

WHOLE HOUSE / WATER STORE R.O. INSTRUCTIONS



PLEASE READ THESE INSTRUCTIONS COMPLETELY AND UNDERSTAND THEM BEFORE INSTALLING THE EQUIPMENT. IF YOU HAVE ANY QUESTIONS CALL-IN A PROFESSIONAL INSTALLER OR CONSULT THE PERSON THAT YOU PURCHASED THE UNIT FROM AND GET ALL QUESTIONS ANSWERED BEFORE PROCEEDING. FAILURE TO INSTALL AND OPERATE PROPERLY CAN CAUSE SEVERE AND COSTLY DAMAGE TO THE EQUIPMENT AND THE SURROUNDING AREA!

For : _____

Model: _____

Location: _____

1. Preliminary.
 - a. Please review the hydraulic and electrical diagrams that have been supplied.

- b. Save the enclosed information on all of the components and devices (meters, pumps, switches, etc) that have been supplied. They may need referral to for making adjustments and also for service and replacement in the future.
- c. Be sure that the unit is paced in an area where freezing will not occur and that is not in direct sunlight.
- d. Place unit on a hard level surface that will support a wet weight (exclusive of storage tanks) of _____ pounds.
- e. Place unit within 20 feet horizontal and 10 feet vertical of a drain that is to all applicable local codes and can withstand a constant water flow of _____USGPM without overflow.
- f. Place unit within 10 feet of a fused _____ volt ___ 1 phase ___ Hz power Supply adequate for _____ amps with everything running.
- g. A water supply to the unit must be available that has the following characteristics:
 - 1. Flow of _____ GPM at a pressure of 30 to 70 PSI.
 - 2. Temperature from 40 to 100 degrees F.
 - 3. Hardness, pH and alkalinity combined for a Langelier's Saturation Index not to exceed +1.6
 - 4. No iron bacteria.
 - 5. Only trace amounts of Hydrogen Sulfide.
- h. Place storage tank within 10 feet of the unit.

2. Installation.

- a. Connect water supply to the fitting marked INLET. This is a 1" female threaded plastic fitting located in the upper left corner of the unit and on the rear. Leave the water supply to the system OFF.
- b. You will notice just on the other side of the plastic panel two (2) valves that rotate. Turn both valves so that the red handles are in line with the pipes –right arrow pointing toward the valve and left arrow pointing away.
- c. Note the RED handled valve on the front of the unit just to the right of the Maxi-cure. Place this valve in the OFF position.
- d. Connect the fitting from the RO unit on the lower rear right side section marked DRAIN to the main drain. Use ½" rigid or flexible tubing. Max. flow will be approximately 5 GPM.
- e. Connect the fitting marked PRODUCT which is adjacent to the drain fitting to the top tank fitting marked PRODUCT with same size tubing as the drain. Use ONLY non-metal pipe or tubing such as PVC or polyethylene. RO water is very pure making it corrosive to metal pipes – even stainless steel.
- f. Connect the storage tank to the inlet of the re-pressure pump. This fitting is a 1" fitting on the right side of the unit near the bottom and it is marked PUMP INLET. Use RIGID PIPE that is not metallic such as PVC or

reinforced poly tubing to avoid any chance of a vacuum collapse. Pipe must be at least 1”.

- g. Assemble the meter assembly to the outlet of the UV light on the upper right side of the unit. Use the PVC union provided. Meter outlet must face UP.
 - h. Connect the meter outlet fitting to the fill table line(s) to be serviced with RO water
 - i. Connect the black, red, green (ground) 12 gauge power lines from the control box to the above mentioned fused supply using local code connections. Be sure that the fuse/breaker is in the off position while making this connection. **NOTE: The unit is not internally fused so be sure that the breaker at the breaker panel is in good operating order.**
 - j. Connect the three colored (blue, yellow, red) 18 gauge wires at the control box to the matching colored wires from the tank floats at the top of the tank. These wires are 24-volt transformer isolated control wires. Be sure to use tight connections that are adequately supported. **IF WIRES ARE DISCONNECTED TANK OVERFLOW CAN TAKE PLACE.** For reference, the top switch closes in the DOWN position and the switch about 8” lower also closes in the DOWN position.
 - k. Connect the white wires marked PUMP LEVEL to the two wires from the lower float in the tank that prevent dry-running of the re-pressure pump. These wires are 24-volt transformer isolated control wires. Note: The float in the tank must close in the UP position.
 - l. Double check all connections and then proceed to start-up and run section.
 - m. Install the bulb into the UV light. See enclosed UV instructions.
 - n. Install the bulb into the ozone unit. See enclosed OZONE instructions
3. Information on the microprocessor control system
- The system has been pre-programmed to:
- a. Read and display permeate water quality in TDS and water temperature in Deg. F.
 - b. Count and display the hours of on time of the high pressure pump
 - c. Have a 60 second flush to drain with the high pressure pump on after the tank level switch indicates that the tank is full.
 - d. To turn the unit on and off 2 seconds after the stop or re-start switch contact is made
 - e. Display a failure to start due a low inlet pressure. The low pressure switch will shut of the unit when the pressure after the solenoid valve is 5 PSI and re-start when the pressure is 10 PSI.
 - f. Delay the low pressure message to turn the unit off for 3 seconds to prevent unnecessary interruption due to a momentary pressure drop
 - g. Start high pressure pump 10 seconds after inlet solenoid valve opens upon signal from the tank switch
 - h. Attempt a pump re-start 10 seconds after the low pressure fault indication

- i. Stop pump re-start attempts after 5 tries in a 10 minute period. After 60 minutes, the unit will again try to re-start and again try 5 times in a 10 minute period.
 - J. There is no need to operate the up or down buttons.
 - k. Manual run, Manual Flush. Push the button once and the unit will go into the service mode and operate for 5 minutes of operating parameters are met. Useful for diagnostic work on the system. Push the button again any time during the 5 minute period and the unit will go into the flush (service with a high drain flow) for 5 minutes.
4. Clean inlet filter.
- a. Be certain that the red handled valve adjacent to the Maxi-cure is in the OFF position.
 - b. Turn on the water to the system
 - c. Remove the front cover from the Maxi-cure valve.
 - d. Push and hold the left button on the valve timer for 5 seconds. Regeneration will begin and water will flow to drain. View this water
 - e. After about 25 minutes this water will cease to flow. Observe the quality (color) of this water.
 - f. Repeat steps d. and e. **until the water to drain is clear –this may require five or six regeneration cycles. Failure to do this will cause plugging of the inlet cartridge filter and possibly plugging of the RO membrane.**

5. Start-up and run.

- a. Open the red handled valve
- b. Please note the inlet solenoid valve to the right of the two blue cartridge filters. Note the wires going to a coil on the top of this valve. Turn the coil approximately 1/8 turn counter clockwise.
- c. Water will begin to flow into the unit to rid it of air. Allow water to flow for a few minutes.
- d. Turn the coil clockwise finger tight until water flow ceases.
- e. Turn on the electrical power to the unit.
- f. The green panel display window will glow.
- g. Push the ON/OFF button. After a few moments the high pressure pump (left side of the unit) will start.
- h. Water will begin to flow into the storage tank unless there is a fault message. Adjust the valve marked DRAIN VALVE until the flow to drain in the meter marked DRAIN METER is approximately ___ GPM.
- i. Adjust the valve marked RE-CIRC. VALVE until the gauge marked SYSTEM PRESS. Reads ___ to ___ PSI.
- j. Continue adjusting the drain and re-circulation valves until the system pressure is stable and the **drain flow is 10% higher than the product flow.**

- k. When water in the storage tank reaches the level of the bottom tank float, the re-pressure pump can be started by pushing the on/off button on top of the pump. See the pump instruction manual. The pump will start and draw water from the tank and then shut off when the delivery pressure gauge (right) reaches approximately 50 PSI.
- l. Allow some water to flow into the system (open a use faucet) to fill the UV chamber and bleed the system of air.
- m. **Record** the following information. This will be extremely important in the future to diagnose problems and replace filters as needed:
 - 1. Product flow. _____GPM
 - 2. Drain Flow _____GPM
 - 3. System Pressure _____PSI
 - 4. TDS of product water _____PPM
 - 5. Pressure on gage marked inlet _____PSI
 - 6. Pressure on gage marked post filter _____PSI
 - 7. Pressure difference G2 minus G1 _____PSI
 - 8. Temperature of water to unit _____deg. F.

6. Maintenance:

- a. When pressure difference between G2 minus G1 increases by more than 5 PSI above the initial reading replace the left filter cartridge which is 5 micron. Change every 4 months minimum.
- b. Check and adjust the drain and re-circulation valves daily for the first week and then every week after that.
- c. When TDS increases by more than 20% from the above with no corresponding change in raw water TDS clean or replace the RO element(s).
- d. Replace the right filter cartridge which is a 5 or 10 micron carbon block every 6 months
- e. If water production through the product flow meter drops by more than 15% without a reduction in inlet water temperature or a drop in operating pressure, clean or replace the RO element(s).
- f. The motor with the high pressure brass pump attached to it with a clamp collar must be serviced. This type of motor and pump must be lubricated every 2 or 3 months with a few drops of light machine oil. There are small oil ports close to where the pump and motor are joined.

REVERSE OSMOSIS WARRANTY

**DIME WATER, INC.
2575 FORTUNE WAY STE. J
VISTA, CA 92081**

Phone 760-734-5787 Fax 760-734-5798 E-mail sales@dimewater.com

PLEASE READ AND UNDERSTAND THIS WARRANTY BEFORE PROCEEDING WITH THE INSTALLATION OF THE SYSTEM.

All components except the element(s) are warranted to be free of defects in materials or workmanship for a period of one year from the date of installation.

Repair or replacement at option of Dime Water, Inc and based upon inspection by Dime Water. Defective items are to be returned to Dime Water, Inc. at owner's expense. Dime Water will then pay for the transportation on the repaired or new replacement parts.

Elements have a one year pro-rata warranty. If it is established that the element problem is related to material and or workmanship then the elements will be replaced at no charge in the first month after the date of installation. A cost of 8 1/3% per month will be charged for each month after the first month. Improper system operation, excessive water temperature (above 100 Deg. F.), failure to prevent chlorine passage into the system, scaling due to softener or chemical feed operational negligence and general system neglect voids the element warranty.

All warranty is for materials only. Any labor charges must be paid by the system owner. Dime Water, Inc. is not responsible for contingent liability caused by Reverse Osmosis equipment failure. We do not warrant any system or part of a system that has been damaged by neglect, improper use, act of nature, fire or vandalism.

