PREMIER WATER SYSTEMS
Top Quality Water Purification & Softener Products

Oceanic WATER SYSTEMS

Installation Manual For Drinking Water, Under Sink Reverse Osmosis Systems

Operating Temperatures:

Minimum Temperature: 39° F.
Between 39°F and 50°F the flow rate will be very slow.

Note: This is the outside temperature not the home temperature. (Make Smaller)

Do not connect the system to municipal or well water sources that freeze. The reverse osmosis membrane contained is treated and tested on regular water and will be destroyed if frozen. The membrane will also be destroyed if the system is connected to hot water. These are basis to insure bacteriological safe water.

Operating Pressure:

Minimum 55 PSI (2.95 kg/cm2)

If the pressure is lower then 55 PSI you need to purchase a Low Pressure Membrane for $25.00 (that is the cost we purchase the membrane for from the manufacturer directly), which will give you 60 Gallons at 30 PSI.

- This Reverse Osmosis System is designed to operate at a water pressure in the range of 55 to 85 PSI. The system runs slow from 45 to 50 PSI.
- At pressures lower than 55 PSI the quantity as well as the quality of the water will be reduced. At higher pressure, severe damage to the system may result.
- If local water pressure exceeds 95 PSI a pressure regulator must be installed which will reduce the water pressure into the system. It is recommended that total TDS (Total Dissolved Solids) does not exceed 2000 PPM.

PREPRATION

Product Checklist

Make sure you have all these parts before starting installation.

RO System Head

3 Housing/Canisters

3 Pre-Filters

Storage Tank

Goose Faucet

Tank Valve

Drain Saddle

Feed Water Adapter

Housing Wrench

Flow Restrictor
(Found inside the black tubing)

Color Coded Tubing

Extra Connector Elbows

Recommended Tools & Materials Needed :

- Variable speed (VS) deill
- Carbide grinding burr 1/4" (6mm) drill bit
- 7/16" (11mm) drill bit
- 1/2" (13mm) and 5-8" (16mm) open-end wrenches (or adjustables)
- Philips screwdriver
- Flashlight or droplight
- Teflon tape
- Protective eyewear (i.e... goggles)

System Assembly

Pre-filters

1. Stage 1: Sediment Block
2. Stage 2: GAC Block
3. Stage 3: Carbon Block

- Remove the plastic/paper wrapping on the 3 filters.
- Make sure each housing has a black rubber O - Ring in its groove.

Put the three filters in the housing .

Starting from the 3rd stage housing on the left , hand twist the housing onto the main system turning counterclockwise, one by one, for all 3 housing.

Use the wrench provided to completely tighten the housing starting from 1st-stage. Repeat this step for the 2nd stage housing in the middle , and fdr thr 3rd stage housing on right.

Make sure all tubes are securely in the system first pull then push all tubes in. Tighten the elbow connectors by hand to make sure all elbows are tighten. These steps are important to prevent leakges.

PLAN FOR INSTALLATION

Prior to installation, we recommend you read the entire manual to familiarize yourself with the system, and help you determine the best location for installation. Please check and comply with all local plumbing codes.

PREPARE SITE FOR INSTALLATION

1. Prior to installation, close the cold water shut-off valve

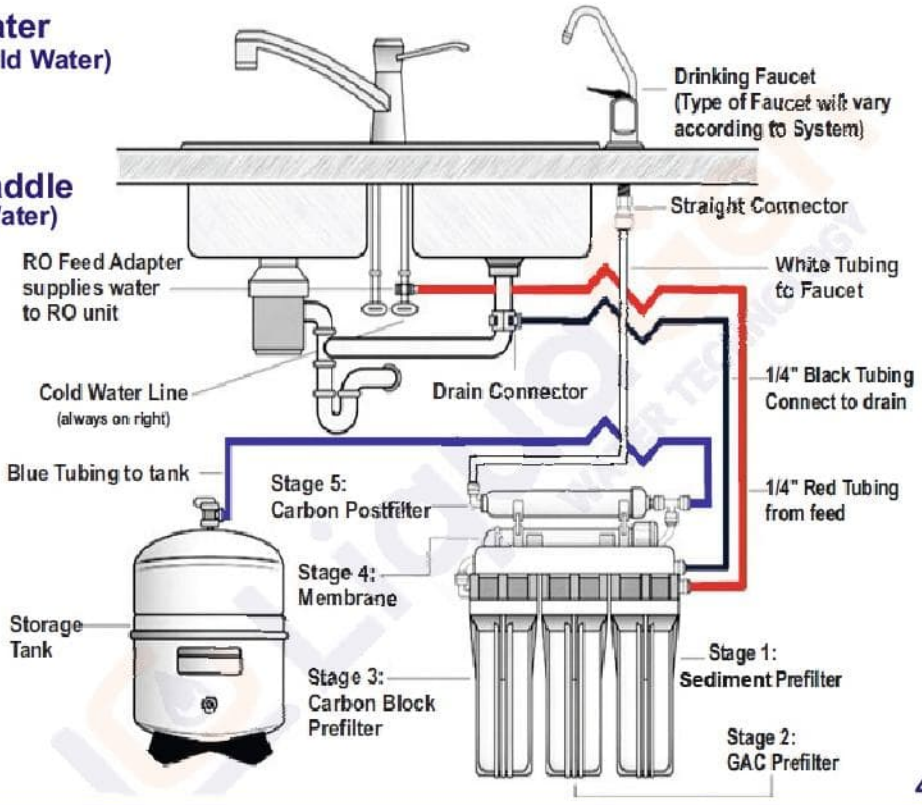
2. Temporality Place the system and tank into the under sink cabinet or desired location to ensure adequate space and proper positioning

3. Remove system and tank from under your sink to begin installation

INSTALLATION OVERVIEW

Tubing Connections:

- **Red Tube - Feed Water**
  (Incoming Cold Water)
- **White Tube - Faucet**
- **Black Tube - Drain Saddle**
  (Waste Water)
- **Blue Tube - Tank**



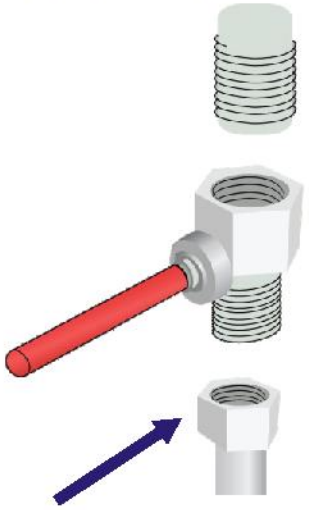
Step 1: Installation Of Feed Water Assembly

1. Locate the cold water supply valve under the kitchen sink (the round or oblong handle on the right side). Turn off the incoming cold water completely by turning the shut off handle clock-wise.

   Note: *If the cold water shut off valve cannot turn off the water, the main supply to the house must be shut off for the installation. Another option is to use a self piercing saddle valve which can be purchased at a local hardware store.*

2. Some shut off valves have an extra port for an icemaker hookup. You will not need the feedwater adapter for this type of installation.

3. On some shut of valves you can install the feedwater adapter directly to the valve. Slip the back washer into the feedwater adapter. Tighten feedwater adapter to the valve with an adjustable wrench. Tighten until snug. Insert the ¼"nylon elbow fitting into the feedwater adapter.



REMEMBER
TURN OFF WATER FIRST

4. Most under sink shut off valves have FEED WATER DIAGRAMS are built in smooth to corrugated riser going up to the faucet. Secure another adjustable wrench to the smooth/corrugated riser line nut. Gently undo the riser line from the sink faucet. Do not be alarmed! There will be water left in the line – this is normal. However, if the flow does not stop you probably haven't shut the water off properly. (See the Note in Step # 1, Section # 3 if you need help with water shut off.)

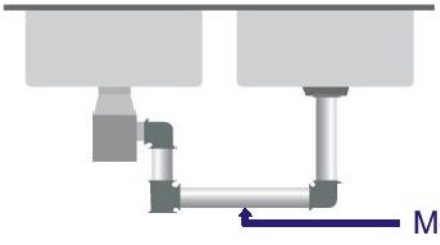
5. Screw the provided quick connect adapter onto the fitting coming from the cold water side of the sink faucet. Using two adjustable wrench tighten the feedwater adapter to the cold water line. Take extreme care not to twist or damage the connection to the water connection.

Step 2: Drain Saddle Installation

Note: *To avoid annoying drainage noise, mount drain line as low as possible on the vertical tailpiece, or on horizontal tailpiece.*

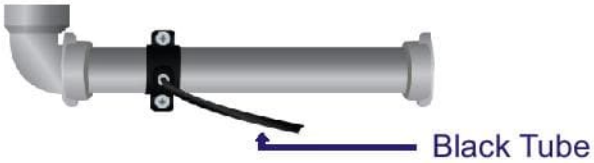
There is constant water pressure "packed" inside the RO system which blocks the waste water from backing-up into the system. So the waste is "forced-drained", not "gravity-drained".

The drain saddle assembly should be installed above the trap and on the vertical or horizontal tailpiece. To reduce the drain noise, mount the drain line as low as possible above the trap, or on the horizontal tailpiece.



- Mark the position of the hole on the drain pipe and drill a ¼" hole through one side of the drain pipe. There is a piece of self-adhesive sponge provided. Glue this sponge to the inside of the saddle, this will cushion any gap between the saddle and the pipe. Make sure the hole on the sponge is thoroughly punched out, and is aligned to the hole on the saddle.

- Make sure to align the drain saddle hole to the drilled hole perfectly. Mis-aligning these two holes will block the waste and cause membrane damage. Attach the drain saddle to the drain pipe and tighten the two screws evenly.



Step 3: Faucet Installation

- Drill ½"diameter hole for standard RO faucet. (Air-Gap faucet: drill 1&1/4" hole.)
- For best results use a ½" carbide-tipped masonry drill bit.
- Wear safety glasses to protect your eyes while drilling the faucet hole.

Note: *No Need to drill a hole if an existing hole is available:*

a) Spare Hole: If there is a spare hole in the sink covered by a chrome cover, simply remove the chrome cover and install the RO faucet there.

b) Spray hose: If the spray hose is not in use, remove the hose, and mount the RO faucet there. Remember to plug up the outlet under the main faucet. If the spray hose uses a diverter at the base of the spout, be sure to remove it to avoid trouble later on.

c) Hanging Faucet: If drilling a hole is not feasible (i.e. rental home, drill tool not available etc.), the faucet can just on the cabinet door or wherever that is conve -nient. Be creative!

When drilling a hole for the RO faucet, choose a location that looks good, work well, and is most convenient for dispensing pure water. An ample flat area is required for the faucet base so that the faucet can be drawn down tightly.

1. Faucet location: Make sure the faucet stud will be accessible from below when the hole is drilled. If space is not available on the upper sink area, the faucet can be located on the counter top by the edge of the sink. If the counter top is ceramic tile, the method for drilling the hole will be the same as for porcelain sinks.

2. For Stainless Steel Sink: Before using a ½"carbide drill bit, an indent should be made with a center punch to keep the drill bit from walking. A small pilot hole will also aid the drill bit.

3. For Porcelain Sink: Porcelain enamelled sink can readily be chipped if care is not exercised when drilling the hole. Before starting the drill motor, apply firm downward pressure on the bit until a crunching occurs. This will help keep the drill bit from walking when starting the hole. A small pilot hole also aids the drill bit.

***Note**: Immediately after the hole drilling is done, clean up all metal chips, for metal chips will stain the porcelain!*

1. Mount the faucet.

2. Connect the Clearline to the faucet.

3. The faucet has two operating positions: Push black lever down to fill a glass of water, or lift lever up into a locked position to fill a container or to drain the storage tank.

Tank Input & Output Connection

Prepare Tank:

1. Apply 5 wraps of Teflon tape to tank's threaded output stem at the top of the tank.

2. Hand tighten the plastic tank valve onto to the top of the output stem

Tubing Color: Blue Tubing: Connect the BLUE tubing to the tank's valve. Fitting Type : The tank valve has a quick connect fitting. Simply push the blue tubing into the valve part.

Note: *Do not over tighten the tank valve otherwise it will crack and leak. The tank pressure must be between 4-7 PSI when measured empty.*

Flushing The Membrane

Flushing the membrane is crucial before using the system. It removes the carbon from the lower filters which are left in the membrane and housing. This increases the reverse osmosis membranes life by 2 years.

Manual flush kit →

Connect the incoming and outgoing tubes. Make sure all tubes are securely in the system. First pull then push all tubing's in. Tighten the elbow connectors by hand to make sure all elbows are tighten.
These steps are important to prevent leakages.

Turn housing wrench counter-clockwise to tighten housing.

Double check all connectors are securely tighten and push in all tubing to prevent leakages.

Make sure Housing is tighten.

TROUBLE SHOOTING

NOT ENOUGH WATER FROM TANK

Possible Cause	Solution
Feed water valve is plugged or closed.	Open valve or unclog.
Sediment/Carbon prefilter or Carbon Post Filter is clogged.	Replace Filter.
Low incoming water pressure.	Incoming water pressure must be above 40 PSI Install a Booster Pump
Reverse Osmosis Membrane is fouled.	Make sure incoming water pressure is within operating limits. Make sure drain line is not clogged. (See High TDS) Correct cause of fouling and replace RO Membrane.
Air Pressure in holding tank is incorrect.	Empty water from holding tank. Air pressure in valve stem should be between 8-10 PSI.
Air Bladder in Holding Tank is ruptured.	Replace Holding Tank
Holding Tank valve is closed.	Open valve.
No water to drain. Drain Flow Restrictor is clogged.	Replace Drain Flow Restrictor.
No water to drain. Air Gap Faucet is clogged.	Clear or replace Air Gap Faucet.
Check Valve on RO Membrane Housing is stuck.	Replace Check Valve.
The Automatic Shut-Off Valve is Malfunctioning	Replace Automatic Shut-Off Valve.

System Making Rumbling Noise

If there are bubbles in the water or if the systems making a loud noise it's most likely due to air in the water. To resolve this issue, let the storage tank fill up completely. Once the tank is filled close the incoming cold water supply (red tube connected to the feed water). Pull the system out and hold it upside down. Switch the faucet on till the tank is completely empty. Close the faucet and open the incoming water line (red tube). The air in the water should be gone and with that the rumbling noise.

LOW WATER PRESSURE FROM FAUCET

Possible Cause	Solution
Air Pressure in Holding Tank is incorrect. This is the #1 reason for low flow from Reverse Osmosis Faucet.	Open faucet and empty water from holding tank. Shut off feed water to system and remove holding tank from under sink. (The tank is easier to work on.) Locate the air valve stem (just like on a car or bicycle tire) and add air. If there is still water is removed, continue to add air until all the water is removed. Once all the water is removed, continue to add air and pressurize to 8 PSI Re-install the tank under the sink, turn on the feed supply to the system and allow the tank to fill.
Carbon Post Filter is clogged.	Replace Post Filter.
Holding Tank Valve is partially closed.	Open Valve.
The Faucet is out of adjustment or faulty.	Repair or replace Faucet.
Heavy water use. Holding Tank is empty.	Allow Holding Tank to refill.
Low Water Production	See previous section on Low Quantity of Water From Holding Tank.

Yearly System Sanitation Flush

It is recommended that you sanitize your RO system every year. By doing so you will ensure that the system is operating at its peak performance. Please follow the instructions below:

> ***Note:*** *Turn off main water supply. Make sure all filters including the membrane are removed prior to sanitizing the system.*

1. Open faucet & drain tank. Mix 1 cup of household bleach & 4 cups of tap water. Pour the mixture into the pre- sediment filter (housing #1)
3. Re-install all housings into the original location including the membrane housing without the membrane.
4. Turn on main water supply & open the faucet till water is running. Turn faucet off.
5. System will continue to run until automatic shut off valve engages
6. Wait 30 minutes, open the faucet, and drain tank. Run additional 5 minutes.
7. Turn off main water supply & install new pre-filters,membrane and post filters.
8. Flush the system to increase the life of the reverse osmosis membrane.