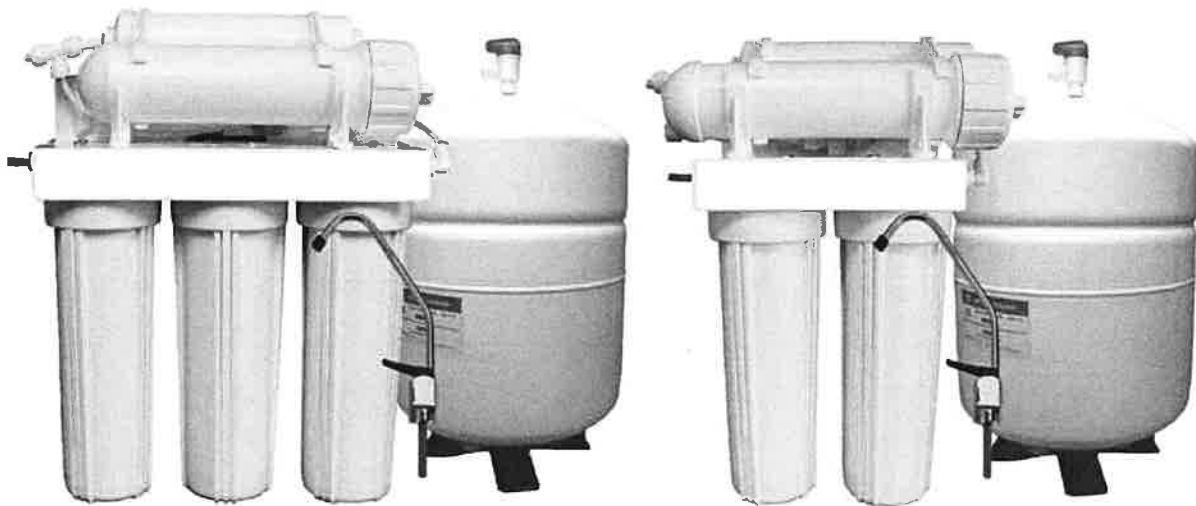


Reverse Osmosis System Instruction Manual



It is the responsibility of the installer to insure inlet water pressure does not exceed 80PSI. If pressure exceeds 80PSI, a pressure regulator must be installed on inlet line before continuing.

Before beginning installation, check contents of package

Each unit contains:

1. Assembled system (unit) consisting of: Post Carbon Cartridge, Membrane in housing, Pre-filter housings with sediment and carbon cartridges, mounting bracket and clips.
2. Non air gap faucet assembly (chrome).
3. Holding tank (3.2 gallon).
4. Bag of parts consisting of: $\frac{1}{2}$ " male X $\frac{1}{2}$ " female adapter, Drain saddle, Faucet adapter Tank shut off valve, $\frac{1}{4}$ " plastic insert, 2 mounting screws, yellow drain restrictor.
5. $\frac{1}{4}$ " Black tubing (5 ft.) for waste line.
6. $\frac{1}{4}$ " Red tubing (5 ft.) for feed water line.
7. $\frac{3}{8}$ " White tubing (10 ft.) for product water to tank and faucet.

Unit contains all parts and tubing for under sink installation, more tubing or fittings may be required for installing in a different location such as in basement or utility room.

Below is a list of common tools needed for installation.

1. Electric Drill
2. Assorted Drill bits $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ "
3. Tubing cutter, Screw driver, Pliers, Adjustable wrench
4. Trouble light or Flashlight
5. Teflon tape
6. Household bleach (liquid, non -scented).

System sanitizing

It is recommended that system be sanitized and pre-filled prior to installation to kill any bacteria present from sitting in stock, this should be done anytime filters are changed or system is allowed to sit for an extended period of time. Please follow proceeding steps to sanitize system.

- A. Remove the Sediment cartridge and Block Carbon cartridge (5 stage RO has 2) from lower housings and set aside until sanitizing is complete.
- B. Install inlet saddle tap in desired location for installation of RO unit, this should be a cold water source, (see system installation step regarding inlet saddle tap on page 2).
- C. Attach $\frac{3}{8}$ " tank shut off valve to top of holding tank, teflon tape is recommended on tank threads for proper leak proof seal. (Wrap 2 or 3 times around threads).
- D. Install $\frac{1}{4}$ " red tubing from inlet saddle tap to $\frac{1}{4}$ " speedfit on left (or first) housing. make sure to slide tubing into speedfit connection until tubing passes "O" ring seal in fitting (force tubing all the way in).

Continued on page 2.

Continued from page 1

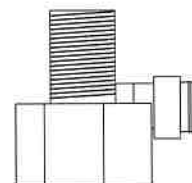
- E. On outlet of second (or third if (5 stage) filter housing, remove 3/8" safety clip from 3/8" fitting installed in housing, then press on collet (or ring) to allow 1/4" elbow to slide out, leave this elbow attached to tubing. Now you have access to 3/8" port on housing to facilitate installation of 3/8" line to holding tank, install this line now. This should leave you with feed water thru filter housings and directly to holding tank.
- F. Now unscrew first filter housing (which should be empty-no filter) and pour in 1/2 to 3/4 teaspoon of Chlorine bleach, screw housing back on.
- G. Turn feed water on using inlet saddle tap, check for leaks, you can open tank shut off valve at this point and allow holding tank to fill with water and Chlorine solution, shut off feed water when full and allow tank to stand for minimum of 15 minutes.
- H. After sitting for at least 15 minutes tank should be drained and refilled with straight tap water to rinse out Chlorine solution. Careful when disconnecting line to holding tank as this will be under slight pressure, even with feed water and tank valve off. Wrap towel or rag around connection then slowly remove to allow pressure to dissipate slowly.
- I. After Rinsing holding tank, filter housings can be removed and filters placed back in position. Sediment filter in first housing, Carbon cartridge(s) in second and third housings (if 5 stage RO).
- Also Line to holding tank should be disconnected, and speedfit elbow removed earlier re-placed back into 3/8" fitting on housing.

Sanitizing is now complete

System installation

Installation step 1.

The RO system can be tied into the Cold water supply using supplied fitting (Shown on the right) 1/2" male X 1/2" female adapter tee with a 1/4" quick connect fitting. The 1/4" polytube used needs to be cut straight and any burrs removed before inserting into quick connect fitting.



When the 1/4" polytube is inserted make it is inserted all the way past the o-ring located inside the 1/4" opening and is coming straight out of fitting.

Installation step 2.

As stated in system sanitizing, tank shut off valve shown should Be mounted to top of holding tank, teflon tape is recommended On tank threads to prevent leakage. Holding tank should be placed in position at this point, it may be Placed horizontally or upright using provided stand, tank should Placed so that shut off valve can be easily reached and tank is not Subject to freezing.



Installation step 3.

Faucet installation:

The customer should be consulted before determining location of faucet. The faucet should swivel freely for convenience, and empty out into sink. If sink already has a hole provided that can accommodate the RO faucet, then no drilling is required. Also if sink has a spray hose that is not utilized this may be removed and faucet can be mounted there, you will need some way to cap or plug spray attachment. Get customers permission!

Drilling stainless steel sink:

Position chrome washer in place on sink, make certain there's ample room underneath sink for mounting, also make certain spout empties out over sink area. Spout should swivel freely.

Mark sink with center punch thru hole in chrome washer. Drill mounting hole using 1/2" steel drill bit.

Mounting faucet:

Using diagram A below, piece those parts that belong above sink together onto faucet, insert faucet stem through 1/2" hole. Under sink, slide onto faucet stem, plastic positioning washer, flat metal washer, locking star washer, and 9/16" hex nut. Tighten hex nut firmly while making certain faucet body remains in desired position.

Next screw 3/8" faucet adapter onto faucet stem, tighten firmly but do not overtighten.

Drilling a countertop:

Make sure when choosing position on countertop that spout will empty out into sink. Feel underneath countertop for obstructions that may hamper installation.

Use 1/2" wood bit on Formica style countertop.

For ceramic tile, consult tile store on proper bit.

On corian style countertop use steel bit.

Drilling Porcelain or Cast Iron sinks:

It is highly recommended that a Relton Porcelain

Drill Kit be used on porcelain sinks to prevent chipping. Follow directions provided with kit.

Since these kits can be expensive, check with dealer for possible loan or rental arrangements.

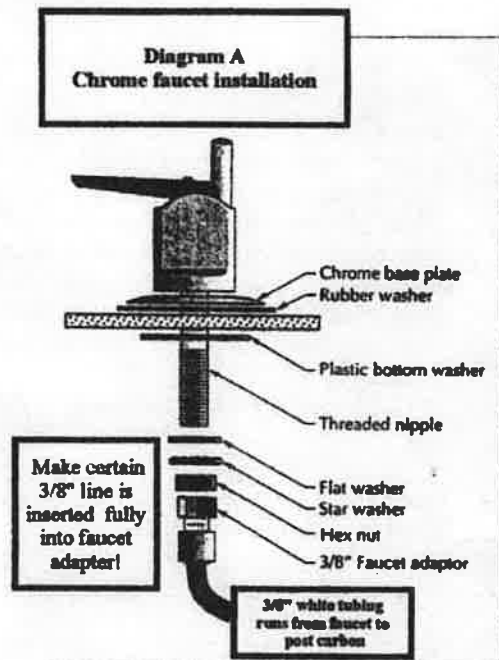
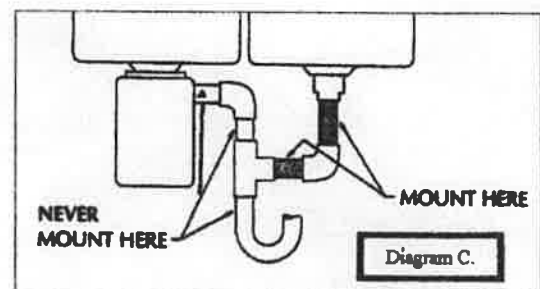
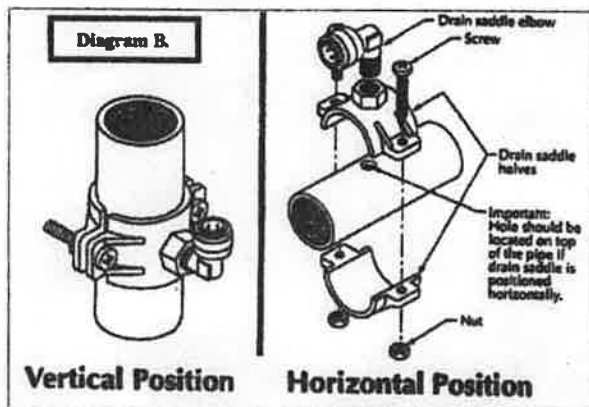
Relton kits consist of a pilot bit, porcelain cutter bit, and finish hole cutter.

Installation step 4.

Drain saddle connection:

Drain line from the RO system must flow at a slow but steady rate to carry waste water from membrane, this flow is important in order to prevent deposits on surface of membrane causing premature failure. In basement installations drain line may run to a floor drain, laundry tub, reclamation, tank, or garden. This installation covers use of a drain saddle for undersink install. Using diagrams B. and C. below, determine best position for saddle clamp, make sure to locate above "P" trap on drain. Mount clamp as high as possible on drain and as far from garbage disposal as possible.

Mark position of clamp on drain line, drill hole using 1/4" drill bit. Careful! Some drain line can be brittle with age. Align drain clamp with drilled hole and attach, tightening both screws evenly. Apply Teflon tape to 1/4" fitting and screw into drain clamp.



Installation step 5.

Running feed, product, and drain line. RO system should be mounted in desired position at this time, keep in mind that unit must have filters changed every 6 to 12 months depending upon feed water. So keep system handy for filter changes.

Red 1/4" tubing is for feed water line from feed water valve to pre-filter housing #1 (on left), This should have a short piece of red tubing protruding from it, remove this short piece and replace with feed water line from inlet feed water valve. Add 1/4" ball valve after inlet.

Line from holding tank runs to tee on left hand side of post carbon cartridge.

Line to faucet runs from out port of post carbon cartridge.

Next double check that all connections are in place and tubing is inserted snugly into speed fittings.

This should complete installation, and feed water to RO can be opened at this point.

Check all connections for leaks, you may disconnect product water and waste water lines and check for proper flow. Waste water should be a slow steady drip to a steady stream (small stream) depending upon inlet pressure. Product water is approximately 1/4 of waste water flow, (a steady drip).

First 2 tanks full of water should be discarded to flush membrane.

A tee may be placed in product water line leading to faucet, to run to ice maker on refrigerator, or additional outlets.

All lines are color coded for ease of installation and serviceability.

Replacement filters and membrane

Filters should be replaced at least once a year, and may be obtained from dealer.

Membrane has a life expectancy of 3-5 years, depending upon influent water.

Filter Pack- 4 stage (with 2 pre filter housings)

Consist of:

- (1) 5 Micron sediment cartridge
- (1) 10 Micron CBC10 Carbon cartridge
- (1) 10" Post Carbon Cartridge w/3/8" QC

Filter pack- 5 stage (with 3 pre filter housings)

Consist of:

- (1) 5 Micron sediment cartridge
- (2) 10 Micron CBC10 Carbon cartridge
- (1) 10" Post Carbon cartridge w/3/8"QC

Membrane

- (1) 50 Gal. Per day TFC membrane

System perimeters

DO NOT USE THIS SYSTEM WHERE FEED WATER IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE UNIT.

Water pressure: 40-80 psi

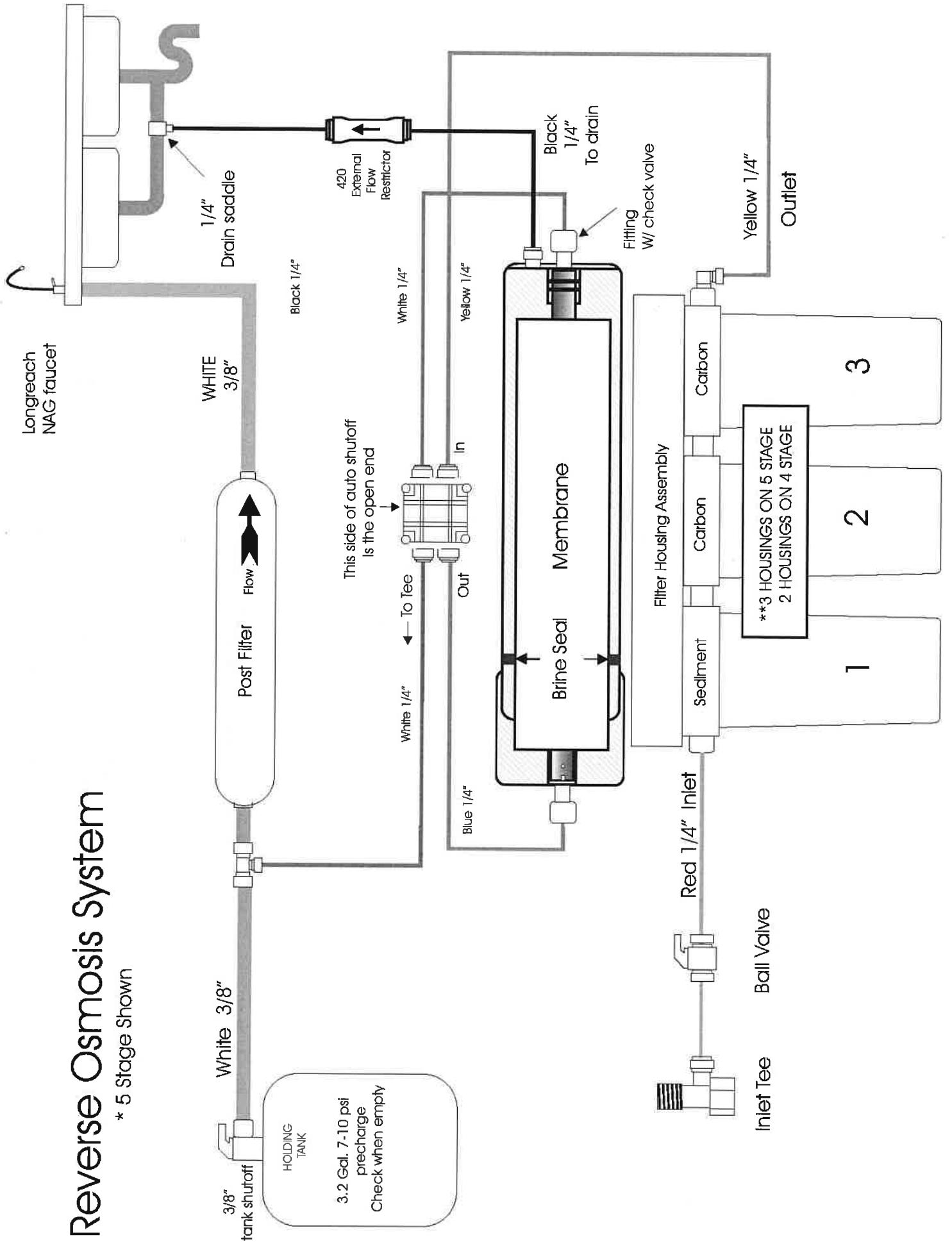
TDS : Max. 2000

Temperature : 40-90 F

PH : 5-10

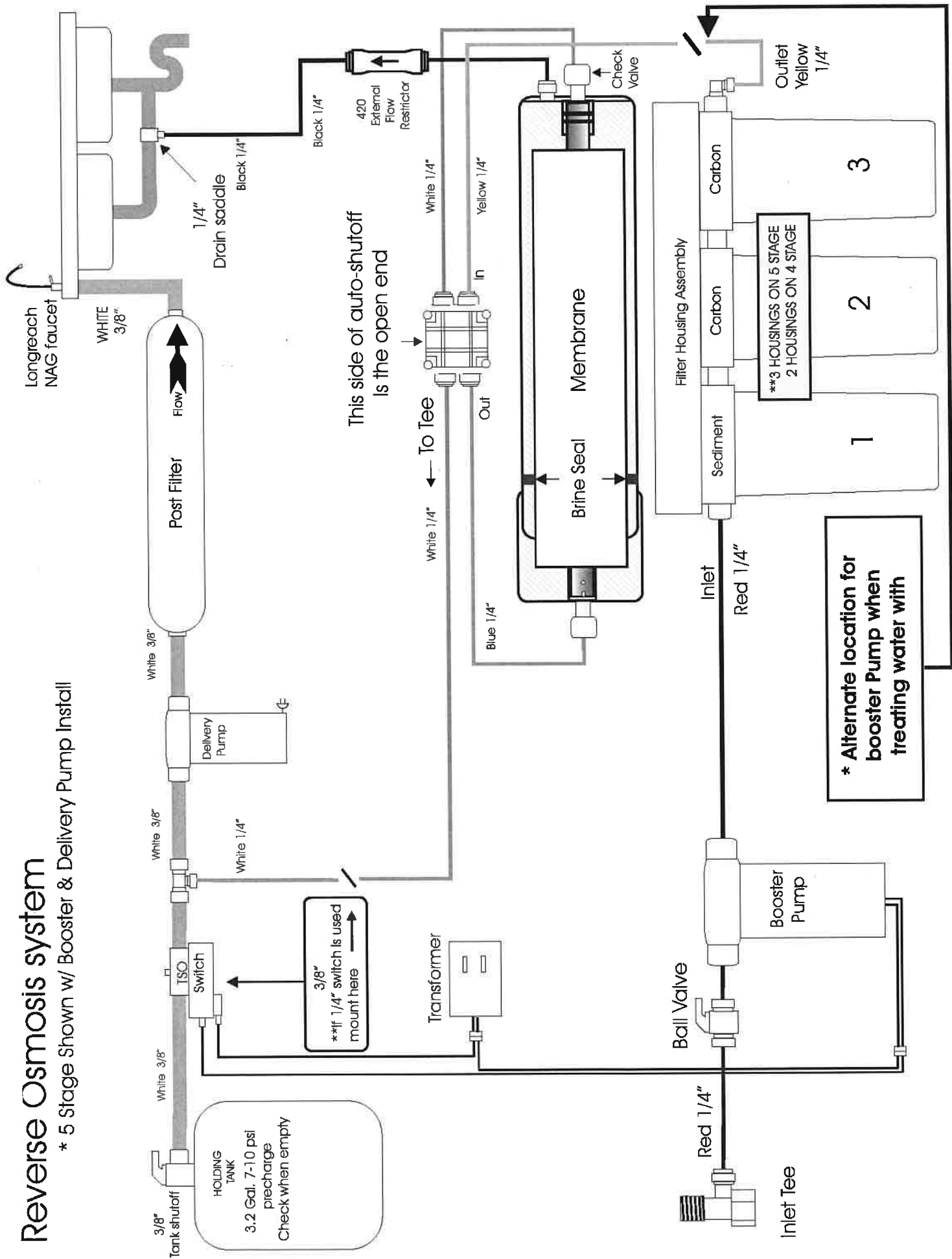
Reverse Osmosis System

* 5 Stage Shown



Reverse Osmosis system

* 5 Stage Shown w/ Booster & Delivery Pump Install



Reverse Osmosis system

Dimensions

Filters used

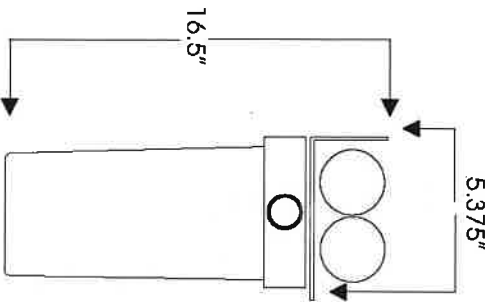
- 1-5 micron meltblown sediment
- 2-10 micron carbon block

Membrane

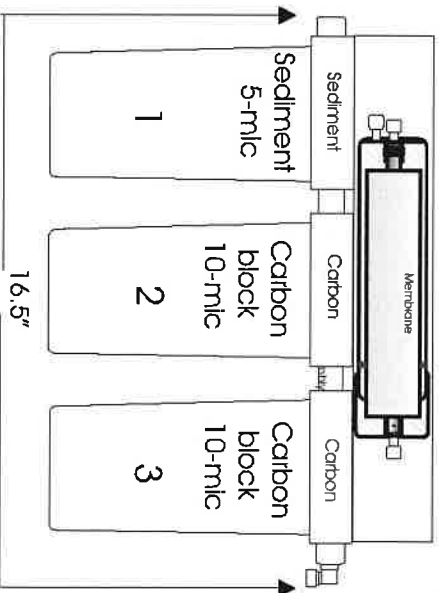
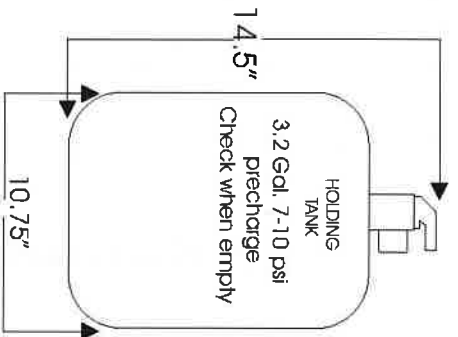
Rated 50 GPD

Holding tank capacity

3.2 Gal @ 60 PSI



5 stage RO System



Filters used

- 1-5 micron meltblown sediment
- 1-10 micron carbon block

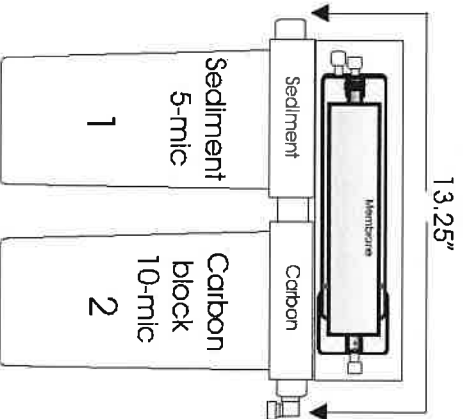
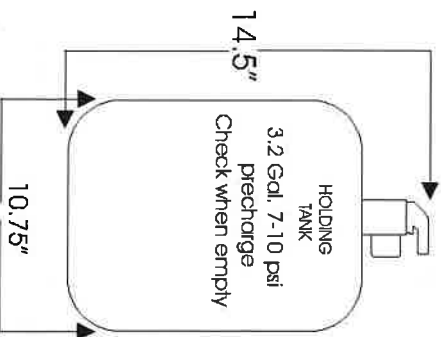
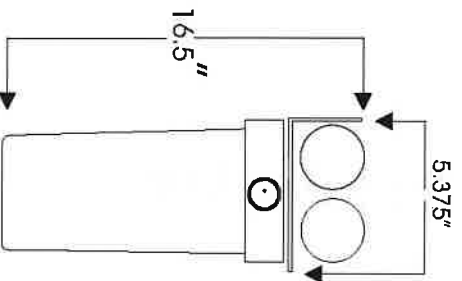
Membrane

Rated 50 GPD

Holding tank capacity

3.2 gals @ 60 psi

4 Stage RO System



Five Year Limited Warranty

Manufacturer warrants its Pro Series drinking water system to be free from defects in material and workmanship for a period of five years from the date of purchase when installed within operating conditions listed below

We will repair or replace any part of the water system found to be defective in operation because of defective parts or workmanship. This warranty does not cover the disposable sediment and carbon filters whose life depends on feed water conditions. The reverse osmosis membrane is covered for manufacturing defects only, and if required prefilter conditions to the membrane are not followed the membrane will not be covered.

Warranty Valid Only If Operated Within Conditions Listed Below

- A. If installed on chlorinated water system, pre-filters must be replaced at least once a year. Evidence of chlorine damage to membrane will void warranty.*
- B. Feed water supply must be between 40 and 100 psi*
- C. The water temperature must be between 40 and 90.*
- D. The PH of feed water must be within range of 3-11.*
- E. The Total Dissolved Solids (TDS) Must not exceed 2000 PPM*

Warranty Service Policy

All replacement filters must be Pro Series filters or membranes or the warranty is void. To obtain warranty service we ask that the proceeding policy be followed:

- A. Contact dealer unit was purchased thru, or contact the factory for a dealer nearest you.*
- B. Shipping and handling must be prepaid for any part returned under warranty.*
- C. Any part(s) returned and determined to be not covered under warranty will be repaired or replaced and charged at retail cost for parts and shipping.*

This warranty will not cover damage due to: occurrences of neglect, misuse, alteration, accident, misapplication, fire, flood, act of God or freezing and hot water.

Our limitations of this warranty are to repair or replace defective parts of the Reverse Osmosis system and we assume no liability for incidental and consequential damages from corrosion or other causes. Labor to repair or replace defective parts is not covered under warranty.

This warranty gives you specific legal rights, you may have other rights which vary from state to state.