

Reverse Osmosis Installation (Point of Use)

These are general directions for point of use Reverse Osmosis installation and do not contain details on its operation. These directions are intended to give instruction on system placement, plumbing considerations and start up procedures. Remember that it is important to have a professional neat looking job. Keep the work site and path to the work site neat and clean. This will, not only make the job go faster, but provide a more professional image. Always be sure to leave the work site as clean, if not, cleaner than when the work began.

Before arriving at the job, the installer should review the contract as well as the job sheet titled Water Test Results (WTESTFOM.SAM). Once at the job, the installer should first consider the placement of the equipment. Customer's preferences should always be considered. The person who has sold the job will probably have worked out some of these details and should have made notes on them in the "System Design" area of the job sheet titled Water Test Results (WTESTFOM.SAM). If there are any questions about the information on the Water Test Results (WTESTFOM.SAM), they should be directed to the salesman or the system designer for the job. There will be times the placement of the equipment will be left up to the installer. The following is a list of things to be considered:

1. Future use of the space.
2. Anticipated additional equipment (water treatment or other equipment).
3. Serviceability of equipment.
4. Location of drain and how the drain line will be run.
5. Electrical outlet location (only if you are using a booster pump) and its proximity to the equipment.

The customer should be informed of the anticipated time and duration for interruption of water and sewage use. Once the location of the equipment is determine perform the following steps:

Under Sink Mounting of R.O

If the R.O. unit is to be mounted under the sink, follow the instructions provided by the manufacturer with the following additions:

1. Select the correct Tee to tap into the feed line. DO NOT use a saddle clamp to tap into the feed water line of the house. Some manufacturers provides you with a 1/2" compression Tee fitting that will connect directly to 1/2" copper tubing. The fitting has a shut-off already installed in the branch of the tee that will accept 3/8" O.D. tubing. If the tee is not supplied with the unit or there is no 1/2" tubing under the sink that can be used by this fitting, then choose another size compression fitting or sweat type tee that can be adapted to 3/8" tubing. Whatever the tee ends up being, make sure there is a shut off on the branch of the tee that will allow the R.O. to be shut off without interrupting the flow of water to the rest of the house.

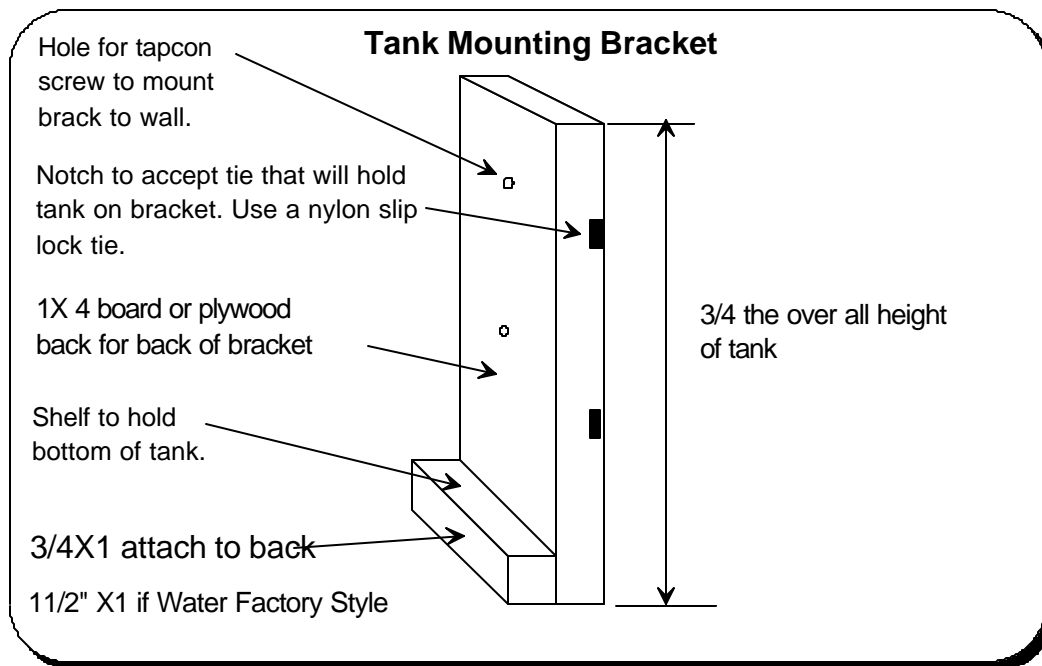
2. Before inserting the tee, add a dropper full (1ml) of 5.25% bleach to the pipe that will be connected to the inlet of the tee.
3. If a hole must be drilled the counter top to install the faucet, make sure the area under the hole is accessible and the plumbing for the faucet won't interfere with draws or other obstructions such as cabinet walls. When installing the faucet, an adapter for 3/8" tubing may have to be screwed on to the end of the faucet's threaded connecting stem. This is **NOT A PIPE THREAD CONNECTION** and does not need to be pipe doped or tefloned.
4. If you are using the drain saddle and not providing an air gap at the drain connection, you must use the air gap faucet provided and connect it according to the manufacturer's instructions. The connection to the drain must be made so the water sent to the drain will run through the sink trap before being dumped into the rest of the septic drainage system.
5. Make sure to add chlorine to the POST FILTER sump to disinfect the water. Adding a dropper full of 5.25% bleach, to both the area inside and outside of the cartridge, should suffice.
6. If the system is used to remove health related minerals from the water install a faucet type TDS monitor.
7. Be sure to check for leaks as described in the instructions. Check for leaks after the water has come out of the faucet and the faucet has been closed to allow water and pressure to be applied to the whole system.
8. **INSTALL THE START UP WARNINGS ON THE FAUCETS.**
9. Explain the operation of the system to the customer and go over the information found in Customer Information for New Water Systems (CINW9211.SAM). Show them where you have left the information packet.
10. **MAKE SURE THE CUSTOMER KNOWS WHAT HAS TO BE DONE TO DRAIN THE SYSTEM BEFORE USING THE WATER.**
11. **TURN ON THE HOT WATER HEATER** if you turned it off.
12. Review and check the items on the Water Job Completion Check List (WTCOMPCK.SAM).

Remote Mounting of R.O.

If the R.O. is to be mounted in the basement follow the instructions below:

1. Hang the R.O. unit and the storage tank. If the storage tank is larger than 3 gallons, find a place near the R.O. unit to set it on the floor. To mount the R.O. unit on the wall use plastic sheilds and sheet metal screws. To mount the tank on the wall use a bracket like the one in the drawing on this page.
2. Turn off the water to the house. If necessary, shut off the water pump.
3. Cut the water line where the Tee for the R.O. tap will be placed. Drain the system to remove the water. This is sometimes aided by the opening of one or more faucets in the house

4. Select the correct Tee to tap into the feed line. DO NOT use a saddle clamp to tap into the feed water line of the house. Some manufacturers provides you with a 1/2" compression Tee fitting that will connect directly to 1/2" copper tubing. The fitting has a shut-off already installed in the branch of the tee that will accept 3/8" O.D. tubing. If the tee is not supplied with the unit or there is no 1/2" tubing under the sink that can be used by this fitting, then choose another size compression fitting or sweat type tee that can be adapted to 3/8" tubing. Whatever the tap ends up being, make sure there is a shut off in the branch of the tee that will allow the R.O. to be shut off without interrupting the flow of water to the rest of the house.



5. Put a couple of dropper fulls (2ml) of 5.25% bleach in the system through the newly installed open ball valve. Close the ball valve and all faucets that have been opened, turn the water on to the house and check for leaks.
6. Install the fitting(s) in the waste line that will allow for the connection of an appropriate air gap. Install the air gap. If it is necessary to cut into the sewer line, **wear disposable rubber gloves and be sure to thoroughly wash hands before finishing installation.**
7. Follow the instruction provide with the R.O. to finish installation.
8. Be sure to check for leaks as described in the instructions. Check for leaks after the water has come out of the faucet and the faucet has been closed to allow water and pressure to be applied to the whole system.
9. **INSTALL THE START UP WARNINGS ON THE FAUCETS.**
10. Explain the operation of the system to the customer and go over the information found in Customer Information for New Water Systems (CINW9211.SAM). Show them where you have left the information packet.
11. **MAKE SURE THE CUSTOMER KNOWS WHAT HAS TO BE DONE TO DRAIN THE SYSTEM BEFORE USING THE WATER.**

12. TURN ON THE HOT WATER HEATER.

13. Review and check the items on the Water Job Completion Check List (WTCOMPCK.SAM).

Special Fitting Required for R.O. :

1. John Guest RO pal.
2. Smart faucet if necessary.
3. Tank bracket if necessary.
4. Fittings to cut into drain line and connect 3/8" tubing (Mister Drain, Trap, Tee-Y, etc...)
5. Enough 3/8" polyethylene tubing to connect R.O. to water system and to remote faucets.
6. Ties and hangers for 3/8" tubing
7. 3/8" John Guest X 1/4" male adpt(s).
8. 3/8" John Guest faucet adpt(s).
9. 3/8" John Guest tee(s)
10. 3/8" John Guest ball valves

Notes: