

Reverse Osmosis

Drinking Water Systems



*Installation
Manual*

Reverse Osmosis Package Content



4-Stage Reverse Osmosis Assembly



5-Stage Reverse Osmosis Assembly



Reverse Osmosis Membrane



Drain Saddle Valve



Angle Stop Adapter Valve



Drinking Water Storage Tank



Storage Tank Shut-Off Ball Valve



Filter Housing Wrench



3/8" Tubing Faucet Adapter



1/4" Tubing



3/8" Tubing



Faucet Package



Read the entire Installation Manual prior to installation of this System. Install the system under the supervision of a professional licensed installer or plumber.

Section 1: Introduction

Congratulations on your purchase of a Reverse Osmosis Drinking Water Appliance.

Like any other fine product this appliance requires periodic maintenance in accordance with the schedule outlined below.

Recommended Filter Change Schedule*

1 - Pre-filter, 10", 5 Micron.....	6 Months
2 - Granulated Activated Pre-Carbon Filter (NRO-5)...	6 Months
3 - Extruded Carbon Block Pre-Filter.....	6 Months
4 - Reverse Osmosis Membrane.....	24 - 36 Months
5 - In-Line Carbon Post-Filter.....	6 Months
6 - Filter Housings.....	1 Year
7 - Membrane Housing.....	1 Year

*Based on standard conditions.

Your new Reverse Osmosis (R.O.) Drinking Water system uses a combination of filtration technologies to reduce unwanted contaminants in a water supply. The following steps combine to give you the best in clear sparkling drinking water:

MECHANICAL FILTRATION - The sediment pre-filter will remove the larger particles such as silt, rust and scale. Its 5 micron (equal to 0.0002 inch) nominal rating helps to give maximum life to the R.O. Membrane and carbon filter.

ACTIVATED CARBON PRE-FILTER - The activated carbon in a pre-filter will remove any chlorine that may be present in the feed water. This pre-treatment is also necessary for membrane protection in chlorinated water. The Activated Carbon Pre-Filter cartridge contains carbon particles with a vast network of pores. The tremendous surface area of these pores (typically 800-1200 square meters per gram of carbon) give the carbon very good adsorptive sites for chlorine as well as other substances that contribute to tastes and odors.

CARBON BLOCK PRE-FILTER - The carbon block filter removes even more contaminants than the Granular Activated Carbon filter due to a larger surface area. The contaminants are in contact with more carbon for a longer period. Carbon blocks can remove chlorine more effectively, eliminate undesirable odors and halogenated organic compounds.

REVERSE OSMOSIS MEMBRANE - The R.O.

Membrane is the heart of the filtration system. It is designed to reduce the dissolved mineral content of the water. Minerals picked up in the environment by the water are measured as Total Dissolved Solids (T.D.S.). In the Reverse Osmosis process, dissolved minerals are separated from the incoming water (Feed Water) to produce the product water (the Permeate). The excess minerals are rinsed to drain (the Reject Water). The spiral wound construction of the R.O. Membrane provides maximum surface area for water production and is less susceptible to fouling by particulate matter, turbidity and colloidal materials.

IN-LINE CARBON POST-FILTER - This carbon filter is designed to reduce unwanted tastes and odors that may accumulate in the storage tank. The product water from the membrane as well as the holding tank passes through the Carbon Post-Filter on the way to the Dispensing Faucet. The Carbon Post-Filter reduces tastes and odors that may pass through the system. It adds a final "polish" to the water.

AUTOMATIC SHUT-OFF VALVE - The A.S.O. Valve senses when the product water tank is full and closes the feed water supply to prevent excess reject water from going to drain when the unit is not producing water.

Section 2: Preparation

2A - Major System Components

The following components comprise the R.O. Drinking Water System

1. A Reverse Osmosis assembly consisting of the white bracket, filter housings, automatic shut-off, membrane module and an in-line carbon filter.
- 2) A drinking water holding tank.
- 3) A faucet kit.
- 4) Plastic tubing, angle stop adapter and drain clamp.
- 5) Other items necessary for installation may include wood screws or machine screws for mounting the R.O. assembly, or concrete anchors for hanging on basement wall, additional tubing or tube connectors, plastic wire ties for organizing tubing.

NOTE: Systems are equipped with Quick Connect fittings, see last page for proper usage.

2B - Tools Recommended for Installation

The following tools will cover most of the installation sites encountered:

- 3/8" variable speed electric drill.
- Extension work light with outlet.
- Safety Glasses.
- 1-1/4" porcelain hole cutter kit.
- 1-1/4" Greenlee hole punch and 1/8" and 1/2" metal drill bits for pilot hole.
- Center punch and hammer.
- 1-1/4" wood bit.
- Assorted wood and metal drill bits including 7/32" metal drill bit.
- Phillips head and flat blade screwdrivers.
- 1/2", 9/16" and 5/8" open end wrench.
- 10" Crescent wrench w/jaws taped to hold faucet.
- Teflon tape.
- Wide masking tape or duct tape.
- Plastic tubing cutter.
- Extra plastic tubing.
- Low range air pressure gauge.
- Bicycle hand air pump.
- Small bottle of liquid chlorine bleach.

2C - Determine System Location

The R.O. system can be located under a sink or in a basement depending on space availability and the customer's preference. If a basement installation is selected, additional tubing, hardware and fittings may be needed and a hole will have to be made from inside the cabinet, through the floor, to the basement. Never install in an area of the home where temperature is freezing as damage to the system will result.

This water system is for INDOOR use ONLY. To preserve the system, avoid using extremely Hot or Cold water, and protect the system from sudden temperature changes.

Install the system at a location with adequate drainage.

Considerations for an ice maker or other remote hookup should be determined, including routing and any additional tools, fittings, and tubing that may be required.

WARNING: *DO NOT install the system where the water is micorbiologically unsafe or of unkown quality without adequate disinfection before or after the system.*

- 1. FAUCET** - The faucet should be placed near the sink where drinking water is normally obtained. Convenience of use (filling of water pitchers and glasses), and an open area beneath the faucet under the sink for attaching product tubing are considerations. A 2" diameter flat surface is required above and below the mounting site. The thickness of the mounting surface should not exceed 1-1/4". Watch for strengthening webbing on the underside of cast iron sinks.
- 2. DRINKING WATER HOLDING TANK** - The holding tank may be placed where it is convenient within 10 feet of the faucet, under the sink or in an adjacent cabinet are best choices. If a longer run of tubing is required, the tubing should be the 1/2" diameter O.D. size to prevent a high pressure drop. Remember, these tanks can weigh up to 30 pounds when full of water , a firm, level area is required.
- 3. R.O. ASSEMBLY** - The R.O. Assembly may be mounted on either the right or left side of the under-sink area or a cabinet. Mounting in the basement is also an option, one possible location is near the laundry /utility sink where cold potable water and drain access is handy. The mounting location should allow adequate clearance and accessibility for cartridge changes.
- 4. FEED WATER CONNECTION** - The angle stop adapter feed water shut off valve should be located as close to the R.O. assembly as possible, usually the cold water feed at the sink. **USE A POTABLE COLD WATER SUPPLY ONLY.** Softened water is preferred as it will extend the life of the R.O. Membrane.
- 5. DRAIN CONNECTION** - The drain saddle assembly is designed to fit around a standard 1-1/2" OD drain pipe. The drain saddle should always be installed above (before) the trap and on the vertical or horizontal tailpiece. Never install the drain saddle close to the outlet of a garbage disposal or plugging of the R.O. drain line may occur. If discharging into an utility sink or standpipe, an air gap of greater than 1" above the flood rim must be provided. Do NOT connect the system drain line to the dishwasher drain or near the garbage disposal.

2D - Prepare The Area For Installation

To save time it is often advised to call the customer and request they clear under the sink prior to arrival. Otherwise, remove supplies from under the sink and stack them neatly away from the working area. Arrange a light for the work area, if necessary.

If a basement installation is called for, determine where components will be located and how they will be mounted. Special mounting brackets and hardware may be necessary to secure the system to a wall or ceiling joists.

Inspect cold water supply line and drain to determine if any special fittings, in addition to what is included in the kit, are required.

2E - Prepare the R.O. for Installation

Open shipping carton and remove components. Check that all installation parts are present which includes the R.O. assembly, storage tank, faucet, installation hardware and tubing.

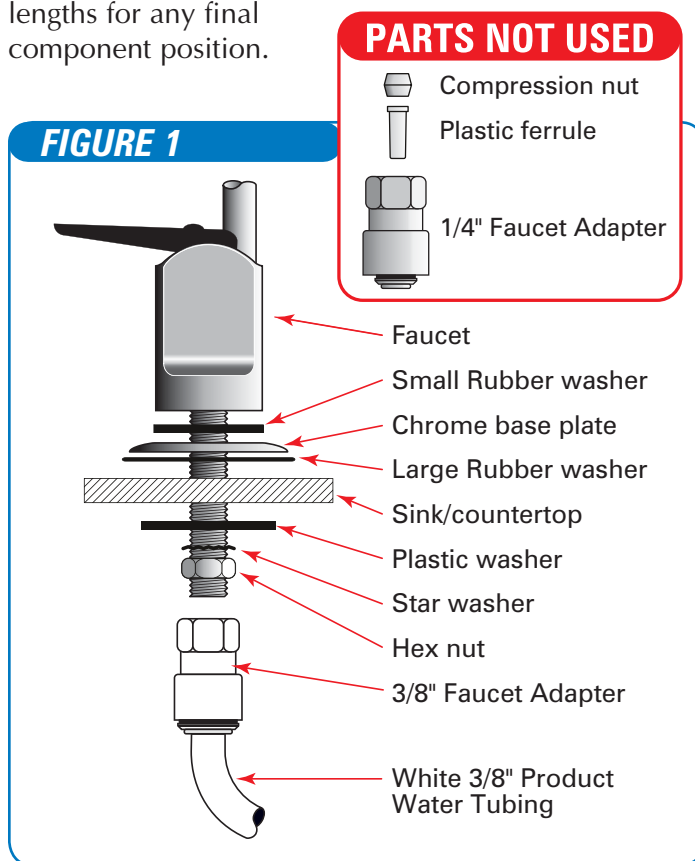
Check that the air supply in the empty tank is approximately 7 psi. Adjust if necessary.

Section 3: Installation Steps

All plumbing should be done in accordance with state and local plumbing codes.

NOTE: Some codes may require installation by a licensed plumber; check with the local plumbing authority prior to installation.

In restricted under-sink areas, it may be easier to install the faucet first. Allow adequate tubing lengths for any final component position.



3A - Install The Faucet

See *Figure 1* for Faucet Installation Diagram making note of the parts included in the faucet kit that are not used in this installation.

Inside the Faucet Assembly box there are extra parts included that are not used with these particular systems. Just dispose of the extra parts.

The customer should be consulted before determining faucet location. The faucet should be positioned so that it empties into the sink and the spout swivels freely for convenience.

If the sink already has a hole provided that can accommodate the R.O. faucet, then no drilling is required and you can proceed to the section on mounting the faucet.

3A1 - Make The Faucet Mounting Hole

IMPORTANT: It is mandatory that safety glasses be worn during sink hole drilling operations to prevent eye injury.

Before starting the hole making operation, always check below the sink so that nothing interferes with mounting the faucet such as reinforcing ribs, support brackets or cabinet construction.

Stainless Steel Sink

Recommended tools:

- Center punch
- Variable speed drill and high speed drill bits.
- Greenlee chassis punch 7/8" hole size (alternate 9/16" size may be used for non air gap faucet)
- Protective gloves

Procedure:

- a. Center punch a small indent at the desired faucet location.
- b. Slowly drill the required pilot hole for the chassis punch.
- c. Set up the chassis punch per instructions and tighten nut to cut the desired hole size.
- d. Clean up sharp edges with a file if necessary.

Porcelain/Enamel/Ceramic On Sheet Metal Or Cast Iron Base:

Recommended tools:

- Variable speed drill
- Relton porcelain cutter tool set 7/8" size (alternate 9/16" size may be used for air gap or non air gap faucet)
- Plumber's putty

It is important to understand what is involved in this procedure. First, the glassy layer of porcelain must be penetrated through to the base metal. Second, a center disc of porcelain must be removed while protecting the surrounding porcelain against chipping or fracturing. Third, the base metal must be drilled through to complete the hole.

Procedure:

- a. Mark the center for the 7/8" hole
- b. Form shallow putty dam around hole area and fill with enough water to lubricate carbide drill bit.
- c. Carefully drill pilot hole through porcelain/enamel and base metal using carbide type pilot drill.

IMPORTANT: Always operate drill with light pressure at slow speed (300-400 rpm).

- d. Insert pilot tip of spring-loaded porcelain cutter into pilot hole.
- e. Drill porcelain/enamel using spring-loaded porcelain cutter, making certain a complete ring has been cut through the porcelain/enamel to the metal base.
- f. Change to the metal cutter. With slow speed and light pressure, cut away the inner porcelain/enamel disc down to base metal. Make certain that the cutter does not touch outer rim of the cut porcelain/enamel. Continue with this bit to cut through metal until sink has been completely penetrated.

IMPORTANT: When using a porcelain cutter it is critical to take precautions that it is always in a sharpened condition. Dull cutters are known to chip sinks.

3A2 - Mount the Faucet:

- a. Familiarize yourself with all components shown in the faucet diagram, *Figure 1*. Dispose of unused parts shown in red box of illustration.
- b. Remove plastic protective coating from chrome base plate as shown in *Photo 1*. Install the small rubber washer, chrome base plate and large rubber washer onto the threaded nipple of the faucet as shown in *Figure 1*.



PHOTO 1

NOTE: Rubber washer may be replaced with bead of plumber's putty for neater appearance.

- c. Feed the threaded nipple through sink/counter mounting hole and orient the faucet.
- d. From below sink/counter assemble the black plastic washer, star washer and hex nut on threaded nipple and tighten by hand.
- e. After rechecking faucet orientation, tighten hex nut (9/16" wrench or deep socket) until faucet feels secure.
- f. From below sink/counter, install 3/8" Faucet Connector on the faucet threaded nipple and tighten, *Photo 2*. (Do not over tighten or fitting may break.)
- g. From above the sink make any minor orientation corrections by turning the faucet with a padded adjustable wrench.



PHOTO 2

NOTE: Flats on chrome faucet may be used for tightening with an adjustable wrench. Use care not to mar chrome finish.

3B - Install Angle Stop Valve

The Angle Stop Adapter as shown in *Photo 3*, fits both 3/8" and 1/2" angle stop feed water valves. For 1/2" valves, remove the 3/8" adapter and discard.

1. Shut-off water supply at the angle stop valve. *See Photo 4.*
2. Disconnect riser from angle stop valve. *See Photo 5.*
3. Ensure that the sealing gasket is fully inserted into the Angle Stop Valve female thread.
4. Install Angle Stop Adapter Valve on supply valve. *See Photo 6.*
5. Connect the riser to the Angle Stop Adapter Valve. *See Photo 7.*



3C - Storage Tank, Sanitizing

Pre-Filling & Sanitizing the Storage Tank

Pre-filling the tank is always recommended so there is pressure to check for leaks and several gallons of water to flush the carbon Post-Filter. Tanks should be sanitized for 15 minutes to be completely sanitized. It is important to use a sanitizer when pre-filling tank so the solution can sanitize the tubing, fittings, and faucet

at the time of installation and startup. Put 50 drops of a good quality unscented 5-1/4% liquid bleach (this is 1/2 tsp. or 3 ml) directly into the tank.

1. Wrap the threads on the top of the water storage tank 3 times with plumbers (Teflon) tape only. Make sure it is tight, but not over tight.
2. Connect the tank ball valve, *Photo 8*, to the top of the water storage tank, *Photo 9*.
3. Insert a length of feed water tubing into the Angle Stop Adapter.
4. Insert free end of feed water tubing into the fitting on the storage tank.
5. Gradually open feed water valve and tank valve and allow tank to fill. This is a very quick operation.
6. Turn off feed water valve and tank valve, remove tubing from tank and set tank aside for 15 minutes minimum. (A small amount of water will be released from the connection when tubing is removed from the tank.)



NOTE: Do not tamper with the air valve on the storage tank. It has been preset and screwed on with blue cap by the manufacturers.

3D - Install the Drain Connection

IMPORTANT: Before starting this procedure, inspect the condition of the drain piping, especially in older homes where the traps and tailpieces can be deceptively thin and frail. If in poor condition, it is wise to inform the customer that the condition should be remedied.

The drain saddle assembly is designed to fit around a standard 1-1/2" OD drain pipe.

The drain saddle should always be installed above (before) the trap and on the vertical or horizontal tailpiece. Never install the drain saddle close to the outlet of a garbage disposal or plugging of the R.O. drain line may occur.

1. Peel adhesive covering from the back of foam square gasket and line up with the hole in the saddle drain and apply. This gasket provides a leak proof seal on the drain stand pipe.
2. Position both halves of drain saddle at desired location on drain pipe.
3. Use bolts and nuts to clamp drain saddle onto drain pipe. Do not over tighten and make sure there is equal space between saddle halves on each side.



PHOTO 10

4. Using a 1/4" drill bit, carefully drill hole through threaded fitting of drain saddle (See Photo 10.) being careful not to drill through opposite side of drain pipe.

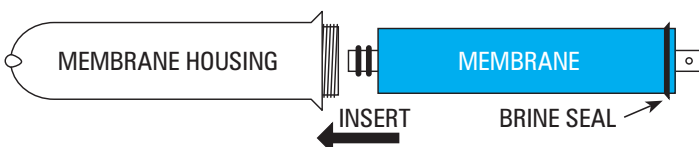


PHOTO 11

5. Insert drain tubing into compression nut and tighten onto drain saddle (See Photo 11.).

3E - Install the R.O. Membrane

The R.O. Membrane has been shipped to you in a special preservative. Unscrew the end cap from the membrane housing on the appliance, insert the membrane as illustrated below.



IMPORTANT: Keep the membrane and your hands clean in order to avoid bacterial contamination of the membrane.

The O-rings on the product water tube of the membrane **MUST FULLY SEAT** in the membrane housing for proper operation. Also make sure that the Brine Seal on the membrane seals with no gaps or wrinkles inside the membrane housing. Once the membrane is installed, replace the end cap and reconnect the tubing.

To insure that all the special preservative is flushed from the system before use, **DO NOT** use the first two tankfuls of water produced by the system.

3F - Make Initial Tubing Connections

It is advantageous to make some of the tubing connections at this time, since the under sink work area is cramped and access to the components is easier.



The shipping plugs (used to keep the system sealed from external elements during shipping) must first be removed prior to making the tube connections to the R.O. Refer to Page 10 for proper use and operation of the quick connect fittings on the R.O. system.

3G - Install the R.O. Assembly & Storage Assembly

The R.O. assembly is usually mounted to the right or left sink cabinet sidewall, taking into consideration the space available and the tank location. Generally, the tank is placed in the rear of the cabinet while the R.O. assembly is positioned toward the front for cartridge accessibility.

To mount the R.O. assembly elevate at least 2" off the cabinet floor and, while keeping level, mark the

location of the mounting holes on cabinet sidewall. Make small pilot holes with an awl or drill and screw in the two mounting screws, leaving just enough protruding to allow bracket mounting slots to slide over them.

NOTE: *If the cabinet sidewalls are not of solid construction, the purification assembly can be set on the cabinet floor and held against the sidewall with the mounting screws.*

The tank may be oriented either vertically or horizontally. It is generally placed to the rear of the cabinet but can be set in the front center (between the sink basins) for ease of access if space permits.

3H - Make Final Tubing Connections

With all of the components in place, the final tubing connections can be made. When routing tubing between components, several guidelines should be observed.

- Tubing runs should generally follow the contour of the cabinets rather than interfere with the cabinet storage area.
- Strive for neatness and an orderly tubing “flow” using fasteners (e.g. insulated staples) to secure the tubing. Cut tubing to the desired length.
- Arrange the tubing so there are no sharp bends and leave some “play” in the tubing for ease of servicing.
- Try to keep the tubing from the R.O. assembly to the tank and faucet as short as practical for good flow.

3I - Install Ice Maker Hookup (optional)

NOTE: *Check with refrigerator manufacturer for compatibility with your refrigerator model.*

The R.O. drinking water appliance can be connected to any standard refrigerator ice maker or ice maker/water dispenser. It should never be connected to a commercial type bar ice maker.

Hooking up an ice maker involves connecting a tee with shut off valve into the faucet tubing and routing tubing over to the refrigerator. Do not hook-up to existing copper tubing.

Before turning off the existing tap water supply to a refrigerator ice maker, always shut off the ice maker first (usually by lifting the lever arm above the bin to

the uppermost position). The ice maker should only be turned on again after the R.O. system has been drained several times and the tank has a full supply of water.

NOTE: *Before any service is performed on the RO system, always turn off ice maker valve and the ice maker unit. Only turn on when system is operating and tank is full.*

3J - Start Up the System

1. Double check that all connections are secure. Also make sure all filter housings are tightened securely by using the housing wrench provided.
2. Turn on feed water valve and inspect all connections for leaks. If any leaks are noted, turn off valve and correct before proceeding.
3. Turn on storage tank valve and open faucet until a steady stream of water flows. Close faucet, wait at least 5 minutes and carefully check for leaks. Correct as necessary.

3K - Flush System of Sanitizers and Check Operation.

1. Lift faucet handle and allow tank to drain completely of sanitizing solution. **Do Not Use This Water.** When tank is empty, the faucet will steadily drip. This is the rate water is processed by the R.O. system.
2. Inspect system for leaks. Instruct customer to wait at least 4 hours and drain tank again. The water should be discarded as it may contain some preservative/disinfectant solution.
3. System should be ready to use as soon as the tank refills. If any objectionable taste is noticed after second tank draining, instruct customer to wait and drain tank the following day. Only at this time should an ice maker be turned on if one is connected to the system.

Section 4: Operation & Maintenance

4A - Normal Operation

1. It is normal for the Total Dissolved Solids (T.D.S.) of the water to be higher than normal during the first 5 gallons of operation, this is due to the sanitizing solution and the new Post-Filter. After this water is rinsed to drain, the removal rate should stabilize at a value greater than 75%. Water pressure affects the production rate and quality.

2. R.O. systems produce drinking water at relatively slow rates, it can take up to 8 hours or more to fill the holding tank. Normal operation is to let the Holding Tank fill with water and then draw water as is needed. When the pressure in the Holding Tank falls to a given pressure (as the water is being used) the Automatic Shut Off Valve (A.S.O. Valve) will start water production and the system will refill the Holding Tank. When the Holding Tank is full and no water is being used, the A.S.O. Valve will automatically shut off the feed water to conserve water.

The more water that is used (up to the capacity of the system) the better the R.O. system will function. Utilize other uses for the water, such as flowers, pets and rinsing glassware.

After periods of non-use, such as a week's vacation, it is better to empty the holding tank and allow the system to produce fresh water for use. If the system is not used for 3-4 weeks or longer, it is a good idea to re-sanitize the system and to change the Activated Carbon and Sediment Filters.

NOTE: It is strongly recommended to SHUT OFF the water supply when the system will not be used for a long period of time.

B - Changing Filters

IMPORTANT: This R.O. System contains filters which must be replaced at regular intervals to maintain proper performance. Use only factory approved filters.

Please see Page 2 for the recommended interval for changing the filters. Local conditions may dictate more frequent changes.

Use a drip pan to catch any water that may spill when the Filter Housings are removed.

1. Close the Angle Stop Adapter Valve by turning clockwise and open the Dispensing Faucet by lifting the handle. Allow the Holding Tank to empty.
2. Loosen and remove the appropriate Filter Housing. Discard the cartridge(s).
3. Wash the inside of the Housing(s) using a mild detergent and a soft cloth. Do not use abrasive cleaners or pads. Thoroughly rinse all soap from the housing before reassembly.
4. To sanitize the system and replace the filter cartridge(s):

NOTE: The system should be sanitized before installing the Activated Carbon Post Filter Cartridge.

- a. Use a good quality unscented 5-1/4% liquid bleach such as Clorox.
- b. Add one cap full of bleach (this is 2 tsp. or 10 ml) to the Sediment Filter Housing. Install the Sediment Pre-Filter only. Check the Housing O-ring for proper position in its groove, replace Sediment Filter Housing on R.O. assembly.
- c. Add one cap full of bleach to the Activated Carbon Post-Filter Housing. Carefully fill the housing with tap water and temporarily install the housing, without the Activated Carbon Post-Filter.
- d. The Dispensing Faucet should be open, slowly open the Angle Stop Adapter Valve on the Feed Water Line.
- e. As soon as water begins to drip out of the Dispensing Faucet, close the Faucet.
- f. Let the system stand for 15 minutes.
- g. At the end of 15 minutes, in the following order, close the Angle Stop Adapter Valve, close the Holding Tank Valve and open the Dispensing Faucet to release the pressure.
- h. Remove the Post Carbon Filter Housing and empty (Repeat procedure if your system has a Pre Carbon Filter Housing). Remove any wrapping/packaging from carbon cartridge (s) and install in housings. Check the O-ring to insure that it is positioned properly in its groove and replace Housing(s) on R.O. unit.
- i. Disconnect the product water tubing that runs from the Holding Tank. Put 50 drops of bleach (this is 1/2 tsp. or 3 ml) into the tubing and reconnect it.
- k. Slowly open the Angle Stop Adapter Valve. When water begins dripping out of the Dispensing Faucet, in the following order, close the Faucet and then open the Holding Tank Valve.
- l. Do not open the Faucet for at least 8 hours.
- m. Discard the first two full tanks of water produced, they will contain chlorine.
- n. When the Faucet is first opened, expect air and carbon fines (very fine black powder), from the new carbon filter (s) to be rinsed out. This is normal for the first tank of water.

C - Additional Operation Requirements

The following additional conditions must be followed to stay within warranty.

Please contact your insurance carrier before installing the water system. The manufacturer's insurance **WILL NOT** cover water damage if the homeowner/user **DOES NOT** accept the following requirements.

- Must install a **Pressure Regulator/Pressure Limiting Valve** and **Leak Detector Shut-Off Device**.
- Homeowner/user is obligated to properly maintain the water system unit semi-annual and/or annually, which includes the following:
 - Replace the O-Ring Seals on the Filter Housings, Fittings, and Filter Cartridges with proper replacement parts.
 - Replace the Fittings Connectors with proper replacement parts.
 - Replace the Filter Housings with proper replacement parts.

- Replace the Filter Cartridges with the correct size and length replacements.
- Replace the Teflon Tape on ALL connector fittings.

All O-Ring Seals, Fittings, Filter Housings, and Teflon Tape wear out after a certain period of time. The lifetime of these components are subject to water quality. Therefore, adequate maintenance is necessary and mandatory.

- It is recommended the entire system be replaced after one year of use.
- Please contact a professional, licensed installer or plumber to meet the above requirements. The homeowner/user assumes the risk for failing to comply with the above requirements. The manufacturer's insurance **WILL NOT** cover any loss. Please consult your own insurance carrier for terms and conditions.

Proper Use of Quick Connect Fittings...

Your new Reverse Osmosis Drinking Water Appliance is outfitted with user-friendly quick connect push-in fittings. Proper use of the fittings is shown in the diagrams.

It is important that the tubing selected for use with these connectors be of high quality, exact size and roundness, and with no surface nicks or scratches. If it is necessary to cut the tubing, use a plastic tubing cutter or sharp razor knife. Make a clean, square cut.

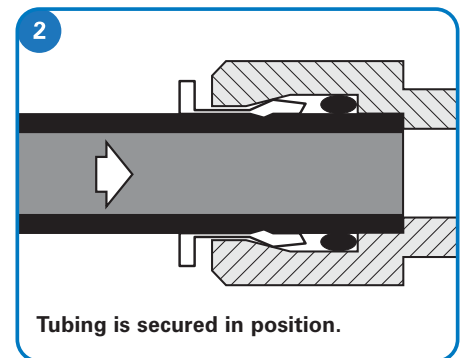
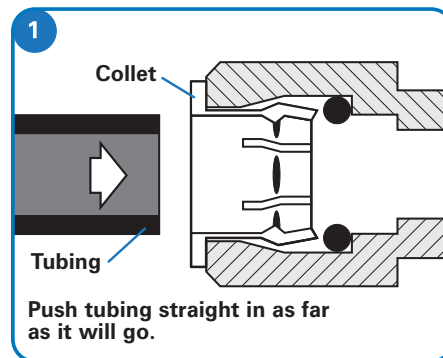
A blue locking clip is installed in certain fittings to provide extra security. Remove this clip first before trying to remove tubing by sliding away from fitting.

Should a leak occur at a fitting, the cause is usually defective tubing.

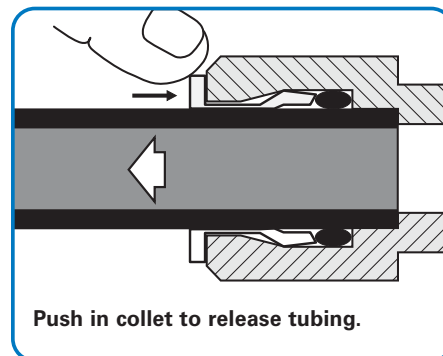
To fix:

- Relieve pressure
- Release tubing
- Cut off at least 1/4" from end
- Reattach tubing
- Confirm connection is leak free

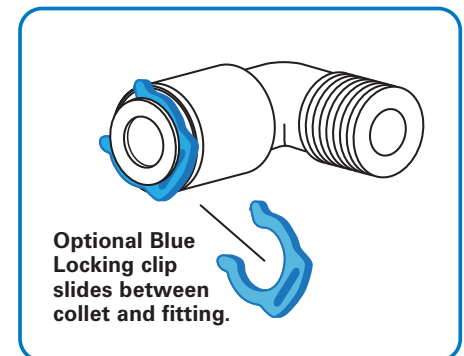
To Attach Tubing...



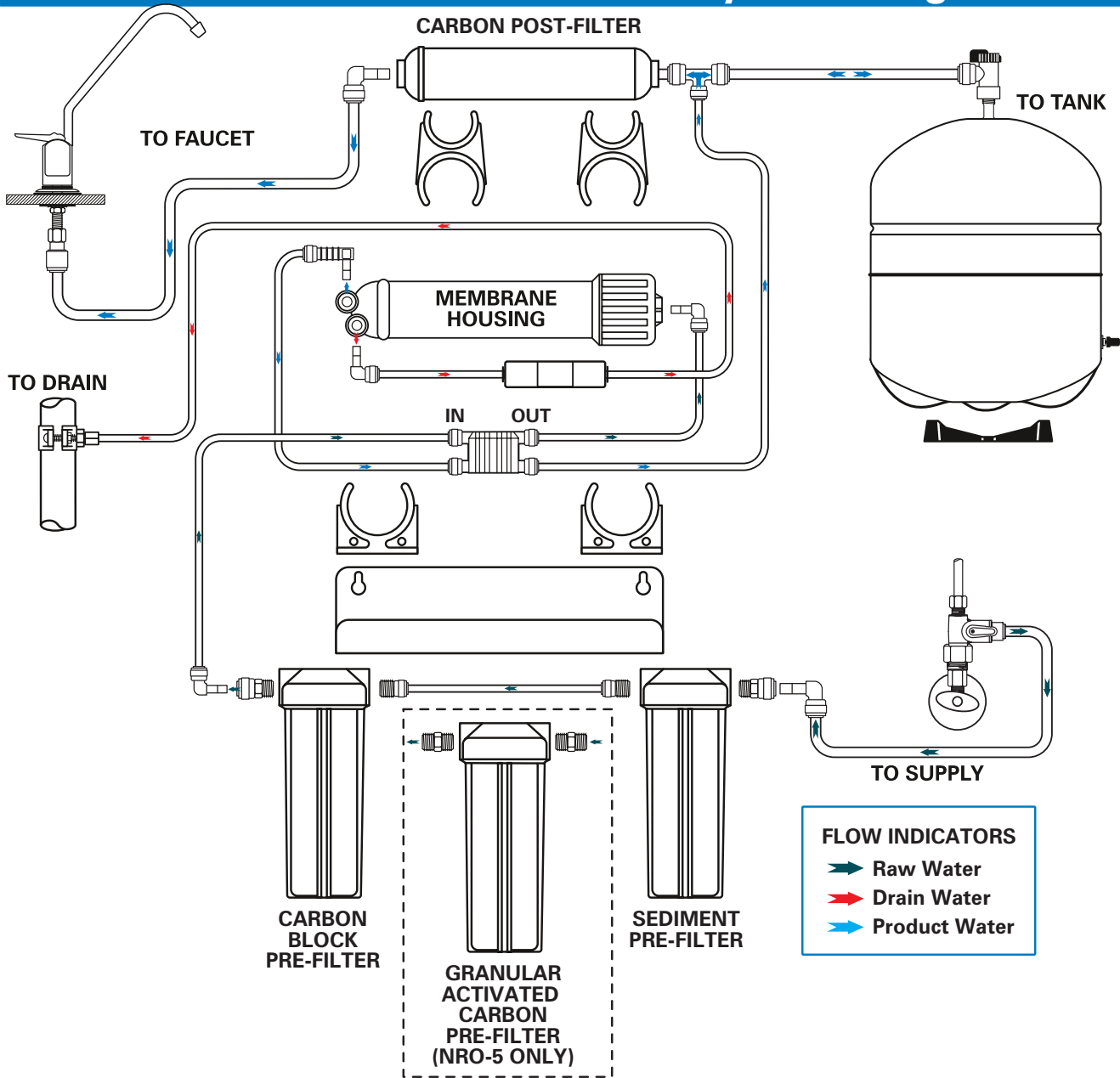
To Release Tubing...



Optional Locking Clip...



Residential Reverse Osmosis System Diagram



Residential Reverse Osmosis System Warranty

All products are covered by warranty against manufacturing and material defects only for one year and with proper adequate maintenance. Product compatibility and application suitability are the sole responsibility of the user. Installation must be conducted in accordance with supplier's express written recommendations, complying with recognized codes of practice and relevant national standards, and all systems must be properly maintained. The manufacturer warranty covers systems for water use only and water pressure regulated area only, unless otherwise specified in writing. Leaks and other malfunctions resulting from improper installation or inadequate maintenance are not covered by the warranty, and insurance liability coverage is the responsibility of the user.