

# *JV400-LX Series*

*JV400-130LX / 160LX*

## **INSTALLATION GUIDE**

# Change Tracking

Date	2013.04.30	Manual Ver.	2.2	Remark	
Status	Index	Rev.	Changes		
Revised	5.1-P.1 -P.2	1.5	Illustrations of jointing are changed.		
Revised	5.1-P.5	1.1	Work procedure for W ink using is changed.		

Date	2013.10.10	Manual Ver.	2.1	Remark	
Status	Index	Rev.	Changes		
Revised	2	1.3	Weight is changed..		
Revised	4.2	1.1 1.2	Screw type is changed..		
Revised	4.3	1.3	Screw type is changed..		
Revised	4.4	1.3	Screw type is changed..		
Added	5	1.3	6 color is added.		
Added	5.1	1.4	6 color is added.		
Revised	7.3	1.5	Work procedure is changed.Important is added.		
Revised	7.6	1.2	Work procedure is changed.		

Date	2013.04.15	Manual Ver.	2.0	Remark	
Status	Index	Rev.	Changes		
Revised	3	1.2	Illustration is changed in accordance with heater change.		
Revised	4	1.2	Illustration is changed in accordance with heater change.		
Revised	4.2-P.6 4.2-P.7 4.2-P.9	1.1	Drying heater is changed and Finger guard is added.		
Revised	4.3	1.2	Work procedure is changed in accordance with heater change.		
Revised	4.4	1.2	Drying heater is changed and Finger guard is added.		
Revised	4.5	1.2	Finger guard is added.		
Added	4.6	1.0	New page is added.		
Added	5	1.2	6 color is added.		
Added	5.1	1.3	6 color is added.		
Added	5.2	1.3	6 color is added.		
Revised	6.1	1.2	Drying heater is changed and Finger guard is added.		
Revised	7.3	1.4	Ink set is changed.		
Revised	7.6	1.1	Work procedure is changed.		

Date	2013.01.20	Manual Ver.	1.8	Remark	
Status	Index	Rev.	Changes		
Revised	2	1.1	Specification for power supply is changed.		
Revised	4	1.1	Caution for environmental of installation is added.		
Revised	6.2	1.1	Caution is added.		

# Change Tracking

Date	2012.10.15	Manual Ver.	1.7	Remark	
Status	Index	Rev.	Changes		
Revised	4.5-P.14	1.1	The illustration is changed.		
Revised	7.2-P.1 7.2-P.2	1.1 1.3	Page is deleted.		
Revised	7.3-P.1 7.3-P.2 7.3-P.3	1.3 1.2 1.2	Entire change according to the work for air purge was added.		

Date	2012.06.07	Manual Ver.	1.6	Remark	
Status	Index	Rev.	Changes		
Revised	7.2-P.4	1.2	"Target value" is changed.		

Date	2012.05.29	Manual Ver.	1.5	Remark	
Status	Index	Rev.	Changes		
Revised	5	1.1	6c and 6c+W ink set are deleted, and 4c+W is added.		
Revised	5.1-P.2	1.2	The illustration of the coupling is changed. Ink set 6c and 6c+W are deleted, and 4c+W is added.		
Revised	5.1-P.3	1.2	An important item of step 2 is changed.		
Revised	5.2	1.2	The ink label illustration is changed.		
Revised	7.2-P.4	1.2	Step 6 is deleted (The following numbers advance).		

Date	2012.05.15	Manual Ver.	1.4	Remark	
Status	Index	Rev.	Changes		
Revised	4.3-P.11	1.1	Deleted:Step6)		
Revised	4.3-P.12	1.1	Step number advances.		

Date	2012.03.16	Manual Ver.	1.3	Remark	
Status	Index	Rev.	Changes		
Revised	4.3	1.1	3) of Step 3 was added.		

Date	2012.02.07	Manual Ver.	1.20	Remark	
Status	Index	Rev.	Changes		
Revised	3	1.1	Installation Space was revised.		
Revised	7.3	1.1	The procedure of the air purge was changed.		

Date	2012.01.11	Manual Ver.	1.10	Remark	
Status	Index	Rev.	Changes		
Revised	4.4	1.1	Step4 was added.		
Revised	5.1	1.1	The connection of the ink tube was changed.		
Revised	5.2	1.1	Hint was added. Label of accessories was changed.		

# Change Tracking

Date	2011.12.19	Manual Ver.	1.00	Remark	
Status	Index	Rev.	Changes		
Released			New issued		

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INSTALLATION GUIDE > About the Installation Guide						Rev.
Model	JV400-130/160LX	Issued	2011.02.15	Revised	F/W ver.	Remark
<b>1. About the Installation Guide</b>						1.0

■ **Outline**

This document is a collection of information for service engineers when setting up JV400-130/160LX inkjet printers. During the setup, proceed with the work by referring to this document and the following related documents.

■ **Documents related to this unit**

Documents other than this document which describe the JV400-130/160LX are listed below. Refer to these as required.

- Operation Manual (included with product)
- Mechanical Drawing
- Maintenance Manual
- Accessories List

<b>1</b>
<b>2</b>
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Model	JV400-130/160LX	Issued	2011.02.15	Revised		F/W ver.		Remark	
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# 1.1 Description of the Ink Used

■ **Outline**

Hand the "Material Safety Data Sheet (MSDS)" over to the user who will actually use this unit. Furthermore, explain about the following items with regards to using the product safely.

- Usage environment
- Emergency measures

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## 2. Main Unit Specifications

■ List of main unit specifications

Item		Specifications	Remarks
		JV400-130/160LX	
Power supply specifications		Single phase AC100V to 120V : 1440W x 2 Single phase AC220V to 240V : 1800W x 2	
Power consumption		2120VA or less x2 lines	Main unit including heater
Installation environment	Usable temperature	20°C ~ 35°C	In environments outside of the range shown on the left, the ink ejection stability may deteriorate
	Relative humidity	35 to 65% Rh (no condensation)	
	Precision guaranteed temperature	20°C to 25°C	
	Temperature gradient	± 10°C/h or less	
	Dust	Office equivalent	
Weight	Main unit	198kg(130LX), 235kg(160LX)	
External dimensions (W)		2885 mm or less	

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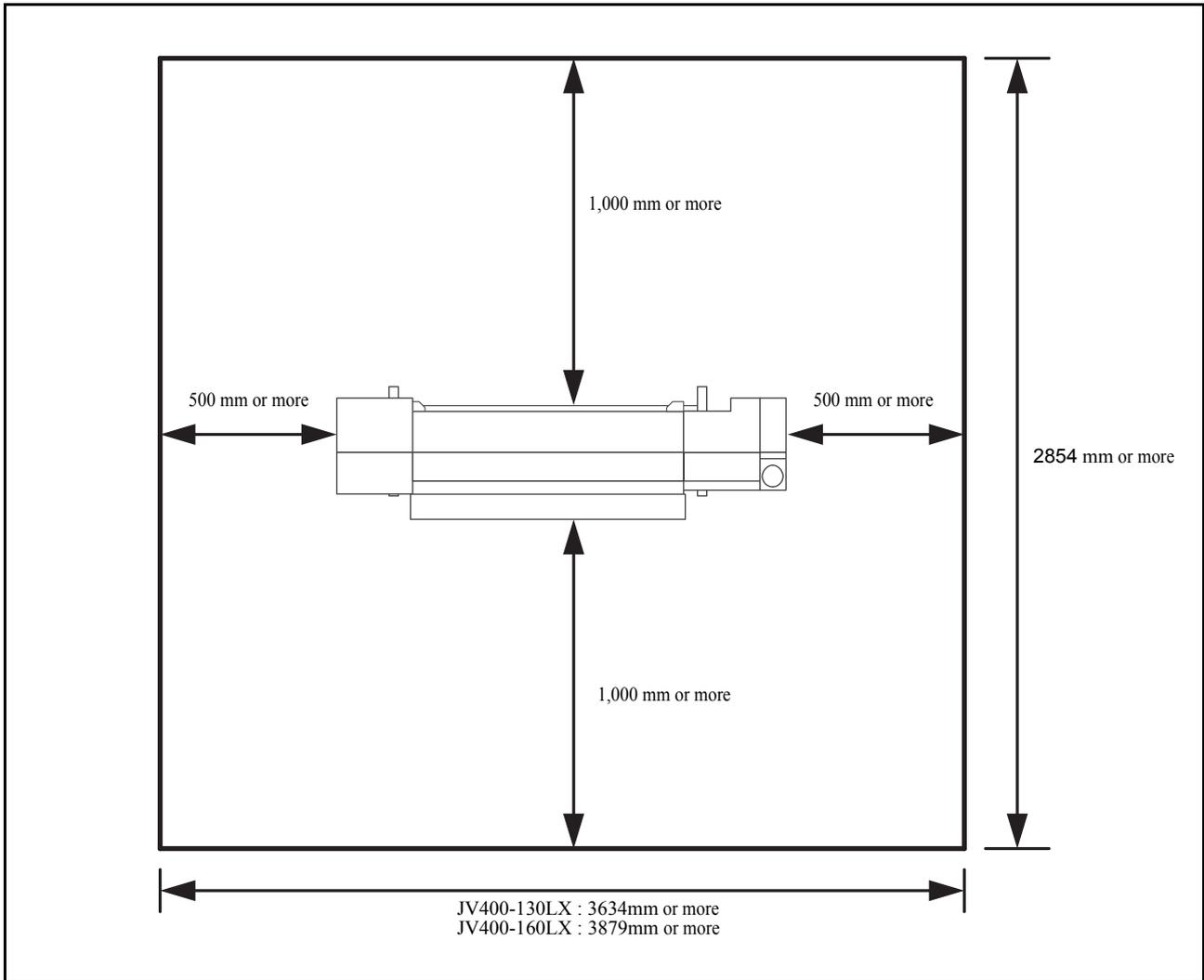
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### 3. Installation Space



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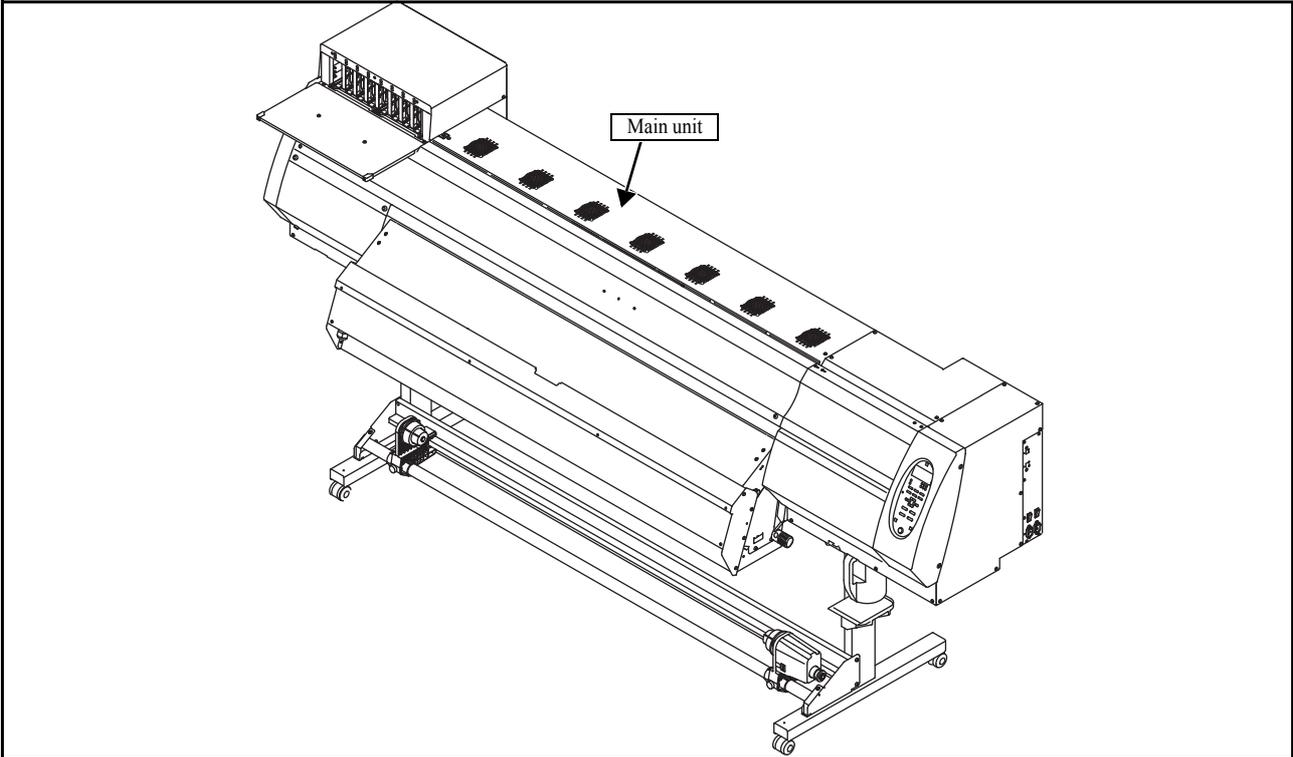
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# 4. Printer Assembly



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### ■ List of work procedures

Work operation	Description	Refer to
<input type="checkbox"/> 1 Unpacking	Unpack the product.	4.1 (p.2)
<input type="checkbox"/> 2 Assembling the leg with the main body	Assemble the leg with the main body.	4.2 (p.3)
<input type="checkbox"/> 3 Mounting the Drying heater Assy	Mount the Drying heater Assy.	4.3 (p.10)
<input type="checkbox"/> 4 Mounting the Accessories	Carry out the work to attach the accessories.	4.4 (p.14)
<input type="checkbox"/> 5 Removing the Stopper	Remove the stopper.	4.5 (p.15)



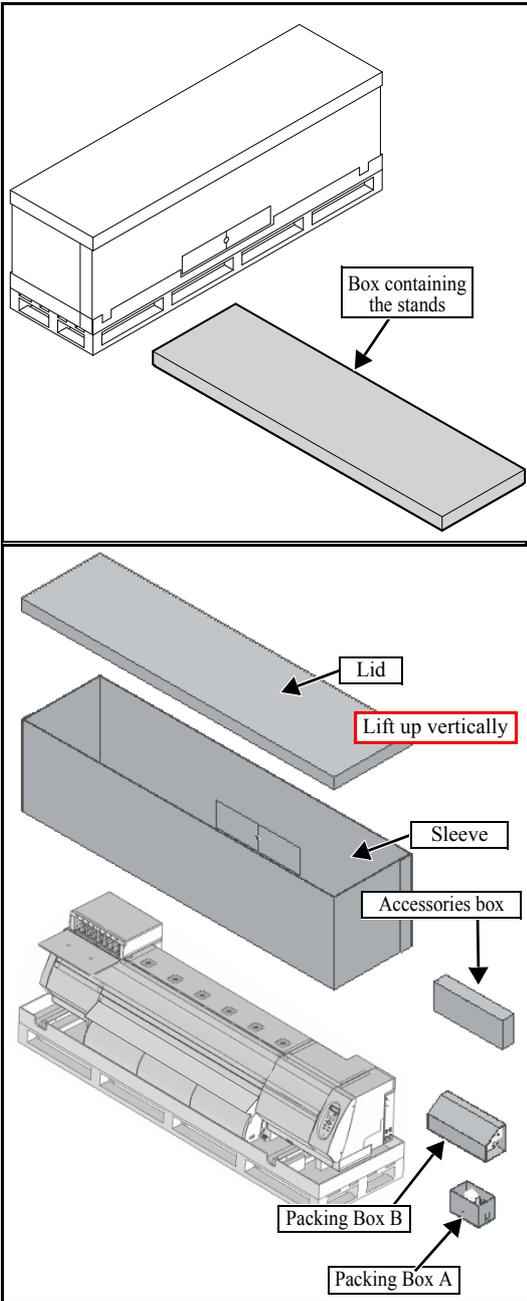
- In order to prevent accidental cuts, always wear gloves when performing disassembly and assembly work.
- When carrying out the work, ensure that there is sufficient surrounding space, and install in a stable location.
- This product is extremely heavy. Take great care when handling the product.



- Do not install the machine in the room or area using (photographic) fixing solution or acid solution (acetic acid, hydrochloric acid). An irrecoverable deflection or nozzles missing occur the machine by chemical effect of above solution.

# 4.1 Unpacking

## ■ Work procedures



1. Lift down the carton which contains the stands.

2. Remove the lid and sleeve of the box that packages the main unit, and take out the **Accessories box**, **packing box A**, and **packing box B**.



Because of the small clearance between the main unit and sleeve, lift the sleeve up vertically to avoid touching the main unit.

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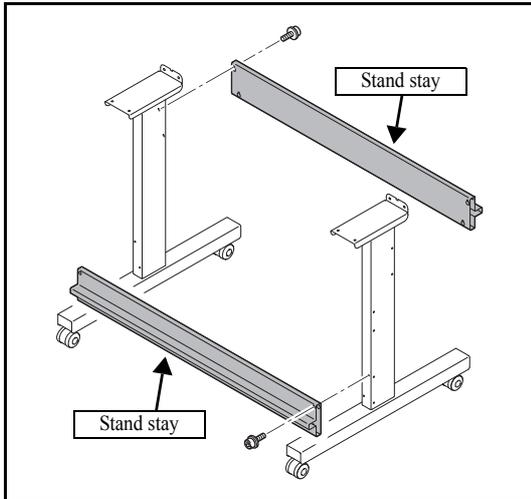
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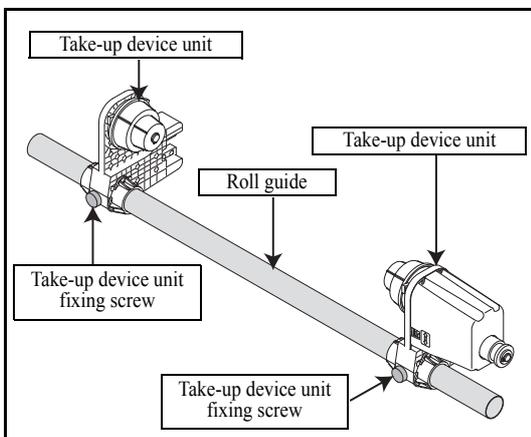
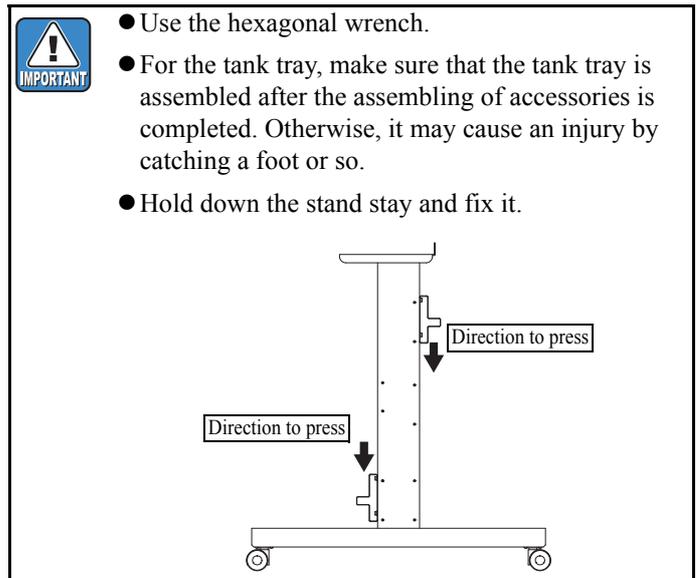
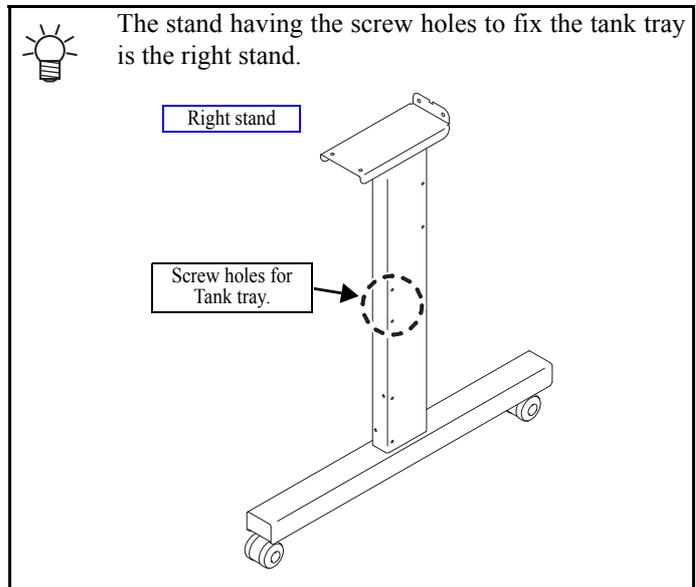
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# 4.2 Assembling the Stands and the Device

## Work procedures



1. Fix the Stand stay to the stand with the screws (M5x15, 8 pcs).



2. Assembling Take-up device unit Assy

Put the take-up device units on the roll guide, and tighten the take-up device unit fixing screws.

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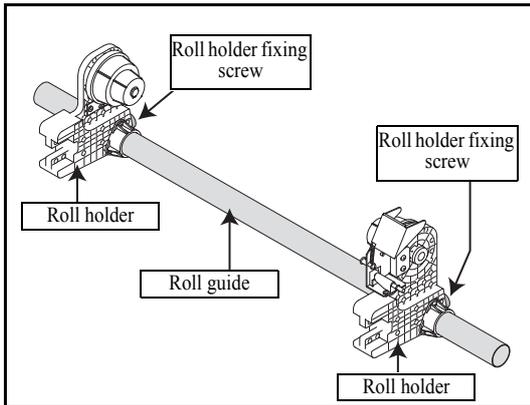
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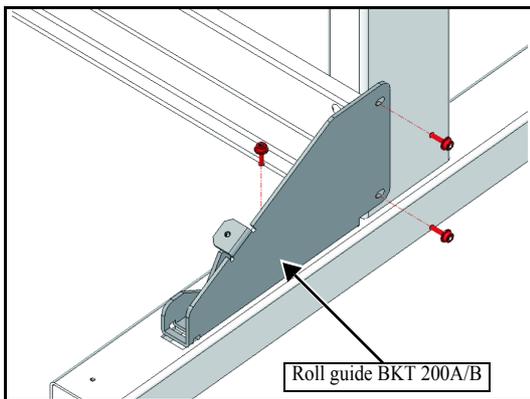
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## 4.2 Assembling the Stands and the Device



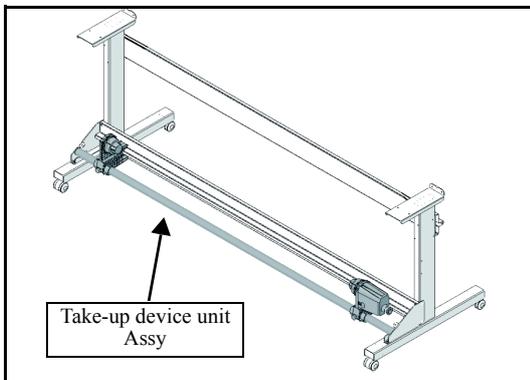
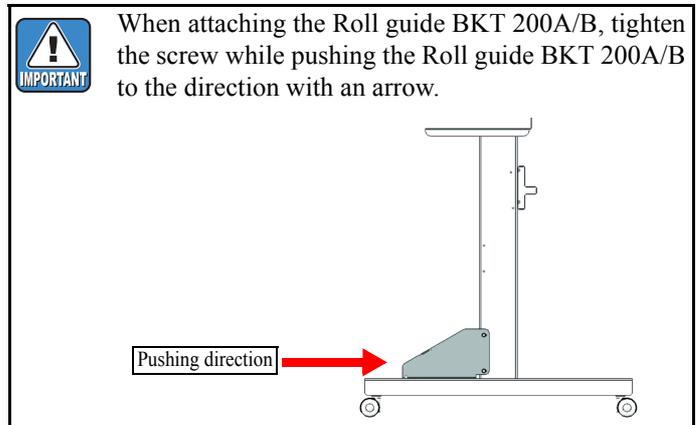
### 3. Assembling Roll holder Assy

Put the roll holders on the roll guide, and tighten the roll holder fixing screws.

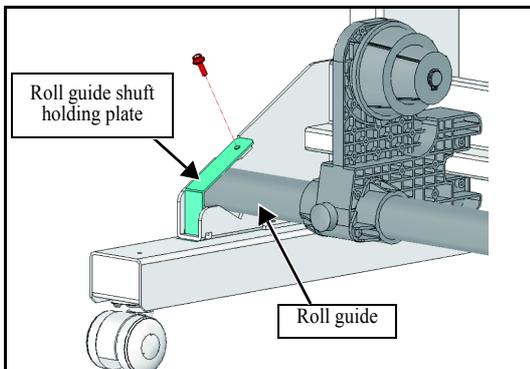


### 4. Attach the Roll guide BKT 200A/B on the Stand.

screw : M5x15, 6pcs



### 5. Mount the take-up device unit Assy on the Roll guide BKT 200A/B.



### 6. Fix the Roll guide with the Roll guide shaft holding plate. (Right and left)

screw: M5x15, 2pcs

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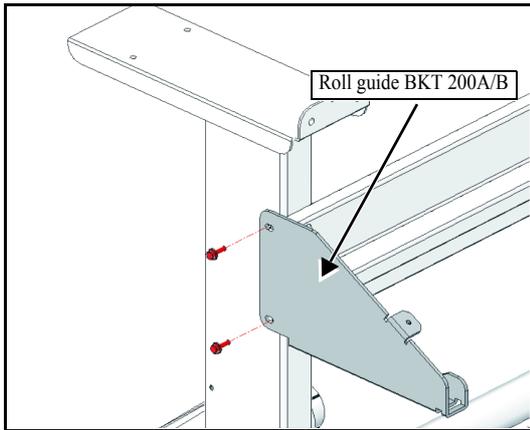
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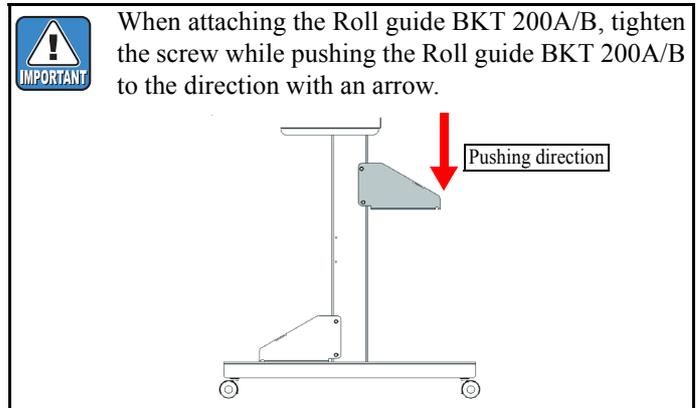
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## 4.2 Assembling the Stands and the Device



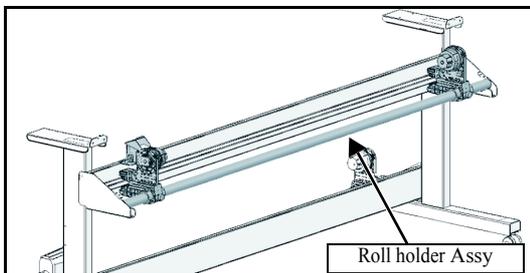
7. Attach the Roll guide BKT 200A/B on the Stand.

screw : M5x15, 4pcs



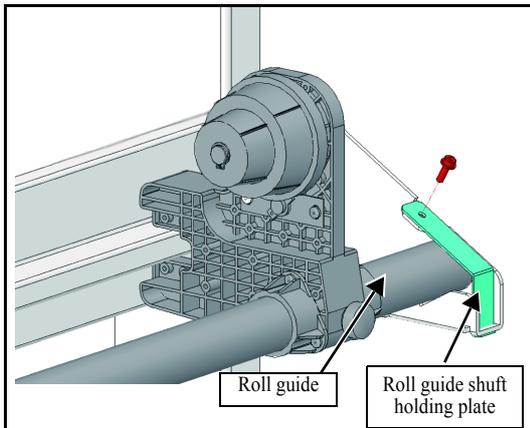
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8. Mount the Roll holder Assy on the Roll guide BKT 200A/B.

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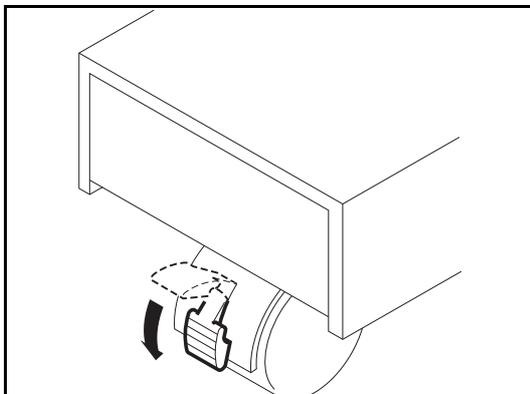
9. Fix the Roll guide with the Roll guide shaft holding plate.  
(Right and left)

screw: M5x15, 2pcs

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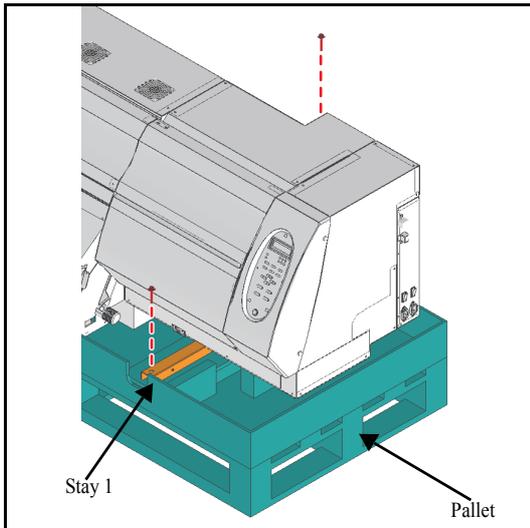
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10. Lock the four stoppers of the stand.

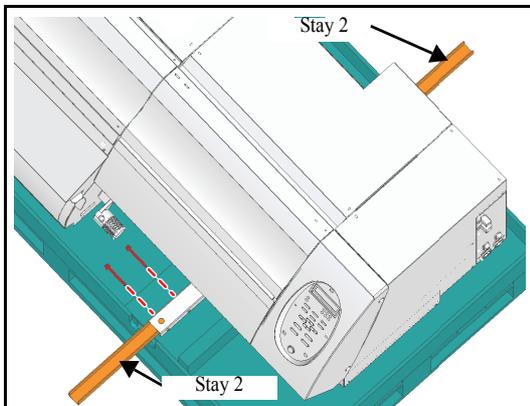
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## 4.2 Assembling the Stands and the Device

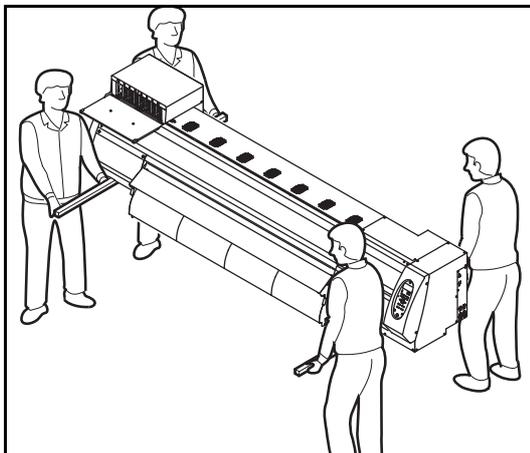


11. Remove screws of the Stay 1 of both sides of the Main unit.

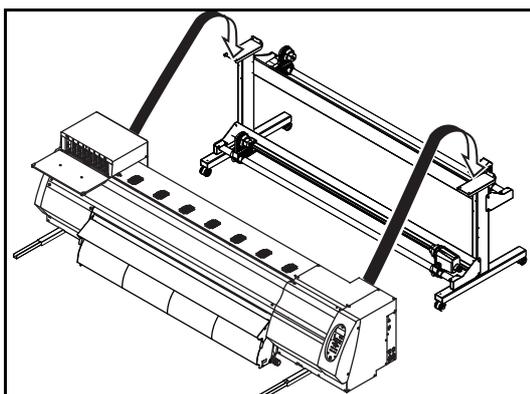
The Main unit is fixed to the pallet  
Release the Main unit by removing the screw.



12. Using screws (CS6x55, 8pcs), attach the Stay2 to the Main unit.



13. Hold the handles of the plotter by four people.



14. Put the front face of the stand first.

Align the screw hole of the stand and that of the main unit.

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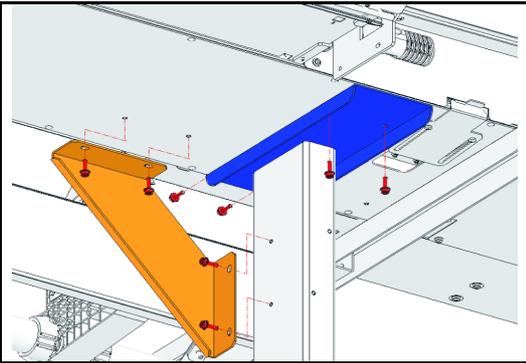
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## 4.2 Assembling the Stands and the Device



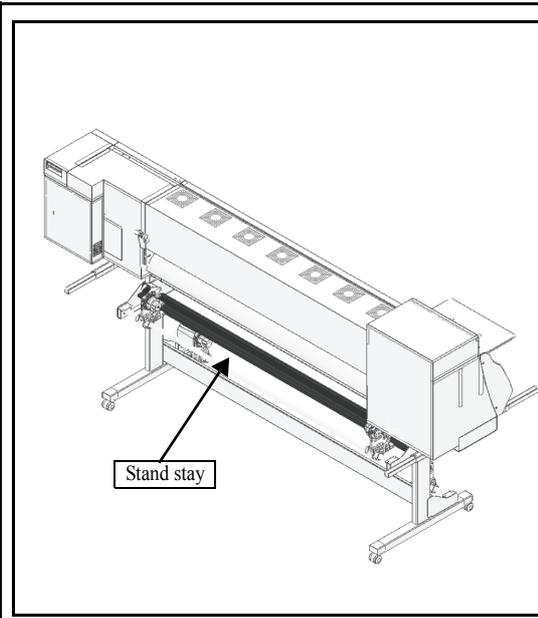
15. Fix the legs on the main body with the screws (CS5x15SMW 8pcs).

Use the attached hexagon wrench.

16. Attach the Stand reinforcement plate.(Right and left)

screw: P4x10SMW x 8

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If the screw holes of the main unit and of the stand do not fit, follow the steps below.

(1), Loosen the screws (CS5x15SMW, 4pcs) of the upper stand stay on the back of the main unit, turning one-half with the supplied hexagonal wrench.



- Be sure to turn "one-half" to loosen the screw.
- Do not loosen the screw of the lower stand stay on the front of the main unit.

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(2), Fitting the screw holes of the main unit and the stand, temporarily tighten the screws (CS5x15SMW, 8pcs).

(3), Fully tighten the screws that were loosened on the step (1).



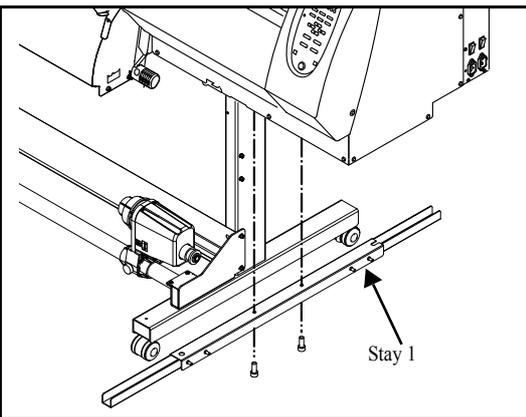
- Hold down the stand stay and tighten the screw.

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(4), Fully tighten the screws that were temporarily tightened on the step (2).

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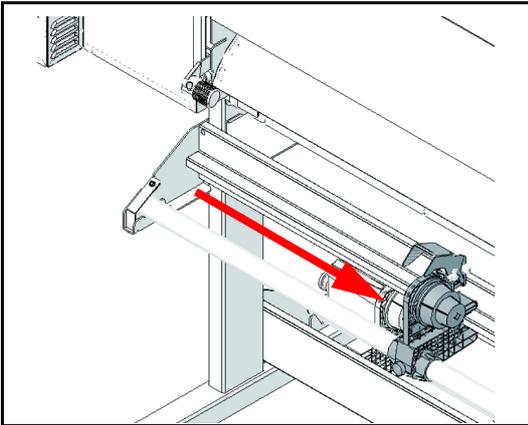


17. Remove two screws each from the right and left sides and detach the Stay1.

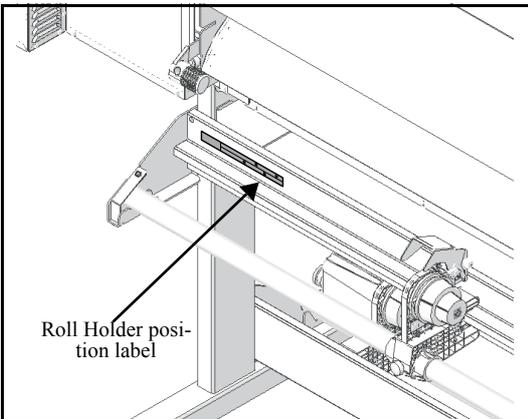
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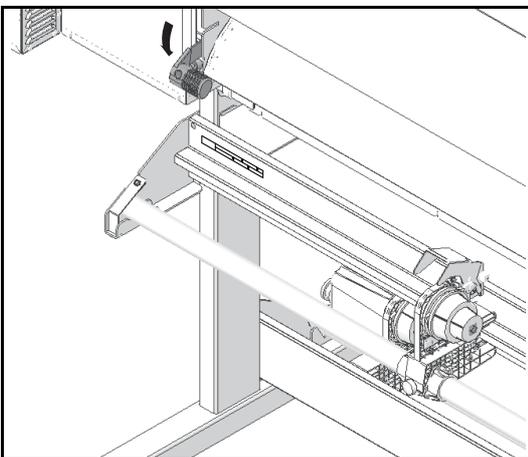
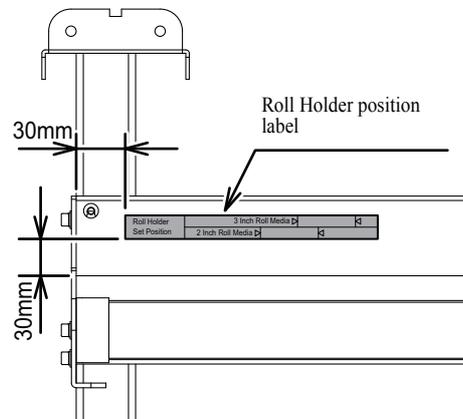
## 4.2 Assembling the Stands and the Device



18. Move Roll Holder to the center of the unit.



19. Paste the Roll Holder position label.



20. Check Clamp Lever is lowered.

When Clamp Lever is lifted, push it down.

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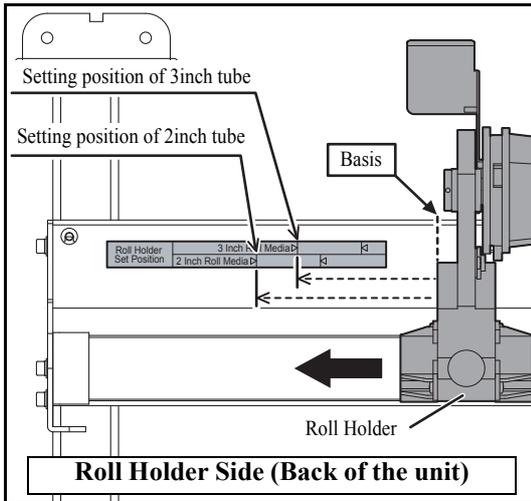
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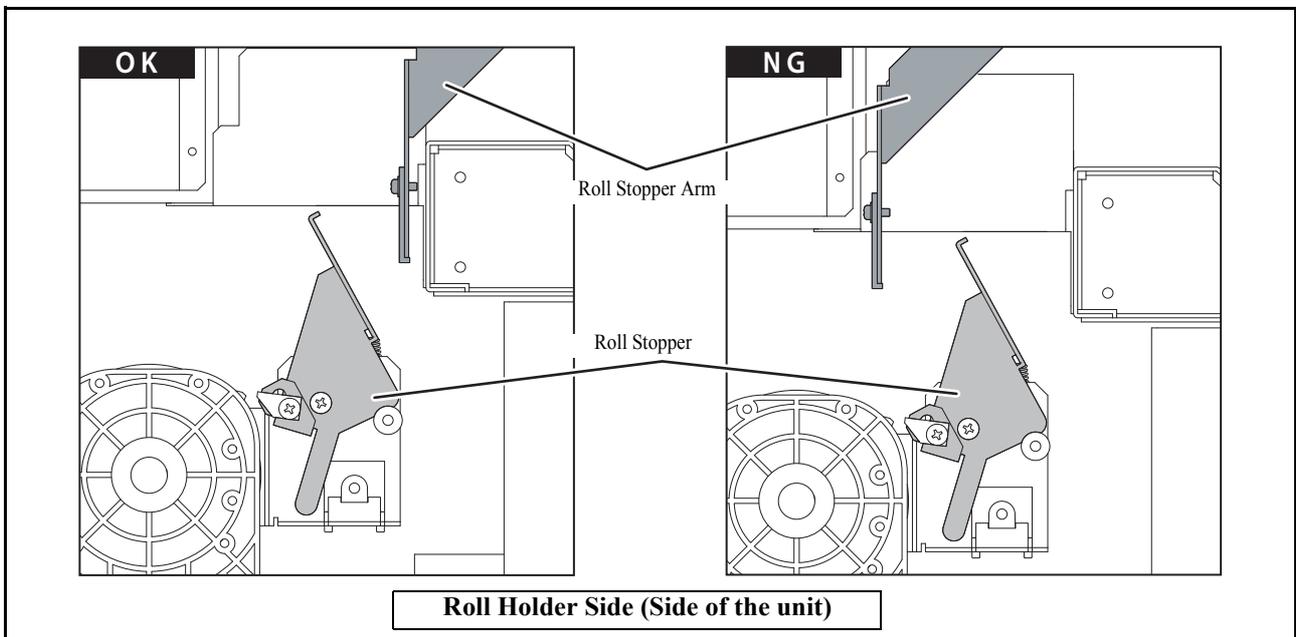
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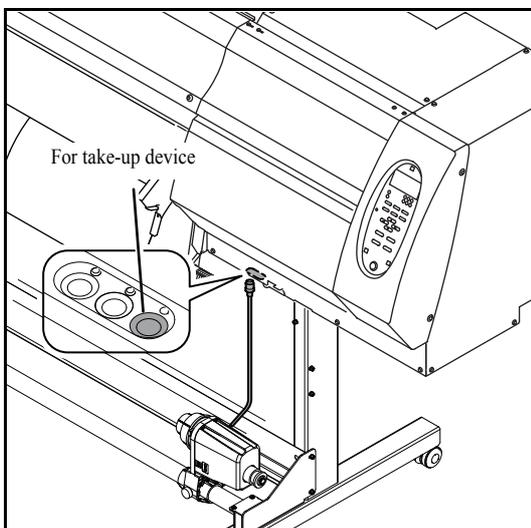
## 4.2 Assembling the Stands and the Device



21. Move Roll Holder to the roll setting position.



22. Check the position of Roll Stopper Arm.



23. Connect the cable of the take-up device to the connector at the bottom of the plotter.

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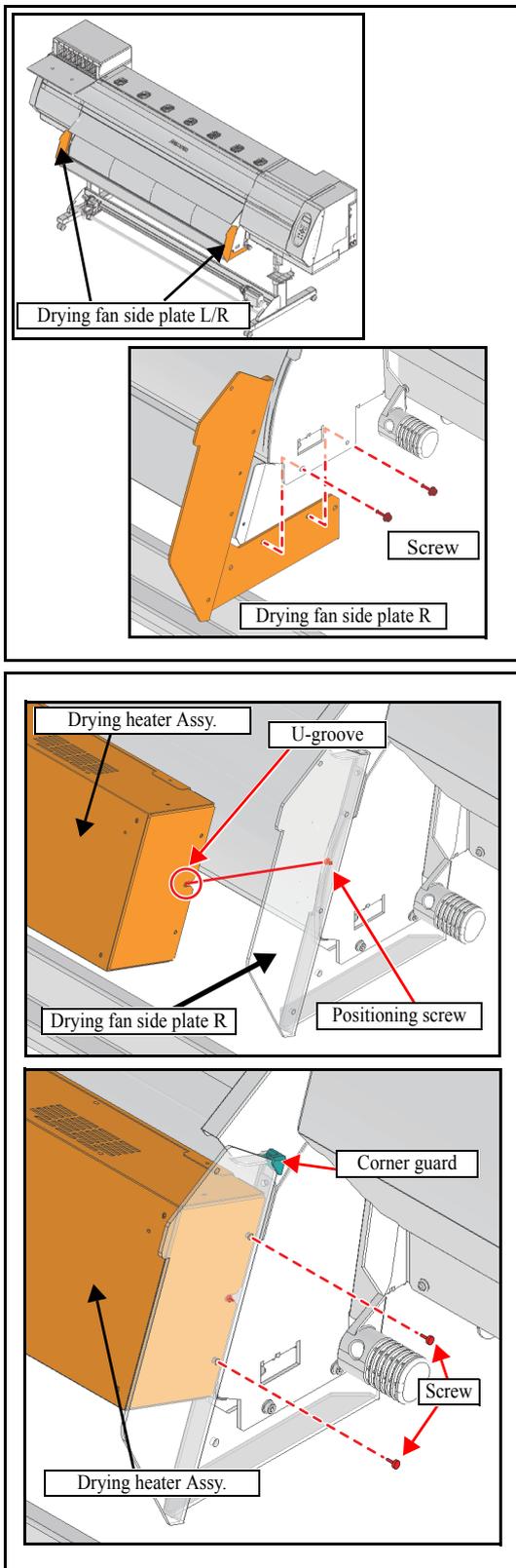
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## 4.3 Mounting the Drying heater Assy

### ■ Work procedures

#### □ Fixing Drying Heater Assy



1. Attach the Drying fan side plate.(Right and left)  
M5x15,4pcs

2. Fix the Drying Heater Assy on the Drying fan side plate L/R.  
(Right and left)

- 1), Hook the U-groove of the Drying Heater Assy on the positioning screw of the Drying fan side plate L/R and set.
- 2), With a screw(P4x10SMW,4pcs), fix Drying Heater Assy.(Right and left.)
- 3), Attach the Corner guard.(Right and left)

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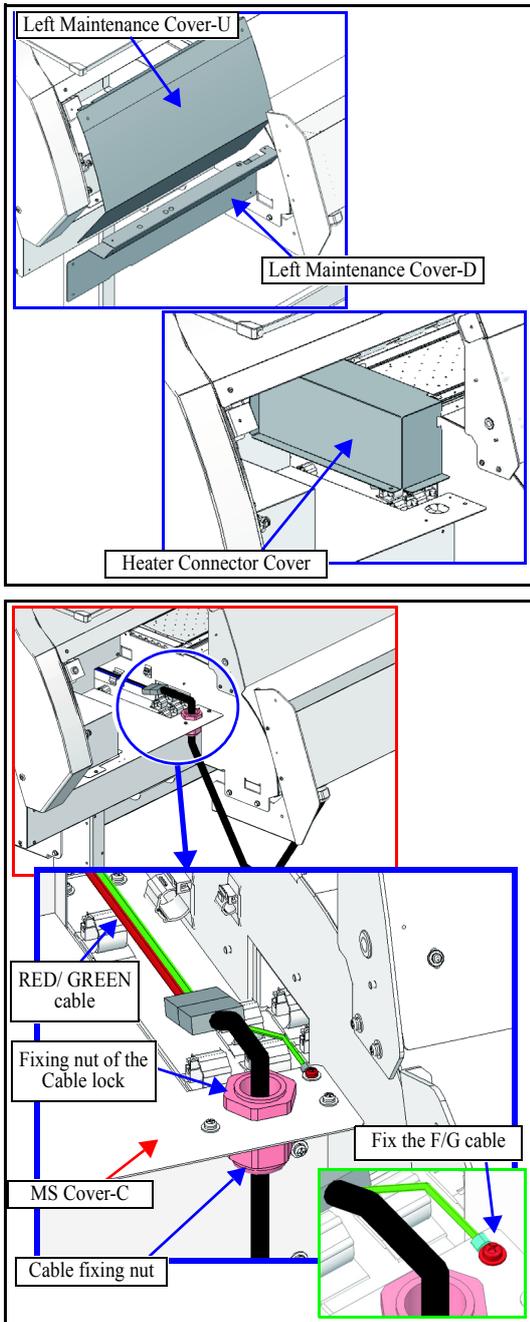
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## 4.3 Mounting the Drying heater Assy

### □ Connecting Heater Power Cable



3. Remove three covers below.

- 1), Left Maintenance Cover-U
- 2), Left Maintenance Cover-D
- 3), Heater Connector Cover

4. Connect the Heater Power Cable.

Connect it with the RED/ GREEN cable connected with “CN7” and “CN9” of the Heater PCB.

- 1), Fix the cable lock on the round hole of MS cover-C.  
Tighten the fixing nut of the cable lock firmly.
- 2), Connect the connector.
- 3), Fix a F/G cable with a screw.
- 4), Tighten the Cable fixing nut so that a cable does not fall out.  
Slack off the cable so that the tension may not apply on the connector.

5. Attach the cover removed in the Step 3.

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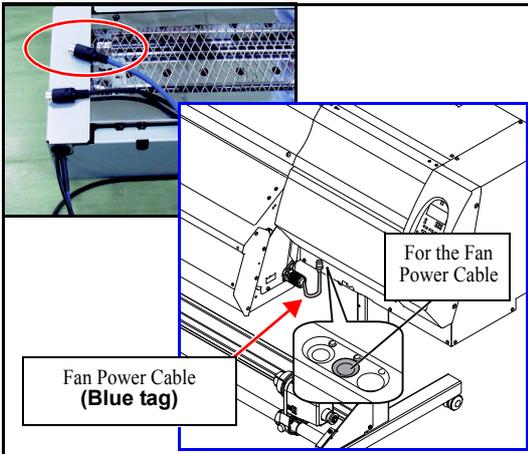
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## 4.3 Mounting the Drying heater Assy

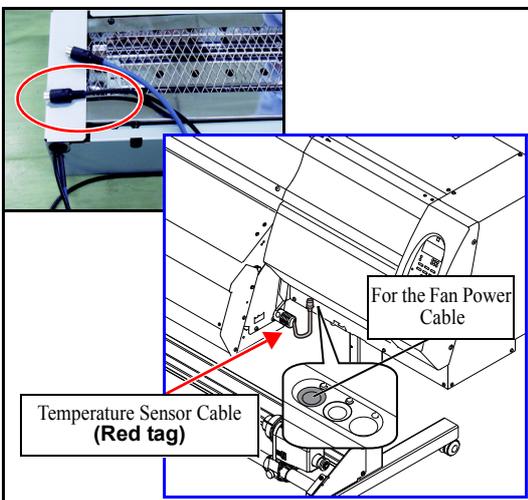
### □ Connecting Fan Power Cable



6. Connect the Fan Power Cable(**Blue tag**).

Be connected to the central connector.

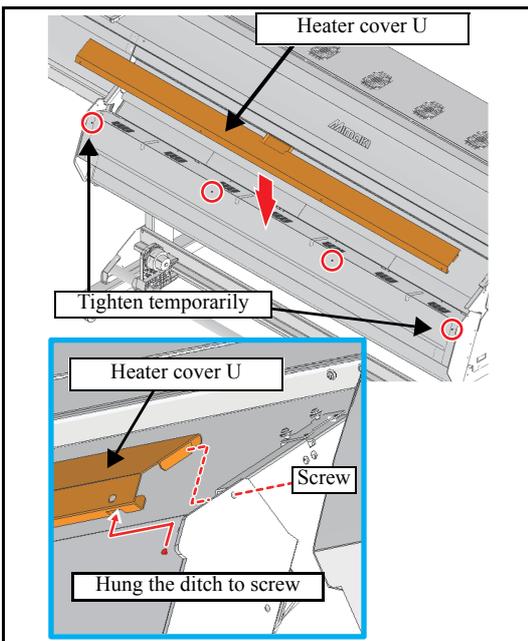
### □ Connecting Temperature Sensor Cable



7. Connect the Temperature Sensor Cable(**Red tag**).

Be connected to the left connector

### □ Attaching Heater Cover



8. Fix the Heater Cover U.

Tighten screws (P3x8SMW x4) temporarily of the Drying heater Assy., and hung the ditch of the Heater cover bottom to the screws. And then tighten the screws.

Fix the Heater cover U with Screw(P4x10SMW), for the Drying fan side plate L/R. (Right and left)

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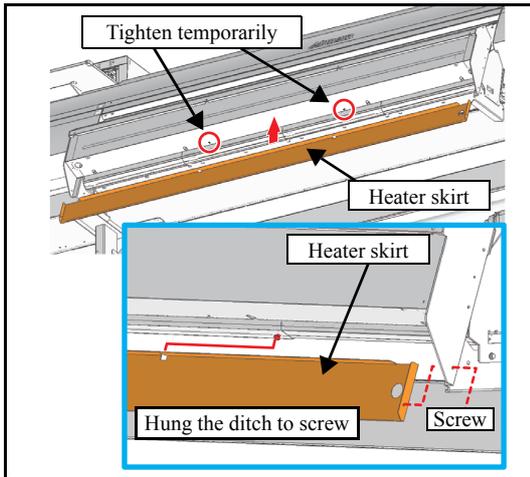
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## 4.3 Mounting the Drying heater Assy



### 9. Fix the Heater Skirt.

Tighten screws (P4x10SMW x2) temporarily of the Drying heater Assy., and hung the ditch of the Heater skirt to the screws. And then tighten the screws.

Fix the Heater skirt with Screw(P4x10SMW), for the Drying fan side plate L/R. (Right and left)

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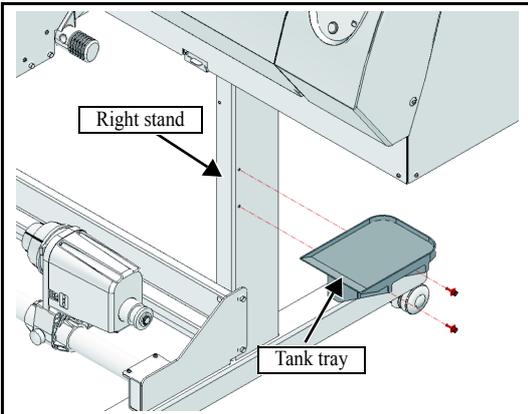
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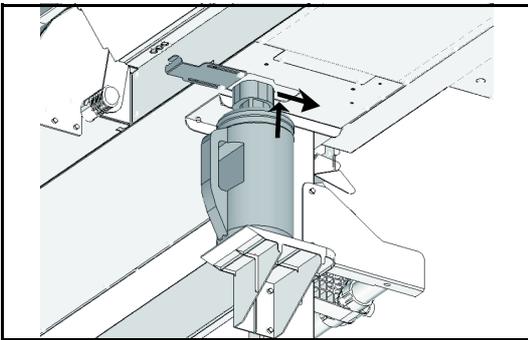
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# 4.4 Mounting the Accessories

## ■ Work procedures

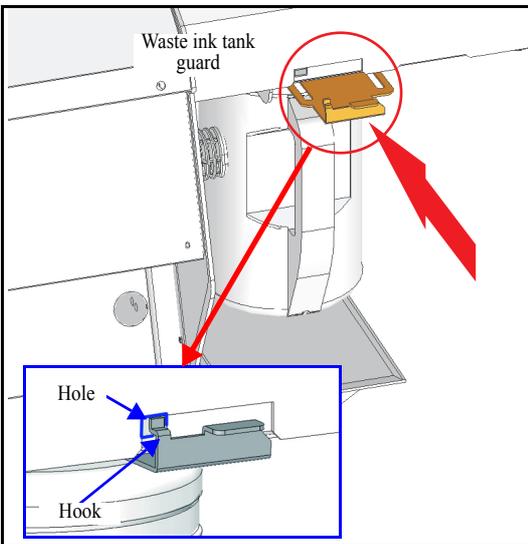


1. Fix the tank tray to the stands with the screws (M5x15, 2pcs).



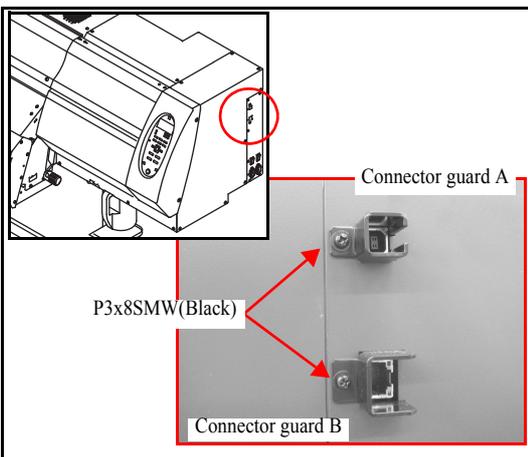
2. Attach the waste ink tank.

Insert the waste ink tank.



3. Close the waste ink tank guard.

Put a hook of the waste ink tank guard in a hole of the printer then lock it.



4. Attach the "Connector guard A" and "Connector guard B".

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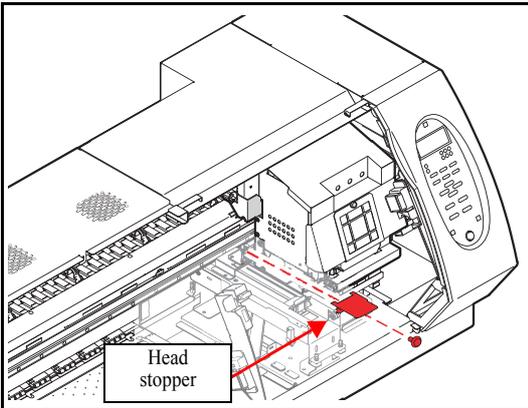
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## 4.5 Removing the Stopper

### ■ Work procedures



1. Open Front cover, remove the screws (P4x 10SMW, 1pcs), and remove Head stopper.



As the screw is at the rear side of the encoder scale, be careful not to damage on the encoder scale when removing it.

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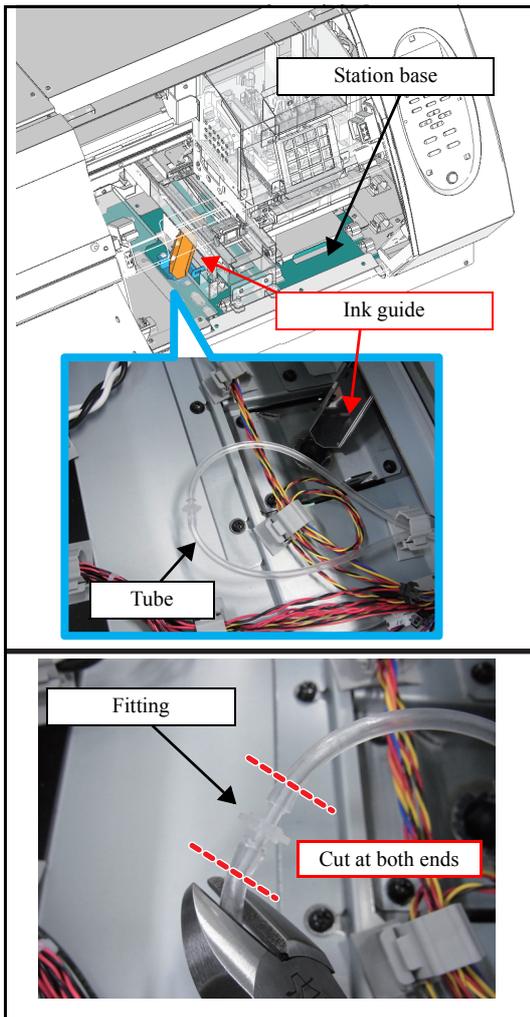
## 4.6 Removing the Fitting

### ■ Work procedures



Perform the work as below before ink filling (turning power supply on).

1. Open Front cover.  
Move the Carriage with hand to position easy to work as required.
2. Cut the tube at both sides of the fitting which is connected to the tube shown as left-hand figure.  
Fitting can be disposed of.



3. Insert the end of the tubes that is cut to the exhaust hole.

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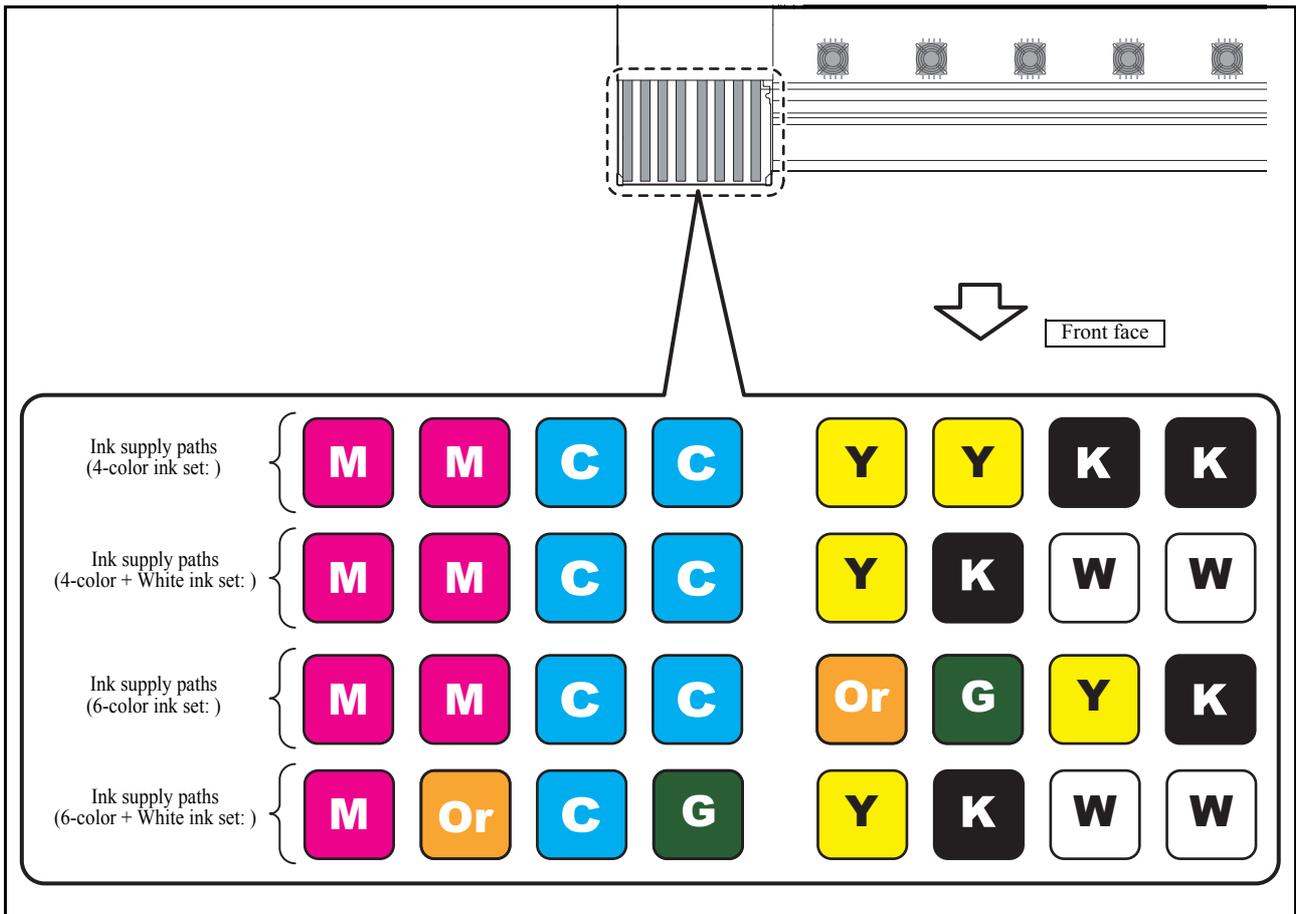
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## 5. Ink Set



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### ■ Outline

For JV400-130/160LX, 4 ways of ink setting above are available.

This was set to four-color at the factory, however, by opening/ closing the joint, you can change it to another color. The procedure to change to except four-color is as below:

5

### ■ List of work procedures

Work operation	Description	Refer to
<input type="checkbox"/> 1 Head cleaning	Celan the inside of head and ink paths to be changed.	7.5 (p.8)
<input type="checkbox"/> 2 Changing of Joint	Confirm the above ink paths, and change the joint concerned.	5.1 (p.2)
<input type="checkbox"/> 3 Pasting label on eco case	Paste the label indicating ink color on the eco case.	5.2 (p.6)

6

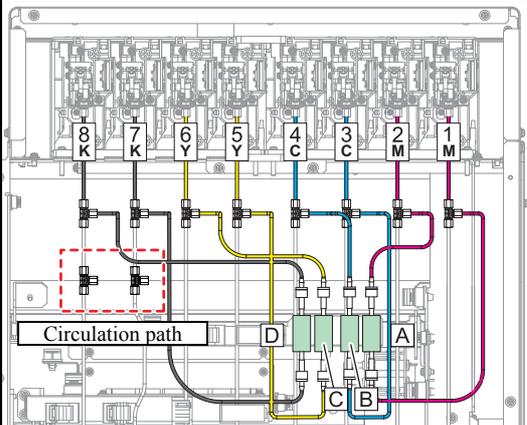
7

# 5.1 Changing the Joints

## ■ Outline

Depending on chosen ink set, it must change a relationship between joints and liquid contact valve.  
Connect ink tubes of the same colors to each other through liquid contact valve.

Change as the followings.



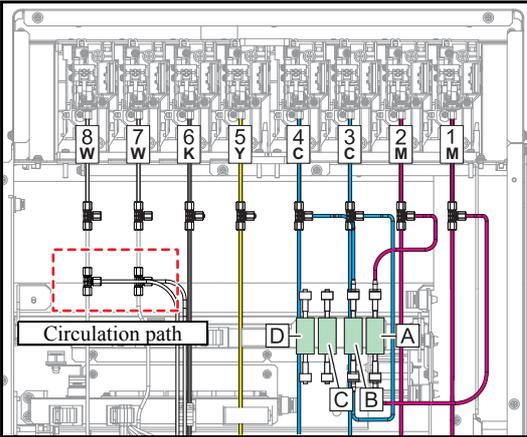
**Ink Set : 4color [M,M,C,C,Y,Y,K,K] (Factory default)**  
4 types

	Joint No.	Liquid contact valve	Joint No.	Ink color
Connection 1	1	A	2	Magenta
Connection 2	3	B	4	Cyan
Connection 3	5	C	6	Yellow
Connection 4	7	D	8	Black

**Circulation path:** Disconnect. Removed tubes are connected each other.

**1**

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**Ink Set : 4color+W [M,M,C,C,Y,K,W,W]**  
2 types

	Joint No.	Liquid contact valve	Joint No.	Ink color
Connection 1	1	A	2	Magenta
Connection 2	3	B	4	Cyan

For joints number from 5 to 8, attach rubber plug to them.  
Liquid contact valve C,D are unused.  
For removed tubes, be careful that they will not be bent, and they should bundle together.

**Circulation path:** Connect.

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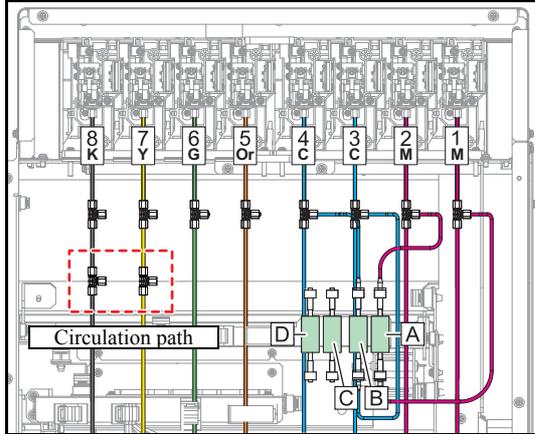
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# 5.1 Changing the Joints

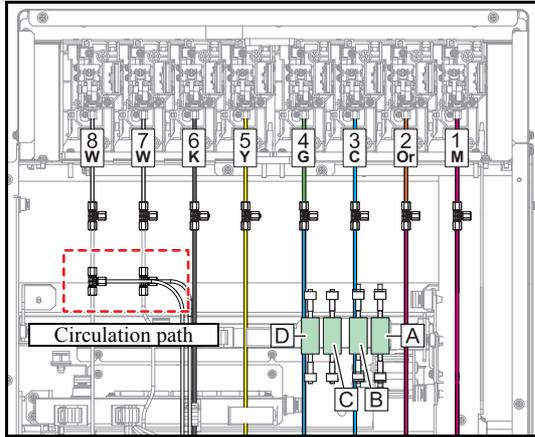


**Ink Set : 6color [M,M,C,C,Or,G,Y,K]**  
2 types

	Joint No.	Liquid contact valve	Joint No.	Ink color
Connection 1	1	A	2	Magenta
Connection 2	3	B	4	Cyan

For joints number from 5 to 8, attach rubber plug to them.  
Liquid contact valve C,D are unused.  
For removed tubes, be careful that they will not be bent, and they should bundle together.

**Circulation path:** Disconnect. Removed tubes are connected each other.



**Ink Set : 6color+White [M,Or,C,G,Y,K,W,W]**  
0 types

For joints number from 1 to 8, attach rubber plug to them.  
Liquid contact valve A,B,C,D are unused.  
For removed tubes, be careful that they will not be bent, and they should bundle together.

**Circulation path:** Connect.

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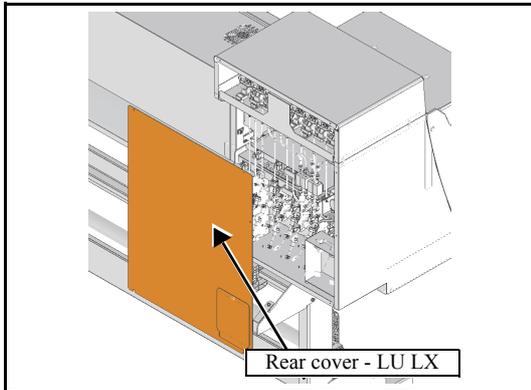
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# 5.1 Changing the Joints

## ■ Work procedures

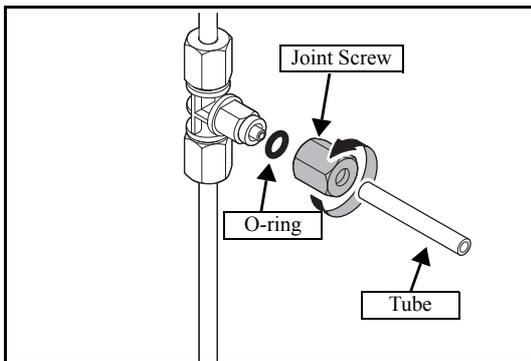


Use protective glasses and gloves during work.  
Depending on the working condition, ink may reach your eyes or your skin may be roughed due to ink.



1. Remove **Rear cover - LU LX** from the back panel of the main unit.

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2. Loosen the **joint screws** and remove the **tube** and **O-rings**.

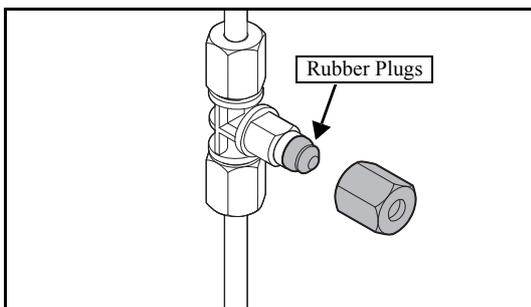
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The O-rings are required when the 4-color, 6-color and 4-color +W ink set is used.  
Store these carefully to avoid losing them.

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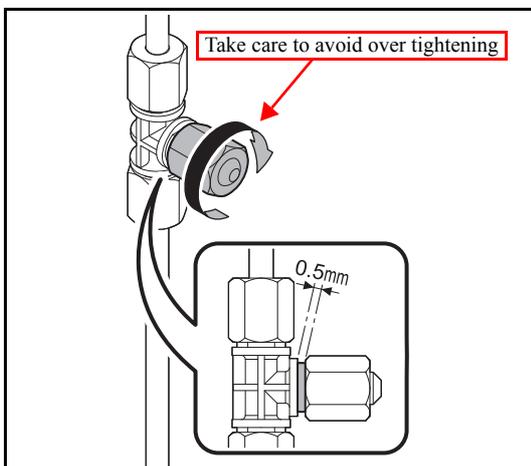
3. Put the **rubber plugs** on the joint.

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Make sure that O-ring is not remaining in the joint screws.

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4. Tighten the joint screws.  
Leave a space of around 0.5 mm between the coupler and screw.

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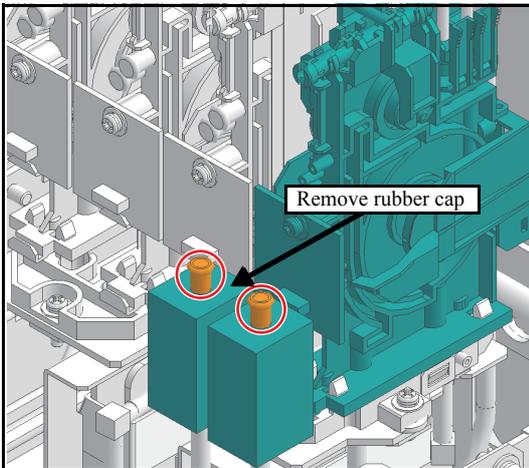


When clamping the joint screws, do not clamp them too much.

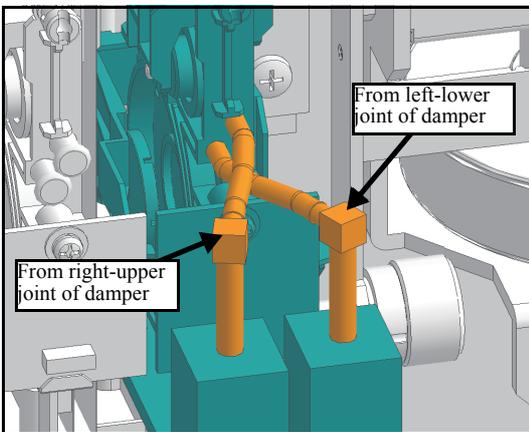
5. Return the **Rear cover - LU** to the original location, and affix using the screws.

# 5.1 Changing the Joints

When white ink is used, connect the ink tube of circulation path (circulation tube) in accordance with the following.



1. Remove the Damper rubber cap ( x2).



2. Connect two Circulation tubes as shown in the left figure.

Connect the left Liquid contact valve to the right-upper joint of the damper.

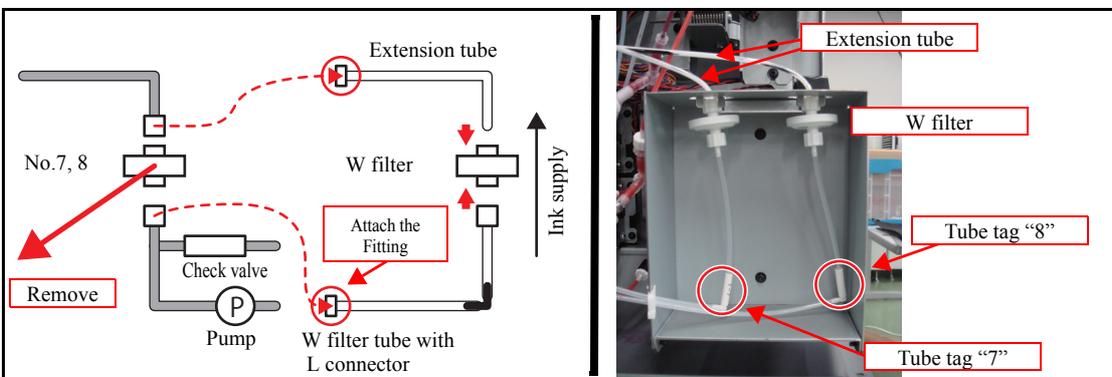
Connect the right Liquid contact valve to the left-lower joint of the damper.

(When you look down the tubes, tubes are crossed.)

When white ink is used, connect the tube for white ink filter in accordance with the following.

1. Remove **Rear cover - LU LX** from the back panel of the main unit.

2. Connect the part of the red dotted line of the figure below.  
(Remove the No.7 and No.8 filter.)



3. Return the **Rear cover - LU** to the original location, and affix using the screws.

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## 5.2 Pasting label on eco case

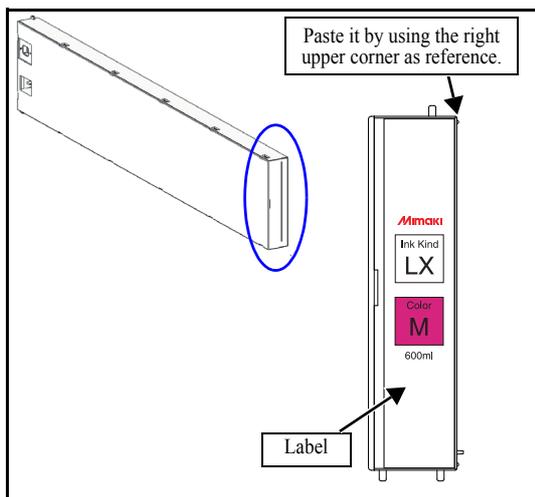
### ■ Outline

Paste the color label on the rear surface of the eco case depending on ink color to be used.



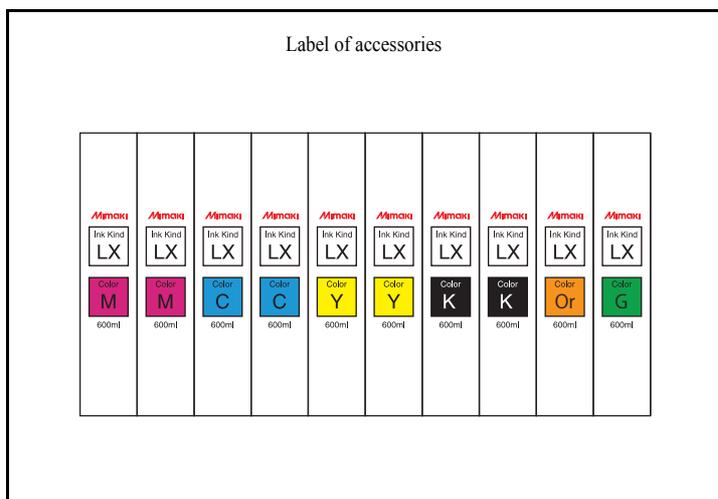
Eco case of this machine will be transported with a state inserted in cartridge slot of the main unit. Perform the operation after you pull out the eco case from the main unit.

### ■ Work procedures



1. Paste the same ink color label as the set ink pack on the rear surface of the eco case.

Paste it by using the right upper corner of the rear surface of the eco case as reference.



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INSTALLATION GUIDE > Power Supply Related						Rev.			
Model	JV400-130/160LX	Issued	2011.02.15	Revised		F/W ver.		Remark	
<b>6. Power Supply Related</b>									1.0

■ List of work procedures

	Work operation	Description	Refer to
<input type="checkbox"/>	1 Setting the Voltage Selector	Set the Voltage Selector.	6.1 (p.2)
<input type="checkbox"/>	2 Connecting the Power Cable	Connect the power supply cable.	6.2 (p.3)
<input type="checkbox"/>	3 Turning the Power On	Turn on the power supply.	6.3 (p.4)
<input type="checkbox"/>	4 Turning the Power Off	Turn off the power supply.	6.4 (p.5)

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<b>2</b>
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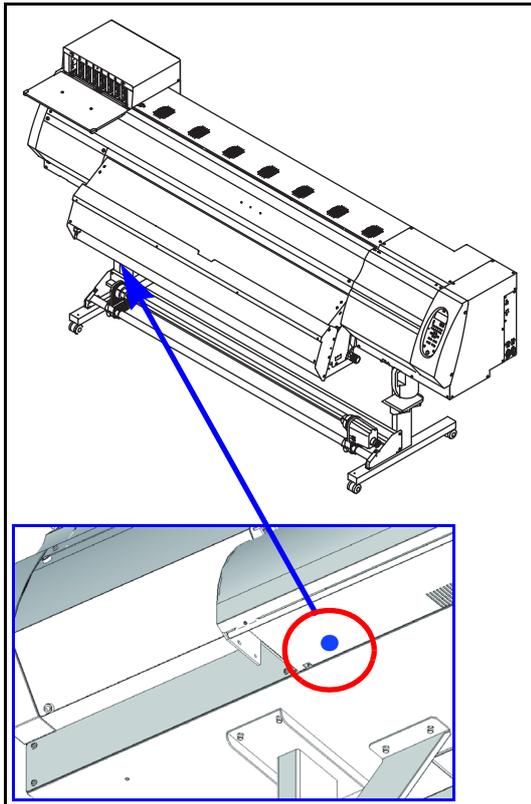
# 6.1 Setting the Voltage Selector

■ Outline

The device voltage should be switched to 100 to 120V or 220 to 240V to match the power supply voltage.



Because the device may be damaged by an incorrect setting, do not change the setting after installation.



1. Switch the **voltage selector switch** to the side for the voltage you are using.

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## 6.2 Connecting the Power Cable

### ■ Outline

This device connects to the included two power cables.

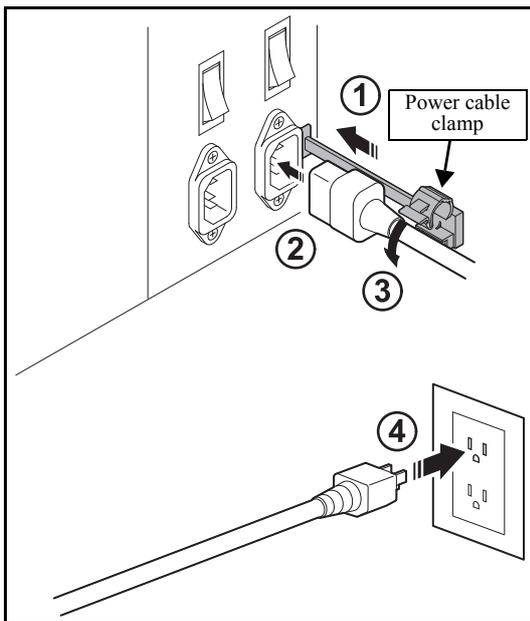
If you do not use the included power cables, use cable that match your region.

Connect the power cables into a power outlet with the following specifications.

Voltage	AC100 to 120V, AC220 to 240V
Frequency	50/60Hz ± 1Hz
Capacity	15A or more (AC100 to 120V ± 10%) x 2 lines 10A or more (AC220 to 240V ± 10%) x 2 lines



- Always connect the cables to a power outlet near the device so that the cables can be easily removed.
- When plugging the cables into the power outlets, connect the cable into outlets on a separate circuit from other devices. Because of the large power consumption, the power supply breaker may be tripped.
- Power supply cables should be connected to an earthed outlet. Otherwise, there is a risk of electrical shock or of damaging the device.
- When connecting the power cables, ensure that the power switch of the device is off.
- Always connect the same voltage power supply to the inlet1 and inlet2.



1. Insert the **power cable clamp** into the power supply box.

2. Insert the **power cable** into the inlet of this device.

3. Lock the power cable.

Run the power cable through the clamp, and lock the clamp until it clicks.

4. Insert the **power plug** into a plug socket.



Insert into the socket of separate power line, respectively.

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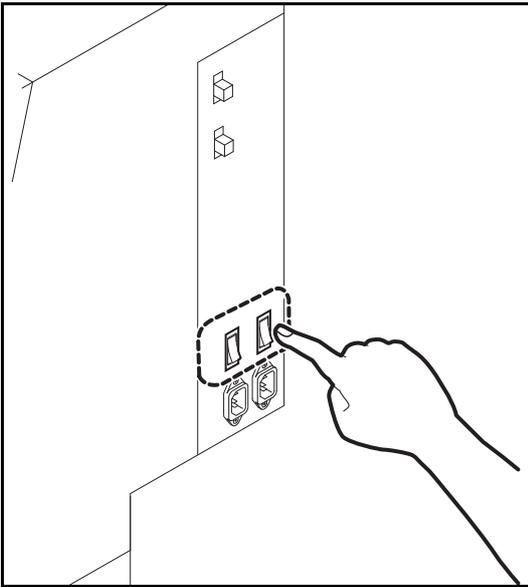
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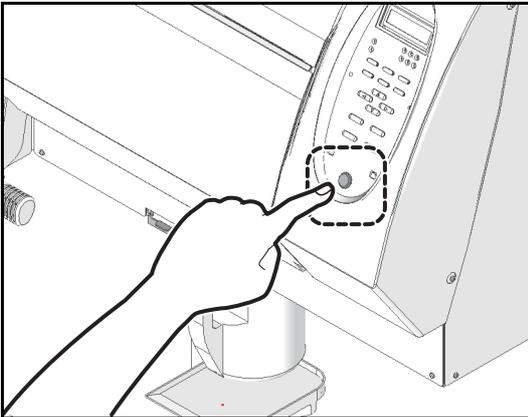
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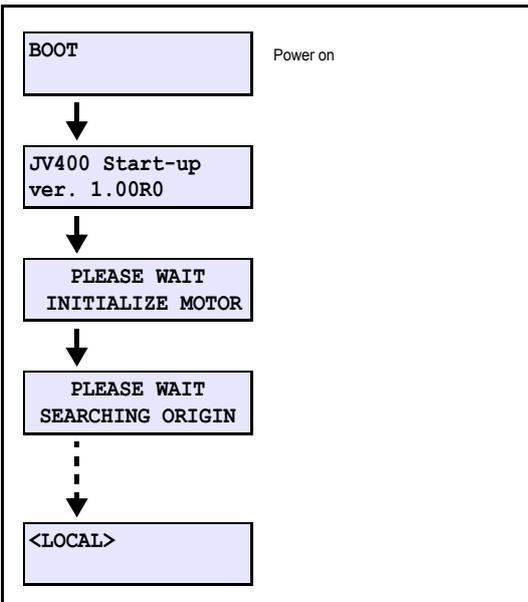
## 6.3 Turning the Power On



1. Turn on the main power supplies of this device.  
Move the power supply switch on the back panel of this device to " | " to turn on the **main power supply**.



2. When you press the power switch at the front of the machine, it will start.



When the power is turned on, the firmware version is displayed.

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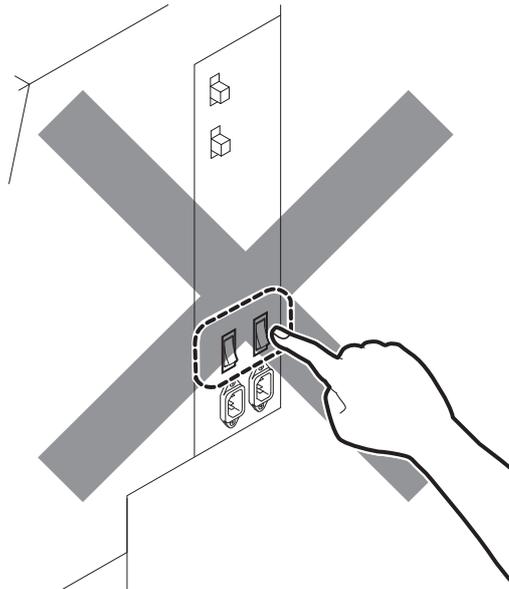
## 6.4 Turning the Power Off

### ■ Outline

When turning the power off, check that the unit is not receiving data, and there is no remaining un-output data. Furthermore, check that the head is in the capping station.



- If you turned the power off without performing capping, turn the power back on again. Return the head to the capping station to prevent the head from drying out. If the power is turned off during plotting, the head might not be parked in the capping station. Leaving the head for a long time without capping may cause nozzle blockages.
- Do not turn off the main power switch on the side, as this will stop the function for preventing nozzle blockages from functioning.



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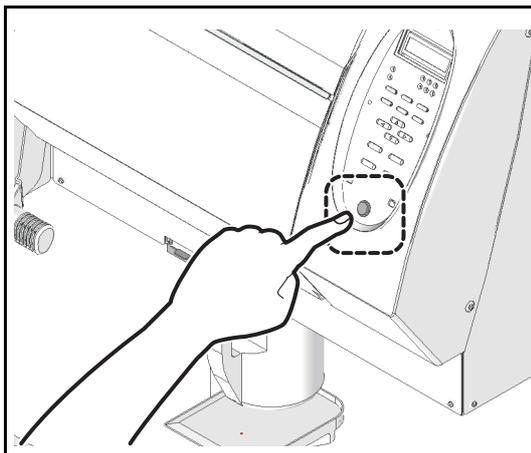
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1. Press the power switch on the front of the device once.

■ List of work procedures

	Work operation	Description	Refer to
<input type="checkbox"/>	1 Setting at Startup	Set the language and the power supply voltage.	7.1 (p.2)
<input type="checkbox"/>	2 Initial Ink Fill	Perform ink initial filling.	7.3 (p.4)
<input type="checkbox"/>	3 Test Print	Perform test print to check the nozzle status.	7.4 (p.7)
<input type="checkbox"/>	4 Cleaning the Heads	Perform cleaning to recover from nozzle missing and deflection.	7.5 (p.8)
<input type="checkbox"/>	5 Image Quality Adjustment	Perform the adjusting function such as FEED COMP. and DROP.POScorrect.	7.6 (p.9)

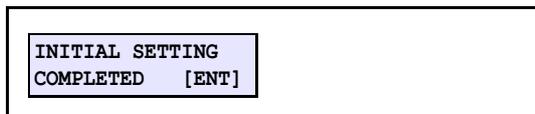
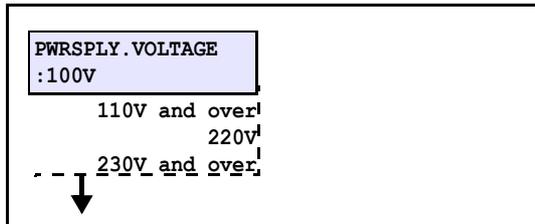
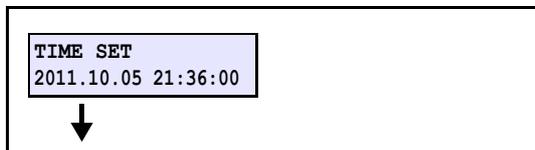
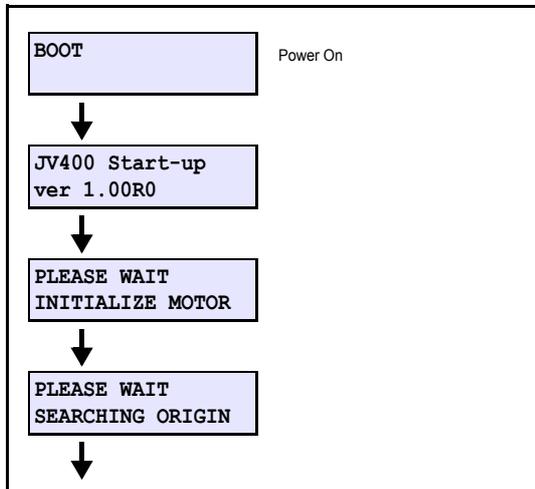
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# 7.1 Setting at Startup

## ■ Outline

Set the language, the power supply voltage and the time difference suitable for the installation place.

## ■ Working Procedures



1. Turn on the power supply.

2. Set the language to use.

[▲][▼] :Select  
[ENTER] :Register

3. Set the time difference.

[◀][▶] :Change the selection item  
[▲][▼] :Select  
[ENTER] :Register

4. Set the power supply voltage.

Select depending on the connected power supply voltage of the machine.

[▲][▼] :Select  
[ENTER] :Register

The setting value is as below:

- Area of 100V : ” 100V ”
- Area of 110~120V : “ 110V and over ”
- Area of 220V : “ 220V “
- Area of 230~240V : “ 230V and over “

If you do not set the proper voltage, it may cause damage.

5. Terminate with [ENTER].

(When you press [END], the screen returns to the previous one.)

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INSTALLATION GUIDE > Outputting Plots > Pressure Adjustment (Deleted)							Rev.	
Model	JV400-130/160LX	Issue	2011.02.15	Revised	2012.10.15	F/W ver.	1.00	Remark
<b>7.2 Pressure Adjustment (Deleted)</b>								<b>1.0</b>

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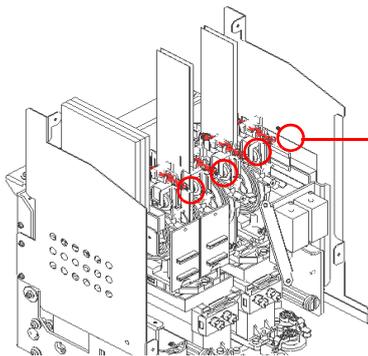
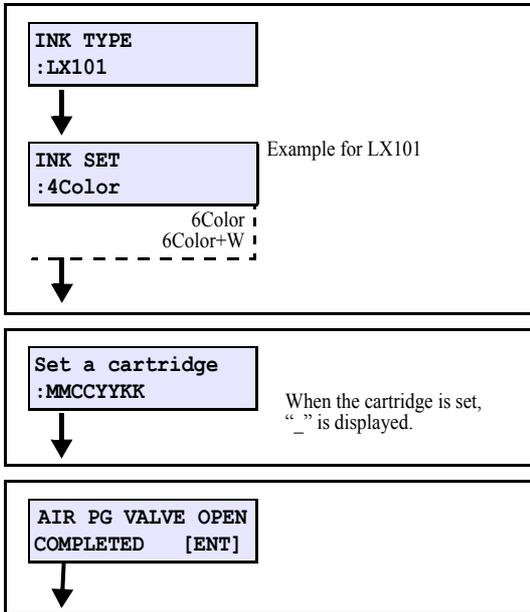
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# 7.3 Performing the Initial Ink Fill

## Working Procedures



1. Remove the head cover.
2. Select the ink set type to fill.

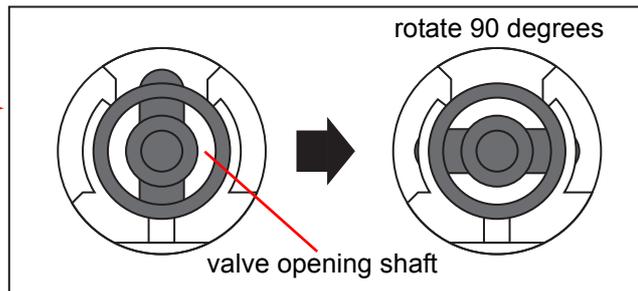


Select the ink set which is selected in chapter 5."Ink Set".  
When select different ink set, it is not filled normally.

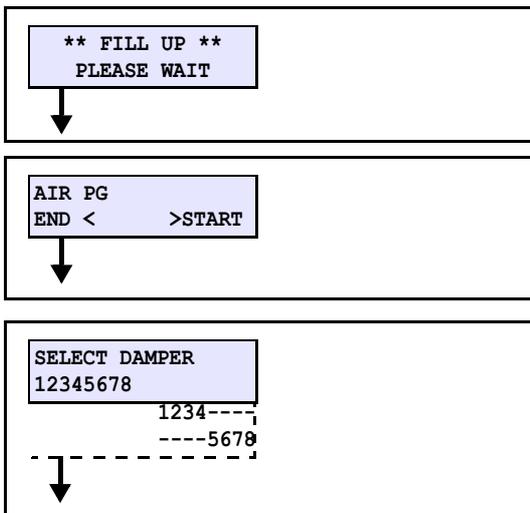
3. Insert all ink cartridges.  
When all ink cartridges are inserted, filling operation starts.

4. Rotate the valve opening shaft 90 degrees with a flathead screwdriver.

After rotating it, press the [ENTER] key.



5. Wait until the filling operation has been completed.



6. Remove air.(Filling head air port)

With the [▶] key, move to the air purge sequence.

(When you press the [◀] key, air purge work is not performed and the machine moves to the cleaning operation.(to step 15.)

7. Select a damper on which you perform air purge.

[▲][▼]: Select

[ENTER]: Register



This does not mean that you can perform air purge on all air purge ports you selected at the same time.

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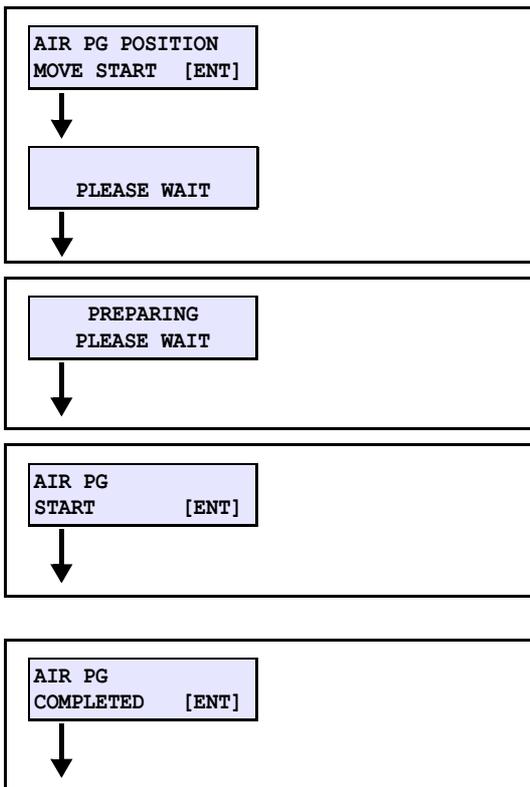
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## 7.3 Performing the Initial Ink Fill



8. Press the ENTER key to move the carriage on the wiper.

The head corresponding to the damper selected in 7. moves on the wiper.

9. Wait for a while until the machine is ready for opening the port.

10. Prepare the ink filling jig and press the [ENTER] key.



Do not remove the cap of the damper's port that is not selected.

11. Inset the ink filling jig into each port in order and flow a certain amount of ink.

\*For reference: Amount shall be about 10cm-flowing on the jig.

- 1). After flowing ink from all ports of the damper selected in 7., press the [ENTER] key to stop sending ink.
- 2). Remove the ink filling jig and close the cap.

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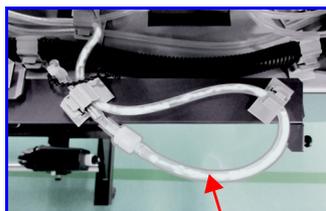
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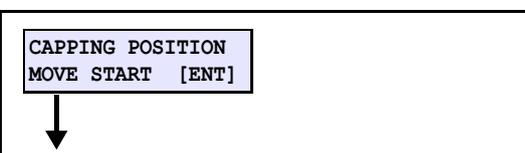
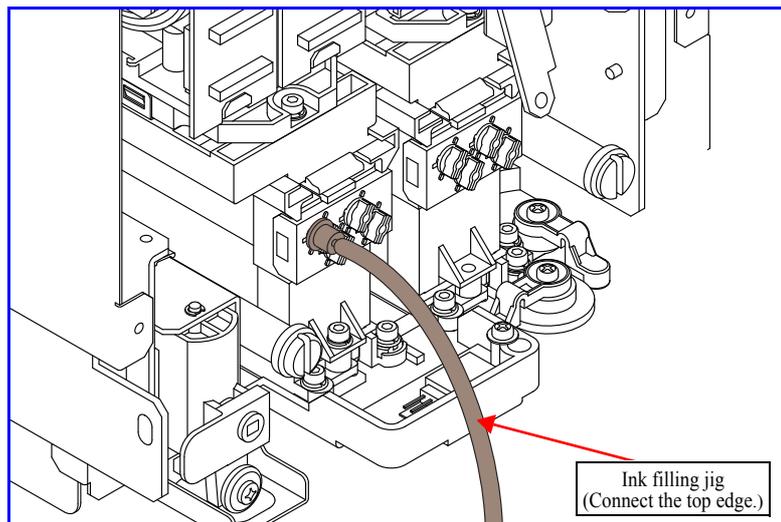
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Use the ink filling jig.

Connect the top edge of the ink filling jig with the "Fitting" on the carriage front surface.

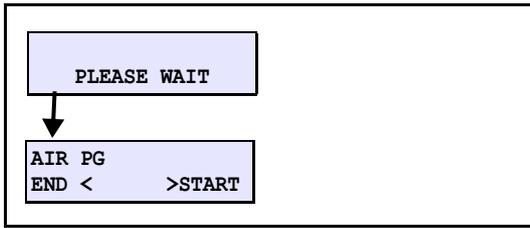


Ink filling jig



12. Press the [ENTER] key to return the carriage to the position that close the cap.

## 7.3 Performing the Initial Ink Fill



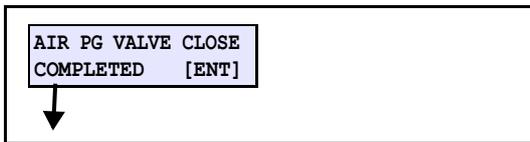
13. Wait for a while until the amount of ink in the damper returns to the normal status.

- 1) When the operation has been completed, the screen returns to the one in 6. Perform the same work to the remaining damper.



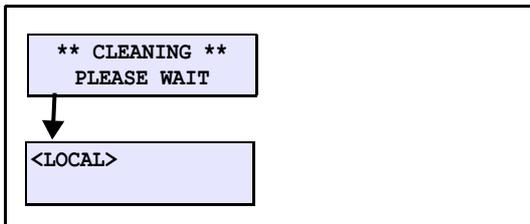
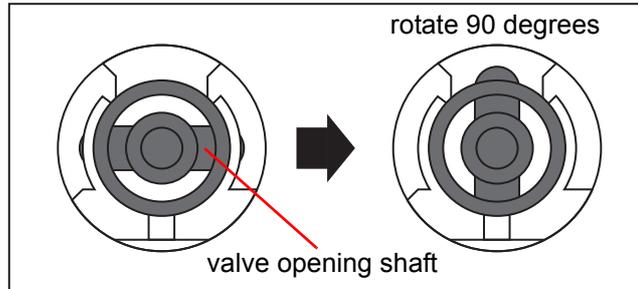
When you connect the jig with other color, clean the top edge of the ink filling jig so that colors may not be mixed.

- 2) After the work for all dampers have been completed, press the [ ◀ ] key.



14. Check that no air remains in the damper, and return the valve opening shaft with a flathead screwdriver to the original status.

Press the [ ◀ ] key to terminate the operation.



15. When you press [ENTER], the cleaning operation starts.

When the cleaning operation has been completed, the screen returns to LOCAL.

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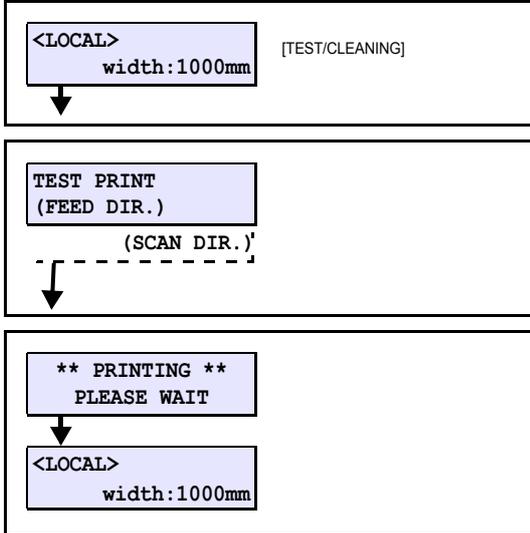
7

## 7.4 Performing a Test Print

### ■ Outline

Perform test print to check the nozzle status.

### ■ Working Procedures



1. Press [TEST/CLEANING].

Select the “ TEST PRINT “.

2. Select the pattern arranging direction.

[▲][▼] :Select

[ENTER] :Print start

3. Perform test print and return to LOCAL.

4. Check the nozzle status, and if nozzle missing etc. occurs, perform cleaning.

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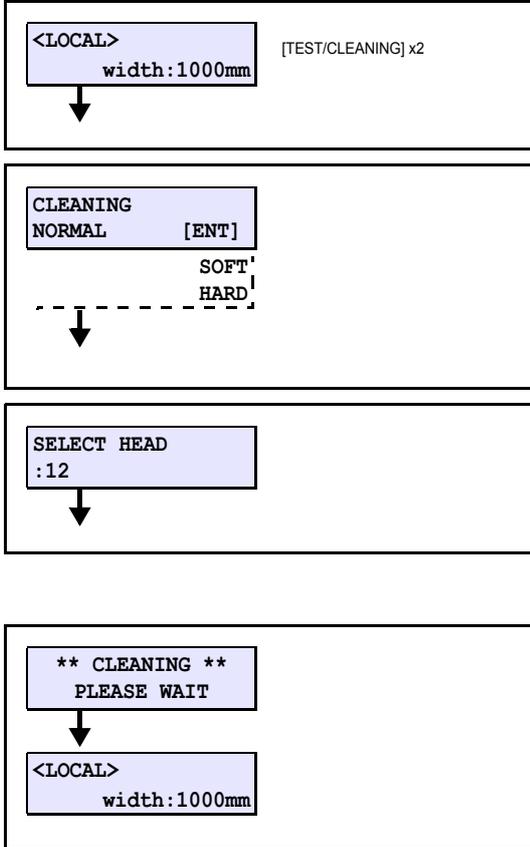
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# 7.5 Cleaning the Heads

## ■ Outline

Perform cleaning to recover from nozzle missing and deflection.

## ■ Working Procedures



1. Press [TEST/CLEANING] twice.  
Select “ CLEANING “.

2. Select the cleaning type.  
[▲][▼] :Select  
[ENTER] :Register

3. Select the head to clean.  
Start the cleaning operation with [ENTER].  
[◀][▶] :Select the Head.  
[▲][▼] : Select perform or not.  
[ENTER] :Start cleaning.

4. Perform cleaning and return to LOCAL.

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■ **Outline**

Perform the adjusting function such as FEED COMP. and DROP.POScorrect.

■ **Working Procedures**

□ **DROP. POScorrect**

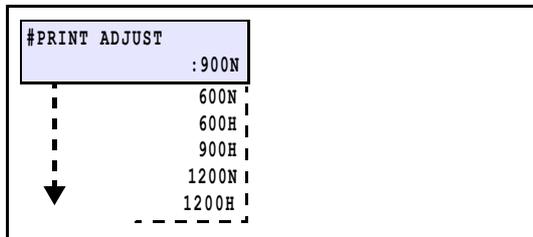
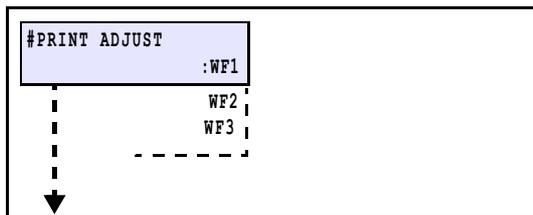
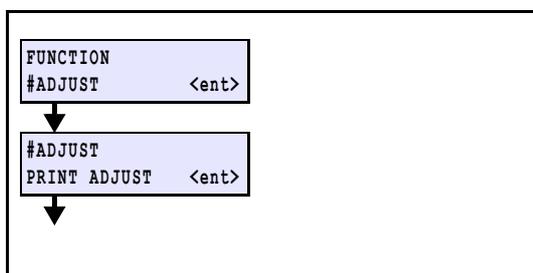
Compensate the parameter so that the drop positions of other heads are on the same line as the drop position of reference head (Head 1A) in the Y-direction.

Perform compensating by the following combination of wave shape, Y-resolution and scanning speed.

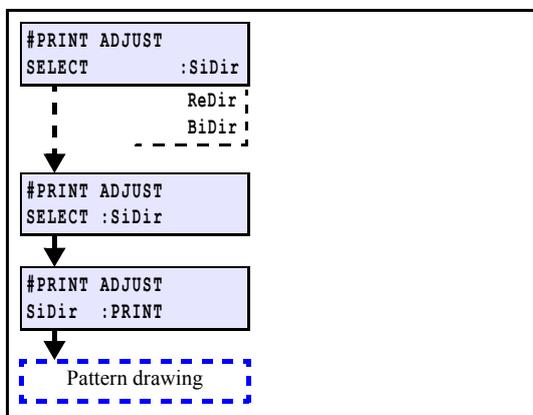
WF1:900N,1200N

WF2:900N,1200N,900H,1200H

WF3:600N,600H (for only LX100)



■ **Forward adjustment**



1. Set Media at X-origin.

Set the drawing origin as follows;  
(Set in [LOCAL] -> [ORIGIN])  
X ≥ 0, Y > 0

2. Display [#ADJUST] -> [PRINT ADJUST].

3. Select the waveform.

[▲]/[▼] : Switches

[ENTER] : Confirms (Next)

4. Select the Y-resolution and scanning speed.

[▲]/[▼] : Y-resolution & Scanning speed change

[ENTER] : Confirms (Next)

5. Select “SiDir” on the [SELECT] display.

[▲]/[▼] : Switches

[ENTER] : Confirms (Next)

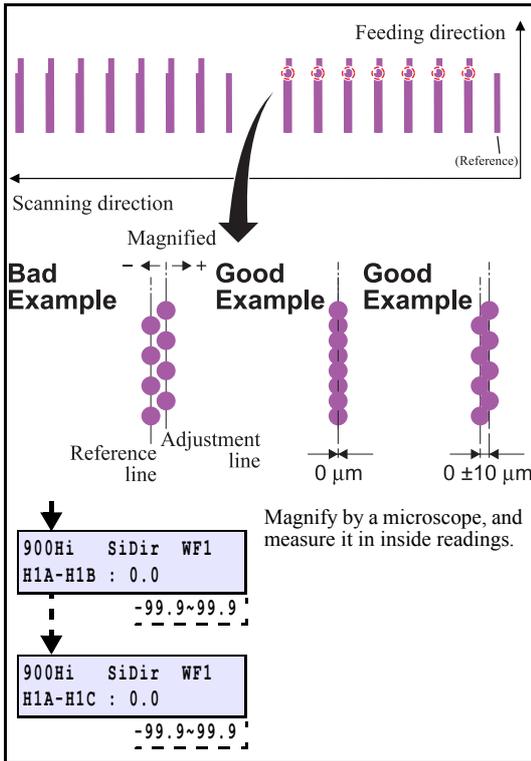
6. Press the [ENTER] key to draw the pattern.

[ENTER] : To start Pattern drawing

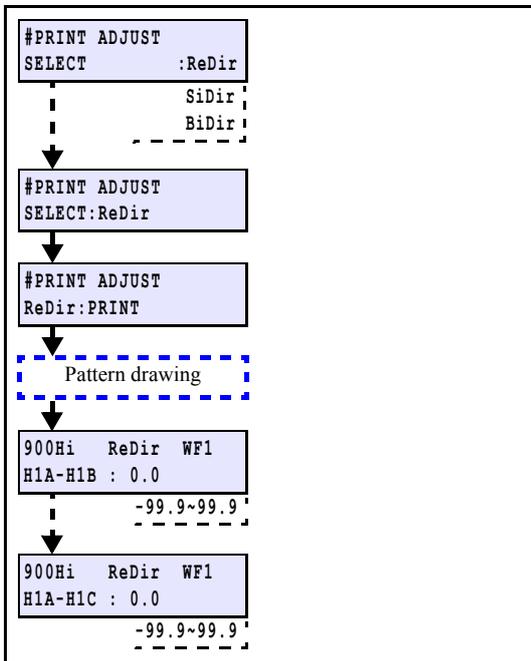
[▶] : To the compensation display  
(Without drawing)

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# 7.6 Image Quality Adjustment



## Return adjustment



7. Check and compensate the patterns.

Input the adjustment value (the measured value: μm) so that the impact dots of other nozzle lines (7 lines) are at the same position in the Y-direction, referring to the reference nozzle H1A line.

Check and execute the compensation for H1A-H1B ~ H2D.

[▲]/[▼] : Compensating value input (Input unit: 20 μm)

[ENTER] : Confirms (Next)



Input the compensating value, referring to the left figure, if the displacement on the drop position of head applied for the compensation occurs either right or left against the reference head.

8. When compensated, draw and check the patterns again.



Repeat “Drawing -> Checking (Compensating)” until any compensation is not required.

9. On the [SELECT] display, select “ReDir”, and adjust it in the same way as “SiDir”.

[▲]/[▼] : Switches

[ENTER] : Confirms (Next)

10. Press the [ENTER] key to draw the pattern.

[ENTER] : To start Pattern drawing

[▶] : To the compensation display (Without drawing)

11. When compensated, draw and check the patterns again.



Repeat “Drawing -> Checking (Compensating)” until any compensation is not required.

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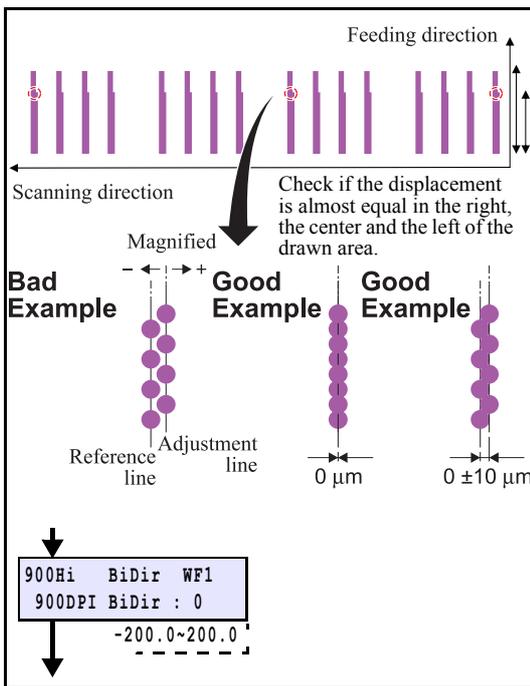
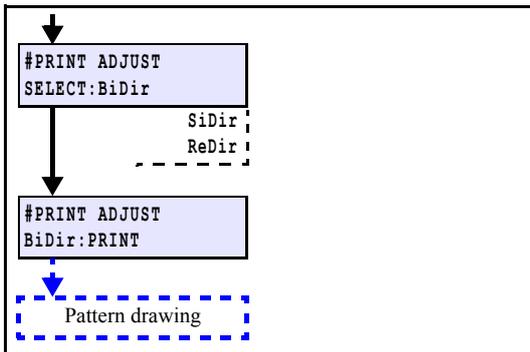
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# 7.6 Image Quality Adjustment

## ■ Going and returning adjustment



12. Select “BiDir” on the [SELECT] display.

[▲]/[▼] : Switches

[ENTER] : Confirms (Next)

13. Press the [ENTER] key to draw the pattern.

[ENTER] : To start Pattern drawing

[▶] : To the compensation display  
(Without drawing)

14. Check and compensate the patterns.

The reference lines are drawn in going, and then the adjustment lines are drawn at the same Y-coordinate positions in returning. The position where the lines above are overlapped on one vertical line is specified as the correct dot position (H1A: M-color fixed)

Confirm that the dots are on the same line.

\* The adjusting procedure is the same although the drawing pattern is different depending on mode.

[▲]/[▼] : Compensating value input (Measured value)

[ENTER] : Confirms



If the displacement is significantly different in the right and left, other reasons are considered.

15. When compensated, draw and check the patterns again.



Repeat “Drawing -> Checking (Compensating)” until any compensation is not required.

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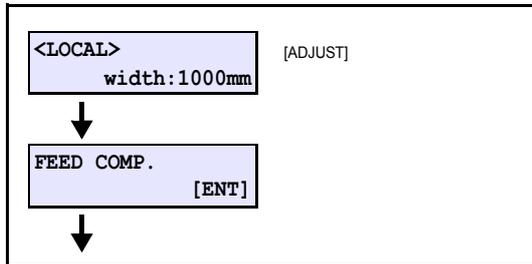
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# 7.6 Image Quality Adjustment

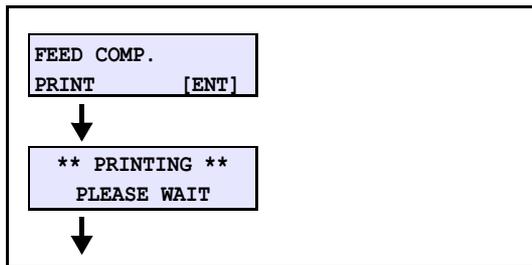
**□ FEED COMP.**

Perform correction of media feed amount.



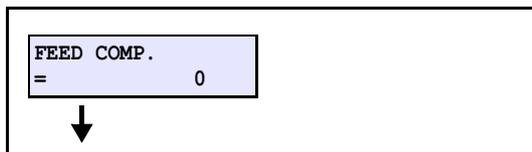
1. Press [ADJUST] , and select “FEED COMP.”.

[ENTER] :Register



2. Start print with [ENTER].

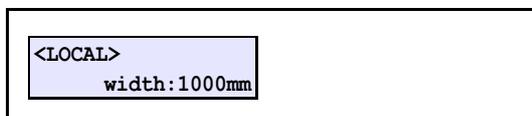
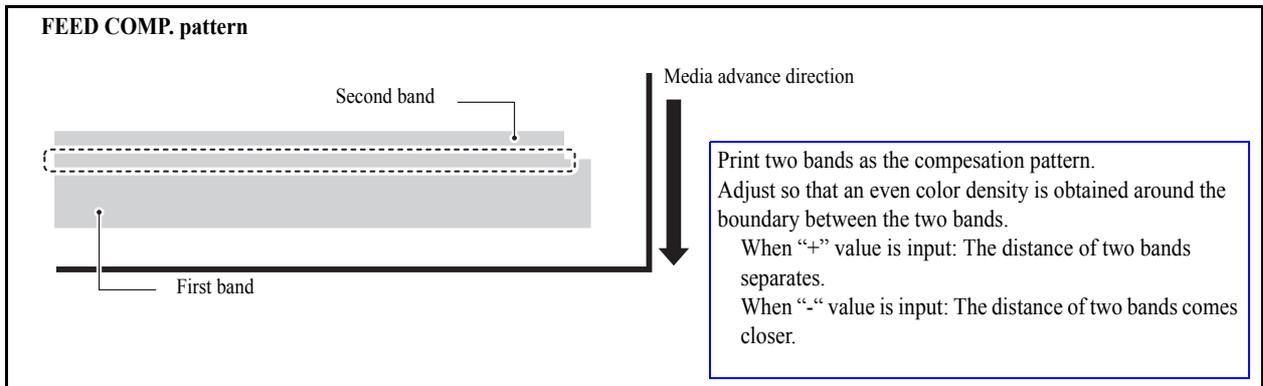
[ENTER] :Start



3. Input the correction value.

[▲][▼] :Input the correction value

[ENTER] :Proceed to inputting of correction value of the next pattern



4. It returns to LOCAL.

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**Mimaki**<sup>TM</sup>