

Textile **JET**

Tx400-1800B

OPERATION MANUAL

OPERATION MANUAL

MIMAKI ENGINEERING CO., LTD.

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

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CAUTION

CAUTION

DISCLAIMER OF WARRANTY:

THIS LIMITED WARRANTY OF MIMAKI SHALL BE THE SOLE AND EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING , BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF

MERCHANTABILITY OR FITNESS, AND MIMAKI NEITHER ASSUMES NOR AUTHORIZES DEALER TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY OR MAKE ANY OTHER WARRANTY OR MAKE ANY OTHER WARRANTY IN CONNECTION WITH ANY PRODUCT WITHOUT MIMAKI'S PRIOR WRITTEN CONSENT. IN NO EVENT SHALL MIMAKI BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOSS OF PROFITS OF DEALER OR CUSTOMERS OF ANY PRODUCT.

Requests

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



- 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



- 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 "Tx400-1800B" color inkjet plotter.
Tx400-1800B is a Color InkJet Printer for direct printing on fabric.
This operation manual describes the operation and maintenance of model Tx400-1800B 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 Tx400-1800B 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


	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.
	Indicates the case where it is assumed that misuse of the machine, ignoring this sign, can cause damage only to property.
	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  <ul style="list-style-type: none"> • 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. 	Handling of ink cartridges  <ul style="list-style-type: none"> • Store ink cartridges and waste ink tank in a place that is out of the reach of children.
Do not use the device in damp places  <ul style="list-style-type: none"> • Avoid damp environments when putting the device into service. Do not splash water onto the device. High humidity or water will give rise to fire, electric shocks or breakdown of the device. 	Occurrence of an Abnormality  <ul style="list-style-type: none"> • 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.
Notes when recoating adhesive  <ul style="list-style-type: none"> • When recoating adhesive, keep fire away and be sure to turn OFF the belt heater and the main heater. Also, be sure to provide adequate ventilation. 	
Power supply and power voltage  <ul style="list-style-type: none"> • This unit contains parts applied high voltage. Carrying out electrical work by those unauthorized for that work is prohibited.  <ul style="list-style-type: none"> • 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  <ul style="list-style-type: none"> • 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  <ul style="list-style-type: none"> • 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. 	
How to Handle Touch Panel  <ul style="list-style-type: none"> • Do not put anything on the touch panel. Putting things may cause unintended operation and can result in personal injury or machine breakage. 	

Cautions and Requests

 CAUTION	
Use the drying heater	
<ul style="list-style-type: none"> 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. 	

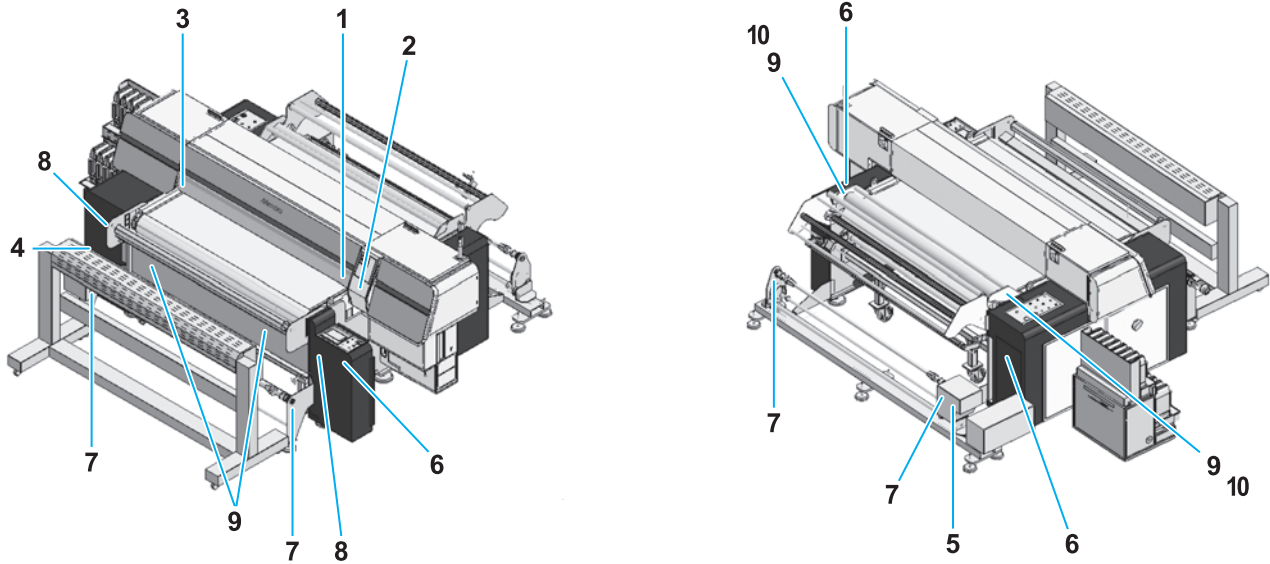
Cautions about Installation

 CAUTION			
	<ul style="list-style-type: none"> Keep it away from direct sunlight. 		<ul style="list-style-type: none"> Do not install on the uneven place.
	<ul style="list-style-type: none"> Be sure to use in the environment below: Operating environment: 15 ~ 30 °C (59 ~ 86°F) 35 ~ 65 % (Rh) ^{*1} 		<ul style="list-style-type: none"> Do not install on the vibrating place.
	<ul style="list-style-type: none"> Do not install on the place where wind of the air conditioner etc. directly blows against. 		<ul style="list-style-type: none"> Do not install on the place where you use fire.

*1.40 to 65% (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.



1: Order No. M901549					2: Order No. M907092																		
<table border="1"> <tr> <th>⚠ 注意</th> <th>⚠ 注意</th> <th>⚠ CAUTION</th> <th>⚠ ACHTUNG</th> <th>⚠ ATTENTION</th> </tr> <tr> <td>滾輪转动时, 请勿将手插入前盖内部的。</td> <td>キャリッジ動作中は、フロントカバーの中に指を入れないでください。</td> <td>-MOVING CARRIAGE- Do not put fingers inside this area</td> <td>-Beweglicher Wagen- Finger nicht in diesen Bereich bringen.</td> <td>-CHARIOT MOBILE- Ne pas mettre de doigts dans cette zone.</td> </tr> </table>					⚠ 注意	⚠ 注意	⚠ CAUTION	⚠ ACHTUNG	⚠ ATTENTION	滾輪转动时, 请勿将手插入前盖内部的。	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.	<table border="1"> <tr> <th>⚠ 注意</th> <th>⚠ CAUTION</th> </tr> <tr> <td>ワイパークリーニングを行う際は、必ずワイパ下のファイバインク吸収材のクリーニングも同時に行ってください。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。</td> <td>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.</td> </tr> </table>					⚠ 注意	⚠ CAUTION	ワイパークリーニングを行う際は、必ずワイパ下のファイバインク吸収材のクリーニングも同時に行ってください。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.
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3: Order No. M906637			4: Order No. M907647		5: Order No. LSR-04																		
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6: Order No. M908801				7: Order No. PA020-M		8: Order No. LSR-06																	
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				9: Order No. SF004-10E		10: Order No. SF022-10E																	

How to Read This Operation Manual

Describes to know beforehand.

The page title.

This explains the outline of functions.

Test Printing


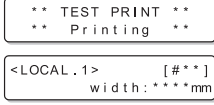
Test printing is performed to check if printing failures (blurring and missing) due to nozzle clogging.


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.2-14	• If the origin position has been set
	• If the head gap has been adjusted ☞ P.2-30	

- 1** Press the **TEST DRAW** key in LOCAL. 
- 2** Press the **ENTER** key. 

• When printing has ended, the screen returns LOCAL.
- 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.2-35)

Number of an operation sequence.

Indicates a screen display.

Shows buttons in text, surrounded by .

2-36

Page number (Chapter 2, Page 36)

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.

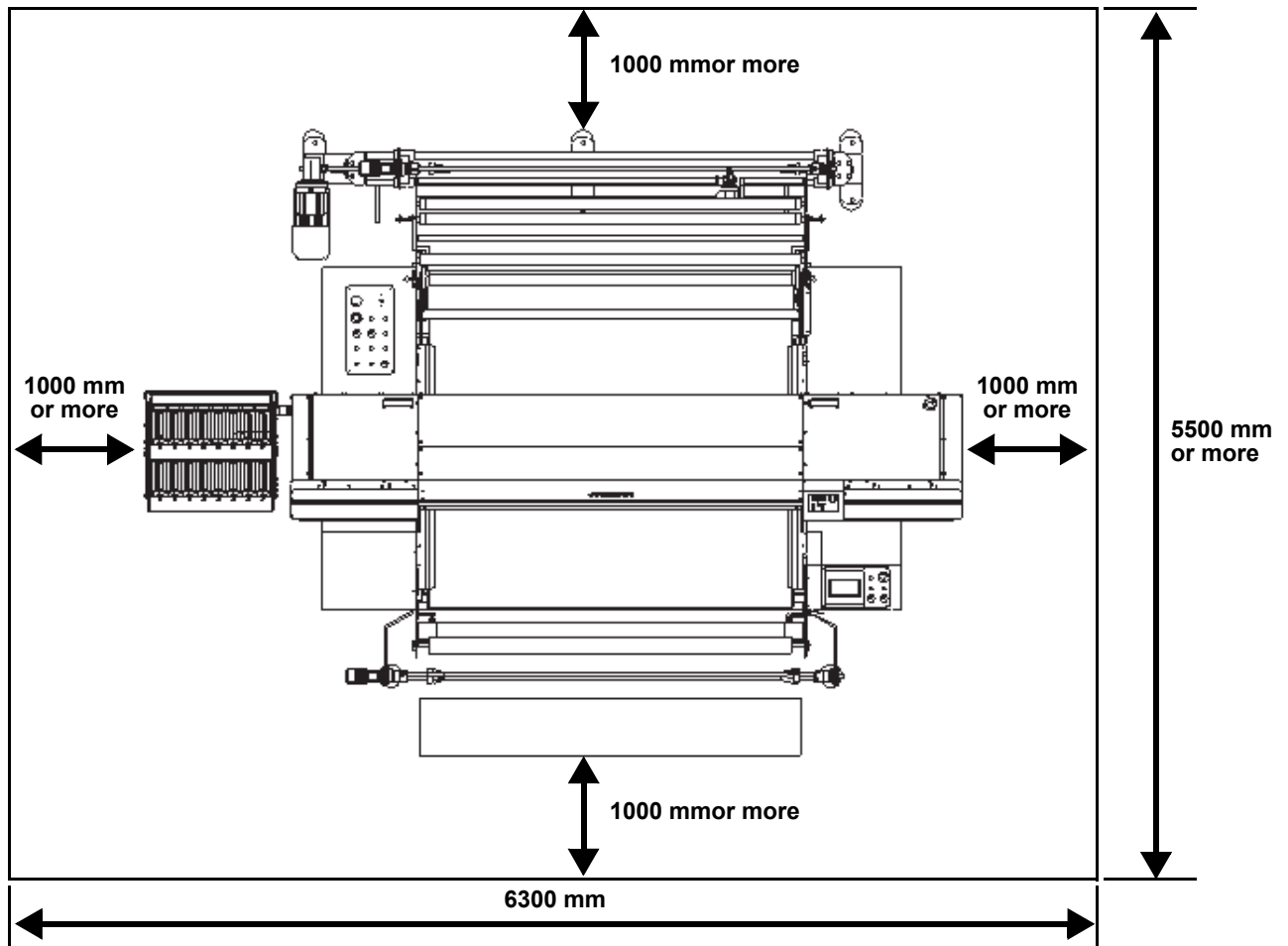
Installing the device	1-2	Other setting	1-12
Where to install the device	1-2	For waste ink tank	1-12
Moving This Machine	1-2	Installing USB output driver	1-12
Configuration and Function	1-3	Setup of media feeding system	1-13
Front/Sides	1-3	For opening/closing cover	1-16
Rear	1-4	For opening/closing cover	1-16
Operation Panel	1-5	For power cable	1-17
Operation Touch Panel	1-6	Media	1-18
Operation Panel (Front surface of media feeding system)	1-7	Usable Sizes of Media	1-18
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Ink supply unit	1-9	Limited media	1-18
Names and function of the parts under the front cover	1-10	For ink	1-20
Carriage	1-10	Ink type	1-20
Capping Station	1-11	Precautions in handling the ink	1-20
Head height adjustment rod and adjustment screw	1-11	About ink supply unit	1-21
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		Setting ink	1-22
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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	3500 mm	1650 mm	2300 kg



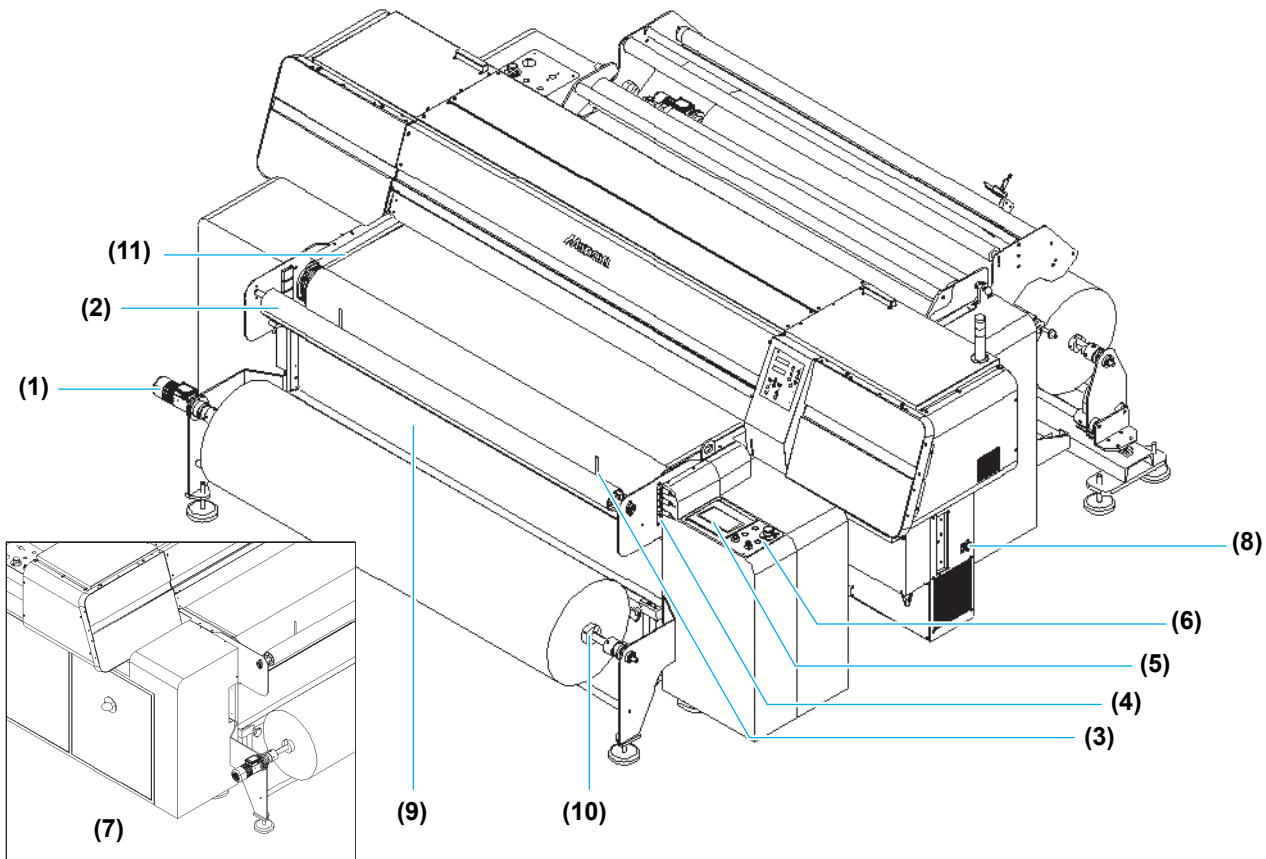
Moving This Machine

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

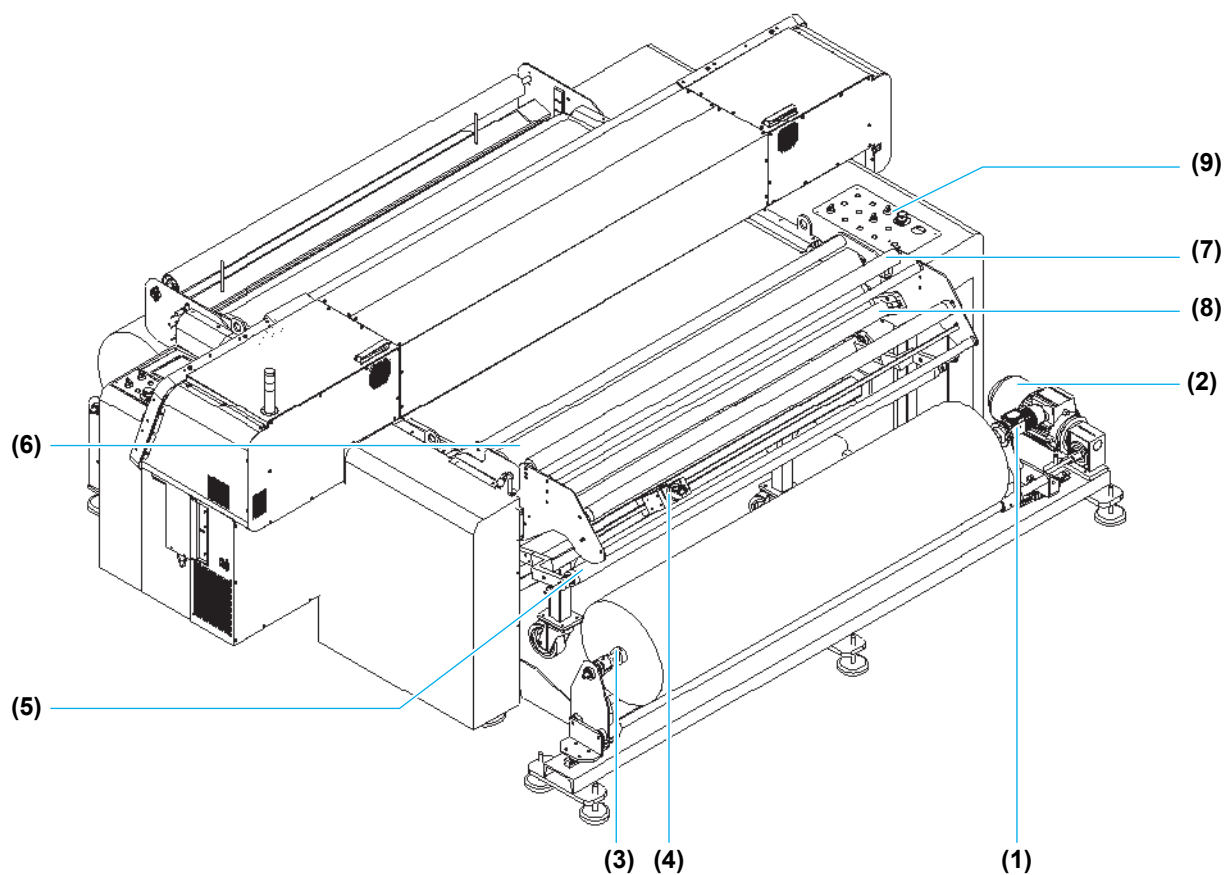
Front/Sides



1
Before Use

	Name	Function
(1)	Take-up unit	Unit to take up the printed fabric.
(2)	Peeling roller	Peels the fabric from the feeding belt.
(3)	Fabric end guide	Use when you wish to perform the peeling operation of the fabric more surely.
(4)	Peeling sensor	Monitors the position to peel the fabric.
(5)	Operation touch panel	Panel to display operation keys to perform setting required to this machine and operation items.
(6)	Operation panel (Front)	There are buttons for manual/automatic operations of take-up unit, the [Emergency] button and the [RESET ALARM] button.
(7)	Power switch on media feeding system side	All power switches of Tx400-1800B.
(8)	Power switch on printer side	The power switch of the printer. If the switch of (7) is not ON, you cannot turn on this power switch.
(9)	Belt washing unit	Washes ink, lint, etc. adhering to the belt surface with water.
(10)	Roll horder	Supports the paper core of two to three inches.
(11)	Belt end guide	Safety cover for preventing your hand etc. from being caught in the feeding belt.

Rear

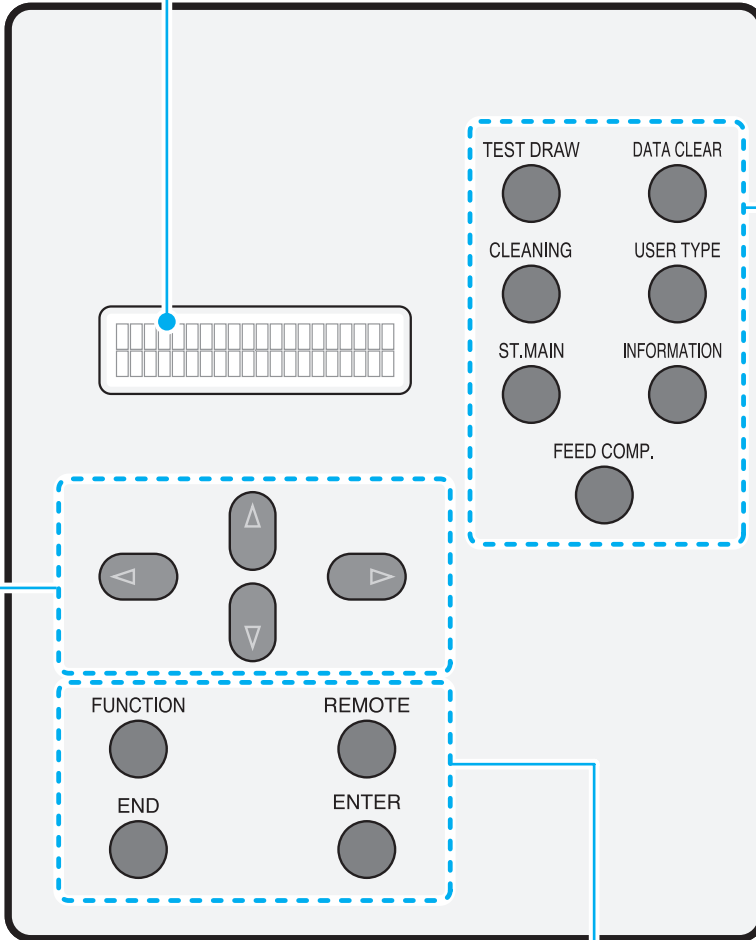


	Name	Function
(1)	Feeding unit	Unit to feed the roll media before printing.
(2)	Centering motor	Prevents meandering of the roll media with weaving.
(3)	Roll holder	Supports the paper core of two to three inches.
(4)	Centering sensor / Media end sensor	Detects weaving of the media and changes its operation to the centering operation. Detects the media end with the sensor.
(5)	Tension bar	Places the proper tension on the fabric and controls the operation of the feeding unit.
(6)	Pressure Roller	Places the pressure and attaches the media on the feeding belt.
(7)	Smoothing wrinkle roller	Smooths wrinkle of the fabric.
(8)	Fabric winding roller	Sucks remaining water drops on the feeding belt. It is required to change the wound fabric periodically.
(9)	Operation panel (Rear)	You can perform manual/automatic operation of the feeding unit, the centering unit, the pressure roller, etc. At the media setting, you can operate without moving to the operation panel (front).

Operation Panel

Display

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



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.

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.

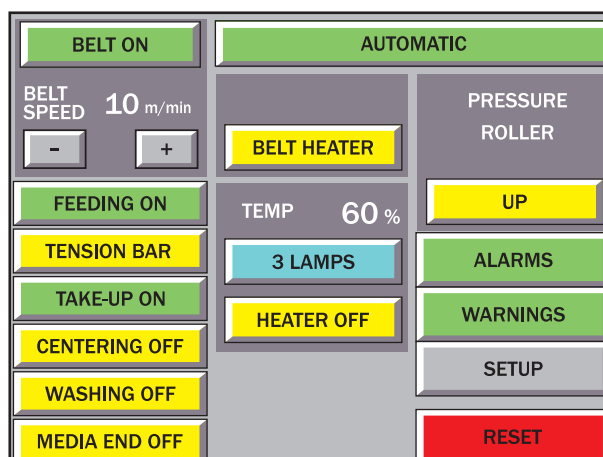
USER TYPE key
Press to change the user type.

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.

Operation Touch Panel



Each button is separated by color depending on its status and meaning.

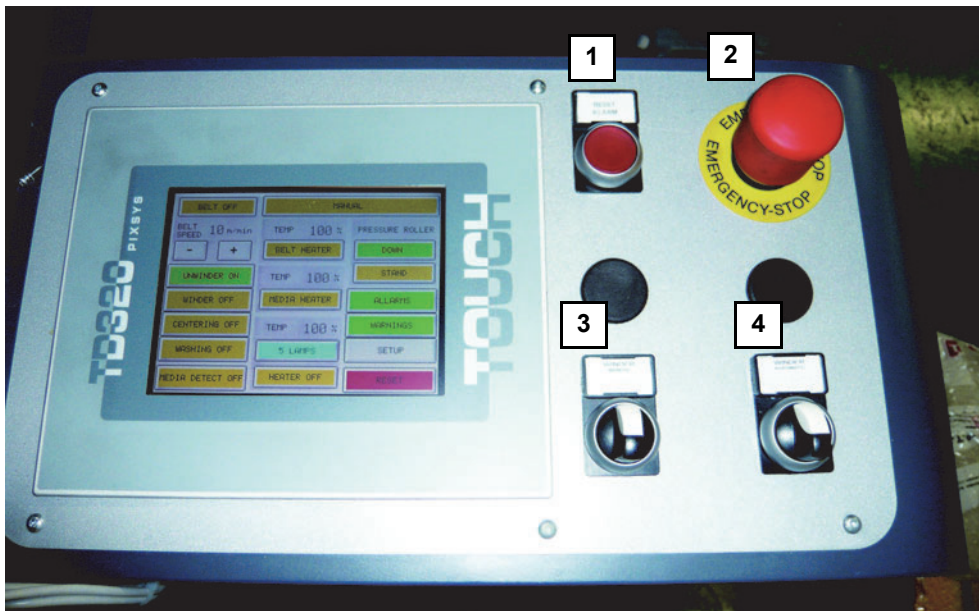
Yellow	It means that the function is invalid or it is in the stand-by status.
Green	It means that the function is valid or it is in the operation status.
Red	It means that the buttons other than the RESET are in the error status.
Blue	It means that this is the button to display two conditions.
Gray	It means that this is the button to affect the operation of the machine.

Function

You can switch valid/invalid by pressing the corresponding button for each function.

MANUAL/AUTOMATIC	Switches the operation modes of this machine (MANUAL mode/AUTOMATIC mode). When the button is AUTOMATIC, it operates linking with the printing operation.
BELT ON/OFF	Switches ON/OFF of the feeding belt. When it is in ON status, belt will move. In the MANUAL mode, it moves continuously to the front of the machine while it is ON. When it is in the AUTOMATIC mode and ON, it operates linking with the printing operation/JOG operation.
FEEDING ON/OFF	Switches valid/invalid of the feeding/take-up device. When this function is ON, you can feed/take up the media as required. When you set BELT ON in the AUTOMATIC mode, this becomes ON automatically.
TAKE-UP ON/OFF	
TENSION BAR	Switches valid/invalid of the media end detection with the tension bar. When this function is ON, when the set time has passed with the tension bar at the lower position, the status enters in the media end.
CENTERING ON/OFF	Switches valid/invalid of the media centering unit. When it is in ON status, the centering unit adjusts the media position at feeding/printing work.
WASHING ON/OFF	Switches valid/invalid of the washing unit. When it is in ON status, the washing unit washes the belt.
MEDIA END ON/OFF	Switches valid/invalid of the media detection sensor. When it is in ON status, the media detection sensor checks the media end.
BELT HEATER	Switches valid/invalid of the belt heater. When it is in ON status, the belt heater dehydrates the belt. When recoating adhesive, be sure to turn this OFF.
3LAMPS/5LAMPS	Among the main heater located in the front part of this machine, you can determine how many lamps will be valid. By pressing this button, lamps under operation will be displayed and the status will be changed.
HEATER ON/OFF	Switches valid/invalid of the main heater located in the front part of this machine. When it is in ON status, the media detection sensor checks the media end during printing. When recoating adhesive, be sure to turn this OFF.
PRESSURE ROLLER UP/DOWN	Moves the pressure roll bar up and down. When this function is in DOWN status, the pressure roller touches media.

Operation Panel (Front surface of media feeding system)

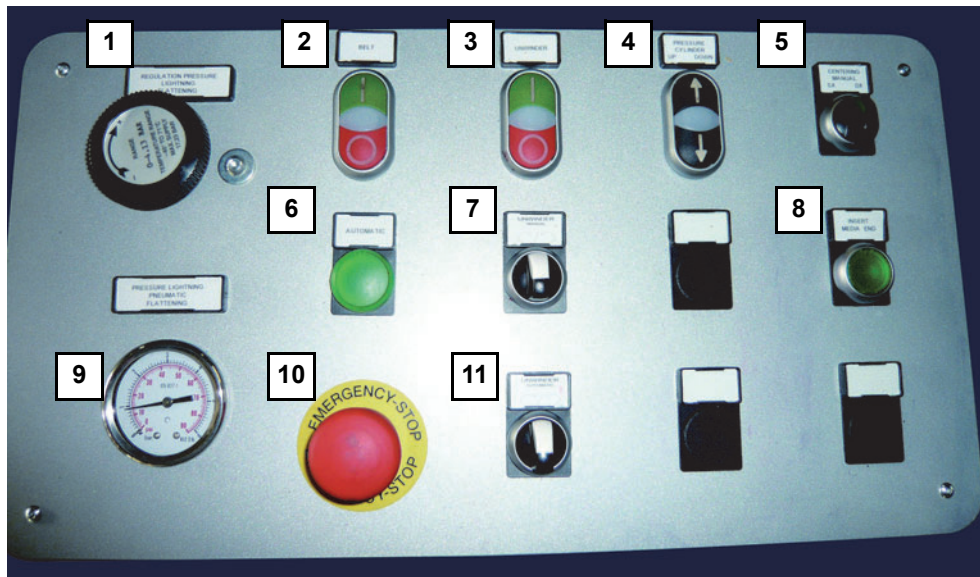


1

Before Use

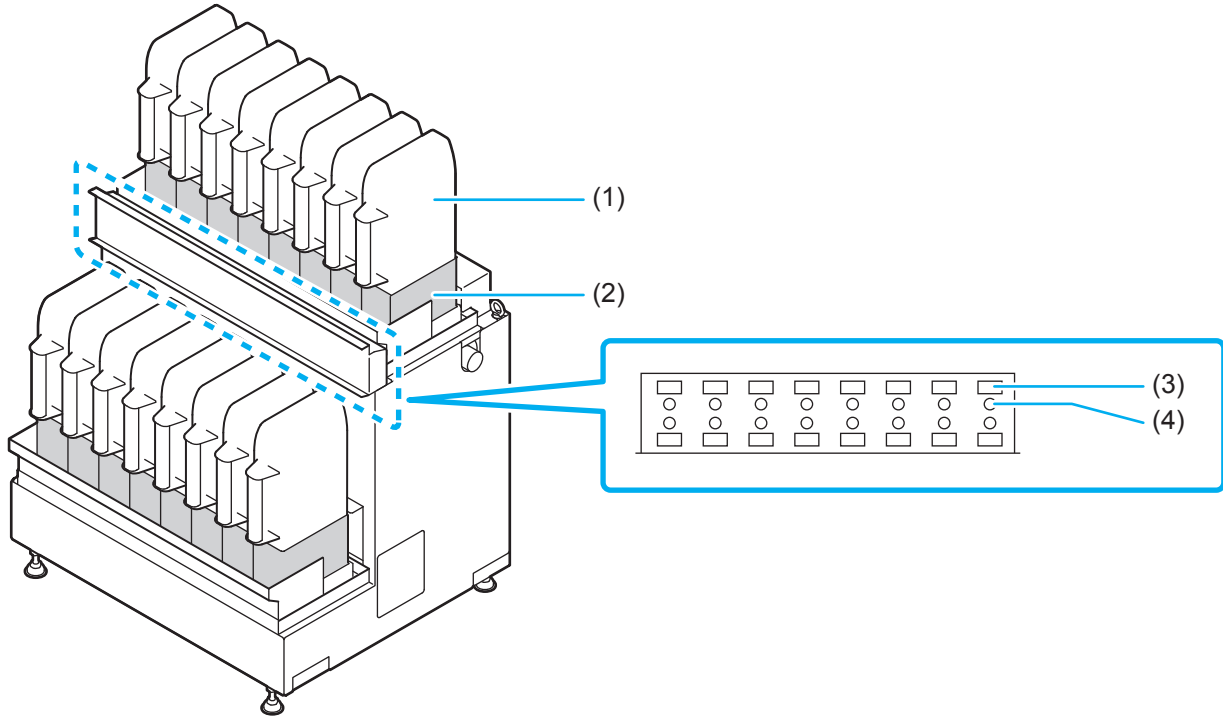
	Name	Function
(1)	[RESET ALARM] button	When this button lights in red, the machine is in the warning status because of problem of some kind. To release the error status, first return the [Emergency] button (button 2) to the original status and then press this button.
(2)	[Emergency] button	Immediately stop this machine under operation.
(3)	[TAKE-UP MANUAL] lever	The rotating direction of the take-up motor changes depending on the lever direction.
(4)	[TAKE-UP AUTOMATIC] lever	Determines the media rotating direction of the take-up device when you set BELT ON in the AUTOMATIC mode. Rotate this to the left or the right depending on the media rotating direction.

Operation Panel (Rear surface of media feeding system)



	Name	Function
(1)	Adjusting dial	Adjusts the pressure of the pressure roller.
(2)	[BELT] button	When you press "I", the belt will move, and when you press "O", it will stop.
(3)	[FEEDING] button	When you press "I", the media will be fed, and when you press "O", it will stop.
(4)	[PRESSURE CYLINDER] UP(↑)/DOWN(↓) switch	When you press UP (↑), the roller will move up, and when you press DOWN (↓), the roller will move down.
(5)	[CENTERING MANUAL] lever	Rotating to right or left, adjust the media position manually. In the AUTOMATIC mode, you cannot adjust even if you operate the lever. After adjusting the position in the MANUAL mode, change to the AUTOMATIC mode.
(6)	[AUTOMATIC] lamp	When it is in the AUTOMATIC mode, this lights in green.
(7)	[FEEDING MANUAL] lever	The rotating direction of the take-up motor changes depending on the lever direction.
(8)	[MEDIA END] switch	When it lights in green by pressing this, the media end detection becomes valid.
(9)	Air pressure gauge	Displays the pressure of the pressure roller.
(10)	[Emergency] button	Immediately stops this machine under operation.
(11)	[FEEDING AUTOMATIC] lever	Determines the media rotating direction of the take-up device when you set BELT ON in the AUTOMATIC mode. Rotate this to the left or the right depending on the media rotating direction.

Ink supply unit

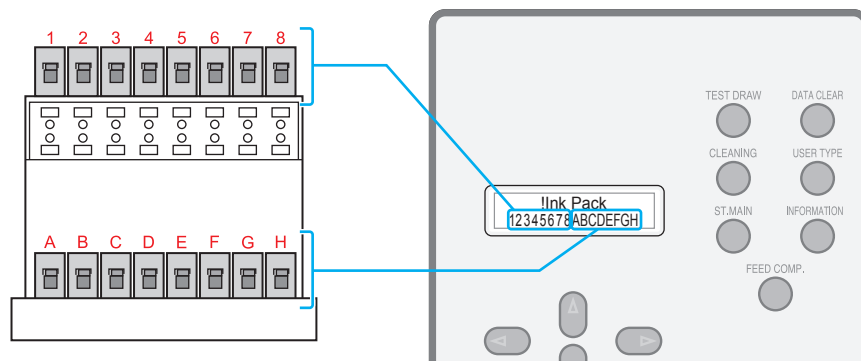


1 Before Use

	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.



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.

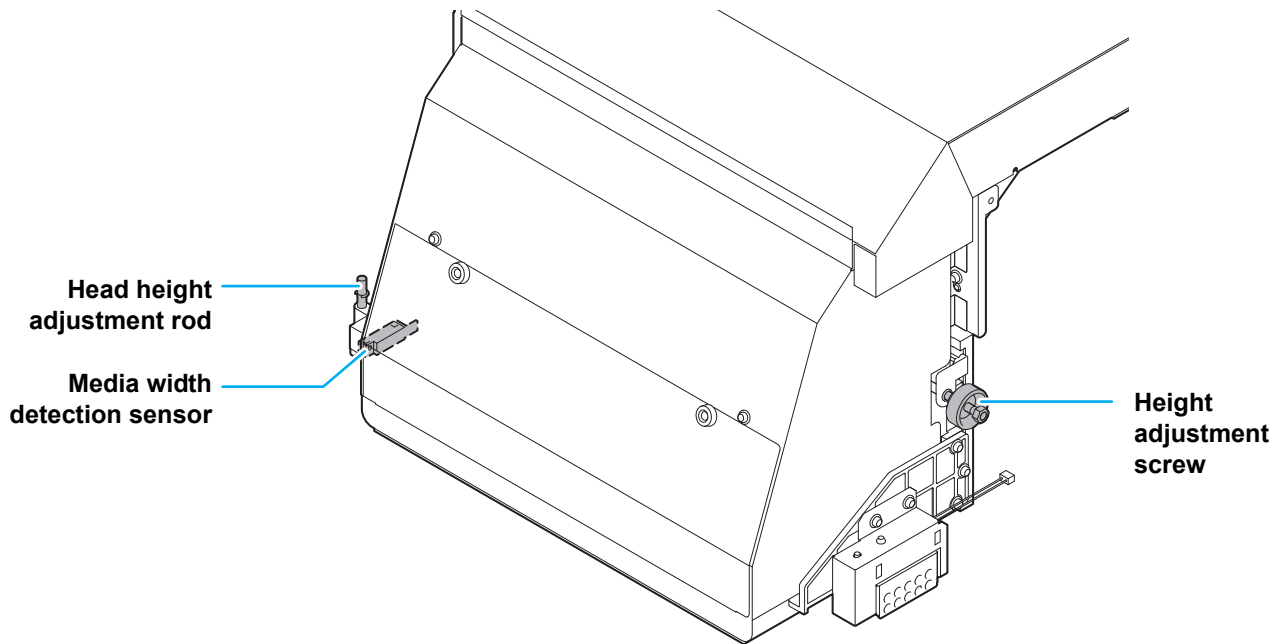
Carriage

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.4-3)



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



- When setting a fabric in position for plotting, be sure to adjust the head height. (☞ P.2-32)

Capping Station

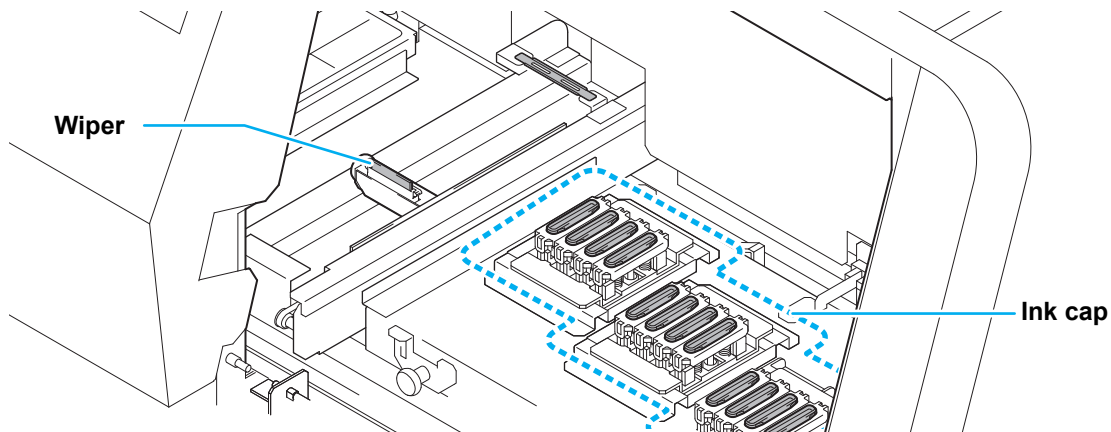
The capping station consists of the ink caps, the wiper for cleaning the heads, etc.

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 clogged ink.



1

Before Use

Head height adjustment rod and adjustment screw

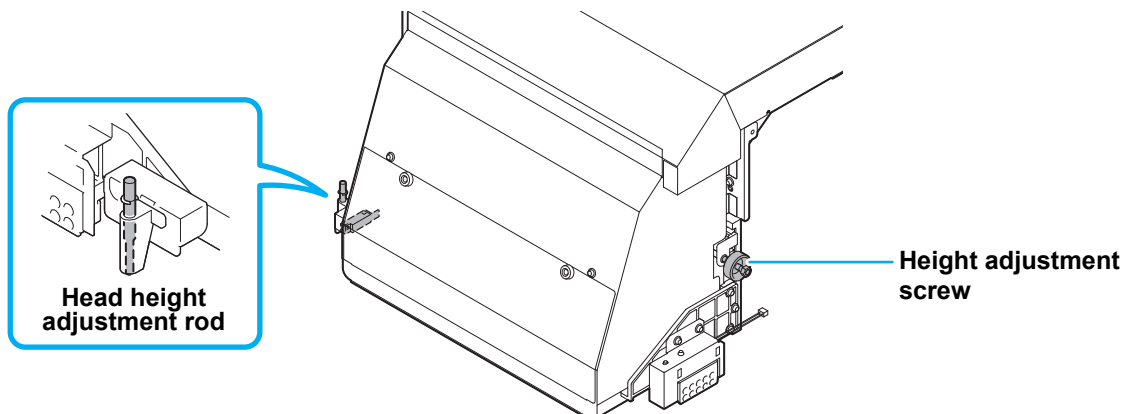
After setting a fabric, adjust the head height according to the thickness of the fabric. (☞ P.2-32)



- 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.



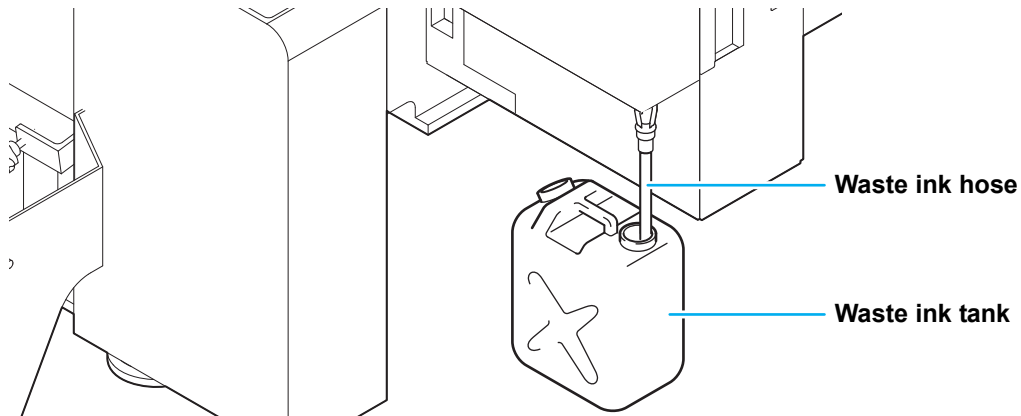
Other setting

For waste ink tank

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



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



Installing USB output driver

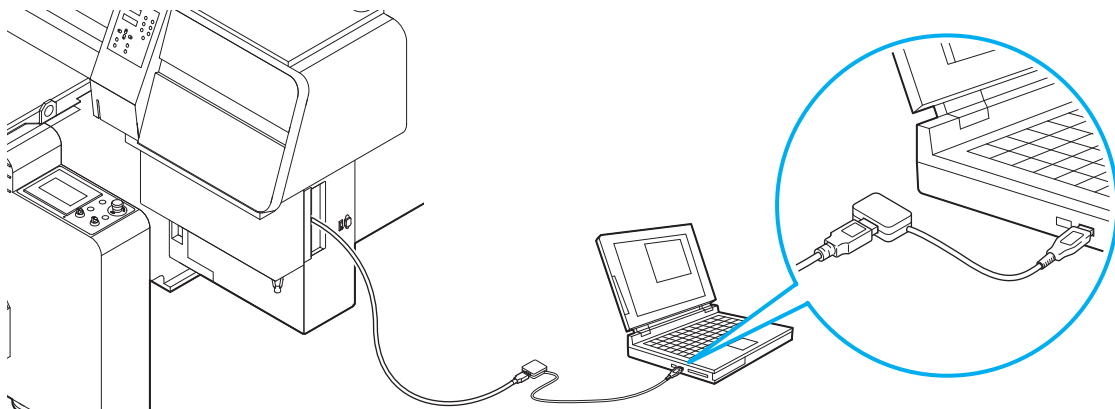
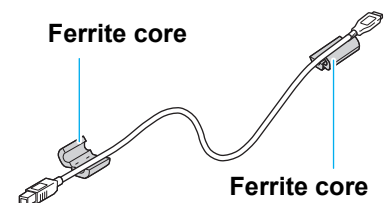
When connecting the plotter using a USB interface, it is necessary to install the USB2.0 output driver.



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



- 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.



Setup of media feeding system

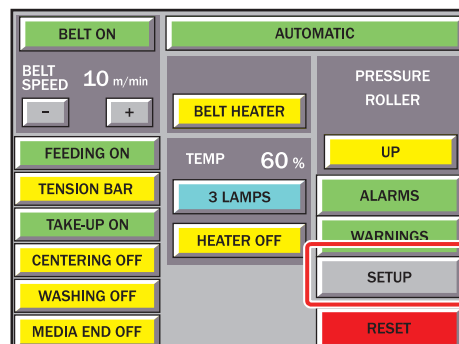
You can set the following items in Setup.

Pressing the [SETUP] button on the operation touch panel, perform the setting.

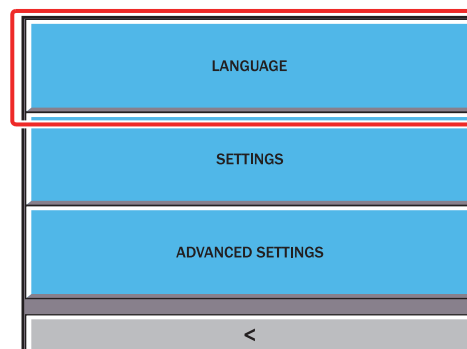
- Setting of language to be displayed on the operation touch panel
- Normal setting
- Detailed setting

Language setting

- 1 Press the [SETUP] on the operation touch panel.



- 2 Press the [LANGUAGE].
 - If you wish to cancel, press the [<].



- 3 Select language to be displayed.
 - Selectable language : English, Italian
 - If you wish to cancel, press the [<].

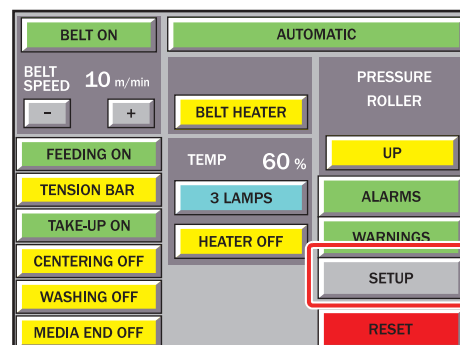


Normal setting

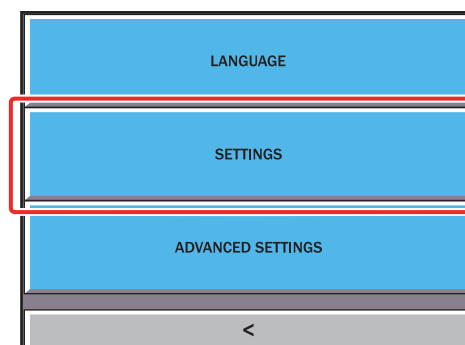
For normal setting, you can set five items below:

Tab Name	Item Name	Outline
HEATER	MAIN HEATER (default : 40%)	Sets the main heater temperature. This value is displayed in operation percentage. The main heater dehydrates the surface of the media right after printing.
Washing Unit	WATER VALVE (default : 60s)	Sets the timing of the water supply valve. The water supply valve is opened once in a certain hour (first parameter is "Open Every") and remains opened for a certain hour (second parameter is "Remains Open For"). Both parameters are displayed on the second time scale.
	WASHING UNIT (default : 30s)	Sets the timing of the washing unit. In other word, when a certain hours have passed after the belt stopped, the washing unit moves down and stops. This parameter is displayed on the second time scale.
PRESSURE ROLLER	DETACH AFTER	Set the timing of the pressure roller to move upward. Sets the time of the pressure roller to move upward after making this DOWN from the operation touch panel and the belt stops. This parameter is displayed on the second time scale.
TENSION BAR	MEDIA END DETECTION	Sets the time for detecting media end after the tension bar moved downward (TIME FOR DETECTION) on the second time scale.

- 1** Press the [SETUP] on the operation touch panel.



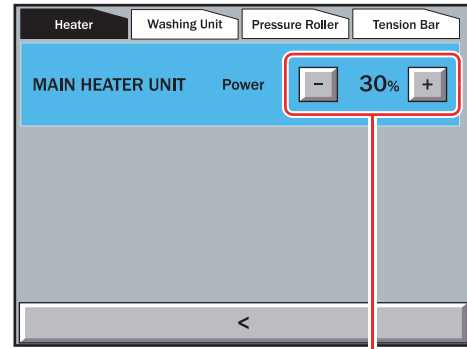
- 2** Press the [SETTINGS].
- If you wish to cancel, press the [<].



3

Select the item to be set and set it by pressing the [+]/[-].

- If you wish to cancel, press the [<].



Press the [+]/[-] of the item to be set.

4

Press the [<] to return to the initial screen.

1**Before Use**

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, resulting 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.

!Ma int e . 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	$\pm 10\%$
Frequency	50/60Hz ± 1 Hz
Capacity	36A and above



- 100V system outlet cannot be used.



- 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.

Usable Sizes of Media

The media usable in this machine is as below:

Maximum width	1860mm
Minimum width	210mm
Maximum printing width	1850mm
Thickness	7mm or less
Roll outside diameter	φ 400mm
Roll weight	44kg or less
Roll inside diameter	2 ~ 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



- The belt encoder unit to feed the media correctly is attached on the right side of the media feeding system. Be careful not to make the media hanging over the position of 25mm from the right edge of the media feeding system.
- If you print with the media hanging over the belt encoder unit, the media cannot be fed correctly, and it may adversely affect the printing quality. Be careful especially when using wider media (the media with 1800mm and more width).

Precautions in handling the fabric

Here, procedures and precautions in handling the usable fabric are explained.

Fully understand the contents and use depending on the kind or the characteristic of fabric.



- Use pre-processed fabric recommended by MIMAKI.
- When setting the fabric, be sure to adjust the head height. Other wise, the fabric and/or the head can be damaged.
- Do not use fabric with curled edges. Use of such a fabric may cause contact with the print head nozzle, resulting in inferior ink discharge.
- Do not use fabric whose edges are remarkably loose in comparison with the center. Crease occurs at the fixing section, which may come into contact with the head nozzle face.
- Thick hard fabric cannot be used for unattended operation. When using a denim-like fabric, skew check must be performed by the operator. Once skew starts, the self-restoration action of the fabric itself is disabled. If the fabric is neglected, skew advances to the right or left end of the belt which may cause head jam.
- Brushed fabric is unavailable for Fabric edge guide. The peeling sensor react to the brushed part, and not able to feed fabric properly.

Limited media

With the following media, correction from the plotter is difficult.

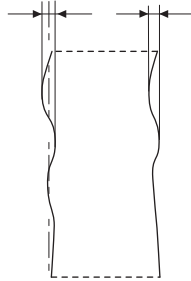
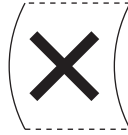
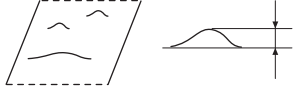
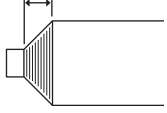
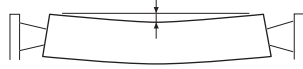
When using any of the following media, perform test printing to determine whether it can be used or not.

- High 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 or 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.



- 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 $\pm 5\text{mm}$ / 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	$\pm 15\text{mm}$, Cloth (width of 500mm and less) is $\pm 2\text{mm}$.	
Inner diameter of roll	2 ~ 3 inches	
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 400mm or less	
Roll weight	44kg or less	
Print side	Not specified	
Fabric wrinkle	Not allowed	

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.



- 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



- 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.



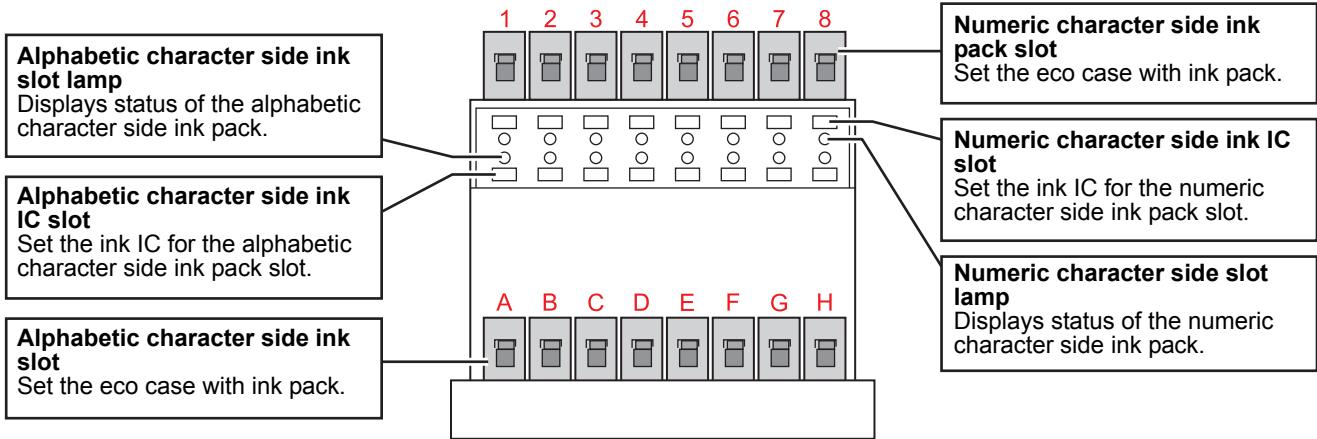
- Do not shake the ink pack violently. Shaking or turning it roughly can cause leakage of ink.
- Open the ink pack just before attaching. In addition, be sure to use within six months from opening the ink pack. After opening and long time has passed, the print quality will decline.
- Be sure to store 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.3-15) to ON and to set the length be 3m or below for "Setting of cleaning while printing" (☞ P.3-16).



- 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”.

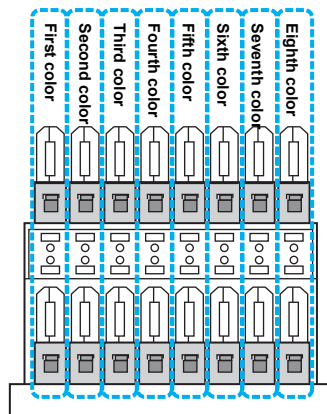


1 Before Use

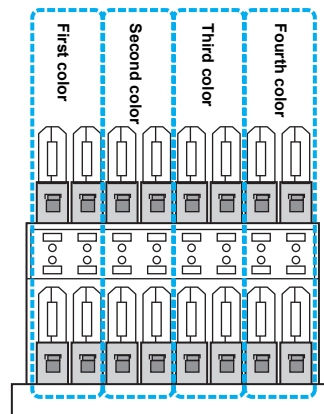
Setting of 8-color/ 4-color ink pack

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



In case of 8 colors



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.

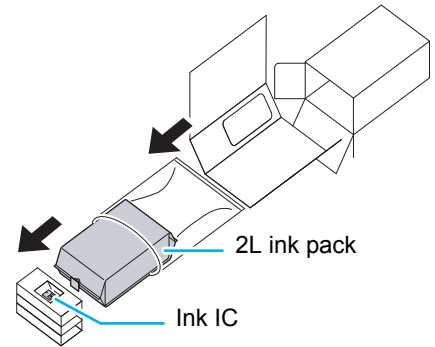
Setting ink

Setting ink

1

Prepare the 2L ink pack.

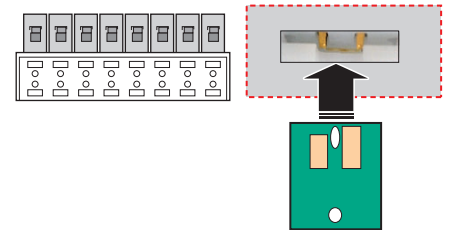
- From the container box, take out the 2L ink pack and the ink IC.



2

Set the ink IC in the ink slot.

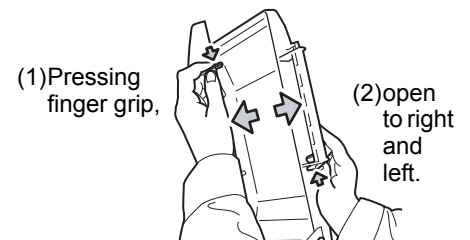
- Insert the ink IC with the surface with metal upward. If you insert the wrong side by accident, it causes faulty or damage of the ink IC.
- Do not touch the metal part of the ink IC. It may break the ink IC by static, or may cause read error by stain or flaw.



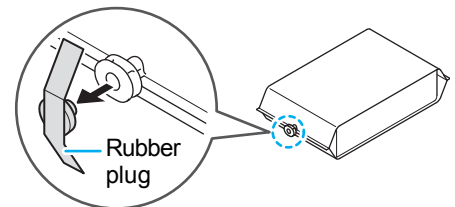
3

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

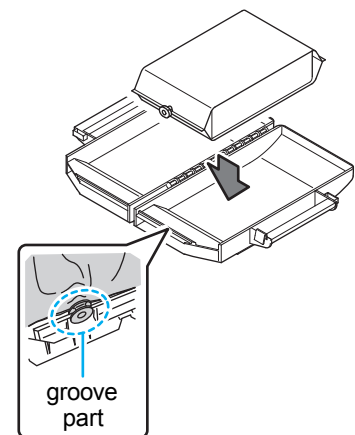
- (1) Open the 2L eco case as shown on the right.



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



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

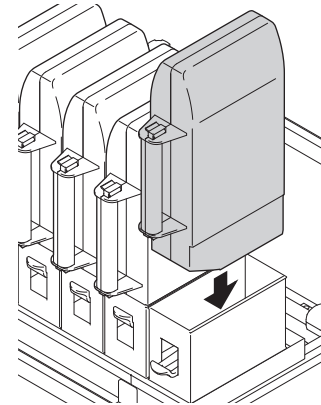


- (4) Attach an provided nameplate to the eco case.

4 Attach the 2L eco case to the base.

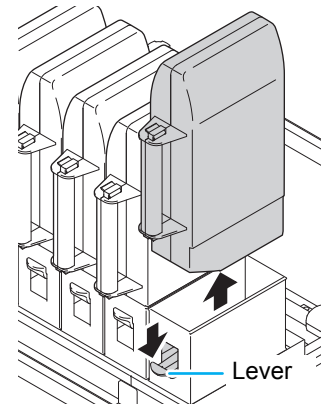
Important!

- 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).

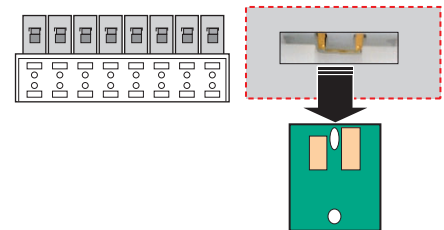


Changing an Ink Pack

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

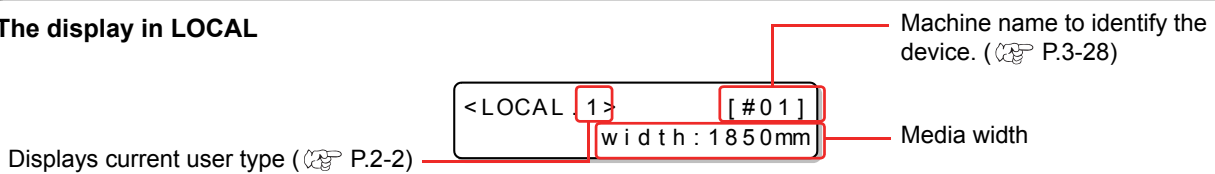


LOCAL

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



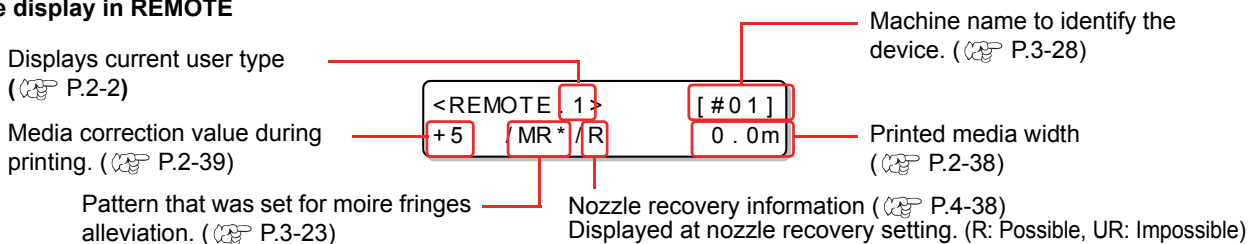
Function

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

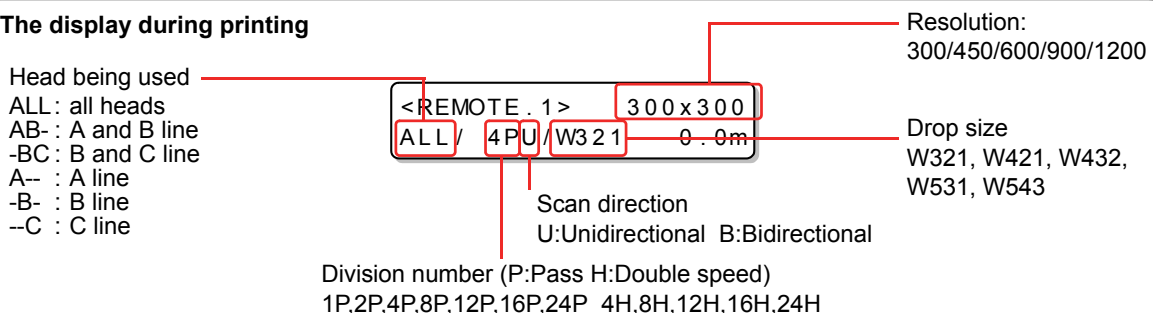
REMOTE

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

The display in REMOTE



The display during printing



Chapter 2

Basic Operations



This chapter

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

User Type	2-2	Attach the fabric winding roller	2-18
Settings That Can Be Registered in		Feed the media	2-20
User Types	2-2	Take up the media	2-26
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Turning the Power ON	2-4	Detecting the Media	2-34
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Automatic function	2-8	Test Printing	2-36
Assistant function	2-9	Test Printing	2-36
Switch ON/OFF of the centering unit	2-9	Performing Head Cleaning	2-37
Switch ON/OFF of the belt washing unit ...	2-10	Printing Data	2-38
Switch ON/OFF of the belt heater	2-11	Starting a Printing Operation	2-38
Switch ON/OFF of the main heater	2-12	Suspending printing operation	2-39
Adjust the angle of the main heater	2-13	Deleting Received Data (Data Clear)	2-39
Setting a Media	2-14	Correcting the feeding quantity of the	
Maximum Print Area	2-14	fabric while printing	2-39
Notes for Setting a Media	2-14		
Outline of media setting	2-15		
About media route	2-15		

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	Refresh	P.3-25
Media Feed	P.3-6	mm/inch	
Print Mode	P.3-11	Auto Cleaning	P.3-15
Ink Layers	P.3-25	Color Pattern	P.3-21
Drying Time	P.3-22	Moire Reduction	P.3-23
Priority	P.3-14		

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
```

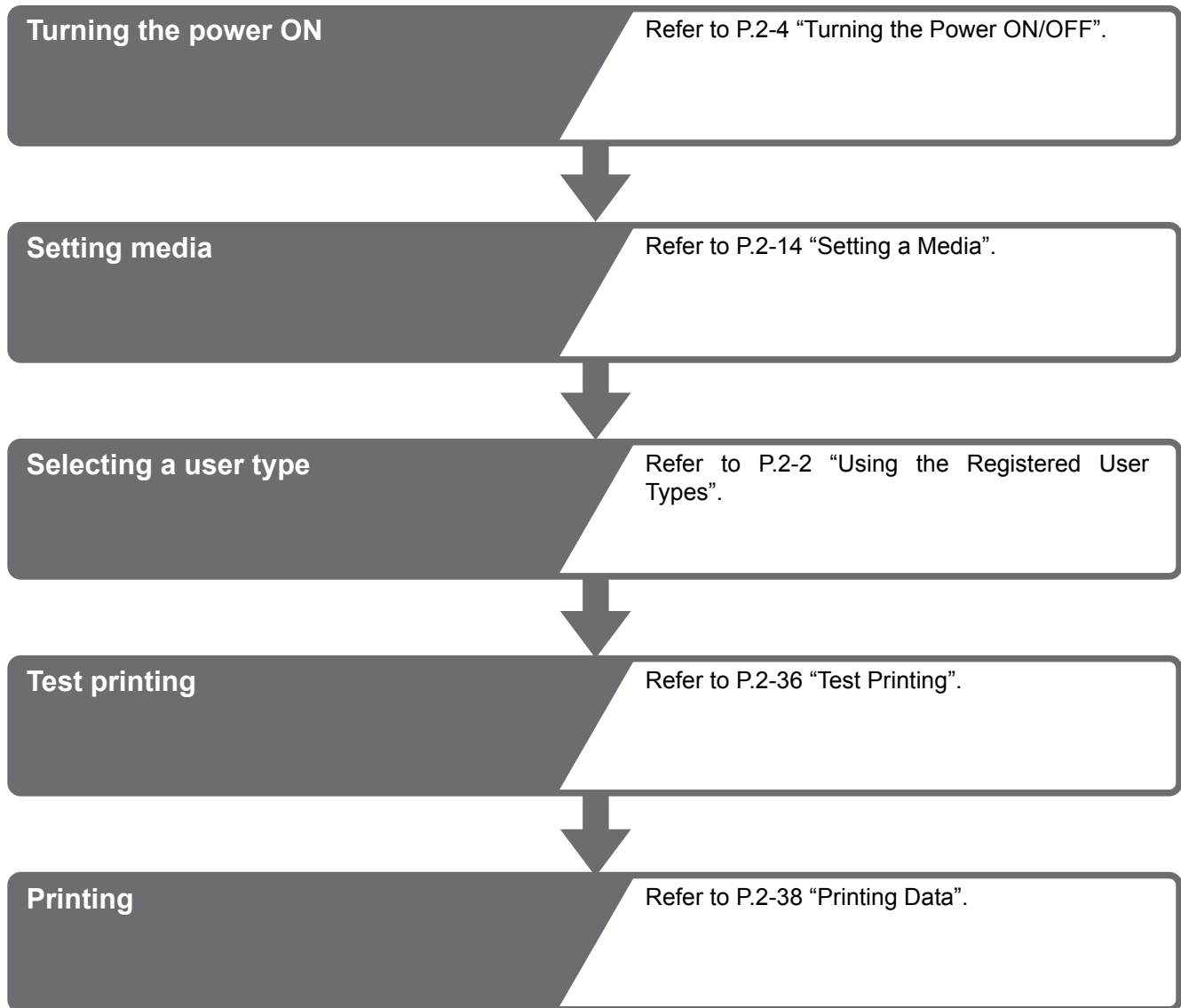
Number of the selected user type

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.



Operation Flow

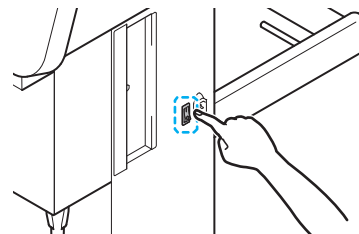


Turning the Power ON/OFF

Turning the Power ON

1 Turn ON the power of the connected PC.

2 Turn the power switch ON.
 • Move the power switch to the [I] side.

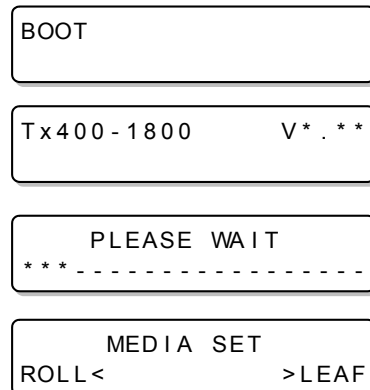


3 Turn ON the power switch of the media feeding system side.

- When you rotate the power lever switch to the [ON] side, the power supply becomes ON.
- If you wish to turn the power supply ON, be sure to close the front cover. If the front cover is open, the operation does not start even if you turn the power supply ON.
- When the power is turned on, the firmware version is displayed following [BOOT].

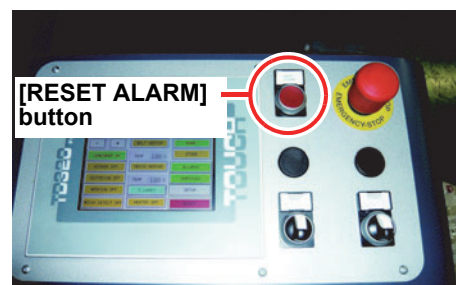


- The message "PLEASE WAIT" appears on the LCD.
- The screen turns to the media selecting.

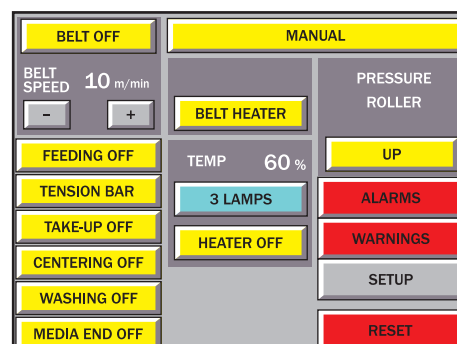


4 Turn ON the power supply of the media feeding system side.

- Press the [RESET ALARM] button on the operation panel (front).



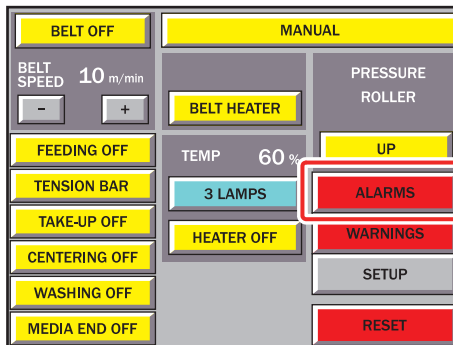
- When you press the [RESET ALARM] button, the operation touch panel is displayed and beep sounds. However, this is not an abnormal status.



5

Reset the alarm.

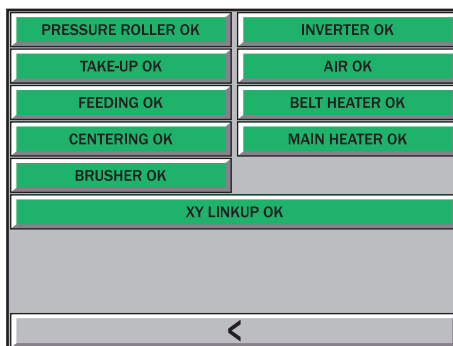
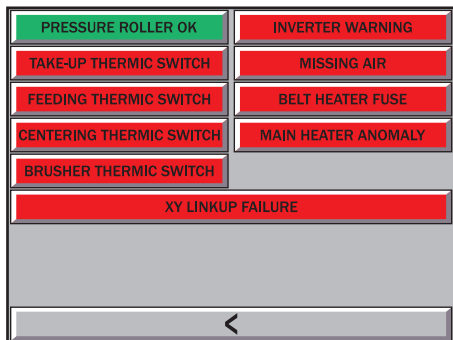
- When you press the [ALARMS] (display in red) on the operation touch panel, alarm sections are displayed.



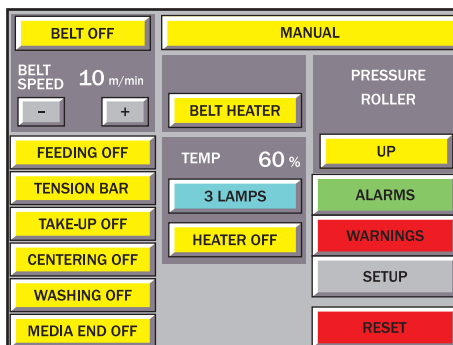
- Press all alarm section buttons of 11 kinds to reset the alarm. (When it is reset, they are displayed in green.)

Important!

- Even if you press the alarm section button, if it does not change to green, it means an error occurs in that part. Check the error contents.



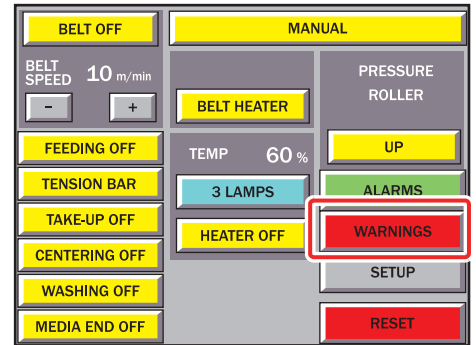
- Press the [<] to return to the initial screen.



6

Reset the warning.

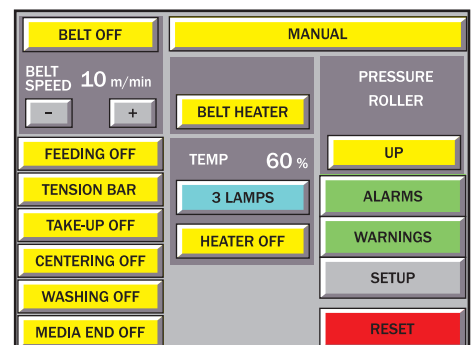
- When you press the [ALARMS] (display in red) on the operation touch panel, warning sections are displayed.



- Press all warning section buttons of 4 kinds to reset the warning. (When it is reset, they are displayed in green.)



- Press the [<] to return to the initial screen.



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.5-13 "Error Messages")



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.4-8 "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.



- 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 OFF the power supply of the media feeding system side.

- When you rotate the power lever switch to the [OFF] side, the power supply becomes OFF.
- By turning OFF the power supply of the media feeding system side, you can also turn OFF the power supply of the printer side.



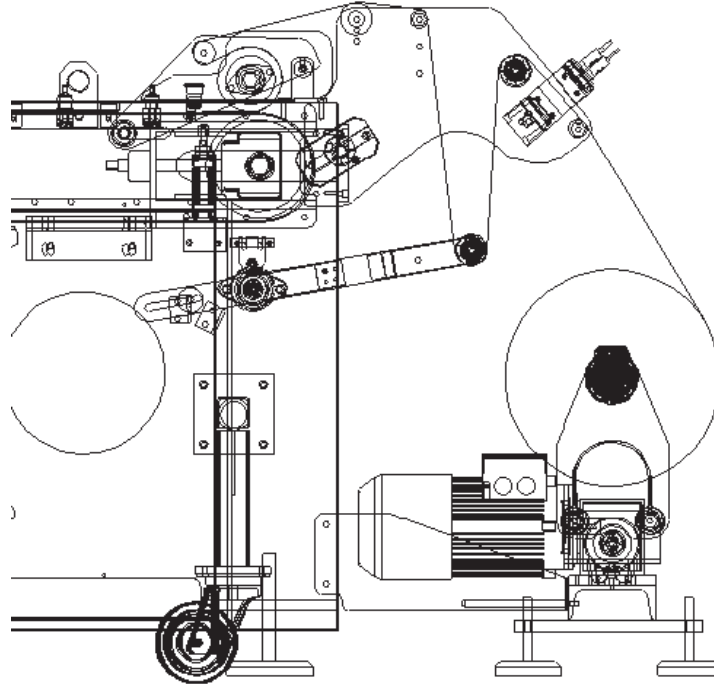
Automatic function

During automatic function, this machine receives the command directly from the inkjet printer. Each component of the feeding belt and this machine is controlled by the printer.

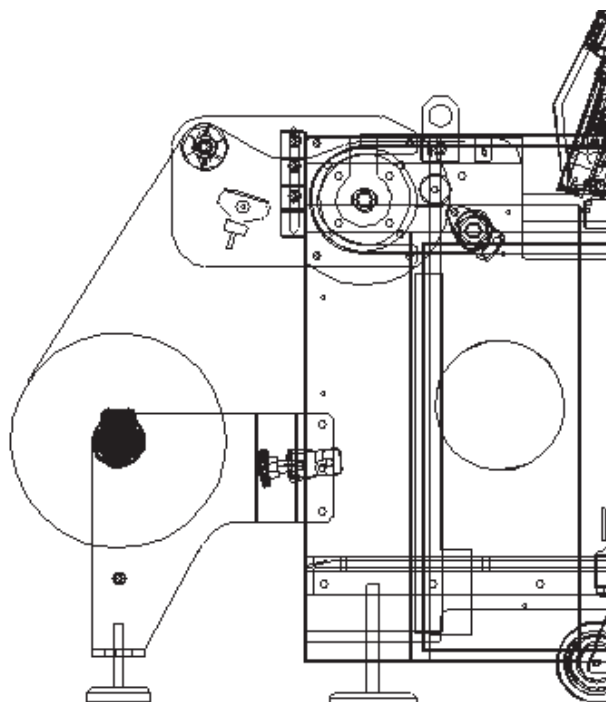
As the feeding system has the centering unit, the media is set in the center as it is in the initial position. In addition, the media feeding during printing is controlled by the operation of the tension bar with two sensors.



- Do not touch this machine during the automatic function. There is the danger of injury as the pressure roller may move down automatically etc. and your finger may be pinched.



Until the media is detected in the peeling sensor (START) located right behind the peeling roller, the take-up unit is in the idling status. When it is detected, the take-up unit takes up the media until the peeling sensor (STOP) responds. This process will repeat up to the end of the printing process.



Assistant function

Among the assistant devices prepared in this machine such as the centering unit, the belt heater, the belt washing unit, the external heater, etc., you can switch ON/OFF for some of them depending on the kind of media.

Switch ON/OFF of the centering unit

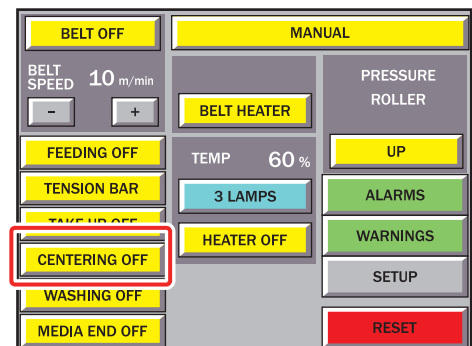
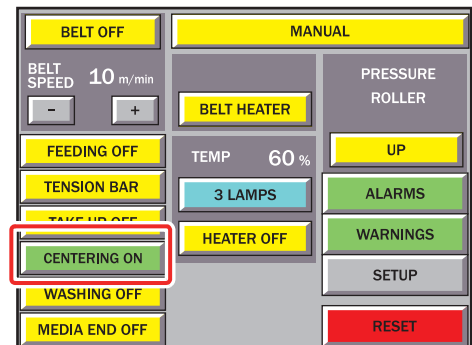
By using the centering unit, you can keep the media straight during printing. However, depending on the way of winding media, the media may fold due to this centering operation.

1

Switch by pressing the [CENTERING ON/OFF] on the operation touch panel.

- If you wish to change to ON : lights in green

- If you wish to change to OFF : lights in yellow



2

Basic Operations

Switch ON/OFF of the belt washing unit

By using the belt washing unit, you can wipe off ink stuck through and on the feeding belt.

1

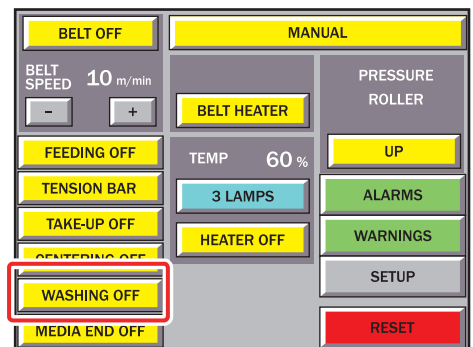
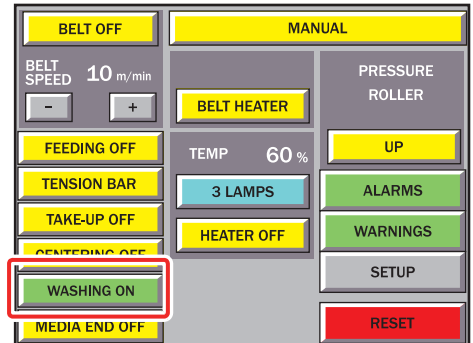
Switch by pressing the [WASHING ON/OFF] on the operation touch panel.

• If you wish to change to ON : lights in green

Important!

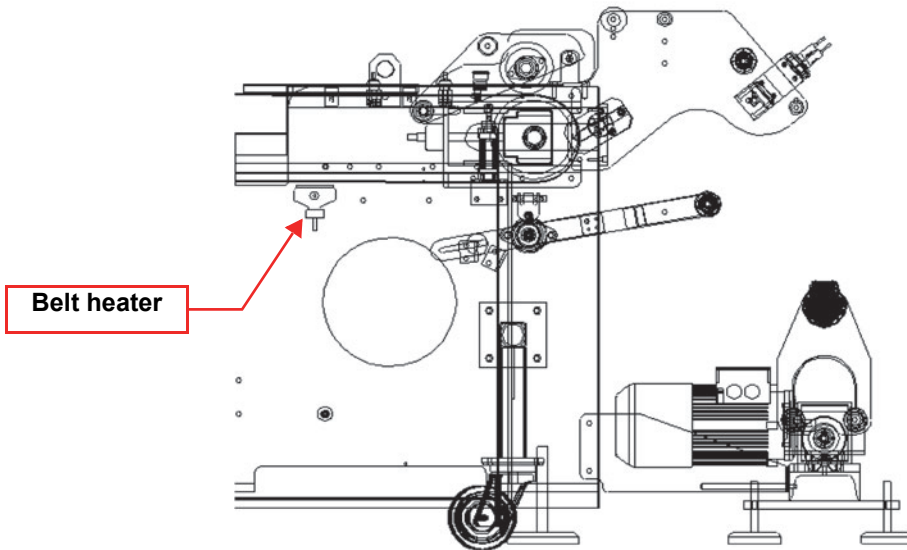
• The belt washing unit is ON only when the feeding belt is in the operation status. Even if it is ON on the operation touch panel, if the feeding belt is not in the operation status, it will not operate.

• If you wish to change to OFF : lights in yellow



Switch ON/OFF of the belt heater

By using the belt heater, you can keep the adherence and dryness of the feeding belt.



1

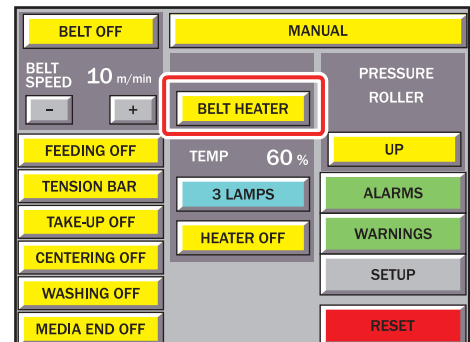
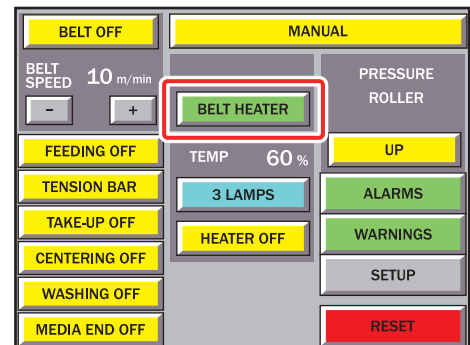
Switch by pressing the [BELT HEATER] on the operation touch panel.

- If you wish to change to ON : lights in green

Important!

- For the belt heater temperature setting, refer to “Normal setting” (P.1-14).
- When recoating adhesive, be sure to turn this OFF.

- If you wish to change to OFF : lights in yellow



2

Switch ON/OFF of the main heater

1

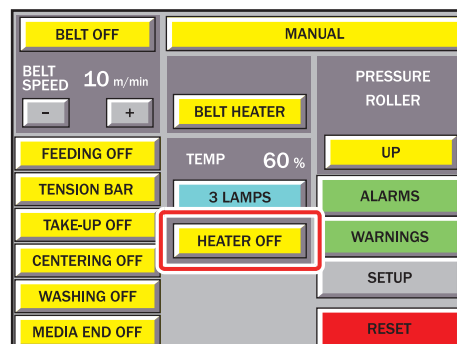
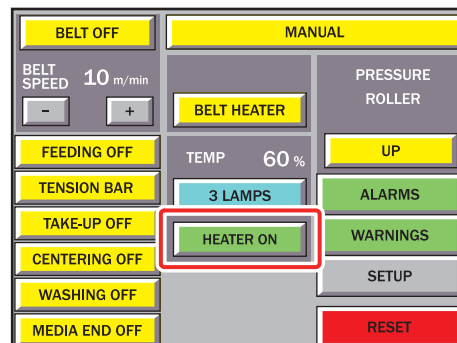
Switch by pressing the [HEATER ON/OFF] on the operation touch panel.

• If you wish to change to ON : lights in green

Important!

- For the main heater temperature setting, refer to “Normal setting” (☞ P.1-14).
- When recoating adhesive, be sure to turn this OFF.

• If you wish to change to OFF : lights in yellow

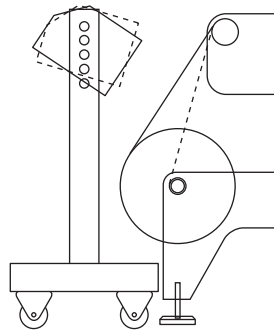


Adjust the angle of the main heater

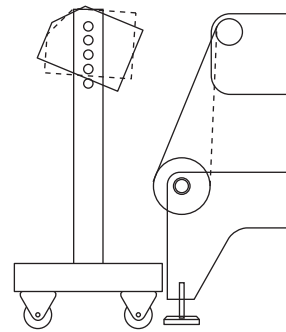
When using the main heater, adjust the angle of the heater depending on the media angle to dehydrate the media normally after printing.

Important!

- When using the main heater, make it parallel against the media surface from the free roller to the take-up device.
- The angle of the media surface differs depending on the take-up method (inward/outward) or the taken-up amount of the media.



Change of angle by taken-up amount



Change of angle by take-up method (inward/outward)

1

Loosen the hexagon head bolt on the side surface of the main heater using the attached monkey wrench.



2

Adjust the angle of the heater and tighten the hexagon head bolt.

Important!

- Adjust the angle of the main heater with two persons or more without fail.



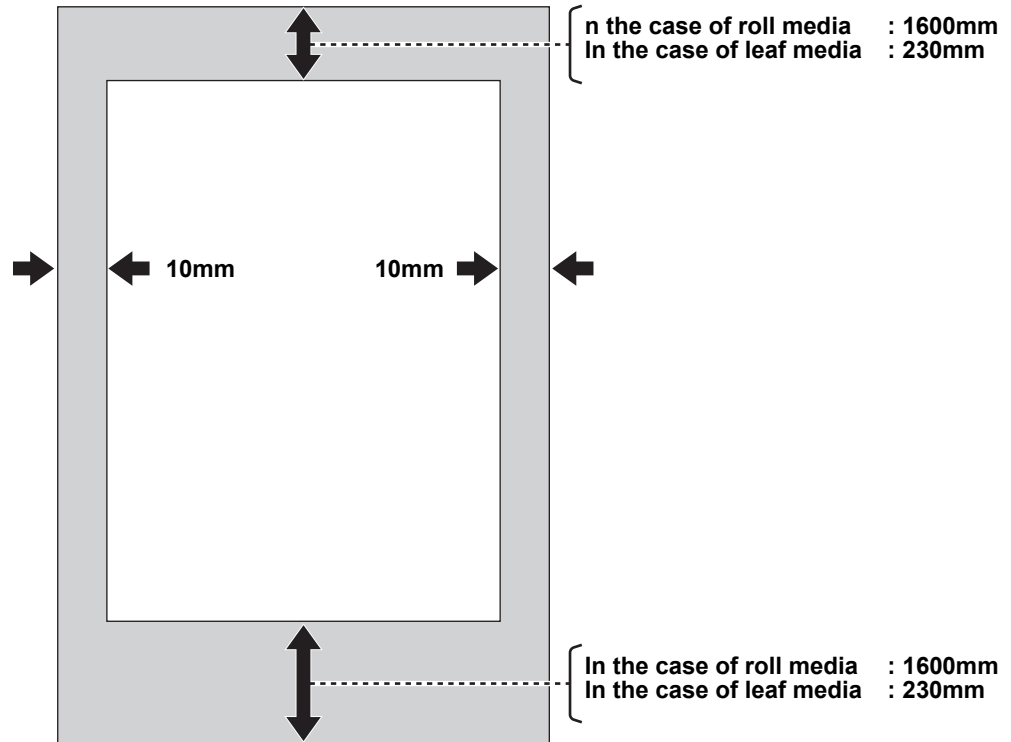
2

Basic Operations

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.



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

For usable media, refer to P.1-18 "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 because the roll is heavy in weight.

Outline of media setting

It is recommended to set media by two persons and more from the aspect of workability.



- As the pressure roller is a heavy roll, much care should be taken for falling of the roller and being wedged during media setting.

Attach the fabric winding roller
(☞ P.2-18)

To prevent the media from being stained, prepare the fabric winding roller.

Feed the media(☞ P.2-20)

Set the media and feed it to the take-up unit side.

Take up the media(☞ P.2-26)

Fix the media on the paper core and take up it.

Adjusting the Head Height
(☞ P.2-32)

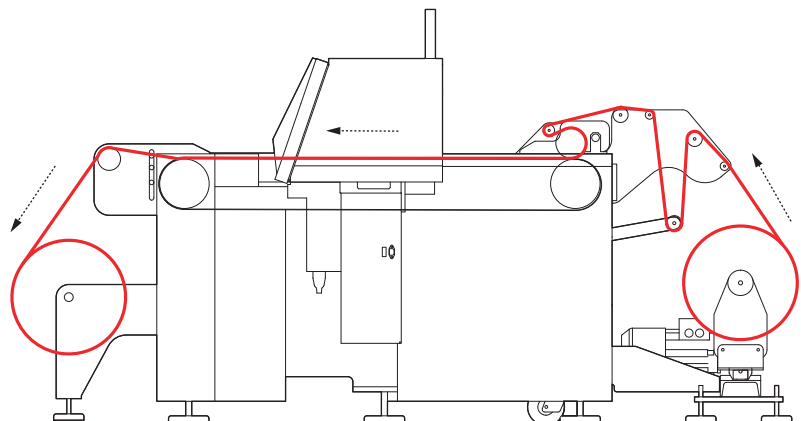
Refer to P.2-32 "Adjusting the Head Height".

Detecting the media (☞ P.2-34)

Refer to P.2-34 "Detecting the Media".

About media route

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.



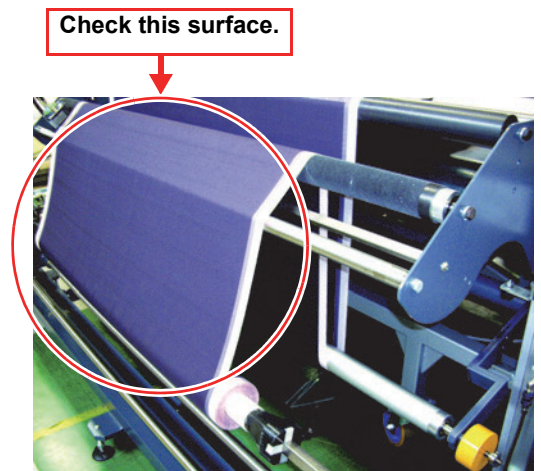
Adjusting weight of tension bar

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.

● Reference for weight adjustment

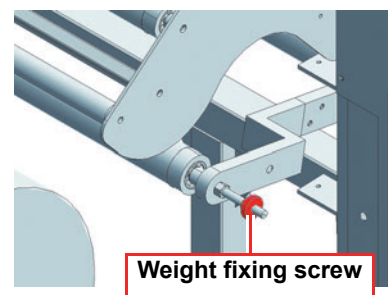
Check whether the tension suited for the media is applied on by referring to the phenomenon below. If the proper tension is not applied on the media, it is required to adjust the number of counter weights.

Weight	Media surface	Status at feeding
Not enough	Partial waviness occurs and the media surface is not flat.	
Proper	The media surface is flat.	
Too much	The media surface acquires wrinkles.	The tension bar does not move upward, or, the paper core slips.



● Method for attaching counter weight

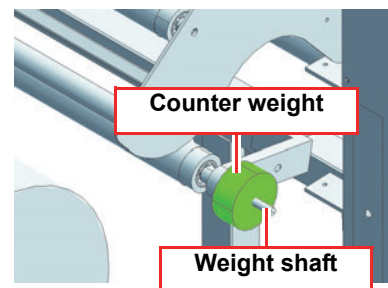
1 Remove the weight fixing screw.



2 Insert the attached counter weight into the weight shaft of the floating tension bar.

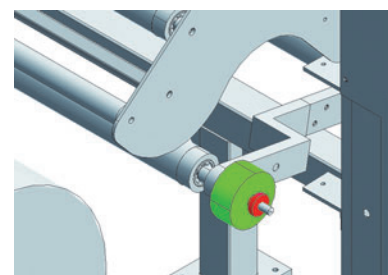
- This machine provides one counter weight each for 2000g, 1300g, 600g, 300g and 100g.

- Important!**
- Be sure to attach the counter weights of the same weight both for right and left. If the weights are different, feeding defect may occur.



3 Attach the weight fixing screw.

- Be sure to attach the weight fixing screw so that the attached counter weight may not fall.



- After attaching the counter weight, perform test print to check that the tension is suitable for the media.

Attach the fabric winding roller

After washing belt, drops of water that could not be removed with the wiper of the washing unit may remain in some cases.

If those drops are carried to the belt surface, it may stain the media before printing.

You can remove drops adhering to the belt by attaching the fabric winding roller in advance.

Important!

- Before shipment, the fabric winding roller had no fabric. Prepare water-absorbing fabric with the size below:

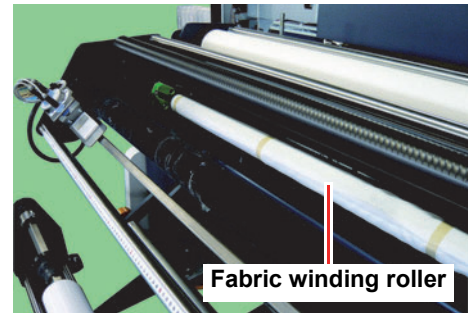
Material : cotton sheeting, velveteen, etc. (water-absorbing fabric)

Size : 195cm x 100cm

1

Remove the fabric winding roller.

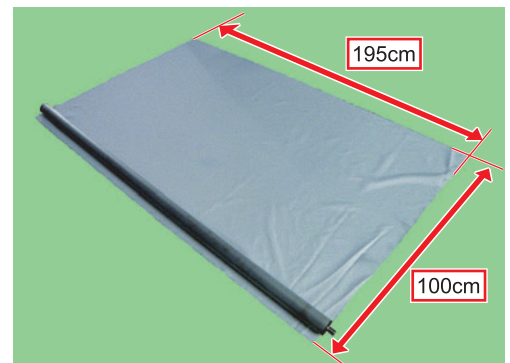
- The fabric winding roller is located in the rear surface of this machine and around the feeding belt roller.



2

Wind the fabric on the fabric winding roller.

- (1) Align the roller with the fabric as indicated in the right figure.



- (2) Fix the roller and the fabric with adhesive tape.

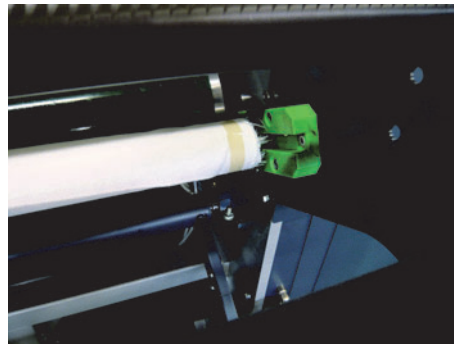
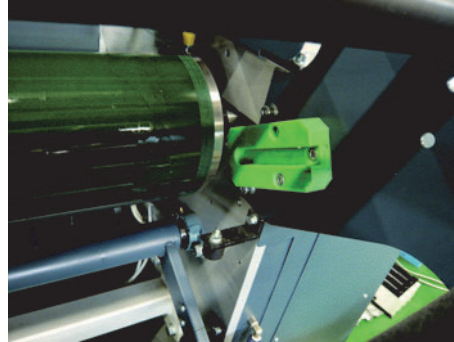
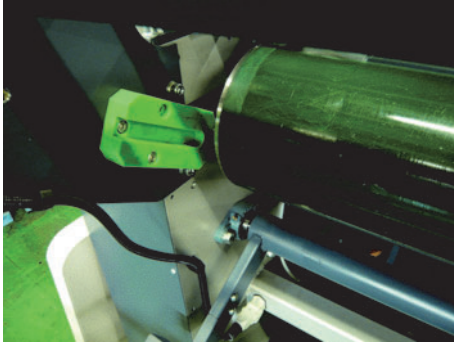


- (3) Wind the fabric on the roller and fix it with adhesive tape.



3**Attach the fabric winding roller with the fabric.**

- Attach the fabric winding roller by aligning it with the groove of the resin block around the feeding belt roller on the rear surface of this machine.

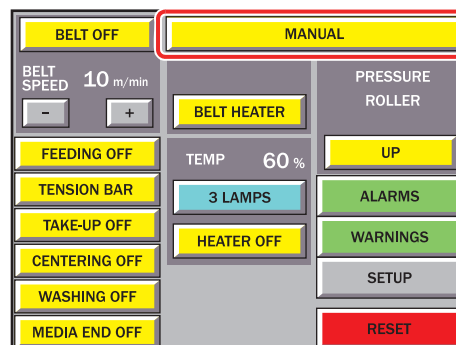
**4****Rotate the feeding belt to check that the fabric winding roller can rotate smoothly.****2**

Basic Operations

Feed the media

1

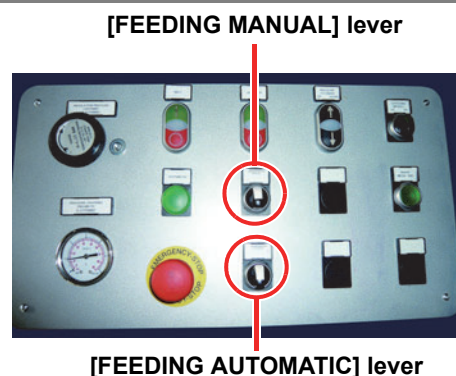
Press the [AUTOMATIC] on the operation touch panel to make the status to [MANUAL].









2

Operate the [FEEDING MANUAL] lever and the [FEEDING AUTOMATIC] lever on the rear control panel to select the rotation direction of the feeding unit.

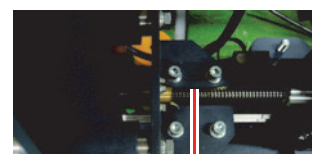
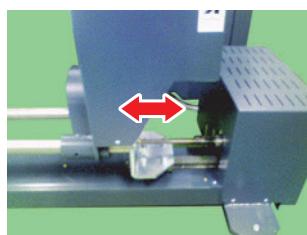
- The rotation direction of the [FEEDING MANUAL] lever is determined by the direction of the [FEEDING AUTOMATIC] lever.
- The direction of the [FEEDING AUTOMATIC] lever is determined by the print side, either taking up inwards or outwards. For details, refer to the table below.



Print side	[FEEDING AUTOMATIC] lever	[FEEDING MANUAL] lever	
		When feeding media	When taking up media
Taking up outwards	Rotate counterclockwise 	When feeding media  Rotate clockwise	When taking up media  Rotate counterclockwise
Taking up inwards	Rotate clockwise 	When feeding media  Rotate clockwise	When taking up media  Rotate counterclockwise

3

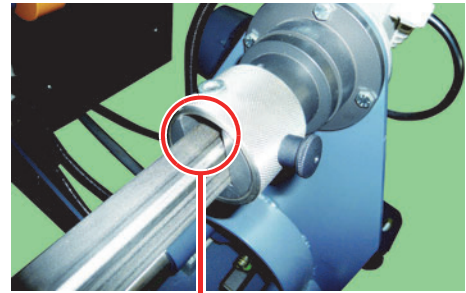
Rotate and adjust the [CENTERING MANUAL] lever on the rear surface control panel so that the centering unit may be located at the center of the centering area.



Adjust so that the centering unit may be located at the center of green seal of both ends.

4 Set the media on the roll shaft.

(1) Rotate the roll shaft and make the roll shaft slot turn up.



Roll shaft slot

(2) Loosen the finger screw and move the shaft fixing collar.



- Before moving the shaft fixing collar, be sure to check that the roll shaft slot turns up. If you move the shaft fixing collar with the roll shaft slot turn down, the roll shaft may fall off and it is very dangerous.

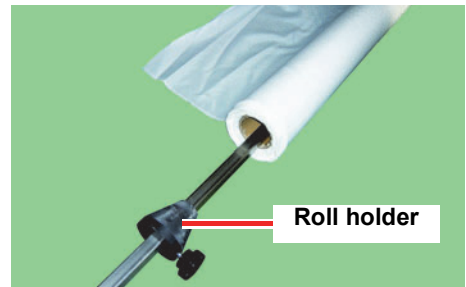


Shaft fixing collar

(3) Remove the roll shaft.

(4) Put the media through the roll shaft and fix with the roll holder.

- After setting the roll holder, rotate the media manually to check that the media does not slip between the roll holder and the paper core.
- If slip must occur during printing, fix the roll holder and the paper core with tape.



Roll holder

(5) Set the roll shaft on the feeding unit.

(6) Return the shaft fixing collar to the original position.



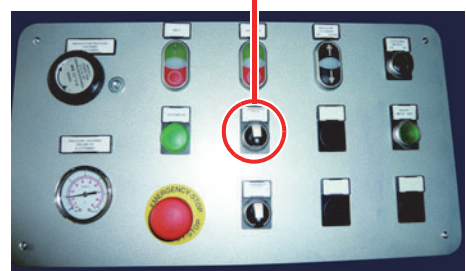
- Surely fix the shaft fixing collar. If you rotate the feeding unit without fixing it, the roll shaft may fall off and it is very dangerous.



5 Rotate the [FEEDING MANUAL] lever on the rear surface control panel to feed the media.

- Feed it by about 3m.

[FEEDING MANUAL] lever



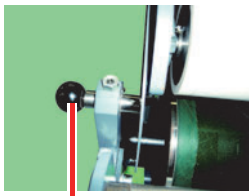
6**Put the media through the centering unit sensor and the dancing tension bar.**

- For the media of 1000mm and less in width, the media may exceed the adjustment range of the right and left movement of the centering sensor unit when you set the media on the center basis. In this case, adjust the setting position of the media so that it may fall inside adjustment range of the centering sensor.

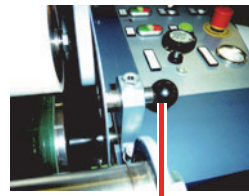
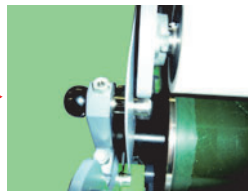
Centering unit sensor



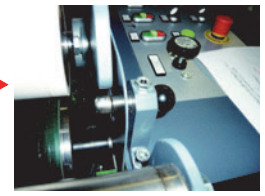
Dancing tension bar

7**Push the safety pins on both ends of the pressure roller.**

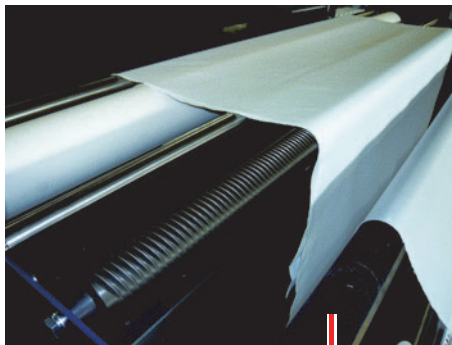
Safety pin



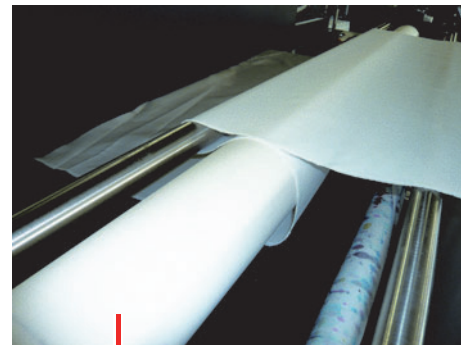
Safety pin



- To prevent injury from unexpected falling of the pressure roller, be sure to push the safety pins.
- Check that the safety pin comes out completely. If it does not come out completely, it cannot prevent the pressure roller from falling.

8**After putting the media through the turning bar located on the upper side of the pressure roller, wind the media on the pressure roller.**

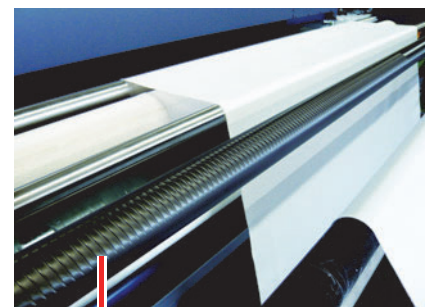
Turning bar



pressure roller

Important!

- Smoothing wrinkle roll bar can function when the media is set at the center basis.
- Smoothing wrinkle roll bar cannot function when the media is set at the right end basis. In this case, do not use the smoothing wrinkle roll bar.

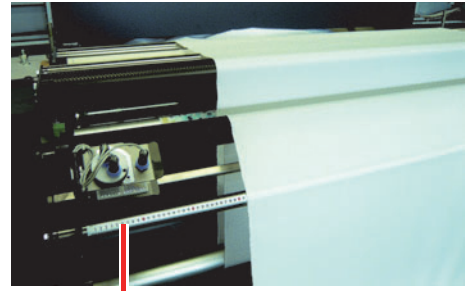


Smoothing wrinkle roll bar

9 Check that the media is not set slanted from the media roll ends, the centering sensor, the tension bar and the pressure roller.

Important!

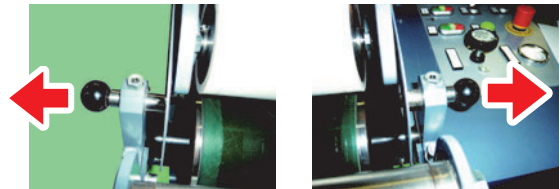
- When you wish to set the media of maximum width (1860mm), set it on the position where it does not conflict with the belt encoder. If the media may be caught in the belt encoder, normal printing cannot be performed.



See from the rear side of the machine and check that the media is set straight.

- If the media is set slanted, adjust the slanted part by moving the media right and left.
- If it is hard to move the media, lift the tension bar slightly. Releasing the tension makes the work easier.
- If you set the media of maximum width (1860mm), be careful about it including confliction with the belt encoder. Even if you move the media, misalignment cannot be corrected in some cases. Therefore, perform adjustment of the centering position etc. to prevent the media from slanted setting.

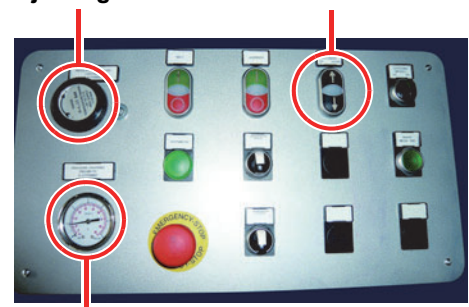
10 Return the safety pins to the original position.



11 Press the [PRESSURE CYLINDER] DOWN (↓) switch to move the pressure roller down.

- Rotate the adjusting dial to adjust the pressure of the pressure roller (refer to the table below).
- Check the air pressure gauge located under the control and adjust the pressure depending on the media to be used.
- Depending on the kind of the media to be used, pre-treatment and adhesive status, pressure adjustment is required in some cases. For reference, for stretch material, make the pressure lighter, and for non-stretch material, make the pressure stronger.
- After printing starts, also check the peeling status of the fabric on the take-up side of this machine to fine adjust the pressure.

adjusting dial PRESSURE CYLINDER



Air pressure gauge

Rotating direction of adjusting dial	pressure roller	Air pressure gauge display
Rotate clockwise	Lighten	Air pressure goes up.
Rotate counterclockwise	Gets heavier	Air pressure goes down.



- The pressure roller is a heavy roller.
- Before you move the pressure roller down, check that no one is near it.
- It is very dangerous if your hand etc. is wedged by the pressure roller as there is the danger of injury.

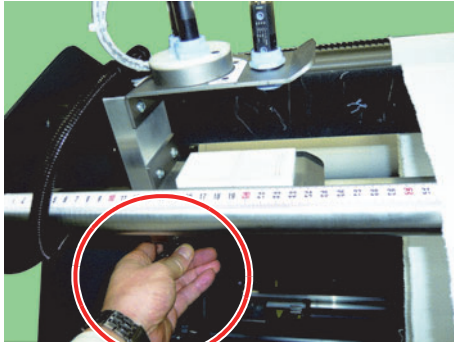
12

Adjust the position of the centering sensor.

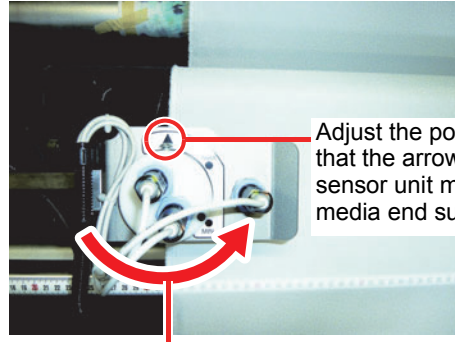
- Rotate the centering sensor unit to adjust the centering detection width.
 - Maximum** : Allows media misalignment of about 30mm.
 - Minimum** : Allows media misalignment of about 10mm.
- Use it by adjusting the position between the maximum value and the minimum value at will.

Important!

- For the media with much weaving, stretch material, etc., the effect of centering cannot be expected in some cases even if you use the centering unit. Be sure to perform test printing to check if the centering functions effectively before using it.
- If media windles or wrinkle occurs at fixation, print with the centering function OFF.



Loosen the finger screw located on the rear surface of the sensor unit to make the sensor unit movable to right and left.



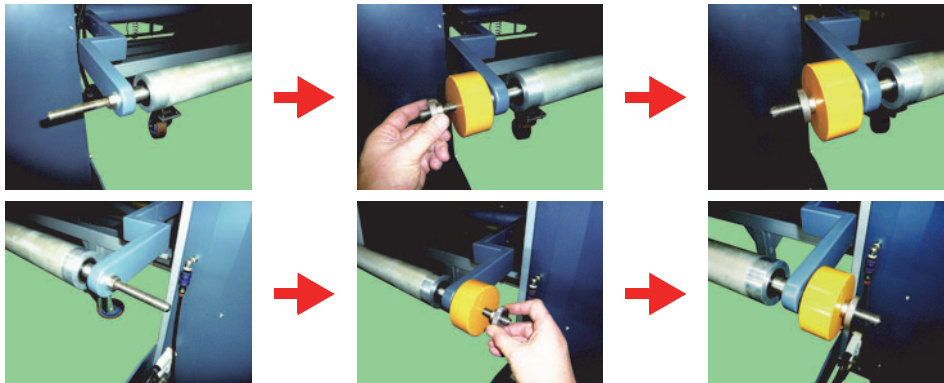
Adjust the detection width of the centering sensor.

Adjust the position so that the arrow of the sensor unit matches the media end surface.

13

Weight the tension bar as required to put proper tension on the media.

- For the weight attaching on the tension bar, adjust them so that they weigh same for right and left. If you weight much on only one side, media may skew or wrinkle may occur.
- Depending on the kind of media, width, pre-treatment status, etc., the proper weight may change. For reference, for stretch material, make the pressure lighter, and for non-stretch thick material, make the pressure stronger.

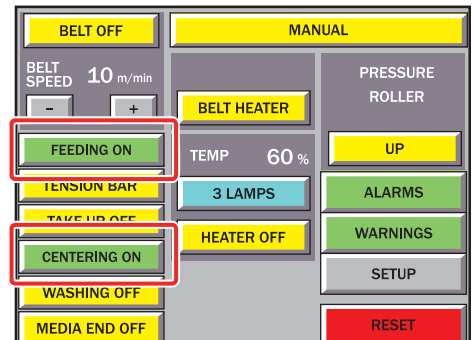


14

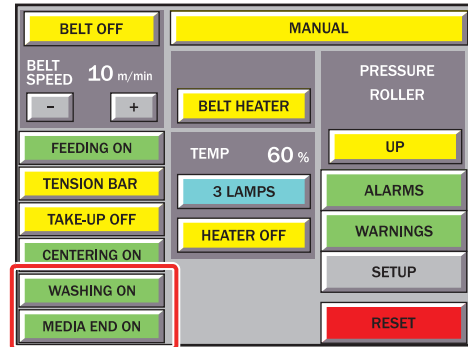
Pressing the [FEEDING OFF]/[CENTERING OFF] on the operation touch panel, switch the status to the [FEEDING ON]/[CENTERING ON].

Important!

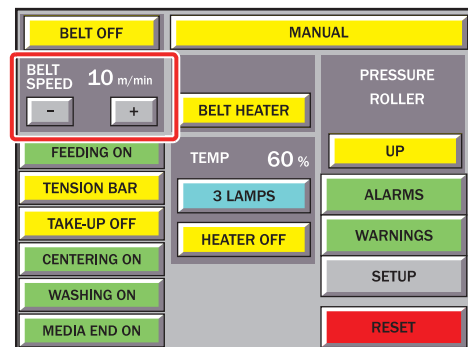
- Do not press the [TAKE-UP OFF] without the media being set on the take-up unit. The warning error, [PEELING ERROR], to prevent the machine breakage or the media damage at taking up may occur unnecessarily.
- If it is the [TAKE-UP ON], switch it to the [TAKE-UP OFF].



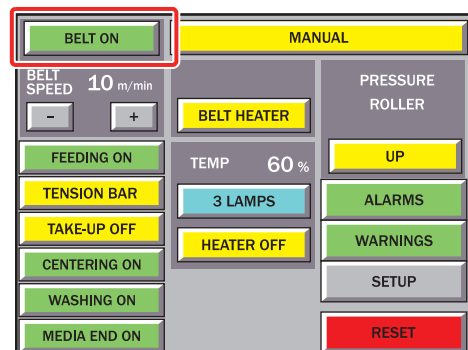
- 15** Pressing the [WASHING OFF]/[MEDIA END OFF] as required, switch to the [WASHING ON]/[MEDIA END ON].



- 16** Set the speed to about 10m/min by pressing the BELT SPEED [-]/[+].



- 17** When you press the [BELT OFF] to switch to the [BELT ON], the belt will operate and feed the media.



Important!

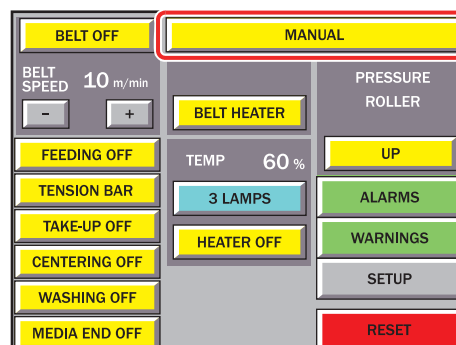
- With the jog key of the printer unit, you can perform back feed of the media in units of 300mm. However, do not perform back feed if possible as there is danger of wrinkle and fold occurring on the media, media stain due to belt washing water, etc.
- If you wish to perform back feed by necessity, first loosen the media of take-up side, operate keys while taking up the media of the feeding side, etc., and then perform it with much care about the media status.
- For damages such as break of printer or media, deterioration of printing quality, etc. caused from performing back feed, our company shall not hold responsible. So please be careful about it.
- If the media cannot be fed normally, the warning error [DANCING BAR ANOMALY] occurs. In such a case, release the warning by following the procedures below:
 - (1) Rotate the [FEEDING MANUAL] lever of the rear surface control panel to move the floating tension bar downward until it becomes flat.
 - (2) Check the direction of the [FEEDING MANUAL] lever to confirm that the media feeding direction is proper. (Check it by referring to the table in the Step 2 of P.2-20.)
- When you fed the media more than a certain amount with the jog key of the printer unit, the warning error of [PEELING ERROR] may occur to prevent the media from being taken into the lower part of the belt. At this time, check that the media has not been taken into the belt, and if there is no problem, press [WARNINGS] [PEELING ERROR] to release the warning.

Take up the media

Take up the fed media on the empty paper core.

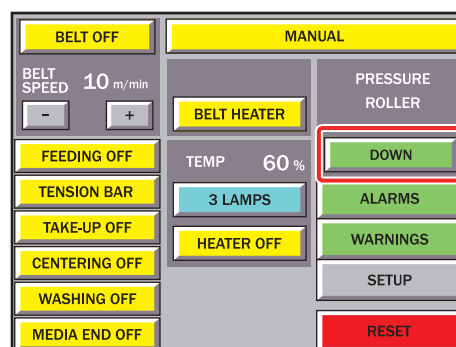
1

Press the [AUTOMATIC] on the operation touch panel to make the status to [MANUAL].



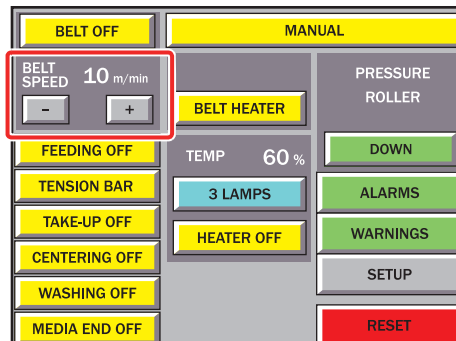
2

Press PRESSURE ROLLER [UP] to change it to [DOWN].



3

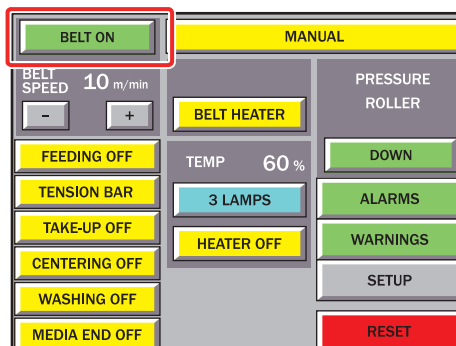
Set the speed to about 10m/min by pressing the BELT SPEED [-]/[+].



4

Press the [BELT OFF] to make it to [BELT ON].

- Belt will operate and feed the media.
- If enough amount of media is taken up to fix the media to fabric core, press the [BELT ON] and switch to the [BELT OFF].



5 Set the empty paper core on the take-up unit.

- Set the empty paper core on the take-up unit in the same way as the setting of the roll shaft of the feeding unit.
- The empty paper core with radial thickness of 5mm and more is recommended.
- If radial thickness of the paper core is not enough, take-up may not be performed properly because the paper core may be broken or bent in the middle of take-up.

6 Fix the media on the empty paper core.

- Feed the media until it conflicts with the empty paper core and fix it on the paper core with adhesive tape.

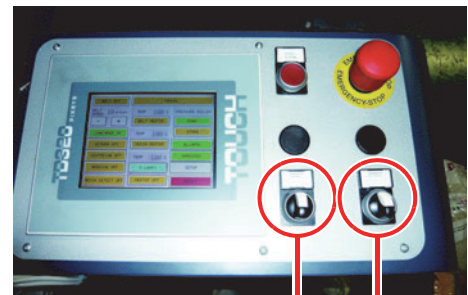
Important!

- When you fix the media on the empty paper core, fix it at intervals of 30cm and more preferably in order not to be peeled at take-up.








7 Operate the [TAKE-UP MANUAL] lever and the [TAKE-UP AUTOMATIC] lever on the front control panel to wind the media.

- The rotation direction of the [TAKE-UP MANUAL] lever is determined by the direction of the [TAKE-UP AUTOMATIC] lever.
- The direction of the [FEEDING AUTOMATIC] lever is determined by the print side, either taking up inwards or outwards. For details, refer to the table below.
- Wind the media making going round at least twice to prevent the media from falling from the paper core.



TAKE-UP MANUAL] lever

[TAKE-UP AUTOMATIC] lever

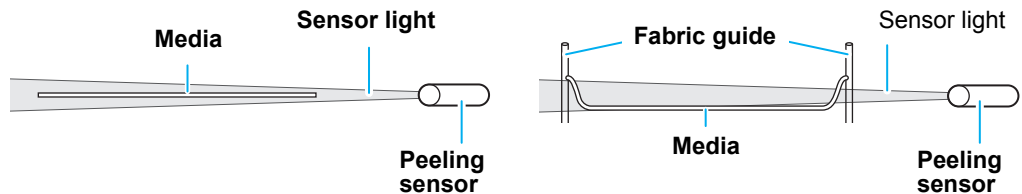
Print side	[TAKE-UP AUTOMATIC] lever	[TAKE-UP MANUAL] lever	
Taking up outwards	Rotate clockwise 	When loosening the media  Rotate clockwise	When taking up media  Rotate counterclockwise
	Taking up inwards	Rotate counterclockwise 	When loosening the media  Rotate clockwise

8

Adjust the fabric guide to slant the media end.

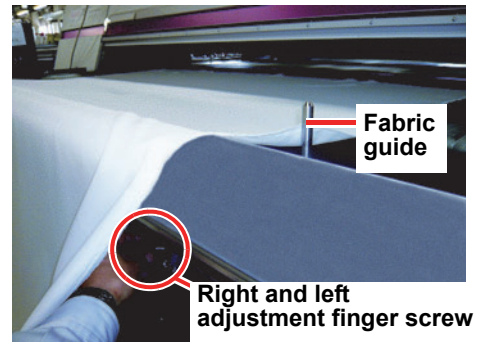


- This machine checks the media position by detecting media with the peeling sensor.
- The peeling sensor can detect the media when the media shades light emitting from the sensor.
- When using firm media or wider media, the media cannot be detected in some cases because light emitting from the sensor is not shaded much. When using such media, to make the media can shade the sensor light by slanting the media edge with the fabric guide in order to detect the media easily.



- For the wider media (1000mm and more), if wrinkle or waviness may occur on the media at peeling, it is not required to use the fabric guide.

- (1) Loosen the right and left adjustment finger screw and move to right and left.
 - The fabric guide moves to right and left.

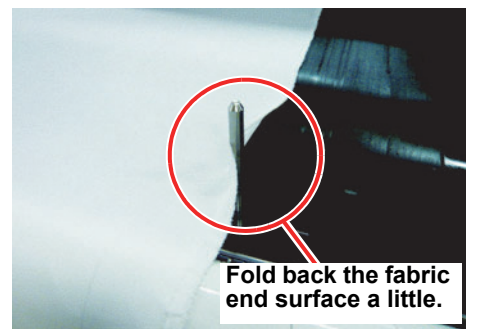


- (2) Align the fabric guide position so that it is in the status indicated in the photo.

Important!

- Make the amount of pressing the fabric guide against the fabric edge about 10mm. If you press it too much, the media may be taken up on the roll with the fabric edge folded.

- (3) Adjust both of right and left of the fabric in the same way.



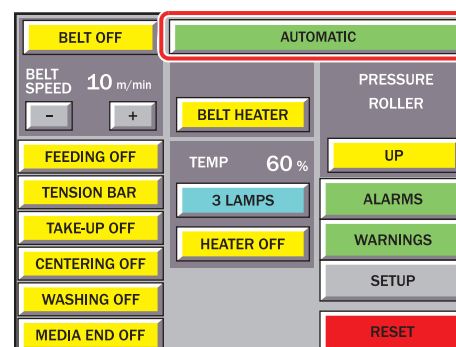
9 Set the external heater.

- When using the external heater, move it by adjusting the heater position so that heat can be applied evenly on the media front.



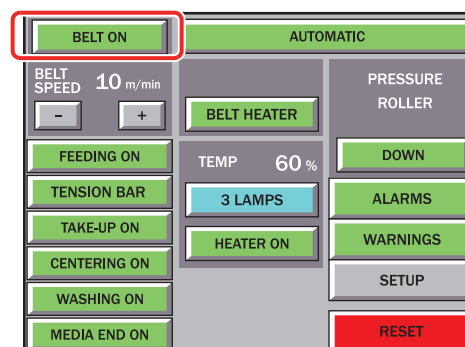
- When using the external heater, the heat of the heater may be directly applied to the cover of the machine, the heater unit cable, etc. and they may reach a high temperature. Though we inform you of that by pasting the caution label on the position where it is easy to reach a high temperature, depending on the heater installing status, unwilling position may reach a high temperature. Be careful to use the external heater by paying attention to the position (other than the media) where the heat of the heater will be applied to.
- When recoating adhesive, be sure to turn this OFF.

10 Press the [MANUAL] on the operation touch panel to make the status to [AUTOMATIC].



11 Press the [BELT OFF] to make it to [BELT ON].

- Other than this, make the button of the required function "ON".



12 Operate the Tx400 side to make it in the printing status.

- Perform setting of the head height (P.2-32), media width (P.2-34), etc. and make it in the printing status.

13 Output the printed data.

- When the setting of the media feeding system and the Tx400 are completed, output the printed data and start printing.

Set the interleaving paper roll when using Rc210 ink

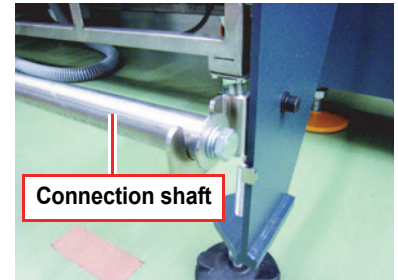
For using Rc210 ink, set the interleaving paper roll to prevent offset when the media is taken up.

Important!

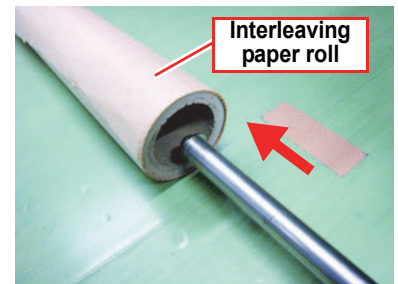
- Please use interleaving paper which the external diameter is 160mm or less at the maximum.
- Please do not use breakable interleaving paper since it becomes overloaded with such interleaving paper while printing.

1 remove the connection shaft for setting the interleaving paper roll.

- remove the connection shaft below the take-up unit.
- 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.



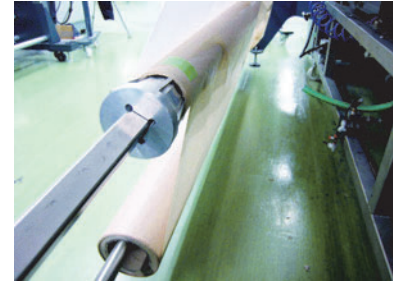
4 Perform the work in P.2-20 "Feed the media" and feed the media to the take-up side of the machine front surface.

5 Perform the work up to the Step 6 in P.2-26 "Take up the media" and fix the media on the paper core.

6

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.

**7**

Perform the work from the Step 7 in P.2-26 “Take up the media” and wind the media and the interleaving paper on the paper core.

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) 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.
 - (2) 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.4-22)

1 Set the fabric.

2 Press the **FUNCTION** key.

FUNCTION
SETUP <ENT>

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

FUNCTION
MAINTENANCE <ENT>

4 Press the **ENTER** key.

MAINTENANCE
Station <ENT>

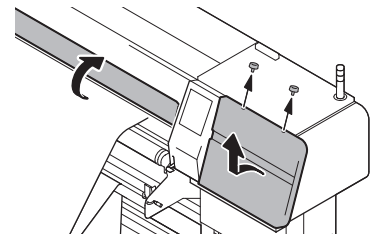
5 Press **▲** **▼** to select [Head Height].

MAINTENANCE
Head Height <ENT>

6 Press the **ENTER** key twice.

- The carriage will move.

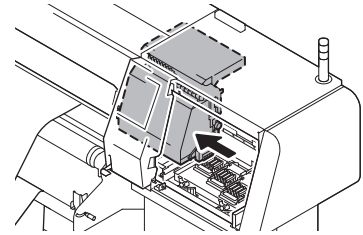
7 Open the front cover and the maintenance cover R.



8

Move the carriage.

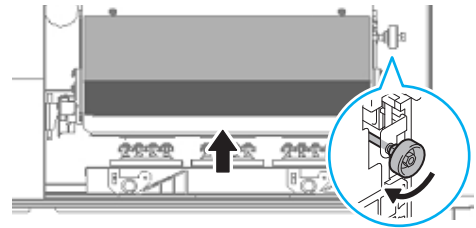
- Move the carriage by hand until the head height adjusting rod comes on the media.
- If the carriage hits the spacer or the fabric retainer, go to the step 9 and raise the head.



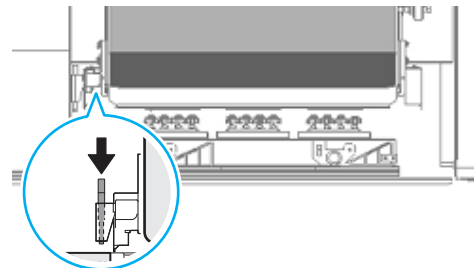
9

Adjust the head height.

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



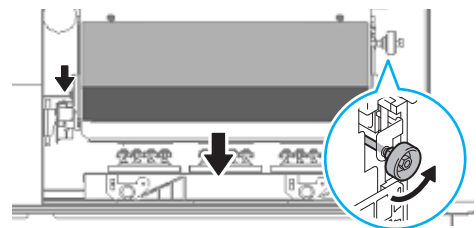
- (2) Push the head height adjusting rod to up to the position not to move even pressing from the above.



- 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.**




- 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.
- 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.




- 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** Press the  key.

Media Psth
Check : ent

- 3** Press   to input the media remaining, and press the  key.

• The setting of the media remaining can be checked on the P.3-39 "Confirming Machine Condition".

MEDIA SET
Capacity = 2m

- 4** 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  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  key.

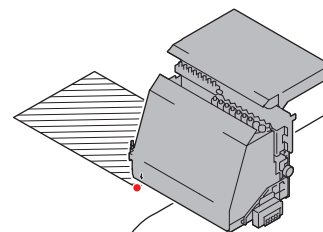
• The carriage moves.

PRINT AREA
Width = MANUAL




- 5** Set the printing origin.

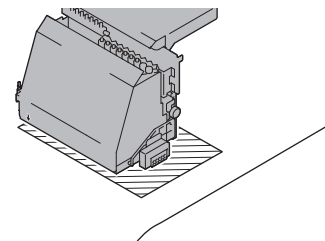
- (1) Press   to move the carriage to the print start position (origin).
• Put an arrow mark of the carriage on the setting position.
(2) Press the  key.








• 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.



6 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.
- (2) Press the  key.
 - After capping, the screen returns to LOCAL.

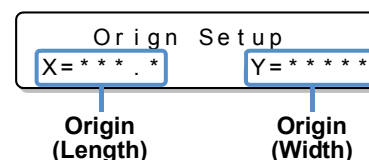


- If you set the wrong printing area, detect again from the Step 1 after performing the operation below.
 - (1) Press the  key.
 - (2) Press   to select [MEDIA SET].
 - (3) Press the  key.
 - (4) Press   to select "RESET".
 - (5) Press the  key.

When Changing the Origin

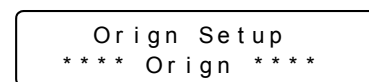
1 Press in LOCAL, to adjust the Origin to the position

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



2 After determining the origin, press the key.

- The origin is changed.



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.2-14	• If the origin position has been set
	• If the head gap has been adjusted (☞ P.2-32	

1

Press the **TEST DRAW** key in LOCAL.

```
TEST PRINT
                                <ENT>
```

2

Press the **ENTER** key.

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

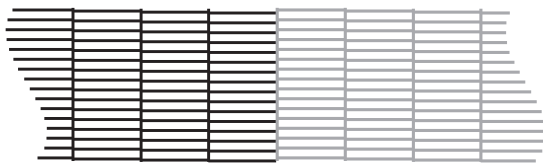
```
** TEST PRINT **
**   Printing   **
```

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

3

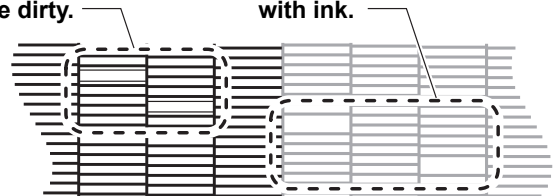
Check the result of the test printing.

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



Normal pattern

The nozzles are dirty.



Clogged with ink.

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.4-4, P.4-5)
- Wash the nozzle head. (☞ P.4-8)
- See "If nozzle clogging is not solved (ink filling)" to improve poor image quality. (☞ P.4-24)

Printing Data

Starting a Printing Operation

1 Setting a media. (☞ P.2-14)

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

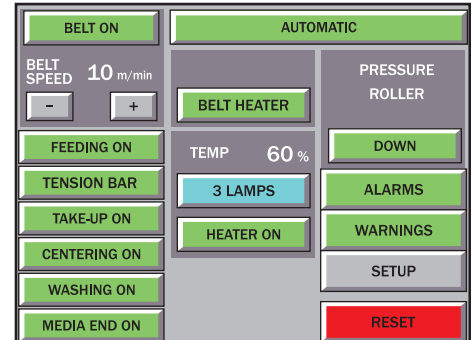
- Select the user type according to the media to be used.

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

3 Make the media feeding system printable.

Switch each item below on the operation touch panel:

- Press [MANUAL] to change it to [AUTOMATIC].
- Press [BELT OFF] to change it to [BELT ON] [FEEDING ON] and [TAKE-UP ON].
- Press PRESSURE ROLLER [UP] to change it to [DOWN].
- Refer to the assistant function (☞ P.2-9) to change the required function to ON.



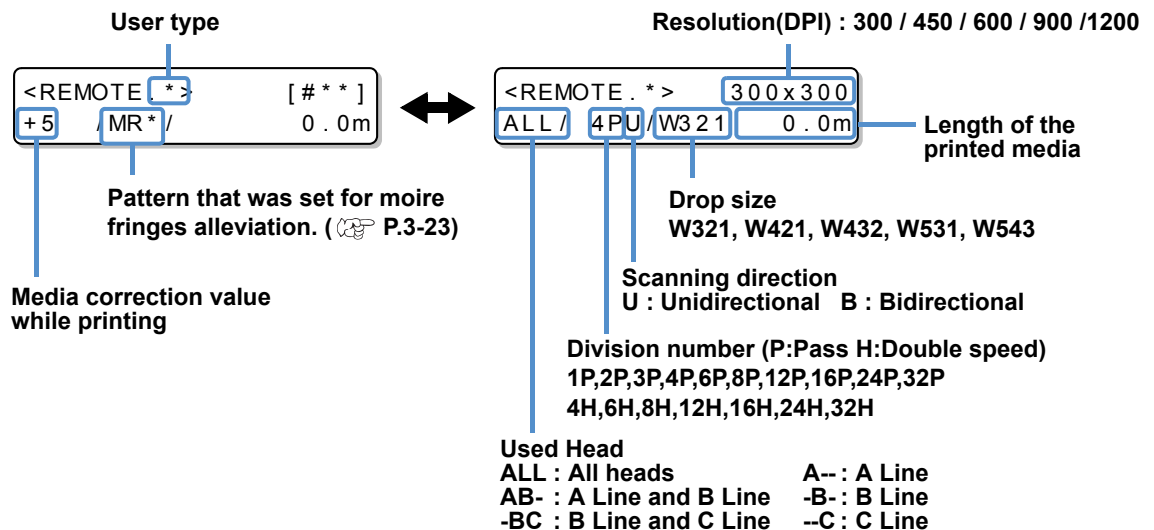
4 Press the **REMOTE** key.

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

<REMOTE . * > [# * *]
+5 0 . 0m

5 Transmit data to be printed from the PC.

- The printing starts.
- The information of the printing being executed is displayed. (☞ P.1-25)



6 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 : e n t

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).

Feed Comp . 5
 Adjust = -2

Correction value before changing

Input value (current correction value)

4 Press the **ENTER** key twice.

- The new correction value is saved.

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	Setting Color pattern	3-21
Registering All Printing Conditions Together (Type Registration)	3-2	Setting Drying Time	3-22
How to Register User Types	3-2	When moire fringes occur during printing ...	3-23
Setting Media Correction	3-4	Other Settings	3-25
Setting Media Feed	3-6	Machine settings	3-26
Setting feeding speed	3-6	Switch head to use	3-27
Setting jog speed	3-7	Set machine name	3-28
Setting belt encoder	3-8	Set stamp	3-29
Setting softness	3-10	Performing setting related to warning	3-30
Setting the Printing Quality	3-11	Setting of blank data	3-34
Setting Priority Order	3-14	Setting of media dryness feed using MAIN heater	3-35
Setting Automatic Cleaning	3-15	Printing the List of Settings	3-37
Setting of cleaning before printing	3-15	Confirming Machine Information	3-38
Setting of cleaning while printing	3-16	Confirming Machine Condition	3-39
Setting of cleaning after printing	3-18		
Setting of Power ON cleaning	3-20		

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.

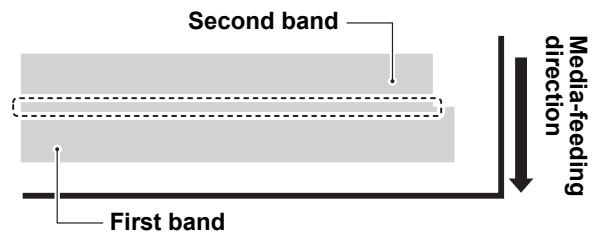
Function Name		Set Value	Overview	
Media Comp. (☞ P.3-4)		-500 to <u>0</u> to 500	Used to print a pattern for correcting a mediafeeding rate and correct it.	
Media Feed (☞ P.3-6)	Feed Speed	10 to <u>100%</u>	Used to slow the media feeding speed.	
	Jog Speed	10 to <u>100%</u>	Used to set the speed for moving media with jog key.	
	Belt Encoder	ON	Belt Joint Adj. (F/R) : OFF/ Level 0 (Correction weak) to Level 3 (Correction strong)	Used to set ON/OFF of the belt encoder monitoring the feeding amount of the media.
		OFF		
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.3-11)			Used to set printing quality and a printing direction.	
Ink Layers (☞ P.3-25)		<u>1</u> to 9	Used to set the number of multi-layer printing.	
Priority (☞ P.3-14)		<u>HOST</u> / PLOT	Used to set the priority order of settings (by host/plot). <ul style="list-style-type: none"> • Media Comp. • Print Mode • Ink Layers • Refresh • Use Head • Drying Time • Feed Speed 	
Refresh (☞ P.3-25)		LEVEL 0 (refreshing interval is long) ~ <u>1</u> ~ <u>3</u> (refreshing interval is short)	Used to set the refreshing interval of the ink head during printing.	
mm/inch (☞ P.3-25)		<u>mm</u> / inch	Used to select the unit to be displayed on the screen.	
Auto Cleaning (☞ P.3-15)	Before Printing	ON / <u>OFF</u>	Used to set the automatic cleaning of the printing heads performed for each printing operation.	
	During Printing	<u>ON</u>		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
		<u>OFF</u>		
Power ON	ON / <u>OFF</u>	Used to set the automatic cleaning at turning ON the power supply.		
Color Pattern (☞ P.3-21)	ON	Space : 5 to 50mm	Used to print a color pattern on the right edge of a media.	
	<u>OFF</u>			
Drying Time (☞ P.3-22)		<u>0.0</u> to 10.0 sec	Used to set the time for ink to dry.	
Moire Reduction		<u>OFF</u> , 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

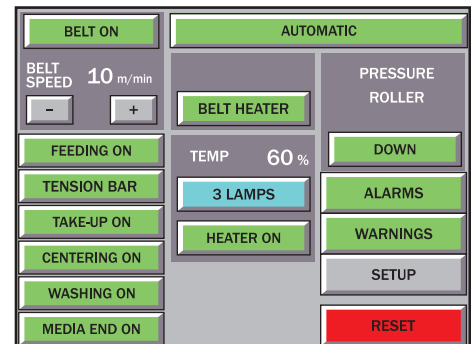
Set the fabric. (☞ P.2-14)

2

Make the media feeding system printable.

Switch each item below on the operation touch panel:

- Press [MANUAL] to change it to [AUTOMATIC].
- Press [BELT OFF] to change it to [BELT ON] [FEEDING ON] and [TAKE-UP ON].
- Press PRESSURE ROLLER [UP] to change it to [DOWN].
- Refer to the assistant function (☞ P.2-9) to change the required function to ON.



3

Press the **FEED COMP.** key in LOCAL.

TYPE 1
Set Origin :ent

4

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

5

Press the **ENTER** key.

TYPE 1
Print :Y= 1800mm

6

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

7

Press the **ENTER** key to print a correction pattern.

** Media Comp **
** Printing **

8

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

TYPE 1
Pattern Check [▲] / [▼]

9



Press the **ENTER** key.

- The screen to enter a correction value is displayed.

10

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.

11

Press the  key.

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

12

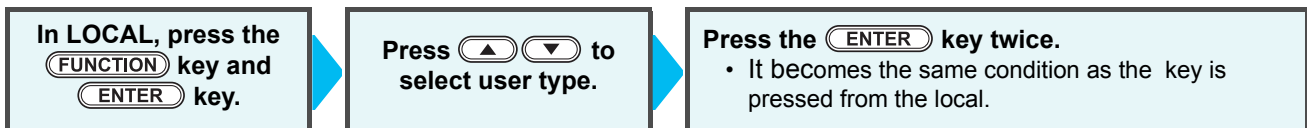
Press the  key several times to end the setting.



- To make effective the value set while printing, set the priority order of the media correction on the "Panel" referring to P.3-14 "Setting Priority Order".

Performing the media correction without key

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



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.3-14 "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.



- When adhesive of the belt becomes weak, the media may not adhere to strongly. In this case, make the feeding speed/the jog speed slower, you may be able to keep the adhesion.

Setting belt encoder

To improve the printing quality, you can use the function to monitor the feeding amount by the belt encoder.

Important!

- When you make the belt encoder setting to "ON", printing quality is improved, however the printing speed becomes slower than it is "OFF".
- When feeding unevenness may occur at the joint of the belt, set the belt encoder setting to "OFF" and make "Belt Joint Adj." valid (Step 10).
- It is recommended to also make "Softness" valid when you set "Belt Joint Adj." valid.
When you set "Softness" valid, the effect to prevent feeding unevenness can be improved.

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 [Belt Encoder].

TYPE 1
Belt Encoder <ENT>

7

Press the **ENTER** key.

TYPE 1
Belt Encoder :ON

8

Press **▲▼** to select "ON" or "OFF".

TYPE 1
Belt Encoder :OFF

ON : The belt encoder monitors the feeding amount.
The printing speed becomes slower, however, feeding unevenness can be reduced.

OFF : The belt encoder does not monitor the feeding amount.

The printing speed becomes faster, however, feeding accuracy may be degraded.

• Depending on the setting value selected here, the setting method differs. When you selected "ON", perform the procedures from the Step 11.

When you selected "OFF", proceed to the Step 10 and perform the setting of [Belt Joint Adj.].

9

Press the **ENTER** key.

Belt Joint Adj.
F:OFF R:OFF

10

Press **▲▼◀▶** to set the Belt Joint Adjustment.

Belt Joint Adj.
F:Level1 R:Level0

Selection at front (F) side/ rear (R) side : Select by pressing **◀▶**.**Setting of correction value** : Select by pressing **▲▼**.**Level 0 to 3** : Joint Adj. becomes valid.

The amount of correction is smaller for Level 0 and is the biggest for Level 3.

It is recommended to set "Level 1" to the front side, and "Level 0" to the rear side.

OFF : Joint Adj. is not performed.

11

Press the **ENTER** key.

TYPE 1
Belt Encoder <ENT>

12

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.

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.

TYPE 1
Softness :Level 1
- 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.																																																																																									
MAPS	<p>In case that feeding unevenness cannot be resolved even though media correction (☞ P.3-4) is performed, make "MAPS (Mimaki Advanced Pass System) valid. Feeding unevenness will become less visible by distributing the pass boundary.</p> <p>Important!</p> <ul style="list-style-type: none"> • Before setting MAPS, make sure to perform correction of the dot position (☞ P.4-22), and correct the ink dot position beforehand. • If you increase the MAPS level, feeding unevenness will be less visible. However, the total length of printing time will be longer. • If you make the MAPS setting valid, image quality may be lowered in the following conditions. Make sure to set the MAPS level after checking printed image. <ol style="list-style-type: none"> (1) When you are using "Moire Reduction" or "Softness" functions concurrently (2) When you printed with 6 pass or less • While nozzle recovery is being set, MAPS cannot be available. In case that you want to make MAPS available, make the nozzle recovery function (☞ P.4-38) invalid. <p>Conditions which nozzle recovery can be set</p> <table border="1"> <thead> <tr> <th rowspan="3">Resolution (Y dpi x X dpi)</th> <th rowspan="3">Scan speed</th> <th colspan="6">Pass</th> </tr> <tr> <th colspan="3">8-colors</th> <th colspan="3">4-colors</th> </tr> <tr> <th colspan="3">Standard</th> <th colspan="3">Standard</th> </tr> </thead> <tbody> <tr> <td>300 x300</td> <td>Standard</td> <td>2</td> <td>4</td> <td>8</td> <td>1</td> <td>2</td> <td>4</td> </tr> <tr> <td>300 x450</td> <td rowspan="3">Standard</td> <td rowspan="3">3</td> <td rowspan="3">6</td> <td rowspan="3">12</td> <td rowspan="3">3</td> <td rowspan="3">6</td> <td rowspan="3">12</td> </tr> <tr> <td>450 x 450</td> </tr> <tr> <td>600 x 450</td> </tr> <tr> <td>900 x 450</td> <td>High Speed</td> <td></td> <td>6</td> <td>12</td> <td></td> <td>6</td> <td>12</td> </tr> <tr> <td>300 x600</td> <td rowspan="2">Standard</td> <td rowspan="2">4</td> <td rowspan="2">8</td> <td rowspan="2">16</td> <td rowspan="2">2</td> <td rowspan="2">4</td> <td rowspan="2">6</td> </tr> <tr> <td>450 x 600</td> </tr> <tr> <td>600 x 600</td> <td rowspan="3">High Speed</td> <td rowspan="3"></td> <td rowspan="3">8</td> <td rowspan="3">16</td> <td rowspan="3"></td> <td rowspan="3">4</td> <td rowspan="3">6</td> </tr> <tr> <td>1200 x 600</td> </tr> <tr> <td>600 x900</td> </tr> <tr> <td>900 x 900</td> <td rowspan="2">Standard</td> <td rowspan="2"></td> <td rowspan="2">12</td> <td rowspan="2">24</td> <td rowspan="2"></td> <td rowspan="2">6</td> <td rowspan="2">12</td> </tr> <tr> <td>1200 x 900</td> </tr> <tr> <td rowspan="2">1200 x 1200</td> <td>Standard</td> <td>8</td> <td>16</td> <td>32</td> <td>4</td> <td>8</td> <td>16</td> </tr> <tr> <td>High Speed</td> <td></td> <td>16</td> <td>32</td> <td></td> <td>8</td> <td>16</td> </tr> </tbody> </table> <p><input type="checkbox"/> of the list above are the conditions which nozzle recovery can be set.</p>	Resolution (Y dpi x X dpi)	Scan speed	Pass						8-colors			4-colors			Standard			Standard			300 x300	Standard	2	4	8	1	2	4	300 x450	Standard	3	6	12	3	6	12	450 x 450	600 x 450	900 x 450	High Speed		6	12		6	12	300 x600	Standard	4	8	16	2	4	6	450 x 600	600 x 600	High Speed		8	16		4	6	1200 x 600	600 x900	900 x 900	Standard		12	24		6	12	1200 x 900	1200 x 1200	Standard	8	16	32	4	8	16	High Speed		16	32		8	16
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	High Speed		16	32		8	16																																																																																			

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

FUNCTION
 SETUP <ENT>
- Press the **ENTER** key.

SETUP
 Select :TYPE 1
- Press **▲** **▼** to select one of the types (1 to 4) and press the **ENTER** key.

4Press   to select [Print Mode].

TYPE 1	
Print Mode	<ENT>

5Press the  key.

TYPE 1	
DPI	: 3 00x300

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

TYPE 1	
DPI	: 6 00x450

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

7Press the  key.

TYPE 1	: 600x450
Pass	: B I - D 4P

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

TYPE 1	: 600x450
Pass	: B I - 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.

9Press the  key.

TYPE 1	: 600x450
High Speed	: O FF

10Press   to select the setting items.



- 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.

TYPE 1	: 600x450
High Speed	: O N

11Press the  key.

TYPE 1	: 600x450
Drop Size	: L 3 M2 S1

12Press   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	: L 4 M2 S1

13Press the  key.

TYPE 1	: 600x450
MAPS	: OFF

14Press   to select the MAPS level.

- Set Value : OFF, Level 1 to Level 9
- If you set the MAPS "OFF," it will not perform correction by MAPS.

TYPE 1	: 600x450
MAPS	: Level 1

15 Press the **ENTER** key.

16 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.3-14 "Setting Priority Order". However, for setting about MAPS correction, the value set here will become valid even though you set the priority order up as "HOST."



- 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		ON / OFF		12	ON / OFF
450x600 dpi	4	————	4	————		
	8		ON / OFF		8	ON / OFF
	16		ON / OFF		16	ON / OFF
600x300 dpi	2	————	2	————		
	4		ON / OFF		4	ON / OFF
	8		ON / OFF		8	ON / OFF
600x450*1 dpi	3	————	3	————		
	6		ON / OFF		6	ON / OFF
	12		ON / OFF		12	ON / OFF

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

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






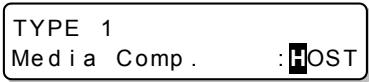
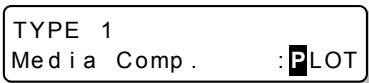
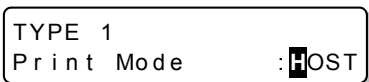
- of the list above are the recommended mode for actual use.
- The lower the resolution or the pass is set than the recommended mode for actual use, the lower the image quality becomes.
- An image quality also lowers depending on the used ink or media, preprocessing or the like. Perform test printing (☞ P.2-36) 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. 
- 2** Press the **ENTER** key. 
- 3** Press **▲▼** to select one of the types (1 to 4) and press the **ENTER** key.
- 4** Press **▲▼** to select [Priority]. 
- 5** Press the **ENTER** key. 
- 6** Press **▲▼** to select "HOST" or "PLOT". 
- 7** Press the **ENTER** key. 
- 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 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.



- 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.



- 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	: 1234 5 678

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	: N ormal

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	: S oft

14

Press the **ENTER** key.

TYPE 1	
Interval	: 1 0 m

15

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

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

TYPE 1	
Interval	: 9 m

16

Press the **ENTER** key.

17

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

- 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.

TYPE 1	
Priority	: B oundary

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 : **S**oft

11 Press the  key.

TYPE 1
 time : **1**min

12 Pressing  , select time up to starting cleaning after printing.
 • Set Value : 1 to 60min

TYPE 1
 time : **10**min

13 Press the  key.

TYPE 1
 After Printing <ENT>

14 Press the  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 Information			You can print the setting contents and the information of this machine.
Warning		—————	See P.3-38 “Confirming Machine Information”.
Blank Data		Valid / Invalid	Set the operation when there are blank data at the head of data.
Heater Setup	Dryness Feed	ON / OFF	Sets the setting of the dryness feed after the completion of printing.

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].

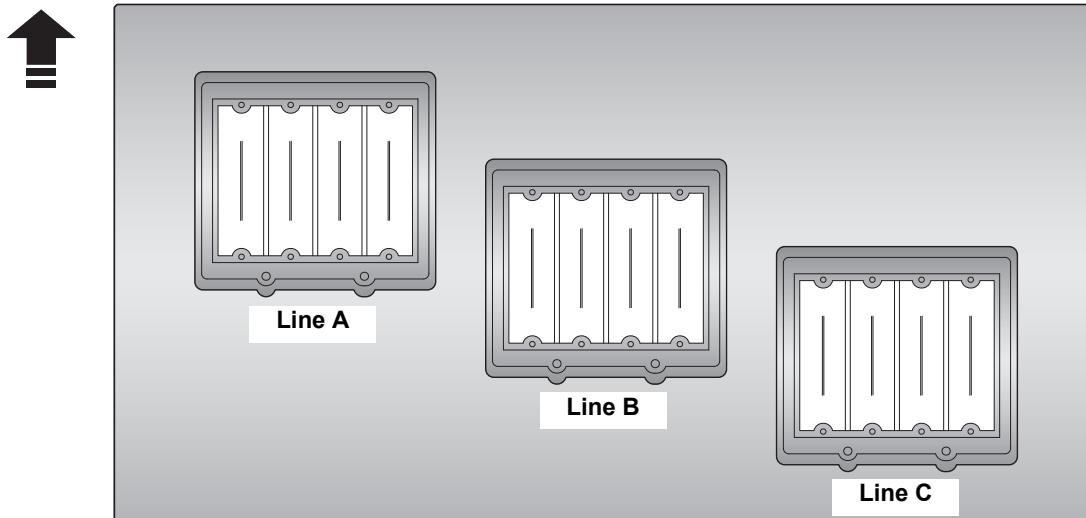
FUNCTION
MACHINE SETUP <ENT>
- 3** Press the **ENTER** key twice.

Use Head
Head Line : **A**ALL
- 4** Press **▲ ▼** to select one of the set values.
• Set Value: A-- / -B-/--C/AB-/BC/ALL

Use Head
Head Line : **B**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	Tx400-0 1
--------------	------------------
- 6** Press **▲** **▼** to select a machine name (01 to 99).

Machine Name	Tx400-1 0
--------------	------------------
- 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.

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.4-38) is valid and when you display the confirmation screen (☞ P.5-11 "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.
Adhesive	ON/OFF	Clear the time to recoat adhesive on the belt or the used counter.

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.



- 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 time for replacing the mist fan filter/the time for recoating the adhesive on the belt

- 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 the warning item to set.
• Items : Mist Fan / Adhesive

Warning
Mist Fan <ENT>
- 7** Press the **ENTER** key twice.

Mist Fan
Set Limit = **0**m
- 8** Press **▲** **▼** to set the printing distance until the warning is displayed.
• Set Value : 0m to 30000m

• If you set the value to "0m", the warning is not displayed.

Mist Fan
Set Limit = **100**m
- 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/the adhesive on the belt

Important! • If you clear the counter, the warning below becomes not displayed.

!Mist Fan
Clean Filter

!Belt Adhesive
Reapply Adhesive

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 the warning item to set.

• Items : Mist Fan / Adhesive

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.

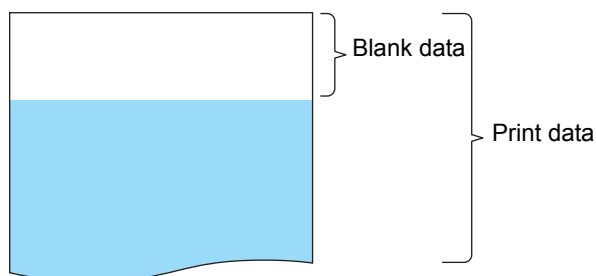
Nozzle Recovery
Act. Limit : ON
- 8** Press **▲** **▼** to select one of the set values.
• Set Value : ON / OFF

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 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 : **V**alid
- 6** Press **▲** **▼** to select one of the set values.
• Set Value : Valid / Invalid

Blank Data
Sel : **I**nvalid
- 7** Press the **ENTER** key.

MACHINE SETUP
Blank Data <ENT>
- 8** Press the **END** key several times to end the setting.

Setting of media dryness feed using MAIN heater

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.
- After dryness feed ends, there are blank data by the length set in Step 12, "feed length". Media can be rewinded by pressing the jog key, but media remains sticking on the belt, and it may get into the lower side of the belt.
- Also, in the case you rewind the media, the media at the feeding unit side bends. Check whether enough tension is applied before printing.

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.

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. Heater Setup
Dryness Feed : OFF

• Selection screen of ON/OFF of the dryness feed is displayed.

8 Select dryness feed "ON" by pressing **▲** or **▼**. Heater Setup
Dryness Feed : ON

• When you selected "OFF", proceed to the Step 1.

9Press the **ENTER** key.Dryness Feed
Speed : **A**UTO**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 : **3**0 mm/s**11**Press the **ENTER** key.Dryness Feed
Feed Length : **1**000mm**12**Set the feed length by pressing **▲** or **▼**.

- Set Value : 10 to 2000mm

Dryness Feed
Feed Length : **1**500mm**13**Press the **ENTER** key.Heater Setup
Dryness Feed <ENT>**14**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.

```
Information
Serial No.   <ENT>
```

• Items to be displayed : Version, Serial No., Dealer No.

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 Level 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! <ul style="list-style-type: none"> 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! <ul style="list-style-type: none"> The displayed remaining amount is a value calculated from the media remaining amount set at the roll media detection (P.2-34) 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.3-28.
Set value	SETUP <TYPE1> Display [^]/[v] Key	By pressing ▼ , a list displays the settings of the user type being selected.
Counter log	SETUP <TYPE1> Display [^]/[v] Key	By pressing ▼ , you can check the used counter of the mist fan and the adhesive on the belt.
Nozzle Recovery	Nozzle Recovery Display [^]/[v] Key	When pressing ▼ , the resolution currently printed and the pass information whose recovery is possible of the used head are displayed. Important! <ul style="list-style-type: none"> 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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When the message of [Replace wiper] is		Set the nozzle recovery function	
displayed	4-6	by the line	4-41
Cleaning the Head Nozzles	4-8	Check valid/ invalid of the nozzle	
Maintenance of head nozzle surface	4-10	recovery function	4-42
Wash ink discharge passage		Print the setting list of the nozzle	
(Drain Wash)	4-17	recovery	4-43
When the Machine Is Not Used for a		When waste ink tank is filled up	4-44
Long Time (Storage Wash)	4-19	Cleaning mist fan filter	4-45
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around It	4-21	Cleaning of peeling sensor	4-48
If the Positions of Dots Shift... ..	4-22		
If nozzle clogging is not solved (ink filling) ..	4-24		
About ink port discharging jig	4-24		

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.

	<ul style="list-style-type: none">• Never disassemble the machine. Disassembling it can result in electric shock hazards or damage to the machine.
	<ul style="list-style-type: none">• Prevent moisture from entering the machine. Moisture inside the machine can cause electric shock hazards or damage to the machine.
	<ul style="list-style-type: none">• 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 printer 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.
	<ul style="list-style-type: none">• 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.

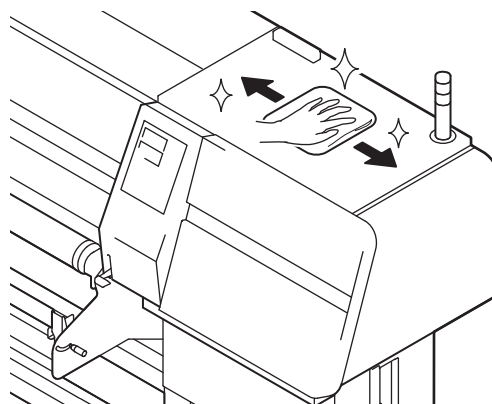
About Cleaning Solution

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
Sublimation dye ink	SPC-0631 Aqueous cleaning solution 2L pack
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.



Maintaining the Capping Station

Perform maintenance of the ink cap and 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.2-37) 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



- 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.4-4 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

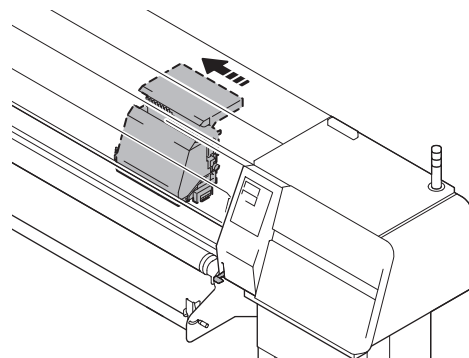
Press the **ST.MAIN** key in LOCAL.

Station
Sel : Carriage Out

2

Press the **ENTER** key.

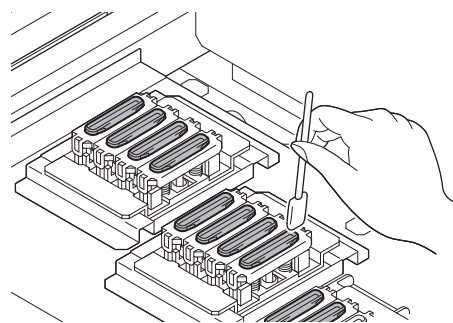
- The carriage moves onto the platen.



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.

- After its initial operation, the machine returns to the media selection. (P.2-34)

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

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.



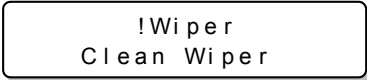
- If you use the machine with the wiper dirty, nozzle clogging may easily occur. Clean the ink cap and the wiper when the work is completed daily or when the roll media is replaced.



- 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.



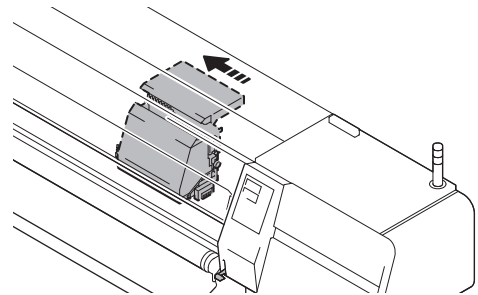
When the message is displayed, clean the wiper at once.

1 Press the **ST.MAIN** key in LOCAL.



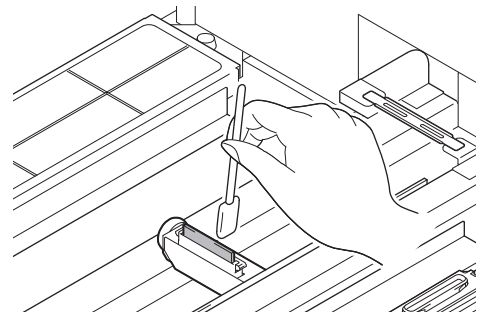
2 Press the **ENTER** key.

- 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.

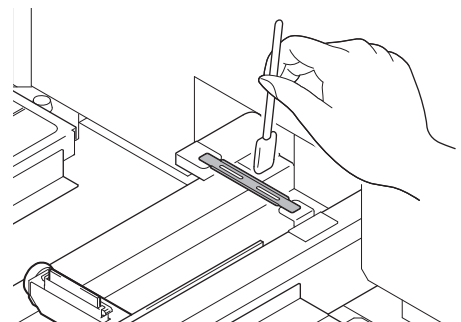


4 Clean the wiper cleaner.

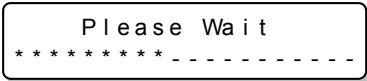
- Wipe off the ink sticking to the wiper cleaner with a clean stick dipped in cleaning solution for maintenance.



- 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.



- After its initial operation, the machine returns to the media selection. (☞ P.2-34)

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 : **C**arriage Out

2 Press **▲** **▼** to select [Wiper Exchange].

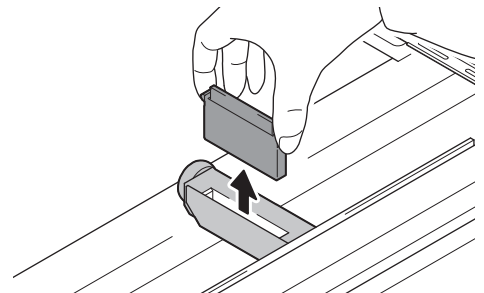
Station
Sel : **W**iper Exchange

3 Press the **ENTER** key.
• The carriage moves onto the platen.

Wiper Exchange
Completed : ent

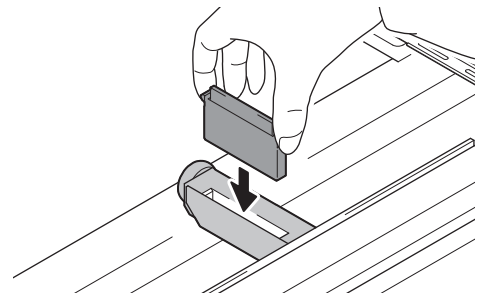
4 Open the maintenance cover R to take out the wiper.

- 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.

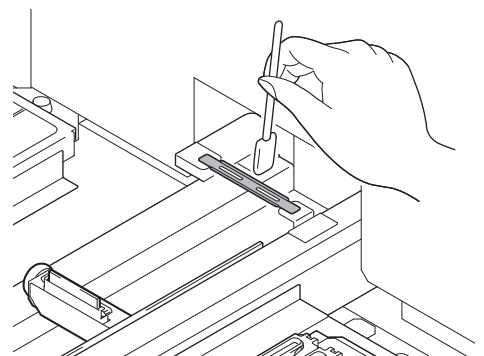


6 Clean the wiper cleaner.

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



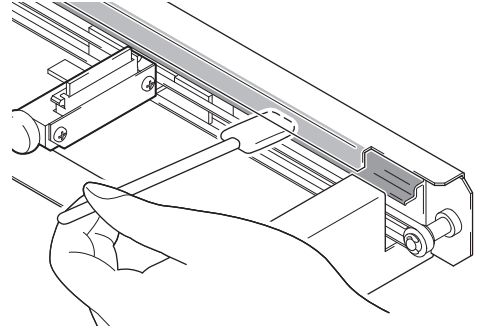
- Be careful so that you may not get injured with the edge of the wiper cleaner.



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

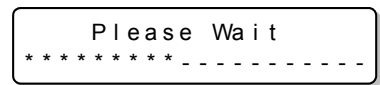
Wash the sponge under the wiper.

- (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.**

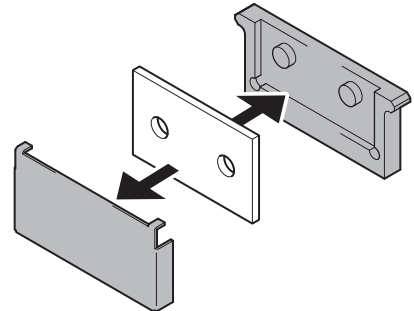
- After its initial operation, the machine returns to the media selection. (☞ P.2-34)



Rotate to unused edge

1

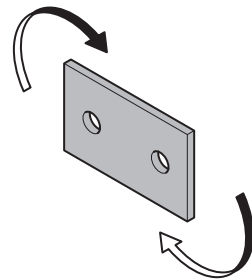
Remove the wiper cover and take the wiper rubber out.



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 : **C**arriage Out

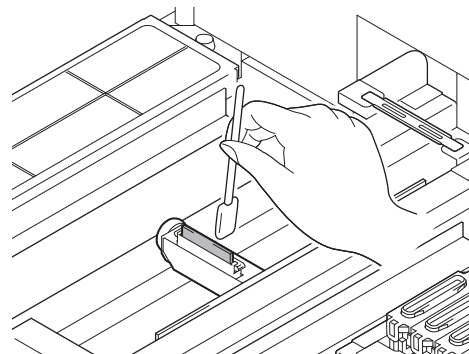
2 Press **▲** **▼** to select [Nozzle Clean].

Station
Sel : **N**ozzleg 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.

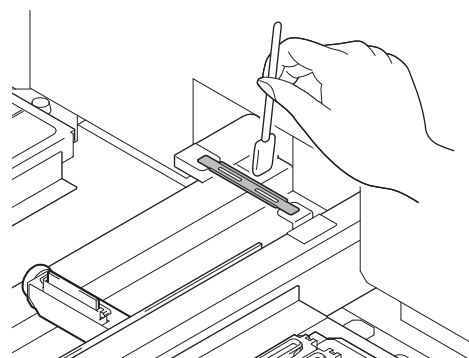


5 Clean the wiper cleaner.

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



- 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.

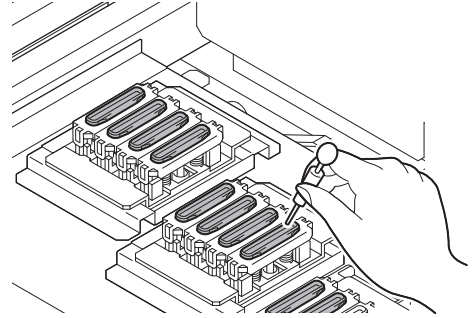
7 Press the **ENTER** key.

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.2-34)

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.4-24) . 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.



- 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.4-8) or for “NOZZLE CLEAN 22” (☞ P.4-12) 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]**
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”.



- 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.

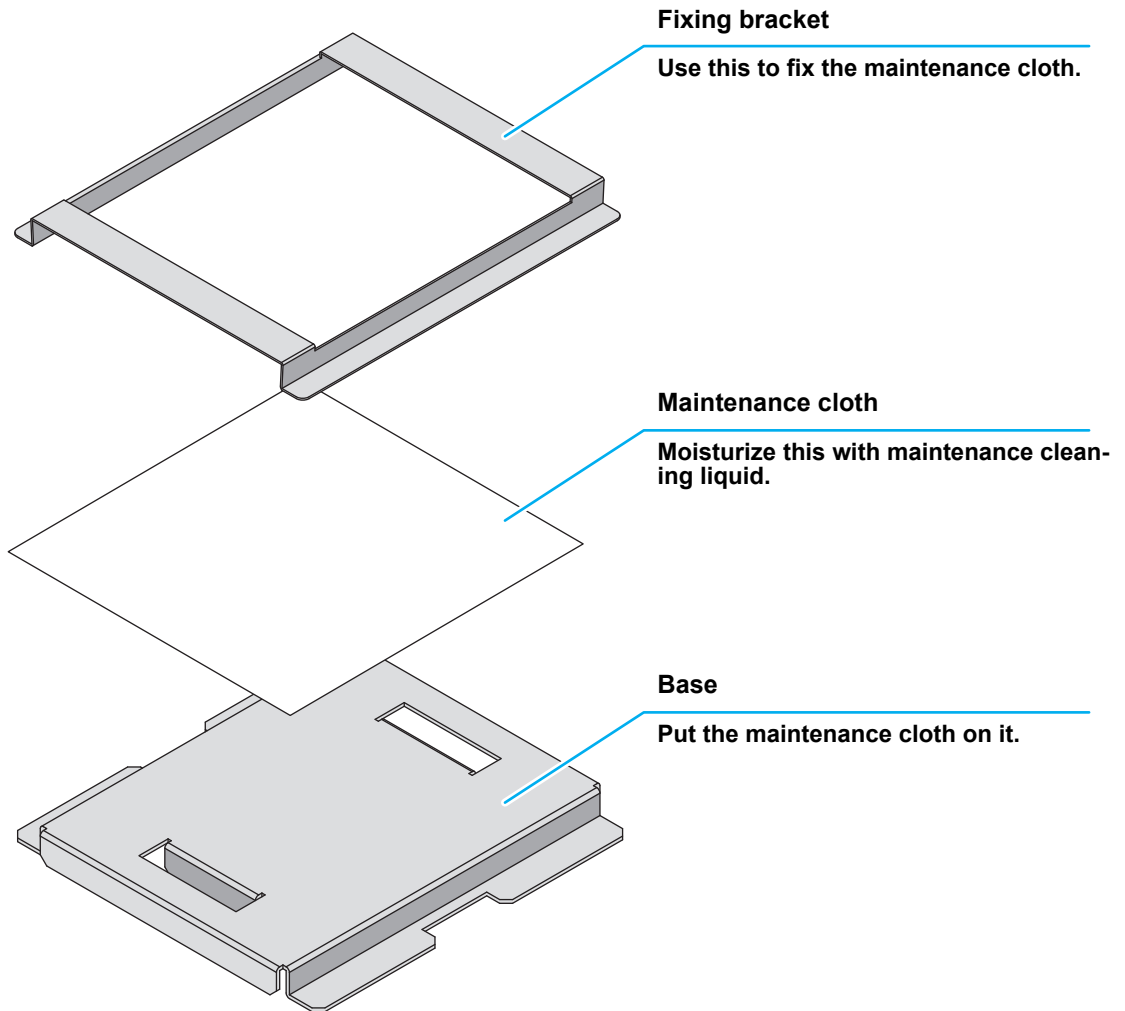
About nozzle cleaning tool

Use the nozzle cleaning tool when performing maintenance of the nozzle surface.



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.



Perform maintenance of the head nozzle surface

1 Press the **ST.MAIN** key in LOCAL.

Station
Sel : **C**arriage Out

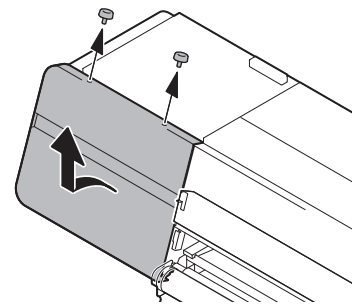
2 Press **▲** **▼** to select [Nozzle Clean2].

Station
Sel : **N**ozzle Clean2

3 Press the **ENTER** key.
• Carriage will move to the left end of this device.

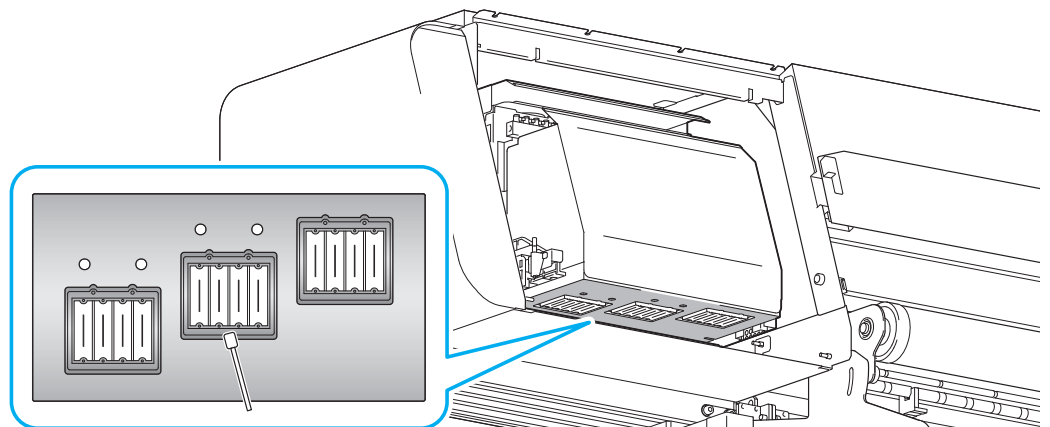
Carriage Mainte
Completed : ent

4 Remove the maintenance cover L.



5 Wipe off ink sticking to around the head with a clean stick.

Important! • Never rub the nozzles.

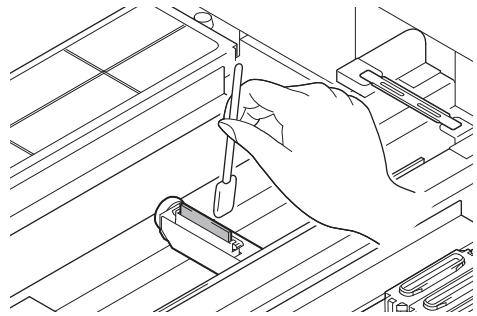


6 After cleaning is completed, close the maintenance cover L.

7 Press the **ENTER** key.

Clean Wiper
Completed : ent

8 Open the maintenance cover R to clean the wiper.

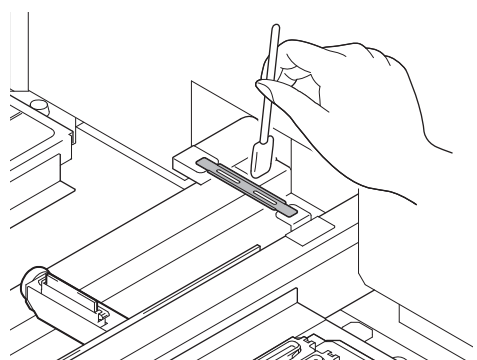


9 Clean the wiper cleaner.

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



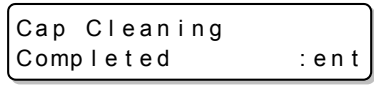
- Be careful so that you may not get injured with the edge of the wiper cleaner.



10 Wash the sponge under the wiper.

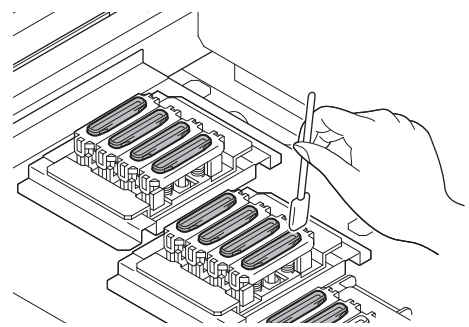
- (1) Remove the sponge in the wiper frame and wash it with water.
- (2) Dry the sponge and put it into the wiper frame again.

11 Press the **ENTER** key.



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.

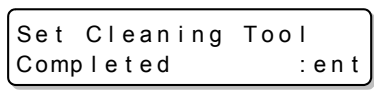


13 Remove hardened ink etc. remaining in the cap with a pair of tweezers.



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.



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.



- As the base rear surface of the nozzle cleaning tool touches the cap, especially make it has no dust.

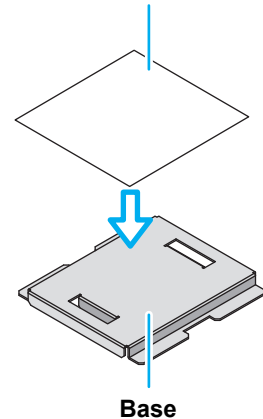
- (2) Put one maintenance cloth on the nozzle cleaning tool base.



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.

Maintenance cloth

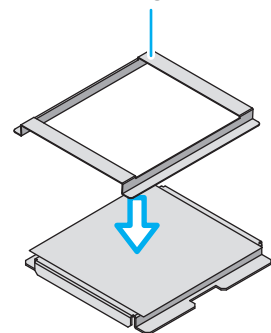


- (3) Set the fixing bracket of the nozzle cleaning tool and fix the maintenance cloth.



- 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.
- Fix firmly the base and the fixing bracket. If there is any gap between the base and the fixing bracket, it may damage the machine.

Fixing bracket

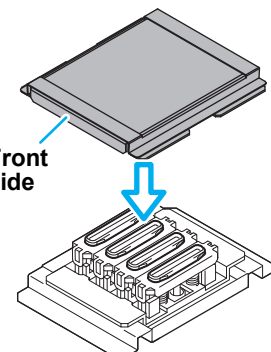


- (4) Set the nozzle cleaning tool on the cap.



- 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.

Front side



- (5) For all heads (A line, B line and C line), perform the work from (1) to (4).

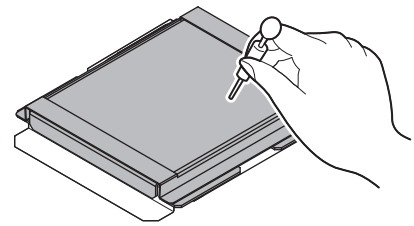
16

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.

- **Set Value** : 1 to 30 min (by the unit of 1 min)
- Recommended time to leave is 10 min.

Nozzle Cleaning2
Wait Timer = 11min

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.



- 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  key.**

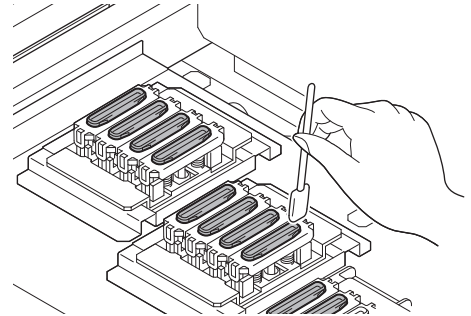
Cap Cleaning	:ent
Completed	

24**Clean the cap rubber.**

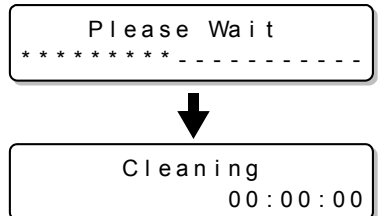
- Wipe off the ink sticking to the cap rubber with a clean stick dipped in cleaning solution for maintenance.



- 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  key.**

- Perform cleaning.
- When cleaning has ended, the machine returns to the media selection. (☞ P.2-34)



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.**

- 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 : **C**arriage Out

2 Press **▲** **▼** to select [Drain Wash].

Station
Sel : **D**rain Wash

3 Press the **ENTER** key.

- Check the waste ink tank and discard the waste ink as required.

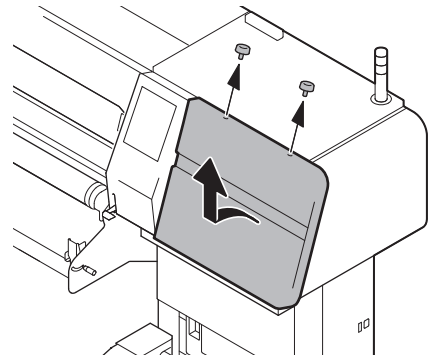
Check Waste Tank
Completed : ent

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.

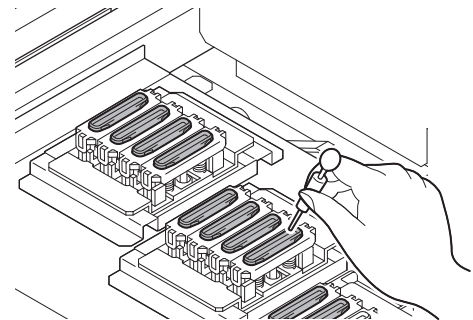
Drain Wash
Completed : ent

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.

- After performing idle absorbing operation for 30 min., the machine returns to the media selection. (☞ P.2-34)

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



MEDIA SELECT
ROLL < > LEAF

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.



- 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 : **C**arriage Out

2

Press **▲** **▼** to select [Strage Wash].

Station
Sel : **S**torage Wash

3

Press the **ENTER** key.

- Check the waste ink tank and discard the waste ink as required.

Check Waste Tank
Completed : ent

4

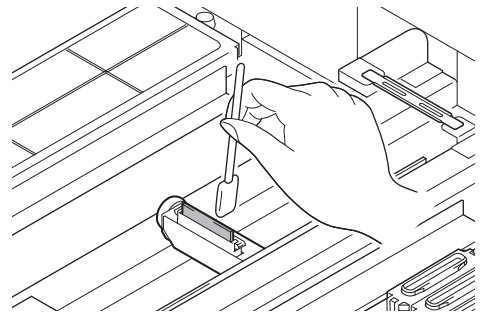
Press the **ENTER** key.

- The carriage moves onto the platen.

Wiper Cleaning
Completed : ent

5

Open the maintenance cover R to clean the wiper.



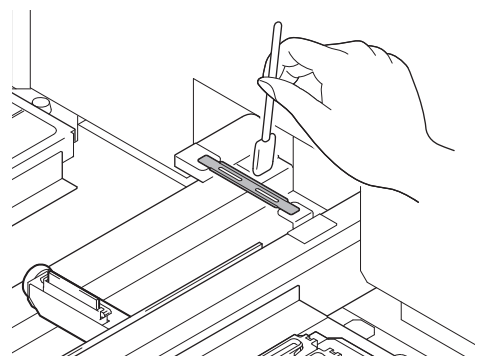
6

Clean the wiper cleaner.

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

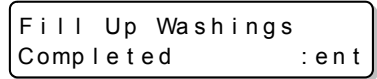


- Be careful so that you may not get injured with the edge of the wiper cleaner.

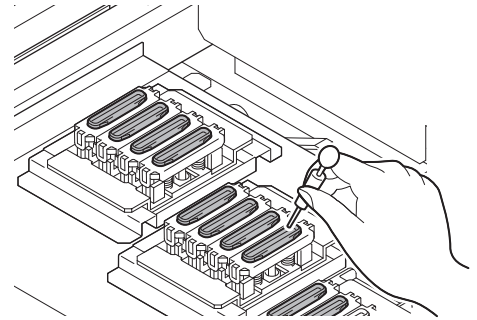


7 Wash the sponge under the wiper.
 (1) Remove the sponge in the wiper frame and wash it with water.
 (2) Dry the sponge and put it into the wiper frame again.

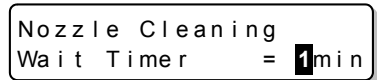
8 Press the **ENTER** key.



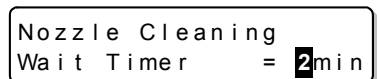
9 Fill up the cap with cleaning solution for maintenance, using a dropper.
 • Fill up the cap with cleaning solution on the verge of overflow from the cap.



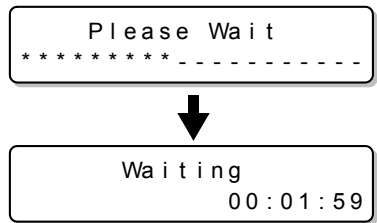
10 Close the maintenance cover R and press the **ENTER** key.



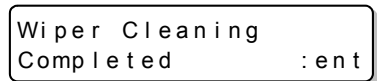
11 Press **▲** **▼** to set the time for the cleaning solution to be left as it is.
 • Set Value: 1 to 99 min (by the unit of 1 min)



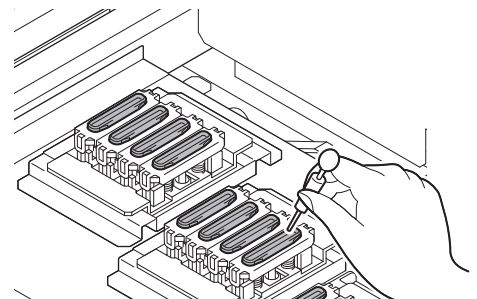
12 Press the **ENTER** key.
 • After the time to be left as it is set in the Step 11 has passed, absorbing of cleaning solution and cleaning start.
 • When the cleaning is completed, the head moves on to the platen.



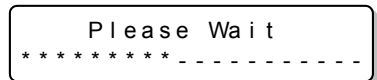
13 Clean the wiper and the wiper cleaner again, and then press the **ENTER** key.



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.



• After performing idle absorbing operation for 30 min., the machine returns to the media selection. (P.2-34)

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

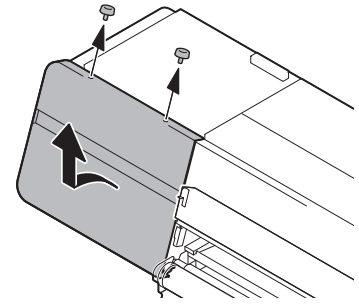


- If ink settles on the skin or fabrics, immediately wash it off with detergent or water. In the event that ink gets in eyes, immediately rinse it off with water and consult a medical doctor.

1 Select [Carriage] of the maintenance menu.

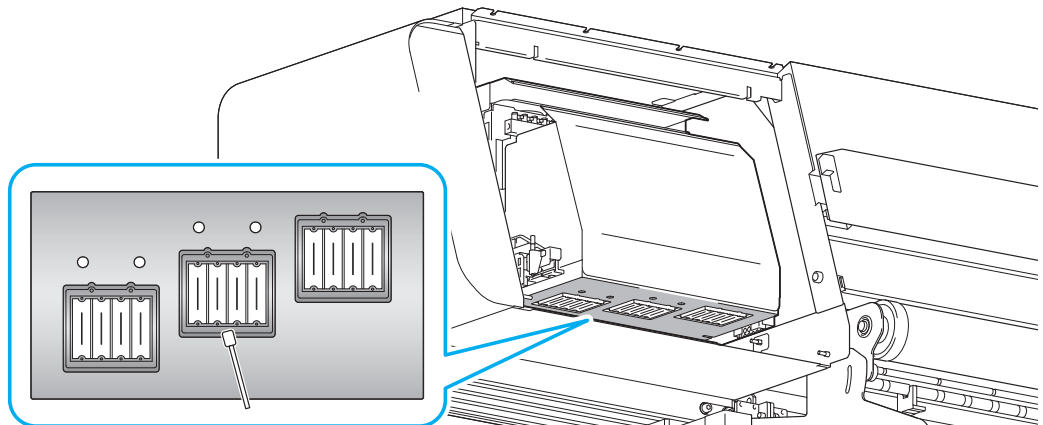
- (1) Press the **FUNCTION** key.
- (2) Press **▲** **▼** to select [MAINTENANCE] and press the **ENTER** key.
- (3) Press **▲** **▼** to select [Carriage] and press the **ENTER** key.
- (4) Press the **ENTER** key.
 - Carriage will move to the left end of this device.

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.

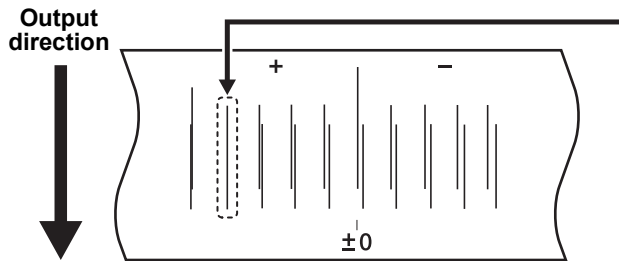
- After its initial operation, the machine returns to the media selection. (P.2-34)



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.

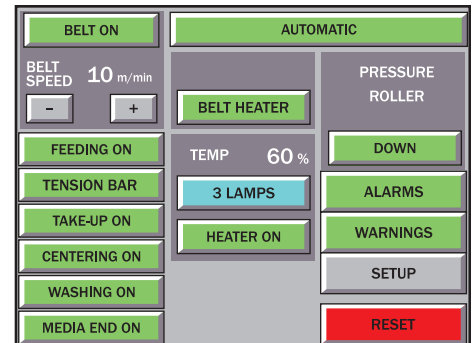
1 Set a media on the machine. (☞ P.2-14)

- To print a pattern, the media of 600mm width or wider is required.

2 Make the media feeding system printable.

Switch each item below on the operation touch panel:

- Press [MANUAL] to change it to [AUTOMATIC].
- Press [BELT OFF] to change it to [BELT ON] [FEEDING ON] and [TAKE-UP ON].
- Press PRESSURE ROLLER [UP] to change it to [DOWN].
- Refer to the assistant function (☞ P.2-9) to change the required function to ON.



3 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

4 Press **▲▼** to select resolution to be corrected.

- Resolution : 300dpi, 450dpi, 450dpiH, 600dpi, 600dpiH, 900dpi, 900dpiH, 1200dpi, 1200dpiH

Print Adjust
Select : 300dpi

5 Press the **ENTER** key.

6 Press **▲▼◀▶** to set the origin position.

7 Press the **ENTER** key.

8

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  **
```

9

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

```
Print Adjust
Pattern Check[▲]/[▼]
```

10

Press the **ENTER** key.

- The screen to enter the correction value is displayed.

11

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 is not between -40.0 and 40.0, adjust the height of the printing heads and then perform the operations in Step 2 and later.

12

Press the **ENTER** key.

13

In the same way as in Step 10, correct the dot position in Pattern 2 and subsequent patterns and press the **ENTER** key.

14

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.2-37) or “Cleaning the Head Nozzles”(☞ P.4-8) , 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.2-37) or “Cleaning the Head Nozzles” (☞ P.4-8) .
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.4-34).
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.4-34).

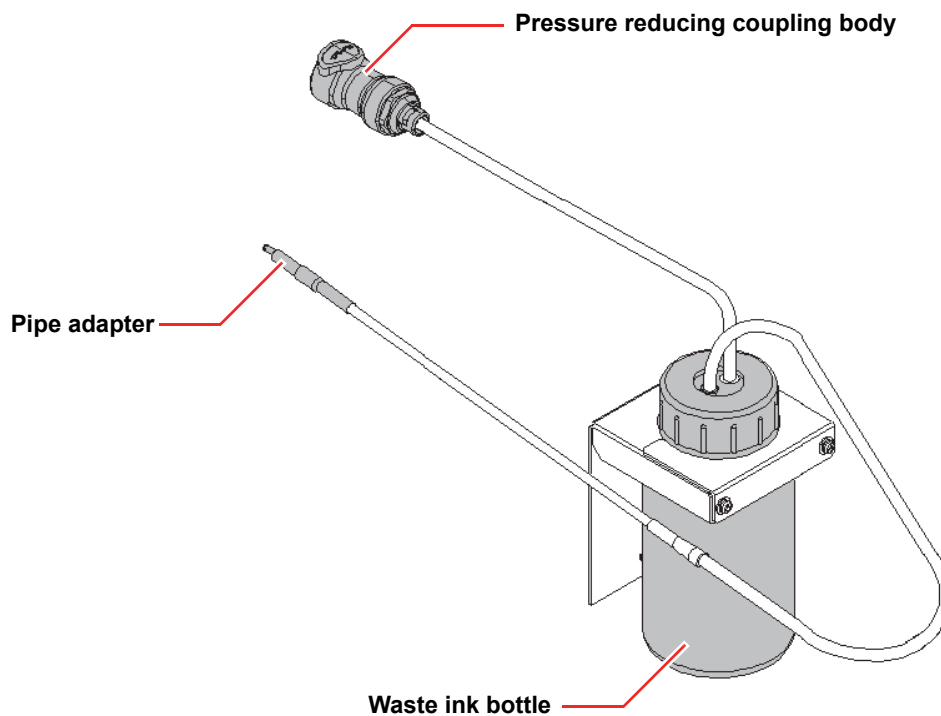


- When you put a new ink, ink filling will be automatically performed even if you do not operate ink filling.

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.

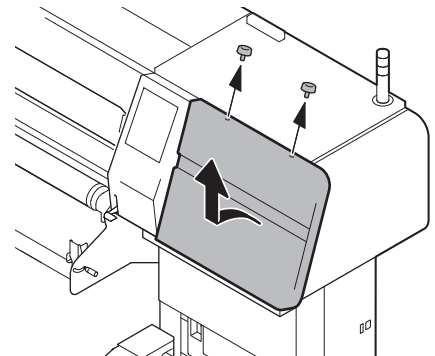
Filling 1/2
00:00:00



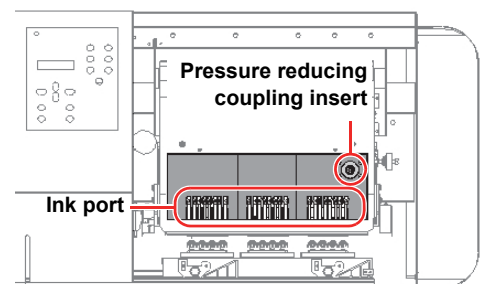
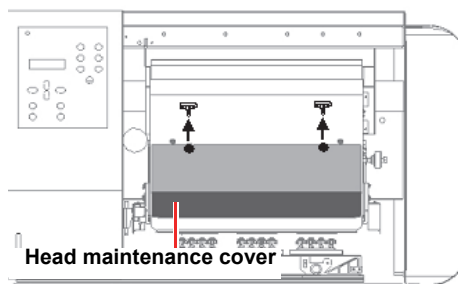
Ink Port Filling
Completed : ent

6 Open the maintenance cover R, and remove the head maintenance cover.

- (1) Open the maintenance cover R.



- (2) Remove the head maintenance cover.



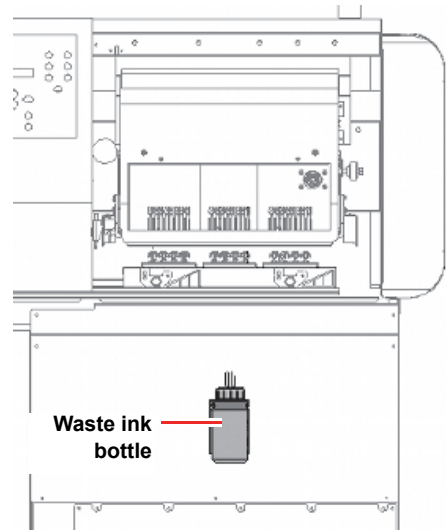
7

Attach the ink port discharging jig.

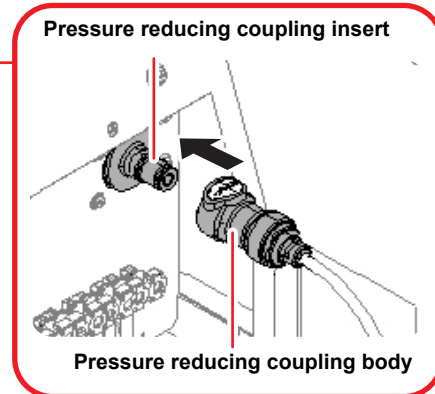
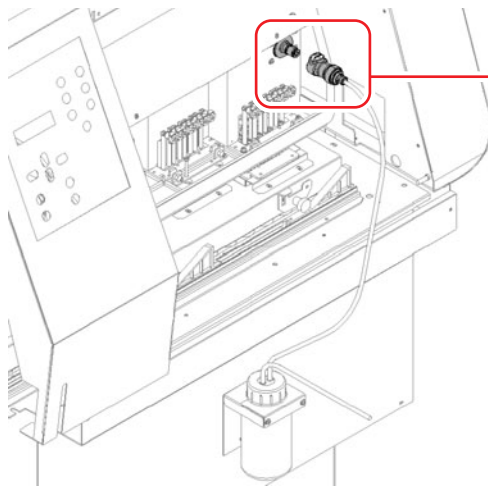
- Attach the ink port discharging jig on the Tx400.
- (1) Empty the waste ink bottle of the ink port discharging jig.
- (2) Paste the waste ink bottle on the position described in the right figure.
 - With the magnet attached on the waste ink bottle, paste the waste ink bottle below the maintenance cover R.
 - When pasting waste ink bottle, make it vertical against the ground.



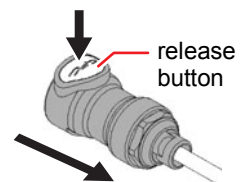
- If ink replacement is performed in the state of the waste ink bottle being slanted, it may cause damages to the machine. Be sure to paste the waste ink bottle making it vertical against the ground.



- (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".



- 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".



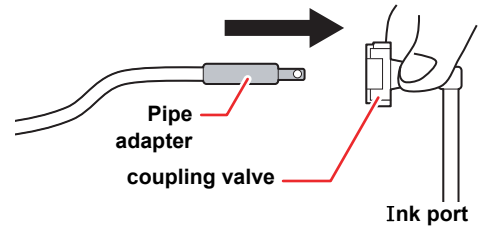
8

Remove ink blot of the pipe adapter of the ink port discharging jig.

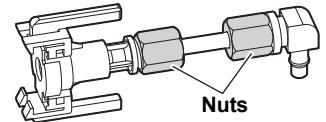
- Wipe ink blot etc. of the pipe adapter with waste cloth immersed in cleaning liquid for maintenance.

9

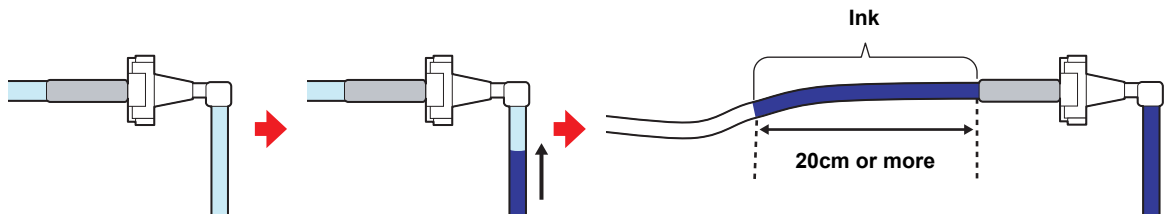
Insert the pipe adapter of the ink port discharging jig into the coupling valve of the ink port.



- 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.

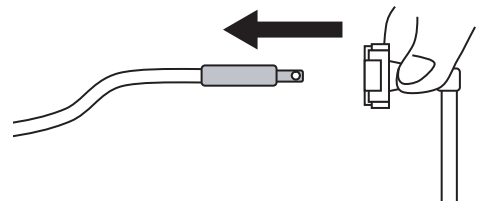
**Important!**

- 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.



- 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.



- 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.

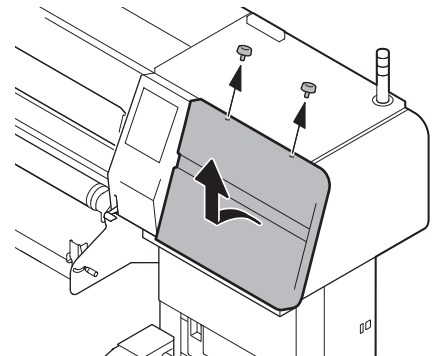
Filling 1/3
00:00:00



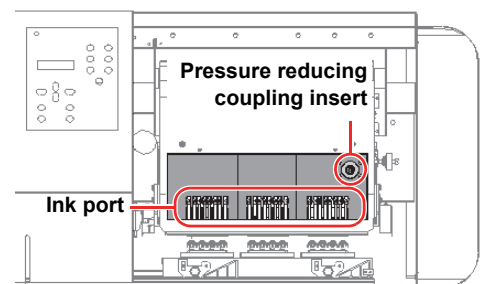
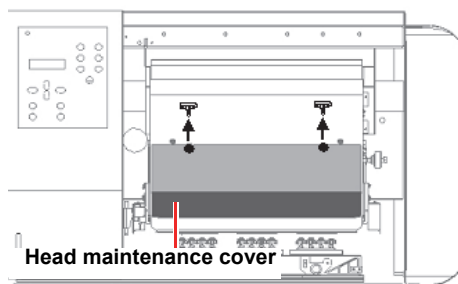
Ink Port Filling
Completed : ent

6 Open the maintenance cover R, and remove the head maintenance cover.

- (1) Open the maintenance cover R.



- (2) Remove the head maintenance cover.



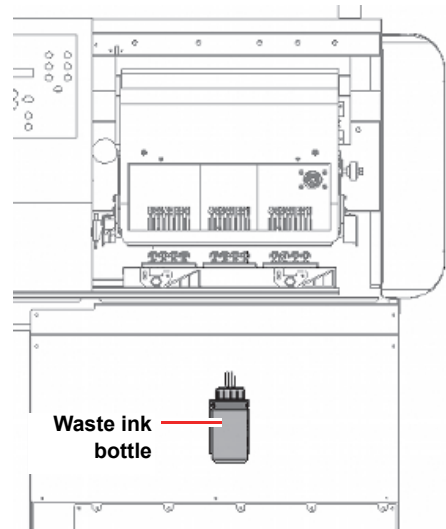
7

Attach the ink port discharging jig.

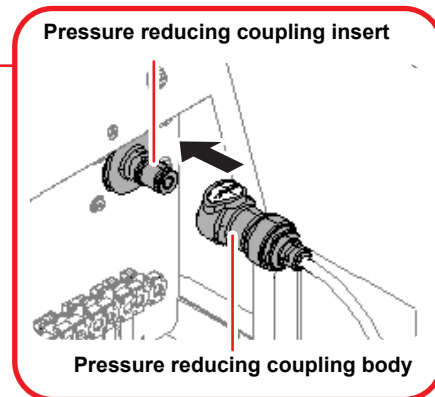
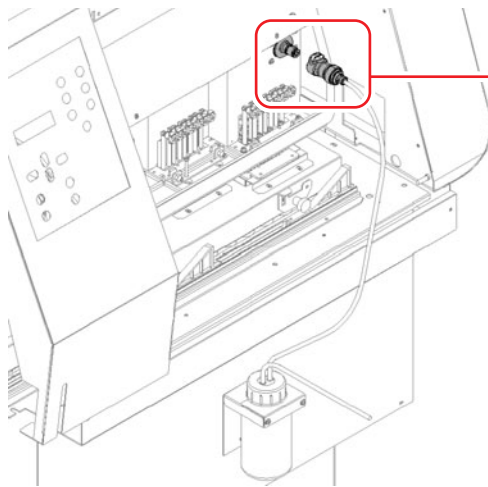
- Attach the ink port discharging jig on the Tx400.
- (1) Empty the waste ink bottle of the ink port discharging jig.
- (2) Paste the waste ink bottle on the position described in the right figure.
 - With the magnet attached on the waste ink bottle, paste the waste ink bottle below the maintenance cover R.
 - When pasting waste ink bottle, make it vertical against the ground.



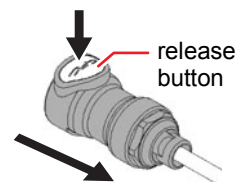
- If ink replacement is performed in the state of the waste ink bottle being slanted, it may cause damages to the machine. Be sure to paste the waste ink bottle making it vertical against the ground.



- (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".



- 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".



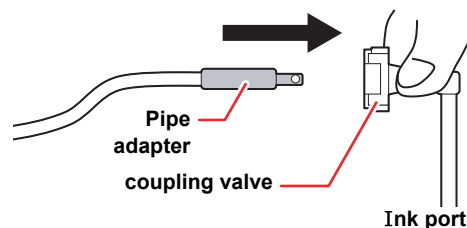
8

Remove ink blot of the pipe adapter of the ink port discharging jig.

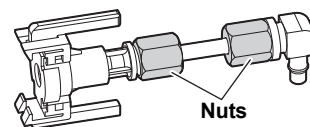
- Wipe ink blot etc. of the pipe adapter with waste cloth immersed in cleaning liquid for maintenance.

9

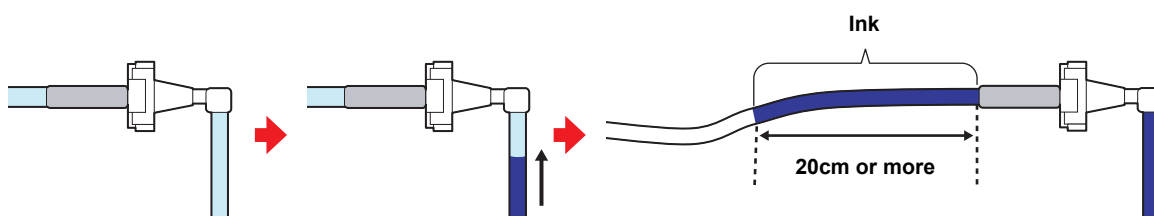
Insert the pipe adapter of the ink port discharging jig into the coupling valve of the ink port.



- 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.

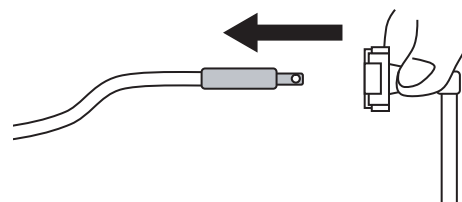
**Important!**

- 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.



- 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.



- 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)

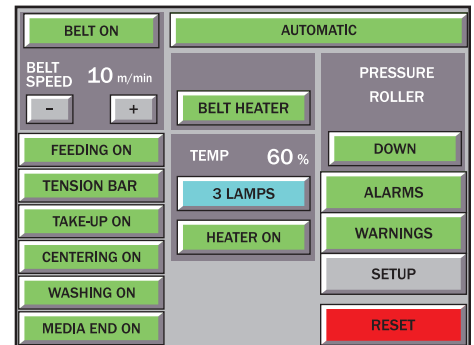
Print a pattern to check if ink was properly filled with.

1

Make the media feeding system printable.

Switch each item below on the operation touch panel:

- Press [MANUAL] to change it to [AUTOMATIC].
- Press [BELT OFF] to change it to [BELT ON] [FEEDING ON] and [TAKE-UP ON].
- Press PRESSURE ROLLER [UP] to change it to [DOWN].
- Refer to the assistant function (☞ P.2-9) to change the required function to ON.



2

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.

3

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.

4

Press the **ENTER** key.

Fill Check
Set Origin : ent

5

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

6

Press the **ENTER** key.

Fill Check
Print : Y= ***mm

7

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

8

Press the **ENTER** key.

- Perform pattern printing.

- 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.4-26, P.4-30)

** Fill Check **
** Printing **



MAINTENANCE
Fill Check <ENT>

9

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 **1**m

5

Select the interval of the flushing operation (0hr 01min. to 24hrs 00min.).

Move the cursor : Press **◀** **▶**.

Set the time : Press **▲** **▼**.

Routine Flushing
Interval = 1h **0**m

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.).

- Move the cursor : Press **◀** **▶**.
- Set the time : Press **▲** **▼**.

```
Routine Cleaning
Interval      = 8h 0m
```

8

Press the **ENTER** key.

```
Routine Control
Cleaning      <ENT>
```

9

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

4

Maintenance

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.

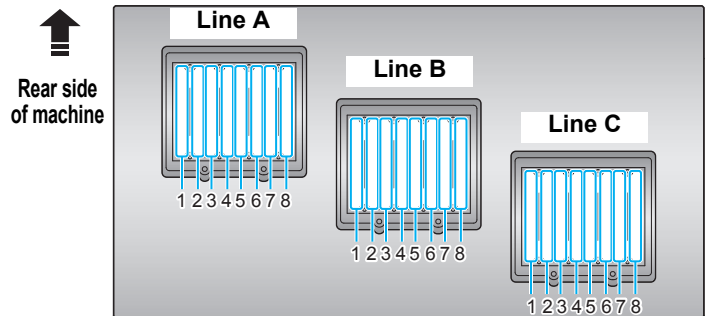
Register setting/ deletion of the nozzle recovery function

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.

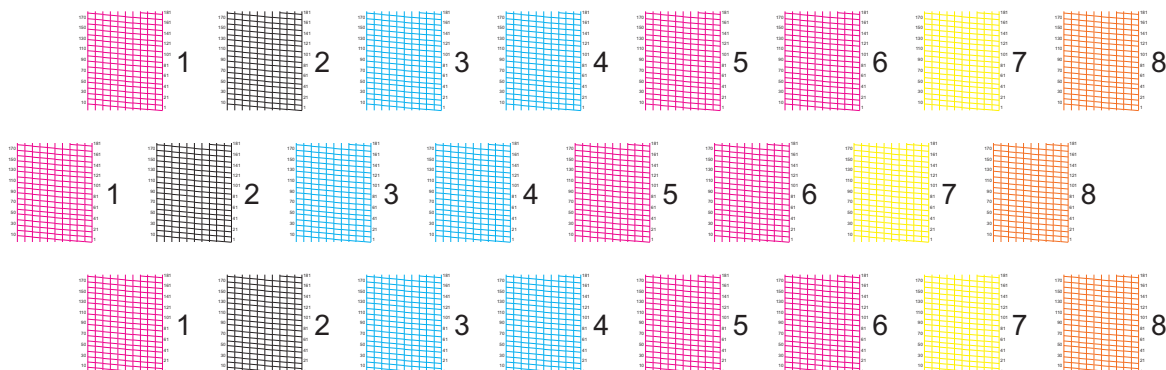
```
Nozzle Recovery Set
Print :ent
```

6 Press the **ENTER** key.

- Printing starts.

Nozzle Recovery
** Printing **

Nozzle pattern



7 By pressing **▲** **▼**, feed the media.

- Feed the media to the position where you can check the printed pattern.

Nozzle Recovery Set
Pattern Check [^] / [v]

8 Press the **ENTER** key.

- The nozzle selection screen is displayed.

Nozzle Recovery Set
Select : LineA-1

9 Press **▲** **▼** **◀** **▶** to select a nozzle line to which the nozzle recovery function will be registered.

- **◀** **▶** : Select a head (Line A, Line B and Line C).
- **▲** **▼** : Select a nozzle line (1 to 8).

Nozzle Recovery Set
Select : LineA-1

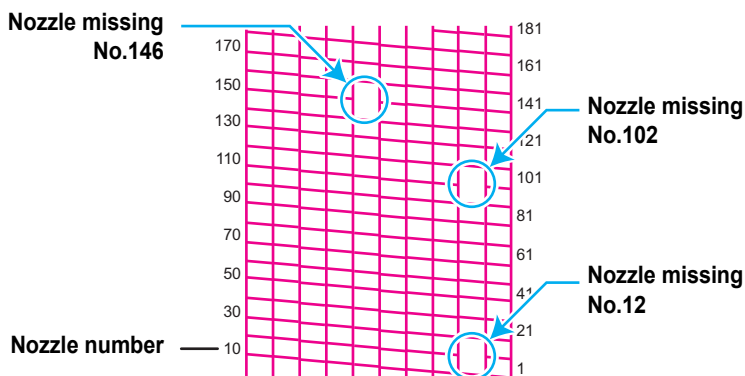
10 Press the **ENTER** key.

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



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  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  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  key.
- (2) Press   to select [MAINTENANCE] and press the  key.
- (3) Press   to select [Nozzle Recovery].

2**Press the  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  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  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.

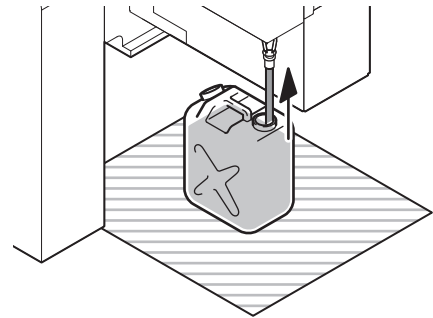


- When discarding waste ink, be sure to wear the attached gloves to do the work.
- If you get the ink on your skin or in your eyes, wash it away with plenty of water immediately.
- During ink discharging, discard the waste ink after discharging is completed.

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.

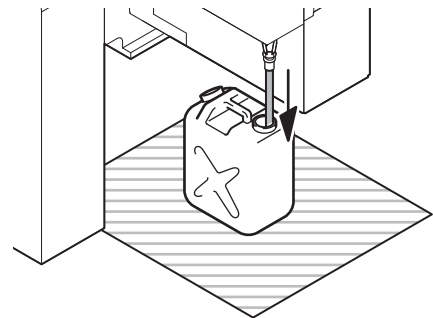


2

Move the waste ink to another polyethylene resin tank.

3

Set the waste ink tank you made empty in this machine.

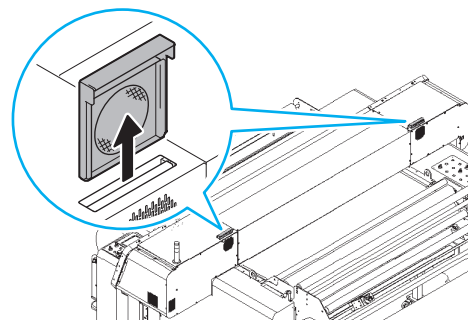


- Discard the waste ink moved in the polyethylene resin tank in compliance with regulation in the local area.

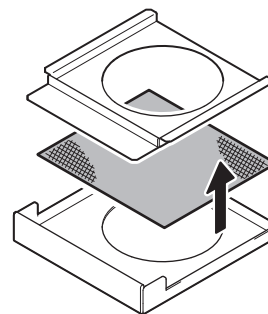
Cleaning mist fan filter

Clean the mist fan filter every day.

- 1** Pull out the mist fan filter unit.

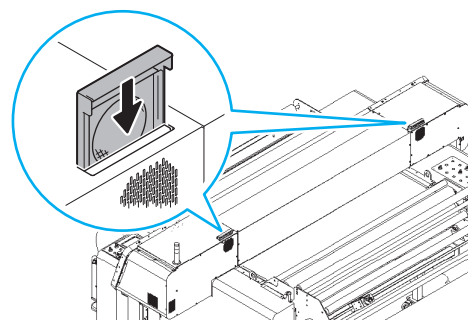


- 2** Take the mist fan filter out.



- 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 "Set the time for replacing the mist fan filter/the time for recoating the adhesive on the belt" (P.3-31), 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

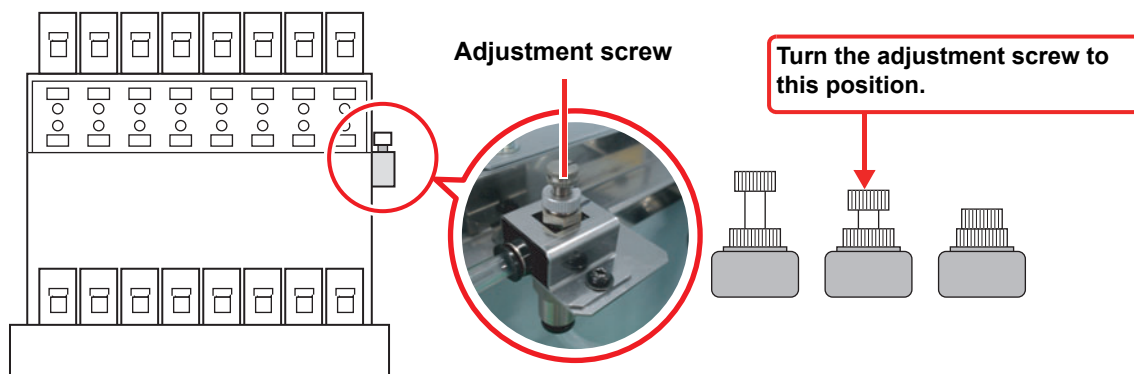
Press the **ENTER key.**

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

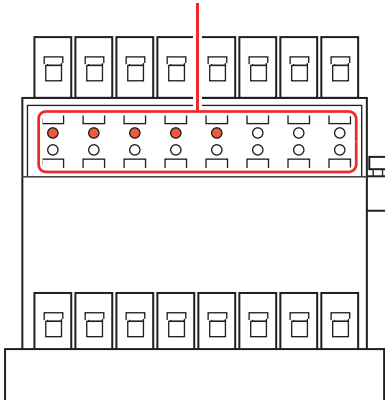
- Because it may change between ± 0.1 to 0.2 kPa, adjust it so that the middle value becomes the target pressure. \pm



- 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	●●●●●●●●○○○○○○○ ○○○○○○○○○	Sounds
	-3.56 ~ -3.65	●●●●●●●●●○○○○○○○ ○○○○○○○○○	
	-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.

Cleaning of peeling sensor

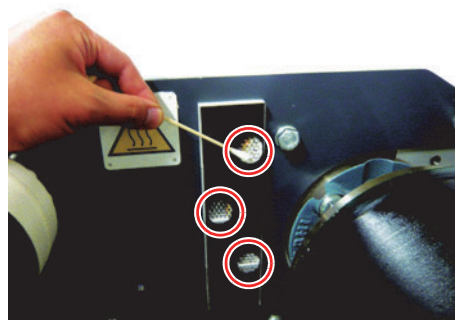
To prevent the peeling sensor from the operation mistake due to blot, clean the peeling sensor periodically (about once a week).

- Important!**
- The peeling sensor may be dirty because of ink mist generated at printing and steam generated when the fabric is evaporated.

In addition, perform cleaning in the following status.

- The alarm beeps without the fabric being peeled.
- The alarm beeps even when the fabric is not taken up on the belt.

1 Wipe inside the three circles of the light reflector with a cotton swab immersed in the washing liquid.



2 Wipe the circles wiped in the Step 1 with a dry cotton swab.

3 Wipe the three lens of the peeling sensor with a cotton swab immersed in the washing liquid.



4 Wipe the lens wiped in the Step 3 with a dry cotton swab.

Chapter 5

Troubleshooting



This chapter

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

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Troubleshooting

Take 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.
	The dryness unit is not connected.	Connect the dryness unit.
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.2-15
	The weight of the tension bar is not proper for the media used.	Adjust the weight of the tension bar. ☞ P.2-16
Mist is much generated.	The head height is too high.	Make the head height within 3mm. ☞ P.2-34
	The absorption of the mist fan filter is poor.	Perform cleaning of the mist fan filter. ☞ P.4-45

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).	<ol style="list-style-type: none"> (1) Execute head cleaning.  P.2-37 (2) Perform maintenance of the inside of the station.  P.4-3 (3) Execute the [Media correction] function.  P.3-4 (4) Change the drawing mode of RIP.  P.3-11
Disagreement in print positions between outward trip and homeward trip.	<ol style="list-style-type: none"> (1) Execute the [Dot position correction] function.  P.4-22
The respective color ink injected by the respective color heads do not properly overlap	<ol style="list-style-type: none"> (1) Execute the [Dot position correction] function.  P.4-22 (2) The head height is too high. Use it with making the height within 3mm.  P.2-32
Slanted blocky stripes (moire fringes) are generated.	<ol style="list-style-type: none"> (1) Perform “Media correction” function.  P.3-4 (2) Perform “moire alleviation” function.  P.3-23
Feeding unevenness occurs.	<ol style="list-style-type: none"> (1) Set the belt encoder setting to “OFF” and [Belt Joint Adj.] to valid.  P.3-8 (2) Make the softness function valid.  P.3-10

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
1 2 3 4 5 6 7 8 ABCDEFGH

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.

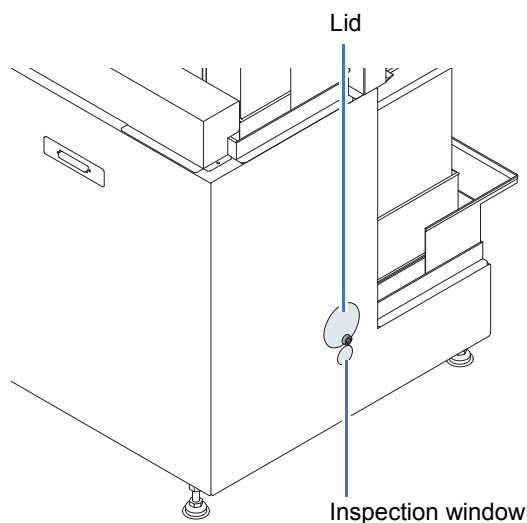
2

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.1-23)
!!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.1-23)
!!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.2-37)

If printing is terminated due to media feeding system error

If a warning error occurs in the media feeding system during printing, a warning message is displayed. Check the status of the media feeding system, and then release the warning and restart printing.

Important!

- When a warning error occurs in the media feeding system, [WARNINGS] on the operation touch panel lights in red and the warning below is displayed on the Tx400 screen.
- Depending on the status, [WARNINGS] on the operation touch panel may switch to green even if the status with error continues.
- If printing is terminated, be sure to check the screen of Tx400. If the warning below is displayed, release the warning by referring to “Warning list” in P.5-17.

Messages	Outline
!BELT ENCODER Press <FUNC> Key	The belt encoder cannot detect the belt moving.
!X Unit Press <FUNC> Key	A warning occurred in the media feeding system.
!Media End Press <FUNC> Key	Media end was detected in the media feeding system.

Releasing method of warning when “!BELT ENCODER” is displayed

When the warning of belt encoder is displayed

!BELT ENCODER
Press <FUNC> Key

1

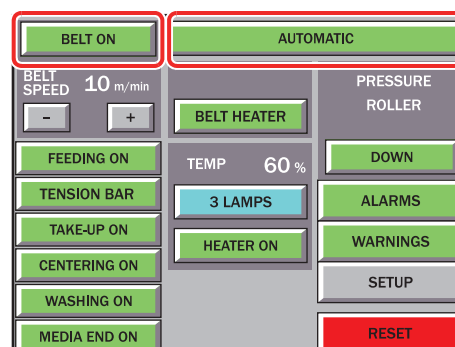
Press **FUNCTION** on the Tx400 operation panel.

!BELT ENCODER
Check : ent

2

Check that the operation touch panel of the media feeding system is [AUTOMATIC] [BELT ON].

- Check that the display of the operation touch panel is as the right figure.
- If it is not, the belt will not operate at printing.
- If it is not, press [BELT OFF] and [MANUAL] to switch them to [BELT ON]/[AUTOMATIC]. The button will change from yellow to green.
- When you switch the operation touch panel to [BELT ON]/[AUTOMATIC], they are automatically switched to [FEED ON]/[TAKE-UP ON].



3

Press the **ENTER** key on the operation panel to display the local screen.

<LOCAL . 1> [# 0 1]
: 1800

4

Press the **REMOTE** key to restart printing.

<REMOTE . 1> [# 0 1]
ALL / 8PU / W321 / 0.0m

Releasing method of warning when “!X Unit” is displayed

When the warning of X-unit is displayed

!X Unit
Press <FUNC> Key

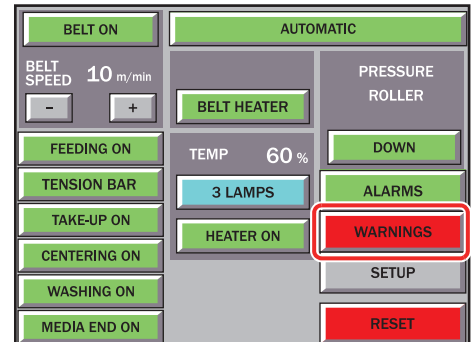
1 Press **FUNCTION** on the Tx400 operation panel.

!X Unit
Check :ent

2 Check [WARNINGS] on the operation touch panel of the media feeding system.

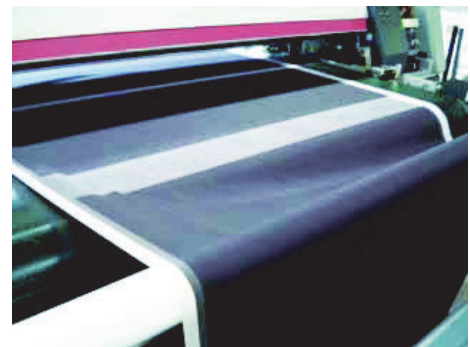
When [WARNINGS] lights in red

- Check the warning list (☞ P.5-17) and release the occurring error.
- After releasing the warning, proceed to the Step 3.



When [WARNINGS] lights in green

- Check the status of media around the peeling sensor.
- Check that waviness on left of the media is not extremely different from that on right around the peeling sensor and the fabric guide is set correctly. (☞ P.2-14 “Setting a Media”)
- After checking the media is set correctly, proceed to the Step 3.



3 Press the **ENTER** key on the operation panel to display the local screen.

<LOCAL . 1> [#01]
: 1800

4 Press the **REMOTE** key to restart printing.

<REMOTE . 1> [#01]
ALL / 8PU / W321 / 0.0m

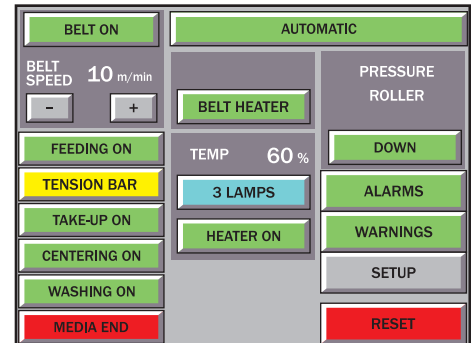
Releasing method of warning when “!Media End” is displayed

There are two methods to detect the media end:

- (1) Detection of media end by media end sensor
- (2) Detection of media end by change of tension bar

● When media end was detected by media end sensor

When media end was detected by the media end sensor, [MEDIA END] on the operation touch panel lights in red and the buzzer sounds to inform you of the error.



When the warning of media end is displayed

!Media End
Press <FUNC> Key

1

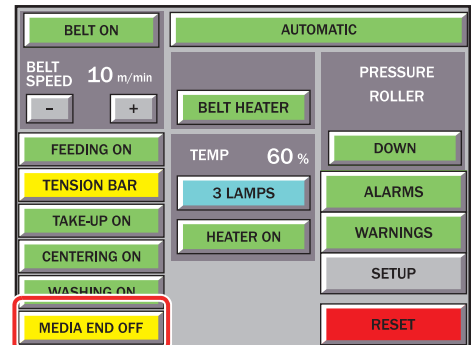
Press **[FUNCTION]** on the Tx400 operation panel.

!Media End
Check :ent

2

Press **[MEDIA END]** on the operation touch panel of the media feeding system to change it to **[MEDIA END OFF]**.

- The media end warning was released.



3

Press the **[ENTER]** key on the operation panel to display the local screen.

<LOCAL . 1> [# 0 1]
: 1800

4

Select restart or termination of printing.

- When you restart printing, press the **[REMOTE]** key.
- When you terminate printing, press the **[DATA CLEAR]** key to delete the printing data.

<REMOTE . 1> [# 0 1]
ALL / 8PU / W321 / 0.0m

** DATA CLEAR **

Important!

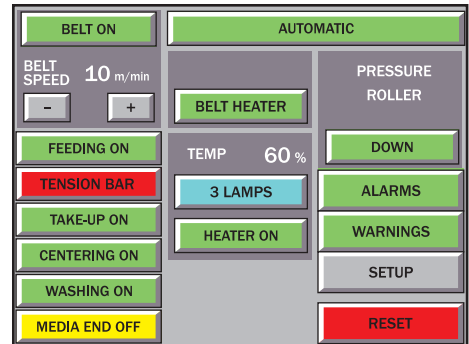
- If you print with the media feeding system is [MEDIA END OFF] status, media end cannot be detected. Be sure to print while checking the remaining amount of the media etc. If you print without media, printing may be performed on the belt.

● When media end was detected by change of tension bar

When media end was detected by change of the tension bar, [TENSION BAR] on the operation touch panel lights in red and the buzzer sounds to inform you of the error.

Important!

- When printing is terminated, the light of [TENSION BAR] changes from red to green, however, be sure to perform the work below. If you restart printing as it is, the warning will be displayed again.



When the warning of media end is displayed

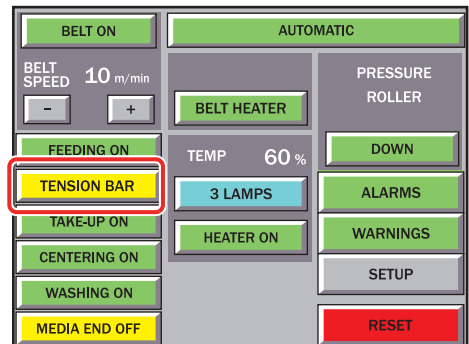
!Media End
Press <FUNC> Key

1 Press **FUNCTION** on the Tx400 operation panel.

!Media End
Check : ent

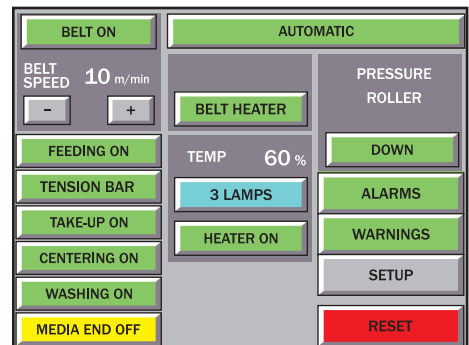
2 Check the media status and release the warning.
When the media is apart from the paper core

- Press [TENSION BAR] to make it lights in yellow.



When the media is not fed because the roll holder is not fixed firmly

- Fix the roll holder again so that the paper core does not move. (P.2-20)
- [TENSION BAR] lights in green. Do not change it and leave it as it is.



3 Press the **ENTER** key on the operation panel to display the local screen.

<LOCAL . 1> [#01]
: 1800

4

Select restart or termination of printing.

- When you restart printing, press the **REMOTE** key.
- When you terminate printing, press the **DATA CLEAR** key to delete the printing data.

```
<REMOTE . 1>      [#01]
ALL / 8PU/W321 / 0.0m
```

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

Important!

- If you print with the media feeding system is [MEDIA END OFF] status, media end cannot be detected. Be sure to print while checking the remaining amount of the media etc. If you print without media, printing may be performed on the belt.

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

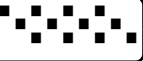
Warning Messages

Message	Cause	Solution
!Pressure Adj.	The pressure in the ink tank is likely to exceed the proper range.	Perform the negative pressure adjustment. (P.4-46)
!Wrong Pressure	The pressure in the ink tank exceeds the proper range.	Perform the negative pressure adjustment. (P.4-46)
!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.4-10)
!Wiper Clean Wiper	Time to clean the wiper has come.	Execute the wiper cleaning. (P.4-5)
!Wiper Replace Wiper	Time to replace the wiper with a new one has come.	Replace the wiper with a new one. (P.4-6)
!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 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.

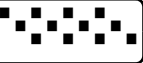
Message	Cause	Solution
!Y Motor Replace Y Motor	The time to replace the Y motor.	Contact our service office or the distributor in your region.
!Mist Fan Clean Filter	The time to replace the mist fan filter.	Refer to P.4-45, replace the mist fan filter.
!N.Recovery 1_3_----- END < > Continue	When the 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".
!X Unit Check Warnings	The warning occurs in the media feeding system.	Check the warning contents from the media feeding system panel.
!X Unit Check Alarms	The alarm occurs in the media feeding system.	Check the alarm contents from the media feeding system panel.
!X Unit Link-Up	The media feeding system is not linked up.	Link up by pressing the [RESET ALARM] button of the media feeding system.
!Belt Adhesive Reapply Adhesive	The time to recoat the adhesive on the belt.	Recoat the adhesive on the belt by referring to P.5-18.
!BELT ENCODER Press <FUNC> Key	The belt does not operate when the feeding belt moves such as at printing.	Release the warning by referring to P.5-6 "Releasing method of warning when "!BELT ENCODER" is displayed".
!X Unit Press <FUNC> Key	A warning occurred in the media feeding system during printing.	Release the warning by referring to P.5-7 "Releasing method of warning when "!X Unit" is displayed".
!Media End Press <FUNC> Key	Media end was detected in the media feeding system during printing.	Release the warning by referring to P.5-8 "Releasing method of warning when "!Media End" is displayed".
!Tank Sensor Cleaning 12345678	Time to clean the sub tank sensor comes closer.	Contact a distributor in your district or our office to call for service.
!Expiration Error 12345678ABCDEFGH	One month and more have passed from the expiration date of ink.	If you use ink as it is, it may cause discharging defect. Replace it with new one.

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.	Securely connect the interface cable in position.	
ERROR 10 COMMAND	The machine received some data other than command data.		
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.

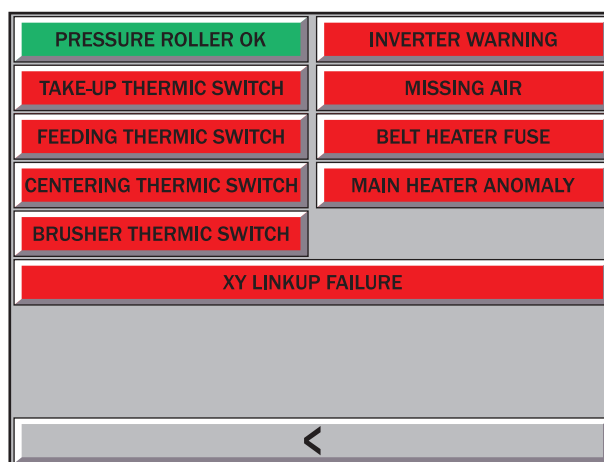
Error messages	Cause	Solution
ERROR 20 I/F BOARD	An error occurred in the communication between the I/F board and the main PCB.	Turn OFF the power to the machine and turn it ON again after a while. If the same error message appears again, contact our service office or the distributor in your region.
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: <ul style="list-style-type: none"> 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.
ERROR 60 FLUSHING nnnn	A flushing performing time out error occurred.	If the same error message appears again, contact our service office or the distributor in your region.
ERROR 90 F/W ss	An error has occurred on the firmware.	
ERROR 140 TANK SENSOR nnnnnnnn	Sub tank sensor error has been detected.	Turn OFF the power to the machine and turn it ON again after a while.
ERROR 140 INK OVERFLOW	Ink has overflowed.	If the same error message appears again, contact our service office or the distributor in your region.
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.
ERROR 147 INK SUPPLY (n)	Ink supply from the 2L ink pack could not be performed.	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.	Turn OFF the power to the machine and turn it ON again after a while.
ERROR 200 HEAD MEMORY 	An error occurred in EEPROM embedded in the head.	If the same error message appears again, contact our service office or the distributor in your region.
ERROR 204 SERIALIZER	Data communication error occurred between the head and the UHC board.	
ERROR 130 BELT ORIGIN	At belt origin detecting, a control abnormality occurred.	
ERROR 131 BELT ENCODER	A control abnormality of the belt encoder occurred.	Turn OFF the power to the machine and turn it ON again after a while.
ERROR 170 X LINK-UP nnnn	The linkup with the media feeding system failed.	If the same error message appears again, contact our service office or the distributor in your region.
ERROR 171 X UNIT nnnn	A system abnormality of the media feeding system was detected.	

About alarm display/warning display of media feeding system

Alarm list

To access the alarm list, press the [Alarm] on the operation touch panel. If an alarm is detected, one or several alarms go forth and the corresponding item is changed to red. To release the error, first correct it in the corresponding unit, and then press the displayed alarm to return it to green.



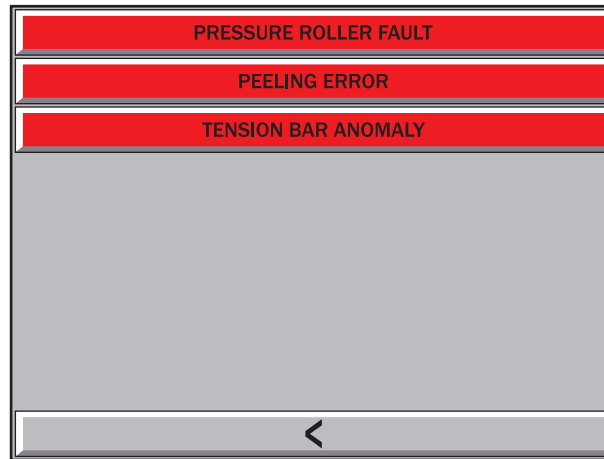
Alarm	
PRESSURE ROLLER FAULT	The pressure roller is not connected with the belt normally.
TAKE-UP THERMIC SWITCH	There is an electrical problem in the take-up unit.
FEEDING THERMIC SWITCH	There is an electrical problem in the feeding unit.
CENTERING THERMIC SWITCH	There is an electrical problem in the centering unit.
BRUSHER THERMIC SWITCH	There is an electrical problem in the brush motor of the washing unit.
INVERTER WARNING	There is an electrical problem in the main motor driving the belt.
MISSING AIR	The air pressure is 6 bars or less and it is not enough.
BELT HEATER FUSE	There is a fuse defect in the belt heater.
MAIN HEATER ANOMALY	There is a fuse defect in the main heater.
XY LINKUP FAILURE	Linkup between this machine and the Y unit failed.



- If you cannot release the alarm, contact a distributor in your district or our office.

Warning list

To access the warning list, press the [Warnings] on the operation touch panel. If a warning is detected, one or several warnings go forth and the corresponding item is changed to red. To release the error, first correct it in the corresponding unit, and then press the displayed alarm to return it to green.



Warning												
PEELING ERROR	The warning occurs when peeling of the fabric or the detection of the sensor has not been performed normally. Check the contents below:											
	<table border="1"> <thead> <tr> <th>Cause</th> <th>Measurement</th> </tr> </thead> <tbody> <tr> <td>The fabric edge guide is not used.</td> <td rowspan="2">Use the fabric edge guide, and perform adjustment.</td> </tr> <tr> <td>The tilt of the media edge by the fabric edge guide is less.</td> </tr> <tr> <td>Adhesion power of adhesive is off-balance. <ul style="list-style-type: none"> Even if you make surface waviness of right and left even at setting the fabric, as adhesion power of adhesive is off-balance, the peeling position of the fabric (height) is much different between right and left. Therefore, the warning may occur. </td> <td>Recoat adhesive, or, change the setting position of the fabric.</td> </tr> <tr> <td>The printed ratio is high, and steam by the heater is generated much. <ul style="list-style-type: none"> As adhesion power of adhesive may weaken due to the generated steam, the warning may occur. </td> <td>Send current of air to the light axis of the peeling sensor by an electric fan etc. from the upper right or the lower left of the take-up unit. (Even slight air has effect.)</td> </tr> <tr> <td>Thought the media has not been set on the take-up unit, the TAKE-UP is ON. <ul style="list-style-type: none"> As the sensor breakage has been detected, the change of the peeling sensor has been monitored in conjunction with the belt operation in a certain time. If you perform printing or the JOG operation without the media being set on the take-up unit, the warning occurs because there is no change in the peeling sensor. </td> <td>Be sure to set the media on the take-up unit when you perform printing or the JOG operation using the keyboard of the print unit. When you set the media, first set the mode to MANUAL, and then operate the BELT ON/OFF. P.2-20 "Feed the media"</td> </tr> </tbody> </table>	Cause	Measurement	The fabric edge guide is not used.	Use the fabric edge guide, and perform adjustment.	The tilt of the media edge by the fabric edge guide is less.	Adhesion power of adhesive is off-balance. <ul style="list-style-type: none"> Even if you make surface waviness of right and left even at setting the fabric, as adhesion power of adhesive is off-balance, the peeling position of the fabric (height) is much different between right and left. Therefore, the warning may occur. 	Recoat adhesive, or, change the setting position of the fabric.	The printed ratio is high, and steam by the heater is generated much. <ul style="list-style-type: none"> As adhesion power of adhesive may weaken due to the generated steam, the warning may occur. 	Send current of air to the light axis of the peeling sensor by an electric fan etc. from the upper right or the lower left of the take-up unit. (Even slight air has effect.)	Thought the media has not been set on the take-up unit, the TAKE-UP is ON. <ul style="list-style-type: none"> As the sensor breakage has been detected, the change of the peeling sensor has been monitored in conjunction with the belt operation in a certain time. If you perform printing or the JOG operation without the media being set on the take-up unit, the warning occurs because there is no change in the peeling sensor. 	Be sure to set the media on the take-up unit when you perform printing or the JOG operation using the keyboard of the print unit. When you set the media, first set the mode to MANUAL, and then operate the BELT ON/OFF. P.2-20 "Feed the media"
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DANCING BAR ANOMALY	If the rotating direction of the feeding unit is not proper or the media was not peeled from the paper core at the media end, the dancing bar moves up to the limit position and the warning occurs. Even if the media is set normally, when the warning occurs frequently, contact a distributor in your district or our office.											
RPRESSURE ROLLER	The pressure roller did not move downward normally. Check that the safety pin was not pushed into.											



- If you cannot release the warning, contact a distributor in your district or our office.

When power of adhesive weakened

When power of adhesive weakened, you must recoat it. Though adhesive was coated on this machine before shipment, when the power of it weakened due to ink, lint, dust, etc., you must recoat it. To peel adhesive coated on before shipment, use the remover attached to this machine. (As adhesive is special one, you cannot peel it with kerosene nor diesel oil.)

The following are the procedures when using Mimaki's genuine adhesive (Polixresin SX).

- **Peel old adhesive**Peel adhesive whose power weakened.
- **Coat new adhesive**Coat adhesive newly.

Rough standard of recoating adhesive

In the following cases, it is time to recoat adhesive:

- Fixation has float when the printed fabric comes out from the front cover
- When the strength of right of fixation is different from that of left
- When drops of water remain on the upper surface of the belt because the belt surface became uneven due to adhesive being peeled partly etc. and washing liquid could not be wiped with the cleaning unit wiper
- On the peeling roller, as the take-up device cannot operate because the media is peeled due to its own weight, when the media may fall on the floor

● In case that Mimaki's genuine adhesive, Polixresin SX , is applied

In case that 1 liter of our genuine adhesive, Polixresin SX, is applied, the usable print length is approximately between 2500mm and 3000mm.

If the adhesive power gets weaker, turn the adjustment dial of rear side of the media feeding system, and lower the air pressure to 0 bar side.

Then, pressure of the pressure roller increases. (MAX: 0 bar)

Also, in case that adhesive power is too strong, turn the adjustment dial, and increase the air pressure.

Then, pressure of the pressure roller decreases.



- If you set time to recoat adhesive, you can perform work without being worried about it. ((☞ P.3-31“Set the time for replacing the mist fan filter/the time for recoating the adhesive on the belt”))
- When the time has come, the message on the right is displayed on the screen to inform you of it.

!Belt Adhesive
Reapply Adhesive

Important!

- Mimaki's genuine adhesive is solvent pressure sensitive adhesive. Be sure to wear the protection mask for organic solvent, the goggles and the gloves to recoat adhesive.
- When recoating adhesive, keep fire away and be sure to turn OFF the belt heater and the main heater. Also, be sure to provide adequate ventilation. In addition, be sure to start the work after one hour and more have passed since the heater was turned OFF.
- When recoating adhesive, be sure to use the chemical-proof (kerosene-proof) gloves.
- When you recoat adhesive in the room with poor ventilation or hermetically closed room, be sure to set up the ventilation equipment.
- When using adhesive, be sure to comply with Ordinance on the Prevention of Organic Solvent Poisoning. In addition, when recoating adhesive, be sure to perform the work under the supervision of a person who completed the training session of organic solvent work chief or a work chief of organic solvent.
- If the fabric loosened before using, and if float or surface waviness occurs when you attach it on the feeding belt (when it passes the pressure roller), adhesive is not a cause. In addition, the fabric cannot be used. ((☞ P.1-18“Media”))

Be sure to check before recoating adhesive

The power of adhesive on the feeding belt differs depending on the type/the used time of adhesive, media type/ thickness, temperature or humidity, etc.

Depending on the adhesive type or other conditions, it is required to adjust the setting value of the pressure roller of the media feeding system.



- The feeding belt is made of polyurethane. Adhesive using solvent expanding polyurethane cannot be used. Ask the adhesive manufacturer whether adhesive you have can be used.



Notes when recoating adhesive

- The worker handling adhesive shall wear the attached antistatic wrist strap to perform the work.
- When recoating adhesive, keep fire away and be sure to turn OFF the belt heater and the main heater. Also, be sure to provide adequate ventilation. In addition, be sure to start the work after one hour and more have passed since the heater was turned OFF.
- Be sure to provide adequate ventilation when recoating adhesive.
- When you reapply adhesive, please make sure to attach heater guard tray (yellow).
- In case that you accidentally dropped the adhesive or remover on the external side of the right and left of the belt, please remove heater guard tray, wipe off the dropped adhesive or remover, and reattach the tray.
- In case that you remove the heater guard tray, please do not spill the adhesive or remover dropped inside the tray.
- In case that you dropped the adhesive or remover without the heater guard tray, or in case that you dropped the adhesive or remover with them collected inside the tray, they will spill out on the floor.
(☞ P.5-21)

Adhesive type

Select adhesive to be coated newly depending on the using environment or the usage.

Type	Good point	Bad point
Solvent type adhesive (recommended by our company)	(1) Has long life. (2) Can be dehydrated and cured in a short period of time until it becomes usable after coating.	(1) As organic solvent is used, preventing measure against toxication and measure against fire are required. (2) When peeling adhesive, organic solvent is required.
Aqueous-emulsion type adhesive	(1) You can dilute adhesive with water or alcohol. (2) There is no fear of organic solvent toxication.	(1) Life is shorter. (2) Cannot be dehydrated and cured in a short time after coating.
Spray type adhesive	(1) Time to dehydrate and cure after coating is not required.	(1) As life is extremely short, it can be used only on a temporary basis.

Set adhesive power

You can change adhesive power by adjusting the pressure of the pressure roller. Adjust adhesive power to make the status of this machine as below:

● Rough standard for setting adhesive power

- (1) No lift shall be found on the media and the media edges within the carriage operating area at printing.
- (2) Media shall be fixed on the belt firmly until take-up starts at printing, and once take-up starts, the belt can be peeled off from the media smoothly.

1 Set the media (👉 P.2-14)

2 Make the belt heater "ON". (👉 P.2-11)

3 Start printing. (👉 P.2-38)

4 Check the adhering status of the belt to the media and adjust the pressure of the pressure roller.

- When increasing the pressure of pressure roller:
Rotate the adjusting dial to the right to lower the value of the pressure indicator.



When media floats in the carriage operation area

- Increase the pressure of the pressure roller.

When media is apart from the belt before take-up starts

- Increase the pressure of the pressure roller.

When media is not peeled off from the belt smoothly even after take-up starts

- Decrease the pressure of the pressure roller.



- Do not make the value of the pressure indicator 2bar and more.

Adjusting dial



Pressure indicator

Important!

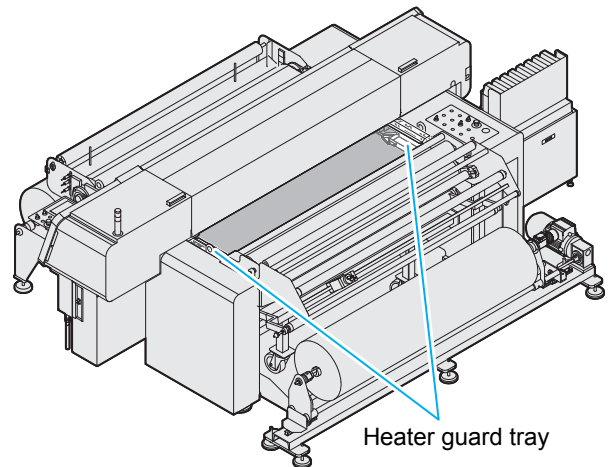
- If adhesive power cannot be improved even if you adjusted the pressure roller, adhesive has come to the end of its life. Perform the works from the next page to peel it off and recoat new adhesive.

Install the Heater Guard Trays

Install the heater guard trays below the belt on the unit back.



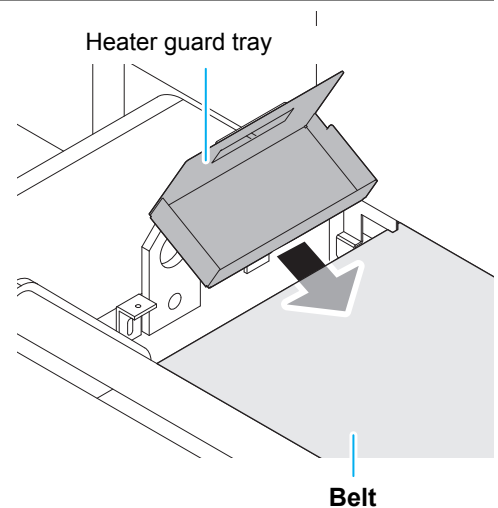
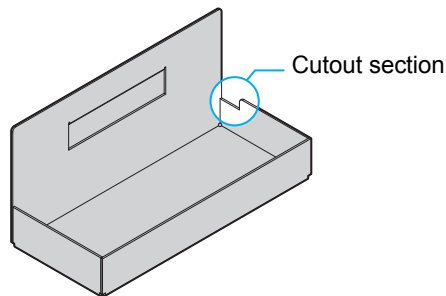
- When reapplying adhesive, be sure to install the heater guard trays.
- If you reapply adhesive without the heater guard trays installed, adhesive applied on the belt may fall to the floor and damage it.
- Periodically check the heater guard trays. Adhesive or remover in the trays may overflow and damage the floor.



1

Insert the heater guard tray diagonally between the side panel and the belt.

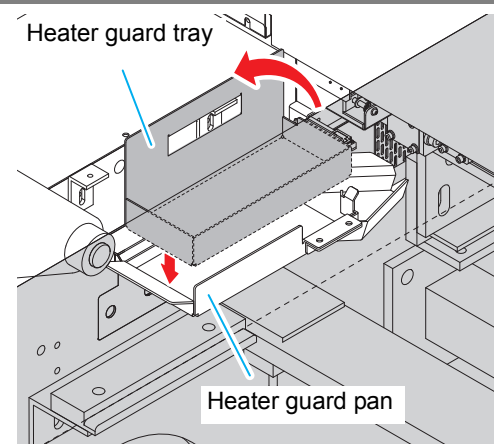
- The heater guard trays have an exclusive tray for the right and left sides, respectively. Face the cutout section towards the front when installing it, as shown in the figure below.



2

As shown in the figure, rotate the heater guard tray and place it on the heater guard pan.

- There is a heater Guard tray on the left and right side. Be sure to install both heater guard trays.



- When removing the heater guard trays, do so in the reverse procedure as installation. When there is adhesive or remover in the trays, be careful not to spill it.

Peel weakened adhesive

To peel adhesive, the items below are required:



- To peel adhesive coated on before shipment, use the remover attached to this machine. As adhesive is special one, you cannot peel it with kerosene nor diesel oil.



Notes when removing adhesive

- The worker handling remover shall wear the attached antistatic wrist strap to perform the work.
- Remover, heating oil, gas oil and ethanol are volatile hazardous objects. If you cannot use it all, put a lid on it and store in a cold dark place for storing hazardous objects.
- When removing adhesive, keep fire away and be sure to turn OFF the belt heater and the main heater. In addition, be sure to start the work after one hour and more have passed since the heater was turned OFF.
- Be sure to provide adequate ventilation when removing adhesive.

Item to be used	Item to be prepared
Doctor Gloves Plastic coma (attached to this machine) Remover	Waste cloth About one liter of kerosene or diesel oil About one liter of ethanol Cloth of about 2m x 2m Resin board of A4 size (thickness of about 1.0 to 3.0mm without sharp edges). Required not be swollen by ethanol or remover (Ex. material: PVC, PP).

1

Set the doctor on the doctor support as the figure.



- The doctor is very heavy. When carrying it or setting it on the doctor support, be sure to perform the work with two and more persons.



The cog of the doctor shall be in the direction in the photo seen from the left side surface.



2

Adjust the hexagon nut under the doctor until it comes to the position where the doctor touches the belt evenly.



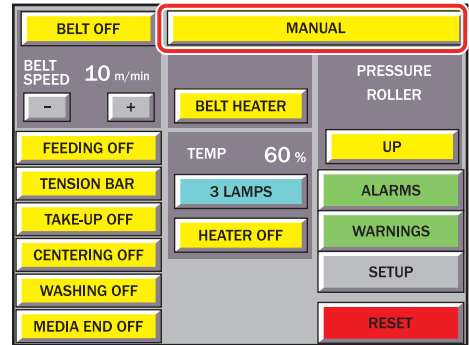
- Be careful not to gap between the doctor and the belt. If there is a gap, remover may leak from the gap and may stain other parts.

3

Fix the round shape nut of the adjustment screw part with your hand to fix the doctor.

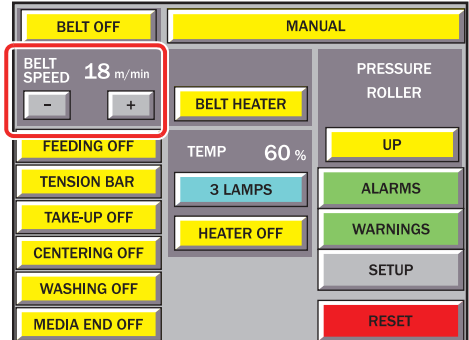
4

Press the [AUTOMATIC] on the operation touch panel to make the status to [MANUAL].



5

Pressing the BELT SPEED [-]/[+], adjust it to 16 to 18m/min.

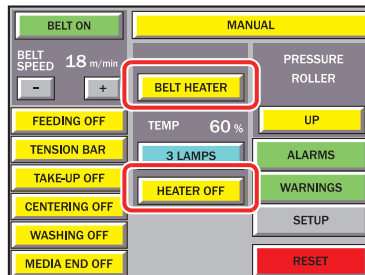
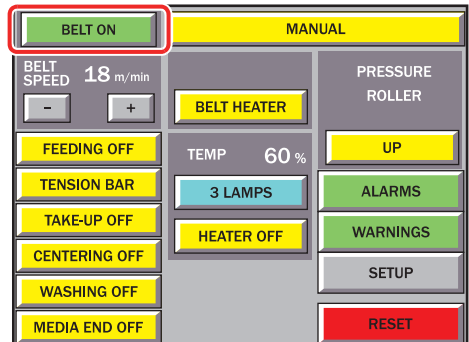


6

First check that there is not the fabric or other object on the feeding belt, and then press the [BELT OFF] to operate the belt.

- When switching to the [BELT ON], the belt starts to move.

- Important!**
- Check that the belt heater and the main heater are OFF (yellow).



7

Set the cloth on the side for applying kerosene (diesel oil) of the doctor to immerse kerosene (diesel oil) evenly.



8

Pour remover on the belt so that it goes through the cloth.

Important!

- Pour remover so that the drop does not drip off on the floor surface while the belt goes round once. If remover may adhere to other parts such as washing unit etc., it may adhere to adhesive again and cause the fixation fault.
- Be careful not to accrete kerosene (diesel oil) on the belt encoder roller in the right side of this machine (front and rear, total 2 positions).
- For the attached remover as standard, the used amount is about 5 liters. For Polix resin SX, kerosene (diesel oil) shall be about one liter as the rough standard.
- If remover drops from the belt, wipe it off completely with a waste cloth etc. Discard a waste cloth with remover perfused after dehydrating it.
- If remover dropped on the belt heater or the main heater, immediately turn OFF the power supply and contact a distributor in your district or our office to call for service.



9

Rotate the belt until adhesive becomes soft and gelled.

10

Remove the doctor and wipe off adhesive on the doctor with the waste cloth immersed in remover.

- This is cleaning to coat adhesive. Perform this before peeled adhesive cures again.



11

Using the prepared resin board, peel off adhesive from the belt.



12

After peeling off adhesive as much as possible with the resin board, remove the remaining adhesive on the belt surface with ethanol and the waste cloth.



Important!

- After the work above is completed, recheck whether there is any adhesive left not being peeled or large dust. If adhesive is newly coated with any adhesive left on the belt surface, concavity and convexity are generated on that part and it may influence on printing result.
- After the belt surface is dehydrated, coat new adhesive. (next page)
- Perfuse gelled liquid including peeled remover onto a waste cloth etc. and discard after dehydrating it.

Coat new adhesive

To coat adhesive, the items below are required:

Item to be used	Item to be prepared
Doctor Gloves Plastic coma (attached to this machine)	Adhesive (Polixresin SX 1000cc, sold separately) Small amount of kerosene or diesel oil (to remove adhesive on the doctor) Waste cloth Water (atomizer)

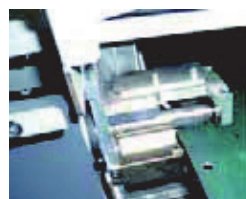
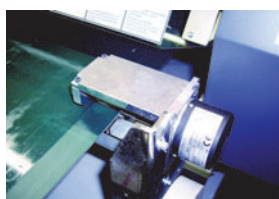


Notes when coating adhesive

- The worker handling adhesive shall wear the attached antistatic wrist strap to perform the work.
- When coating adhesive, keep fire away and be sure to turn OFF the belt heater and the main heater. In addition, be sure to start the work after one hour and more have passed since the heater was turned OFF.
- Adhesive, heating oil and gas oil are volatile hazardous objects. If you cannot use it all, put a lid on it and store in a cold dark place for storing hazardous objects.
- Be sure to provide adequate ventilation when coating adhesive. If you coat adhesive in a place with poor ventilation or in a closed place, be sure to install a ventilation device.



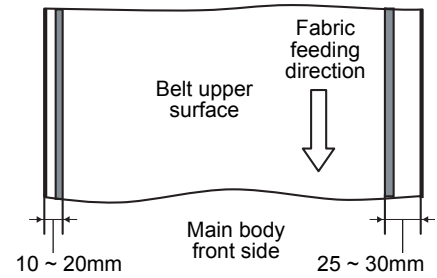
- Mimaki's genuine adhesive is solvent pressure sensitive adhesive. Be sure to wear the protection mask for organic solvent, the goggles and the gloves to recoat adhesive.
- When recoating adhesive, be sure to use the chemical-proof (kerosene-proof) gloves.
- When you recoat adhesive in the room with poor ventilation or hermetically closed room, be sure to set up the ventilation equipment.
- When using adhesive, be sure to comply with Ordinance on the Prevention of Organic Solvent Poisoning. In addition, when recoating adhesive, be sure to perform the work under the supervision of a person who completed the training session of organic solvent work chief or a work chief of organic solvent.
- When using adhesive commercially available, be sure to check compatibility between its solvent component and the belt material of this machine. If you wish to use it, contact a distributor in your district or our office.
- When overcoating adhesive (coating new adhesive on old adhesive), coating may not be performed finely due to concavity/convexity, dust, lint, etc. of the old adhesive surface.
- Be careful not to accrete adhesive around touching area of the belt encoder roller and the belt origin hole in the right side of this machine (front and rear, total 2 positions). Otherwise, the machine may not operate normally.



1

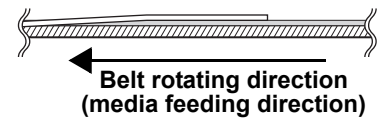
Paste adhesive tape (with smooth-surface) on the belt front surface.

- Paste adhesive tape on the position as indicated in the figure (from both edges for right and left of the belt).



Important!

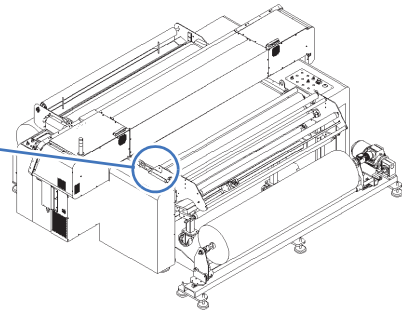
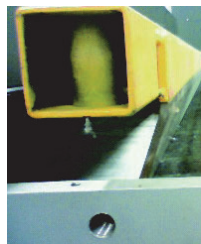
- Check the chemistry of adhesive tape with adhesive before using. (Check that tape does not melt by adhesive.)
- Paste adhesive tape as indicated in the right figure not to be peeled off by the doctor even after the belt goes round.



2

Set the doctor on the belt referring to the Step 2 and 3 in “Peel weakened adhesive”.

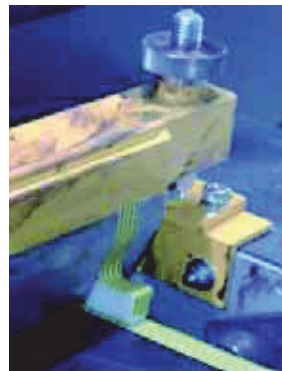
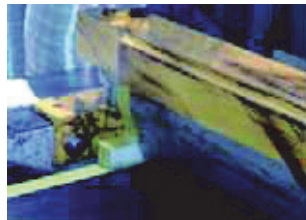
The cog of the doctor shall be in the direction in the photo seen from the right side surface.



3

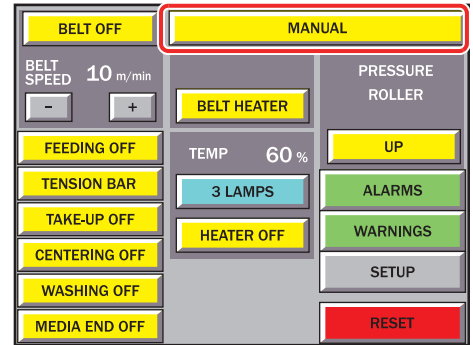
Fix the plastic comas (x 2) attached to this machine on the doctor with adhesive tape.

- On the adhesive tape pasted on the belt, paste one plastic coma each for right and left on the side with adhesive coated of the doctor.



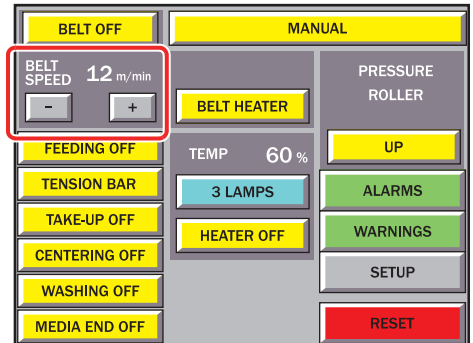
4

Press the [AUTOMATIC] on the operation touch panel to make the status to [MANUAL].



5

Pressing the BELT SPEED [-]/[+], adjust it to 10 to 12m/min.

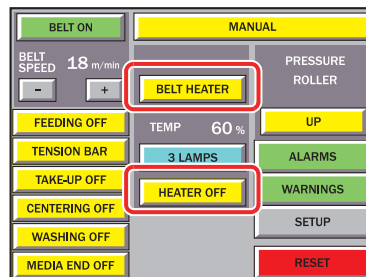
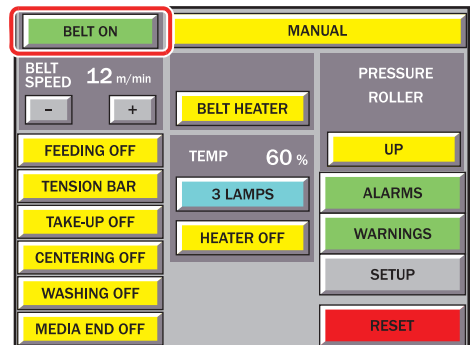


6

First check that there is not the fabric or other object on the feeding belt, and then press the [BELT OFF] to operate the belt.

• When switching to the [BELT ON], the belt starts to move.

Important! • Check that the belt heater and the main heater are OFF (yellow).

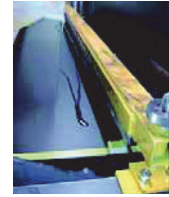


7 Pour adhesive on the belt evenly in the width direction.

- As adhesive is dehydrated and recoated little by little while the belt is moving round once, coat all over the belt by refilling adhesive on less part of it.

Important!

- If you pour large amount of adhesive at a time, it may overflow from right and left, or, it may drip off on the floor.
- If overflow adhesive drops on the belt heater just below it, there is danger of fire.
 - Do not pour adhesive in a breath.
 - Be sure to turn OFF the belt heater and the main heater.
- If adhesive dropped on the belt heater or the main heater, immediately turn OFF the power supply and contact a distributor in your district or our office to call for service.
- If adhesive dropped onto the floor, resin floor cover or coating may be melted.
- If adhesive dropped from the belt, wipe off completely with a waste cloth etc., and leave this machine for 12 hours and more before using next time. Discard a waste cloth with adhesive perfused after dehydrating it.



8 When all adhesive is poured on the belt, spray water on entire doctor width with the atomizer while adhesive is pooled in the doctor.

- By spraying water, you can decrease lines that will occur on adhesive when there becomes no adhesive on the doctor.



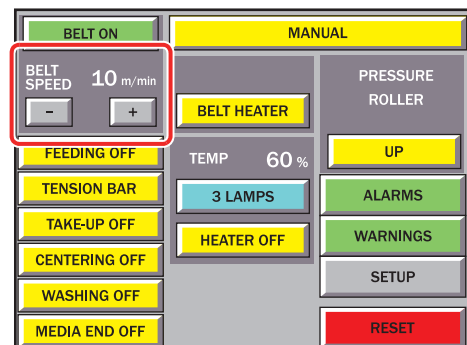
9 Remove the doctor when there is no adhesive on the doctor and wipe off adhesive sticking to the doctor with waste cloth immersed in kerosene (diesel oil).

Important!

- Check that there is no adhesive on the doctor before removing it. If you remove the doctor with adhesive left, adhesive on the doctor drip off on the belt and it may cause concavity and convexity.

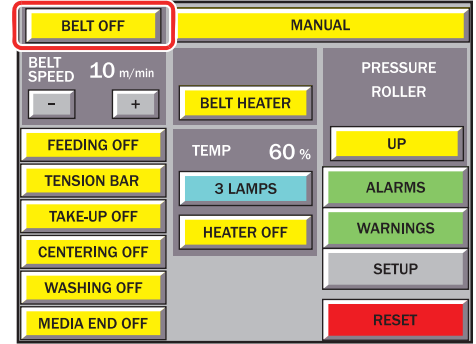
10 Change BELT SPEED.

- Pressing the BELT SPEED [-]/[+], adjust it to 5 to 10m/min.
- To dehydrate adhesive, leave as it is for two or three hours. (Keep the belt heater and the main heater "OFF" during leaving.)



11

Switch to the [BELT OFF] to stop the belt.



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		Tx400-1800B
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,BI,R,Or
	Sublimation dye ink	K,C,M,Y,Lc,Lm,BI,Lbl
	Disperse dye ink	Available at a later date
	Textile pigment ink	K, C, M, Y, Lc, Lm, BI, 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		Tx400-1800B
Roll media size	Maximum width	1860mm
	Minimum width	210mm
	Thickness	7.0mm or less
	Roll outside diameter	φ 400mm or less
	Roll weight	44kg or less
	Roll inside diameter	2 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 : 1.7m Rear edge of feeding machine paper core removing : 3.2m
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		23500 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		2300kg or less
Outside dimensions		4300mm(W) x 2930mm(D) x 1650mm(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 magenta /Light brack /Blue/ Red/Orange
	Sublimation dye ink	Black /Cyan /Magenta /Yellow /Light cyan /Light magenta /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.

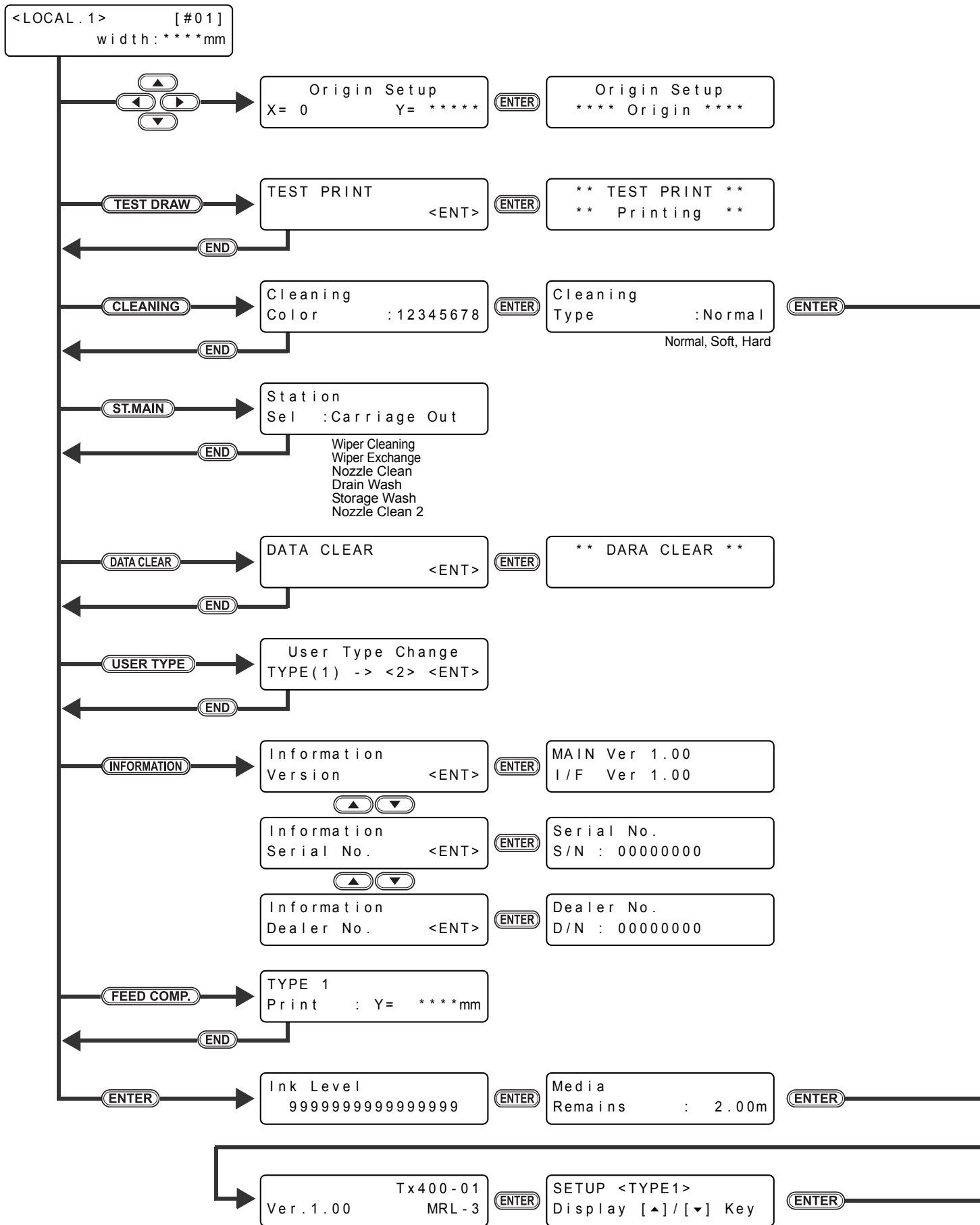
Inquiry Sheet

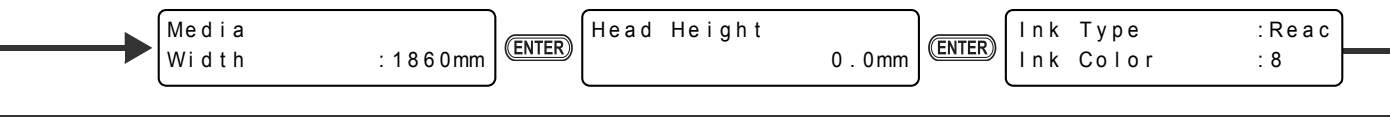
Use this sheet for troubles and abnormal functioning of the machine.
Fill in the following necessary items and fax the sheet to our service office.

Company name	
Person in charge	
Phone number	
Machine model	
Used OS	
Machine information *1	
Error messages	
Inquiry details	

*1. See "Confirming Machine Information" (☞ P.3-38) of "Chapter 3 Extended Functions " and fill in the sheet.

Function Flowchart





<LOCAL . 1> [# 0 1]
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>

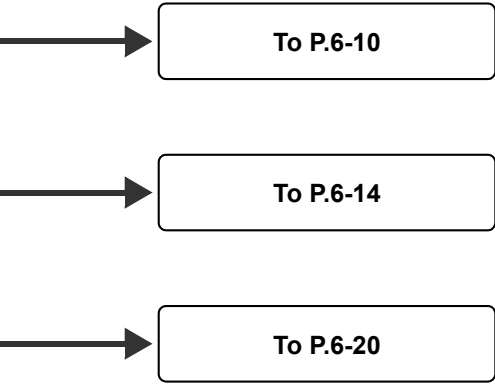
ENGLISH
DEUTSCH
FRANCAIS
ESPAÑOL
ITALIANO
PORTUGUESE
TURKCE

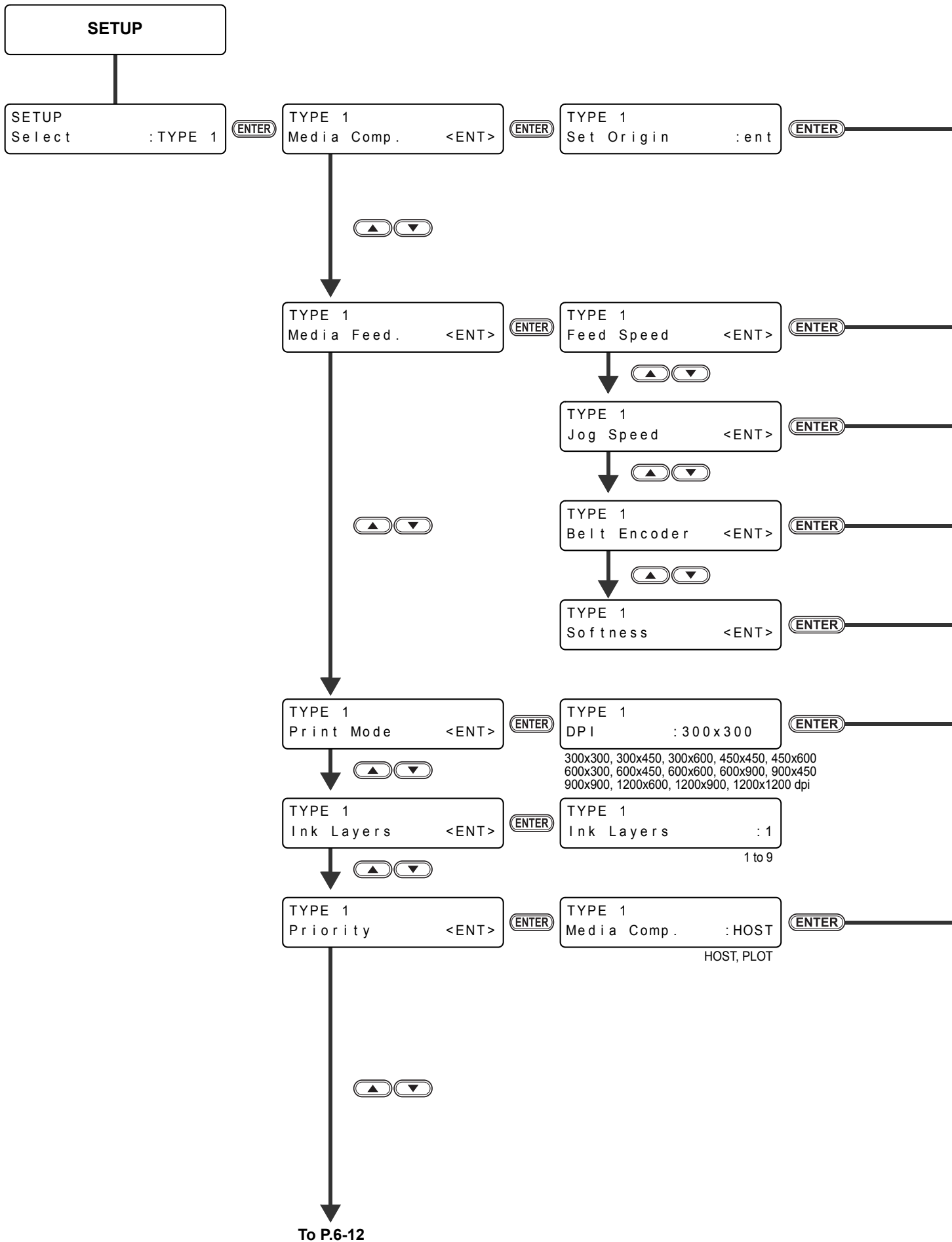
▲ ▼

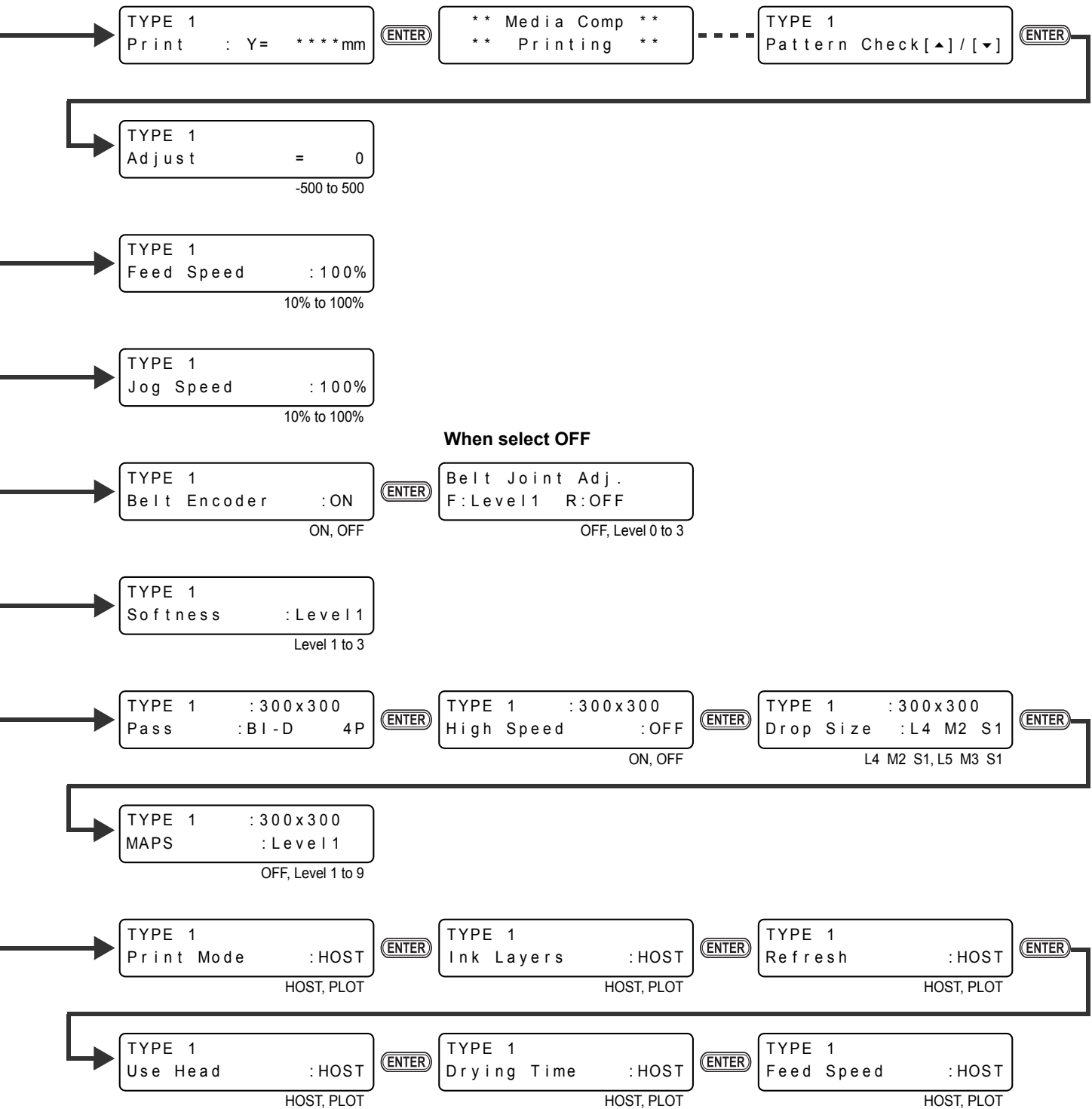
FUNCTION
MEDIA SET <ENT>

ENTER

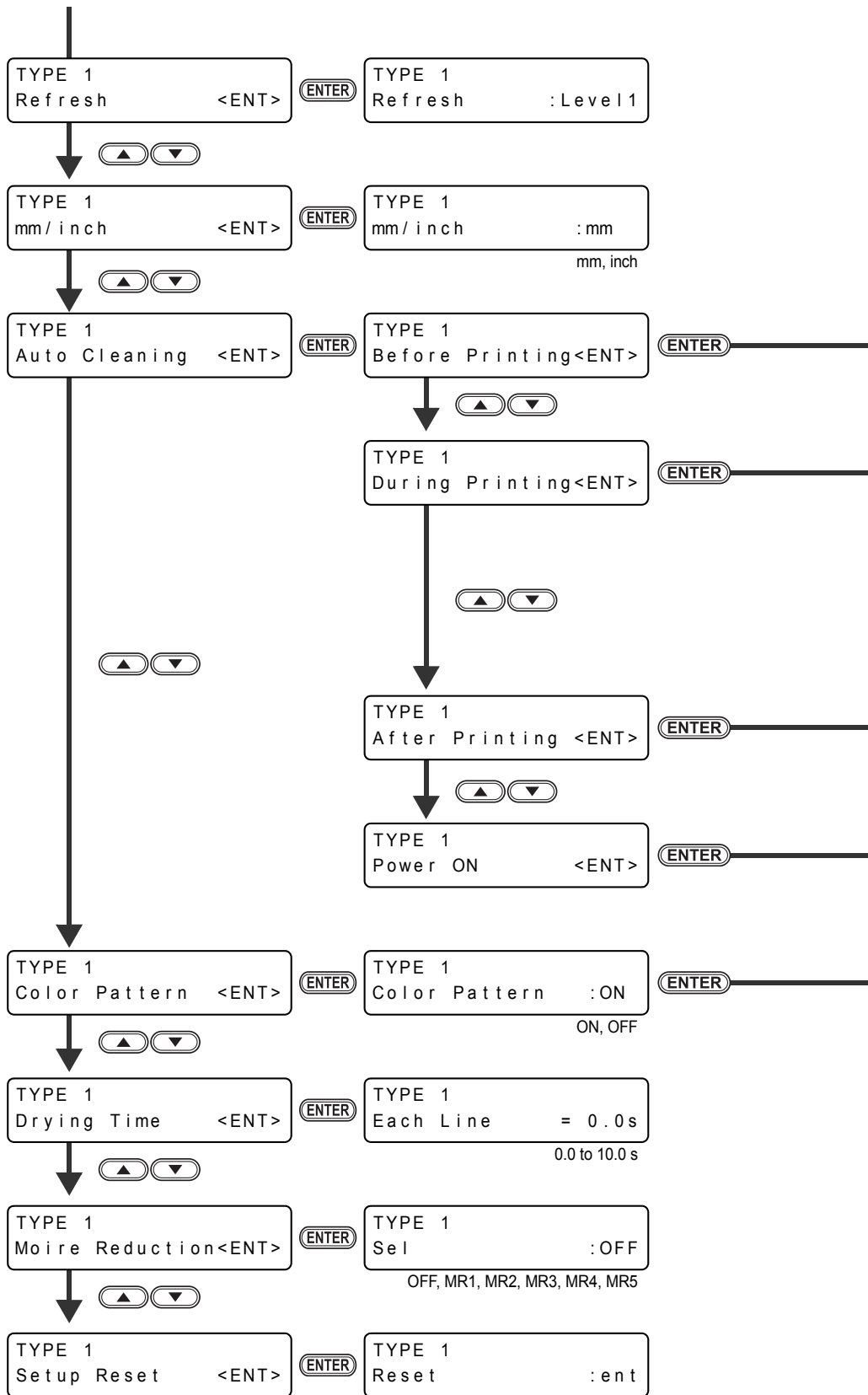
MEDIA SET
MEDIA : RESET

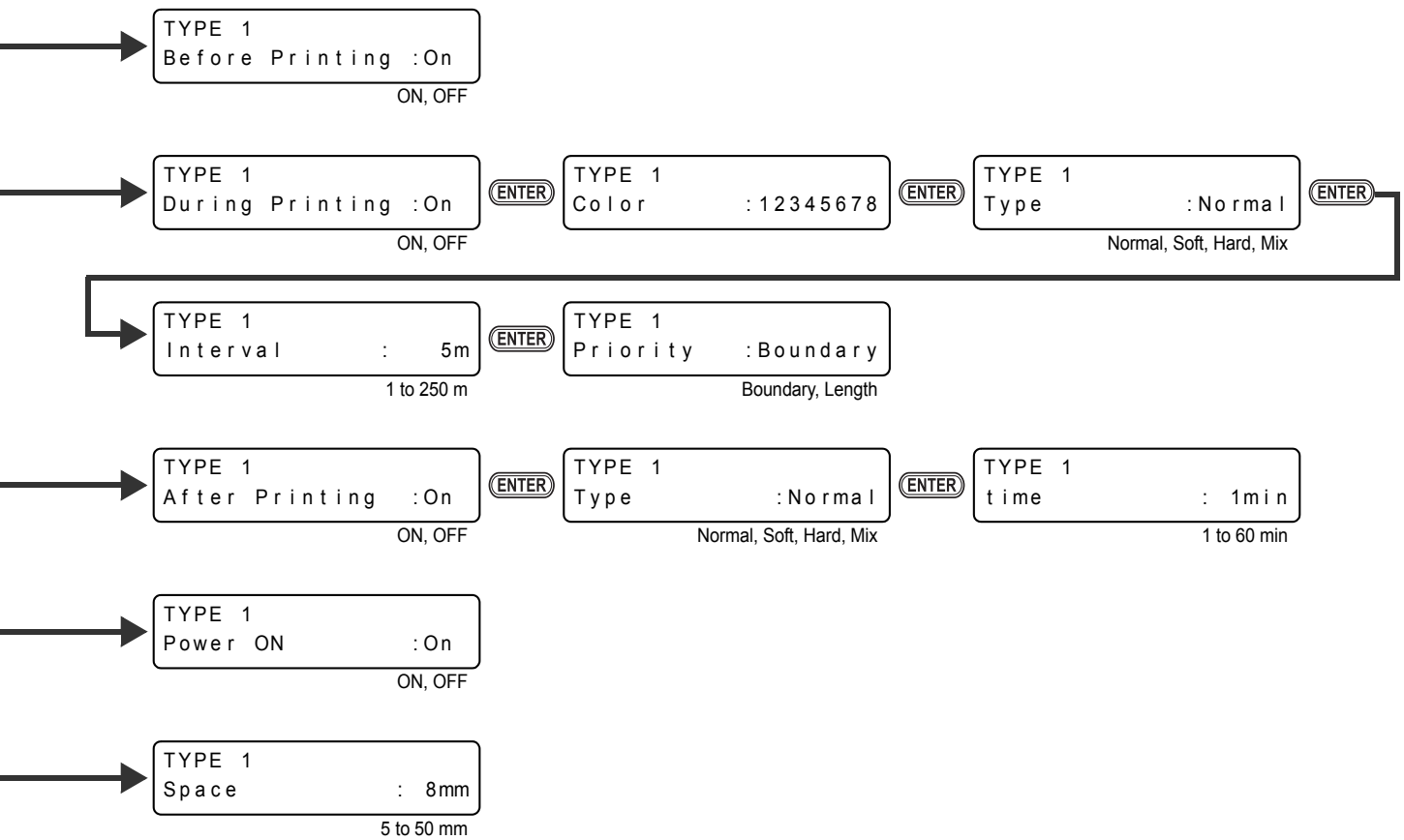


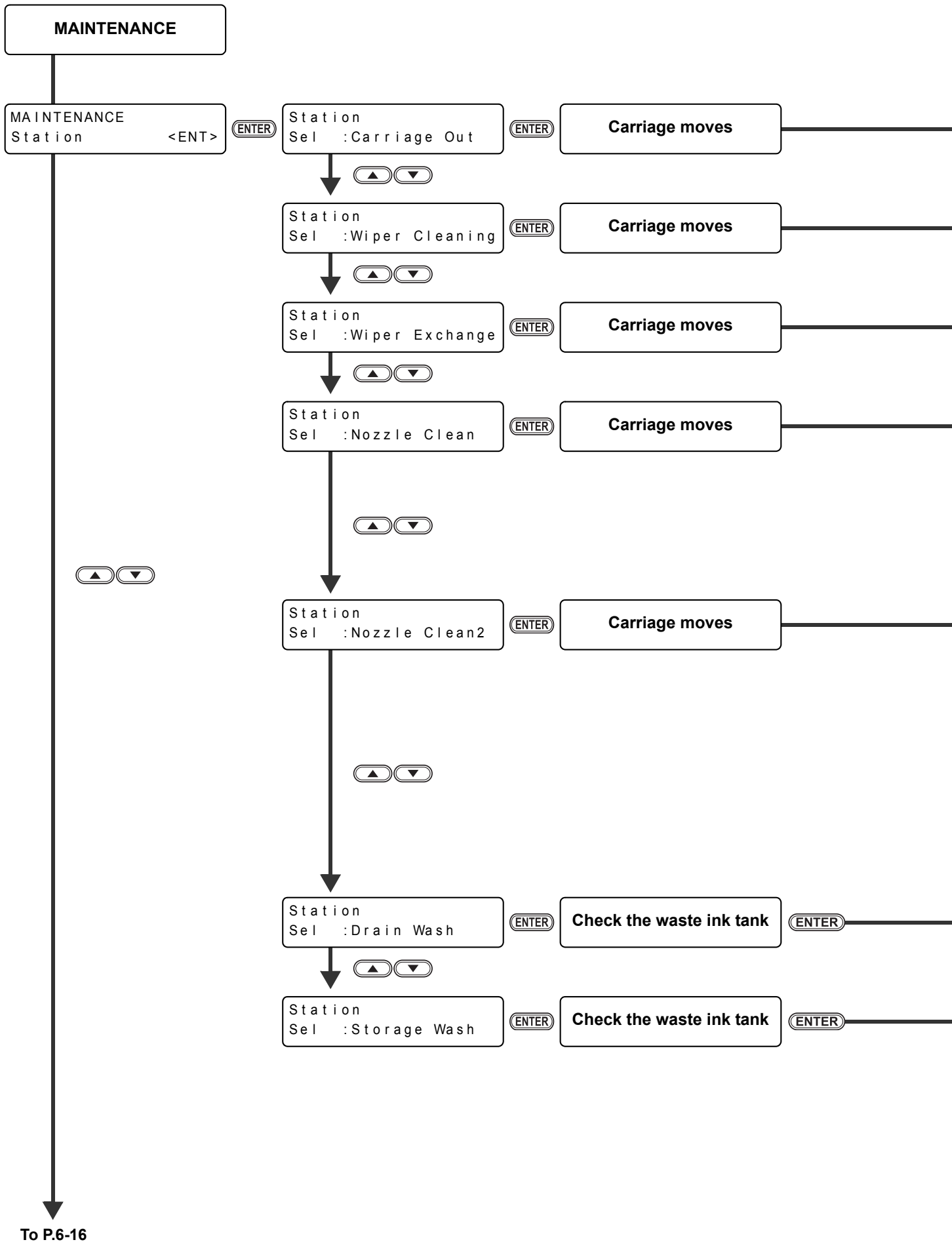


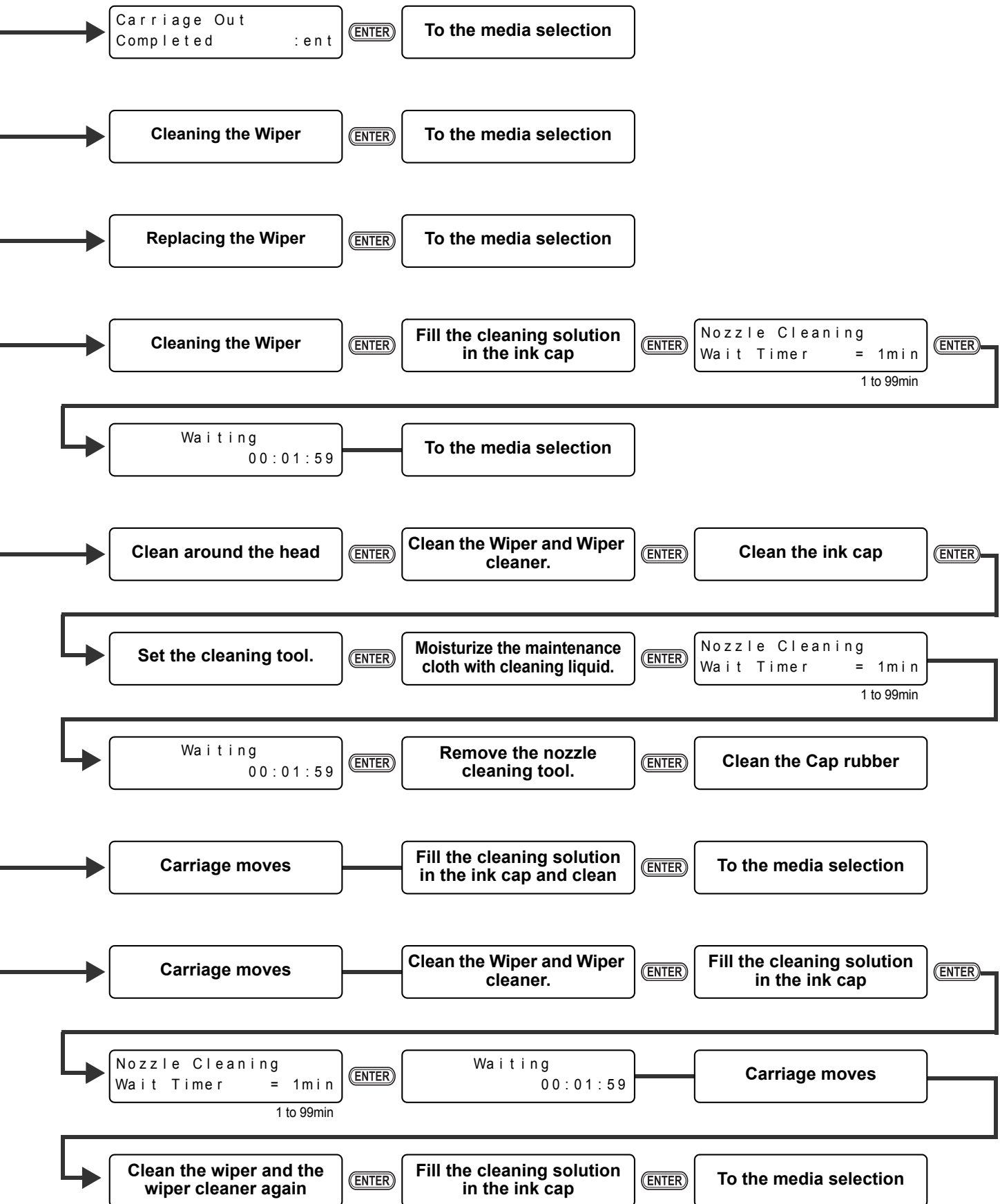


From P.6-10

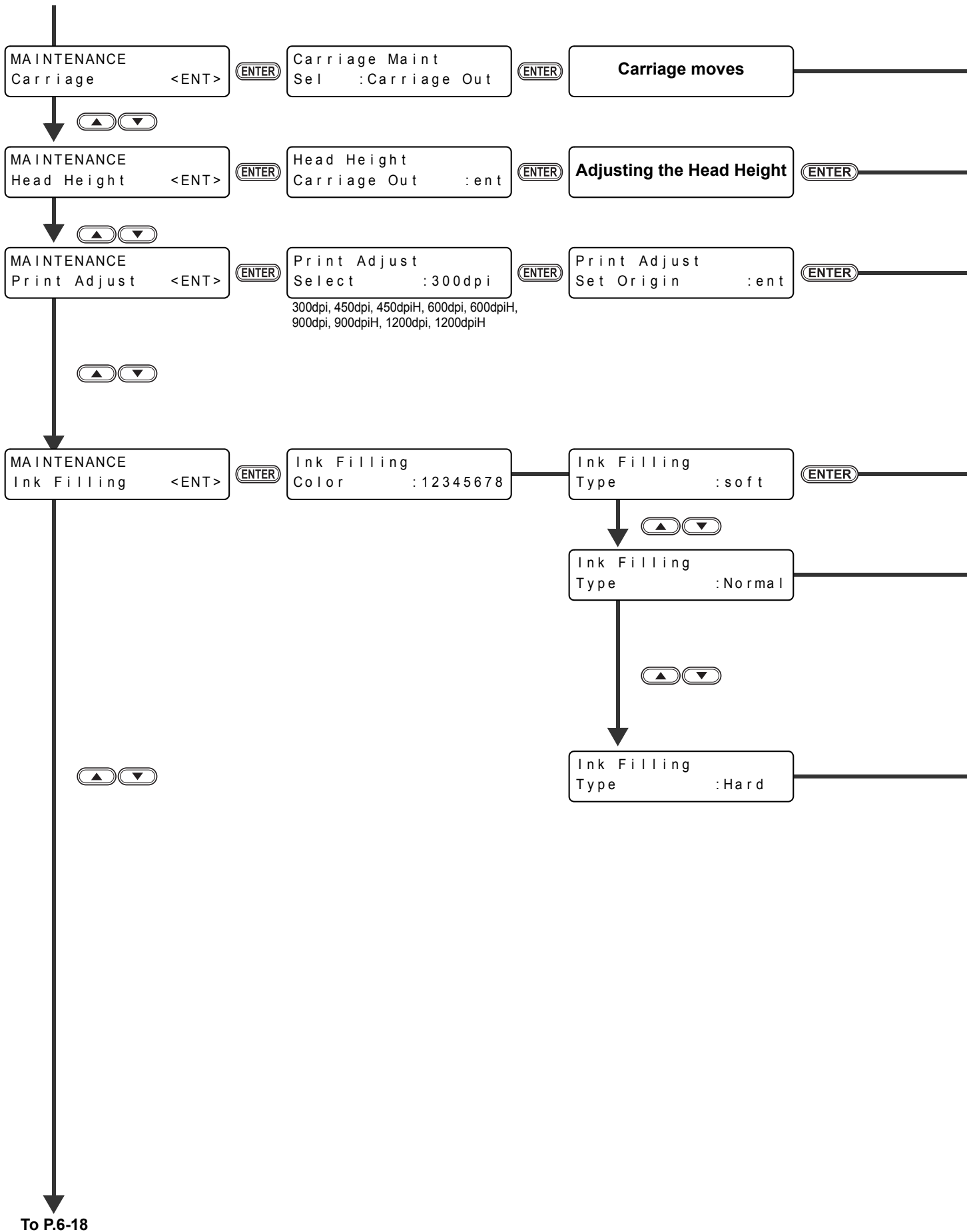


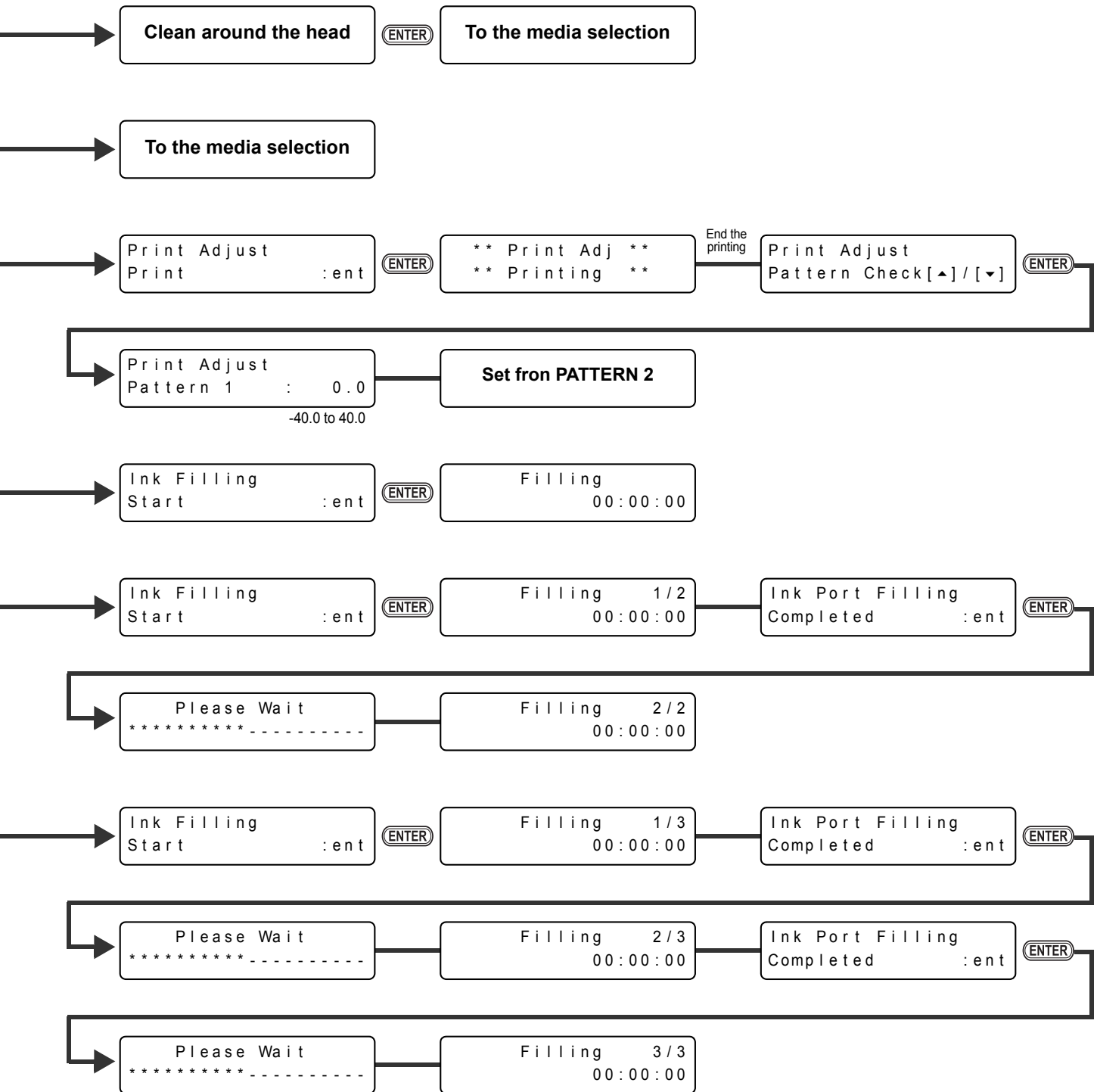




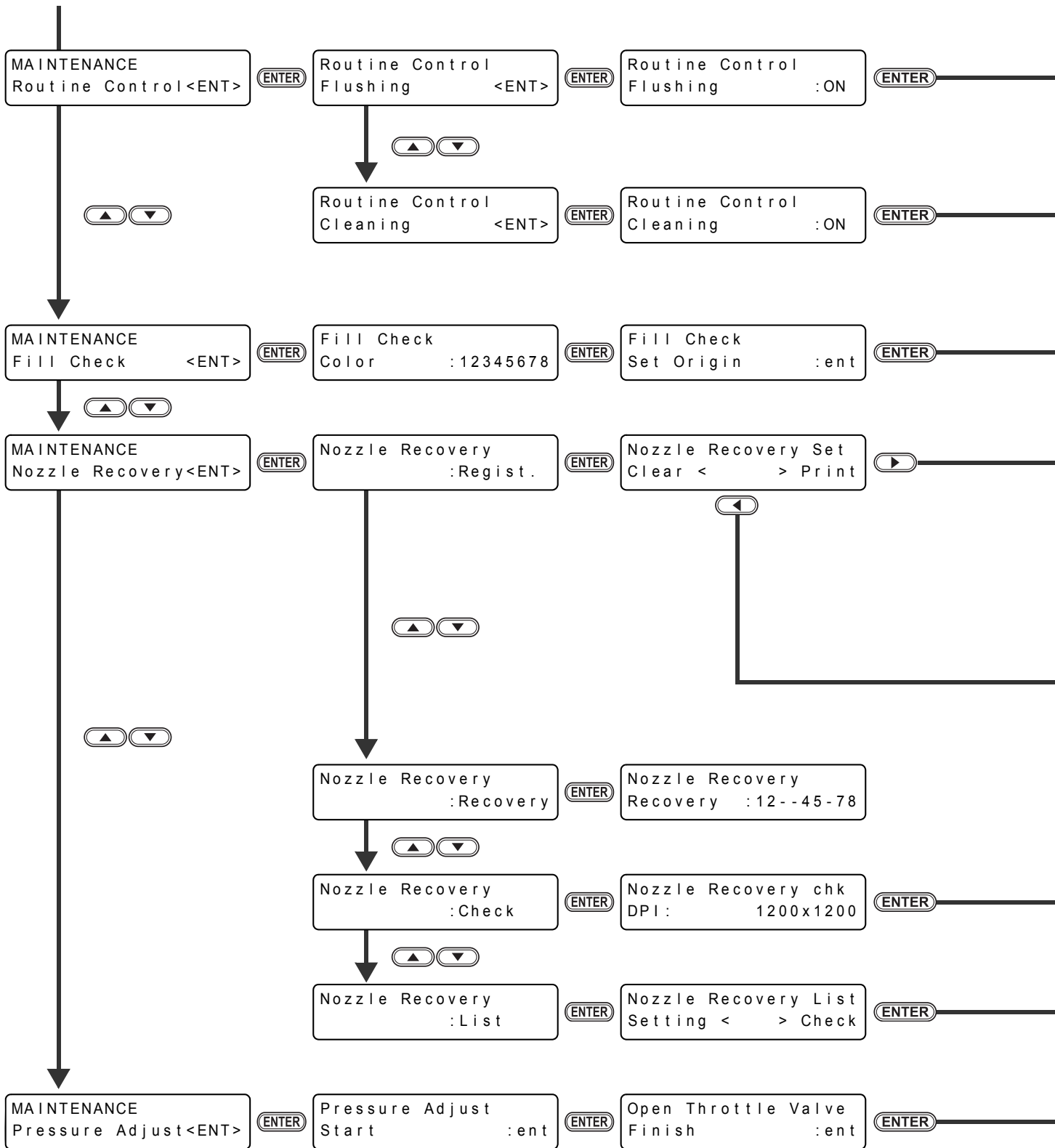


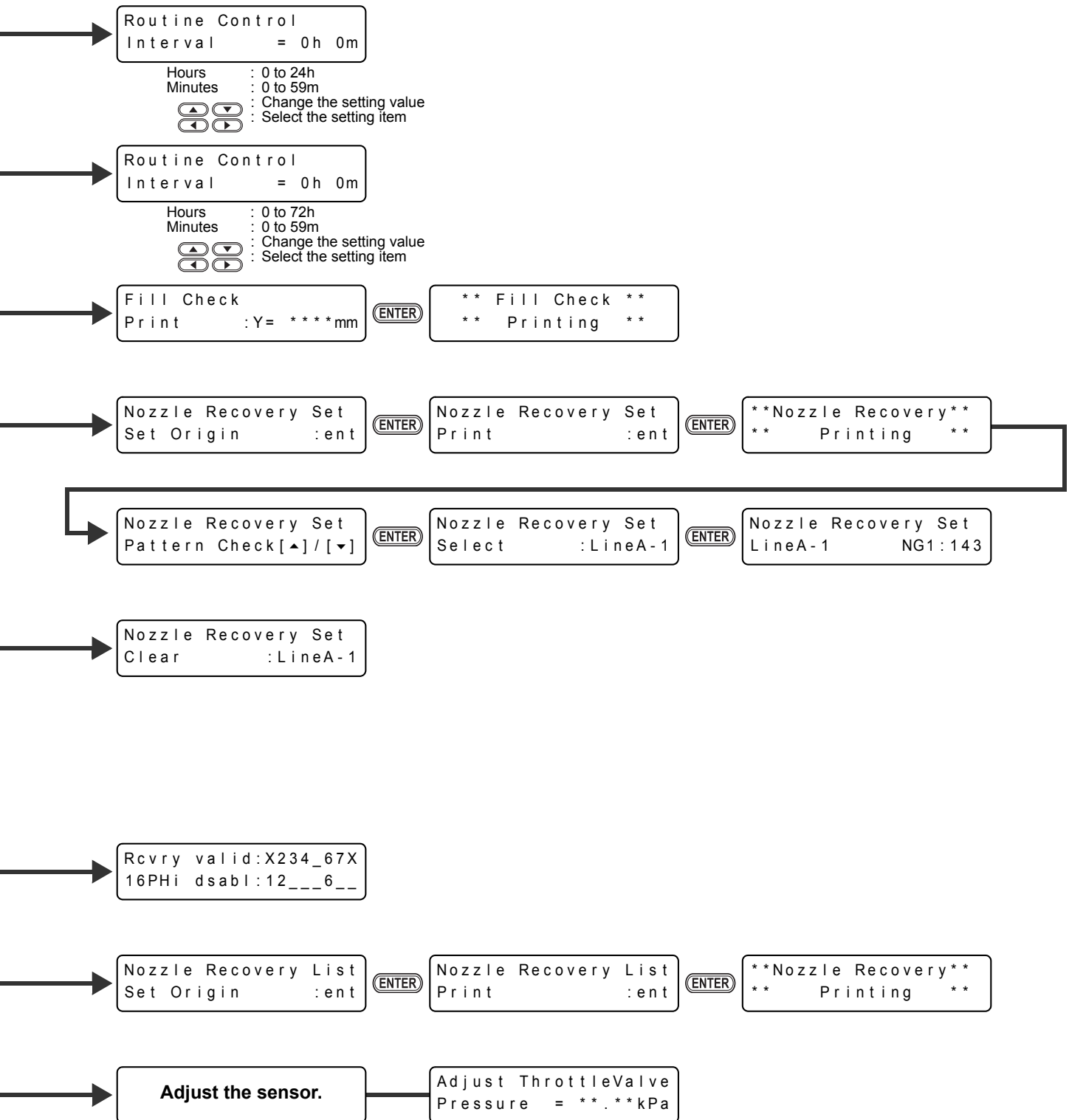
From P.6-14

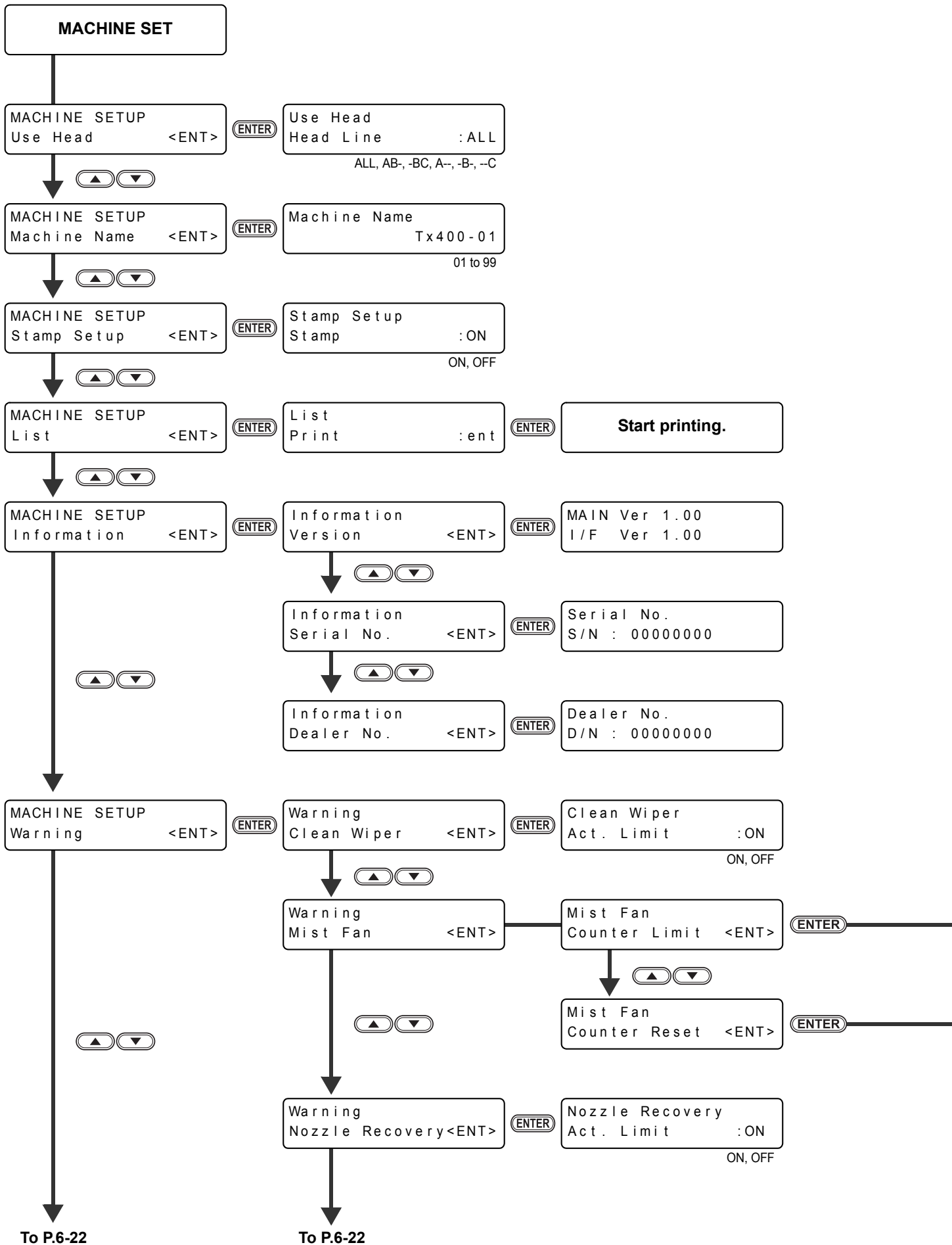


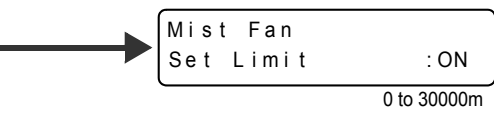


From P.6-16



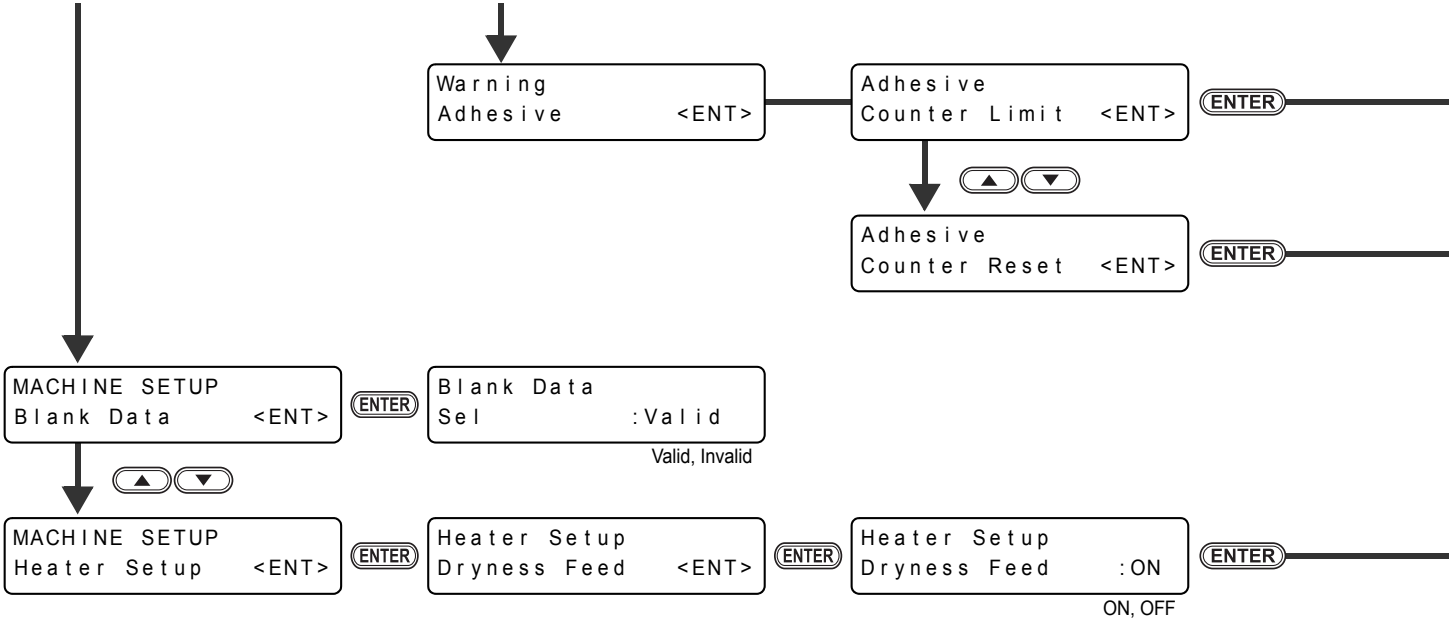






From P.6-20

From P.6-20



Adhesive
Set Limit : ON
0 to 30000m

Adhesive A
Reset : ent

Dryness Feed
Speed : AUTO
AUTO, 1 to 60mm/s

ENTER

Dryness Feed
Feed Length : 1000mm
10 to 2000mm

