PREMIER WATER SYSTEMS
Top Quality Water Purification & Softener Products

Oceanic WATER SYSTEMS

Installation Manual for Aquarium Reef Reverse Osmosis Systems

Minimum Temperature: 39° F.
Between 39° F and 50° F the flow rate will be very slow.
This is the outside temperature not the home temperature.

Operating Pressure: Minimum 45 PSI (2.95 kg/cm2).

Drinking Water Systems with a storage tank can still operate at 38 PSI. But for aquarium and portable systems the PSI must be higher then 45.

These systems are delicate and occasionally get damaged during the shipping process. All systems include extra connector elbows which are easy to replace.

Instructions to Replace Damaged Elbows

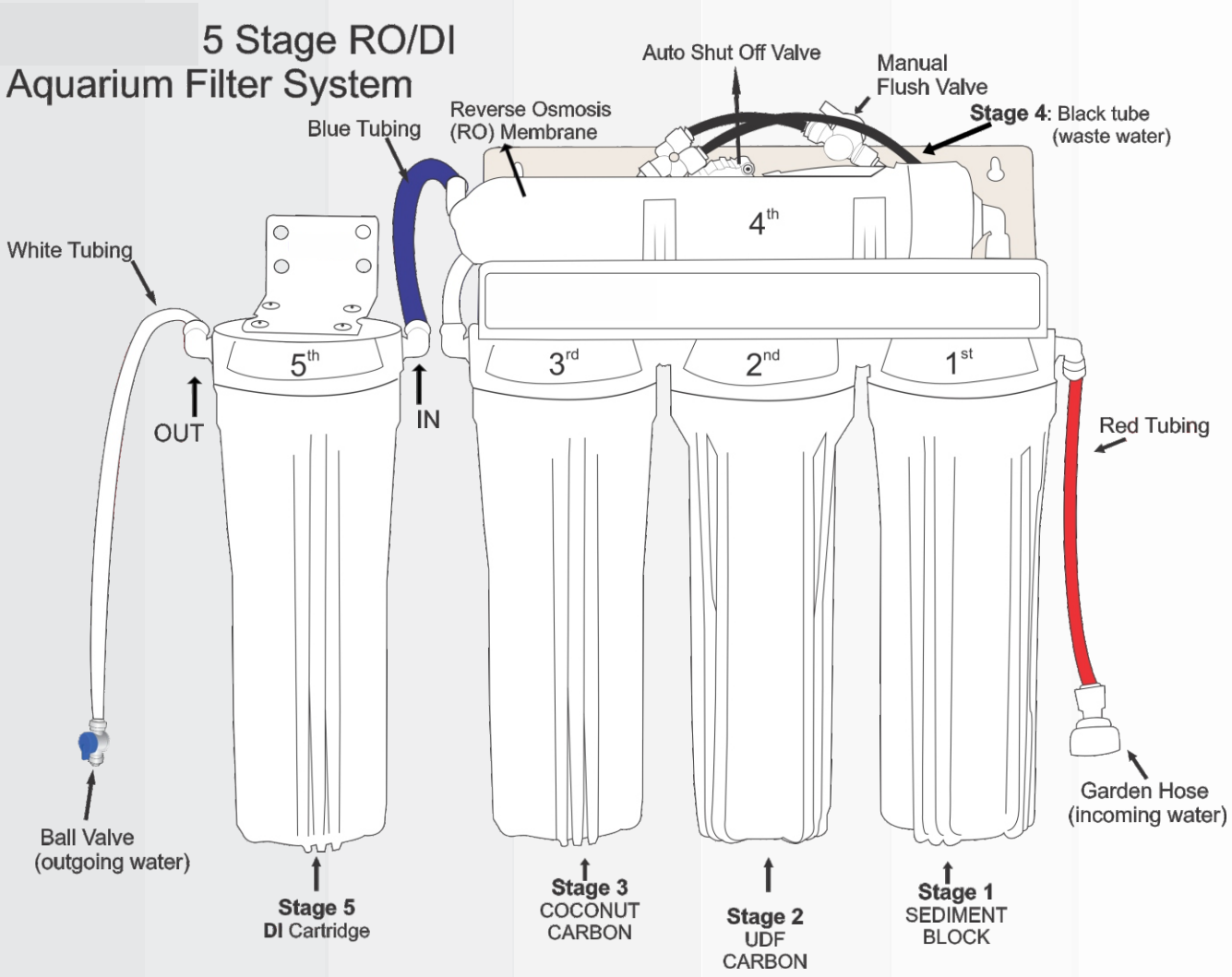
1. Take a pair of scissors and open them.
2. Push one side into the broken elbow and turn it anti-clock wise.
3. Put Teflon tape on the extra elbow which can be found in the box.
4. With your hand twist them on where the broken elbow was.
5. Do not tighten the elbows too much as they might break.

Please Note:

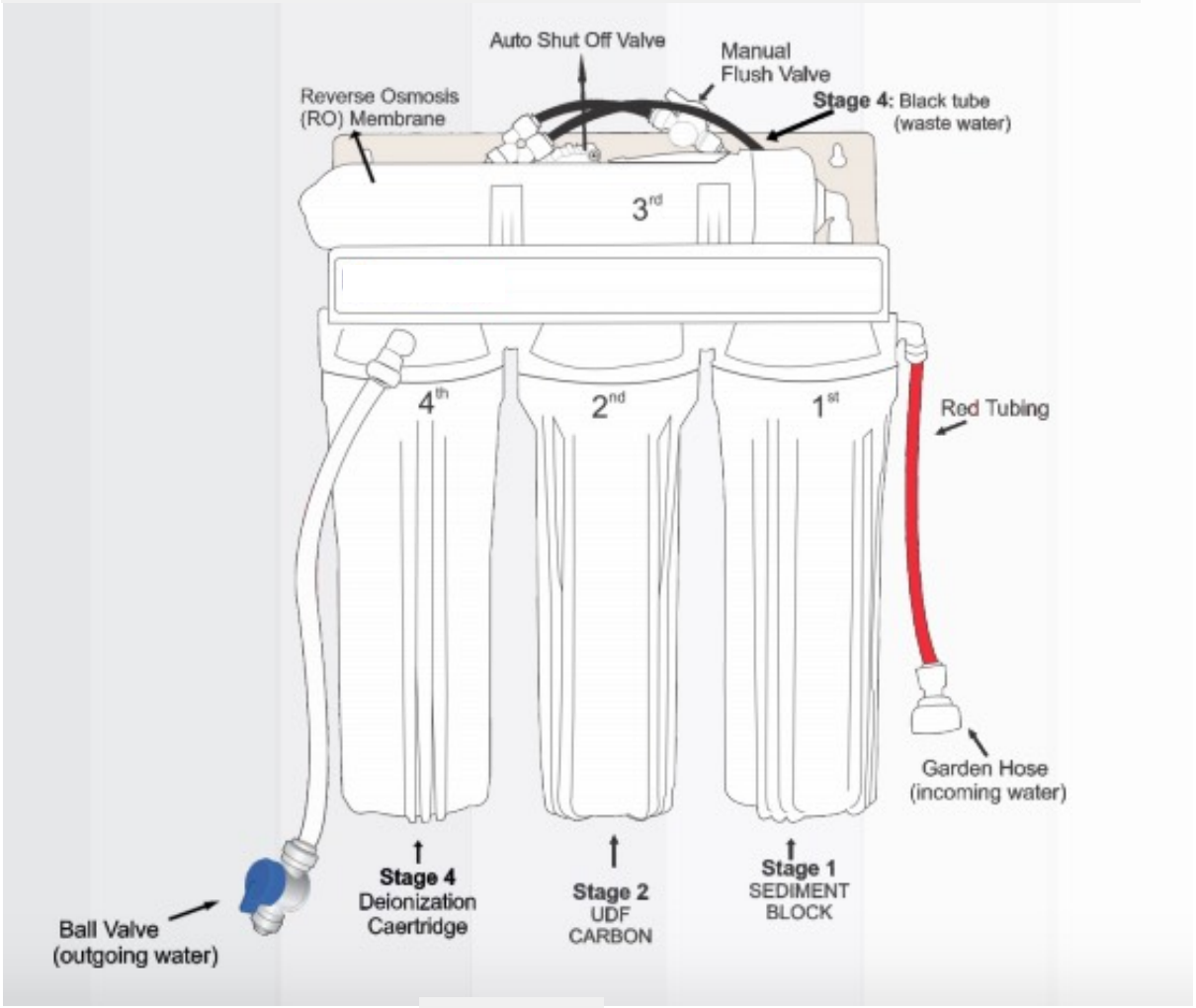
- All systems include extra connectors (elbows) with blue clips.
- After installing the system and before running water, kindly make sure all the tubing is properly pushed in and secure by first pulling and then pushing all the tubing in.
- Tighten all canisters (housing) with the wrench before turning on the water supply.

SETTING UP YOUR RO/DI UNIT :

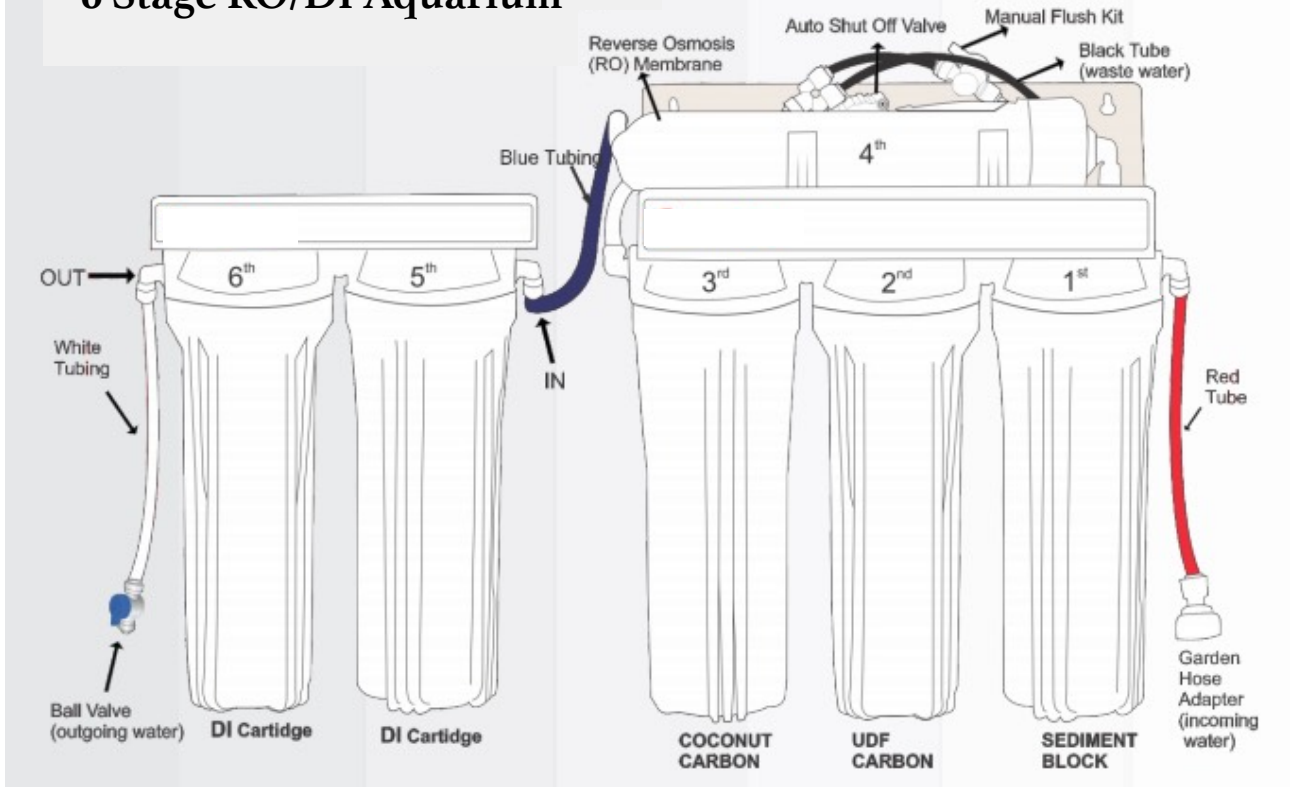
1. Connect the system to the incoming water supply.
2. Check that all connectors and tubing are properly tightened before letting any water enter the system.
3. Flush the Membrane.



4 Stage RO/DI Aquarium



6 Stage RO/DI Aquarium



The usage of each tube:

RED TUBE ~ Incoming Water
BLUE TUBE ~ Connects the RO System to the DI Cartridges on the side.
WHITE TUBE ~ Outgoing Water
BLACK TUBE ~ Waste Water

During shipping tubes become loose. It's important to check all tubing's are securely in the system.

First pull and then push all the tubing's in. This will make sure the system has no leaks. Water creates immense pressure that there is no way you can do it after the water is turned on so it is crucial to check all tubing's Then switch on the incoming water line and again make sure there are no leaks. Then close the incoming water line then put the blue lock on all elbows (fittings).

Tighten all the canisters with the wrench

FLOW RATE IS SLOW FOR 1ST FEW DAYS BUT WILL GRADUALLY PICKS UP

Operating parameters:

1) RO System must be connected with **caution!!** Do not connect the RO System to Municipal or well water source that freeze. The membrane contained is treated and tested on regular water and will be destroyed if frozen. These are basis to insure bacteriological safe water.

WARNING!! Do not plug the RO System to hot water. This will destroy the membrane

DOUBLE CHECK TO PREVENT ANY LEAKS BEFORE FLUSHING THE MEMBRANE.

Why Flush the Membrane?

It is important to flush the membrane because you don't want the Fine (powder) Carbon from the lower filters to be left in the membrane and membrane housing. It clogs the membrane with the black powder .It also increases the life of the membrane by **2 years**.

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.

The system is designed with a Manual Flush Valve. This helps ease the process of flushing the system before usage.

After installing the system you need to flush the membrane for 20-30 minutes.

Directions:

1. The picture above shows the manual flush valve in the open position.
2. In order to flush the membrane the blue valve needs to be in the **"open position."** You should see an increase of water coming out of the black (waste) tubing.
3. Let the water flow for 20-30 minutes.
4. After flushing the membrane please turn the blue valve Off.

*Please note, your system may come with an different flush system.

To maintain top quality of water, we strongly advise that you flush the system every 4 months for about 15 minutes to clear the membrane. Make sure to close the valve after flushing or the system will not work.

Performance of the membrane depends on water quality, pressure, and temperature. And from our experience, we found that the majority of membranes operate at 80% capacity, regardless of manufacturer.

AQUARIUM

Membrane Capacity	Per Day	Per Hour
50 GPD	40 GPD	1.67 GPH
75 GPD	60 GPD	2.5 GPH
100 GPD	80 GPD	3.33 GPH
150 GPD	120 GPD	5 GPH

DRINKING WATER

Membrane Capacity	Household Size
50 GPD	1 -3 People
75 GPD	3 -6 People
100 GPD	4 -8 People
150 GPD	6 -10 People

The following conditions for feed water supply must be met:

This Reverse Osmosis System is designed to operate at a water pressure in the range of 45 to 85 PSI. At pressures lower than 45 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

FAQ's:

Q. I've flushed the system for 30 minutes but water is still flowing from the black tubing.

A. First, please make sure the manual flush kit is in the closed position. Secondly, for every gallon used the system rejects 3-4 gallons of water depending on the water quality, outside temperature, and pressure. This is standard in all RO/DI systems regardless of the brand. The rejected water is simply the waste water which is not fit to pass the filtration phases.

This can be reduced by 80% after installing a Aquatec Patent Permeate Pump which makes the waste water 1:1. Another option is to add another membrane depending on your GPD. We recommend the permeate pump as it's the most cost effective solution in the long run.

Q. How often should I flush the membrane?

A. We recommend every 4 months. This is done to protect the reverse osmosis membrane (brain of the system) and save you tons of money by increasing the life of the system and ensuring maximum filter life. The manual flush kit makes it 10x easier to do so as you simply twist the valve instead of taking the system apart.

Q. When do I replace the filters?

A.

Pre-Filters (Sediment/UDF/Carbon)	--	8-12 Months
RO Membrane	--	3 Years
Green DI Resin Cartridges	--	8-12 Months

*Please note these factors depend on the water quality, temperature, and PSI. The best way to know is by checking when Stage 1 (Sediment) & the DI Color changing resin starts turning brown.

We have cost effective replacement filters under "Filter Kits" designed specifically for each RO/DI unit. Each system also has replacement part links on the product description tabs.

Q. Why is water flowing slowly from my system?

A. Many factors can affect the flow of the water such as:

1. Low Water Pressure - The water PSI needs to be at least 45 PSI for the system to run smoothly. You can find out the PSI by contacting your local water municipal center or pressure gauge. This can be resolved by a low pressure membrane or booster pump.

2. Weather Condition - In extreme cold the system's flow rate may decrease due to the outside water PSI decreasing. This can be resolved by a low pressure membrane or booster pump.

3. Old Filters - When the filters get exhausted it takes longer for water to flow through the system. The best way is to make sure filters are replaced in the proper time frame ensuring 0 PPM water.

Warranty Information

Q. What Does This Warranty Cover?

A. This warranty covers any defects in materials and workmanship of the LiquaGen Reverse Osmosis Drinking Water System when installed and operated within recommended, parameters,with the exceptions stated below.

Q. How Long Does The Coverage Last?

A. The manufacturer will warrant its R.O. (REVERSE OSMOSIS) Drinking Water System, for a period of one year from the date of purchase.

All implied warranties including merchant ability and fitness for a particular purpose are limited to one year from the date of purchase for the R.O. Drinking Water System. This warranty is only applicable when bought directly from LiquaGen.

Q. What Will The Manufacturer Do?

A. The manufacturer will repair or replace at its discretion any defective component.

Q. What Does This Warranty Not Cover?

A. This warranty does not cover the disposable sediment and carbon filters whose service life depends on feed water conditions. In addition, the membrane is only warranted if the required feed water conditions are met.

The above warranty will also not apply to any part of the R.O. Drinking Water System that is damaged because of neglect, misuse, alterations accident, misapplication, physical damage, or damage caused by fire, acts of God, freezing or hot waters or similar causes. Consequential and incidental damages are not recoverable under this warranty.

We request that the buyer works with us in good faith to resolve any issues