

## 9 Replacing the routine maintenance parts

Daily maintenance or early replacement of parts is necessary to keep your machine in optimum operating condition. Replace parts correctly according to the following directions.



Always unplug the power plug before replacing parts. There is a danger of electrocution if it has been done without unplugging.



Follow directions on this manual when replacing parts. Replacing parts in the way ignoring this manual could cause malfunction of the machine as well as electrocution and fire.

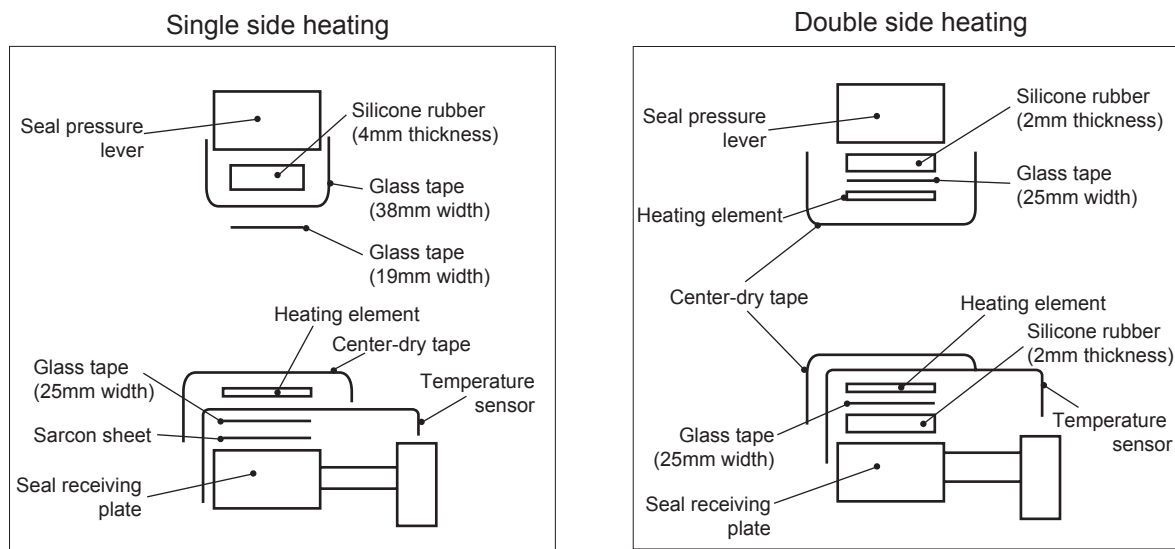


Always use only specified parts sold through Fuji Impulse. Unspecified parts may cause malfunction of the machine.



Always unplug the power plug from the wall outlet before performing the maintenance.

### Structure of the sealing section



### Routine maintenance parts

Below list shows the parts that will wear out with the prolonged use of the machine and their sales unit.

When ordering those consumable parts to your local dealer, please specify the sealer model name, parts name, and quantity.

Parts Name	Sales unit
Heating element (5mm/10mm width)	1 set (20 or 10 pcs./set)
Silicone rubber (single side heating)	2 pcs./set (4 mm thickness)
Silicone rubber (double side heating)	2 pcs./set (2 mm thickness)
Center-dry tape	40mm-width x 5M . . . 1 roll
Glass tape (single side heating)	38mm-width x 10M . . . 1 roll
Glass tape (double side heating)	25mm-width x 5M or 10M . . . 1 roll
Sarcon sheet	2 pcs./set or 5M roll . . . 1 roll
Sponge rubber	2 pcs./set

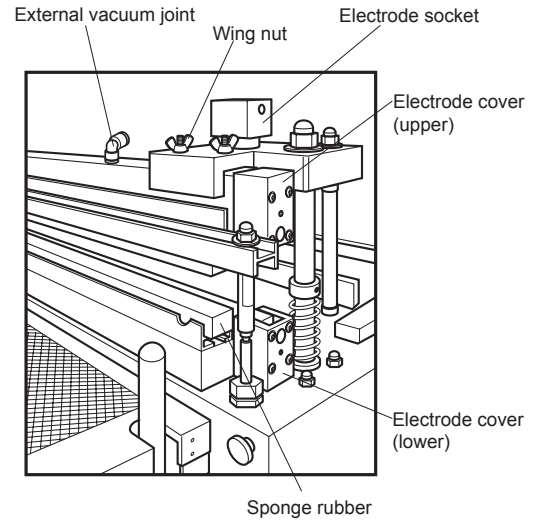
## Preparation before replacing parts

When replacing parts, remove the pressure lever set for the easier replacement.

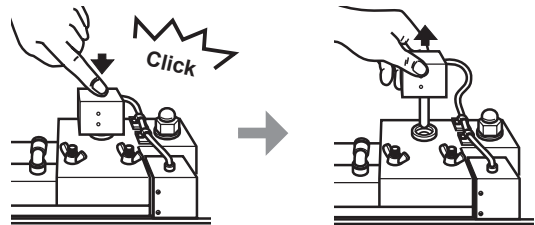
### How to remove the pressure lever set

You will need: Monkey spanner, industrial-purpose alcohol/ Ethanol


1 Remove the tube from external vacuum joints.

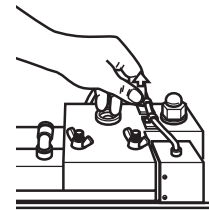


2 Remove the electrode socket after pushing it until it snaps.

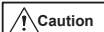


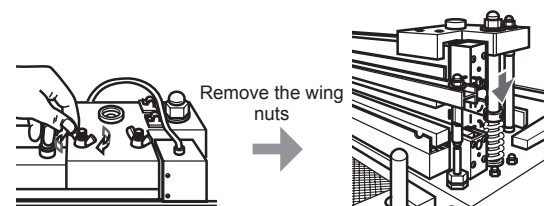
3 Remove the power cord from the clamp. (Only for double-heating type.)

 Caution Be careful not to pull out the power cord.

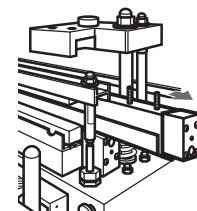


3 Remove four wing nuts.

 Caution By removing the wing nuts, the pressure lever set can be removed. Be careful as there is a danger of damaging the sealing area.



5 By sliding either to right or left, the pressure lever can be removed.

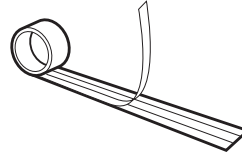


## 9-1 Replacing the Teflon center-dry tape

You will need: Monkey spanner, Scissors

Replace when: The center dry tape discolored and the pouch tend to stick to the sealing area.

The center dry tape breaks, burns, or when the seal becomes messy, etc.

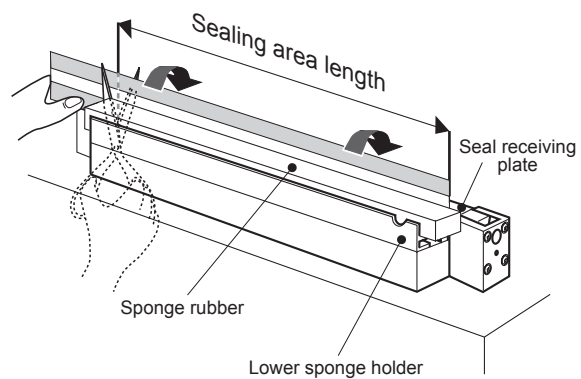


**Attention!** After removing the old center-dry tape, completely remove the adhesive residues remaining on the metal portion of the pressure lever using an industrial-purpose alcohol.

### ● How to replace the Teflon center-dry tape on the seal receiving plate side

(For all machine models.)

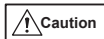
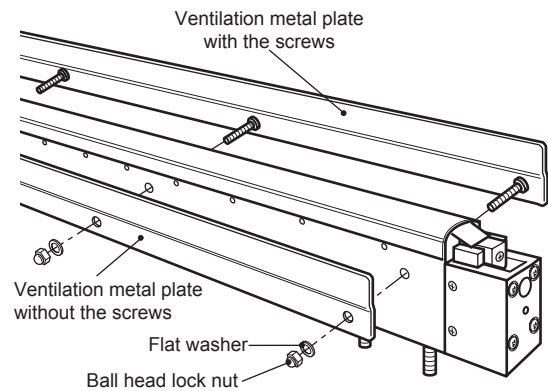
- 1 Refer to "Preparation before replacing parts", remove the pressure lever.
- 2 Remove the sponge rubber. Insert one edge of the new center-dry tape between the lower sponge holder and seal receiving plate with adhesive side facing to the seal receiving plate. Using scissors, cut the center-dry tape in a length of the sealing area.
- 3 Fold the tape so that the other edge of it adheres to the other side of the seal receiving plate.



**Caution** For the double side heating type, be careful not to damage the temperature sensor when removing the center-dry tape.

- How to replace the Teflon center-dry tape on the pressure lever side

- 1 After removing the pressure lever, remove the flat washers, four nuts, and ventilation metal plates.
- 2 Using scissors, cut the new center-dry tape in a length of the sealing area.
- 3 Lightly apply one edge of the tape to the pressure lever with adhesive side facing to it. Be careful not to close the vacuuming section for the external vacuuming.
- 4 Fold the tape so that the other edge of it adheres to the other side of the pressure lever.



When removing the ventilation metal plates, be careful not to bend them.



Apply the tape so that the non-adhesive central part of the tape covers the heating element. Applying the tape with the wrinkles on it will negatively affect the sealing surface.

## 9-2 Replacing the temperature sensor

**Caution** Temperature sensor is connected to the temperature controller and microcontroller. The location of the temperature sensor differs depending on the sealing modes.

You will need: Monkey spanner, Scissors, a Philips screwdriver

Replace when: The kapton tape breaks or is cut, the sensing part is damaged

- 1 After removing the pressure lever, remove the sponge tucked into the lower sponge holder.

### ● Single-side heating type

Temperature sensor is set under the teflon center-dry and heating element. Remove them referring to the replacing procedures of each item.

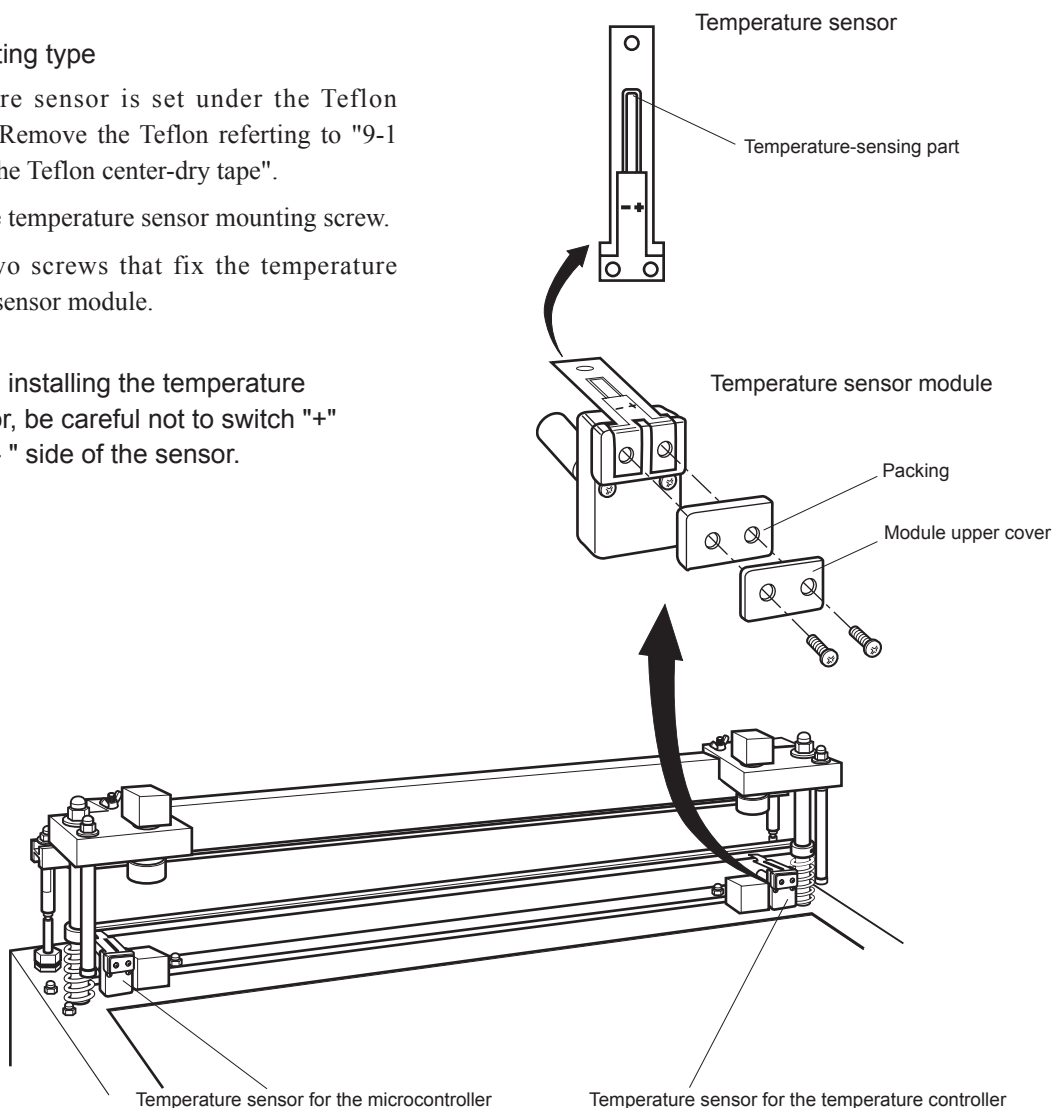
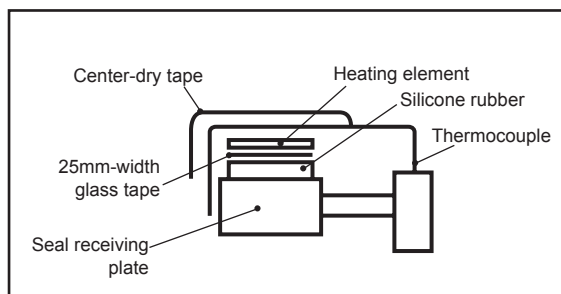
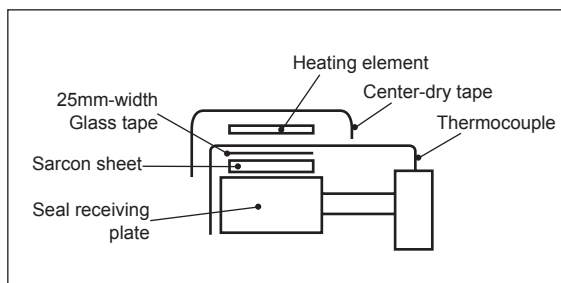
### ● Double-side heating type

Temperature sensor is set under the Teflon center-dry. Remove the Teflon referring to "9-1 Replacing the Teflon center-dry tape".

- 2 Remove the temperature sensor mounting screw.
- 3 Remove two screws that fix the temperature sensor and sensor module.

**Caution** When installing the temperature sensor, be careful not to switch "+" and "-" side of the sensor.

Temperature sensor installation positions



## 9-3 Replacing the heating element

You will need: Monkey spanner, Scissors, a Philips screwdriver, Hexagonal wrench

Replace when: The heating element breaks, unevenness is generated, or when the seal becomes messy, etc.

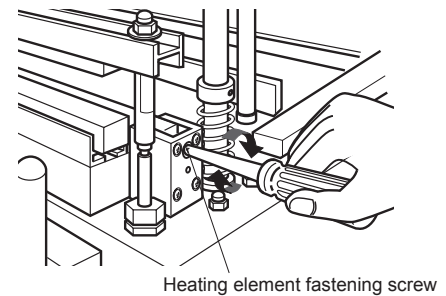
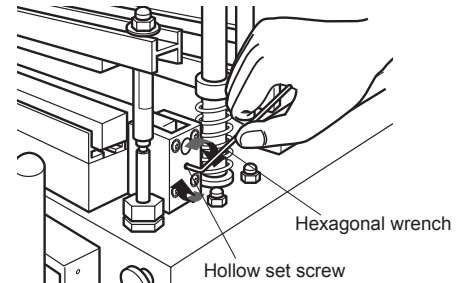


Always use the specified heating element sold through Fuji Impulse. The transformer may damage if you use other heating elements not specified by us.

- How to replace the heating element on the seal receiving plate

(For CR-600)

- 1 Remove the pressure lever. As the heating element on the seal receiving plate is covered with the Teflon center-dry tape, remove the Teflon referring to "9-1 Replacing the Teflon center-dry tape"
- 2 Loosen the tension of heating element by turning the hollow set screw with a hexagonal wrench fully to the right (clockwise).
- 3 Loosen the heating element fastening screws and remove the heating element.



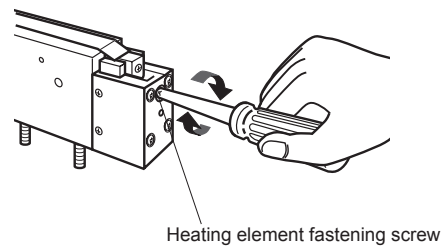
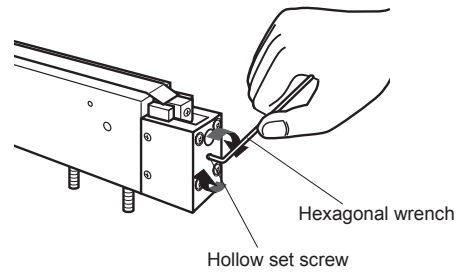
- How to replace the heating element on the seal receiving plate

(For CR-600-10W)

- 1 Remove the pressure lever. As the heating element on the seal receiving plate is covered with the Teflon center-dry tape and temperature sensor, follow the direction of "9-1 Replacing the temperature sensor," up to procedure 2, and remove the temperature sensor.
- 2 Loosen the tension of heating element by turning the hollow set screw with a hexagonal wrench fully to the right (clockwise).
- 3 Loosen the heating element fastening screws and remove the heating element.

● How to replace the heating element on the pressure lever.

- 1 Remove the pressure lever. As the heating element is covered with the Teflon center-dry tape, remove the Teflon referring to "9-1 Replacing the Teflon center-dry tape"
- 2 Loosen the tension of heating element by turning the hollow set screw with a hexagonal wrench fully to the right (clockwise).
- 3 Loosen the heating element fastening screws and remove the heating element.



## 9-4 Insert/ remove the air tube

Insert or remove the air tube while pushing the release ring of the elbow joint with your fingers.

### Remove the tube

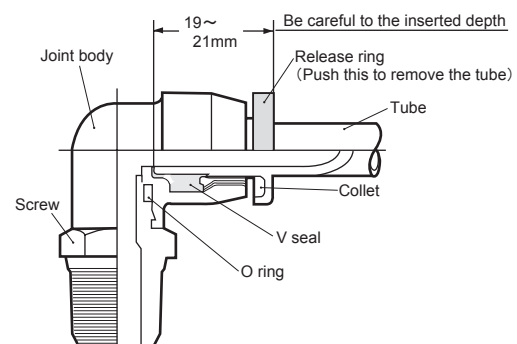
It will be easier to pull out the tube after pushing it while also pushing the release ring.

### Insert the tube

When inserting the tube, make sure to insert it fully to the end of the elbow joint.



Air will leak if the tube is not fully inserted. Insert the tube securely.



## 9-5 Replacing 25mm-width glass tape and Sarcon sheet on the seal receiving plate

You will need: Monkey spanner, Scissors, a Philips screwdriver, industrial-purpose alcohol/ Ethanol

Replace when: The heating element breaks often, the seal becomes messy, etc

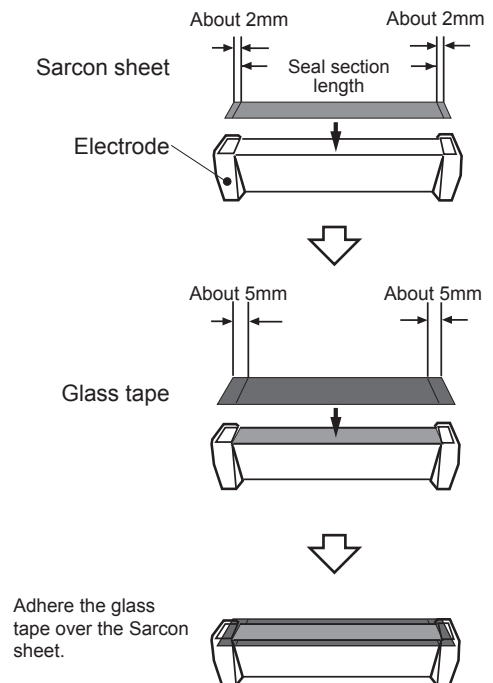
- 1 After removing the pressure lever, remove the Teflon center-dry tape, heating element and temperature sensor.
- 2 Completely remove the glass tape and Sarcon sheet.

**Caution** Applying the Sarcon sheet and glass tape to a surface with adhesive residues will negatively affect the sealing surface. Completely remove them using alcohol/ ethanol, etc.

- 3 Apply the new Sarcon sheet that is cut 2mm longer on both sides to the sealing section.
- 4 Cut the glass tape 5mm longer than the Sarcon sheet on both sides, and adhere it above the Sarcon sheet. The excess tape on both side should cover the electrodes.

**Attention!** If the adhesive of the Sarcon sheet is weak when replacing the glass tape, please replace the Sarcon sheet as well.

**Caution** If the Sarcon sheet and glass tape located below the heating element is damaged, they cannot insulate the heating element properly. Check them at the time of maintenance, and replace if necessary.



## 9-6 Replacing 38mm-width glass tape and Sarcon sheet on the seal receiving plate (For CR-600)

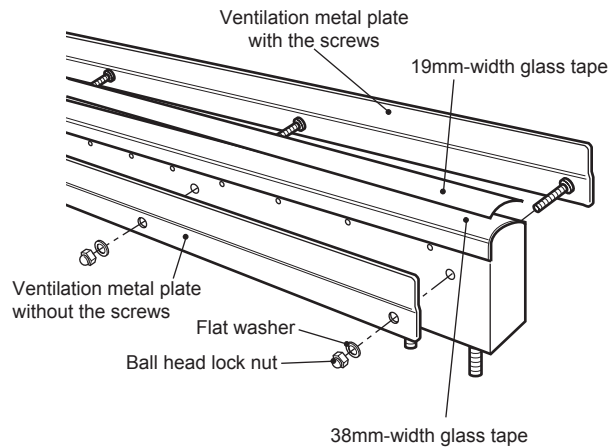
You will need: Monkey spanner, Scissors, a Philips screwdriver, industrial-purpose alcohol/ Ethanol

Replace when: The heating element breaks often, the seal becomes messy, etc

- 1 After removing the pressure lever, remove the flat washers, 4 nuts, ventilation metal plates.
- 2 Completely remove the 19mm-width glass tape.
- 3 Replace 38mm-width glass tape.

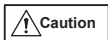


When removing the ventilation metal plates, be careful not to bend them.



## 9-7 Replacing 25mm-width glass tape (For CR-600-10W)

- 1 After removing the pressure lever, remove the Teflon center-dry tape, heating element and temperature sensor (on the seal receiving plate) referring to each replacement method.
- 2 Completely remove the the glass tape.

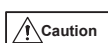


Applying the glass tape to a surface with adhesive residues will negatively affect the sealing surface. Completely remove them using alcohol/ ethanol, etc.

- 3 Cut the new glass tape in the length of 5mm longer than the sealing section on both sides, and apply it so the electrode is covered by the excess part of the glass tape.



If the adhesive of the Sarcon sheet is weak when replacing the glass tape, please replace the Sarcon sheet as well.



If the glass tape located below the heating element is damaged, they cannot insulate the heating element properly. Check them at the time of maintenance, and replace if necessary.

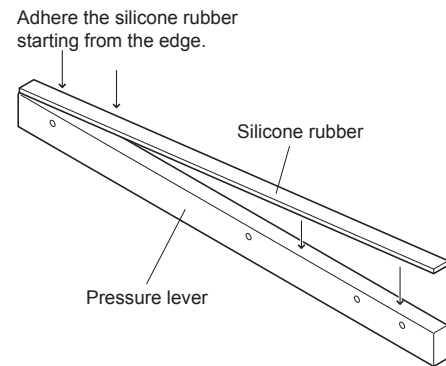
## 9-8 Replacing the silicone rubber

You will need: Monkey spanner, Scissors, industrial-purpose alcohol/ Ethanol

Replace when: The seal becomes messy, the silicone rubber burns.

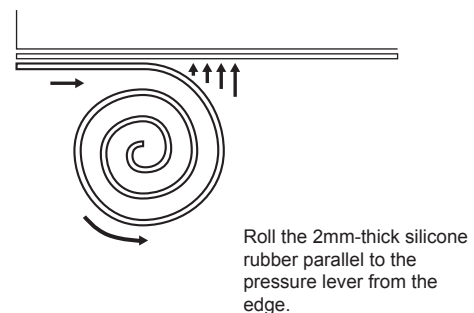
### ● Replacing the silicone rubber on the pressure lever (For CR-600)

- 1 After removing the pressure lever, place it so the silicon rubber comes upward.
- 2 Remove the glass tape and silicone rubber, and completely remove the adhesive residues remaining on the metal portion of the clamping lever using an industrial-purpose alcohol, etc.
- 3 Remove the paper attached to the adhere part of the new silicone rubber (4mm thickness), and adhere it starting from the edge.
- 4 Adhere the 38mm and 19mm-width glass tape on the silicone rubber.



### ● Replacing the silicone rubber on the seal receiving plate and pressure lever (For CR-600-10W)

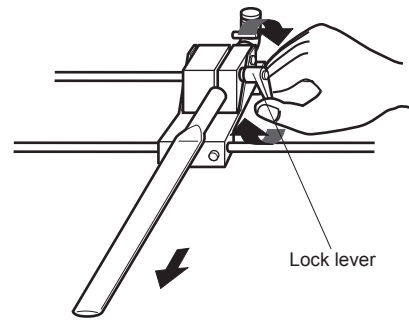
- 1 Remove the Teflon center-dry tape, heating element, temperature sensor (on the seal receiving plate only), glass tape, and silicone rubber. Completely remove the adhesive residues remaining on the metal portion of the clamping lever using an industrial-purpose alcohol, etc.
- 2 Roll the silicone rubber (2mm thickness) and adhere it from the edge of the pressure lever.
- 3 Adhere the 25mm-width glass tape, heating element, temperature sensor (only for the seal receiving plate), and Teflon center-dry tape on the silicone rubber in the exact same order.



## 10 Routine maintenance of the each part

### 10-1 Clean the nozzle

If the objects are stuck in the nozzle, the machine cannot perform vacuuming and gas-flushing properly. Turn the lock lever toward you (counterclockwise) to unlock the nozzle. Clean it after removing it from the machine.



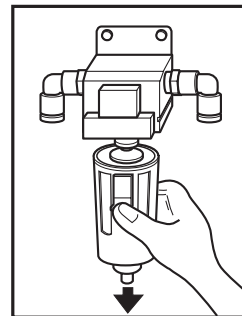
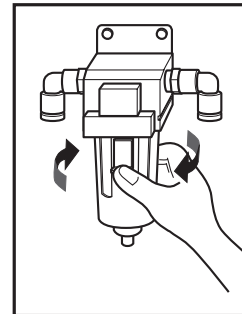
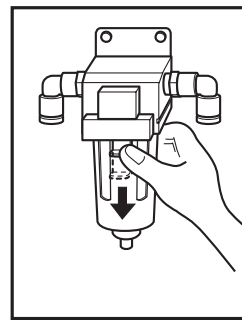
### 10-2 The role of the air filter and how to clean it

Air filter is located between the nozzle and vacuum pump, so all the objects sucked through the nozzle such as dusts will be collected in the filter. Please check the filter at least every month and clean it if necessary.

If you are vacuum packaging the powdery items, check the filter everyday to keep the cleanliness.

- How to remove the filter cup

While pulling down the lever, turn the cup either right or left. It will remove the cup from the filter body.

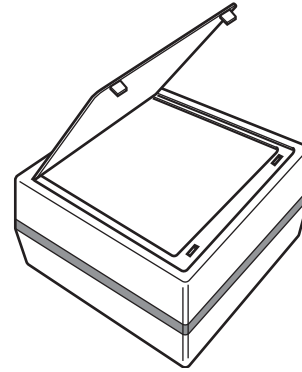


### 10-3 The role of the optional HEPA filter and how to clean it

HEPA filter exhausts clean air as it can remove at least 99.97% of airborne particles 0.3 micrometers ( $\mu\text{m}$ ) in diameter. The clean level of the exhaust part is M3.5 (clean class 100).

The exhaust air from the exhaust tube are filtered by the HEPA filter and exhausted outside the machine. There will be a pre-filter inside the cover. Please perform routine maintenance to keep it clean.

If the machine is used outside of the clean room, the performance of the HEPA filter will be diminished. Please replace the HEPA filter.



### 10-4 The role of the optional dry filter and how to clean it

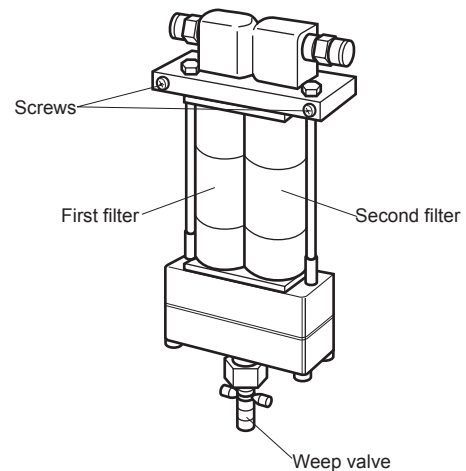
Dry filter is installed to prevent the damage to the cylinders as the cooled compressed air from the air compressor may cause the water drop inside the tube and it may enter inside the cylinders.

Two types of the cartridges are installed inside the dry filter.

The machine is installed with the larger sized dry filter compared to the pump capacity.



When you see the water drop in the tube after the air passing the dry filter, the filters need to be replaced even if it is within the standard replacement cycle.



Refer to the manual of the dry filter in the accessory on how to replace it. When the impurities enter into the filter, remove the two screws that fix the filter and move the pin at the weep valve up and down to clean up inside the filter. The standard replacement cycle for the first filter is about 2 years when the machine is used 8 hours per day; while it is about 6 months for the second filter. Replace or clean up the filter according to the standard replacement cycles for each filter.