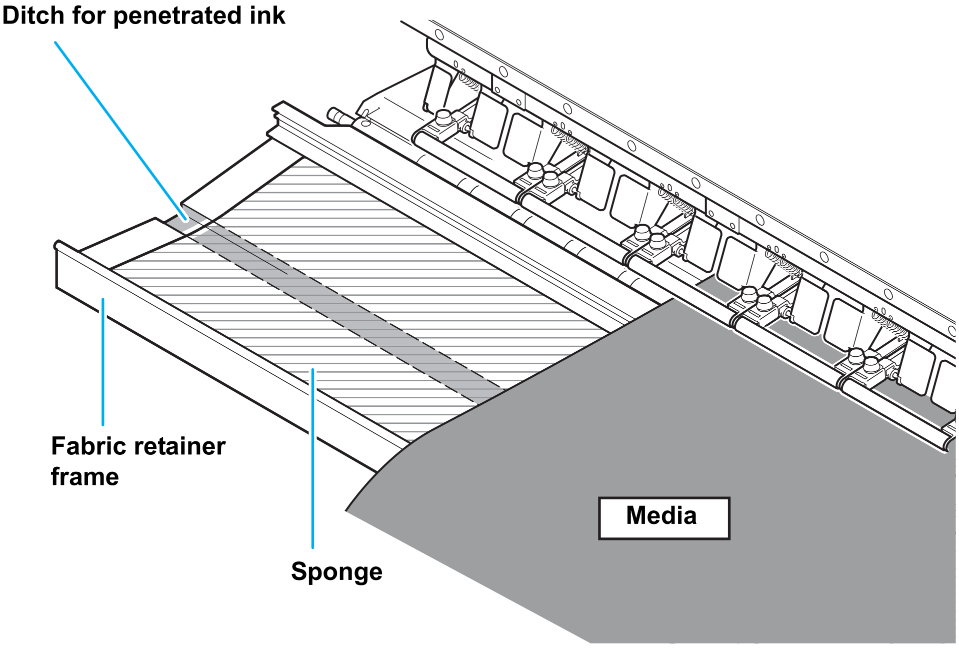
To avoid this trouble, use the fabric retainer.

- The fablic retainer also act as a detection board which detects the printing width.
  Printing with the full width is possible by setting the fablic ratainer to a position apart from the edge.
- If you set the fabric retainer to a position apart from the media, mist may be generated. Use the retainer by setting it next to the media.



Fabric retainer frame

When printing on a cellular fabric, some ink passes through the fabric. The penetrated ink is absorbed by a sponge of the fabric retainer frame and is collected in the ditch for penetrated ink.



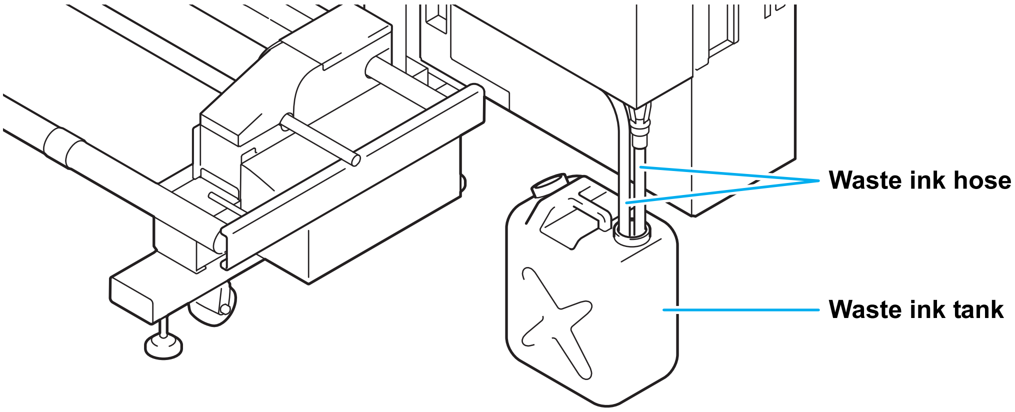
Other setting

For waste ink tank

The ink used for head cleaning and the like, a cleaning solution, or the used ink in the fabric retainer frame will be pooled in the waste ink tank.
Insert the front edge of the waste ink hose into the waste ink tank.

Important!

- Be careful so that ink will not leak.
- Be careful not to turn over the waste ink tank.



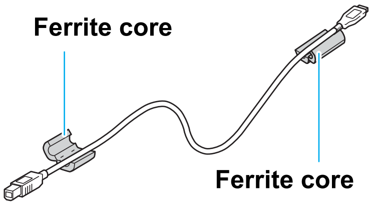
Installing USB output driver

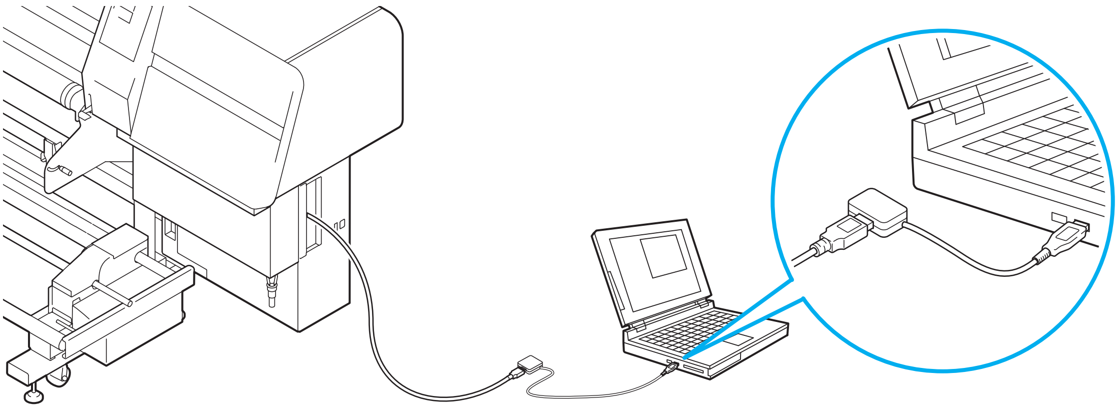
When connecting the plotter using a USB interface, it is necessary to install the USB2.0 output driver.

- For installation procedures, follow the contents of the attached CD-ROM.

Caution

- Attach the attached ferrite core with the USB interface cable in advance (refer to the right figure.)
- When connecting USB2.0 interface cable, turn off the power supply of this machine.
- It is necessary that the application you use supports USB2.0 interface.
- If USB2.0 interface is not attached with the host computer, contact nearest RIP manufacturing corporation or our sales office.





For opening/closing cover

For opening/closing cover

Important!

- Do not open the front cover and the maintenance cover L/R while the plotter is in operation.
  If you open the front cover or the maintenance cover L/R during plotting, the carriage will stop for safety, reselting in abortion of plotting.
  In this case, re-start the plotter and computer following the procedure described below.
- Keep the front cover and maintenance cover L/R closed regardless during plotting operation or not. Otherwise it cause the dust attach to the head nozzle.
- Do not open the maintenance cover L/R except when it is necessary to clean the station interior.

If you open front cover or maintenance cover L/R during printing

If you open the front cover or the maintenance cover L/R during printing, an error will be displayed on the screen and printing becomes unable. By following the procedures below, solve the error.

```
 !Mainte. Cover
Close The Cover
```

1 **Stop the data transmission from the computer.**

- 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.

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

```
   Please Wait
*********------------
```

For power cable

Connect the power cable with the following specification outlet:

Power voltage	AC200 - AC240V ± 10%
Frequency	50/60Hz ± 1Hz
Capacity	7.5A and above

Important!

- 100V system outlet cannot be used.

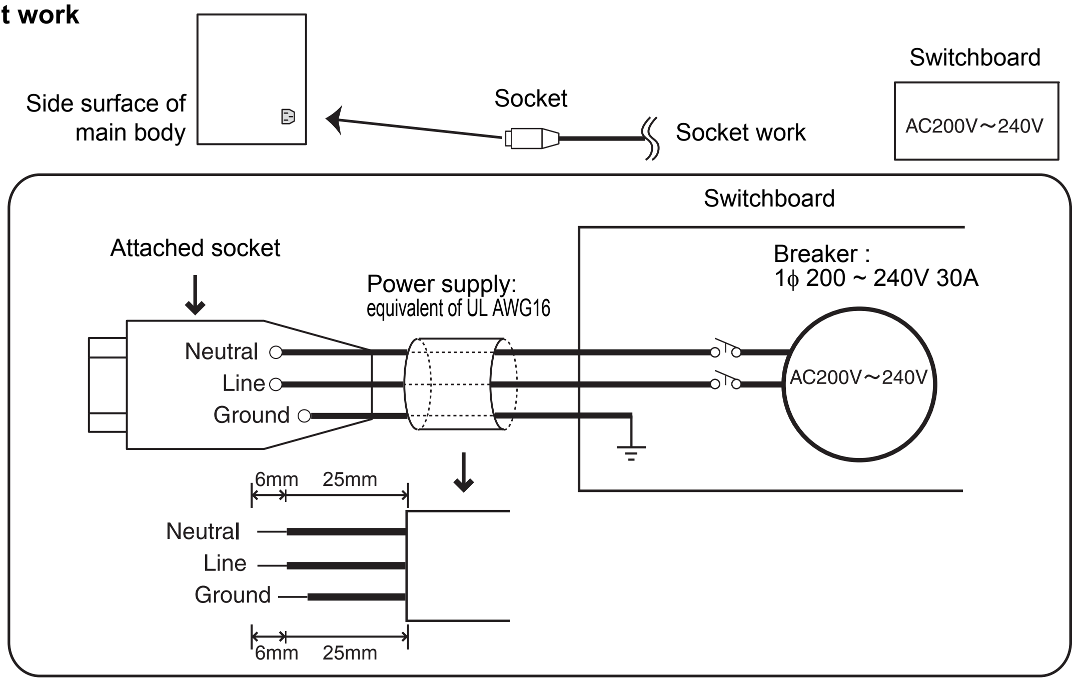
Warning

- You cannot perform the installation of this machine. Request an electrician for doing the installation work.
- The following electrical work is required for power supply to the main body. Request an electrician for the work.
  Socket work to the breaker
  C type grounding work (Special 3rd type grounding work)
- Be careful so that the outlet is surely near this machine. In addition, set in the position where you can remove easily.
- Doing the electrical work of this machine by other than a person who has the license of the electrical work is prohibited to prevent the electric shock.
- Be careful not to perform faulty wiring. It may cause fire or electric shock.
- Connect the power cable with the grounded outlet. Otherwise, it may cause electric shock or damage of this machine.
- Use outlet supporting incoming current 50A/0.01 sec. and more of the breaker.

Caution

- For power supply connection of this machine, IEC60320 standard plug is used based on the rule of “Plug inserting type A”.
  If the socket work supporting the plug of the power cable of this machine is required, use the attached socket, and perform the work between the switchboard and the socket.

Socket work


Side surface of main body
Socket
Socket work
Switchboard
AC200V～240V
Switchboard
Attached socket
Power supply:
equivalent of UL AWG16
Breaker :
1ϕ 200 ~ 240V 30A
Neutral
Line
Ground
AC200V～240V
6mm
25mm
Neutral
Line
Ground
6mm
25mm

Media

Usable Sizes of Media

The media which can be used for this machine are “Roll” and “Leaf”.

	Roll media	Leaf media
Maximum width	1860 mm	
Minimum width	210 mm	
Maximum printing width	1850 mm	
Thickness	7 mm or less	
Roll outside diameter	ϕ 270 mm or less	
Roll weight	38 kg or less	
Roll inside diameter	1.5 ~ 3 inch	
Print side	Regardless of faces out and in	
Taking up direction	Regardless of faces out and in	
Roll end treatment	Light-adhesive tape is used to allow the paper to be removed from the core with ease.	
Setting position	Based on the center	Based on the right

Precautions in handling the fabric

Caution

- When using a media other then the following, be sure to perform test printing to confirm the plot result and then determine whether it can be used or not.

Important!

- When setting the fabric used, be sure to adjust the head height. Otherwise, the fabric and/or the head can be damaged.
- If preventing treatment for fray on right and left edges and tenter are thick against the fabric thickness, adjust the head height and stainless plate height of the fabric holder depending on the thickness of the right and left edges of the fabric.
- If using fabric with thick right and left edges, as take-up slippage may easily occur because right and left edges of the roll rise at take-up. If take-up slippage occurred, fabric tends to skew and it may cause troubles such as contact with the head nozzle surface.
- Do not use a fabric with high expansion and contraction due to ink adhesion or resilient fabric. If such a fabric is used, it may cause the trouble of contact with the nozzle surface or the misaligned printing.
- When using a fabric with curling, be sure to remove the curling before using. Strong curling may effect on the quality of printing or may hit the head nozzle surface and may cause discharging defect.
- 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.

Limited media

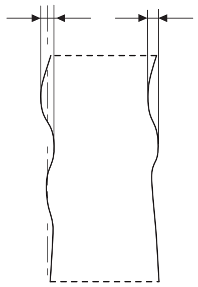
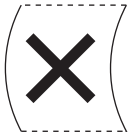
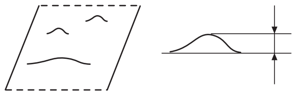
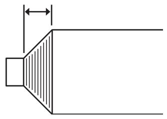
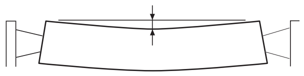
With the following media, correction from the plotter is difficult.
When using any of the following media, perform test printing to determine whether it can be used or not.

- Hight stretch fabric (Stretch materials, vertically extendable knit,etc.)
- Materials which become largely extendable when getting wet by printing.
- Materials with large width variations.
- Materials which present partial wrinkles of slacks when being spread on a flat surface or materials which are totally curved.
- Materials with large take-up shift at the ends of media when rolled.
- Roll media with a paper tube whose strength is insufficient and which bends when attached to a feeding unit.

Important!

- Even when using media other than described above, be sure to print by optional test data. After checking the printing result, judge whether it can be used or not.

Fabric conditions which enable to print

Items	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	±15mm, Cloth (width of 500mm and less) is ± 2mm.	
Inner diameter of roll	~ 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	20mm or more	
Fixation with fabric core	Tape at up to 3 points or weak adhesion	
Roll outer diameter	ϕ mm or less	
Roll weight	kg or less	
Print side	Not specified	
Fabric wrinkle	Not allowed	

For ink

Ink type

For this machine, the following four types of ink can be used:

Acidic dye ink	Suitable for fabric of animal type such as wool, silk, etc. and nylon (scheduled)
Reaction dye ink	Suitable for fabric of wool, silk, etc. as well as cotton, rayon, etc.
Sublimation dye ink	Suitable for fabric of polyester, acrylic, etc.
Disperse dye ink	Suitable for fabric of polyester, acrylic, etc. (scheduled)
Textile pigment ink	Use for cotton. For after-treatment, it can be fixed with heat press.

Important!

- Whichever ink you use, be sure to perform pre-treatment and after-treatment that our company recommends to the fabric to be printed.
- Use textile pigment ink at a humidity of 40% to 60%.

Precautions in handling the ink

Caution

- Use Mimaki’s genuine ink. Troubles occurred from using other than Mimaki’s genuine ink shall be pay remedies even in the warranty period.
- Using ink other than dedicated may cause troubles. For remedies when using ink other than dedicated, the customer shall be borne the cost.
- Do not refill ink in the ink pack. It may cause troubles. In addition, our company shall not hold responsible for faulty caused from refilling ink.
- Do not touch or stain the contact of the cartridge PCB, as this may cause failure of the PCB.
- Request the treatment of used ink pack for industrial waste disposal contractor.

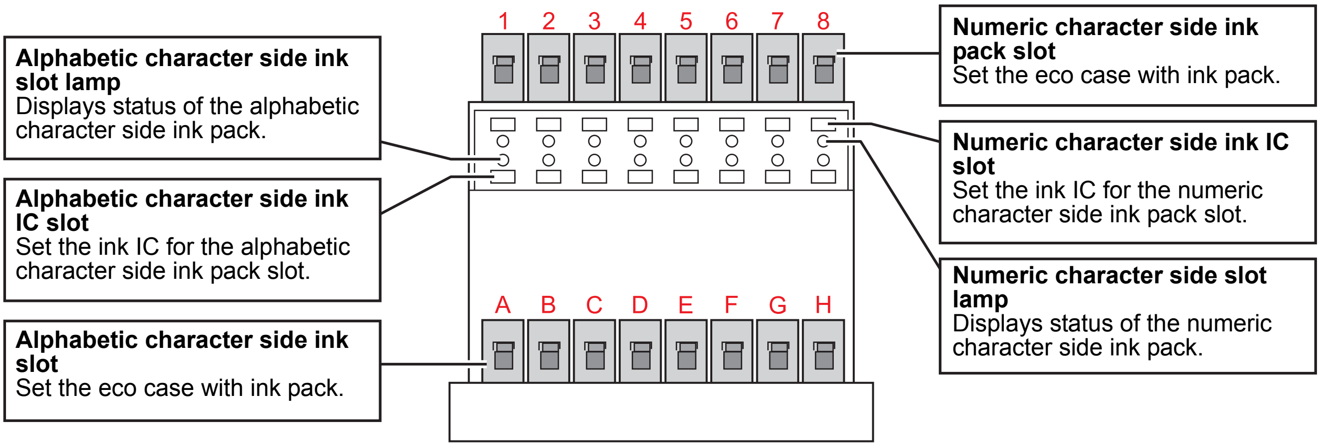
Important!

- Do not shake the ink pack violently. Shaking or turning it roughly can cause leakage of ink.
- Open the ink pack just before attaching. In addition, be sure to use within six months from opening the ink pack. After opening and long time has passed, the print quality will decline.
- Be sure to store the ink packs in a cold and dark place.
- Discard the empty ink pack in compliance with regulation in the local area.
- Do not use expired ink packs. The expiration date is printed on the ink pack.
- Textile pigment ink is easy to dry. If it is dried, nozzle missing or deflection tends to occur. When using it in low humidity environment, it is recommended to set “Setting of cleaning before printing” (☞ P.3-13) to ON and to set the length be 3m or below for “Setting of cleaning while printing” (☞ P.3-14).

- Paste the attached tackiness title on the relative ink station cover part in order not to mess up the color arrangement of eco case set in each ink station.

About ink supply unit

The upper slot is called “numeric character side slot” and the lower slot is called “alphabetic character side slot”.


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H

Alphabetic character side ink slot lamp
Displays status of the alphabetic character side ink pack.

Alphabetic character side ink IC slot
Set the ink IC for the alphabetic character side ink pack slot.

Alphabetic character side ink slot
Set the eco case with ink pack.

Numeric character side ink pack slot
Set the eco case with ink pack.

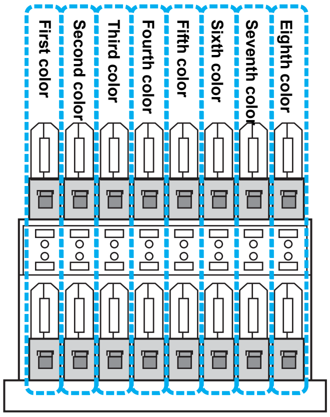
Numeric character side ink IC slot
Set the ink IC for the numeric character side ink pack slot.

Numeric character side slot lamp
Displays status of the numeric character side ink pack.

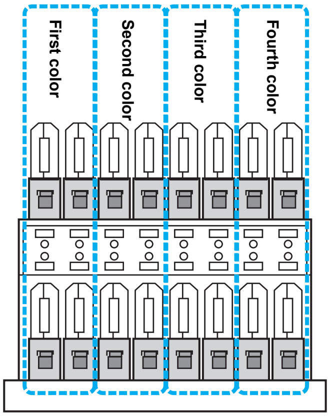
Setting of 8-color/ 4-color ink pack

Be sure to set the same color ink pack for the following combination of the slot in the list:

Slot that the same color of ink pack shall be set in		
8 colors		4 colors
1, A	5, E	1, 2, A, B
2, B	6, F	3, 4, C, D
3, C	7, G	5, 6, E, F
4, D	8, H	7, 8, G, H


First color
Second color
Third color
Fourth color
Fifth color
Sixth color
Seventh color
Eighth color

In case of 8 colors


First color
Second color
Third color
Fourth color

In case of 4 colors

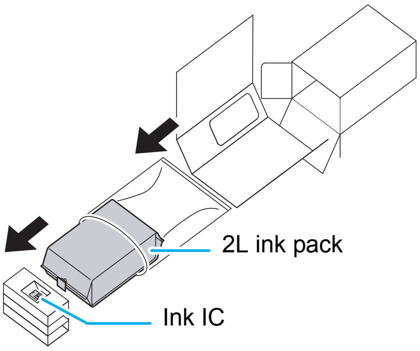
About Ink slot lamp

State of lamp	Outline
OFF	Normal status
ON	Ink cannot be supplied because an error has occurred in the relevant slot.

Setting ink

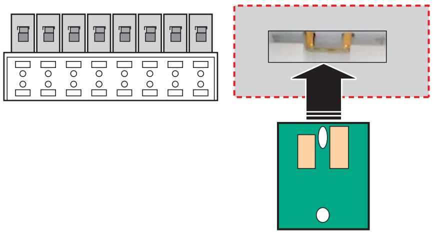
1 Prepare the 2L ink pack.

- From the container box, take out the 2L ink pack and the ink IC.


2L ink pack
Ink IC

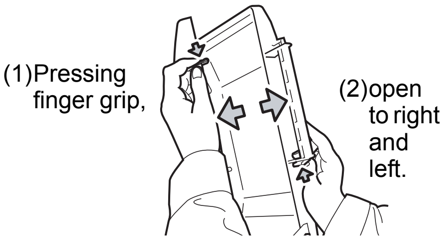
2 Set the ink IC in the ink slot.

- Insert the ink IC with the surface with metal upward. If you insert the wrong side by accident, it causes faulty or damage of the ink IC.
- Do not touch the metal part of the ink IC. It may break the ink IC by static, or may cause read error by stain or flaw.

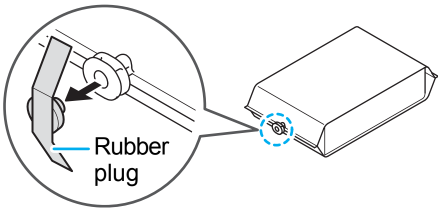


3 Put the 2L ink pack into the 2L eco case.

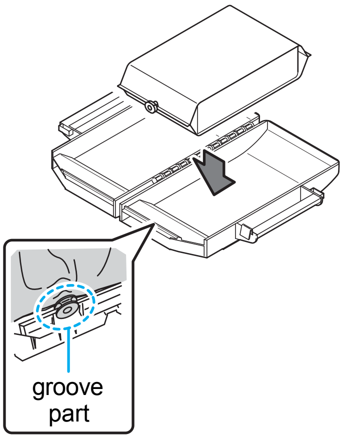
(1) Open the 2L eco case as shown on the right.


(1)Pressing finger grip,
(2)open to right and left.

(2) Peel off the seal adhered on the connector part of the 2L ink pack.

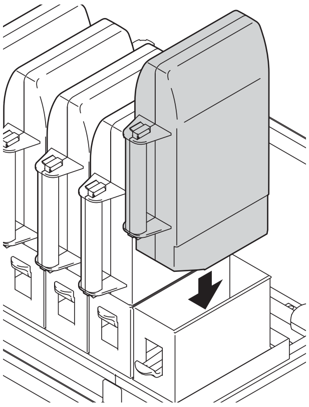

Rubber plug

(3) Put the 2L ink pack facing the connector down, and close the 2L eco case.


groove part

(4) Attach an provided nameplate to the eco case.

4 **Attach the 2L eco case to the base.**

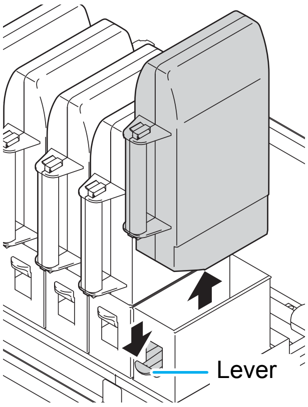


Important!

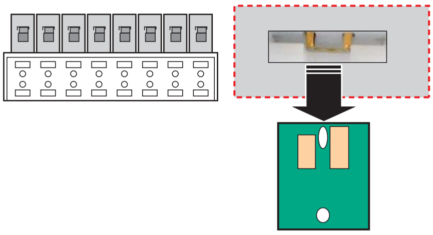
- For the ink pack and the ink IC in the same one container box, be sure to set in the same slot. If they are set in different slots, ink cannot be used in some cases.
- Set the eco case vertically (if it is set sidlingly, the connector will be damaged and it may cause ink leakage).

Changing an Ink Pack

1 **Push the lever of the base down, and remove the 2L eco case.**



2 **Remove the ink IC of the slot from which the 2L eco case was taken out.**



3 **Open the 2L eco case, then replace the 2L ink pack.**

- Be sure to store the used ink pack together with the ink IC removed in the Step 2 (in order to prevent messing up with ink IC of new ink pack).

4 **Set the new ink IC in the ink slot and attach the 2L eco case replaced in the Step 3 on the seat.**

Important!

- Request the treatment of used ink pack for industrial waste disposal contractor.
- When replacing ink pack with ink (not empty), follow the procedures below:
  Otherwise, the control of remaining amount of ink will become impossible.
  (1) Take out the ink pack with ink from the 2L eco case.
  (2) Remove the ink IC of the slot from which the eco case was taken out.
  (3) Store the ink IC together with the ink pack with ink.
  (4) When using that ink pack again, set the ink pack and insert the ink IC stored together into the slot.

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 printer.
Try to change the display language to "Japanese" here.

1 **Press the (FUNCTION) key in the local.**

```
FUNCTION
SETUP                <ENT>
```

2 **Press (▲) (▼) to select [DISPLAY].**

```
FUNCTION
DISPLAY              <ENT>
```

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

```
DISPLAY
ENGLISH              <ENT>
```

4 **Press (▲) (▼) to select [JAPANESE].**

- **Set Value** : [ENGLISH], [JAPANESE],
  [PORTUGUESE],[ITALIANO], [ESPANOL],
  [FRANCAIS],[DEUTSCH],[TURKCE]

```
DISPLAY
JAPANESE             <ENT>
```

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

6 **Press the (END) key several times to end the setting.**

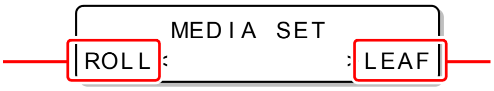
Menu Mode

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

Media selection screen

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

The display when the media is selected



Starts detecting the roll media by pressing the ◀ key. (☞ P.2-30)

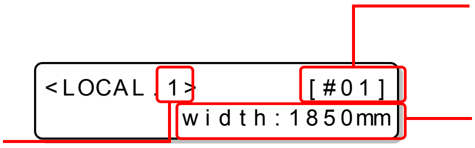
Starts detecting the leaf media by pressing the ▶ key. (☞ P.2-30)

LOCAL

LOCAL is the mode for the preparation state.

- All the keys are effective.
- The machine can receive data from the computer. However, it does not perform printing.

The display in LOCAL



Machine name to identify the device. (☞ P.3-26)

Media width

Displays current user type (☞ P.2-2)

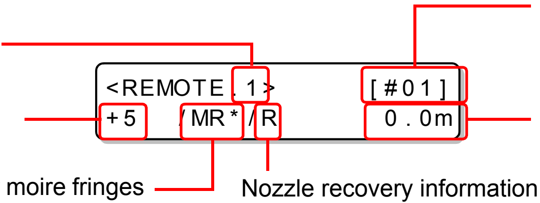
Function

To set Function mode, press the (FUNCTION) key when this machine is in Local mode.
In this mode, printing conditions can be set.

REMOTE

The received data is printed. Printing can be interrupted by pressing the (REMOTE) key.

The display in REMOTE



Displays current user type (☞ P.2-2)

Media correction value during printing. (☞ P.2-36)

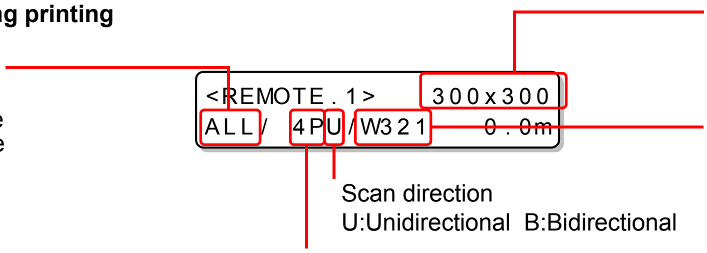
Pattern that was set for moire fringes alleviation. (☞ P.3-21)

Machine name to identify the device. (☞ P.3-26)

Printed media width (☞ P.2-35)

Nozzle recovery information (☞ P.4-41)
Displayed at nozzle recovery setting. (R: Possible, UR: Impossible)

The display during printing



Head being used
ALL : all heads
AB- : A and B line
-BC : B and C line
A-- : A line
-B- : B line
--C : C line

Resolution:
300/450/600/900/1200

Drop size
W321, W421, W432, W531, W543

Scan direction
U:Unidirectional B:Bidirectional

Division number (P:Pass H:Double speed)
1P,2P,4P,8P,12P,16P,24P 4H,8H,12H,16H,24H

Chapter 2
Basic Operations

This chapter

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

- User Type 2-2
  - Settings That Can Be Registered in User Types 2-2
  - Using the Registered User Types 2-2
- Operation Flow 2-3
- Turning the Power ON/OFF 2-4
  - Turning the Power ON 2-4
  - Turning the Power OFF 2-5
- Setting a Media 2-6
  - Maximum Print Area 2-6
  - Notes for Setting a Media 2-6
  - Outline of media setting 2-7
  - Checking spacer/ driven roller 2-8
  - Making preparation of take-up unit 2-14
  - How to adjust fabric retainer 2-16
  - Setting a Roll Media 2-17
  - Setting a Leaf Media 2-27
  - Adjusting the Head Height 2-28
  - Detecting the Media 2-30
  - When Changing the Origin 2-32
- Test Printing 2-33
  - Test Printing 2-33
  - Performing Head Cleaning 2-34
- Printing Data 2-35
  - Starting a Printing Operation 2-35
  - Suspending printing operation 2-36
  - Deleting Received Data (Data Clear) 2-36
  - Correcting the feeding quantity of the fabric while printing 2-36
  - Cut the media 2-37

User Type

Register a printing condition according to each of the media that you use in a user type beforehand. When you replace one media with another, you can set the optimum printing condition only by changing one user type to another.

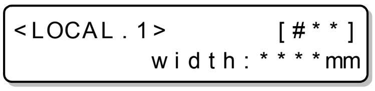
Settings That Can Be Registered in User Types

For the method of registering settings in user types (1 to 4), see P.3-2.

Settings	Reference Page	Settings	Reference Page
Media Comp.	P.3-4	Margin	P.3-12
Media Feed	P.3-6	Refresh	P.3-23
Print Mode	P.3-9	mm/inch	
Ink Layers	P.3-23	Auto Cleaning	P.3-13
Drying Time	P.3-20	Color Pattern	P.3-19
Priority	P.3-11	Moire Reduction	P.3-21

Using the Registered User Types

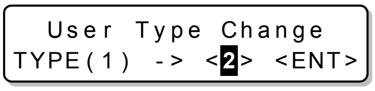
1 **Press the USER TYPE key in LOCAL.**



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

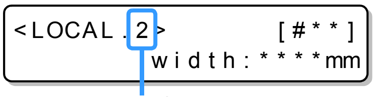
2 **Press ▲ ▼ to select one of the user types (1 to 4).**

- You can also select one by pressing the USER TYPE key.



```
 User Type Change
TYPE(1) -> <2> <ENT>
```

3 **Press the ENTER key.**



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

Number of the selected user type

For Selecting a User Type without Using USER TYPE key

You can select a user type by using the FUNCTION key in the printer mode without pressing the USER TYPE key.

1. **Press FUNCTION to select [SETUP].**
2. **Press the ENTER key.**
3. **Press ▲ ▼ to select one of the user types (1 to 4).**
4. **Press the ENTER key.**

Operation Flow

Turning the power ON

Refer to P.2-4 “Turning the Power ON/OFF”.

Setting media

Refer to P.2-6 “Setting a Media”.

Selecting a user type

Refer to P.2-2 “Using the Registered User Types”.

Test printing

Refer to P.2-33 “Test Printing”.

Printing

Refer to P.2-35 “Printing Data”.

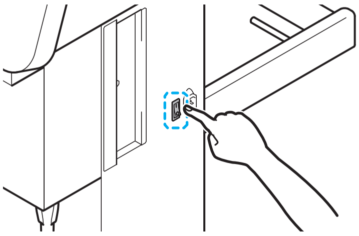
Turning the Power ON/OFF

Turning the Power ON

1 **Turn ON the power of the connected PC.**

2 **Turn the power switch ON.**

- Tilt the power switch toward the " I " side, and the power to the printer is turned on.
- At this time, the front cover must be closed. With the front cover kept open, the printer does not move even when the power is switched on.



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

```
BOOT

```

```
Tx400-1800     V*.**

```

- The message "PLEASE WAIT" appears on the LCD.

```
    PLEASE WAIT
***-----------------
```

- The screen turns to the media selecting.

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

Turning the Power OFF

Check the following items when turning the power OFF.

- If the machine is receiving data from the PC or if there is any data that has not been output yet
- If the head has returned to the capping station
- If any error has occurred (☞ P.5-8 ”Error Messages”)

Caution

Do not turn off the power of this machine as much as possible.

- If turned off, ink may adhere to the head nozzle surface and it may prevent nozzle clogging being improved.
  If turning off by necessity, work from Step 1 to 8 of P.4-12 “Cleaning the Head Nozzles”, fill the cleaning liquid in the cap, and then turn the power off.
- In the control characteristics of this machine, if the power is turned off for more than 12 hours, ink may gradually be discharged from the head nozzle even if the head is capped.
  If ink is discharged from the nozzle, the color of ink may be mixed with ink of adjacent nozzles in the same head.
  Once ink is mixed in the nozzle, ink must be filled in the head again, thus much remaining ink may go to waste.
  Even if it is not used for a long time, do not turn off the power as much as possible.

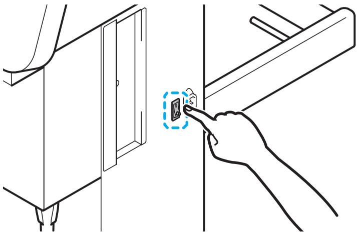
Important!

- If the power is turned off while 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, ink may drip.
- If the power to the printer is turned off without the head capped, re-turn on the power to the printer. The head is retracted in the capping station, preventing the ink dripping.

1 Turn OFF the power of the connected PC.

2 Turn the power switch OFF.

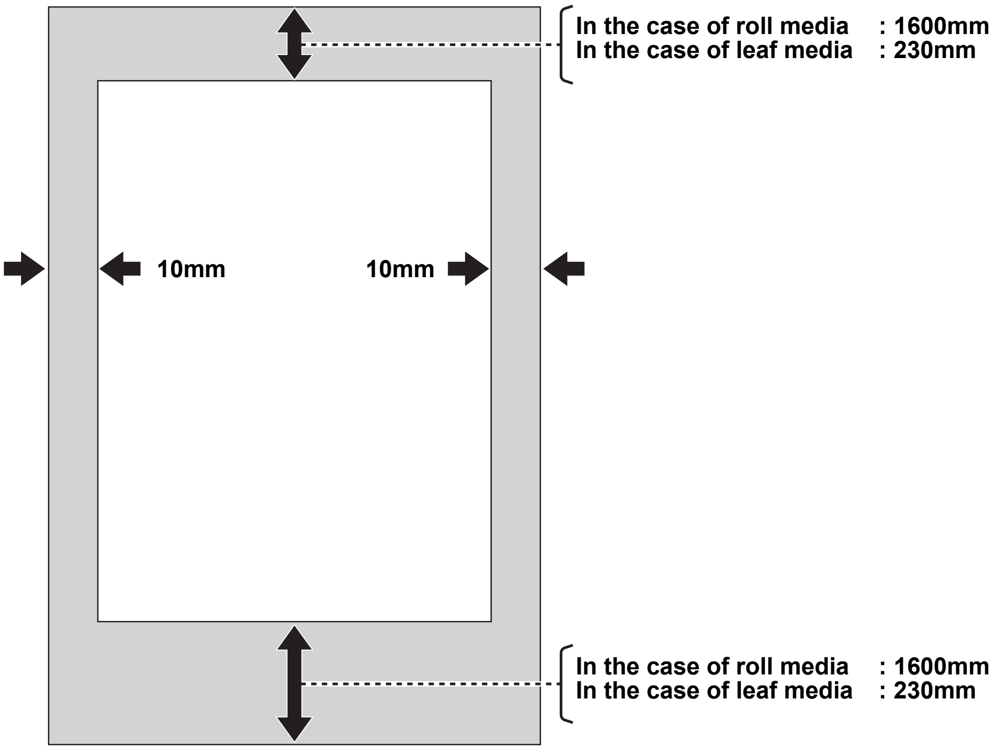
• Tilt the power switch to the "O" side.



Setting a Media

Maximum Print Area

The white area shown in the following figure represents the maximum print area.
The area other than that is the dead space that cannot be printed.


In the case of roll media : 1600mm
In the case of leaf media : 230mm
10mm
10mm
In the case of roll media : 1600mm
In the case of leaf media : 230mm

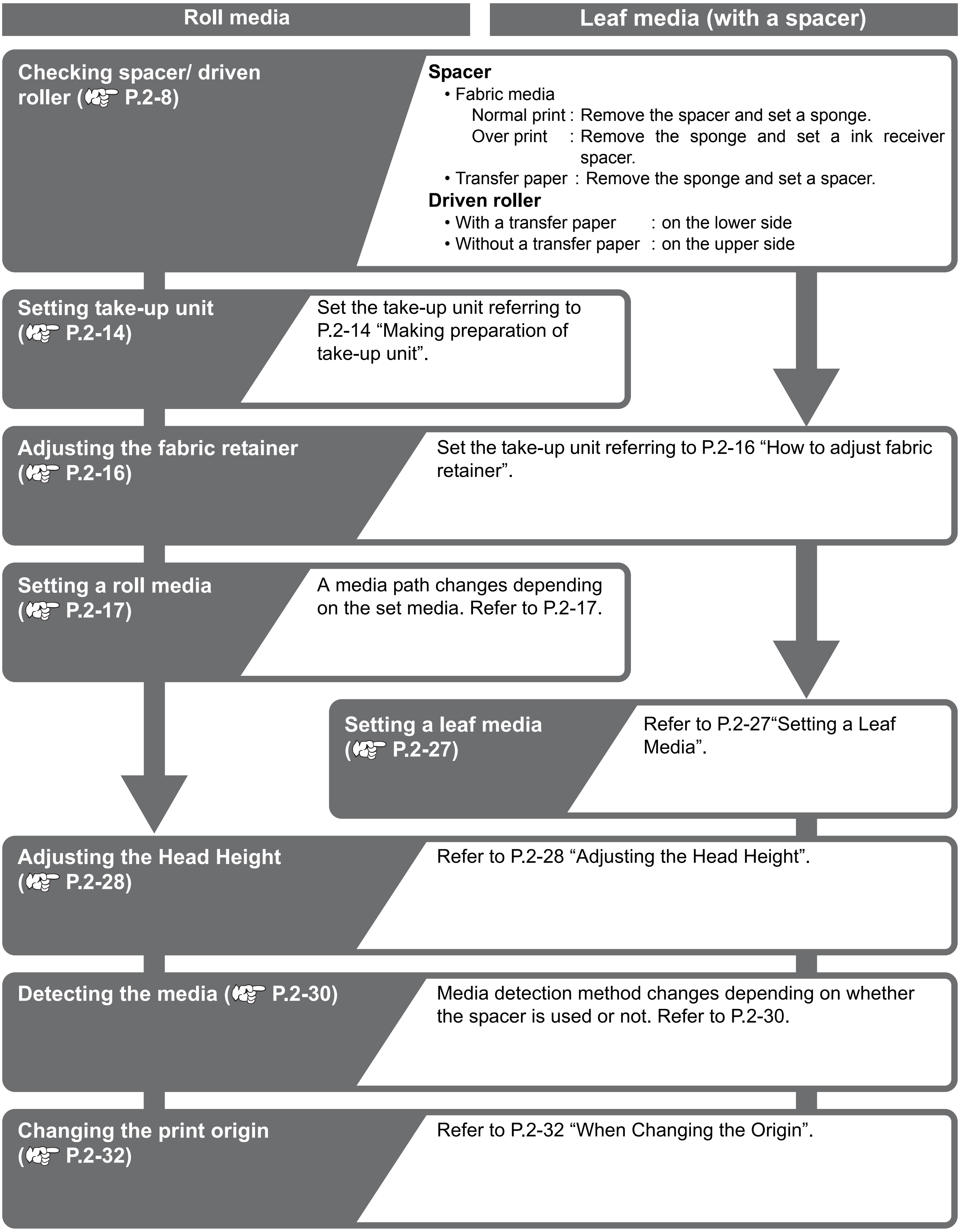
- The margin at the front and rear edges of the fabric can be reduced using a guiding fabric.
- The right and left margin may be changed as required. (☞ P.3-9)

For usable media, refer to P.1-14 “Usable Sizes of Media”.

Notes for Setting a Media

- The roll shaft for setting the roll media is heavy, weighing 8 to 10 kg only with the shaft itself. When setting, take care not to drop the media or the roll shaft on your foot, etc. It could cause injury due to its heavy weight.
- This operation should be performed by 2 or more person bcause the roll is heavy in weight.

Outline of media setting



Checking spacer/ driven roller (☞ P.2-8)

Spacer

- Fabric media
  - Normal print : Remove the spacer and set a sponge.
  - Over print : Remove the sponge and set a ink receiver spacer.
- Transfer paper : Remove the sponge and set a spacer.

Driven roller

- With a transfer paper : on the lower side
- Without a transfer paper : on the upper side

Setting take-up unit (☞ P.2-14)

Set the take-up unit referring to P.2-14 “Making preparation of take-up unit”.

Adjusting the fabric retainer (☞ P.2-16)

Set the take-up unit referring to P.2-16 “How to adjust fabric retainer”.

Setting a roll media (☞ P.2-17)

A media path changes depending on the set media. Refer to P.2-17.

Setting a leaf media (☞ P.2-27)

Refer to P.2-27“Setting a Leaf Media”.

Adjusting the Head Height (☞ P.2-28)

Refer to P.2-28 “Adjusting the Head Height”.

Detecting the media (☞ P.2-30)

Media detection method changes depending on whether the spacer is used or not. Refer to P.2-30.

Changing the print origin (☞ P.2-32)

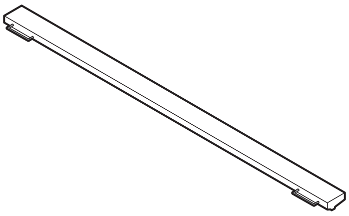
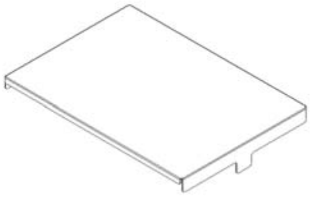
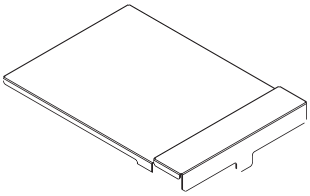
Refer to P.2-32 “When Changing the Origin”.

Checking spacer/ driven roller

Depending on the media you use and the printing method, set the spacer type (attached three types) and the driven roller position.

About each spacer

This machine provides three spacers below:

Spacer	Ink receiving spacer	Fabric edge spacer
		

● When printing on the fabric (when over print is not performed)

Use the sponge attached to the fabric holder frame.
If ink mist is generated much, use ink receiving spacer only. (☞ P.2-10)

● When printing on the fabric (when over print is performed)

Use the ink receiving spacer and the fabric edge spacer. (☞ P.2-10)

● When printing on the sublimation transfer paper

Use the spacer only. (☞ P.2-10)

Important!

- When a fabric retainer is used for printing, remove the ink receiver spacer.

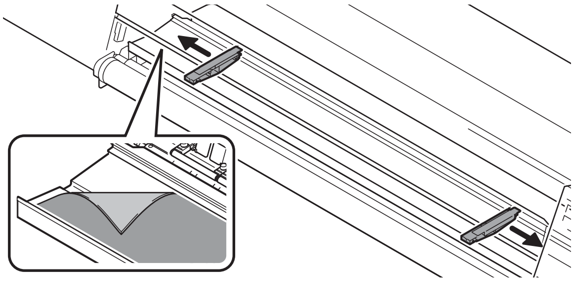
Setting / Removing the Spacer

When the transfer paper is set, it is necessary to set the spacer.

Caution

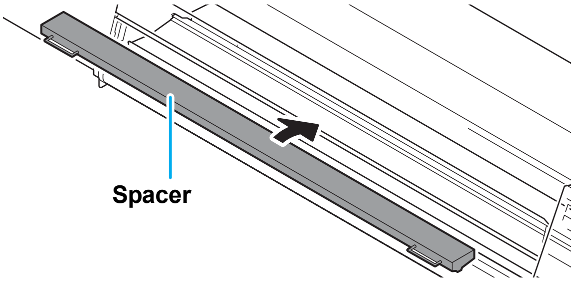
- To set a fabric media, be sure to remove the spacer and set the sponge instead. If not, discharged ink may stain the media during printing.

1 **Move the fabric retainer to the left and the right and remove the sponge.**



2 **Fix the spacer.**

- Fix the spacer, adjusting the concave portion of the ditch for penetrated ink with the convex portion of the spacer.



Important!

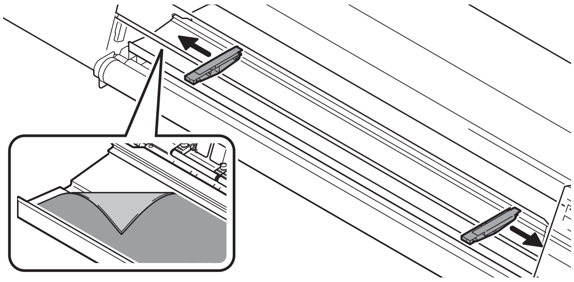
- After setting / removing the spacer, be sure to perform “Setting the Spacer” in MACHINE SETUP. (☞ P.3-34)

Attaching/removing ink receiving spacer

When you perform over print using a fabric media, set the ink receiving spacer in the ditch for penetrated ink.

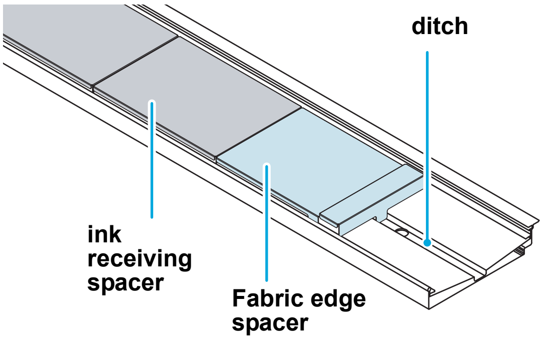
- Be sure to attach the ink receiving spacer when performing over print. By doing so, you can prevent ink mist from being generated.

1 **Move the fabric retainer to the left and the right and remove the sponge.**



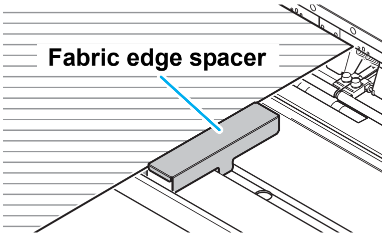
2 **Attach the ink receiving spacer and the fabric edge spacer.**

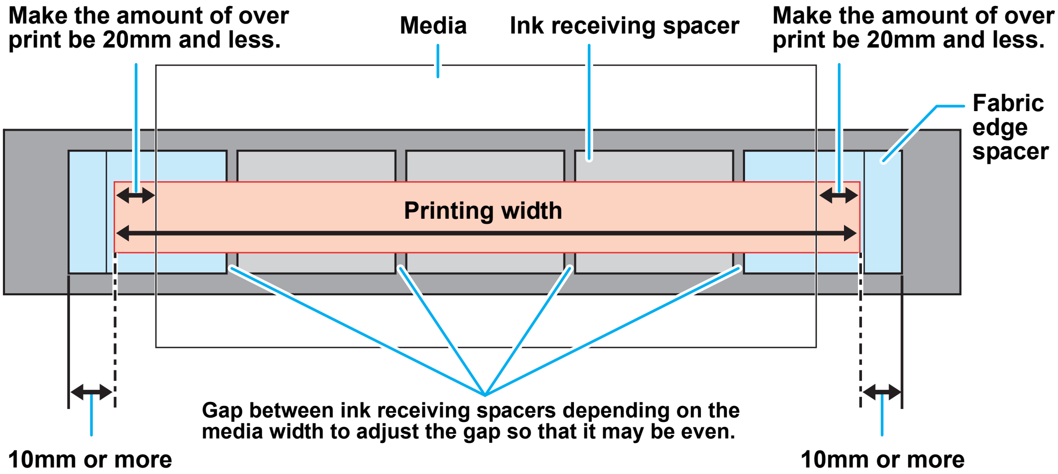
- Attach it by aligning the concave portion in the center of the ditch for penetrated ink with the protrusion of the spacer.
- The size of the ink receiving spacer is W: 250 mm x D: 177 mm.
  Depending on the width of the image to be printed, adjust the number of ink receiving spacers to attach.


ditch
ink receiving spacer
Fabric edge spacer

Reference for attaching ink receiving spacer / fabric edge spacer

- Make the total width of the ink receiving spacer and the fabric edge spacer not be narrower than the width of the image to be printed.
- Adjust the number of spacers so that they are apart from right and left edges of the image by 10mm and more.
- Move the edge of fabric edge spacer closer to the edge of media as much as possible.


Fabric edge spacer


Make the amount of over print be 20mm and less.
Media
Ink receiving spacer
Make the amount of over print be 20mm and less.
Fabric edge spacer
Printing width
Gap between ink receiving spacers depending on the media width to adjust the gap so that it may be even.
10mm or more
10mm or more

3 Turn the “Spacer” ON on MACHINE SETUP.

- Media cannot be detected automatically with the ink receiving spacer attached. Be sure to turn “Spacer” ON to detect media manually. (☞ P.3-34)

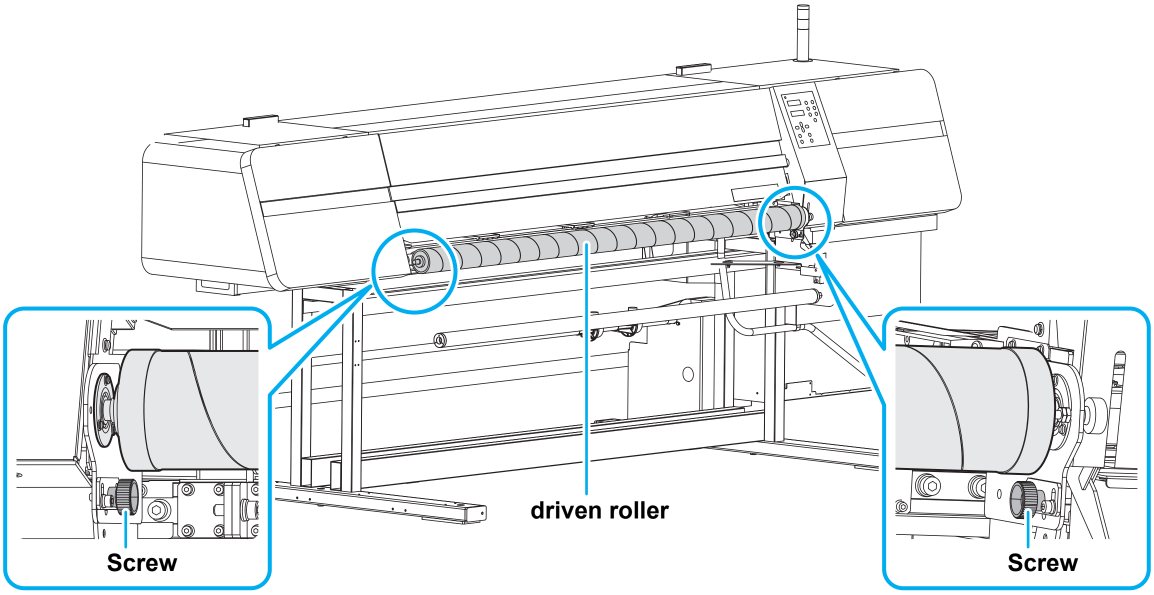
4 Detecting the media.

- Refer to P.2-30 “How to detect media (When the spacer are used)” to detect the media.

Changing position of driven roller

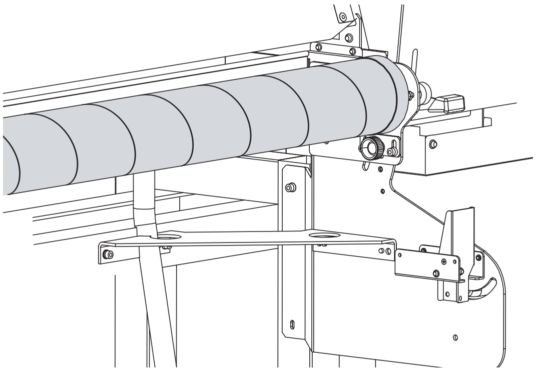
The fixing position of the driven roller varies depending on the media to be set.
When using the fabric media, fix to the upside, and when setting the transfer paper, fix to the downside.
When changing the position of the driven roller, follow the procedures stated below:

1 Remove the screws on the left and the right of the driven roller.

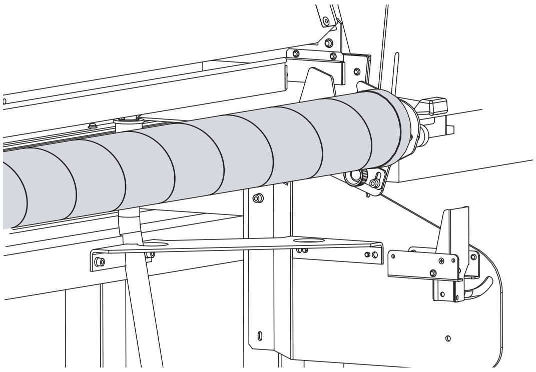


2 Decide the fixing position of the roller in accordance with the media to be used.

- Fix with the screws removed at the Step 1.



When the driven roller is fixed on the upper side



When the driven roller is fixed on the lower side

Mounting the fabric roller

When printing on a loose fabric, the ink remained on the back of the fabric may attach to the driven roller, and the ink may stain the fabric media.
With the fabric roller mounted, the stain of the fabric media can be avoided by the roller removing the attached ink to the driven roller.

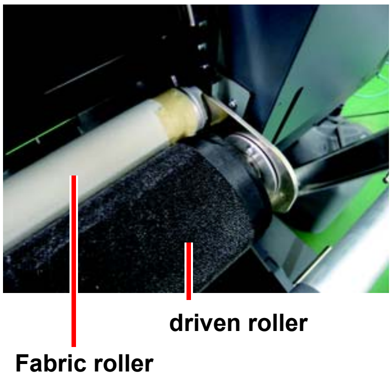
Important!

- Fabric is not wrapped around the fabric roller before shipping. Prepare the well-absorbed fabric with the following size.
  Material : Cotton sheeting, cotton broardcloth or the like
  Size : 195cm x 70cm

1

Remove the fabric roller.

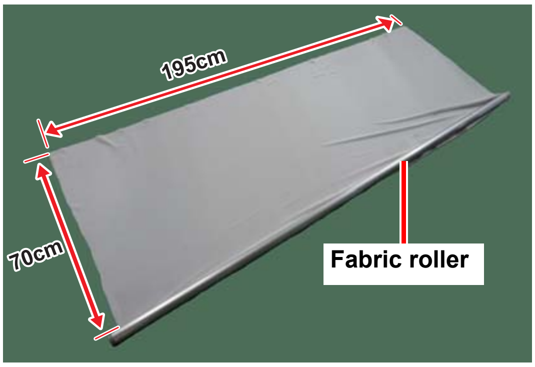
- The fabric roller is at the back of the driven roller.



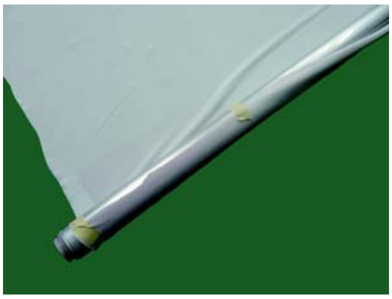
2

Wrap a fabric around the fabric roller.

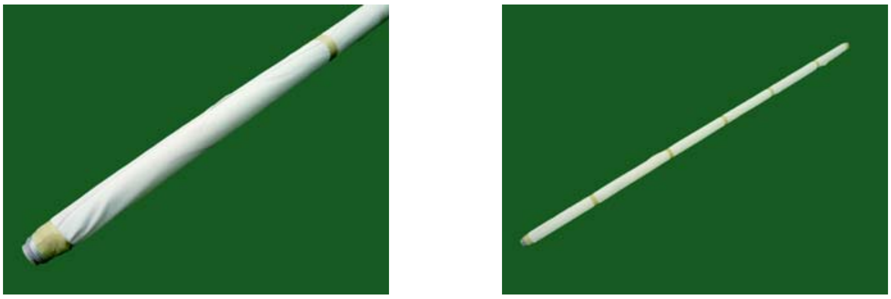
(1) As shown on the right, fit a fabric with the roller.



(2) Secure the fabric and the roller with an adhesive tape.



(3) Wrap the fabric around the roller, and secure with an adhesive tape.

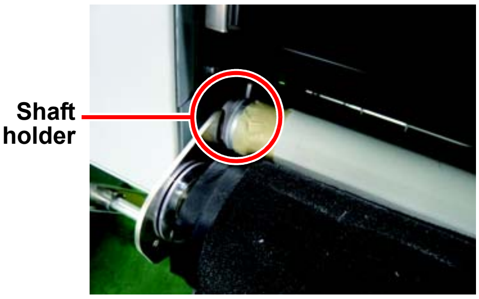


Wrapped with a fabric

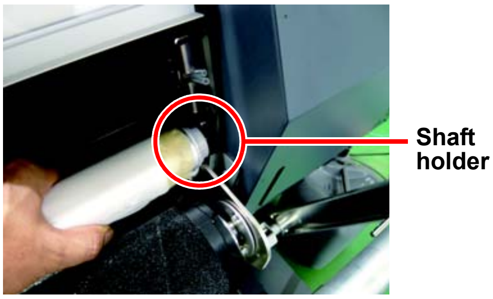
3

Mount the fabric roller with the fabric wrapped.

- Mount the fabric roller in the slot on the back of the driven roller.
- Fit the shaft holder into the slot on both sides of the fabric roller.



Left side of the machine



Right side of the machine

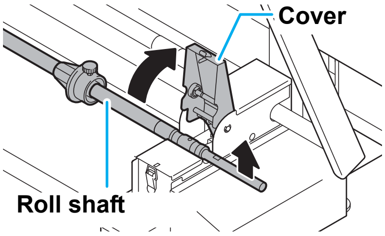
4

Turn the driven roller manually, and check it turns smoothly.

- If the driven roller does not turn smoothly, check the mounted position of the fabric roller.

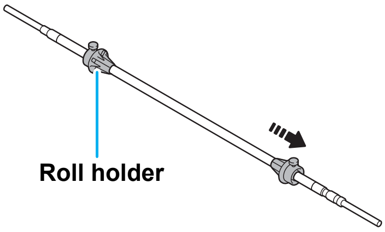
Making preparation of take-up unit

1 **Open the take-up unit cover and take the roll shaft out.**



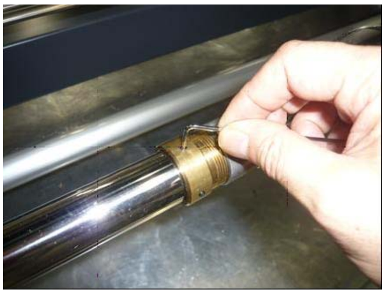
2 **Remove the roll holder.**

- The roll holders are attached on the left and the right sides of the roll shaft. Remove the roll holder of either one side.
- When there exists core support (optional supply item), go to the Step 3. If there is no core support, jump to the Step 8.
- When not using the core support, use strong core (3mm or more thick of the core).



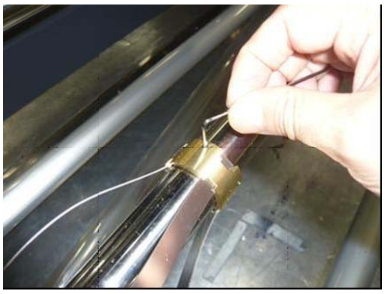
3 **Using the hexagonal wrench attached, loosen the core support.**

- The core support is fixed on the roll shaft.



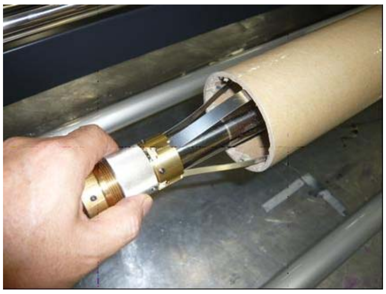
4 **Move the core support more or less to the center of the roll width.**

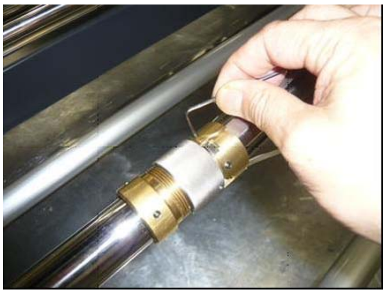
5 **Fix the part of the core support shown in the right drawing.**



6 **Put the attached empty core through the roll shaft.**

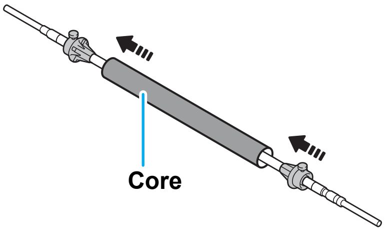
7 When around 2 thirds of the core support enters into the core, inflate it so that the board of the core support touches the inner wall of the core, and fix it with the attached hexagonal wrench.





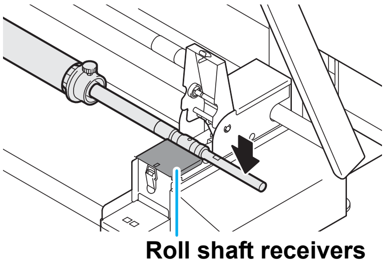
- Adjustable by the adjusting screw of core support.

8 Put the core through to the position where it touches the roll holder, and provisionally fix it with the other roll holder.

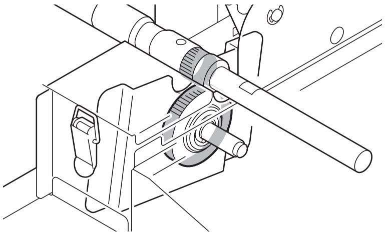


9 Put the roll shaft on which the core is put onto the roll shaft receivers.

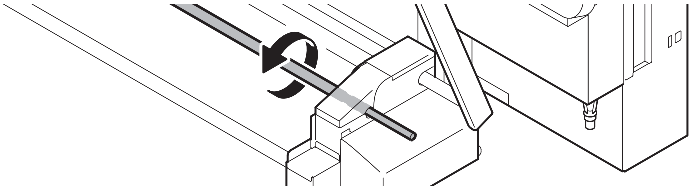
- Put on the roll shaft so that the gear side comes to the right leg side.



10 Close the cover so that the teeth of the gears mesh properly.



- If the gear is not meshed properly, the cover does not close. When the cover does not close, mesh the gear as shown in the drawing below.



Turn the shaft until the gear meshes.

11 Put on the lock.

- Never fail to lock.

12 Slide the left and the right side position of the core as needed and fix the roll holder.

- When winding up the fabric, adjust to the proper position.
- When fixing the core with the roll holder, fix it securely to avoid loosening. If the core is loosely fixed, proper winding could be impaired.
- Then, we continue to set the roll media on the feeding unit. Please proceed to the next page.

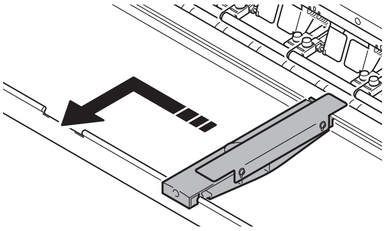
How to adjust fabric retainer

Adjust the height of the stainless steel plate in line with the thickness of the fabric.

1

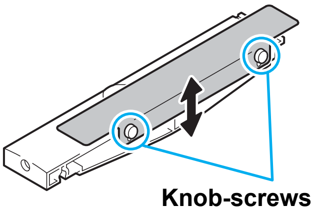
Remove the fabric retainer.

- Slide the fabric retainer to the concave portion in the center of the platen and remove it.



2

Loosen the knob-screws, and adjust the height of the stainless steel plate in line with the thickness of the fabric.



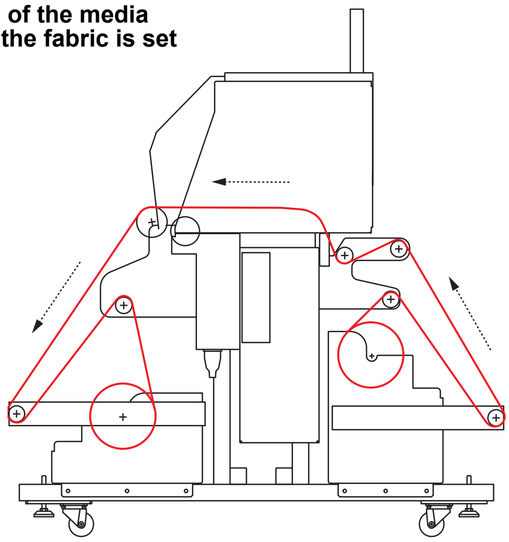
Important!

- When a heavy fabric is pressed and held, set the height of the head in accordance with the thickness of the fabric. If the height of the head is kept low, it may cause the break of the head.

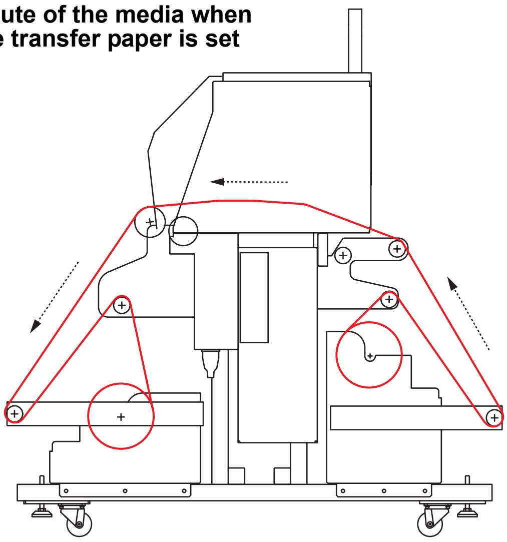
Setting a Roll Media

The route for setting the fabric media is as shown in the following diagram.
Prior to setting the media, if you understand the routing of the media, you can perform the setting of the media smoothly.

Route of the media when the fabric is set



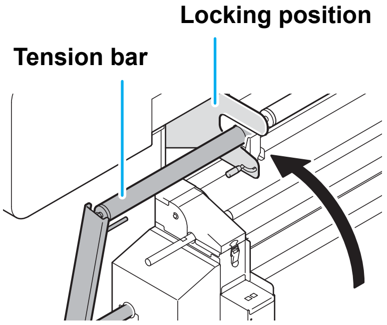
Route of the media when the transfer paper is set



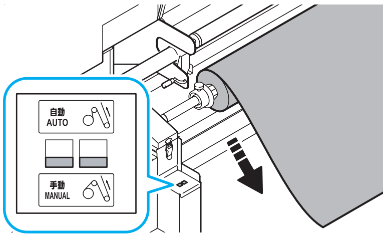
1 Fix the roll media to the feeding unit.

- Fix it referring to P.2-14 “Making preparation of take-up unit”.
- Fix the roll media to the center as the standard.

2 Lifting the tension bars located in the front and rear surface of this equipment and fix it at the locking position.



3 Using the switch of the feeding device, feed out the fabric around 3m.

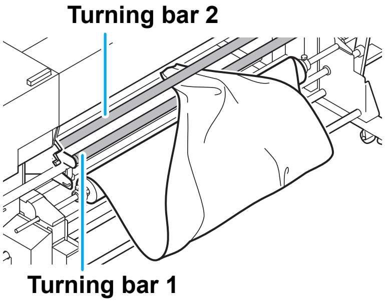


(1) Adjust the “ROTATION” of the feeding unit to the feeding direction of the media.
- To print on the front face : Flip up the switch.
  To print on the back face : Flip down the switch.

(2) Turn to “MANUAL” and feed out the fabric around 3m.

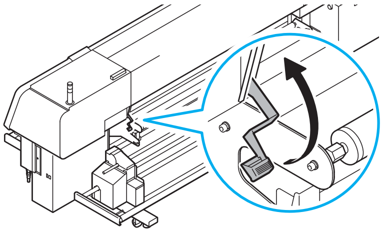
- With the lapse of 3 seconds, the rotation will automatically be turned off.
- If you wish to stop the rotation prior to the lapse of 3 seconds, turn the switch to “AUTO”.
- In case where the tension bar of the feeder unit is not locked, the rotation does not stop automatically even with the lapse of 3 seconds. If you desire to stop the rotation, turn over the switch to “AUTO”.
- When the rotation stops automatically, and you wish to feed out the media further, turn the switch from AUTO to MANUAL.

4 From the outside of the turning bar 1, pass the fabric beneath the turning bar 2.

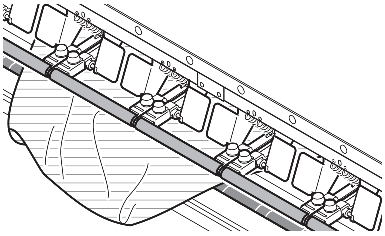


Important!
- When the transfer paper is used, do not pass the transfer paper beneath the turning bar 2.

5 Raise the clamp lever.

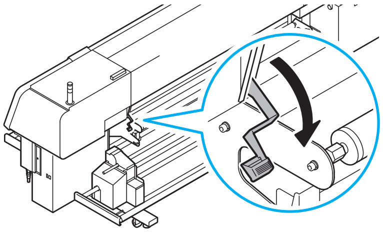


6 Insert the top edge of the fabric between the driving roller and the pinch rollers.

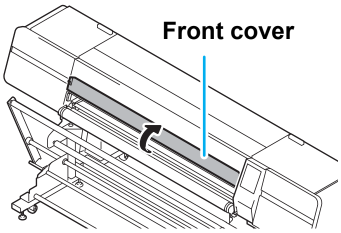


7 Pull down the clamp lever of the rear side of the equipment.

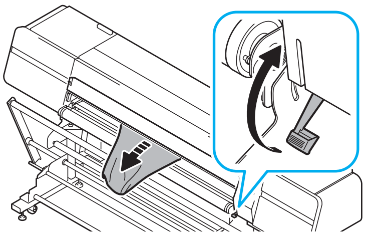
- The fabric is maintained.



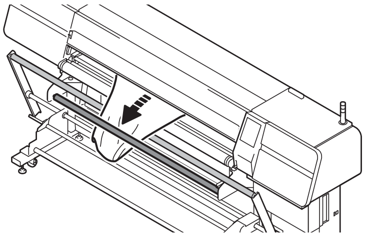
8 Go to the front of the equipment and open the front cover.



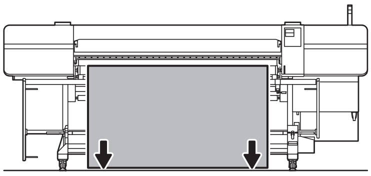
9 While pressing the top edge of the fabric with hand, lift the clamp lever and pull out the fabric.



10 **Pass the fabric inside the turning bar.**



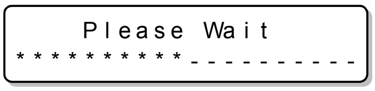
11 **Pull out the fabric until the top edge of the fabric nearly touch the floor and remove the wrinkles, etc.**



12 **Push down the clamp lever.**

- The fabric is retained.

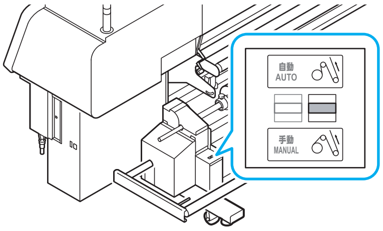
13 **Close the front cover and press the ENTER key.**



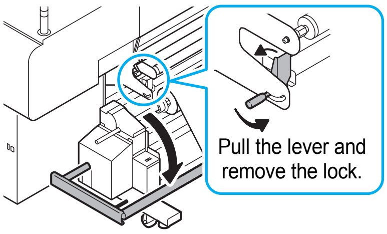
```
Please Wait
**********----------
```

14 **Manipulating the switch of the feeding unit on the rear surface of the equipment, adjust the feeding tension bar so that it becomes mostly horizontal against the floor.**

(1) Confirm that the [ROTATION] of the feeding unit is adjusted to the feeding direction of the fabric.

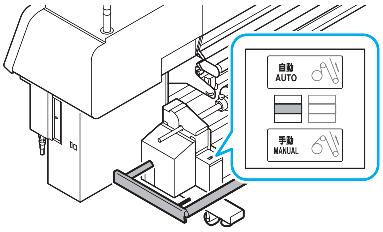


(2) Remove the lock of the feeding tension bar and put it down slowly.



Pull the lever and remove the lock.

(3) Turn the switch to [MANUAL] and repeat adjusting until the feeding tension bar is even.

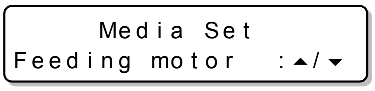


(4) Turn the switch to [AUTO] and stop the rotation.

15 Rewind until the top edge of the fabric comes fabric to the same height of the core set on the take-up unit.

(1) Press the (FEED COMP.) key to display the screen as shown in the right.

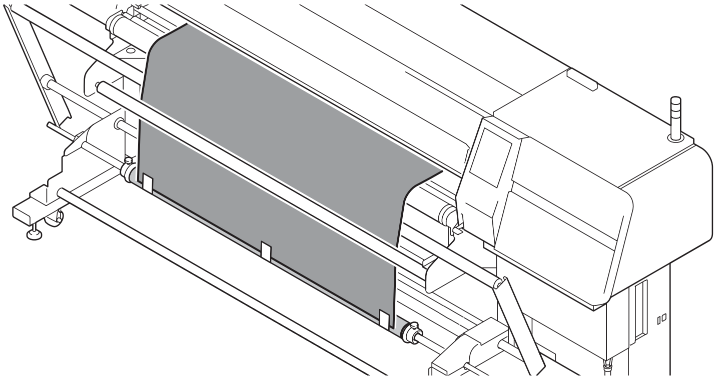
(2) Pressing the (▲) key, wind back the media until it comes to nearly the same height with the core.



```
      Media Set
Feeding motor    :▲/▼
```

16 Fix the top edge of the fabric to the empty core fixed to the take-up unit with adhesive tape, etc.

- Fix so that the fabric is evenly stretched at both ends and in the center. If you follow the below-mentioned procedures, you will be able to stretch the fabric almost evenly.



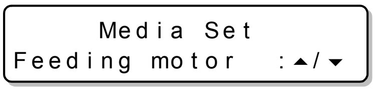
(1) First, fix the center.
  - When fixing the center of the fabric first, tape down it while rotating the paper core to the reverse direction from the take-up direction. By doing this, allowance of the fabric at taping down first is lost and you can fix the fabric so that its tension becomes even in the Step (2).

(2) Pulling the left and the right sides of the fabric toward the outside respectively, fix them.

- When setting wider media, fix five positions and more of the media with tape etc. The more fixing positions are, the more tension of the media becomes even.
- When the position of the fabric set and the position of the core is out of alignment, loosen the screw of the roll holder and make adjustment so that the core comes to the appropriate position.
- From the roll of the feeding side, see and check the position of both ends of the fabric are aligned with the both ends of the roll on the feeding side.

17 Slacken the fabric.

- When the screen shown in the right is displayed, press (▼) and slacken the fabric until it reaches the floor.

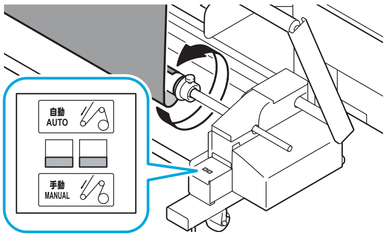


```
      Media Set
Feeding motor    :▲/▼
```

18 Using the switch of the take-up unit on the front surface of the equipment, wind the fabric more than one round.

(1) Adjust the [ROTATION] of the take-up unit to the direction of the taking up.
  - To turn the print face to the front : Flip down the switch.
    To turn the print face to the back : Flip up the switch.

(2) Turn the switch to [MANUAL] and take up the fabric more than one round.



19 Remove the lock of the take-up tension bar and make adjustment so that the tension bar is held nearly horizontal to the floor.

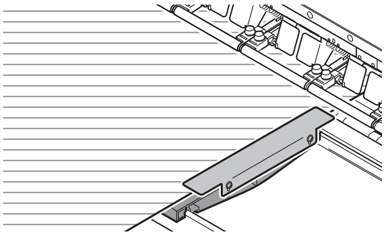
- When the screen shown in the right is displayed, press ▼ and feed the media until the tension bar is even.

```
      Media Set
Feeding motor    :▲/▼
```

20 Check the switches of the feeding unit and take-up unit.

- Confirm that the [ROTATION] is in line with the direction of taking-up and feeding.
- Confirm that both the take-up unit and the feeding unit are set to [AUTO].

21 Lightly nip the fabric with the fabric retainer.



Important! **Be sure to use the fabric retainer. Using it is effective in the following respects.**

- Avoids lifting an edge of the fabric used by curl, warpage, or pilling.
- Avoids passing ink mist through to the back while printing.

Even when you wish to print on the full width of the media, use the fabric retainer by setting it next to the media.

22 Press the FEED COMP. key to return to the media selection screen.

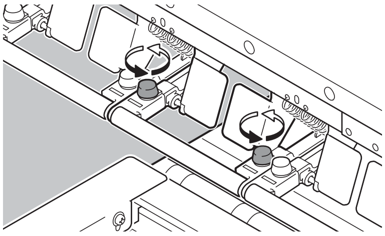
```
      MEDIA SET
ROLL<           >LEAF
```

Removing the pinch roller, prevent the appearance of wrinkles

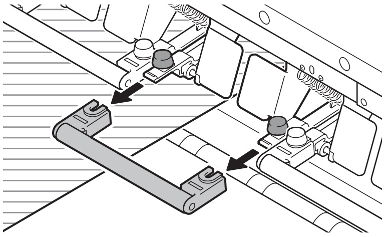
When both ends of the fabric used are more extended compared with its center part, or when the edge of the fabric is made thicker because of gumming treatment for preventing the unraveling, the wrinkles tend to appear more easily.
In such cases, use the equipment removing the pinch rollers on both ends.

1 **Lift the clamp lever.**

2 **Loosen the left and right knob-screws of the pinch rollers you want to remove.**

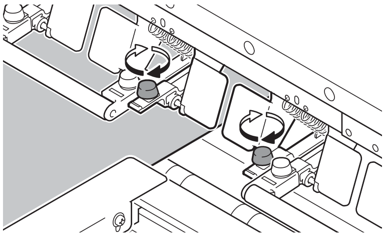


3 **Pull out the pinch rollers.**



4 **Lightly tighten the knob-screws.**

- Lightly tighten the knob-screws for preventing the dropping or missing of the knob-screws.



5 **Push down the clamp lever.**

Important!

- When the pinch rollers of the left and right ends of this equipment are removed, if the length of the fabric appearing in the removed position is extremely different between the left and the right, re-set the media once again. (☞ P.2-17)

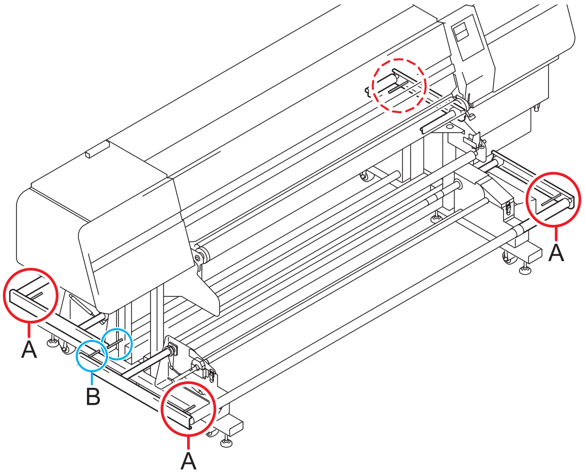
Adjusting weight of tension bar

There is a wide variety of media including the difference in material such as natural fiber and synthetic fiber, or the difference in manufacturing method such as fabrics, knitted wear and others. Further, even with the same media, their stretching characteristics may vary due to differences in their pre-treatment process. For printing such a variety of media applying appropriate tension for the media, there is a need for adjusting the weight of the tension bar.

● About position for attaching counter weight

The taking-up/feeding tension bar weighs 3000g each. To adjust the weight of the tension bar depending on the media you use, it is required to attach the counter weight.

- When the weight of the tension bar is desired to be made heavier than 3000g, insert into part A portion of the following diagram the counter weight of the desired weight. (You may set maximum 10 pieces on one side and maximum 20 pieces as the total of both sides.)
- When you desire to make the weight of the tension bar lighter than 3000g, insert in part B of the following diagram the counter weights weighing twice as heavy as the weight desired to reduce. (You may set up to the maximum of 18 pieces.)
- Fit the same number of the counter weights into each of the right and left of the take-up /feeding tension bar (4 points in total).



● Reference for weight adjustment

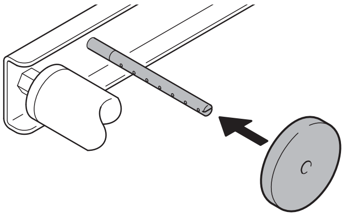
Check whether the tension suited for the media is applied on by referring to the phenomenon below.
If the proper tension is not applied on the media, it is required to adjust the number of counter weights.

Phenomenon			Countermeasure
Media front surface at setting	**At printing**	**Print result**	
The print surface tightens.	Stable printing can be performed.	Surface waviness or ruck on the media is hardly found.	The tension is suited for the media. It is not required to adjust the counter weight.
Surface waviness has occurs on the media and the printing surface comes down.	The media flops at printing.	As the print surface comes down, printing cannot be performed with the proper head height. Therefore, the printing quality deteriorates.	Add the counter weight on the A part of the figure above to increase the tension bar weight.
As the media is pulled too much, ruck partially occurs between the pinch rollers etc.	The tension bar bends and ruck occurs on the media or the media skews.	Ruck occurs on the media may hit the head, and it may cause the media jam or the damage of the head.	Reduce the number of counter weights set on the A part of the figure above, or add the counter weight on the B part.

● Method for attaching counter weight

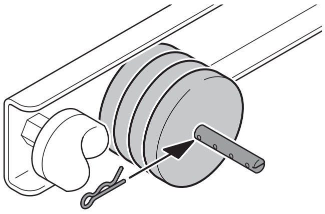
1 Insert the attached counter weights to the take-up/feeding tension bar.

- Each tension bar weighs approximately 3000g. And a counter weight weighs approx. 200g a piece. Attach the necessary pieces of the counter weight.
- For coarse fabric and stretchy fabric against pulling, apply rather lighter tension bar and for densely woven fabric and for resilient fabric, apply the tension bar with heavier weight.



2 Fix the attached clips.

- Make sure to fix the clips so that the applied weight does not fall down.



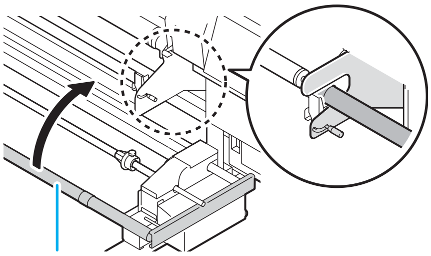
Important!

- The weight of the tension bar may be adjusted between 6700g Max and 1500g Min.
- After adjusting the weight, perform test printings to adjust the tension to an appropriate one to the media and use this equipment.

Procedures for setting media again when you cut roll media on the way

When you set a fabric roll media on this machine and if you cut the media on the way due to changing of data to be printed, set it again by following procedures below.

1 **Fix the take-up tension bar located in front of this machine at the waiting position.**



2 **Set an empty paper core on the take-up unit. (☞ P.2-14)**

3 **Press the FUNCTION key.**

```
FUNCTION
SETUP                  <ENT>
```

4 **Press ▲ ▼ to select [MEDIA SET].**

```
FUNCTION
MEDIA SET              <ENT>
```

5 **Press the ENTER key twice.**

- The mode enters into the media undetected status.

```
MEDIA SET
MEDIA                 :RESET
```

↓

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

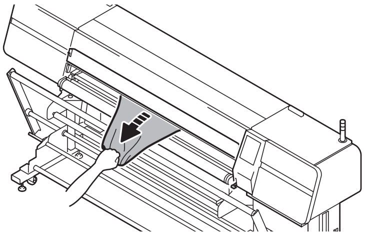
6 **Press the FEED COMP. key.**

- The media set assistant screen is displayed.

```
        Media Set
Feeding motor         :▲/▼
```

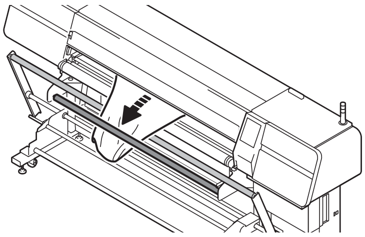
7 **Press ▼ to feed the fabric so that the top edge of it is located on approximately same position as the paper core.**

- Feed the fabric while pulling it. If you feed it without pulling, there is the danger of the fabric being taken into the grid roller because the tension is not placed.



8 **Pass the fabric inside the turning bar.**

- Check the label pasted on this machine and then pass the media.



9 **Press ▲▼ to adjust the fabric so that the top edge of it is located on approximately same position as the paper core.**

10 **Perform the work from the Step 16 of “Setting a Roll Media”. (P.2-20)**

Set the interleaving paper roll when using Rc210 ink

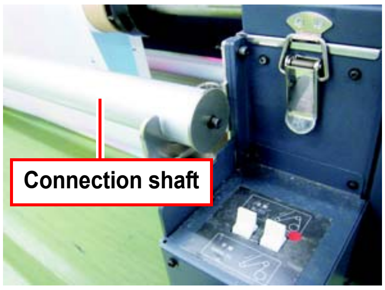
For using Rc210 ink, set the interleaving paper roll to prevent offset when the media is taken up.

Important!

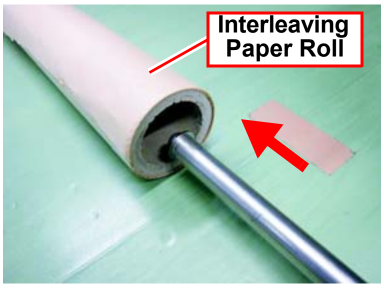
- Please use interleaving paper which the external diameter is 160mm or less at the maximum.
- Please do not use breakable interleaving paper since it becomes overloaded with such interleaving paper while printing.

1 **Remove the connection shaft for setting the interleaving paper roll.**

- remove the connection shaft in front of the roll shaft.
- be sure to attach/ remove the connection shaft with two or more persons. If you drop the connection shaft, you may be injured due to its weight.



2 **pass the connection shaft through the interleaving paper roll.**



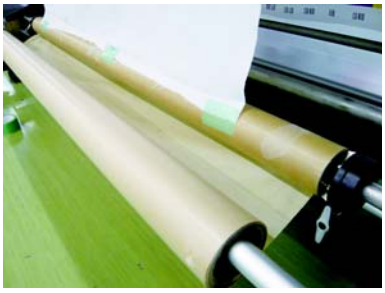
3 **attach the connection shaft with the interleaving paper roll set on the shaft holder.**

- attach the interleaving paper roll at the center.

4 **Perform the work up to the Step 16 in P.2-17 “Setting a Roll Media” and fix the media on the paper core.**

5 **Pull out the interleaving paper and fix the top edge of it on the paper core on which the media was pasted with tape.**

- Fix the interleaving paper with adhesive tape.



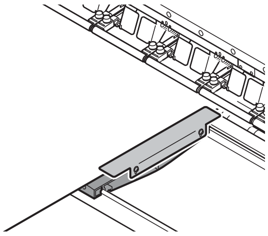
6 **Perform the work from the Step 17 in P.2-17 “Setting a Roll Media” and wind the media and the interleaving paper on the paper core.**

Setting a Leaf Media

When test printing is made or setting list is printed, set a leaf media.

1 **Set the leaf media.**

- Set the leaf media to cover the media sensor. (☞ P.1-9)
- To avoid lift or wrinkle of the media while printing, put a weight on the front end of the leaf media. Lift or wrinkle of the media while printing may break the head.



2 **Adjusting the Head Height. (☞ P.2-28)**

3 **The display returns to the media selection.**

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

Important!

- For the leaf media, use only a withy one.
  When using the leaf media, the take-up device is invalid. If the set media is not withy, the printing face will not become flat and the media will jam.

Adjusting the Head Height

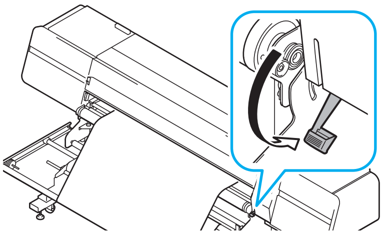
Adjust the height of the head in line with the thickness of the fabric you use.

Important!

- Unless the head is properly set at the height against the thickness of the fabric you use, deterioration of the printing quality or the breakage of the head could be caused. Perform the head height adjustment each time when you change the fabric.
- When the height of the head is set at 1.3mm (minimum value) from the surface of the platen, pay attention to the following points:
  (1) Remove the fabric retainer. The head and the fabric retainer may touch with each other which could cause the break of this equipment.
  (2) Use the fabric with surface without wrinkles and convex-concave shapes. The fabric and the head may graze with each other, or the fabric may be caught and pressed by the head causing a jam of being clogged at some point.
  (3) Use the equipment keeping the head height at 3mm .
- After adjusting the head height, make sure to perform the correction of the dot position. (☞ P.4-26)

---

1 **Set the fabric and push down the clamp lever.**



---

2 **Press the FUNCTION key.**

```
FUNCTION
SETUP                <ENT>
```

---

3 **Press ▲ ▼ to select [MAINTENANCE].**

```
FUNCTION
MAINTENANCE          <ENT>
```

---

4 **Press the ENTER key.**

```
MAINTENANCE
Station              <ENT>
```

---

5 **Press ▲ ▼ to select [Head Height].**

```
MAINTENANCE
Head Height          <ENT>
```

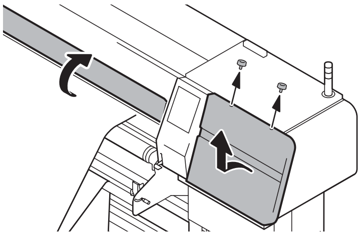
---

6 **Press the ENTER key twice.**

- The carriage will move.

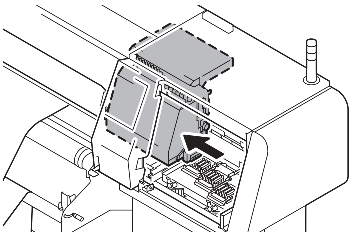
---

7 **Open the front cover and the maintenance cover R.**



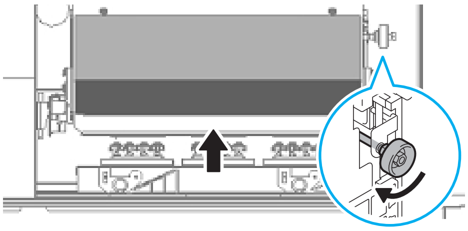
8 Move the carriage.

- Move the carriage by hand until the head height adjusting rod comes on the media.
- If the carriage hits the spacer or the fabric retainer, go to the step 9 and raise the head.

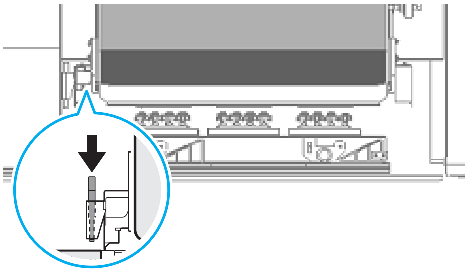


9 Adjust the head height.

(1) Turn the height adjusting screw clockwise to raise the head.



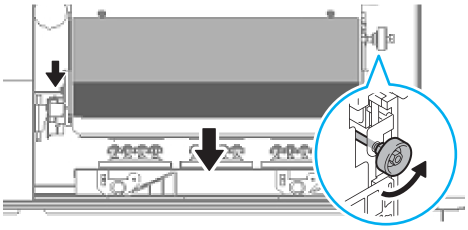
(2) Push the head height adjusting rod to up to the position not to move even pressing from the above.



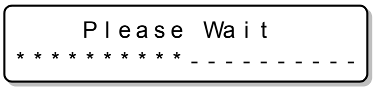
- When the tip of the height adjusting rod is touching the surface of the fabric, move up the position of the head.

(3) While pressing the head height adjusting rod, turn the height adjusting screw counter-clockwise to lower the head.

- Lower the head until the tip portion of the rod touches the surface of the fabric used.
- By adjusting the height to this state, the height of the head is set approximately to 3mm.



10 Close the front cover and press the ENTER key.



```
Please Wait
**********----------
```

- In the head height adjustment, if the adjustment is made so that the tip of the height adjusting rod touches the surface of the fabric, the distance between the head and printing surface of the fabric will become optimum.
- Even if you raise the head height, if the adjustment is made so that the tip of the height adjusting rod touches the surface of the fabric, the distance between the printing surface and the head is not changed.
- If you wish to avoid the fluff on the surface of the fabric or the warp of the edge part of the fabric, or concave-convex part of the fabric while printing, you may use the equipment extending distance between the head and the printing surface of the fabric.
- If preventing treatment for fray on right and left edges and tenter are thick against the fabric thickness, adjust the head height depending on the thickness of the right and left edges of the fabric.
- When the distance between the head and printing surface of the fabric is extended, the printing quality will become inferior.

Important!

- It is recommended to use the equipment keeping the head height 3mm or more. When using the equipment with the head height of 3mm or less, the blurring of the printed images, changes in color while printing or nozzle missing due to ink mist could be caused.
- Please be aware that we shall not be held ourselves responsible for the printing quality caused by the use of this equipment with the head height of 3 mm or above.

Detecting the Media

Media detection is a function for setting the printable area.

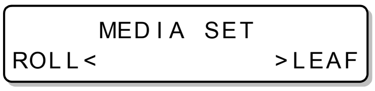
Important!

- When sublimation transfer ink is used, media detection method changes depending on the setting of “Spacer” in MACHINE SETUP.
  When “ON” is set on the “Spacer” in MACHINE SETUP, refer to P.2-30 “How to detect media (When the spacer are used)” and detect media.

How to detect media (When the spacer is not used)

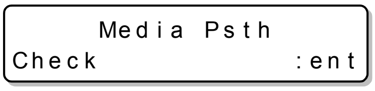
1 **Press ◀ ▶ on the media selection screen, and select ROLL/LEAF.**

- If “LEAF” is selected, go to the step 4.



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

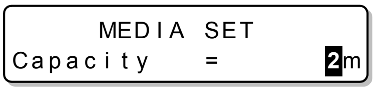
2 **Check the media path (☞ P.2-17) and press the ENTER key.**



```
    Media Psth
Check          :ent
```

3 **Press ▲ ▼ to input the media remaining, and press the ENTER key.**

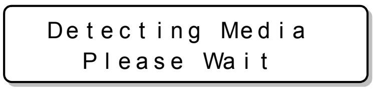
- The setting of the media remaining can be checked on the P.3-42”Confirming Machine Condition”.



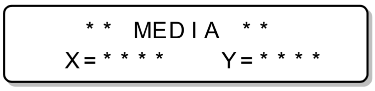
```
    MEDIA SET
Capacity   =     2m
```

4 **Automatic detection of the media width starts.**

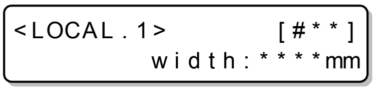
- After the detection, the screen displays the printing area and then returns to LOCAL.



```
  Detecting Media
   Please Wait
```



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



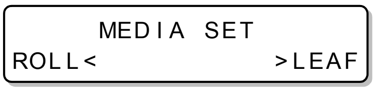
```
<LOCAL.1>      [#**]
      width:****mm
```

How to detect media (When the spacer are used)

When the spacer are used ("ON" is set on the "Spacer" in MACHINE SETUP), detect media as follows.

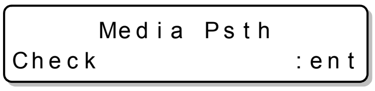
1 **Press ◀ ▶ on the media selection screen, and select ROLL/LEAF.**

- If “LEAF” is selected, go to the step 5.



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

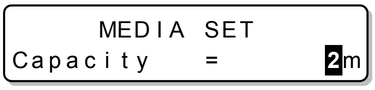
2 **Check the media path (☞ P.2-17) and press the ENTER key.**



```
    Media Psth
Check          :ent
```

3 **Press ▲ ▼ to input the media remaining, and press the ENTER key.**

- The setting of the media remaining can be checked on the P.3-42 “Confirming Machine Condition”.



```
    MEDIA SET
Capacity   =     2m
```

4 The feeding unit / take-up unit starts the preparatory operation.

- The feeding unit and the take-up unit starts the preparatory operation for printing. Wait until the operation ends.

5 Input width of the printing area.

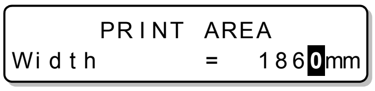
- Set the printing area in the Y direction.

If you know the printing width:

(1) Press ▲▼ to input the value.

(2) Press the ENTER key.

- The carriage moves.



```
      PRINT  AREA
Width          =    1860mm
```

Important!

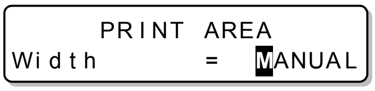
- When inputting the printing width with ▲▼, be careful that it may print out of the media depending on the print start position set on the Step 6.

If you do not know the printing width:

(1) Press the ▲▼ key to select "MANUAL".

(2) Press the ENTER key.

- The carriage moves.

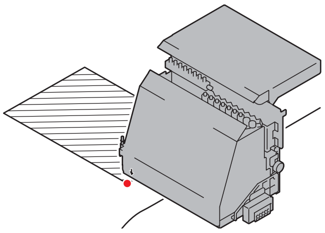


```
      PRINT  AREA
Width          =   MANUAL
```

6 Set the printing origin.

(1) Press ◀▶ to move the carriage to the print start position (origin).

- Put an arrow mark of the carriage on the setting position.



Important!

- When performing over print, set an origin on the position of 20 mm or less from right end of the media. If over print width is large, ink mist may be generated.

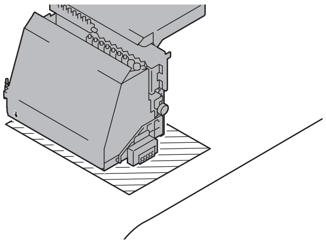
(2) Press the ENTER key.

- If "MANUAL" is set on the Step 5, go to the Step 7.
- If a number is entered for the printing width on the Step 5, the left end of the printing area is automatically adjusted to the entered number, and the mode is returned to the LOCAL. Skip the step 7.

7 Set the width of the printing area.

(1) Press ◀▶ to move the carriage to the left end of the printing area.

- Put an arrow mark of the carriage on the setting position.



Important!

- When performing over print, set an origin on the position of 20 mm or less from right end of the media. If over print width is large, ink mist may be generated.

(2) Press the ENTER key.

- After capping, the screen returns to LOCAL.

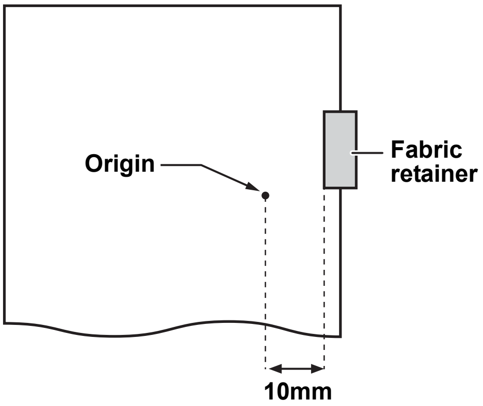
- If you set the wrong printing area, detect again from the Step 1 after performing the operation below.

(1) Press the ENTER key.
(2) Press ▲▼ to select [MEDIA SET].
(3) Press the ENTER key.
(4) Press ▲▼ to select “RESET”.
(5) Press the ENTER key.

When Changing the Origin

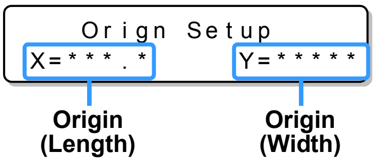
When the media is automatically detected, the starting point for printing (the origin) is set at the point shown in the diagram in the right.
You may change the Origin according to the printing status.

- If the width of the printing area is entered from the panel, the origin position is set according to the Step 6 of "How to detect media (When the spacer are used)" (☞ P.2-30).



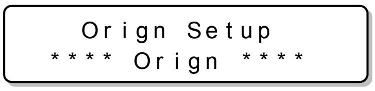
1 **Press ▲▼◀▶ in LOCAL, to adjust the Origin to the position**

- Select the carriage and media, moving the point with the ▲▼◀▶.


Orign Setup
X=***.*   Y=*****

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

- The origin is changed.


Orign Setup
**** Orign ****

Test Printing

Test printing is performed to check if printing failures (blurring and missing) due to nozzle clogging, etc. occur.

Test Printing

Important!

- When using a leaf media, set the media larger than the A3 size placed sideways
- When using a roll media, check the media is not slacken.

Check before test printing.	• If a media has been set ☞ P.2-6	• If the origin position has been set
	• If the head gap has been adjusted ☞ P.2-28	

1 Press the TEST DRAW key in LOCAL.

```
TEST PRINT
                 <ENT>
```

2 Press the ENTER key.

- Test printing starts.

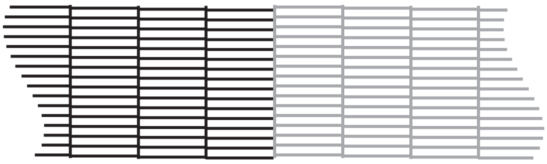
```
 **  TEST PRINT  **
 **   Printing   **
```

- When printing has ended, the screen returns to LOCAL.

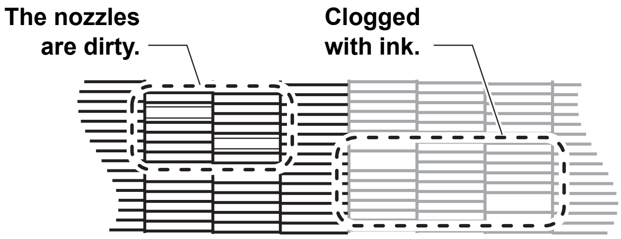
```
<LOCAL.1>       [#**]
        width:****mm
```

3 Check the result of the test printing.

- When the result is normal, end the operation.
- When the result is abnormal, perform head cleaning. (☞ P.2-34)



Normal pattern



Abnormal pattern

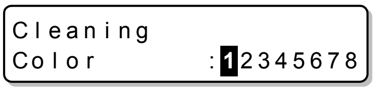
Performing Head Cleaning

Head cleaning can be performed in three ways. Select one according to the result of test printing.

NORMAL : When any line is missing
SOFT : When only head wiping is needed (when lines are bent)
HARD : When poor image quality cannot be improved even by NORMAL or SOFT cleaning

---

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

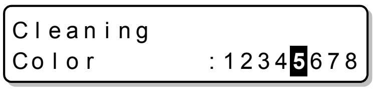


```
Cleaning
Color         :12345678
```

---

2 **Press (◀)(▶) to select the head to clean by block.**

- The heads are divided into two blocks of [1234] and [5678].

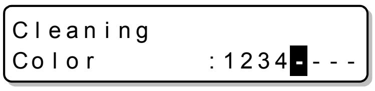


```
Cleaning
Color         :12345678
```

---

3 **Press (▲)(▼) to select the execution of the cleaning.**

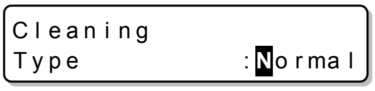
- When the cleaning is not made, the display shows [----].



```
Cleaning
Color         :1234----
```

---

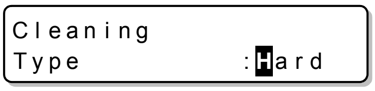
4 **Press the (ENTER) key.**



```
Cleaning
Type            :Normal
```

---

5 **Press (▲)(▼) to select a type of cleaning.**

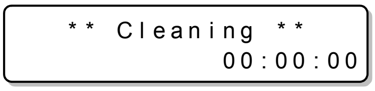


```
Cleaning
Type            :Hard
```

---

6 **Press the (ENTER) key twice.**

- The remaining cleaning time is indicated in the lower part of the display.
- When cleaning has ended, the screen returns to LOCAL.



```
    ** Cleaning **
              00:00:00
```

---

7 **Perform test printing again to check the result.**

- Repeat the cleaning and test printing until the result becomes normal.

When image quality is not improved even though head cleaning is repeated:

- Clean the wiper and ink cap. (☞ P.4-8, P.4-9)
- Wash the nozzle head. (☞ P.4-12)
- See “If nozzle clogging is not solved (ink filling)” to improve poor image quality. (☞ P.4-28)

Printing Data

Starting a Printing Operation

Important!

- When using the roll media, make the roll media not loosened before starting the printing. When the roll media has not been rewound tightly, it may cause image quality to deteriorate.

---

1 Setting a media. (☞ P.2-6)

2 Select the user type (1 to 4). (☞ P.2-2)

- Select the user type according to the media to be used.

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

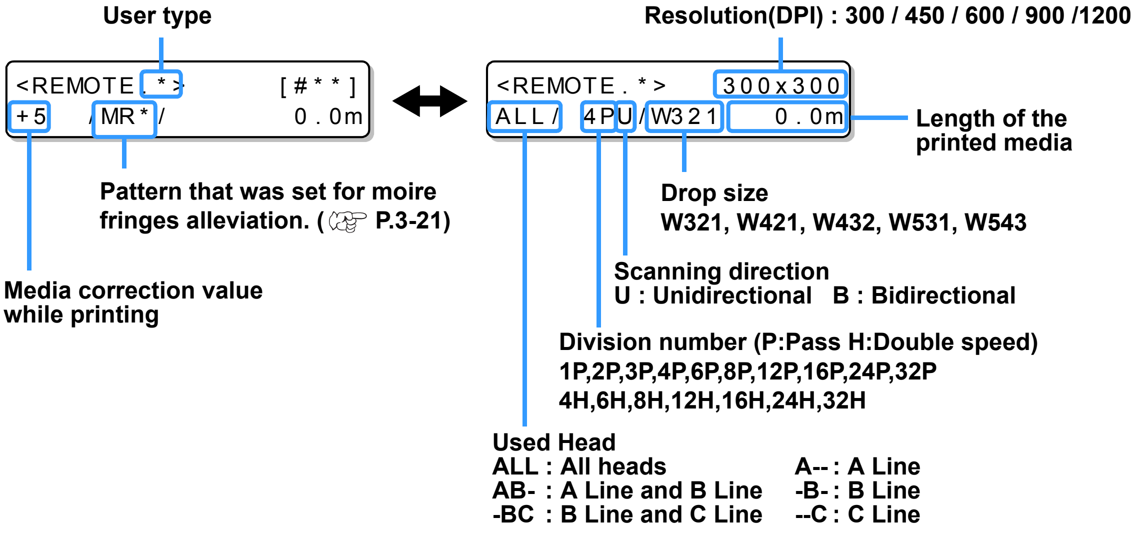
3 Press the REMOTE key.

- The screen changes to REMOTE, and data can be received from the PC.

```
<REMOTE.*>          [#**]
+5                   0.0m
```

4 Transmit data to be printed from the PC.

- The printing starts.
- The information of the printing being executed is displayed. (☞ P.1-21)



```
<REMOTE.*>          [#**]
+5    /MR*/          0.0m
```

```
<REMOTE.*>        300x300
ALL/  4PU/W321       0.0m
```

User type

Pattern that was set for moire fringes alleviation. (☞ P.3-21)

Media correction value while printing

Resolution(DPI) : 300 / 450 / 600 / 900 /1200

Length of the printed media

Drop size
W321, W421, W432, W531, W543

Scanning direction
U : Unidirectional B : Bidirectional

Division number (P:Pass H:Double speed)
1P,2P,3P,4P,6P,8P,12P,16P,24P,32P
4H,6H,8H,12H,16H,24H,32H

Used Head

ALL	**: All heads**	**A--**	**: A Line**
AB-	**: A Line and B Line**	**-B-**	**: B Line**
-BC	**: B Line and C Line**	**--C**	**: C Line**

5 After the printing operation is completed, press the REMOTE key to put the mode back into the LOCAL.

- If the transmission of the data from the computer is cut over 30 seconds, the message as shown in the right is displayed.

```
<REMOTE.*>          [#**]
     Data Waiting
```

Suspending printing operation

Perform the following operation when stopping a printing operation halfway.

1 Press the REMOTE key during printing.

- The printing operation stops.
- Printing restarts from the interrupted data by repressing the REMOTE key.

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

Deleting Received Data (Data Clear)

If you want to cancel printing, stop the printing operation, and delete the received data.

1 Press the DATA CLEAR key in LOCAL.

```
DATA CLEAR
                   <ENT>
```

2 Press the ENTER key.

- The received data is deleted, and the present mode returns to LOCAL.

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

Correcting the feeding quantity of the fabric while printing

Even if you perform the printing using the same kind of fabric, the printing could not be made beautifully with the feed quantity set by the obtained value through the media correction due to the difference in yarn count or weaving method.

When stripes appear in the printed image while printing, make the corrections performing the following steps.

1 Press the FEED COMP. key during printing.

- Displays the current correction value.

```
Feed Comp.              0
Adjust              :ent
```

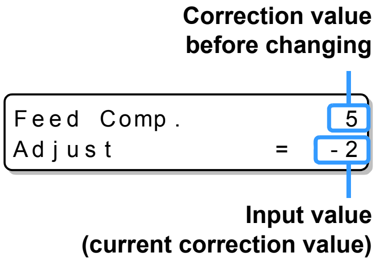
2 Press the ENTER key.

- Displays the correction value input screen.

```
Feed Comp.              5
Adjust             =    0
```

3 Press ▲▼ to change the correction value.

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



Correction value before changing

```
Feed Comp.              5
Adjust             =   -2
```

Input value (current correction value)

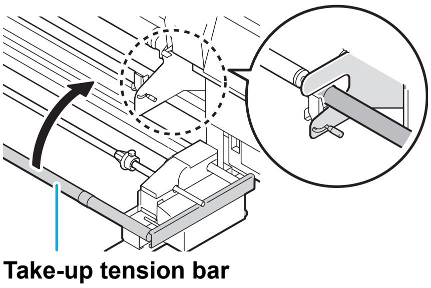
4 Press the ENTER key twice.

- The new correction value is saved.

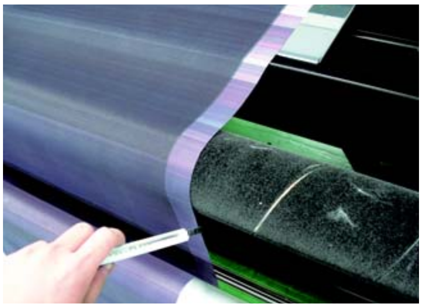
Cut the media

When you wish to cut the media printed by using the ink receiving spacer, follow the procedures below:

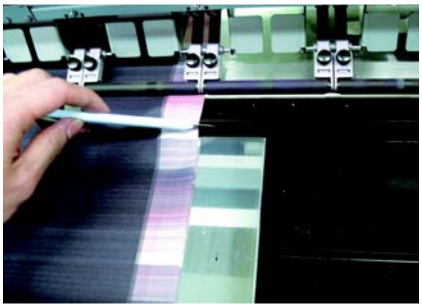
1 **Fix the take-up tension bar located in front of this machine at the waiting position.**



2 **Cut the fabric under the driven roller.**



3 **Open the front cover and cut the media at the rear of the ink receiving spacer.**



4 **Discard the fabric remaining on the ink receiving spacer.**

- Penetrated ink of the spacer adheres to the fabric remaining on the ink receiving spacer. Discard the fabric remaining on the ink receiving spacer.

5 **Clean the ink receiving spacer.**

- Using a waste cloth, clean ink adhering to the ink receiving spacer.
- If it is hard to remove it, run water over the waste cloth, squeeze well and then wipe it off.

Important!

Note when performing over print

- Be sure to clean the ink receiving spacer after using it.
- If you set new media without cleaning the ink receiving spacer after using it, the media will be stained by ink remaining on the ink receiving spacer.
- If you leave ink remaining on the ink receiving spacer, ink will harden, and even if you clean it, it will be hard to be removed.

Chapter 3

Extended Functions

This chapter

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

About User Types 3-2
  Registering All Printing Conditions Together (Type Registration) 3-2
  How to Register User Types 3-2
Setting Media Correction 3-4
Setting Media Feed 3-6
  Setting feeding speed 3-6
  Setting jog speed 3-7
  Setting softness 3-8
Setting the Printing Quality 3-9
Setting Priority Order 3-11
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About User Types

Registering All Printing Conditions Together (Type Registration)

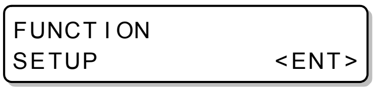
This machine allows you to register printing conditions in each of the user types (1 to 4).
Register a printing condition according to each media that you use in a user type beforehand. When you replace one media to another, you can set the optimum printing condition only by changing one user type to another.

Example of Type Registration

Type 1	Pongee 1	Type 3	Tropical
Type 2	Pongee 2	Type 4	Tropicalmat

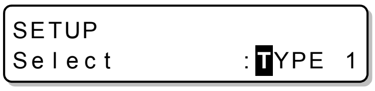
How to Register User Types

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



```
FUNCTION
SETUP              <ENT>
```

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



```
SETUP
Select          :TYPE 1
```

3 **Press (▲)(▼) to select one of the types (1 to 4) and press the (ENTER) key.**

4 **Select and set each item of "List of Functions to Be Set".**

- For details on how to set each function, see the reference page contained in P.3-3 "List of Functions to Be Set in User Types".

List of Functions to Be Set in User Types

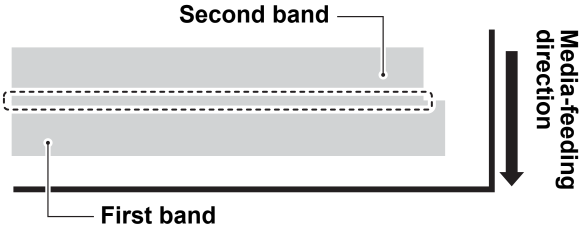
This section describes the overview of each function to be set and set values that can be registered in user types.
The underlined has been set as default.

Function Name			Set Value	Overview
Media Comp. (☞ P.3-4)			-500 to 0 to 500	Used to print a pattern for correcting a mediafeeding rate and correct it.
Media Feed (☞ P.3-6)	Feed Speed		10 to 100%	Used to slow the media feeding speed.
	Jog Speed		10 to 100%	Used to set the speed for moving media with jog key.
	Softness		OFF/ Level 0 (Correction weak) to Level 3 (Correction strong)	Set this when feeding unevenness cannot be solved even if media correction was set.
Print Mode (☞ P.3-9)				Used to set printing quality and a printing direction.
Ink Layers (☞ P.3-23)			1 to 9	Used to set the number of multi-layer printing.
Priority (☞ P.3-11)			HOST / PLOT	Used to set the priority order of settings (by host/plot). • Media Comp. • Print Mode • Ink Layers • Refresh • Use Head • Drying Time • Feed Speed
Margin (☞ P.3-11)	Right Margin		-9 to 0 to 85mm (1mm unit)	Used to set left and right margins of a media.
	Left Margin		-9 to 0 to 85mm (1mm unit)	
Refresh (☞ P.3-23)			LEVEL 0 (refreshing interval is long) ~ 1 ~ 3 (refreshing interval is short)	Used to set the refreshing interval of the ink head during printing.
mm/inch (☞ P.3-23)			mm / inch	Used to select the unit to be displayed on the screen.
Auto Cleaning (☞ P.3-13)	Before Printing		ON / OFF	Used to set the automatic cleaning of the printing heads performed for each printing operation.
	During Printing	ON	Color : 12345678, 1234----, ----5678 Type : Normal / Soft / Hard Interval : 0.1 to 10.0m Priority : Boundary / Length	
		OFF		
	Before Printing	ON	Type : Normal / Soft / Hard Time : 1 to 60min	
		OFF		
	Power ON		ON / OFF	Used to set the automatic cleaning at turning ON the power supply.
Color Pattern (☞ P.3-19)		ON	Space : 5 to 50mm	Used to print a color pattern on the right edge of a media.
		OFF		
Drying Time (☞ P.3-20)			0.0 to 10.0 sec	Used to set the time for ink to dry.
Moire Reduction			OFF, MR1 ~ MR5	When moire fringes are generated at printing, set this for alleviating generation of them.

Setting Media Correction

A pattern for media correction is printed and a media-feeding rate is corrected.
After changing the type of the fabric, make correction of the feeding quantity of the media.
If the correction value is not appropriate, stripes may appear on the printed image, thus resulting in a poor printing.

- Two bands are printed in the correction pattern.
- Make adjustment so that an even color density is obtained in the boundary between the two bands.



1. **Set the fabric. (☞ P.2-6)**

2. **Press the (FEED COMP.) key in LOCAL.**

```
TYPE 1
Set Origin         :ent
```

3. **Press (▲)(▼)(◀)(▶) to set the origin position.**

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

```
TYPE 1
Print      :Y= 1800mm
```

5. **Press (▲)(▼) to enter the width of the cloth set in the Step 1.**

6. **Press the (ENTER) key to print a correction pattern.**

```
 ** Media Comp  **
 **  Printing   **
```

7. **Press (▲)(▼) to move the correction pattern to the position where it can be easily seen.**

```
TYPE 1
Pattern Check[▲]/[▼]
```

8. **Press the (ENTER) key.**
   - The screen to enter a correction value is displayed.

9. **Check the correction pattern and enter a correction value.**

```
TYPE 1
Adjust     =        0
```

   - Press the (▲)(▼) to enter a correction value.
     Enter a correction value in "+":The boundary between the two bands is widened.
     Enter a correction value in "-":The boundary between the two bands is narrowed.

10 **Press the ENTER key.**

- Print a correction pattern again and check it.
- If the correction is required, operate procedures from the Step 3 to 9 to correct.

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

- To make effective the value set while printing, set the priority order of the media correction on the "Panel" referring to P.3-11 "Setting Priority Order".

Performing the media correction without FEED COMP. key

Media correction is selectable from the local by using the FEED COMP. key, not by pressing the FUNCTION key.

In LOCAL, press the FUNCTION key and ENTER key.

Press ▲ ▼ to select user type.

Press the ENTER key twice.

- It becomes the same condition as the FEED COMP. key is pressed from the local.

Setting Media Feed

Setting feeding speed

When feeding media slowly during printing, set the media feed.

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

```
FUNCTION
SETUP                <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select            :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Media Feed].**

```
TYPE 1
Media Feed           <ENT>
```

5 **Press the ENTER key twice.**

```
TYPE 1
Feed Speed           :100%
```

6 **Press ▲ ▼ to select feed speed.**

- Set the speed for printing making the feeding speed before shipment 100%. (Select “90%” if you wish to feed at 90% speed of that before shipment.)
- **Feed speed** : 10% to 100%

```
TYPE 1
Feed Speed           : 90%
```

7 **Press the ENTER key.**

```
TYPE 1
Feed Speed           <ENT>
```

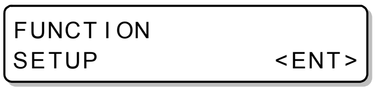
8 **Press the END key several times to end the setting.**

- To make effective the value set while printing, set the priority order of the media feed on the "Panel" referring to P.3-11 “Setting Priority Order”.

Setting jog speed

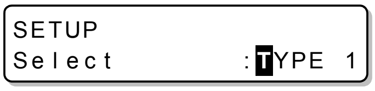
Set the speed to move the media using the jog keys.

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



```
FUNCTION
SETUP              <ENT>
```

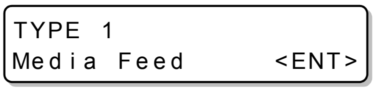
2 **Press the ENTER key.**



```
SETUP
Select           :TYPE 1
```

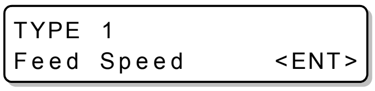
3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Media Feed].**



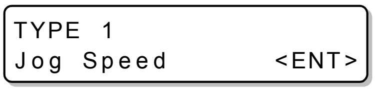
```
TYPE 1
Media Feed         <ENT>
```

5 **Press the ENTER key.**



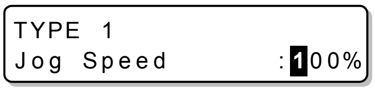
```
TYPE 1
Feed Speed         <ENT>
```

6 **Press ▲ ▼ to select [Jog Speed].**



```
TYPE 1
Jog Speed          <ENT>
```

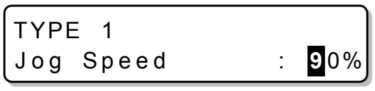
7 **Press the ENTER key.**



```
TYPE 1
Jog Speed          :100%
```

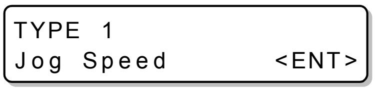
8 **Press ▲ ▼ and select the speed.**

- Set the speed for moving making the jog speed before shipment 100%. (Select “90%” if you wish to move at 90% speed of that before shipment.)
- **Jog Speed** : 10% to 100%



```
TYPE 1
Jog Speed          : 90%
```

9 **Press the ENTER key.**



```
TYPE 1
Jog Speed          <ENT>
```

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

Setting softness

Even if you performed media adjustment (☞ P.3-6), if feeding unevenness cannot be solved, make the "softness" valid.

Important!

- When you set the softness valid, the print quality with lower pass (6-pass and below) may be degraded in some cases. Be sure to check the printed image, and perform the correction setting (valid/invalid) or the correction level.

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

```
FUNCTION
SETUP                <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select             :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Media Feed].**

```
TYPE 1
Media Feed           <ENT>
```

5 **Press the ENTER key.**

```
TYPE 1
Feed Speed           <ENT>
```

6 **Press ▲ ▼ to select [Softness].**

```
TYPE 1
Softness             <ENT>
```

7 **Press the ENTER key.**

```
TYPE 1
Softness              :OFF
```

8 **Press ▲ ▼ to select the correction level.**

```
TYPE 1
Softness           :Level1
```

Level 0 to 3 : The softness correction becomes valid.
The correction amount is smaller for Level 0 and is the biggest for Level 3.
It is recommended to set this to "Level 0".

OFF : The softness correction is not performed.

9 **Press the ENTER key.**

```
TYPE 1
Softness             <ENT>
```

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

Setting the Printing Quality

In the printing quality setting, the following items are set:

Set Item	Overview
Scanning direction Number of passes	Set the direction for scanning and the number of pass. BI-D : Printing is performed in both outward and return directions of the carriage.Select this when you want to print in a shorter period of time. UNI-D : Printing is performed only in the outward direction of the carriage.Select this when you want to print finer.
High Speed	Set for high speed printing.
Drop Size	Set an amount of the ink of L/M/S size to set the ink density for printing.

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select          :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Print Mode].**

```
TYPE 1
Print Mode         <ENT>
```

5 **Press the ENTER key.**

```
TYPE 1
DPI          :300x300
```

6 **Press ▲ ▼ and select the resolution to change its print quality.**

```
TYPE 1
DPI          :600x450
```

- Resolution : 300x300, 300x450, 300x600, 450x450, 450x600, 600x300, 600x450, 600x600, 600x900, 900x450, 900x900, 1200x600, 1200x900, 1200x1200 (dpi)

7 **Press the ENTER key.**

```
TYPE 1       :600x450
Pass        :BI-D   4P
```

8 **Press ▲ ▼ to select the scanning direction and the number of pass.**

```
TYPE 1       :600x450
Pass        :BI-D  12P
```

- The scanning direction and the number of pass vary depending on the resolution set in the Step 6. Please refer to the "Combination of Factors That Can Be Set" in the next page.

9 **Press the ENTER key.**

```
TYPE 1       :600x450
High Speed         :OFF
```

10 **Press ▲ ▼ to select the setting items.**

```
TYPE 1       :600x450
High Speed         :ON
```

- The setting contents vary depending on the resolution set in the Step 6 and 8. Please refer to the "Combination of Factors That Can Be Set" in the next page.

11 Press ▲ ▼ to select the drop size.

- **Set Value** : L3M2S1, L4M2S1, L5M3S1, L4M3S2, L5M4S3
- Select from the five types above. "M" or "S" cannot be set separately even if ◀ ▶ is pressed.

```
TYPE 1       :600x450
Drop Size    :L4 M2 S1
```

12 Press the ENTER key.

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

- To make effective the value set while printing, set the priority order of the media correction on the "Panel" referring to P.3-11 “Setting Priority Order”.

Important!

- Printing continuously in condition of high ambient temperature may cause white lines or blur depending on the ink or drawing mode used. (Sublimation dye ink and reactive dye ink tend to cause white lines or blur.)
  In this case, switch the drop size in the printing mode of RIP used to "3,3,3" "4,4,4" "5,5,5" or other mode of the dot size. It can extend the maintenance cycle of the head being used, and can reduce white lines or blur.

Combination of Factors That Can Be Set

Here, the combinations with the 8 color ink set are described. In the case of the 4 color ink set, the number of pass would become one half.

Resolution (dpi)	Bidirectional		Unidirectional	
	Pass	High Speed	Pass	High Speed
300x300 dpi	2	———	2	———
	4		4	
	8		8	
300x450[*1] dpi	3	———	3	———
	6		6	
	12		12	
300x600 dpi	4	———	4	———
	8		8	
	16		16	
450x450[*1] dpi	3	———	3	———
	6	ON / OFF	6	ON / OFF
	12		12	
450x600 dpi	4	———	4	———
	8	ON / OFF	8	ON / OFF
	16		16	
600x300 dpi	2	———	2	———
	4	ON / OFF	4	ON / OFF
	8		8	
600x450[*1] dpi	3	———	3	———
	6	ON / OFF	6	ON / OFF
	12		12	

Resolution (dpi)	Bidirectional		Unidirectional	
	Pass	High Speed	Pass	High Speed
600x600 dpi	4	———	4	———
	8	ON / OFF	8	ON / OFF
	16		16	
600x900 dpi	6	———	6	———
	12	ON / OFF	12	ON / OFF
	24		24	
900x450[*1] dpi	3	———	3	———
	6	ON / OFF	6	ON / OFF
	12		12	
900x900 dpi	6	———	6	———
	12	ON / OFF	12	ON / OFF
	24		24	
1200x600 dpi	4	———	4	———
	8	ON / OFF	8	ON / OFF
	16		16	
1200x900 dpi	6	———	6	———
	12	ON / OFF	12	ON / OFF
	24		24	
1200x1200 dpi	8	———	8	———
	16	ON / OFF	16	ON / OFF
	32		32	

[*1] Even with the use of 4 color ink set, the number of pass does not change.

- ▨ of the list above are the recommended mode for actual use.
- The lower the resolution or the pass is set than the recommended mode for actual use, the lower the image quality becomes.
- An image quality also lowers depending on the used ink or media, preprocessing or the like. Perform test printing (☞ P.2-33) before printing an actual data, and select the mode to use.

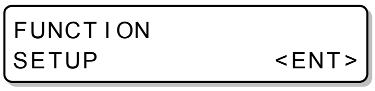
Setting Priority Order

It is determined which is prioritized for printing, the setting by the machine (plot) or the setting by the PC (host).

Set Value	Overview
HOST	Settings made in the computer (Host) are treated preferentially.
PLOT	Settings made in this equipment (Plot) are treated preferentially.

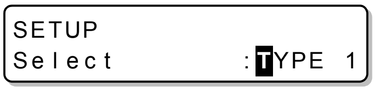
Items to be selected: Media Comp./ Print Mode / Ink Layers / Refresh / Use Head / Drying Time/Feed Speed

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



```
FUNCTION
SETUP              <ENT>
```

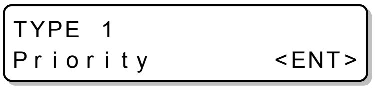
2 **Press the ENTER key.**



```
SETUP
Select          :TYPE 1
```

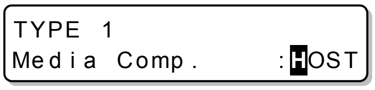
3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Priority].**



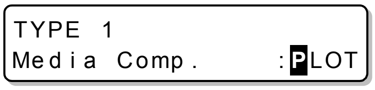
```
TYPE 1
Priority           <ENT>
```

5 **Press the ENTER key.**



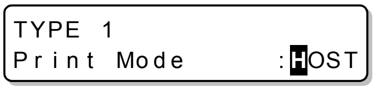
```
TYPE 1
Media Comp.        :HOST
```

6 **Press ▲ ▼ to select "HOST" or "PLOT".**



```
TYPE 1
Media Comp.        :PLOT
```

7 **Press the ENTER key.**



```
TYPE 1
Print Mode         :HOST
```

8 **Perform the same operations as in Steps 6 and 7 to set other items.**

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

- Even with the setting by the host being prioritized, the items set by the panel become effective if they have not been specified by the host.

Setting Margins

The left and right margins of a media to be printed will be set.

Set Item	Set Value	Overview
Left Margin	-9 to 85mm	Used to set margins on the left edges of a media.
Right Margin	-9 to 85mm	Used to set margins on the right edges of a media.

Important!

- When the spacer is used, you cannot set the margins.

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

```
FUNCTION
SETUP                <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select            :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Margin].**

```
TYPE 1
Margin               <ENT>
```

5 **Press the ENTER key twice.**

```
TYPE 1
Right Margin    :      0mm
```

6 **Press ▲ ▼ to set the right margin and press the ENTER key.**

- **Set Value** : -9 to 85mm

```
TYPE 1
Right Margin    :     10mm
```

7 **Press ▲ ▼ to select [Left Margin].**

```
TYPE 1
Left Margin          <ENT>
```

8 **Press the ENTER key.**

```
TYPE 1
Left Margin     :      0mm
```

9 **Press ▲ ▼ to set the left margin and press the ENTER key.**

- **Set Value** : -9 to 85mm

```
TYPE 1
Left Margin     :     10mm
```

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

Setting Automatic Cleaning

Setting of cleaning before printing

You may make the setting so that the equipment automatically performs the cleaning of the head before starting the printing.
The machine can perform a stable printing operation with its heads always kept clean.

Set Item	Overview
ON	Cleaning is performed before starting the printing.
OFF	Cleaning is not made before printing.

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

```
FUNCTION
SETUP             <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select          :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Auto Cleaning].**

```
TYPE 1
Auto Cleaning     <ENT>
```

5 **Press the ENTER key.**

```
TYPE 1
Before Printing<ENT>
```

6 **Press the ENTER key.**

```
TYPE 1
Before Printing  :ON
```

7 **Press ▲ ▼ to select "ON" or "OFF".**

8 **Press the ENTER key.**

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

- The cleaning before printing is performed when printing is made in Remote. The cleaning is not performed before the test printing or printing of the set list.

Setting of cleaning while printing

It is set whether head cleaning is performed automatically during printing.
In cleaning during printing, a cleaning interval is set according to the length of a printed media.
Printing is interrupted each time a media is printed for the set length, and head cleaning is performed automatically during the interval.
After the cleaning, printing restarts.

Set Item	Set Value	Overview
Type	Normal / Soft / Hard / Mix	A cleaning type is selected.
Interval	1 to 250m	Interval between each cleaning operation (print length)
Priority	Boundary / Length	Set the cleaning method when you print repeatedly using copy function of RIP you use.

Caution

- To prevent the head from being damaged, be sure to use it making the cleaning during printing to “ON” when you print for a long time.

Important!

- When you wish to perform cleaning during printing, start printing after wipe off ink adhering to the head and around wiper. If you perform cleaning without wiping ink off, the nozzle status may be worsened.
- In the case of a fabric liable to be extended or shrunk with moisture, the fabric could be extended or shrunk while being printed and when the printing is restarted misalignment or change of color tone could be found. In such cases, turn the setting to OFF or select the cleaning type "Soft".

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select          :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Auto Cleaning].**

```
TYPE 1
Auto Cleaning      <ENT>
```

5 **Press the ENTER key.**

```
TYPE 1
Before Printing<ENT>
```

6 **Press ▲ ▼ to select [During Printing].**

```
TYPE 1
During Printing<ENT>
```

7 **Press the ENTER key.**

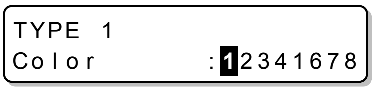
```
TYPE 1
During Printing   :OFF
```

8 **Press ▲ ▼ to select “ON”.**

- When selecting OFF, proceed to Step 18.

```
TYPE 1
During Printing   :ON
```

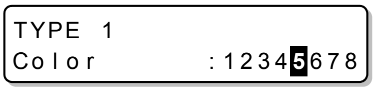
9 Press the ENTER key.



```
TYPE 1
Color          :12341678
```

10 Press ◀ ▶ to select the head to clean by block.

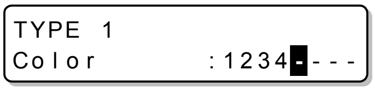
- The heads are divided into two blocks of [1234] and [5678].



```
TYPE 1
Color          :12345678
```

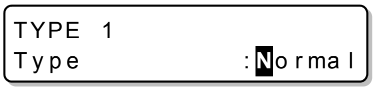
11 Press ▲ ▼ to select the execution of the cleaning.

- When the cleaning is not made, the display shows [----].



```
TYPE 1
Color          :1234----
```

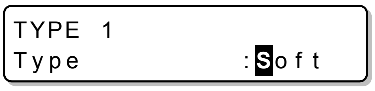
12 Press the ENTER key.



```
TYPE 1
Type              :Normal
```

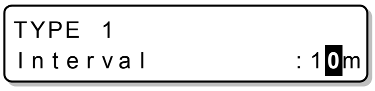
13 Press ▲ ▼ to select one of the cleaning type.

- **Set Value** : Normal / Soft / Hard / Mix
- When you select "Mix", perform cleaning by combining cleaning type depending on the head temperature.



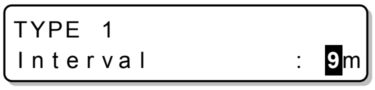
```
TYPE 1
Type              :Soft
```

14 Press the ENTER key.



```
TYPE 1
Interval            : 10m
```

15 Press ▲ ▼ to select the interval before performing the cleaning.

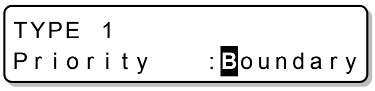


```
TYPE 1
Interval            :  9m
```

- **Set Value** : 1 to 250m

16 Press the ENTER key.

17 Press ▲ ▼ to select the cleaning method when you printed using copy function of RIP.



```
TYPE 1
Priority       :Boundary
```

- Select a setting value from either of below:
- **Boundary**: Perform cleaning between printing data.
  Length : Perform cleaning at the cleaning intervals (printing length) set in the Step 15.

Important!

- The setting performed here is only valid when you printed with the copy function of RIP. The cleaning intervals (printing length) set in the Step 15 is applied to those when performing normal printing.

18 Press the ENTER key.

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

Setting of cleaning after printing

You can set cleaning so that it will be performed automatically after print operation is completed.
If you leave the discharging defect that occurred during printing, ink or dust adhering to the nozzle surface, recovery will become more difficult with time.
If the machine is used in the unattended operation etc. and you cannot perform head maintenance right after printing, set this to “ON” so that stable printing can be performed.

Set Item	Set Value	Overview
Type	Normal / Soft / Hard / Mix	A cleaning type is selected.
time	1 to 60min	Set time up to performing cleaning automatically after printing.

Important!

- If the function is set and performed on the operation panel, cleaning is not performed. When it returns to the local mode and one minute has passed, cleaning starts.
- When you select cleaning and perform it from the operation panel after printing was completed and before cleaning is performed, cleaning will not be performed after printing will be completed.
- When printing starts newly after printing was completed and before cleaning is performed, cleaning will start after set time has passed after new printing is completed.

---

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

```
FUNCTION
SETUP            <ENT>
```

---

2 **Press the ENTER key.**

```
SETUP
Select         :TYPE 1
```

---

3 **Press ▲▼ to select one of the types (1 to 4) and press the ENTER key.**

---

4 **Press ▲▼ to select [Auto Cleaning].**

```
TYPE 1
Auto Cleaning    <ENT>
```

---

5 **Press the ENTER key.**

```
TYPE 1
Before Printing<ENT>
```

---

6 **Press ▲▼ to select [After Printing].**

```
TYPE 1
After Printing  <ENT>
```

---

7 **Press the ENTER key.**

```
TYPE 1
After Printing    :OFF
```

---

8 **Press ▲▼ to select "ON".**

- When selecting OFF, proceed to Step 13.

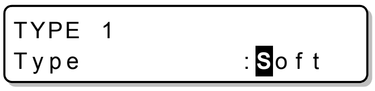
```
TYPE 1
After Printing    :ON
```

---

9 **Press the ENTER key.**

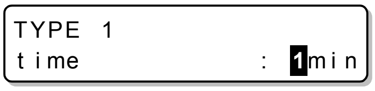
10 **Press ▲ ▼ to select one of the cleaning type.**

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



```
TYPE 1
Type          :Soft
```

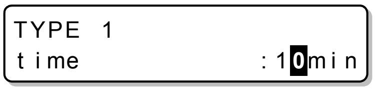
11 **Press the ENTER key.**



```
TYPE 1
time          : 1min
```

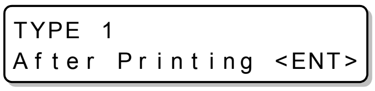
12 **Pressing ▲ ▼, select time up to starting cleaning after printing.**

- **Set Value** : 1 to 60min



```
TYPE 1
time          :10min
```

13 **Press the ENTER key.**



```
TYPE 1
After Printing <ENT>
```

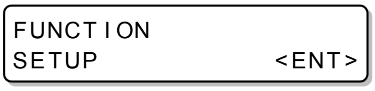
14 **Press the END key several times to end the setting.**

Setting of Power ON cleaning

Set whether you perform head cleaning automatically at turning ON the power supply or not.
The type of cleaning differs depending on the power OFF time of the power supply.

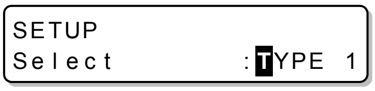
Set Value	Overview
ON	Performs head cleaning at turning ON the power supply.
OFF	Does not perform head cleaning at turning ON the power supply.

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



```
FUNCTION
SETUP              <ENT>
```

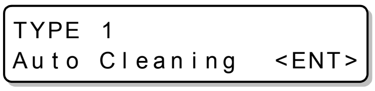
2 **Press the (ENTER) key.**



```
SETUP
Select           :TYPE 1
```

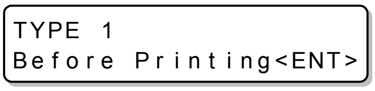
3 **Press (▲)(▼) to select one of the types (1 to 4) and press the (ENTER) key.**

4 **Press (▲)(▼) to select [Auto Cleaning].**



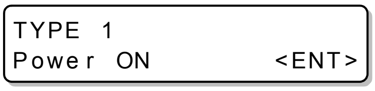
```
TYPE 1
Auto Cleaning      <ENT>
```

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



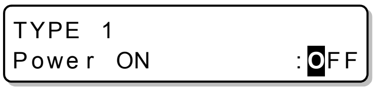
```
TYPE 1
Before Printing<ENT>
```

6 **Press (▲)(▼) to select [Power ON].**



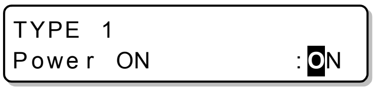
```
TYPE 1
Power ON           <ENT>
```

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



```
TYPE 1
Power ON             :OFF
```

8 **Press (▲)(▼) to select "ON" or "OFF".**



```
TYPE 1
Power ON             :ON
```

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

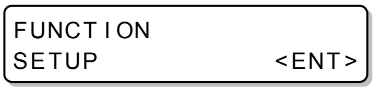
10 **Press the (END) key several times to end the setting.**

Setting Color pattern

You may print the color pattern beside the image to be printed.

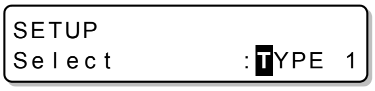
Set Value		Overview
ON	Space：5 to 50mm	The color pattern to check the nozzle missing may be printed beside the images. Also, the space between the image and the color pattern.
OFF	――――――	――――――――――――――――――――――――――――――

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



```
FUNCTION
SETUP             <ENT>
```

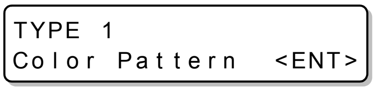
2 **Press the (ENTER) key.**



```
SETUP
Select          :TYPE 1
```

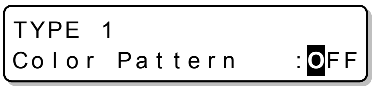
3 **Press (▲)(▼) to select one of the types (1 to 4) and press the (ENTER) key.**

4 **Press (▲)(▼) to select [Color Pattern].**



```
TYPE 1
Color Pattern     <ENT>
```

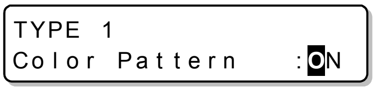
5 **Press the (ENTER) key.**



```
TYPE 1
Color Pattern      :OFF
```

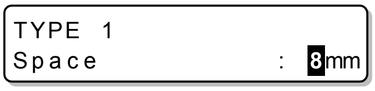
6 **Press (▲)(▼) to select ON.**

- When selecting OFF, proceed to Step 9.



```
TYPE 1
Color Pattern      :ON
```

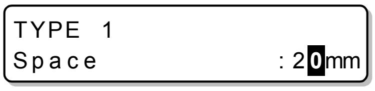
7 **Press the (ENTER) key.**



```
TYPE 1
Space              : 8mm
```

8 **Press (▲)(▼) to set drying time.**

- **Set Value** : 5 to 50mm



```
TYPE 1
Space              : 20mm
```

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

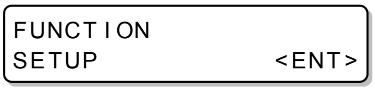
10 **Press the (END) key several times to end the setting.**

Setting Drying Time

The following items for ink drying time are set.

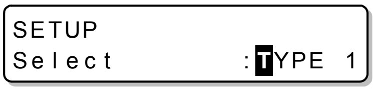
Set Item	Set Value	Overview
Each Line	0.0 to 10.0sec	Ink drying time for each scanning is set. (During bidirectional printing, the machine stops for a certain period of time specified for each of the outward and return scanning.)

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



```
FUNCTION
SETUP              <ENT>
```

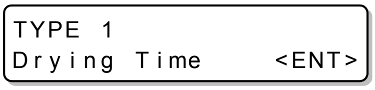
2 **Press the ENTER key.**



```
SETUP
Select           :TYPE 1
```

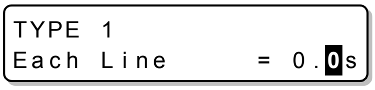
3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select [Drying Time].**



```
TYPE 1
Drying Time        <ENT>
```

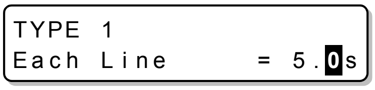
5 **Press the ENTER key.**



```
TYPE 1
Each Line         = 0.0s
```

6 **Press ▲ ▼ to set drying time.**

- **Set Value** : 0.0 to 10.0(sec)



```
TYPE 1
Each Line         = 5.0s
```

7 **Press the ENTER key.**

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

When moire fringes occur during printing

When moire fringes occur in the image during printing, terminate printing and perform the setting below.

Set Value	Overview
OFF	Normally set this to OFF.
MR1 ～ MR5	Set these when there are moire fringes in the printed image. While watching the printed image, change the setting of MR1 to MR5. Then, use the setting whose moire fringes have been most reduced.

1 **When moire fringes occur in the printed image, terminate printing by pressing the REMOTE key.**

2 **Press the FUNCTION key in LOCAL.**

```
FUNCTION
SETUP               <ENT>
```

3 **Press the ENTER key.**

```
SETUP
Select             :TYPE 1
```

4 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

- Select the user type used when you printed in the Step 1.

5 **Press ▲ ▼ to select [Moire Reduction].**

```
TYPE 1
Moire Reduction<ENT>
```

6 **Press the ENTER key.**

```
TYPE 1
Sel                  :OFF
```

7 **Press ▲ ▼ to select [MR1] and press the ENTER key.**

```
TYPE 1
Sel                  :MR1
```

8 **Press the END key several times to return to the local mode.**

9 **Press the REMOTE key to restart printing and check whether moire fringes have been reduced or not.**

- You can check whether the moire fringes have been reduced or not by the printed result. For 4-pass printing, after performing 4-scan, for 8-pass printing, after performing 8-scan, you can check it.

- When the moire fringes have been reduced, continue printing as it is.
- When the moire fringes have not been reduced, perform the procedures below:

(1) Terminate printing by pressing the REMOTE key again.
(2) Operate the procedures from the Step 2, and set the value to other than [MR1] in the Step 7.
(3) Press the END key several times to return the mode to local.
(4) Press the REMOTE key to restart printing, and check the moire fringes.

- Until you can check that the moire fringes have been reduced, change the setting value of MR1 to MR5 and check.

Important!

- Even if you check with all setting values of MR1 to MR5, the moire fringes may remain. In such a case, select the setting value whose moire fringes have been most reduced among MR1 to MR5. In addition, by changing the resolution, the moire fringes may be reduced.
- Depending on the image to be printed, the setting value to reduce the moire fringes differs. Even if you set the value suitable for reducing the moire fringes here, the moire may occur in other image.

Other Settings

Change the settings according to the types of use.

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press the ENTER key.**

```
SETUP
Select          :TYPE 1
```

3 **Press ▲ ▼ to select one of the types (1 to 4) and press the ENTER key.**

4 **Press ▲ ▼ to select an item to set.**

- See “List of Functions to Be Set in User Types”. (☞ P.3-3)

5 **Press the ENTER key.**

6 **Press ▲ ▼ to select a set values.**

- See “List of Functions to Be Set in User Types”. (☞ P.3-3)

7 **Press the ENTER key.**

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

Important!

- The set value is retained even when the power is turned "OFF".

Machine settings

It is each type of setting for using this machine more comfortably.
The following items are settable in MACHINE SETUP.

Item		Set value	Outline
Use Head		ALL, AB-, -BC A--, -B-, --C	If troubles such as the nozzle clogging is not solved, you can print with another head which has no error.
Machine Name		01 ~ 99	The names of machines (machine No.) are set for recognizing them when they are connected to one another with a USB 2.0 interface used.
Stamp Setup		ON / OFF	Setting to output the output date and drawing conditions after the completion of printing.
List			You can print the setting contents and the information of this machine.
Information			See P.3-41 “Confirming Machine Information”.
Feeding Device		ON / OFF	Select “ON” when using the feeding device of this machine.
Take-Up Device		ON / OFF	Select “ON” when using the take-up device of this machine.
Warning		————	See P.3-30 “Performing setting related to warning”.
Spacer		ON / OFF	Select whether the spacer is used or not.
Blank Data		Valid / Invalid	Set the operation when there are blank data at the head of data.
Heater Setup	Heater	ON / OFF	Set ON/OFF of the external dryness heater (using or not).
	Standby	0 ~ 600 s	Set the standby time until the external dryness heater becomes hot.
	Dryness Feed	ON / OFF	Set the dryness feed after printing has been completed.

Switch head to use

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

Ex : When nozzle clogging in C line head is not solved → Set to “AB-”.

Set Value	Overview	
A--/-B-/--C /AB-/-BC/ALL	A--: Use the head of the A line. -B-: Use the head of the B line. --C: Use the head of the C line.	AB-: Use the heads of the A line and the B line. -BC: Use the heads of the B line and the C line. ALL: Use all heads.

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

```
FUNCTION
SETUP                <ENT>
```

2 **Press (▲)(▼) to select [MACHINE SETUP].**

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

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

```
Use Head
Head Line            :ALL
```

4 **Press (▲)(▼) to select one of the set values.**

- **Set Value**: A-- / -B-/--C/AB-/-BC/ALL

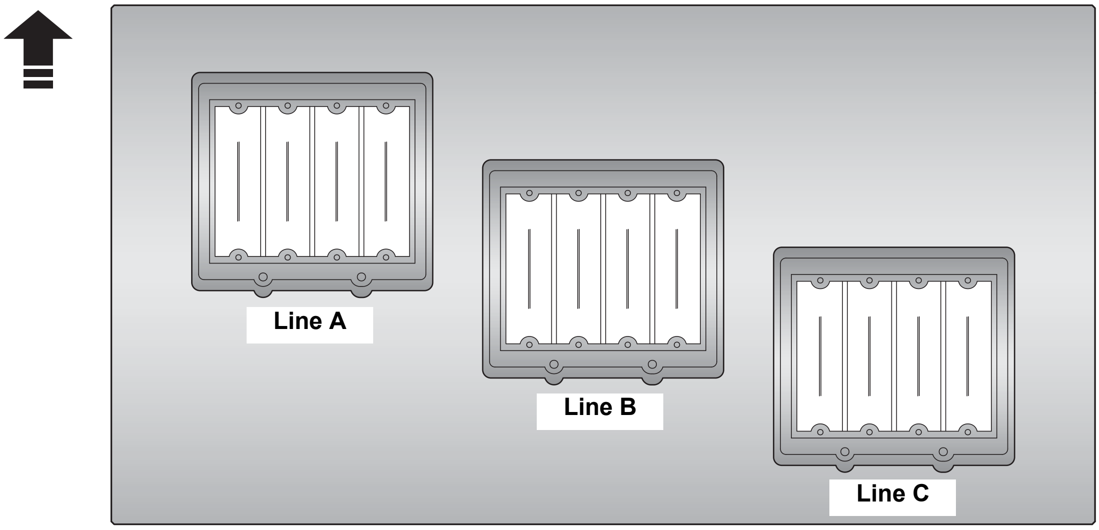
```
Use Head
Head Line            :-BC
```

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

```
MACHINE SETUP
Use Head             <ENT>
```

6 **Press the (END) key several times to end the setting.**

Rear side of machine



Set machine name

The names of machines (machine No.) are set for recognizing them when they are connected to one another with a USB 2.0 interface used.

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

```
FUNCTION
SETUP            <ENT>
```

2 **Press (▲)(▼) to select [MACHINE SETUP].**

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

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

```
MACHINE SETUP
Use Head         <ENT>
```

4 **Press (▲)(▼) to select [Machine Name].**

```
MACHINE SETUP
Machine Name     <ENT>
```

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

```
Machine Name
              Tx400-01
```

6 **Press (▲)(▼) to select a machine name (01 to 99).**

```
Machine Name
              Tx400-10
```

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

```
MACHINE SETUP
Machine Name     <ENT>
```

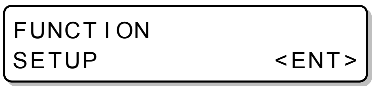
8 **Press the (END) key several times to end the setting.**

Set stamp

Set whether the current print condition (resolution / passes or others) is printed or not with an image data when printing data.

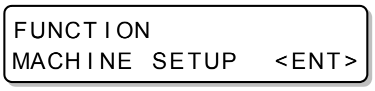
Set Value	Overview
ON	Prints the print condition with an image data.
OFF	Prints only an image data.

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



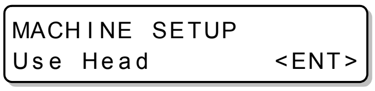
```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**



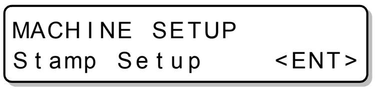
```
FUNCTION
MACHINE SETUP      <ENT>
```

3 **Press the ENTER key.**



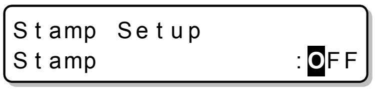
```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲ ▼ to select [Stamp Setup].**



```
MACHINE SETUP
Stamp Setup        <ENT>
```

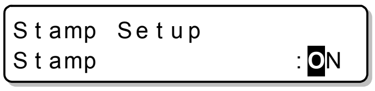
5 **Press the ENTER key.**



```
Stamp Setup
Stamp               :OFF
```

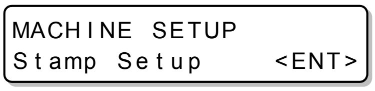
6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF



```
Stamp Setup
Stamp               :ON
```

7 **Press the ENTER key.**



```
MACHINE SETUP
Stamp Setup        <ENT>
```

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

Setting the Feeding Device

Set whether the feeding device of this machine is used or not.

Set Value	Overview
ON	Uses the feeding device of this machine.
OFF	Not uses the feeding device of this machine.

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲ ▼ to select [Feeding Device].**

```
MACHINE SETUP
Feeding Device     <ENT>
```

5 **Press the ENTER key.**

```
Feeding Device
Feeding Device      :OFF
```

6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF

```
Feeding Device
Feeding Device      :ON
```

7 **Press the ENTER key.**

```
MACHINE SETUP
Feeding Device     <ENT>
```

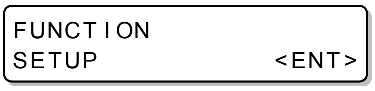
8 **Press the END key several times to end the setting.**

Setting the Take-up Device

Set whether the take-up device of this machine is used or not.

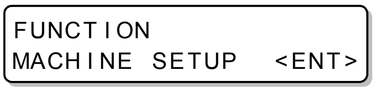
Set Value	Overview
ON	Uses the take-up device of this machine.
OFF	Not uses the take-up device of this machine.

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



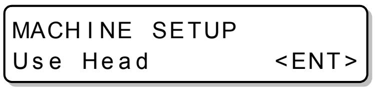
```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**



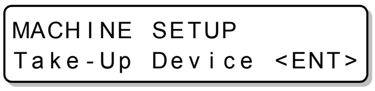
```
FUNCTION
MACHINE SETUP      <ENT>
```

3 **Press the ENTER key.**



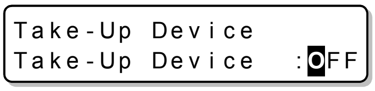
```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲ ▼ to select [Take-Up Device].**



```
MACHINE SETUP
Take-Up Device     <ENT>
```

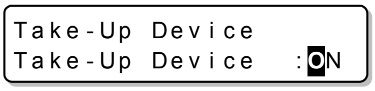
5 **Press the ENTER key.**



```
Take-Up Device
Take-Up Device      :OFF
```

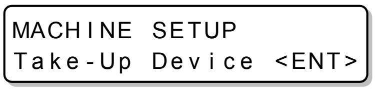
6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF



```
Take-Up Device
Take-Up Device      :ON
```

7 **Press the ENTER key.**



```
MACHINE SETUP
Take-Up Device     <ENT>
```

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

Performing setting related to warning

Perform setting related to warning. The settable items are as below:

Items	Set Value	Overview
Clean Wiper	ON/OFF	Set this to “OFF” when you wish to print continuously even if the warning informing you that the wiper cleaning time has come. If this is set to “ON”, printing cannot be performed after the warning is displayed.
Mist Fan	ON/OFF	Perform setting of the replacing time for the mist fan filter or clearing of the used counter.
Nozzle Recovery	ON/OFF	When “Nozzle recovery registration” of the maintenance function (☞ P.4-41) is valid and when you display the confirmation screen (☞ P.5-6 “Warning Messages”) before starting printing, set this to “ON”. When this is set to “OFF”, print is performed without displaying the confirmation screen at printing.

Perform setting of the warning related to wiper cleaning

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

```
FUNCTION
SETUP                <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head             <ENT>
```

4 **Press ▲ ▼ to select [Warning].**

```
MACHINE SETUP
Warning              <ENT>
```

5 **Press the ENTER key twice.**

```
Clean Wiper
Act. Limit             :ON
```

6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF

```
Clean Wiper
Act. Limit            :OFF
```

7 **Press the ENTER key.**

```
Warning
Clean Wiper          <ENT>
```

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

Caution

- If continuing use when a warning is displayed for the time of the wiper cleaning, the nozzle condition may worsen or the head may break. Clean the wiper as often as possible.

Set the replacing time for the mist fan filter

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

```
FUNCTION
SETUP               <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head            <ENT>
```

4 **Press ▲ ▼ to select [Warning].**

```
MACHINE SETUP
Warning             <ENT>
```

5 **Press the ENTER key.**

```
Warning
Clean Wiper         <ENT>
```

6 **Press ▲ ▼ to select [Mist Fan].**

```
Warning
Mist Fan            <ENT>
```

7 **Press the ENTER key twice.**

```
Mist Fan
Set Limit =            0m
```

8 **Press ▲ ▼ to set the printing distance until the warning is displayed.**

```
Mist Fan
Set Limit =          100m
```

- **Set Value** : 0m to 30000m

- If you set the value to “0m”, the warning is not displayed.

9 **Press the ENTER key.**

```
Mist Fan
Counter Limit       <ENT>
```

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

Clear the used counter of the mist fan filter

Important!

- If the counter is cleared, the warning on the right is not displayed.

```
  !Mist Fan
 Clean Filter
```

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲▼ to select [Warning].**

```
MACHINE SETUP
Warning            <ENT>
```

5 **Press the ENTER key.**

```
Warning
Clean Wiper        <ENT>
```

6 **Press ▲▼ to select [Mist Fan].**

```
Warning
Mist Fan           <ENT>
```

7 **Press the ENTER key.**

```
Mist Fan
Counter Limit      <ENT>
```

8 **Press ▲▼ to select [Counter Reset].**

```
Mist Fan
Counter Reset      <ENT>
```

9 **Press the ENTER key twice.**

- The used counter is reset.

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

Perform setting of the warning related to nozzle recovery

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲ ▼ to select [Warning].**

```
MACHINE SETUP
Warning            <ENT>
```

5 **Press the ENTER key.**

```
Warning
Clean Wiper        <ENT>
```

6 **Press ▲ ▼ to select [Nozzle Recovery].**

```
Warning
Nozzle Recovery<ENT>
```

7 **Press the ENTER key.**

```
Nozzle Recovery
Act. Limit         :ON
```

8 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF

```
Nozzle Recovery
Act. Limit         :OFF
```

9 **Press the ENTER key.**

```
Warning
Nozzle Recovery<ENT>
```

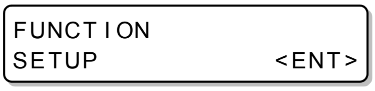
10 **Press the END key several times to end the setting.**

Setting the Spacer

Set whether the spacer is used or not when printing.

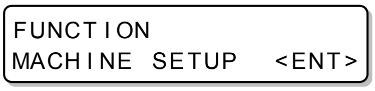
Set Value	Overview
ON	The spacer is used.
OFF	The spacer is not used.

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



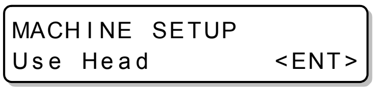
```
FUNCTION
SETUP            <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**



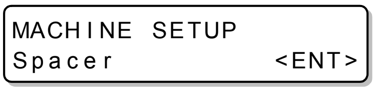
```
FUNCTION
MACHINE SETUP    <ENT>
```

3 **Press the ENTER key.**



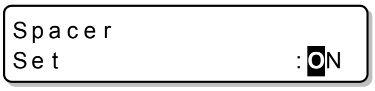
```
MACHINE SETUP
Use Head         <ENT>
```

4 **Press ▲ ▼ to select [Spacer].**



```
MACHINE SETUP
Spacer           <ENT>
```

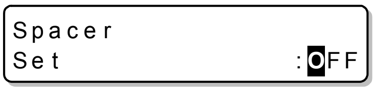
5 **Press the ENTER key.**



```
Spacer
Set                :ON
```

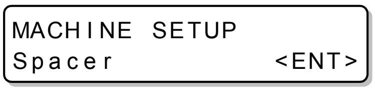
6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF



```
Spacer
Set               :OFF
```

7 **Press the ENTER key.**



```
MACHINE SETUP
Spacer           <ENT>
```

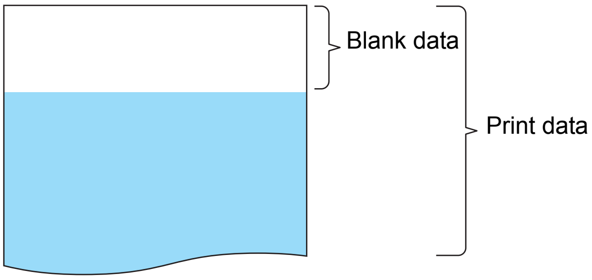
8 **Press the END key several times to end the setting.**

Important!

- After setting / removing the spacer, be sure to set as above.

Setting of blank data

Set the operation when there are blank data at the head of the data to be printed.



Set Value	Overview
Valid	Perform printing by feeding the blank part.
Invalid	Perform printing by deleting the blank part.

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

```
FUNCTION
SETUP               <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head            <ENT>
```

4 **Press ▲ ▼ to select [Blank Data].**

```
MACHINE SETUP
Blank Data          <ENT>
```

5 **Press the ENTER key.**

```
Blank Data
Sel               :Valid
```

6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : Valid / Invalid

```
Blank Data
Sel             :Invalid
```

7 **Press the ENTER key.**

```
MACHINE SETUP
Blank Data          <ENT>
```

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

Setting external dryness heater

You can use the external heater for dehydrating media by connecting it with the optional relay BOX.

For the setting of external dryness heater, you can set each item below:

Set Item	Overview
Heater	Set ON/OFF of the external dryness heater (using or not).
Dryness Feed	Set whether to dehydrate automatically the part from the printer surface to the heater position after printing is completed or not.

Important!

- This machine cannot control the heater which is not connected with the optional relay BOX.

Setting heater

Set ON/OFF of the external dryness heater connected with the optional relay heater of this machine.

Set Item	Overview
ON	The external dryness heater is used.
OFF	The external dryness heater is not used.

Important!

- When using the external dryness heater by connecting with the optional relay BOX, be sure to make this setting "ON".
- When using the external dryness heater not being connected with the optional relay BOX, it is not necessary to perform this setting.

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

```
FUNCTION
SETUP              <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

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

```
MACHINE SETUP
Use Head           <ENT>
```

4 **Press ▲ ▼ to select [Heater Setup].**

```
MACHINE SETUP
Heater Setup       <ENT>
```

5 **Press the (ENTER) key twice.**

```
Heater Setup
Heater              :OFF
```

6 **Press ▲ ▼ to select one of the set values.**

- **Set Value** : ON / OFF

```
Heater Setup
Heater              :ON
```

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

```
Heater Setup
Heater             <ENT>
```

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

Setting of dryness feed

The dryness feed is the function to dehydrate the part that was not dehydrated by the heater from the position where printing had been completed to the MAIN heater.
When this function is “ON”, the machine performs feeding automatically to dehydrate media by the length set in advance after printing has been completed.

Important!

- When next printing data is received at the completion of printing, dryness feed is not performed.
- For dryness feed, to gain the same dryness result as printing, feeding speed becomes slower compared with that when feeding media with the jog key.

Set Item	Set Value	Overview
Feed Speed	AUTO, 10 to 60 mm/s	Set the feed speed. AUTO : Make the feed speed match with printing conditions. Entering numeric value : Perform feeding at the specified speed.
Feed Length	10 to 2000 mm	Set the length to feed.
Back Feed	ON/OFF	You can set the machine so that it returns media automatically by the fed amount after dryness feed. When you set Back Feed to “ON”, set the back feed speed.

Caution

About back feed

- When you set back feed to “ON”, it returns media automatically by the length fed by dryness feed.
- Back feed is not available for some media types. Press ▲ to perform back feed in advance and check that there is no waviness or ruck on the media.
- When using transfer paper, once it passes on the heater, concavity and convexity are generated on the media by the right and left edges warping. In such a case, make back feed to OFF. Otherwise, it may cause media clogging and may damage the head.

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

```
FUNCTION
SETUP               <ENT>
```

2 **Press ▲ ▼ to select [MACHINE SETUP].**

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

3 **Press the ENTER key.**

```
MACHINE SETUP
Use Head            <ENT>
```

4 **Press ▲ ▼ to select [Heater Setup].**

```
MACHINE SETUP
Heater Setup        <ENT>
```

5 **Press the ENTER key.**

```
Heater Setup
Heater          <ENT>
```

---

6 **Press ▲▼ to select [Dryness Feed].**

```
Heater Setup
Dryness Feed    <ENT>
```

---

7 **Press the ENTER key.**

- Selection screen of ON/OFF of the dryness feed is displayed.

```
Heater Setup
Dryness Feed     :OFF
```

---

8 **Select dryness feed “ON” by pressing ▲ or ▼.**

- When you selected “OFF”, proceed to the Step 17.

```
Heater Setup
Dryness Feed     :ON
```

---

9 **Press the ENTER key.**

```
Dryness Feed
Speed       :AUTO
```

---

10 **Set the feeding speed by pressing ▲ or ▼.**

- **Set Value** : AUTO or 1 to 60mm/s
- When you set the feeding speed automatically depending on the set printing conditions, make this “AUTO”.

```
Dryness Feed
Speed       :30 mm/s
```

---

11 **Press the ENTER key.**

```
Dryness Feed
Feed Length    :1000mm
```

---

12 **Set the feed length by pressing ▲ or ▼.**

- **Set Value** : 10 to 2000mm

```
Dryness Feed
Feed Length    :1500mm
```

---

13 **Press the ENTER key.**

```
Dryness Feed
Back Feed        :OFF
```

---

14 **Select ON/OFF of back feed by pressing ▲ or ▼.**

```
Dryness Feed
Back Feed        :ON
```

- When you set back feed to “ON”, it returns media automatically by the length fed by dryness feed.
- When you set back feed to “ON”, proceed to the Step 15, and set to “OFF”, proceed to the Step 17.

Important!

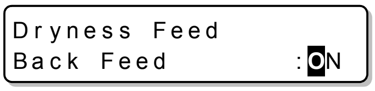
- **Back feed is not available for some media types. Press ▲** to perform back feed in advance and check that there is no waviness or ruck on the media.

---

15 **Press the ENTER key.**

```
Dryness Feed
Speed(Back)    :AUTO
```

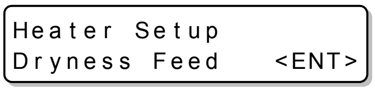
16 **Set the back feeding speed by pressing ▲ or ▼.**



```
Dryness Feed
Back Feed          :ON
```

- **Set Value** : AUTO or 1 to 60mm/s
- When you set the feeding speed automatically depending on the set printing conditions, make this “AUTO”.

17 **Press the ENTER key.**



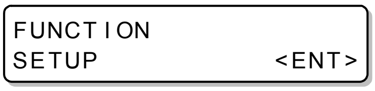
```
Heater Setup
Dryness Feed      <ENT>
```

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

Printing the List of Settings

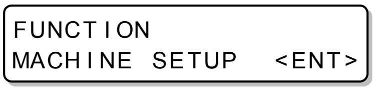
You can print the setting contents and the information of this machine.
Use this as a reference for the maintenance.

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



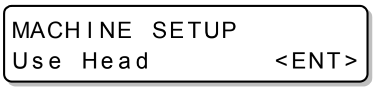
```
FUNCTION
SETUP              <ENT>
```

2. **Press ▲ ▼ to select [MACHINE SETUP].**



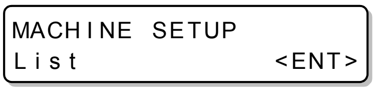
```
FUNCTION
MACHINE SETUP      <ENT>
```

3. **Press the ENTER key.**



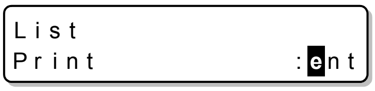
```
MACHINE SETUP
Use Head           <ENT>
```

4. **Press ▲ ▼ to select [List].**



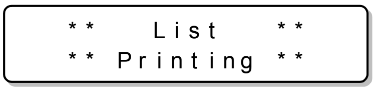
```
MACHINE SETUP
List               <ENT>
```

5. **Press the ENTER key.**



```
List
Print               :ent
```

6. **Press the ENTER key.**
   - Printing the list will start.



```
  **   List    **
  **  Printing **
```

Confirming Machine Information

The information of this machine can be confirmed. You may confirm the following items:

Item	Overview
Version	This displays the version information of the machine.
Serial No.	This displays serial number.
Dealer No.	This displays dealer number.

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

```
Information
Version           <ENT>
```

2 **Press ▲ ▼ to select the information to be displayed.**

- **Items to be displayed :** Version, Serial No., Dealer No.

```
Information
Serial No.        <ENT>
```

3 **Press the ENTER key.**

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

Confirming the machine information without the INFORMATION key

The information of this machine can be confirmed with the FUNCTION key in LOCAL without the INFORMATION key.

In LOCAL, press the FUNCTION key.

Press ▲ ▼ to select the [MACHINE SETUP], and press the ENTER.

Press ▲ ▼ to select the [Information], and press the ENTER.

- It becomes the same condition as the ST.MAIN key is pressed from the local.

Confirming Machine Condition

Confirm the machine condition such as error information or ink remaining.

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

```
Ink Level
  9999999999999999
```

2 **Press ◀ ▶ to select the information.**

- To return to the LOCAL or the REMOTE screen, press the END key.

	Items	Overview
Error information	Error Info Display[V] key	Displays only when an error occurs. Press ▼ to check the occurring error with a list.
Ink Level	Ink Leve 9999999999999999	Displays a rough remaining amount of ink in all the slots. **Alignment of the slot displayed** : 12345678ABCDEFGH **Display** : [1] to [9]=rough remaining amount [0]=ink end [-]=error Important! • The displayed remaining amount is a calculated value. It can differ from an actual ink remaining amount. • To display the ink remaining amount as accurately as possible, be sure to set the packed ink pack and the ink IC into the same slot at the same time.
Roll media remaining	Media Remains :***.**m	Displays a rough remaining amount of the roll media. Important! • The displayed remaining amount is a value calculated from the media remaining amount set at the roll media detection (☞ P.2-30) and the feeding amount. It can differ from an actual media remaining amount. Use the value as a guide.
The width of the printing area	Media Width :****mm	Displays the width of the printing area set at the media detection.
Head height	Head Height *.*mm	Displays the head height from the bottom position of the head.
Filled ink set	Ink Type :Reac Ink Color :8	Displays the ink type and the color mode of the ink filled in this machine.
Machine name	Tx400-01 Ver.1.00 MRL-3	Displays the machine name and the version of this machine set on P.3-26.
Feeding / Take-up device setting	Feeding Device :ON Take-Up Device :Low	Displays the feeding device setting (☞ P.3-28) and the take-up device setting (☞ P.3-29).
Set value	SETUP <TYPE1> Display [∧]/[∨] Key	By pressing ▼, a list displays the settings of the user type being selected.
Counter log	SETUP <TYPE1> Display [∧]/[∨] Key	By pressing By pressing ▼, you can confirm the used counter of the mist fan., you can check the used counter of the mist fan and the adhesive on the belt.
Nozzle Recovery	Nozzle Recovery Display [∧]/[∨] Key	When pressing ▼, the resolution currently printed and the pass information whose recovery is possible of the used head are displayed. Important! • This is displayed only when the nozzle recovery setting is valid during data receiving.

Chapter 4
Maintenance

This chapter

describes the items required to use this machine more comfortably, which are the methods for the daily care, the maintenance of the ink unit etc.

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Maintenance

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

Precautions for Maintenance

Pay attention to the following items when maintaining this machine.

🚫	• Never disassemble the machine. Disassembling it can result in electric shock hazards or damage to the machine.
🚫	• Prevent moisture from entering the machine. Moisture inside the machine can cause electric shock hazards or damage to the machine.
🚫	• Do not use benzene, thinner, or any chemical agent containing an abrasive. Such materials can deteriorate or deform the surface of the cover. • Do not apply a lubricant, etc. to any parts inside the machine. Doing so can cause damage to the printerr mechanism. • Be careful so that the cleaning solution for maintenance or ink does not adhere on the cover. The surface of the cover may change in quality or in shape.
⚠ Caution	• If ink settles on the skin or fabrics, 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.

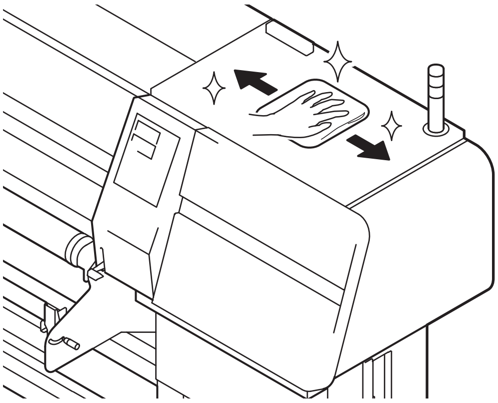
About Cleaning Solution

Use cleaning solution for maintenance that can be applied to the ink you use.

Ink type	Applicable cleaning solution for maintenance
Reaction dye ink	SPC-0137 Cleaning solution bottle kit A29 SPC-0631 Aqueous cleaning solution 2L pack
Sublimation dye ink	
Textile pigment ink	SPC-0701 Sb210 Maintenance cleaning solution

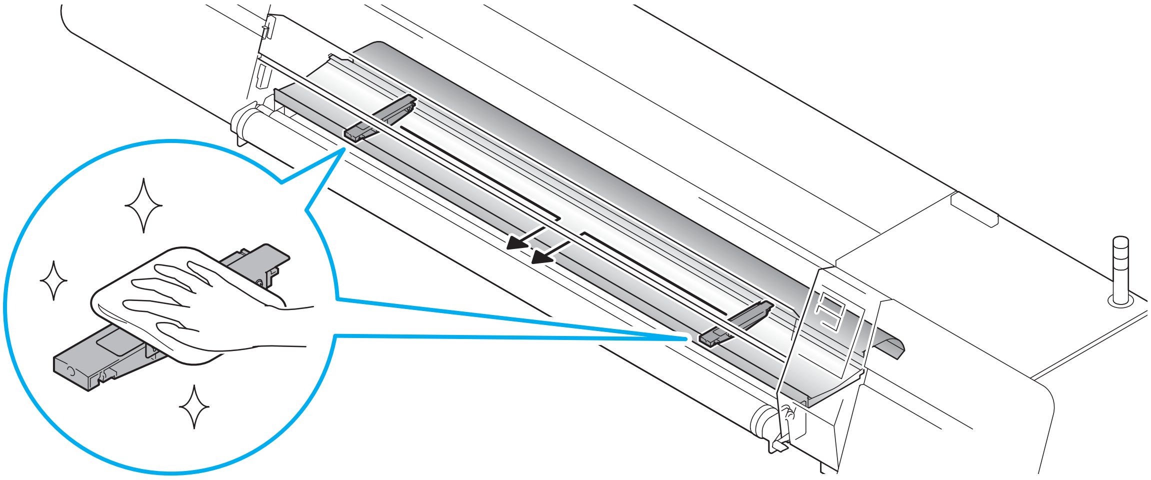
Cleaning the Exterior Surfaces

When the exterior surfaces of the machine are stained, dampen a soft fabric with water or a neutral detergent diluted with water, squeeze it, and wipe the surfaces with the fabric.



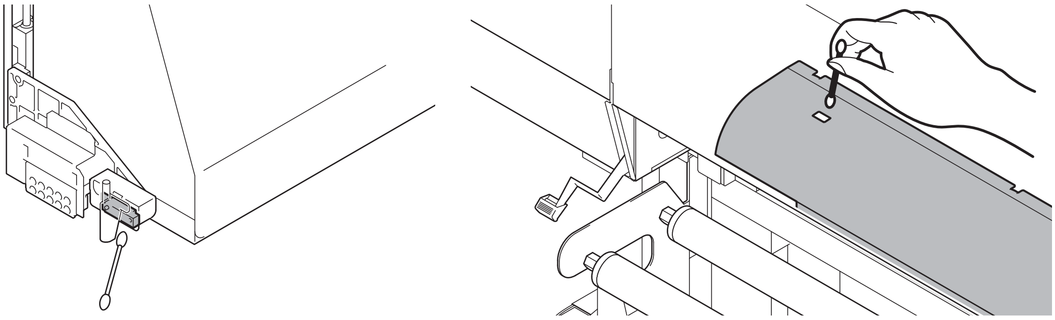
Cleaning fabric retainer

When you wish to clean dirt such as ink etc. adhered on the cloth holder, you can remove the cloth holder to clean it.



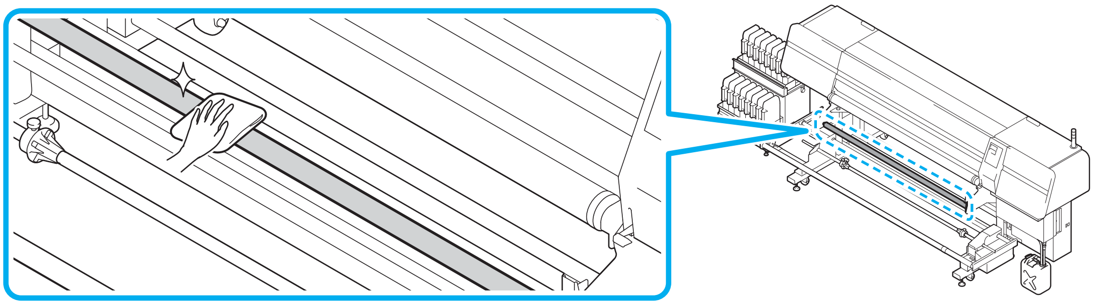
Cleaning the Media Sensor

When the sensor is covered with dust, etc., it may cause false detection of media.
Using a cotton swab, remove the dust, etc. accumulated on the surface of the sensor.



Cleaning turning bar (take-up side)

Remove ink blot etc. adhering to the turning bar located on the front surface of the machine and used at taking-up the media.
Moisten soft cloth with water or waterish mild detergent, squeeze tightly and then wipe it off.



Cleaning the fabric retainer frame

When printing on a cellular fabric, some ink passes through the fabric.
The penetrated ink is absorbed by the sponge on the fabric retainer frame and is collected in the ditch for penetrated ink.
Wash the sponge with water, and wipe out the ink adhered to the fabric retainer frame with a waste cloth. (about once a week)

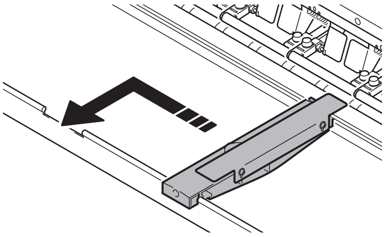
Important!

- If leaving the ink adhered to the sponge or the ink collected in the ditch for penetrated ink, the sponge may be clogged and mist may be generated.

---

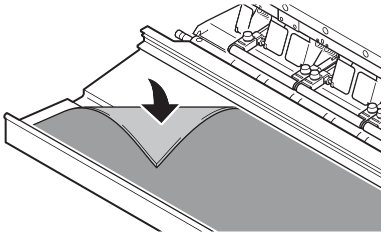
1 **Remove the fabric retainer.**

- Move the fabric retainer to the concave portion in the center of the platen to remove it.



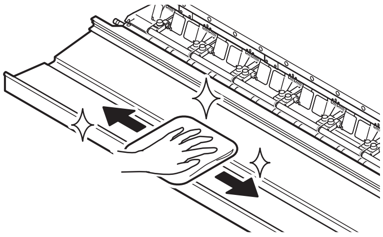
---

2 **Remove the sponge.**



---

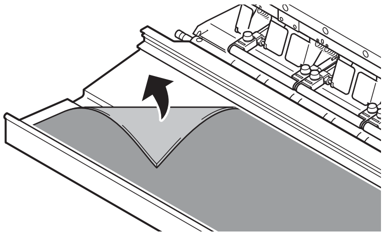
3 **Wipe off the dirt in the fabric retainer frame with waste cloth etc.**



---

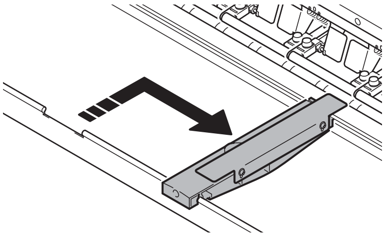
4 **Attach the sponge.**

- Wash the removed sponge, then squeeze it well and place in the original position.



---

5 **Remove the fabric retainer.**



Cleaning of spike roller

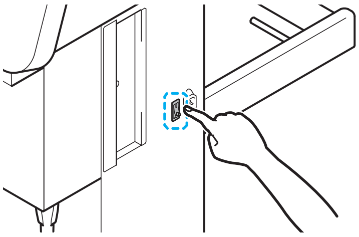
Remove pre-treatment agent or lint adhering to the spike roller with the resin brush periodically.

Important!

- Clean the spike roller periodically.
- In some cases and depending on media pre-treatment agent, if it is left on the spike roller, it may cause rust.
- If rust is generated on the spike roller, there is the fear that it cannot feed the media normally.

1 Turn the power switch OFF.

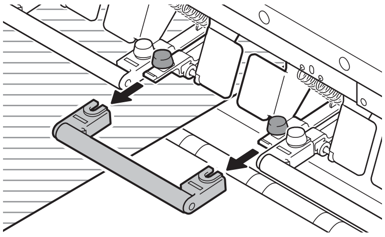
- Tilt the power switch to the "O" side.



2 Open the front cover and raise the clamp lever.

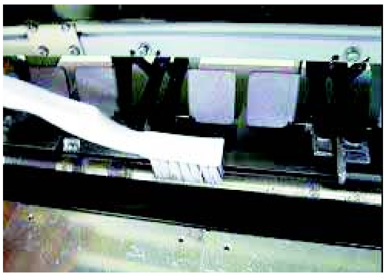
3 Remove the pinch roller.

- Loosen the hand screws (for two positions) and then pull it to front.



4 Wipe the surface of the spike roller with the brush to remove blot.

- Wipe the surface of the spike roller for several times lightly.
- Brush circumference of the spike roller while rotating it with your fingers.
- Wipe off dirty edge of the brush with a dry cloth.



Important!

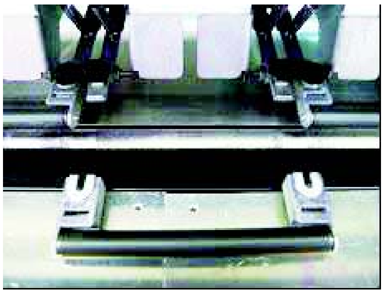
- Be sure to clean the spike roller with resin brush. If you wipe off with a fabric or a paper, lint may adhere to concavity and convexity parts. In addition, if you use a hard metallic brush etc., it may scratch the spike roller.
- Do not immerse the brush in water or washing liquid. It expedites rust.

5 Remove blot on the pinch roller surface.

- Wipe the pinch roller surface with a cloth etc. to remove ink blot.

6 Attach the pinch roller.

- When attaching the pinch roller, align it with the protrusion of attaching side.



7 Turn on the power supply of this machine to check whether the operation is normal.

(1) Press the ST.MAIN key in LOCAL.
(2) Press ▼▲ to select [Carriage Out].
(3) Press the ENTER key.
- The carriage moves onto the platen.

(4) Open the front cover.
(5) Move the carriage manually to the left edge and check that the carriage does not contact with the pinch roller.
- If the carriage contacts with the pinch roller, attach the pinch roller again and then check that it does not contact with the carriage.

(6) After you check that there is no problem, close the front cover.
(7) Press the ENTER key.
- After its initial operation, the machine returns to the media selection. (☞ P.2-30)

Maintaining the Capping Station

Perform maintenance of the ink capand the wiper in the capping station (station maintenance).

- If you use the machine with the ink cap or the wiper dirty, nozzle clogging may easily occur.
  Clean the ink cap and the wiper when the work is completed daily or when the roll media is replaced.

Ink cap/wiper works respectively as follows:

- **Wiper** : It wipes off ink sticking to the head nozzles.
- **Ink cap** : It prevents the head nozzles from clogging due to dryness.

As the machine is used repeatedly, the wiper and ink cap gradually become dirty with ink, dust, etc.
If nozzle missing cannot be corrected even after head cleaning (☞ P.2-34) has been performed, use a cleaning kit and clean stick.

Tools required for maintenance	• Cleaning solution bottle kit A29 (PN: SPC-0137) [sold separately]	• Dropper
	• Clean stick (SPC-0527)	• Gloves

Caution

- Do not move the carriage out of the capping station by hand. When you wish to move the carriage, press the ST.MAIN key to perform the carriage out. (☞ P.4-8 Step 1 and 2)
- If ink settles on the skin or fabrics, 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.

Cleaning the Ink cap

Clean the cap when the failure of the picture image quality occurs, when the nozzle clogging is not solved even after performing cleaning function, or when it is not used for a long time.

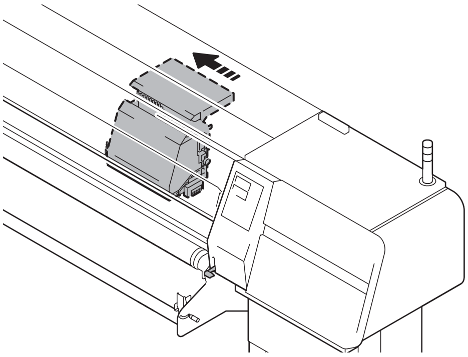
- If you use the machine with the ink cap dirty, nozzle clogging may easily occur.
  Clean the ink cap and the wiper when the work is completed daily or when the roll media is replaced.

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel   :Carriage Out
```

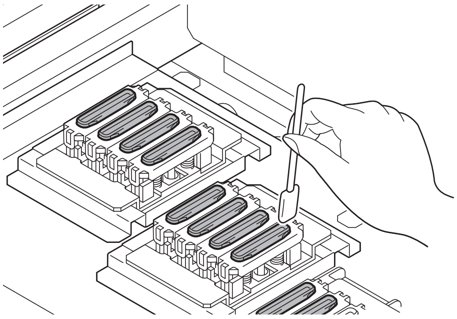
2 **Press the ENTER key.**

- The carriage moves onto the platen.



3 **Open the maintenance cover R to clean the cap rubber.**

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



4 **Close the maintenance cover R and press the ENTER key.**

```
   Please Wait
*********-----------
```

- After its initial operation, the machine returns to the media selection. (☞ P.2-30)

Performing the station maintenance without ST.MAIN key

ST.MAINTENANCE is selectable from the local by using the ST.MAIN key, not by pressing the FUNCTION key.

In LOCAL, press the FUNCTION key.

Press ▲ ▼ to select [MAINTENANCE].

Press the ENTER key twice.
- It becomes the same condition as the ST.MAIN key is pressed from the local.

Cleaning the Wiper

Wiper has a function to wipe off ink etc. adhered on the nozzle of the head.
Clean the wiper periodically to print in the good status.

- If you use the machine with the wiper dirty, nozzle clogging may easily occur.
  Clean the ink cap and the wiper when the work is completed daily or when the roll media is replaced.

Important!

- Do not touch the rubber part of new wiper. If you touch it, it may cause the nozzle clogging.
- Perform maintenance of the wiper, the wiper cleaner and the sponge under the wiper periodically. If you leave the wiper etc. dirty, it may cause discharge defects or damage of the machine.

● When the time to clean the wiper comes

When the time to clean the wiper comes, the right message is displayed on the screen.
When the message is displayed, clean the wiper at once.

```
!Wiper
Clean Wiper
```

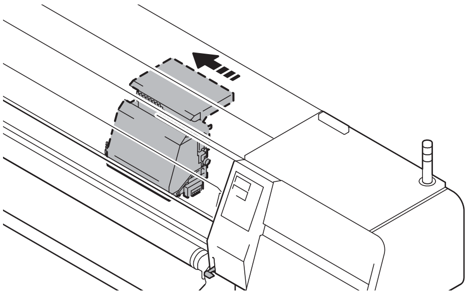
---

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel    :Wiper Cleaning
```

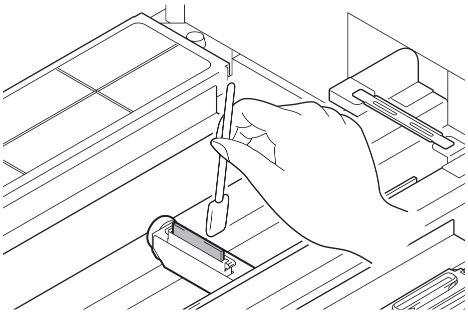
2 **Press the ENTER key.**

- The carriage moves onto the platen.



3 **Open the maintenance cover R to clean the wiper.**

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

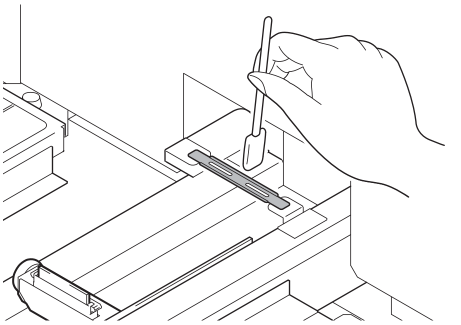


4 **Clean the wiper cleaner.**

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

Caution

- Be careful so that you may not get injured with the edge of the wiper cleaner.



5 **Close the maintenance cover R and press the ENTER key.**

```
Please Wait
*********-----------
```

- After its initial operation, the machine returns to the media selection. (☞ P.2-30)

When the message of [Replace wiper] is displayed

The wiper is consumable. When the right message is displayed, replace the wiper at once or remove the wiper rubber to rotate it to use the unused edge.

```
      !Wiper
  Replace Wiper
```

Important!

- A cleaning wiper (SPA-0171) is an option. Buy one through the dealer in your region or at our service office.
- Do not select [WIPER Exchange] at any time other than when the wiper is replaced. Once it is selected, the counter that counts the number of times the wiper is used is reset.

Replacing the Wiper

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel   :Carriage Out
```

2 **Press ▲▼ to select [Wiper Exchange].**

```
Station
Sel   :Wiper Exchange
```

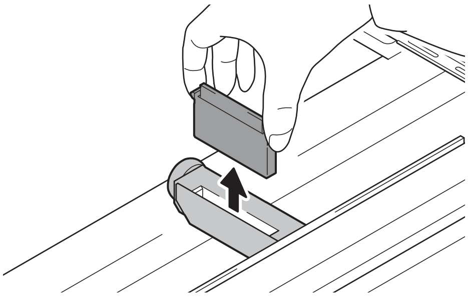
3 **Press the ENTER key.**

- The carriage moves onto the platen.

```
Wiper Exchange
Completed          :ent
```

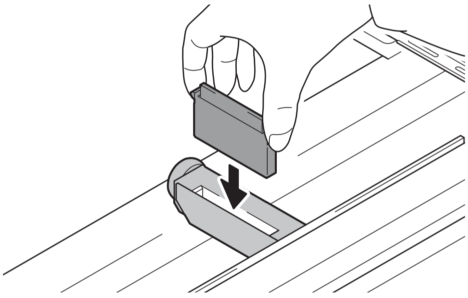
4 **Open the maintenance cover R to take out the wiper.**

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



5 **Insert the new wiper.**

- Insert the wiper by holding its both ends.
- Do not touch the rubber part of the wiper. If you touch it, it may cause the nozzle clogging.
- There is no difference between front and back side of the wiper. You can insert it facing either side to the front.

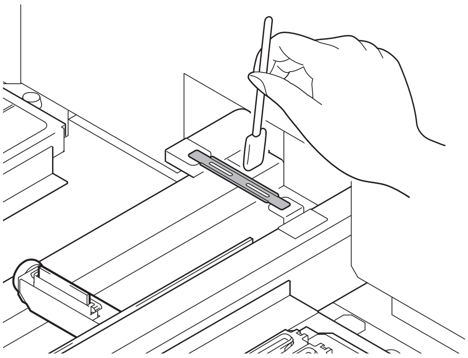


6 **Clean the wiper cleaner.**

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

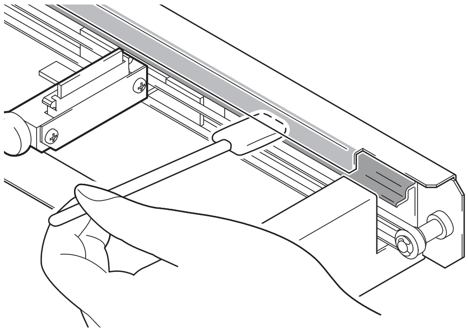
Caution

- Be careful so that you may not get injured with the edge of the wiper cleaner.



7 **Clean the guide ditch of the wiper.**

- Clean the guide ditch with a clean stick or cloth.
- If dirt is hard to be removed, dip the clean stick in water etc. and then clean it.

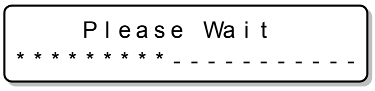


8 **Wash the sponge under the wiper.**

(1) Remove the sponge in the wiper frame and wash it with water.
(2) Dry the sponge and put it into the wiper frame again.

9 **Close the maintenance cover R and press the ENTER key.**

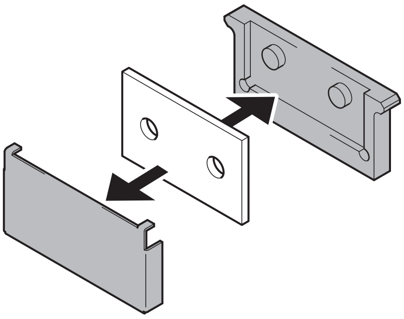
- After its initial operation, the machine returns to the media selection. (☞ P.2-30)



```
      Please  Wait
*********___________
```

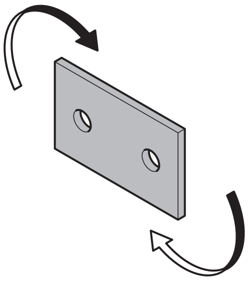
Rotate to unused edge

1 **Remove the wiper cover and take the wiper rubber out.**



2 **Rotate the wiper rubber upward and downward.**

- Rotate it with the unused part upward.



3 **Bring the wiper cover to the original status.**

Cleaning the Head Nozzles

When nozzle missing occurs, clean the head nozzle.

Check the items on the right beforehand.	**Is [NEAR END] or [INK END] displayed?** • At the cleaning operation, perform ink absorbing. At this time, if [NEAR END] or [INK END] is displayed, cleaning operation cannot be performed. • Replace with the ink pack with enough ink.

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel    :Carriage Out
```

2 **Press ▲ ▼ to select [Nozzle Clean].**

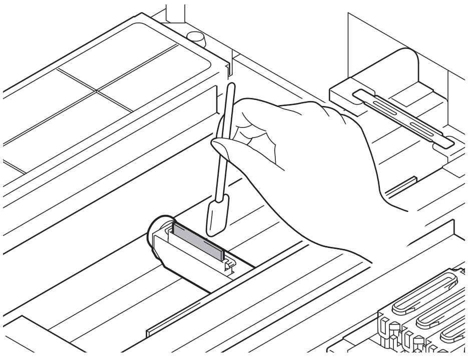
```
Station
Sel    :Nozzleg Clean
```

3 **Press the ENTER key.**

- The carriage moves onto the platen.

```
Wiper Cleaning
Completed         :ent
```

4 **Open the maintenance cover R to clean the wiper.**

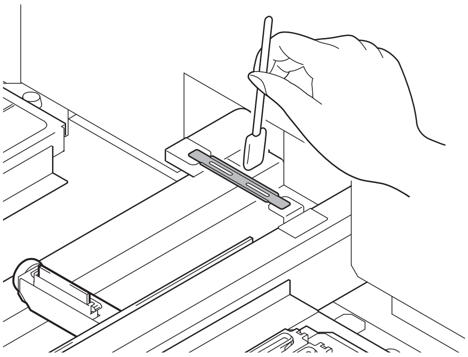


5 **Clean the wiper cleaner.**

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

Caution

- Be careful so that you may not get injured with the edge of the wiper cleaner.



6 **Wash the sponge under the wiper.**

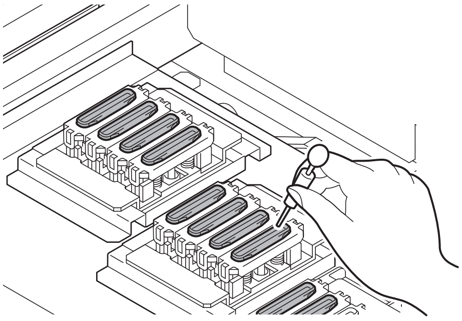
(1) Remove the sponge in the wiper frame and wash it with water.
(2) Dry the sponge and put it into the wiper frame again.

7 **Press the ENTER key.**

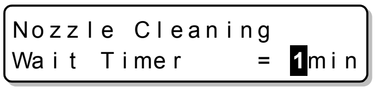
```
Fill Up Washings
Completed         :ent
```

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

- Fill up the cap with cleaning solution on the verge of overflow from the cap.
- Fill the cleaning solution only to the head has nozzle missing.



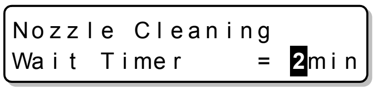
9 Close the maintenance cover R and press the ENTER key.



```
Nozzle Cleaning
Wait Timer      = 1min
```

10 Press ▲ ▼ to set the time for the cleaning solution to be left as it is.

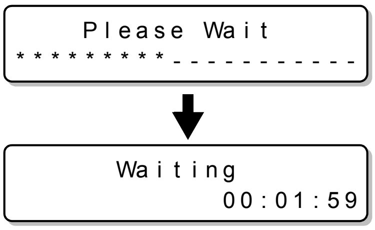
- **Set Value** : 1 to 99 min (by the unit of 1 min)



```
Nozzle Cleaning
Wait Timer      = 2min
```

11 Press the ENTER key.

- The screen on the right is displayed for the time set in Step 10.
- After the time to be left as it is has passed, absorb the cleaning solution filled up in the cap and perform cleaning.
- When cleaning has ended, the machine returns to the media selection. (☞ P.2-30)



```
    Please Wait
*********___________
```

```
      Waiting
            00:01:59
```

Important!

- When nozzle missing is not corrected even after this cleaning has been performed several times, perform “If nozzle clogging is not solved (ink filling)” (☞ P.4-28) . When the problem is not solved even after the operation above, contact the distributor in your region or our service office.

Maintenance of head nozzle surface

If you leave ink or dust adhering to the nozzle surface of the head during printing as it is, it may cause discharging defect or capping defect.
Be sure to perform maintenance of the nozzle surface after the work is completed to keep the head nozzle surface clean.

Caution

- Do not rub the nozzle part of the ink head when performing maintenance. It may cause image quality deterioration.
- If ink settles on the skin or fabrics, 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.
- Sb210 Maintenance cleaning solution is the dedicated cleaning solution used for “NOZZLE CLEAN” (☞ P.4-12) or for “NOZZLE CLEAN 22 (☞ P.4-16) of the device with Sb210. Do not use Sb210 Maintenance cleaning solution for the device without Sb210. It may cause discharging defect.

Tools required for maintenance	• Maintenance cleaning solution	• Dropper
	• Clean stick (SPC-0527)	• Gloves
	• Maintenance cloth (SPC-0677)	• Waste
	• Nozzle cleaning tool	

About cleaning solution

To perform head nozzle surface maintenance, maintenance cleaning solution suitable for ink you use is required.

Used ink	Maintenance cleaning solution
Sb210 ink	• Sb210 Maintenance cleaning solution (SPC-0701) [sold separately] *1
Other than Sb210 ink	• Aqueous cleaning solution 2L pack (SPC-0631) [sold separately]
	• Cleaning solution bottle kit A29 (SPC-0137) [sold separately]

*1. Do not use this for maintenance other than “NOZZLE CLEAN” and “NOZZLE CLEAN 2”.

- Cleaning solution in the “Cleaning solution bottle kit A29 (including 100cc)” is the same as the one in the “Aqueous cleaning solution 2L pack (including 2L)”.
- “Aqueous cleaning solution 2L pack” is more inexpensive than “Cleaning solution bottle kit A29”.
- Before using “Aqueous cleaning solution 2L pack”, put it into the “Refill bottle for cleaning solution (Product No.: SPC-0695). (The refill bottle is “1 liter-bottle x 2” and you can use it repeatedly as many times as you want.)

● About “Cleaning solution bottle kit A29”

For the maintenance, use cleaning solution in the bottle.
When it gets empty, purchase new “Cleaning solution bottle kit A29” or “Aqueous cleaning solution 2L pack and Refill bottle for cleaning solution”.

● About “Aqueous cleaning solution 2L pack”

Before using “Aqueous cleaning solution 2L pack”, put it into the “Refill bottle for cleaning solution”.

Important!

- Do not leave the “Aqueous cleaning solution 2l pack” opened. Cleaning solution will deteriorate and cleaning effect will weaken.

● About “Refill bottle for cleaning solution”

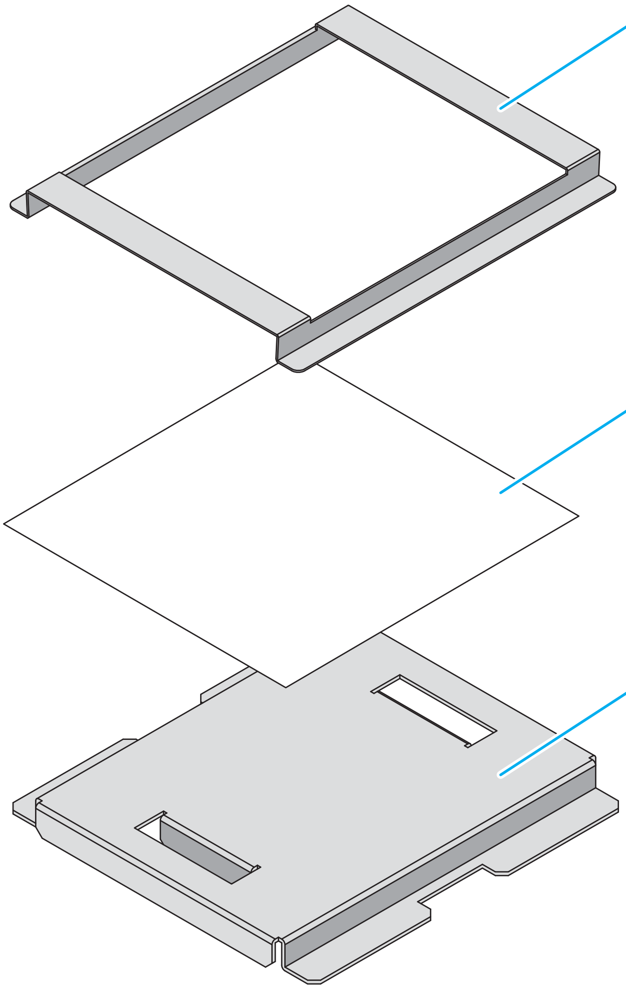
Put cleaning solution (2 liters) included in the “Aqueous cleaning solution 2L pack” into the bottle (1 liter x 2).
After using cleaning solution, recap it tightly.

About nozzle cleaning tool

Use the nozzle cleaning tool when performing maintenance of the nozzle surface.

Caution

When using the nozzle cleaning tool, check that there is no ink blot or dust etc. adhering to the tool. If ink blot or dust etc. adheres to the nozzle cleaning tool, it will reduce the maintenance effect or cause the damage of the machine.
Before you use this nozzle cleaning tool, remove the white protective film.



Fixing bracket

Use this to fix the maintenance cloth.

Maintenance cloth

Moisturize this with maintenance cleaning liquid.

Base

Put the maintenance cloth on it.

Perform maintenance of the head nozzle surface

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel   :Carriage Out
```

2 **Press ▲ ▼ to select [Nozzle Clean2].**

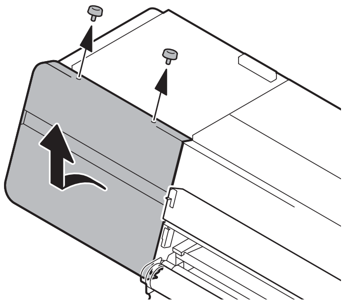
```
Station
Sel   :Nozzle Clean2
```

3 **Press the ENTER key.**

- Carriage will move to the left end of this device.

```
Carriage Mainte
Completed         :ent
```

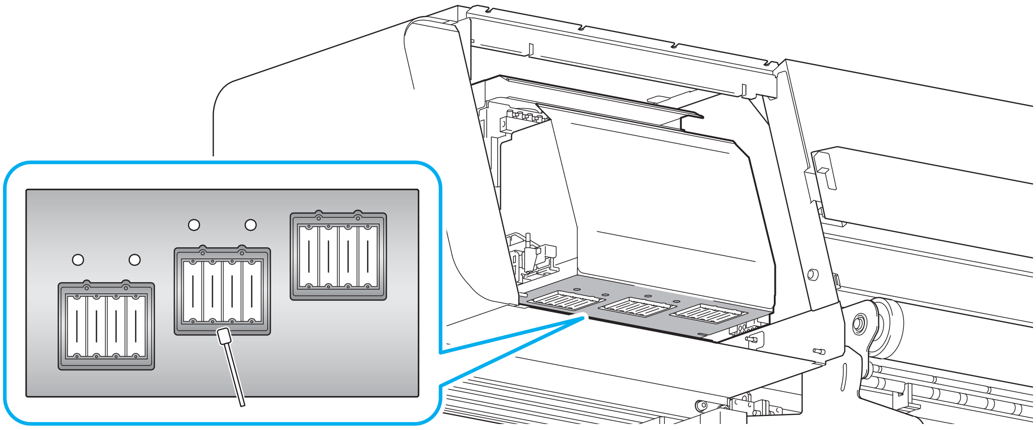
4 **Remove the maintenance cover L.**



5 **Wipe off ink sticking to around the head with a clean stick.**

Important!

- Never rub the nozzles.

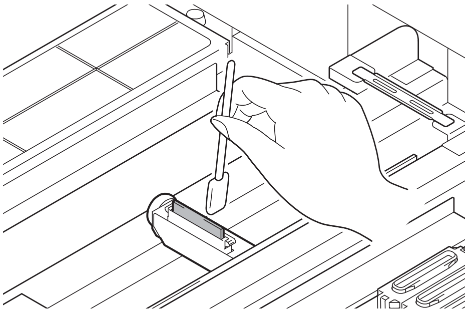


6 **After cleaning is completed, close the maintenance cover L.**

7 **Press the ENTER key.**

```
Clean Wiper
Completed         :ent
```

8 Open the maintenance cover R to clean the wiper.

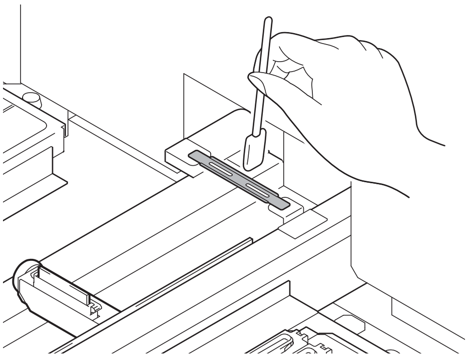


9 Clean the wiper cleaner.

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

Caution

- Be careful so that you may not get injured with the edge of the wiper cleaner.



10 Wash the sponge under the wiper.

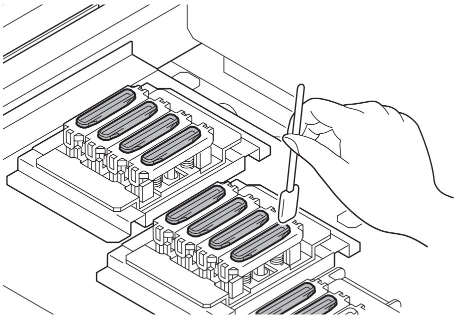
(1) Remove the sponge in the wiper frame and wash it with water.
(2) Dry the sponge and put it into the wiper frame again.

11 Press the ENTER key.

```
Cap Cleaning
Completed          :ent
```

12 Open the maintenance cover R to clean the cap rubber.

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



13 Remove hardened ink etc. remaining in the cap with a pair of tweezers.

Important!

If the sponge is misaligned or floats, return it to the original position. Leaving it with being misaligned may damage the nozzle surface.

14 Press the ENTER key.

```
Set Cleaning Tool
Completed          :ent
```

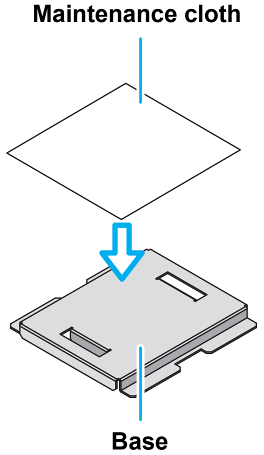
15 Set the nozzle cleaning tool on the cap.

(1) Wipe off ink or dust adhering to the nozzle cleaning tool with a waste cloth moisturized with maintenance cleaning liquid.

Important!

- As the base rear surface of the nozzle cleaning tool touches the cap, especially make it has no dust.

(2) Put one maintenance cloth on the nozzle cleaning tool base.

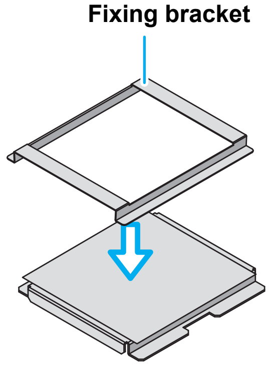


Important!

Use the maintenance cloth keeping to the note below to prevent the head from damaging.

- Do not use a maintenance cloth to which ink blot or dust adheres.
- Do not use a maintenance cloth that was dropped down on the floor.
- Do not use a maintenance cloth that was used before.
- Do not touch the maintenance cloth with a dirty hand.
- When taking the maintenance cloth out from the bag, seal the bag rapidly in order to avoid dust etc. entering in the bag.
- Be sure to save the maintenance cloth in the bag in order to prevent it from touching dust etc.

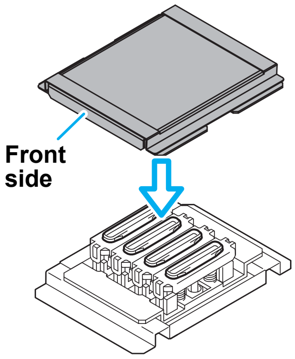
(3) Set the fixing bracket of the nozzle cleaning tool and fix the maintenance cloth.



Caution

- Set it so that the base and the fixing bracket are not misaligned back and forth. If you perform maintenance with it being misaligned, it may damage the nozzle surface.
- Set it so that no ruck occurs on the maintenance cloth. If you perform maintenance with ruck, the maintenance effect may be reduced.
- Fay firmly the base and the fixing bracket. If there is any gap between the base and the fixing bracket, it may damage the machine.

(4) Set the nozzle cleaning tool on the cap.



Caution

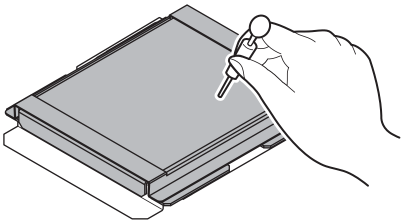
- Set it so that the base rear surface fays with all caps. If the nozzle cleaning tool and the cap are misaligned, or the nozzle cleaning tool is set on the tilt, it may damage the machine.
- Set the nozzle cleaning tool with the direction that is indicated in the right figure. If you set the nozzle cleaning tool with wrong direction, it may damage the machine.

(5) For all heads (A line, B line and C line), perform the work from (1) to (4).

16 Press the ENTER key.

```
Drop Washing Liquid
Completed        :ent
```

17 Moisturize the maintenance cloth set on the nozzle cleaning tool with maintenance cleaning liquid.



- Absorb maintenance cleaning liquid in a dropper and drop it on the maintenance cloth set on the nozzle cleaning tool.
- Drop 3cc and more of maintenance cleaning liquid in order to moisturize the maintenance cloth enough.
- For all nozzle cleaning tools (A line, B line and C line), moisturize the maintenance cloth with maintenance cleaning liquid.

Important!

- Check that the maintenance cloth is fully moisturized. If you perform maintenance using a dry maintenance cloth, it may damage the nozzle surface.

18 Close the maintenance cover R.

19 Press the ENTER key.

```
Nozzle Cleaning2
Wait Timer      =10min
```

20 Press ▲ ▼ to set the leaving time.

```
Nozzle Cleaning2
Wait Timer      =11min
```

- **Set Value** : 1 to 30 min (by the unit of 1 min)
- Recommended time to leave is 10 min.

21 Press the ENTER key.

- The screen on the right is displayed for the time set in Step 20.
- When the leaving time has passed, wiping is performed.

```
   Please Wait
*********-----------
```

↓

```
     Waiting
         00:01:59
```

↓

```
   ** Wiping **
```

↓

```
Remove Cleaning Tool
Completed       :ent
```

- If wiping is completed, the message prompting you to remove the cleaning tool.
- During the right screen being displayed, a buzzer sound beeps continuously to prevent you from not taking the cleaning tool out.

22 Open the maintenance cover R and remove the nozzle cleaning tool.

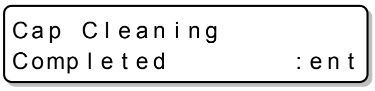
Important!

- After raising the nozzle cleaning tool from the cap, and by putting it on the waste cloth at once, remove it paying attention not to drop maintenance cleaning liquid from the nozzle cleaning tool.
- Ink has been mixed in cleaning liquid. If dropped cleaning liquid adheres to the floor or the machine, the color may not be removed.

Caution

- When the message "Remove cleaning tool" is displayed on the screen, remove the nozzle cleaning tool at once. If you leave the nozzle cleaning tool on the cap for a long time, there is the danger that the cap will be firmly fixed on the tool. In addition, if the status that the head is left without being capped continues, the nozzle gets dry and it may cause charging defect.

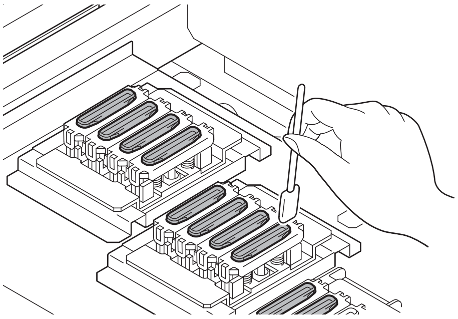
23 **Press the (ENTER) key.**



```
Cap Cleaning
Completed           :ent
```

24 **Clean the cap rubber.**

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

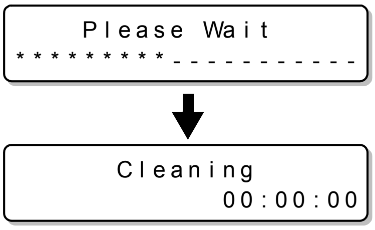


Caution

- Fine dust or dirt on the nozzle cleaning tool base adheres to the cap. Be sure to clean the cap rubber.
- If you use this machine without cleaning the cap rubber, there is the danger that the nozzle surface may be damaged, or capping defect may occur.

25 **Close the maintenance cover R and press the (ENTER) key.**

- Perform cleaning.
- When cleaning has ended, the machine returns to the media selection. (☞ P.2-30)



```
   Please Wait
*********-----------
```

↓

```
    Cleaning
        00:00:00
```

About handling nozzle cleaning tool after using it

After using the nozzle cleaning tool, clean it enough and save it in the bag to prevent it from dust etc. to use it next time.

1 **Remove the fixing bracket from the base and remove the maintenance cloth.**

- Discard the removed maintenance cloth.

2 **Moisturize a waste cloth etc. with maintenance cleaning liquid and wipe off ink adhering to the base and the fixing bracket.**

Caution

- Be sure to clean the base and the fixing bracket enough. If you leave ink adhering to them, ink may be hardened.
- If ink adhering to the base rear surface will be hardened, the machine will be damaged when you use it next time. Be sure to clean both of base front surface/rear surfaces.

3 **Save the cleaned nozzle cleaning tool in the bag.**

- Be careful about the nozzle cleaning tool preventing it from dust etc.

Wash ink discharge passage (Drain Wash)

Wash the ink discharge passage regularly (about once a week) to prevent the head nozzles from clogging due to ink coagulation inside the passage.

1 **Press the ST.MAIN key in LOCAL.**

```
Station
Sel    :Carriage Out
```

2 **Press ▲ ▼ to select [Drain Wash].**

```
Station
Sel    :Drain Wash
```

3 **Press the ENTER key.**

- Check the waste ink tank and discard the waste ink as required.

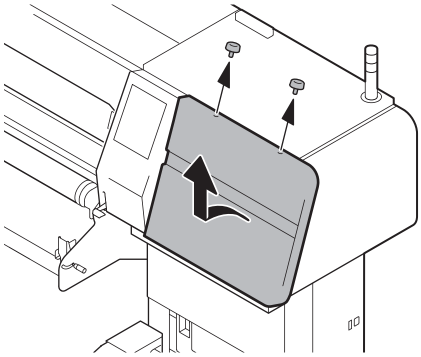
```
Check Waste Tank
Completed        :ent
```

4 **Press the ENTER key.**

- The carriage moves onto the platen.
- Repeat the idle absorbing operation (Absorption for 10 seconds and interruption for 10 seconds) until the washing operation is completed.

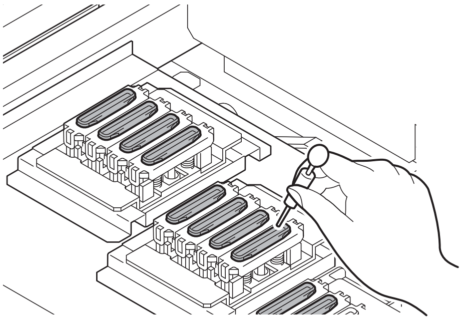
```
Drain Wash
Completed        :ent
```

5 **Open the maintenance cover R.**



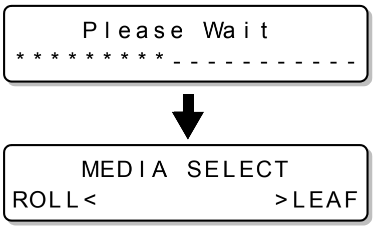
6 **Fill up the cap with cleaning solution for maintenance, using a dropper.**

- When idle absorbing operation is stopped, fill up the cap with cleaning solution on the verge of overflow from the cap.
- Fill up all caps with cleaning solution.



7 **Close the maintenance cover R.**

8 **Press the ENTER key.**



```
  Please Wait
*********-----------
```

```
  MEDIA SELECT
ROLL<          >LEAF
```

- After performing idle absorbing operation for 30 min., the machine returns to the media selection. (P.2-30)

When the Machine Is Not Used for a Long Time (Storage Wash)

When the machine is not going to be used for a week or more, use the cleaning function for custody to clean the head nozzles and ink discharge passage. After this, keep the machine in custody.

Check the items on the right beforehand.	**Is [NEAR END] or [INK END] displayed?** • The cleaning solution or ink is absorbed when the nozzles are washed. At this time, if the state of {INK END] or {NEAR END] is detected, the nozzle washing operation cannot start. • Replace the ink pack with another from which the state of [NEAR END] or [INK END] is not detected.

Caution

- In the control characteristics of this machine, if the power is turned off for more than 12 hours, ink may gradually be discharged from the head nozzle even if the head is capped.
  If ink is discharged from the nozzle, the color of ink may be mixed with ink of adjacent nozzles in the same head.
  Once ink is mixed in the nozzle, ink must be filled in the head again, thus much remaining ink may go to waste.
  Even if it is not used for a long time, do not turn off the power as much as possible.

1 Press the ST.MAIN key in LOCAL.

```
Station
Sel    :Carriage Out
```

2 Press ▲ ▼ to select [Strage Wash].

```
Station
Sel    :Storage Wash
```

3 Press the ENTER key.

- Check the waste ink tank and discard the waste ink as required.

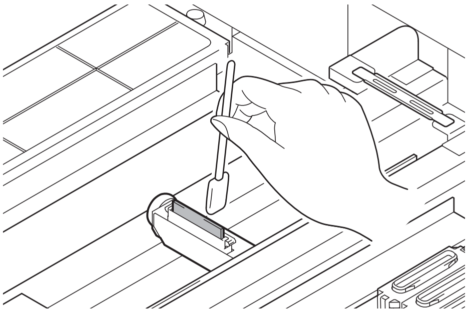
```
Check Waste Tank
Completed        :ent
```

4 Press the ENTER key.

- The carriage moves onto the platen.

```
Wiper Cleaning
Completed        :ent
```

5 Open the maintenance cover R to clean the wiper.

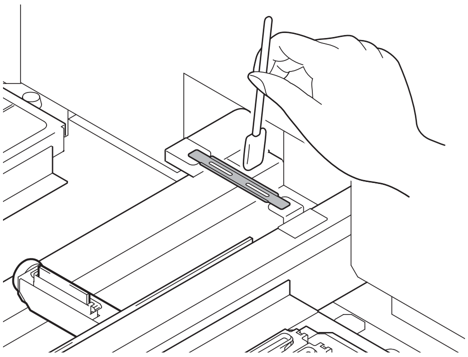


6 Clean the wiper cleaner.

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

Caution

- Be careful so that you may not get injured with the edge of the wiper cleaner.



7

Wash the sponge under the wiper.

(1) Remove the sponge in the wiper frame and wash it with water.
(2) Dry the sponge and put it into the wiper frame again.

8

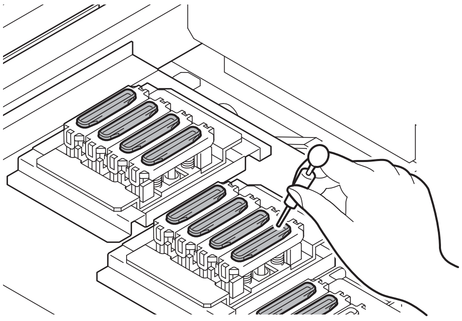
Press the ENTER key.

```
Fill Up Washings
Completed           :ent
```

9

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

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



10

Close the maintenance cover R and press the ENTER key.

```
Nozzle Cleaning
Wait Timer      = 1min
```

11

Press ▲ ▼ to set the time for the cleaning solution to be left as it is.

```
Nozzle Cleaning
Wait Timer      = 2min
```

- Set Value:1 to 99 min (by the unit of 1 min)

12

Press the ENTER key.

- After the time to be left as it is set in the Step 11 has passed, absorbing of cleaning solution and cleaning start.
- When the cleaning is completed, the head moves on to the platen.

```
      Please Wait
*********-----------
```

↓

```
        Waiting
             00:01:59
```

13

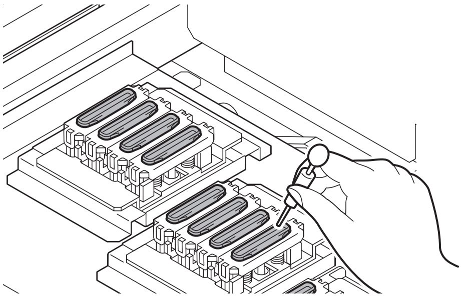
Clean the wiper and the wiper cleaner again, and then press the ENTER key.

```
Wiper Cleaning
Completed           :ent
```

14

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

- When idle absorbing operation is stopped, fill up the cap with cleaning solution on the verge of overflow from the cap.
- Fill up all caps with cleaning solution.



15

Close the maintenance cover R and press the ENTER key.

```
      Please Wait
*********-----------
```

- After performing idle absorbing operation for 30 min., the machine returns to the media selection. (☞ P.2-30)

Cleaning the Ink Head and the Area around It

Because the ink head employs a very precise mechanism, due care needs to be taken when it is cleaned. Using a clean stick, etc., rub off gelatinous ink or dust that may stick to the lower part of the slider and the area around the ink head. In doing so, never rub the nozzles of the head.

Tools needed for cleaning	• Cleaning solution bottle kit A29 (PN: SPC-0137) [sold separately]	
	• Clean stick (SPC-0527)	• Gloves

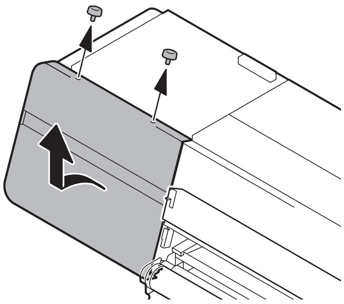
Caution

- If ink settles on the skin or fabrics, 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.

1 Select [Carriage] of the maintenance menu.

(1) Press the (FUNCTION) key.
(2) Press (▲)(▼) to select [MAINTENANCE] and press the (ENTER) key.
(3) Press (▲)(▼) to select [Carriage] and press the (ENTER) key.
(4) Press the (ENTER) key.
- Carriage will move to the left end of this device.

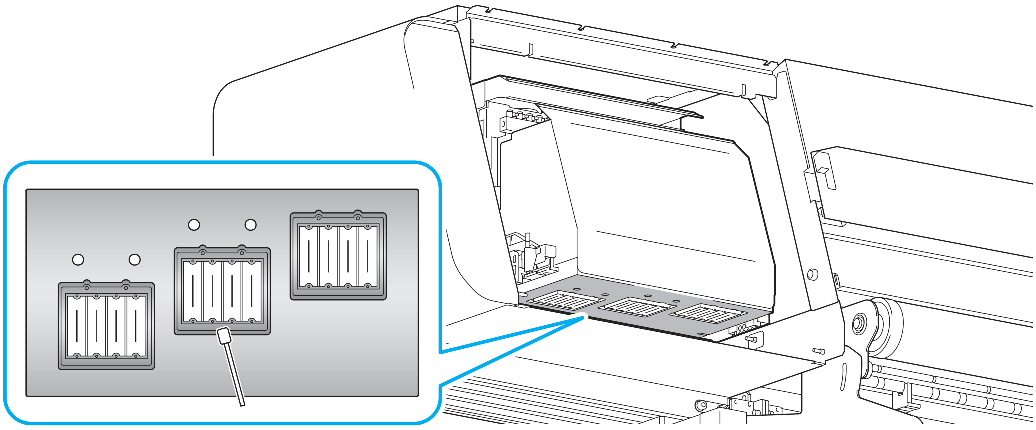
2 Remove the maintenance cover L.



3 Wipe off ink sticking to around the head with a clean stick.

Important!

- Never rub the nozzles.



4 After cleaning is completed, close the maintenance cover L.

5 Press the (ENTER) key.

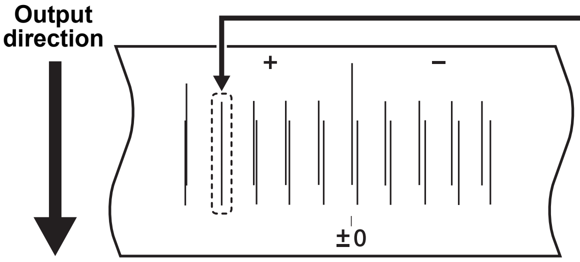
```
Please Wait
*********------------
```

- After its initial operation, the machine returns to the media selection. (☞ P.2-30)

If the Positions of Dots Shift...

If the width of the media to be used, the head height or the ink type is changed, correct the ink landing position during bidirectional printing (Bi) by the following operation to gain proper printing result.

Example of a Printed Pattern



The fourth in the + direction from the 0 position is indicated as a straight line.
In this case, the dot position correction value is 4.0.

1 **Set a media on the machine. (☞ P.2-6)**

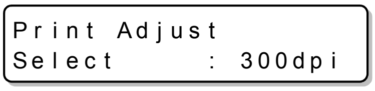
- To print a pattern, the media of 600mm width or wider is required.

2 **Select [Print Adjust] of the maintenance menu.**

(1) Press the FUNCTION key.
(2) Press ▲ ▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲ ▼ to select [Print Adjust] and press the ENTER key

3 **Press ▲ ▼ to select resolution to be corrected.**

- **Resolution** : 300dpi, 450dpi, 450dpiH, 600dpi, 600dpiH, 900dpi, 900dpiH, 1200dpi, 1200dpiH



```
Print Adjust
Select          : 300dpi
```

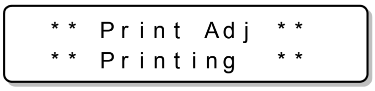
4 **Press the ENTER key.**

5 **Press ▲ ▼ ◀ ▶ to set the origin position.**

6 **Press the ENTER key.**

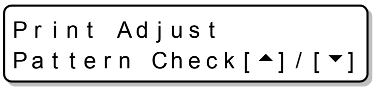
7 **Press the ENTER key to start pattern printing.**

- Multiple test patterns are printed. (The printed patterns are called Pattern 1, Pattern 2, Pattern 3 in the order of printing.)



```
  ** Print Adj  **
  ** Printing   **
```

8 **Press ▲ ▼ to move the correction pattern to the position where it can be easily seen.**

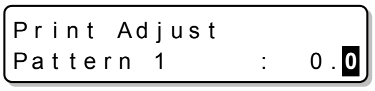


```
Print Adjust
Pattern Check[▲]/[▼]
```

9 **Press the ENTER key.**

- The screen to enter the correction value is displayed.

10 **Press ▲ ▼ to correct the dot position of Pattern 1.**



```
Print Adjust
Pattern 1        :   0.0
```

- **Correction value :** -40.0 to 40.0
- Check the test patterns. The position where an outward feeding line and a return feeding line become one straight line is the correction value.
- When the correction value in not between -40.0 and 40.0, adjust the height of the printing heads and then perform the operations in Step 2 and later.

11 **Press the ENTER key.**

12 **In the same way as in Step 10, correct the dot position in Pattern 2 and subsequent patterns and press the ENTER key.**

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

If nozzle clogging is not solved (ink filling)

Perform ink filling

Even if you performed “Performing Head Cleaning”(☞ P.2-34) or “Cleaning the Head Nozzles”(☞ P.4-12) , nozzle clogging is not solved in some cases. If nozzle clogging is not improved, perform ink filling.
There are three types of ink filling. Select from them depending on the status of nozzle clogging.

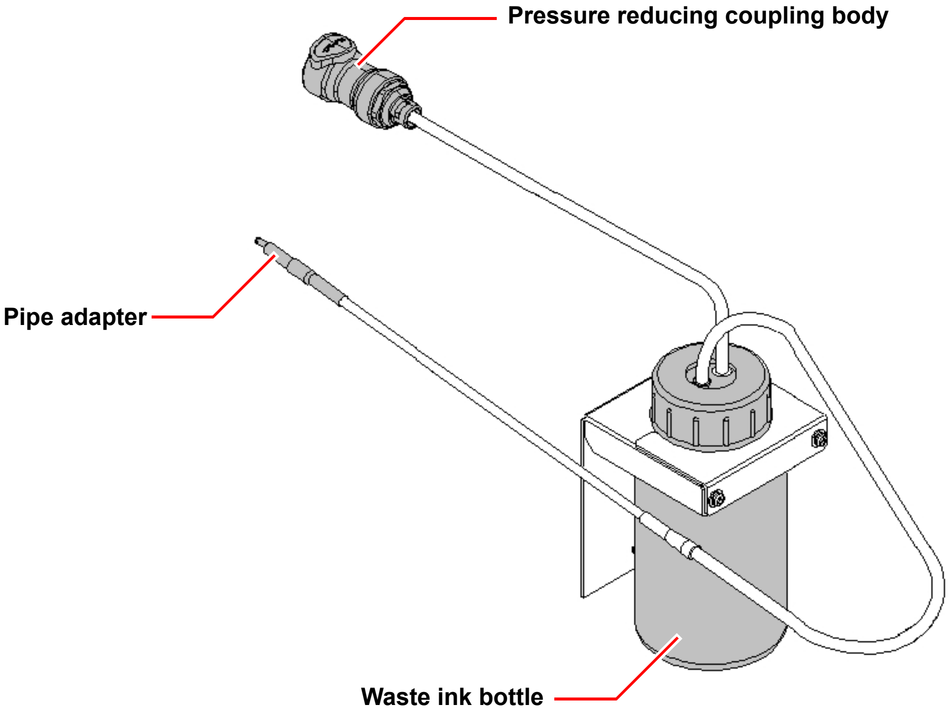
Set Value	Overview
Soft	Select if nozzle clogging cannot be solved even after “Performing Head Cleaning” (☞ P.2-34) or “Cleaning the Head Nozzles” (☞ P.4-12) .
Normal	Select if nozzle clogging cannot be solved even after performing ink filling in “Soft”. After ink filling is completed, check the status referring to “Check ink filling status (filling check)” (☞ P.4-38).
Hard	Select if nozzle clogging cannot be solved even after performing ink filling in “Normal”. After ink filling is completed, check the status referring to “Check ink filling status (filling check)” (☞ P.4-38).

- When you put a new ink, ink filling will be automatically performed even if you do not operate ink filling.

Tools required for ink filling (Normal/Hard)	• Gloves	• Ink port discharging jig	• Waste cloth
	• Cleaning solution bottle kit A29 (PN: SPC-0137) [sold separately]		

About ink port discharging jig

The ink port discharging jig is used for washing of ink port and for ink filling. Be sure to use it after emptying the bottle.

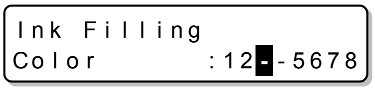


● Ink filling “Soft”

1 **Select [Ink Filling] of the maintenance menu.**

(1) Press the FUNCTION key.
(2) Press ▲ ▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲ ▼ to select [Ink Filling].
(4) Press the ENTER key.

2 **Press ▲ ▼ ◀ ▶ to select the head to perform ink filling.**

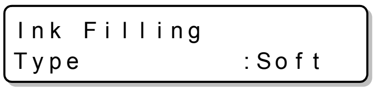


```
Ink Filling
Color        :12--5678
```

Selecting head : Press ◀ ▶.
Performing ink filling : Press ▲ ▼.

- When ink filling is not performed, “ - “is displayed on the screen.

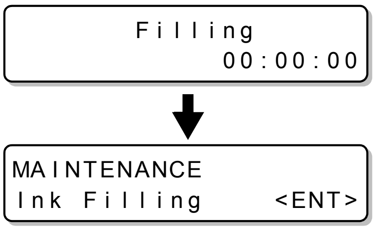
3 **Press the ENTER key.**



```
Ink Filling
Type           :Soft
```

4 **Press the ENTER key.**

- Ink is supplied automatically.
- When ink has been supplied completely, the screen returns to the shown on the right.



```
     Filling
        00:00:00
```

```
MAINTENANCE
Ink Filling      <ENT>
```

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

● Ink filling “Normal”

1 **Select [Ink Filling] of the maintenance menu.**

(1) Press the (FUNCTION) key.
(2) Press (▲)(▼) to select [MAINTENANCE] and press the (ENTER) key.
(3) Press (▲)(▼) to select [Ink Filling].
(4) Press the (ENTER) key.

2 **Press (▲)(▼)(◀)(▶) to select the head to perform ink filling.**

```
Ink Filling
Color          :12--5678
```

Selecting head : Press (◀)(▶).
Performing ink filling : Press (▲)(▼).

- When ink filling is not performed, “ - “is displayed on the screen.

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

```
Ink Filling
Type              :Soft
```

4 **Press (▲)(▼) to select “Normal”.**

```
Ink Filling
Type            :Normal
```

5 **Press the (ENTER) key twice.**

- Ink is supplied automatically.
- When ink has been discharged completely, the screen on the right appears.

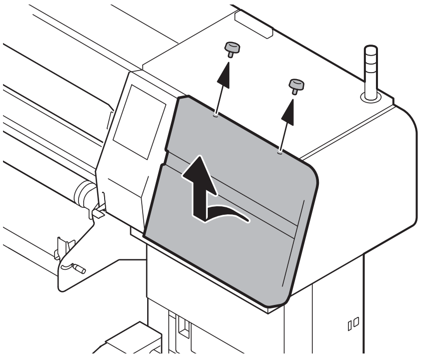
```
           Filling    1/2
                 00:00:00
```

↓

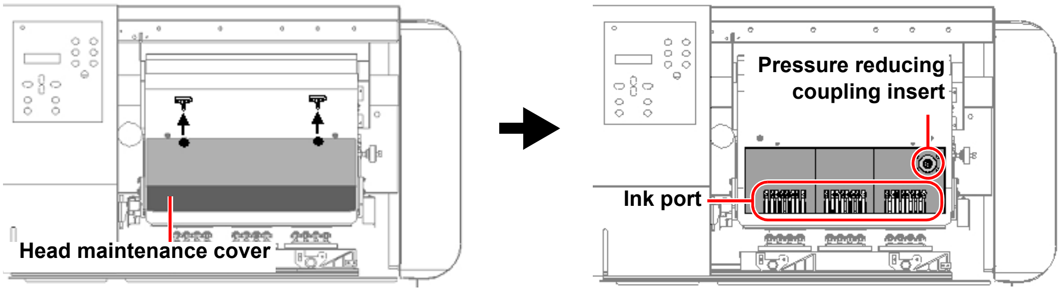
```
Ink Port Filling
Completed            :ent
```

6 **Open the maintenance cover R, and remove the head maintenance cover.**

(1) Open the maintenance cover R.



(2) Remove the head maintenance cover.



7 Attach the ink port discharging jig.

- Attach the ink port discharging jig on the Tx400.

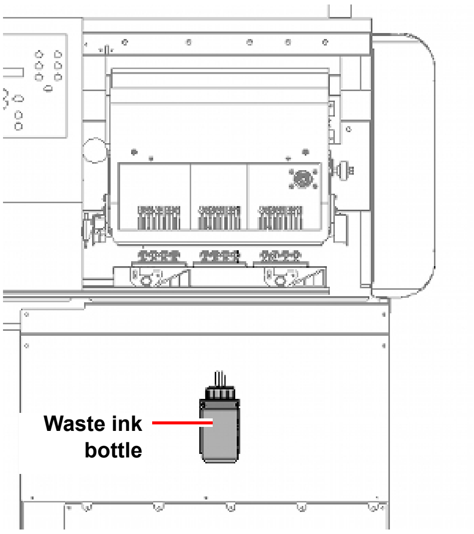
(1) Empty the waste ink bottle of the ink port discharging jig.

(2) Paste the waste ink bottle on the position described in the right figure.

- With the magnet attached on the waste ink bottle, paste the waste ink bottle below the maintenance cover R.
- When pasting waste ink bottle, make it vertical against the ground.

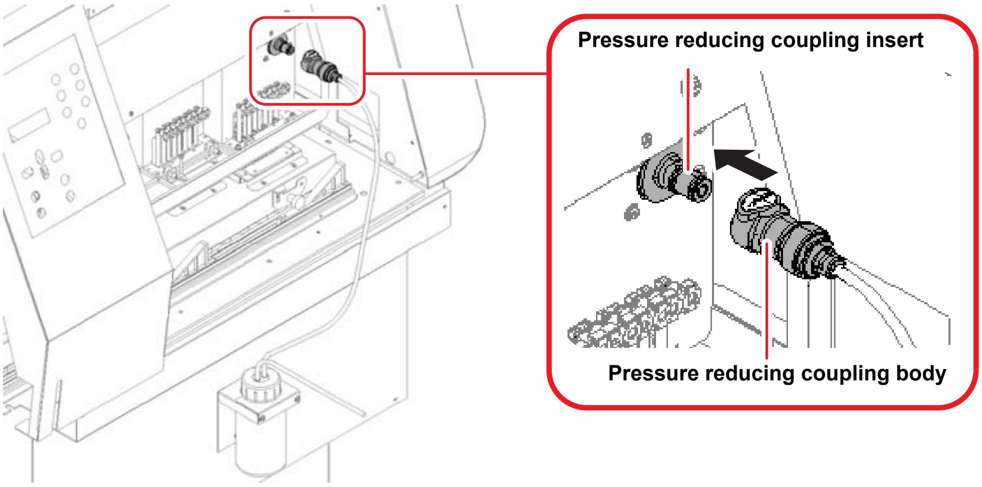
Caution

- If ink replacement is performed in the state of the waste ink bottle being slanted, it may cause damages to the machine. Be sure to paste the waste ink bottle making it vertical against the ground.



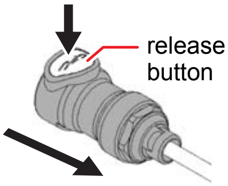
(3) Insert the pressure reducing coupling body of the ink port discharging jig into the pressure reducing coupling insert located in the right side of the carriage.

- Insert it until you hear it “click”.


Pressure reducing coupling insert
Pressure reducing coupling body

Caution

- If you do not hear it “click” when you insert the pressure reducing coupling body, remove it by pressing the release button and insert it again until you hear it “click”.
- If you discharge ink while the pressure reducing coupling body is not connected thoroughly, ink filling defect will occur in the head due to air going into the head. Connect the body until you hear it “click”.

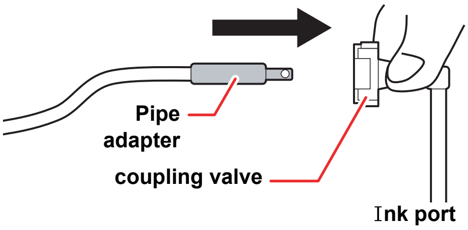


8 Remove ink blot of the pipe adapter of the ink port discharging jig.

- Wipe ink blot etc. of the pipe adapter with waste cloth immersed in cleaning liquid for maintenance.

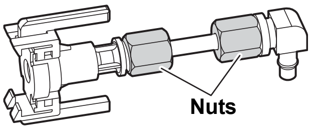
9

Insert the pipe adapter of the ink port discharging jig into the coupling valve of the ink port.



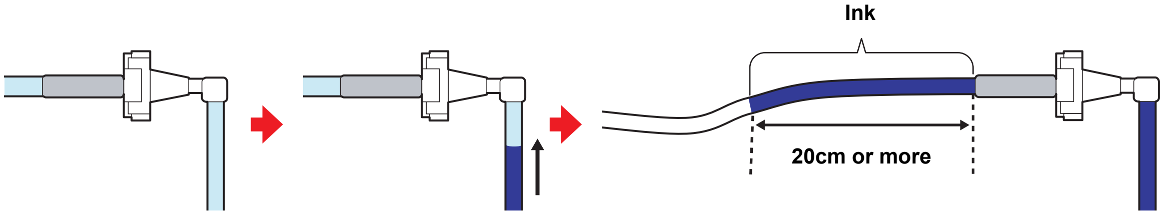
Caution

- While taking out and putting in the pipe adapter, hold the joint of the ink port with your fingers. Otherwise, the ink port may break and ink may leak.
- Check that no loose exists on the nut of the coupling valve. If the nut is loosened, air will get mixed in the ink port and it cannot discharge ink properly.



10

Check the ink is extruded by 20cm or more in the tube of the ink discharge tool.



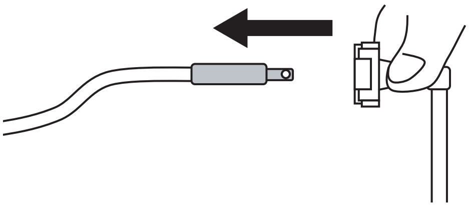
Important!

- Once the pipe adapter is put in, the cleaning solution continues to flow from the ink port. While the tool is set, do not look away or go away from the tool. Otherwise, the cleaning solution may be discharged too much.

11

Remove the pipe adapter from the coupling valve of the ink port.

- Wipe the removed pipe adapter with waste cloth etc. immersed in cleaning liquid for maintenance to remove ink blot etc.



Important!

- When you remove the pipe adapter, be sure to wash it with cleaning liquid for maintenance. If the adapter to which ink adheres may be attached to the other ink port, it may cause mixed of ink colors.

12

Insert the pipe adapter into the cleaning liquid bottle and wash the tube of the ink port discharging jig.

- When you insert the pipe adapter into the cleaning liquid bottle, cleaning liquid in the bottle is absorbed up and the tube of the ink port discharging jig is washed.

13 Check the waste ink bottle.

- When waste ink has been pooled in the bottle making up more than half of it, empty the bottle by following the procedures below.

(1) Remove the ink port discharging jig.
  - While pressing the release button of the pressure reducing coupling body, pull it out to the front.
  - Remove the waste ink bottle pasted on the Tx400.

(2) Remove the cap of the waste ink bottle and discard the waste ink inside.
(3) Replace the cap of the waste ink bottle.
(4) Attach the ink port discharging jig on the Tx400.
  - Referring to the Step 7, attach the ink port discharging jig.

Caution

- Before discarding waste ink, be sure to remove the ink port discharging jig from the main body.
- Replace the cap tightly so that it has no loose.

14 For all selected ink ports, perform the procedures from the Step 8 to 13.

15 Remove the ink port discharging jig.

Caution

- Be sure to remove the ink port discharging jig. If you operate the procedures from the next step with the jig, it may cause the damage of the machine.

16 Attach the head maintenance cover, and close the maintenance cover R.

17 Press the ENTER key.

- Ink is supplied automatically.
- When ink has been supplied completely, the screen returns to the shown on the right.

```
        Filling    2/2
           00:00:00
```

↓

```
MAINTENANCE
Ink Filling      <ENT>
```

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

● Ink filling “Hard”

1 Select [Ink Filling] of the maintenance menu.

(1) Press the FUNCTION key.
(2) Press ▲▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲▼ to select [Ink Filling].
(4) Press the ENTER key.

2 Press ▲▼◀▶ to select the head to perform ink filling.

```
Ink Filling
Color          :12--5678
```

Selecting head : Press ◀▶.
Performing ink filling : Press ▲▼.

- When ink filling is not performed, “ - “is displayed on the screen.

3 Press the ENTER key.

```
Ink Filling
Type              :Soft
```

4 Press ▲▼ to select “Hard”.

```
Ink Filling
Type              :Hard
```

5 Press the ENTER key twice.

- Ink is supplied automatically.
- When ink has been discharged completely, the screen on the right appears.

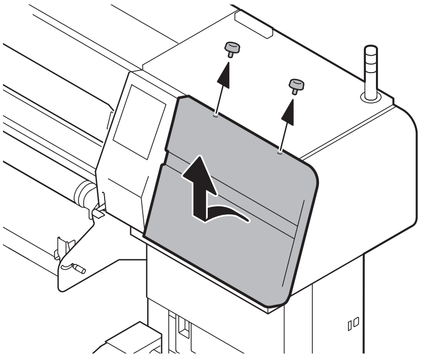
```
           Filling   1/3
                00:00:00
```

↓

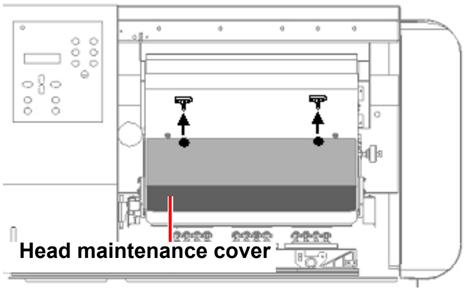
```
Ink Port Filling
Completed           :ent
```

6 Open the maintenance cover R, and remove the head maintenance cover.

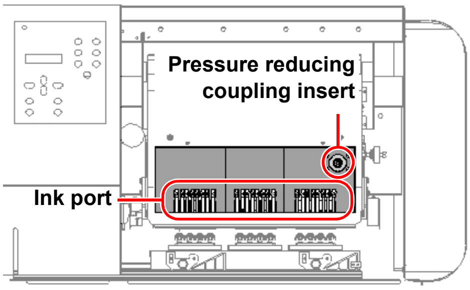
(1) Open the maintenance cover R.



(2) Remove the head maintenance cover.



➡



7 Attach the ink port discharging jig.

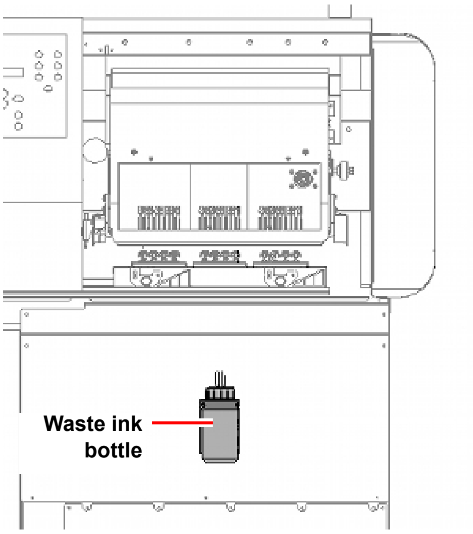
- Attach the ink port discharging jig on the Tx400.

(1) Empty the waste ink bottle of the ink port discharging jig.

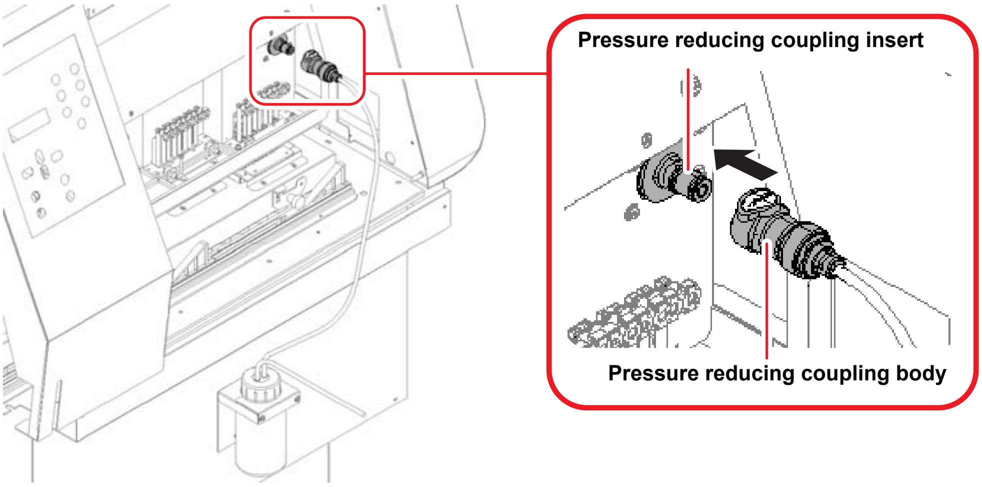
(2) Paste the waste ink bottle on the position described in the right figure.
  - With the magnet attached on the waste ink bottle, paste the waste ink bottle below the maintenance cover R.
  - When pasting waste ink bottle, make it vertical against the ground.

Caution

- If ink replacement is performed in the state of the waste ink bottle being slanted, it may cause damages to the machine. Be sure to paste the waste ink bottle making it vertical against the ground.

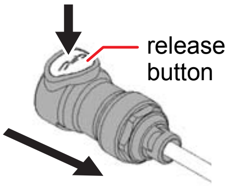


(3) Insert the pressure reducing coupling body of the ink port discharging jig into the pressure reducing coupling insert located in the right side of the carriage.
  - Insert it until you hear it “click”.


Pressure reducing coupling insert
Pressure reducing coupling body

Caution

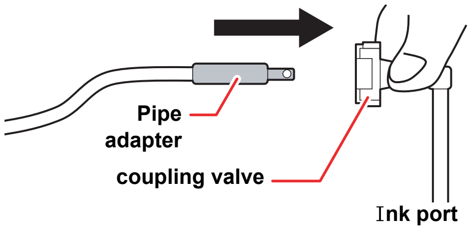
- If you do not hear it “click” when you insert the pressure reducing coupling body, remove it by pressing the release button and insert it again until you hear it “click”.
- If you discharge ink while the pressure reducing coupling body is not connected thoroughly, ink filling defect will occur in the head due to air going into the head. Connect the body until you hear it “click”.



8 Remove ink blot of the pipe adapter of the ink port discharging jig.

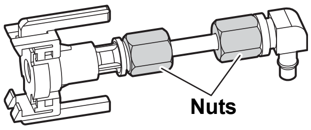
- Wipe ink blot etc. of the pipe adapter with waste cloth immersed in cleaning liquid for maintenance.

9 Insert the pipe adapter of the ink port discharging jig into the coupling valve of the ink port.

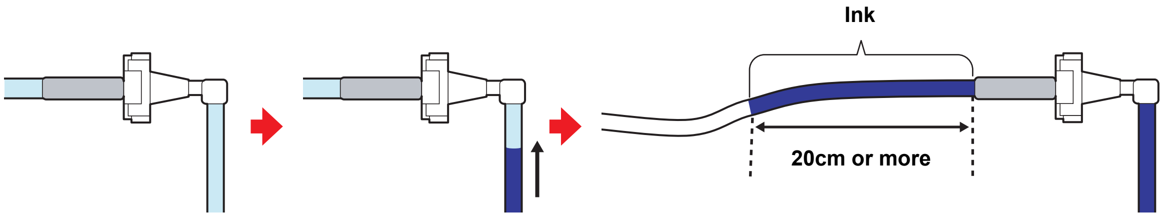


Caution

- While taking out and putting in the pipe adapter, hold the joint of the ink port with your fingers. Otherwise, the ink port may break and ink may leak.
- Check that no loose exists on the nut of the coupling valve. If the nut is loosened, air will get mixed in the ink port and it cannot discharge ink properly.



10 Check the ink is extruded by 20cm or more in the tube of the ink discharge tool.

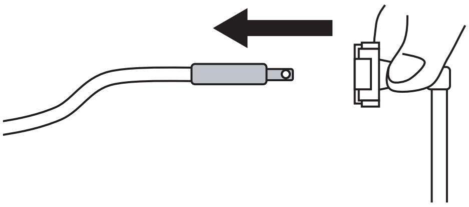


Important!

- Once the pipe adapter is put in, the cleaning solution continues to flow from the ink port. While the tool is set, do not look away or go away from the tool. Otherwise, the cleaning solution may be discharged too much.

11 Remove the pipe adapter from the coupling valve of the ink port.

- Wipe the removed pipe adapter with waste cloth etc. immersed in cleaning liquid for maintenance to remove ink blot etc.



Important!

- When you remove the pipe adapter, be sure to wash it with cleaning liquid for maintenance. If the adapter to which ink adheres may be attached to the other ink port, it may cause mixed of ink colors.

12 Insert the pipe adapter into the cleaning liquid bottle and wash the tube of the ink port discharging jig.

- When you insert the pipe adapter into the cleaning liquid bottle, cleaning liquid in the bottle is absorbed up and the tube of the ink port discharging jig is washed.

13 Check the waste ink bottle.

- When waste ink has been pooled in the bottle making up more than half of it, empty the bottle by following the procedures below.

(1) Remove the ink port discharging jig.
  - While pressing the release button of the pressure reducing coupling body, pull it out to the front.
  - Remove the waste ink bottle pasted on the Tx400.

(2) Remove the cap of the waste ink bottle and discard the waste ink inside.
(3) Replace the cap of the waste ink bottle.
(4) Attach the ink port discharging jig on the Tx400.
  - Referring to the Step 7, attach the ink port discharging jig.

Caution
- Before discarding waste ink, be sure to remove the ink port discharging jig from the main body.
- Replace the cap tightly so that it has no loose.

14 For all selected ink ports, perform the procedures from the Step 8 to 13.

15 Remove the ink port discharging jig.

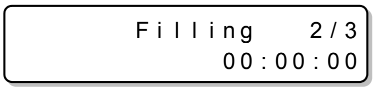
Caution
- Be sure to remove the ink port discharging jig. If you operate the procedures from the next step with the jig, it may cause the damage of the machine.

16 Attach the head maintenance cover, and close the maintenance cover R.

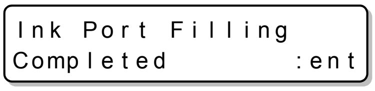
17 Press the (ENTER) key.

- Ink is supplied automatically.

- When ink has been supplied completely, the screen returns to the shown on the right.



```
Filling      2/3
        00:00:00
```



```
Ink Port Filling
Completed    :ent
```

18 Work from the Step 6 to the Step 17 again.

19 Press the (END) key several times to end the setting.

Check ink filling status (filling check)

Print a pattern to check if ink was properly filled with.

1 **Select [Fill Check] of the maintenance menu.**

(1) Press the (FUNCTION) key.
(2) Press (▲)(▼) to select [MAINTENANCE] and press the (ENTER) key.
(3) Press (▲)(▼) to select [Fill Check].
(4) Press the (ENTER) key.

2 **Press (▲)(▼)(◀)(▶) to select the head to be used for printing pattern.**

```
Fill Check
Color          :12-5678
```

Selecting head : Press (◀)(▶).
Performing printing : Press (▲)(▼).

- If pattern printing is not performed, "-" is displayed on the screen.

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

```
Fill Check
Set Origin          :ent
```

4 **Press (▲)(▼)(◀)(▶) to set the origin position.**

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

```
Fill Check
Print         :Y=  ****mm
```

6 **Press (▲)(▼) to enter the print width.**

- Make the print width wider as much as possible. If the print width is narrow, you cannot fully check.

```
Fill Check
Print         :Y=  1000mm
```

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

- Perform pattern printing.

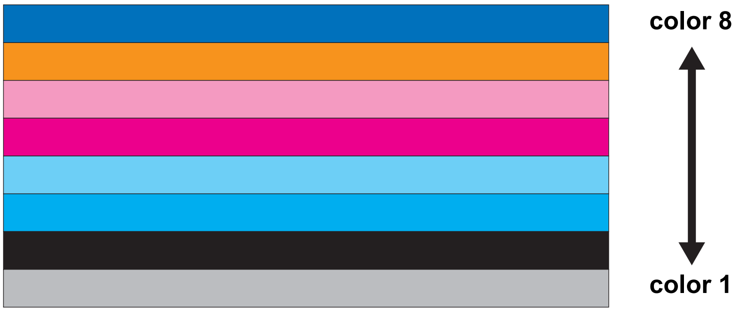
```
  ** Fill Check  **
  **  Printing   **
```

↓

```
MAINTENANCE
Fill Check          <ENT>
```

- When printing is completed, the right screen is displayed.
- If nozzle clogging becomes worse on the way of the pattern, perform "Normal" or "Hard" ink filling. (☞ P.4-30, P.4-34)

8 **Press the (END) key several times to end the setting.**



Setting Regular Operations

Various regular operations are performed with the power ON to prevent problems, such as ink coagulation, from occurring (Regular settings). For the regular settings, the following items can be set:

Set Item	Set Value		Overview
Flushing	ON	0hr 01min. to 24hrs 00min.	When a certain hour has passed, if you wish to perform the flushing operation automatically, set to "ON" and set the interval to perform the flushing operation.
	OFF		Flushing operation is not performed automatically.
Cleaning	ON	0hr 01min. to 24hrs 00min.	When a certain hour has passed, if you wish to perform the cleaning operation automatically, set to "ON" and set the interval to perform the cleaning operation.
	OFF		Cleaning operation is not performed automatically.

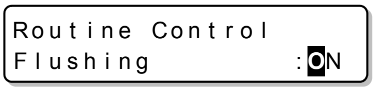
Set flushing operation

To prevent nozzle clogging, you can perform the flushing operation periodically.

1 **Select [Routine Control] of the maintenance menu.**

(1) Press the FUNCTION key.
(2) Press ▲▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲▼ to select [Routine Control].

2 **Press the ENTER key twice.**

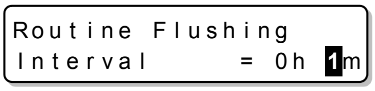


```
Routine Control
Flushing            :ON
```

3 **Press ▲▼ to select ON.**

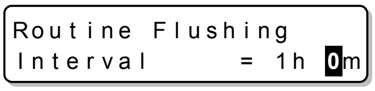
- When selecting OFF, proceed to Step 6.

4 **Press the ENTER key.**



```
Routine Flushing
Interval      = 0h 1m
```

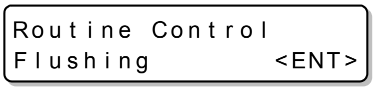
5 **Select the interval of the flushing operation (0hr 01min. to 24hrs 00min.).**



```
Routine Flushing
Interval      = 1h 0m
```

Move the cursor : Press ◀▶.
Set the time : Press ▲▼.

6 **Press the ENTER key.**



```
Routine Control
Flushing           <ENT>
```

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

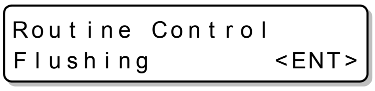
Set cleaning operation

To prevent nozzle clogging, you can perform the cleaning operation periodically.

1 Select [Routine Control] of the maintenance menu.

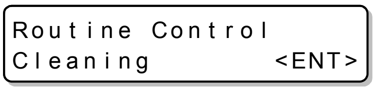
(1) Press the FUNCTION key.
(2) Press ▲ ▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲ ▼ to select [Routine Control].

2 Press the ENTER key.



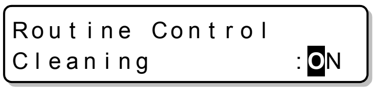
```
Routine Control
Flushing        <ENT>
```

3 Press ▲ ▼ to select [Cleaning].



```
Routine Control
Cleaning        <ENT>
```

4 Press the ENTER key.

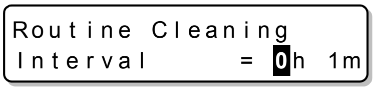


```
Routine Control
Cleaning          :ON
```

5 Press ▲ ▼ to select ON.

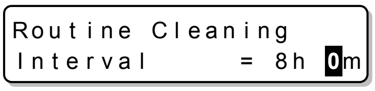
- When selecting OFF, proceed to Step 8.

6 Press the ENTER key.



```
Routine Cleaning
Interval      = 0h  1m
```

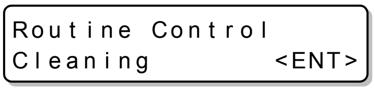
7 Press ▲ ▼ to select the interval of the cleaning operation (0hr 01min. to 24hrs 00min.).



```
Routine Cleaning
Interval      = 8h 0m
```

Move the cursor : Press ◀ ▶.
Set the time : Press ▲ ▼.

8 Press the ENTER key.



```
Routine Control
Cleaning        <ENT>
```

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

When nozzles missing can not be improved

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

You can set each item below for the nozzle recovery.

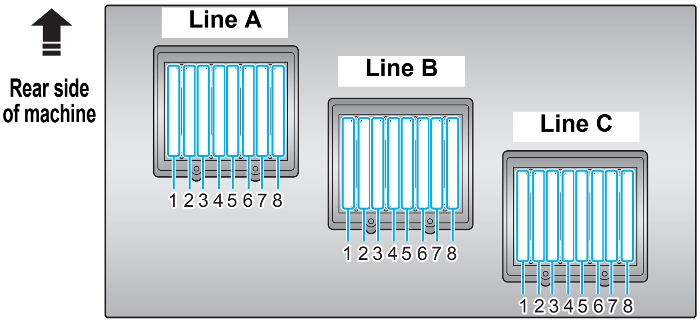
Set Item	Overview
Regist.	You can set/ delete the nozzle to recover. Print the test pattern and specify the nozzle recovery.
Recovery	You can set valid/ invalid of the nozzle recovery function by the nozzle line.
Check	You can check valid/ invalid of the nozzle recovery function by the resolution. The checking result is displayed on the screen.
List	You can check the nozzle on which the nozzle recovery was set and can check whether the setting is available for recovery.

Register setting/ deletion of the nozzle recovery function

You can set/ delete the nozzle to recover. Print the test pattern and specify the nozzle recovery.

Registering nozzle recovery function

The head of this machine consists of nozzles as the right figure.
You can set the recovery by specifying the nozzle line (1 to 8) each for the Line A, the Line B and the Line C.



1 **Select [Nozzle Recovery] of the maintenance menu.**

(1) Press the (FUNCTION) key.
(2) Press ▲▼ to select [MAINTENANCE] and press the (ENTER) key.
(3) Press ▲▼ to select [Nozzle Recovery].

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

```
Nozzle Recovery Set
Clear <        > Print
```

3 **Press ▶ to select “Print”.**

- When you choose “Print”, the screen moves to the origin setting screen automatically.

```
Nozzle Recovery Set
Set Origin       :ent
```

4 **Press ▲▼◀▶ to select origin position.**

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

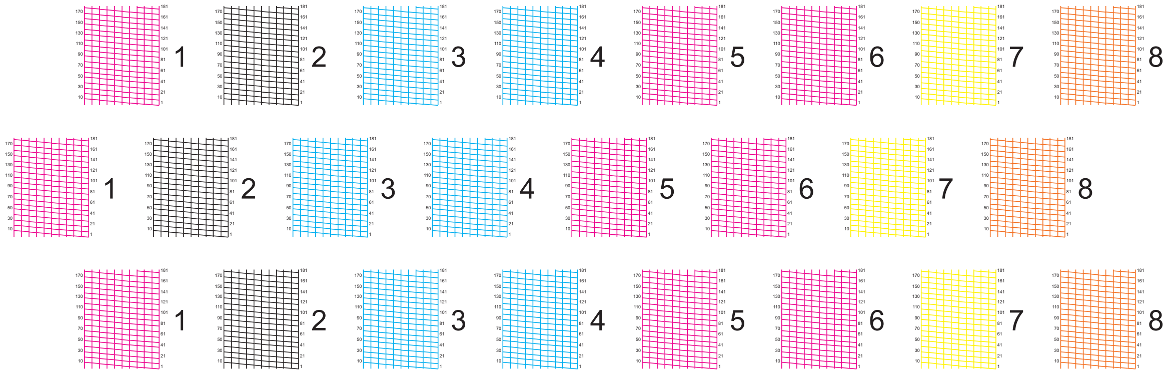
```
Nozzle Recovery Set
Print            :ent
```

6 Press the ENTER key.

```
**Nozzle Recovery**
**     Printing   **
```

- Printing starts.

Nozzle pattern



7 By pressing ▲▼, feed the media.

```
Nozzle Recovery Set
Pattern Check[∧]/[∨]
```

- Feed the media to the position where you can check the printed pattern.

8 Press the ENTER key.

```
Nozzle Recovery Set
Select       :LineA-1
```

- The nozzle selection screen is displayed.

9 Press ▲▼◀▶ to select select a nozzle line to which the nozzle recovery function will be registered.

```
Nozzle Recovery Set
Select       :LineA-1
```

- ◀▶ : Select a head (Line A, Line B and Line C).
- ▲▼ : Select a nozzle line (1 to 8).

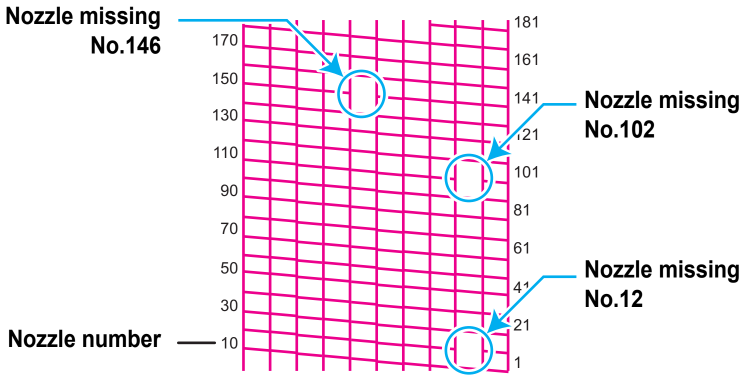
10 Press the ENTER key.

```
Nozzle Recovery Set
LineA-1       NG1:OFF
```

11 Press ▲▼ to select nozzle number whose nozzle recovery function will be made valid.

```
Nozzle Recovery Set
LineA-1       NG1:012
```

Example of recovery nozzle registration


Nozzle missing No.146
Nozzle missing No.102
Nozzle missing No.12
Nozzle number
170
150
130
110
90
70
50
30
10
181
161
141
121
101
81
61
41
21
1

Registration number	Recovery Nozzle No.	State
1	12	Target for nozzle recovery
2	102	Target for nozzle recovery
3	146	Target for nozzle recovery
4	OFF	No registration
5	OFF	No registration

12 **Press the ENTER key.**

- The next nozzle number registration screen is displayed.

```
Nozzle Recovery Set
LineA-1        NG1:OFF
```

13 **Perform the procedures in the Step 11 to 12 to register up to NG5.**

- If there is no nozzle whose nozzle recovery function is made valid, select “OFF”.
- When the registration of all nozzle numbers have been completed, the screen in the Step 8 is displayed. Perform the procedures from the Step 9 to register other nozzle line.

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

Important!

- Up to 5 nozzles can be registered per 1 nozzle line.
- Even if you use this function, time required for printing does not change.
- For the lowest number of paths of the printing mode, the Nozzle Recovery function is invalid.

Deleting nozzle recovery function

1 **Select [Nozzle Recovery] of the maintenance menu.**

(1) Press the FUNCTION key.
(2) Press ▲▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲▼ to select [Nozzle Recovery].

2 **Press the ENTER key twice.**

```
Nozzle Recovery Set
Clear <        > Print
```

3 **Press ◀ to select “Clear”.**

```
Nozzle Recovery Set
Clear           :ALL
```

4 **Press ▲▼◀▶ to select a nozzle line whose setting will be deleted.**

```
Nozzle Recovery Set
Clear         :LineA-1
```

- ◀▶ : Select a head (Line A, Line B and Line C).
- ▲▼ : Select a nozzle line (1 to 8).
- If “ALL” is selected, the contents set for all nozzle lines are deleted.

5 **Press the ENTER key.**

- The next nozzle line selection screen is displayed. Perform the procedures in the Step 6 to select a nozzle line whose setting will be deleted.

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

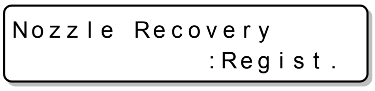
Set the nozzle recovery function by the line

You can set the nozzle recovery function by the line.

1 **Select [Nozzle Recovery] of the maintenance menu.**

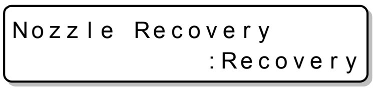
(1) Press the (FUNCTION) key.
(2) Press (▲)(▼) to select [MAINTENANCE] and press the (ENTER) key.
(3) Press (▲)(▼) to select [Nozzle Recovery].

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



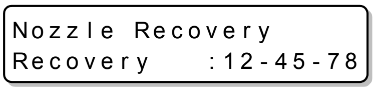
```
Nozzle Recovery
              :Regist.
```

3 **Press (▲)(▼) to select "Recovery".**



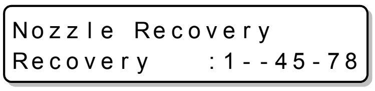
```
Nozzle Recovery
              :Recovery
```

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



```
Nozzle Recovery
Recovery      :12-45-78
```

5 **Press (▲)(▼)(◀)(▶) to select the setting for each nozzle line.**



```
Nozzle Recovery
Recovery      :1--45-78
```

(1) Press (◀)(▶) to select a nozzle line.
(2) Press (▲)(▼) to select either of ON (head number is displayed)/ OFF ("-" is displayed).

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

7 **Press the (END) key several times to end the setting.**

Check valid/ invalid of the nozzle recovery function

You can check the set contents of the nozzle recovery function. Valid/ invalid of the nozzle recovery is displayed by the resolution on the screen.

---

1 **Select [Nozzle Recovery] of the maintenance menu.**

(1) Press the (FUNCTION) key.
(2) Press (▲)(▼) to select [MAINTENANCE] and press the (ENTER) key.
(3) Press (▲)(▼) to select [Nozzle Recovery].

---

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

```
Nozzle Recovery
           :Regist.
```

---

3 **Press (▲)(▼) to select "Check".**

```
Nozzle Recovery
           :Check
```

---

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

```
Nozzle Recovery chk
DPI:      1200x1200
```

---

5 **Press (▲)(▼) to select the resolution.**

```
Nozzle Recovery chk
DPI:        600x 600
```

---

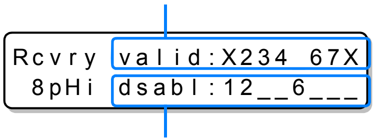
6 **Press the (ENTER) key.**

```
Rcvry valid:X234_67X
16PHi dsabl:12__6___
```

---

7 **Press (▲)(▼) to select pass.**

The contents set in the nozzle recovery function registration are displayed.
Number : Recovery is valid.
X : Recovery is invalid.
_ : No setting



```
Rcvry valid:X234 67X
 8pHi dsabl:12__6___
```

Valid/ invalid of recovery by the number of passes is displayed.
Number : Recovery is valid.
_ : Recovery is invalid.
No setting

---

8 **Press the (END) key several times to end the confirmation.**

Print the setting list of the nozzle recovery

You can check the nozzle on which you set the nozzle recovery and the condition required for recovery.

---

1 **Select [Nozzle Recovery] of the maintenance menu.**

(1) Press the FUNCTION key.
(2) Press ▲ ▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲ ▼ to select [Nozzle Recovery].

---

2 **Press the ENTER key.**

```
Nozzle Recovery
            :Regist.
```

---

3 **Press ▲ ▼ to select "List".**

```
Nozzle Recovery
            :List
```

---

4 **Press the ENTER key.**

```
Nozzle Recovery List
Setting <    > Check
```

---

5 **Press ◀ ▶ to select the list to print.**

- When you choose the list, the screen moves to the origin setting screen automatically.

```
Nozzle Recovery List
Set Origin      :ent
```

---

6 **Press ▲ ▼ ◀ ▶ to select origin position.**

---

7 **Press the ENTER key.**

```
Nozzle Recovery List
Print           :ent
```

---

8 **Press the ENTER key.**

- Printing starts.

```
**Nozzle Recovery**
**    Printing    **
```

When waste ink tank is filled up

Ink used for the head cleaning etc. is pooled in the waste ink tank. When the waste ink tank is filled up, discard the waste ink in the waste ink tank.

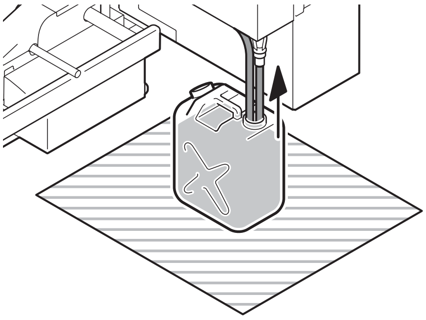
- When purchasing spare waste ink tank, contact nearest sales outlet or our sales office.
- Prepare polyethylene resin tank to which the waste ink in advance.

Caution

- When discarding waste ink, be sure to wear the attached gloves to do the work.
- If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.
- During ink discharging, discard the waste ink after discharging is completed.

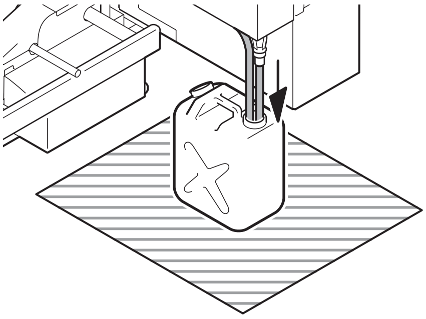
1 Pull out the hose from the waste ink tank.

- When pulling out the hose, pull it out slowly holding the mouth of the hose with waste cloth to avoid the waste ink from scattering.
- It is recommended to place a paper below the tank to prevent the floor from getting dirty.



2 Move the waste ink to another polyethylene resin tank.

3 Set the waste ink tank you made empty in this machine.



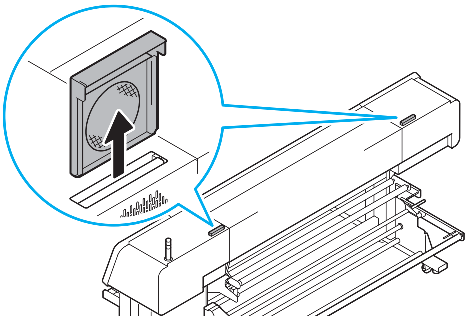
Important!

- Discard the waste ink moved in the polyethylene resin tank in compliance with regulation in the local area.

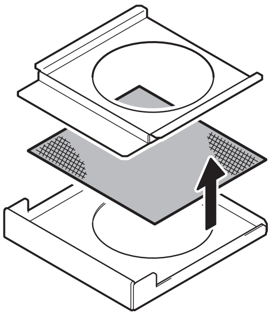
Cleaning mist fan filter

Clean the mist fan filter every day.

1 **Pull out the mist fan filter unit.**



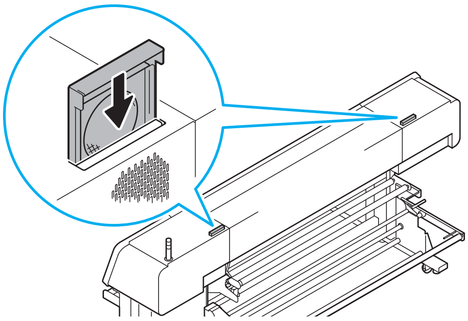
2 **Take the mist fan filter out.**



3 **Clean the mist fan filter.**

- Wash the mist fan filter taken out and dry it.

4 **Bring the mist fan filter unit back to the original status.**



5 **Clear the used counter of the mist fan filter.**

- Referring to “Clear the used counter of the mist fan filter”(☞ P.3-32), clear the used counter.

If negative pressure abnormality occurs

By the environment or aging, the pressure controlled in this machine may exceed the control range.
The error display occurred by pressure abnormality falls into two types depending on the extent.

Error Display		Description
(1)[*1]	!Pressure Adj.	Displays when the pressure is likely to exceed the controlled range. When the screen shown on the left is displayed, the pressure is in the controlled range. You can print or perform cleaning normally. However, if it is left for a while, it may exceed the controlled range, and the screen shown as (2) may be displayed.
(2)	!Wrong Pressure (**)	The pressure has exceeded the controlled range. Printing or cleaning cannot be performed.

[*1] Displays on the firmware version 1.40 or later.

Important!

- When error display of (1) appears, immediately adjust the pressure as the following procedures to reset to the normal value.
- The negative pressure can be adjusted even during a pause of printing.

1 Select [Pressure Adjust] of the maintenance menu.

(1) Press the FUNCTION key.
(2) Press ▲ ▼ to select [MAINTENANCE] and press the ENTER key.
(3) Press ▲ ▼ to select [Pressure Adjust].

2 Press the ENTER key.

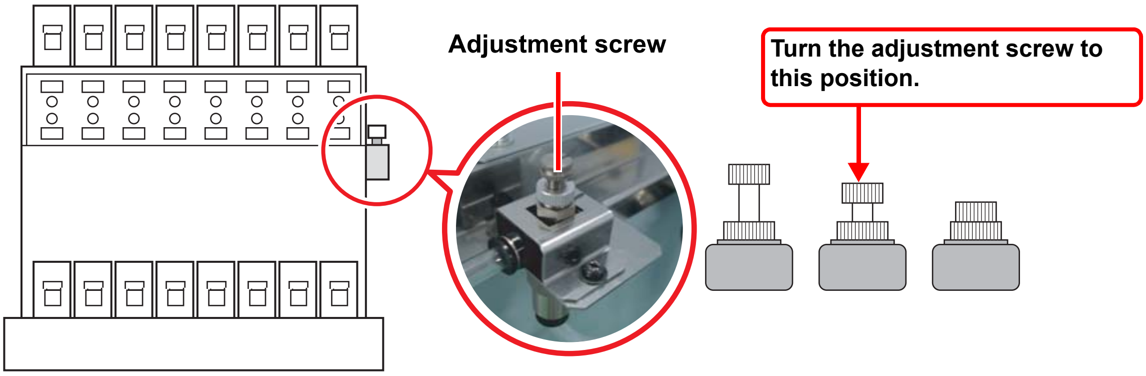
```
Pressure Adjust
Start               :ent
```

3 Press the ENTER key.

```
Open Throttle Valve
Finish              :ent
```

4 Rotate the adjustment screw of the throttle valve to release it so that air can flow.

- The throttle valve is located on the right side of the ink supply unit. Rotate it until the adjustment screw of the throttle valve comes to the middle position.

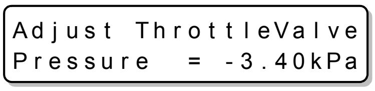


5 Press the ENTER key.

- Sensor adjustment starts.

```
*  Adjusting Sensor  *
     Please Wait
```

6 Rotate the adjustment screw of the throttle valve to adjust the pressure so that it becomes -3.40kPa.

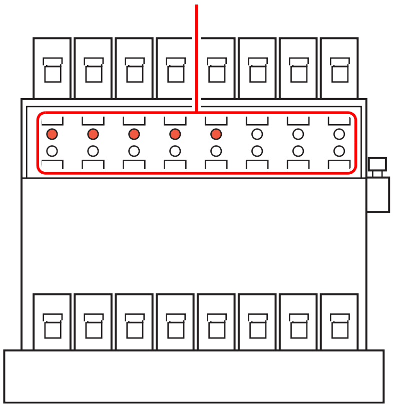


```
Adjust ThrottleValve
Pressure  = -3.40kPa
```

- Because it may change between ± 0.1 to 0.2 kPa, adjust it so that the middle value becomes the target pressure.±

- Pressure is informed with the buzzer and the ink throttle lamp as well as the screen display.

Ink throttle lamp
The target value of the pressure is displayed during the negative pressure adjustment.



Status of lamp and buzzer for each pressure value

Pressure		Ink throttle lamp	Buzzer
High	～-2.75	●○○○○○○○ ○○○○○○○○	Sounds
	-2.76 ～ -2.85	●●○○○○○○ ○○○○○○○○	
	-2.86 ～ -2.95	●●●○○○○○ ○○○○○○○○	
	-2.96 ～ -3.05	●●●●○○○○ ○○○○○○○○	
	-3.06 ～ -3.15	●●●●●○○○ ○○○○○○○○	
	-3.16 ～ -3.25	●●●●●●○○ ○○○○○○○○	
	-3.26 ～ -3.35	●●●●●●●○ ○○○○○○○○	Stops
Proper value	-3.36 ～ -3.45	●●●●●●●● ○○○○○○○○	Stops
Low	-3.46 ～ -3.55	●●●●●●●● ●○○○○○○○	Stops
	-3.56 ～ -3.65	●●●●●●●● ●●○○○○○○	Sounds
	-3.66 ～ -3.75	●●●●●●●● ●●●○○○○○	
	-3.76 ～ -3.85	●●●●●●●● ●●●●○○○○	
	-3.86 ～ -3.95	●●●●●●●● ●●●●●○○○	
	-3.96 ～ -4.05	●●●●●●●● ●●●●●●○○	
	-4.06 ～ -4.15	●●●●●●●● ●●●●●●●○	
	-4.16 ～	●●●●●●●● ●●●●●●●●	

7 Press the ENTER key.

- The error is released and the negative pressure control starts.

Chapter 5

Troubleshooting

This chapter

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

Troubleshooting 5-2
    Image Quality Is Poor 5-3
    If an error occurs in 2L ink pack or ink IC 5-4
Warning/Error Messages 5-6
    Warning Messages 5-6
    Error Messages 5-8

Troubleshooting

Take the appropriate actions as described below before taking the trouble as a failure. If the problem is still not solved after troubleshooting, contact your distributor or our service office.

Failure phenomenon	Cause	Solution
Power does not turn ON.	The power cable of the machine is not connected securely.	Securely connect the power cable of the machine to the outlet.
	The power switch is not ON.	Turn ON the power switch.
Printing does not start.	The interface cable is not connected securely.	Securely connect the interface cable.
	The interface cable is not correct.	Use a USB2.0 Hi-Speed-compliant cable.
	The error message is displayed on the display.	Refer to P.5-5 and remove the error.
	The host computer setting (machine model, etc.) is wrong.	Check the host computer setting.
	The USB driver is not installed.	Install the USB driver included with the machine.
	The mode is not REMOTE.	Press the REMOTE key to switch to REMOTE.
Printing is misaligned. (The fabric is fed sidling.) The fabric gets wrinkled. Ink adhered to the fabric.	A preprocessed fabric which suits ink to use is not used.	Use a pre-processed fabric which suits the ink.
	A fabric which is wrinkled or folded at both edges is used.	Do not use fabrics which are wrinkled or folded at both edges.
	A fabric which is easy to be elastic by absorbing moisture is used.	Do not use fabrics which are easy to be elastic by absorbing moisture or fabrics of stretch material. (Use preprocessed nonelastic fabrics.)
	A fabric of stretch material is used.	
	The edge of the roll media is widely displaced in the width direction.	Do not use widely displaced roll media.
	The media path is not proper for the media used.	Set the proper path for the media. ☞ P.2-17
	The weight of the tension bar is not proper for the media used.	Adjust the weight of the tension bar. ☞ P.2-23
Mist is much generated.	Penetrated ink is floating.	Use the fabric retainer. ☞ The Step 21 of P.2-21 ”Setting a Roll Media” Even when you wish to print exceeding the full width of the media, use the fabric retainer by setting it near the media as much as possible.
		Use a ink receiver spacer. ☞ P.2-8
	The head height is too high.	Make the head height within 3mm. ☞ P.2-30
	The absorption of the mist fan filter is poor.	Perform cleaning of the mist fan filter. ☞ P.4-48

Image Quality Is Poor

This section describes the corrective actions to be taken in case the image quality is not satisfactory. Take appropriate measures to remedy the problems with image quality. If the remedy does not work, contact your distributor or our service office.

Failure phenomenon	Solution
White lines or slight touching of ink occurs (for head moving direction).	**(1)** Execute head cleaning. ☞ P.2-34 **(2)** Perform maintenance of the inside of the station. ☞ P.4-7 **(3)** Execute the [Media correction] function. ☞ P.3-4 **(4)** Change the drawing mode of RIP. ☞ P.3-9
Disagreement in print positions between outward trip and homeward trip.	**(1)** Execute the [Dot position correction] function. ☞ P.4-26
The respective color ink injected by the respective color heads do not properly overlap	**(1)** Execute the [Dot position correction] function. ☞ P.4-26 **(2)** The head height is too high. Use it with making the height within 3mm. ☞ P.2-28
Slanted blocky stripes (moire fringes) are generated.	**(1)** Perform “Media correction” function. ☞ P.3-4 **(2)** Perform “moire alleviation” function. ☞ P.3-21

If an error occurs in 2L ink pack or ink IC

If an error occurs in the 2L ink pack or the ink IC, a warning message is displayed.
Printing, cleaning, and all the other operations that use ink become disabled if warning occurs.
In this case, replace the ink pack immediately.

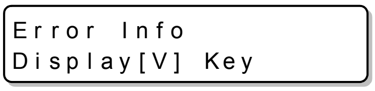
Important!

- Do not leave as it is for a long time with the warning message displayed. The function for preventing nozzle clogging does not operate.
  If nozzles are clogged, the machine must be repaired by our service engineer.
- Do not leave the ink slot without the 2L ink pack inside it. The ink attached to the connector may clot and not be able to be supplied.

Display details of 2L ink pack/ink IC error

You can check the details of the cartridge error with the following operations. (☞ P.5-5)

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

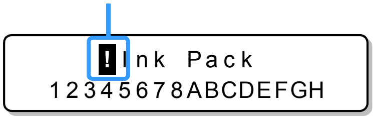


```
Error Info
Display[V] Key
```

2 **Press the ▼ key to display occurred errors in order.**

- When you press the END key, the screen returns to LOCAL.

If there are multiple warnings, this will be inverted to inform you of it.



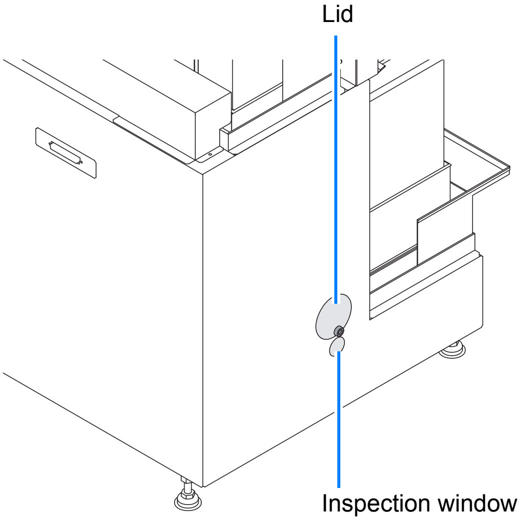
```
!Ink Pack
12345678ABCDEFGH
```

Check method for ink leakage

If ink leakage occurs due to the connector defect of ink pack etc., ink will pool on the tray inside the ink supply unit. (ERROR142 INK LEAK will be displayed on the screen.)
If “INK LEAK” is displayed on the screen, contact a distributor in your district or our office to call for service.
In addition, check ink leak as below:

1 **Open the lid of the inspection window located on the left side surface of the ink supply unit.**

(1) Loosen the finger screw.
(2) Rotate the lid of the inspection window.



2 **Check if ink leak out.**

- Check the tray inside the ink supply unit.
- If ink leak out, you can find ink pool on the tray.
- If you cannot check it because inside the ink supply unit is dark, use a flashlight etc.

3 **Remove all ink that you have set and contact a distributor in your district or our office to call for service.**

Messages and Solutions

Message	Cause	Solution
!Filling	Ink has not been filled up.	Contact our service office or the distributor in your region.
!Ink End 12345678	The ink of the ink pack has been completely used up.	Replace the 2L ink pack corresponding to the displayed color number. (☞ P.1-19)
!Ink Near End 12345678	The ink has been nearly used up.	
!Ink Pack 12345678ABCDEFGH	The 2L ink pack is not set.	Set the 2L ink pack of the displayed number.
!Ink End (Ink Pack) 12345678ABCDEFGH	The ink of the 2L ink pack has been completely used up.	Replace the 2L ink pack of the displayed number. (☞ P.1-19)
!Ink Color Error 12345678ABCDEFGH	The color of ink you set is different from that at the initial filling.	Check that the ink IC of the displayed number is the one that was attached to the 2L ink pack. Then, check the 2L ink pack color of the displayed number.
!Ink Type Error 12345678ABCDEFGH	The type of ink you set is different from that at the initial filling.	
!Ink IC Error 12345678ABCDEFGH	The ink IC of the ink pack cannot be read normally.	Insert the ink IC of the displayed number again. If the same warning message still appears, contact our service office or the distributor in your region.
!Ink Count Error 12345678ABCDEFGH	Because the ink IC was not replaced at ink replacing, the used amount of ink of the 2L ink pack is abnormal.	Replace the ink IC.
!No Ink IC 12345678ABCDEFGH	Ink IC is not set.	Set the ink IC.
!Ink Limit 12345678ABCDEFGH	The specified expiration date of an ink has passed.	Check that the ink IC of the displayed number is the one that was attached to the 2L ink pack. Then, check the expiration date of the 2L ink pack of the displayed number.
!Ink Pack Connector 12345678ABCDEFGH	Life of the connector part of the 2L ink pack has been expired.	If you will continue to use as it is, it may cause ink leakage. Contact our service office or the distributor in your region.
!Sub Tank Remain 12345678	Ink consumption status inside the sub tank is abnormal. (There is a possibility of discharging defect.)	Perform cleaning. (☞ P.2-34)

Warning/Error Messages

If some trouble occurs, the buzzer sounds and the display shows a corresponding error message.
Take appropriate measures to remedy the displayed error.

- If there are multiple troubles, [!] in the display will be inverted to inform you of it. Press the ▼ key to check the contents of troubles.

```
Error Info
Display[V] Key
```

Warning Messages

Message	Cause	Solution
!Pressure Adj.	The pressure in the ink tank is likely to exceed the proper range.	Perform the negative pressure adjustment. (☞ P.4-49)
!Wrong Pressure	The pressure in the ink tank exceeds the proper range.	Perform the negative pressure adjustment. (☞ P.4-49)
!Suction 12345678	Ink was not absorbed because there are dirt in the vicinity of the head and the ink cap.	Perform cleaning of the capping station and the nozzle surface. (☞ P.4-14)
!Wiper Clean Wiper	Time to clean the wiper has come.	Execute the wiper cleaning. (☞ P.4-9)
!Wiper Replace Wiper	Time to replace the wiper with a new one has come.	Replace the wiper with a new one. (☞ P.4-10)
!Mainte. Cover Close The Cover	The maintenance cover is open.	Close the maintenance cover.
!Head Height Check Head Heigh	The head height is not proper. Or, the fabric is floating (the head protection sensor detected an error.)	Check the head height or the status of the fabric you set.
!Lever Check The Lever	The clamp lever is in the upper status.	Push down the clamp lever.
!Temperature Env. Temp is Low	The environmental temperature is outside the temperature range for printing. (Temperature range : 15°C to 30°C 59°F to 86°F)	Adjust the temperature of the installation environment so that it is within the range of 15°C (59°F) to 30°C (86°F).
!Temperature Env. Temp is High		
!Below Operable Temperature	The environmental temperature is below the operable temperature (4°C (39°F)).	Adjust the temperature of the installation environment so that it is 4°C (39°F) and higher.
!Replace Battery	The battery is dead.	Contact our service office or the distributor in your region.
!Ink Low 12345678	Ink for cleaning or ink initial filling is not enough.	Replace the ink pack corresponding to the displayed color number.
!Operation Motor OFF	Motor excitation has been cut off.	**(1)** Close the cover and move the clamp lever down. **(2)** Press the ENTER key to perform the initial operation.
!Operation Media Un-Detection	The media width has not been detected.	Perform the media detection.
!Operation Print Area Short	A smaller size media than the data to be printed has been set.	Set an enough size media for printing.
!X Motor Replace X Motor	The time to replace the X motor.	Contact our service office or the distributor in your region.

Message	Cause	Solution
!Y Motor Replace Y Motor	The time to replace the Y motor.	Contact our service office or the distributor in your region.
!Mist Fan Clean Filter	The time to replace the mist fan filter.	Refer to P.4-48, replace the mist fan filter.
!Lever Check The Lever	The clamp lever is in the upper status.	Push down the clamp lever.
!Media No Media	A leaf media is not properly set.	Set the leaf media properly.
!Take-Up Take-Up Cover Open	The taking-up cover is open.	Close the taking-up cover.
!Media No Media	A leaf media is not properly set.	Set the leaf media properly.
!Take-Up Take-Up Cover Open	The taking-up cover is open.	Close the taking-up cover.
!Take-Up Take-up Limit	Taking-up limit has been detected.	Move down the taking-up tension bar. Check the taking-up direction.
!Take-Up Take-up Wrong	Printed fabric has not been taken up normally.	It is possible that the core set in the taking-up machine has loosened. Check the status of the core.
!Take-Up Take-up DirSW	Taking-up direction switch is in the opposite side.	Check the taking-up direction switch.
!Media End Select :End !Media End Select :Cont. !Media End Media Take Up [V]	The media came away from the feeding tension bar.	**When you wish to suspend printing** →Select “End”. **When you wish to continue to print** →Select “Continue”. • When you select “End”, “Media Take Up [V]” is displayed. If you press the ▼ key, you can take up the media with applying tension.
!Take-Up Take-up Origin	The origin for taking-up has not been detected properly.	The taking-up tension bar may be in the waiting position. Check the taking-up tension bar. The core may loosen. Check the status of the core.
!Feeding Feeding Cover Open	The feeding cover is open.	Close the feeding cover.
!Feeding Feeding Limit	Feeding limit has been detected.	Move down the feeding tension bar. Check the feeding direction or the fabric.
!Feeding Feeding Wrong	The fabric has not been fed normally.	It is possible that the paper core set in the feeding machine has loosened. Check the status of the core.
!Feeding Feeding DirSW	Feeding direction switch is in the opposite side.	Check the feeding direction switch.
!Feeding Feeding Origin	The origin for feeding has not been detected properly.	The feeding tension bar may be in the waiting position. Check the feeding tension bar. The core may loosen. Check the status of the core.
!N.Recovery 1_3_____ END < > Continue	When the operation restriction of the nozzle recovery is ON and the current printing mode is “nozzle recover is invalid”	When you cancel printing, select “END”. When you print continuously, select “Continue”.

Error Messages

When an error message is displayed, eliminate the error according to the chart below.
If the same error message appears again, contact your distributor or our service office.

Error messages	Cause	Solution
ERROR 01 MAIN ROM	An error occurred in the control ROM. (F-ROM)	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 02 MAIN RAM	An error occurred in the control RAM. (S-RAM)	
ERROR 03 POWER +5V	An error occurred on the power supply voltage. (Power supply voltage +5 V)	
ERROR 03 POWER +35V	An error occurred on the power supply voltage. (Power supply voltage +35 V)	
ERROR 04 F-ROM ss	An error occurred in the control ROM. (Various parameters)	
ERROR 05 FPGA nn	An error occurred in the FPGA configuration.	
ERROR 06 UHC ss nnnn	An error occurred in the UHC.	
ERROR 07 DFC ss	An error occurred in the DFC.	
ERROR 07 HEAD VOLTAGE (nnn)	Abnormal power voltage of the head has been detected. (nnn: head line)	
ERROR 07 ■■■■■■■■ TEMP nnnnnn ■■■■	Abnormal temperature of the head has been detected. (nnn: nozzle that has an error)	
ERROR 08 LINEAR ENCODER	An error occurred in detecting the linear encoder.	
ERROR 10 COMMAND	The machine received some data other than command data.	Securely connect the interface cable in position.
ERROR 11 PARAMETER	Any parameter outside the range of acceptable numeric values was received.	Check the output setting of the host computer.
ERROR 12 OFF SCALE	Data outside the area available for printing was received.	Check the printing area.
ERROR 14 COLOR COMMAND	Unsupported color specifying data was received.	Check the output setting of the host computer.
ERROR 16 MRL COMMAND	The received data does not follow the command system set with the machine.	Transmit data that is compatible with the command system using the application supported by this machine.

Error messages	Cause	Solution
ERROR 20 I/F BOARD	An error occurred in the communication between the I/F board and the main PCB.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 21 I/F NONE	The I/F board does not exist.	
ERROR 23 HOST I/F	A time out error occurred in the communication with the host computer.	Securely connect the interface cable in position. Check whether an error has not occurred in the host computer.
ERROR 24 I/F INITIAL	An error occurred in the I/F board initialization.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 25 FULL-SPEED	An error occurred in communication between the host computer and this machine due to the USB2.0 connection. (Full-Speed mode connection)	Check that the host PC supports the USB2.0 interface. (Communication can be resumed without changing any setting. However, it is recommended to use the connection in Highspeed mode.)
ERROR 25 PACKET SIZE OVER	An error occurred in communication between the host computer and this machine due to the USB2.0 connection.	Check that the cable is securely connected. Also, check to see if any error has occurred in the host computer.
ERROR 25 USB PROTOCOL		
ERROR 25 USB ENVIRONMENT		
ERROR 25 USB DATA		
ERROR 34 DATA REMAIN	The function setting has been changed or an unavailable function has been commanded while an unfinished printing job remains in the queue.	Finish printing all the data that has been received by the machine or clear the remaining data, and then try again.
ERROR 41 MOTOR Y	An excessive load was applied to the Y motor.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 43 Y OVER CURRENT	An error due to an excessive current of the Y motor was detected.	
ERROR 44 SCAN RANGE	Scanning was tried on outside the area available for scanning.	
ERROR 45 CAPPING	An error occurred in the capping control.	
ERROR 46 WIPING	An error occurred in the wiper control.	
ERROR 47 STATION	An error occurred in the station control.	

Error messages	Cause	Solution
ERROR 50 MEDIA DETECT	The media width could not be detected.	The reason may be one of the followings: • The positions of the left and the right ends of the media you set are not proper. • The position of the taking-up tension bar is not proper. • The position of the feeding tension bar is not proper. If the same error message appears again even if you have made the machine proper status, contact our service office or the distributor in your region.
ERROR 51 Y ORIGIN	The Y origin has not been detected.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 60 FLUSHING nnnn	A flushing performing time out error occurred.	
ERROR 90 F/W ss	An error has occurred on the firmware.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 140 TANK SENSOR nnnnnnnn	Sub tank sensor error has been detected.	
ERROR 140 INK OVERFLOW	Ink has overflowed.	
ERROR 142 INK LEAK	Ink leakage has been detected.	After removing all 2L eco cases from slots, contact our service office or the distributor in your region.
ERROR 143 INK SLOT SOLENOID	An error of the valve solenoid power voltage of the ink slot has been detected.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 147 INK SUPPLY (n)	Ink supply from the 2L ink pack could not be performed.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 148 SUCTION nnnnnnnn	Ink could not be absorbed.	
ERROR 200 ■ ■ ■ ■ ■ ■ ■ ■ HEAD MEMORY ■ ■ ■ ■	An error occurred in EEPROM embedded in the head.	
ERROR 204 SERIALIZER	Data communication error occurred between the head and the UHC board.	

Error messages	Cause	Solution
ERROR 40 MOTOR X	An excessive load was applied to the X motor.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 42 X OVER CURRENT	An error due to an excessive current of the X motor was detected.	
ERROR 67 FEEDING UNIT NONE	The feeding unit is not connected.	Turn OFF the power supply and then check the cable of the feeding unit. If the same error message appears again even if the cable connection has no error, contact our service office or the distributor in your region.
ERROR 67 TAKE-UP UNIT NONE	The taking-up unit is not connected.	Turn OFF the power supply and then check the cable of the taking-up unit. If the same error message appears again even if the cable connection has no error, contact our service office or the distributor in your region.
ERROR 67 FEEDING SENSOR	The sensor status of the feeding unit is abnormal.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
ERROR 67 TAKE-UP SENSOR	The sensor status of the taking-up unit is abnormal.	

Chapter 6
Appendix

This chapter

contains the lists of the specifications and functions of this machine.

Main Body Specifications 6-2
Ink Specifications 6-4
Inquiry Sheet 6-5
Function Flowchart 6-6

Main Body Specifications

Item		Tx400-1800D
Printing head	Method	Drop-on-demand piezoelectric print heads
	Specification	Twelve-heads (4 x 3 lines, Stagger arrangement)
Resolution		300, 450, 600, 900, 1200 dpi
Printing mode	8-color mode	300 x 300 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 300 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 300 x 600 dpi : 4 / 8 / 16 pass, Unidirection / bidirection 450 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 450 x 600 dpi : 4 / 8 / 16 pass, Unidirection / bidirection 600 x 300 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 600 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 600 x 600 dpi : 4 / 8 / 16 pass, Unidirection / bidirection 600 x 900 dpi : 6 / 12 / 24 pass, Unidirection / bidirection 900 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 900 x 900 dpi : 6 / 12 / 24 pass, Unidirection / bidirection 1200 x 600 dpi : 4 / 8 / 16 pass, Unidirection / bidirection 1200 x 900 dpi : 6 / 12 / 24 pass, Unidirection / bidirection 1200 x 1200 dpi : 8 / 16 / 32 pass, Unidirection / bidirection
	4-color mode	300 x 300 dpi : 1 / 2 / 4 pass, Unidirection / bidirection 300 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 300 x 600 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 450 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 450 x 600 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 600 x 300 dpi : 1 / 2 / 4 pass, Unidirection / bidirection 600 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 600 x 600 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 600 x 900 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 900 x 450 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 900 x 900 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 1200 x 600 dpi : 2 / 4 / 8 pass, Unidirection / bidirection 1200 x 900 dpi : 3 / 6 / 12 pass, Unidirection / bidirection 1200 x 1200 dpi : 4 / 8 / 16 pass, Unidirection / bidirection
Usable inks	Acidic dye ink	Available at a later date
	Reaction dye ink	K,C,M,Y,Lc,Lm,Lk,Bl,R,Or
	Sublimation dye ink	K,C,M,Y,Lc,Lm,Bl,Lbl
	Disperse dye ink	Available at a later date
	Textile pigment ink	K, C, M, Y, Lc, Lm, Bl, Or
Ink set	8-color mode	2 ink packs per 1 color
	4-color mode	4 ink packs per 1 color
Ink supply		Supply by toggle switching with 2 ink pack sets Ink pack replacement method
Amount of supplied ink		8-color ink set (excluding textile pigment ink) 2L ink pack x 2 per 1 color, 4L/color 4-color ink set 2L ink pack x 4 per 1 color, 8L/color
Usable media		Polyester, cotton, silk, transfer paper etc.
Maximum Printing width		1850mm

Item		Tx400-1800D
Roll media size	Maximum width	1860mm
	Minimum width	210mm
	Thickness	7.0mm or less
	Roll outside diameter	ϕ 270mmor less
	Roll weight	38kg or less
	Roll inside diameter	1.5 to 3 inch
	Print side	Regardless of faces out and in
	Rolling-up processing	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.
Printing margin		Front edge up to taking-up machine set : 2.3m Rear edge of feeding machine paper core removing : 1.6m
Distance accuracy	Absolute accuracy	± 0.The larger of the two: 5 mm or ± 0.3% of a specified distance However, it depends on the feeding/the taking-up machine.
	Reproducibility	
Rectangular accuracy		± 0.5 mm / 1000 mm
Media skew		5 mm or less / 10 m (In case the fabric is aligned.)
Head height adjustment		Variable between 1.3mm and 7mm from the lower face of the media
Waste ink tank		Bottle type 10 liters
Interface		USB 2.0
Command		MRL-III (MIMAKI original command)
Noise	During standby	Less than 58 dB (FAST-A, back and forth and around.)
	Continuous operation noise	Less than 65 dB
	Noise during discontinuous printing	Less than 70 dB
Safety standards to be met		VCCI-Class A, FCC-Class A, UL 60950-1, CE Marking (EMC Directive, Low Voltage Directive), CB Report, and RoHS Directive
Power specifications		Single phase AC200 to 240 ± 10% 7.5A or less 50/60Hz ± 1Hz
Power consumption		1500 VA or less
Installation environment	Allowable temperature	15 °C to 30 °C (59°F to 86°F)
	Relative humidity	35 to 65% Rh (with no dew condensation)
	Accuracy-ensuring temperature	20 °C to 25 °C (68°F to 77°F)
	Temperature gradient	± 10 °C (18°F) / h or less
	Dust	Equivalent to the normal office level
Weight		500kg or less
Outside dimensions		4300mm(W) x 1550mm(D) x 1600mm(H) (including ink station and projecting point)

Ink Specifications

Item		
Form		Dedicated ink pack
Color	Acidic dye ink	Available at a later date
	Reaction dye ink	Black /Cyan /Magenta /Yellow /Light cyan /Light magemta /Light brack /Blue/ Red/Orange
	Sublimation dye ink	Black /Cyan /Magenta /Yellow /Light cyan /Light magemta /Blue/ Light blue
	Disperse dye ink	Available at a later date
	Textile pigment ink	Black /Cyan /Magenta /Yellow /Light cyan /Light magenta /Blue /Orange
Amount of supplied ink		2 liter
Shelf life		Written on the ink pack. Within six months from unsealing, or within valid duration written on the ink pack
Storage temperature	During storage	0 °C to 40 °C (32°F to 104°F) (For 40 °C (104°F), within one month.)
	During transportation	0 °C to 40 °C (32°F to 140°F) (For 60 °C (140°F), within 120 hours. For 40 °C (104°F), within one month.)

Important!

- Do not disassemble the ink packs or refill them with ink.
- Ink may freeze if left in a cold place for a long time.
- If ink has been frozen, unfreeze it spending one day and longer in the room temperature (25 °C (77°F)) and then use.

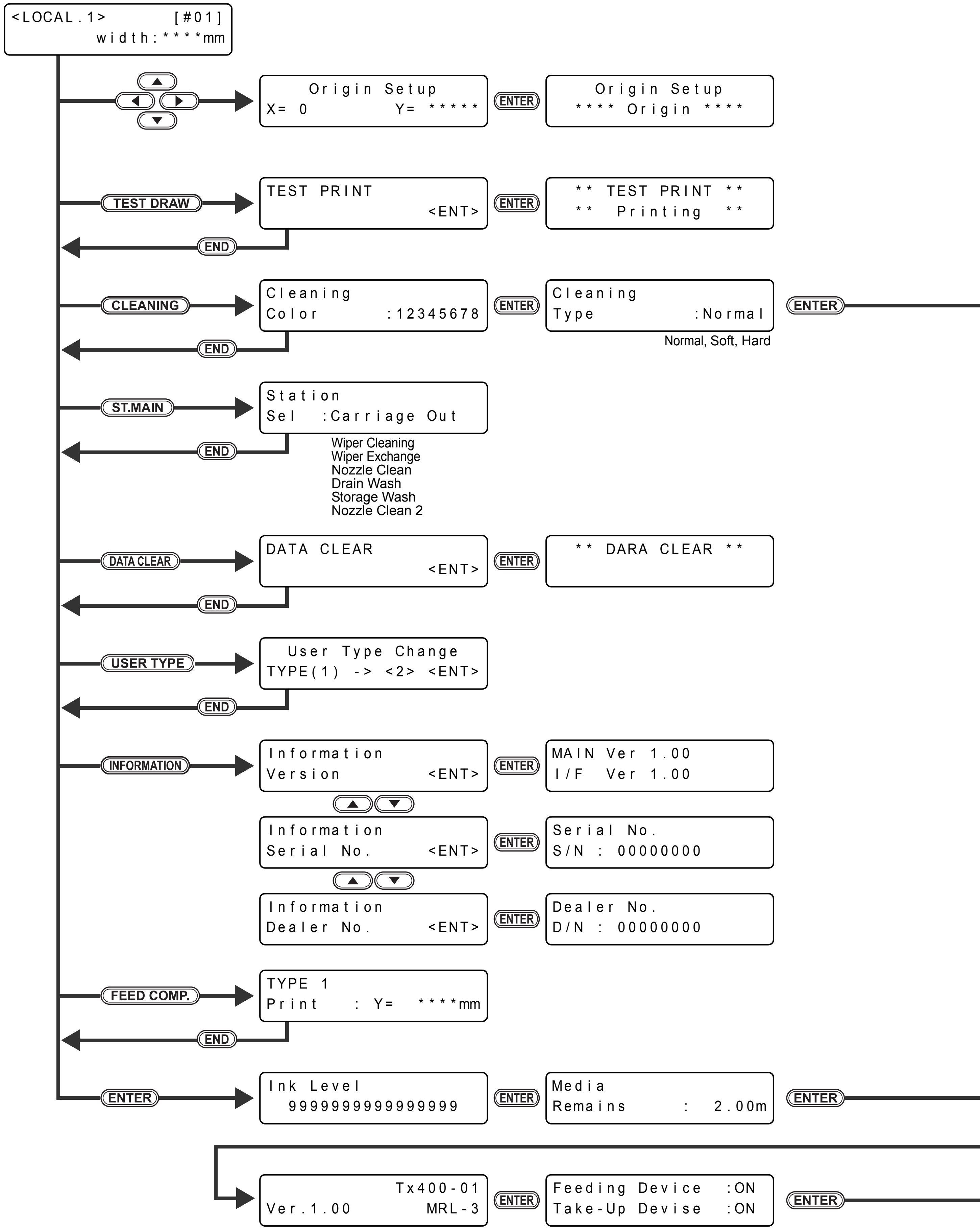
Inquiry Sheet

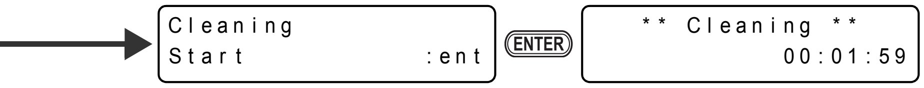
Use this sheet for troubles and abnormal functioning of the machine.
Fill in the following necessary items and fax the sheet to our service office.

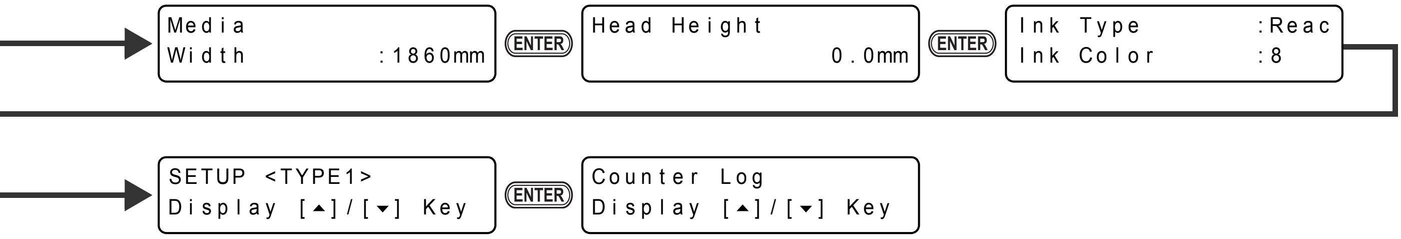
Company name	
Person in charge	
Phone number	
Machine model	
Used OS	
Machine information[*1]	
Error messages	
Inquiry details	

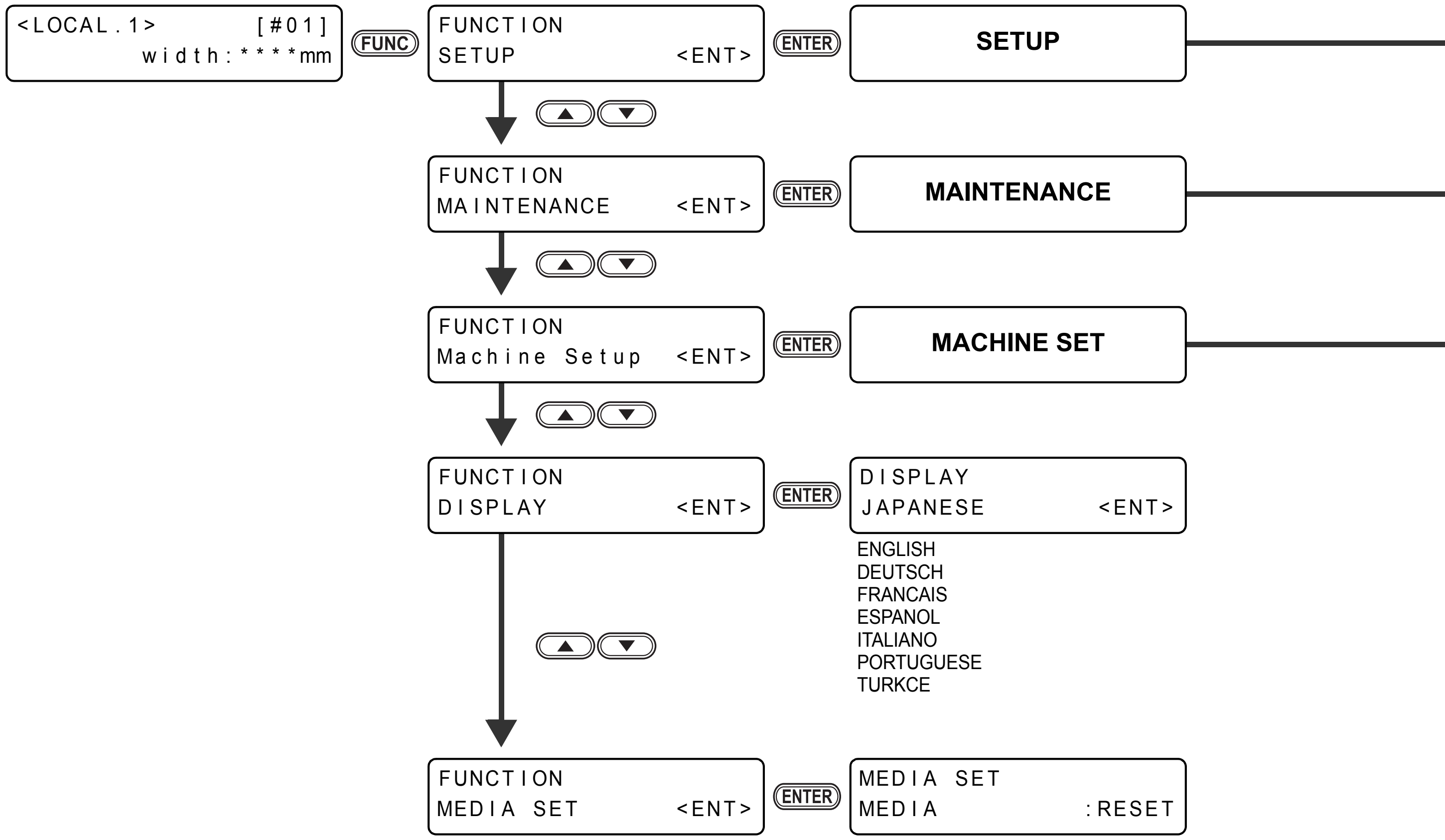
[*1] See “Confirming Machine Information” (☞ P.3-41) of "Chapter 3 Extended Functions " and fill in the sheet.

Function Flowchart

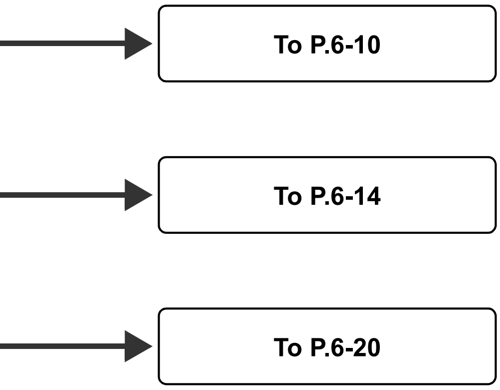

<LOCAL.1> [#01]
width:****mm
Origin Setup
X= 0 Y= *****
ENTER
Origin Setup
**** Origin ****
TEST DRAW
TEST PRINT
<ENT>
ENTER
** TEST PRINT **
** Printing **
END
CLEANING
Cleaning
Color :12345678
ENTER
Cleaning
Type :Normal
ENTER
Normal, Soft, Hard
END
ST.MAIN
Station
Sel :Carriage Out
Wiper Cleaning
Wiper Exchange
Nozzle Clean
Drain Wash
Storage Wash
Nozzle Clean 2
END
DATA CLEAR
DATA CLEAR
<ENT>
ENTER
** DARA CLEAR **
END
USER TYPE
User Type Change
TYPE(1) -> <2> <ENT>
END
INFORMATION
Information
Version <ENT>
ENTER
MAIN Ver 1.00
I/F Ver 1.00
Information
Serial No. <ENT>
ENTER
Serial No.
S/N : 00000000
Information
Dealer No. <ENT>
ENTER
Dealer No.
D/N : 00000000
FEED COMP.
TYPE 1
Print : Y= ****mm
END
ENTER
Ink Level
9999999999999999
ENTER
Media
Remains : 2.00m
ENTER
Tx400-01
Ver.1.00 MRL-3
ENTER
Feeding Device :ON
Take-Up Devise :ON
ENTER

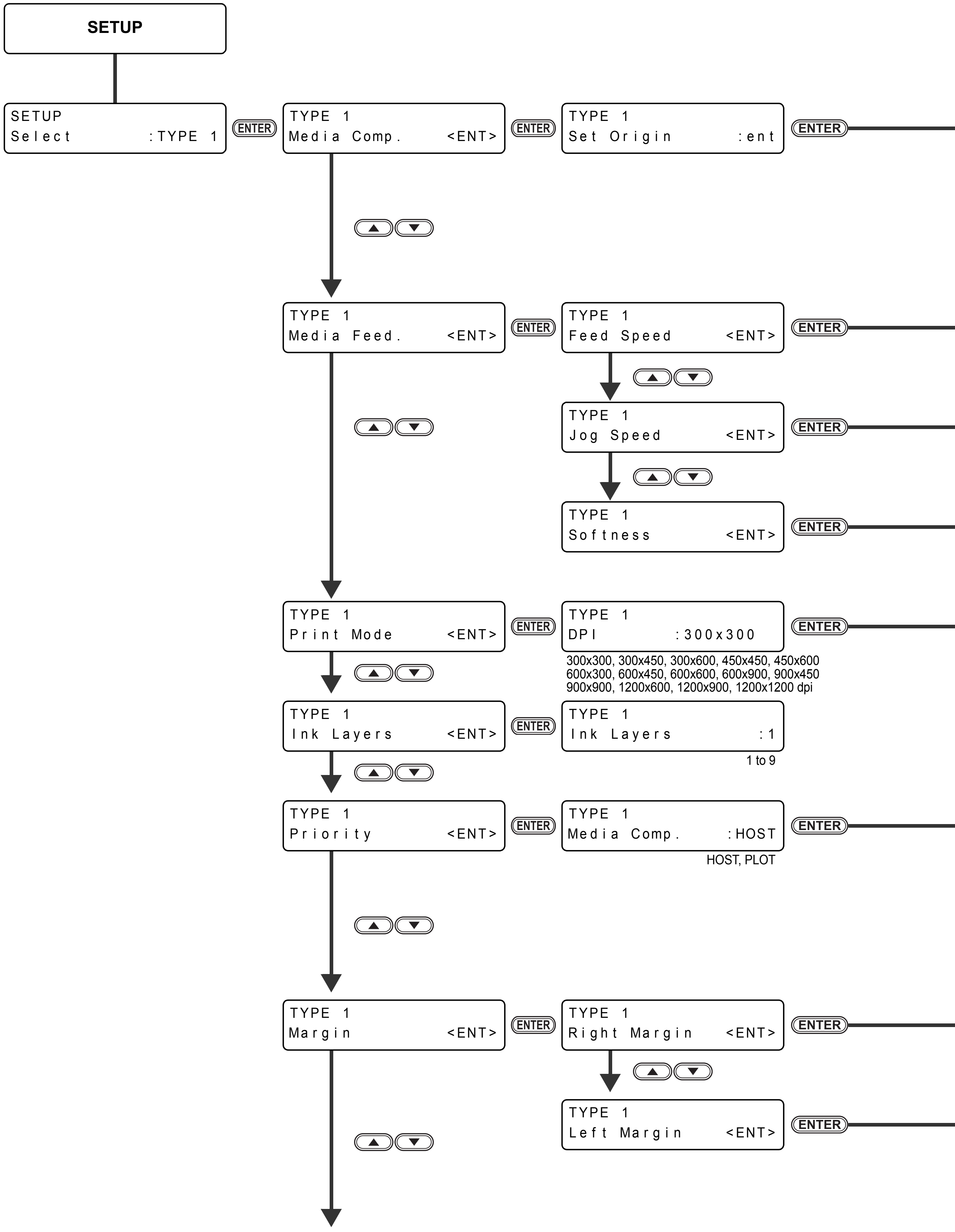

Cleaning
Start :ent
ENTER
** Cleaning **
00:01:59


Media
Width :1860mm
ENTER
Head Height
0.0mm
ENTER
Ink Type :Reac
Ink Color :8
SETUP <TYPE1>
Display [▲]/[▼] Key
ENTER
Counter Log
Display [▲]/[▼] Key

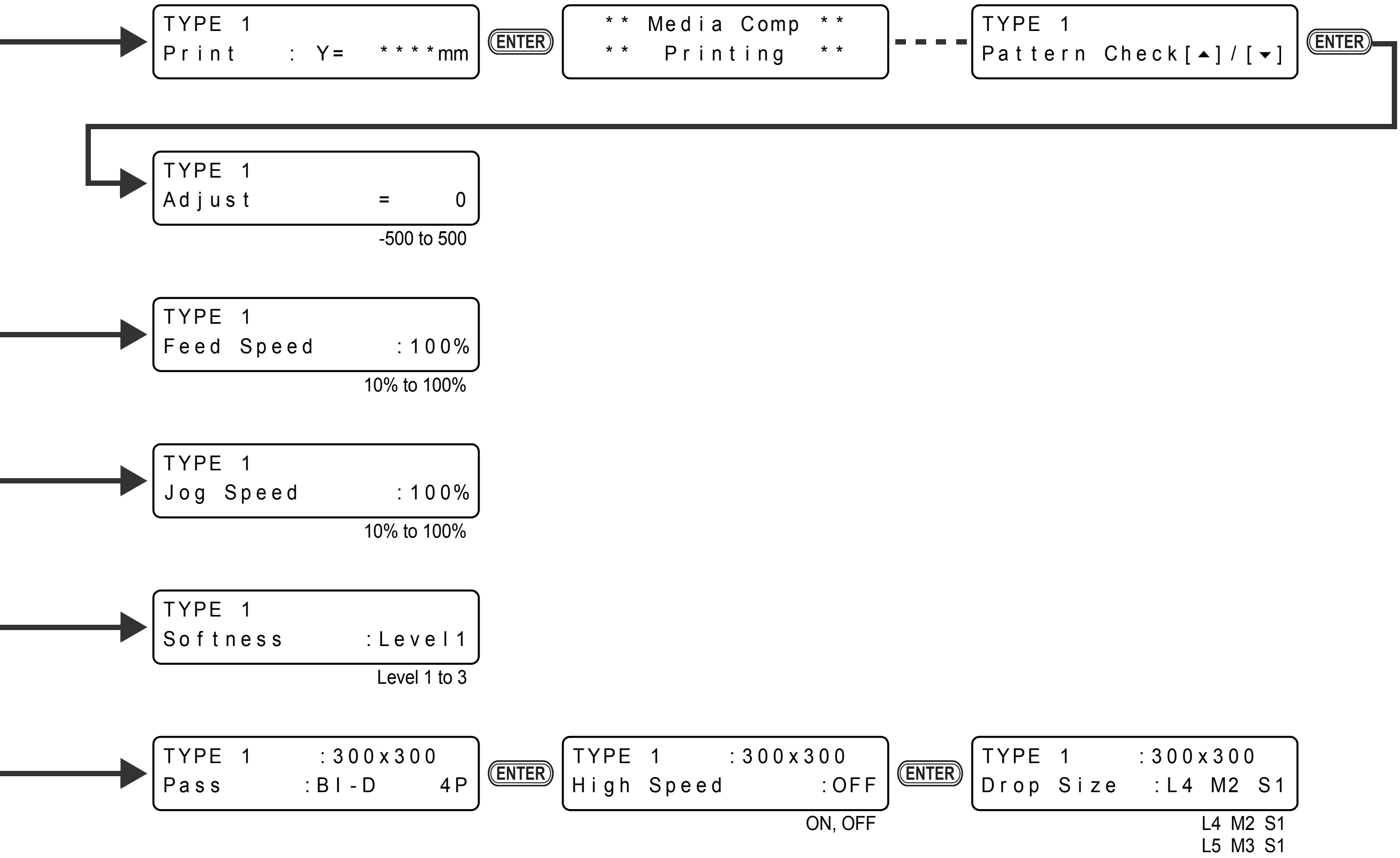


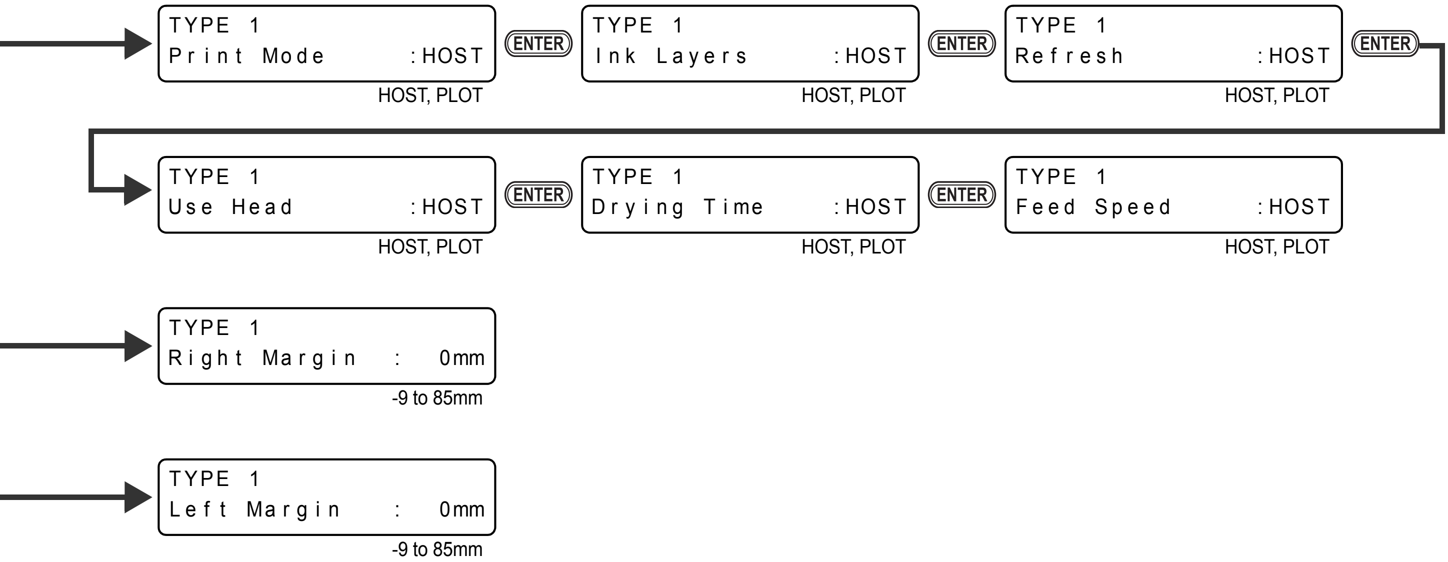
<LOCAL.1> [#01]
width:****mm
FUNC
FUNCTION
SETUP <ENT>
ENTER
SETUP
FUNCTION
MAINTENANCE <ENT>
ENTER
MAINTENANCE
FUNCTION
Machine Setup <ENT>
ENTER
MACHINE SET
FUNCTION
DISPLAY <ENT>
ENTER
DISPLAY
JAPANESE <ENT>
ENGLISH
DEUTSCH
FRANCAIS
ESPANOL
ITALIANO
PORTUGUESE
TURKCE
FUNCTION
MEDIA SET <ENT>
ENTER
MEDIA SET
MEDIA :RESET


To P.6-10
To P.6-14
To P.6-20

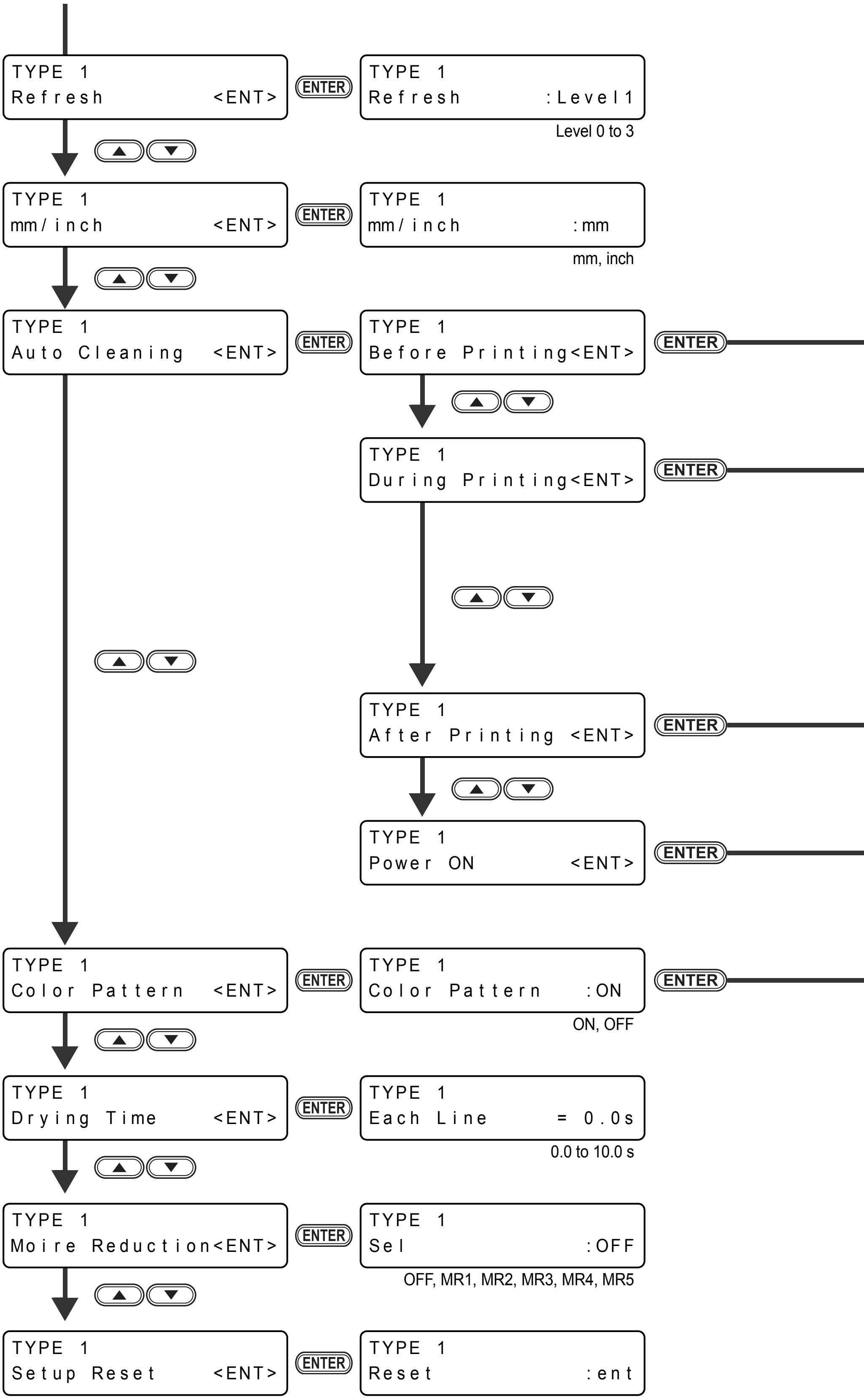

SETUP
SETUP Select :TYPE 1
ENTER
TYPE 1 Media Comp. <ENT>
ENTER
TYPE 1 Set Origin :ent
ENTER
▲ ▼
TYPE 1 Media Feed. <ENT>
ENTER
TYPE 1 Feed Speed <ENT>
ENTER
▲ ▼
TYPE 1 Jog Speed <ENT>
ENTER
▲ ▼
TYPE 1 Softness <ENT>
ENTER
▲ ▼
TYPE 1 Print Mode <ENT>
ENTER
TYPE 1 DPI :300x300
ENTER
300x300, 300x450, 300x600, 450x450, 450x600
600x300, 600x450, 600x600, 600x900, 900x450
900x900, 1200x600, 1200x900, 1200x1200 dpi
▲ ▼
TYPE 1 Ink Layers <ENT>
ENTER
TYPE 1 Ink Layers :1
1 to 9
▲ ▼
TYPE 1 Priority <ENT>
ENTER
TYPE 1 Media Comp. :HOST
ENTER
HOST, PLOT
▲ ▼
TYPE 1 Margin <ENT>
ENTER
TYPE 1 Right Margin <ENT>
ENTER
▲ ▼
TYPE 1 Left Margin <ENT>
ENTER
▲ ▼

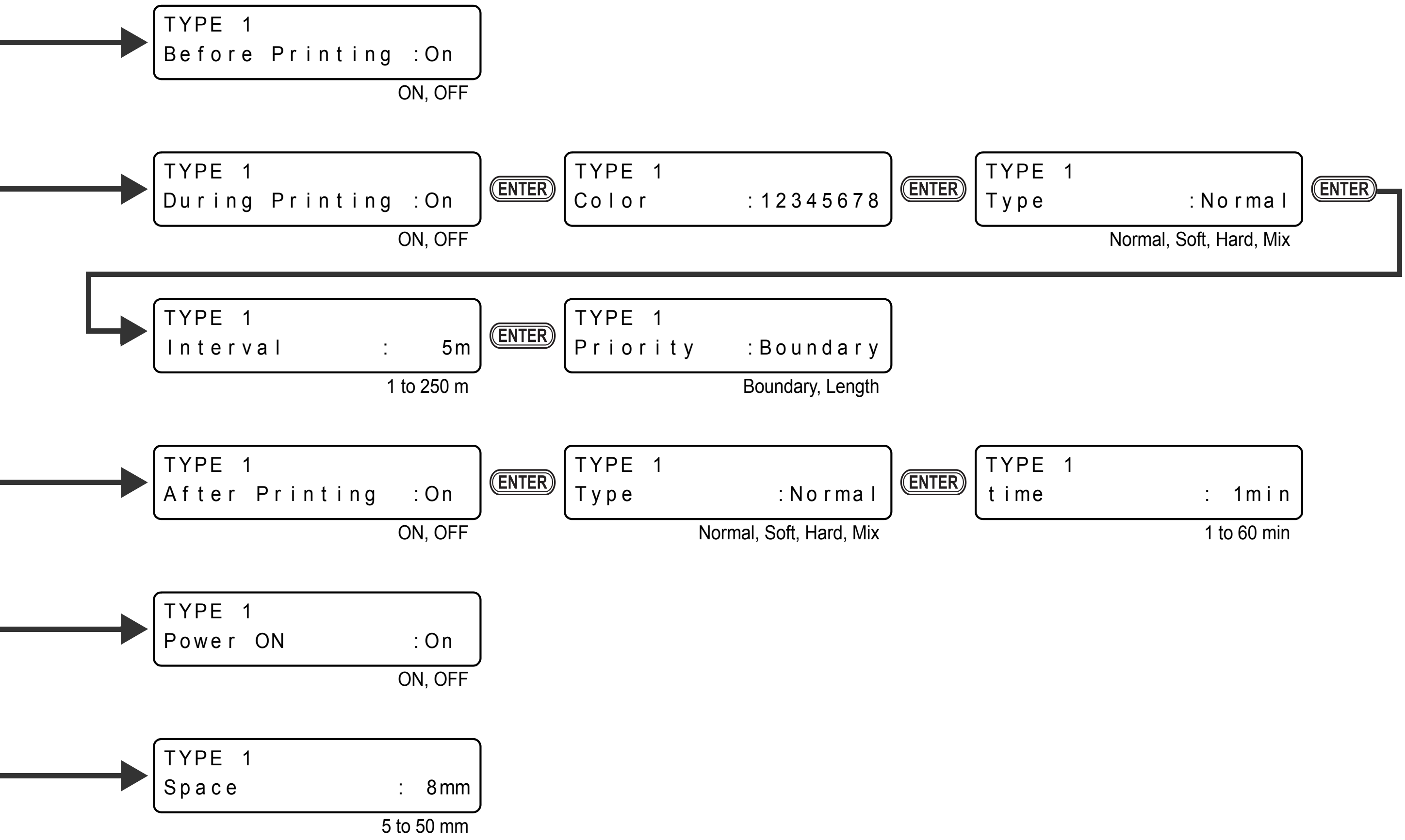
To P.6-12

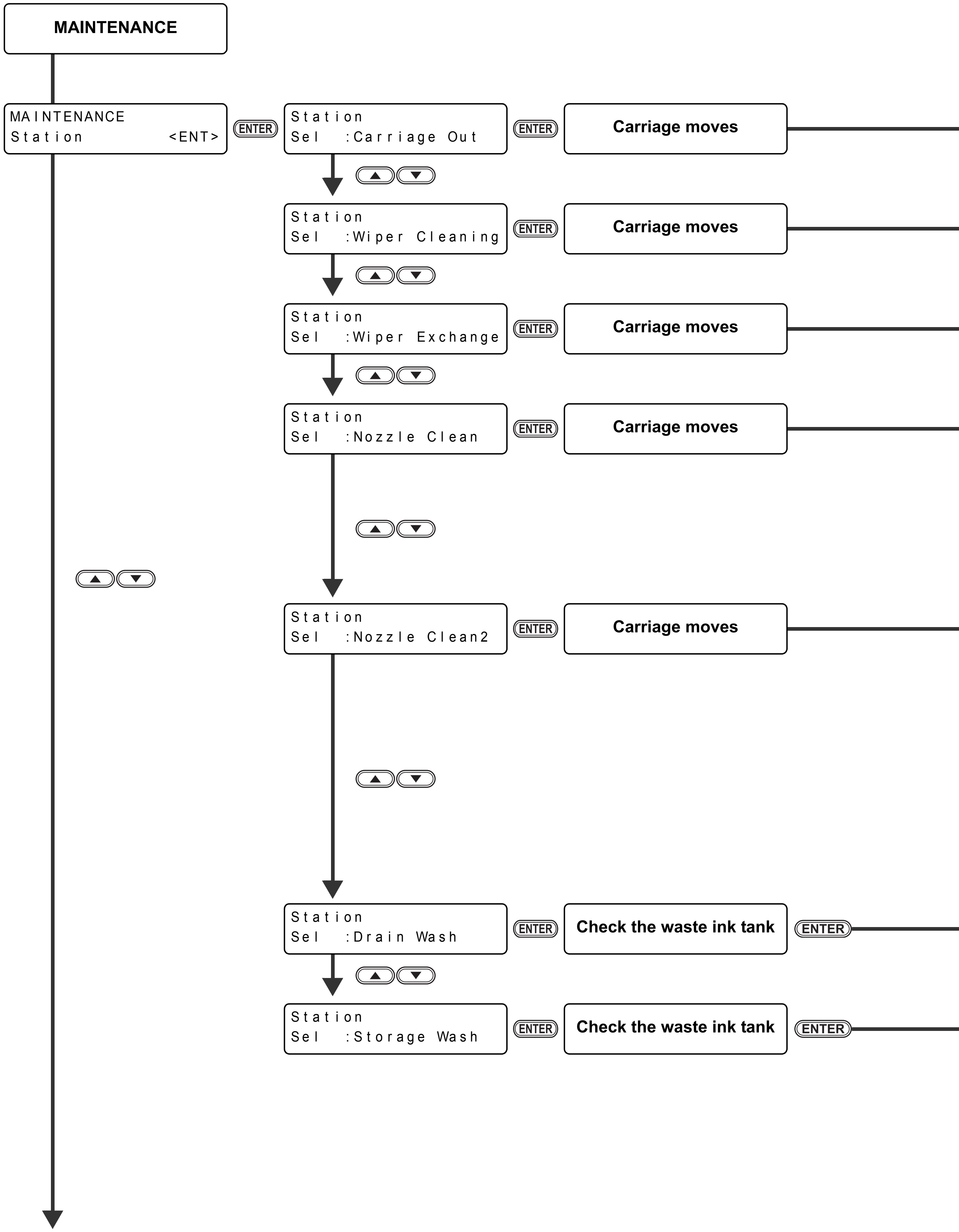

TYPE 1
Print : Y= ****mm
ENTER
** Media Comp **
** Printing **
TYPE 1
Pattern Check[▲]/[▼]
ENTER
TYPE 1
Adjust = 0
-500 to 500
TYPE 1
Feed Speed :100%
10% to 100%
TYPE 1
Jog Speed :100%
10% to 100%
TYPE 1
Softness :Level1
Level 1 to 3
TYPE 1 :300x300
Pass :Bl-D 4P
ENTER
TYPE 1 :300x300
High Speed :OFF
ON, OFF
ENTER
TYPE 1 :300x300
Drop Size :L4 M2 S1
L4 M2 S1
L5 M3 S1


TYPE 1
Print Mode :HOST
HOST, PLOT
ENTER
TYPE 1
Ink Layers :HOST
HOST, PLOT
ENTER
TYPE 1
Refresh :HOST
HOST, PLOT
ENTER
TYPE 1
Use Head :HOST
HOST, PLOT
ENTER
TYPE 1
Drying Time :HOST
HOST, PLOT
ENTER
TYPE 1
Feed Speed :HOST
HOST, PLOT
TYPE 1
Right Margin : 0mm
-9 to 85mm
TYPE 1
Left Margin : 0mm
-9 to 85mm

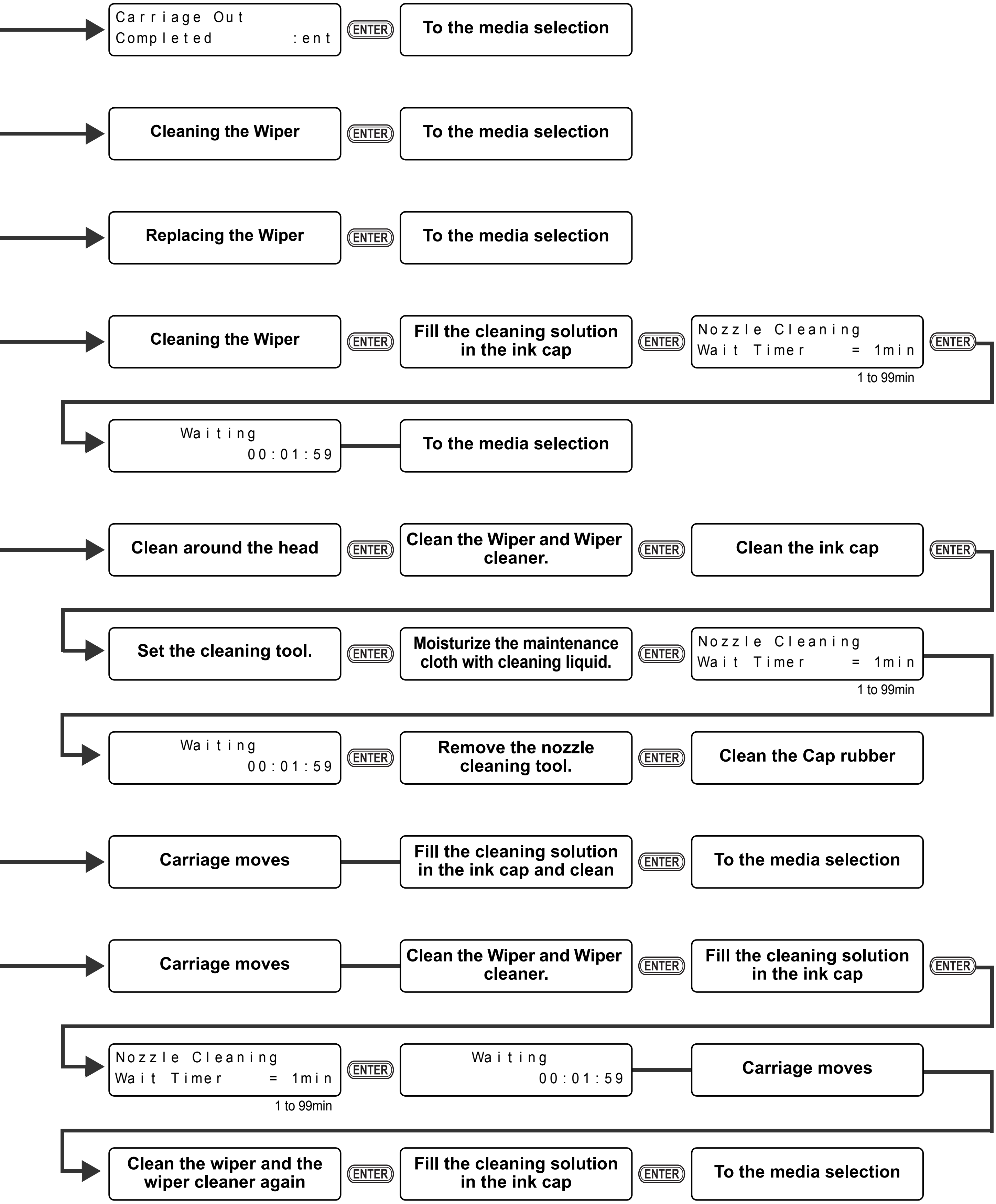
From P.6-10

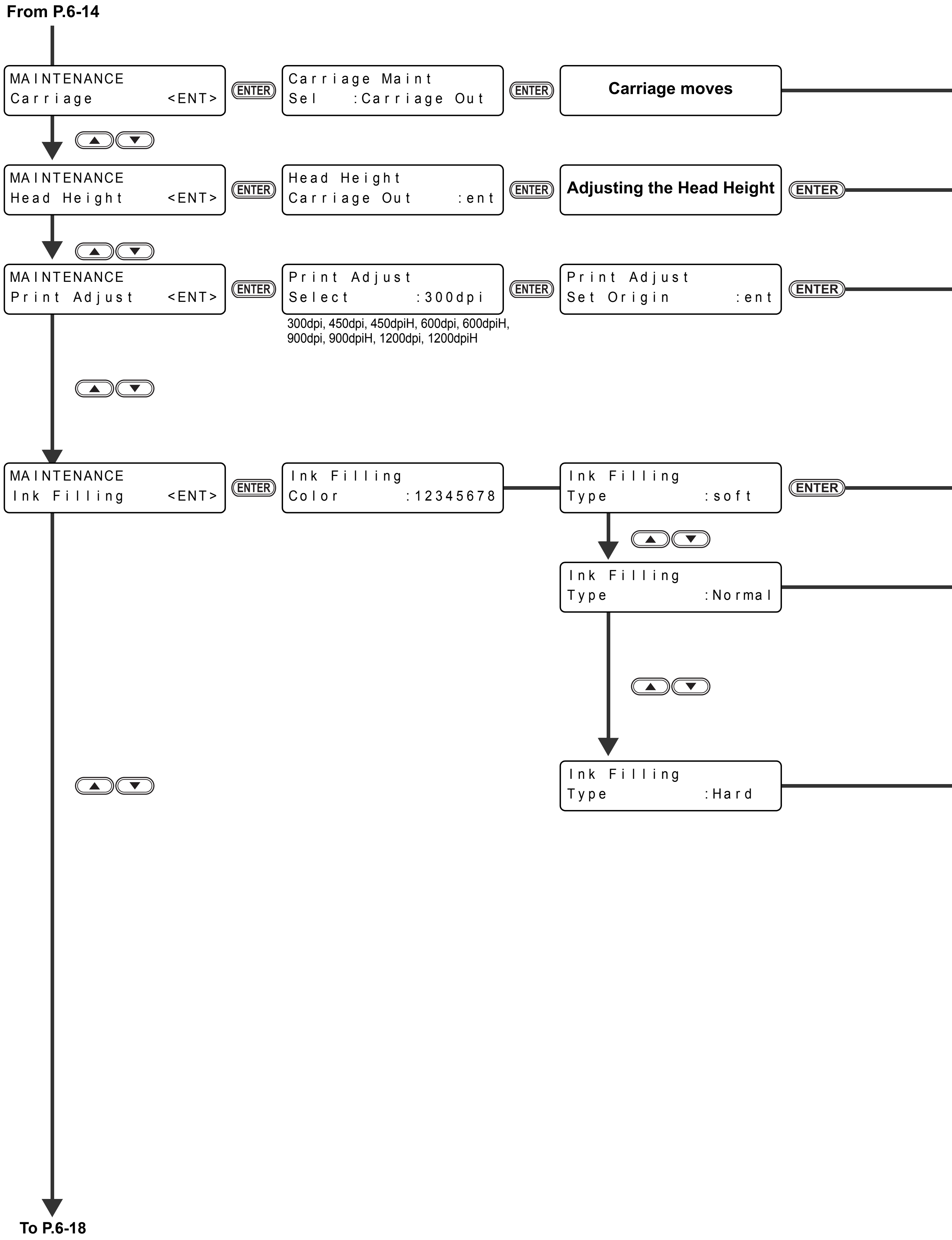

TYPE 1
Refresh <ENT>
ENTER
TYPE 1
Refresh :Level1
Level 0 to 3
TYPE 1
mm/inch <ENT>
ENTER
TYPE 1
mm/inch :mm
mm, inch
TYPE 1
Auto Cleaning <ENT>
ENTER
TYPE 1
Before Printing<ENT>
ENTER
TYPE 1
During Printing<ENT>
ENTER
TYPE 1
After Printing <ENT>
ENTER
TYPE 1
Power ON <ENT>
ENTER
TYPE 1
Color Pattern <ENT>
ENTER
TYPE 1
Color Pattern :ON
ENTER
ON, OFF
TYPE 1
Drying Time <ENT>
ENTER
TYPE 1
Each Line = 0.0s
0.0 to 10.0 s
TYPE 1
Moire Reduction<ENT>
ENTER
TYPE 1
Sel :OFF
OFF, MR1, MR2, MR3, MR4, MR5
TYPE 1
Setup Reset <ENT>
ENTER
TYPE 1
Reset :ent

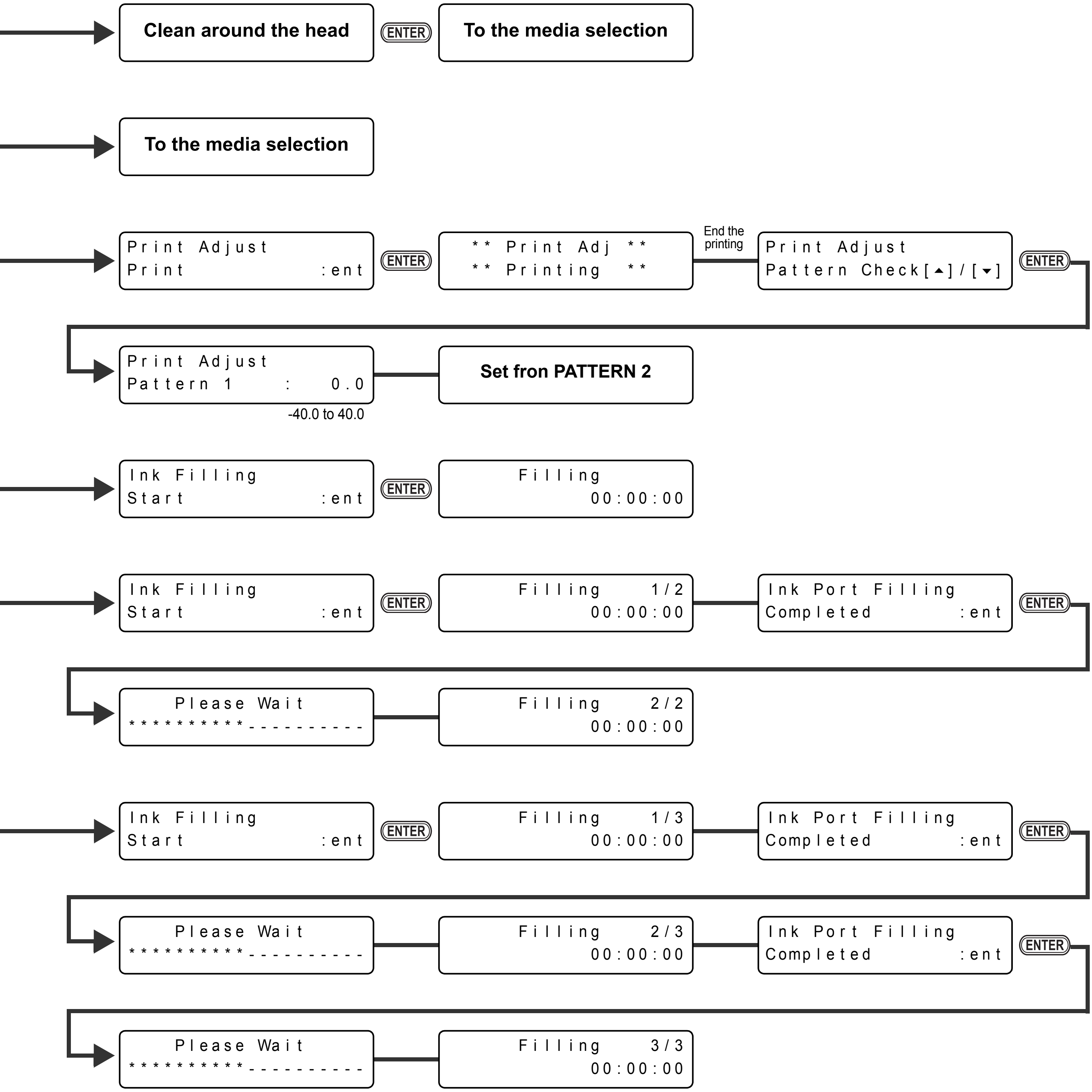

TYPE 1
Before Printing :On
ON, OFF
TYPE 1
During Printing :On
ON, OFF
ENTER
TYPE 1
Color :12345678
ENTER
TYPE 1
Type :Normal
Normal, Soft, Hard, Mix
ENTER
TYPE 1
Interval : 5m
1 to 250 m
ENTER
TYPE 1
Priority :Boundary
Boundary, Length
TYPE 1
After Printing :On
ON, OFF
ENTER
TYPE 1
Type :Normal
Normal, Soft, Hard, Mix
ENTER
TYPE 1
time : 1min
1 to 60 min
TYPE 1
Power ON :On
ON, OFF
TYPE 1
Space : 8mm
5 to 50 mm


MAINTENANCE
MAINTENANCE
Station <ENT>
ENTER
Station
Sel :Carriage Out
ENTER
Carriage moves
▲ ▼
Station
Sel :Wiper Cleaning
ENTER
Carriage moves
▲ ▼
Station
Sel :Wiper Exchange
ENTER
Carriage moves
▲ ▼
Station
Sel :Nozzle Clean
ENTER
Carriage moves
▲ ▼
▲ ▼
Station
Sel :Nozzle Clean2
ENTER
Carriage moves
▲ ▼
Station
Sel :Drain Wash
ENTER
Check the waste ink tank
ENTER
▲ ▼
Station
Sel :Storage Wash
ENTER
Check the waste ink tank
ENTER

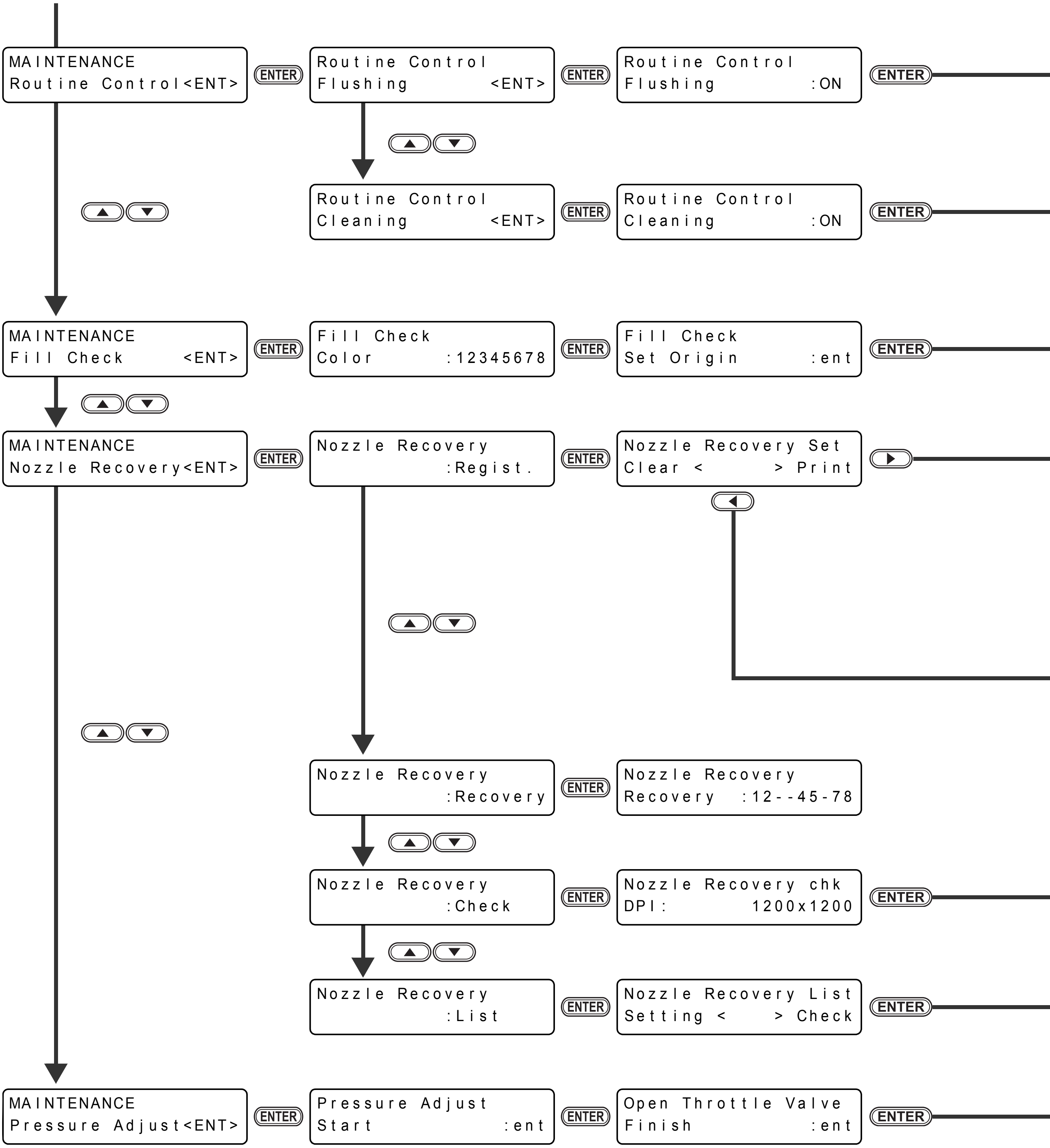
To P.6-16


Carriage Out
Completed :ent
ENTER
To the media selection
Cleaning the Wiper
ENTER
To the media selection
Replacing the Wiper
ENTER
To the media selection
Cleaning the Wiper
ENTER
Fill the cleaning solution in the ink cap
ENTER
Nozzle Cleaning
Wait Timer = 1min
1 to 99min
ENTER
Waiting
00:01:59
To the media selection
Clean around the head
ENTER
Clean the Wiper and Wiper cleaner.
ENTER
Clean the ink cap
ENTER
Set the cleaning tool.
ENTER
Moisturize the maintenance cloth with cleaning liquid.
ENTER
Nozzle Cleaning
Wait Timer = 1min
1 to 99min
Waiting
00:01:59
ENTER
Remove the nozzle cleaning tool.
ENTER
Clean the Cap rubber
Carriage moves
Fill the cleaning solution in the ink cap and clean
ENTER
To the media selection
Carriage moves
Clean the Wiper and Wiper cleaner.
ENTER
Fill the cleaning solution in the ink cap
ENTER
Nozzle Cleaning
Wait Timer = 1min
1 to 99min
ENTER
Waiting
00:01:59
Carriage moves
Clean the wiper and the wiper cleaner again
ENTER
Fill the cleaning solution in the ink cap
ENTER
To the media selection


From P.6-14
MAINTENANCE
Carriage <ENT>
ENTER
Carriage Maint
Sel :Carriage Out
ENTER
Carriage moves
MAINTENANCE
Head Height <ENT>
ENTER
Head Height
Carriage Out :ent
ENTER
Adjusting the Head Height
ENTER
MAINTENANCE
Print Adjust <ENT>
ENTER
Print Adjust
Select :300dpi
300dpi, 450dpi, 450dpiH, 600dpi, 600dpiH,
900dpi, 900dpiH, 1200dpi, 1200dpiH
ENTER
Print Adjust
Set Origin :ent
ENTER
MAINTENANCE
Ink Filling <ENT>
ENTER
Ink Filling
Color :12345678
Ink Filling
Type :soft
ENTER
Ink Filling
Type :Normal
Ink Filling
Type :Hard
To P.6-18


Clean around the head
ENTER
To the media selection
To the media selection
Print Adjust
Print :ent
ENTER
** Print Adj **
** Printing **
End the printing
Print Adjust
Pattern Check[▲]/[▼]
ENTER
Print Adjust
Pattern 1 : 0.0
-40.0 to 40.0
Set fron PATTERN 2
Ink Filling
Start :ent
ENTER
Filling
00:00:00
Ink Filling
Start :ent
ENTER
Filling 1/2
00:00:00
Ink Port Filling
Completed :ent
ENTER
Please Wait
**********----------
Filling 2/2
00:00:00
Ink Filling
Start :ent
ENTER
Filling 1/3
00:00:00
Ink Port Filling
Completed :ent
ENTER
Please Wait
**********----------
Filling 2/3
00:00:00
Ink Port Filling
Completed :ent
ENTER
Please Wait
**********----------
Filling 3/3
00:00:00

From P.6-16



```
MAINTENANCE
Routine Control<ENT>
```

```
Routine Control
Flushing          <ENT>
```

```
Routine Control
Flushing            :ON
```

```
Routine Control
Cleaning          <ENT>
```

```
Routine Control
Cleaning            :ON
```

```
MAINTENANCE
Fill Check        <ENT>
```

```
Fill Check
Color        :12345678
```

```
Fill Check
Set Origin         :ent
```

```
MAINTENANCE
Nozzle Recovery<ENT>
```

```
Nozzle Recovery
             :Regist.
```

```
Nozzle Recovery Set
Clear <        > Print
```

```
Nozzle Recovery
             :Recovery
```

```
Nozzle Recovery
Recovery   :12--45-78
```

```
Nozzle Recovery
             :Check
```

```
Nozzle Recovery chk
DPI:          1200x1200
```

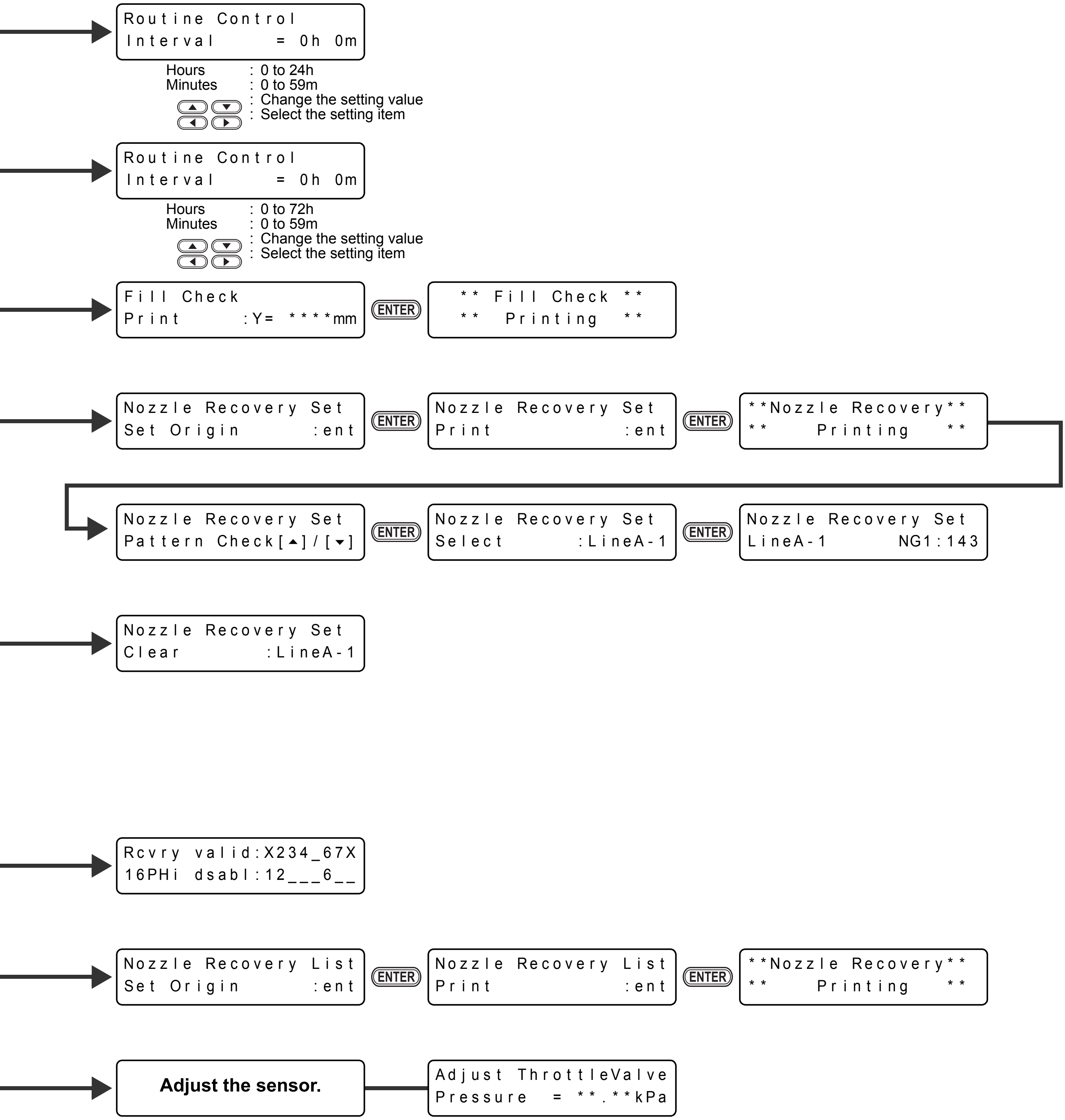
```
Nozzle Recovery
             :List
```

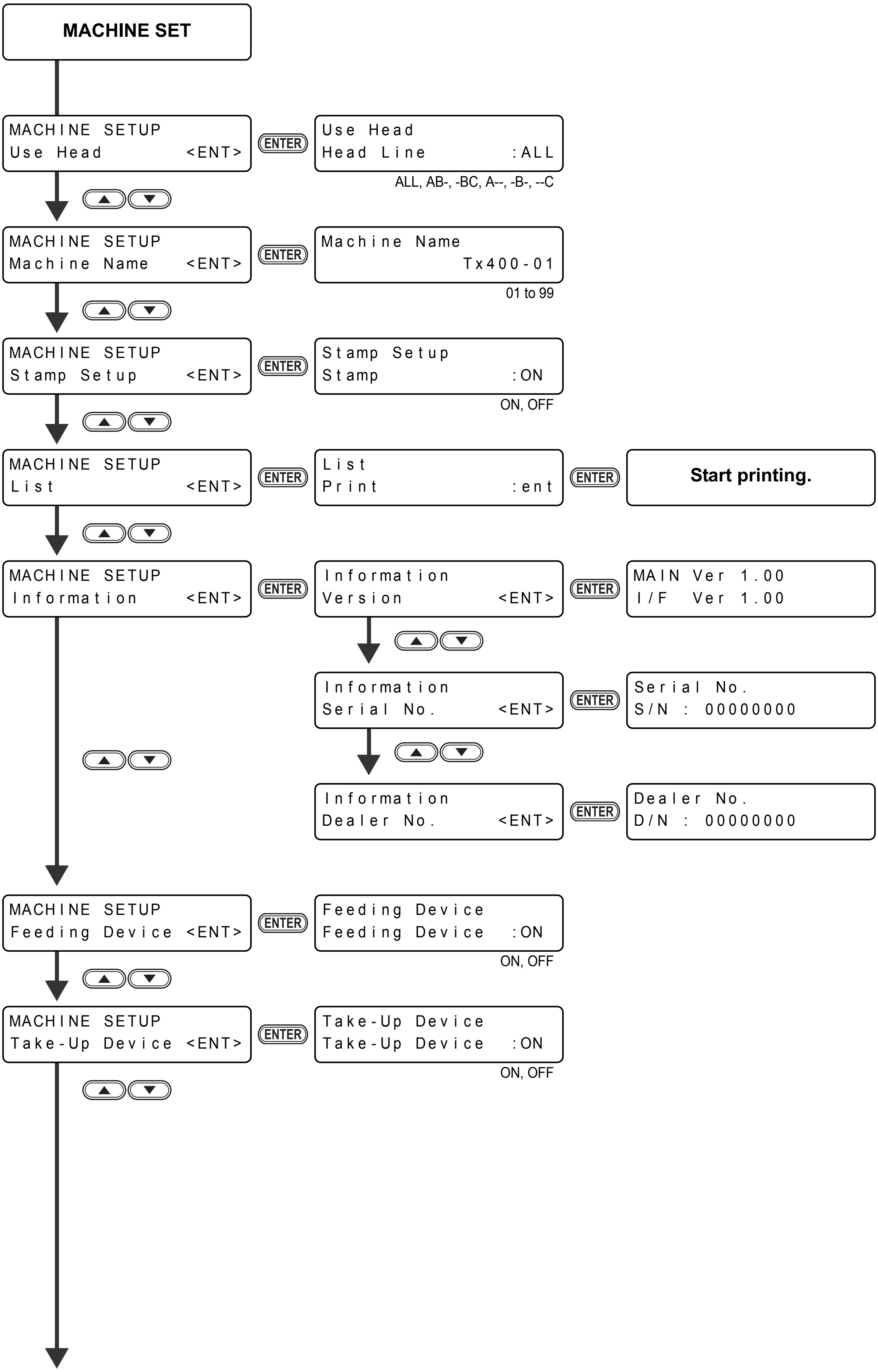
```
Nozzle Recovery List
Setting <      > Check
```

```
MAINTENANCE
Pressure Adjust<ENT>
```

```
Pressure Adjust
Start              :ent
```

```
Open Throttle Valve
Finish             :ent
```


Routine Control
Interval = 0h 0m
Hours : 0 to 24h
Minutes : 0 to 59m
: Change the setting value
: Select the setting item
Routine Control
Interval = 0h 0m
Hours : 0 to 72h
Minutes : 0 to 59m
: Change the setting value
: Select the setting item
Fill Check
Print :Y= ****mm
ENTER
** Fill Check **
** Printing **
Nozzle Recovery Set
Set Origin :ent
ENTER
Nozzle Recovery Set
Print :ent
ENTER
Nozzle Recovery
** Printing **
Nozzle Recovery Set
Pattern Check[▲]/[▼]
ENTER
Nozzle Recovery Set
Select :LineA-1
ENTER
Nozzle Recovery Set
LineA-1 NG1:143
Nozzle Recovery Set
Clear :LineA-1
Rcvry valid:X234_67X
16PHi dsabl:12___6__
Nozzle Recovery List
Set Origin :ent
ENTER
Nozzle Recovery List
Print :ent
ENTER
Nozzle Recovery
** Printing **
Adjust the sensor.
Adjust ThrottleValve
Pressure = **.**kPa



MACHINE SETUP
Use Head <ENT>

Use Head
Head Line :ALL

ALL, AB-, -BC, A--, -B-, --C

MACHINE SETUP
Machine Name <ENT>

Machine Name
Tx400-01

01 to 99

MACHINE SETUP
Stamp Setup <ENT>

Stamp Setup
Stamp :ON

ON, OFF

MACHINE SETUP
List <ENT>

List
Print :ent

Start printing.

MACHINE SETUP
Information <ENT>

Information
Version <ENT>

MAIN Ver 1.00
I/F Ver 1.00

Information
Serial No. <ENT>

Serial No.
S/N : 00000000

Information
Dealer No. <ENT>

Dealer No.
D/N : 00000000

MACHINE SETUP
Feeding Device <ENT>

Feeding Device
Feeding Device :ON

ON, OFF

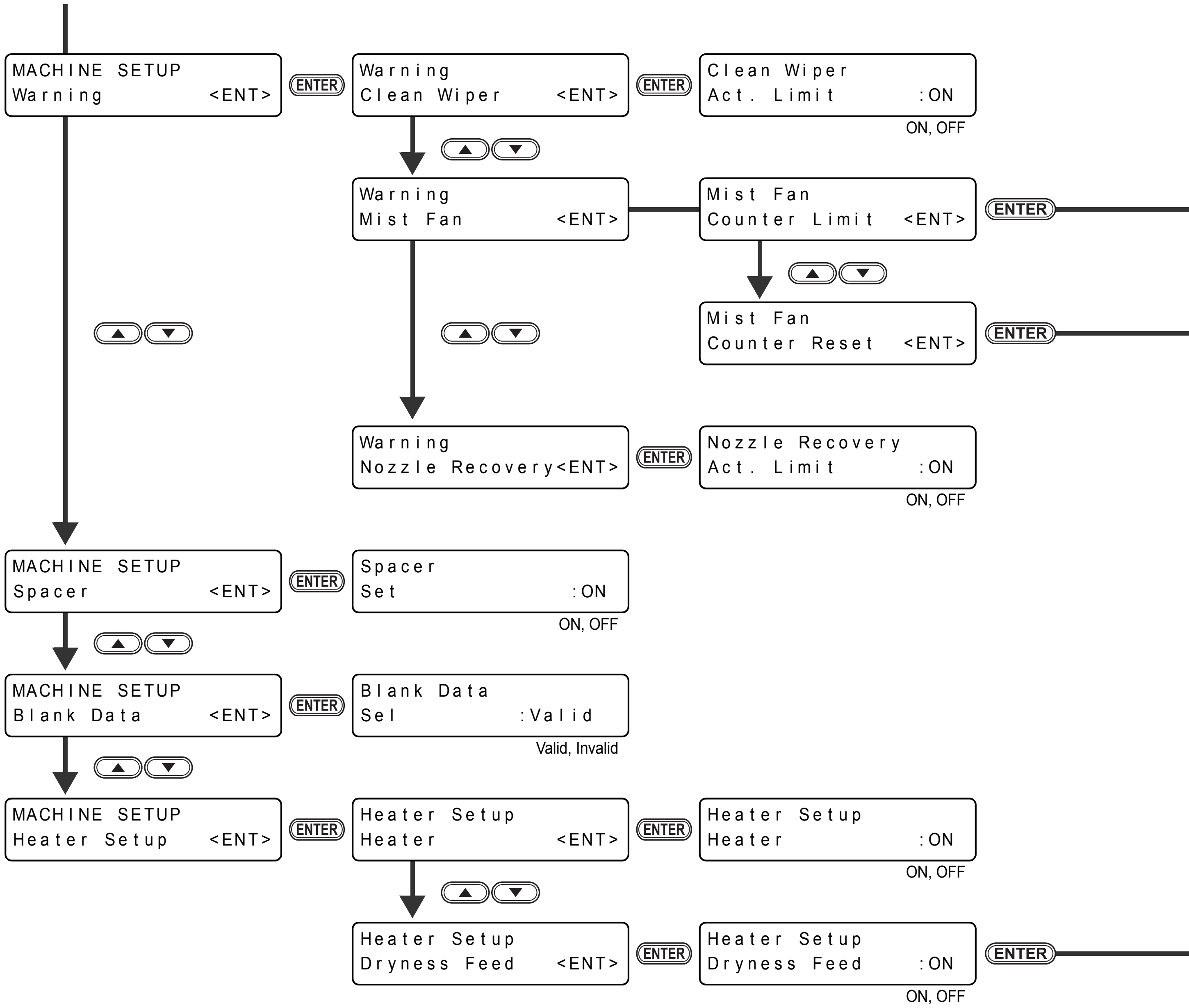
MACHINE SETUP
Take-Up Device <ENT>

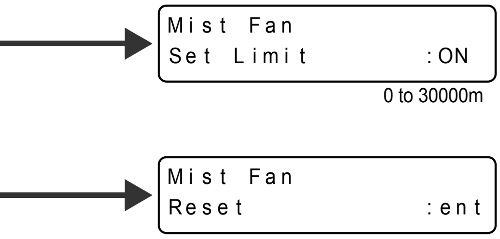
Take-Up Device
Take-Up Device :ON

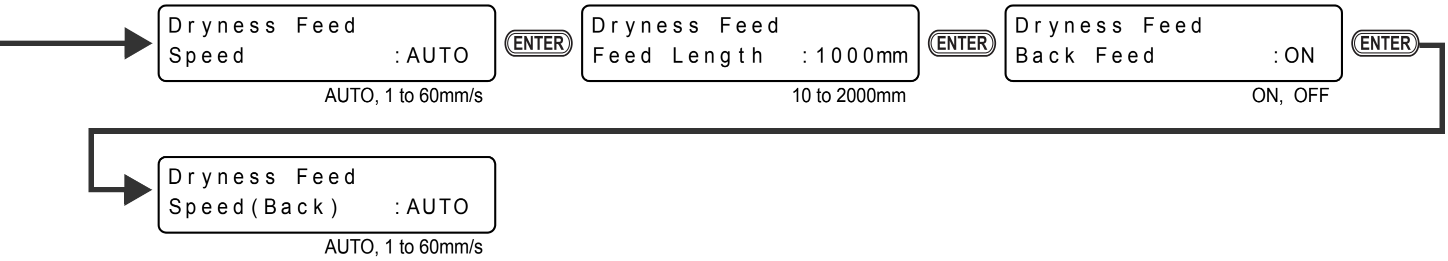
ON, OFF

To P.6-22

From P.6-20


MACHINE SETUP
Warning <ENT>
ENTER
Warning
Clean Wiper <ENT>
ENTER
Clean Wiper
Act. Limit :ON
ON, OFF
Warning
Mist Fan <ENT>
Mist Fan
Counter Limit <ENT>
ENTER
Mist Fan
Counter Reset <ENT>
ENTER
Warning
Nozzle Recovery<ENT>
ENTER
Nozzle Recovery
Act. Limit :ON
ON, OFF
MACHINE SETUP
Spacer <ENT>
ENTER
Spacer
Set :ON
ON, OFF
MACHINE SETUP
Blank Data <ENT>
ENTER
Blank Data
Sel :Valid
Valid, Invalid
MACHINE SETUP
Heater Setup <ENT>
ENTER
Heater Setup
Heater <ENT>
ENTER
Heater Setup
Heater :ON
ON, OFF
Heater Setup
Dryness Feed <ENT>
ENTER
Heater Setup
Dryness Feed :ON
ON, OFF
ENTER


Mist Fan
Set Limit :ON
0 to 30000m
Mist Fan
Reset :ent


Dryness Feed
Speed :AUTO
AUTO, 1 to 60mm/s
ENTER
Dryness Feed
Feed Length :1000mm
10 to 2000mm
ENTER
Dryness Feed
Back Feed :ON
ON, OFF
ENTER
Dryness Feed
Speed(Back) :AUTO
AUTO, 1 to 60mm/s

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