# Installation, Operation and Maintenance Manual Single-Stage Total PFAS Filtration System

Model: PWDWTPFAS1

# wwatts 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. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

### 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.

### 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.



PWDWTPFAS1 is certified by IAPMO R&T to NSF/ANSI 42 for the reduction of Chlorine, Taste and Odor, and Particulates Class 1; NSF/ ANSI 53 for the reduction of Total PFAS, Lead, Cyst and Asbestos; NSF/ANSI/CAN 372 for low lead Compliance; NSF/ANSI 401 for reduction of Micro-Plastics; and to CSA B483.1 as verified and substantiated by test data.

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





## Overview

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

Your new system is equipped with a high capacity Carbon Block filter tested as a mixture made up of PFOA (500 ppt), PFOS (1,000 ppt), PFHxS (300 ppt), PFNA (50 ppt), PFHpA (40 ppt), PFBS (260 ppt), and PFDA (10 ppt), Lead, Cyst, Asbestos, Microplastics, Chlorine Taste and Odor, and Particulates Class 1 reduction capability. The PWDWTPFAS1 water filtration unit provides clean, clear, great tasting water to your existing faucet and has a 3,200 gallon filtration capacity. System is certified to reduce Total PFAS, Lead, Cyst, Microplastics, Chlorine Taste and Odor, and Class 1 Particulate.

Simple under sink installation, only requiring standard household tools, allows changing of the filter with just a quarter turn.

# System Maintenance

It is important to change filters at the recommended interval indicated in this manual. Many contaminants are not detectable by taste. In addition, other bad tastes and odors may become apparent over time if filters are not replaced.

When replacing any of the filter elements, pay special attention to any cleaning instructions. Should you have any further questions, please visit our website at www.watts.com/purewater or call our Pure Water Customer Service or Technical Support Team at 1.800.224.1299.

## Operational Parameters

#### NOTICE

Installation must comply with state and local plumbing regulations.

Call customer service if you need assistance with technical details 1-800-659-8400.

	Maximum	Minimum
Operating Temperature:	100°F (37.8°C)	35°F (1.7°C)
Operating Pressure:	100 psi (689 kPa)	10 psi (69 kPa)
pH Parameters:	10	5
Flow Rate:	2.5 gpm (9,46 lpm)	

#### NOTICE

**Water Operating Pressure:** The operating water pressure in your home should be tested over a 24-hour period to attain the maximum pressure. If the incoming water pressure is above 85psi, a pressure regulator is recommended and if over 100psi, then a pressure regulator is required.

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# Installation Precautions

#### NOTICE

- System is intended to be installed on the cold water line ONLY. Do not use 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 in insure suitable and non-adverse water conditions, including bacteriological safe quality.
- Filter housing must be protected against freezing temperatures, frost, snow, sleet and ice. Exposure to these elements can damage the housing and lead to water damage.
- This product has a limited service life. We recommend that a record be kept regarding the date of install and any other performance maintenance (See page #7). Because of the products' limited service life and to prevent costly repairs or possible water damage, we strongly recommend that the head be replaced every ten years.
- Turn off water supply to head and remove the cartridge if it must be left unattended for an extended period of time.
- After prolonged periods of non-use (such as vacation) it is recommended that the system be flushed thoroughly. Let water run 5 - 6 minutes before using
- The filter recommended for use with this system carries a limited service life. Changes in taste, odors, color and/or flow of the water being filtered indicates that the cartridge should be replaced.
- Make certain that installation complies with all state and local laws and regulations.
- If you have anything other than flexible hose under your sink, check to see if you need to purchase special fittings prior to starting install.

### Contents of Under Counter System

Please make sure all of the items listed below are contained in the box. If any of the items are missing please contact Customer Service at (800) 224-1299 prior to installing.

- System Head with Integrated Bracket
- Model #PWCBTPFAS1 Quick-Change Filter in separate box
  inside system box
- 3/8" Kitchen Faucet Adapter
- Mounting Screws
- 3/8" Plastic Tubing

### Recommended Tools For Installation

- Small knife or tube cutter
- Variable speed drill
- 1/8" (3mm) drill bit
- Adjustable wrench
- Phillips screwdriver

# System Diagram



# Parts List

Item	Description
Α	System Head with Attachable Bracket
В	Quick-Change Total PFAS Filter
С	Kitchen Faucet Adapter
D	3/8" Plastic Tubing
E	Mounting Screws not shown (x2)

### Kitchen Faucet Adapter Connection

### **A** CAUTION

Water supply line to the system must be from the cold water supply line only. Hot water will severely damage your system.

- Step 1 Turn off the cold water supply to the faucet by turning the angle stop valve completely off.
- Step 2 Open cold water sink faucet to relieve pressure.
- Step 3 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 4 Hand-tighten the kitchen faucet adapter to the cold water angle stop valve as shown. Next hand-tighten the lower end of the cold water line onto the top of the kitchen faucet adapter.







# **Cartridge Installation**

Step 1 - Line up arrow on cartridge with unlocked position on head, insert cartridge and turn to locked position.



# System Module Mounting

- Step 1 Mount the system to one side of the cabinet allowing 2" of clearance below the filter for easy filter removal and replacement.
- Step 2 Using the mounting bracket, mark with a pencil the holes for the mounting screws on the wall surface.





Step 3 - Using a 1/8" drill bit, drill pilot holes for the mounting screws. Insert mounting screws into the wall with a screwdriver leaving approximately 3/8" of each mounting screw

exposed and hang system head on the mounting holes of the bracket.

## Inlet and Outlet Tube Connection -Filtration System

Step 1 - Determine two different lengths of 3/8" tubing needed to connect the system head inlet and outlet to the kitchen faucet adapter (reference image for inlet and for outlet locations and



directions on the right for cutting and installing tubing). Be sure to allow enough tubing to prevent kinking in the line.

Step 2 - Wet one end of the 3/8" plastic tubing with water and push it into the inlet side of the system head approximately 5/8" until it stops. Connect the other end of the tubing to the



inlet side of the kitchen faucet adapter. Refer to Quick-Connect instructions on the right for more detail.

Step 3 - Repeat same process with outlet side.

#### NOTICE

Reference image for inlet and outlet locations.

# **Using Quick-Connect Fittings**

### Cutting

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.



### Connecting

Make certain to push the tubing completely into the connector until it comes into contact with the internal tubing



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.

Pull on the tube to check that it is secure. The system must be tested prior to leaving the site and/or before use.

### Disconnecting

To disconnect, ensure the system is depressurized before removing the tube. Push in collet squarely against the face of the



fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.

## System Start Up

- Step 1 Turn on water supply at cold water angle stop. Turn cold water faucet handle to the open position to start the flow of water through the unit. Run 20 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. A container with a known volume can be filled to determine how much water has flushed through the system. Initially, the water may appear cloudy which is due to tiny air bubbles and it will clear up shortly. Close the faucet when finished.
- Step 2 Check for leaks. If you have any leaks, shut off the water supply to your system, tighten any fittings then turn the supply back on.

#### NOTICE

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

### **Filter Maintenance**

# Semi-Annual Total PFAS Quick Change Reduction Filter

### (6-Months - PWCBTPFAS1, EDP#7101117)

- Step 1 Turn off incoming water supply to the filtration unit.
- Step 2 Open the cold water faucet handle to relieve the water pressure.
- Step 3 Remove the filter from the head by turning to the left, then pulling downwards. Discard the old filter.
- Step 4 Remove filter cartridge from filter cartridge box inside system box
- Step 5 To install new filter cartridge, with the filter label facing approximately 45 degrees to the left, push the filter into the filter head and twist it to the right until the filter locks in and the label on filter is facing the front.
- Step 6 Follow start-up procedure.



#### NOTICE

Mark the date the filter is installed on cartridge label

# Troubleshooting

#### LEAKS BETWEEN THE SYSTEM HEAD ASSEMBLY AND THE FILTERS:

- 1. Turn off water supply to the filter and turn on the cold water from kitchen faucet until water and airflow stops.
- 2. Remove cartridge and inspect O-rings to make sure they are in place and clean.
- 3. Re-install cartridge, turn on water supply and check for leaks.

#### LEAKS AROUND THE FITTINGS:

- 1. Turn off water supply to the filter and turn on the cold water from kitchen faucet until water and airflow stops.
- 2. While pulling the 3/8" plastic tubing with one hand, press in on the collar around the inlet and/or outlet fitting. Check to make sure that the 3/8" plastic tubing is cut squarely and that it is not scratched or crimped. If the 3/8" plastic tubing is unevenly cut or scratched, cut off 1/2" to 5/8" and re-install tubing.
- 3. Turn on water supply and check for leaks.

#### LEAKS ON THE KITCHEN FAUCET ADAPTER CONNECTION:

- 1. Turn off water supply to the filter and turn on the cold water from kitchen faucet until water and airflow stops.
- 2. Locate the kitchen faucet adapter.
  - If the 3/8" plastic tubing is leaking, follow the previous steps ("Leaks around the fittings").
  - If the thread between the kitchen faucet adapter and cold water line is leaking, tighten more securely. If leaking continues, apply plumbers tape to threads and re-tighten.
- 3. Turn on water supply and check for leaks.

If leaks persist, or if there are other leaks on system, turn off water supply. Contact Customer Service or Technical Support Team at 1.800.224.1299

## Performance Data Sheet

### Watts pure water

In U.S.-Watts Regulator Co., N. Andover, MA 01845 (Watts.com);

In Canada-Watts Water Technologies (Canada), Inc., Burlington, ON L7L 5H7 (Watts.ca)

### Single-Stage Total PFAS Filtration System - PWDWTPFAS1

### **GENERAL USE CONDITIONS**

### A WARNING

 PWDWTPFAS1 is certified by IAPMO R&T to meet NSF/ANSI 42 for the reduction of Chlorine, Taste and Odor, and Particulates Class 1; NSF/ANSI 53 for the reduction of Total PFAS, Lead, Cyst and Asbestos; NSF/ANSI/CAN 372 for low lead Compliance; NSF/ANSI 401 for reduction of Micro-Plastics; and to CSA B483.1 as verified and substantiated by test data.

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 those standards respectively

The compounds certified under NSF/ANSI 401 have been deemed as 'incidental contaminants / emerging compounds.' Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels. While occurring at only trace levels, these compounds can affect the public acceptance/perception of drinking water quality.

This product is used to filter certain chemical compounds, including Total PFAS and Lead from water. Please dispose of used filter cartridge in accordance with federal, state and local laws, polices and guidelines and in accordance with your local municipality's rules. Customer is solely responsible for the proper disposal of this product and any claims associated with the disposal of this product. While testing was performed under standard laboratory conditions, actual performance may vary. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts. DO NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

- Operating Temperature: Maximum 100°F (38°C) Minimum 35°F (1.7°C)
- Operating Water Pressure: 100 psi (862 kPa) Minimum 10 psi (69 kPa)
- Maximum Flow Rate: 2.5 gpm (9.46 lpm)
- Rated Capacity Total PFAS: 3,200 gallons (12,113 liters)
- Rated Capacity Lead: 3,200 gallons (12,113 liters)
- Rated Capacity Cyst, Asbestos: 3,200 gallons (12,113 liters)
- Rated Capacity Microplastics: 3,200 gallons (12,113 liters)
- Rated Capacity Chlorine: 3,200 gallons (12,113 liters)
- Rated Capacity Particulate (sediment): 3,200 gallons (12,113 liters)

### RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVAL:

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

<b>Description</b> Quick-Change Tota	al PFAS Reduction	Model / P Filter PWCBTPFA	<b>art Number</b> S1 / 7101117	Change 6 Months	<b>e time Fra</b> or 3,200 G	<b>me</b> allons	
Substance	Average Influent Concentration	NSF/ANSI Influent Challenge Concentration	Reduction Requirement / Max Permissible Product Water Concentration	Max Effluent Concentration	Minimum % Reduction	Average % Reduction	Average Effluent Concentration
NSF/ANSI Standard 42 -	Aesthetic Effects						
Chlorine, Taste and Odor	2.00 mg/L	2.0 mg/L ±10%	≥ 50%	0.36 mg/L	81.15%	92.9%	0.14 mg/L
Particulate Class I (particles 0.5 to $<$ 1 $\mu m)$	1,100,000 particles/mL	at least 10,000 particles/mL	≥ 85%	40,000 particles/mL	96.36%	98.26%	19,167 particles/mL
NSF/ANSI Standard 53 -	Health Effects						
Total PFAS	0.00217 mg/L	$0.00216 \text{ mg/L} \pm 20\%$	0.00002 mg/L	0.00002 mg/L	99.27%	99.55%	0.00001 mg/L
Lead @ pH 6.5	0.160 mg/L	$0.15 \text{ mg/L} \pm 10\%$	0.005 mg/L	0.0031 mg/L	98.18%	99.43%	0.0009 mg/L
Lead @ pH 8.5	0.156 mg/L	0.15 mg/L ± 10%	0.005 mg/L	0.0005 mg/L	99.68%	99.82%	0.0003 mg/L
Cyst	129,750 microspheres/L	minimum 50,000/L	99.95%	9 microspheres/L	99.993%	99.996%	6 microspheres/L
Asbestos	205,622,500 fibers/L	$10^7$ to $10^8$ fibers/L; fibers $> 10~\mu m$ in length	≥ 99%	54 fibers/L	99.999%	99.999%	34 fibers/L
NSF/ANSI Starndard 401 - Emerging Contaminents							
Microplastics	1,100,000 particles/mL	at least 10,000 particles/mL	≥ 85%	40,000 particles/mL	96.36%	98.26%	19,167 particles/mL

Not all water will contain contaminants listed. Testing performed under standard laboratory conditions; actual performance may vary. Filter usage must comply with all state and local laws. Filter is only to be used with cold water. 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 water that may contain filterable cysts.



# Service Record

Date of Purchase:	Model Number:	Serial Number:
Date of Install:	Installed by:	

Quick Change Carbon filter (6 Months)	
	Quick Change Carbon filter (6 Months)



### **Limited Warranty**

#### What Your Warranty Covers:

Watts warrants your PWDWTPFAS1 (excluding replaceable filters) to be free from defects in material and workmanship under normal usage for a period of one year from the date of original purchase. If any part of this system is found to be defective within the warranty period, return the system after obtaining a return authorization from Watts (see below), and Watts will repair, or at Watts' option, replace the system at no charge.

#### How to Obtain Warranty Service:

To obtain warranty service, call 1.800.224.1299 for a return authorization number. Then, ship your system to our factory, freight and insurance prepaid, with proof of the date of original purchase. Please include a note stating the warranty problem. Watts will repair, or at Watts' option, replace the system and ship it back to you at no charge.

#### What this Warranty Does Not Cover:

This warranty does not cover defects resulting from improper installation (installation contrary to Watts printed instructions), abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes, adverse water conditions or other events or conditions beyond Watts' control.

This warranty will be void if defects occur due to failure to observe the following conditions:

- 1. The 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 10 and 100 pounds per square inch.
- 4. Incoming water to the system cannot exceed 100 degrees F (38 degrees C.)
- 5. If the incoming water pressure is above 85psi, a pressure regulator is recommended.
- 6. If the incoming water pressure is above 100psi, then a pressure regulator is required.

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.

#### **Other Conditions:**

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

#### Limitations and Exclusions:

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY WATTS WITH RESPECT TO THE SYSTEM. WATTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. WATTS HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The warranty remedy described above shall constitute the sole and exclusive remedy for breach of warranty, and Watts shall not be responsible for an incidental or consequential damages, including travel expense, telephone charges, loss of revenue or profits, loss of time, inconvenience, loss of use of the equipment, or loss or damage caused by this system and its failure to function properly. This warranty sets forth all of Watts responsibilities regarding this system.

#### Your Rights Under State Law:

Some states do not allow the exclusion or limitation of incidental or consequential damages and some states do not allow limitations on how long implied warranties may last. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state. SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE.



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