Reverse Osmosis Filtration System

Models PXRQ15RBL and PNRQ15RBL

Questions? Call 800.GE.CARES (800.432.2737) or visit our Website at: GEAppliances.com In Canada, call 1.800.561.3344 or visit www.GEAppliances.ca

WARNING: Read entire manual. Failure to follow all guides and rules could cause personal injury or property damage.

• Check with your state and/or local public works department for plumbing codes. You must follow their guides as you install the Water Filtration system.

NOTE: Failure to comply with these installation instructions will void the product warranty, and the installer will be responsible for any service, repair or damages caused thereby.

TOOLS AND MATERIALS REQUIRED FOR INSTALLATION

- Electric drill and 1-1/4" Drill Bit (type as required) if mounting is needed for faucet
- Two (2) Adjustable Wrenches
- 1/16" Drill Bit (optional for pilot holes)
- Tape Measure
- Phillips and Flat Blade Screwdrivers
- Utility Knife
- If your main water line is a rigid pipe, you will require a compression fitting and possibly other plumbing hardware to complete the installation.

IMPORTANT — To avoid damaging the sink, consult a qualified plumber or installer for drilling procedures. Special drill bits may be needed for porcelain or stainless steel.

CONTENTS INCLUDED

- Reverse Osmosis Assembly and Tubing
- Product Literature (Owner's Manual and Installation Instructions)
- Performance Data Sheet
- Feed Water Adapter

WITH PRODUCT

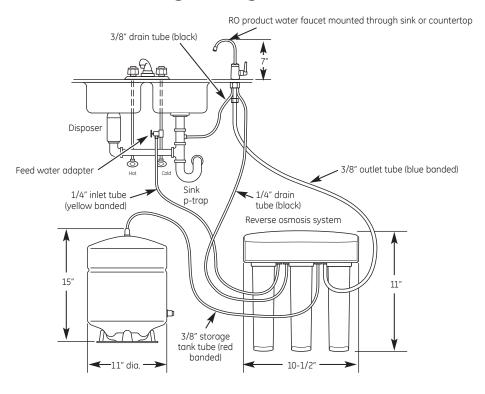
- Faucet Assembly with Electronic Base Monitor and Tubing
- Storage Tank
- Drain Line Adapter

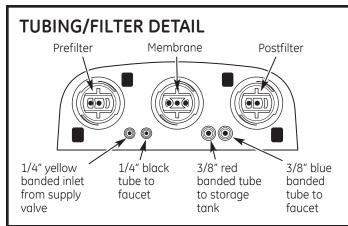
BEFORE BEGINNING INSTALLATION

Read these instructions completely and carefully.

- **IMPORTANT** Save these instructions for local inspector's use.
- **IMPORTANT** Observe all governing codes and ordinances.
- **Note to Installer** Be sure to leave these instructions with the Consumer.
- **Note to Consumer** Keep these instructions for future reference.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.
- A shutoff valve must be available or added near the installation point.

Things to Check Before Beginning Installation





FEED WATER

The water supply to the undercounter Reverse Osmosis system must have the qualities listed in the specifications. Municipal water supplies most often will have these qualities. Well water may need conditioning—have the water tested by a water analysis laboratory and get their recommendations for treatment.

IMPORTANT — For water with a hardness greater than 10 grains (at 6.9 pH), the use of a softener is recommended. Failure to install a softener will reduce the life of the Reverse Osmosis cartridge.

FILTRATION DRAIN CONNECTION

A suitable drain point and air gap (check your state and/or local codes) are needed for reject water from the Reverse Osmosis membrane cartridge.

RO FAUCET

The RO product water faucet installs on the sink or on the countertop next to the sink. Often, it is installed in an existing sink spray attachment hole or a hole may be drilled. Space is required underneath for tubing to and from the faucet, and for securing the faucet in place. All faucet connections are done on or above the sink or countertop.

BASEMENT INSTALLATION

If installing in a basement, leave enough tubing in place during installation to be able to move unit to floor for ease at servicing and making filter/membrane changes. Additional tubing and fittings required.

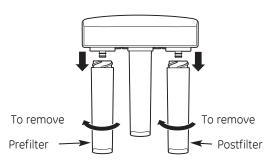
NOTE: See parts list on page 25 for optional parts that may be required for a basement installation.

REVERSE OSMOSIS ASSEMBLY

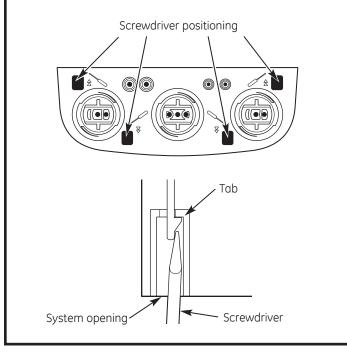
MOUNTING SYSTEM INSTALLATION

Choose a location under the sink to mount the system. Location should be easily accessible, with adequate clearance between the bottom of the filter cartridges and the floor or bottom of the cabinet for removal of filter cartridges. Allow enough space on either side of the system for the tubing connections.

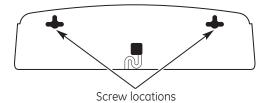
- 1. Remove the prefilter and postfilter cartridges.
- 2. Remove the assembly cover by unlocking the four tabs on the cover from the system.



- **3.** Use a flat-head screwdriver to work from left to right from the underside of the system.
- **4.** Use the icons on the bottom of the system for screwdriver positioning.

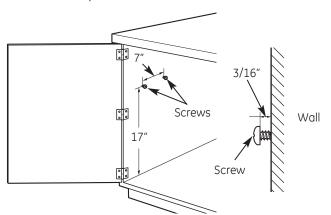


5. Hold the Reverse Osmosis assembly up to the wall surface where you wish to install it. Mark location for screws. There should be a minimum of 17" from the marks to the bottom of the cabinet floor.

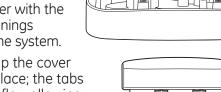


IMPORTANT — Do not get dirt or debris inside the assembly area. Use only to mark mounting hole locations.

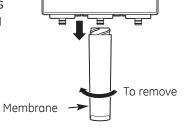
6. Install screws to the wall, leaving a 3/16" clearance between the head of the screw and wall (drill pilot holes if needed).



- 7. Hang the Reverse Osmosis assembly on the screws. Tighten or loosen the screws as desired until the system is secure on the wall.
- 8. To install the cover, line up the front tabs on the cover with the openings in the system.



- 9. Snap the cover in place; the tabs will flex, allowing the cover to snap in place.
- **10.** Remove the membrane cartridge.



FEED WATER SUPPLY

Check and comply with local plumbing codes as you plan, then install a cold feed water supply fitting.

A. PREFERRED INSTALLATION

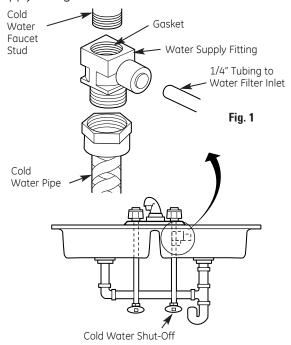
Utilizing existing kitchen sink water supply valve and removable faucet tubing.

A typical connection using the included water supply fitting is shown in the illustration below.

- 1. Close the water shut-off valve that is immediately in front of the supply tube and open the faucets to drain water from the sink cold water pipe.
- **2.** Remove the nut that connects the cold water faucet to the supply tube. Some water may spill out.

NOTES:

- Be sure to turn off the water supply and open a faucet to drain the pipe.
- Make sure the gasket is installed in the water supply fitting.



- 3. Hand-tighten the water supply fitting onto the cold water faucet. Be sure the gasket, as shown, is in place before final assembly. Finish tightening with an adjustable wrench. Be careful not to overtighten or cross-thread, since damage to the threads can occur. Make sure the 1/4" quick connection is not against a wall that causes the supply tubing connection to bend. A quarter turn to tighten or loosen the adapter may be necessary to avoid this.
- 4. Reconnect faucet tubing line to the fitting.
- **5.** Install tubing. (See *Installing the Tubing* section.)

B. OPTIONAL INSTALLATION 1

Utilizing existing kitchen sink water supply valve (A) and removable faucet tubing (B).

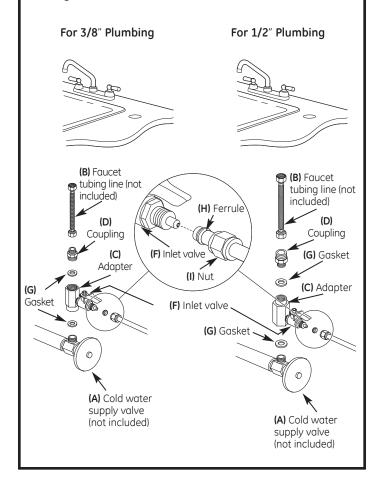
- **1.** Refer to illustration below to complete assembly depending on supply valve size (A).
- 2. Close the cold water supply valve (A) under the sink.
- **3.** Unscrew the flexible tubing line (B) from the supply valve (A) that connects to the COLD water riser.

NOTE: For rigid pipe, see *D. Optional Rigid Pipe Installation* on page 11.

Note Adapter (C) orientation:

3/8-inch installation—Rounded end of adapter (C) connects to supply valve (A).

1/2-inch installation—Rounded end of adapter (C) connects to coupling (D), then to existing faucet tubing (B).



FEED WATER SUPPLY (cont.)

B. OPTIONAL INSTALLATION 1 (CONT.)

- 4. Assemble adapter (C) and coupling (D) as shown in illustration on page 9, per your configuration. Ensure that the gasket (G) is in place before final assembly. Start installation by hand, then finish tightening with adjustable wrench. Be careful not to overtighten or cross-thread since damage to threads may occur.
- 5. Hand-tighten assembled adapter (C) onto supply valve (A) for the proper size installation. Be sure gasket (G) is in place before final assembly. Start installation by hand; then finish tightening with an adjustable wrench. Be careful not to overtighten or cross-thread since damage to threads may occur.
- **6.** Reconnect faucet tubing line (B) to top of adapter (C).
- 7. Cut wire ties on tubing coils, using care not to damage tubes or parts if using a utility knife.
- 8. Remove the 1/2" nut (I) and ferrule (H) from end of inlet valve. Using the yellow banded tubing provided, place the nut (I) and ferrule (H) onto the tubing and install onto inlet valve (F) as shown at left. Tighten with adjustable wrench. Be careful not to overtighten or cross-thread since damage to threads may occur.

NOTE: Inspect the ends of the tubing prior to installation to be sure there are no imperfections and that the end of the tubing is cut square. It may be necessary to cut the tubing again.

C. OPTIONAL INSTALLATION 2

Where codes permit (Requires additional parts)
*For 1/2" OD or larger metal tubing only.

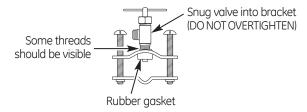
NOTE: Codes in the state of Massachusetts require installation by a licensed plumber and do not permit the use of the saddle valve. For installation, use plumbing code 248-CMR of the Commonwealth of Massachusetts.

Saddle valve is available through GE Parts and Services at 1.800.626.2002, part number WS15X10023. Self-piercing saddle valves are not recommended.

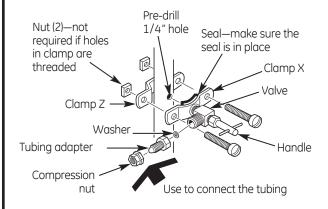
1. Turn off the cold water supply and attach saddle valve as required by product selection. (Be sure to follow manufacturer's Installation Instructions.)

WARNING: Many homes are electrically grounded through the plumbing. To protect yourself from serious injury or fatal shock, use a battery-powered hand drill only to make the hole. DO NOT USE AN ELECTRIC DRILL.

- 2. Close the water supply valve by turning the handle clockwise.
- 3. Open the main water supply valve and several house faucets to purge air from the system. Close faucets when water runs smoothly.



Optional water supply connection (using saddle valve)*
*For 1/2 " OD or larger metal tubing only.



D. OPTIONAL RIGID PIPE INSTALLATION

For installation with rigid pipe between supply valve and sink faucet.

Option 1

- **1.** Remove pipe from supply valve and sink faucet.
- 2. Obtain flexible pipe sized to your plumbing.
- 3. Install flexible pipe.
- **4.** GO back to *B. OPTIONAL INSTALLATION 1* section, step 4.

Option 2

- 1. Obtain compression fittings to fit rigid pipe.
- **2.** Obtain any other fittings required to connect compression fittings to adapter.

NOTE: Adapter has 1/2" and 3/8" internal and external threads.

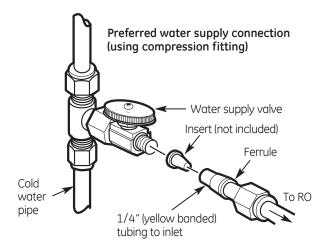
- 3. Remove pipe from supply valve.
- **4.** Cut pipe to fit length of assembled fittings and adapter.
- 5. Install compression fitting to pipe.
- **6.** GO back to *B. OPTIONAL INSTALLATION 1* section, step 4.

NOTE: Above described materials are not included with the product.

E. OPTIONAL REMOTE LOCATION INSTALLATION

(requires additional part)

- 1. Turn off the cold water supply.
- 2. Complying with plumbing codes, install a fitting on the cold water pipe to adapt 1/4" OD tubing. A typical connection is shown in illustration below. Make sure a water supply valve is used.
- 3. If the RO unit is to be installed more than 6 feet from the valve, replace the yellow banded inlet tubing with a longer length of GE 1/4" tubing. A 33-foot length of 1/4" tubing is available through GE Parts and Services at 1.800.626.2002, part number WS07X10018. DO NOT SUBSTITUTE TUBING OF UNKNOWN QUALITY.
- 4. If the RO unit is to be installed more than 6 feet from the faucet, replace the blue banded outlet tubing with a longer length of GE 3/8" tubing. A 33-foot length is available through GE Parts and Services at 1.800.626.2002, part number WS07X10019. See Faucet Mounting Installation on page 13 for more details. DO NOT SUBSTITUTE TUBING OF UNKNOWN QUALITY.

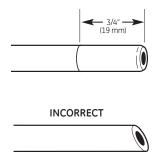


If you are using copper tubing, **DO NOT** connect it directly onto the RO unit. Purchase a connector and use a short length of the yellow banded tubing provided to make final connection to RO. Do not use copper tubing to attach to icemaker or faucet.

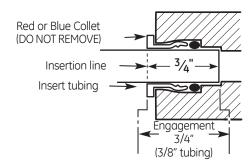
FEED WATER SUPPLY (cont.)

INSTALLING THE TUBING TO TANK AND FAUCET

1. Measure 3/4" from the end of each remaining piece of tubing (faucet end and inlet end) and mark with a pencil. (Check for roundness, smoothness, cuts, nicks, flat spots and sharp edges).



2. Push the tubing firmly into each fitting on the manifold until the line is flush with the fitting collar. (If the tubing is removed, re-cut the end, measure, mark and re-insert). Tubing must be fully inserted to avoid leaks. To remove tubing: depress and hold red or blue collet; pull tubing out to remove.



3. Pull out slightly on tubing to ensure a good seal.

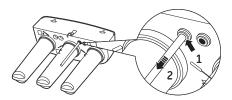
FLOW RESTRICTOR REPLACEMENT PROCEDURE

Each time the Reverse Osmosis cartridge is changed, you will need to replace the flow restrictor in the drain line as well.

Be sure to wash your hands before handling inner parts of the system.

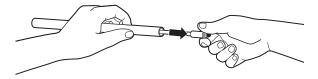
FLOW RESTRICTOR REPLACEMENT PROCEDURE (cont.)

1. Remove drain line tubing by pushing up on the drain line collet with one hand (1) and removing the drain line with the other hand (2).



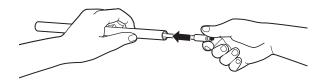
2. Once the drain line has been removed from the system base, grasp the end of the flow restrictor and pull it straight out from the tube*. If the restrictor is difficult to remove by hand, a pair of pliers may be used to grip the end of the restrictor

to aid in removal from the tubing.

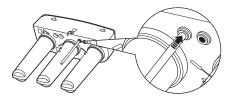


*In some instances, the restrictor may slide out of the drain tubing as it is removed from the drain line port. If, after removing the drain line as described in step 1, the restrictor is no longer in the end of the tubing, check the drain line port. Remove the restrictor from the port and proceed to step 3.

3. Take new restrictor and slide it back into the drain tubing. Insert the restrictor by hand only. Do not use pliers to insert. Make sure to insert restrictor all the way into the tubing. Failure to do so could result in improper operation of the RO system.



4. Reinsert drain line tubing in system base. Tug lightly on the tubing to ensure that the collet is engaged and has a proper grip on the tubing.



FAUCET ASSEMBLY

INSTALL THE FAUCET

Be sure there is room underneath and above the sink to make the needed connections. Before starting, make sure there is sufficient room for the faucet base and unit. Select one of the following places to install the faucet:

- **A.** In an existing sink spray attachment or soap dispenser hole.
- **B**. In a hole to be drilled in the sink top.
- **C**. In a hole to be drilled in the countertop, next to the sink.

NOTES:

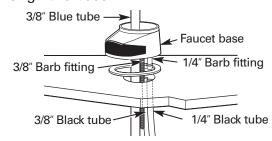
- Be sure the faucet base will fit flat against the surface at the selected location so the bottom gasket between the base and surface area will seal.
- Make sure to leave enough clearance at the back of the faucet in case you need to remove it.

Installation Steps (refer to illustration below for clarification)

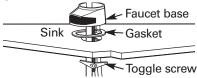
 If drilling is needed, make a 1½" diameter hole. Be sure to use the proper procedure for drilling porcelain or stainless steel.
 Special drill bits may be needed. Consult a qualified plumber for the proper procedure.

NOTE: When drilling in stainless steel, the edges may be sharp and could puncture the tube. Be careful to not cut yourself or damage the tube.

- 2. Remove the faucet body and base by turning the base counterclockwise.
- 3. Push the 1/4" black tube and the 3/8" black tube onto the correct barb fittings on the faucet base. Push the 3/8" blue tube through the base.

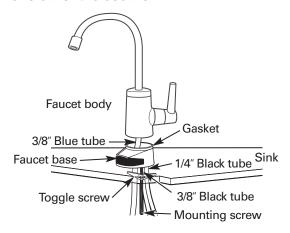


4. Align the gasket to cover the hole completely. Then place the toggle screw on the base into the hole.



INSTALL THE FAUCET (CONT.)

- **5.** Tighten the toggle screw until the base is firmly in place and does not wobble or turn.
- **6.** Push the 3/8" blue tube up to connect it to the fitting on the bottom of the faucet body. It should go in about 3/4". Pull tube slightly to make sure it is secure.

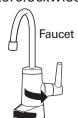


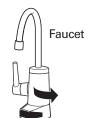
7. Push the faucet body down into the faucet base and turn the faucet 1/8 of a turn counterclockwise until it stops into place.

NOTE: You can install the faucet so the handle is on the right or the left side.

If you want the faucet handle on the right, position the handle on the front-right side of the base before turning 1/8 of a turn counterclockwise.

If you want the faucet handle on the left, position the handle on the rear-left side of the base before turning 1/8 of a turn counterclockwise.





Faucet handle on the RIGHT

Faucet handle on the LEFT

8. Locate the hole at the rear of the base. Insert the set screw and begin to tighten by hand. Finish tightening with the Allen wrench provided in the packet. DO NOT OVERTIGHTEN.



FAUCET ASSEMBLY (cont.)

OPTIONAL ONE-PERSON FAUCET TUBING INSTALLATION

1. From under the sink, gather the 1/4" drain line (black), 3/8" drain line (black) and 3/8" outlet tube (blue banded) in one hand with the drain tubes the same length and the outlet tube offset approximately 6 inches.



2. Wrap a rubber band around all 3 tubes.



Insert a typical No. 2 pencil through the rubber band location.

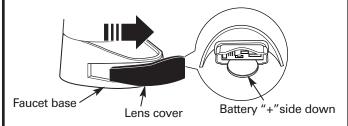


4. Rotate the pencil down until it is in line with the tubing and push up through the mounting hole. Release the grip on the pencil and the tubes will remain in position for easier faucet connection.



INSTALL THE BATTERY

- Remove the lens cover from the faucet base. Grip it from both sides and pull forward.
- Install one CR2032 3V battery with the "+" side DOWN into the battery tray. Slide the battery tray completely back into the base.



- 3. Each light will illuminate in sequence twice. The OK (green) light or Filter (amber) light may stay on for a few extra seconds. If you want to reinitiate the start-up sequence, remove the battery for 90 seconds so the electronics can fully reset; then put the battery back in.
- 4. The OK (green) light will normally flash one time per second when dispensing water. If the system needs service, the Filter or R.O. (amber) lights will flash one time per second while dispensing and will randomly flash when not in use.

NOTE: For lights to change between OK and R.O., the system must detect a change in the filtering process for 25 consecutive seconds. For example, if the system was showing that service was needed, it will take 25 seconds of consecutive filtering for the system to confirm the correct service changes were made.

FOR FILTER CHANGE: Replace the battery when changing the filter. Remove the used battery and wait 90 seconds before installing the new battery to ensure the proper electronics are reset for the next 6 months.

FILTRATION DRAIN CONNECTION

Check and comply with local plumbing codes as you plan.

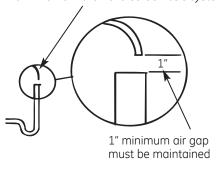
A CAUTION: The options detailed below are the ONLY approved installation configurations. Do not use any drain saddle device.

NOTE: Failure to follow these Installation Instructions will void the warranty, and the installer will be responsible for any service, repair or damages caused thereby.

PREFERRED INSTALLATION: OPTION A—BASEMENT ACCESS INSTALLATION

Route the drain line DIRECTLY from the Reverse Osmosis system to a standpipe in the basement, bypassing the air gap provided in the faucet. The air gap installation is left to the discretion of the installer. The drain line may also be routed to a floor drain or washtub, provided that the air gap is maintained. Special air gap fittings are available to connect the drain line to the top of the standpipe.

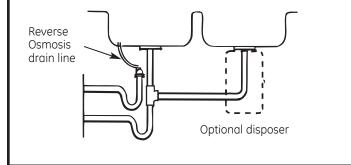
Drain line from the Reverse Osmosis system



PREFERRED INSTALLATION: OPTION B—DRY-VENTED P-TRAP INSTALLATION

Install a separate dry-vented p-trap under the sink to be used exclusively for the Reserve Osmosis drain line. A dry-vented p-trap is a

p-trap that has its own vent/stack. Attach the drain line adapter to the p-trap and secure it with the slip joint nut and washer as shown. The drain line MUST be routed through the air gap provided in the RO water faucet.

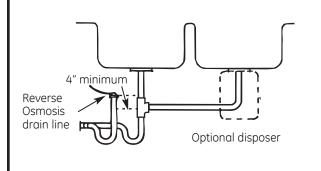


FILTRATION DRAIN CONNECTION (cont.)

PREFERRED INSTALLATION: OPTION C—WET-VENTED P-TRAP INSTALLATION

Install a p-trap under the sink to be used exclusively for the Reverse Osmosis drain line.

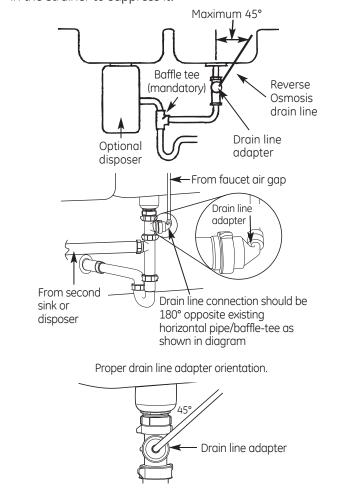
A wet-vented p-trap is a p-trap that shares a common vent/stack. Attach the drain line adapter to the p-trap and secure it with the slip joint nut and washer as shown. The drain line MUST be routed through the air gap provided in the RO water faucet. Locate the Reverse Osmosis p-trap as high as possible (minimum of 4" above horizontal).



SECONDARY INSTALLATION: OPTION D—DRAIN LINE ADAPTER INSTALLATION

A CAUTION: Using Option D may result in clogging under adverse conditions and requires periodic inspection/cleaning by the user.

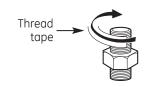
DO NOT INSTALL THE DRAIN LINE DOWNSTREAM OF A DISPOSER OR IN A HORIZONTAL PIPE. Install the drain line adapter under the sink as shown (parts included). The baffle tee shown must be installed to prevent a clog in the Reverse Osmosis drain line. Route the drain line from the air gap to the drain line adapter, ensuring that there are no dips, loops or low spots in the line. The drain line adapter should be aligned vertically so that the hose connection points upward (the hose connection should never be allowed to drop below 45° from this vertical position). This installation MAY result in a slight drain noise in the sink drain when the Reverse Osmosis system is regenerating. If this happens, simply place the sink drain stoppers in the strainer to suppress it.



STORAGE TANK AND STARTUP

STORAGE TANK INSTALLATION

- Remove the protective cap from the top of the tank
- 2. Apply 2-3 wraps of thread tape, in a clockwise direction, to the tank threads.



3. Install the push-to-connect fittings on the threaded fitting on the tank cs shown.



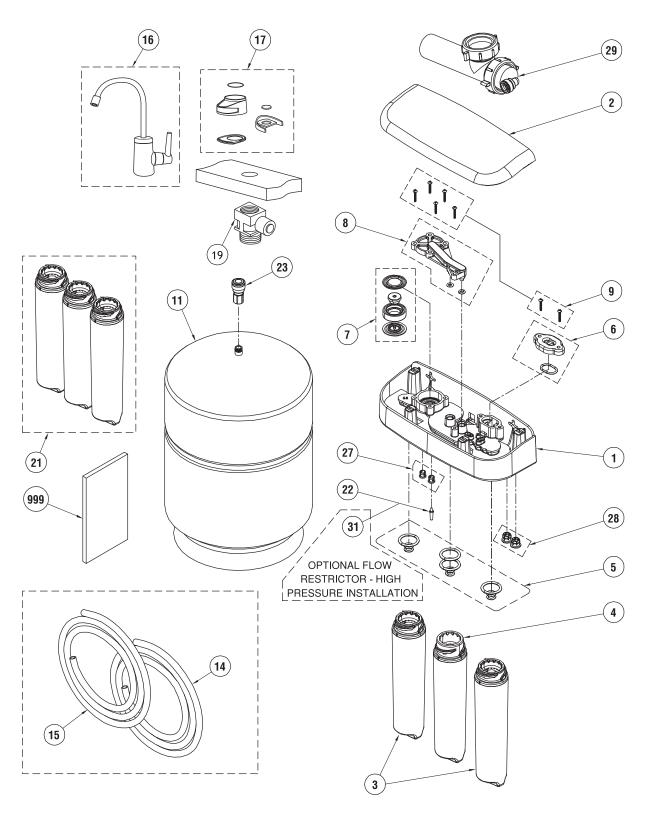
4. Push the 3/8" red banded tubing from the Reverse Osmosis System into the fitting on the storage tank.

SYSTEM STARTUP PROCEDURE

IMPORTANT — If installing the unit in new construction, ensure that house plumbing is flushed thoroughly before opening the water supply valve.

- 1. Check that all tubing connections are secure.
- 2. Turn on the Feed Water Supply Valve.
- 3. Check all connection points for leaks.
- **4.** Follow the **Sanitization** procedures on page 19.
- **5.** After sanitization is complete, reinstall prefilter, postfilter and Reverse Osmosis cartridges.
- **6.** Membrane contains a food grade preservative. Allow the system to fill the tank, then drain it completely four times before using the water from the system.
- 7. Recheck all water connection points a few days later to check for small leaks.

PXRQ15RBL and PNRQ15RBL



OPTIONAL PARTS FOR REMOTE INSTALLATION

			QUAN	QUANTITY	
			Р	Р	
			X	N	
			R	R	
			Q	Q	
			1	1	
			5	5	
REF. NO.	GE PART NO.	PART DESCRIPTION 1	R	R	
			В	В	
			R	L	
0001	WS19X10017	MANIFOLD ASSEMBLY	1	1	
0002	WS19X10018	HOOD	1	1	
0003	FQROPF	PRE AND POSTFILTER SET	1	1	
0004	FQROMF	RO CARTRIDGE	1	1	
0005	WS03X10047	O-RING KIT (4 LG, 6 SM)	1	1	
0006	WS03X10048	FLOW METER CAP & O-RING	1	1	
0007	WS15X10050	SHUT-OFF VALVE ASSEMBLY	1	1	
8000	WS10X10030	SHUT-OFF COVER & CHECK			
		BALL ASSEMBLY	1	1	
0009	WS02X10034	SCREWS, SET OF 7	1	1	
0011	WS32X10021	WATER STORAGE TANK	1	1	
0014	WS07X10018	TUBING, 1/4" DIA. X 33"—WHITE	1	1	
0015	WS07X10019	TUBING, 3/8" DIA. X 33"—WHITE	1	1	
0016	WS15X10076	FAUCET SPOUT, CHROME	1	1	
0017	WS10X10045	FAUCET BASE, CHROME	1	1	
0019	WS60X10016	INLET ADAPTER—NO VALVE	1	1	
0021	WS35X10041	SANITIZATION KIT	1	1	
0022	WS15X10041	FLOW RESTRICTOR	1	1	
0023	WS22X10055	TANK CONNECTOR, 3/8" TUBE	1	1	
0024	WS22X10054	FAUCET FITTING, 3/8" TUBE	1	1	
0027	WS22X10052	COLLET, 1/4" (SET OF 2)	1	1	
0028	WS22X10053	COLLET, 3/8" (SET OF 2)	1	1	
0029	WS18X10006	DRAIN LINE ADAPTER	1	1	
0031	WS15X10049	FLOW RESTRICTOR, HIGH-PRESSURE	_	_	
0999	49-50261-1	OWNER'S MANUAL &			
		INSTALLATION INSTRUCTIONS	1	1	