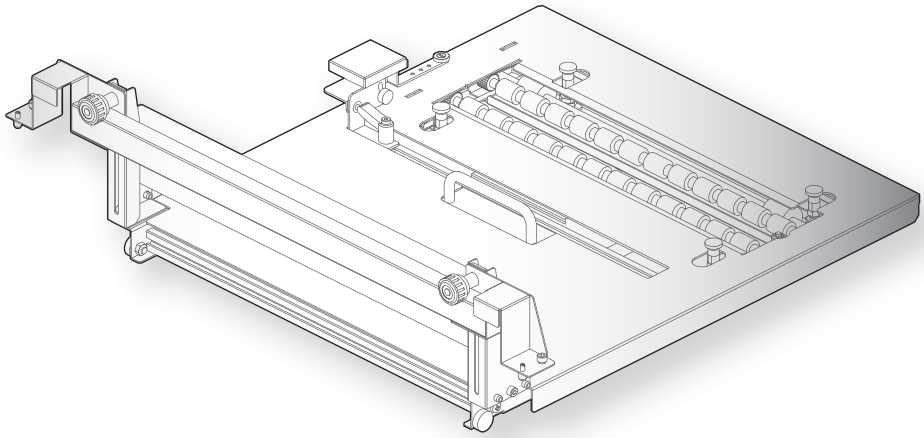
MUTOH

Rotary Unit
IJ-RTU-01 / IJ-RTU-02
Operation Manual



Unpacking 2
Attaching the rotary unit 7
Nozzle check and cleaning 16
Loading the media 28
Basic printing instructions 37
Detaching the rotary unit 41
Maintenance 46
Messages and Error Messages 51
Troubleshooting 53
Safety Instructions 58
Revision History 61

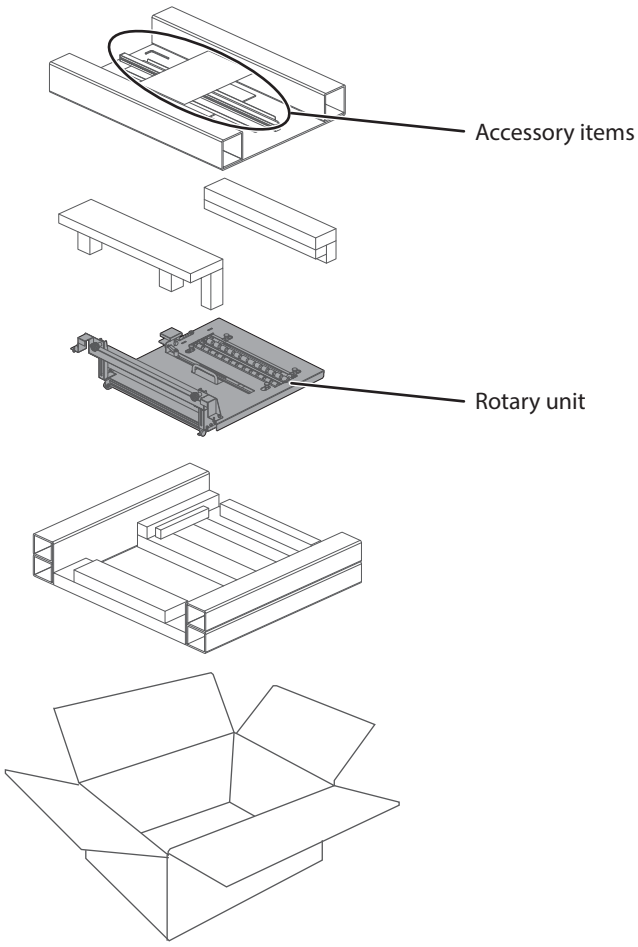
- Unauthorized copying or duplication of the whole or part of the contents of this Manual is prohibited.
- Every care has been taken in writing the contents of this Manual, but please contact MUTOH or the dealer you purchased the product from if you find any unclear, erroneous or otherwise unsatisfactory content in the Manual.
- Please be aware that MUTOH will not be liable in any way for failures or accidents that result from handling or operating the printer according to any procedures other than those set forth in this Manual.
- Company names and product names that appear in this Manual are registered trademarks of the respective companies.

- This operation manual is intended for users of XPJ-661UF.
  If you are using rotary unit on VJ-626UF, download "Rotary Unit Operation Manual (Model: VJ626-ROTARY)" from MUTOH Club (https://club.mutoh.co.jp/mutoh/guser/) or contact MUTOH or your local MUTOH dealer.

Unpacking

Unpacking the Unit

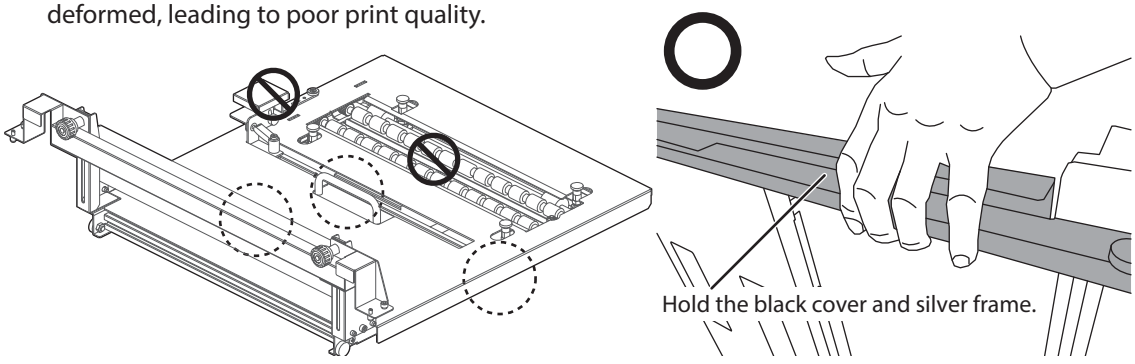
[1] Open the packing box. Remove the packing materials, and take out accessory items and rotary unit.



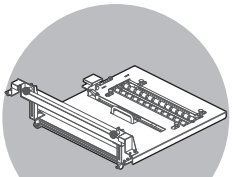
⚠ CAUTION

- When carrying this product, always hold the handle with one hand, and put the other hand lightly on the attachment or side of the product.
  Do NOT hold rollers or media retainer. It can cause damage to the Unit.
- When holding the side of the product, make sure to hold the black cover and silver frame on each side of the unit.

  If holding the black cover only, you may have a chance to drop the product or the cover can be deformed, leading to poor print quality.



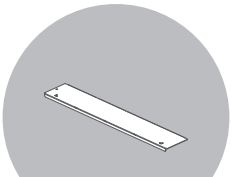
[2] Check that the following items are included.



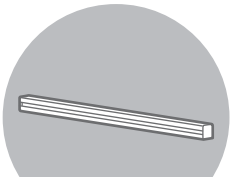
Rotary unit: 1

Rotary Unit Handling Notes: 1 Japanese / English

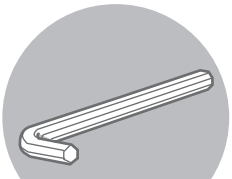
Operation Manual: Japanese / English (this document)



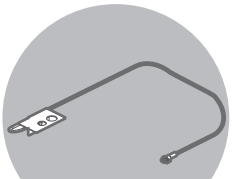
Dummy table: 1



Guide bar: 1



Hex wrench: 1



Unit detection plate: 1 (IJ-RTU-02 only)

Screw (M3 x 5): 1 (IJ-RTU-02 only)

Note

Dummy table is used for a nozzle check while the rotary unit is installed in the printer.

Required items for installing the Unit

To install the Unit, you will need the following item in addition to the accessory items.

Phillips-head screwdriver : 1

Note

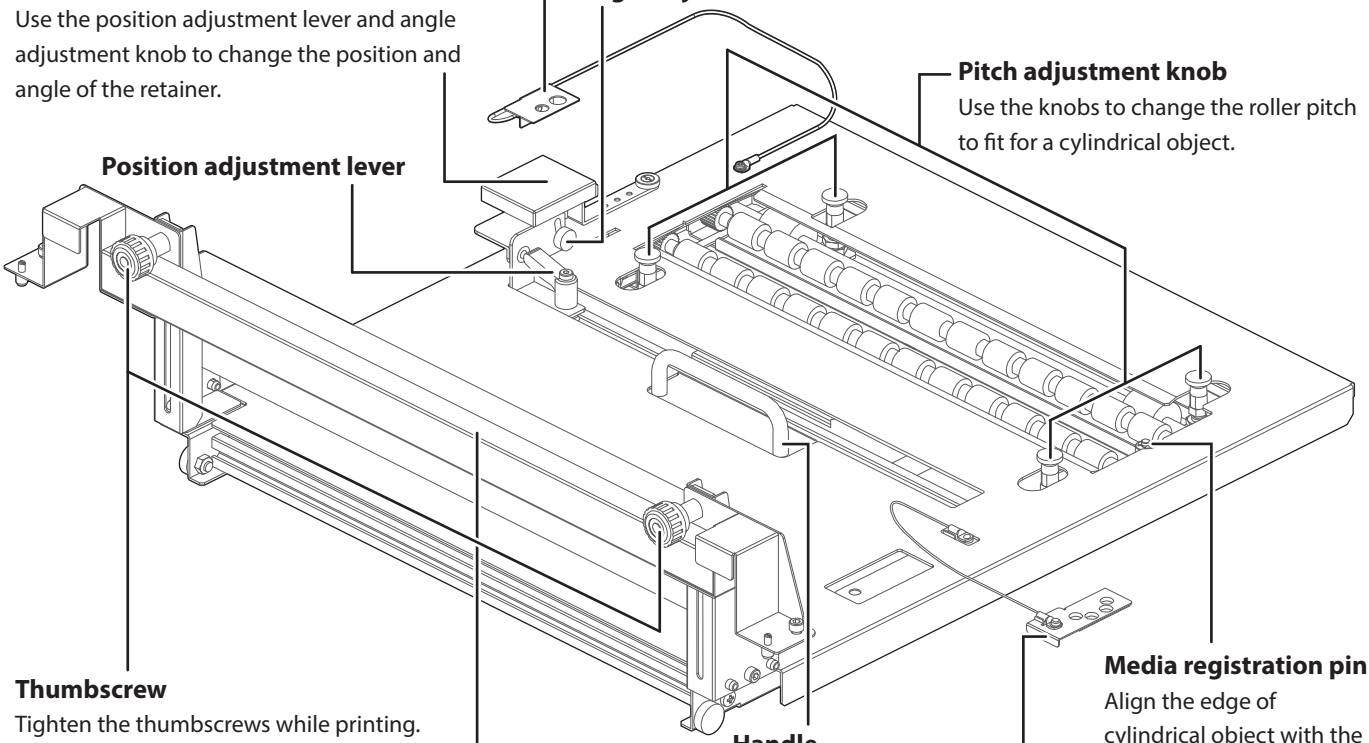
If you are using rotary unit on VJ-626UF, see the relevant operation manual for firmware and print application requirements.

☞ "About the operation manual" P.3

About the operation manual

This operation manual is intended for users of XPJ-661UF.
If you are using rotary unit on VJ-626UF, download "Rotary Unit Operation Manual (Model: VJ626-ROTARY)" from MUTOH Club (https://club.mutoh.co.jp/mutoh/guser/) or contact MUTOH or your local MUTOH dealer.

Name of each part



Media retainer
Hold a cylindrical object to stay on the rollers while printing.
Use the position adjustment lever and angle adjustment knob to change the position and angle of the retainer.

Unit detection plate (IJ-RTU-02 only)[*1*2*3]
Attach this plate to the obstacle detection sensor on the printer.

Angle adjustment knob

Pitch adjustment knob
Use the knobs to change the roller pitch to fit for a cylindrical object.

Position adjustment lever

Thumbscrew
Tighten the thumbscrews while printing.
When the table needs to move up or down, loosen the thumbscrews.

Handle
Hold this handle when moving this Unit.

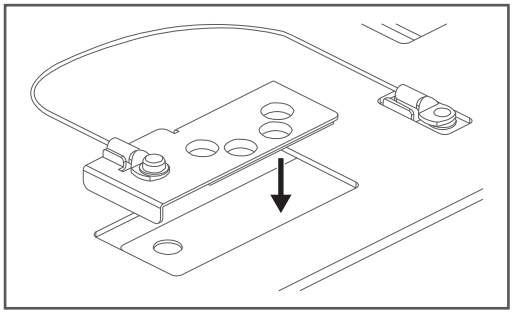
Media registration pin
Align the edge of cylindrical object with the media registration pin.

Attachment
Loosen the thumbscrews so that the table with rotary unit installed can move up or down to the appropriate height for the diameter of media.

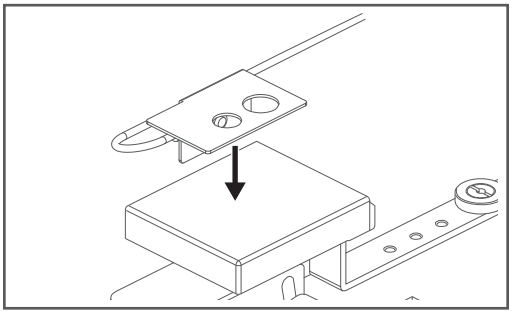
Unit detection plate (IJ-RTU-01 only)[*1*4]
Attach this plate to the obstacle detection sensor on the printer.

*1 When removing the rotary unit from the printer or while not using the rotary unit, stick the unit detection plate to the rotary unit.

IJ-RTU-01



IJ-RTU-02



*2 The position to attach the unit detection plate varies depending on where the obstacle detection sensor is located in your printer.

☞ "Attach the unit detection plate (IJ-RTU-02 only)" P.9

*3 To install the rotary unit (IJ-RTU-02) on VJ-626UF, you will need an optional rotary unit detection plate (IJ-RTUDP-01).

*4 To install the rotary unit (IJ-RTU-01) on XPJ-661UF with the serial number JM2U001001 or later, you will need an optional rotary unit detection plate (IJ-RTUDP-02).

Environmental Condition

Use this Unit under the following printer environmental condition:
☞ XPJ-661UF Startup Guide

Environmental conditions (complies with the printer operating condition)	Operating environment	Temperature 20 to 32 °C, Humidity 40 to 60% No condensation
	Recommended Printing Environment	Temperature 22 to 30 °C, Humidity 40 to 60% No condensation
	Environment for storage	Temperature -20 to +60 °C, Humidity 20 to 80%

Requirements for usable media

Usable media

Printable objects	Cylindrical rigid object *Cylindricity: Up to 0.5 (print quality is not guaranteed)
Diameter	Φ 30 mm to Φ 120 mm
Maximum width	360 mm
Maximum Weight	1.0 kg

WARNING	**Do NOT print on containers, bottles or packaging used for food or drink application.** **Do NOT print on areas where can directly or potentially contact with mouth.**

Important!

The minimum media width and length that are settable in the User Type for the printer are 30 mm x 20 mm.

When printing on an object smaller than this, take extra care not to print on the rotary unit.
Once UV ink cures on the Unit, you can hardly remove it.

Note

Contact your local MUTOH dealer about roll media recommended for your printer.

Cautions for handling media

To achieve expected print quality, follow the instructions below.
Failure to follow these instructions could result in damage to the printer.

- Do NOT use heat-sensitive media.
  It can be deformed by prolonged irradiation from the UV-LED lamp, or affect its image quality, or cause it to contact with the head.
- Do NOT use light reflective object like a mirror or light transparent object that can cause irregular reflection of UV light.
  This will cure the ink on the print head.
- Using ethanol or isopropyl alcohol used for disinfectant, clean the surface of object before printing.
  It helps to remove dirt and oil from the print area, and avoid static electricity as well.

Correctly load and set up media

When loading a new media, make sure to place it on an appropriate position and input correct media information.
If wrong media size is entered, the printer will print on unintended area on the rotary unit. It can also cause poor print quality, ink mist or head strike.

Enter the correct diameter of object as much as possible.
Before loading a cylindrical object, measure the actual diameter, then place it on the rotary unit.

Please also read “Precautions when using this printer” in the XPJ-661UF Operation Manual.

Attaching the rotary unit

Note

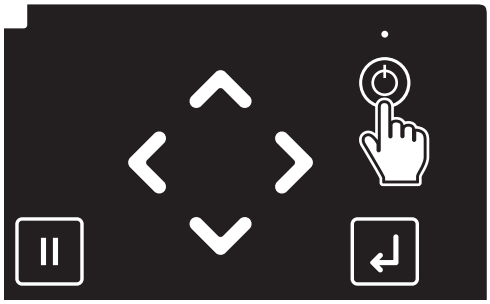
If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

"About the operation manual" P.3

Put printer into rotary mode

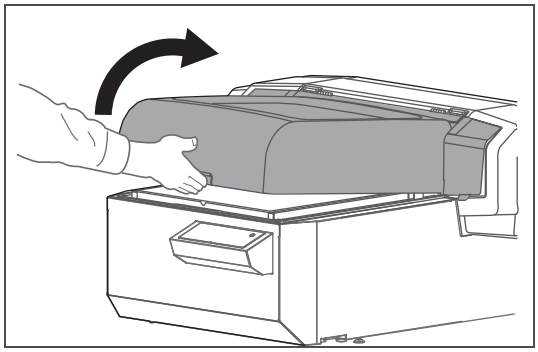
You will need a Phillips-head screwdriver (commercially available) for this procedure.

[1]



Make sure that the power button is turned on.

[2]

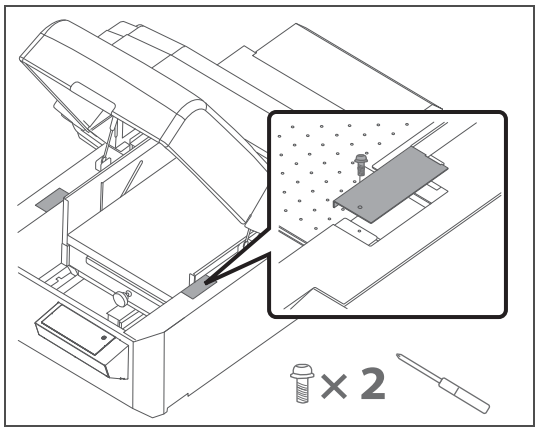


Open the front cover.

Note

Hold the handle on the front cover to gently open it.
Fully open the front cover.

[3]

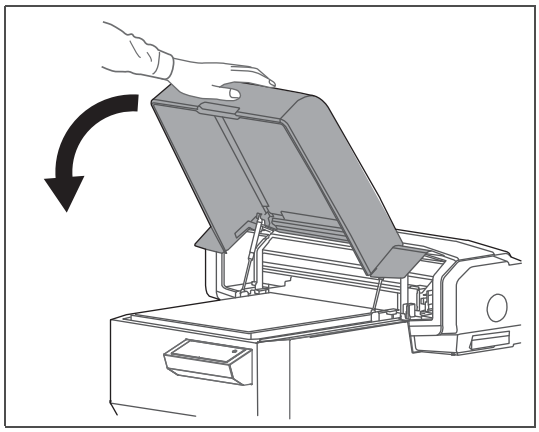


Use the Phillips-head screwdriver to remove the screws, and then remove the attachment covers (x2) from the printer.

Note

- If it is difficult to remove the covers, put the printer into Rotary Mode, then remove them from the printer.
- Make sure to keep the screws and attachment covers removed from the printer.

[4]

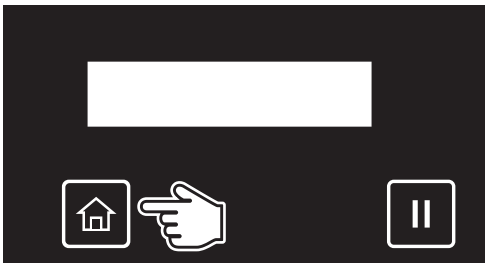


Close the cover.

Note

Hold the position shown on the left and gently close the cover.

[5]



Tap [Home].

[6]

- Use ▼ to choose the menu shown left.
- Tap ▶.

[7]

Tap ▶.

[8]

Tap [Enter].

[9]

Tap ▼.

[10]

Tap [Enter].

The message on the left will appear.

[11]

Remove the media and the jig on the table, and then tap [Enter].

Please Wait

The table moves to the installation position of rotary unit.

[12]

Install Rotary Unit
then Tap Enter

- Next, you will install the rotary unit in the printer.

Note

You can cancel switching to Rotary Mode by tapping ◀ while the following message is displayed on the operation panel.

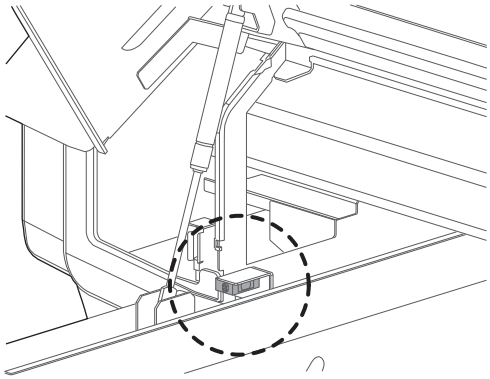
- "Unload Media then Tap Enter"
- "Install Rotary Unit then Tap Enter"

Attach the unit detection plate (IJ-RTU-02 only)

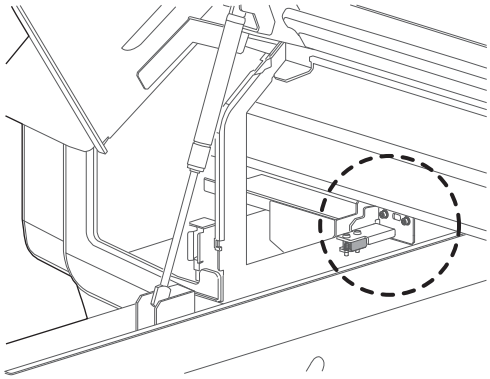
The position to attach the unit detection plate varies depending on where the obstacle detection sensor is located in your printer.
You will need a Phillips-head screwdriver (commercially available) for this procedure.

[1] Locate the obstacle detection sensor in your printer.

- If the sensor is located in the front side of the printer.

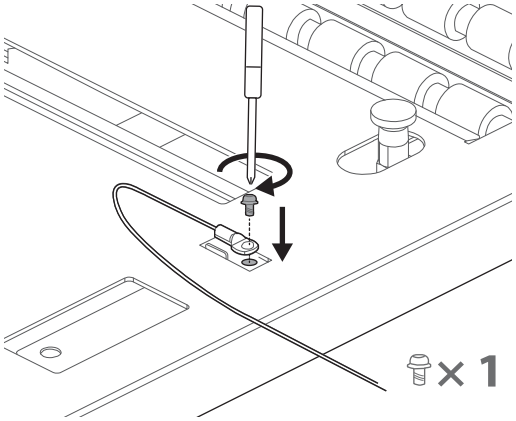


- If the sensor is located at the back of the printer.

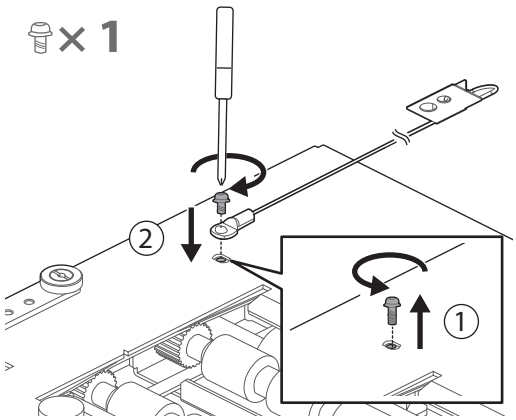


[2] Attach the unit detection plate to the rotary unit.
Use a Phillips screwdriver to fasten it with the supplied screw.

- If the sensor is located in the front side of the printer, attach the unit detection plate on the origin side.



- If the sensor is located at the back of the printer, (1) remove the screw that is fastened to the rotary unit on the non-origin side and (2) attach the unit detection plate to the screw hole with the screw supplied with the rotary unit.



Note

To install the rotary unit (IJ-RTU-02) on VJ-626UF, you will need an optional rotary unit detection plate (IJ-RTUDP-01).

Install rotary unit

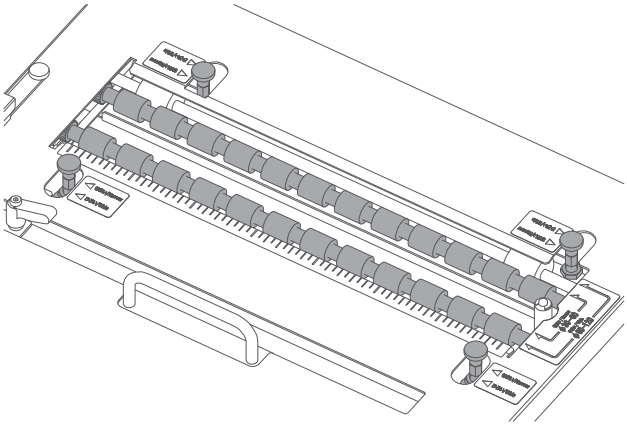
This procedure requires the hex wrench supplied with the printer.

⚠ CAUTION	• **When moving this Unit, always hold the handle and the area shown with dotted circles.** Do NOT hold rollers or media retainer. It can cause damage to the Unit. • **When holding the side of the product, make sure to hold the black cover and silver frame on each side of the unit.** If holding the black cover only, you may have a chance to drop the product or the cover can be deformed, leading to poor print quality.

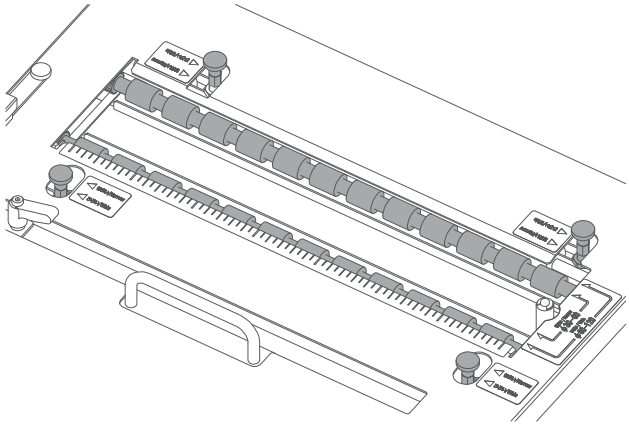
[1] Change the roller pitch to fit for a cylindrical object to be loaded.

- Narrow: Φ30 mm to Φ80 mm
- Wide: Φ60 mm to Φ120 mm

<Roller Pitch: Narrow>

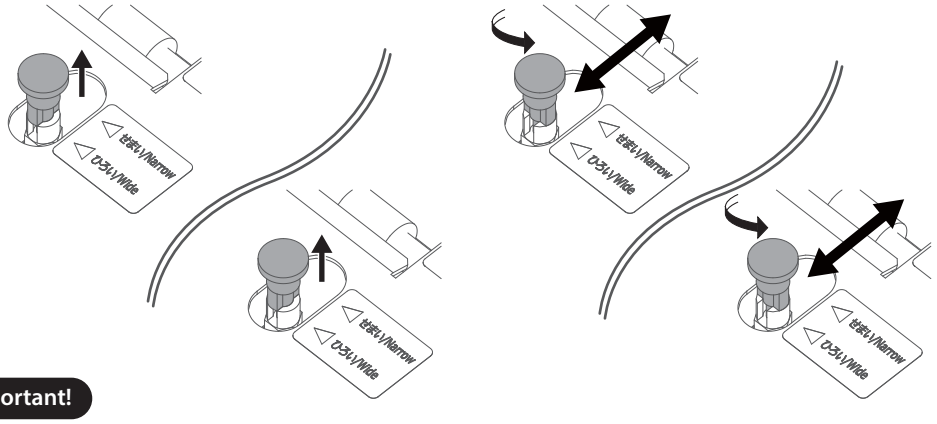


<Roller Pitch: Wide>



<How to change roller pitch>

・Pull up the knob and rotate it anticlockwise by 90 degrees to unlock it (x4).
・Then move the knobs to change the roller pitch.
・Once the pitch has been changed, rotate the knob clockwise by 90 degrees to lock it (x4).



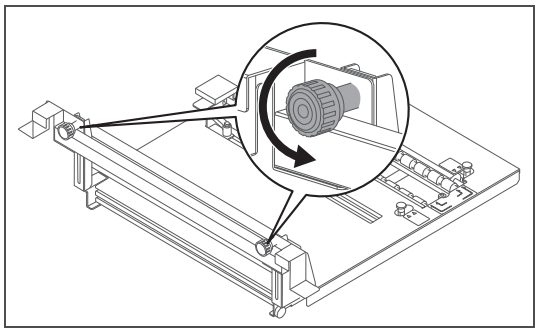
Important!

When changing the roller pitch, always slide the right and left knobs per roller at a time.
Do NOT slide one knob only or two knobs separately. The roller cannot move correctly.

Note

- All pitch adjustment knobs must be set to the same setting (“Narrow” or “Wide”). If not, the printer cannot print on an object correctly.
- If you are using Φ60 to Φ80 mm cylindrical object, you can choose either one of pitch setting. You can get more consistent result with the Wide setting.

[2]



Loosen the thumbscrews (x2) to unlock the attachment.

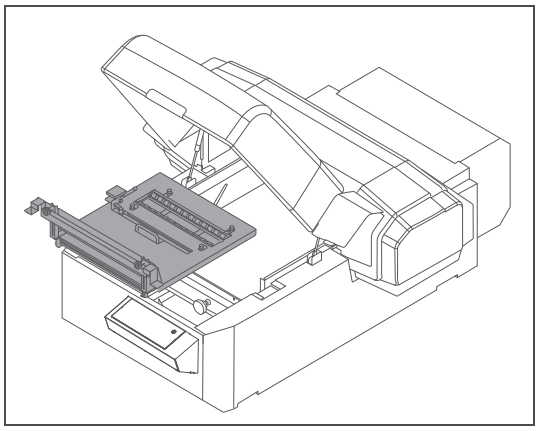
- Check that the attachment can slide up and down smoothly.

Note

Rotate the thumbscrews more than half a turn.
Be careful not to loosen too much.

[3] Open the front cover.

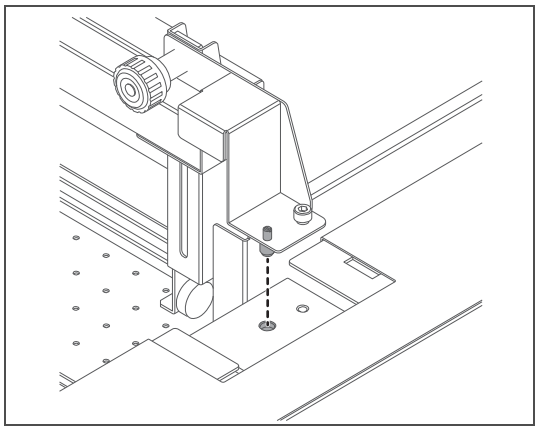
[4]



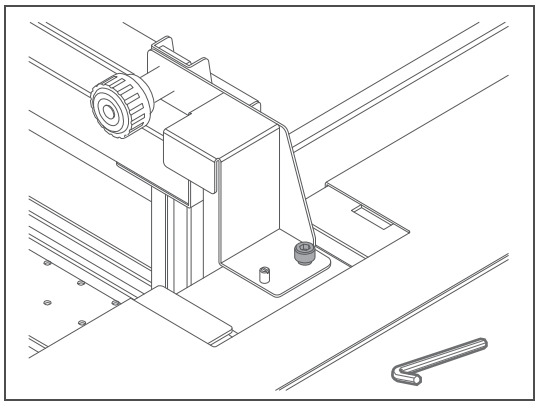
Install the rotary unit in the printer.

Important!

When installing rotary unit, be careful not to hit the inside of printer. It may affect print quality.



- Align the registration pin on the rotary unit with the hole on the printer and insert it.



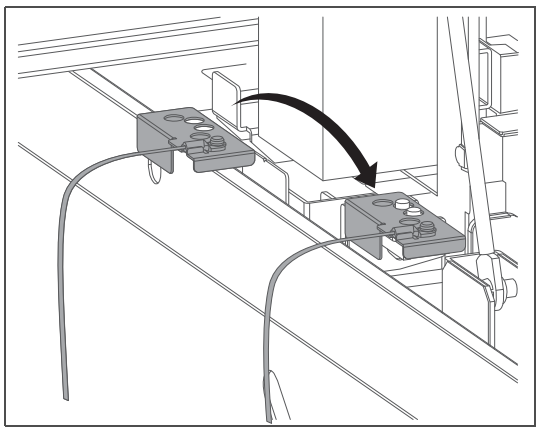
- First, tighten the screw on the right side of rotary unit using the hex wrench supplied with the rotary unit.
- Then, tighten the other side of screw.

[5] Attach the unit detection plate to the obstacle detection sensor.

- Make sure that the wire of the plate does not get twisted.

Note

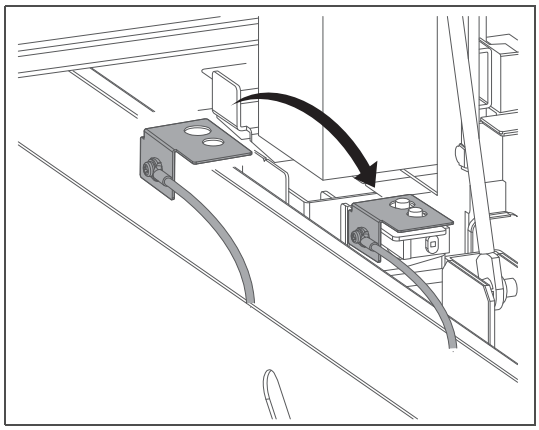
- Make sure to attach the unit detection plate to the obstacle detection sensor.
  If not, an error message will appear on the operation panel and you will not be able to move on to the next step.
- The location of the obstacle detection sensor in the printer varies depending on the printer's serial number. Also the specification of the unit detection plate differs by the model number. See the illustrations below to attach it.



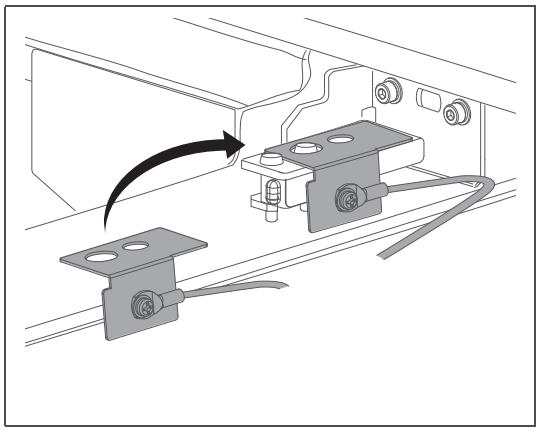
- To attach IJ-RTU-01 to XPJ-661UF with the serial number JM2U001000 or earlier.
- To attach IJ-RTU-01 to VJ-626UF
- To attach IJ-RTU-02 to VJ-626UF

Note

To install the rotary unit (IJ-RTU-02) on VJ-626UF, you will need an optional rotary unit detection plate (IJ-RTUDP-01).



- To attach IJ-RTU-02 to XPJ-661UF with the serial number JM2U001000 or earlier.



- To attach IJ-RTU-02 to XPJ-661UF with the serial number JM2U001001 or later.
- To attach IJ-RTU-01 to XPJ-661UF with the serial number JM2U001001 or later.

Note

To install the rotary unit (IJ-RTU-01) on XPJ-661UF with the serial number JM2U001001 or later, you will need an optional rotary unit detection plate (IJ-RTUDP-02).

[6] Close the front cover.

[7]

Install Rotary Unit
then Tap Enter

The message on the left will appear.

- Tap [Enter].

[8]

Installed?
No

Tap ▼.

[9]

Installed?
Yes

Tap [Enter].

[10]

User Type :
Type 1

Select the "User Type", and then tap [Enter].

[11]

**:Diameter?
Narrow / ***. *mm

**:Diameter?
Wide / ***. *mm

Check that the diameter and roller pitch displayed on the panel match with the size of object you want to use.

- To change the settings, tap [Cancel].
- If correct, tap [Enter] and go to step 13.

Note

Depending on the settings in the selected user type, the appropriate message appears.

[12]

**:Diameter:
(29-125) ***. *mm

Input the diameter of the object and then tap [Enter].

**:Roller Pitch:
Narrow

**:Roller Pitch:
Wide

When the media diameter entered is between 60.0 and 80.0 mm, use ▲ or ▼ to select the roller pitch setting, then tap [Enter].

Note

You can get more consistent result with the "Wide" setting.

[13]

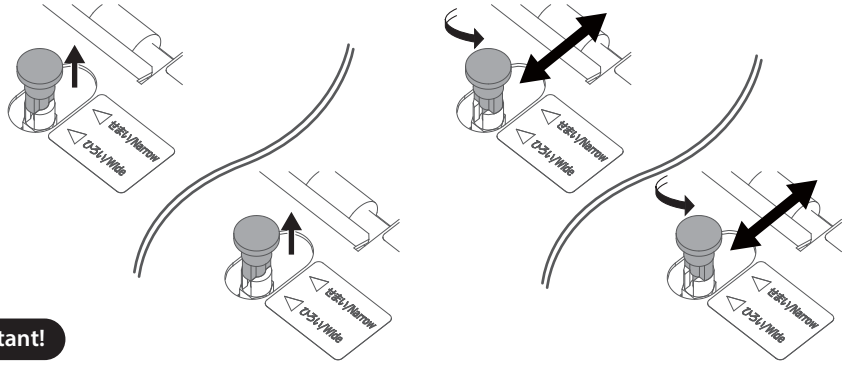
Set Pitch to Narrow
then Tap Enter

Set Pitch to Wide
then Tap Enter

Follow the instruction on the operation panel to change the roller pitch on the rotary unit.

- Tap [Enter], and then open the front cover.

Adjust the roller pitch.



Important!

When changing the roller pitch, always slide the right and left knobs per roller at a time.
Do NOT slide one knob only or two knobs separately. The roller cannot move correctly.

[14] Close the front cover, and then tap [Enter].

[15]

Changed Pitch?
No

Tap ▼.

[16]

Changed Pitch?
Yes

Tap [Enter].

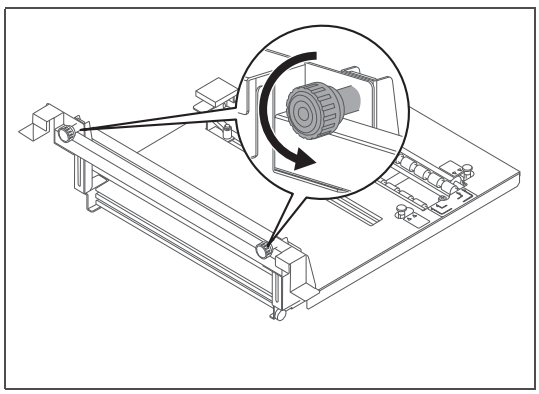
[17]

Loosen Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[18]



Loosen the thumbscrews (x2) to unlock the attachment.

- After ensuring that both thumbscrews are loosened, close the front cover and tap [Enter].

Note

- Rotate the thumbscrews more than half a turn.
  Be careful not to loosen too much.
- For simplicity, the printer body is excluded in this illustration.

[19]

Loosen Thumb Screw?
No

Tap ▼.

[20]

Loosen Thumb Screw?
Yes

Tap [Enter].

Please Wait

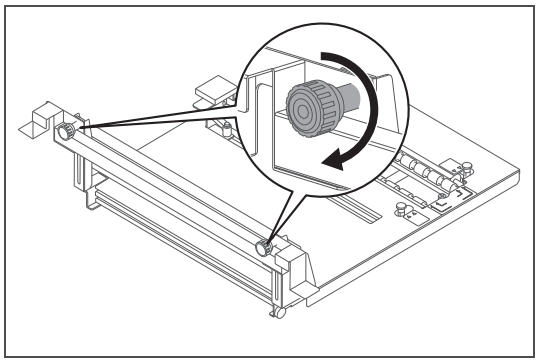
The table moves to the appropriate height.

Tighten Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[21]



Tighten the thumbscrews until the attachment is locked.

- After ensuring that the thumbscrews on both left and right are tightened, close the front cover and tap [Enter].

Note

- Do NOT tighten too much. It causes damage to the rotary unit.
- For simplicity, the printer body is excluded in this illustration.

[22]

Tighten Thumb Screw?
No

Tap ▼.

[23]

Tighten Thumb Screw?
Yes

Tap [Enter].

Set media, then
Tap [∧] key.

- Now, the rotary unit is installed in the printer.

Nozzle check and cleaning

By using the dummy table supplied with the rotary unit, you can run a nozzle check with the rotary unit installed.

Before starting everyday operation, please perform nozzle check printing to check the print head condition. If nozzle clog is found, perform cleaning.

This printer offers the following four kinds of nozzle checks:

- Nozzle Check R: Print the nozzle check pattern by the nozzles used for Rotary Mode.
- Nozzle Check RB: Print the “Nozzle Check R” pattern on the partially colored background.
- Nozzle Check: Print the normal nozzle check pattern (print the pattern by using all nozzles).
- Nozzle Check B: Print the “Nozzle Check” pattern on the partially colored background.

Note

- When printing on XPJ-661UF using the rotary unit, it is recommended to select Nozzle Check R or Nozzle Check RB to run a nozzle check.
- “Nozzle Check RB” and “Nozzle Check B” will only appear in the menu if the printer is set to 6-color configuration.
- If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.
  ☞ "About the operation manual" P.3

Required Items:

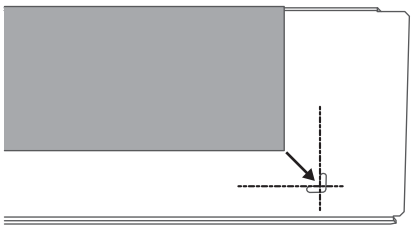
- Dummy Table
- Media for nozzle check
  (Maximum media size: width 480 mm × length 70 mm, Maximum media thickness: 0.3 mm)
- Scotch tape or masking tape

Note

- When using white ink, colored media, transparent films or semi-transparent films (such as OHP film, tracing paper and more) are recommended to use for nozzle check.
- The minimum media size for nozzle check printing is (W) 280 mm x (L) 35 mm.
  Depending the nozzle check pattern, the printer may leave blank space.
- You can print the nozzle check pattern twice without replacing media.
  To run the second nozzle check print on the same media, you need at least (W) 280 mm x (L) 70 mm media.
- When loading media on the dummy table, make sure to place it on the table without slant.

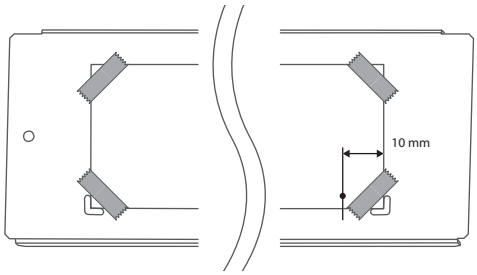
Place media on the dummy table

[1]



Align the corner of media with the inner side of L-shaped registration hole on the dummy table and place it on the table.

[2]



Using scotch tape or masking tape, tape each corner of the media in place.

Note

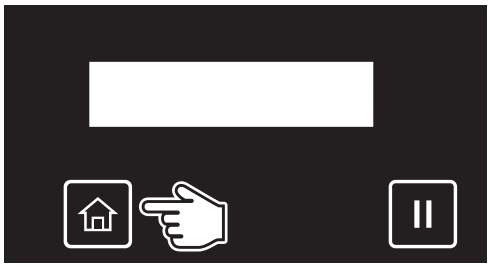
When printing the nozzle check pattern, the printer leaves 10 mm margin in right side.
Make sure that the tape does not cover the print start position.

Important!

Make sure to sit the media flat on the dummy table without warps.
If not, it can cause the head strike and you may not print the nozzle check pattern correctly.

Install the dummy table

[1]



Tap [Home].

Note

While the message "Set media, then Tap [∧] key" or "Print Ready" appears on the panel, tapping ❮ will print the Nozzle Check R pattern.
Then the menu will move to Step 4.

[2]

- Use ❯ to choose the menu shown left.
- Tap ❯.

[3]

Test Print1
Nozzle Check R

Test Print2
Nozzle Check RB

Test Print3
Nozzle Check

Test Print4
Nozzle Check B

The selection menu of nozzle check pattern will appear.

- Use the ▲ / ▼ to select the pattern, and then tap [Enter].

[4]

Execute?
No

Tap ▼.

[5]

Execute?
Yes

Tap [Enter].

Please Wait

The table moves to the front side of the printer.

[6]

Unload Media
then Tap Enter

Remove the media on the table, and then tap [Enter].

Note

If the printer is set to any of the following settings, Step 7 through Step 13 are skipped. You can go to the Step 14.

- Roller Pitch setting is set to "Narrow" and Diameter setting is set to 76.0 mm or more.
- Roller Pitch setting is set to "Wide" and Diameter setting is set to 83.8 mm or more.

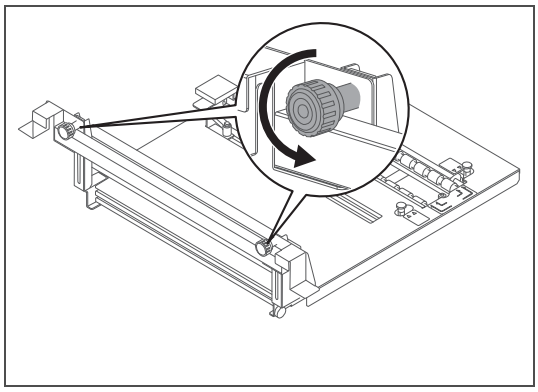
[7]

Loosen Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[8]



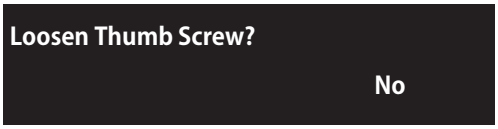
Loosen the thumbscrews (x2) to unlock the attachment.

- After ensuring that both thumbscrews are loosened, close the front cover and tap [Enter].

Note

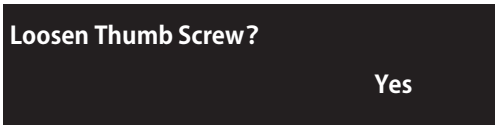
- Rotate the thumbscrews more than half a turn.
  Be careful not to loosen too much.
- For simplicity, the printer body is excluded in this illustration.

[9]



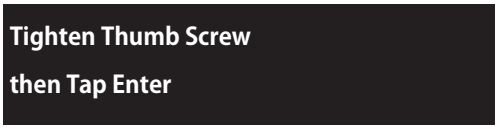
Tap ▼.

[10]



Tap [Enter].

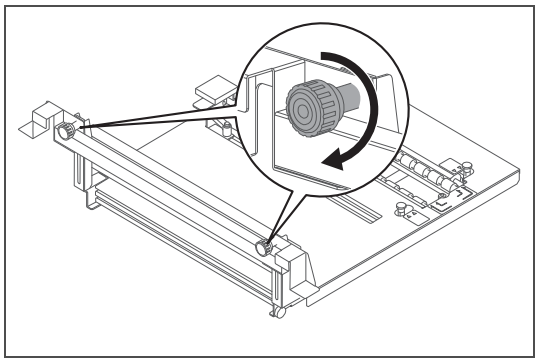
The table moves to the appropriate height for nozzle check printing.



The message on the left will appear.

- Open the front cover of the printer.

[11]



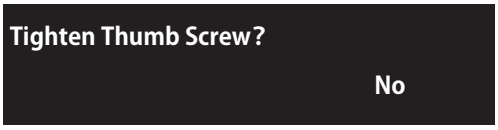
Tighten the thumbscrews until the attachment is locked.

- After ensuring that the thumbscrews on both left and right are tightened, close the front cover and tap [Enter].

Note

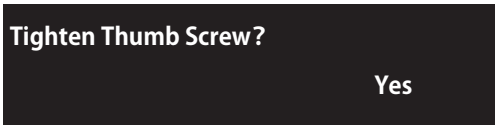
- Do NOT tighten too much. It causes damage to the rotary unit.
- For simplicity, the printer body is excluded in this illustration.

[12]



Tap ▼.

[13]



Tap [Enter].

The table moves to the installation position of dummy table.

[14]

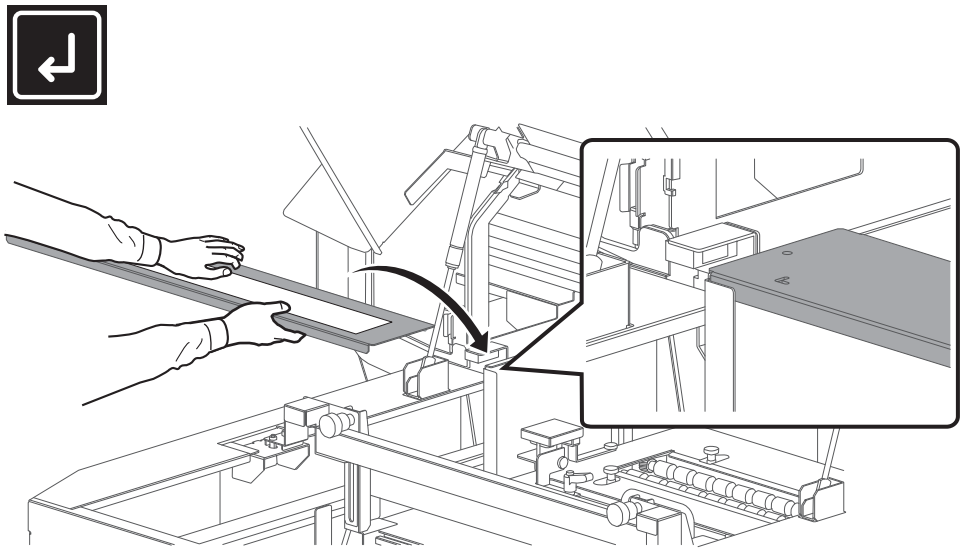
Install Dummy Table
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[15] Install the dummy table.

- Fit the L angle of the dummy table into the gap of the printer to place it on the printer.
- Close the front cover, and then tap [Enter].



Important!

When installing / removing the dummy table, do not touch or pull the wire of unit detection plate.

[16]

Installed?
No

Tap ▼.

[17]

Installed?
Yes

Tap [Enter].

Printing

Nozzle check patterns will be printed.

Please Wait

The table moves to the front side of the printer.

[18]

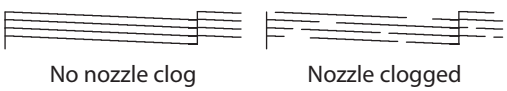
Nozzle Check1
Cleaning

The message on the left will appear.

- Open the front cover, and then check the nozzle check pattern.

Check the Nozzle check pattern

[1]



No nozzle clog　Nozzle clogged

Check the nozzle check print.

- If the print showed missing nozzles, go to the "Perform Cleaning" P.22.
- If the print showed no missing nozzles, end the nozzle check.
  "End the nozzle check" P.25

No nozzle clog　Nozzle clogged

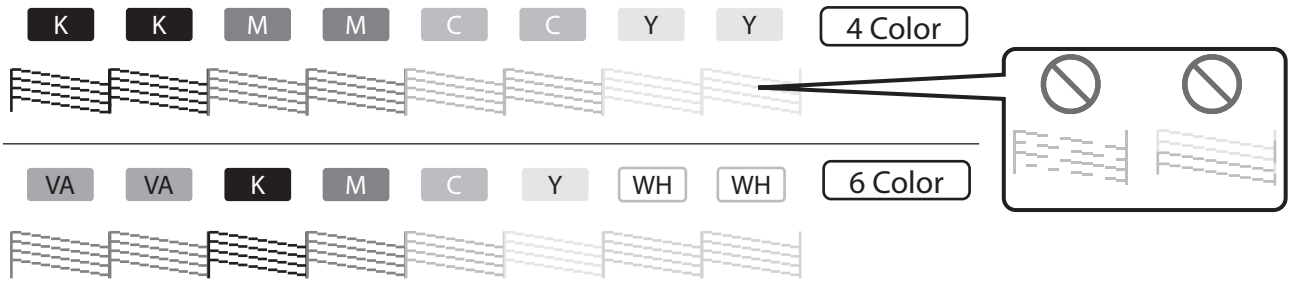
When performing nozzle check RB, part of the nozzle check pattern background is black (part of the white pattern).

Note

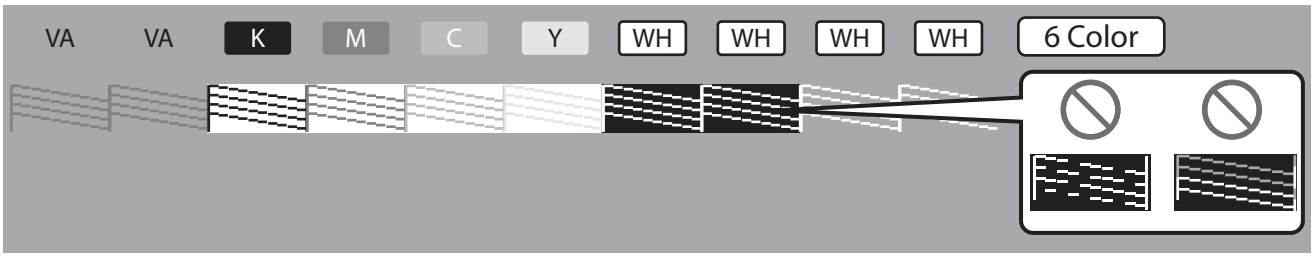
- For the CMYK nozzles, the background is printed in white ink.
- For varnish (and part of white) nozzles, the background is not printed.

Note

- The figure below are examples of the Nozzle Check R patterns.
- The printer information (date and time of printing, printer's serial number, firmware version) is printed on the nozzle check pattern.



- The figure below is an example of the Nozzle Check RB pattern. In this example, non-colored background area is shown in gray.



Perform Cleaning

[1] Close the front cover.

[2]

Nozzle Check1
Cleaning

The message on the left will appear.

- Tap ❯.

[3]

Cleaning Type1
Short

Cleaning Type2
Normal

Cleaning Type3
Long

Cleaning Type4
Little Charge

Cleaning Type5
Initial Charge

Select the cleaning mode.

- Use ^ / v to select, and then tap [Enter].

Cleaning **%

Cleaning will start.

Note

- If you select "Initial Charge", the message "Empty Waste Ink Tank then Tap Enter" will appear on the panel by tapping ❯. Follow the instructions on the printer's operation manual to let the waste ink to drain completely into a container such as plastic bottle. Once emptied, make sure to reset the waste ink counter.

  ☞ XPJ-661UF Operation Manual “Emptying waste ink tank”

- If you select “Little Charge” or “Initial Charge”, the message “Ink Charge **%” will be displayed.

[4]

Nozzle Check2
Test Print

When head cleaning ends, the message on the left will appear.

Run the second nozzle check print on the same media

[1]

Nozzle Check2
Test Print

Tap .

[2]

Test Print1
Nozzle Check R

Test Print2
Nozzle Check RB

Test Print3
Nozzle Check

Test Print4
Nozzle Check B

The selection menu of nozzle check pattern will appear.

- Use / to select the pattern, and then tap [Enter].

Important!

Before selecting nozzle check pattern, check that the media on the dummy table has enough space.
To run the second nozzle check print on the same media, at least (W) 280 mm x (L) 70 mm media is needed.
If the media size is not enough, the pattern will be printed on the dummy table.

Printing

Nozzle check patterns will be printed.

Please Wait

The table moves to the front side of the printer.

[3]

Nozzle Check1
Cleaning

The message on the left will appear.

- Open the front cover, and then check the nozzle check pattern.
☞ "Check the Nozzle check pattern" P.21
- If the print showed no missing nozzles, end the nozzle check.
☞ "End the nozzle check" P.25

To run the third nozzle check print

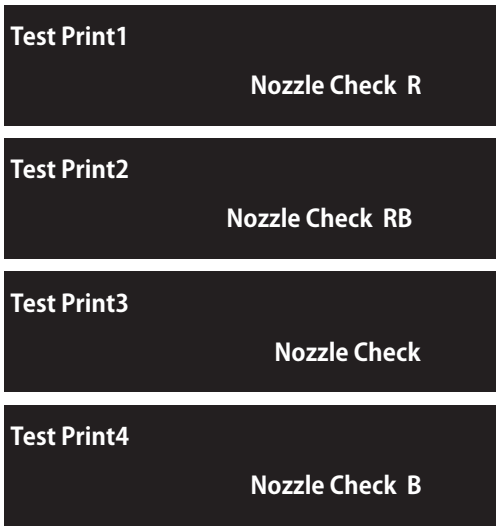
The printer can run up to “two” nozzle check prints on the same media.
If you want to run a nozzle check one more time, follow the steps below to place a new media on the dummy table.

[1]

Nozzle Check2
Test Print

Tap .

[2]



The selection menu of nozzle check pattern will appear.

- Use ^ / v to select the pattern, and then tap [Enter].

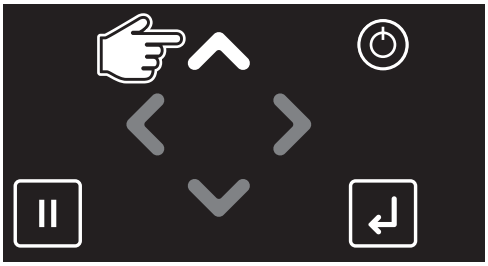
[3]

The message on the left will appear.

- Open the front cover, and then remove the media.
- Place the new media on the dummy table, and then close the front cover

☞ "Place media on the dummy table" P.17

[4]



Tap ^.

The message on the left will appear.

Nozzle check patterns will be printed.

The table moves to the front side of the printer.

[5]

The message on the left will appear.

- Open the front cover, and then check the nozzle check pattern.

☞ "Check the Nozzle check pattern" P.21

Remove the dummy table

[1]

```
Nozzle Check1
Cleaning
```

To end the nozzle check, tap [Cancel].

[2]

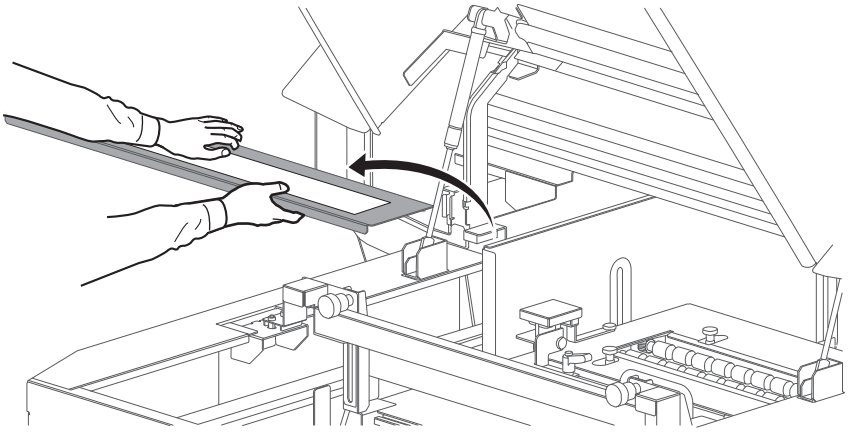
```
Remove Dummy Table
then Tap Enter
```

The message on the left will appear.

- Open the front cover of the printer.

[3] Remove the dummy table.

- Close the front cover, and then tap [Enter].



Important!

When installing / removing the dummy table, do not touch or pull the wire of unit detection plate.

[4]

```
Removed?
                    No
```

Tap ▼.

[5]

```
Removed?
                   Yes
```

Tap [Enter].

```
Please Wait
```

The message on the left will appear.

Move the table to original height

Note

If the printer is set to any of the following settings, you can skip this procedure and start printing.

- Roller Pitch setting is set to "Narrow" and Diameter setting is set to 76.0 mm or more.
- Roller Pitch setting is set to "Wide" and Diameter setting is set to 83.8 mm or more.

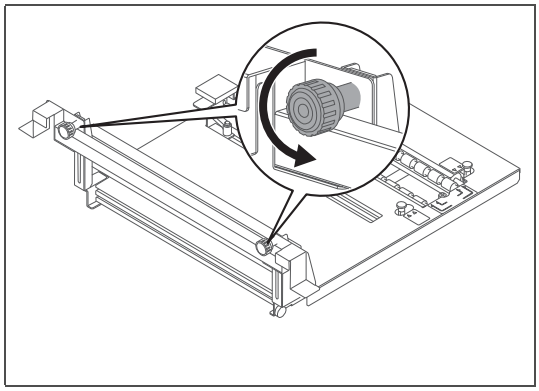
[1]

Loosen Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[2]



Loosen the thumbscrews (x2) to unlock the attachment.

- After ensuring that both thumbscrews are loosened, close the front cover and tap [Enter].

Note

- Rotate the thumbscrews more than half a turn.
  Be careful not to loosen too much.
- For simplicity, the printer body is excluded in this illustration.

[3]

Loosen Thumb Screw?
No

Tap ▼.

[4]

Loosen Thumb Screw?
Yes

Tap [Enter].

Please Wait

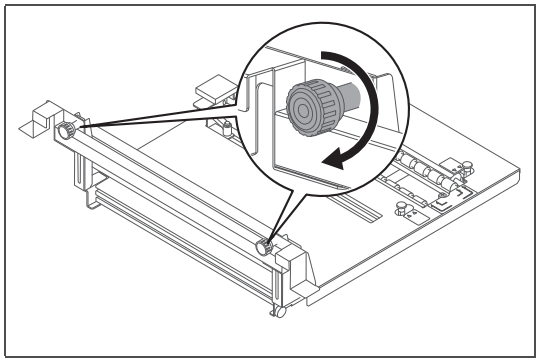
The table moves to the original height before the nozzle check.

Tighten Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[5]



Tighten the thumbscrews until the attachment is locked.

- After ensuring that the thumbscrews on both left and right are tightened, close the front cover and tap [Enter].

Note

- Do NOT tighten too much. It causes damage to the rotary unit.
- For simplicity, the printer body is excluded in this illustration.

[6]

Tighten Thumb Screw?
No

Tap [▼].

[7]

Tighten Thumb Screw?
Yes

Tap [Enter].

Set media, then
Tap [∧] key.

- The nozzle check ends.

Loading the media

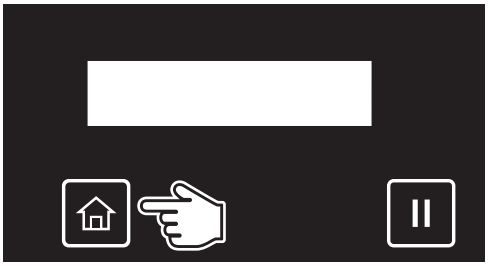
Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

"About the operation manual" P.3

Select Print Settings

[1]



Tap [Home].

[2]

Tap ›.

[3]

Tap [Enter].

[4]

Select the “User Type”.

- Use ^ / v to select, and then tap [Enter].

[5]

To change the “Print Mode”, tap ›.

: Print Mode :
Balanced

: Print Mode :
Fast

: Print Mode :
Fine

Select the print mode.

- Use ^ / v to select, and then tap [Enter].

Note

When using rotary unit, the printer always prints at 720 x 1080 print resolution. You cannot change the print resolution by print mode setting.

- "** : Print Mode : Balanced"
  Balanced mode of high quality print and quick print time.
- "** : Print Mode : Fast"
  Select this mode for high speed printing. Print quality might be reduced.
- "** : Print Mode : Fine"
  Select this mode for high quality printing. Printing speed would be reduced.
  This mode can be effective for small diameter objects to improve print quality.

[6]

Type : 5**
Media Setting

Tap v several times, to bring up the display on the left.

- Tap >.

[7]

: Media Setting3
Height

Tap v several times, to bring up the display on the left.

- Tap >.

[8]

:Diameter:
(29-125) *.* mm**

Input the diameter of the object and then tap [Enter].

:Roller Pitch:
Narrow

:Roller Pitch:
Wide

When the media diameter entered is between 60.0 and 80.0 mm, use ^ or v to select the roller pitch setting, then tap [Enter].

Note

You can get more consistent result with the "Wide" setting.

Please Wait

The message on the left will appear.

[9]

Unload Media
then Tap Enter

Remove the media on the table, and then tap [Enter].

[10]

Set Pitch to Narrow
then Tap Enter

Set Pitch to Wide
then Tap Enter

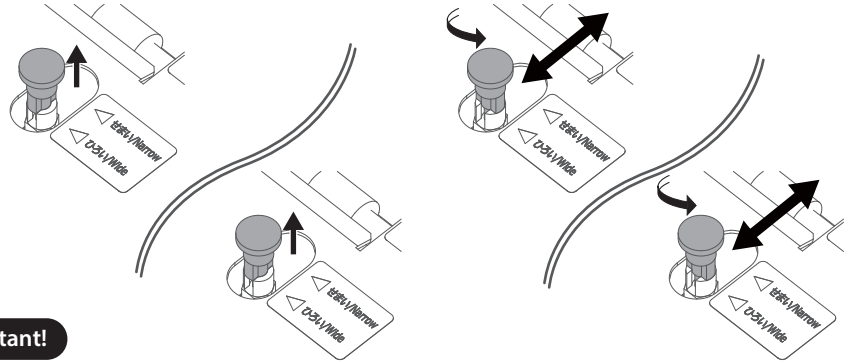
Follow the instruction on the operation panel to change the roller pitch on the rotary unit.

- Tap [Enter], and then open the front cover.

Note

Depending on the media diameter entered in the Step 8, the appropriate instruction will display on the panel.

Adjust the roller pitch.



Important!

When changing the roller pitch, always slide the right and left knobs per roller at a time.
Do NOT slide one knob only or two knobs separately. The roller cannot move correctly.

[11] Close the front cover, and then tap [Enter].

[12]

Changed Pitch?
No

Tap ▼.

[13]

Changed Pitch?
Yes

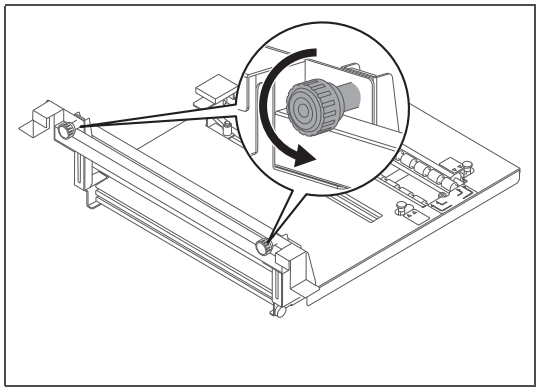
Tap [Enter].

The message on the left will appear.

Loosen Thumb Screw
then Tap Enter

- Open the front cover of the printer.

[14]



Loosen the thumbscrews (x2) to unlock the attachment.

- After ensuring that both thumbscrews are loosened, close the front cover and tap [Enter].

Note

- Rotate the thumbscrews more than half a turn.
  Be careful not to loosen too much.
- For simplicity, the printer body is excluded in this illustration.

[15]

Loosen Thumb Screw?
No

Tap ▼.

[16]

Loosen Thumb Screw?
Yes

Tap [Enter].

Please Wait

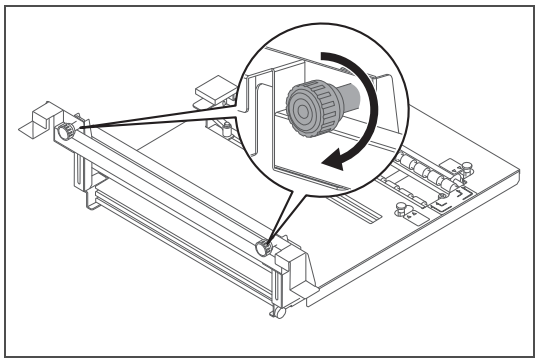
The table moves to the appropriate height.

Tighten Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover of the printer.

[17]



Tighten the thumbscrews until the attachment is locked.

- After ensuring that the thumbscrews on both left and right are tightened, close the front cover and tap [Enter].

Note

- Do NOT tighten too much. It causes damage to the rotary unit.
- For simplicity, the printer body is excluded in this illustration.

[18]

Tighten Thumb Screw?
No

Tap ▼.

[19]

Tighten Thumb Screw?
Yes

Tap [Enter].

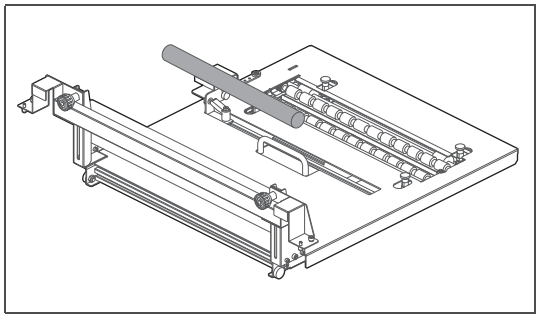
Set media, then
Tap [∧] key.

- The next step is to load a cylindrical object.

Loading the media

[1] Open the front cover.

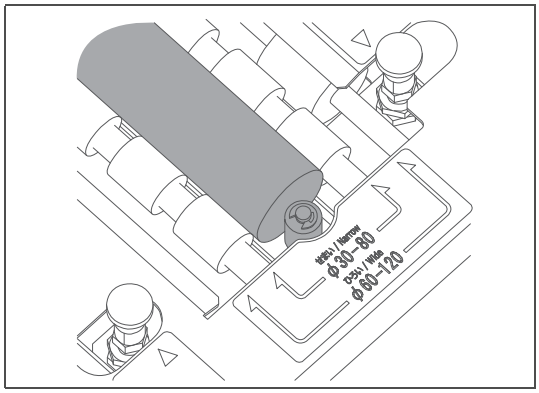
[2]



Load a cylindrical object on the rotary unit.

Note

For simplicity, the printer body is excluded in this illustration.



Align the edge of the object with the media registration pin.

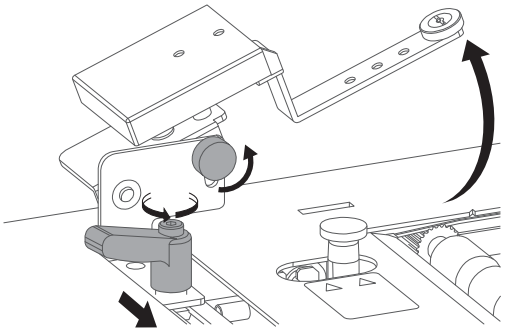
Note

Please see "Origin of image on Layout and Print Tool 2 and print start position" P.39, and place it on the Unit correctly.

Note

If a cylindrical object does not stay on the rollers, use the media retailer to hold it on the rollers.

- Depending on the shape of object, the media retainer cannot hold the object properly.
- If you are using lightweight object, the object might be lifted by the media retainer. In such cases, do not use the media retainer.



<How to adjust the media retainer>

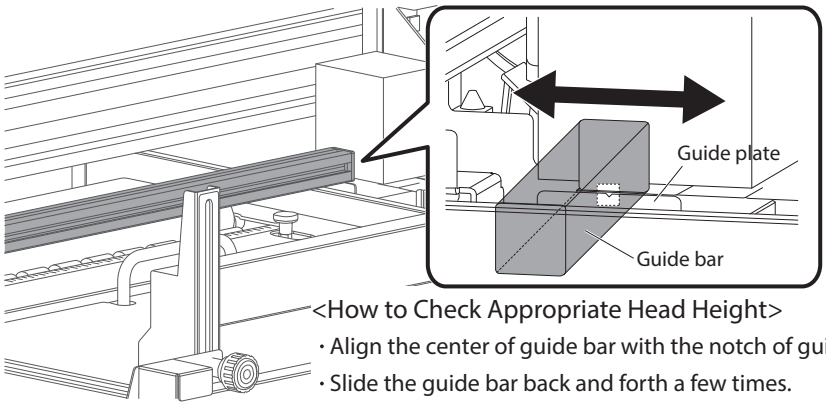
- Use the position adjustment lever to change the position of media retainer.
- Use the angle adjustment knob to change the angle of media retainer.

[3] Put the right side of the guide bar on the guide plate and place in on the printer as shown below to check the following points:

- Make sure that the object does not touch the guide bar.
- Check that the gap between the object and guide bar is not too large.

Important!

If the gap between the print head and object is not adequate, measure the diameter of the object again and input the correct diameter.
Otherwise, it can damage the print head, causing printing failure.



<How to Check Appropriate Head Height>

・Align the center of guide bar with the notch of guide plate.
・Slide the guide bar back and forth a few times.

[4] Close the front cover.

[5]

Set media, then
Tap [∧] key.

Tap ∧.

[6]

****:Detailed-Set:**	
	On

Tap [Enter].

Note

- This menu only appears when the User Type are selected for the first time.
- If you select "On", you will have to input the media height, obstacle detect, media size and origin position after tapping ∧ each time you set a media on the table.
- If you select "Off" via ∨, "Ready to Print" will be displayed after tapping ∧ each time you set a media on the table.
  In that case, the currently selected User Type values will be used for the media height, obstacle detect, media size and origin position.
- Even if "Off" is selected, you can enter media height, obstacle detect, media size and origin position from the "**: Media Setting1 Set Media" by tapping [Cancel] while the message "Print Ready" or "Set media, then Tap[∧] key." appears on the panel.

1. Inputting the media width, length and the origin position

[1]

```
**:Width:
(30 - 360)                    360 mm
```

Use the ▲ or ▼ to input the media width.

Tap [Enter].

Note

Any value from 30 mm to 360 mm can be set for the width.

[2]

```
**:Length:
(20 - 405)                    405 mm
```

Use the ▲ or ▼ to input the media length.

Tap [Enter].

Note

Any value from 20 mm to 405 mm can be set for the length.

[3]

```
**:Origin:
        PF:  0.0              CR:  0.0
```

- Use ▲ or ▼ to enter the PF (longitudinal) value.
- Use ◀ or ▶ to enter the CR (lateral) value.
- Tap [Enter].

Note

Any value between the following range can be entered:

PF value: 0.0 to 385.0

CR value: 0.0 to 340.0

```
Moving To
Origin Position
```

- The table will move inward.
- The carriage will move to the set position, with its LED pointer lit steady.

[4]

```
**:Origin:
        PF:  0.0              CR:  0.0
```

Check the position of the LED pointer.

- If it shows the correct position, tap [Enter].
- If it is not in the intended position, adjust the origin position as follows:
  - Use ▲ or ▼ to move the table forward/backward.
  - Use ◀ or ▶ to move the LED pointer leftward/rightward.
  - Tap [Enter].

Please Wait

The message on the left will appear.

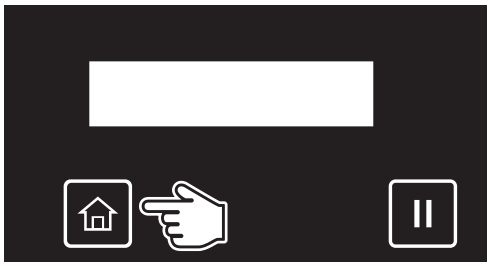
Print Ready
Type 1

That completes setting of the media.

Change the User Type

To print on other round object with different diameter size, select an appropriate user type (from Type 1 to Type 10).
When changing the user type, you can also change the diameter or roller pitch setting in the selected user type.

[1]



Tap [Home].

[2]

Menu1
Setup

Tap ❯.

[3]

Setup1
User Type

Tap [Enter].

[4]

User Type :
Type 1

Select the "User Type".
• Use ^ / v to select, and then tap [Enter].

[5]

**:Diameter?
Narrow / ***. *mm

**:Diameter?
Wide / ***. *mm

Check that the diameter and roller pitch displayed on the panel match with the size of object you want to use.

• To change the settings, tap [Cancel].
• If correct, tap [Enter] and go to step 7.

Note

Depending on the settings in the selected user type, the appropriate message appears.

[6]

Input the diameter of the object and then tap [Enter].

When the media diameter entered is between 60.0 and 80.0 mm, use ^ or v to select the roller pitch setting, then tap [Enter].

Note

You can get more consistent result with the “Wide” setting.

[7] The user type is saved with the specified diameter and roller pitch settings.

- For the following procedures, see "Select Print Settings" P.28 from step 9 onward.

Basic printing instructions

This section explains the basic cylindrical printing instructions using rotary unit.
For the detailed instruction of each application, see the operation manual of applicable application.

Required application (Supported version):

- XPJ-661UF Driver (Ver. 1.00 or later)
- Layout and Print Tool 2 (Ver. 1.9.0 or later)
- MUTOH Layer Editor (Ver. 5.2.0 or later)

Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for instructions on the print application.

"About the operation manual" P.3

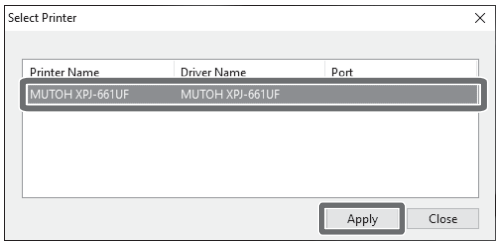
1. Create Print Page Layout in Layout and Print Tool 2

[1] Start Layout and Print Tool 2.

Note

Step 2 through Step 4 appears when you start Layout and Print Tool 2 for the first time.

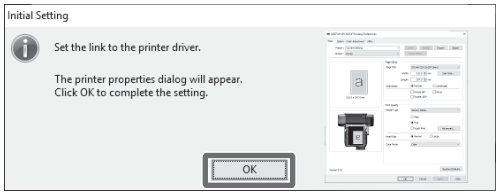
[2]



Select the printer driver.

- Click [Apply].

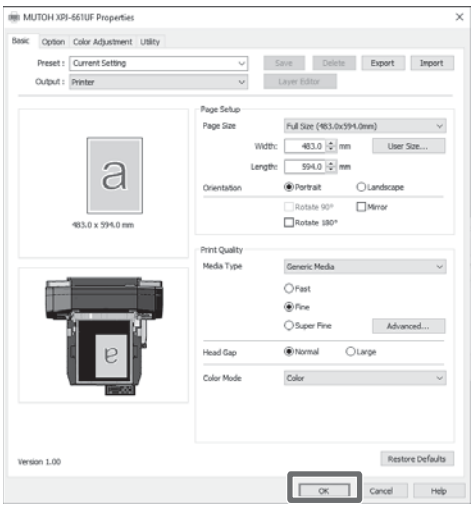
[3]



If the driver settings have not been completed, the dialog on the left will appear.

- Click [OK].

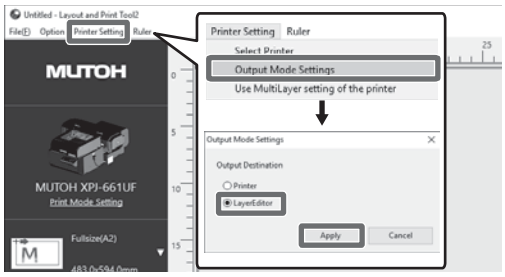
[4]



The dialog on the left will appear.

- Click [OK].

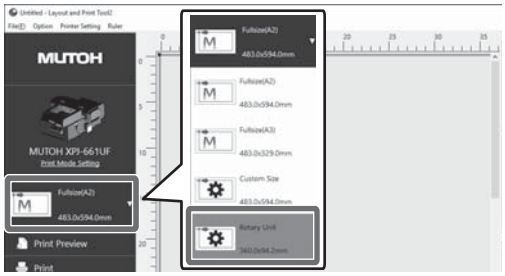
[5]



Select the output destination.

- Click [Printer Setting].
- Click [Output Mode Settings].
- Select [Layer Editor], and then click [Apply].

[6]



Select the type of media.

- Open the Media dropdown list.
- Click [Rotary Unit].

[7]

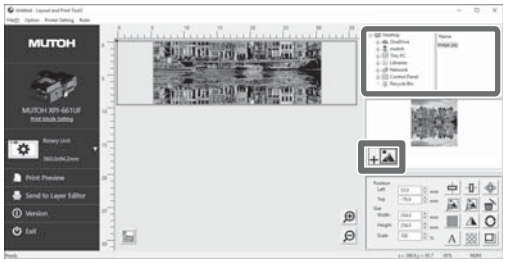
Configure media settings.

- Enter the media width.
- Enter the media diameter, or circumference.
- Click [Apply].

Note

- Enter the correct diameter or circumference of object as much as possible. Before loading a cylindrical object, measure the actual diameter, then place it on the rotary unit.
- When performing 360 degree printing, if wrong value is entered here, the seam will be thick or visible.

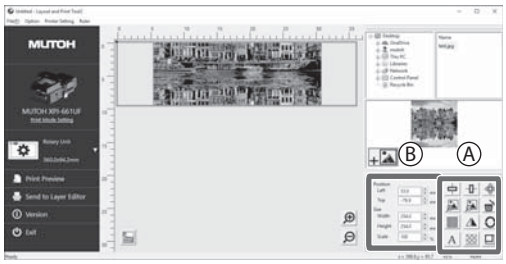
[8]



Select the image to be used in printing.

- Click the button to insert the image.

[9]



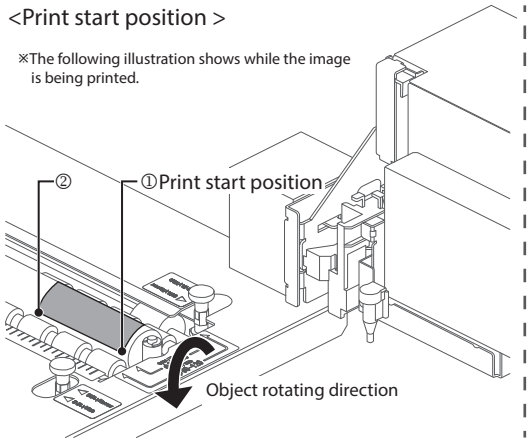
Align the image by using the following methods:

- Click the edit buttons (A on the left illustration).
- Enter values directly (B on the left illustration).

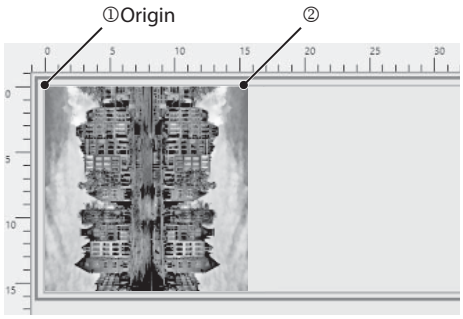
Origin of image on Layout and Print Tool 2 and print start position

The illustration below shows where the origin of image in Layout and Print Tool 2 will be printed on an object on the rotary unit. When creating a page layout or placing an object on the Unit, make sure that the image will be printed at the intended location.

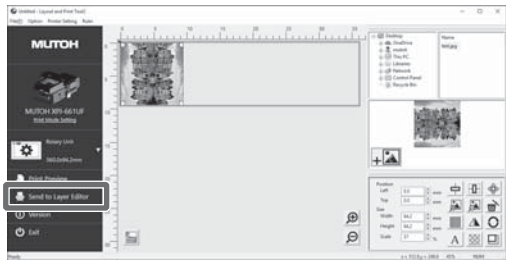
<Print start position >



<Origin of image on Layout and Print Tool 2 >



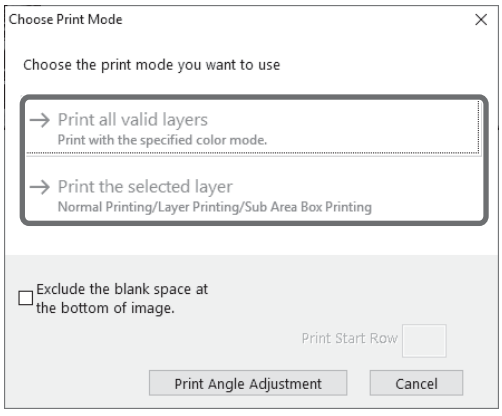
[10]



Send the print data to MUTOH Layer Editor.

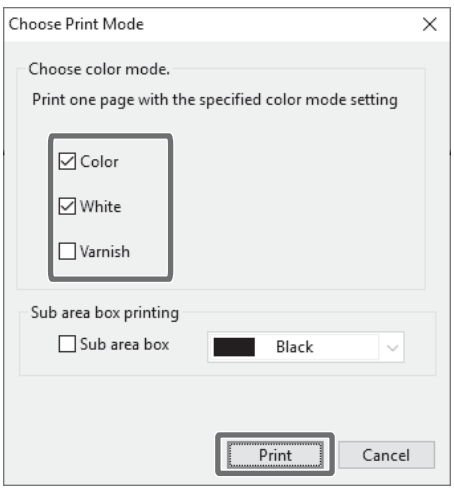
- Click [Send to Layer Editor].

[11]



Select the Print Mode.

- Color Printing: Select [Print all valid layers].
- Layer Printing: Select [Print the selected layer].

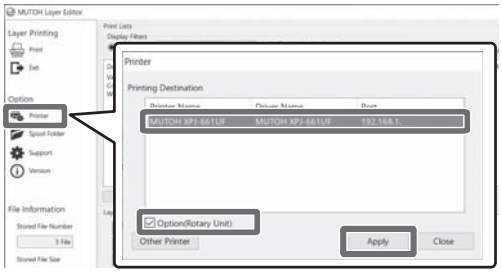


To perform layer printing, check the color mode to print the selected page.

- Click [Print].

2. Print from MUTOH Layer Editor

[1]



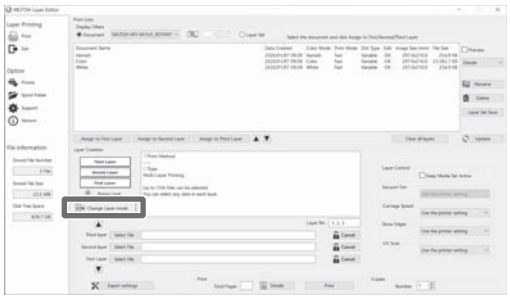
Select the printer.

- Click [Printer].
- Choose the printer that you are using.
- Select [Option (Rotary Unit)] and then click [Apply].

Note

The printer selection dialog automatically appears when you start MUTOH Layer Editor for the first time.

[2]



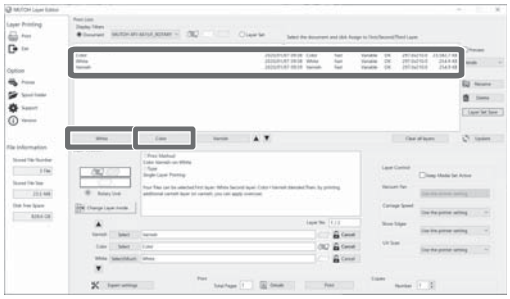
Click [Change Layer mode].

[3]

Configure the layer mode settings.

- Select [Color Varnish on White], and then click [Apply].

[4]



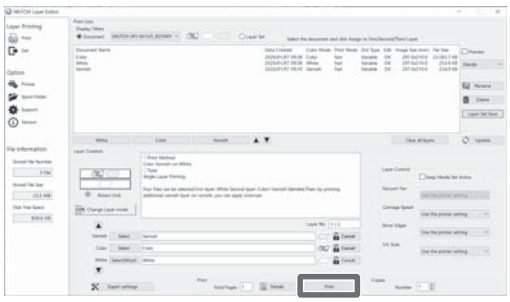
Select two files to assign to appropriate layers.

- From the Print Data List, click on the white file, then click “White”. Next, click on the color file, then click “Color”.

Note

To see the image preview of the selected file, check Preview.

[5]



Start printing.

- Confirm that the media is already loaded.
  ☞ "Loading the media" P.28
- Click [Print].

Detaching the rotary unit

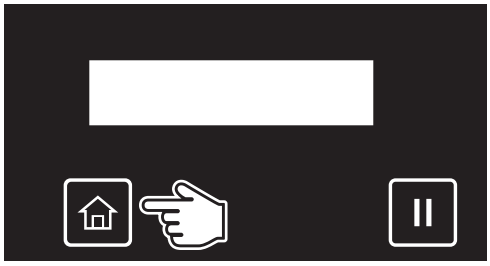
Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

"About the operation manual" P.3

Exit Rotary Mode

[1]



Tap [Home].

[2]

Tap ▼ several times, to bring up the display on the left.

- Tap ▶.

[3]

Tap ▶.

[4]

Tap [Enter].

[5]

Tap ▼.

[6]

Tap [Enter].

The message on the left will appear.

[7]

Remove the media on the table, and then tap [Enter].

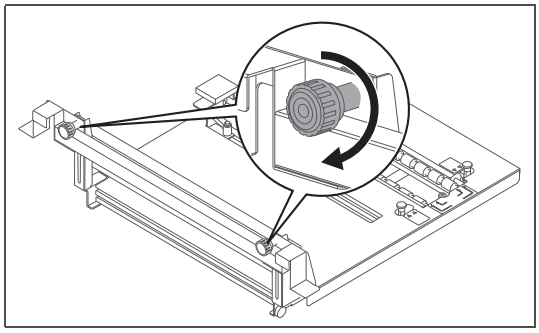
[8] **Remove Rotary Unit**
then Tap Enter

Remove the rotary unit from the printer.

Remove rotary unit

You will need a Phillips-head screwdriver (commercially available) and the hex wrench supplied with the printer for this procedure.

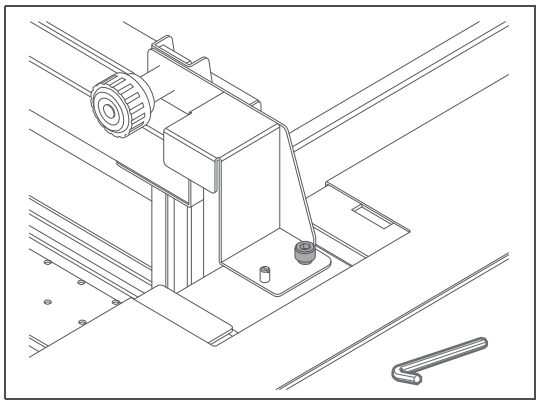
[1] Open the front cover.

[2] 

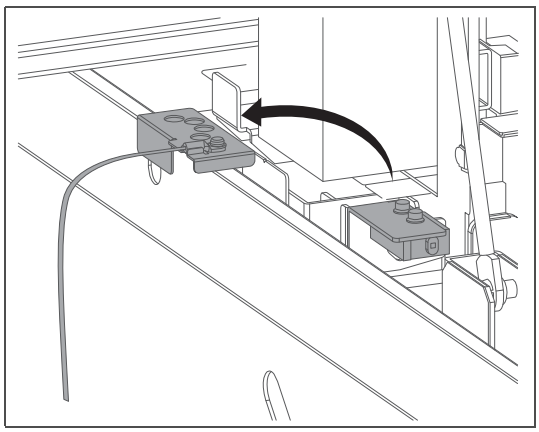
Tighten the thumbscrews until the attachment is locked.

Note

- Rotate the thumbscrews more than half a turn.
  Be careful not to loosen too much.
- For simplicity, the printer body is excluded in this illustration.

[3] 

- Use the hex wrench supplied with the Unit to loosen the screw.
- Loosen the other side of screw.

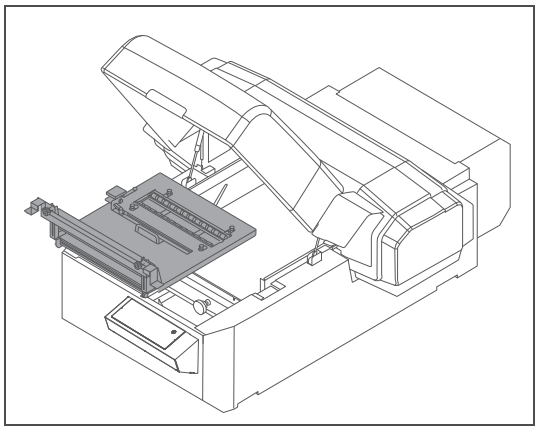
[4] 

Remove the unit detection plate from the obstacle detection sensor.

Note

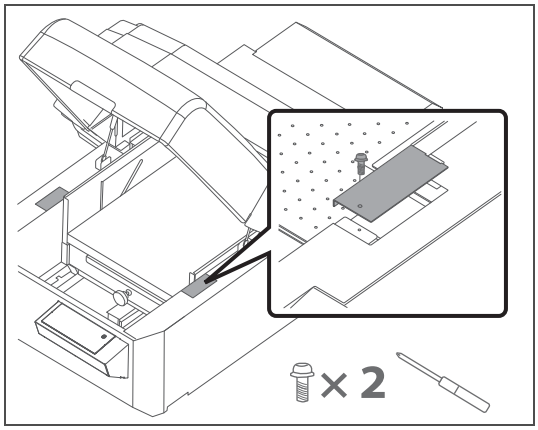
- Make sure to remove the unit detection plate from the sensor.
  If not, an error message will appear on the operation panel and you will not be able to move on to the next step.
- The location of the obstacle detection sensor in the printer varies depending on the printer's serial number. Also the specification of the unit detection plate differs by the model number.
  See the illustrations below to remove it.
  ☞Attach the unit detection plate to the obstacle detection sensor P. 12

[5]



Remove the rotary unit from the printer.

[6]



Attach the attachment covers (x2) on the printer.

- Using the Phillips-head screwdriver, tighten the screws to secure the covers to the printer.

[7] Close the front cover.

[8]

Remove Rotary Unit
then Tap Enter

The message on the left will appear.

- Tap [Enter].

[9]

Removed?
No

Tap ▼.

[10]

Removed?
Yes

Tap [Enter].

Please Wait

The table moves to the Flat mode position.

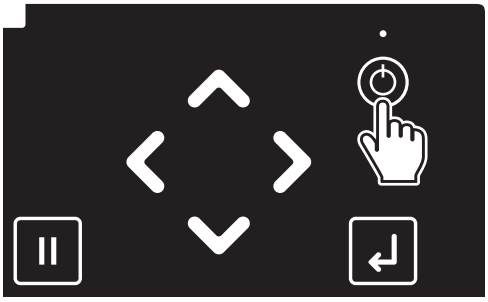
[11]

Set media, then
Tap [∧] key.

- Now, the rotary unit has been removed from the printer.

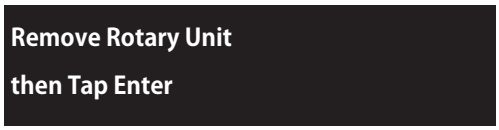
How To Correct Error After Power Off

If you need to turn off the printer due to an error requiring reboot, or you are forced to turn off the printer, follow the instruction below to correct the error. When the printer is turned off, it will automatically exit Rotary Mode.

[1] 

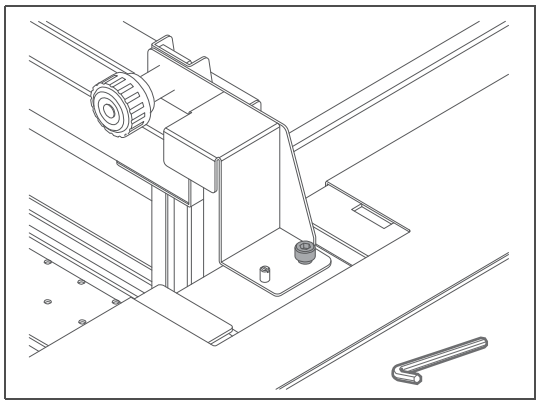
Press the power button to restart the printer.

The message on the left will appear.

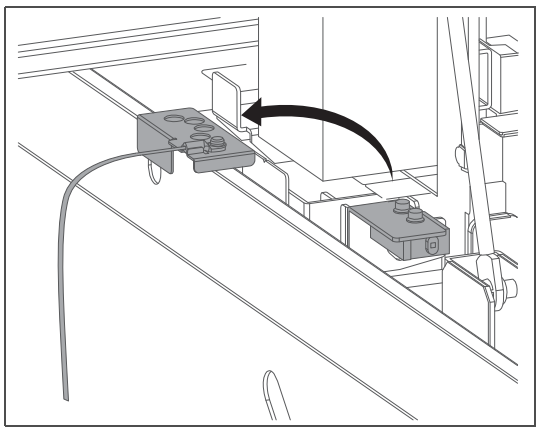
[2] 

Remove the rotary unit from the printer.

[3] Open the front cover.

[4] 

- Use the hex wrench supplied with the Unit to loosen the screw.
- Loosen the other side of screw.

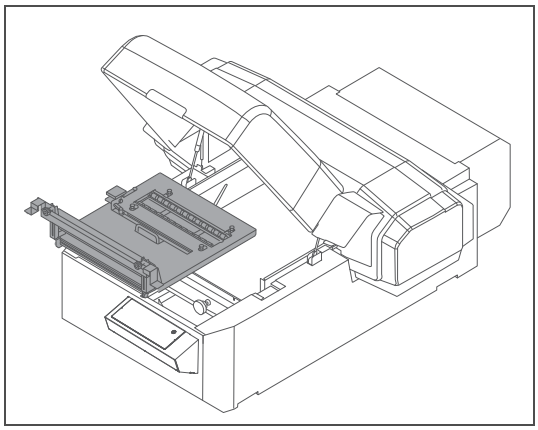
[5] 

Remove the unit detection plate from the obstacle detection sensor.

Note

- Make sure to remove the unit detection plate from the sensor.
  If not, an error message will appear on the operation panel and you will not be able to move on to the next step.
- The location of the obstacle detection sensor in the printer varies depending on the printer's serial number. Also the specification of the unit detection plate differs by the model number.
  See the illustrations below to remove it.
  ☞Attach the unit detection plate to the obstacle detection sensor P. 12

[6]



Remove the rotary unit from the printer.

[7] Close the front cover.

[8]

Remove Rotary Unit
then Tap Enter

The message on the left will appear.

- Tap [Enter].

[9]

Removed?
No

Tap ▼.

[10]

Removed?
Yes

Tap [Enter].

Initializing

The message on the left will appear.

Set media, then
Tap [∧] key.

- Now, the rotary unit has been removed from the printer.

[11] If you want to perform cylindrical printing using rotary unit, put the printer into Rotary Mode.

☞ "Put printer into rotary mode" P.7

Maintenance

To maintain the performance of this product, please conduct maintenance by yourself.
The types of maintenance are shown below.

- Maintenance on rotary unit: Clean off the rubber on the rollers and surface of rotary unit.
- Maintenance on Printer: Perform a daily maintenance including print head cleaning.

Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

☞ "About the operation manual" P.3

Maintenance on rotary unit

At the end of printing operation, follow the steps below to clean the following parts:

- Rubber parts on the roller
- Surface of rotary unit and instruction labels

Note

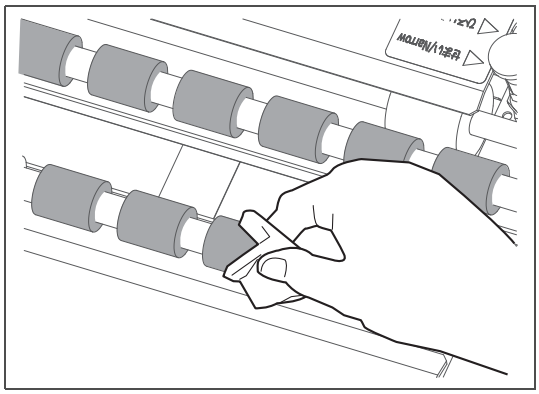
If ink already cured on the rotary unit, you cannot remove it with this maintenance.

Required Items:

- Soft cloth
- Neutral detergent (if needed)

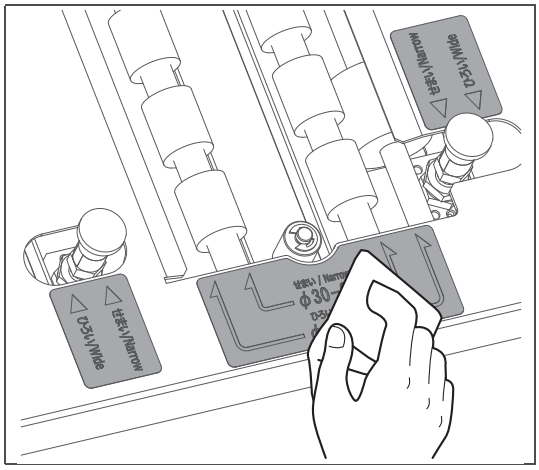
[1] Open the front cover.

[2]



Moisten a soft cloth with water or neutral detergent diluted with water and thoroughly wring it. Use this cloth to clean off dirt on the rubber parts of rollers.

[3]



Clean off dirt on the surface of rotary unit and instruction labels.

Maintenance on Printer

The printer can be put into sleep mode while the rotary unit is installed in the printer.

When you are not using the printer, always leave the power on and put the printer into the sleep mode while not in use. If you do not put the printer into the sleep mode, the ink inside the printer could settle out and/or coagulate, causing poor image quality or printer failure.

Make sure to follow the instructions on the operation panel to perform daily maintenance.

If you set the printer's sleep mode, the printer performs the following operation.

- Automatic Head cleaning by timer set in the "Cleaning Timer" Menu.
- Ink circulation
- "Little Charge"

Important!

To leave the printer in sleep mode for seven days or more, perform followings once a week:

- **Check the ink level and replace the relevant ink cartridge if "Ink Low" is displayed.**
- **Agitate the ink cartridges.**

Steps

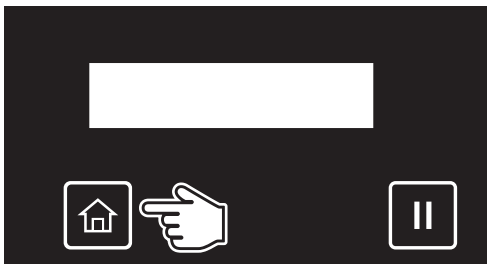
[1] Make sure that the printer's operating condition is as follows:

- The front cover and the maintenance cover are closed.
- The remaining ink level is sufficient.
- The waste ink tank has enough space.

Important!

If you are going to use the sleep mode for a prolonged period of time, first empty the waste ink tank, as follows.

[2] Prepare items required for daily maintenance.
☞ XPJ-661UF Operation Manual "Preparing for Daily Maintenance"
☞ Daily Maintenance Sheet for XPJ-661UF

[3] 

Tap [Home].

[4]

- Tap ▼ several times, to bring up the display on the left.
- Tap ▶.

[5]

Sleep Mode1
Start

Tap ❯.

[6]

Sleep Mode
Start —> Enter

Tap [Enter].

[7]

Daily Maintenance
Start —> Enter

Tap [Enter].

Please Wait

The table moves to the front side of the printer.

[8]

Unload Media
then Tap Enter

Remove the media on the rotary unit, and then tap [Enter].

Loosen Thumb Screw
then Tap Enter

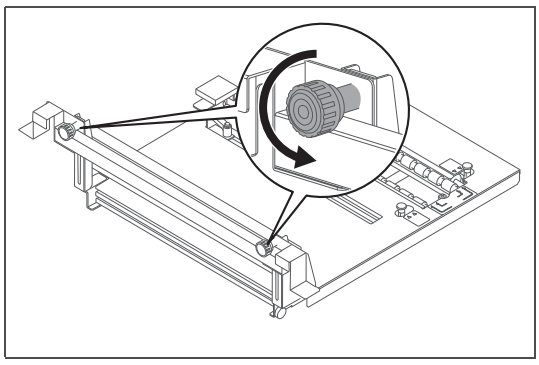
The message on the left will appear.

- Open the front cover.

Note

Depending on the media being used, you will not need to loosen the thumbscrew. In such cases, the message "Loosen Thumb Screw then Tap Enter" will not appear. Go to step 12.

[9]



Loosen the thumbscrews (x2) to unlock the attachment.

- After ensuring that both thumbscrews are loosened, close the front cover and tap [Enter].

Note

- Rotate the thumbscrews more than half a turn.
- For simplicity, the printer body is excluded in this illustration.

[10]

Loosen Thumb Screw?
No

Tap ❯.

[11]

Loosen Thumb Screw?
Yes

Tap [Enter].

Please Wait

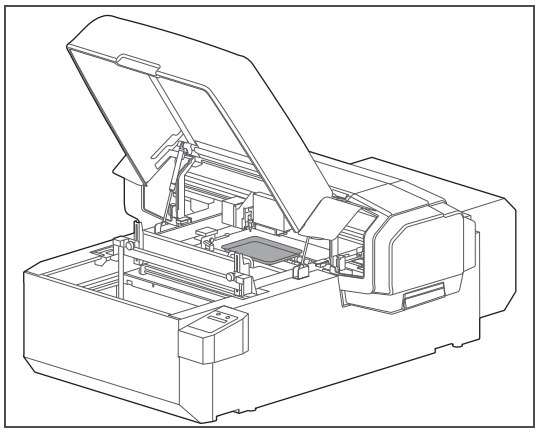
The table, carriage and cleaning wiper move to gain access to daily maintenance.

[12]

Daily Maintenance
End —> Enter

The message on the left will appear.

[13]



Open the front cover, and then place the tray on the rotary unit.

[14] You can start daily maintenance.

☞ XPJ-661UF Operation Manual "Performing Daily Maintenance"

☞ Daily Maintenance Sheet for XPJ-661UF

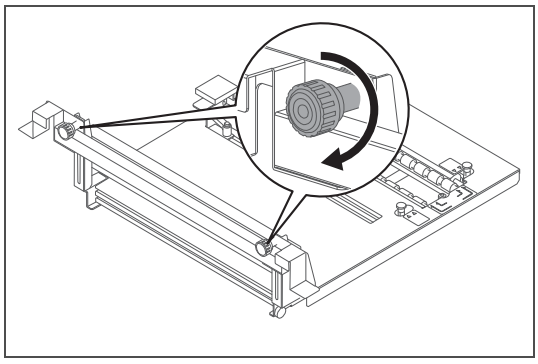
- After the daily maintenance is complete, tap [Enter].

Tighten Thumb Screw
then Tap Enter

The message on the left will appear.

- Open the front cover.

[15]



Tighten the thumbscrews until the attachment is locked.

- After ensuring that the thumbscrews on both left and right are tightened, close the front cover and tap [Enter].

Note

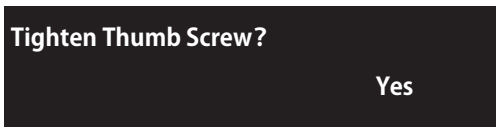
- Rotate the thumbscrews more than half a turn.
- For simplicity, the printer body is excluded in this illustration.

[16]

Tighten Thumb Screw?
No

Tap ▼.

[17]



Tap [Enter].

The printer automatically performs the “Short” cleaning.

The sleep mode will start.

- To exit the sleep mode, tap [Enter].

Note

- While in sleep mode, the small LED light above the power button flashes every 5 seconds.
- To set the timer for automatic head cleaning during sleep mode, see “Sleep Mode2: Cleaning Timer” of the XPJ-661UF Operation manual.

Messages and Error Messages

Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

"About the operation manual" P.3

Status messages

When the printer is operating correctly, each operation status is displayed on the operation panel as below.
For other messages, see the XPJ-661UF Operation Manual.

Display	Description
Rotary Unit Install Unit -> Enter	Install the rotary unit and then tap [Enter].
Execute? No	Check that the rotary unit is installed and then tap ▼.
Execute? Yes	Check that the rotary unit is installed and then tap [Enter].
Loosen Thumb Screw then Tap Enter	The printer will move the table up or down. Loosen the thumbscrews on the Unit, and then tap [Enter] on the operation panel.
Loosen Thumb Screw? No	Check that the thumbscrews are loosened and then tap ▼.
Loosen Thumb Screw? Yes	Check that the thumbscrews are loosened and then tap [Enter].
: Diameter? Narrow / *.*mm	You are changing the user type. Check that the diameter and roller pitch settings displayed match with the size of object you want to use. "Change the User Type" P.35
Set Pitch to Wide then Tap Enter	Adjust the roller pitch to “Wide” setting and then tap [Enter].
Set Pitch to Narrow then Tap Enter	Adjust the roller pitch to “Narrow” setting and then tap [Enter].
Changed Pitch? No	Check that the roller pitch is adjusted and then tap ▼.
Changed Pitch? Yes	Check that the roller pitch is adjusted and then tap [Enter].
Tighten Thumb Screw then Tap Enter	The printer will move the table back and forth. Tighten the thumbscrews on the Unit, and then tap [Enter] on the operation panel.
Tighten Thumb Screw? No	Check that the thumbscrews are tightened and then tap ▼.
Tighten Thumb Screw? Yes	Check that the thumbscrews are tightened and then tap [Enter].
Install Dummy Table then Tap Enter	Install the dummy table and then tap [Enter].
Installed? No	Check that the dummy table is installed and then tap ▼.

Display	Description
Installed? Yes	Check that the dummy table is installed and then tap [Enter].
Set media, then Tap [∧] key.	Place the new media on the dummy table, and then tap ∧. ☞ "To run the third nozzle check print" P.23
Remove Dummy Table then Tap Enter	Remove the dummy table and then tap [Enter].
Removed? No	Check that the dummy table is removed and then tap ∨.
Removed? Yes	Check that the dummy table is removed and then tap [Enter].
Remove Rotary Unit then Tap Enter	Remove the rotary unit and then tap [Enter].
Removed? No	Check that the rotary unit is removed and then tap ∨.
Removed? Yes	Check that the rotary unit is removed and then tap [Enter].

Error message display and remedies

Error messages are displayed when certain failures occur during printer operation.
For other messages, see the XPJ-661UF Operation Manual.

Display	Description
Check Rotary Unit	• When you are installing the rotary unit in the printer: The Unit has not been installed correctly. Follow the instruction below to install the Unit again. ☞ "Attaching the rotary unit" P.7 • When you are removing the rotary unit from the printer: The Unit has not been correctly removed as instructed. Follow the instruction below to remove the Unit again. ☞ "Detaching the rotary unit" P.41

Troubleshooting

Note

If you are using rotary unit on VJ-626UF, see the relevant operation manual for panel operation.

"About the operation manual" P.3

Rotary unit Installation Issues

Symptom	Possible cause and remedy
Cannot install the unit.	Did you select “Rotary Unit” from the Option menu on the operation panel before installing the unit? • Go to “Menu5 Option” to select “Option1 Rotary Unit”, then follow the instructions to install the unit. "Put printer into rotary mode" P.7
	Did you fit the registration pins on the rotary unit into the guide holes on the printer? • Fit the registration pins on the both sides of rotary unit into the guide holes on the printer, then install the rotary unit. "Install rotary unit" P.10
	Are there any deformation, damage or missing parts on the rotary unit? • If any, you cannot use the rotary unit. Contact your local MUTOH dealer.
Cannot move on to the next step.	Did you attach the unit detection plate to the obstacle detection sensor? • If not, an error message (”Check Rotary Unit”) will appear on the operation panel and you will not be able to move on to the next step. "Put printer into rotary mode" P.7

Media Loading Issues

Symptom	Possible cause and remedy
Object doesn’t stay stable on the rollers.	Do you use a cylindrical object? • Check that the object sits flat on the rollers (not conical, drum, or concave shape).
	Is there any bump on the surface of object? • If the object has a small bump on its surface, place it on the rotary unit that the bump does not contact with the rubber of rollers. Important! To avoid damage to the print head, place the object that the bump does not contact with the head.
	Is your object extremely light, long, or short? • Avoid using extremely light, long, or short object. "Requirements for usable media" P.5

Symptom	Possible cause and remedy
Media retainer doesn't hold the item on the rollers properly.	Do you use a cylindrical object with enough length and weight that the media retainer can hold it properly? • Depending on the shape of object, the media retainer cannot hold the object properly. • If the length of object is less than 80 mm, the media retainer cannot hold it. • If you use a light object, the media retainer sometimes hold it too tightly and moves the object upward. ☞ "Loading the media" P.28
Guide bar touches the object.	Did you enter the correct diameter of object? • It is recommended to measure the diameter in several places on the object and enter the average value.
	Did you enter the diameter of object that is smaller than the actual diameter? • Add the amount of contact with the object to the diameter you enterd, and enter the value in the Diameter menu.
The gap between the objectand guide bar is too large.	Did you enter the correct diameter of object? • It is recommended to measure the diameter in several places on the object and enter the average value.
	Did you enter the diameter that is larger than the actual diameter? • Subtract the distance between the guide bar and surface of object from the diameter you entered, and enter the value in the Diameter menu.
Entered the diameter of objectcorrectly, but the distancebetween the head and objectis not appropriate.	Are two rollers on the rotary unit set to the same roller pitch setting (”Narrow” or “Wide”)? • Set all pitch adjustment knobs (x4) to the same setting (”Narrow” or “Wide”). ☞ "Loading the media" P.28
	Did you match the roller pitch on the rotary unit to the Roller Pitch setting on the operation panel? • If it does not match, the printer cannot adjust the head height correctly. ☞ "Loading the media" P.28
	Did you place the guide bar on the correct position to check the head height? • Place the right side of the guide bar on the guide plate on the printer to check the head height. ☞ "Loading the media" P.28

Printer issues

Symptom	Possible cause and remedy
Noise occurs while printing.	Does the object stay stable on the rollers? • Place the object to sit flat on the rollers. ☞ "Loading the media" P.28
	Is there any obstacle on the surface of cylindrical object? • Clean the surface of object, then place it on the rotary unit. If any obstacle is present on the object, you may not achieve the predictable print result.
	Is there any cured ink, dust, or obstacle on the rubber roller? • Clean the surface of rubber roller, then place a cylindrical object. If any obstacle is present on the rubber, you may not achieve the predictable print result. ☞ "Maintenance on rotary unit" P.46 • If you cannot remove cured ink on the roller, please do NOT use the rotary unit.Contact your local MUTOH dealer.
	Is there any damage on the moving parts (rollers, belt, bearing, etc.)? • If you find any damage, stop using it immediately and contact your local MUTOH dealer.
Cannot change the roller pitch.	Is there any damage on the pitch adjustment knobs? • If any, contact your local MUTOH dealer.
	Did you pull up the pitch adjustment knob and rotate it anticlockwise by 90 degrees to unlock it? • Make sure to unlock the knob, then change the roller pitch.
	Did you slide the right and left knobs at a time? • Do NOT slide one knob only or two knobs separately. The roller cannot move correctly. • If it is difficult to change the roller pitch while rotary unit is installed in the printer, remove the rotary unit from the printer, then change the roller pitch.
Noise or vibration occurs whilethe table moves up or down. **Important!** • If the printer makes unusual noise, remove the rotary unit from the printer, then reboot the printer (in such cases, it will not prompt an error message.) ☞ "How To Correct Error After Power Off" P.44	Did you follow the instructions on the operation panel to loosen or tighten thumbscrews? • Make sure to follow the instructions to loose or tighten the thumbscrews. **Important!** If the printer moves the table up without loosening the thumbscrews, it can cause the damage to the rotary unit.
	When you loosen the thumbscrews, did you rotate them more than half a turn? • Make sure to rotate the thumbscrews more than half a turn to unlock, and check that the attachment can slide up and down smoothly.
	Did you measure the wight of object? • A cylindrical object up to 1.0 kg can be loaded.

Printing issues

Symptom	Possible cause and remedy
Printer doesn't expectedlyprint (ink mottle, ink bleed orfaint print appears)	Do you use a cylindrical object? • Check that the object sits flat on the rollers (not conical, drum, or concave shape).
	Is there any label on the cylindrical object? • If yes, remove the label, then start printing.
	Is your object extremely light, long, or short? • Avoid using extremely light, long, or short object. ☞ "Requirements for usable media" P.5
	Do you use the media retainer? • Media retainer is recommended to use only when a cylindrical object does not stay on the rollers while printing. Check that the printer can print on the object properly without using the media retainer. ☞ "Loading the media" P.28
	Are Nozzles in good condition? • Perform Nozzle check. Then if nozzle missing is found, conduct head cleaning. ☞ "Nozzle check and cleaning" P.16 • Perform Daily Maintenance. ☞ "Maintenance on Printer" P.47 • The problem still persists, perform "LittleCharge".
	Is Ink cartridge within the validity period? • Use a non-expired ink cartridge.
	Did you agitate ink in the cartridge? • When "Shake XX Cartridge" message appears on the operation panel, agitate ink in the cartridge.
	Do you perform daily maintenance properly? • Follow the instructions on the XPJ-661UF Operation Manual to perform maintenance. ☞ "Maintenance on Printer" P.47
Printed color is not accurate.	Are Nozzles in good condition? • Perform Nozzle check. Then if nozzle missing is found, conduct head cleaning. • Perform Daily Maintenance. ☞ "Nozzle check and cleaning" P.16 • The problem still persists, perform "LittleCharge".
	Did you agitate ink in the cartridge? • When "Shake XX Cartridge" message appears on the operation panel, agitate ink in the cartridge.

Symptom	Possible cause and remedy
Nozzle missing remains afterhead cleaning.	Is there any ink stains or deposits on the cleaning wiper or circumference of the print head? • Perform head cleaning or “Little Charge” again and check the nozzle check print. ☞ "Maintenance on Printer" P.47 • Perform Daily Maintenance and check the nozzle check print. • The problem still persists, contact your local Mutoh dealer. **Important!** Do NOT use light reflective object like a mirror or light transparent object that can cause irregular reflection of UV light. This will cure the ink on the print head.
Document was printed with wrong size (enlarged, reduced, wider, longer...).	Did you select “Rotary Unit” from the Choose Media dropdown list in Layout and Print Tool 2? • Check that rotary unit is selected from the Choose Media dropdown list. ☞ "Basic printing instructions" P.37
	Did you attempt to print an image directly from RIP software or printer driver? • A print file must be 720 x 1080 dpi with L dot setting. • Use Layout and Print Tool 2 to create a print file. ☞ "Basic printing instructions" P.37

Safety Instructions

About the safety notices

Signification of WARNING and CAUTION

WARNING	Used for dangerous situations where death or serious injury may be caused.
CAUTION	Used for dangerous situations that may cause slight or medium injury, or when all or parts of products are damaged.

Meaning of symbols

Warning symbol	Meaning
	Indicates “prohibited” operations.
	Indicates “required” operations.

When Storing rotary unit

WARNING

Do NOT place this Unit

- **on the area where is not stable or not level**
- **on the floor with busy area**
- **on the tall shelf**

On such places, the Unit could fall off or people can trip over.

CAUTION

When storing this Unit,

- **keep out direct sunlight**
- **avoid high temperature, high humidity and high dust**
- **avoid vibration from other devices.**

If not, it causes damage to the Unit, leading to malfunction.

Concerning handling the Unit

CAUTION

Do NOT step on or place items on this Unit.
If not, it causes damage to the Unit, leading to malfunction.

- **When moving this Unit, always hold the handle with one hand, and put the other hand lightly on the attachment or side of the product.**
  Do NOT hold rollers or media retainer. It can cause damage to the Unit.
- **When holding the side of the product, make sure to hold the black cover and silver frame on each side of the unit.**
  If holding the black cover only, you may have a chance to drop the product or the cover can be deformed, leading to poor print quality.

Do not use volatile solvents such as thinner, benzene, or alcohol.
These solvents may cause damage to the paint.

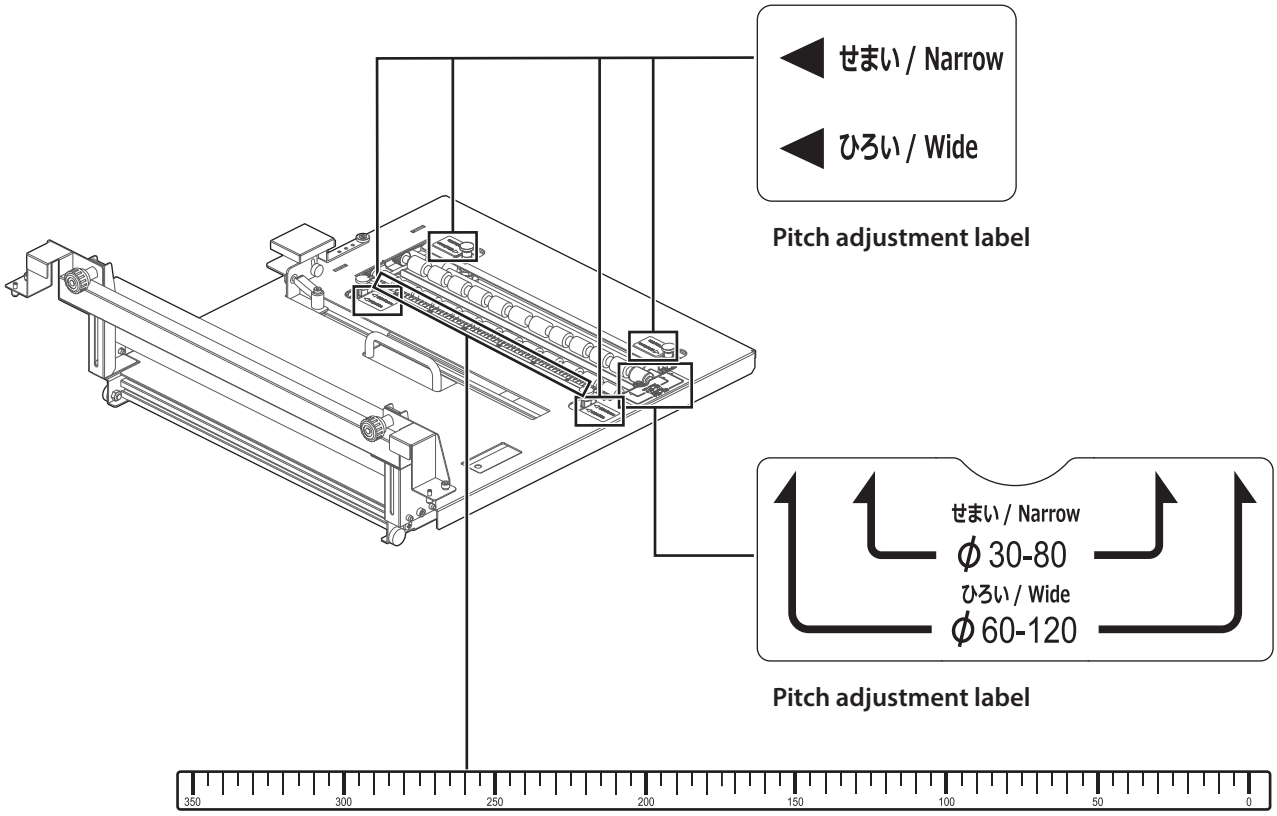
When loading a new media, make sure to place it on an appropriate position and input correct media information.
If wrong information is entered, the printer can print on an unintended position on the rotary unit.
Once UV ink cures on the Unit, you can hardly remove it.

When Handling UV Ink

Extra care must be taken when handling UV ink. Before use, read instructions on the XPJ-661UF Operation Manual and safety data sheet (SDS) of the UV ink.

Instruction labels

Operation instruction labels are applied on the printer at places where caution in operation is required. The contents of these labels are as shown below.



Pitch adjustment label

Pitch adjustment label

Scale label

350 mm scale in 5 mm divisions from the media origin (0).

Revision history

Date	Version	Manual code	Supported Firmware
2020.2	00	ROTAUT61E-A-00	V.1.01
2022.1	01	ROTAUT61E-A-01	V.1.04 or later

MUTOH