600 GPD and 1000 GPD
REVERSE OSMOSIS
INSTRUCTION & OWNER MANUAL

PREMIER
WATER SYSTEMS

Top Quality Water Purification & Softener Products

7623 FULTON AVE | NORTH HOLLYWOOD CA 91605
(661) 575 – 0033
WWW.PREMIERWATERSYSTEMS.NET

Description:

Our Commercial Hydroponic System is a customized Reverse Osmosis water filter that is capable of reducing up to 99% of most contaminants. This system is designed for use with hydroponic or horticultural applications. This system is built to give the maximum amount of flow from the membrane while sending less waste water to the drain, compared to similar RO filters. Please read the following setup and maintenance guide to get the maximum results from your filter.

Precautions:

- Do not install the unit where the source/inlet pressure may be more than 80 psi or there are excessive water hammer/spike problems. Keep out of direct sunlight or high intensity lights, which degrade the housing and fittings over time.
- Do not drop or place heavy objects on top of unit.
- Do not install where leakage or failure may cause damage to property.

OPERATING REQUIREMENTS:

- *Minimum water pressure: 40 PSI, Maximum water pressure: 200 PSI, Optimal water temperature: 77*F (25*C), Maximum water temperature: 105*F (40.5*C) - Up to 1000 (or 600) Gallons per day at 100 PSI. At lower PSI = lower production. i.e. 70 psi 700 GPD*

OPTIONAL ADDITIONS (NOT INCLUDED): *AUTO-SHUT OFF VALVE, DI FILTER, BOOSTER PUMP*

INSTALLATION INSTRUCTIONS

Congratulations on your new Premier Commercial water treatment system. We hope your system brings you many years of service and fresh clean water. There are a few basic steps we wanted to inform you about when it comes to the installation and maintenance of your water treatment system. If you should have any difficulties or questions, do not hesitate to contact us and we will be happy to help you any way we can.

We strongly recommend to hooking your Commercial RO unit to a softened water supply.

Your system was built to order, and it is ready to hook up to a water supply with the appropriate adapters included. Your system has been pressure tests all systems prior to shipping, so your RO membrane will be installed. The only other work you need to complete is hooking the unit up to a supply and drain line.

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1) Unpack your unit completely.

2) Inspect for any damage or broken parts as a result of shipping.

3) Locate and connect the supply side (RIGHT SIDE of lower housing) of the equipment. The side port is ready for the supply tube, the Black 3/8" tubing.

4) Then connect your specified adaptor, if it has not already been done.

5) Locate and connect the Drain line to the other end of the membrane housing (LEFT SIDE). The correct port for the drain line is the port to the side, not the center port. Place the other end in an appropriate area to accept drain water.

6) Take the remaining tube and insert it into the remaining open port (center) on the membrane housing (RIGHT SIDE). This is the product/RO water.

7) Now allow the system to run for approximately 15 minutes to flush completely. Please check systems for leaks, parts can come lose during shipping!

These instructions cover the most common set up configurations. If you ordered different colored tubing or filter cartridge housings, you may not be able to follow these instructions completely. Please contact us if you have problems with your unit. Customer is responsible for filter and membrane changes and associated costs. We carry a complete line of parts and accessories for all of our systems. Thank you for your business!

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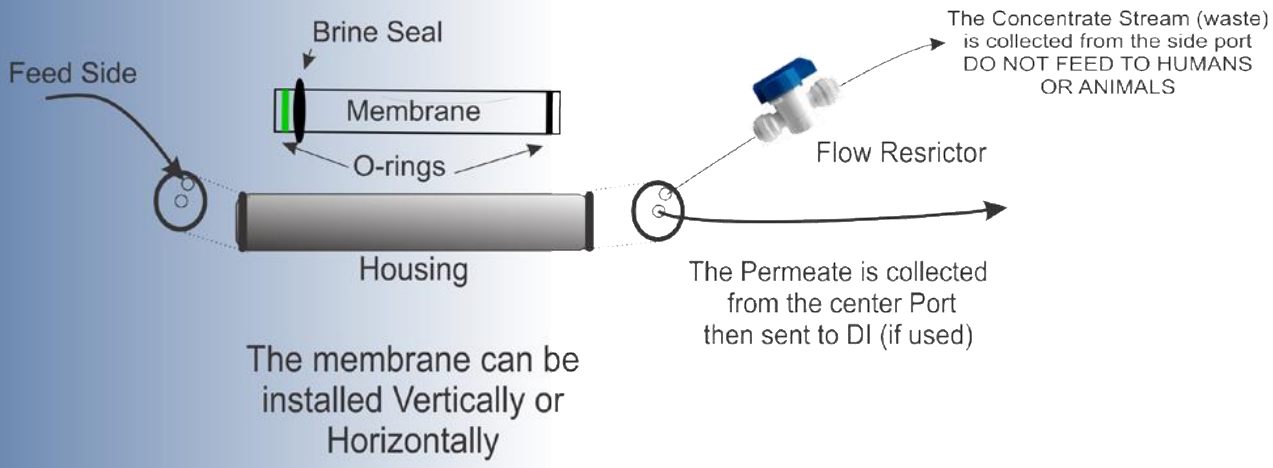
Commercial Membrane Installation and Replacement Guide



The membrane can be installed Vertically or Horizontally

Feed Side of Membrane Housing

- Insert membrane into housing, making careful to note, which side has the brine seal. The use of a non-petroleum based lubricant is acceptable, if needed.
- Insert Plug into center hole on brine seal side.
- Thread Tefloned fitting in to Off-Center hole This will be where the Feed Water is introduced to the membrane
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Product Side of Membrane Housing

- Thread the 2 remaining fittings in the "bottom" cap.
- Insert tube into the off-center fitting, this will be the drain, run tubing to your drain line NOW. Then cut this line and insert the ball valve provided. See diagram above. This valve will need to be adjusted on occasion, so place in an accessible spot, but not where it will be accidentally re-adjusted. Open this valve 1/2 way for now.
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- The Product water (good water) will come out through the center fitting, attach the tube now.
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- Start running water through SLOWLY, turn up the volume SLOWLY, until you are at full volume, do this over a 45 to 60 second period.
- Run the first few gallons of the Product water to drain to clean the membrane.
- Then slowly adjust the valve until you have a 1 to 1 ratio of product to water**
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- ** in order to have a 1 to 1 ratio you must feed this membrane with softened water, for other hard water or any other water high in TDS you must waste at 2 parts waste to 1 part product water

REPLACEMENT FILTERS:
MODEL # **CBBREP32520K85**
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Trouble shooting guide to assist with the determination of Problems

Problem	Solution
●High TDS after membrane	Clogged Pre-filters. Causing Pressure Drop. Insufficient pressure will yield poor TDS rejection from RO membranes. Change Pre-Filters.
●Low incoming water pressure.	Incoming water pressure must be above 40 PSI, Add a booster pump if below 40psi. Make sure Pre-Filters are not clogged causing low pressure.
●Reverse Osmosis membrane has exhausted/failed.	Average Membrane life is 2 to 3 years. Most common cause for membrane failure is insufficient pre-filter maintenance. AquaFX Carbons are rated for 3,750 gal @ 1.0 GPM of 2ppm Chlorine. Do not exclude drain water from this capacity, as it is treated water. Very high TDS (>550ppm) may also yield premature failure.
●No water to drain.	Flow Restrictor is clogged, Replace Drain Flow Restrictor. (rare) Check to see if water is turned on.
●All water is going out of the drain	With no back pressure, most of the water will exit out of the drain. Make sure External Flow restrictor is present.
●Very little/slow water production	Reference units flow rate vs. actual production. Slow flow from RO is normal. Cold water, low pressure and high contaminant levels will contribute to decreasing the rate of water production. Heating water, increasing pressure or additional pre-filtration will help to counteract these adverse affects.
●Drain Water Continues After Product line is full	The most common cause of a 'continuing drain' is a pressure leak on the product side of the RO. If the pressure cannot build, the ASO will not close. Check ASO with a ball valve right after RO. Close Ball valve then wait 1-3 minutes. If drain continues, replace Automatic Shut-Off Valve. If it stops, have the customer, find then stop pressure leak. If a float valve is being used, it is more than likely the culprit.
●The incoming feed water TDS has increased.	An increase in feed water TDS will also give an increase in Product Water TDS. R.O. (Dolphin) Users will see this rise in TDS. RO/DI (Barracuda, Mako, Great White) Users will not see this rise, but the DI will exhaust faster than normal.
● DI is exhausting very fast	R.O. Membranes are manufactured with a preservative on them, if your initial startup allows the membrane to 'rinse' into the DI; there will be some immediate exhaustion, followed by normal exhaustion. Chloramines Vs Chlorine – If the customers water is disinfected with Chloramines (NH2CL) the compound will still be present post RO. For R.O. (Dolphin) users, they may wish to purchase DI to remove the compound. There will also be other methods discussed for during training. RO/DI (Barracuda, Mako, Great White) users will have the compound removed by the DI. This will tax the DI, Chloramines appears in several forms, so the decreased life would depend on the strain of Chloramine. (mono, di or tri)

Trouble Shooting Guide

Cloudy or milky colored water:

Bad Membrane
Replace Membrane and sanitize when below 75% rejection
Water Supply has a high oxygen content
System is still new

Water does not taste or smell right

Bad Membrane — Replace membrane when 75% rejection and sanitize
Filters have expired. - Replace filters.
©Should replace every 6 to 12 months.
System needs sanitizing

Low Water Output

Incoming water pressure is below 40 PSI,
Increase pressure to 40 psi
Bad check valve, Replace check valve, Open valve.
Filters clogged — Replace filters
Kinked tube — Unkink tube — If damaged, replace tube

Notes

Installation Date_____
Initial Pressure _____PSIG

Initial TDS _____

1ST Scheduled Filter Change_____
1St Actual Filter Change_____

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