

# Installation, Operation and Maintenance Manual

## Jumbo Cartridge Filter Housing

### Model PWWJCHSG

# 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.



PWWJCHSG

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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.

## Introduction

Prior to shipment, Watts® Jumbo Cartridge Filter Housing have been inspected to assure they are free from manufacturing defects. Before installation, however, please check the lid's O-ring to ensure it is in place and note the inlet and outlet labels for proper pipe connections. (See drawing on Page 3.)

**Note: Filter housing has two outlets to allow for same direction piping. A plug has been provided to use to close off the pipe fitting not used.**

## Specifications

Material, body & cartridge end caps	Glass reinforced PP
Brass reinforced gauge port	1/4" FNPT
Material, swing bolts	304SS
O-ring	EPDM
Lid closure	Swing bolt
Pipe fittings (One inlet and two outlets) PVC	2" SLIP Female PVC
Drain	1/2" FNPS with drain plug
Overall height	42.7"
Width	15.4"
Maximum flow rate (with pleated cartridges 5 micron and up)	150 GPM (34M3/hr)
Maximum flow rate (with depth cartridges)	100 GPM (22.7M3/hr)
Maximum flow rate (with pleated 1 micron absolute cartridge)	50 GPM (11.3M3/hr)
Maximum flow rate (with carbon cartridge)	15GPM (3.4 M3/hr)
Maximum working pressure	125psi (8.75 bar)
Maximum temperature	125°F (52°C) @ 80psi
Cartridge change-out, sediment	30psi differential (max.)
Cartridge change-out, carbon	Every 6-12 months*
Shipping weight	47 lbs.
Carton dimensions (L x W x D)	16" x 16" x 40"

\*Depending on chlorine level and water usage.

**Note: Flow rates are for guidelines only, and they are based on micron rating, solids content and other factors. Users are to determine the best flow rate for their application based on these factors.**

## Installation Procedures

Install filter housing using the appropriate size pipe. (Pipe fittings are 2" slip). Follow the PVC glue and primer manufacturer's instructions when making all solvent weld connections. Be sure to install shutoff valves before and after the filter housing and on any drain connections, which are to be installed. A 1/4" FNPT port is located on top of the filter's lid, and a pressure gauge has been provided. Locate this gauge (in carton) and install it in gauge port using Teflon tape. A second gauge may be installed; downstream of the filter (in the pipe line) to indicate pressure differential and help you determine when cartridge replacement may be necessary.

## Cartridge Installation

To remove the filter's lid when the filter is under pressure, turn off the inlet and outlet valves, press pressure relief button to relieve pressure. Then remove eyebolts, lid, and notice the way the O-ring is positioned. From time to time, this O-ring may be lubricated with non-petroleum based lubricant for optimum performance. Filter cartridges have double O-rings on the male ends to provide superior sealing. From time to time, these O-rings may be lubricated with non-petroleum based lubricant for better results. The other end of the cartridge is closed, and a handle is part of the end cap for convenience.

Filter cartridges have locking tabs on the male ends of the cartridges to lock the cartridges in place. For proper installation, insert filter cartridge into the cartridge adapter, which is located at the bottom of the filter housing. Once the cartridge is pushed down all the way, rotate cartridge clockwise to engage the locking tabs until the cartridge has been locked in place.

To remove cartridge, rotate cartridge counterclockwise and pull upward.

## Vent and Pressure Gauge

A 1/4" FNPT port and pressure gauge has been installed in the filter's lid to indicate working pressure. A second gauge may be installed, downstream of the filter in the pipe line to indicate pressure differential and help determine when cartridge replacement may be necessary.

## Initial Start Up

Once the piping procedures are completed, shutoff valves have been installed and the cartridge has been inserted and locked in place, open outlet completely, start up pump and open inlet valve slowly to check for leaks. If leaks occur, shut off pump, close inlet and outlet valves, release pressure by pressing pressure release button, remove lid and check the O-ring to be sure it is properly seated.

## Caution

Do not attempt to remove lid without relieving pressure. To open lid, close shutoff valves before and after filter, press pressure relief button to relieve pressure. Once pressure has been relieved, remove eyebolts and lid. To start up filter, replace lid, tighten eyebolts, and open shutoff valves slowly to check for leaks. If lid O-ring does not seat properly, close shutoff valves, relieve pressure, open lid, apply a small amount of non-petroleum based lubricant to the O-ring to help it seal, reposition O-ring and close lid.

**Do not operate filter above 125psi (8.8 bar). In installations where pressure is above 100psi (6.9 bar), install a pressure release valve to release pressure at 125psi (8.8 bar) or less.**

## Routine Cartridge Replacement

1. Close inlet valve.
2. Close outlet valve.
3. Open valve on drain, if a drainpipe has been installed.
4. Press pressure relief button to relieve pressure.
5. Remove lid after pressure has been relieved.
6. Rotate cartridge counterclockwise and pull upward. Remove the cartridge.
7. Install new cartridge. Push downward and rotate clockwise to engage locking tabs lubricating O-rings if necessary.
8. Check lid O-ring to ensure it is properly seated. Lubricate if necessary.
9. Replace lid.
10. Replace eyebolts and tighten. (Hand tight is sufficient.)
11. Close valve on drain if a drainpipe was installed.
12. Open outlet pipe completely.
13. Open inlet pipe slowly to check for leaks.
14. Vent filter to dispel air by depressing pressure relief button. Be careful when relieving pressure or dispelling air if high temperature water is being filtered.

**Note:** If leaks occur, close the inlet and outlet pipes and follow procedures previously described under "Caution" section above.



### Pleated Cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

MODEL NUMBER	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCP1AB	1	1 Absolute	1
PWWJCP1	1	1	1
PWWJCP5	1	5	1
PWWJCP20	1	20	1
PWWJCP50	1	50	1
PWWJCM150	1	150	1

**Note:** 5, 20, 50 and 150 micron cartridges are cleanable and reusable to reduce costs.



### Depth Cartridges

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for the reduction of soft particulate.

MODEL NUMBER	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCMB1	1	1	1
PWWJCMB5	1	5	1
PWWJCMB20	1	20	1
PWWJCMB50	1	50	1



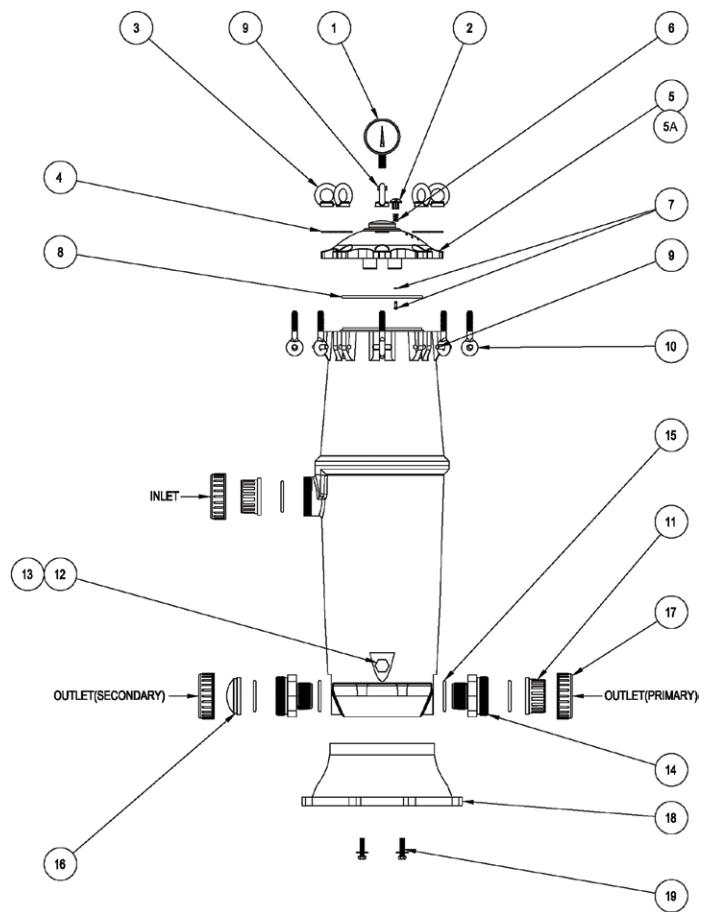
### Activated Carbon Cartridge

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

MODEL NUMBER	MAX. FLOW	CAPACITY	CHLORINE REDUCTION
PWWJCAC5	15 GPM	140,000 Gals.	90%

Note: We build filtration systems, or they may be installed on site. For more information please inquire.

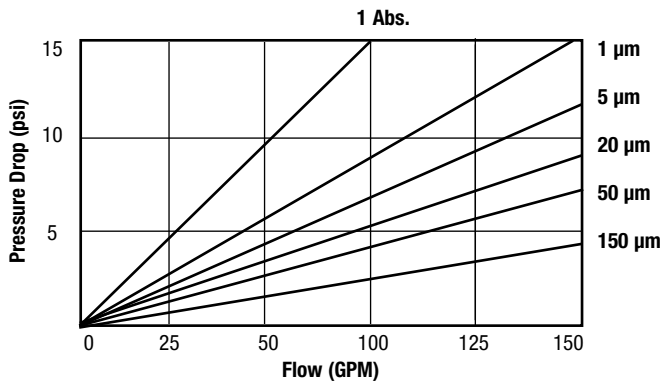
## Parts List



**Note:** Two outlets are provided so outlet piping may be directed to either direction. A plug is provided to close off the outlet not being used.

ITEM #	DESCRIPTION
1	1/4" Pressure Gauge
2, 6 & 7	Pressure relief assembly includes cap, spring and stem
2	Pressure release button
3	Wing Nut
4	Washer for lid closure
5	Lid with brass reinforced gauge port
5A	Lid without brass reinforced gauge port
6	Pressure relief spring
7	Lock pin with O-ring
8	O-ring for lid closure, EPDM
9	Stud for eye bolt
10	Eyebolt
11	Adapter 2" PVC
12	Drain plug 1/2" NPS without O-ring
13	Drain plug O-ring
14	Coupler
15	Coupler O-ring
16	Plug for second outlet
17	Nut for plumbing adapter
18	Base
19	Mounting Bolts

## Pressure Drop



## Low Pressure Drop

Watts® Jumbo Cartridge Housings are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes.

(See chart above for pressure drop data using pleated cartridges.)

### 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](http://www.watts.com/prop65)

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