# Installation, Operation and Maintenance Manual

**Under Counter Water Filtration System** 

Model PWDWHCUC1

# **PURE WATER**

# A WARNING



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

Keep this Manual for future reference.

# A WARNING

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



The PWDWHCUC1 is certified to NSF/ANSI 42 for reduction of aesthetic chlorine, taste and odor, NSF/ANSI 53 for the reduction of cysts, and NSF/ANSI 372 for lead free compliance.



PWDWHCUC1

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# Introduction

Thank you for your purchase of a Watts water treatment system. Your new water treatment system contains a heavy duty sediment, cyst and chlorine reducing filter block. The PWDWHCUC1 water filtration provides clean, clear, great tasting water with a higher flow and gal-lon rating than other similar systems.

# System Maintenance

Just because you cannot 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 element, other bad tastes and odors will be apparent in your drinking water.

This is why it is important to change out your filter at the recommended intervals as indicated in this system manual. When replacing the filter element, pay special attention to any cleaning instructions. Should you have any further questions please refer to our website at www.watts.com/purewater or call our customer service department at 1-800-244-1299.

With proper installation and maintenance, this system will provide you with high quality water for years to come. If you have any questions or concerns, please contact our Customer Service department at 1-800-244-1299 or refer to our on-line troubleshooting at www.watts.com/purewater.

| Filter Replacement Date |  |
|-------------------------|--|
|                         |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |

| Model Number: | Serial Number: | Date of Purchase: | Date of Install: |
|---------------|----------------|-------------------|------------------|
|               |                |                   |                  |

Installed by: \_\_\_\_\_

# IMPORTANT

If you are unsure about installing your Watts water filter, contact a Watts representative or consult a professional plumber.

# **A** CAUTION

Test the water periodically to verify that the system is performing satisfactorily. Discard small parts remaining after the installation.

# NOTICE

Failure to install the system correctly voids the warranty. Handle all components of the system with care. Do not drop, drag or turn components upside down.

Be sure the floor under the water filter system is clean, level and strong enough to support the unit.

# **Operational Parameters**

#### NOTICE

- System is intended to be installed on the cold water line ONLY. Do not use with hot water supply.
- Do not install if your water lines are susceptible to water hammer.
- System to be used with municipal or well water sources properly treated and tested on regular basis to insure suitable and non-adverse water conditions, including bacteriological safe quality.

| Operating Temperatures | Maximum 100°F (37.8°C)      | Minimum 40°F (4.4°C)       |
|------------------------|-----------------------------|----------------------------|
| Operating Pressure     | Maximum 125psi<br>(689 kpa) | Minimum 25psi<br>(172 kpa) |
| pH Parameters          | Maximum 10                  | Minimum 5                  |
| Flow Rate              | 1.6 GPM @ 60psi             |                            |

# Contents of Under Counter System

- 1 Filtration System
- 1 Filter Attached
- 1 Parts Bag (blue tubing, brass insert, brass nut, QC stem adapter, QC union, delrin sleeve, mounting screws)



3/8in. Delrin Sleeve

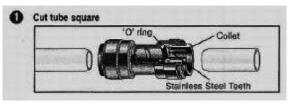
Check to confirm that you have all parts. Inspect all parts for signs of damage, cracks, kinks, wear or breaks. DO NOT USE if damages in any way. Contact If any of the items are missing please contact Watts Customer Service for replacement parts.

# **Tools Recommended for Installation**

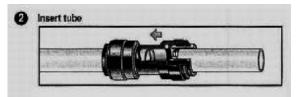
- $\sqrt{\text{Phillips}}$  bit for electric drill
- √ Sharp Knife or Scisors
- $\sqrt{1/2}$ " Adjustable Wrench
- √ Electric Drill

# How to use the Quick-Connect fittings

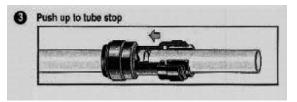
To make a connection, the tube is simply pushed into the fitting. Place a piece of tape  $\frac{1}{2}$ " from end of tube to indicate how far the tube should be inserted. The unique patented Quick-Connect locking system holds the tube firmly in place without deforming it or restricting flow



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



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



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.

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|----------------|---|-------------------|---------------------------|
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| 和前生言           |   | conserved and     | CAR COMPLETE              |

Pull on the tube to check that it is secure. Always test the system for leaks following installation and before use, and periodically during use.

| sconnec        | ting  |
|----------------|---|
| Push in co     | llet and remove tube  |
|                | A CONTRACTOR OF |
| 101800         |   |
| and a fair and |   |

To disconnect, ensure the system is depressurized before removing the tube. Push in collet squarely against face of fitting. With the collet held in this position, the tube can be removed. Do not reconnect. Quick-Connect fitting can be reused only on a new connection or after existing tube ends are recut free of score marks, burrs and damage.

# STEP 1

# Blue Tube Connection- Angle Stop Valve NOTICE

Do not use with hot water supply. Hot water will severely damage your system, will not filter properly, and can result in leaks and property damage. Water supply line to the system must be from the cold water supply only.

#### NOTICE

- Step A Turn off the cold water supply to the faucet by turning the angle stop valve completely off.
- Step B Open cold water sink faucet to relieve pressure.
- Step C Place a small container under the cold water angle stop valve to catch any runoff water. Disconnect the cold water faucet supply hose from the cold water angle stop valve.
- Step D Locate the blue 3/8" tube in the parts bag. Remove a brass nut, plastic delrin sleeve and brass insert from the parts bag. To assemble, place the brass nut on the blue tube first (Open end out), then the sleeve and then push



the brass insert all the way into the end of the tube. (See Picture).

Step E - Insert the assembled blue tube into the open fitting of the cold water angle stop valve and simply tighten using an adjustable wrench. DO NOT OVER TIGHTEN.

# STEP 2

# Blue Tube Connection- Faucet Hose

Step A - Locate the threaded 3/8" male stem adapter fitting in the parts bag. Thread the stem adapter on to the supply hose attached to the faucet and tighten with an adjust-able wrench.

Step B - Locate the 3/8"x3/8" Quick Connect union in the parts bag. Push the union on to the 3/8" stem adapter fitting attached to the faucet hose until fully seated.

Step C - Connect the open end of the 3/8" blue tube to the open end of the 3/8"x3/8" Quick connect union fitting by pushing the tube into the adapter until fully seated.

# STEP 3

# System Module Mounting - Wood Surface

Step A - Determine best location for the filtration system to be mounted and spliced into the 3/8" blue tubing. Using the mounting holes on the bracket, mark the location for the mounting screws on the cabinet wall under the sink (Make sure to leave enough room to remove the filter during



filter changes, approximately 2" below filter). In the parts bag, locate the two self tapping screws. Using an electric drill with a Phillips bit, screw them into the cabinet at the marked location. Hang the system on the screws using the mounting holes in the bracket

# STEP 4

# Blue Tube Connection - Filtration System

Step A - After mounting the system, determine where and cut the

3/8" blue tubing into two parts in order to connect it to the filtration system.

Step B - Connect the 3/8" blue tube coming from the angle stop valve into the left side of the filtration system (IN), by pushing the tubing firmly into the quick connect fitting. Connect the



3/8" blue tube coming from the faucet supply hose into the right side of the filtration system (OUT), by pushing the tubing firmly into the quick connect fitting.

# System Start Up

Step A- Slowly turn on water. Check for signs of leaks or damage at all locations including water supply connection, at cold water faucet hose connection, at quick connect fittings, at angle stop valve connection and at filter module and cartridges. Inspect connections, lines and filter module/ cartridges at least every six months thereafter for signs of leaks or damage. Turn water off immediately and replace if leaking, weeping, cracked, damaged or corroded.

Step B - Run 5 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.

### NOTICE

Check frequently over the next 24 hours to ensure no leaks are present

# Maintenance

Ordering Code: EDP# 7100643 Includes: (1) Carbon Block Cvst Filter Step A - Turn off incoming water supply to the filtration unit.

Step B – Open the cold water faucet handle to relieve the water pressure

# Annual Filter Change Out

**NOTICE** At least every 12 months, you must change the filter with a new Watts filter.

WARNING No one who has a compromised or weak immune system should change filters due to possible exposure to germs and bacteria. Always wear gloves and thoroughly wash hands immediately after changing filter.

- Step C Remove filter from lid by turning it to the left, then pull-ing the filter down out of the lid. Properly dispose of old filter. Do not reuse. Cannot be recycled.
- Step D Remove plastic wrapping and cap from new filter.
- Step E To install new filter cartridge, with the filter label facing approximately 45 degrees to the left, push the filter into the lid and hand twist it to the right until the filter locks in and the label on filter is facing the front.
- Step F Follow System Start Up procedure.

#### **Routine Maintenance**

- Step A Regularly check for any leaks or damaged parts or connections.
- Step B Make sure system installation has adequate clearance at all times with nothing touching filter, tubes or connections.
- Step C Regularly test water supply and output to confirm water condition and filter performance.

# Performance Data Sheet

WATTS 8716 W Ludlow Drive Suite #1 Peoria, AZ 85381 PWDWHCUC1

GENERAL USE CONDITIONS:

# A WARNING

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:
- 3: Operating Water Pressure:
- 4: Maximum flow Rate:

Description

PWCBHCUC1

5: Rated Capacity (Chlorine):

replacement time frame may vary.

Depending on incoming feed water conditions

7100643

Part Number

Maximum 100° F (38° C) Maximum125-psi (689kpa) 1.6 gpm (6.06 lpm) 10000 Gallons (37,854 liters)

Minimum 40° F (4.4° C) Minimum 25-psi (172kpa)

# **RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVAL:**

The PWDWHCUC1 is certified to NSF/ANSI 42 for reduction of aesthetic chlorine, taste and odor, NSF/ANSI 53 for the reduction of cysts, and NSF/ ANSI 372 for lead free compliance.

The PWDWHCUC1 system has been tested according to NSF/ANSI 42, 53, for 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 42.

While testing was performed under standard laboratory conditions, actual performance may vary.

**Change time Frame** 

10000 gallons of water

| Testing parameters: | Flow rate 1.6  | e 1.6 gpm pH 7.6 gpm |          | Water pressure: 60 psi. |            |
|---------------------|----------------|----------------------|----------|-------------------------|------------|
|                     | Cyst Reduction | Flow Reduction       | Influent | Effluent 1              | Effluent 2 |
| Influent Avg.       | 370000 count/L | Eighth Cycle         | 130000   | <25                     | <25        |
| Effluent Avg.       | <25 count/L    | 25%                  | 210000   | <25                     | <25        |
| Percent Reduction   | >99.98 %       | 50%                  | 333000   | <25                     | <25        |
| Maximum Effluent    | <25 count/L    | 75%                  | 810000   | <25                     | <25        |

# **Under Counter System**





| ITEM # | ORDERING CODE | DESCRIPTION                    |
|--------|---------------|--------------------------------|
| 1      | 7300767       | 3/8" Brass Insert (not shown)  |
| 2      | 7300768       | 3/8" Delrin Sleeve (not shown) |
| 3      | 7300769       | 3/8" Brass Nut                 |
| 4      | 7300067       | 3/8" Blue Tubing               |
| 5      | 7300770       | 3/8" QC Union                  |
| 6      | 7300771       | 3/8" QC Stem Adapter           |
| 7      | 7300766       | System Head Assembly           |
| 8      | 7100643       | 15" HC Carbon Filter           |

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

LIMITEDWARRANTY: CertainWattsPureWaterproductscomewithalimitedwarrantyfromWattsRegulatorCo. Otherproductsmayhavenowarrantyorarecoveredbytheoriginalmanufacturer'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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