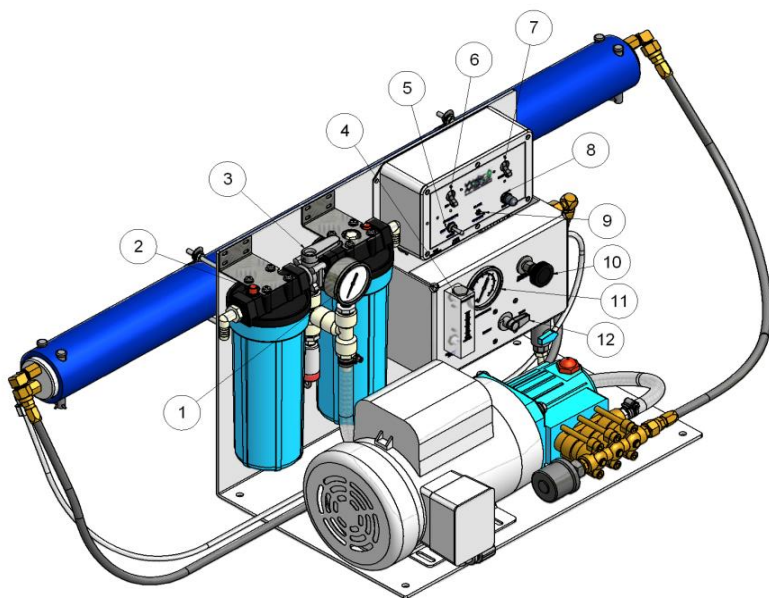


Water Makers INC.

Reverse Osmosis Desalination

ISL SERIES QUICK REFERENCE GUIDE



1. Feed Pressure Gauge
2. Filter Vent Button
3. Filter Selector Valve
4. Product Flow Meter
5. Start Toggle Switch
6. RO Pump Switch

7. Feed Pump Switch
8. Stop Pushbutton
9. Clean/Operate Switch
10. Pressure Regulator
11. RO Pressure Gauge
12. Manual Product Diverter Valve

Note: Prior to operating the unit the following initial conditions must be satisfied:

1. Check high pressure pump oil level.
2. Check the pressure regulator is full open.
3. Check the filter selector valve in the “operate” Position.
4. Check the manual product diverter in the “reject” position.
5. Check the suction seacock open.
6. Check the circuit breaker in the main panel is closed/on.
7. Check the clean/operate switch in the “operate” Position.
8. Check the Feed pump and R.O. pump switches in the “off” position.

Note: If you have installed any optional upgrades refer to those instructions prior to operating the watermaker.

1. Normal Start-Up:

- A. Place the feed pump switch in the “on” position.
- B. Press and hold the start toggle switch down until the feed pressure indicates at least 10 psi then release.

Note: If the feed pump does not continue running after releasing the start toggle, check the pre-filter for dirt or damage, replace as necessary.

- C. Allow 1-2 minutes for all air to be purged from the system.
- D. Depress the red vent button on the pre-filter to purge any air from the canister.
- E. Place the R.O. pump switch in the “on” position.
- F. Turn the pressure regulator slowly clockwise until the R.O. pressure gauge indicates 800-900 psi.

Note: Within 1-2 minutes product water should be seen in the product flow meter.

- G. Using a handheld TDS Meter (Watermakers, Inc. Part# TDS-AP-1) sample the product water. When the product TDS falls below 550 ppm turn product diverter to the “tank” position.

2. Normal Shutdown:

- A. Turn the product diverter to the “reject” position.
- B. Turn the pressure regulator slowly counter clockwise until fully “open”.
- C. Press the STOP pushbutton.
- D. Place the RO pump and Feed pump switches in the “off” position.

Note: The unit must be rinsed with fresh water after each use to avoid fouling the membranes. Failure to do so will void any warranty.

- E. If the timed rinse option has been installed place the start toggle switch in the “rinse” position. Otherwise refer to the instructions below.

3. Fresh Water Rinse:

- A. Turn the filter selector valve to the “rinse” position.
- B. After approx. two minutes turn the filter selector valve to the “operate” position.

CAUTION: Failure to return the filter selector valve to the “operate” position will result in draining the ships fresh water tanks and damage to associated equipment.

4. Filter Replacement:

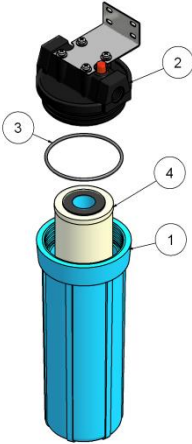
The Pre-Filters should be replaced before the feed pressure, as indicated on the Feed Inlet gauge, drops to 10psi.

The Charcoal Filter should be replaced every six months or when ever chlorine is detected in the rinse water.

CAUTION: The watermaker must be in the normal shutdown condition prior to servicing the Pre-Filters.

Note: **DO NOT** attempt to rinse or wash and reuse the filter elements, this may cause serious damage to the watermaker and void any warranty.

CAUTION: When removing the filter canisters they will be full of water and as a result quite heavy. Take care to cover any equipment that may be damaged by exposure to or contact with water.



- A. Remove the sump (1) from the lid (2) by turning the sump to the left.
- B. Pour out any water remaining in sump.
- C. Remove and discard old filter element (4).
- D. Insert new filter element into sump.
- E. Check O-Ring (3) for damage and replace if necessary.
- F. Thread sump onto lid by turning the sump to the right until hand tight.
- G. Repeat for remaining canisters.

5. High Pressure Pump Oil Change:

New Installation break in period	50 hours
All Cat Pumps	500 hours

CAUTION: Never rotate the pump crankshaft while the oil reservoir is empty.

- A. Open the watermaker circuit breaker(s) in the main power panel.
- B. Remove oil fill cap.
- C. Remove oil drain plug.
- D. Drain oil into suitable container at least one (1) U.S. quart capacity.
- E. Check oil for water, metal or other contaminants as this could be a sign of larger problems.
- F. Replace oil drain plug.
- G. Refill pump to the center of the red dot on the sight glass with one bottle Cat Pump Oil (Watermakers, Inc, part# 06100).
- H. Replace the oil fill cap.
- I. Dispose of used oil in accordance with all local ordinances.