



# Crystal Quest® General Commercial INSTALLATION AND OPERATION GUIDE



Copyright 2017  
Crystal Quest®  
All rights reserved  
MADE IN THE USA



## GUIDE FOR MEDIA INSTALLATION

- Disregard this section if a 3 cu.ft tank was ordered. Media will already be inside of the tank.
  - **Materials Needed:** Funnel for placing media, small amount of water to add to the tank, media (if larger than 3 cu.ft tank, media will be in separate packaging)
  - Placing the media inside the tank should be done prior to installation.
  - Media tank should be upright and at installation area. Plug a slip cap or put a piece of tape over the top of the distributor/riser tube to prevent media from entering the tube while loading the media.
1. Place the media funnel (funnel not included) in the top of the media tank with the riser tube still inside and centered. Place a small amount of water in the tank before the media goes in.
  2. Begin placing media into tank. If more than one type of media is going into tank, place heavier media in tank first. Gravel should already be in the tank. **IMPORTANT** – Make sure the riser tube is firmly on the bottom of the tank. If the riser tube is pulled out of the gravel once the media is added, it is impossible to put it back in without removing the other media from the tank.
  3. Pour resin/media into the funnel, slowly letting it fall down inside the media tank around the riser tube. If you have a twin alternating system, divide the resin/media equally between the two tanks. The media tank should be approximately 3/4 full. This can vary depending on the media for your specific system.
  4. Remove the funnel and the slip plug or tape from the top of the riser tube.
  5. Brush any loose resin/media off the top opening of the tank. Clean the top edge with a cloth so the O-ring can seal securely to the valve base.
  6. Look at the bottom of your control valve and locate the upper basket. Inside the basket, the control valve has O-rings that will seal on the riser tube. Install the valve on top of the media tank, making sure the top of the riser tube inserts inside the opening of the upper basket. Guide the riser into the O-ring seal and tighten gently. Be careful not to over torque the valves as the threads are plastic.
  7. Install the control valve onto the top of the tank. Be sure to hold the control valve where there will be no damage to the valve from the pressure you exert from tightening the valve back onto the tank.

## ASSEMBLING WATER FILTER SYSTEM WITH CONTROL VALVE

Unpack the control valve from the shipping box. It is recommended that you keep the original boxes and packing materials. See specific instructions for control valve or head included with your system purchase.

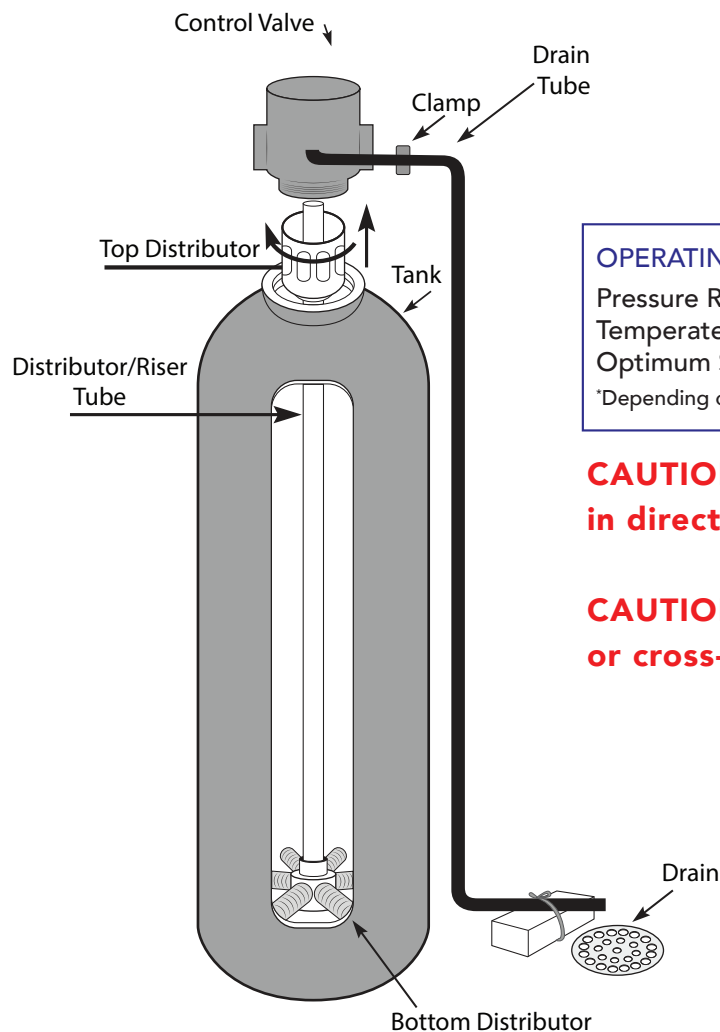
1. Unscrew and remove the top cap from the unit.
2. Unplug slip cap from the distributor/riser tube (also referred to as a PVC tube).
3. To prevent leaks, lubricate the inner and outer O-rings on the bottom of control valve with any non-petroleum oil (do not use coconut oil).
4. Twist and lock top distributor to the bottom of control valve. Ensure it is fully locked in place.
5. Attach control valve to the tank by sliding distributor tube into top distributor. Turn control valve clockwise to tighten. Distributor tube needs to be equal to the top of the resin tank (not more than 1/4" above). Lubricate the inner O-ring prior to attaching the control valve to the tank.
6. You may choose to install a flow reducer on incoming line at control valve and plumb into the inlet port on the control valve.
7. If brine tank included with system, attach drain line hose barb and compression nut of the brine tank by turning clockwise to tighten until snug.
8. To prevent leaks, wrap threads of hose barb and compression nut with thread seal tape clockwise, approximately 3 times around.

**CAUTION – DO NOT OVERTIGHTEN compression nut! Hand tighten and add a half turn with a wrench.**



## CONNECTING WATER FILTER SYSTEM TO WATER SUPPLY MINIMUM MATERIALS NEEDED

- Use specified sized male thread adapters to plumb the system
- Wrenches, either open end or adjustable jaw, sized to fit compression adapters
- Pipe cutter
- Threaded seal tape
- Sandpaper or emery cloth
- Before installing fittings to the inlet and outlet of the bypass valve or manifold, wrap the threads 3 times around with threaded seal tape. Install fittings.
- Parts already included: tank, media, distributor/riser tube, valve head, drain line flow reducer.



### OPERATING SPECIFICATIONS:

Pressure Range: 40-100 psi  
Temperature Range: 40°-100° F  
Optimum Service Flow: 14-280 gpm\*  
\*Depending on size of system

**CAUTION: Install water filter in direction of arrows.**

**CAUTION: Do not over tighten or cross-thread.**



## CONNECTING WATER FILTER SYSTEM TO WATER SUPPLY INSTRUCTIONS

1. Turn off the main water shutoff valve.
2. Open all plumbing fixtures fed by filtration system including all outside faucets in order to drain the lines of all water.
3. Cut and remove a section of the main incoming water line near where the system is to be installed. Allow this line to drain thoroughly.
4. If copper piping is used and soldered, preform these procedures away from the valve. This simple step will ensure that you are not applying head as you solder, or pressure as you tighten the adapters onto the bypass while they are mounted on the valve body itself.
5. Solder a 3" to 5" piece of copper pipe into each of the two pipe adapters away from the valve, and then let them cool before threading each one onto the yoke valve.
6. Cut out section of main water supply line downstream from the supply shut off at position water filter is to be installed. Using a pipe cutter cut ends of pipe. Sand ends to ensure that they are square and smooth.
7. Check plumbing inlet and outlet to ensure the proper flow of water through the unit. Match plumbing inlet and outlet located on the sides of the valve head.
8. Apply threaded seal tape onto the male adapters for the brass valve when cool and securely tighten them to the valve. This is done before reattaching them onto the read of the valve/meter body assembly.
9. Turn on the water to the unit and check for leaks. Leave all faucets turned off and open a single faucet (such as an outside faucet), letting the water run for 3-5 minutes. This rinses the new resin/media inside the tank, and any particles or color will rinse out through the drain tube.



## AUTHORIZED DISTRIBUTOR

Should service be required during or after the warranty period or should you have any questions regarding how to use your Commercial Water Purification System, please contact manufacturer's Technical Support Department Monday through Friday, 9 AM to 5 PM Eastern Time, or your authorized CRYSTAL QUEST dealer:



Mailing Address:

**FilterWater.com**

P.O. Box 968

Southampton, PA 18966

USA

<http://www.FilterWater.com>

Tel. +1 (800) 439-0263

Fax +1 (215) 354-0304

Email: [Sales@filterwater.com](mailto:Sales@filterwater.com)