

# Misting Part Specialties

## REVERSE OSMOSIS Maintenance

Misting Part Specialties MPSRO1000 requires periodic maintenance/inspection to ensure optimal performance from the reverse osmosis system, and to provide the best quality filtered water for equipment protection. Maintenance schedule may vary according to regional water quality. The maintenance service guide is an estimated schedule, and should be adapted to account for inlet water quality.



**WARNING:** \*Failure to replace pre-filters on a maintenance schedule will damage RO membrane, causing high TDS levels or product recovery failure.

MAINTENANCE SCHEDULE				
	90 Days	180 Days	270 Days	360 Days
Test TDS	X	X	X	X
#1-20 Micron Sediment Filter Pt# F9004	Replace	Replace	Replace	Replace
#2-10 Micron Carbon F8002	Replace	Replace	Replace	Replace
#3-5 Micron Sediment Filter Pt# F9006	Replace	Replace	Replace	Replace
Reverse Osmosis Membrane Pt# F12005	Replace if membrane TDS levels exceed 25% of the inlet water, up to a maximum level of 50 PPM (parts per million).	Replace if membrane TDS levels exceed 25% of the inlet water, up to a maximum level of 50 PPM (parts per million).	Replace if membrane TDS levels exceed 25% of the inlet water, up to a maximum level of 50 PPM (parts per million).	Replace if membrane TDS levels exceed 25% of the inlet water, up to a maximum level of 50 PPM (parts per million).

### FILTER REPLACEMENT

When replacing the triple filters, follow the instructions listed below .

- Step 1.** Turn the power switch on front of RO unit to the "OFF" position.
- Step 2.** Shut off inlet water supply and pressure tank valves.
- Step 3.** Remove the first pre-filter canister, starting from the left inlet side using a filter canister wrench. Turn the canister counterclockwise slowly to release pressure. To catch spillage from canister a bucket is recommended.
- Step 4.** Remove and discard the 20 micron sediment filter. Wipe out the canister with cleaning solution (bleach). Replace the 20 micron sediment filter. Spin the canister back on the triple canister base and snug with wrench.
- Step 5.** Repeat steps 3-4, replacing the 10 micron carbon block. Check the position of the canister o-ring\* and make sure the o-ring is setting inside the o-ring groove, and then the 5 micron sediment filter in sequence.



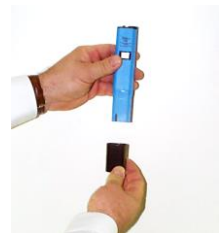
**IMPORTANT:** \*Make sure the o-ring is seated in the canister groove to avoid damage to the o-ring. It is recommended that the canister be kept in an upright position. O-ring lubricant may be needed to prevent the o-ring from becoming damaged. It is also important to purge the 10 micron Carbon Block filter before installing the 5 micron filter. This will help extend the life of the 5 micron filter.



The total dissolved solids (TDS) reading needs to be checked and recorded on each maintenance service to track the efficiency and condition of the reverse osmosis membrane. High TDS levels indicate a breakdown of the membrane fiber and therefore the membrane must be replaced. A TDS pocket meter (#A1001) is recommended. Following are step-by-step instructions for

using a TDS meter.

- Step 1.** Turn the "OFF" time dial down to cycle the misting system more often (approximately 20 seconds).
- Step 2.** Take the fluid cap off the end of the meter and place cap under a mist tip.
- Step 3.** Let the misting system cycle several times to fill the cap container with RO water. Fill container approximately ¾ full.
- Step 4.** Turn the on/off switch located at the top of the TDS meter to the "ON" position. Insert the TDS meter into the container cap. Allow a few seconds for the meter reading to stabilize.
- Step 5.** Read the TDS quartz display (parts per million) on the front of meter. Record the TDS level/date on service card. If TDS levels exceed 25% of the inlet water or a maximum level of 50 PPM the membrane will need to be replaced.
- Step 6.** Repeated testing is recommended for an accurate reading. Turn the "OFF" time dial to original setting.



MEMBRANE REPLACEMENT CHART										
Inlet water (ppm)	60	80	100	120	160	200	300	400	500	600
Greater than 25% (inlet water)	15	20	25	30	40	50				
TDS level exceeds 50 PPM	----	----	----	----	----	50	50	50	50	50
Replace membrane	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes