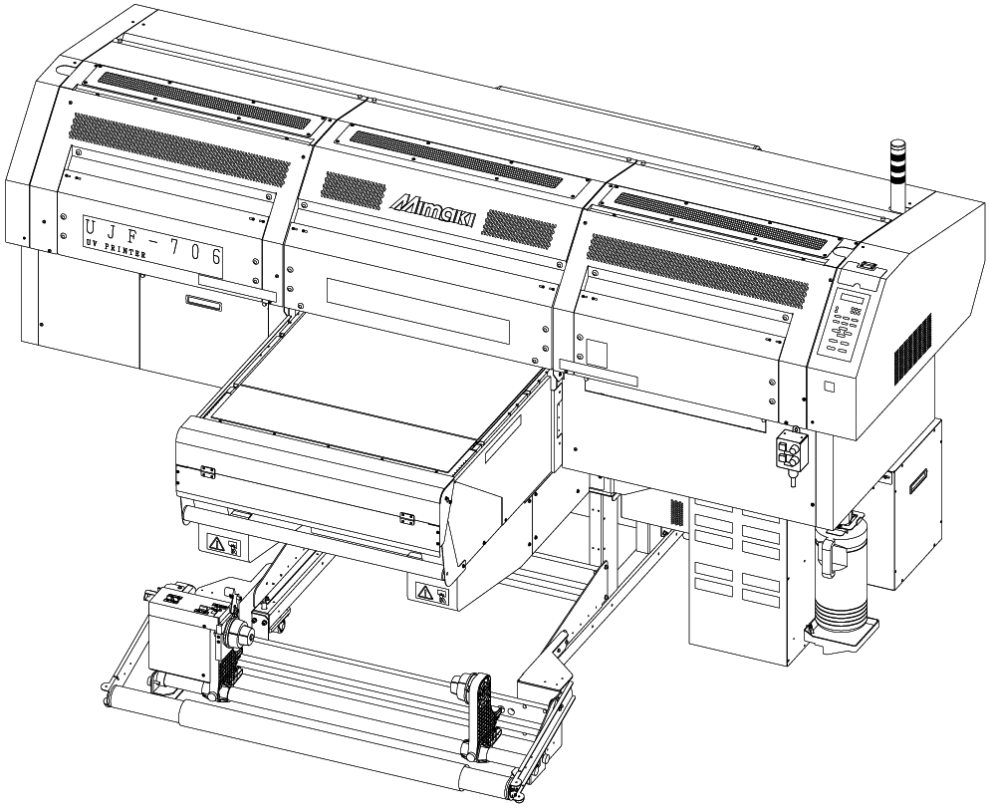
OPERATION MANUAL

MIMAKI

# UV PRINTER
# UJF-706

# OPTIONAL ROLL UNIT

# OPERATION MANUAL




MIMAKI ENGINEERING CO., LTD.

D202150-12

# TABLE OF CONTENTS

## CHAPTER 4 Troubleshooting



## CHAPTER 5 Appendix

## CAUTION

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

## Requests

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

## FCC Statement (USA)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the operation manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which 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 described in this manual generates low radio waves while it is in operation. The product can interfere with radios and televisions if set up or commissioned under improper conditions. The product is not guaranteed against any damage to specific-purpose radios 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.
- Move the receiver away from the product.
- Plug the power cord of this machine into an outlet which is isolated from power circuits connected to the television set or radio.

# 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

Congratulations on your purchase of UJF-706 optional roll unit.
UJF-706 optional roll unit is an unit for feeding roll media stably.

Page feeding function allows the unit to print continuously on a roll media.
In addition, by making the roll unit function OFF, you can print the 100mm-thick media.
(When the option roll unit is not attached, you can print the 150mm-thick media.)

This Operation Manual describes media setting or others when the roll unit is set and used on UJF-706.
For printing and various settings of UJF-706, refer to the Operation Manual of UJF-706.

You can also download the latest operation manual from our website.

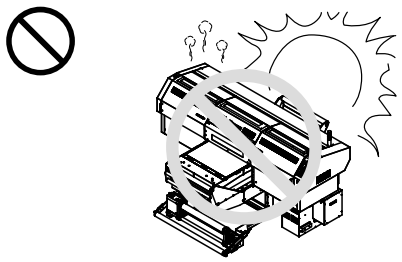
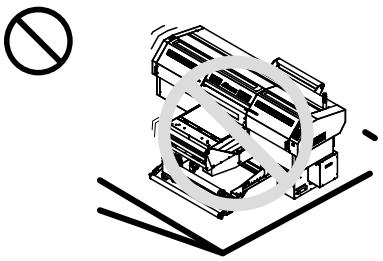
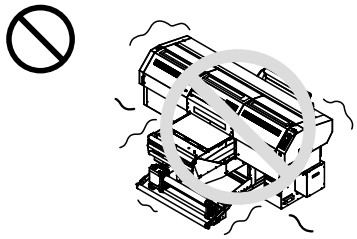
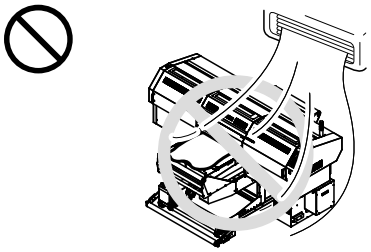
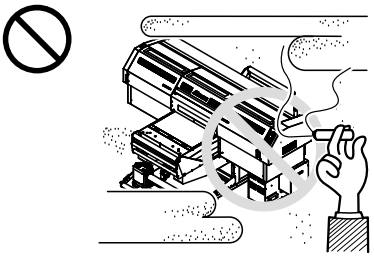
## Symbols

Symbols are used in this Operation Manual for safe operation and for prevention of damages to the machine.
The indicated sign is different depending on the content of caution.
Symbols and their meanings are given below. Please follow these instructions as you read.

### Examples of symbols

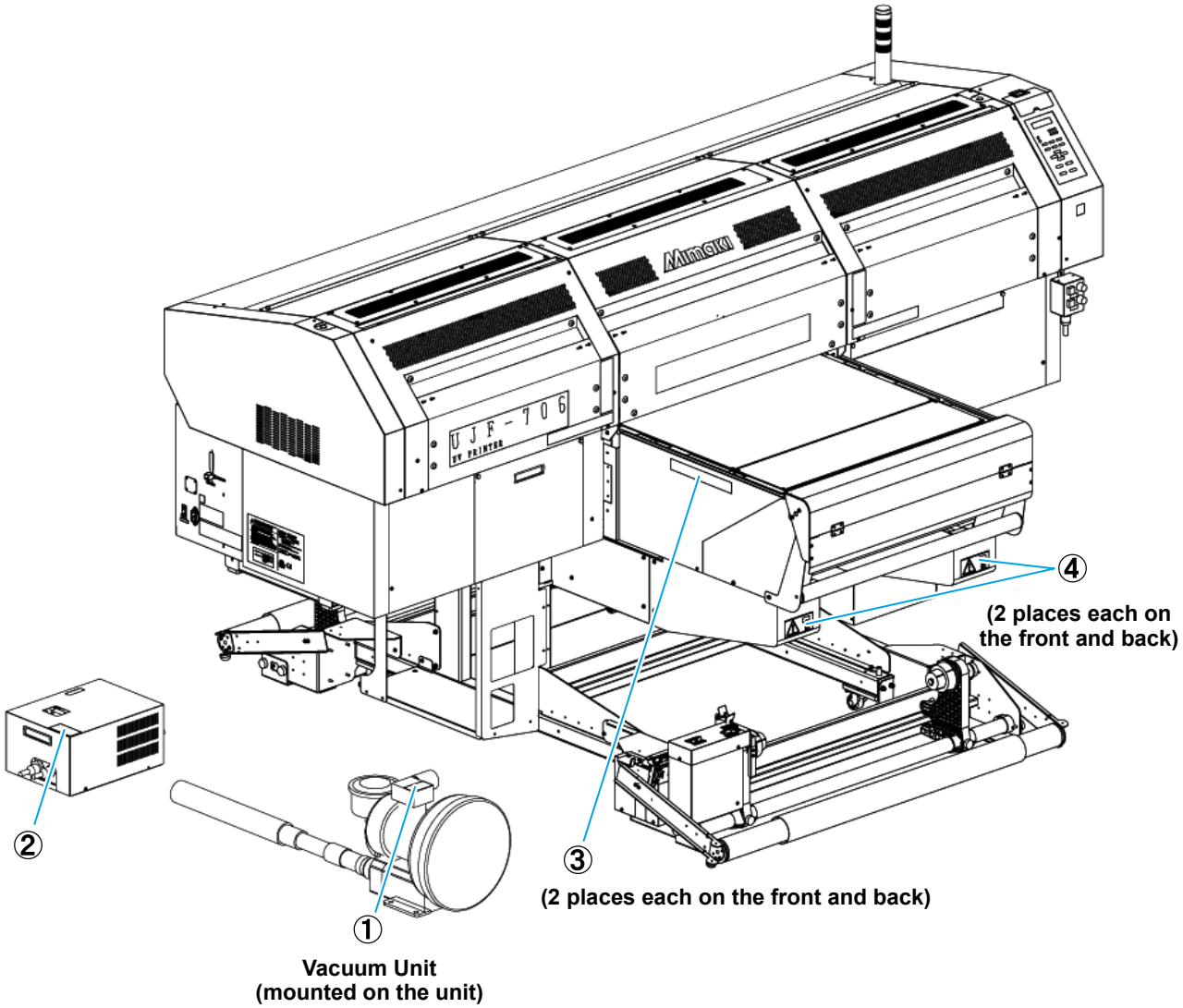
| | |
|---|---|
|   | Failure to observe the instructions given with this symbol can result in death or serious injuries to personnel. Be sure to read it carefully and use it properly. |
|   | Failure to observe the instructions given with this symbol can result in injuries to personnel or damage to property. |
|   | Important notes in use of this machine are given with this symbol. Understand the notes thoroughly to operate the machine properly. |
|  | Useful information is given with this symbol. Refer to the information to operate the machine properly. |
|  | Indicates the reference page for related contents. |
|  | The symbol "△" indicates that the instructions must be observed as strictly as the CAUTION instructions (including DANGER and WARNING instructions). A sign representing a precaution (the sign shown at left warns of hazardous voltage) is shown in the triangle. |
|  | The symbol "⃠" indicates that the action shown is prohibited. A sign representing a prohibited action (the sign shown at left prohibits disassembly) is shown in or around the circle. |
|  | The symbol "●" indicates that the action shown must be taken without fail or the instructions must be observed without fail. A sign representing a particular instruction (the sign shown at left instructs to unplug the cable from the wall outlet) is shown in the circle. |

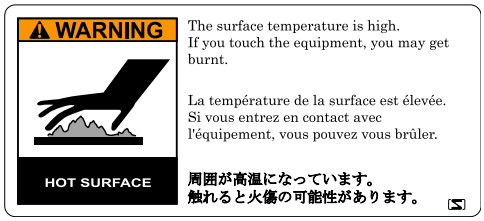
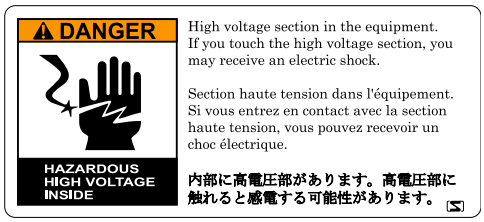
## Precautions for installation

| CAUTION | | |
|---|---|---|
| **A place exposed to direct sunlight** | **A place that is not horizontal** | **A place where temperature and humidity varies significantly** |
|  |  | •Use the machine under the following environment.<br>•Operating environment :<br>15 ～ 30 ℃ (59 ～ 86 °F)<br>35 ～ 65 % (Rh) |
| **A place that vibrates** | **A place exposed to direct air blow from air conditioner, etc.** | **Around a place where fire is used** |
|  |  |  |

# Position of the warning label

Warning labels are adhered on this machine. Be sure to fully understand the warnings given on the labels.
In the case where any of the warning label has become so soiled that the warning message is illegible or has come off, purchase a new one from your local distributor or our office.

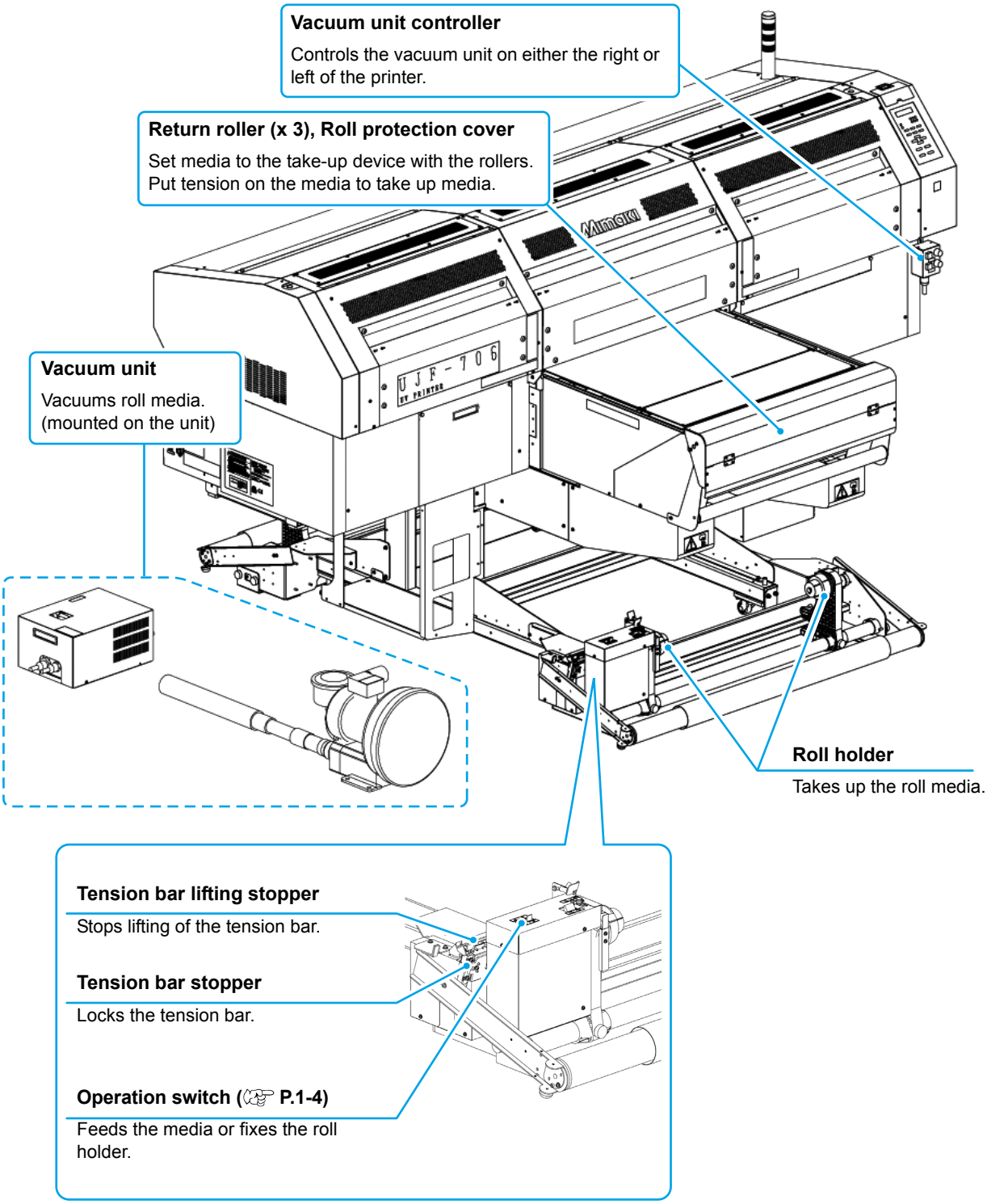


| | Order No. | Label |
|---|---|---|
| (1) | M907071 |  |
| (2) | M907072 |  |
| (3) | M906115 |  |
| (4) | M906222 |  |

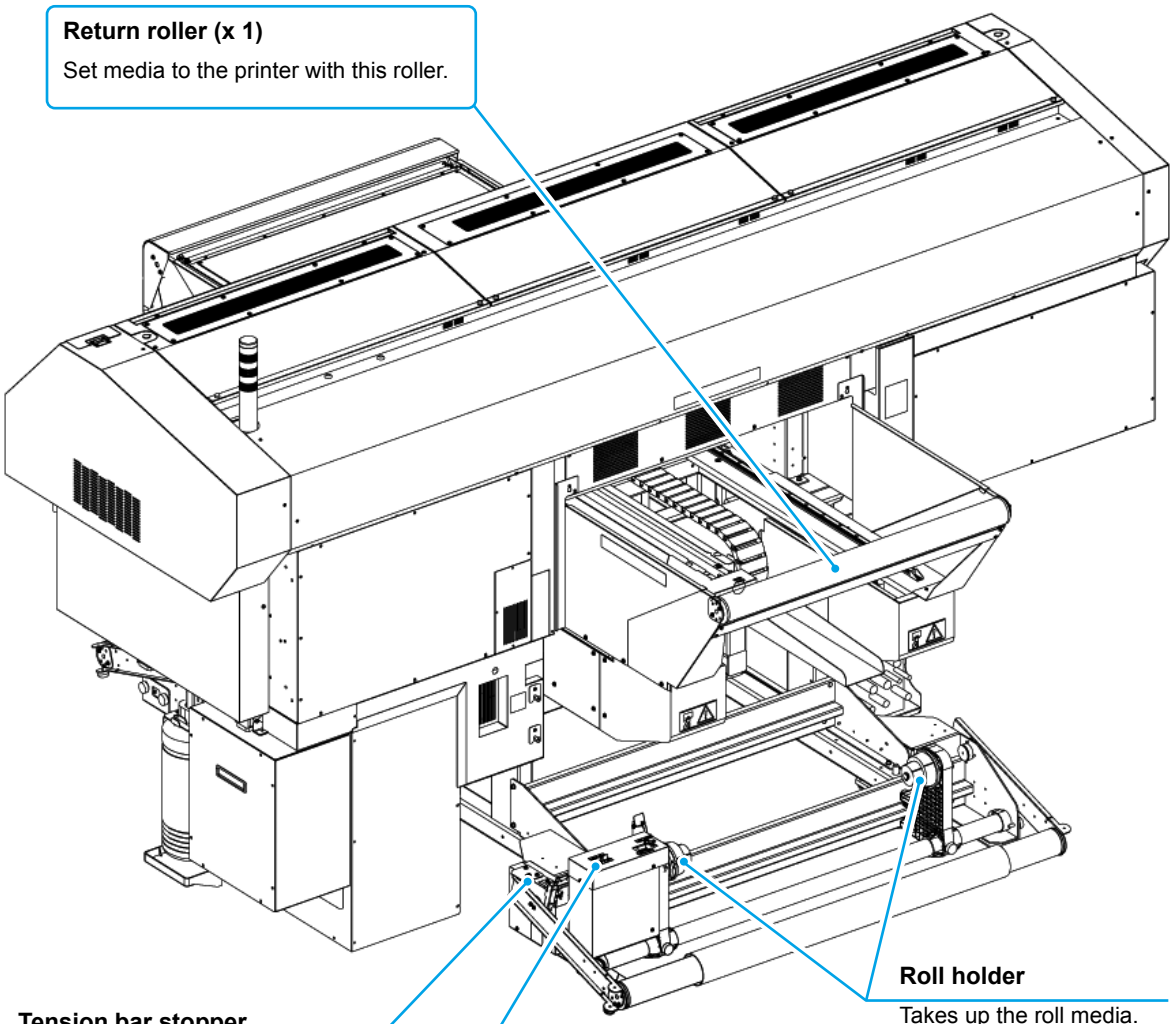
# *CHAPTER 1*
# *Before Use*

**This chapter describes the parts name and functions.**

## Front Side (Take-up device)



# Rear Side (Feeding device)



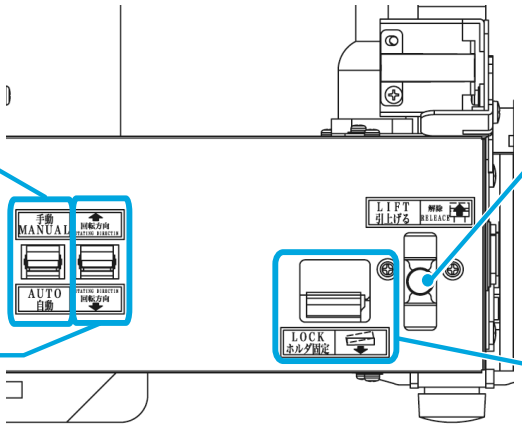
# Operation Switch

**MANUAL / AUTO switch**

Set AUTO to set media, and set MANUAL to feed media after drawing.

**ROTATING DIRECTION switch**

Normally (drawing on the obverse side) flip it down on the take-up side, and up on the feeding side.
When drawing on the reverse side, set each switch in the opposite position.




**Rotation lock lever**

Lock or release the rotation of the roll holder.
Pull it up to release the lock.

**Holder lock lever**

Flip it down to lock the roll holder.

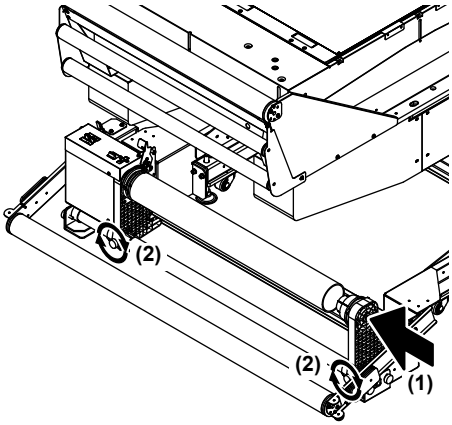
# CHAPTER 2
# How to Use

**This chapter describes the procedure from setting media to drawing, and usage hint of this unit.**

# Setting the media

## 1 Set a paper core to the take-up device, and then mount the roll holders on both sides.

**(1)** Set a paper core to the left roll holder, and then slide the right roll holder to the left to set to the paper core.
**(2)** Tighten screws on both sides to fix the holders.

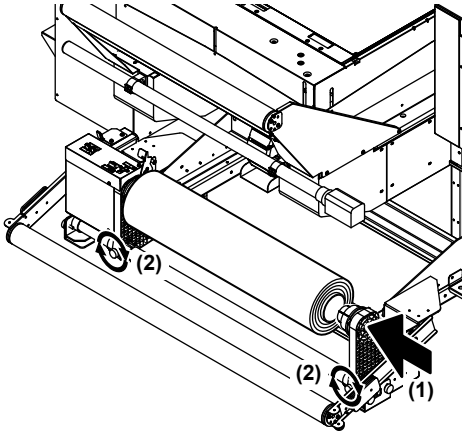



Caution

- Insert the paper core all the way seated in the roll holder on both sides. A loosened core may spin around during working.

## 2 Set a media to the feeding device, and then mount the roll holders on both sides.

**(1)** Set a media to the left roll holder, and then slide the right roll holder to the left to set to the media.
**(2)** Tighten screws on both sides to fix the holders.



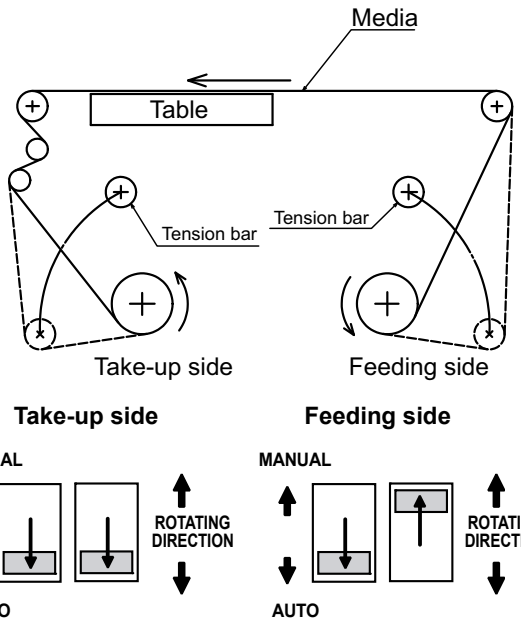

Caution

- Insert the media all the way seated in the roll holder on both sides. A loosened media may spin around during working.

- Set a media “facing inward” (see the figure below).
- Center the media on the table.
- Setting direction of the media depends on the side to be drawn, obverse or reverse.

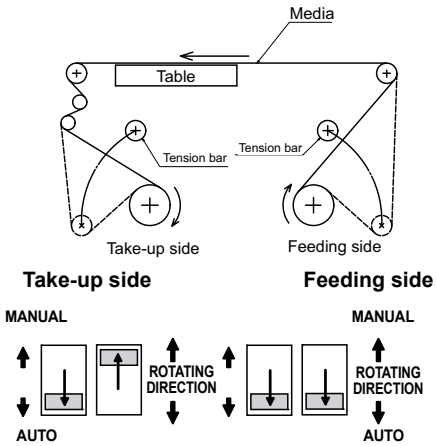
**Recommended**

**Facing inward (drawing on the obverse)**




**For reference**

**Facing outward (drawing on the reverse)**

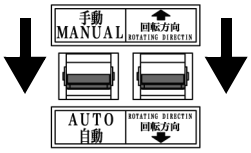



- When media is set facing outward, one time lock on the feeding side is disabled. (☞P.2-6)
  Instead, the rotation lock lever and the holder lock lever of the roll holder are enabled as a brief function. (☞P.1-4)

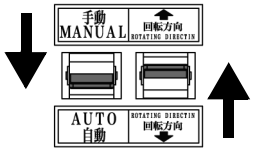
## 3 Set the operation switch as shown on the right.

- Normally (drawing on the obverse side) set as shown on the right.
  When drawing on the reverse side, set each switch in the opposite position.

Take-up side

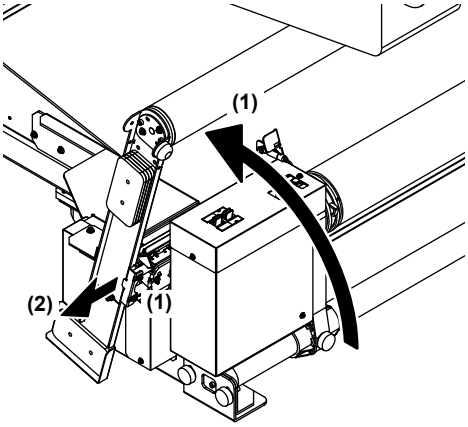



Feeding side




## 4 (Both of the take-up side and the feeding side) Release the tension bar stopper and then move the tension bar to its evacuation position.

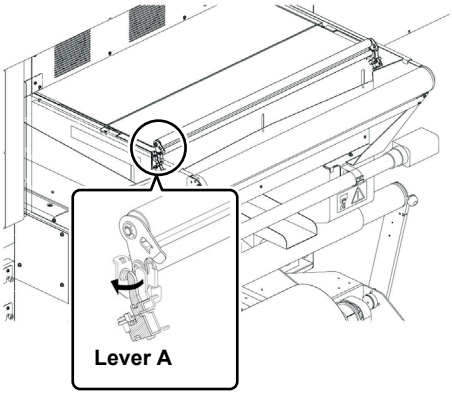
**(1)** Push the tension bar stopper to the right to release, and then raise the tension bar.
**(2)** Pull the tension bar stopper to the left to lock and fix the tension bar.



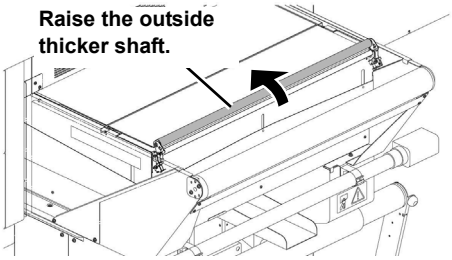

## 5 Press the ▲ key of the operation panel to move the table to the back, and then press the VACUUM key to turn it off.

## 6 (Feeding side) Raise the outside shaft of the two-shaft at the rear edge of the table.

**(1)** Move the lever A at both edges of the shaft outside to unlock the shaft.

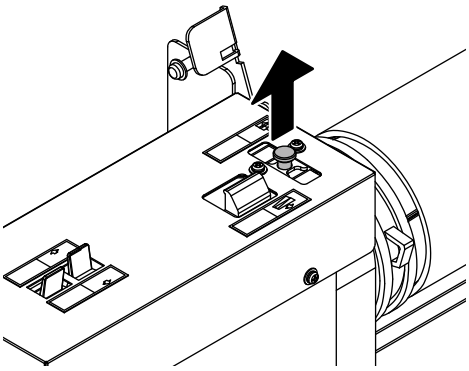



**(2)** Raise the shaft.

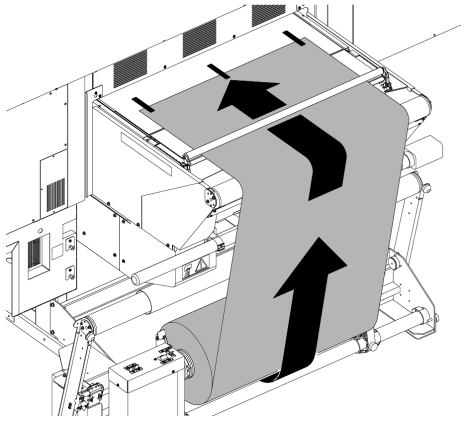


**7** **(Feeding side) Pull the rotation lock up on the right of the operation switch.**

- The lock of the roll holder is released.

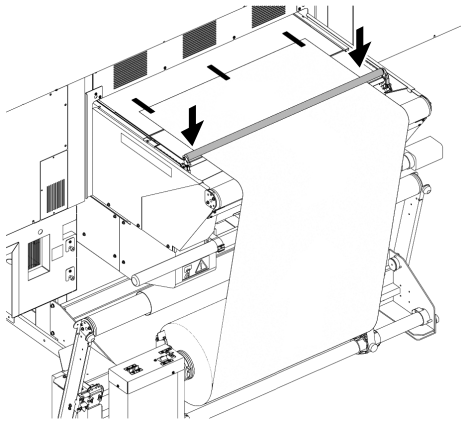


**8** **(Feeding side) Pull out the media and pass it through the two-shaft. Then, paste the top edge of the media on the table edge with tape.**



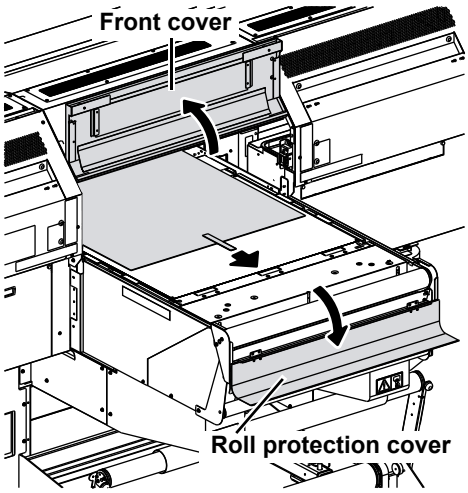
**9** **(Feeding side) Move the shaft that you raised in the Step 6 downward, and tuck the media into it.**

- When you move the shaft downward, the hooks at right and left of the shaft are inserted into with a clicking sound. If they are not inserted fully, press them from above.



## 10 Press the END of the operation panel to move the table to the front.

• After moving, open the roll protection cover and the front cover on the take-up side.

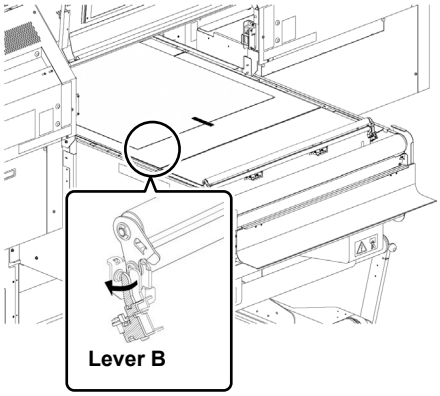



• When using heavy-duty media (Tarpaulin or FF), press the VACUUM key before pressing the END key to turn it on, which feeds the media to the front smoothly.

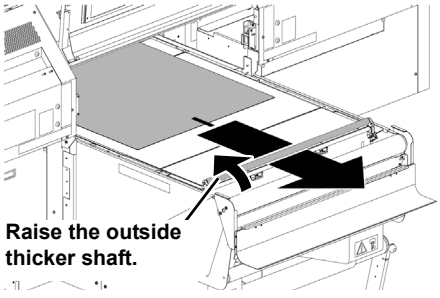
## 11 If the VACUUM is on, press the VACUUM key of the operation panel to turn it off.

## 12 (Take-up side) Raise the outside shaft of the two-shaft at the front edge of the table, and pass the media through it.

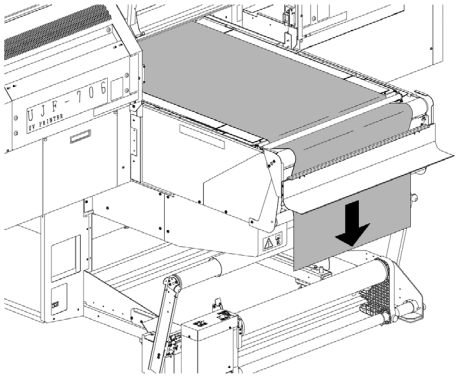
**(1)** Move the lever B at both edges of the shaft outside to unlock the shaft.




**(2)** Raise the shaft.
**(3)** Pass the media through one shaft, and pull out the top edge of the media.



## 13 (Take-up side) Remove the tape on the top of the media, and then pull the media to the paper core of the take-up device.



- Set the media along the rollers as shown on the right.

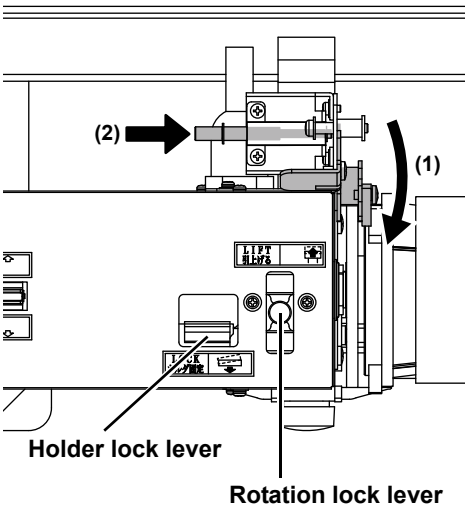
Important!

- Do not attach the media to the paper core in this step.

## 14 (Feeding side) Lock the roll with the one time lock.

**(1)** Pull the hook to the front in the back right of the operation switch.

**(2)** Push the bar to the right in the back left, and release the hook to lock it.

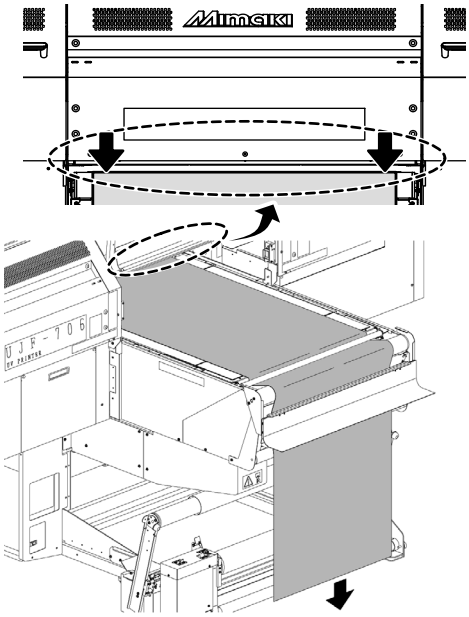



Important!

- When the media is set facing outward (drawing on the reverse), this function is disabled. (☞P.2-2)
  Instead, the rotation lock lever and the holder lock lever of the roll holder are enabled as a brief function.

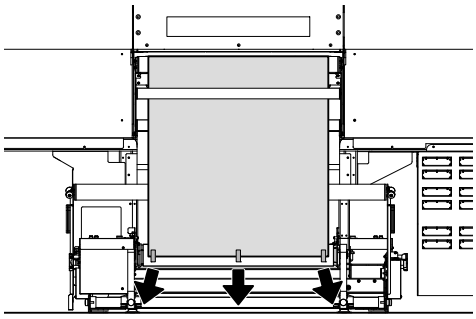
## 15 (Take-up side) Pull the media slowly to set it symmetrically.

- Looking the table horizontally, pull both sides of the media to make the slack or tension even.

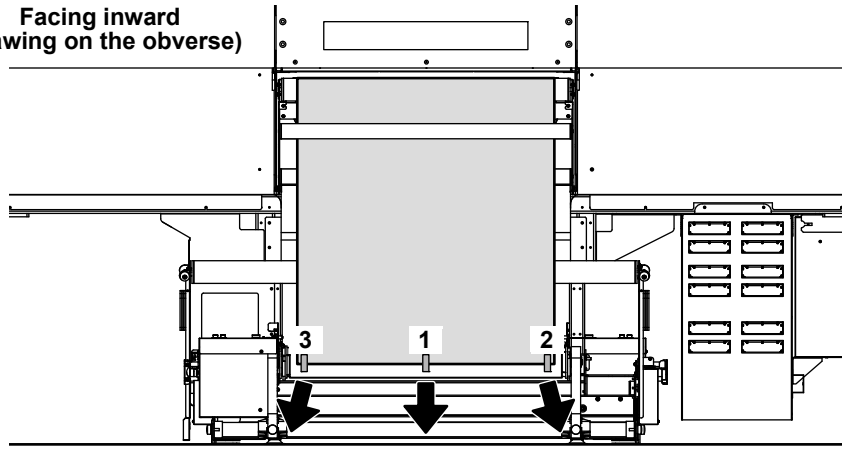


## 16 (Take-up side) Attach the center of the media to the paper core with tape.

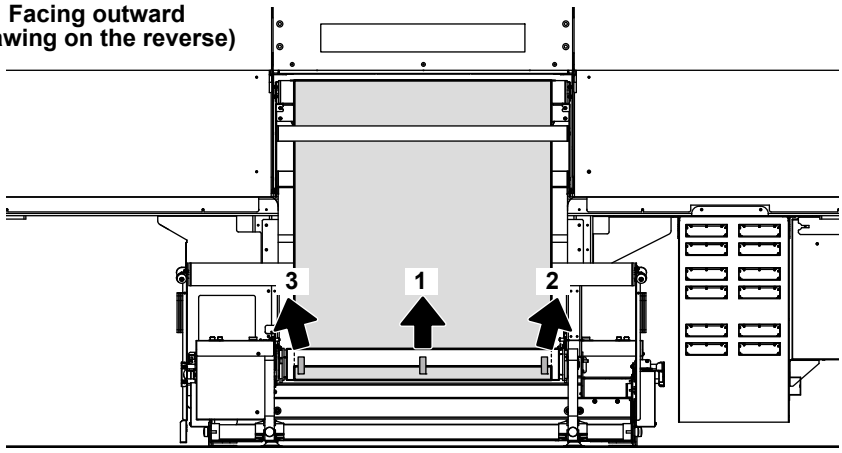
**(1)** Attach the top center of the media with tape while pulling not to cockle it.
**(2)** Attach the right and left of the media with tape.
**(3)** Check the media is attached in a straight line.



**Facing inward (drawing on the obverse)**



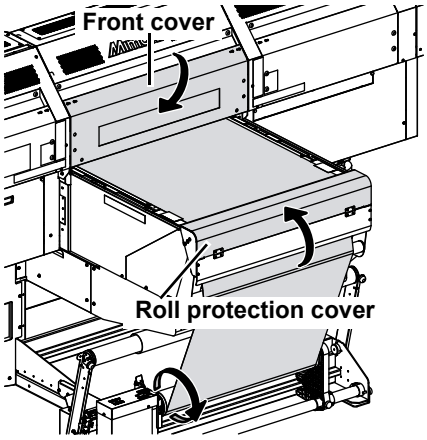

**Facing outward (drawing on the reverse)**




Pass media through the back of the paper core, and put on upward.

## 17 (Take-up side) While rotating the paper core, take up the media for six winds and more, and move the outside shaft of the two-shaft downward.

- By the operation above, the one time lock on the feeding device is released (with a clicking sound).
- After reeling the media, close the roll protection cover and the front cover.
- When you move the shaft downward, the hooks at right and left of the shaft are inserted into with a clicking sound. If they are not inserted fully, press them from above.

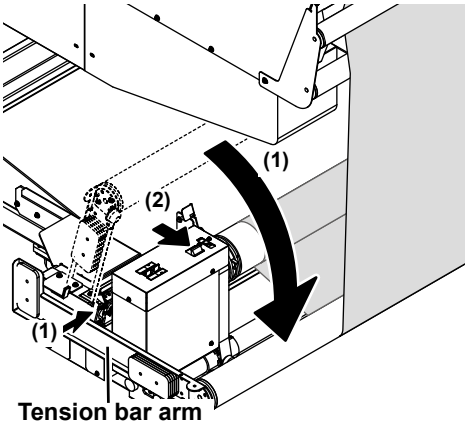


## 18 Press the VACUUM key of the operation panel to turn it on.

• The media is attached on the table.

## 19 (Take-up side) Release the tension bar stopper, lower the tension bar, and lock the roll holder when the tension bar arm becomes parallel to the floor.

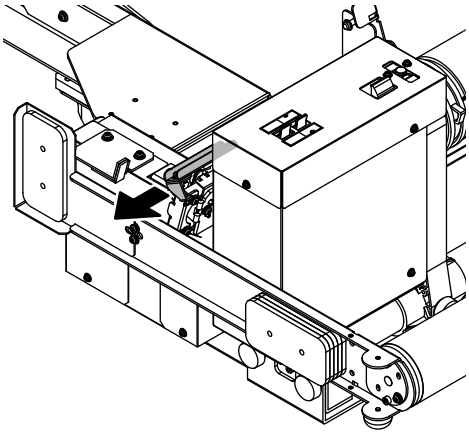
**(1)** Push the tension bar stopper to the right to release it, and then lower the tension bar.
**(2)** When the tension bar arm becomes parallel to the floor, set the holder lock lever to the direction as shown on the right.




Important!

• If the holder lock lever is too tight to set:
The lever may not be set correctly at a certain position of the roll holder.
In such case, turn the roll holder several millimeters to set smoothly.

## 20 (Take-up side) Pull the tension bar lifting stopper to the left to set it.



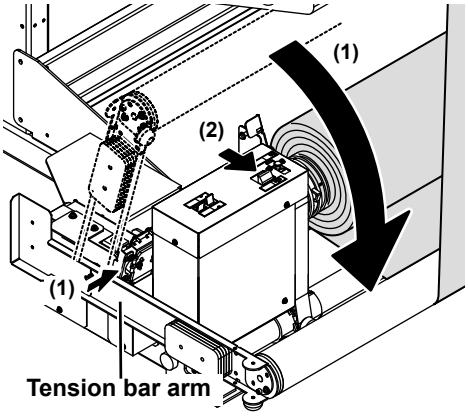
## 21 (Take-up side) Check the position of the operation switch.

• Check the position is the same as the step 3.
If the position is not the same, set the position as the step 3.

Take-up side


## 22 (Feeding side) Release the tension bar stopper, lower the tension bar, and lock the roll holder when the tension bar arm becomes parallel to the floor.

**(1)** Push the tension bar stopper to the right to release it, and then lower the tension bar.
**(2)** When the tension bar arm becomes parallel to the floor, set the holder lock lever to the direction as shown on the right.



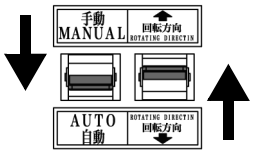

Important!

• If the holder lock lever is too tight to set:
The lever may not be set correctly at a certain position of the roll holder.
In such case, turn the roll holder several millimeters to set smoothly.

## 23 (Feeding side) Check the position of the switch.

- Check the position is the same as the step 3.
  If the position is not the same, set the position as the step 3.

Feeding side




## 24 Press the VACUUM key of the operation panel to turn it off.

Setting media is complete.

# Operation before drawing

Perform the following operations before drawing data.
For details, refer to the operation manual of this printer.

- Check the nozzle condition by test drawing.
  For the media that is hard to check the drawings such as transparent one, put a paper under the media to check the nozzle condition.
- Set the origin position.
  Adjust the origin to fall within the area of set media.

# Drawing data

Drawing procedures of data is the same as the UJF-706 without this unit. Refer to the operation manual of this printer.

# Feeding and cutting media (after drawing)

Perform the followings to cut a roll media after drawing.
Operate this in front of this printer (Take-up device).

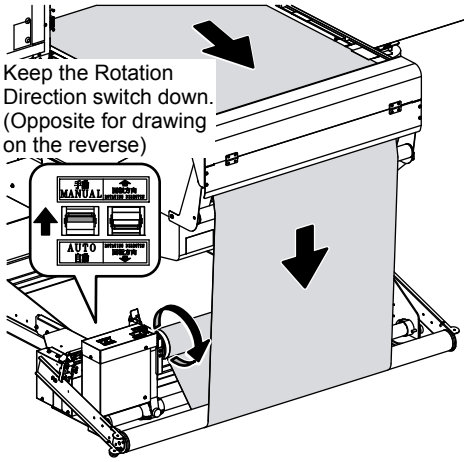
## 1 Press the VACUUM key to turn it off.

Caution

- When the vacuum is off, a media can slip on the table.
  This occurs from an imbalance in tension bars which is caused by the different diameter of the media roll on the feeding and take-up side. In such case, support the media with your hands because it is a temporary phenomenon.

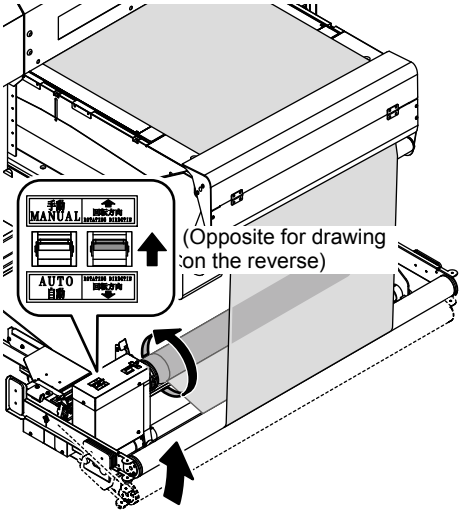
## 2 Feed the media.

- Switch the MANUAL / AUTO switch to MANUAL.
  The media is fed to the front of this printer.

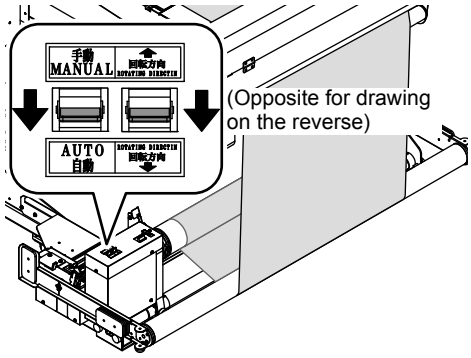



## 3 When cutting position of the media comes outside of the table, flip the ROTATING DIRECTION switch to the opposite side.

- Switch the ROTATING DIRECTION switch to the opposite side.
  Wait until the tension bar arm becomes parallel to the floor.



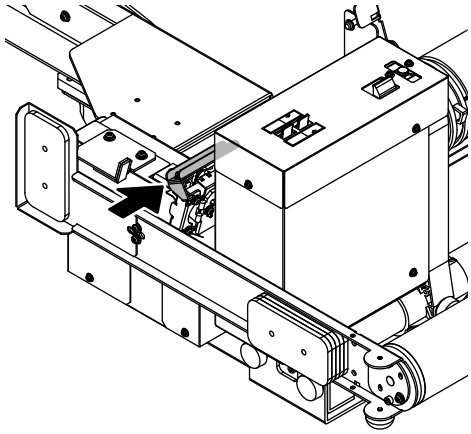
**4** **When the tension bar arm becomes parallel to the floor, switch the ROTATING DIRECTION switch to the original position, and switch the MANUAL / AUTO switch back to AUTO.**




**5** **Press the VACUUM key to turn it on.**

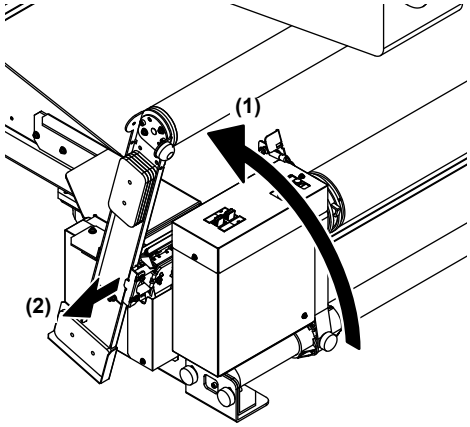
**6** **Release the tension bar lifting stopper.**

- Push the tension bar lifting stopper to the machine to release it.



**7** **(Take-up side) Move the tension bar to its evacuation position.**

**(1)** Raise the tension bar.
**(2)** Pull the tension bar stopper to the left to lock and fix the tension bar.




**8** **(Feeding side) Move the tension bar to its evacuation position.**

- As the take-up side, raise the tension bar, and then pull the tension bar stopper to the left to lock and fix the tension bar.

**9** **Cut the media, and then remove the roll media from the paper core.**

# Hint on usage of this unit

This section describes hints to use this unit well.

## Cleaning the table

Keep the table clean as the head.
Remove stickum of tape or ink drops from the table if they remain.

## Head maintenance

Maintain the head referring to the operation manual of this printer.

## Precautions when using various types of media

Various thickness of media can be used from thick one (1 mm) to thin one (25 μm) with the care of the followings depending on the media types.

- Thick or withy media
  Skewing media when setting may occur cockling and may prevent stable printing.
- Thin media
  To use the media of 50 μm thick or less, basically take a stretched one (commonly called OPP).
  Unstretched media (CPP) is strongly affected by contraction occurred with ink curing, and a printed media may cockle.

## How to close the absorbing holes on the table

When a narrow media is used, the absorbing holes outside the media width on the table are unnecessary.
Cover the unnecessary holes with thin films to improve adsorption power and to feed or print stably.

Important!

- Prevent the covering film on the absorbing holes from turning or lifting.
  Turning or lifting of the film may hit the moving head or may cause jam.
- Do not cover the holes with thick films.
  The area sensor that detects the media thickness automatically recognizes the film position higher than the media face as a top, and consequently head gap may widen or the prints may blur.

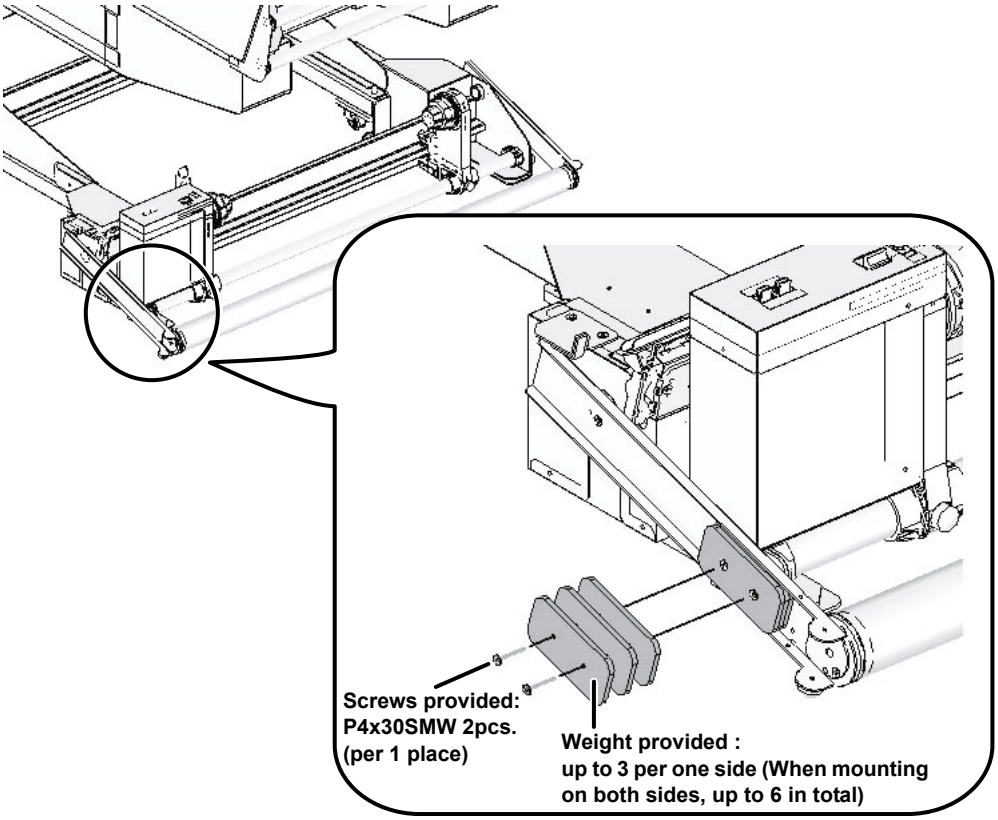
# How to use the weight

Mount the weight on the tension bar to increase the bar weight.
The weight is usually not required. Mounting it in the following cases may solve the problems.

- A media is skewing even when the media is set in a straight line.
- A media always cockles.

The weight can be mounted on both sides of the tension bar arm (take-up and feeding side).

## ● How to set the weight



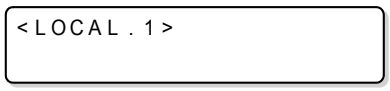

Important!

- Up to 3 weights can be mounted per one side.
  Mounting 3 or more weights overloads the take-up or the feeding motor and may cause abnormal movement.

## How to use the UV lamp

The UV lamp mounted on UJF-706 to cure ink produces heat by irradiation.
Especially when using the media of 50 μm thick or less, the heat may expand films.
If a media cockles or strains, lower the light intensity (50% down) with the following procedures.
Even if light intensity is lowered, ink is cured enough (When MIMAKI ink is used).

**1** **When <LOCAL> is displayed, press the [UV] key.**




**2** **Select [SET UV LEVEL] with the [▲][▼] key, and press the [ENTER] key.**


**3** **Press the [▲][▼] key to set the UV level of light intensity [HIGH] to 1, and press the [ENTER] key.**

- Set to 1 from 16.


**4** **Press the [▲][▼] key to set the UV level of light intensity [NORMAL] to 1, and press the [ENTER] key.**

- Set to 1 from 8.


**5** **Press the [▲][▼] key to set the UV level of light intensity [LOW] to 1, and press the [ENTER] key.**

- If it is not 1, set to 1.


**6** **Press the [END] key to finish.**

- When RIP is set to have a priority at printing, the UV LEVEL setting of RIP has a priority. In this case, set UV LEVEL setting of RIP to 1 or set the printer to have a priority.

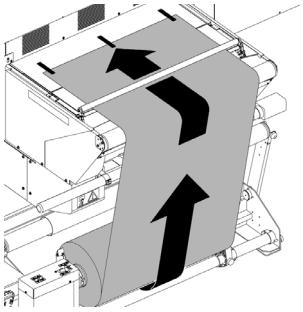
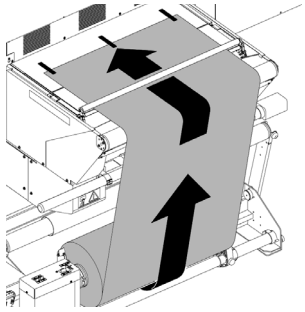
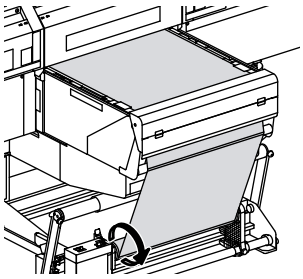
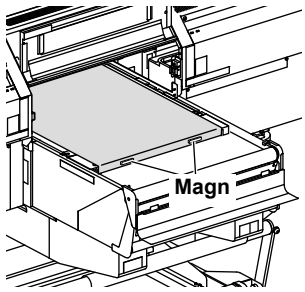
## How to use the mist fan

The mist fan is mounted as standard on UJF-706. The suction power of mist generated at printing can be set on the operation panel. The amount of mist changes depending on shapes of the printing media (3D object), printing mode, or ink density. Select the proper setting depending on the condition.
For the setting procedures, refer to the operation manual of this printer.

# How to use roll media 1 print

For “Roll media 1 print”, when you perform multiple drawings one by one (not continuously), you can draw with an easy media setting operation, not resetting the roll media every time you draw.

## Difference between normal drawing and roll media 1 print

| ● Procedures of normal drawing | ● Procedures of roll media 1 print |
|---|---|
| **(1)** Set the roll media on the feeding part. (Refer to the Step 1 to 11 in P.2-2"Setting the media")  | **(1)** Set the roll media on the feeding part. (Refer to the Step 1 to 11 in P.2-2"Setting the media")  |
| **(2)** Set the roll media on the take-up part. (Refer to the Step 12 to 24 in P.2-5"Setting the media")  | **(2)** Without setting the roll media on the take-up unit, perform “Roll media 1 print setting” using a magnet etc.   |
| **(3)** Perform drawing. | |
| **(4)** Cut the drawn media. | |
| **(5)** When you draw next time, set the roll media again on the take-up part. | **(3)** When you draw next time, perform “Roll media 1 print setting” again. |

### ● About roll media 1 print

“Roll media 1 print” is a printing method to fix the media top edge on the table unit using a magnet etc. (or equivalent), not setting the media top edge part on the take-up part as normal. The work for printing can be simplified.

Caution

- However, this method is different from the normal roll media setting method and is not a media setting method recommended formally by our company.
  This method can simplify the media setting, but on the other hand, the work is influenced by humans. In addition, if you change the media type, it may cause defects such as waviness or bulge on the table surface due to the media thickness change.
- If defects occur when you draw with this method, change the method to the normal media setting method using take-up unit.

## Draw using the roll media 1 print

**1** **Set [Feeding/ TakeUp] of MACHINE SETUP to “Feeding Only”.**

**(1)** Press the FUNCTION key in LOCAL mode.
**(2)** Select [MACHINE SET UP] with the ▲▼ key, and press the ENTER key.
**(3)** Select [Feeding/TakeUp] with the ▲▼ key, and press the ENTER key.
**(4)** Select “Feeding Only” with the ▲▼ key, and press the ENTER key.
**(5)** Press the END key once time.

**2** **Set [VACUUM] of the SET UP function to “LOW”.**

**(1)** Select [SET UP] with the ▲▼ key, and press the ENTER key.
**(2)** Press the ▲▼ to select the type to use (1 to 4), and then press the ENTER key.
**(3)** Select [VACUUM] with the ▲▼ key, and press the ENTER key.
**(4)** Select "LOW" with the ▲▼ key, and press the ENTER key.
**(5)** Press the END key several times to end the setting.

**3** **Raise the tension bar at the take-up side and the feeding side and fix it.**

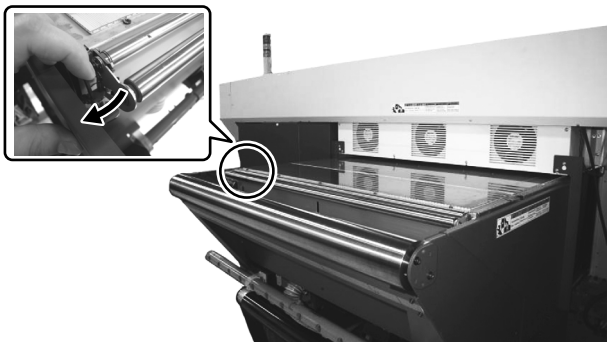
**4** **Raise the roll protection cover above the take-up side.**

**5** **Press the ▲ key and move the table to the rear (rear of the main body).**

**6** **While releasing the hook of right and left of the outside shaft of two-shaft at the rear edge of the table, raise it.**

• Move the lever at both edges of the two-shaft outside to unlock.

**Normal status**

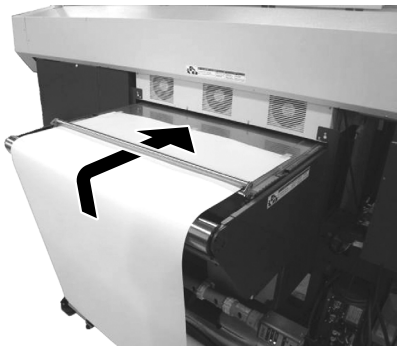


**Status when you raise the shaft**

**7** **Set the roll media at the feeding side (referring to P.2-2"Setting the media"), and raise the rotation lock (referring to P.2-4 Step 7) to pull out the media.**

**8** **Fix the media temporarily at the top edge of the table.**

- Set the top edge of the media by putting it through outside the turning roller.
- Pass the media through the two-shaft that you raised in the Step 5, and fix it temporarily with tape etc.



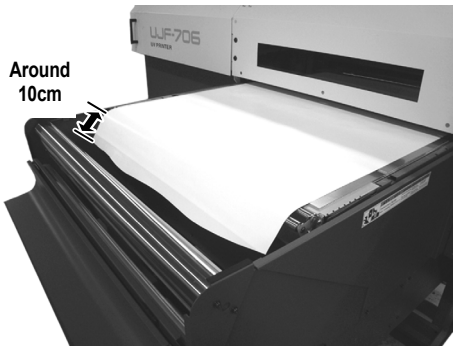
**9** **Move the two-shaft that you raised in the Step 6 downward, and check that the lever of right and left is surely locked.**

**10** **Press the ▼ key to move the table to the front.**

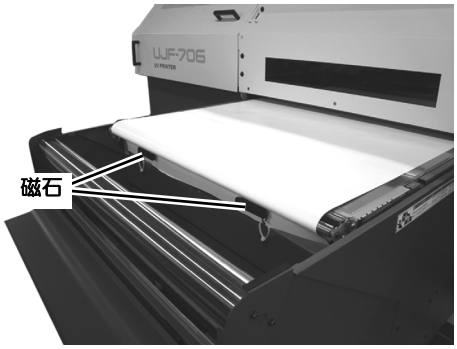
- It is not necessary to move the table to the front edge. Move it to the position where you can work with tape fixing the media temporarily and the two-shaft.

**11** **Remove tape fixing the media temporarily, and pull out the media slowly so that the edge surface of the media may be parallel with the table.**

**12** **Put the media on the outside shaft (thicker one) of the two-shaft moved downward in the Step 7, and make the media hang by around 10cm.**

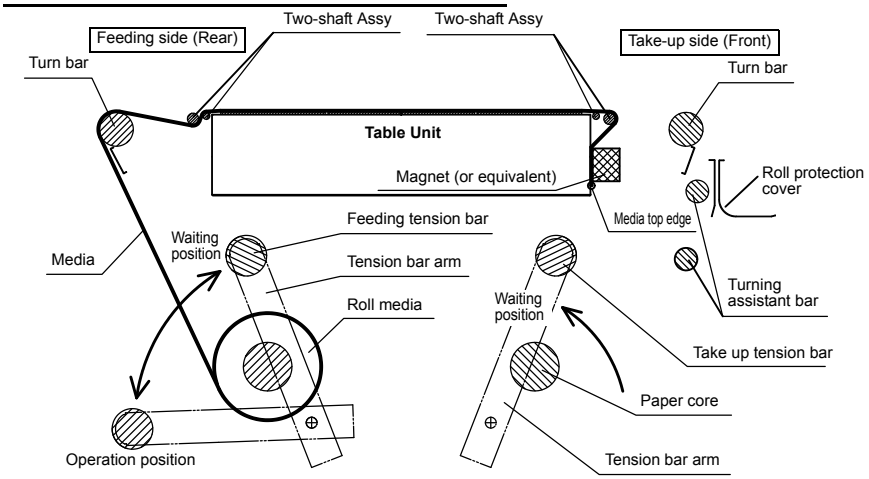


## 13 Fix the top edge of the media with a magnet etc. indicated as the figure.




- The cross-section diagram of the media path is as below. Check that the media is set correctly.

**Cross-section diagram of media setting status**




## 14 Press the VACUUM key on the operation panel to absorb the media on the table.

- If there is waviness on the absorbed media, smooth it with your hand etc.
- If the vacuum unit is connected, you can absorb the media with the vacuum unit.

## 15 Press the END key.

- The table returns to the front edge.

## 16 Go to the feeding side, move the tension bar downward to the position where it may be parallel with the floor and lock the roll holder.

- Perform the work referring to P.2-8 Step 19.

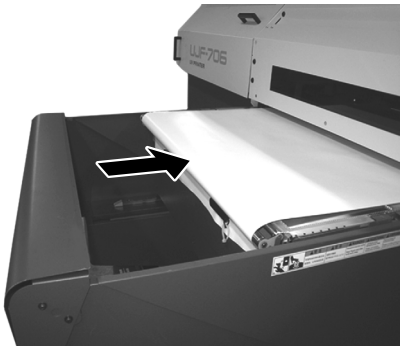
## 17 Perform checking before drawing.

**(1)** Set the operation switch of the roll unit at the feeding side (referring to P.2-2 Step2).
**(2)** Perform test drawing, and check the nozzle status (referring to the operation manual of UJF-706).
**(3)** Adjust with RIP so that you can draw at the center of the media as much as possible.
**(4)** Check that there is no foreign object on the media.

## 18 Start drawing.

- For the roll media 1 print, perform drawing one by one.

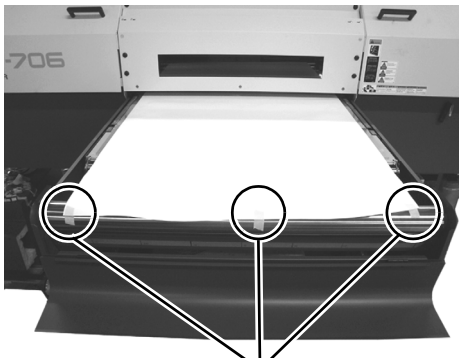
## 19 Press the ▲ key to move the table to the rear.



## 20 Remove the magnet etc. fixing the media, and press the END key.

• The table moves to the front.

## 21 Fix the top edge of the media on the turning bar at the front of the table with tape.



Fixing with tape

## 22 While holding the turning bar to prevent it from rotating, press the VACUUM key to make the table absorption “off”.

- If you absorb the media with the vacuum unit, operate the vacuum unit to make the table absorption “off”.

Caution

- In the status that the media is absorbed, you cannot cut properly. Be sure to make the table absorption “off” before cutting the media.
- **Be sure to hold the turning bar firmly when you make the table absorption “off”.** When you make the table absorption “off”, the power to hold the media becomes weaker and the tension bar at the feeding side may drop. When there is a person at the feeding side, be careful to perform the work.

## 23 Rotate the turning bar with your hand, and wind the media on the roller.

Important!

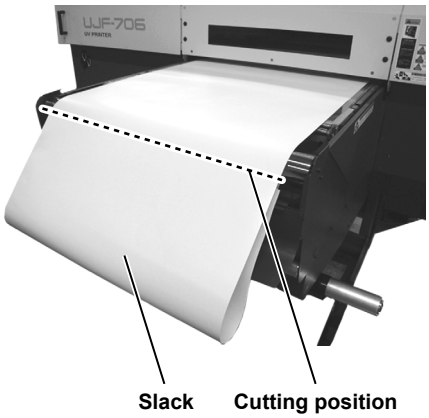
- Be sure to take up the media slowly (about quarter of one wind for one second).
  If the speed to pull out the media at the take-up side is too fast against the speed to feed the media at the feeding side, the feeding tension bar cannot operate properly.

## 24 Rotate the part to be drawn until you can take up with the roller, press the VACUUM key and make the table absorption “on”.

• Check that the media is fixed on the table by absorption before the next work.

**25** **Rotate the turning bar reversely to make slack, and cut off the media at the cutting position of the right figure.**

- By cutting the media at the cutting position of the right figure (front side of the turning bar), the remaining media comes to the bottom of the two-shaft. Therefore, you can fix the media easily.
- This is the end of drawing with the roll media 1 print.
  When you perform next drawing, perform the procedures from the Step 26.




**26** **Press the ▲ key to move the table to the rear by about 20cm.**

**27** **Fix the top edge of the media with a magnet etc. in the same way as the Step 13.**

- If there is waviness on the media surface, smooth it with your hand etc. before fixing.

**28** **Press the END key to return the table to the front.**

**29** **Perform the procedures from the Step 18 to draw.**

# *CHAPTER 3*
# *Maintenance*

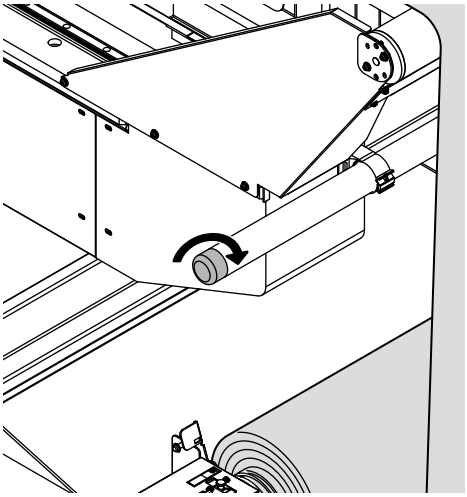
**This chapter describes maintenance of this unit.**

# Ionizing bar

Important!

- Do not touch the adjustment switch on the right of the ionizing bar.

Perform cleaning of the ionizing bar on the feeding side once a week.
Turn the dial on the left of the ionizing bar to the front until it stops for several times.
When turning the dial, the holes of the bar is closed and the ionizing needles are cleaned.



# CHAPTER 4
# Troubleshooting

**This chapter describes the actions to be taken when this unit develops any trouble or displays an error message.**

## Media cockles (While printing)

When using a thin media (50 μm thick), media contracts while curing ink (UV ink characteristic).
Some media cockle by the contraction and may affect the printings.
To remove the cockles, perform the following operations if needed.

*These operations are based on the assumption that the media is horizontally set on the printer.

- Lower the light intensity of the lamp. (☞P.2-16 "How to use the UV lamp")
- Mount the weights on the tension bar to reduce the cockles. (☞P.2-15 "How to use the weight")
- For thin media of 50 μm thick or less, do not use an unstretched one.

- If a media always cockles on the right or the left of the printing data, reversing or centering the data to the media may remove the cockles.

## Media cockles (While feeding)

Some media have a bilateral difference (one side is long, one side is straining, or others) that has been made during the production process of the roll media.
Such a media may cockle when suctioning onto the table before printing. In most cases, the cockle can be removed by hand before printing, however, if not removed, try the followings.

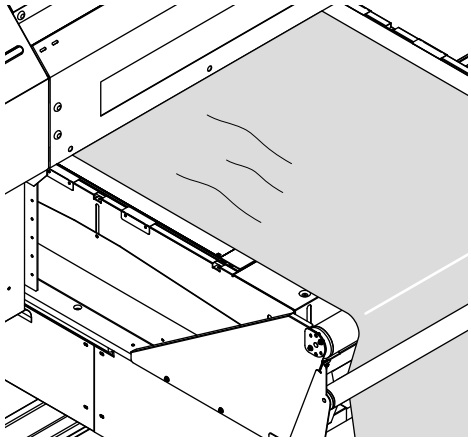
*These operations are based on the assumption that the media is horizontally set on the printer.

- Mount the weights on the tension bar to reduce the cockles. (☞P.2-15 "How to use the weight")
- Slightly adjust the fitting position of the roller in front and back of the table to change the tension of the media and to correct the media contraction on the right and the left side.
  Adjust with the following procedures. (Use the provided phillips screwdriver)

- A long media with originally skewed or stretched may skew during printing (meandering while feeding). Operate depending on the condition.
- If the problem is not solved after the following procedures, skew of the media may be originally large. If trying to feed forcibly, various problems may occur. Such a media is discouraged from using.

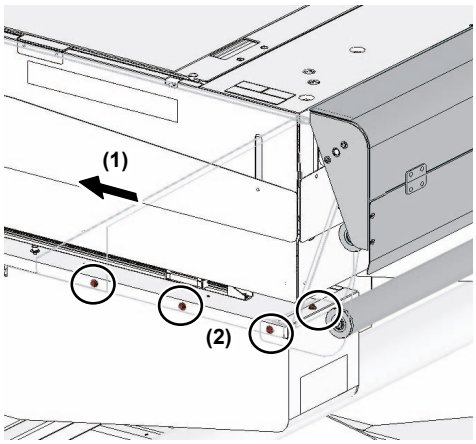
### 1 Check the direction of cockles or skews of the media on the table.

- Check the direction of cockles or skews on the table.
  The figure on the right shows the cockle and the skew are on the left.

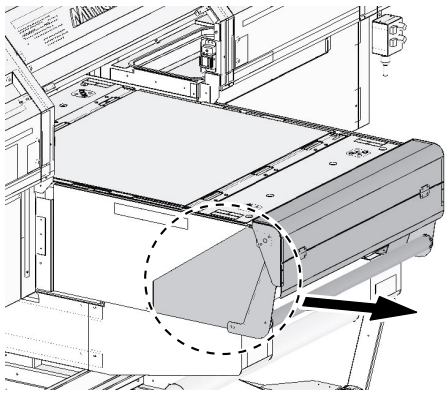


## 2 Lengthen the skewed media path to tighten the media.

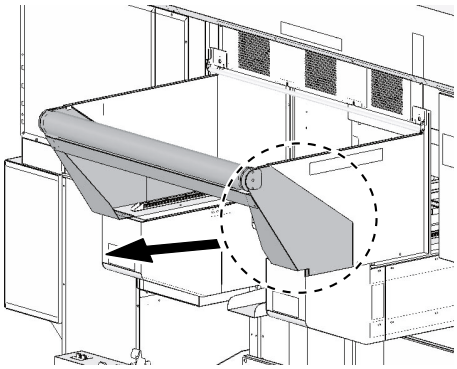
**(1)** Press the ▲ ▼ key of the operation panel to move the table from the top to the back about 100 mm.
**(2)** Loosen the screws (4 places).




**(3)** Move the screws-loosened side of the unit (shown in grey on the right figure) to the front (about 2 to 3 mm can be moved).
**(4)** Retighten the screws loosened at step (2).
**(5)** Check the condition of the cockles.



**(6)** If it is not improved enough, perform the same operation on the back of the printer.



# Media skews

When using a long media, if meandering causes unstable feeding on the table, or cockles made by taking-up or feeding affects the printings, check the followings.

- Recheck the media set (it is set parallel to the machine or the table).
- Mount the weight on the tension bar to reduce skewing. (☞P.2-15 "How to use the weight")
- If it is not solved after performing above, slightly adjust the fitting position of the roller in front and back of the table and check the condition. (☞P.4-2 "Media cockles (While feeding)")

- The roll media skews largely when it is thick and withy. Feeding a hard one continuously with skewed may cause meandering, although a stretch media is corrected.
  The main causes are the condition of the media set, or the distortion in the shape of the media.

# Troubles that messages are displayed

If something is wrong with the device, the buzzer sounds and a corresponding error message is given on the LCD. Take an appropriate corrective measure in accordance with the message.

## Error message

If any error message appears on the LCD, solve the error by following the list below.
If the same error message appears again on the LCD, contact your local MIMAKI distributor or MIMAKI office to call for service.

| Message | Cause | Solution |
|---|---|---|
| ERROR 64<br>TAKE-UP VOLTAGE | Voltage error of the take-up motor is detected. | • Check the connection of the roll option, turn off the power to the device, and turn it on after a while.<br>• If the same message appears again on the LCD, contact your local distributor to call for service. |
| ERROR 64<br>FEEDER VOLTAGE | Voltage error of the feeding motor is detected. | |
| ERROR 65<br>TAKE-UP TENSION-BAR | An error is detected when controlling the take-up unit tension bar. | • Recheck the mounting of the roll media and the position of the tension bar are appropriate. |
| ERROR 66<br>FEEDING TENSION-BAR | An error is detected when controlling the feeding unit tension bar. | |
| ERROR 67<br>TAKE-UP UNIT | An error of the take-up unit is detected. | • Check the connection of the roll option, turn off the power to the device, and turn it on after a while.<br>• If the same message appears again on the LCD, contact your local distributor to call for service. |
| ERROR 67<br>FEEDER UNIT | An error of the feeding unit is detected. | |

# *CHAPTER 5*
# *Appendix*

**This chapter describes specifications of this unit.**

# Specifications

| Item | | Specification | Remarks |
|---|---|---|---|
| **Ink Type** | | SPC-0371, SPC-0516, F-200 | |
| **Vacuum** | | Strong vacuum equipped<br>(different from the standard vacuum of the printer) | |
| **Ionizing Bar** | | Media ionizing unit equipped | |
| **Maximum Drawing Area** | **Standard scanning** | 700 mm (W) x 600 mm (D) | |
| **Usable Media** | **Maximum Width** | 710 mm | |
| | **Minimum Width** | 210 mm | |
| | **Thickness** | Between 50 μm and 1.0 mm when the roll unit is used<br>(Maximum 150 mm when the roll unit is unused) | |
| | **Outside diameter of Roll** | ϕ 250 mm or less | |
| | **Weight of Roll** | 25 kg or less<br>(no defect by sag under the machine's own weight holding both sides of the roll) | |
| | **Caliber of of the paper core** | 2 inch, 3 inch | |
| | **Drawing surface** | Inner or Outer face (either side is available) | |
| | **Fixing of the media end** | Fix with tape or weak adhesive on the paper core | |
| | **Maximum outside diameter of the take-up** | ϕ 300 mm or less | |
| **Drawing Margin** | **Roll media** | Right and left : 2 mm (default)<br>Front : 150 mm, Rear : 0 mm | • Media skew is excluded. ± 2mm crossing<br>• Margin on both sides changeable. Minimum 5 mm |
| | **Leaf media** | Right and left : 25 mm (default)<br>Front : 15 mm, Rear : 20 mm | |
| **Distance accuracy** | **Absolute accuracy** | Whichever the larger one of ± 0.3 mm or ± 0.3 % of the disignated | • Test media : Glossy photopaper<br>• Media stretch and initial meandering at setting are excluded. |
| | **Repeatability** | Whichever the larger one of ± 0.2 mm or ± 0.1 % of the disignated | |
| **Perpendicularity** | | ± 0.5 mm / 1000 mm | |
| **Media skew** | | 5 mm or less / 10 m | |
| **Print gap** | | 0.9 mm to 2.0 mm<br>(Media thickness is automatically detected by the area sensor. No manual switch) | |
| **Media heater** | | not equipped | |
| **Media cut** | | not equipped | |
| **Interface** | | USB2.0 | |
| **Command** | | MRL-III | |
| **Power specification** | | Single phase AC 200 to 240 V ± 10 %,<br>50/60Hz ± 1Hz | |
| **Power consumption** | | 4.0kVA or less (Main unit: 0.5kVA,<br>UV device: 2.4kVA, Blower: 0.7kVA) | |
| **Weight** | | 545 kg or less<br>(Printer: 500 kg + Roll unit: 45 kg) | |
| **Operation environments** | | 2250 mm or less (W) x 1570 mm or less (D) x 1370 mm or less (H) | |
| **Outer shape when option is attached** | | 2520 mm (W) x 2070 mm (D) x 1550 mm (H) | • As a working space, ensure the space of 1m for front/ rear and of 0.5m for right/ left around machine. |



NH
FW : 1.80