# **Inspect Shipment**

Your Reverse Osmosis Water Filtration System is shipped complete in one carton. Remove all items from your shipping carton.

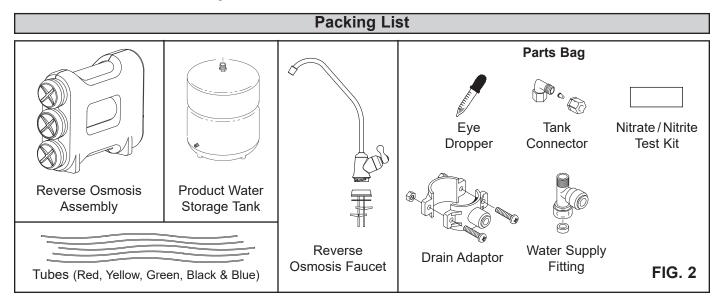
Check all items against the packing list below. Note any items lost or damaged in shipment.

Note any damage to the shipping carton. Refer to the exploded view and parts list in the back of the manual for the part names and numbers of missing or damaged items. If problems exist, refer to the website or the toll free number listed throughout this manual.

Keep the small parts in the parts bag until you are ready to install them.

**NOTE:** Codes in the state of Massachusetts require installation by a licensed plumber and do not permit the use of saddle valves.

If you live in the state of Massachusetts, review plumbing code 248-CMR of the Commonwealth of Massachusetts before proceeding with the installation.



### Do not return the unit to store.

If you have any questions, or there are missing parts or damage, please call **Toll Free 1-866-986-3223** or visit **whirlpoolwatersolutions.com** 

When you call, please be prepared to provide the model, date code, and serial number, found on the rating decal on back.

## **Tools Needed**

Review the tools needed list. See Fig. 3. Gather needed tools before proceeding with the installation.

Read and follow the instructions provided with any tools listed here.



# **Plan Your Installation**

Read through the entire manual before beginning your installation. Follow all steps exactly. Reading this manual will also help you get all the benefits from your system.

Your Reverse Osmosis Water Filtration System can be installed under a sink or in a remote location. Typical remote sites are a laundry room or utility room. Review the location options below and determine where you are going to install your system.

### UNDER THE SINK LOCATION

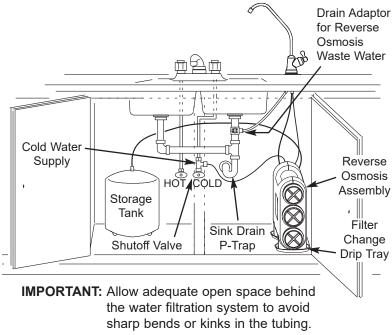
The Reverse Osmosis Filter Assembly and storage tank may be installed in a kitchen or bathroom sink cabinet. See Fig. 4. A suitable drain point is needed for drain water from the Reverse Osmosis system.

### **REMOTE INTERIOR LOCATION**

The Reverse Osmosis Filter Assembly and storage tank may also be installed in a remote interior location away from the Reverse Osmosis Faucet. You will need a nearby water source and drain point. See Fig. 5.

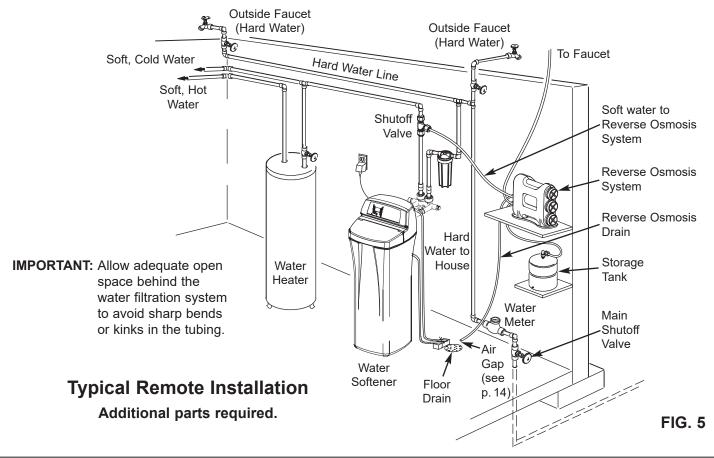
### CHECK SPACE REQUIREMENTS

Check size and position of items for proper installation into location chosen.



## **Typical Under Sink Installation**

All install parts included in package.



# **Overview and Site Preparation**

### OVERVIEW

Read through the entire manual before beginning your installation.

There are seven steps to installing your Reverse Osmosis Water Filtration System. They are as follows:

- STEP A Install Cold Water Supply Fitting
- STEP B Install Drain Adaptor
- **STEP C** Install Storage Tank
- STEP D Install Reverse Osmosis Faucet
- STEP E Connect Tubing
- STEP F Sanitize, Pressure Test & Purge System

These steps are explained in detail over the next few pages. Follow all steps. Reading this manual will also help you receive and use all the benefits your Reverse Osmosis Water Filtration System can give you.

### PREPARE SITE FOR INSTALLATION

- **1**. Before starting, close the hot and cold water shutoff valves (See Figure 6).
- 2. Temporarily place tank and filter assembly into planned location. Check position of items and space required for proper installation. Ensure tubes may be routed without kinking.
- **3**. Remove tank and filter from planned location and set aside.

**NOTE:** You must check and comply with all local plumbing codes.

**NOTE:** Codes in the state of Massachusetts require installation by a licensed plumber and do not permit the use of saddle valves.

If you live in the state of Massachusetts, review plumbing code 248-CMR of the Commonwealth of Massachusetts before proceeding with the installation.

**NOTE:** For best system performance, the feed water to the system should be softened or have hardness less than 10 grains per gallon, with no iron.

#### Questions? Call Toll Free 1-866-986-3223 or visit whirlpoolwatersolutions.com

When you call, please be prepared to provide the model, date code, and serial number, found on the rating decal on back.

# **Step A - Install Cold Water Supply Fitting**

### CHOOSE TYPE OF WATER FITTING TO INSTALL

Check and comply with local plumbing codes as you plan, then install a cold water supply fitting. Refer to the Specifications page for supply water requirements. The fitting must provide a leak-tight connection to the RO 1/4" tubing. A typical connection using the included water supply fitting is shown in Figure 6.. An optional connection using standard plumbing fittings (not included) is shown in Figure 7.

**NOTE:** Local code may dictate which type of water fitting is used. Consult a plumber if you are not familiar with local codes or plumbing procedures.

**NOTE:** Codes in the state of Massachusetts require installation by a licensed plumber and do not permit the use of saddle valves.

If you live in the state of Massachusetts, review plumbing code 248-CMR of the Commonwealth of Massachusetts before proceeding with the installation.

# INSTALL COLD WATER SUPPLY FITTING (Included)

This fitting will be installed on the cold water pipe. The fitting must provide a leak-tight connection to the Reverse Osmosis 1/4" tubing. Locate the cold water line in the sink cabinet. It is recommended, but not required, that the cold water line be soft water.

Complete the following steps to install the water supply fitting.

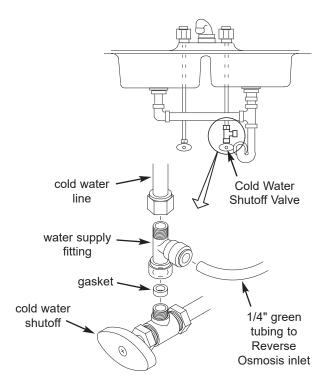
- Close the water shutoff valve (angle stop valve) that the water supply fitting will be installed on, and open faucet(s) to relieve pressure.
- **2**. Disconnect the existing cold water line from the water shutoff valve.
- **3**. Make sure that the water supply fitting's gasket is inside the female threaded portion of the fitting.
- 4. Install the water supply fitting onto the cold water shutoff valve, where the existing cold water line was removed, and hand tighten. Be sure not to cross thread or overtighten.
- **5**. Connect the existing cold water line to the male threaded portion of the water supply fitting and hand tighten. Be sure not to cross thread or overtighten.

#### **OPTIONAL PIPE FITTINGS**

#### (compression type shown)

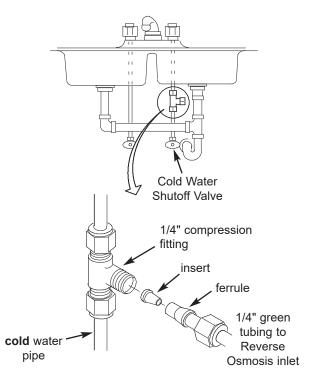
**NOTE:** Be sure to turn off the water supply and open a faucet to drain the pipe.

Complying with plumbing codes, install a fitting on the cold water pipe to adapt 1/4" OD tubing. A typical connection is shown in Figure 7. If threaded fittings are used, be sure to use pipe joint compound or thread sealing tape on outside threads.



Cold Water Supply Connection (using included water supply fitting)

FIG. 6



#### Cold Water Supply Connection (using compression fitting - not included)

# **Step B - Install RO Drain Under Sink**

### INTRODUCTION

A suitable drain point is needed for the drain water from the Reverse Osmosis filter. You have two options:

- Install the Drain Adaptor included with your unit As shown in Figures 8-10, the drain adaptor is installed onto your sink's drain pipe above the P-trap. This is normally used for under sink installations.
- Use another existing drain in your home As shown in Figures 11 and 12, the drain tube from the RO filter runs directly to an open drain. This is often used for remote location installations.

**NOTE:** An incorrectly connected drain point can cause water to leak from the faucet's air gap.

**NOTE:** Local code may restrict the type of drain installation to use. Either drain installation type, if permitted by code, may be used in under sink or remote location installations. Consult a plumber if you are not familiar with plumbing procedures.

### **INSTALL DRAIN ADAPTOR**

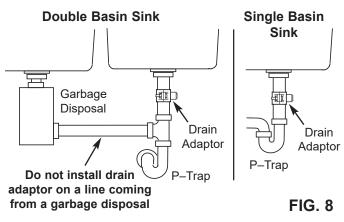
#### (Under sink Installation)

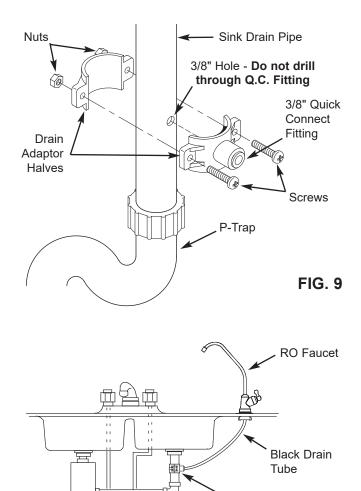
The drain adaptor included with your RO system is designed to fit around a standard 1-1/2" O.D. drain pipe. In the following procedure, you will install the drain adaptor above (upstream of) the P-trap. See Fig. 8 & 10. Be sure to comply with local plumbing codes.

**NOTE:** Before starting this procedure, inspect the drain pipe under the sink for corrosion, and replace if necessary, before continuing with installation.

- Test fit the two halves of the drain adaptor onto the sink drain pipe, about 6 inches above the P-trap (See Fig. 9). Make sure that the Q.C. fitting is toward the direction of the RO faucet (See Fig. 10).
  NOTE: Locate so that the drain tubing from the Reverse Osmosis faucet will run straight to the adaptor, with no dips, loops, or kinks.
- Using the hole through the drain fitting as a guide, mark the pipe where a 3/8" hole will be drilled (See Fig. 9), and remove the drain adaptor from the pipe.
  NOTE: Do not drill through the drain adaptor's Q.C. fitting, as this could damage the o-ring.
- 3. Drill a 3/8" dia. hole in the pipe and remove flash.
- 4. Clean the sink tailpiece to assure a leak-tight fit.
- **5**. Place the halves of the drain fitting back onto the sink drain pipe. Use a pencil or similar pointed object to align the Q.C. fitting so that it is centered on the hole you drilled.
- **6**. Assemble the nuts and screws, as shown in Figure 9, and tighten both sides equally to secure the drain adaptor halves onto the pipe. Do not overtighten.
- 7. Do not connect black tubing to the Q.C. fitting at this time. It is done after the RO faucet is installed.

## **Under the Sink Installation**



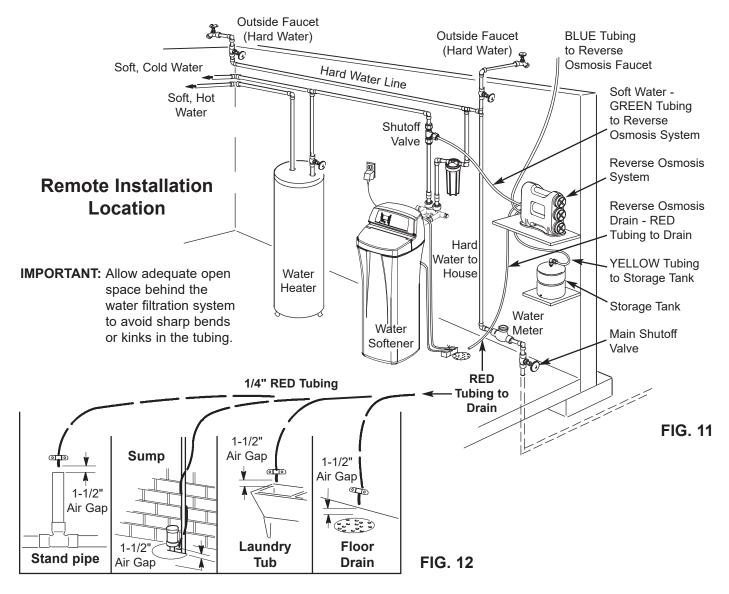


HOT COLD P-Trap IMPORTANT: Do not install drain adaptor below the P-Trap. Locate drain adaptor so that when the black drain tube from the Reverse Osmosis Faucet is installed it will run straight to the adaptor, with no dips, loops, or kinks.

~

Drain Adaptor

# **Step B - Install RO Drain in Remote Location**



### INSTALL A REMOTE DRAIN POINT AND AIR GAP (Remote Location)

Route the drain tubing to an existing drain in the house. A floor drain, laundry tub, standpipe, sump, etc. are suitable drain points. See Fig. 12. This type of drain is the preferred over the p-trap drain adaptor.

Be sure to provide a 1-1/2" air gap between the end of the hose and the drain point. This will keep water from backing up into the system.

**NOTE:** Check your local plumbing codes.

# To install a remote drain point, complete the following steps:

1. Locate the 1/4" red tube and determine whether it is long enough to reach from the Reverse Osmosis filter assembly to the drain point . See Fig. 11.

- **2**. If longer tubing is required, see parts list in back of manual and replace the red tube with an adequate length 1/4" tubing.
- 3. Cut one end of the drain tube square. See Fig. 17.
- Insert this tube all the way into the red collet fitting on the Reverse Osmosis filter assembly. See Figs. 18, 19 & 22.
- **5**. Pull on the tubing to be sure it is held firmly in the fitting.

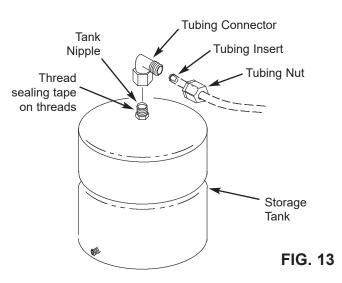
**NOTE:** A flow control insert is located inside the elbow fitting that the drain tube connects to. Refer to Fig 27. Leave this fitting in place.

 Route the tubing to the drain point and secure at the end with a bracket (not included). See Fig. 12. Provide a 1-1/2" air gap between the end of the tube and the drain. See Fig. 12.

# **Step C - Install Storage Tank**

### INSTALL STORAGE TANK

- Apply thread sealing tape (2 wraps clockwise) to the threads on the nipple at the top of the tank. See Fig 13.
- **2**. Locate the tubing connector. See Fig. 13. Slowly tighten the tubing connector onto the tank nipple 7-8 full turns, so as not to cross thread or overtighten.
- **3**. Do not connect the tube at this time. This will occur later in the assembly.
- **4**. Place the storage tank next to the Reverse Osmosis Assembly. The tank can be placed upright or on its side.



# **Step D - Install RO Faucet**

### SELECT LOCATION OF REVERSE OSMOSIS FAUCET MOUNTING HOLE

You will need to select the location of the Reverse Osmosis Faucet. You have three options to choose from:

- Use the existing sink top hole for the spray hose or soap dispenser (Must be 1-1/4" in diameter)
- Drill a new hole in the sink
- Drill a new hole in the countertop next to the sink
- 1. Determine where you are going to install your Reverse Osmosis Faucet.
- **2**. Check to ensure the Reverse Osmosis faucet will mount flat against the mounting surface.
- **3**. Visually review the routing of the tubes from the Reverse Osmosis filter assembly to the faucet. Check to ensure there is adequate tube routing space between the faucet and filter assembly.
- **4**. If drilling is needed, drill a 1-1/4" diameter hole in the mounting surface.

**IMPORTANT:** Drilling holes into countertops and sinks should only be performed by an installer who is qualified for drilling such materials. Drilling of surfaces made of stone or solid surface materials such as granite, marble, Corian<sup>®</sup> or other plastic resin products or sinks made of porcelain or stainless steel may cause permanent, irreparable damage to the sink or countertop surface.

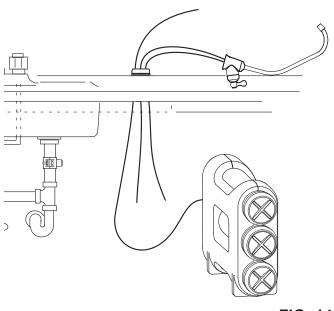


FIG. 14

Corian® is a registered trademark of E. I. du Pont de Nemours and Company.

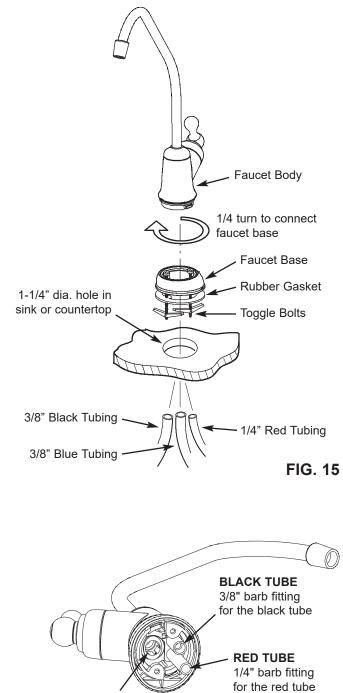
# Step D - Install RO Faucet (cont.)

## INSTALL REVERSE OSMOSIS FAUCET

- **1.** Locate and organize your RO faucet install parts. Refer to Fig. 15.
- **2.** Mount faucet base to sink hole until the faucet base is flat against the sink surface. The rubber gasket should be between the sink surface and the faucet base.
- **3.** Tighten the toggle bolts until the base is firmly mounted to the sink surface. Do not overtighten.
- **4.** Feed a length of 3/8" blue tubing up through the hole and insert end into the push-in fitting on the bottom of the faucet. See Figure 16. Push tubing through the collet and all the way into the fitting. Full engagement is 3/4" length of tube into the fitting. Pull on the tube to be sure it's held firmly in the fitting. The other end of this tubing will be connected to the RO system, as shown on page 15.

**NOTE:** If you routed the red drain tubing directly to a remote drain point (see page 11), disregard step 5 and move on to step 6.

- **5.** Feed a length of 1/4" red tubing up through the hole and connect to the 1/4" barb on the bottom of the faucet. See Figure 16. The other end of this tubing will be connected to the RO system, as shown on page 15.
- **6.** Feed a length of 3/8" black tubing up through the hole and connect to the 3/8" barb on the bottom of the faucet. See Figure 16. The other end of this tubing will be connected to the drain, as shown on page 15.
- **7.** Mount the faucet body on to the faucet base, 1/4 turn. See Figure 15.



BLUE TUBE 3/8" quick connect fitting for the blue tube

# **Step E - Connect Tubes**

### HOW TO CUT AND CONNECT THE TUBES

Your Reverse Osmosis system includes push-in fittings for quick tubing connection. Review the following instructions before connecting the tubes in the next step. Failure to follow these instructions may lead to future leaks.

#### Cut tubes to length

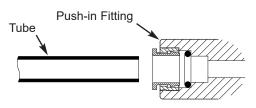
- 1. Use a sharp cutter or knife to cut the end of tubing. Always cut the tubing square. See Fig. 17.
- Inspect the tube up to 1" from the end to be sure there are no nicks, scratches, or other rough spots. If needed, cut the tubing again. See Fig. 17.
  NOTE: Tubing lengths should allow for the removal of the assembly from the hanger washers for servicing. If tubing lengths are shortened for neater appearance, it may be necessary to keep the assembly on the hanger washers for service.

#### Connect tubes

- Push tubing through collet, until it engages the o-ring. See Fig. 18. Continue pushing until the tube bottoms out against the back of the fitting. See Fig. 19. Do not stop pushing when the tube engages the o-ring. Failure to follow these instructions may lead to future leaks. When a 1/4" tube is fully engaged, 11/16" of the tube has entered the fitting. When a 3/8" tube is fully engaged, 3/4" of the tube has entered the fitting. Mark tube with a piece of tape or marker.
- **2**. If additional tubing is required, see parts list at the end of this manual.

#### **To Disconnect Tubes**

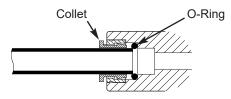
- 1. Push the collet inward with a finger tip. See Fig.21.
- **2**. Continue holding collet inward while pulling the tubing out. See Fig. 21.



Cut tubing square with end of tubing round, smooth, with no cuts, nicks or flat spots.

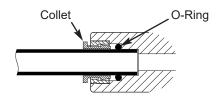
**Tube Correctly Cut** 

FIG. 17



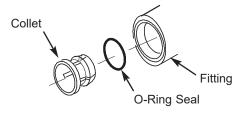
### Tube Partially Engaged with Fitting

FIG. 18

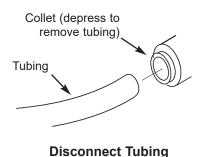


Tube Fully Engaged with Fitting

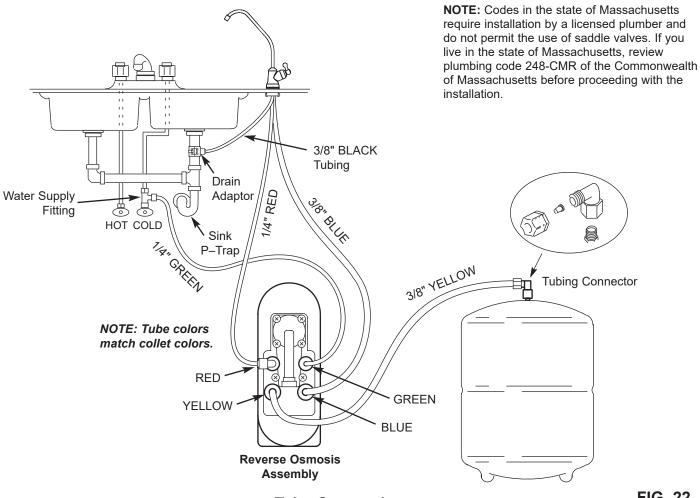
FIG. 19



Collet and O-Ring FIG. 20



# **Step E - Connect Tubes (cont.)**



**Tube Connections** 

**FIG. 22** 

#### CONNECT YELLOW TUBE FROM REVERSE **OSMOSIS ASSEMBLY TO STORAGE TANK**

- 1. Locate the 3/8" yellow tube and cut one end square. See Fig. 17.
- 2. Insert all the way into the yellow collet fitting on the Reverse Osmosis filter assembly. See Figs. 18, 19 & 22.
- 3. Route the other end of this tube to the fitting on top of the storage tank. See Fig. 22.
- 4. Cut tube square and to length. See Fig. 17.
- 5. Do not connect at this time. This will occur in the sanitizing step.

#### CONNECT GREEN TUBE FROM COLD WATER SUPPLY PIPE TO REVERSE OSMOSIS ASSEMBLY

- 1. Locate the 1/4" green tube and cut one end square. See Fig. 17.
- 2. Connect to cold water supply fitting. See Fig. 6.
- 3. Route the other end of this tube to the green collet fitting on the Reverse Osmosis filter assembly. See Fig, 22
- 4. Cut tube square and to length. See Fig. 17.
- 5. Insert all the way into the fitting. See Figs. 18 & 19.
- 6. Pull on the tube to be sure it is held firmly in the fitting.

#### CONNECT BLUE TUBE FROM REVERSE OSMOSIS FAUCET TO REVERSE OSMOSIS ASSEMBLY

- 1. Locate the 3/8" blue tube attached to the faucet. Fig. 22.
- 2. Route the loose end of this tube to the blue collet fitting on the Reverse Osmosis filter assembly. See Fig. 22.
- 3. Cut tube square and to length. See Fig. 17.
- 4. Insert all the way into the fitting. See Figs. 18 & 19.
- 5. Pull on the tube to be sure it's held firmly in the fitting.

#### CONNECT BLACK TUBE FROM REVERSE **OSMOSIS FAUCET TO DRAIN ADAPTOR**

- 1. Locate the 3/8" black tube attached to the faucet. Fig 22.
- 2. The loose end needs to be attached to the quick connect fitting on the sink drain adaptor.
- 3. Cut this tube as needed to route it as straight as possible, without loops, dips, or kinks.
- 4. Cut the end of the tube square. See Fig. 17.
- 5. Insert all the way into the fitting. See Figs. 18 & 19.
- 6. Pull on the tube to be sure it is held firmly in the fitting.

#### **RED TUBE TO REVERSE OSMOSIS FAUCET**

The red tube connection was completed in the faucet assembly steps.

# **Step F - Sanitize, Test and Purge System**

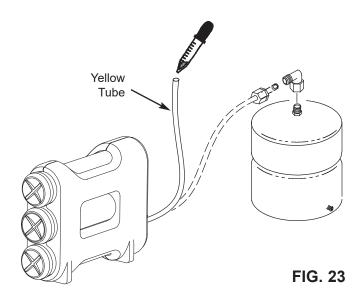
### SANITIZE THE SYSTEM

Sanitize the system immediately after installation of the Reverse Osmosis system. It's also recommended after servicing inner parts. It is important that the person installing or servicing the system have clean hands while handling inner parts of the system.

Complete the following steps to sanitize the system. See Fig. 23.

- **1**. Make sure that the water supply to the Reverse Osmosis system is off.
- **2**. Open the Reverse Osmosis faucet. If the tank is not already empty, allow the water to empty.
- **3**. Locate the eyedropper included in parts bag and common household bleach (5.25%).
- **4**. Add 3 ml. of bleach into open end of yellow tube. Handle bleach according to bleach manufacturer's recommendations. See Fig. 23.
- **5**. Connect yellow tube to tank connector. See Figs. 13 and 22.
- **6**. Sanitizing the system will be completed during the pressure test and purging steps on the following page.

**NOTE:** The bleach must be removed from the system before drinking the water. See purging instructions on the next page.



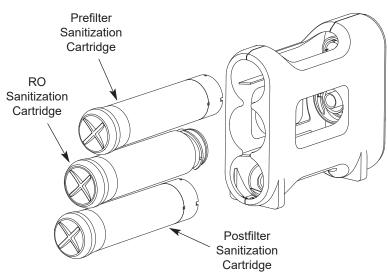
# Manufacturer recommends using the Model 7301203 Sanitizing Kit

This reusable sanitizing kit (not included) is recommended to easily and completely sanitize your Reverse Osmosis system annually.

The kit includes the following:

- Prefilter sanitization cartridge (contains no filtration media)
- Postfilter sanitization cartridge (contains no filtration media)
- RO sanitization cartridge (contains no RO membrane)
- Syringe, 1 oz.
- Complete instructions

Uses standard 5.25% household bleach (not included) to completely sanitize the Reverse Osmosis system.



### To order, go to whirlpoolwatersolutions.com

and click on the "Replacement Parts" link under the "Owner Center" tab,

#### or call toll free 1-866-986-3223

# **Step F - Sanitize, Test and Purge System (cont.)**

### PRESSURE TEST THE SYSTEM

**NOTE:** Complete the sanitizing procedures on the preceding page before pressure testing.

To pressure test the system, complete the following steps.

- 1. Open the water supply valve to the Reverse Osmosis system.
- **2**. Purge air from the house plumbing by opening several house faucets. Close faucets when water runs smooth, with no spurting.
- **3**. Pressure will start to build in the RO system. In about 2 hours check all fittings and connections. Check for water leaks. Fix leaks if any are found. If problems exist, refer to the troubleshooting chart or call the toll free number below).

**NOTE:** When the system is first pressurized, water may "spurt" from the faucet air gap hole until air is expelled from the RO system.

Please review the following operating features before using your Reverse Osmosis system:

You will not have filtered water immediately. It may take several hours to fill the storage tank and create maximum flow from the Reverse Osmosis faucet.

Water Pressure from the Reverse Osmosis faucet will be less than your standard faucet.

Water will run to the drain while the Reverse Osmosis system is producing water, even if you are not drawing water from the Reverse Osmosis faucet. You may hear a small quantity of water going to the drain at times when water is not being used. This is normal. Water going to the drain will automatically shut off when the storage tank is full.

### PURGING THE SYSTEM

To purge the system, complete the following steps.

- Open the Reverse Osmosis Faucet and let water flow through the system for a 24 hour period. Water flow will be a slow trickle at this time.
  NOTE: Do not consume water from the RO system until purging is complete.
- **2**. Close the Reverse Osmosis faucet after the 24 hour purging period is complete.
- 3. In addition, fill and empty the tank twice.
- **4**. When the purging is finished, your Reverse Osmosis system is ready for use.

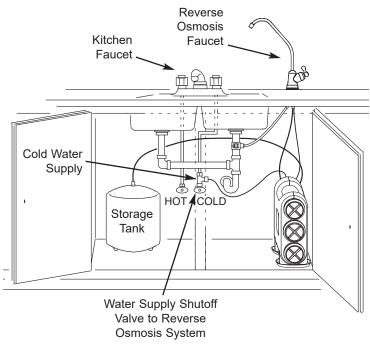


FIG. 24

**NOTE:** Codes in the state of Massachusetts require installation by a licensed plumber and do not permit the use of saddle valves.

If you live in the state of Massachusetts, review plumbing code 248-CMR of the Commonwealth of Massachusetts before proceeding with the installation.

**NOTE:** As with all other water system applications, leaks may occur. Because the system pressure builds slowly, leaks may not be immediately apparent. Recheck for leaks 24 hours after purging the system is complete.