

Installation, Operation and Maintenance Manual

3-Stage Under Counter Filtration with UV

Model PWSYS-UV-3STG

PURE WATER

Important

Please read the entire manual before proceeding with the installation and startup. Your failure to follow any attached instructions or operating parameters may lead to the product's failure.

Save manual for future reference.

This system has been designed to fit under most kitchen sinks.

DO NOT TOUCH THE UV LAMP OR QUARTZ TUBE AT ANY TIME WITH BARE HANDS OR FINGERS.

Fingerprints or skin oils on the lamp and tube assembly may reduce UV functionality.

This system requires a GFCI electrical outlet at point of installation.



PWSYS-UV-3STG

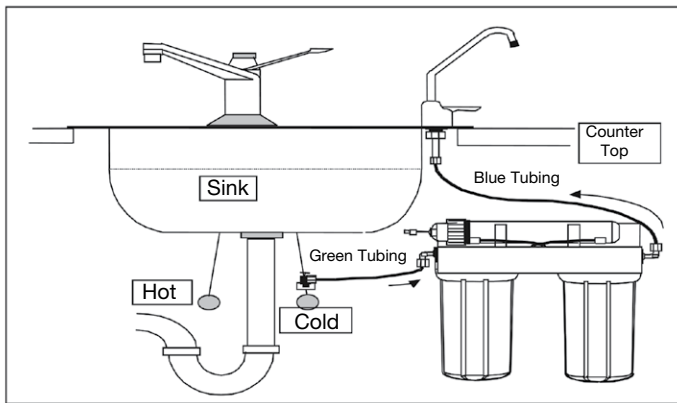
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Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Introduction

Thank you for your purchase of a Watts Pure Water under counter filtration system with UV. With proper installation and maintenance, this system will provide you with high-quality water for years to come. All of Watts Pure Water water enhancement products are rigorously tested by independent laboratories for safety and reliability.



STEP 1

Mounting System Under Sink

- Step A** Locate a space under the sink that allows the unit to be mounted close to the cold water supply and allows for easy access during maintenance and filter changes. Allow 2" (50mm) clearance between the bottom of the filter housing and the floor of the sink cabinet.
- Step B** Using the mounting hole on the bracket, mark the location for the mounting screws on the cabinet wall under the sink.
- Step C** Screw the (2) screws into the wall at the marked locations.
- Step D** The UV modules bracket is designed to be mounted without removing the screws. Hang the UV module on the screws using the mounting holes in the bracket.

STEP 2

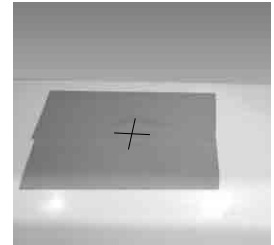
Drill a Hole for the Faucet in a Porcelain Sink

Note: Most sinks are predrilled with 1½" or 1¼" diameter hole that you can use for your RO faucet. (If you are already using it for a sprayer or soap dispenser, see Step 2).

Caution: Porcelain sinks are extremely hard and can crack or chip easily.

Use extreme caution when drilling. Watts accepts no responsibility for damage resulting from the installation of faucet.

Step A – Determine desired location for the RO faucet on your sink and place a piece of masking tape on over where the hole is to be drilled. Mark the center of the hole on the tape.

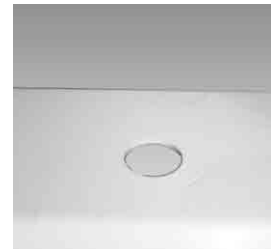


Step B – Using a variable speed drill set on the slowest speed, drill a ⅛" pilot hole through both porcelain and metal casing of sink at the marked center of the desired location. Use lubricating oil or liquid soap to keep the drill bit cool. (If drill bit gets hot, it may cause the porcelain to crack or chip).



Step C – Using a 1¼" hole saw, proceed to drill the large hole. Keep drill speed on the slowest speed and use lubricating oil or liquid soap to keep the hole saw cool during cutting.

Step D – Make sure the surroundings of the sink are cooled before mounting the faucet to the sink after drilling and remove all sharp edges.



OR

Punch a Hole for the Faucet in a Stainless Steel Sink

Note: If mounting faucet to a Stainless Steel Sink, you will need a 1¼" Hole Punch. The faucet opening should be centered between the back splash and the edge of the sink, ideally on the same side as the vertical drain pipe.



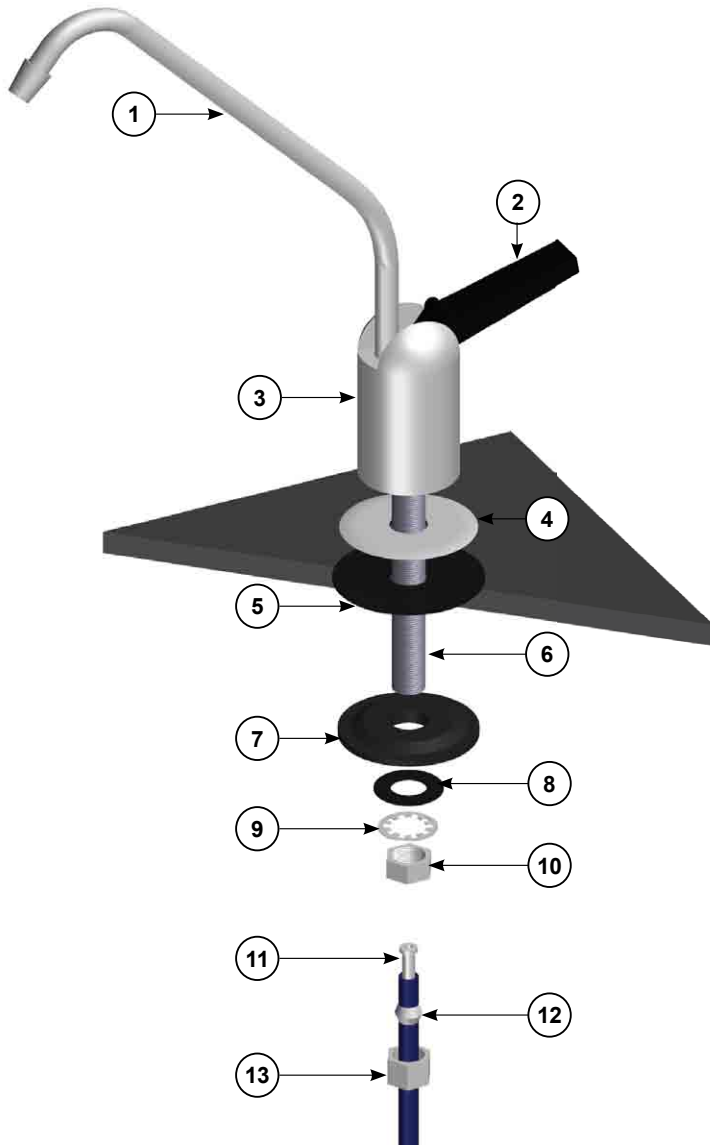
Step A – Drill a ¼" pilot hole. Use a ½" Hole Punch and an adjustable wrench to punch the hole in the sink. Change to the 1¼" Hole Punch to enlarge the hole



The faucet can now be installed.

STEP 3 Non-Airgap Faucet Installation

Standard Faucet Installation



1. Long Reach Spout
2. Handle
3. Faucet Body
4. Escutcheon Plate
5. Black Rubber Washer
6. Stem Bolt
7. Black Locating Washer
8. Small Black Washer
9. Star Washer
10. Lock Nut
11. Tube Insert
12. Delrin Sleeve
13. Compression Nut



Figure A: List of Parts and Assembly in Exploded View

Figure B: Complete Assembly

Gather and identify the faucet pieces.

Step A - Place the escutcheon chrome plate and the black rubber washer on the faucet shank . (Parts found in faucet parts bag) .

Step B - Insert the faucet shank through the hole in sink and let it rest on the sink top .

Step C - From the underside of the sink, slide on the location washer, star washer and Lock nut onto the stem bolt . Check for orientation the tighten lock nut securely .

Step D - Locate the Blue tube from the Filters . Measure the tube from the unit over to the faucet and cut it to the desired length . Remove a the compression nut, plastic sleeve and tube insert from the parts bag . To assemble, place the compression nut on the tube first, then the sleeve (small tapered end of the sleeve must point to the end of tube) and then insert the tube insert all the way into the end of the tube .

Step E - Push the assembled blue tube into the faucet until it stops . Slide compression nut and plastic sleeve down until you can thread nut onto the faucet . Use a wrench to securely tighten the compression nut while continuing to push the tube into the faucet

STEP 4

Adapt-A-Valve™ Installation

Caution: Water supply line to the system must be from the cold water supply line only.

Hot water will severely damage your system.

Configuration for 1/2 inch valve
(using no brass fittings)

Figure 1



Figure 1

Configuration for 3/8 inch valve
(using brass fittings)

Figure 2



Figure: 2

Placement diagram for Adapt-A-Valve™

Figure 3



Hot Supply Cold Supply

Figure: 3

Step A – Turn off the cold water supply to the faucet by turning the angle stop valve completely off.

Step B – Attach the Adapt-A-Valve™ as illustrated in Fig 2, Fig 3, choosing the configuration that fits your plumbing needs

Step C – Completed Valve installation Figure: 3.

Start Up Instructions

Step A Lift black faucet handle up on faucet to start flow of water through unit. Run 7 gallons of water through unit. Close faucet.

Note: You may hear some noise as air is being purged from the unit and the first few glasses of water through the unit may be dark in color due to carbon fines.

Step B Check for leaks. If you have any leaks, shut off water supply to system, repair and restart unit.

Step C Connect plastic electrical connector from UV unit to the plastic electrical connector from AC adapter.

Step D Plug adapter into GFCI electrical outlet. You will see a pale blue light from the view port on the UV housing body. The light indicates that the UV lamp is on and working.

Please follow these guidelines:

Do not unplug UV unit from power supply. Turning system off and on will shorten the life of the UV lamp. UV should be on continuously for maximum effectiveness.

The system requires a warm-up period for proper operation. Wait 20 minutes after plugging in the system before using water.

Water not drawn from unit for a period of time may have a taste or odor and will be warm. To avoid this, allow water to run through the system for one minute before using.

Recommended Replacement Schedule

Filter Element Cartridges

Watts recommends changing the filter element cartridges at least every 6 months or 1350 gallons (5100 liters).

Stage 1: EDP# 7100331 (5-micron Sediment Filter)

Stage 2: EDP# 7100452 (1-micron Carbon Block)

UV-Lamp: Every 12 months or 9000 hours.

Cap & Quartz Tube: Every 24 months

Annual Filter Pack includes Sediment, Carbon Block and UV Lamp - EDP# 7100112.

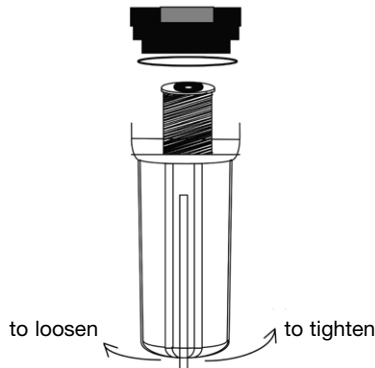
Filter Change

- Step A** Turn off incoming feed water supply to unit. **Note: There will be water in the unit filter housing. Lift the faucet handle to relieve the water pressure.**
- Step B** Remove filter housing from lid by turning it to the left, as shown in Figure D.
- Step C** Remove used filter cartridges and discard. Discard the filter gaskets. **Note: Do not discard filter-housing O-ring.**
- Step D** Clean inside of filter housing with warm soapy water. Rinse the filter housing with clean warm water to remove soap.
- Step E** Lubricate O-ring with water-soluble lubricant (i.e. K-Y Jelly® or Silicone lubricant). **Note: Do not use Petroleum based lubricants such as Vaseline®.**

Do not over-tighten filter housing, overtightening may damage O-ring(s), cause water leaks, or affect system performance.

- Step F** Seat O-ring in groove in filter housing.
- Step G** Insert new filter cartridges into filter housing.
- Step H** Screw filter housing onto lid (as shown in Figure D).
- Step I** Repeat Step 4: Start Up

Figure D:
Filter Bowl Removal



Replacement filters for this and many other filtration systems can be purchased directly from Watts. Additionally, Watts sells filtration and reverse osmosis systems suitable for almost any individual or commercial application.

Replacement Filter Packs

MODEL	FREQUENCY	DESCRIPTION
PWFIL-SED-STD-10-5M-DEP	6 Months	5-micron sediment filter
PWFIL-SED-STD-10-1M-LEAD	6 Months	1-micron carbon block filter
PWFIL-3PACK-STD-UV	Annual	Includes all filters and UV Replacement Lamp

Note: Water conditions may require more frequent cartridge replacement

Ultra Violet Bulb Replacement

Warning: Do not touch UV Lamp or Quartz Tube with bare fingers or hands. Fingerprints on the lamp or tube may reduce lamp effectiveness. Handle with clean cloth or gloves.

- Step A** Turn off the incoming water supply.
- Step B** Unplug transformer from the power outlet and disconnect transformer wire harness from the UV lamp at the plastic connector.
- Step C** Remove UV lamp from housing by pulling on the UV wire harness away from the UV housing. Use caution when removing lamp not to break glass. Discard of old lamp.

Note: DO NOT TOUCH NEW UV LAMP GLASS WITH BARE HANDS, THIS WILL DAMAGE THE LAMP.

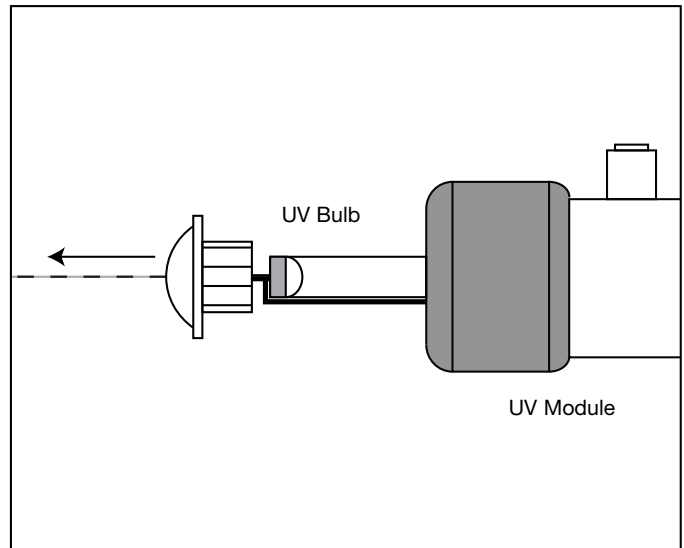
- Step D** Install new lamp by pushing it into the UV housing using the white end cap.
- Step E** Plug the transformer power cord connector into the UV module wire harness connector and plug the transformer into an electrical outlet. The white UV end cap will light up when in service (Plugged in). If light does not come "on" see troubleshooting on page 15.

Turn on the incoming water supply and follow up with page 4, Start Up Instructions.

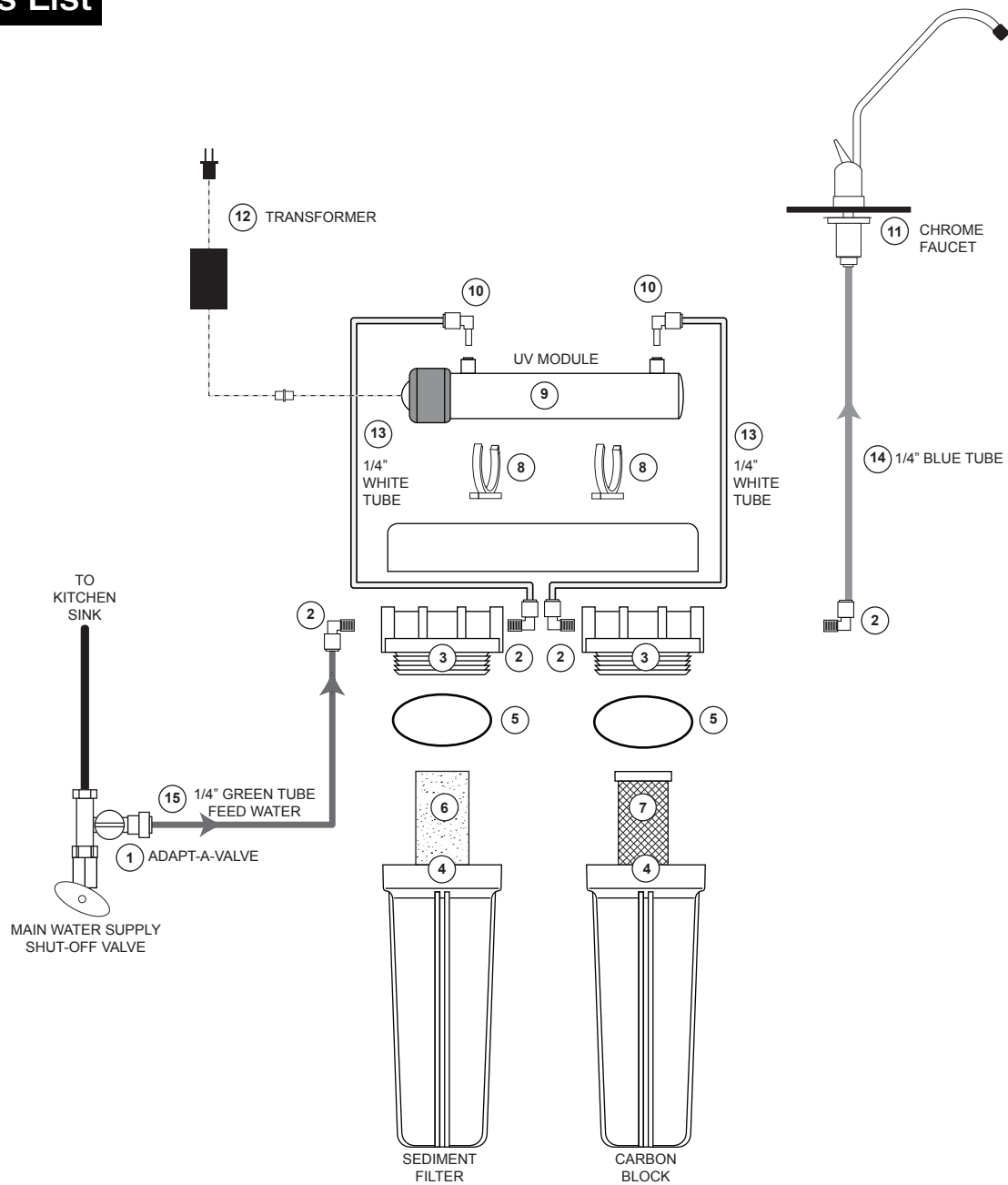
Do not over-tighten filter housing, overtightening may damage O-ring(s), cause water leaks, or affect system performance.

- Step F** Snap UV housing body back into single mounting clip. Reconnect the 1/4" blue tubing back on to the UV housing body.

Figure E: UV Tube Assembly



Parts List



ITEM #	DESCRIPTION
1	Adapt-A-Valve™
2	Elbow - 1/4" QC X 1/4" M
3	Filter Housing - Lid - 1/4" Ports
4	Filter Housing - Bowl - 10" - White
5	O-ring for Filter Housing
6	Sediment Filter
7	Lead, Cyst, VOC Carbon Block
8	Mounting Clip - UV Module
9	UV Module
10	Elbow - 1/4" QC X 1/4" Stem
11	Faucet - Chrome
12	Transformer
13	1/4" White Tubing
14	1/4" Blue Tubing
15	1/4" Green Tubing

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. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

LIMITED WARRANTY: Certain Watts Pure Water products come with a limited warranty from Watts Regulator Co. Other products may have no warranty or are covered by the original manufacturer's warranty only. For specific product warranty information, please visit www.watts.com or the published literature that comes with your product. Any remedies stated in such warranties are exclusive and are the only remedies for breach of warranty. **EXCEPT FOR THE APPLICABLE PRODUCT WARRANTY, IF ANY, WATTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, WATTS HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND IN NO EVENT SHALL WATTS BE LIABLE, IN CONTRACT, TORT, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY, FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR PROPERTY DAMAGE, REGARDLESS OF WHETHER IT WAS INFORMED ABOUT THE POSSIBILITY OF SUCH DAMAGES.**



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