OPERATION MANUAL

ソフトメディア搬送キット
Soft Media Feeding Kit
OPT-J0400

取扱説明書
OPERATION MANUAL

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MIMAKI ENGINEERING CO., LTD.

URL: http://mimaki.com/

D203034-10

Foreword

Congratulations on your purchase of “Soft Media Feeding Kit” for MIMAKI color ink jet printer .

DISCLAIMER OF WARRANTY

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

On This Operation manual

- This Operation manual is describing the operations and maintenance of “Soft Media Feeding Kit” (called as this machine hereafter)
- Read this Operation manual carefully and understand them thoroughly to use.
- It is also necessary to keep this Operation manual on hand.
- 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.
- Descriptions contained in this Operation manual are subject to change without any notice for improvement.
- You can also download the latest manual from our website.

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.

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About installing this machine

Where to Install This Machine

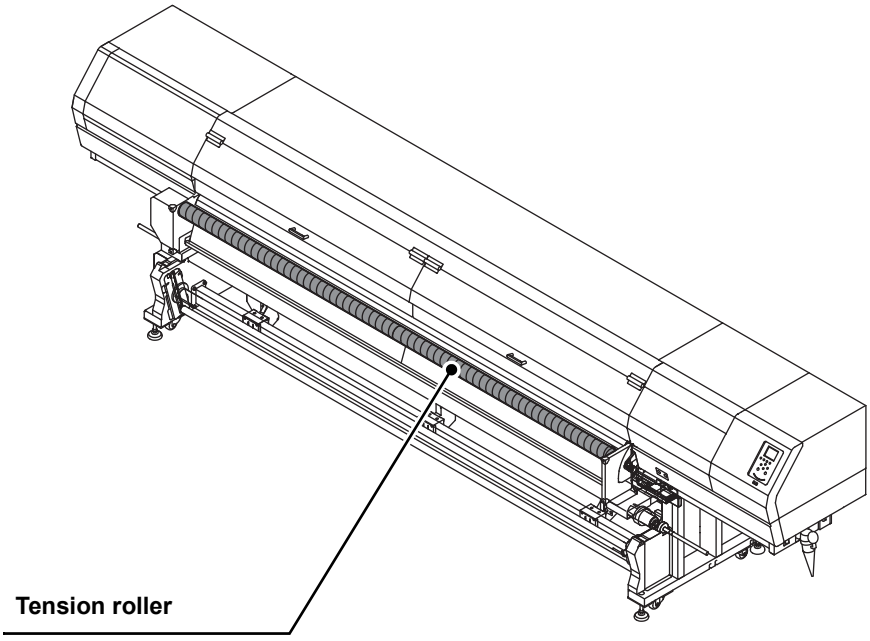
This unit is an optional kit for feeding the soft media for the Mimaki inkjet printer.
Listing in the following table the space required when mounting this unit to the Mimaki printer.
Please set up taking into account the size of the unit attached to the printer and the space necessary for the print.

Width	Depth
The width of the printer	The depth of the printer +25mm (Front side) + 70mm (Rear side)

Names of Parts and Functions

• Here, the soft media feeding kit is described with the figures of the kit mounted on the “SIJ-320UV”Mimaki UV inkjet printer.

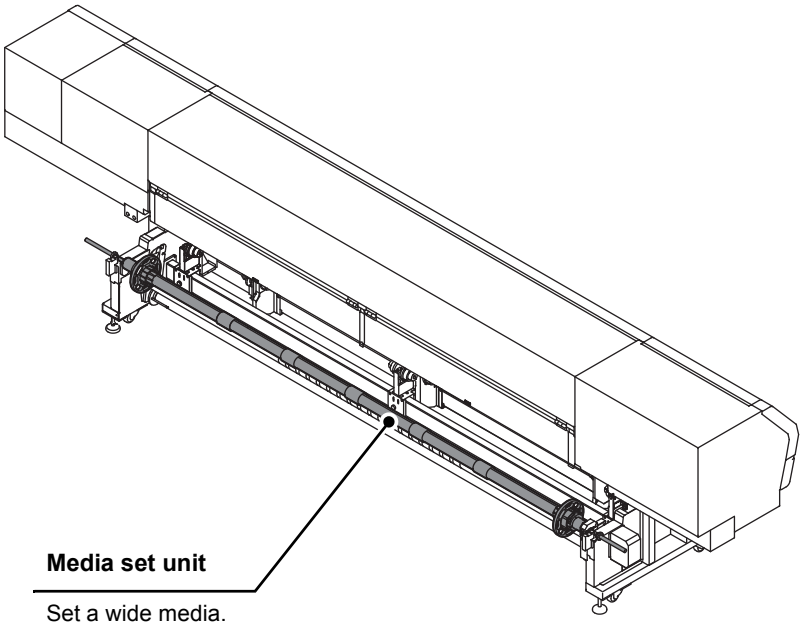
Front Side of the Machine



Tension roller

This roller feeds media.

Rear Side and Right Side of the Machine



Media set unit

Set a wide media.

Media

Usable media sizes and notes for handling are described.

Usable sizes of media

Type of Recommended media *1		Soft PVC film (DELUN 4025A (thickness = 0.25mm))
Maximum width		3250mm
Minimum width		210mm
Maximum printing width		3200mm
Roll media	Thickness	1mm or less (Should not cause trouble during media transport)
	Roll outside diameter	Φ250mm or less
	Roll weight	100kg or less
	Roll inside diameter	3 inches
	Side printed	Depends on the media to be used
	Roll end treatment	The roll end is gently fixed to the core with weak-adhesive tape or weak glue for easy removal.

*1. Depending on a media to be used, it may not adhere or the media may not be properly fed. Always try and check the media to be used beforehand.

Caution in handling of medias

Pay attention to the followings for handling of medias.

Important!

- **When handling media, wear the gloves.**
  If you touch the media with your bare hand, the media may be stained due to fingerprints or oil of your finger. Be careful about it.
- **Do not use the heater.**
  Waviness may occur on the media and it may cause media clogging.
- **Use media recommended by MIMAKI to ensure reliable, high-quality printing.**
  Set the heater temperature to meet the characteristics of the media.
- **Pay attention to the expansion and contraction of the media.**
  Do not use media immediately after unpacking. The media can be affected by the room temperature and humidity, and thus it may expand and contract.
  The media have to be left in the atmosphere in which they are to be used for 1 day or more after unpacked.
- **Do not use curled media.**
  This may result in paper jamming.
  If a regular-sized coated sheet of media is rolled and stored, the coated side has to face outside.
- **Be careful to dusts on the edge face of the media.**
  Some rolls have dusts contained in the package gathered on the edge surface of the roll. If you use as it is, the drawing quality may be degraded due to nozzle missing or ink drops. Be sure to set the roll after removing dusts adhering on the edge face of the roll.

Setting a Media

The method for setting media when using the Soft Media Feeding Kit is explained below.

- In general, this section describes the changes that should be made in the media setting procedure when using the Soft Media Feeding Kit.
- For more information about the basic media setting procedure, refer to the operation manual that came with your printer.

Adjusting the Head Height

If you use a soft PVC, adjust the head height as follows;

Lever position	Vinyl Standard
Distance between platen and head	1.7mm

- Please raise the lever when the media is prone to gather dust in the head or is often stained with ink traces.

Setting a roll media

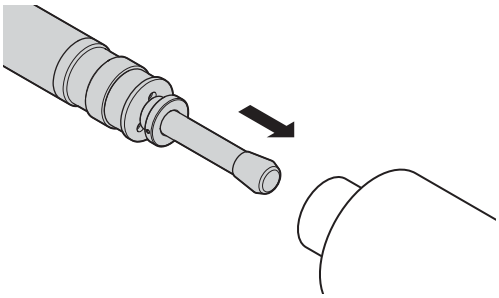
Important!

- When you set the roll media, please use a "media set axis" and "roll holder" shipped with the Soft Media Feeding Kit.
- When secure the media to the take-up device, secure the media with face in or face out according to the soft PVC media to be used. (Please refer to the operation manual of your printer for the method of securing media.)

Loading the media on the media set shaft

1 **Insert the "Media set shaft", which is included in the Soft Media Feeding Kit box, into the roll media.**

- Put roll media at the center of the wide media set area.

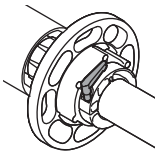


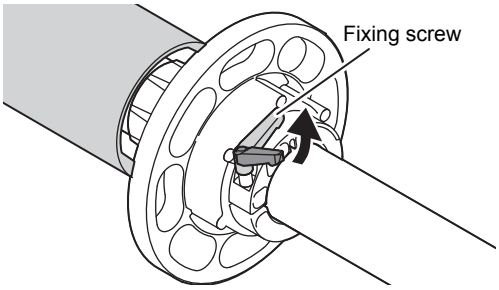
2 **Set the roll holder for right and left.**

(1) Insert the roll holder (right and left) in a paper core and tighten with the fixing screw.

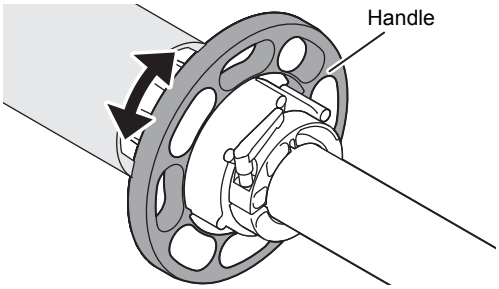
Caution

- After tightening the screw, turn the ratchet handle in toward the roll holder. If ratchet handle protrudes, it will cause to be involved.



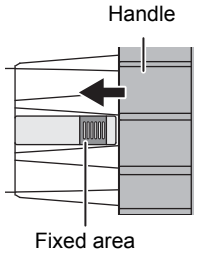


(2) Turn the handle of the take-up roll holder to tightly secure the paper core.

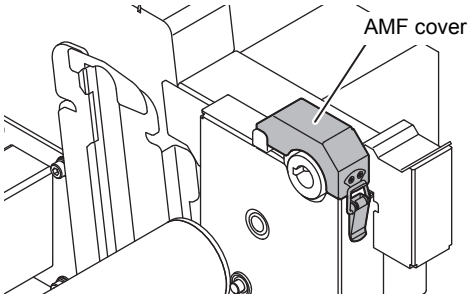


Fixed area of the roll holder

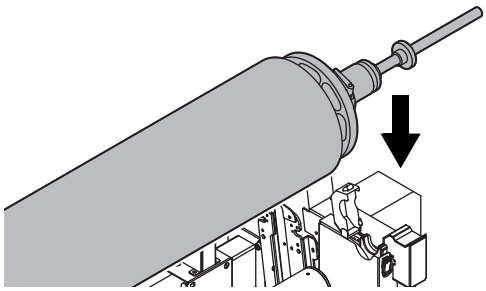
- Install the unit so that the handle is fixed within the "green area" of the sticker on the roll holder.



3 **Open the AMF cover.**



4 **Install the media set shaft (with the roll media) on the feeding device, and then close the AMF cover.**



5 **Regarding the procedure for feeding the media to the front of the unit, refer to the operation manual that came with your printer.**

To secure the media to a media take-up device

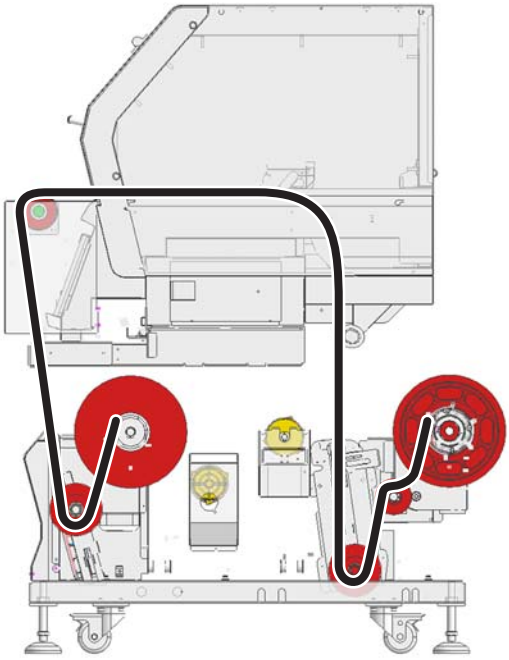
Important!

- Prior to securing the media, please check the printing side of the media (inside / outside) always.

- When taping the media to the roll axis, it is recommended that you put a tape evenly so that the media does not float in between the tape and the tape.

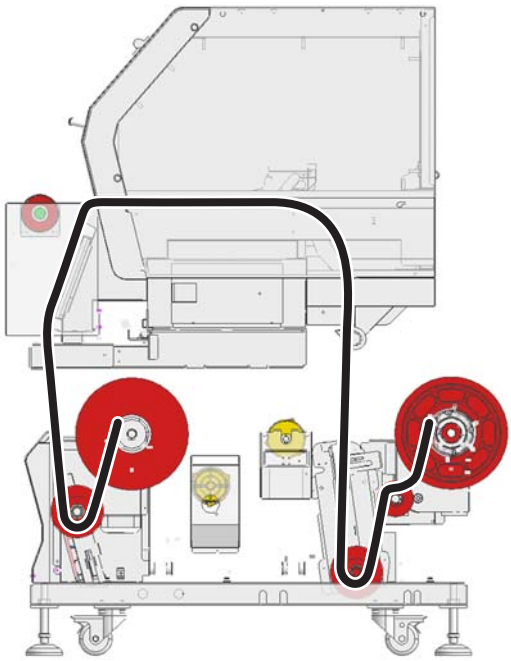
In the case ofsoft PVC media(4025A)

Set to ON the setting of the tension roller.
Set to ON the take-up unit and feeding unit.



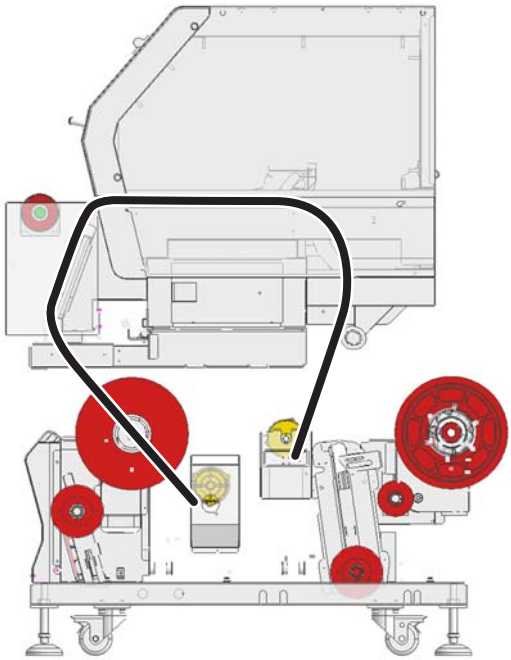
In the case of tarpaulin media

Turn OFF the setting of the tension roller.
Set up the take-up unit and the feeding unit to ON.



In the case of PVC / Film media

Turn OFF the setting of the tension roller.
Set the torque of the small take-up unit to MAX..



Installing the counter weight for adjusting the take-up/ feeding tension-bar weight

Install the proper number of the counter weight depending on the media type.
Counter weight can be installed up to three sets in each of the right and left of the tension bar.

Caution
- The weight of the counterweight will be about 500g each. (The combination of up and down, one set is about 1kg)
- Handle the counter weight with care.
  If your finger or foot is stuck in the weight, you may be injured.

Important!
- There is no distinction between "for the upper" and "for the lower" to the counterweight.
  Counterweight can be installed either up or down.
- Not to lose the unused counter weight, put it in the storage box.

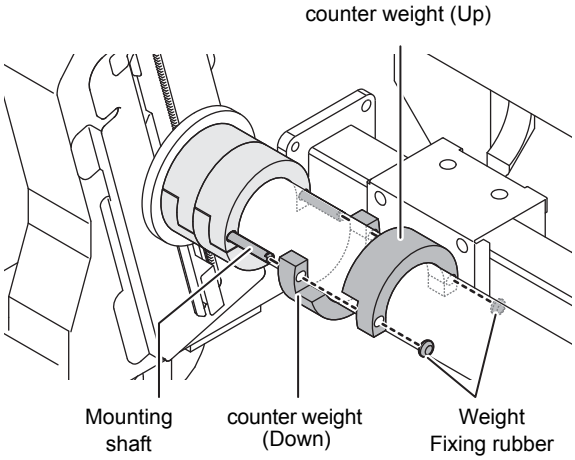
Media condition	Solution
Ruck is generated in the media feeding direction.	The tension applied on the media is too strong. According to your media, reduce the counter weight.
The media skews at printing.	
The media sags and the machine cannot take it up beautifully.	The tension applied on the media is too weak. According to your media, increase the counter weight.
The media floats on the platen.	

If you want to heavier take-up / feeding tension-bar, please attach the weights in the following manner.

(1) Insert a counter weight for the lower into the mounting shaft

(2) Insert the counter weight for the upper into the mounting shaft, and combine with a counter weight for the lower

(3) Fasten the counter weight with the weight fixing rubber



- If you are using the recommended media (DELUN made 4025A), please attach12 pieces of counterweight to the tension bar (about 6kg / top and bottom of the combination in 6 pairs)
- When installing a counterweight to the tension bar, please set to be on the left and right equally.
  f you are using the recommended media, install triplicate on one side.

Please check the work after setting the media

Once you have set the soft media, please execute ”Print of the media check pattern” and ”Media confirmation feed” in order to check if it can properly feed the media and successfully print.

Set the tension roller to ON

1. **Press the [FUNC1](MENU) in Local.**
2. Press [▲][▼] to select **“Machine setup”**, and press the [ENTER] key.
3. **Press the [FUNC1].**
4. Press [▲][▼] to select **“Tension Roller”**, and press the [ENTER] key.
5. **Press [▲][▼] to select “ON”, and press the [ENTER] key.**
6. **Press the [END/POWER] key several times to end the setting.**

- Setting of the tension roller can be set on the screen after the media detection.

Perform a media check feed

In the media confirmation feed, please focus to check the following two points.
- If the media can successfully feed
- If wrinkles do not occur in the media during the feed

If there is an abnormality in the above two points, please adjust the weight of the tension bar by changing the number of counterweight.

1. **Press the [FUNC2](TEST PRINT/CLEANING) in Local.**
2. Press [▲][▼] to select **“Media Check”**, and press the [ENTER] key.
3. Press [▲][▼] to select **“Feed”**, and press the [ENTER] key.
   - Execution screen will be displayed.
4. **Press the[ENTER] key to start the feed**
   - When wrinkle occurs, please add a counterweight to tension bar.

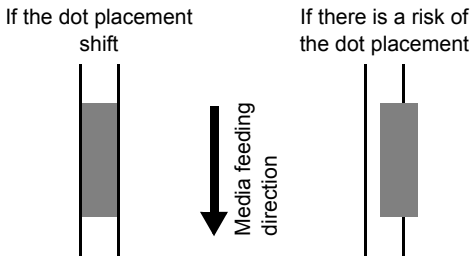
Important!
- If the tension bar is too heavy, the media will be stretched. Please attach the counter weight of the appropriate amount according to the characteristics of the media.

5. **Press the [END/POWER] key several times to end the setting.**

Print a media check pattern

Print a media check pattern, and make sure there is no ink landing deviation caused by the media stretch.

1. **Press the [FUNC2](TEST PRINT/CLEANING) in Local.**
2. Press [▲][▼] to select **"Media Check"**, and press the [ENTER] key.
3. Press [▲][▼] to select **"Print"**, and press the [ENTER] key.
   - Execution screen will be displayed.
4. **Press the [ENTER] key to start the print**
5. **Verify the printed patterns**
   - The following pattern is printed.
   - **If the dot placement shift does not occur :**
     Magenta will fall between the two of cyan line. It is considered that there is no deterioration of image quality due to the media stretch.
   - **If there is a risk of impact of the dot placement shift :**
     Magenta will not fall between the two of cyan line. It is considered that the media is stretched due to too heavy tension bar.
     Since it becomes a cause of deterioration in image quality, please make adjustments of the counterweight.



Important! • Please perform the entire media for the confirmation of pattern,

6. **Press the [END/POWER] key several times to end the setting.**

• Setting of the tension roller can be set on the screen after the media detection.

When using small take-up device

When using small take-up device, please do the following tasks in order to stabilize the image quality.

- Set the "Tension rollers", " feeding unit ", " take-up unit "of the machine settings to OFF
- Set the torque limiter of small take-up device to "LMAX.."

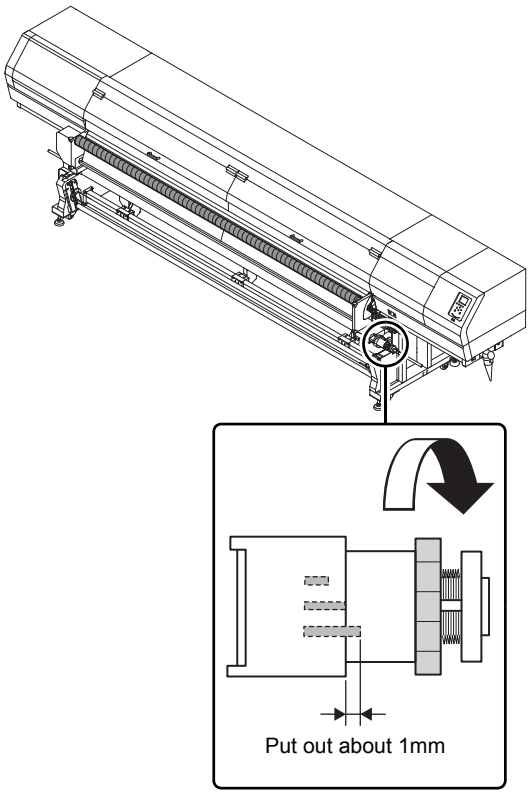
Set the Tension roller to OFF.

1. **Press the [FUNC1](MENU) in Local.**
2. Press [▲][▼] to select **"Machine setup".**
3. **Preess the [FUNC1](<<) in Local.**
4. Press [▲][▼] to select **"Tension Roller", and press the [ENTER] key.**
5. Press [▲][▼] to select **"OFF", and press the [ENTER] key.**
6. **Press the [END/POWER] key several times to end the setting.**

Set the Feeding unit and Take-up unit to OFF.

1. **Press the [FUNC1](MENU) in Local.**
2. Press [▲][▼] to select **"Machine setup".**
3. **Press [p][q] to select "Feeding Unit", and press the [ENTER] key.**
4. Press [▲][▼] to select **"OFF", and press the [ENTER] key.**
5. **Press [▲][▼] to select "Take-up Unit", and press the [ENTER] key.**
6. Press [▲][▼] to select **"OFF", and press the [ENTER] key.**
7. **Press the [END/POWER] key several times to end the setting.**

Set the torque limiter of the small take-up device to "MAX."



Maintenance

Maintain the machine regularly or as necessary so that its accuracy will be maintained and it can continue to be used for a long time.

Precautions for Maintenance

Pay attention to the following items when maintaining this machine.

	• When using cleaning solution for maintenance, be sure to wear the supplied glove and protective glasses.
	• Never disassemble the machine.Disassembling it can result in electric shock hazards or damage to the machine. Before maintenance, be sure to turn off the power button and main power switch, and unplug the power cable;otherwise, an unexpected accident may occur.
	• Prevent moisture from entering the machine.Moisture inside the machine can cause electric shock hazards or damage to the machine.
	• To ensure stable ink jetting, it is necessary for the machine to eject a small amount of ink (flushing) regularly when a printing (outputting) operation has not been performed for a long time. • When the machine is not to be used for a long time, turn off only the power button on the front side, leave the main power switch at the side turned ON (in the position of |), and leave the power cable connected. • Do not use benzene, thinner, or any chemical agent containing an abrasive.Such materials can deteriorate or deform the surface of the cover. • Do not apply a lubricant, etc. to any parts inside the machine. Doing so can cause printing failure. • Be careful that the cleaning solution, ink, etc. not to stick to the cover because this may cause the surface of the cover to deteriorate or deform.

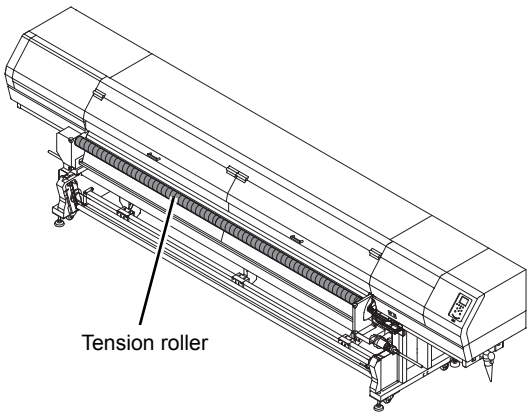
About Cleaning Solution

Use the cleaning liquid dedicated for the ink being used.

Type of Ink	Applicable maintenance washings
UV ink	Washing liquid for maintenance (SPC-0568)

Cleaning the tension roller

Remove ink stain etc. adhering to the tension roller at the front side of the machine.
Moisten soft cloth with water or waterish mild detergent, squeeze tightly and then wipe it off.



Troubleshooting

Take appropriate actions as described below before taking the trouble as a failure.
If still the problem is not solved after troubleshooting, contact your dealer or an office of MIMAKI.

Media get jammed / media is soiled

Media jamming or stained media is considered to be due to the use of an unsuitable media or improper setting of media.

Is a recommended media used ? → **No** → Use recommended media.

Is the appropriate tension applied to the media? → **No** → Adjust the counterweight, and apply the tension that fits your media. (→P.8)

Is the media not curled or bent ends ? → **No** → Avoid using any media with curls or bent ends. In addition, when the tip is bent, it will be the cause of the wound wrinkles.

↓ **Yes**

Is the height of the head proper? → **No** → Adjust the distance between the media and the head will be 1.7 mm to 2 mm.

● **If the media gets clogged, perform the work below:**

Open the front cover and raise the clamp lever. → **Remove the clogged media.** → **Close the front cover.**

Image quality is poor

This section describes the corrective actions to be taken in case the image quality is not satisfactory.
Take remedy for particular problems with image quality. If the remedy does not work, contact your dealer or an office of MIMAKI.

Phenomenon	Measures
White lines / blur / dark stripes (in the direction of travel of the heads)	**(1)** Execute the head cleaning. **(2)** Perform maintenance of the inside of the station. **(3)** Execute the [Feed Comp.] function. **(4)** If any pieces of paper or dust is attached on the path of the heads such as media press, remove it.
Characters are double- or triple-printed in the media feed direction	**(1)** Execute the [Feed Comp.] function.
Ink drops falling on media during printing	**(1)** Execute the wiper cleaning. **(2)** Execute the ink cap cleaning. **(3)** Clean around the head. **(4)** Execute the head cleaning [Normal]. **(5)** Set a shorter interval of Interval Wiping operation.

When media heaves up at feeding

We call the status of heaving media at feeding “cockling”.
When media cockling occurs, check the following items:

Note/ checking items	Measures
Checking media set status	**(1)** Check that the media is set straight and reset it.
Media feeding	**(1)** For roll media, feed the media by about tens of centimeters to one meter. **(2)** For leaf media, press [▲][▼] and perform feed/ back feed.
Heighten the head	**(1)** Please raise the height of the head, correct the dot position then print.

If the wrinkles on the platen

Note/ checking items	Measures
Check the media tension	**(1)** Please apply higher tension to the media. Low tension may cause wrinkles.

If the ink landing position is shifted in the Y direction

Note/ checking items	Measures
Check the media tension	**(1)** Please lower the tension applied to the media. The media applied high tension are not fed smoothly and it will cause the shift of the ink landing position.

When using non-recommended medias

Note/ checking items	Measures
Understand the characteristics of the media	**(1)** Reduce the tension applied to the media. The media applied high tension are not fed smoothly and it will cause the shift of the ink landing position.