

## A WATTS Brand

# INSTALLATION, OPERATION AND MAINTENANCE MANUAL MODEL: 500320 UV-3



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

Refer to enclosed warranty for operating parameters to ensure proper use with your water supply.

Watts Premier Phone: 800-752-5582

Manual: 299228

8716 W Ludlow Drive, Suite 1 www.premierH2o.com

Peoria, AZ 85381 Fax: 623-866-5666

Manual Date: 07/19/2016

Thank you for your purchase of a state of the art Premier Water Treatment system.

## **UV Water Treatment System:**

This Premier water treatment system contains a heavy duty lead & cyst filter block. This specialty formulated block is capable of reducing lead, cryptosporidium, Giardia & Entamoeba.

## **System Maintenance**

Just because you can not taste it, does not mean that it is not there. Many contaminants in the drinking water are undetectable to the taste. Additionally, over time if you do not replace the filter elements, other bad tastes and odors will be apparent in your drinking water. This is why it is important to change your filters at the recommended intervals as indicated in this system manual.

When replacing any of the filter elements, pay special attention to any cleaning instructions. Should you have any further questions please refer to our web site at <a href="https://www.premierH2o.com">www.premierH2o.com</a> or call our customer service department at 1-800-752-5582.

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Service Record Date of Purchase:		Serial Number: Installed by:	
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Date	Sediment Filter (6 months)	CB Filter (6 Months)	Date	Sediment Filter (6 months)	CB Filter (6 Months)

# **Operational Parameters**

Installation needs to comply with state and local plumbing regulations.

	Maximum	Minimum
Operational Temperature	100°F (37.8°C)	40°F (4.4°C)
Operating Pressure	85 psi (5.98 kg/cm <sup>2</sup> )	20 psi (1.406 kg/cm²)
pH Parameters	10	5
Flow Rate	0.5 GPM @ 60 psig	

# **Contents of Under Counter System**

- 1 UV Unit Filters Pre-installed
- 1 Transformer
- 1 Parts Bag
- 1 Faucet Assembly

If any of the items are missing, please contact Premier prior to installing

## **Tools Recommended For Installation**

A small knife

Variable speed drill

1/8" (3mm), 1/4" (6.4 mm) and 7/16" (11.0mm) drill bits

1/2" Diamond Tip Drill bit (for porcelain sinks)

1/2" hole punch (for stainless steel sinks)

1/2" and 5/8" open-end wrenches (or adjustable wrenches)

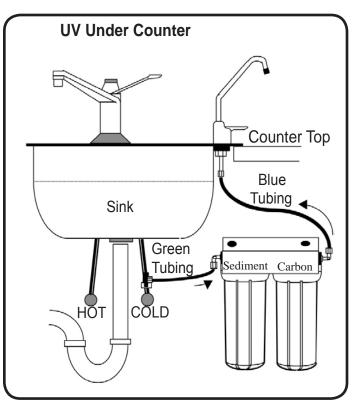
Phillips screwdriver

#### Installation

This system has been designed to fit under most kitchen sinks. Please read the entire manual carefully before proceeding with installation.

#### **Step 1: Mounting System Under Sink**

- (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. System must be installed to the cold water supply only. Allow approximately 2" (5cm) clearance between the bottom of the filter housing and the floor of the sink cabinet.
- (B) Using the mounting holes on the bracket, mark the location for the mounting screws on the cabinet wall under the sink.
- (C) Screw the (2) screws into the wall at the marked location.
- (D) Hang the module on the screws using the mounting holes in the bracket.



## Drill a Hole for the Reverse Osmosis Faucet

## **Marble Counter-top**

We recommend contacting a qualified contractor for drilling a hole in a marble counter-top.

## Counter Top / Porcelain & Stainless Steel Sink

Note: Most sinks are pre drilled with 1  $\frac{1}{4}$ " diameter hole that you can use for your RO faucet. (If you are already using it for a sprayer or soap dispenser, see step 1)

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. Diamond tip bit recommended.

- Step 1 Determine desired location for the RO faucet on your sink and place a piece of masking tape over where the hole is to be drilled. Mark the center of the hole on the tape.
- Step 2 Using a variable speed drill set on the slowest speed, drill a 1/8" 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 3 Using a 1/2" diamond tip 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 4 After drilling, remove all sharp edges and make sure the surroundings of the sink are cooled before mounting the faucet.



## Mount the Faucet & Connect Blue Tube to Faucet

Refer to installation instructions found on faucet box.

Mount the faucet and connect 1/4" blue tube found in the shipping box to the faucet.

# 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.



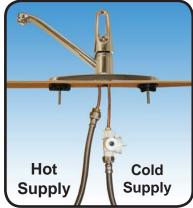




Hot Cold Supply



1/2" Configuration (Without Brass Fittings)

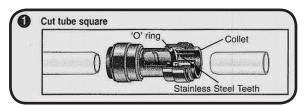


#### WARNING: Do not use Teflon tape with the Adapt-a-Valve.

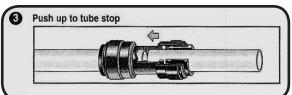
- Step 5 Turn off the cold water supply to the faucet by turning the angle stop valve completely off. Open cold water on the sink faucet to relieve pressure.
- Step 6 Choosing the configuration that fits your plumbing, attach the adapt-a-valve as illustrated in the four photos above.
  - \*Do not forget to install the white compression washer for 3/8" configuration.
  - \*Brass adapter B does not need to be tightened with a wrench, only finger tight.

## **How to use the Quick Connect Fittings**

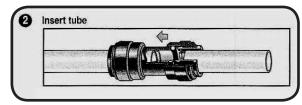
To make a connection, the tube is simply pushed into the fitting. The unique locking system holds the tube firmly in place without deforming it or restricting flow. Use the steps below in reference to any quick connect tube connections.



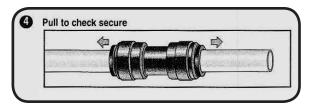
It is essential that the outside diameter be free of score marks and that burrs and sharp edges be removed before inserting into fitting.



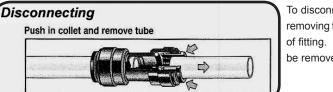
Push the tube into the fitting, to the tube stop. The collet (gripper) has stainless steel teeth which hold the tube firmly in position while the O-ring provides a permanent leak proof seal.



Fitting grips before it seals. Ensure tube is pushed into the tube stop.



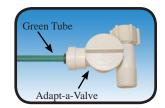
Pull on the tube to check that it is secure. It is a good practice to test the system prior to leaving site and /or before use.



To disconnect, ensure the system is depressurized before removing the tube. Push in the collect squarely against face of fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.

## **Connect Green Tube**

- Step 7 Locate the 1/4" green tube in the box. Insert one open end of the green 1/4" tube to the open 1/4" quick connect elbow fitting above the "FIVE MICRON SEDIMENT FILTER" label making sure the tube is pushed in all the way passed the o-ring to the tube stop.
- Step 8 Insert the other open end of the green 1/4" tube into the open 1/4" quick connect fitting on the plastic adapt-a-valve making sure the tube is pushed in all the way passed the o-ring to the tube stop.



## **Connect Blue Tube**

Step 9 Locate the 1/4" blue tube attached to the faucet. Insert the open end of the blue 1/4" tube into the open 1/4" quick connect elbow fitting above the "CARBON BLOCK PRE-FILTER" label making sure the tube is pushed in all the way passed the o-ring to the tube stop.

# **System Start Up**



Warning: To prevent the possibility of electrical shock, clean up any water on cabinet floor and dry all water from outside of unit.

Step 10 Turn on the incoming cold water at the angle stop valve and the Adapt-a-Valve. Check the system for leaks and tighten any fittings as necessary. (Check frequently over the next 24 hours to ensure no leaks are present).



Step 11 Turn faucet handle to the open position to start the flow of water through the unit. Run 7 gallons of water through the unit in order to flush out the normal black carbon fines (it will "sputter" until the air is purged out) from the unit. Initially, the water may appear cloudy which is due to tiny air bubbles and it will clear up shortly. Close the faucet when finished.

Check for leaks. If you have any leaks, shut off the water supply to your system, tighten any fittings / housings and restart unit.

Step 12 Plug the (24 volt) 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).

# Filter Change

Premier recommends changing the filter element every 6 months. However filter life may vary depending on local water conditions and water use.

**Use Premier's replacement cartridge only.** Other filters may look the same, but only filters by Watts are manufactured to fit your filter unit in order to ensure proper reduction of water contaminants.

Sediment Pre-Filter Part# 104017

Carbon Block Filter Part# 101015

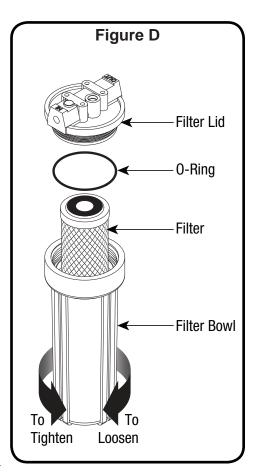
(A) Turn off incoming water supply to the system.

Note: There will be water in the filter housing. Lift the faucet handle to relieve the water pressure.

- (B) Remove filter housing from lid by turning it to the left, as shown in Figure D.
- (C) Remove used filter cartridges and discard.

NOTE: Do not discard filter-housing o-ring.

- (D) Clean inside of filter housing with warm soapy water and rinse well to remove soap.
- (E) Lubricate o-ring with water-soluble lubricant (i.e. K-Y Jelly  $\ensuremath{\mathbb{R}}$ ).



#### NOTE: Do not use Petroleum based lubricants such as Vaseline ®.

- (F) Seat o-ring in groove in filter housing and insert new filter cartridges into appropriate filter housing.
- (G)Screw filter housing onto lid as shown in Figure D.
- (H) Turn on water supply to filter unit check system for leaks periodically over the next 24-48 hours.

# Important guidelines

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

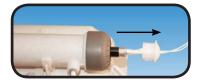
The system requires a warm-up period for proper operation. Wait 20 minutes after plugging in the system before using water.

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.

Replacement filters for this and many other filtration systems can be purchased directly from Premier. Ordering options include mail order, telephone ordering, and online filter replacement. Additionally, Premier sells filtration and reverse osmosis systems suitable for almost any individual or commercial application.

# **Annual Ultra Violet Bulb Replacement**

- Step 1 Turn off the incoming water supply to the UV system.
- Step 2 Unplug transformer from the power outlet and disconnect transformer wire harness from the UV lamp at the plastic connector.
- Step 3 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 4 Install new lamp by pushing it into the UV housing using the white end cap.
- Step 5 Plug the (24 volt) 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).
- Step 6 Turn on the incoming water supply to the UV system.

#### Performance Data Sheet Premier Inc. 8716 W Ludlow Drive Suite #1

Peoria, AZ 85381

**UV-3** 

#### **GENERAL USE CONDITIONS:**

1: System to be used with municipal or well water sources treated and tested on regular basis to insure bacteriological safe quality. DO NOT use with water that is micro biologically 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.

2: Operating Temperature: Maximum 100°F (40.5°C) Minimum 40°F (4.4°C) 3: Operating Water Pressure: Maximum 85-psi (5.98 kg/cm²) Minimum 20-psi

4: Maximum flow Rate: 0.50 gpm (1.89 lpm)
5: Rated Capacity: 600 Gallons (2,200 liters)

6: Turbidity < 5 NTU

#### RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVAL:

Note: Depending on incoming feed water conditions replacement time frame may vary.

Description Part Number Change time Frame

Stage 1: Sediment: 5M-10 104017 6 Months or 600 gallons of water Stage 2: Carbon block 101015 6 Months or 600 gallons of water

Stage 3: UV Bulb 170016 12 Months or 9000 Hours

This system has been tested according to NSF/ANSI Standard 53 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 53. Testing performed under standard laboratory conditions, actual performance may vary.

Substance	Percent Reduction	Influent Challenge Concentration (mg/L unless noted)	Maximum Permissible Product Water Concentration
CRYPTOSPORIDIUM (see Cyst)	99.99%	minimum 50,000/mL	99.95%
CYST	99.99%	minimum 50,000/mL	99.95%
LEAD pH 6.5	99%	0.15 +/- 10%	0.010
LEAD pH 8.5	99%	0.15 +/- 10%	0.010



# **Limited Warranty**

#### WHAT YOUR WARRANTY COVERS:

If any part of your Ultra UV-3 is defective in workmanship (excluding replaceable filters and UV bulbs), return unit after obtaining a return authorization (see below), less tank, within 1 year of original retail purchase, Watts Premier will repair or, at Watts Premier's option, replace the system at no charge.

#### **HOW TO OBTAIN WARRANTY SERVICE:**

For warranty service, call 1-800-752-5582 for documentation and a return authorization number. Once the return authorization number has been created, ship your Reverse Osmosis unit (less tank) to our factory, freight and insurance prepaid, with proof of date of original purchase. Include a note stating the problem experienced and include your name, address and your return authorization number. No returns will be accepted without the proper return authorization number. Watts Premier will repair it, or replace it, and ship it back to you prepaid.

#### WHAT THIS WARRANTY DOES NOT COVER:

This warranty does not cover defects resulting from improper installation, (contrary to Watts Premier's printed instructions), from abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes or other such acts of God.

- 1. The UV System must be hooked up to a potable municipal or well cold water supply.
- 2. The pH of the water must not be lower than 5 or higher than 10
- 3. The incoming water pressure must be between 20 and 100 pounds per square inch.
- 4. Incoming water to the UV cannot exceed 100 degrees F (40 degrees C.)
- 5. Incoming TDS/Total Dissolved Solids not to exceed 1800 ppm.
- 6. Do not use with water that is micro-biologically unsafe or of unknown quality without adequate disinfection before or after the system.

This warranty does not cover any equipment that is relocated from the site of its original installation. This warranty does not cover any charges incurred due to professional installation. This warranty does not cover any equipment that is installed or used outside the United States of America and Canada.

#### **LIMITATIONS AND EXCLUSIONS:**

WATTS PREMIER WILL NOT BE RESPONSIBLE FOR ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WATTS PREMIER WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING TRAVEL EXPENSE, TELEPHONE CHARGES, LOSS OF REVENUE, LOSS OF TIME, INCONVENIENCE, LOSS OF USE OF THE EQUIPMENT, AND DAMAGE CAUSED BY THIS EQUIPMENT AND ITS FAILURE TO FUNCTION PROPERLY. THIS WARRANTY SETS FORTH ALL OF WATTS PREMIER'S RESPONSIBILITIES REGARDING THIS EQUIPMENT.

#### **OTHER CONDITIONS:**

If Watts Premier chooses to replace the equipment, may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment is returned to you or for the remainder of the original warranty period, whichever is longer. This warranty is not assignable or transferable.

#### YOUR RIGHTS UNDER STATE LAW:

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply. This warranty gives you specific legal rights, and you may have other legal rights which vary from state to state.

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **For more information: www.watts.com/prop65**