

UNDER SINK

AquaTru 4-Stage Reverse Osmosis System







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WARNING A

Please read and keep these instructions before proceeding with the installation.

Safety Instructions

- Installation needs to comply with state and local laws and regulations.
- System must be installed indoors away from possible environmental damage.
- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before the water enters the system.
- Keep the system away from heat sources and direct sunlight.
- This reverse osmosis system contains replaceable treatment components critical for effective reduction of total dissolved solids. The product should be tested periodically to verify that the system is performing satisfactorily.
- This system is intended to be installed under a sink with access to cold tap water and a waste water drain.
- To prevent the possibility of electrical shock, be sure that all electrical appliances and outlets are turned off at the circuit breaker before working in the cabinet area.
- Please wear safety glasses to protect eyes when drilling.

Operational Parameters

- Daily Production Rate: 54 GPD
- Rated Capacity 360 Gallons
- Operating Pressure: 40-85 PSI
- Use Cold Tap Water Only, 40°-100° F, (4°-37° C)
- Max Total dissolved solids 1500 mg/L
- Maximum hardness 10 gpg (171 mg/l)
- Chlorine < 2 PPM
- PH 3-11
- Turbidity 5 NTU max

Before Installation

Inspect the system:

Please take all the components out of the box. Inspect all the parts and connection fittings carefully, make sure that nothing was damaged during shipping. If any part is cracked or broken, please do not proceed with the installation. Contact customer service for assistance.

Tools needed for Installation:

- Electric drill
 - Drill bit:
 - 1/4" for the waste water line, 1/8" for pilot hole, not mandatory
 - 13/16" for the RO water faucet
- Adjustable wrench
- Philips screwdriver
- Utility knife or scissors
- PTFE Tape (often referred to as "plumber's tape" or "Teflon® tape")

Qualified Installers

- Using a qualified installer is recommended.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the warranty.



Box Contents



Filter manifold and 3 filters

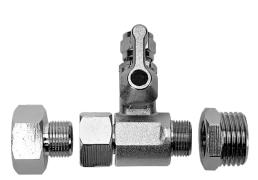
(PRE/Carbon Filter, RO Filter & VOC Filter)



RO holding tank



RO water faucet



Cold tap water adaptor with 3/8" adaptor and a 1/2" conversion thread



Drain saddle for waste water for 1.5" inch drain line



RO faucet quick connect fitting (with clear washer)



RO holding tank valve



Installation gasket

TruPure holding tank sanitizer (installation gasket inside the chamber)



Filter manifold installation hardware



AquaTru 4-Stage Reverse Osmosis System Installation Steps

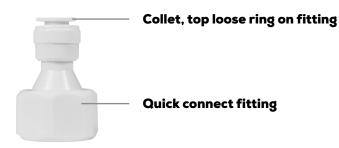
Installation will be a breeze, since most of the parts are already assembled. We will guide you through the rest with the following steps:

- 1. How to use the quick connect fittings
- 2. Fitting the cold tap water adaptor
- 3. Mounting the drian saddle for RO waste water
- 4. Installation of the RO faucet
- 5. Connecting the TruPure holding tank sanitizer
- 6. Location and installation of the RO water system
- 7. Making all of the required water connections
- 8. System startup
- 9. System maintenance

It is important that you follow these steps in the order listed above to minimize any potential installation issues.

1. Tubing Quick Connect Guide

The tube connection in your RO system uses a Quick Connect locking mechanism to lock the tubing in place. Be careful not to damage your tubing when you unpack it. Tubing that is bent at the end or has other damage will not seal and leak water. If your tubing arrives damaged, please contact customer service for assistance.



Attached Tubing:

Push tubing in straight and level with the Collet.

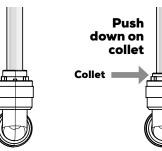
The tubing will go in 5/8 of an inch into the Collet before the lock is activated.

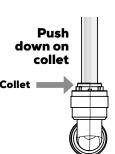
Pull on the tube to make sure the lock has activated and the tubing is secure.

Release Tubing:

Push and hold the Collet in to release the lock while pulling out on it.

Collet must be held down while pulling up on the tube to release the tube.

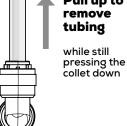






Push In

5/8"



Pull up

to lock



Tap water adaptor

2 H

2. Cold Tap Water Adaptor

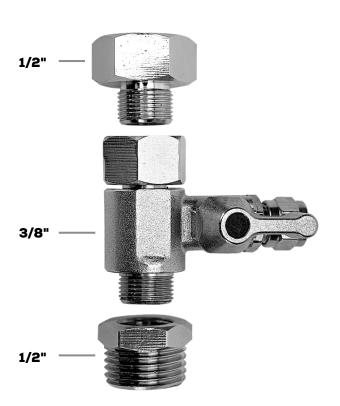
WARNING

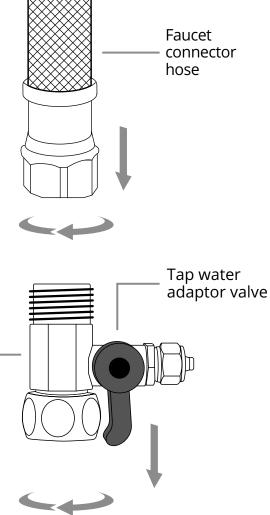
The water supply to the unit MUST be from the cold water line. Hot water will severely damage your RO system.

Locate the cold water valve underneath the sink, and turn it off. Next, open the cold water handle on your sink to release the pressure. Check to make sure the water has stopped flowing before proceeding.

Note: On single handle faucets, the hot water may have to be turned off to prevent hot water crossover during installation. If water continues to come out of the faucet with the cold and hot water valve turned off, the main water supply must be turned off as well.

If the valve does not fit on the cold water shut off valve, a second option is to install the valve on the end of the faucet connector hose that connects with the kitchen faucet.





Note: The AquaTru Under Sink RO System comes with a 3/8" cold tap water adaptor that has a 1/2" conversion thread. Based on your plumbing needs, you may need to use the additional conversion thread.

Cold water shutoff valve

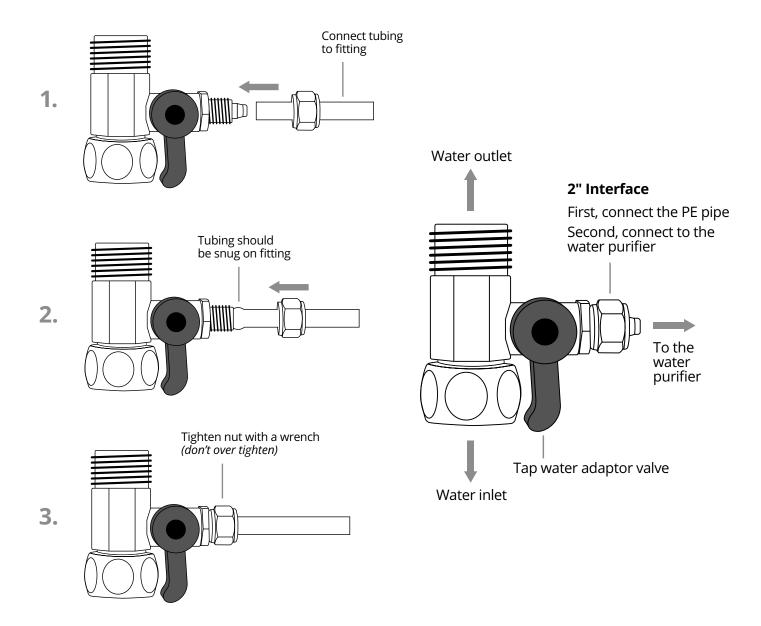


2. Cold Tap Water Adaptor

Before mounting onto the tap water line, connect the white tubing to the end of the adaptor and then install the adaptor. The AquaTru Under Sink RO system comes with comes with a 3/8" adaptor that has a 1/2" conversion thread. Please use the appropriate adaptor size based on your plumbing needs.

After connecting the white tubing to the cold tap water adaptor, give it a pull to make sure it is secure on the adaptor. Wrap the cold water line shutoff valve with **plumber's tape** and then wrap the male thread on the cold tap water adaptor with **plumber's tape**.

First, install the adaptor to the cold water valve, then install the faucet connector hose to the adaptor.

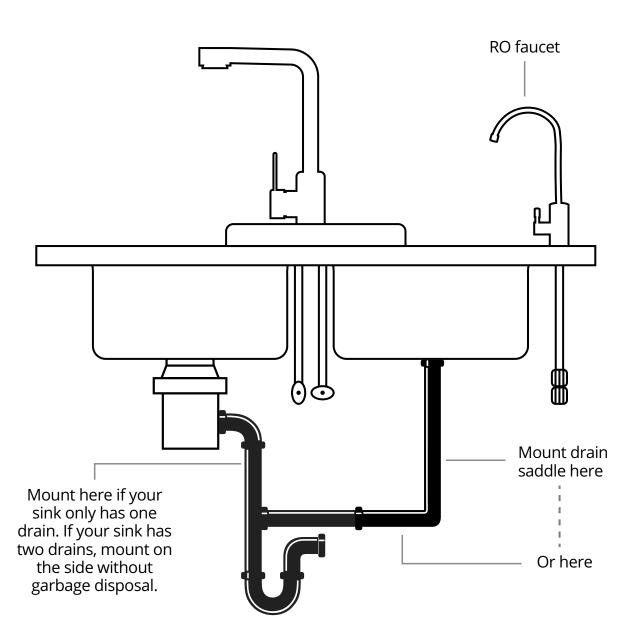




3. Drain Saddle Installation

Caution

To avoid possible drainage noise, mount the drain saddle as low as possible onto the vertical tailpiece. The drain saddle assembly should be installed above the trap and on the vertical or horizontal tailpiece.





3. Drain Saddle Installation

Mark the position of the hole on the drain pipe and drill a 1/4" hole through one side of the drain pipe. There is a piece of self-adhesive sponge provided. Glue this sponge to the inside of the saddle, this will cushion any gap between the saddle and the pipe.

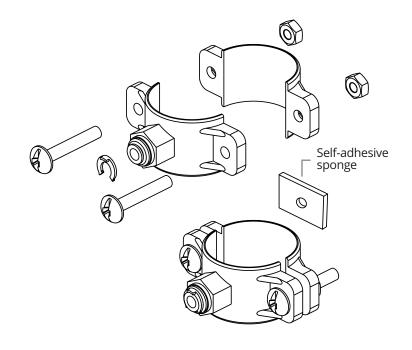
Make sure the hole on the sponge is thoroughly punched out, and align it to the hole in the saddle.

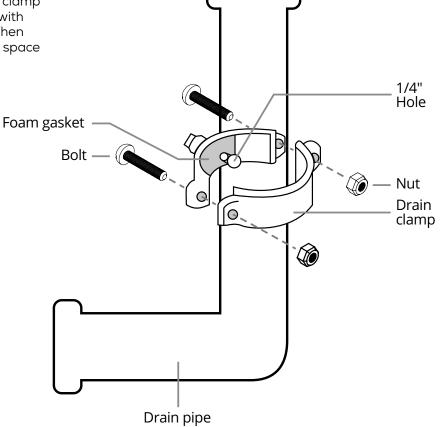
Take the half side of the saddle without the foam and insert a nut into the recess on each side.

Position both halves of the saddle on the drainpipe with the saddle's opening aligned over the drilled hole. The foam gasket will be between the drain saddle and the drilled hole.

Tip: To ensure the hole on the drain saddle is aligned with the hole in the drain pipe, insert the drill bit into the drain saddle and use the drill bit to align the two holes as you assemble the drain saddle onto the drain pipe.

Secure the drain clamp halves together in place on the drain pipe. Screw bolts through the drain clamp half with the foam gasket and the other half with the two nuts installed. Do not over tighten. When tightening the bolts, make sure there is equal space on both sides between the drain saddles.







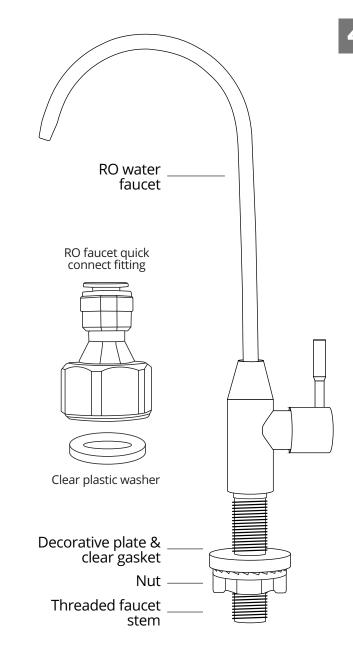
4. RO Faucet Installation

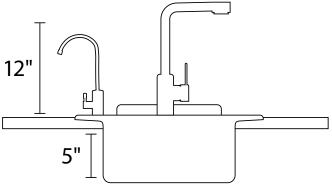
The RO faucet may be installed on any flat surface. Check the underside of your install location for interference by making sure that drilling a hole will not damage any pipes or wiring underneath the countertop of the sink. Check to be sure there is enough room for the threaded faucet stem and nut.

Note: For drilling, you must use an appropriate drill bit and drilling method for the material of your sink and or countertop. Different drill bits are required for stainless steel, porcelain, marble, etc.

You may use an existing hole in your counter or sink or drill a new hole (if using an existing hole begin at step 2). Make sure the faucet decoration plate and nut plate are big enough to cover the hole you use.

- 1. Drill a **13/16"** hole using an appropriate drill bit and drilling method for the material.
- 2. Remove the plastic nut from the threaded faucet stem.
- 3. Insert the threaded faucet stem though the newly drilled or pre-existing hole, making sure the decorative plates and clear gasket stay on the threaded stem and that they completely cover the hole when installed.
- 4. Under the sink, install the plastic nut on the threaded faucet stem, making sure the gasket that comes with the fitting is seated inside the fitting. Hand tighten it. Make sure the faucet does not move and the top decorative plate covers the hole.
- 5. Install the RO faucet quick connect fitting to the threaded stem. First, wrap plumber's tape around the thread. Make sure the clear washer is fully seated inside the quick connect fitting. Screw the fitting onto the threaded stem. Hand tighten with an adjustable wrench. **Do not overtighten.**



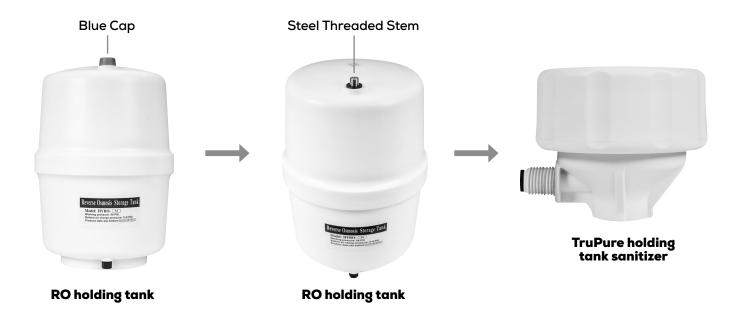


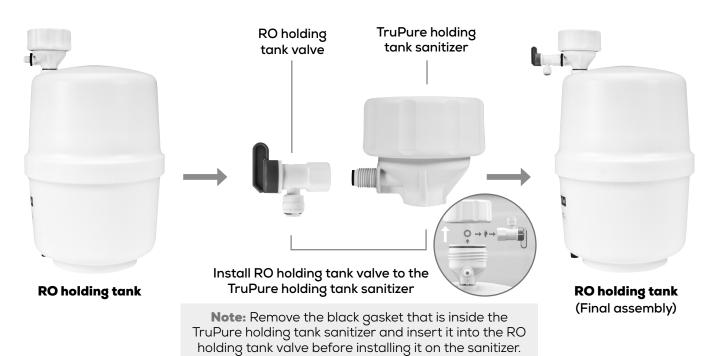


STEP

5. Installation of TruPure Holding Tank Sanitizer

- 1. Unscrew the blue cap from the RO holding tank.
- 2. Wrap the plumber's tape around on the stainless steel threaded stem of the RO holding tank.
- 3. Screw the TruPure holding tank sanitizer onto the holding tank, hand tighten.
- 4. Remove the black gasket inside the TruPure holding tank sanitizer. Insert this gasket inside the holding tank valve.
- 5. Wrap plumber's tape on the male thread of the TruPure holding tank sanitizer and screw the RO holding tank valve onto the TruPure sanitizer's threaded stem, hand tighten.







6. RO System Location and Mounting

Install the three filters into the filter manifold in accordance to the filter color code. Locate the area under your sink where you want to install the RO system, (RO manifold with filters and RO holding tank).

Note: The filter manifold can be mounted on a cabinet wall.

Helpful Hint: Write the date of filter installation with a permanent marker on the filter body, or use our helpful Filter Replacement Records chart on the last page of this manual, so you can easily identify when to replace the filters.

The Pre-Filter should be replaced every 6 months

The VOC Filter is replaced every 12 months

The RO Filter is replaced every 24 months

The VOC Carbon with PH+ Mineral Boost Filter is replaced every 12 months

Caution

Before mounting the filter manifold on a cabinet wall, make sure it can support the weight of the filters and manifold and the wall is thick enough to accommodate the mounting screws. If the mounting screws are too long, we recommend that you buy shorter screws at your local hardware store.

7. RO System Water Connection

After you have located the optimal location for your filters and RO holding tank, you will need to cut the 1/4" tubing to the correct length using the diagram below. Cut the tubing using a sharp utility knife. Make sure not to bend or damage the tubing.

Connection Point:



A to B

Connect the white tubing from the tap water adaptor valve point **A** to the quick connect fitting marked **B** - marked **"Cold Supply"** on the filter manifold.



C to D

Connect the white tubing to the quick connect fitting **C** - marked **"Holding Tank"** on the filter manifold, then connect the other end to the holding tank valve **D.**



E to F

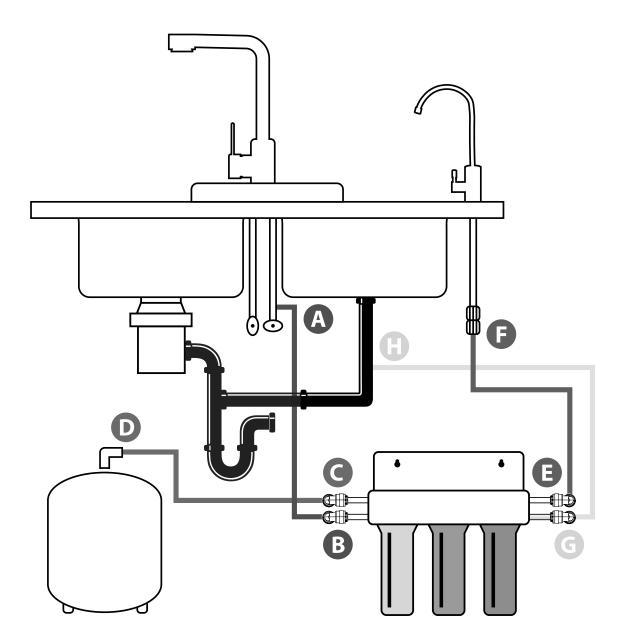
Connect the white tube to the quick connect fitting **E** - marked **"Water Faucet,"** on the filter manifold, then connect the other end to the RO water faucet quick connect fitting **F.**



G to H

Connect the yellow tube to the quick connect fitting marked "**Drain" - G** on the filter manifold, then connect the other end to the drain saddle valve **H.**





- Cold Water Supply
- Holding Tank
- RO Water Faucet
- Drain



STEP STEP

8. System Maintenance: Filters

Turn on the tap water:

Slowly turn on your cold water supply, then open the tap water adaptor valve, (turn counterclockwise) to allow untreated water to enter the system.

CHECK FOR LEAKS!

Open RO holding tank valve:

Open the tank's ball valve to allow water to enter the tank. The tank's valve is "ON" when the valve handle is parallel (in the same direction) with the valve outlet.

CHECK FOR LEAKS!

Wait for the tank to fill:

Before usage, fill the RO holding tank and empty it completely two times. Allow 2 to 3 hours for the tank to fill. When the tank is filled, the RO system will shut off automatically.

CAUTION

When the unit is first filled with water, some tiny black particles are flushed out of the carbon filter. It's important that you fill the RO holding tank and empty it out 2 times before consuming the water.

Drain Tank:

Open the RO water faucet to drain the tank. Let the tank drain completely before closing the lever.

CHECK FOR LEAKS!

Make sure there is no leaking at the joint, fitting, valve and tubing connections.

END OF INSTALLATION



AquaTru® ATU100 is certified against ANSI/NSF Standard 42, 53, 58, 401 & P473 to remove 74 contaminants as specified in the performance data sheet.

AquaTru.com



STEP

9. System Maintenance

Filter Change:

The RO system contains three filters that must be replaced at regular intervals to maintain performance. **Use only genuine AquaTru** filters. The three filters are:

- Pre-Filter (AT2001) should be replaced every 6 months or every 600 gallons, whichever comes first.
- VOC Filter (ATU2003) is replaced every 12 months or every 360 gallons, whichever comes first.
 When replacing this filter we recommend that you also sanitize the holding tank.
 See Sanitize RO holding tank before proceeding.
- RO Filter (AT2002) is replaced every 24 months or every 1,200 gallons, whichever comes first.
 When replacing this filter, we recommend that you also sanitize the holding tank.
 See Sanitize RO holding tank before proceeding.
- VOC Carbon with PH+ Mineral Boost Filter (AT2004) is replaced every 12 months or 360 gallons, whichever comes first.

Sources of supply for replacement components: AquaTru.com

Tips before you start:

- 1. Ensure the service area is free of any excess dirt or dust in order to not cross contaminate parts.
- 2. Wash hands with soap and water and/or wear sanitary gloves.

How to Change Your Filters

- 1. Turn off the cold water supply line.
- 2. Empty the RO holding tank by opening the RO water faucet.
- 3. Remove the filter to be replaced.

Helpful Hint: The filter can pivot out of the base to make it easier to unscrew.

- 4. Install the new filter, making sure that the filter is fully installed.
 - **Helpful Hint:** Write the date of filter installation with a permanent marker on the filter body, or use our helpful Filter Replacement Records chart on the last page of this manual, so you can easily identify when to replace the filters.
- 5. Close the RO water faucet.
- 6. Open the cold tap water supply line.

CHECK FOR LEAKS!

- After the RO holding tank has been completely filled, empty it to flush out the filter before consuming.
- 8. Refill the RO holding tank.



9. System Maintenance: Sanitizing the RO Holding Tank

Sanitize RO holding tank:

The RO system should be sanitized once a year. We recommend that you do the sanitizing process each time you replace the VOC filter, every 12 months. You should complete the sanitizing process **before** you replace the VOC filter. Please do the following.

For best results – We recommend that you use 2 tablespoons of household bleach. To ensure that the tanks get sterilized, check that the bleach hasn't expired. If it has expired, buy new bleach.

Tips before you start:

- 1. Make sure you have sanitizing solution and a new VOC filter.
- 2. Ensure the surface area is free of any excess dirt or dust in order to not cross contaminate parts.
- 3. Wash hands with soap and water and/or wear sanitary gloves.

How to Sanitize Your RO Holding Tank

- 1. Turn off the cold water supply line to the RO system.
- 2. Open the RO water faucet, and drain the water out of the RO holding tank. Before proceeding, make sure that the tank is completely empty.
- 3. Unscrew the top cap of the TruPure holding tank sanitizer. **Note: If the tank is not completely empty, the RO holding tank and sanitizer is pressurized and will spray water when opened.**
- 4. Pour 2 tablespoons of bleach into the tank sanitizer. If there is too much water in the sanitizer to add bleach, pour the water out before adding the bleach.
- 5. Reconnect the top cap on the tank sanitizer, make sure that it is on tight.
- 6 Turn off the RO water faucet.
- 7. Turn on the cold water supply line for the system to fill the RO system.

CHECK FOR LEAKS!

- 8. Allow 2 hours for the RO holding tank to completely fill.
- 9. Empty the RO holding tank by opening the RO water faucet.
- 10. Refill the RO holding tank again and close the cold water supply line.
- 11. Empty the RO holding tank.
- 12. Replace the VOC filter and other filters as needed.

Helpful Hint: Write the date on the filter you replaced and notate it in our helpful Filter Replacement Records chart on the last page of this manual, so you can easily remember when it needs to be replaced again.

- 13. After replacing a filter, run two full tanks of water through the filter and drain the water out before comsuming the water.
- 14. Should you have any further questions please refer to our website at aquatruwater.com or call our customer service department at 1-800-220-6570.

CHECK FOR LEAKS!



FAQ & Troubleshooting

PROBLEM	CAUSE	SOLUTION
Low / slow production	Low water pressure	Make sure the water supply is turned on and the valve is all the way open.
It takes longer than 3 hours to fill the tank		Tap water pressure should be at a minimum of 40 PSI. If your home does not have 40 PSI, we suggest replacing your under sink purifier with an AquaTru countertop model that comes with a built-in pump.
	Crimps in tubing	Check tubing and straighten and replace as needed.
	Clogged filters	If the production rate previously was high but it has gone down significantly over a period of months, you should replace the Pre-Filter and RO Filter.
Low water flow from the faucet	Check the air pressure in the tank	The RO holding tank should have a pressure of 6 to 8 PSI when empty. Use a pressure gauge and pump with a Schrader valve connector to refill the tank.
	RO holding tank valve	Make sure that the holding tank valve is fully open.
	Check for sanitize gasket in sanitizer	The TruPure Holding Tank Sanitizer is shipped with the gasket stored inside the sanitizer. Before installing, unscrew the sanitizer to access the small bag inside that holds the gasket, and use that gasket when installing the RO holding tank valve.
Small amount of water in the tank	System startup	Normally it takes about 2 hours to fill one tank. Note: Low incoming water pressure and water temperature can drastically reduce the water production rate.
	Low water pressure	Tap water pressure should be at a minimum of 40 PSI. If your home does not have 40 PSI, we suggest replacing your under sink purifier with an AquaTru countertop model that comes with a built-in pump.
	Too much air in the holding tank	The RO holding water tank should have a pressure of 6 to 8 PSI when empty. Use a pressure gauge to check the pressure. If the reading is higher than 8 PSI, let air out using the Schrader valve on the bottom of the tank.



FAQ & Troubleshooting

PROBLEM	CAUSE	SOLUTION	
Leaks from filter manifold	Filter not fully installed, or O-ring is damaged	 Check that the filter is fully installed. Depressurize the filters by turning off the tap water supply line and then turning off the RO holding tank valve." Turn off the tap water supply line. Turn off the RO holding tank valve. Open the RO faucet. When water stops flowing from the faucet, it is safe to remove each filter. Inspect O-ring. Reinstall the filters making sure they are fully inserted. Repressurize the system. 	
Water leaks	A gasket is not fully sealing	Depressurize the system and remove all water from the tank. Remove the item that is leaking and inspect the gasket to make sure it is free of any defects. If the leak is from a thread, apply new plumber's tape and then reinstall the components, making sure you tighten in accordance with the manual.	

One-Year Limited Warranty

Your AquaTru water purifier is warranted to be free from defects in materials and workmanship for one year from the original purchase date. Should the product have a defect in materials or workmanship, we will repair or replace it without charge to you (a shipping and processing fee will apply). **Warranty does not include filters**. To obtain service under warranty, simply call our customer service center toll-free at **800.220.6570**.

This warranty does not cover filters, damage caused by accident, misuse or any use other than as intended and described in this product manual, or damage resulting from failure to maintain and clean this product as also specified in this product manual. This warranty applies only to the original purchaser of the AquaTru water purifier.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD.

Some states do not allow limitations on the duration of implied warranties, so the above limitation may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which may vary from state to state.

Contact Info for Warranty Service:

AquaTru,® LLC P.O. Box 9169 | Van Nuys, CA | 91409-8291 1.800.220.6570 | aquatru.com





Under Sink / Filter Records

Filter Replacement Records

1 Pre/Carbon Filter	2 RO Filter	3 VOC Filter
Date:	Date:	Date:

