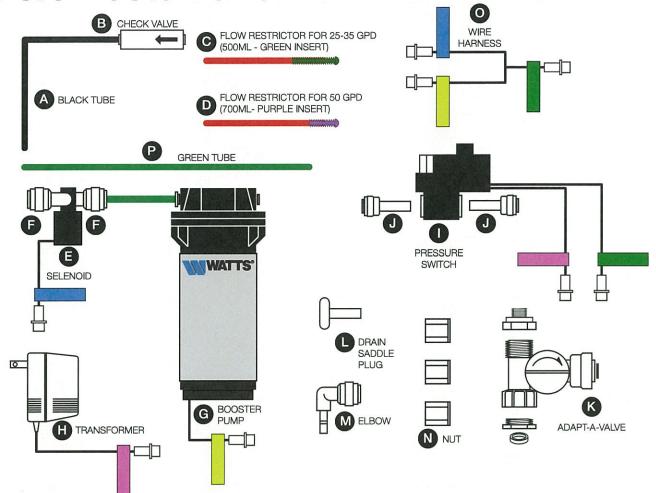
### **Zero Waste Retrofit Kit Instruction**



# NOTE: UNIT IS NOT INTENDED FOR USE WITH TANKLESS WATER HEATERS Introduction

Thank you for buying the Zero Waste Retrofit Kit. This kit is designed to retrofit existing reverse osmosis systems and save water from being wasted.

#### How it works:

This conversion kit works by using the booster pump to increase the pressure throughout the system so that the brine water (which is usually wasted) can be recycled back into the hot water line. Here is what each component does:

- Booster Pump: Boosts the pressure throughout the system.
- · Solenoid: Shuts off the water to the unit when the tank is full.
- Pressure Switch: Turns off the pump and closes the solenoid when the tank is full.
- Check Valve: A one-way valve that allows the brine (waste) water to get pushed into the hot water, but not let any hot water back in.
- Flow Restrictor: Controls how much water is returned into the hot water line. See instructions for sizing.
- Transformer: Provides power to the electrical components.

#### **Package Contents:**

LABEL	PART#	DESCRIPTION	QTY
Α	610117	BLACK TUBE	1
В	610019	DOUBLE-CHECK VALVE	1
С	622055	500 mL FLOW RESTRICTOR (GREEN INSERT)	1
D	622054	700 mL FLOW RESTRICTOR (PURPLE INSERT)	1
Е	152035	SOLENOID	1
F	125088	1/4" QC x 1/8" MPT ELBOW FITTING	2
G	152008	BOOSTER PUMP	1
Н	252004	TRANSFORMER	1
1	152030	PRESSURE SWITCH	1
J	228048	1/4" QC x 3/8" STEM FITTING	2
K	560080	ADAPT-A-VALVE w/ BRASS ADAPTERS & WASHER	1
L	228073	DRAIN SADDLE PLUG	1
М	125089	1/4" STEM x 1/4" QC ELBOW	1
N	125002	COMPRESSION NUT FOR 1/4" FITTING	3
0	152044	WIRE HARNESS	1
Р	610109	GREEN TUBE	1



A Watts Water Technologies Company

#### **How To Use the Quick Connect Fittings**

To make a connection, the tube is simply pushed in by hand; the unique patented John Guest collet locking system then holds the tube firmly in place without deforming it or restricting flow.

#### **Cut the Tube Square**



Cut the tube square and remove burrs and sharp edges. Ensure that the outside diameter is free from score marks.

#### Push Up to the Tube Stop



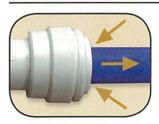
Push the tube into the fitting and up to the tube stop

#### **Pull to Check Secure**



Pull on the tube to check that it is secure. Test the system before use

#### To Disconnect Push in collet and remove tube



To disconnect, ensure that the system is depressurized, push the collet square against the fitting. With the collet held in this position the tube can be removed.

#### **Tools Needed**

- 5/8" Open-ended wrench or adjustable wrench
- Knife or Scissors
- · Phillips screwdriver / screw gun
- Channel Lock

#### Checklist

Reverse osmosis system must be at least 25 feet (piping distance) from the hot water heater

> For proper performance and pump life, make sure you are up to date with your filters and please verify the pressure of the storage tank (as recommended by your operating manual)

Reverse osmosis system must use a single 25-50 GPD membrane

A non-switched outlet

#### Instructions:

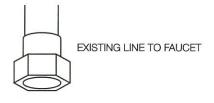
PLEASE NOTE installation may vary depending on your system, please review the attached diagrams for your unit. If your unit is not shown, please contact customer service at 800-752-5582.

#### Preparation

- Step 1 Turn off the hot and cold water angle stops
- Step 2 Lift the handle on the reverse osmosis faucet to drain the water from the system and storage tank. Note: If the tank is equipped with a ball valve, close the valve to preserve tank water

#### Adapt-a-valve Installation at Hot-Water **Angle Stop**

Connect the adapt-a-valve as shown below









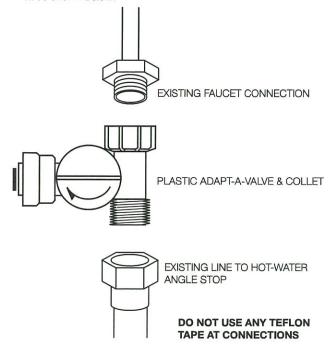


DO NOT USE ANY TEFLON TAPE AT CONNECTIONS



# Alternate Adapt-a-valve installation at Hot Water Connection to Faucet

If you are connecting the adapt-a-valve at the faucet connection, install as shown below:



#### **Brine Connection**

Step 3 - Disconnect the existing brine tube from the membrane.

Make sure to also remove the existing flow restrictor from the unit. The existing brine tube will no longer be used.

NOTE: Part of this upgrade will include switching your existing flow restrictor with one provided with this kit. Please see sizing chart below:

MEMBRANE	FLOW RESTRICTOR
25 GPD MEMBRANE	500 ML FLOW RESTRICTOR (RED TUBE WITH GREEN INSERT)
35 GPD MEMBRANE	500 ML FLOW RESTRICTOR (RED TUBE WITH GREEN INSERT)
50 GPD MEMBRANE	700 ML FLOW RESTRICTOR (RED TUBE WITH PURPLE INSERT)

- Step 4 Determine which flow restrictor to use based on the table
- Step 5 Connect the open end of the red flow restrictor tube to the check valve - make sure the tube is inserted 0.75 inches into the check valve
- Step 6 Connect the red tube with the flow restrictor insert into the brine port of the unit
- Step 7 Connect the black tube from the new check valve/flow restrictor assembly to the hot water adapt-a-valve
- Step 8 Disconnect the tube to the drain saddle. This drain tube will no longer be used
- Step 9 Insert the plug into the drain saddle.

#### **Connection to Unit**

Step 10 - Choose the correct configuration on the following pages for your specific unit

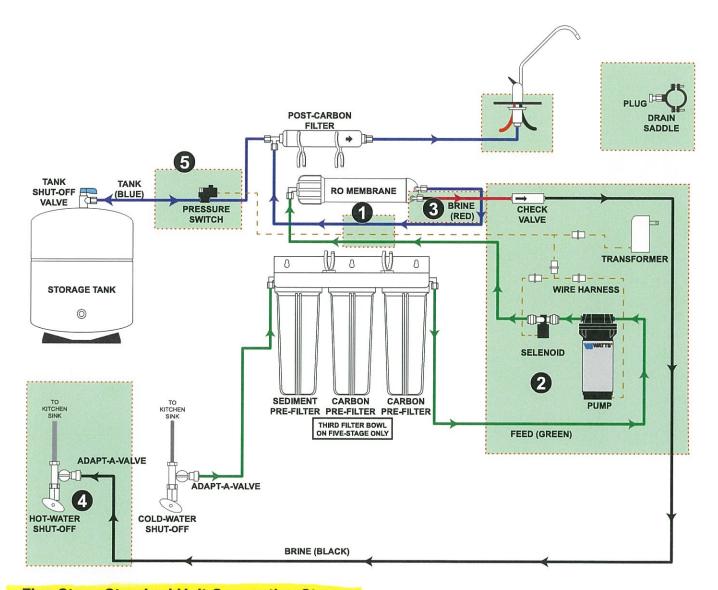
- Step 11 All electrical connections are color coded for your convenience. Plug the wire harness into the pump and solenoid
- Step 12 Connect the pressure switch to the wire harness
- Step 13 Connect the transformer to the pressure switch

#### Startup

- Step 14 Turn on the hot and cold water supply valves and check for leaks
- Step 15 Plug the transformer into the electrical outlet and let the unit run for two minutes and check for leaks.
- Step 16 Open the RO faucet and make sure water begins to trickle out within 10 minutes. If it does not, check your connections and the direction of flow through the pump
- Step 17 Periodically check the unit for leaks during the first fivedays of operation.



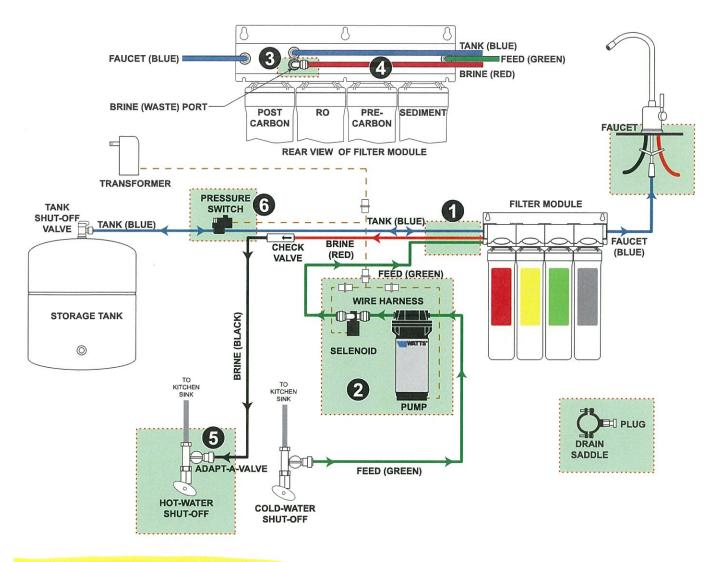
© 2015 Watts Premier



#### **Five-Stage Standard Unit Connection Steps**

- Step 1 Remove the existing Automatic Shut-off Valve
- Step 2 Install the Booster Pump and Solenoid between the third stage filter canister and the cap of the reverse osmosis membrane (if needed, use provided green tube)
- Step 3 Connect the red flow restrictor tube into the brine elbow
- Step 4 Connect the open end of the black hose into the adapt-a-valve connected to the hot water shut-off
- Step 5 Splice the pressure switch on the line leading to the tank





#### **RO Pure/Plus Connection Steps**

- Step 1 Remove the existing Automatic Shut off Valve
- Step 2 Install the Booster Pump and Solenoid between the cold water adapt-a-valve and the connection behind the red filter (if needed, use provided green tube)
- Step 3 Install the provided elbow to the brine port on the filter module (please remove any existing elbows and/or flow restrictors)
- Step 4 Connect the red flow restrictor tube into the brine elbow
- Step 5 Connect the black tube into the hot water adapt-a-valve
- Step 6 Splice the pressure switch on the line leading to the tank



## **Warranty**

LIMITED WARRANTY: Watts Premier warrants each product to be free from defects in material and workmanship for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including, without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Any implied warranties that are imposed by law are limited in duration to one year.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allowthe exclusion or limitation of incidental or consequential damages. Therefore, the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable State laws to determine your rights.

#### California Proposition 65 Warning

WARNING: this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (Installer: California law requires that this warning be given to the consumer). For more information: www.wattsind.com/prop65.

