

Avery Dennison®

TrafficJet™ Xpress CLEAR Maintenance

Instructional Bulletin : # 9.77

Revision : # 02

Last Updated : February 2024

Regular maintenance on your Avery Dennison TrafficJet Xpress Printer is required to support proper functioning and prolonged service life. The document summarizes the mandatory maintenance procedures for the printer. Should you have any questions, please contact Avery Dennison Technical Services.

CLEAR ✓ Maintenance™

Clean. Lasting. Efficient. Accurate. Reliable.



The CLEAR Maintenance program is a simple process designed to keep your TrafficJet Xpress Printer at peak performance, ensuring high-quality prints during every operation.

WARNING - Safety First!

- Clean periodically. Debris and dust will accumulate on electrical components when the machine is used for extended periods. There is a risk of failure, electric shock, or fire due to current leakage.
- Do not clean by blowing—e.g., avoid using air blowers. Doing so may lead to failure, electric shock, or fire involving the machine if airborne debris or dust gets inside electrical components.
- Wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out. A vacuum cleaner may also be used for cleaning.
- Do not allow liquids to get inside the machine. Otherwise, there is a risk of failure, electric shock, or fire.
- Do not look into the UV light directly and the UV-LED unit becomes extremely hot. Be careful not to touch the LED after it has been turned off until it has sufficiently cooled.
- For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.
- Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, Flush, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.
- Never touch the print head nozzle surface. Do not allow water or alcohol to come into contact with the print nozzle surface. This will increase the risk of machine failure or ejection failures (e.g., nozzle clogging or deflection).
- Do not use cotton swabs to clean around the head or carriage. Fibers from cotton swabs may adhere to the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).
- Do not splash ink or Flush on the covers. Exposure to splashing ink or Flush may damage or deform the cover.
- Do not use benzine, thinner, or any chemical agent containing abrasives. Use of these chemicals may result in damage to or deformation of parts.
- Do not move the carriage by hand. To move the carriage, use the carriage out function on the menu



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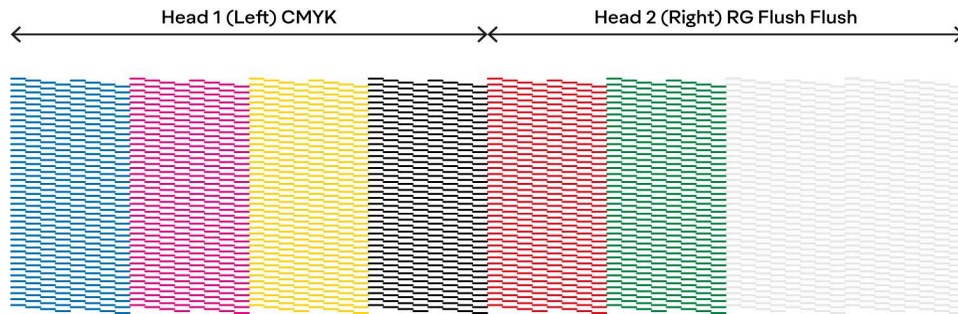
If the machine is not used for a week or more

- [Holiday procedure](#)

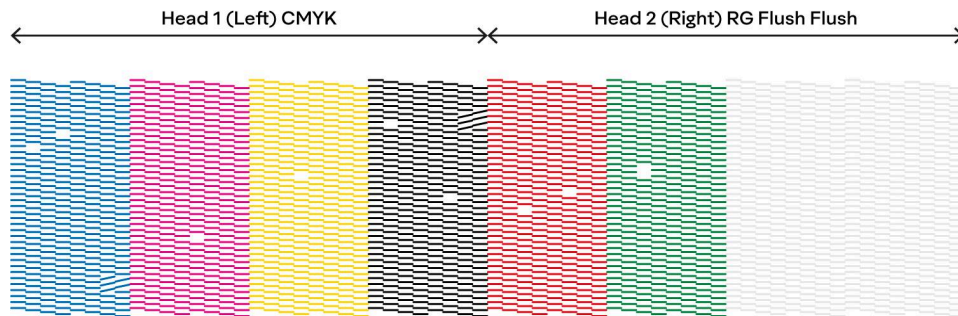
● Daily Maintenance

Nozzle Check and Cleaning Cycle [\(video\)](#)

1. On the LOCAL mode screen, select [MENU] > [Maintenance]. The Maintenance menu is displayed.
2. Select [Test Print] > [SCAN DIR], select [ENTER].
3. The Nozzle Check pattern will be printed and please check thoroughly making sure there is no cross-contamination and there are no missing or deflected nozzles.



4. If there are no missing nozzles (nozzle check above), press the END/POWER Button until you are back in the main menu and perform regular, daily maintenance.
5. If there is cross-contamination, missing or deflected nozzles (nozzle check below), continue with the steps below.



Cleaning Cycle

1. On the LOCAL mode screen, select [MENU] > [Maintenance]. The Maintenance menu is displayed.
2. Select [CLEANING] and pick one of the 4 options (Soft, Normal, Hard, Ultra) depending on the severity of the issues. It is recommended to start with Normal or Hard first before proceeding with Ultra.

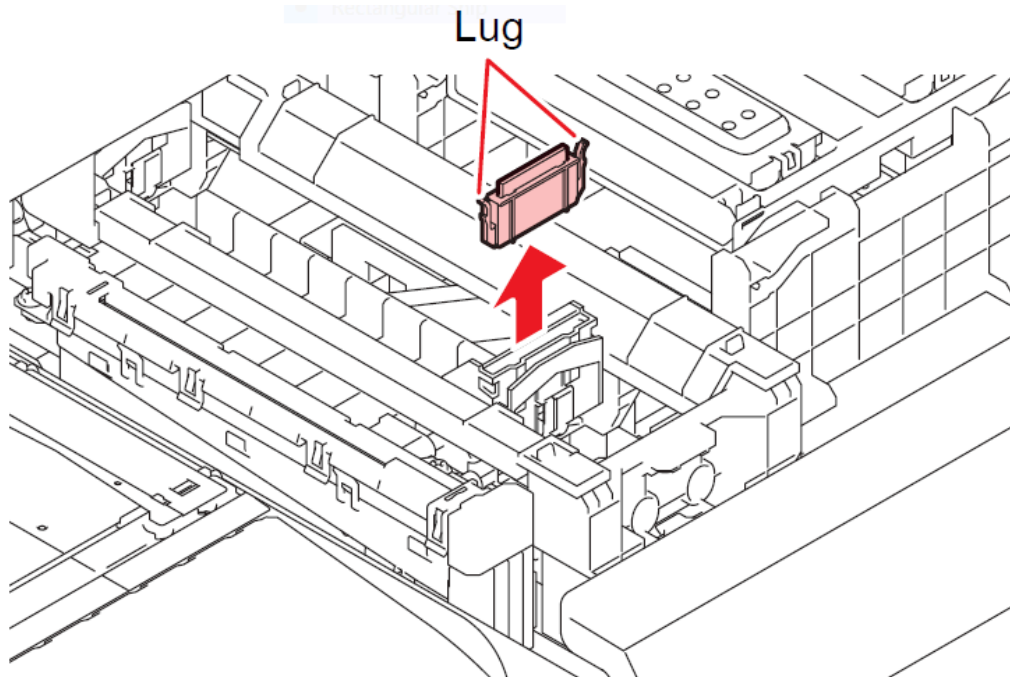
Wiper Cleaning

The wiper wipes off ink adhering to the print head nozzle surface. Continuing to use the dirty wiper may cause the wiper to rub dried ink and dust against the nozzle surface, leading to printing defects (e.g., nozzle clogging or deflection).

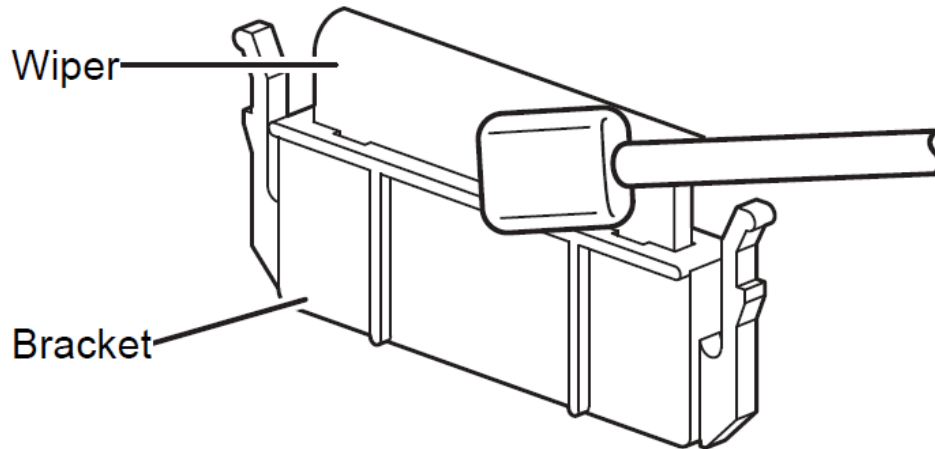
CAUTION

Be careful to avoid leaving fragments from the swab behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).

1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Station Maint.], then press the [ENTER] key. The carriage moves over the platen.
3. Open the front cover.
4. Detach the wiper. Pull out the wiper by holding the protrusions at both ends of the wiper bracket.



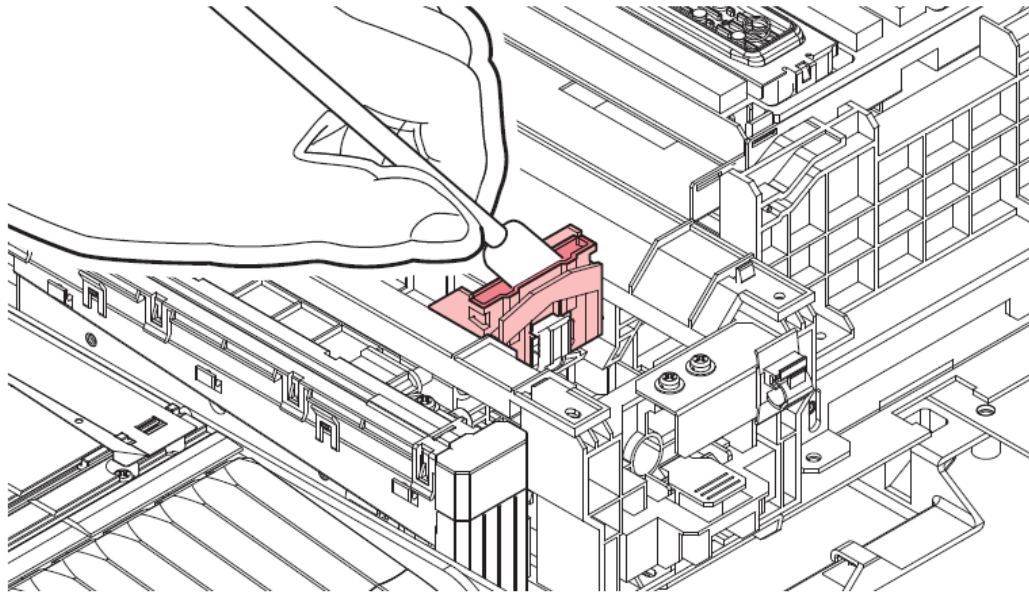
5. Clean the wiper and bracket. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.



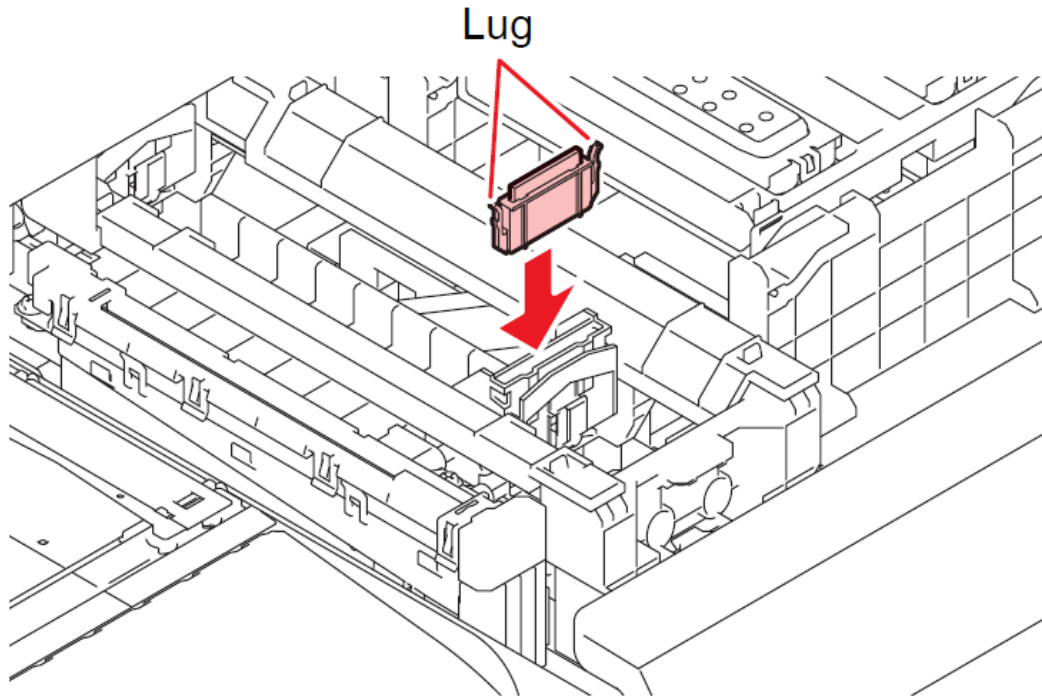
NOTICE

Replace wipers that can not be properly cleaned or are warped with a new one.

6. Clean the wiper slider. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.

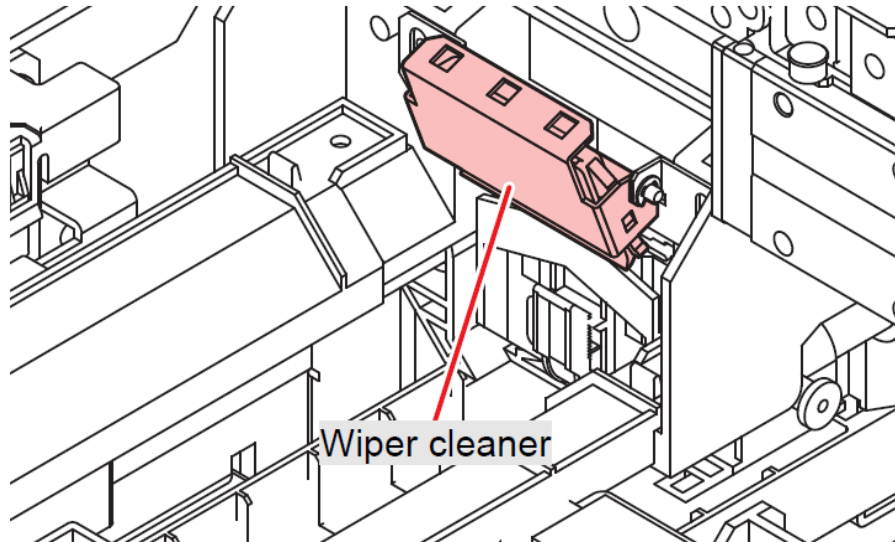


7. Mount the wiper at its original position.



Clean the Wiper Cleaner

1. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.

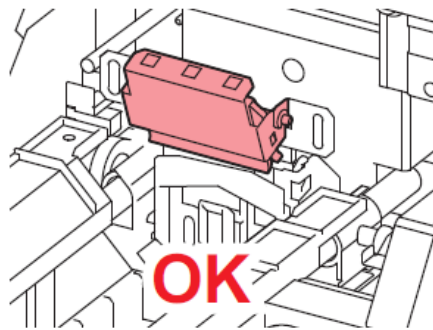


NOTICE

Do **not** remove the wiper cleaner from the bracket.

Only clean the front side of the wiper cleaner. There is no need to clean the backside.

2. After cleaning is completed, check to confirm that the wiper cleaner is **not facing up**.



3. Once cleaning is complete, close the cover, then press the [ENTER] key.

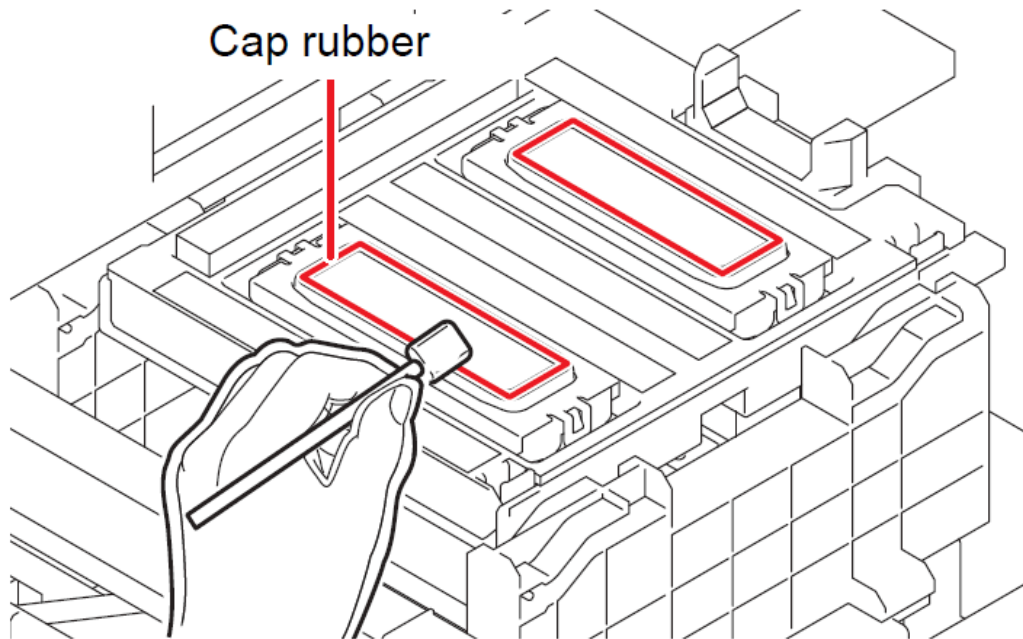
Cap Rubber Cleaning

The cap prevents the print head nozzle surface from drying out. Continuing to use a dirty cap may affect ink take-up and lead to print defects (e.g., nozzle clogging, deflection).

CAUTION

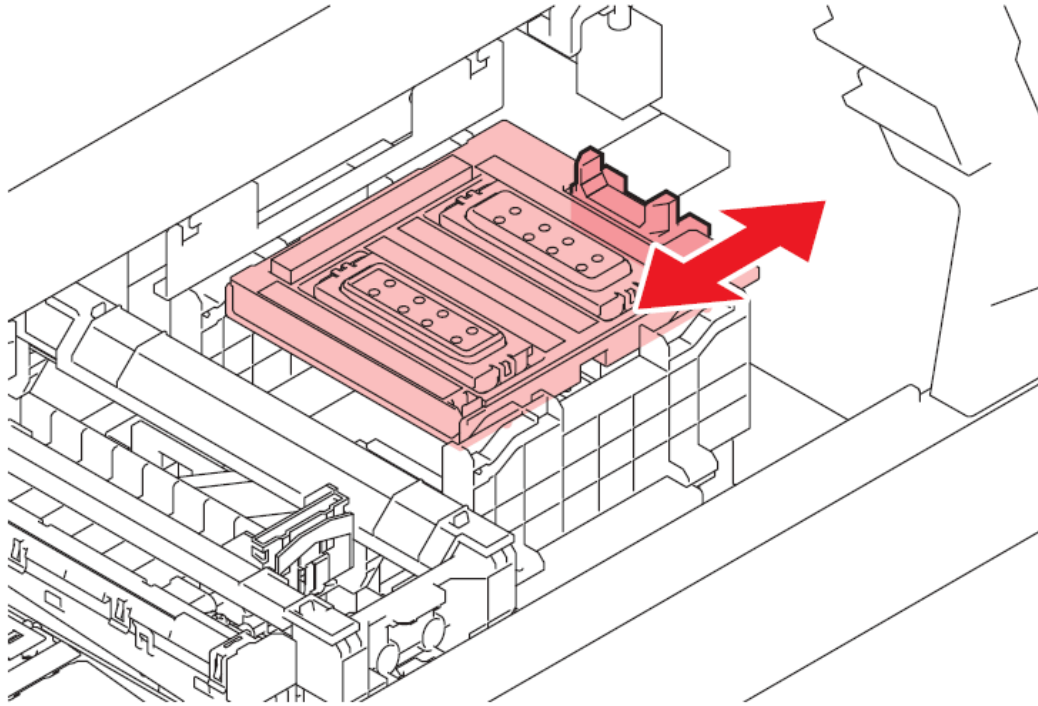
Be careful to avoid leaving fragments from the swab behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).

1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Station Maint.], then press the [ENTER] key. The carriage moves over the platen.
3. Open the front cover.
4. Clean the cap rubber. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.



CAUTION

Check to confirm that the cap slider is not tilted once cleaning is complete. If the cap slider is tilted, move the slider block to the left or right to correct the tilt.



5. Close the front cover, then press the [ENTER] key.

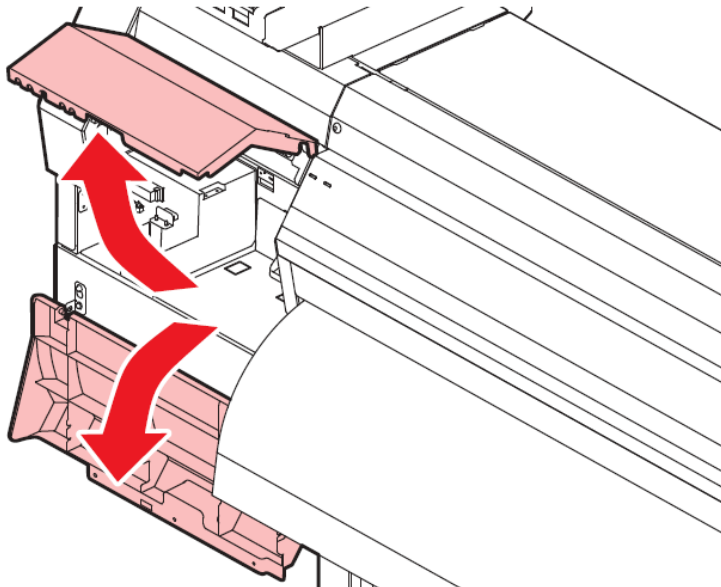
Carriage Underside Cleaning

The underside of the carriage becomes coated with ink wiped off by the wiper. Continuing to use the dirty carriage underside will rub dried ink and dust onto the media, resulting in contaminated prints.

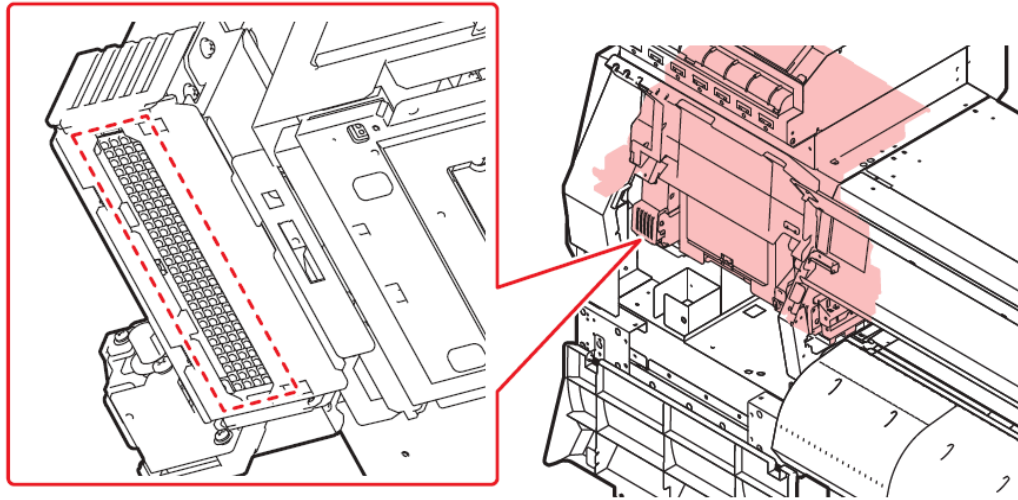
CAUTION

The print head uses an extremely delicate mechanism. Take great care when handling it. Be careful to avoid leaving fragments from the swab behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).

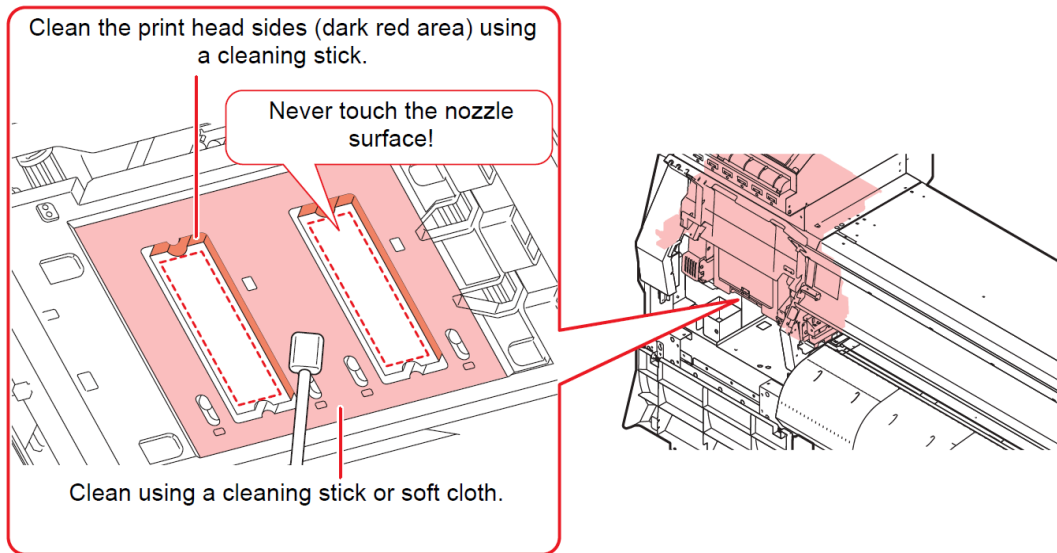
1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Head Maint.], then press the [ENTER] key. The carriage moves to the maintenance space.
3. Open the maintenance covers.



4. Clean the area around the UV-LED lamp glass and clean the glass itself. Wipe off any ink using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.



5. Clean around the print head. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.



CAUTION

Never touch the print head nozzle surface.

6. Once cleaning is complete, close the cover, then press the [ENTER] key.

Weekly Maintenance

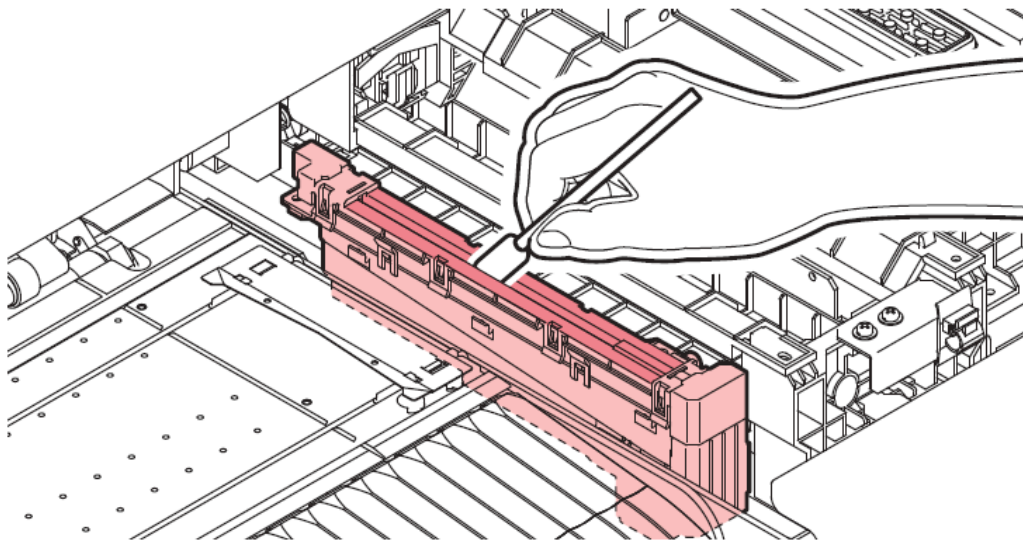
Clean the NCU

The NCU uses a sensor to monitor the ink droplets ejected from the print head nozzles. Continuing to use the dirty NCU may prevent the nozzle check function from operating correctly.

CAUTION

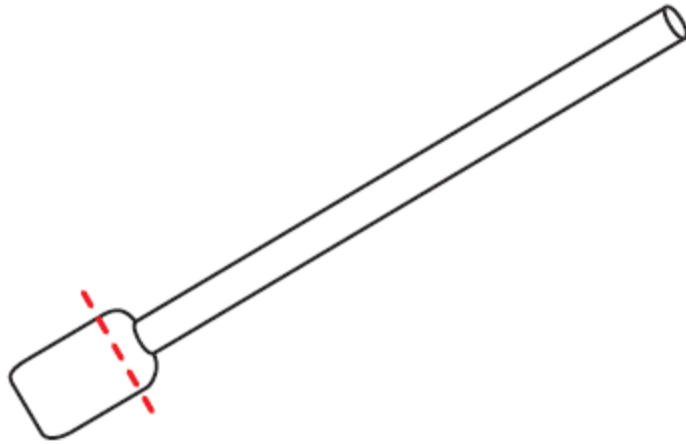
Be careful to avoid leaving fragments from the swab behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).

1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [[ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Station Maint.], then press the [ENTER] key. The carriage moves over the platen.
3. Open the front cover.
4. Clean the NCU. Wipe off any ink and dust adhering using a swab moistened with Flush. Wipe off the Flush. Make sure none remains.



CAUTION

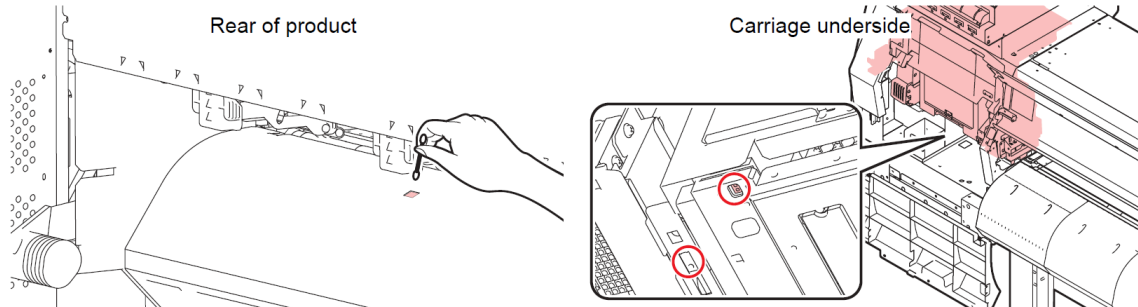
Insert the swab only as far as the line shown in the illustration.



5. Once cleaning is complete, close the cover, then press the [ENTER] key.

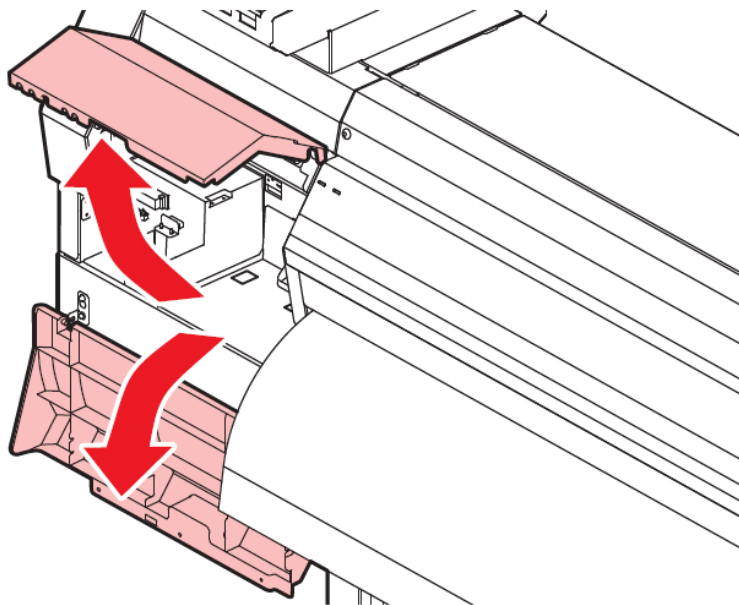
Media Sensor Cleaning

Media sensors are located on the rear cover and carriage underside. The media cannot be detected correctly if dust or debris accumulates on the sensors. Remove any debris using cotton swabs or a soft cloth.



Cleaning the carriage underside sensor

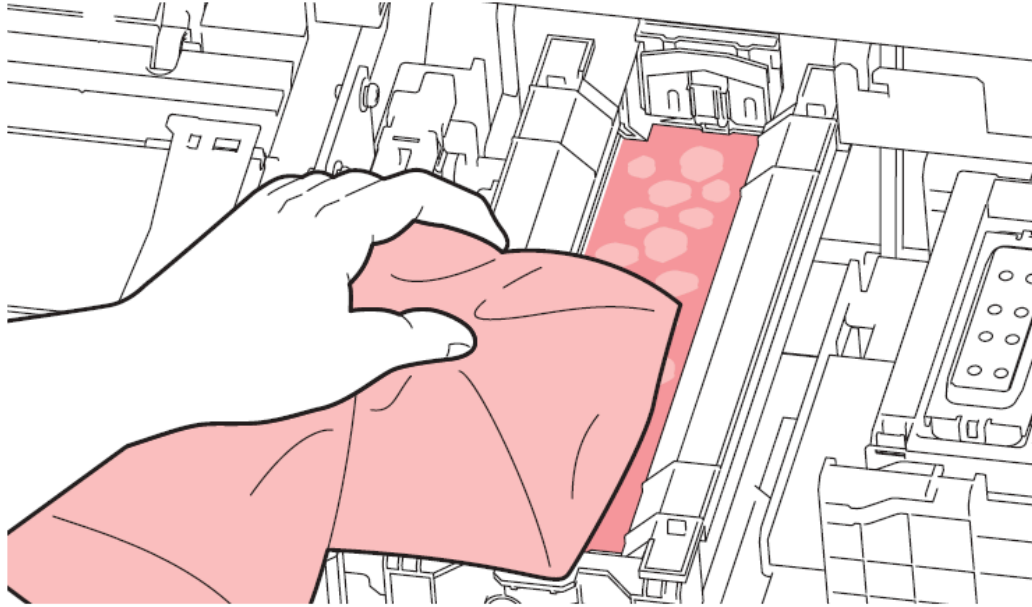
1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Head Maint.], then press the [ENTER] key. The carriage moves to the maintenance space.
3. Open the maintenance covers.



4. Clean the media sensor.
5. Once cleaning is complete, close the cover, then press the [ENTER] key.

Clean the waste Ink pad under the wiper

1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Station Maint.], then press the [ENTER] key. The carriage moves over the platen.
3. Open the front cover.
4. Soak up ink in the waste ink holder with a paper towel once a week. Doing so may result in leaking ink.



CAUTION

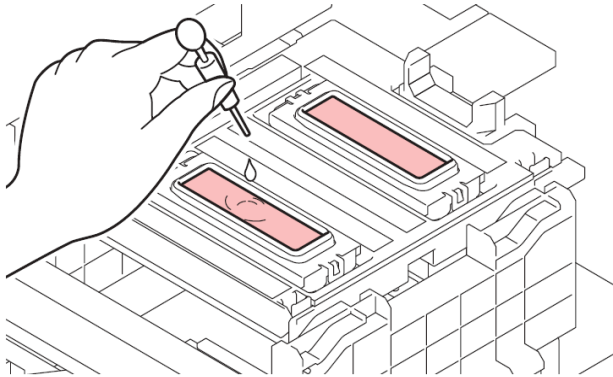
Do not remove the absorbent material in the absorbent material case. Doing so may result in leaking ink.

5. Once cleaning is complete, close the cover, then press the [ENTER] key.

Ink Discharge Channel Cleaning

Clean the ink discharge channel regularly to prevent clogging of the ink discharge channel below the cap.

1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station Maint.] > [Disway Wash], then press the [ENTER] key. The carriage moves over the platen. "Fill the Liquid. Exit Next [ENT]" appears on the display.
3. Open the front cover.
4. Fill the cap with Flush. Use an eye dropper to draw up some Flush and fill until it almost overflows from the cap.



5. Close the front cover, then press the [ENTER] key. Pump tube (ink discharge channel below the cap) washing starts.

Emptying Waste Ink Tank

Ink used during head cleaning and other processes is collected in the waste ink tank at the lower right of the machine.

This product keeps track of the waste ink level. A "Check Waste Ink Tank" message appears when the preset level is reached. Use this a guide for emptying the waste ink tank.

CAUTION

For a 2-liter tank, the preset level is 80 % (1.6 L). Continuing to use the product without disposing of the waste ink may result in waste ink overflowing from the waste ink tank. Visually check ink levels in the waste ink tank about once a week.

Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.

When disposing of the product, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.

When "Check Waste Ink Tank" message appears

1. The "Check Waste Ink Tank" message appears on the display.
2. Check the waste ink levels in the waste ink tank.
 - a. If you note any discrepancies from actual levels, proceed to the next step.
 - b. If there is no discrepancy, replace (dispose of) the waste ink tank referring to "Replacing the Waste Ink Tank".
3. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
4. Select [Replace Wasteinktank], then press the [ENTER] key. "Replace Wasteinktank Level: 80 % (1.6 L)" appears on the display.
5. Press to adjust the level.
6. Press the [ENTER] key once the adjustment is complete.

Replacing the Waste Ink Tank

1 On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key.

- The Maintenance menu is displayed.

2 Select [Replace Wasteinktank], then press the [ENTER] key.

- "Replace Wasteinktank Level: 80 % (1.6 L)" appears on the display.

3 Open the waste ink tank cover.

Hold the handle on the waste ink tank and slide it out.

Attach the cap to the removed waste ink tank, and use tape to prevent leakage of waste ink.

Mount a new waste ink tank.

Close the waste ink tank cover.

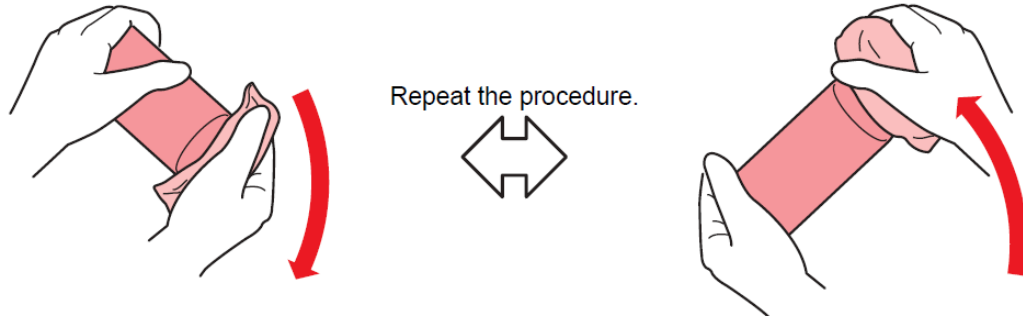
Press the [ENTER] key. The waste ink level will be reset.

Shake the ink bottles

If ink constituents are sedimented, the ink density may become uneven. We recommend shaking the Ink bottle periodically to keep printing consistent.

Shaking the Ink bottle

1. Shake the Ink bottle to the left and right slowly at least 20 times. Tighten the ink bottle lid securely, then shake the bottle slowly from left to right to ensure that the ink moves inside, holding the ink bottle lid with a paper towel.



CAUTION

Shake slowly. If the bottle is shaken too violently, ink may leak out or the air mixed in the ink may cause nozzle clogging.

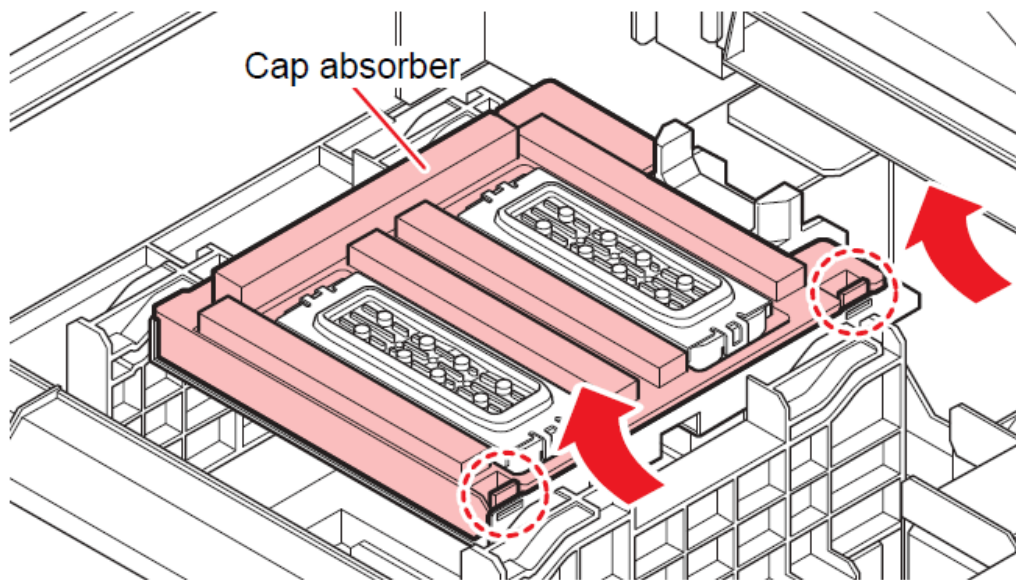
If the ink bottle is partially used, tilt it slowly until the ink bottle is upright.

As Needed

Cap Absorber Replacement

This product maintains a usage count. The "Replace Cap Absorber" message appears on the display when a preset count is reached. (This is supported in firmware version 2.5 and later.) If the cap absorber is very dirty or if ink drips onto the media, replace it with a new cap absorber.

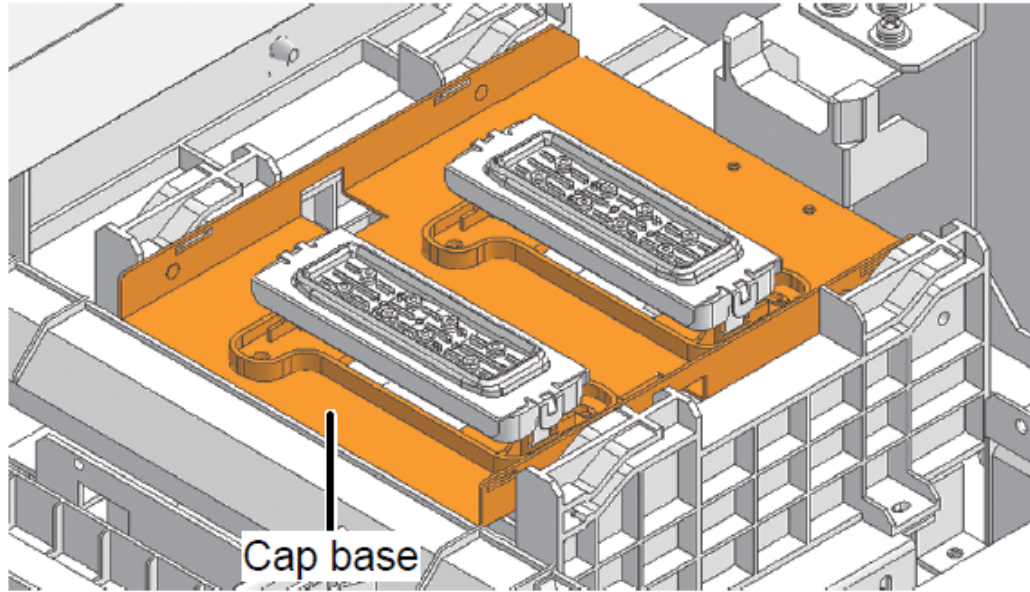
1. The "Replace Cap Absorber" message appears on the display.
2. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
3. Select [Station] > [Carriage Out] > [Station Maint.], then press the [ENTER] key. The carriage moves over the platen. The cap absorber usage count is reset.
4. Turn off the power.
5. Open the front cover.
6. Remove the cap absorber. Push up the two tabs at the front to remove the cap absorber.



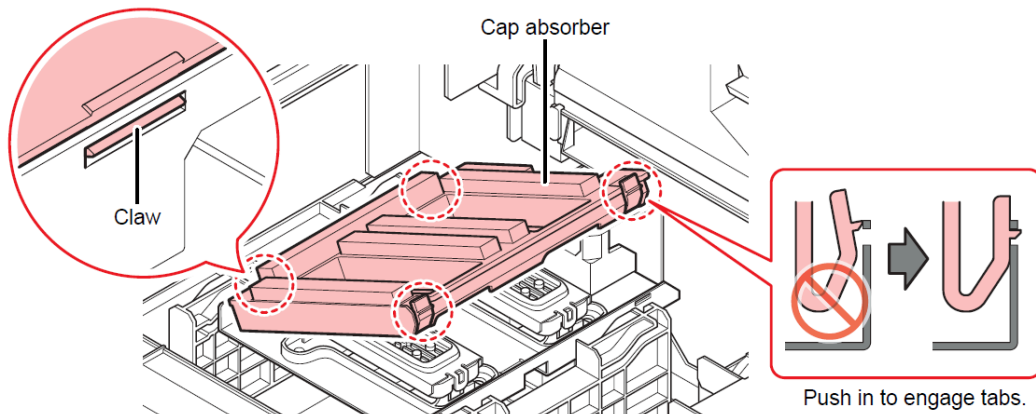
CAUTION

Avoid ink dripping when removing the cap absorber.

7. Clean the carriage base.



8. Mount a new cap absorber. Push the tabs on the cap absorber into the slits at the rear of the C slider, and clip in the tabs at the front.

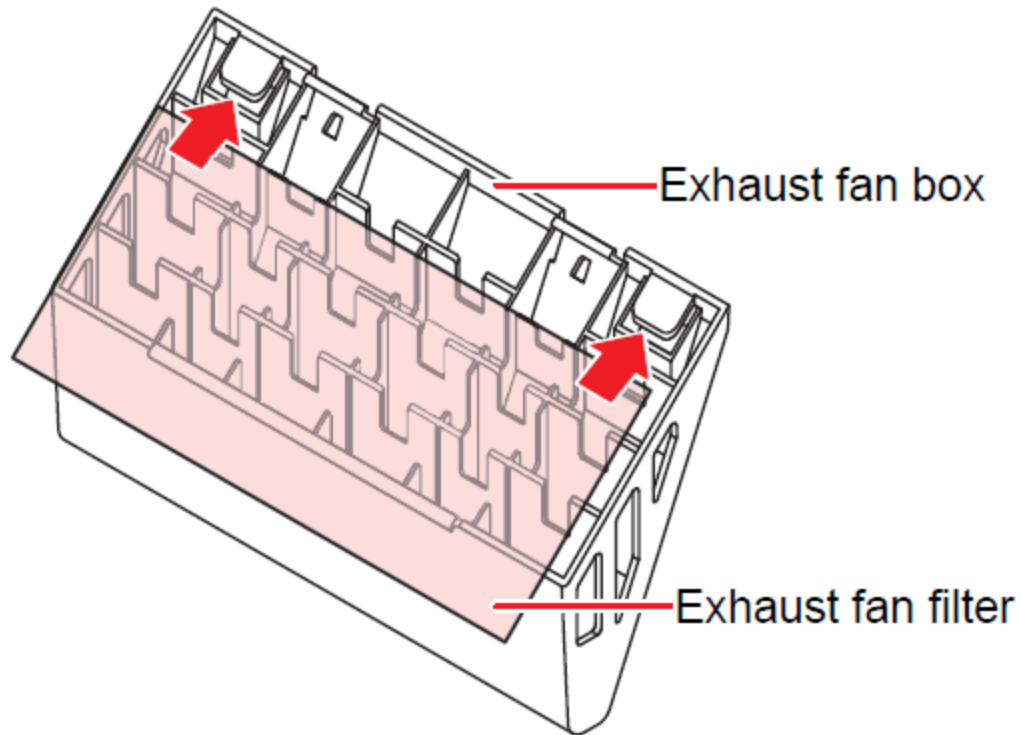


9. Mount a new cap absorber.
10. Push the tabs on the cap absorber into the slits at the rear of the C slider, and clip in the tabs at the front.

Exhaust Fan Filter Replacement

Check the exhaust fan filter condition. Replace if very dirty.

1. Remove the exhaust fan BOX. Push the tabs at the front to remove the exhaust fan box and replace the dirty exhaust fan box with a new one.
2. Mount a new exhaust fan filter in the exhaust fan box. Press the exhaust fan filter into the space under the tabs of the exhaust fan box.

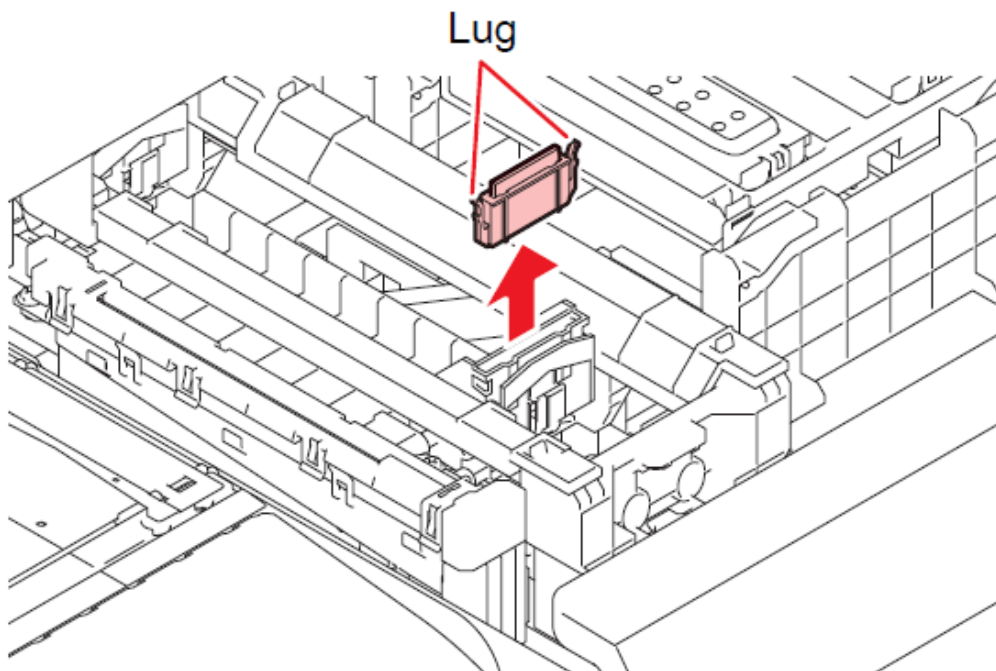


3. Mount the exhaust fan box. Insert the tabs of the exhaust fan box into the slits of the machine, and clip in the tabs at the front.

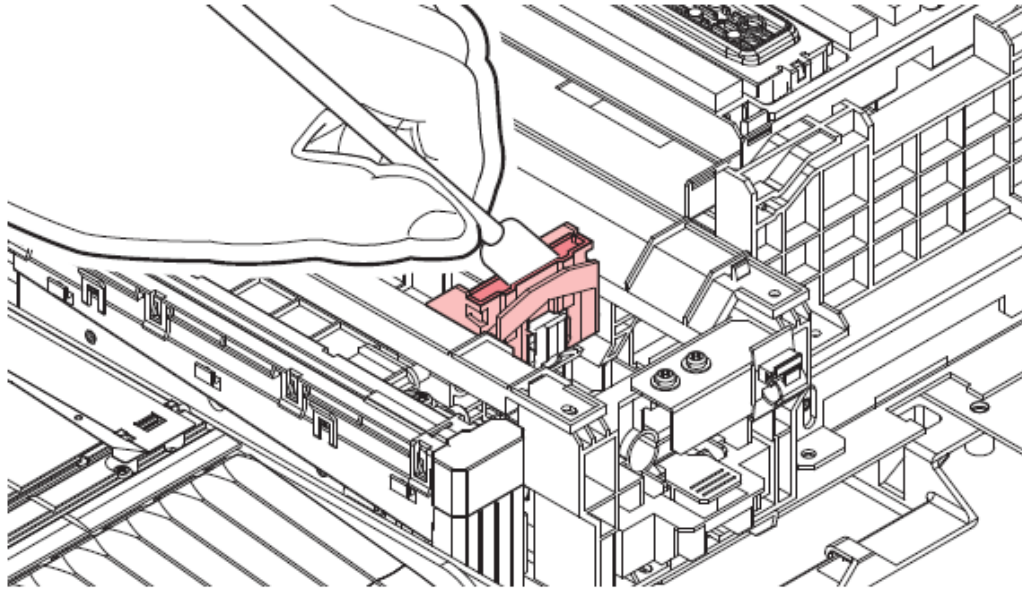
Wiper replacement

This product maintains a count of the number of wiping cycles. The "Replace Wiper" message appears when a preset count is reached. Immediately replace dirty or warped wipers with new ones.

1. "Replace Wiper" appears on the display.
2. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
3. Select [Station Maint.] > [Replace Wiper], then press the [ENTER] key. The carriage moves over the platen.
4. Open the front cover.
5. Detach the wiper. Pull out the wiper by holding the protrusions at both ends of the wiper bracket.



6. Clean the wiper slider. Wipe off any ink and dust adhering using a swab moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.



7. Mount a new wiper.
8. Once the replacement is complete, close the cover, then press the [ENTER] key. The wiper usage count is reset.

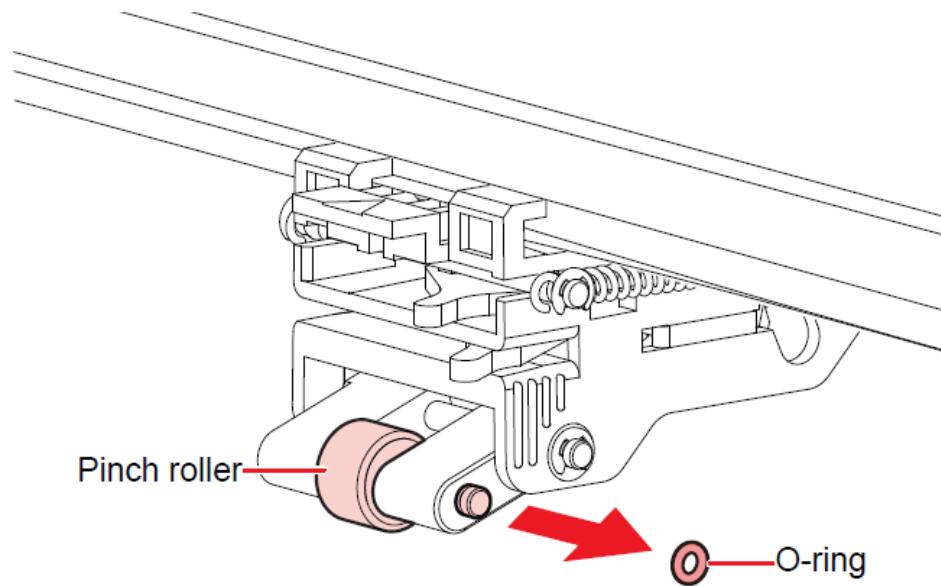
Pinch Roller replacement

CAUTION

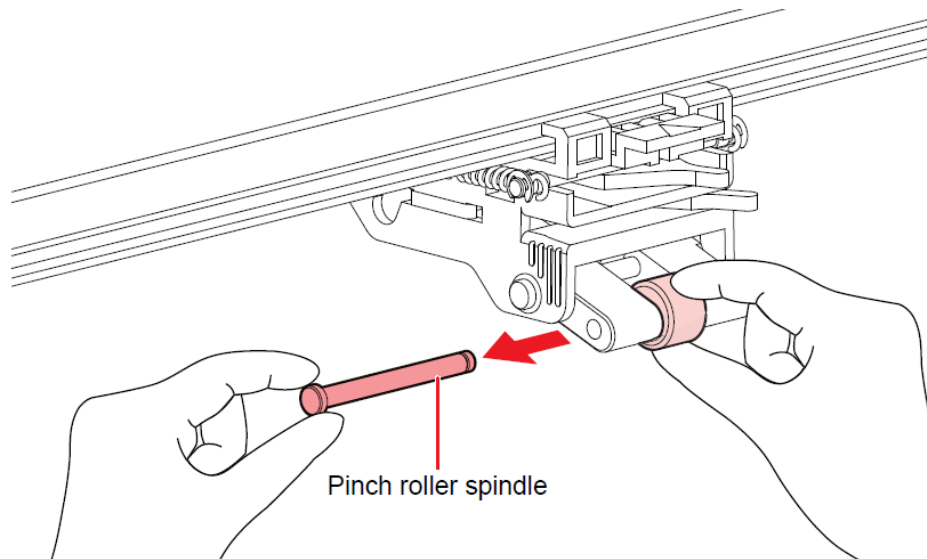
Turn off the main power supply and unplug the power cable before replacing the pinch rollers.

The pinch rollers are small. Be careful to avoid dropping them into the product interior.

1. Open the front cover.
2. Raise the clamp lever.
3. Remove the O-ring retaining the pinch rollers.



4. Remove the pinch roller spindle.

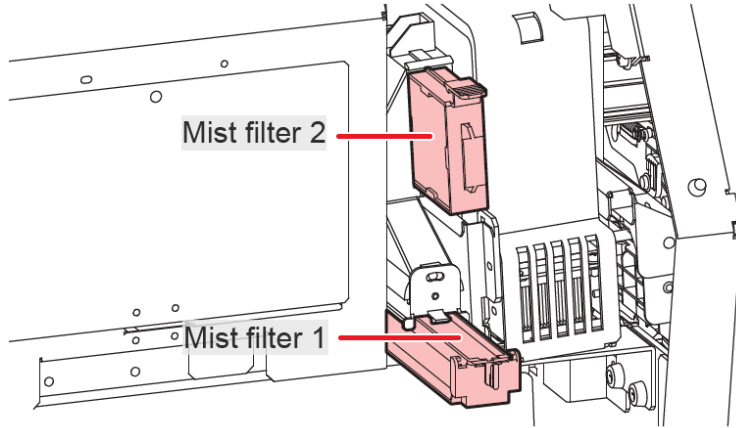


5. Mount new pinch rollers, and secure them using the O-ring.

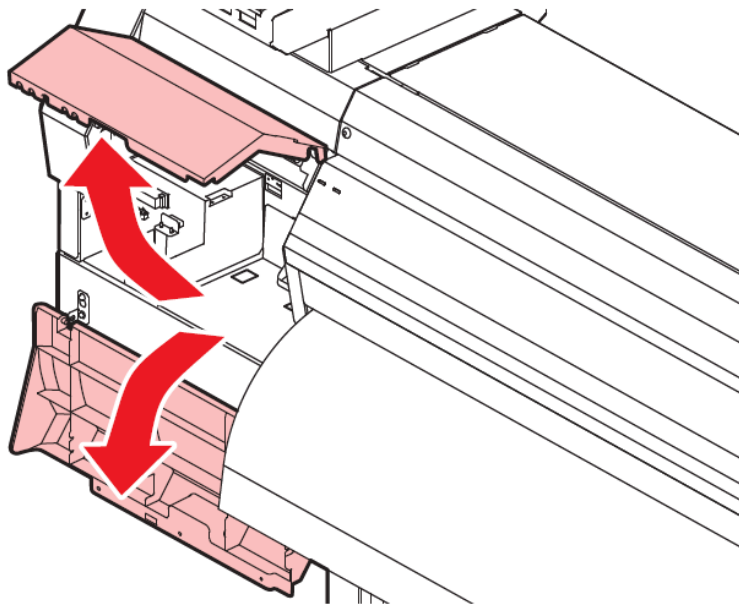
Close the front cover.

Cleaning or Replacing Mist Filters 1 and 2

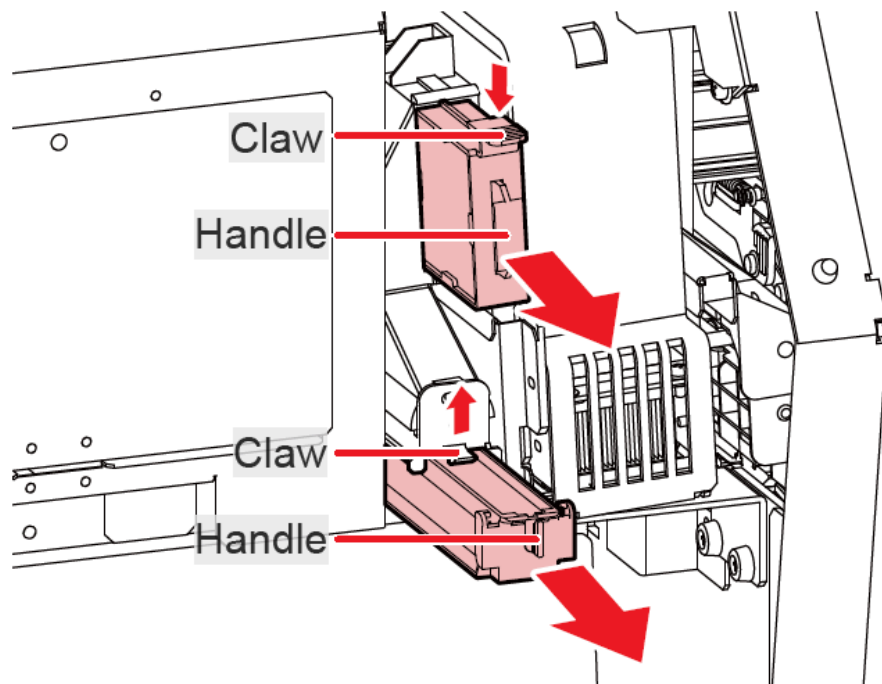
The mist filter absorbs the mist generated when ink droplets are discharged from the print head. Continuing to use it when it is dirty will result in contaminated prints.



1. On the LOCAL mode screen, select [MENU] > [Maintenance], then press the [ENTER] key. The Maintenance menu is displayed.
2. Select [Station] > [Carriage Out] > [Head Maint.], then press the [ENTER] key. The carriage moves to the maintenance space.
3. Open the maintenance covers.



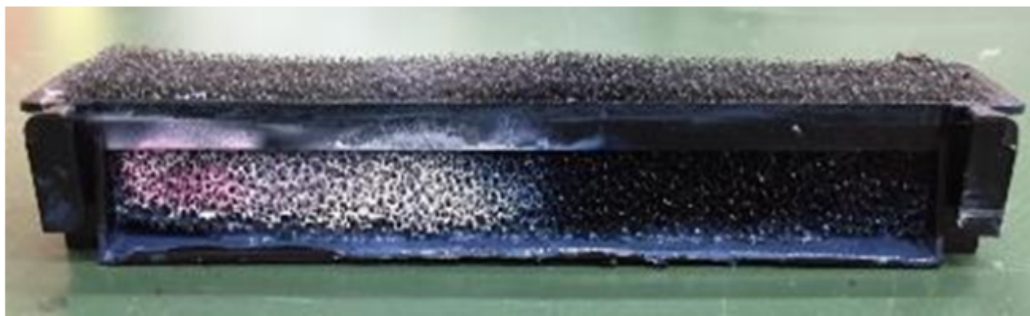
4. Remove the mist filter. To remove the mist filter, pull the knob to the front while pushing the tabs in the direction indicated by the arrows.



5. Clean the filter. Remove the filter and press down on it with a paper towel to remove the dirt. Wipe off the dirt adhering to the filter case.

NOTICE

Replace the mist filter if it gets very dirty. For example, due to liquefaction or ink adhering to the filter.



6. Mount the mist filter in its original position.
7. Once cleaning is complete, close the cover, then press the [ENTER] key.

Platen Cleaning

CAUTION

Turn off the main power supply and unplug the power cable before carrying out maintenance.

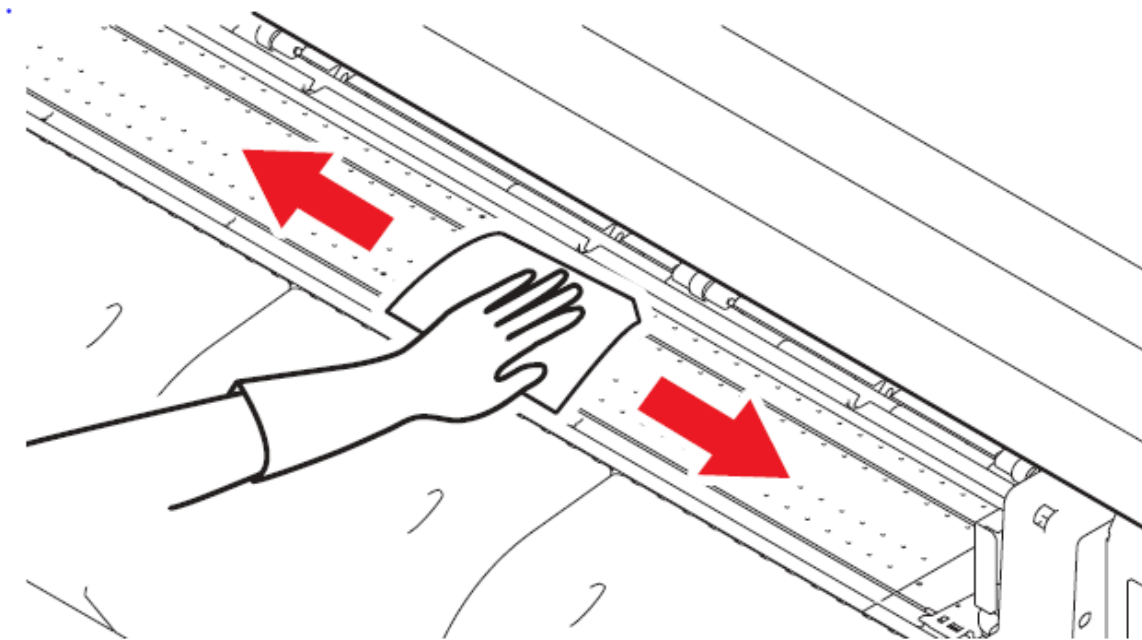
WARNING

Do not allow liquids to get inside the machine. Otherwise, there is a risk of failure, electric shock, or fire.

The grooves in which the media holder slides and the media is cut are susceptible to dust accumulation. Remove any debris carefully.

For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).



Media Holder Cleaning

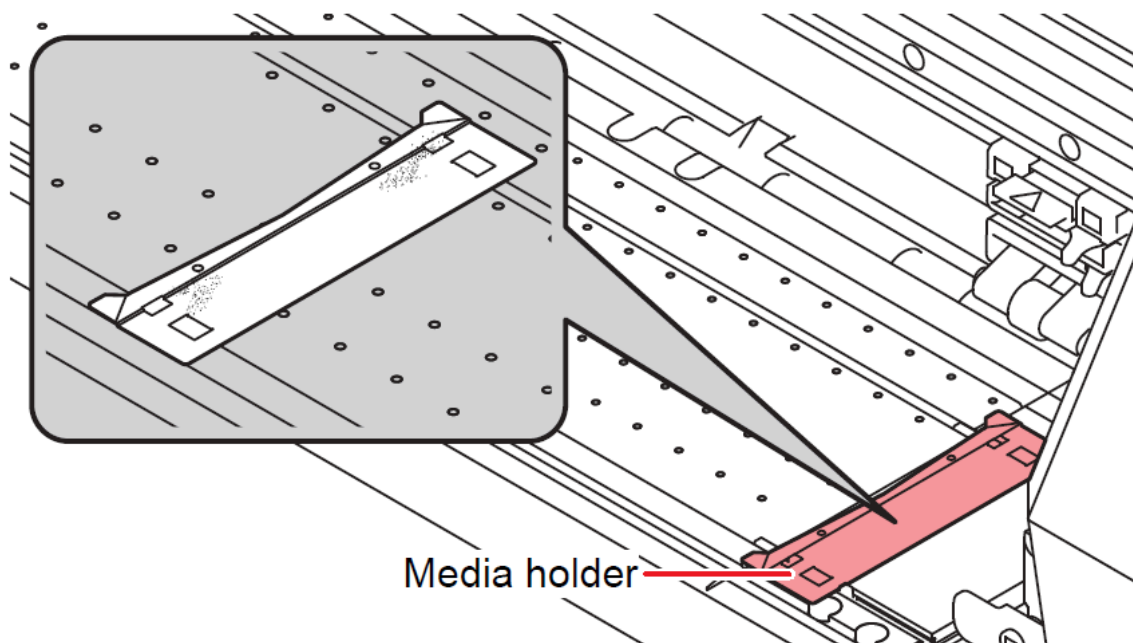
Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).

CAUTION

Turn off the main power supply and unplug the power cable before carrying out maintenance.

WARNING

Do not allow liquids to get inside the machine. Otherwise, there is a risk of failure, electric shock, or fire.



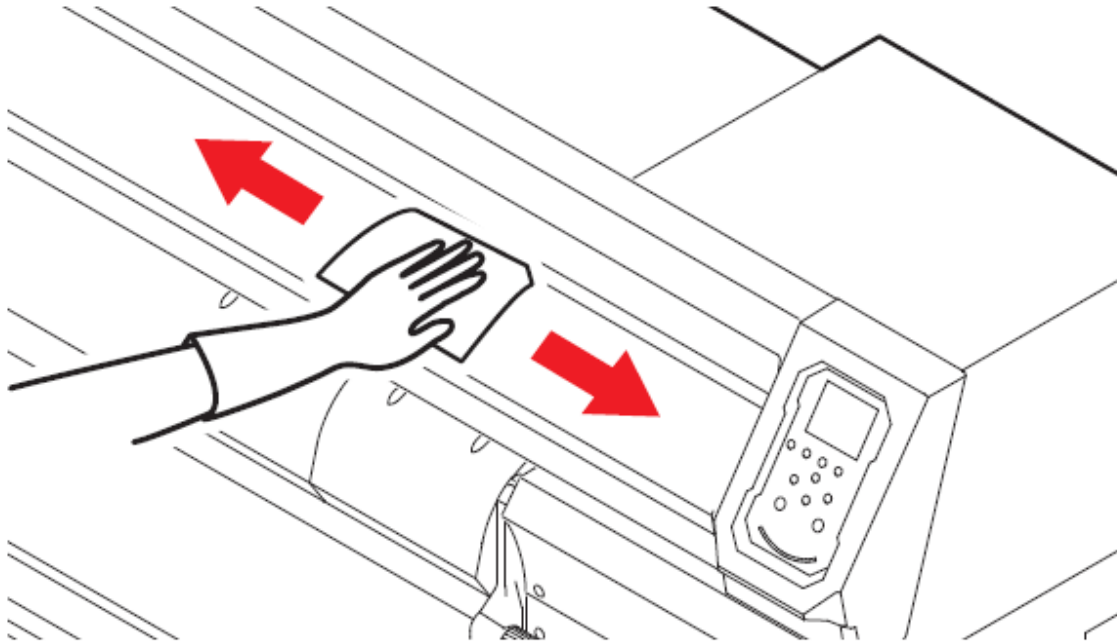
NOTICE

For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

Cover (Exterior) Cleaning

NOTICE

For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.



Lubricate the rails and the rubber drive belt

Use Avery Dennison's recommended grease to periodically grease the bearing rails and the rubber belt that drives the carriage.

- 1 First, clean the rails

CAUTION

Be careful not to contaminate or damage the encoder strip. This can cause an error and in the worst case, requires the encoder strip or encoder reader to be replaced.

- 2 After cleaning the rails, apply a little bit of grease in multiple spots on the rails. When the carriage is moving (e.g. while printing), it will transfer the grease over the rest of the rails.
- 3 Put a little bit of grease on multiple spots of the serrated side of the green drive belt. This will support smooth operation and prolong the life of the belt. When the carriage is moving (e.g. while printing), it will transfer the grease over the rest of the belt.

CAUTION

Do not apply the wrong or too much grease as this can start to contaminate or damage other parts of the printer.

Holiday procedure

Our recommendation is to continue to operate and maintain the printer (daily and weekly maintenance).

WARNING

NEVER completely switch off the printer (main power switch) as the printer performs auto-cleanings with a specified interval. This is designed to keep the printer and print heads in optimal condition.

If you do plan to stop printing for a period of 1 week or longer, make sure the ink and Flush bottles are full, the printer has new chips allowing all inks from the bottle to be used, the waste ink tank is empty, the waste ink counter is reset and the pressure rollers are disengaged so the printer can continue to maintain itself. It is completely at the risk of the user in case, for example, ink runs out, the waste ink tank overflows, or any other issues related to not continuing to operate and maintain the printer.

Alternatively, the printer can be completely flushed out. Please reach out to your Technical Services Representative in case you are interested in this so we can support you with the process. As all the inks and flush in the system will be pushed towards the heads and this is quite an extreme procedure, this is completely at the risk of the user.

The above Avery Dennison literature provides information to the user for proper application, storage, and other requirements. Please refer to Product Data Bulletins or your local Avery Dennison Representative for warranty information. Find the latest information on the Avery Dennison website, www.reflectives.averydennison.com. We encourage you to check our website periodically for updates.

All statements, technical information, and recommendations about Avery Dennison products are based upon tests and information believed to be reliable but do not constitute a guarantee or warranty of any kind. All Avery Dennison products are sold with the understanding that Purchaser has independently determined the suitability of such products for its intended and other purposes.

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