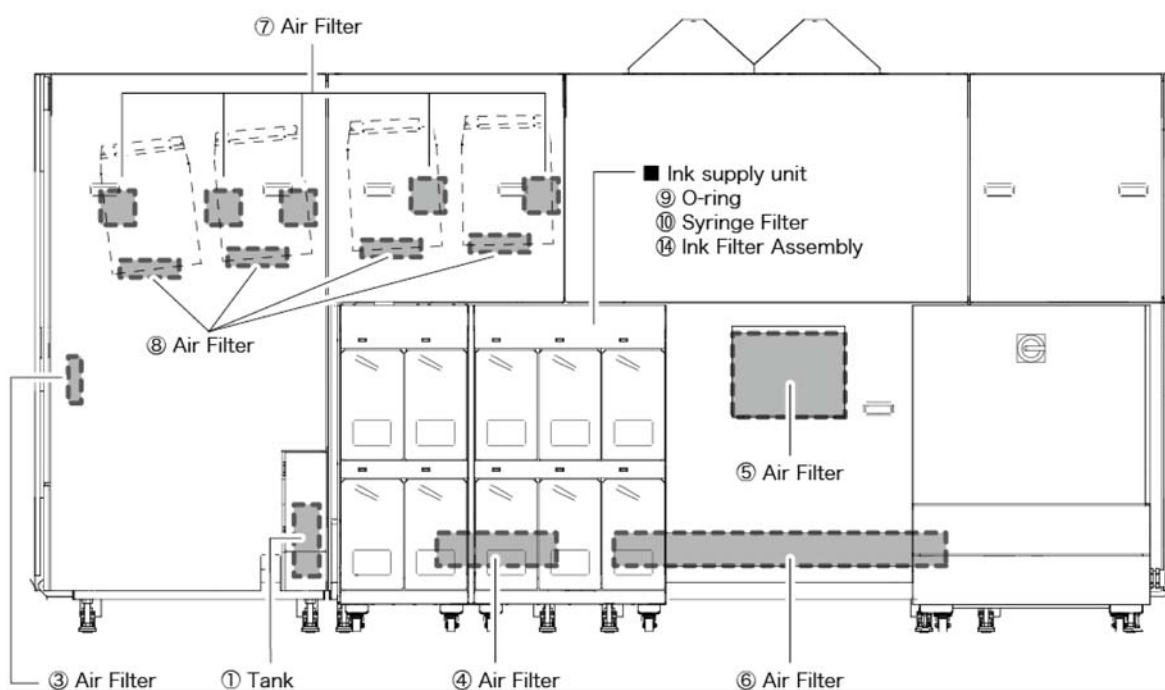
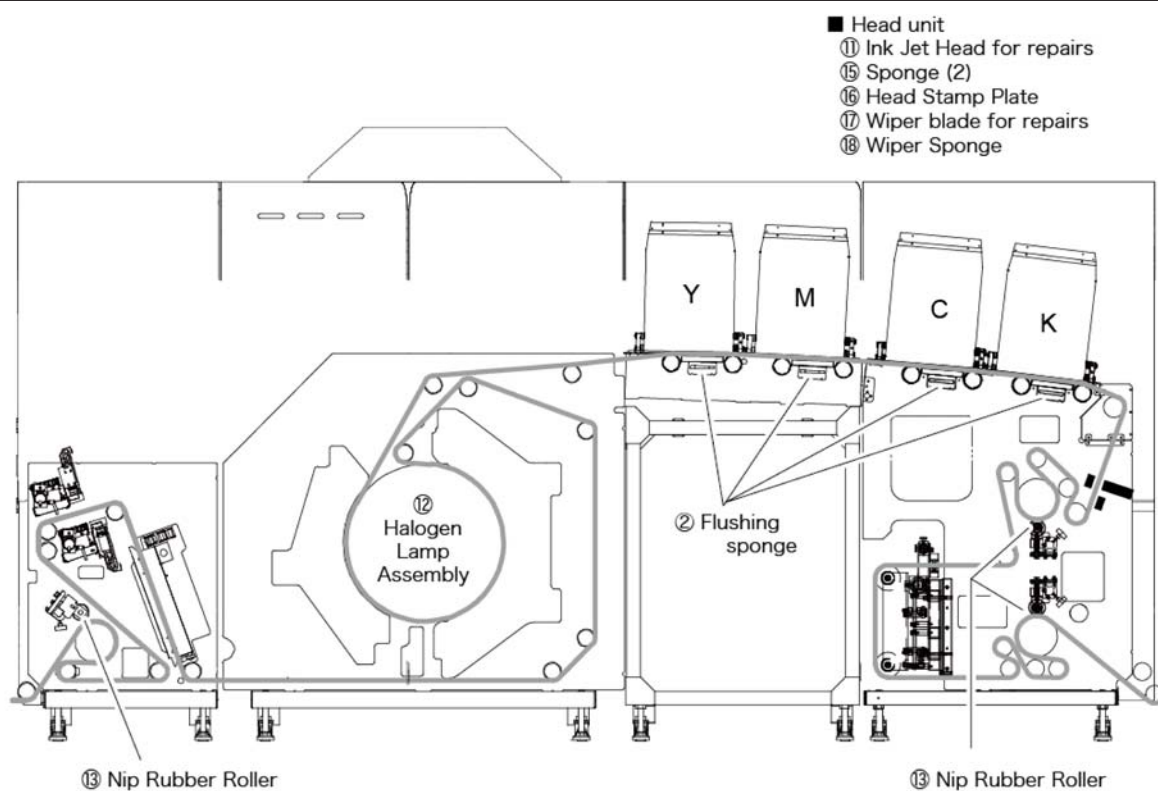

Replacing of consumables / routine replacement parts

Consumable / routine replacement part list

It shows the layout drawing and list of Consumable / routine replacement parts.

	Item code	Item name	Time to replace	Qty
1	100087767V00	Tank 5L	–	1
2	100277566V00	Flushing sponge	1 month	8
3	100117130V00	Air Filter (entrance unit : 12 square cm)	6 months	1
4	100327120V00	Air Filter (middle unit: lower side)	6 months	1
5	100014644V00	Air Filter (dryer: middle side)	6 months	1
6	100327106V00	Air Filter (dryer: lower side)	6 months	1
7	100033441V00	Air Filter	6 months	5
8	100328998V00	Air Filter	6 months	4
9	100275592V00	O-ring	6 months	8
10	100212167V00	Syringe Filter	6 months	4
11	100342910V00	Ink Jet Head for repairs	–	40
12	100325697V00	Halogen Lamp Assembly	–	9
13	S100270734V00	Nip Rubber Roller	1 year	5
14	S100314803V00	Ink Filter Assembly	2 years	4
15	100340474V00	Sponge (2)	2 months	40
16	100353704V00	Head Stamp Plate	2 months	40
17	100346394V00	Wiper blade for repairs	6 months	16
18	100351183V00	Wiper Sponge	6 months	8
19	100349244V00	NYBRINE NFP (18L CAN)	2 years	1
20	100343401V00	Cleaning Fluid 10L	Suitable time	1

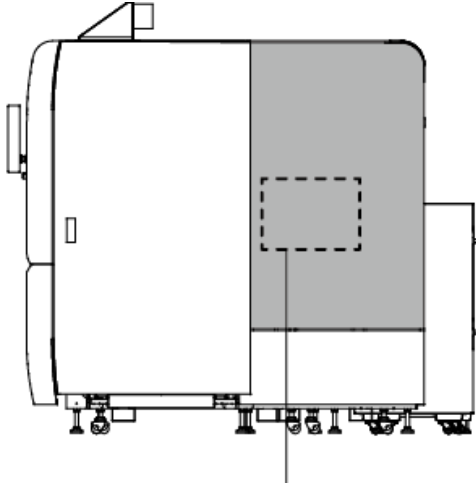


Replacing the air filter (entrance unit : 12 square cm)

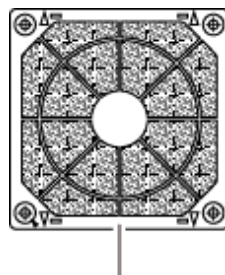
Tools to be prepared

- Phillips screwdriver
- Air Filter (100117130V00)

- 1) Turn off the power box main switch.
- 2) Open the right cover for the entrance unit of the printer.



- 3) Remove the cover, and then attach a new filter.



Cover

❗ The cover is fixed by the projection in the top and bottom.

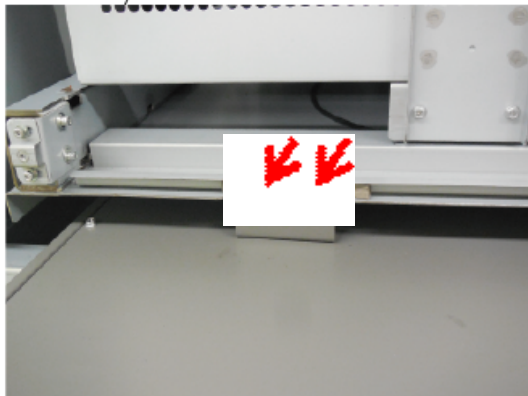
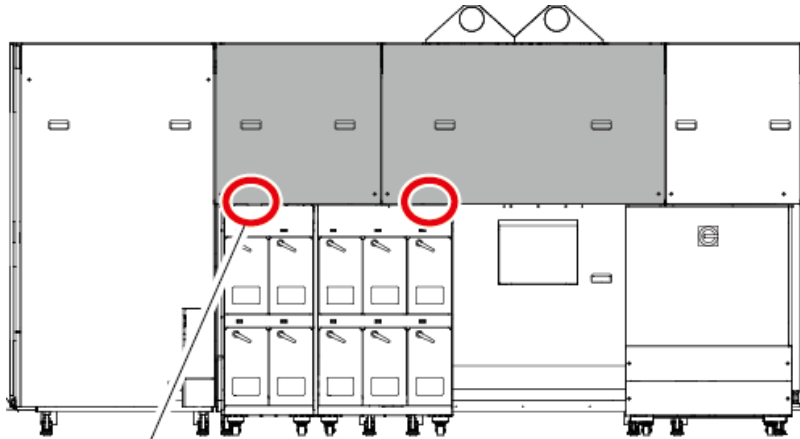
- 4) Attach the right cover.
- 5) Turn ON the power to the system as necessary.

Replacing the air filter (middle unit: lower side)

Tools to be prepared

- Phillips screwdriver
- Spanner
- Air Filter (100327120V00)

- 1) Turn off the power box main switch.
- 2) Remove the back side upper cover of the middle unit and the dry unit.
- 3) Remove the screw of L bracket fixing the ink supply unit and middle unit, dryer.



- 4) By adjusting the adjustment bolt of the ink supply unit, ground in casters.
And, please pull out the ink supply unit.
- 5) Remove the screw of the filter cover in the middle unit,
and replace the air filter.
- 6) Fix the filter cover with a screw.
- 7) Press an ink supply unit slowly.
- 8) Adjust the ink supply unit with the adjustment bolt to
the high screw holes of the middle unit and dryer.
- 9) Fix the ink supply unit to the middle unit, dryer with L
bracket.
- 10) Attach the back side upper cover in the middle unit, dryer.
- 11) Turn ON the power to the system as necessary.

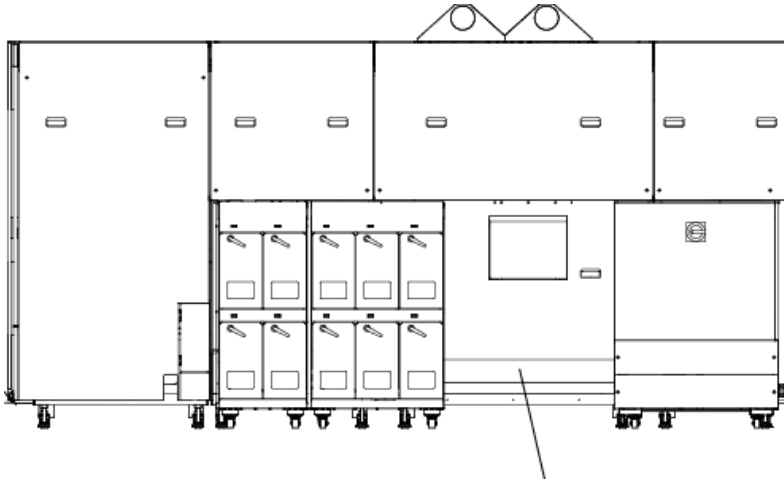


Replacing the air filter (dryer: lower side)

Tools to be prepared

- Phillips screwdriver
- Spanner
- Air Filter (100327106V00)

- 1) Turn off the power box main switch.
- 2) Remove the three screws of the filter cover, and replace the air filter.



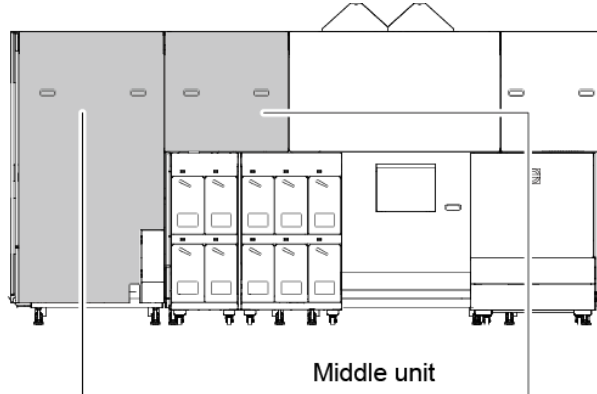
- 3) Attach the filter cover with the screws.
- 4) Turn ON the power to the system as necessary.

Replacing the filter kit

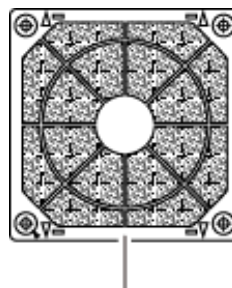
Tools to be prepared

- Phillips screwdriver
- Air Filter (100033441V00)

- 1) Turn off the power box main switch.
- 2) Remove the back side cover of the entrance unit and middle unit.



- 3) There are two air filters to the middle unit and three filters to the entrance unit. Remove the cover, and replace the filter.



Cover

! The cover is fixed by the projection in the top and bottom.

- 4) Attach the back side cover of the entrance unit and middle unit.
- 5) Turn ON the power to the system as necessary.

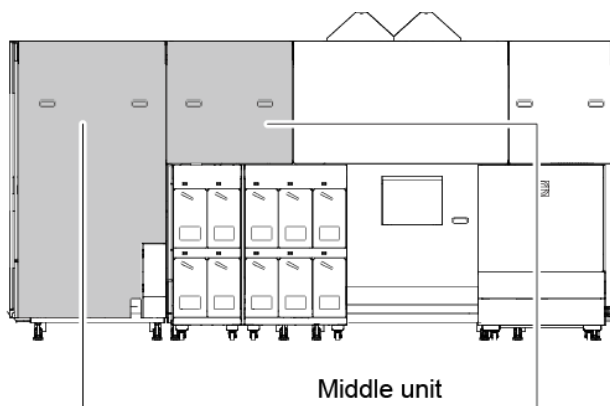
Replacing the filter (back side bottom of the head unit)

❗ When this filter becomes dirty, the inside of the head unit becomes the high temperature and may cause the trouble.

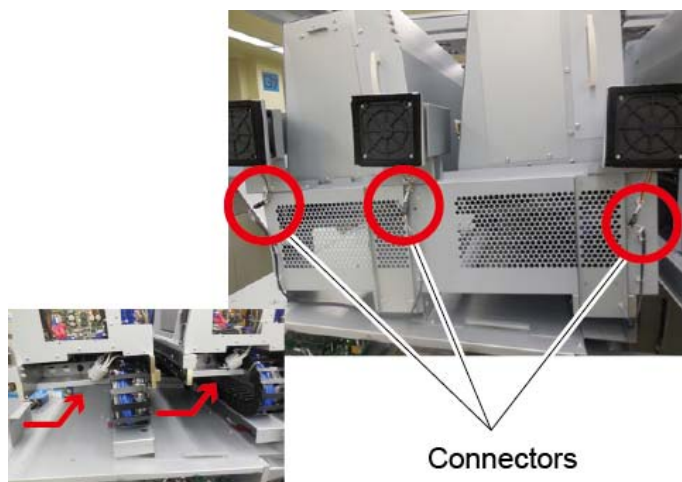
Tools to be prepared

- Phillips screwdriver
- Hexagon wrench (opposite side 3mm)
- Air Filter (1000328998V00)

- 1) Turn off the power box main switch.
- 2) Remove the back side covers of the entrance unit and middle unit.



-
- 3) Remove the connectors of the fan unit, and remove the fan unit.



After removing the fan unit
(The filter is the bottom of units.)

- 4) Remove the filter fixed plate in the bottom of the head unit, and replace the air filter.

❗ When there are dust and paper powder in the neighborhood, clean with a damp rag.



- 5) Attach the filter fixed plate.

❗ Insert the filter fixed plate surely.

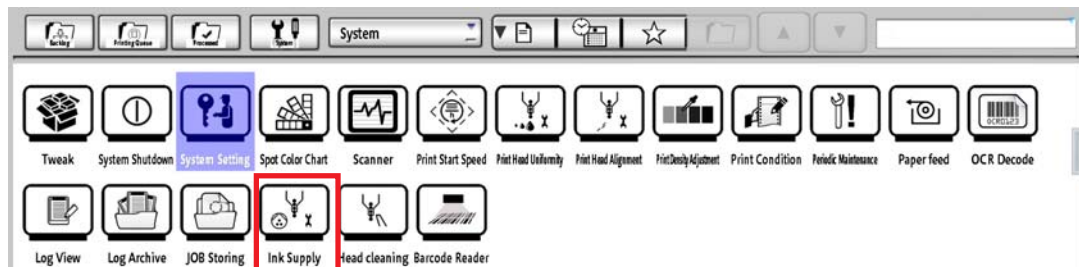
- 6) Carry out the filter replacement of each color.
7) Attach the back side cover of the entrance unit and middle unit.
8) Turn ON the power to the system as necessary.

Replacing the O-ring

Tools to be prepared

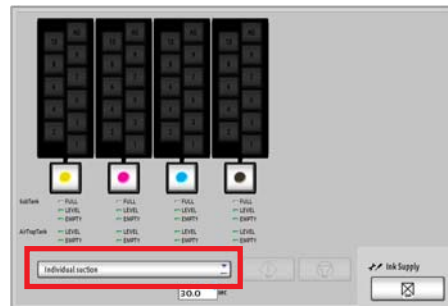
- Precision screwdriver
- Nonwoven cloth
- Plastic gloves
- O-ring (100275592V00: two each color)

- 1) Press the ink supply icon.



- 2) Unlock the upper (or lower) door of the specified color in the following procedures.

- (1) Select "Unlock Cover(Upper or lower)" from the pull-down list.



- (2) Select color(s) button, and press the start button. The rock of the ink cartridge is canceled.

❗ You can select more than one color at the same time.

- 3) Pull out the ink cartridge box, and remove the used ink cartridge.



-
- 4) Remove the hook the O-ring in the precision screwdriver.

⚠ Be careful not to damage the resin parts.



- 5) Attach a new one.
- 6) Place a new ink cartridge in the ink cartridge box.
- 7) Press the exit button, and close the ink supply screen.

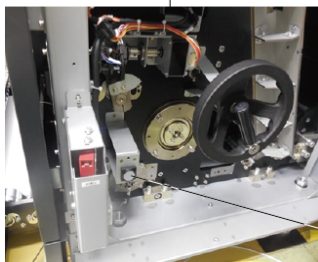
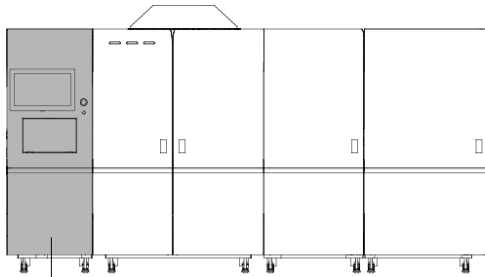
Replacing the nip roller

Tools to be prepared

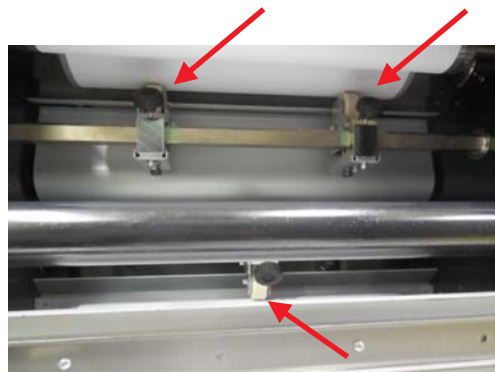
- Hexagon wrench (opposite side 6mm)
- Nip Rubber Roller (S100270734V00)

! The following is a Nip roller replacement procedure of entrance unit.

- 1) Open the front and right cover of the entrance (or exit) unit.
- 2) Move nip roller to original position by pressing the nip release button.



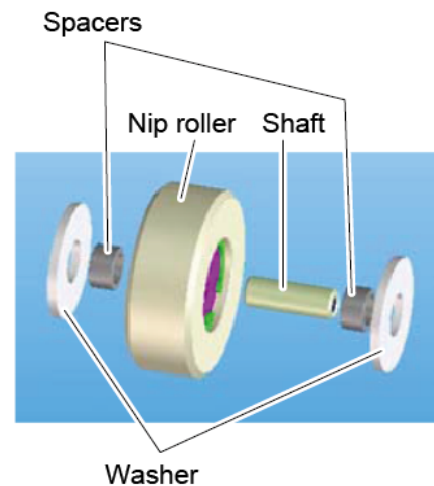
Release switch for nip roller of entrance unit



- 3) Remove the following parts from the nip roller.

! When the bolt is removed, spacers, washers and a shaft come off with the nip roller. Be careful so as not to lose it.

- 4) Attach the shaft, spacers, and washers to a new nip roller. Then, attach the nip roller in the reverse order of removal of the old nip roller.
- 5) Press the release switch for nip roller, and confirm whether a paper is nipped.
- 6) Close the front and right cover of the entrance (or exit) unit.



Cap cleaning unit sponge replacement procedure

Part code	Part name	Specification	Qty
100340474V00	Sponge(2)	Polyurethane T5.0-87*63	40

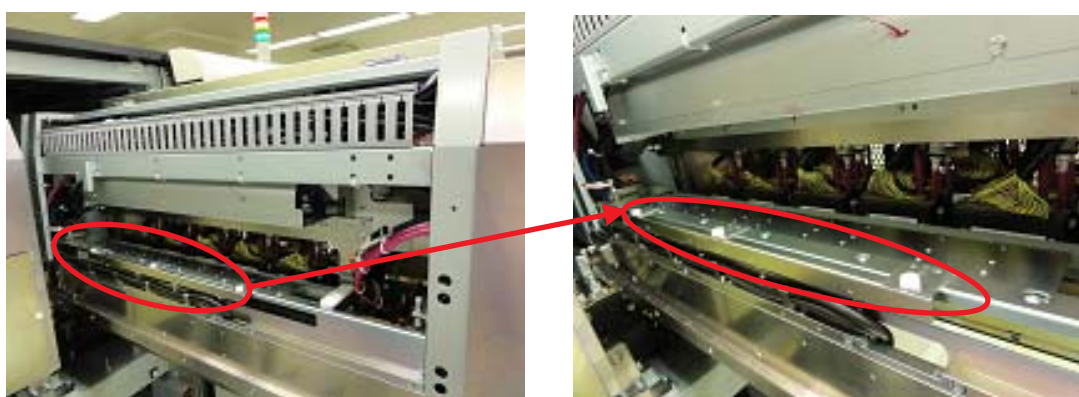
1. Tools to be prepared

- Plastic gloves
- Nonwoven cloth
- Phillips head screwdriver (Size:1)

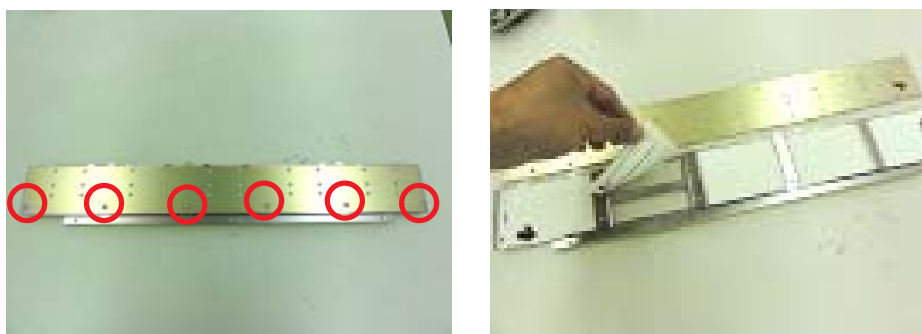
2. Procedure before replacement

2-1. Cap cleaning unit for even head

- (1) Pull out the head unit.
- (2) Remove back side cover of head unit.
- (3) Loosen white screws (3 places) and remove Cap cleaning unit.



- (4) Remove fixed plate (Screws 6 places) and replace sponges.



- (5) After replace sponges, fit upper plate and bottom plate as below, tighten screws.

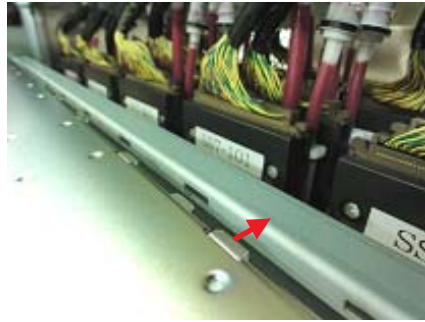
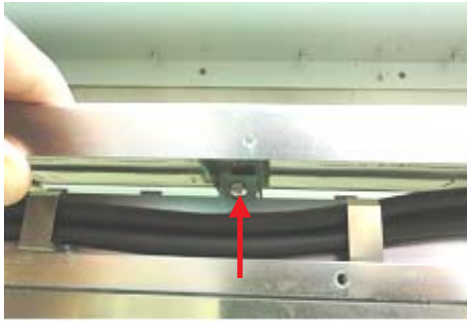
❗ When tighten screws, check unit is not bent.

If unit bent, correct unit straight by hand.



-
- (6) Attach cap cleaning unit.

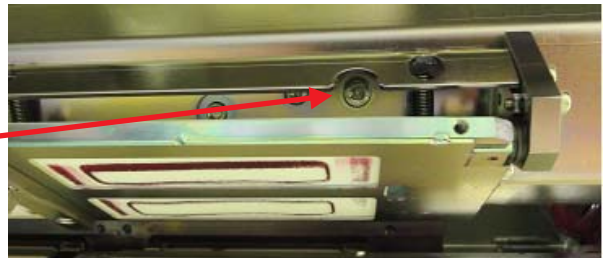
Then slide cap cleaning unit along with guide and put pongs of cap cleaning unit on flame.



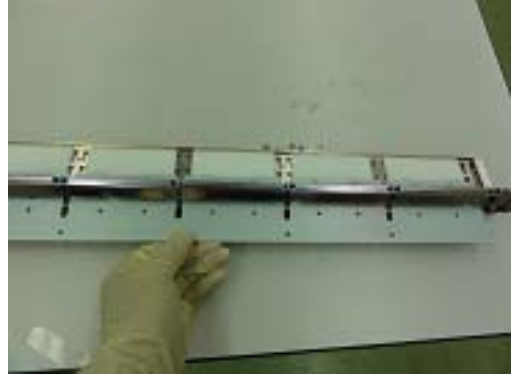
2-2. Cap cleaning unit for odd head

- (1) Remove screws following M4x4 screws.

⚠ Treat unit carefully to prevent frame bent.



-
- (2) Remove sponge fixed plate and replace sponges.



- (3) Attach Cap cleaning unit to head unit.



Head stamp plate replacement procedure

Part code	Part name	Specification	Qty
100353704V00	Head Stamp Plate	for BS	40

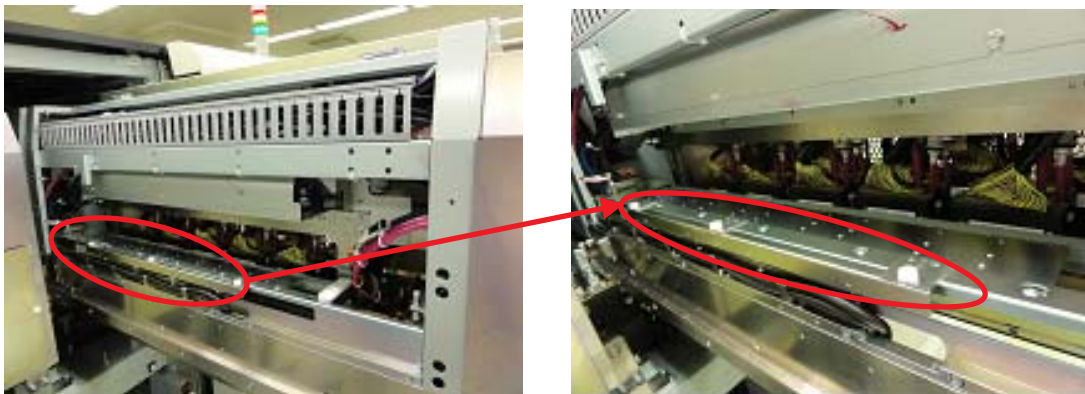
1. Tools to be prepared

- Plastic gloves
- Nonwoven cloth

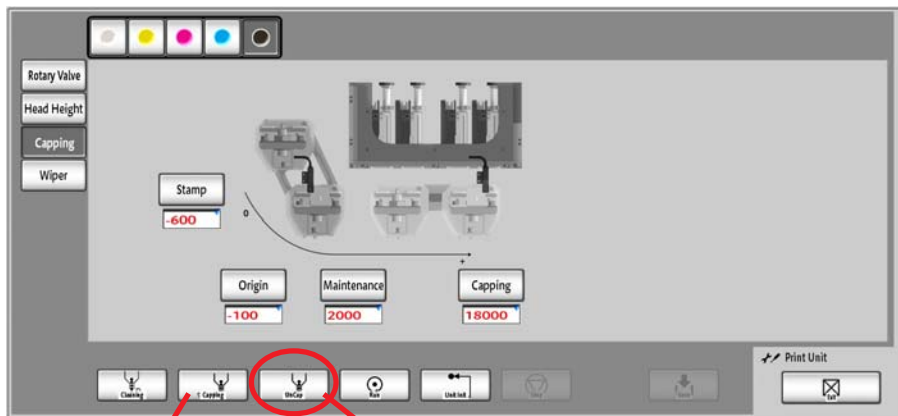
2. Procedure before replacement

2-1. Head stamp plate for even head

- (1) Pull out the head unit.
- (2) Remove back side cover of head unit.
- (3) Loosen white screws (3 places) and remove Cap cleaning unit for even head.



- (4) Move cap unit to un-cap position by “Print unit-Capping” menu, “Uncap button.



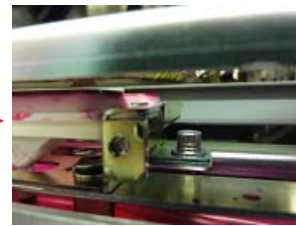
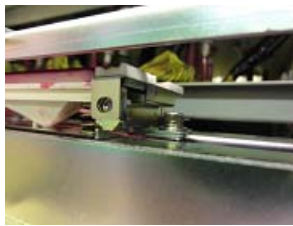
Cap position of the cap unit
(Capping)

Cap unit origin position
(Uncap)

-
- (5) Remove M3x1 screw and remove head stamp plate.



Remove



Head stamp plate

- (6) Attach head stamp plate as below..

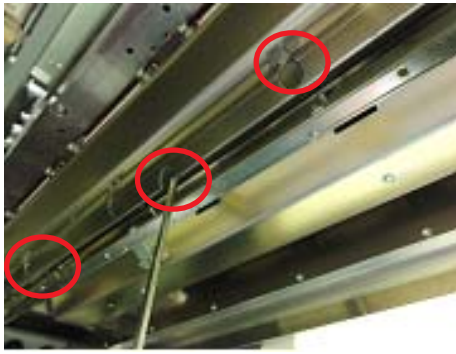
❗ Check the following fuck insert to hole. If not insert, head surface may damage.



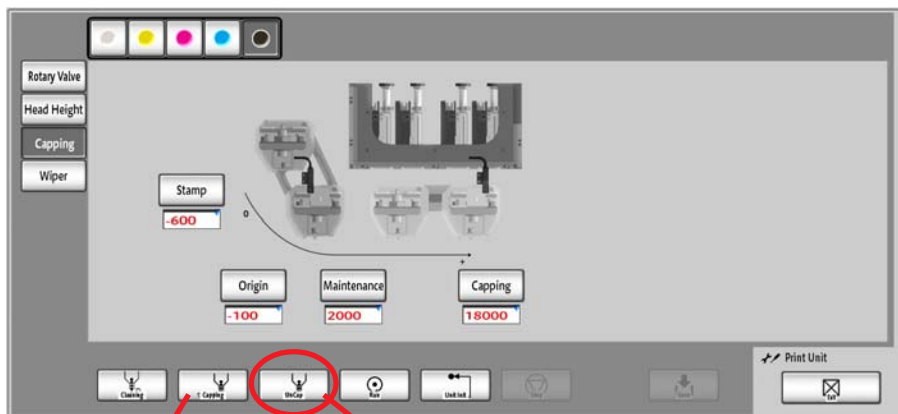
- (7) Attach Cap cleaning unit for even head.

2-2. Head stamp plate for odd head

- (1) Remove Cap cleaning unit for odd head.



- (2) Move cap unit to un-cap position by “Print unit-Capping” menu, “Uncap button.”



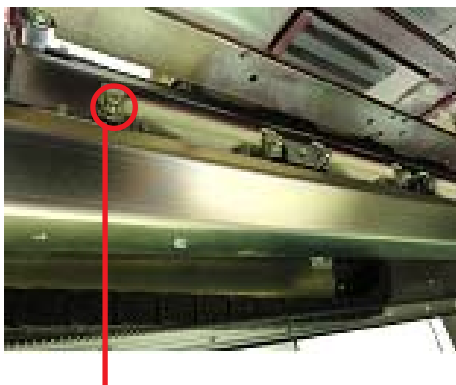
Cap position of the cap unit
(Capping)

Cap unit origin position
(Uncap)

- (3) Remove screw M3x1 and remove head stamp plate.

⚠ Do not touch surface of head.

Do not touch surface of head.



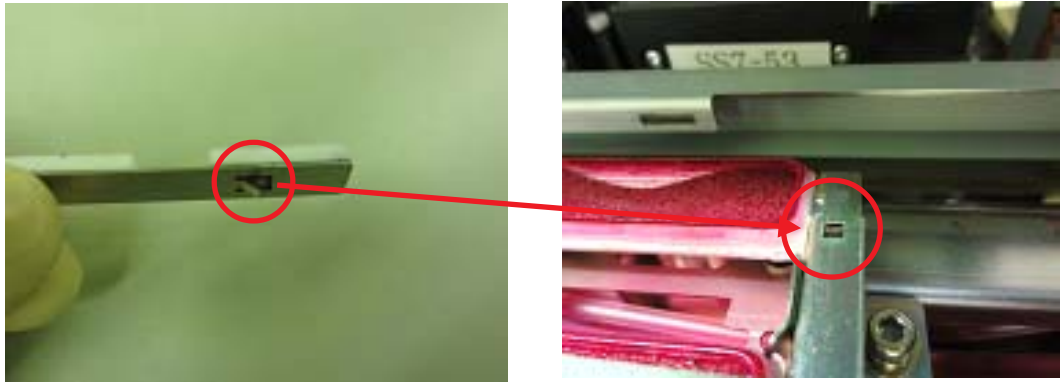
Head stamp plate



Remove screw.

-
- (4) Attach new head stamp plate.

❗ Check the following fuck insert to hole. If not insert, head surface may damage.



- (5) Move cap unit to capping position.
(6) Attach Cap cleaning unit.

Wiper blade and Cleaning blade replacement procedure

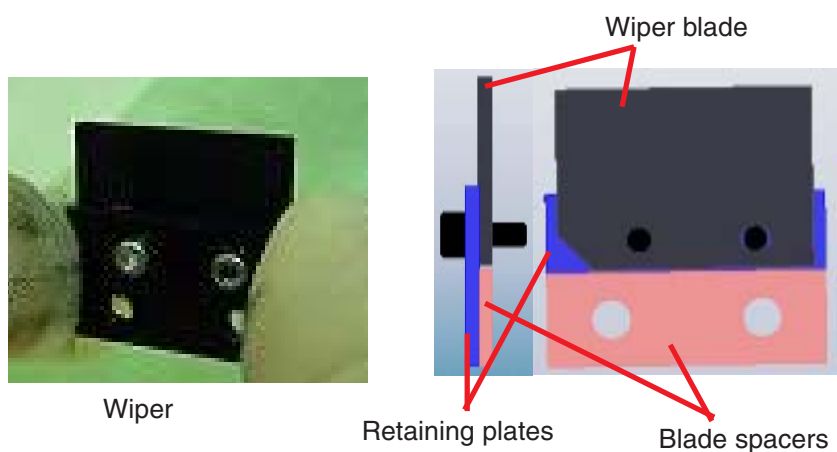
Part code	Part name	Specification	Qty
100346394V00	Wiper blade for repairs	M1384106	16
100351183V00	Wiper Sponge(256-W1)	Wiper Sponge(256-W1)	8
100350920V00	Cleaning blade	EPDM T0.5-20*10	8

❗ This section describes replacement procedure of the wiper blade and the cleaning blade.
Please clean the guide shaft for the up/down of wiper blade in exchange work.

The wiper consists of the following 3 parts.

- Wiper blade
- Retaining plate
- Blade spacer

Only replace the blade and not the whole wiper.

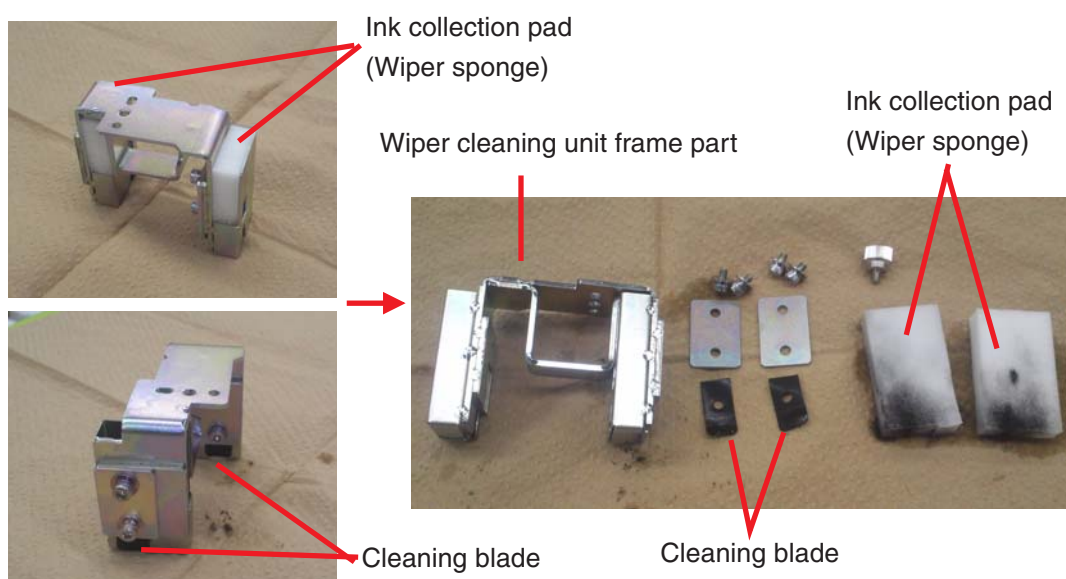


Component part of the wiper cleaning unit

- Frame part
- Ink collection pad

First replacing time, rotate the ink collection pad by 180 degrees to change the corner to use.
Next replacing time, replace the ink collection pad.

- Cleaning blade



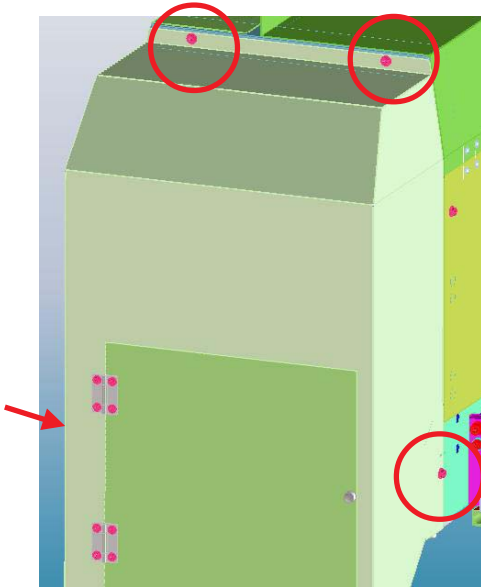
1-Wiper cleaning unit Ink collection pad replacement procedure

1. Tools to be prepared

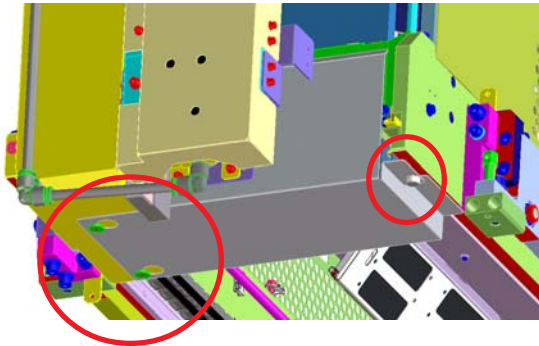
- Plastic gloves
- Nonwoven cloth
- Cleaning solution

2. Replacement procedure

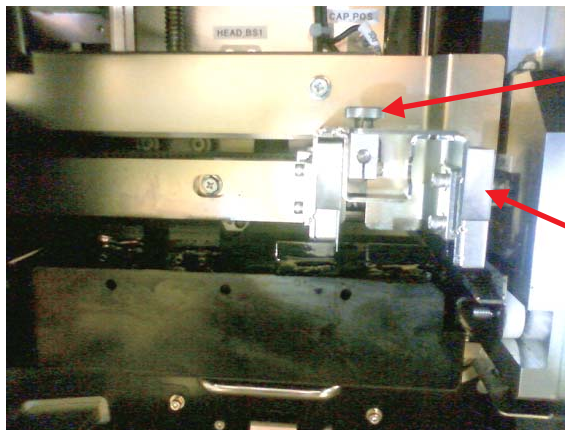
- (1) Turn OFF the printer.
- (2) Remove the front cover of the head unit. (M4 screws at 4 positions)



- (3) Remove the Bottom cover.



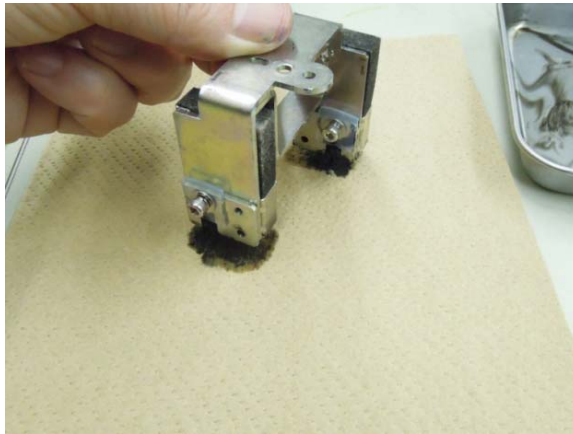
-
- (4) Remove the screw on the top of the wiper cleaning unit (1 places). Remove the wiper cleaning unit to upward.



Wiper cleaning unit fixing screw

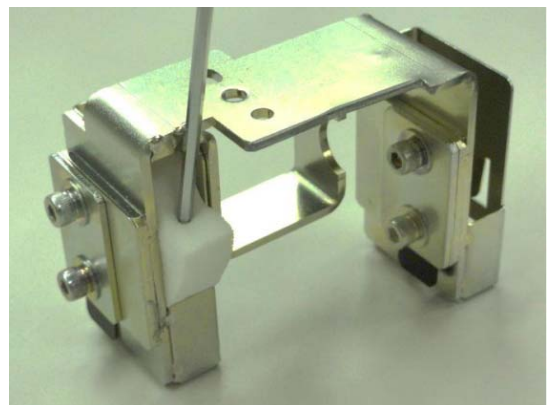
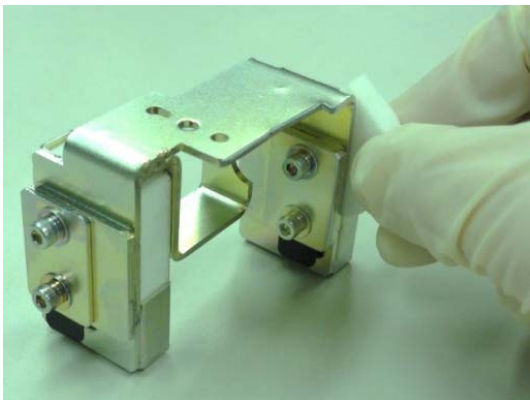
Wiper cleaning unit

- (5) Wipe off the ink that adheres to the frames of the removed wiper cleaning unit using a rag.



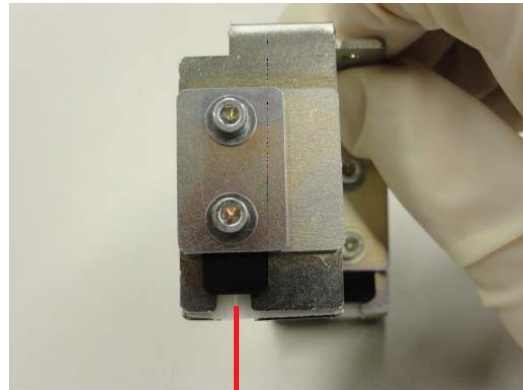
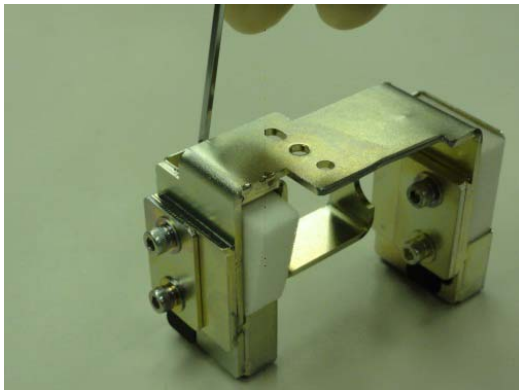
- (6) Remove the ink collection pad from the wiper cleaning unit. If it is difficult to remove it, use a thin stick.

! When the duration of use of the ink collection pad is 3 months Squeeze out the ink from the ink collection pad. Then, rotate the ink collection pad by 180 degrees to change the corner to use.



-
- (7) Insert the ink collection pad into the wiper cleaning unit. Firmly push the ink collection pad to the bottom by using a thin stick.

❗ Check that the ink collection pad is surely inserted in the bottom of the wiper cleaning unit, the ink collection pad is not inclined, and the slit of the ink collection pad is not open.



Ink collection pad slit

- (8) Align the wiper cleaning units on the tray.



- (9) Pour the cleaning solution up to a depth of approximately 5 mm from the bottom of the tray, and leave it for a few minutes.

In the meantime, the waste ink collection pads in the wiper cleaning units absorb the cleaning solution.

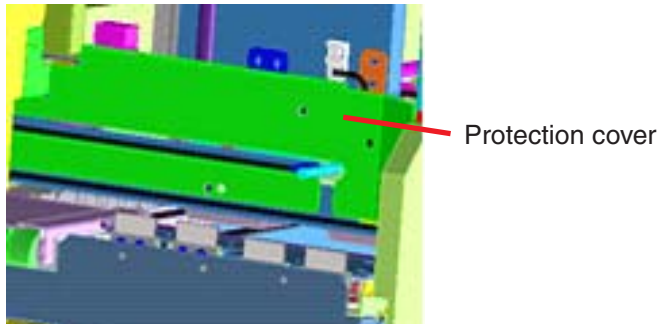
- (10) Remove a wiper cleaning unit from the tray and lightly wipe the bottom of it using a rag.



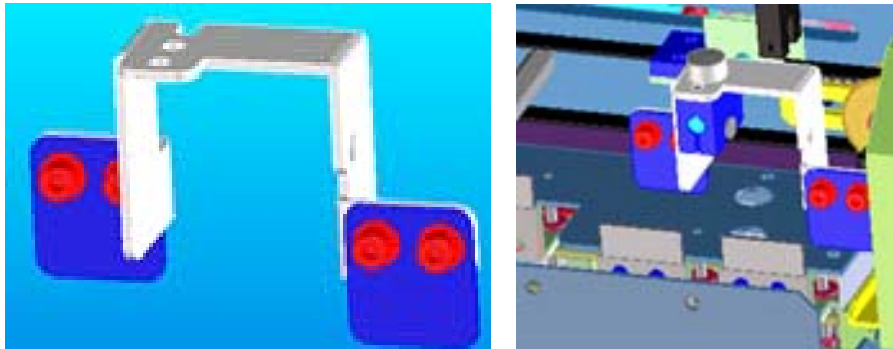
- (11) Install the wiper cleaning unit in the system.

3. Wiper cleaning unit position adjustment procedure

- (1) Check position of the Wiper cleaning unit is parallel to the wiper blades.
If it is not parallel, adjust position of the Wiper cleaning unit using the Blade support positioning plate adjustment jig (100336779V00).
- (2) Remove the Wiper cleaning unit and the protection cover.

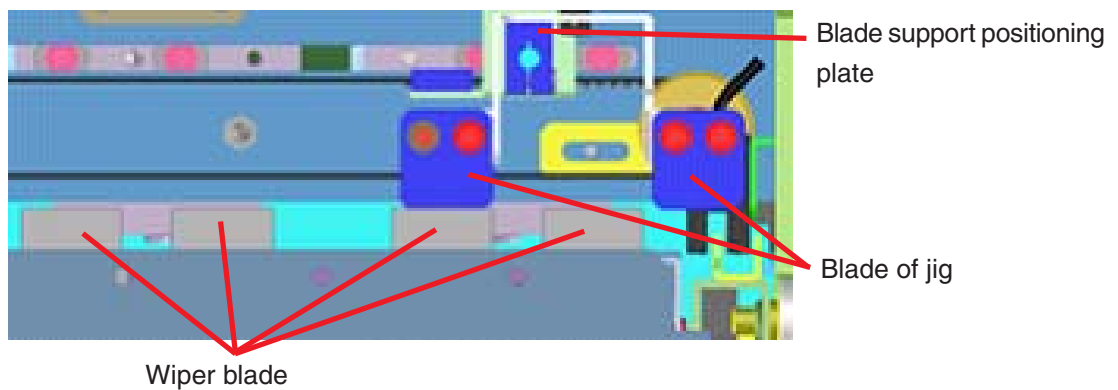


- (3) Attach the Blade support positioning plate adjustment jig.

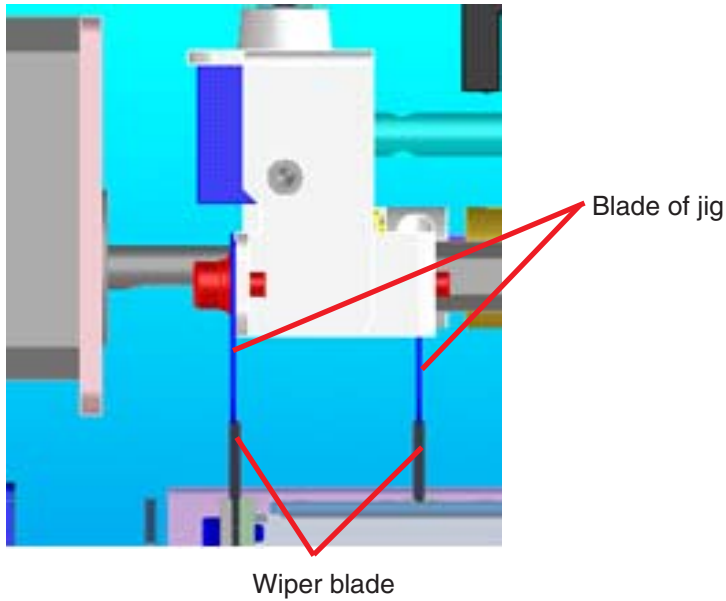


Blade support positioning plate adjustment jig

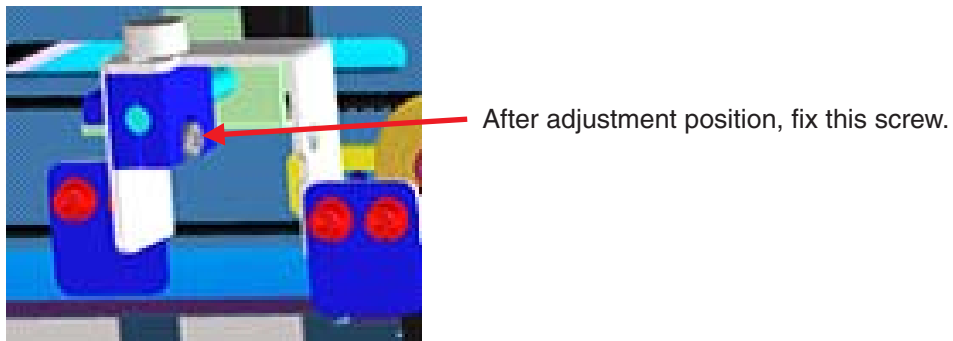
- (4) Adjust the position to the rotation direction of the Blade support positioning plate so that top of the blade of jig and top of the Wiper blade are parallel.



-
- (5) Adjust the position to the front and back direction of the Blade support positioning plate so that the blade of jig and the Wiper blade are arranged.



- (6) After adjustment position, fix the Blade support positioning plate.

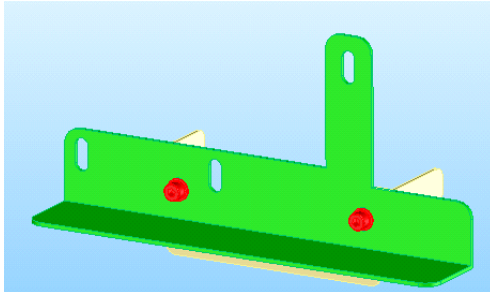


- (7) Remove jig and back to the Wiper cleaning unit and the protection cover.
- (8) Perform head cleaning and check ink on the Wiper blade is clean by the Ink collection pad of the Wiper cleaning unit.

1-Wiper blade replacement procedure

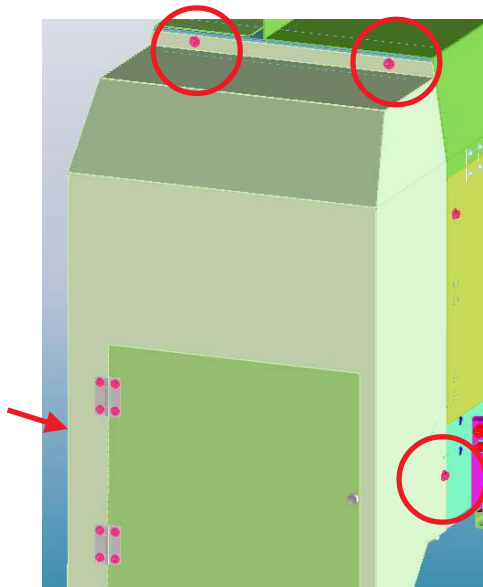
1. Tools to be prepared

- Plastic gloves
- Nonwoven cloth
- Wiper height positioning jig [part code: 100302127V00]

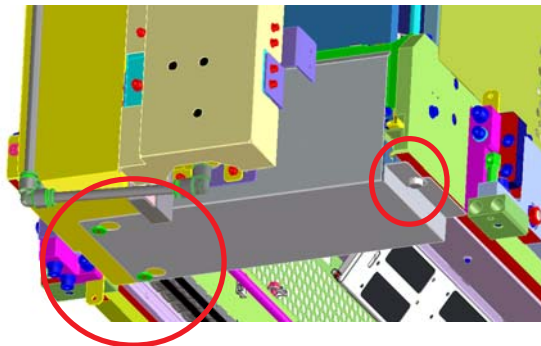


2. Replacement procedure

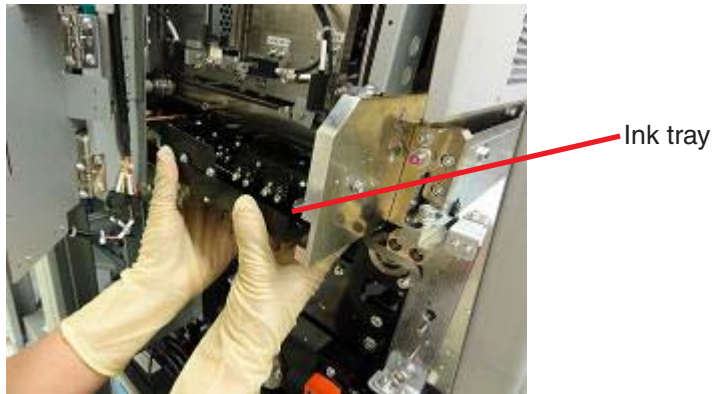
- (1) Turn OFF the printer.
- (2) Remove the front cover of the head unit. (M4 screws at 4 positions)



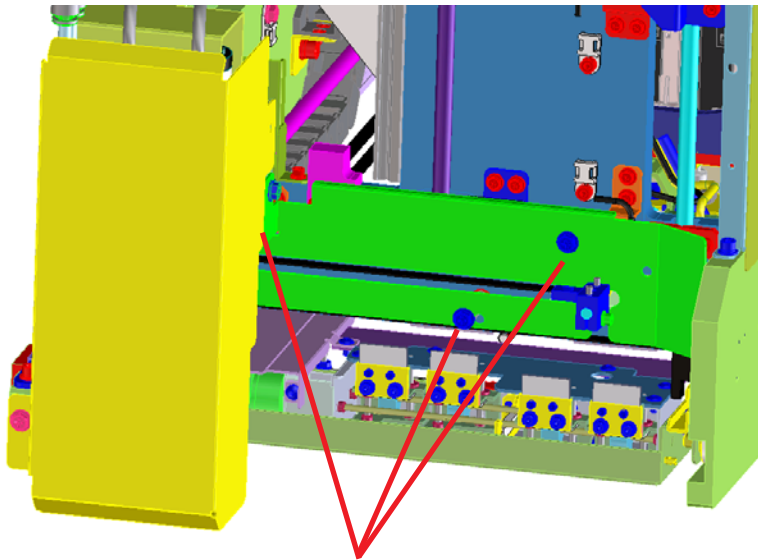
- (3) Remove the Bottom cover.



-
- (4) Remove the ink tray of the wiper unit. At this time, clean the bottom of the wiper unit and ink pan.

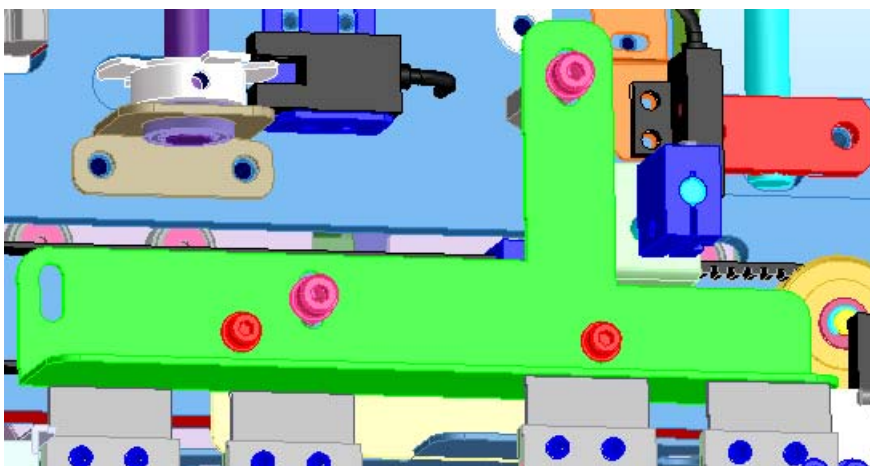


- (5) Remove the wiper cleaning unit.
(6) Remove the Protect cover.

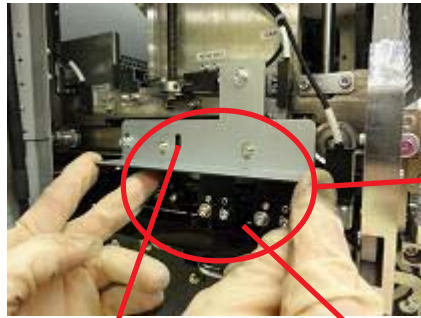


Remove the screws

- (7) Attach the wiper height positioning jig to the position where the protective cover that was removed in Step (3) was fixed.

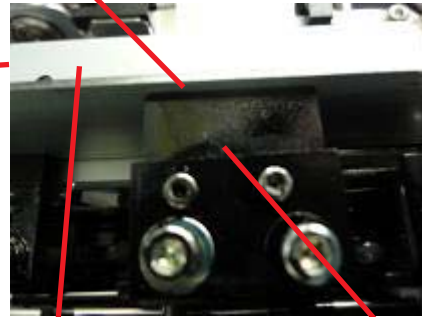


Fix the jig at the position where the tip of the wiper for replacement comes in contact with the bottom of the wiper height positioning jig.



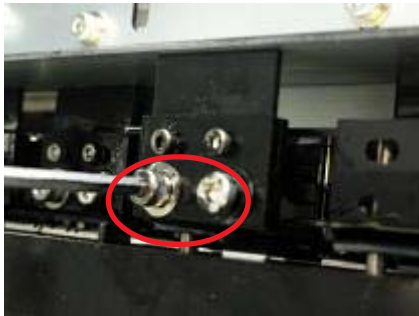
Wiper height positioning jig Wiper

Bring the tip of the wiper in contact with the bottom of the wiper height positioning jig.



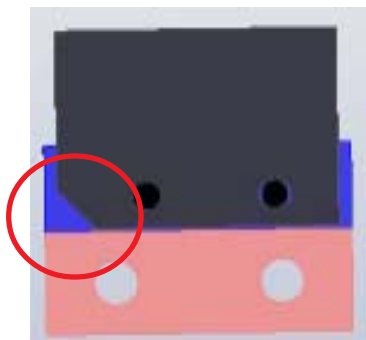
Wiper height positioning jig Wiper

- (8) Remove the M3 screws from the 2 positions, and then the wiper (wiper blade, retaining plate, and blade spacer).

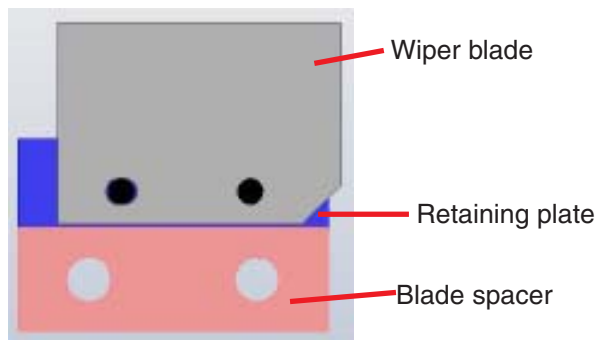


- (9) Remove the wiper blade from the removed wiper, and then attach a new wiper blade. Attach the wiper blade so that its corner is positioned as shown in the figure below.

❗ Be aware of the front and back sides of the wiper blade.



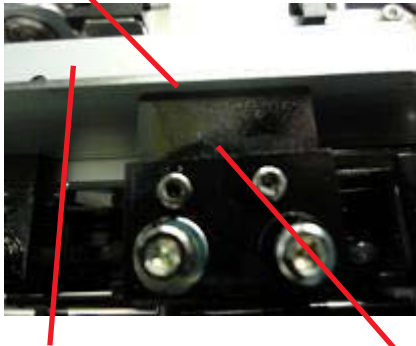
OK



Not Good

-
- (10) Using the reverse order of Step(5), fix the wiper to the position where the tip of the wiper comes in contact with the bottom of the wiper height positioning jig.

Bring the tip of the wiper in contact with the bottom of the wiper height positioning jig.



Wiper height positioning jig

Wiper

- (11) Remove the wiper blade positioning jig.
- (12) Attach the parts in the reverse order of the parts removal during the replacement.
- (13) Turn ON the printer. Check the wiping operation.

1-Wiper cleaning unit Cleaning blade replacement procedure

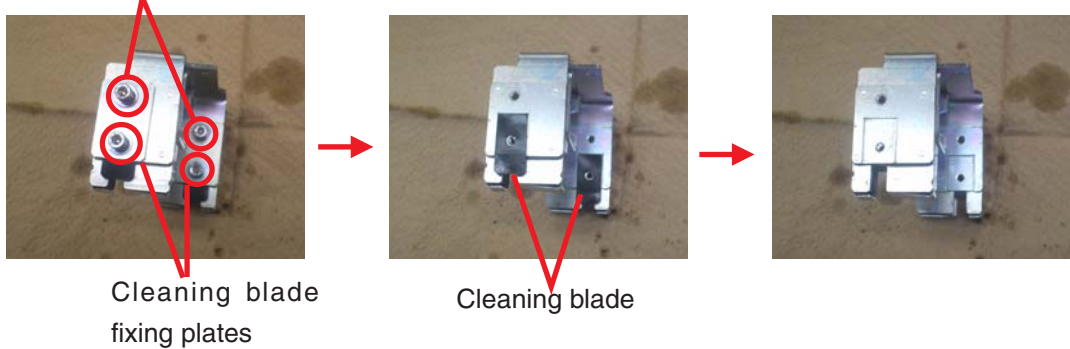
1. Tools to be prepared

- Plastic gloves
- Nonwoven cloth

2. Replacement procedure

- (1) Remove the Wiper cleaning unit
- (2) Remove screws and the Cleaning blade fixing plates.
- (3) Remove the Cleaning blades.

Remove 4 screws.



- (4) Attach new the Cleaning blades on along a groove as shown below and back the Cleaning blade fixing plates.



Wiper blade guide shaft cleaning procedure

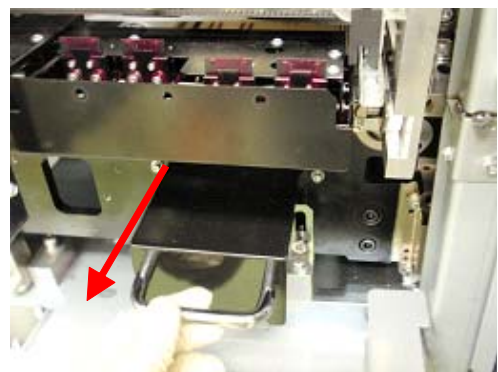
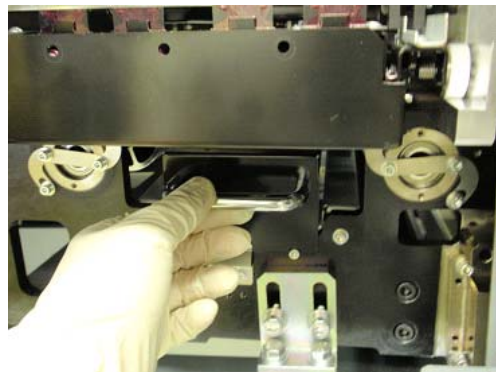
When cleaning of the the Wiper blades At the routine maintenance(every 2 weeks), also clean the guide shaft.

1. Tools to be prepared

- Plastic gloves
- Nonwoven cloth
- Dropper bottle
- Cleaning solution

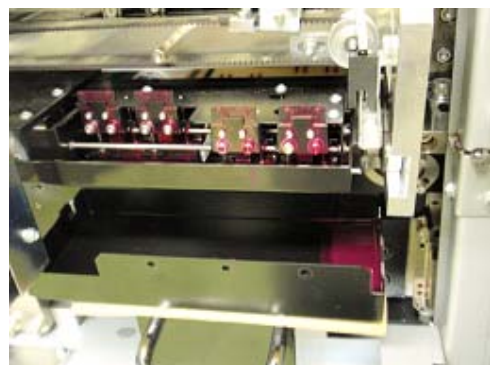
2.Procedures

- (1) Turn OFF the Printer,Open the Head unit front cover.
- (2) Pull out a little flushing tray portion there is no sponge of the tray to come under the wiper unit body, and Kim towel laying on it.

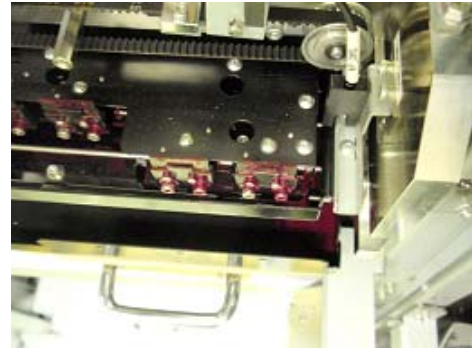
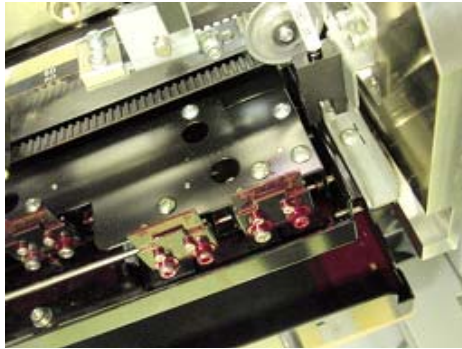


- (3) Remove the ink pan and place on top of the Kim towel.

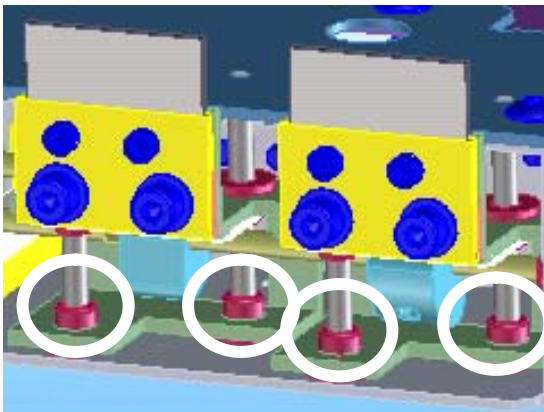
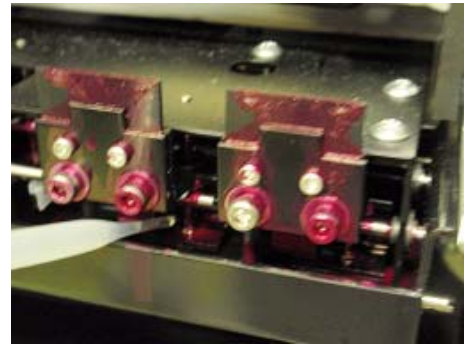
⚠ Please spread the anti-slip material such as the Kim towel,because protect the risk of sliding off the flushing tray if it is placed directly on top of the ink pan.



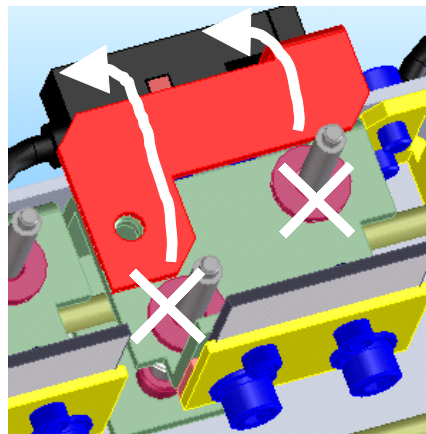
-
- (5) Adjust the position of the ink pan and the tray so that the ink pan is just under the wiper unit in order to receive the Cleaning solution for cleaning.



- (6) Soak a small amount(1or2cc/shaft) Cleaning solution to the drive shaft.
Drop the Cleaning solution to the lower part only.(the part that is enclosed in the figure below)

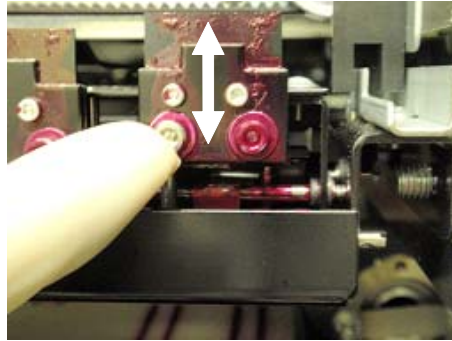
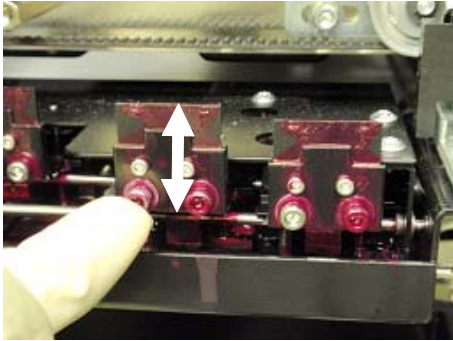


- ❗ Please do not do absolutely soaking the Cleaning solution to the following part because it may causes damage to the origin sensor.



-
- (7) Make sure that the vertical movement is well by Move the shaft up and down five times with a finger.

❗ In the case of movement up and down is hard, please repeat the work of 6 and 7.



- (8) Clean the Ink pan, and assemble it.
- (9) Mount the covers that were removed.

Ink Filter and deaeration module replacement procedure

Part code	Part name	Specification	Qty
S100314805V00	Hollow Fiber Membrane Assy	-	4
S100314803V00	Ink Filter Assembly	-	4

❗ For the layout of the parts, refer to “1. Parts layout” in chapter G Reference.

1. Tools to be prepared

- Waste liquid jig (Jig for tube 8mm diameter) [part code: 100313976V00]
- Plastic gloves
- Nonwoven cloth
- Waste liquid tank (5 L)

❗ The following operations are required during the filter and deaeration module replacement.

Before replacement

- Ink discharge

After replacement

- Ink replenishment

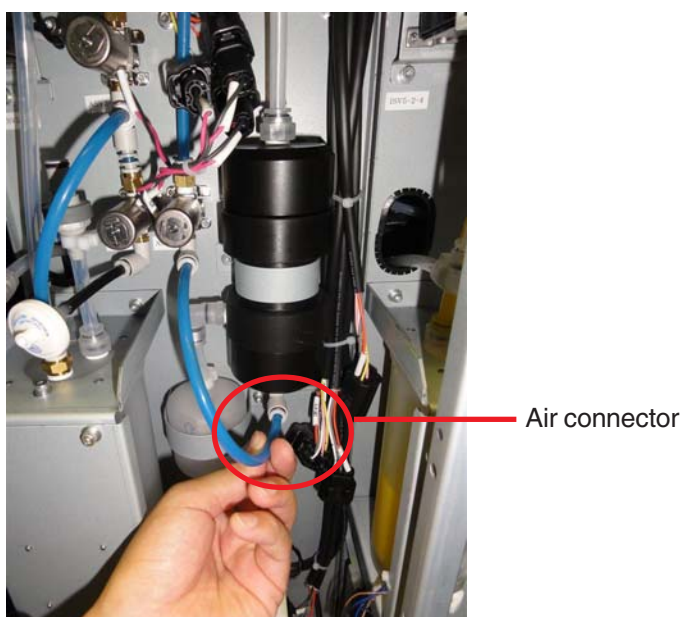
2. Procedure before replacement

2-1. Ink discharge

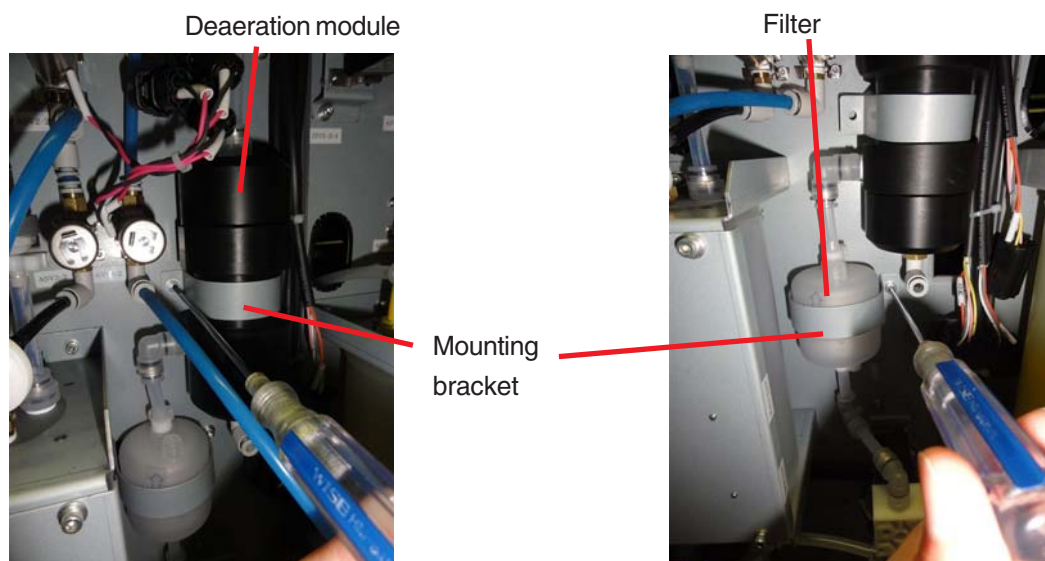
- ❗ - For the ink discharge procedure, refer to “2. Procedure before replacement” in “2-1. Solution transmission pump replacement procedure”.

3. Replacement procedure

- (1) Turn OFF the printer.
- (2) Remove the air connector from the bottom of the deaeration module.

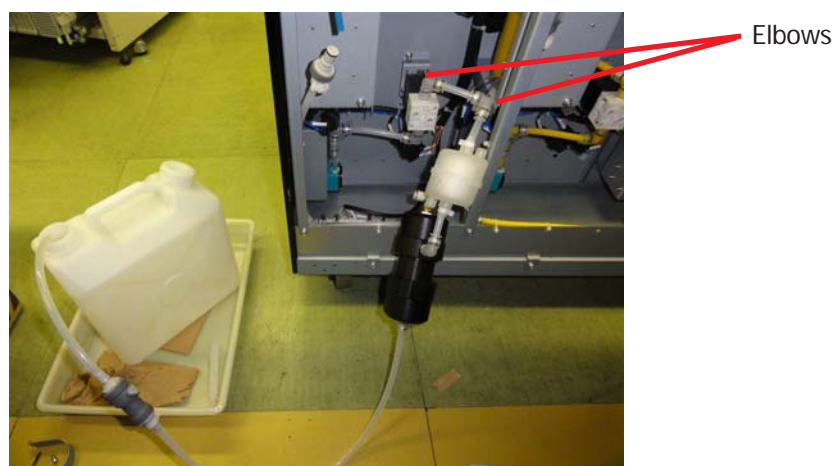


-
- (3) Remove the deaeration module and filter mounting bracket.

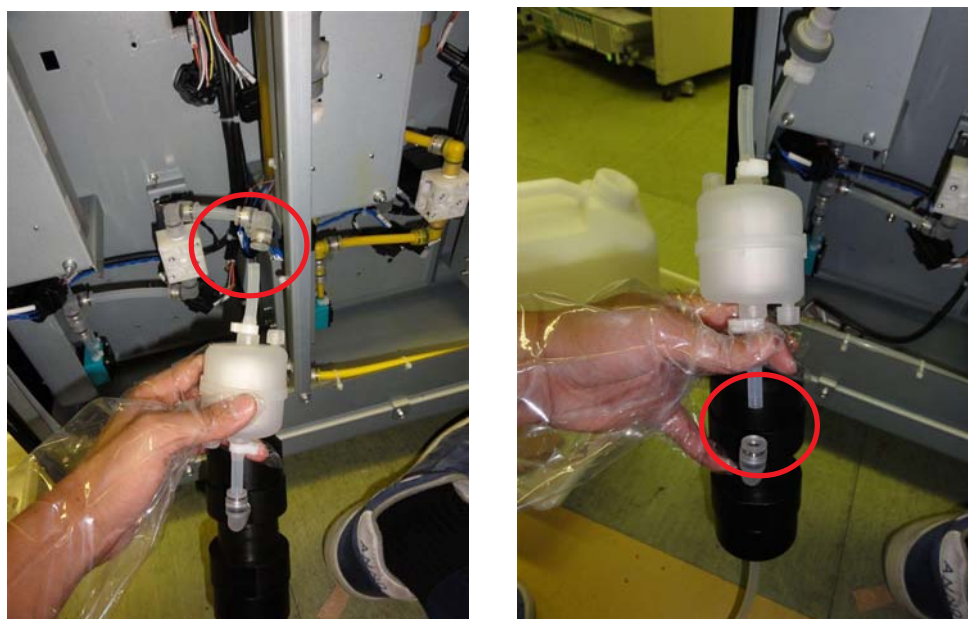


- (4) While turning the two elbows shown in the picture below, put the deaeration module and filter piping in front, and then flip them upside down.

! Take care not to break the piping.



- (5) Remove the filter.

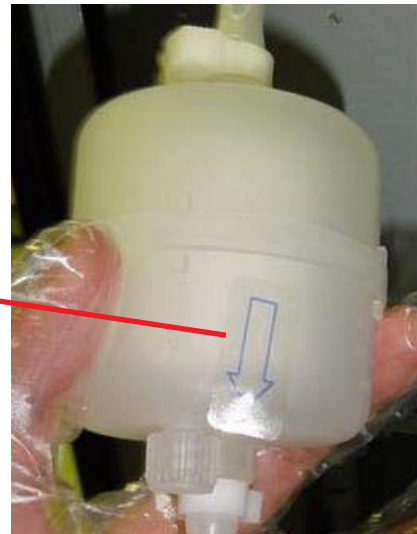
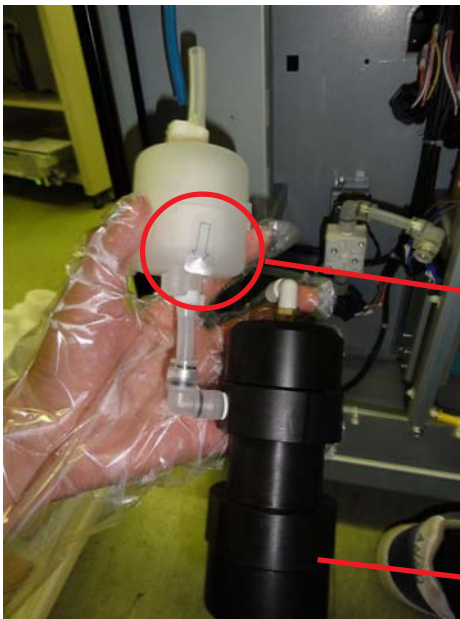


-
- (6) When necessary, remove the deaeration module and replace it with a new deaeration module.



- (7) Attach a new filter.

❗ Take care about the filter direction so that the arrow of the filter faces the deaeration module side.



Deaeration module

- (8) Connect the filter to the elbow, return the piping to its original position, and then attach the bracket.

4. Procedure after replacement

4-1. Ink replenishment

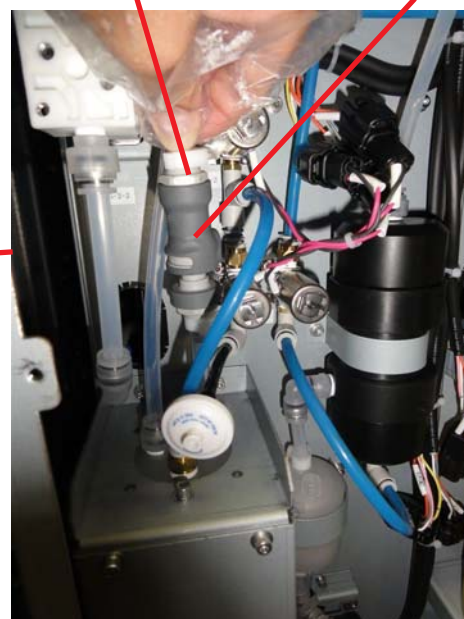
❗ For the ink replenishment procedure, refer to “Procedure after replacement” in “2-1. Solution transmission pump replacement procedure”.

Ink replenishment

- (1) Remove the waste liquid jig that was attached to the non-spill coupling 30 side in ink discharge procedure (2).
- (2) Connect non-spill coupling 30 to 21 as shown in the picture below.



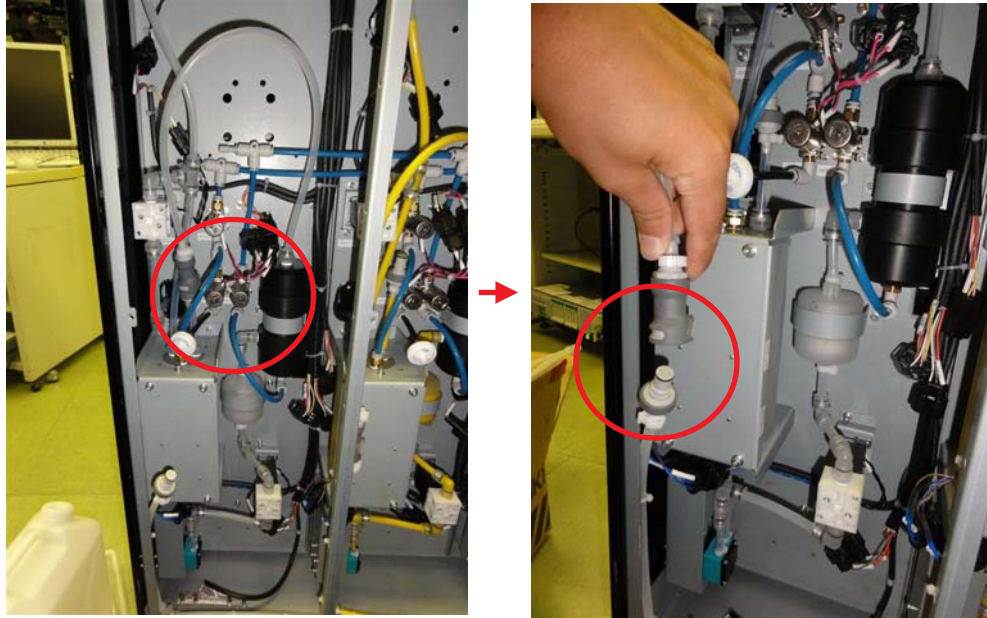
Non-spill coupling 30



Non-spill coupling 21

- (3) Turn ON the printer.
- (4) Select "System" menu and select "19_Ink supply".

-
- (5) Select “Ink supply to air trap tank” from menu. And select color and press “Start” button. Ink is replenished to the air trap.
 - (6) Select “Circulation degas” from menu. And select color and press “Start” button. The circulating degasification is started.
 - (7) Redo step (5) and (6).
 - (8) Check that the sequence has stopped completely, remove non-spill coupling 30 from non-spill coupling 21, and then connect it to non-spill coupling 31.



- (9) Perform the cleaning sequence, and check that ink is supplied normally.