

RESIDENTIAL REVERSE OSMOSIS INSTRUCTIONS

DIME WATER MANUFACTURING

**PLEASE READ THESE INSTRUCTIONS COMPLETELY
BEFORE ATTEMPTING INSTALLATION.**

**FAILURE TO UNDERSTAND AND FOLLOW THE
INSTRUCTIONS CAN LEAD TO COSTLY DAMAGES TO
STRUCTURES AND CONTENTS.**

**IF YOU HAVE ANY QUESTIONS OR CONCERNS,
PLEASE CONTACT THE FACTORY AT 760-734-5787 OR
www.sales@dimewater.com BEFORE PROCEEDING!**

1. Limits of water to the R.O. system.
 - a. **Temperature.** Cold water line only!!! Water temperature *must not exceed 90 deg. F.* Above this temperature, the strength of the components is reduced and *component failures resulting in costly, damaging water leaks* will occur! Minimum temperature for satisfactory operation is 60 deg. F. Below this temperature there is a significant reduction in the amount of water produced. *Protect from freezing temperatures. Freezing will break components and cause costly, damaging water leaks.*
 - b. **Pressure.** For longest equipment life and to minimize the potential for any component failure the static (no water flowing in the facility) water pressure should be *no more than 75 PSIG.* Pressure in excess of this *may cause component failures resulting in costly, damaging water leaks.*
 - c. **Water Chemistry.**
 1. Total dissolved solids (TDS). <2,000 PPM (mg/l)
 2. Hardness. 9 grains per gallon or less. Soften water if above this level.
 3. Iron. 0.2 PPM (mg/l) or less. If above this level, pre-treatment is required.
2. Identify all components. Unit consists of:
 - a. Main assembly consisting of the metal frame that is to be attached to a wall or the side of a cabinet. On this frame are mounted inlet filter(s), Reverse osmosis element in housing and optionally a post filter and/or a UV light. This assembly and all attached fittings has been *air tested at 60 PSI and is certified at the time of shipment to be free of leaks.* *Replacement of any components or removal and re-attachment* of any

lines if done improperly *may cause costly, damaging water leaks*. Prior to making any changes please contact the factory as advised above. Air is used for testing to prevent the introduction into the system of any waterborne contaminants that could grow during storage. Additionally, a molecule of air being a small fraction the size of a molecule of water will provide a much more critical and thus more reliable leak-free assurance. The lines connected to the unit (also leak tested) are color coded for connection as follows:

1. Orange Line. Connects to the inlet cold water line.
2. Black Line. Connects to the drain.
3. Blue line. Connects to the faucet and/or the line to the refrigerator.
4. Green Line. Connects to the accumulator tank.

b. Installation Parts kit.

1. Faucet with plate and nut to mount to counter or sink along with a nut, compression fitting and *tubing insert* which ***must be placed into the tube when the blue line is attached to the faucet. Failure to properly use the compression fitting and to use the tubing insert can cause extensive, costly damages.***
2. Drain saddle valve. Attaches to a standard P-trap assembly on a sink. This too is supplied with a tubing insert. ***Failure to utilize this insert in the tube before attaching the black tube to the drain assembly and properly tightening the compression nut supplied with the assembly after the tube is inserted can cause extensive, costly damages.*** Local prevailing codes may require a different drain assembly incorporating an air gap. Check local codes prior to using this component.
3. Inlet valve assembly. Referred to as an EZ assembly. Affixes to standard ½” tubing connections found under most sinks. May be replaced with any suitable on/off valve that has a compression fitting adaptable to the RO unit ¼” O.D. x 1/8” I.D. poly tubing and is designed for the 75 PSI maximum desired system inlet pressure. Failure to use the proper valve and fitting ***may result in extensive, costly damages.*** If the EZ valve provided is used, first assemble the valve to the pipe fitting. Seal this fitting with at least 10 wraps of Teflon plumbing tape and/or a liquid Teflon sealing compound. Also be sure to use the tubing insert provided when attaching the orange tube to the on/off valve. Failure to use the insert and the recommended fitting to valve sealant material could ***result in extensive, costly damages!***
4. Tank valve. See tank for instructions.

c. Accumulator tank.

1. Remove from the box taking care not to damage the threads on the top of the tank. ***Damaged threads may cause extensive costly damages due to leaks.*** Inspect the threads and apply 10 wraps of Teflon plumbing tape and/or liquid Teflon sealing compound.

2. Check the air pressure in the tank. Adjust up/down until gauge reads approximately 10 PSIG. This will be the exit pressure of the stored RO water as the tank is nearing empty. If higher pressures are required because of ice makers, long tubing runs, etc. this pressure may be increased (this results in earlier system shut-off and less water in storage) or a delivery pump may be required.
3. Thread the tank valve on to the tank. Normal practice is to hand tighten and then turn ½ turn more by using a wrench. ***Do not over tighten. This will crack the valve which will cause extensive, costly damage due to leaks.***

3. Install

- a. Turn-off main water supply.
- b. Relieve water pressure on the line by opening a convenient faucet.
- c. Install the EZ adapter into the cold water line. Or---
- d. Install optional inlet valve as indicated above.
- e. With the valve in the OFF position connect the Orange tube to the adapter/valve. Be sure to use the tubing insert. ***Failure to use the insert may cause extensive costly damages due to water leaks.*** Use enough orange line so that if being installed under a counter the unit may be removed to facilitate future filter replacements. Leave the assembly outside of the cupboard area and then---
- f. Install the faucet to the sink or to the counter.
- g. Attach the Blue line to the faucet. Be sure to use the plastic tubing insert. ***Failure to use the insert will cause extensive, costly damage due to water leaks.***
- h. Attach the drain saddle (or code approved air gap) to the vertical portion of the drain coming from the bottom of the sink. Must be above the water line which is above the top of the horizontal portion of the drain line where it enters the wall. If using the clamp provided, tighten the screws until the clamp cannot be turned. Then using a 1/8" diameter drill bit, place the drill into the center of the compression fitting (remove the nut first) and drill through the pipe. Re-attach the nut, put the insert into the Black tube, put the tube into the fitting, push until it stops, and tighten. ***Failure to use the insert and to properly tighten will result in extensive, costly water leaks.***
- i. Attach the green line to the valve on the accumulator tank. Use the tubing insert that is provided. Push the tube in until it stops and securely tighten. ***Failure to use the insert and tighten properly will cause extensive, costly damage due to water leaks!***
- j. Some systems are supplied with a pump so that extra pressure can be applied to the water to overcome a low pressure situation or to assist with high TDS water. Plug in the transformer that is attached to the pump motor.

4. Start-up

- Open the faucet
- Turn on main water supply
- Close the tank valve
- Open the valve leading to the Orange line.
- When all air is expelled, water will flow to the drain and slowly from the faucet. Note: On water saver style 100 Gallon per day R..O. units two types of drains are offered. One has a small valve on the left side of the unit and one has a fixed drain flow restrictor called a capillary. If the unit has the small adjustable valve, please set the flow to drain so that it is equal to or slightly above the flow from the faucet.
- **CHECK ENTIRE SYSTEM FOR LEAKS. REPAIR AS REQUIRED.**
- Close faucet. Within 3 minutes, all water flow to drain should cease. Consult factory if it does not.
- **CHECK ENTIRE SYSTEM FOR LEAKS. REPAIR AS REQUIRED.**
- Open the tank valve. Water should begin to flow to drain within 2 minutes. If not, consult factory.
- Allow water to run for at least one hour.
- **CHECK ENTIRE SYSTEM FOR LEAKS. REPAIR AS REQUIRED.**
- Open the faucet and run until no more flow.
- Shut-off the faucet
- Mount the unit under the sink.
- **BE SURE ALL LINES ARE NEATLY CURLED AND THAT THERE ARE NO KINKS.**
- After another hour of running, **CHECK FOR LEAKS AND REPAIR AS REQUIRED!**
- After all flow to drain stops (approximately 6-8 hours) **CHECK FOR LEAKS, REPAIR AS REQUIRED THEN** open the faucet and allow water to run until there is no more flow.
- Close the faucet.
- Resume using water after about 1 hour.

Periodically check the system for leaks.

When leaving home for more than a day or two it is a good idea to shut-off the main water supply to the home. This will prevent/minimize any water damage that can be caused by any leaks --- dishwasher, clothes washer, RO unit, softener, toilet valves, etc., etc.

5. Maintenance. Because the raw water conditions vary so much as does the water consumption by the customer, only general guidelines can be applied. Each application is different.

a. Well water supplies:

- (1) Change the inlet (right hand) 5 micron cartridge every 6 months.
- (2) Change any pre or post carbon filters every 12 months.
- (3) Change the R.O. element ONLY if there is a 20% increase in the product TDS or a 30% reduction in daily water production that cannot be explained By a decrease in raw water temperature of 20F. or more.

b. City water supplies:

- (1) See (1) above EXCEPT change 12 months.
- (2) See (2) above EXCEPT change 6-12 months.
- (3) See (3) above. Same as above.

6. Basic warranty.

Material replacement only for one year on all components EXCEPT filter cartridges
And the element.

There is no warranty on the filters.

The element has a pro-rata warranty of 12 months. The first month is full replacement
With following months charged at a rate of 1/12 per month of use.