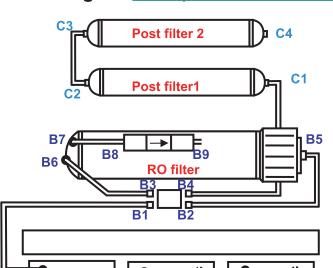
+ 15-0407(Standard-RO-Figure-Installation)

#### C M Y K

## **Whole RO System Quick Connectors Diagram**

Please go to www.purewaterclub.com to see/download the colored version



Position	Parts number	Connection
A1	PT-4040Q	incoming water source in
A2	PT-4040Q	1th stage out
А3	PT-4040Q	2nd stage in
A4	PT-4040Q	2nd stage out
<b>A</b> 5	PT-4040Q	3rd stage in
A6	PT-4040Q	3rd stage out
B1	PT-ASOVQ	to 3rd stage out
B2	PT-ASOVQ	to RO membrane
В3	PT-ASOVQ	to check valve
B4	PT-ASOVQ	to 5th stage
B5	PT-4040Q	RO membrane in
В6	PT-CV	Check valve to ASOVQ
В7	PT-1144Q	to Flow Restrictor
В8	PT-WASH	Flow Restrictor In (waste water)
В9	PT-WASH	Flow Restrictor out, to drain
C1	PT-4040Q	5th stage in
C2	PT-4040Q	5th stage out
C3	PT-4040Q	6th stage in
C4	PT-4040Q	6th stage out, pure water output

Before you connect this RO, you must learn how to properly connect/disconnect quick push-in fittings. The fitting CAN get damaged if inserted tubes are pulled out by force.

If the fitting comes with a C ring on it. remove it first.

Pre-filter3

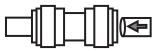


Pre-filter1

## TO CONNECT

Insert tube all the way into the socket (push it in)

Try to pull the tubes to check for security.



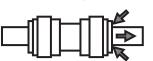


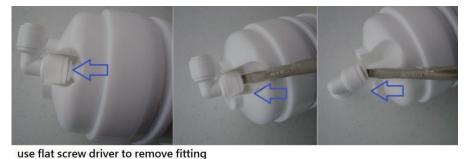
#### TO DISCONNECT

Optional: You may find a collet release tool (fork) to be useful.

To disconnect, all you need is to push on the collet, then pull out the tube.









If using a fork (release tool), push it against the collet. Then pull out the tube.

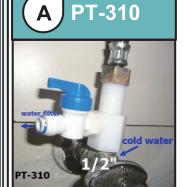
## **Installation Guide**

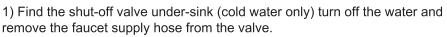
## Installation Step 1: Assembling Water Feeder

Simple plumbing knowledge and ability is required to install the system (or you may hire a plumber). You may need a towel, bucket, 2 adjustable wrenches, Teflon tape, screwdriver, and drill.

## UNDER-SINK (OPTIONS A, G)

- 1/2" (or 3/8") inlet 1/2" (or 3/8") outlet 1/4" RO tube with ball valve
- Works for kitchen/bathroom under sink 1/2" (or 3/8") shut off valve

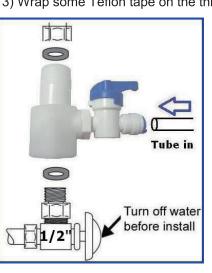


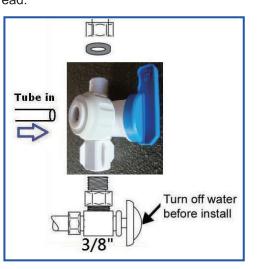


2) Measure the inner diameter of the pipe (3/8" or 1/2".)

3) Wrap some Teflon tape on the thread.







Install water feeder as picture, make sure the O-ring is inserted in the proper position. Use some Teflon tape on the thread.

## GARDEN HOSE / LAUNDRY (OPTION B)









- garden brass hose bibb/spigot or laundry plastic split adapter
- 3/4" inlet 1/4" tube outlet
- make sure to insert o-ring into proper position (see left)
- can screw on the adapter by hand (no tools required)







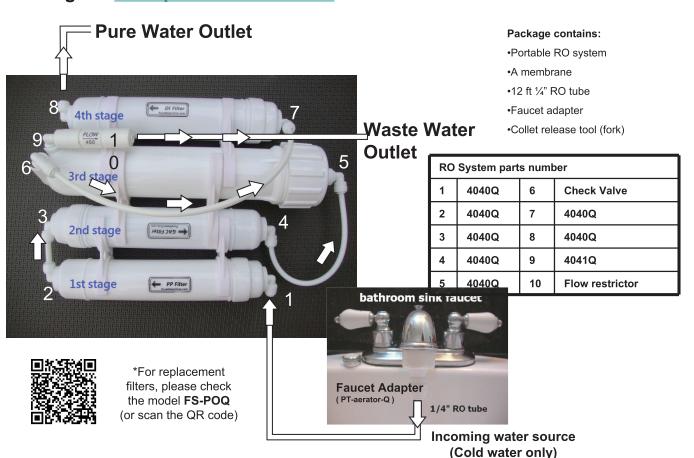


→ 15-0407(Portable-RO-Figure-Installation)

#### C M Y K

## Model number: POQ-4 series, POL-4 series

#### Please go to www.purewaterclub.com to see/download the colored version



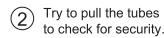
Before you connect this RO, you must learn how to properly connect/disconnect quick push-in fittings. The fitting CAN get damaged if inserted tubes are pulled out by force.

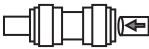
If the fitting comes with a C ring on it, remove it first.

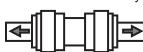


## TO CONNECT

Insert tube all the way into the socket (push it in)





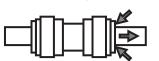


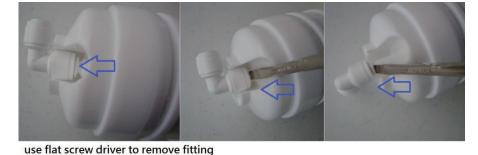
#### TO DISCONNECT

Optional: You may find a collet release tool (fork) to be useful.

To disconnect, all you need is to push on the collet, then pull out the tube.









If using a fork (release tool), push it against the collet. Then pull out the tube.

## **Installation Guide**

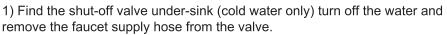
## Installation Step 1: Assembling Water Feeder

Simple plumbing knowledge and ability is required to install the system (or you may hire a plumber). You may need a towel, bucket, 2 adjustable wrenches, Teflon tape, screwdriver, and drill.

## UNDER-SINK (OPTIONS A, G)

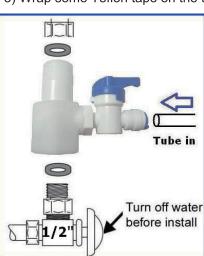
- 1/2" (or 3/8") inlet 1/2" (or 3/8") outlet 1/4" RO tube with ball valve
- Works for kitchen/bathroom under sink 1/2" (or 3/8") shut off valve

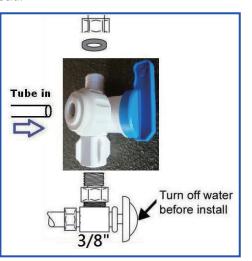




- 2) Measure the inner diameter of the pipe (3/8" or 1/2".)
- 3) Wrap some Teflon tape on the thread.







Install water feeder as picture, make sure the O-ring is inserted in the proper position. Use some Teflon tape on the thread.

## GARDEN HOSE / LAUNDRY (OPTION B)









- garden brass hose bibb/spigot or laundry plastic split adapter • 3/4" inlet 1/4" tube outlet
- make sure to insert o-ring into proper position (see left)
- can screw on the adapter by hand (no tools required)





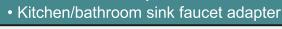




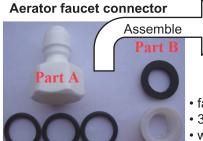
15-0407(common-RO-Figure-Installation) A



## SINK FAUCET (OPTIONS D, E, F)









- faucet adapter with 1/4" quick connection
- 3 black o-rings for faucet adapter
- white female/male converter black o-ring for converter

- $\left( \mathsf{E} \right)$ PT-2W2
- Two way switch
- · Includes a converter + black o-ring (part B)





- Three way switch
- · Includes a converter
- + black o-ring (part B)

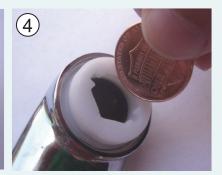


#### For Options D, E, and F, please assemble as the following:

- 1)Bottom-up faucet view.
- 2)Remove the spray aerator adaptor from the faucet.
- 3)Twist in the converter (Part B.)
- 4)Use a coin as a wrench to tighten the converter (clockwise). Avoid using an actual wrench because it can bend/break the converter's thread.







5 Final product (Options D, E, or F):







# NEEDLE VALVE (OPTION C) PT-NED • for PVC pipe only Please assemble as pictured:

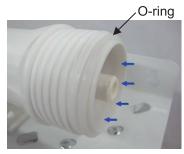
## Installation Step 2: Inserting the RO Membrane



If membrane housing already has the fitting and tube connected, remove tube from RO housing



Take out the membrane from the clear plastic wrapping, then insert membrane into housing (the end with 2 black rings go in first)



The membrane must be inserted all the way to the end. You must be able to twist on the cap completely.



Twist on the cap of the housing, then re-connect the tube from auto shut off valve.

Important: The membrane housing should come with a white O-ring. The sticky grease on it is Vaseline, which will prevent leaking. If the ring is missing, water will leak from the housing.

Please contact us if you're missing the O-ring.

15-0407(common-RO-Figure-Installation) B

#### on) B CMYK

## **Installation Step 3:** Flow Restrictor (Drain)



#### Important:

- •The water that comes out from the restrictor is WASTE water, please do not consume. (You may, however, use it to water lawns, wash clothes/cars, etc.)
- •The other end of the flow restrictor MUST be open and free to flow. It CANNOT be blocked off OR connected back to the RO system as an incoming water source!

Insert the red tube into the flow restrictor. The other end is where waste water comes out.

The ratio from pure water to waste water is 1:3.

#### The Drain Saddle Valve Installation

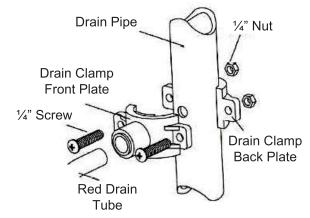


- Drill a 0.3-0.4 mm hole on the drain pipe
- DO NOT drill hole on the bottom of the pipe.
- DO NOT lead waste water back to water supply.





Remember, you MUST match the hose opening with the drilled hole. Screw in the saddle valve together tightly.



## The Pressure Water Tank Installation (optional)

The pressure water tank contains a rubber bladder inside, so the water may taste strange. If using the tank for the first time, please fill it fully with water then drain it out for at least 3 times to clean it out.



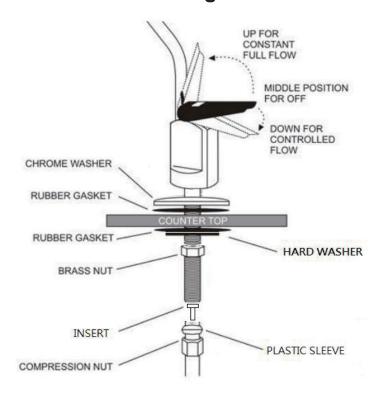




Screw in the valve Valve open position

Valve close position

## Long Reach Faucet Installation (optional)

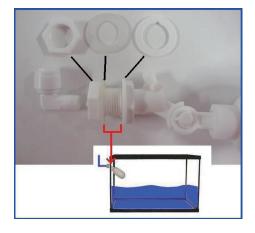


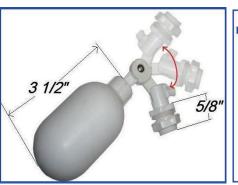


Quick installer kit (PT-LQfaucet) available on our store (optional)

Most sinks have an extra hole for the mounting of additional faucets, sprayers or soap dispensers. If your sink does not already have an additional hole, you may need to drill 1 " hole on the countertop. Carefully mark the faucet location, making sure it is far away enough from the regular water faucet so that they don't interfere with each other. Look to see if you can tighten the lock nut from below, before you drill a hole. Once the hole is prepared, assemble all parts together.

## The Floating Valve Installation (optional)







Floating valve can be adjusted by using a screwdriver to any angle you want. Drill a hole on the tank where you want the water line to be reached.

## Installation Step 4: Flushing the RO System

- 1. Check to see if all the tubes and fittings are secured properly.
- 2. Turn on the water source and check for any leaking. If a fitting is leaking, please go back and reconnect the tube to the fitting. If you cannot stop the leaking, please contact us.
- 3. Let about 5-10 gallons of water flush through the system. This way, the pure water will be safe to use.
- 4. DO NOT consume the pure water produced in the initial flushing of the system.

15-0407(common-RO-Figure-Installation) C

## **Q&A** and Troubleshooting

#### Q: Why is the PPM of my pure water around same as the tap water? The water flow seems fairly fast.

C MY K

A: Make sure you have inserted the RO membrane into the RO housing properly.

#### Q: Why does the system produce less pure water than it produces waste water?

A: This is normal; the ratio for the pure and waste water should be 1:3.

#### Q: Why does the system produce more pure water than it produces waste water?

A: This is not normal; you may have connected the tubes incorrectly. Please refer back to our diagram on the first page.

#### Q: Why does my pure water taste weird, sulfuric, fishy, etc, and the water appears yellow/blackish?

A: DI water is no good for human drinking; carbon filter must be added to improve taste. Be sure that you have completely flushed the whole RO system with at least 10-15 gallons of water.

#### Q: Why isn't my DI water reaching 0 PPM?

A: We guarantee that you will reach 0 PPM water with your DI filter. When your water source has less than 300 PPM, try to reduce the water pressure; a high water pressure will make the water flow out too quickly without allowing enough time for it to filter through.

#### Q: My RO system is making noise from its auto shut-off valve.

A: Please check your water pressure; if you use a booster pump, set it to 60-65 PSI.

#### Q: My drain water never shuts off automatically.

A: An auto shut-off valve only works with a float valve, or any CLOSED container such as a pressure tank, an ice maker, etc. If the container is not closed, then you have to turn off the incoming water manually.

#### Q: Can I blow air through the check valve?

A: No. The check valve is a non-return valve that only allows water to flow in one direction; it cannot be blown through so easily.

#### Q: I installed a float valve on the portable system. It was able to stop pure water, but why is the waste water still coming out?

A: An auto shut-off valve must also be installed for water to be automatically shut-off.

## Q: My DI output no longer provides me 0 PPM but only higher; do I need to change a new DI?

A: One DI can filtrate about 300 gallons of pure water.

- All DI filters (inline or cartridge type) suffer from channeling effect. DI resin would shrink in size when they have been used. Then, some water may pass through the resin without been filtered; the water will find the easiest way to go through the filter, and that is the channeling effect.
- The TDS reading will start off from 0 PPM, and will increase over time as the DI filter is used. A high PPM indicates that the DI filter has to be replaced. When PPM rises, partial or all resin should be replaced to achieve better water quality, especially if your PPM is over 300. Typically, you can just throw out your current DI filter and replace it with a new one, or you can use refill-able DI cartridge to add new resin to keep water always at 0 PPM. • The longer the water stays inside the DI filter, the better the filtration. So adding another stage DI is a very good method.

#### Q: I have a leaking problem.

A: First at all, check the leaking from the thread (the screw on the housing end) or from the tube plug-in end.

- If leaking is from the thread, please detach the fitting and wrap more Teflon tape on it, then re-screw it back into the housing.
- If leaking is from tube-plug-in side, cut off a small piece of tube from the end, because it could be slanted, twisted, or deformed. Please disconnect the tube and re-push the tube all the way into the socket. If the tube is not long enough, replacing a new tube can usually solve the leaking problem.
- If you have pre-filter housing leaking problem, please try twisting open the leaking stage housing. Take out the o-ring and check if the ring is still in good shape. Or try to find if there is any manufactory defects on the groove of the housing, that would cause it to seal improperly. If everything looks good, add some Vaseline on the o-ring and groove, then re-screw on the housing. This will usually resolve the leaking problem.

## WARNINGS, TIPS, AND USEFUL INFORMATION

- For sanitary reasons, you MUST insert membrane by yourself.
- Prepare plumbing tools such as wrenches, screwdriver, Teflon tape, protecting eye-glasses, etc.
- Only connect the RO with cold water and a clean water source, NO seawater.
- Recommended water source TDS reading is not to exceed 1000 PPM.
- The RO system should never be placed under direct sunlight or under freezing temperatures if it is placed outside.
- Maximum temperature: 113°F. Minimum temperature: 33°F.
- 35 PSI minimum is requited for the RO to operate, at 65 PSI 25°C is best.
- If the pressure of the incoming tap water is too low (less than 35 PSI), a booster pump is required.
- If water pressure exceeds 85 PSI, a pressure regulator (PT-regulator) must be installed.
- The installer is responsible for any leaks resulting from installation of tube or related fittings.
- You must check over the entire unit completely while under proper water pressure to ensure that the unit is not leaking and is functioning properly.
- Please flush the whole RO system for at least 10-15 gallons, or drain out the water tank at least 3 times for firsttime usage.
- The RO comes with an auto shut-off valve. An auto shut-off valve only works with a float valve, or any CLOSED container such as a pressure tank, an ice maker, etc. If the container is not closed, then you have to turn off the incoming water manually.
- All RO systems will create waste water. Most RO systems are designed for 1:(3.5 4.5) as standard. We used a 450 Flow Restrictor; the ratio from pure to waste water is 1:3.
- Replace all pre-filters and post-filters per 6-12 months, depending on the water source's quality.
- Replace membranes per 1-2 years.
- Change the DI filter per 500 gallons.

### OTHER PRODUCTS

#### Want to get creative and customize your RO system with more efficiency?

Here we have more products, some handy/useful parts and tools, that will allow you to make things easier for you as you install your RO system. Please note that all products in this section are sold separately.



Refillable DI Resin/Cartridge (OT-RES-HOUDI)



Pressure Gauge (PT-PSI-150)



Pressure regulator (PT-regulator)





(PT-LQfaucet)



Float-Valve Bracket Kit (PT-FVBS)



TDS Meter (PT-TDS-1)



We also offer many other connectors and adapters to suit your personal RO needs.

Please email us at rosales@purewaterclub.com!





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