

Maintenance and Inspection

This chapter explains maintenance • inspection items, and methods to keep product in good condition.

✘Refer to maintenance manual for details



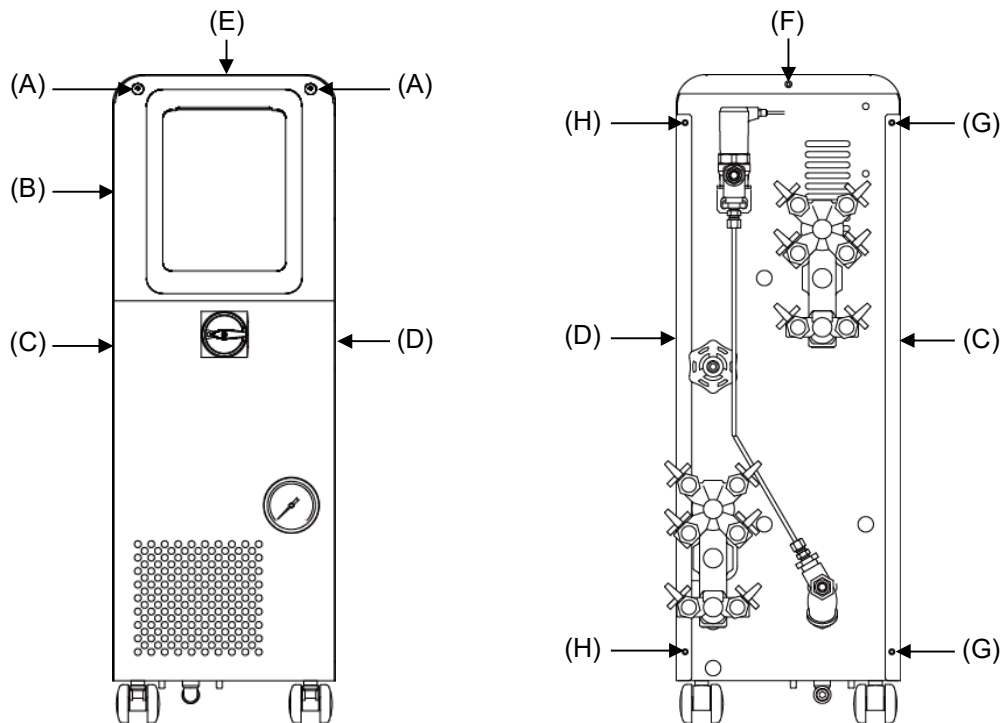
Be sure to perform maintenance and inspection after cooled down for 5 hours after stopped operation. (Use gloves.)

Temperature is very high during operation and immediately after stopped, it is very dangerous.

When you got burned, cool that position immediately with pure cooled water and get medical attention.

Inspection should be performed by qualified personnel only.

1. How to remove outer panels



(A) Panel fixing screw

(B) Front panel

(C) Left side plate

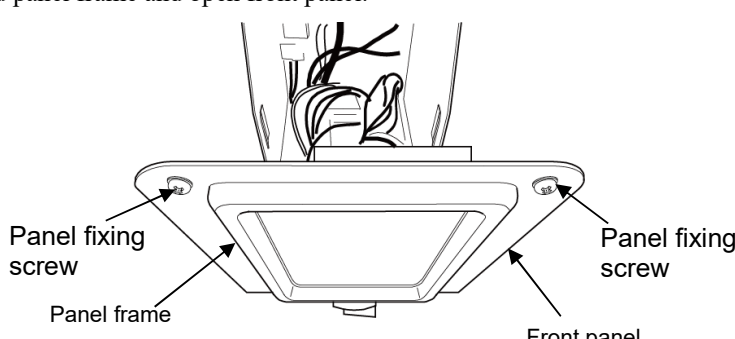
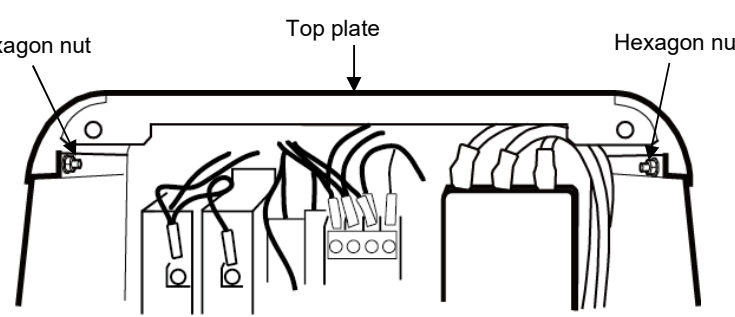
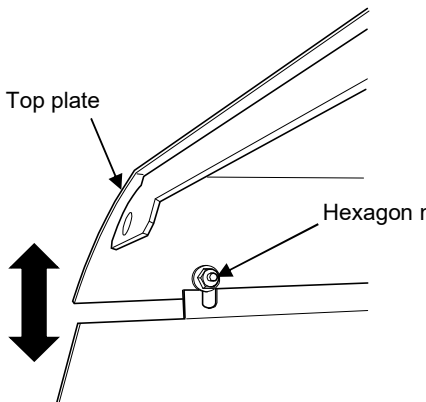
(D) Right side plate

(E) Top plate

(F) Top plate mounting screw

(G) Left side plate mounting screw

(H) Right side plate mounting screw

Step	Item	Working Details
<p>1</p>	<p>Open front panel</p>	<p>Remove two panel fixing screws with Philips screwdriver.</p> <p style="text-align: center;">⇓</p> <p>Hold panel frame and open front panel.</p>  <p>Panel fixing screw</p> <p>Panel frame</p> <p>Panel fixing screw</p> <p>Front panel</p>
<p>2</p>	<p>Remove top plate</p>	<p>Loosen two hexagon nuts inside main body.</p>  <p>Hexagon nut</p> <p>Top plate</p> <p>Hexagon nut</p> <p style="text-align: center;">⇓</p> <p>Remove top plate fixing screws on the back of machine.</p> <p style="text-align: center;">⇓</p> <p>Lift up top plate to remove it.</p>  <p>Top plate</p> <p>Hexagon nut</p>

Step	Item	Details
3	Remove right and left side plates	Remove each mounting screw to remove right and left side plates.

2. Daily maintenance and inspection items

Item	Details
Check operating pressure	Check pump pressure for variations and check to see that pump pressure is not over 0.05 MPa. If you find other abnormalities, stop machine.
Check Leak	Check leak not only at machine but also check at hoses, pipe joints, mold side couplers, etc. If there are some leaks, tighten or replace parts as needed.

3. Monthly maintenance and inspection items

Item	Details
Check Medium	Collect water sample from drain port and inspect contamination. <u>If contamination is severe, flush and replace all water in system.</u>

Item	Details
Check Hose	<p>Check if there are any medium leaks from nearly joint fittings or not and also inspect that there are some deformations (crushing or bulging), flaws, cracks, wear and abnormal hardening or not.</p> <p><u>Replace hoses if leakage of medium occurred as a result of damage.</u></p> <p>* The maximum service temperature of each hose type is as follows. (Optional Accessories).</p> <ul style="list-style-type: none"> ○ Rubber hose for L (for warm water only) : 95°C ○ Rubber hose for H (for warm water only) : 120°C <p><u>In case of hoses had been used at nearly above temperature (20°C lower than above temperature), it will run out quickly and drop in quality.</u></p> <p><u>Replace hoses if abnormal conditions are found during inspection.</u></p> <p>Although, each hose is being used at temperature lower than specified, please replace it <u>within a year as a guideline.</u></p>
Cleaning pump mechain	<p>Remove outer panel of machine and clean accumulated medium in pump mechain.</p> <p style="text-align: center;">[Reference]</p> <p>Because of pump mechanical seal structure, it will not be able to seal perfectly. Sometimes, medium may leak around 4 drops in 1 hour.</p>

4. Maintenance and inspection items should be performed every 3 months

When inspecting electrode unit and float switch, remove outer panel of machine.

***Refer to maintenance manual for details.**

Check terminals for looseness.

5. Check Solid State Relay (SSR)

SSR can be broken because of electrical impact (short circuit) or high environmental temperatures.

When circuit breaker trips, carry out inspection according to following procedures.

Also, periodically conduct inspections.

Item	Working Details
SSR	<p>Turn ON disconnect switch or power breaker, and check that machine is stopped.</p> <p>If SSR is normal, electric current will not flow to heater circuit.</p> <p>Use clamp meter to measure electric current in the heater circuit.</p> <p>If electric current flows to the heater circuit,SSR is in failure, so please replace <u>SSR</u>.</p> <p>Contact our service division for repair and replacement.</p>