

Dual Home Reef Installation Tips!

Overview

- ◆ Always use extra length tubing to make your connections. In the future, you may want to move the unit to replace the filters.
- ◆ Read the push in filter material. Make sure you push the tube completely in.
- ◆ If a fitting is not a push-in, use moderate pressure to snug up the fitting. Modern fittings do not rely on brute strength. They rely on Teflon tape, O-rings or gaskets to make a seal. Just snug the fitting to make it secure. So not over tighten. Plastic fittings that have been screwed on too tightly are subject to splitting. Stressed fittings may take days or even months to split and leak.
- ◆ Please, Please read the installation guide. The guide will answer many of your basic RO questions.
- ◆ OK! You installed without reading the guide. Please read the guide before calling or e-mailing us with any questions or problems.
- ◆ Remember, a 50 gpd system makes a maximum of 2 gal per hour; a slow trickle. Yes, more water goes to the drain than is made. All RO systems send water to drain while operating.

How to Use Push in Fittings

- ◆ Cut square – Cut the tubing squarely and make sure the outside diameter is free of score marks or burrs.
- ◆ Insert tube – Fittings grip before sealing. Be sure the tubing is pushed into the fitting as far as it will go against the stop.
- ◆ Seal - With the tubing in the fitting and against the tube stop, push the collet(gripper) so the stainless teeth hold the tube firmly and the o-ring makes a permanent seal.
- ◆ Check - Pull on the tube to confirm that it is secure. Test the system before you consider your handiwork complete. The system does not fully pressurize right away.
- ◆ Disconnect – If you need to disconnect, depressurize before removing the fitting. Push the collet squarely against the fitting. With the collet in this position, the tube can be removed. The fitting can be reused.
- ◆ Dust caps - The blue dust caps that seal the ends are removed the same way. Dispose of them.

System Description

- ◆ The unit should have come to you with two ¼ inch ball valves. One goes on the storage tank, the other is for turning off DI water.
- ◆ The unit has 3 horizontal components. The largest is the membrane housing, the second is the DI and the smallest is the final carbon filter. The connection at the final carbon filter is for drinking water. The open connection on the DI is for reef keeping water. Attach a handy length of tubing here and a ball valve.
- ◆ in the future, you may want to install a float valve in your tank sump. It would attach to the DI. Simply remove the ball valve and attach the tubing to the float valve and your drinking water and reef water are separate and automatic.
- ◆ Never impede waste water flow! It is critical to membrane life and efficiency.

Installation Guide for the Dual Home Reef

Make sure the work area is safe; electricals off, enough room to work, adequate lighting and conformance with local codes.

Make sure you are hooking up to the cold water line. If in doubt, run the hot water for a few minutes and feel the tubes.

The filters and membrane are already installed in the unit.

Start with installation of the gooseneck faucet

Select the location. Consider looks, function and space requirements. The area should be flat for at least an inch around the faucet. Remember, you need adequate space under the faucet to make the connection. The faucet can be mounted on the sink or on the counter near the sink.

Use a punch or a 1/8 or 1/4 inch drill bit and drill a pilot hole. If mounting on a SS sink, do not push too hard. You do not want the drill to skid.

The faucet hole is typically 1/2 inch, but could vary +/- 1/8 inch. Do not rush. Drill slowly.

Mount the faucet.

Attach enough tubing to reach the unit. Leave enough room for moving the unit for filter changes.

The faucet connects to the final filter. The filter will have an arrow pointing to the faucet connection. The other side is connected to the pressure storage tank. More about that later.

Next is the water supply valve. The type needed depends on your cold water line. If you have copper tubing, use the aluminum and brass supply valve furnished. Install between the stop valve and the sink faucet. Retract the needle and mount the valve. The brass screw pushes on an aluminum block with two profiles, depending on the diameter of the tubing. Once in position, tighten the brass screw, but do not overtighten. The valve is now ready to use.

If you have a braided hose supply line, you need an "adapt-a-valve for braided hose" that we can supply, although you might find one in a hardware or building supply store.

The drain saddle consists of two plastic parts and a foam washer. Remove the backing paper and position the foam seal over the fitting hole in half of the drain saddle. The drain saddle mounts to the drain pipe above the P-trap, between 1 and 4 inches above the start of the bend. Do not mount the drain saddle to a garbage disposal line. After positioning the saddle, just snug the screws so that it is secure.

Drill a 1/4 inch hole through the saddle opening, through one side of the drain pipe. Attach the tubing to the quick connect fitting. The drain is the life blood of the system which would not function long without it. The unit is self flushing and the drain should not be restricted or blocked.

Mount the unit carefully.

The pressure tank has only one plumbing connection, the threaded fitting at the top. Apply Teflon tape to the ball valve and mount it to the tank. Connect the tubing to the ball valve. Connect the other end to the open end of the final filter (the horizontal filter next to the membrane housing).

Locate the waste line on the unit. It has a cylindrical flow restrictor with an arrow on it. Make sure the arrow points to the drain saddle. Again, never impede the wastewater flow. The unit automatically controls the wastewater.

Locate the supply connection on the unit. It is usually an elbow at one end, screwed into the first filter of the system. Connect tubing from this fitting to the water supply line.

Return to the brass and aluminum supply valve which you had positioned on the cold water line. With slow , steady pressure, screw the T- handle into the supply line. It will pierce the line. Once the needle has bottomed, turn the T-handle to the left and water flow will start. At first, open it only a bit to check for leaks. Then open it fully.

The installation is almost complete , but there is a bit more to do.

Check the system as it is filling with water, say after 5 minutes, 15 minutes and periodically over the next few hours. It may take 3-6 hours to fill.

Once the system has filled, open the faucet and let it run until the flow slows to a trickle or a small stream. Close the faucet and the system will be ready to use when it refills. This purges the pressure tank. The units are essentially silent, although if you listen carefully, you may hear wastewater running to the drain.

Typical Questions

How often should I change filters? We recommend annually. When the sediment filter begins to clog, production will slow.

How long will the membrane last? Typically 3-5 years.

How about the final filter? This filter sees high quality water and many of our customers wait 2 years before changing.

Is there air in the system? When first installed, the system could entrap some air which will be absorbed in a few days. Entrapped air will sometimes cause the automatic shut off valve to allow water to go to the drain nonstop. It is not a lot of water and will stop in a few hours.

Enjoy your good drinking and reef water !