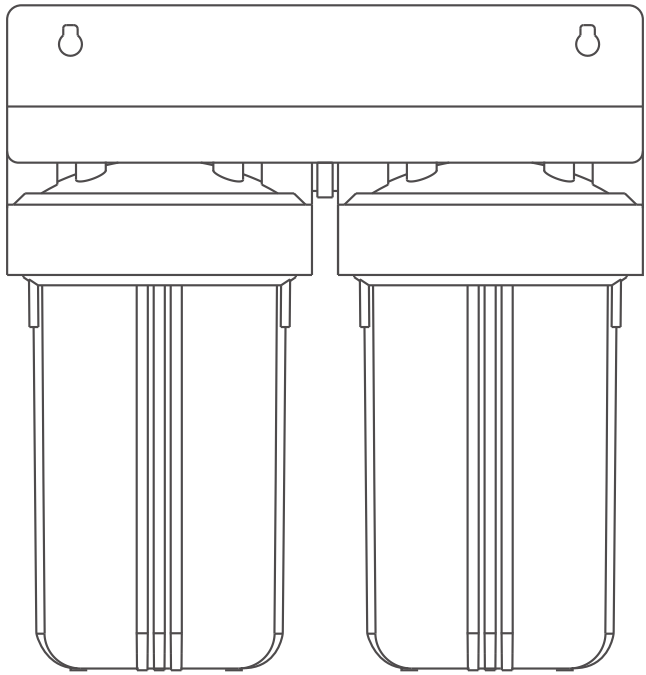
Waterdrop

Read this manual before using and keep it for future reference.

User Manual



2-Stage Whole House Water Filtration System

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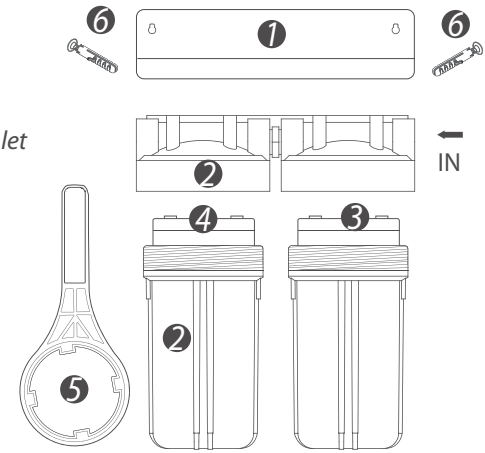
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Product Operation and Specifications

Model	WD-WHF21-PG/WD-WHF21-FG
Flow Rate	Up to 12 GPM
Working Pressure	25~90 psi
Operating Temperature	40-100 ˚F (4 - 38 ˚C)
Feed Water Requirement	Municipal tap water
Grooved Fit PP Cotton Filter	Lifetime: 3-6 months
Sediment and Activated Carbon Filter	Lifetime: up to 6 months
Iron and Manganese Reducing Filter	Lifetime: up to 6 months

Components List

1.Metal filter housing scraper
*2.10"*4.5" 2-stage blue filter with 1"NPT inlet and outlet port*
3. Grooved fit PP cotton filter or Iron and Manganese Reducing Filter
4. Sediment and activated carbon filter
5. Wrench
*6. Expansion screw*2*



Tools Required (Not Included)

Safety glasses	Hacksaw
Towels	Soldering iron or torch
Flat head screwdriver	Adjustable wrench
Medium crescent wrench	Teflon tape

Parts required (Not Included)

(2x) Hex nipples or pipe nipples (2x) Shutoff valves (as needed)
(2x) Pipe union pressure regulators (as needed)

Pre-installation

- Turn off the water to your house before beginning the installation. Turn off power to your water heater before installation. Open all plumbing fixtures in the house to drain the lines of water and pressure.
- Lay out all the fittings and tools you will need to install the system depending on your configuration. Be sure to use Teflon tape on threaded fittings.
- Measure, cut, and remove the section of water line where the system is to be installed. When determining the length of pipe to cut, account for filter width, shutoff valves, union fittings, nipple fittings, pressure gauges (if used) and bypass valve (if used).
- Allow the cut line to drain. Smooth the newly cut ends down to avoid jagged points or edges.
- A three-valve bypass valve and loop may be installed to loop the entire system to make servicing easier.
- The filter should be placed on the main water supply line near where it enters the house at any point past the main shutoff valve for the whole house, but before pipes branch off into multiple directions. However, you may choose to locate the filter after the line branches to the inside and outside plumbing depending on your filtration intent. Your filter should be located in a dry, level area and protected from freezing temperatures and direct sunlight.

Installation

Step 1: Select connection method according to pipe's size

Please select the appropriate connection method according to the size of the pipe in your home. Please pay attention to the direction of water flow when installing. Take the 1" MNPT thread specification and 1" PEX pipe as an example:

1. Close the main intake valve. Turn on the tap to release the pressure in the pipe.

2. Remark two 1". Brass PEX-A Expansion Barb x 1" MNPT Male Adapter(not included in the box). Wrap more than 10 turns of Teflon tape on the external thread of the Adapter. Screw one end of the external thread into the thread of the 1" FNPT filter bottle and tighten it with a wrench. *(Figure 1)*

Notice: If necessary, you can also configure two additional Shutoff Valve and Pressure Gauge to connect, the effect is shown in the figure: *(Figure 2)*

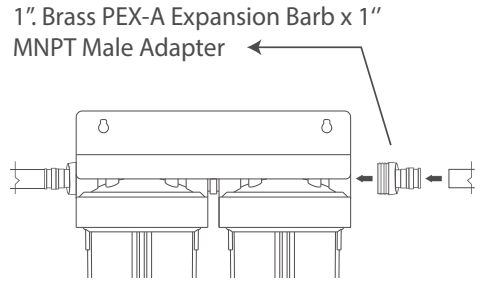


Figure 1

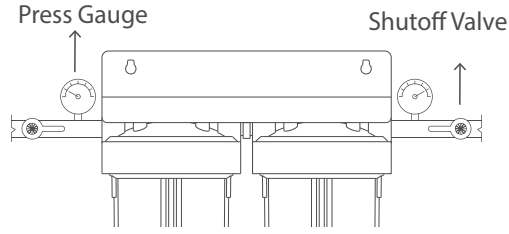


Figure 2

Step 2: Measure the system and cut the pipe *(Figure 3)*

Determine location and water flow direction for the system. Cut off the appropriate length of PEX pipe. Fix the pipe on the system with two 1". Stainless Steel PEX Barb Pinch Clamps. Pay attention to the water inlet direction, and do not install it in the opposite direction. You can also use an expansion ring to fix the pipe.

Step 3: Fix the whole house filter *(Figure 4)*

Securely mount the whole house filter bracket and ensure the system is level.

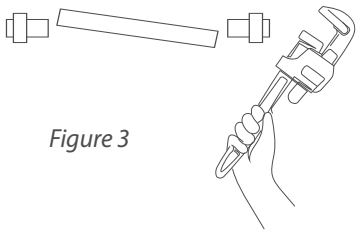


Figure 3

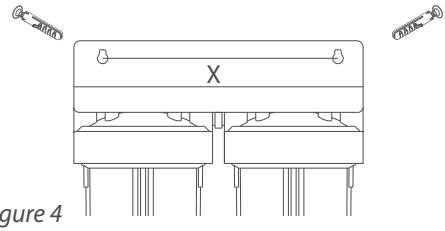
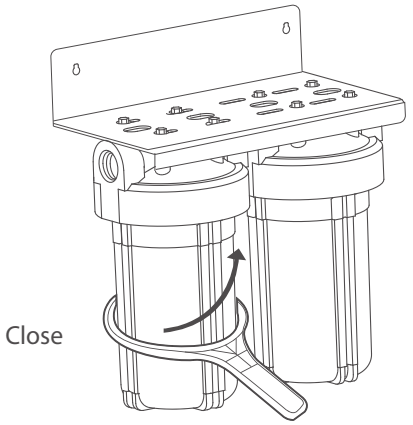


Figure 4

Notice: Fit pipe hanger (not included) on water INLET and OUTLET side for additional support.

Step 4: Screw the filter housing tightly

Tighten the blue filter housing by hand. Then, use supply filter wrench to tighten the blue filter housing.



Step 5: Slowly turn on the main inlet valve. Turn off the water outlet after the domestic water equipment is able to dispense water. Be sure to check whether there is water leakage or slow water seepage at the joints.

Caution: Do not use a hot water faucet to perform the initial system flush.

Notice: The water will be blackish in color for the initial flush. This is residual carbon dust and is to be expected. Continue to run water until it runs clear and all air has been purged. Shut the water off and let the unit sit for a while, and then flush again. It is not unusual for the water to appear "cloudy" for a day or so following installation. This cloudiness is actually tiny air bubbles being purged from the filters. This is normal and will clear up in a day or two.

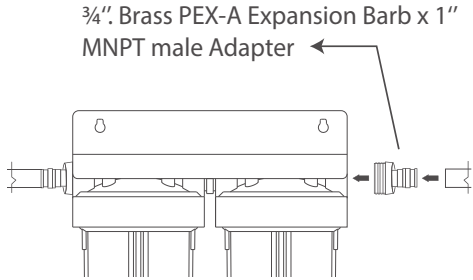
After prolonged periods of nonuse (such as a vacation), it is recommended that the system be flushed thoroughly for at least 10 minutes before using the water.

Other Options

1. 1" MNPT thread specification and ¾" PEX pipe

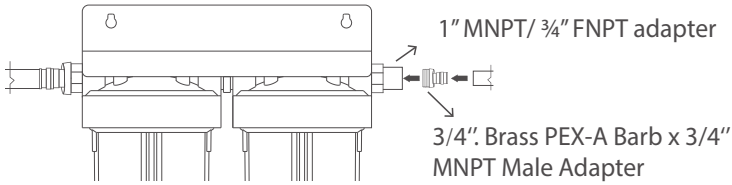
Take out two ¾". Brass PEX-A Expansion Barb x 1" MNPT male Adapter (not included in the box), Wrap more than 10 turns of Teflon tape on the external thread of the connector.

Screw one end of the external thread into the thread of the 1" MNPT filter bottle and tighten it with a wrench. Refer to the installation steps above for further steps.



2. ¾" MNPT thread specification and ¾" PEX pipe

Take out two ¾" FNPT / 1" MNPT adapter (not included in the box), wrap more than 10 turns of Tefon tape on the 1" MNPT external thread of the adapter, then screw the adapter into the thread of the 1" FNPT filter bottle and tighten it with a wrench. Remark two ¾" brass PEX-A barb x ¾" MNPT external thread adapter (not included in the box). Wrap more than 10 turns of Tefon tape on the ¾" Brass PEX-A barb x ¾" MNPT male adapter external thread of the adapter. Screw one end of the male thread into the ¾" FNPT / 1" MNPT adapter and tighten it with a wrench. Refer to the installation steps above for further steps.



Notice: If the direction of the water flow of the bipolar system is opposite to the direction of the water pipe, please unscrew the screw connecting the filter bottle and the hanging plate, rotate the filter bottle 180 degrees and connect it to the hanging plate, and then install the water purification system normally according to the installation steps.

Maintenance Instructions

Your Whole House Water System requires care and cleaning after a period of time. It is recommended that the cartridges be replaced every 6 months depending on the amount of contaminants present in the water supply. If the system has been working properly and the pressure is slowing, it may be time to change the filter cartridge.

Filter Change Instructions

Step 1: Remove the old cartridge

1. Turn off the water supply to the system. Open a nearby faucet to release the pressure and drain the water.
2. Depress the pressure release button on the top of the filter housing to relieve system pressure. This will make removing the filter housing easier.
3. Unscrew the housing using the filter wrench included with your system.
4. Remove and discard the old filter cartridge.

Step 2: Clean the housings

1. Scrub the housing and cap with warm water mixed with about 2 tablespoons of household bleach using a sponge or soft rag. Wear rubber gloves. Rinse all parts very thoroughly!
2. Lubricate the O-ring with clean silicone grease if needed. DO NOT USE PETROLEUM JELLY. Insert the O-ring in filter groove and press into place. Make sure the O-ring is seated correctly.

Caution: This step is important to ensure the proper filter seal. Make sure the O-rings are seated level in the groove. If the O-ring appears damaged, stretched, or crimped, it should be replaced.

Step 3: Install the new cartridge

1.Remove the new filter packaging and insert the filter cartridges into the housings, making sure they slip over the standpipe in the bottom of the housing.
2.Align the bottom of the housing into the cap and hand tighten, then use the filter wrench to fit it snugly. Do not over-tighten.
3.Close any open valves. Turn on the water supply slowly to allow the system to fill with water. Inspect carefully for leaks. If a leak is found, remove the housing and inspect the O-ring to ensure that it is seated properly, and then retighten**.**

Note: If there is a sealing ring left by the old filter element in the filter bottle, please take out the sealing ring and put it in the filter element.

Step 4: Flush the system

Flush the system by turning on a few cold-water faucets. Allow the water to run until the air and carbon has been purged. Water may be cloudy initially as the filters and system clear of trapped air. New activated carbon filter cartridges may contain loose carbon and air bubbles after installation.

Frequently Asked Questions

Q: Why does water leak from the housing connection?

A: The O-ring may not be in place or not enough teflon tape on the threads. Reapply teflon tape and tighten. If it still leaks after adjusting the O-ring or threads, please contact us.

Q: Why does water leak from the pressure release button?

A: The pressure release button has a screw under the bracket. Simply tighten that screw and the leaking should stop.

Q: Why does water appear cloudy and gray?

A: Water may appear cloudy or gray for the first 1-2 days after installation due to the tiny air bubbles being purged from the flters and extra carbon dust in the water.

Q: Why does water pressure slow after a period of time?

A: It is recommended that the cartridges be replaced every 3-6 months depending on the amount of contaminants present in the water supply. If the system has been working properly and the pressure is slowing, it may be time to change the filter cartridge.

Q: Why does water pressure slow immediately after installation?

A: The cartridges may be installed incorrectly. Check to see if a piece of the plastic wrapping is still protecting the filter cartridges. Bathtubs, utility sinks, hose bibs, multi-headed showers,body sprayers, or anything that is considered high-fow should be avoided for the first 72 hours. Any high-fow situation within the first 72 hours may cause a temporary carbon blockage. To clear the blockage, turn of any running water for at least 10 minutes and resume using water at low or normal fow rates.

Warranty

The Waterdrop 2- Stage Whole House Water Filtration System offers a 1-year warranty covering defects in materials and workmanship from the original date of purchase. During the warranty period, we will replace or repair any part deemed defective, If the product proves to be defective within 1 year from the date of purchase, and if the product has not been subjected to tampering, alteration, or improper use after delivery and has not been repaired by the manufacturer. The product is not warranted against misuse, use in abnormal operation temperature conditions, conditions outside listed operating parameters, use in commercial operations, or any other manner outside the product specifications set forth in the owner's manual. Our obligation does not include the cost of transportation. We are not responsible for damage in transit, and claims for such damage should be presented to the carrier by the customer. Should service be required or if you have any questions regarding how to use your product, please call us. We have a professional team and will take care of your problem on time.

NOTE: This does NOT apply to any filter cartridge, as the life expectancy varies based on incoming water quality.

Manufacturer Technical Support

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E-mail: service@waterdropfilter.com



Made in China V001

Qingdao Ecopure Filter Co., Ltd.

Waterdrop