

## Inkjet printer JFX500-2131

# Requests for Daily Care and Maintenance

This machine is a precision machine equipped with extremely fine mechanisms. Especially, the nozzle surface of the heads from which the ink is discharged is affected even by a slightest attachment of dust or paper powder and the proper printing results could not be obtained. With a view to using this machine in a better condition, we would like to recommend performing the following care and maintenance on daily basis.

### 1. When to care

When to care	What to care	Reference Page
Once a day (at the end of the daily work)	Surroundings of the heads	P.2
	Capping station	P.3
	Wiper	P.3
Once a week (at the end of the work on weekend)	Exterior	P.4
	Waste ink tank	P.4
	Cleaning the float sensor part of external ink supply unit	P.5
Once a week or two weeks	Replacing the carriage filter	P.6
Once a year	Replacing the ink filter of external ink supply unit	P.7
	Replacing filter element of filter for vacuum	P.9



- Tools required for maintenance
  - Cleaning stick (SPC-0527)
  - Cleaning liquid for maintenance (SPC-0568)
  - Cotton swab
  - Gloves
  - Soft fabric



- Make sure to wear the attached **goggles and gloves**.

## 2. Daily care



- When possible, use the cleaning stick (SPC-0527) for cleaning around the head/ capping station/ wiper. Using the other cotton bud may attach lint, then it may damage the machine.
- Be sure to perform maintenance for the ink cap and the wiper of capping station every day. If you leave it dirty, dirt may adhere to the nozzle surface, or, dust and dry ink may be rubbed against the nozzle. It may cause discharge defect.
- Clean the bottom of carriage every day so that it will not get dirt from inks or dusts. If you leave it dirty, dust and dry ink may be rubbed against the nozzle at wiping operation when performing head cleaning.
- When you clean the carriage bottom surface, fully be careful not to rub the nozzle surface.

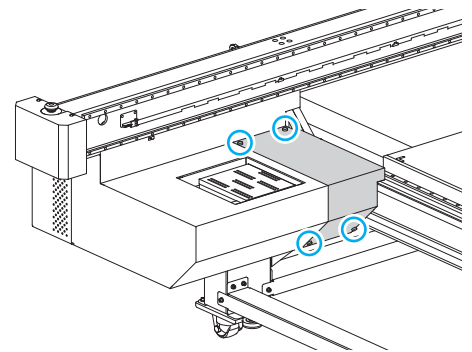
### (1) Surroundings of the heads ("Cleaning the Head and the Area around It" Chapter 4 of the Operation Manual)

**Important!**

- The heads and their surroundings are the parts most liable to be tainted in this machine and if tainted, it could cause adverse effects to the functions of the machine and the results of the printings. Moreover, as the head itself uses very fine mechanisms, sufficient precautions are required for the care and maintenances.

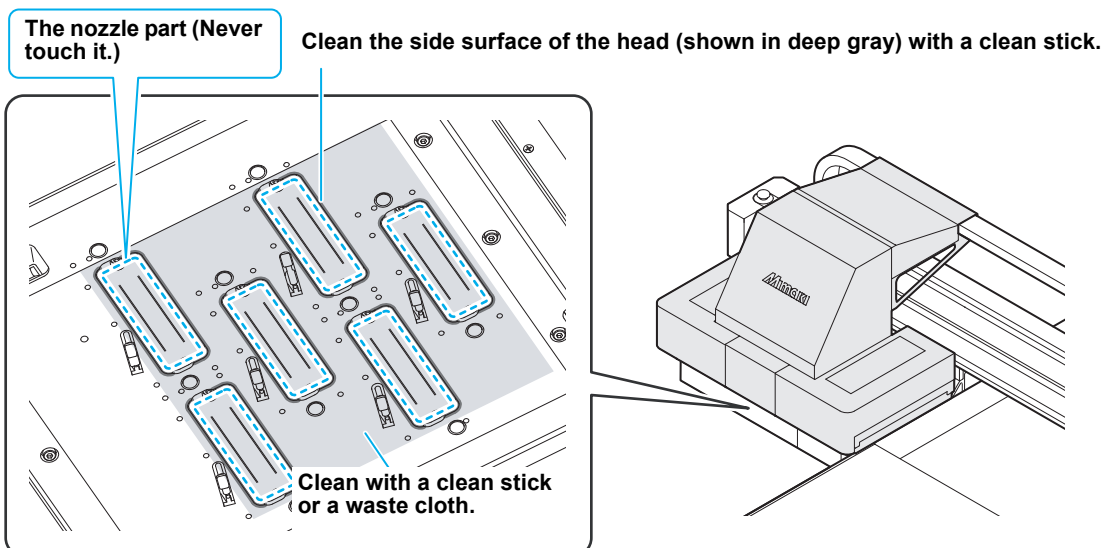
#### 1 After removing the cover of the right side of the flushing, move the carriage to the left edge of the machine.

- Refer to the Step 1 to 5 of Chapter 4 "Cleaning the Head and the Area around It" of the user's manual to perform the operation.



#### 2 Clean the head and the surrounding area.

- Gelled ink and dust could stick under the slider and the surroundings of the head.
- Scrape them off with clean stick etc. In this case, never rub the nozzle portion of the head.



## (2) Capping Station ("Cleaning the Wiper and Cap" Chapter 4 of the Operation Manual)

The surrounding area of the cap is also liable to be stained by the dust and ink. It is recommended to clean the head frequently using the cleaning liquid for maintenance suitable for the ink used to avoid the stains on the head.

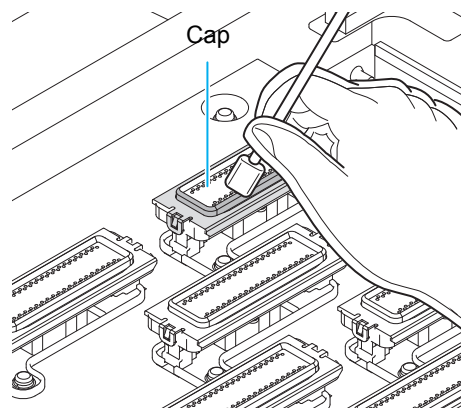
- Cleaning liquid 03 maintenance kit (ML003-Z-K1)

### 1 Move the carriage.

- Refer to the Step 1 to 4 of Chapter 4 "Cleaning the Wiper and Cap" of the user's manual to perform the operation.

### 2 Clean the cap.

- Dip the clean stick into the cleaning liquid for maintenance and wipe off the cap. Wipe off so that cleaning solution for maintenance will not remain.



## (3) Wiper ("Cleaning the Wiper and Cap" Chapter 4 of the Operation Manual)

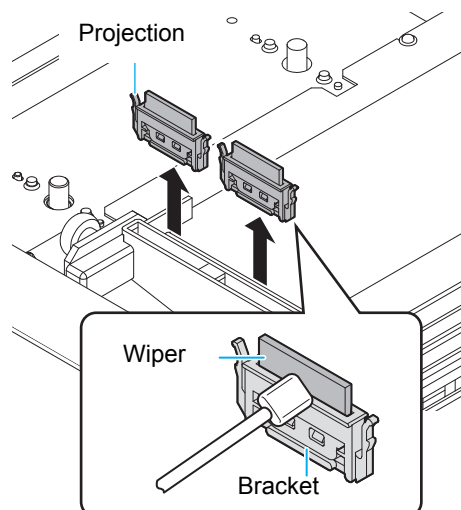
On the wiper, the ink, dust and paper powder are liable to accumulate. Check the state of the wiper and if it is stained, clean it.

### 1 Move the carriage.

- Refer to the Step 1 to 4 of Chapter 4 "Cleaning the Wiper and Cap" of the user's manual to perform the operation.

### 2 Clean the wiper.

- Remove the wiper by holding the protrusions at its both ends.
- Wipe off the ink sticking to the wiper and bracket with a clean stick dipped in cleaning solution for maintenance. Wipe off so that cleaning solution for maintenance will not remain.



Further, in the cases as explained below, replace the wiper with the new one (SPA-0193) in accordance with "Replacing the wiper" on Chapter 4 of the Operation Manual.

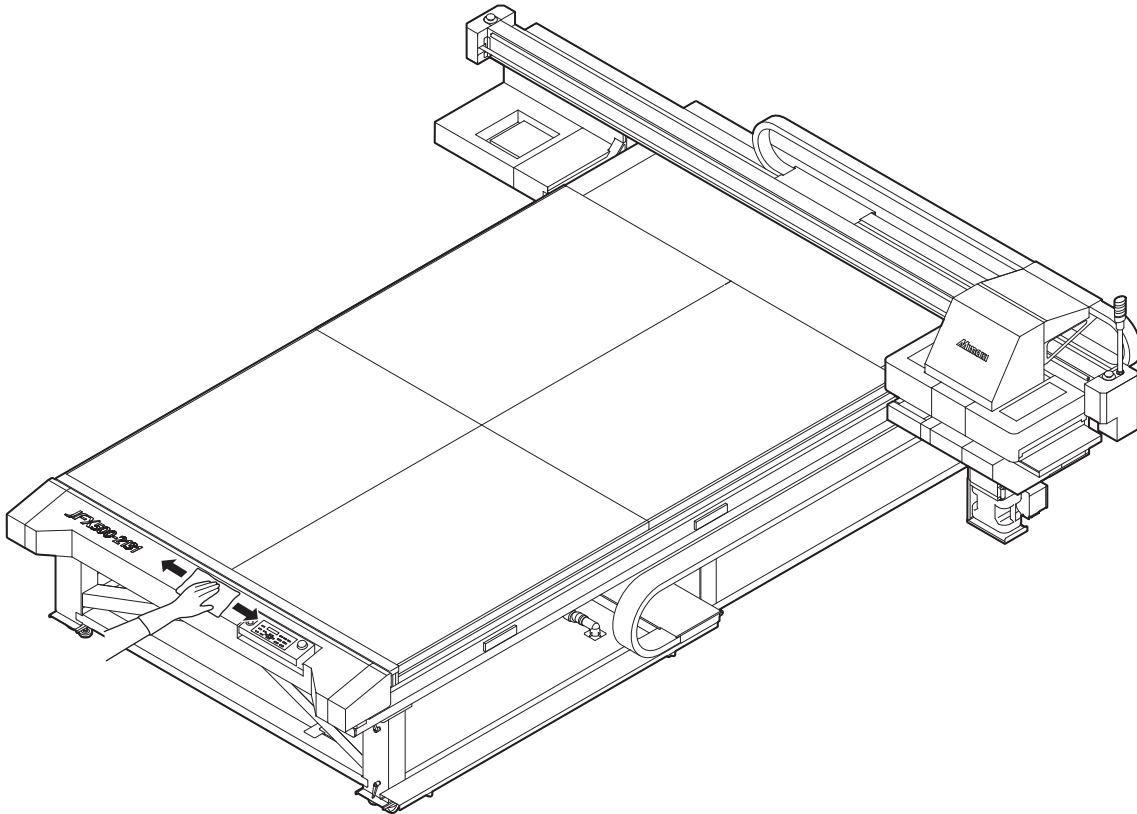
- When the wiper is deformed
- When the stuck ink can not be wiped off
- When the warning for wiper replacement is indicated

### 3. Periodically care (Once a week)

Users are advised to perform the maintenance works described below once a week so that the printer will keep its high performance and accuracy over an extended period of its life.

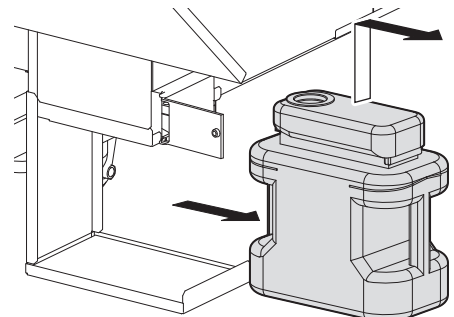
#### (1) Exterior (“Cleaning the Exterior Surfaces” Chapter 4, Operation Manual)

Depending on the using environment, the dusts or sand powder could stick to the exterior of the main unit. To avoid the entry of the dusts into the moving part of the head, wipe them off with soft cloth dipped into water and squeezed tightly.



#### (2) Waste ink tank (“If a Waste Ink Tank Confirmation Message Appears” Chapter 4 of the Operation Manual)

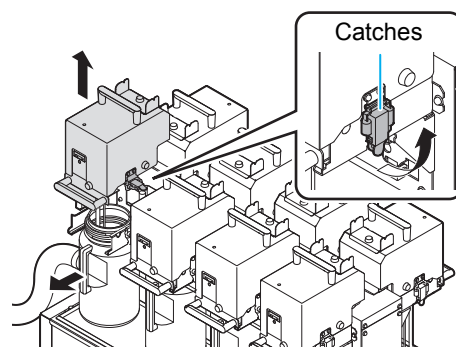
Check whether the waste ink tank is full or not. Take care so that the waste ink never overflows the tank.



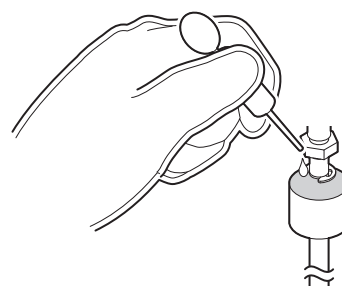
### (3) Cleaning the float sensor part of external ink supply unit

Clean it every time you replace ink bottle or once a week.

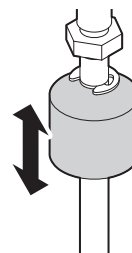
- 1** Remove the ink cover of the ink bottle, and remove the ink bottle.



- 2** Place a few drops of washing liquid on the upper part of the float.

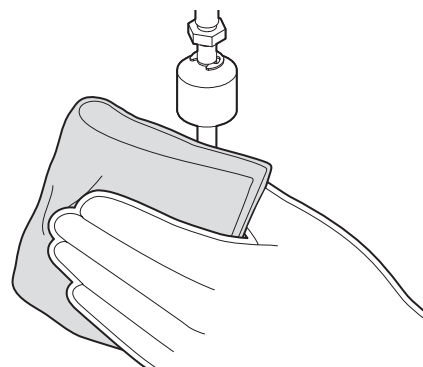


- 3** Move the float up/ down to spread washing liquid evenly.

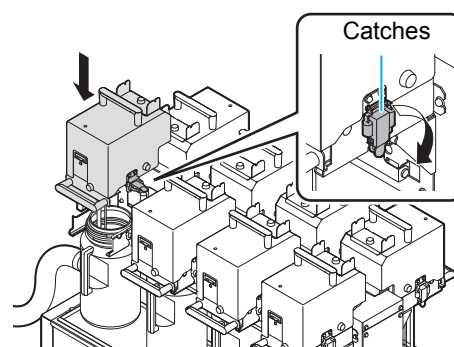


- 4** When the float comes to move smoothly, wipe washing liquid adhering to the float and the pipe with a waste cloth etc.

- Move the float up/ down again and check that there is no abnormality.



- 5** Set the ink bottle on the ink holder, and attach the ink cover.



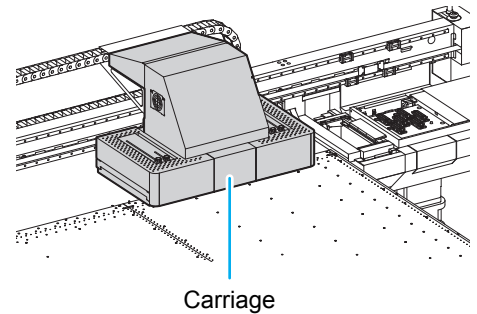
## 4. Periodically care (once in a week or two weeks)

### (1) Replacing the carriage filter

Replace it once in a week or two weeks.

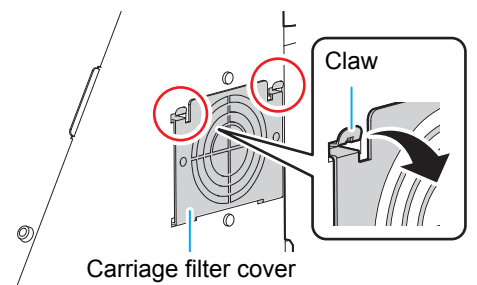
#### 1 Move the carriage.

- Refer to the Step 1 to 4 of Chapter 4 “Cleaning the Wiper and Cap” of the user’s manual to perform the operation.

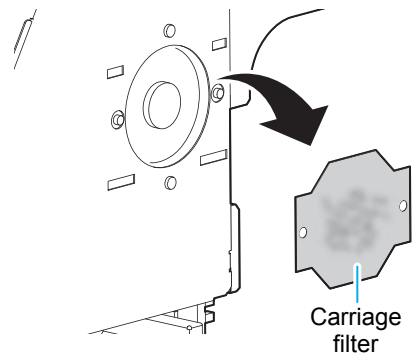


#### 2 Remove the carriage filter cover at the left and right of the carriage.

- Remove the carriage filter cover of right and left of the carriage.
- Pinch the claw attached to the upper part of the carriage filter cover and pull it to the front.



#### 3 Remove the used carriage filter cover.

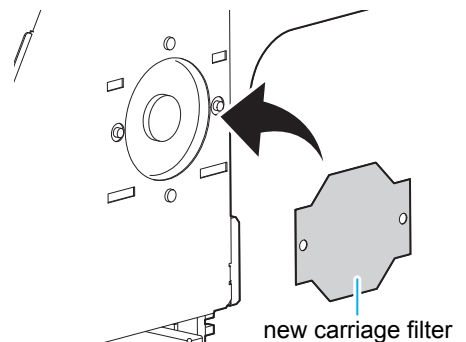


#### 4 Mount a new carriage filter (SPA-0189).

- Insert the holes of right and left of the carriage filter into the convex part of the carriage.

**Important!**

- The carriage filter is located at right and left of the carriage.  
Replace both filters at the same time.



#### 5 Return the carriage filter cover to the original status.

#### 6 When replacement has been completed, press the **ENTER** key.

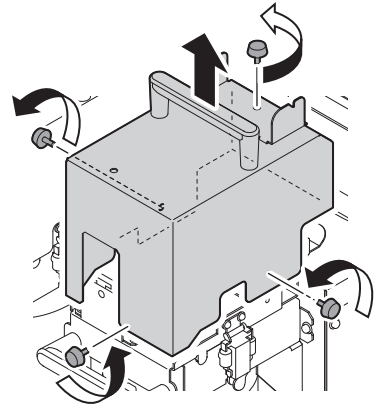
## 5. Periodically care (Once a year)

### (1) Replacing the ink filter of external ink supply unit

Replace it once a year.

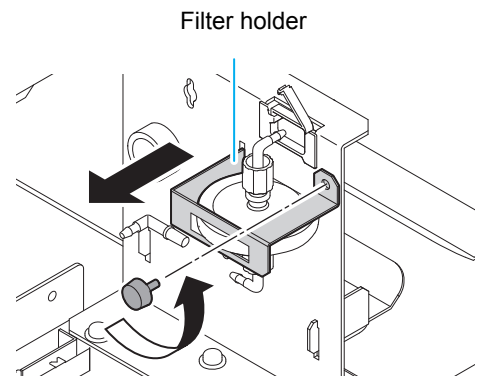
#### 1 Turn off the main power switch, and then remove the ink cover.

- Remove the screws (for 4 positions) of the ink cover, and remove the cover.

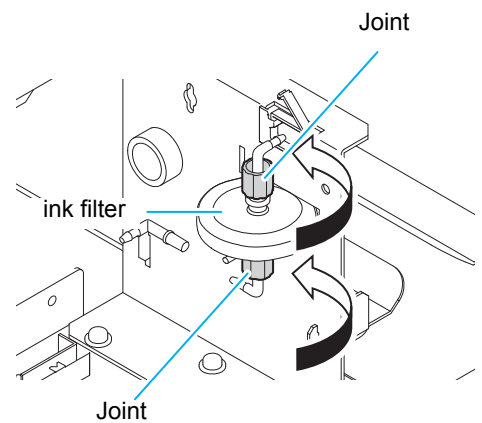


#### 2 Replacing the filter holder.

- Remove the screw of the filter holder, and remove the filter holder.

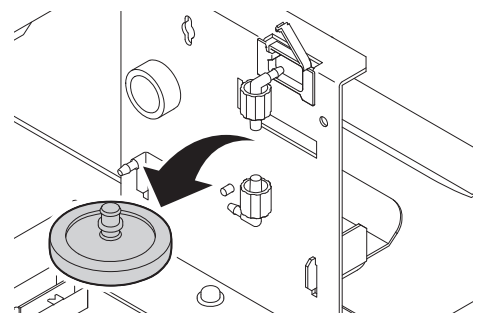


#### 3 Loosen the joints of upper/ lower of the ink filter.

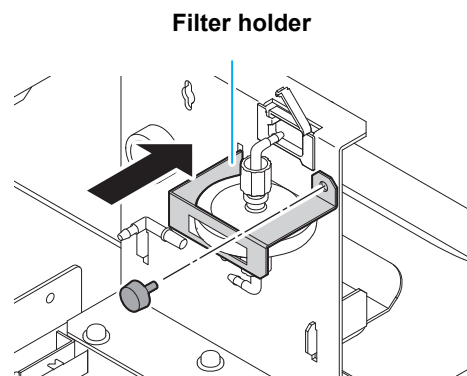


#### 4 Replacing the used ink filter.

#### 5 Attach new ink filter (SPA-0196), and tighten the joint.

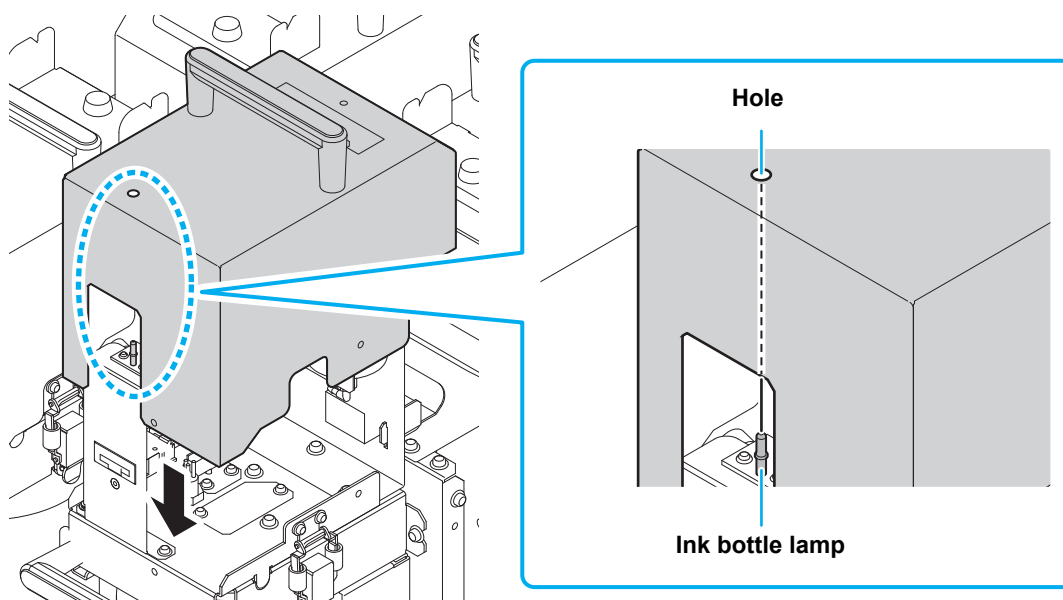


## 6 Attach the filter holder.



## 7 Return the ink cover to the original position, and turn on the main power switch.

- Important!**
- When returning the ink cover to the original position, attach it so that the hole on the ink bottle lamp matches the hole on the ink cover. If the holes do not match, it may cause ink bottle lamp damage.



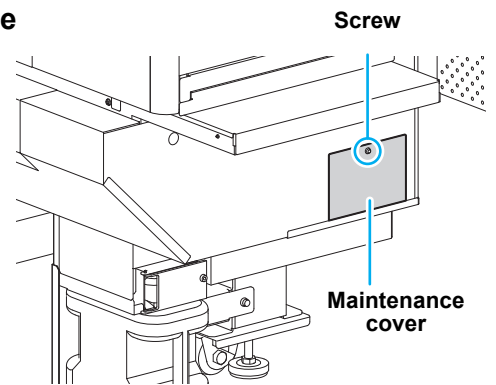


## (2) Replacing filter element of filter for vacuum

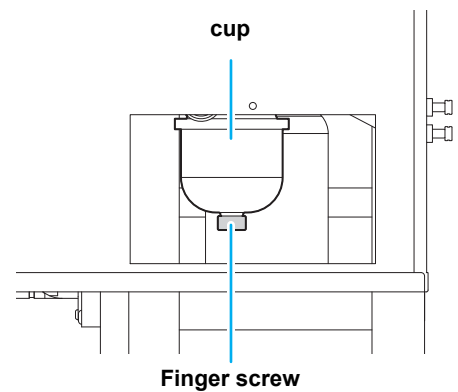
Replace it once a year.

### 1 Turn off the main power switch, and then open the maintenance cover at the right surface of the Y bar.

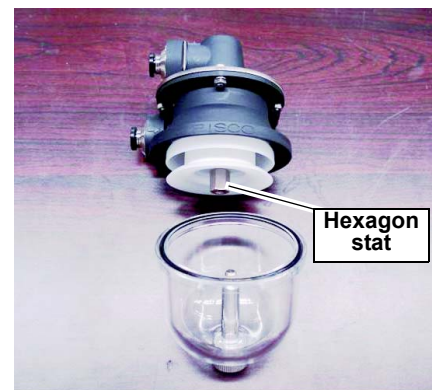
- Remove the screw with a driver and remove the cover.



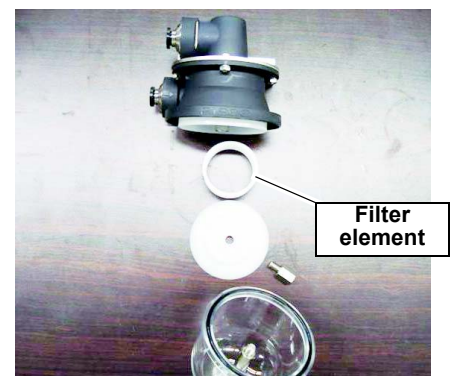
### 2 Loosen the finger screw of the filter for vacuum and remove the cup part.



### 3 Remove the hexagon stat.



### 4 Replace the filter element.



### 5 Attach new filter element (SPA-0209) and return the filter for vacuum to the original status.

### 6 Turn on the main power switch.

## 6. Storage of media

Media should be stored in the little dust area, and not in direct sunlight. Avoid storing the media in the area with high temperature and high humidity.

## 7. Storage of ink bottle

Be careful of the followings to store.

- Store the ink bottle in no direct sunlight, and no high humidity.
- As it's a delicate product, do not drop it.
- Ink IC should not be contaminated and discharged static electricity.
- Be sure to store the ink bottle and the ink IC together.



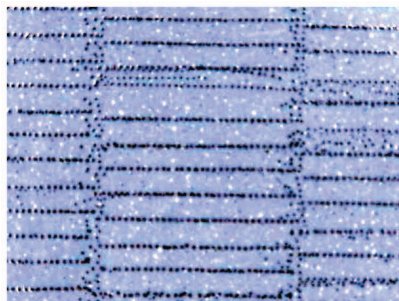
Ink bottle and Ink IC

## 8. The examples of defective printing

These following examples indicate improper head (nozzle) firing by dust, which effect printing.

Confirm the nozzle condition periodically before or during outputting not to use in such as this condition.

The nozzle condition can be confirmed with [test printing] in this plotter. (Operation manual Chapter 2 “Test Printing”)



Deflection



Nozzle out



Ink drooping



Satellite

## 9. Recovery method of defective nozzle discharge

When this printer has not been used for an extended period of time, or depending on the environmental temperature, the discharge at the nozzles could become unstable. In such a case, the following methods may be taken to recover the status of the nozzles.

### 1. Daily maintenance and care

- Perform the cleaning of the parts described in this document.

### 2. Performing Head Cleaning (normal). Refer to Chapter 2 of Operation Manual.

- After having performed the care and maintenance stated in step 1, perform the cleaning of the heads in accordance with the procedures stated in Operation Manual.

**Perform test printing and check**  
(Chapter 2 of Operation Manual)

In the event nozzle missing etc. have not been improved

### 3. Performing Head Cleaning (hard). Refer to Chapter 2 of Operation Manual.

- If the nozzle missing does not disappear even after repeating the head cleaning (normal) several times, reset the cleaning mode to "hard" and perform the cleaning again.

**Perform test printing and check**  
(Chapter 2 of Operation Manual)

In the event nozzle missing etc. have not been improved

### 4. Set the nozzle recovery function. Refer to Chapter 4 of Operation Manual.

- Set the nozzle recovery function.

**Perform test printing and check**  
(Chapter 2 of Operation Manual)

**If the nozzle missing has not been improved even with the above operations, please call us or your sales agent from whom you purchased this printer.**

## 10. Supplies

Product Name	Product No.	Product Name	Product No.
Cleaning liquid for maintenance	SPC-0568	Filter element	SPA-0209
Waste ink tank	SPA-0197	Carriage filter	SPA-0189
Clean stick for the surroundings of the head 50pcs	SPC-0527	Wiper kit	SPA-0193
Ink filter white	SPA-0196		

## 11. Safety Precautions

### CAUTION



Make sure to wear the attached **goggles and gloves**.



The ink, if mixed with water or alcohol, generates condensed substances. Pay attention not to deposit water or alcohol to the nozzle surface, surrounding area of the heads, caps and wipers.



To secure the stability of the ink discharge, when the printer is not used (output) for an extended period of time, it could become necessary to discharge periodically a small amount of ink (flushing), depending on the kinds of the ink.

**When not using for an extended period of time, execute the [CUSTODY WASH] function of this equipment, ("When the Machine Is Not Used for a Long Time (CUSTODY WASH)" Chapter 5 of Operation Manual) and put off the power switch on the front, only. Leave the main power switch at the side of the equipment on and keep the cable socket inserted into the plug.**



**Never disassemble this machine. It could cause electrical shock, fire and breakage.**



**Keep away the moisture from the inside of this machine. If the inside is moistened, it could cause electrical shock, fire and breakage.**



**Perform the maintenance and care after switching off the power and taking off the power cable. Otherwise, it could cause unexpected accidents.**



**Avoid using benzene, thinner, and chemicals containing abrasive compounds. The surface of the cover could be degenerated or deformed.**



**Do not supply lubricant oil etc. to the inside this machine. It could cause the breakdown of this machine.**

## 12. Installation environment

- Use this printer as much as possible in a dust-free environment. Fans and air-blowers could cause the dustspewing.
- The using environment of this printer is from 15 to 30°C (59°F to 86°F) in temperature and from 35 to 65 % in relative humidity. Avoid the use of this printer at a temperature and humidity higher or lower than the indicated ranges.

## 13. Notes for working environment

Performing frequency of the print setting or maintenance is greatly influenced by the printing environment or the condition of the media used. Use this machine with a full understanding of the followings.

Working environment	Consideration
In the gritty and dusty place	<ul style="list-style-type: none"> <li>▪ To keep the nozzle face clean, set to wipe periodically every time it prints about 1500 mm. (Operation Manual Chapter 4 "Cleaning nozzle face automatically")</li> <li>▪ Change the setting of periodic wiping depending on the amount of dust.</li> </ul>
When the head gap is set wide because fibers stick out of media	<ul style="list-style-type: none"> <li>▪ UV light can expose the nozzle when there is a lot of scattered mist. Raise the refreshing level for drawing (Operation Manual Chapter 3 "Other useful settings"), and set the periodic wiping ( Operation Manual Chapter 4 "Cleaning nozzle face automatically").</li> <li>▪ Increase performing frequency of every maintenance.</li> </ul>
When the media that reflects UV light well is used such as glasses or glazed metal	
When there is an infrequently-used ink (print head)	<ul style="list-style-type: none"> <li>▪ An infrequently-used print head can be unstable to discharge ink comparing with the other print heads. Raise the refreshing level for drawing (Operation Manual Chapter 3 "Other useful settings") to raise the usage rate of the head.</li> </ul>
When printing on the media on which static can be charged	<ul style="list-style-type: none"> <li>▪ Put humidifiers on to avoid charge. Static may collect mist or dust around the printing area or the head. To print continuously for a long time, set the periodic wiping. (Operation Manual Chapter 4 "Cleaning nozzle face automatically")</li> </ul>
When printing in a dry place (such as in winter)	
When printing on a markedly uneven media (or object)	<ul style="list-style-type: none"> <li>▪ To keep the head gap the same, set extra media outside the suction area where a printing media is set. Leaving the head that has been degraded by reflected light may cause failure that needs replacing of the head.</li> </ul>

## 14. Maintenance when needed

**Important!**

**A proper maintenance schedule is determined by the operator who observes throughout a period of use of the printer.**

- Some media need maintenance every time of printing.
- The maintenance schedule differs depending on the image to be printed. For example, when the image is almost filled, perform maintenance frequently.

### (1) Cleaning of the LED UV unit

Remove ink or dust attached to the LED UV periodically.

**Important!**

- Clean the LED UV with care in order not to scratch an irradiation part on the bottom of the unit. If there is a certain amount of dirt or a light shielding object on the irradiation part, ink may not cure well and it may cause banding.

### (2) Removal of ink attached to the table

If necessary, remove ink attached to the table with an alcohol-impregnated cloth. Be careful not to scratch the table face when removing cured ink.

**Important!**

**Caution when using solvent**

- Leaving the table after attachment of ink may make the ink removal hard with alcohol only. When using a special solvent, contact our office before use. It may cause a failure of the machine.

### (3) Removal of the vacuum hole clogging on the table

The vacuum holes on the table can be clogged with ink. Remove the ink in the vacuum holes when needed. Be careful not to leave a part of cured ink on the table.

### (4) Cleaning of the bottom of the carriage

Remove ink attached to the bottom of the carriage.

### (5) Cleaning of the print head nozzle face with a cleaning swab

When an image is printed on a special media, or when this machine is not used for a long time, the nozzle may not be cleaned only with a normal cleaning.

Soak a specified cleaning swab into the washing liquid, and wipe out things adhered on the nozzle face.

Perform this work under the direction of our service engineer.





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

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