

US Water Systems Disruptor Filter



DISRUPTOR® FILTER

Owners Manual

320-USP-DS-10, 320-USP-DS-20

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Unpacking / Inspection

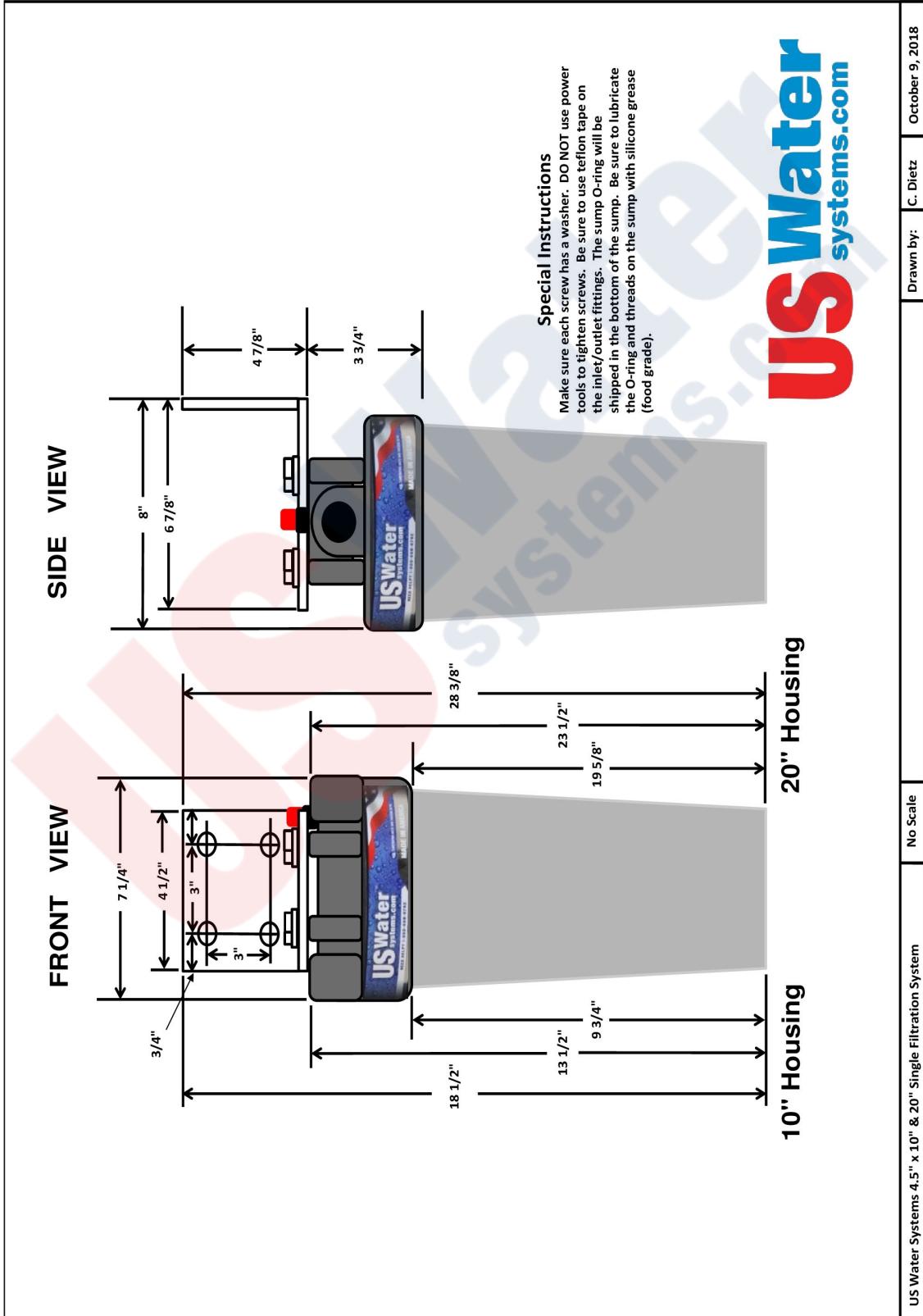
Be sure to check the entire system for any shipping damage or parts loss. Also note damage to the shipping cartons. Contact US Water Systems at 1-800-608-8792 to report any shipping damage within 24 hours of delivery. Claims made after 24 hours may not be honored.

Small parts, needed to install the system, are in a parts bags. To avoid loss of the small parts, keep them in the parts bag until you are ready to use them.

Safety Guide

- Check and comply with your provincial / state and local codes. You must follow these guidelines.
- Use care when handling the filter system. Do not turn upside down, drop, drag or set on sharp protrusions.
- **WARNING:** This system does not remove biological contaminants. US Water Systems recommends that bacteria levels be checked periodically to ensure there is no bacteria present. Coliform and E.coli most importantly.

System Dimensions



US Water Systems 4.5" x 10" & 20" Single Filtration System	No Scale	Drawn by: C. Dietz	October 9, 2018
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US Water Disruptor Filter Specifications and Operation

Cutting-Edge Technology for Severe Water Problems

US WATER ELECTRO-ABSORPTIVE NANOFIBER FILTER USES MECHANICAL FILTRATION AND ZETA CHARGED ELECTRO-ADHESION

The US Water Disruptor Filter is manufactured with Nano Alumina Fibers that have a Zeta potential of 51 millivolts. Many contaminants are actually "magnetically" removed from the water supply and "secured" in the Charged Filter. This is truly "disruptive technology."

US Water Disruptor Filter System is "disruptive technology" in that a filter system can now remove the following contaminants:

- Arsenic V
- Bacteria (99.999%)
- Chromium 6
- Cryptosporidium
- Cysts (99.9%)
- Fulvic Acid
- Humic Acid
- Iodine
- Iron
- Lead
- Legeonella (99.99%)
- Silica
- Tannic Acid
- Tannin
- Virus

The US Water Disruptor media is manufactured from a naturally occurring element called boehmite, which has no known Health Side Effects. In fact, boehmite has long been used as an additive to food products and digestive analgesics. Additionally, it has passed testing for NSF/ANSI Standard 42 and 61 for potable water and USP Class VI testing and endotoxin testing. US Water Disruptor Filtration is the final barrier against the problem contaminants such as fine colloids, silica, tannin, and other organics.

Features

- Two models: 12 GPM and 25 GPM
- 1" Inlet handles up to 25 GPM
- Cartridge has 222 double o-ring seal for a positive barrier
- System conforms to NSF/ANSI 61
- Rated at 100 psi
- Low pressure drop - typically < 3 PSID (clean)

US Water Disruptor Filter Installation Instructions

Maintenance

The Disruptor Pre-filter can be installed for up to a year. The Disruptor filter should be changed annually or sooner depending on the water usage or water conditions.

Pretreatment Guidelines

- Turbidity < 1 NTU
- TOC < 50 mg/l
- pH 5-9.5
- Iron < .3 ppm
- Manganese < .05 ppm

This systems performance is dependent upon incoming water quality and factors such as iron, sulfur, manganese, sediment and other particulates need to be addressed ahead of the US Water Disruptor Pre-Filter. Life expectancy of the filter varies with the water supply, but many users experience filter change intervals in excess of a year when coupled with proper pre-treatment

Where to Install

The Disruptor Pre-filter should be installed as one of the last pieces of equipment in the line of treatment in the US Water system. Water feeds with iron and other precipitants may cause premature failure. If there are known extreme contaminant levels, those contaminants should be removed first. For installation questions please call 1-800-698-8792.

WARNING! The US Water filtration system should not be installed in direct sunlight. The heat and UV light may cause the material to disfigure. Due to the transparency of the filter housing, photosynthesis may occur and cause algae to form on the outside of the filter and on the inner filter housing wall. **Make sure the system is sheltered from the sun.**

WARNING: *If extreme contaminant levels are present in the feed water, iron removal and sediment control should be installed prior to the US Water Disruptor.*

US Water Filter Installation Instructions

1. Install the Disruptor system in the desired location in the water treatment system. Typically this will be the first component in the line of treatment. The cap is marked "IN" and "OUT" on the top of the housing.
2. Mount the housing to the bracket using the supplied screws, orienting the housing to match the applications' desired flow direction.



US Water Filter Installation Instructions

3. Install threaded nipples or other threaded fittings in the housing. Be sure to use Teflon tape on the fittings. Tighten them with channels locks. If flex pipes with rubber gaskets are used there is no need to Teflon tape the outer fittings. If a normal plumbing fitting is used then be sure to Teflon tape the outer fitting.
4. Mount the filter to the wall using the necessary fasteners for the wall type. Mark the hole locations on the wall using a marker or pencil while holding the filter housing level. If this is



to be mounted to a studded wall, a mounting board can be used. A shelf board or plywood can be mounted to the studs, then the filter housing can be screwed to the plywood or shelf board. (Shelf board pictured below).



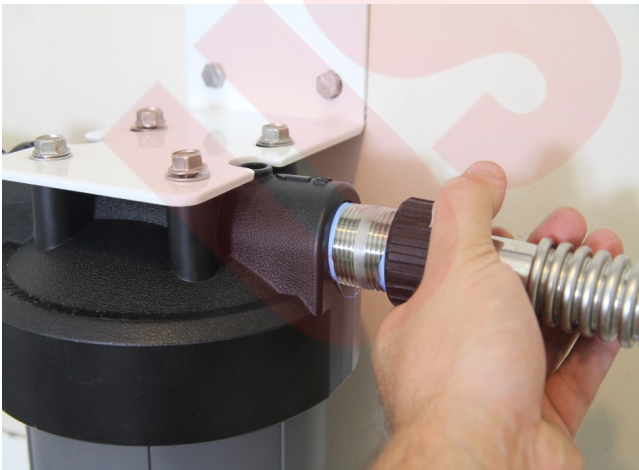
US Water Filter Installation Instructions

5. Shut off the water and release the water pressure at the lowest sink or spigot. Cut the pipe and connect it to the filter. Connect the inlet plumbing to the inlet on the filter housing . Tighten with channel locks.
6. Connect the outlet plumbing to the outlet on the filter housing. Tighten with channel locks.

NOTE: *The connections above are made using the installation kits used with the US*



Water Systems Modular Filtration System. These flex pipes have a rubber gasket and



do not require Teflon tape. If pipe fittings are used be sure to use Teflon tape on the threads prior to installing the fitting on the filter housing. If copper pipe and fittings are being used make sure all solder joints within 12-15" of the filter housing are completed and the pipe is cool, prior to connecting it to the housing fittings.

US Water Filter Installation Instructions

1. Remove the sump from the filter housing and install the filter. A very small amount of silicone grease or water can be used to lubricate the O-rings on the filter. The filter housing cap has a coupling that will accept the o-ringed nipple on top of the filter. Install the filter so the nipple on the top is fully seated in the filter housing cap.



2. Lubricate the O-ring on the filter housing sump and install it. Tighten the filter sump hand tight. That should be adequate. Do not use abrasive tools to tighten the housing or damage may occur.



US Water Filter Startup Instructions

1. Open a faucet or spigot down stream of the filter. Slowly open the water shutoff valve and let the filter fill. Air will be pushed out of the filter through the open spigot or faucet downstream. Once there is no air coming out of the faucet or spigot, turn the water supply on fully and shut the faucet or spigot.
2. Check for leaks. If there are no leaks the filter is installed and ready for service.

US Water Filter Cartridge Replacement Instructions

1. Shutoff the water supply.
2. Open a faucet or spigot closest to the filter housing and allow all the water to empty from the plumbing system.

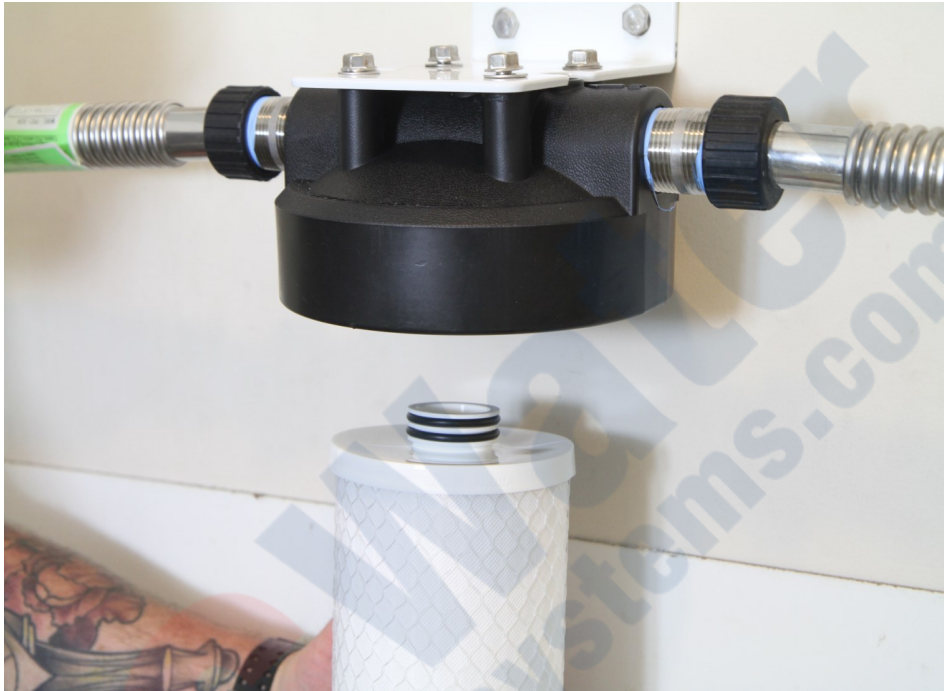
WARNING! If the pressure is not released, the filter sump will be very difficult to get loose. It is imperative that the water pressure is released prior to attempting to remove the filter sump.

3. Remove the sump by spinning it counterclockwise until the sump is completely removed.



US Water Filter Cartridge Replacement Instructions

6. Remove the old filter and discard.



7. Lubricate the O-rings and install the new filter in the filter housing cap.



8. Lubricate the o-ring for the sump and lubricate the sump threads with food grade silicone grease.

US Water Filter Cartridge Replacement Instructions

9. Install the filter sump in the filter cap by turning it clockwise until it is hand tight.



NOTE: The housing should spin tight fairly easily. If not, add more lubrication to the sump threads. This will aid with removing the sump when the filter needs to be replaced again.

10. Turn on the water supply and open a spigot downstream of the filter to release the air.
11. Once the air has been released, fully open the supply valve and close the faucet or spigot.
12. Check the housing for leaks and repair as necessary.

DISRUPTOR® FILTER

Warranty

For the lifetime of the original purchaser, at the original residential place of installation of this *US Water* Water Conditioning System, *US WATER SYSTEMS, INC.* warrants the following:

FIVE YEAR COVERAGE

Filter Housing

We warrant that for five (5) years from the date of purchase, we will replace the filter housing at no charge to you except for transportation and standard labor charges. Damages due to environmental issues or improper installation are not covered.

GENERAL PROVISIONS

This warranty does not apply to any commercial or industrial installations or to any part of the water conditioner which has been subjected to misuse, neglect, alteration or accident; or to any damage caused by fire, flood, freezing, Acts of God, or any other casualty, or if the original serial numbers have been removed.

These warranties are in lieu of all other warranties expressed, or implied, and we do not authorize any person to assume for us any other obligation on the sale of this water conditioner. No responsibility is assumed for delays or failure to meet these warranties caused by strike, government regulations or other circumstances beyond the control of *US WATER SYSTEMS, INC.*

TO OBTAIN WARRANTY SERVICE, CALL OR WRITE: *US WATER SYSTEMS, INC.* 1209 COUNTRY CLUB ROAD INDIANAPOLIS, IN 46234 (800) 608-USWA.

ANY IMPLIED WARRANTIES OF FITNESS OR MERCHANTABILITY ARE LIMITED TO THE TERMS OF THIS EXPRESSED WARRANTY AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE HEREIN. *US WATER* SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION 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.

THIS WARRANTY MAY BE TRANSFERRED TO A SUBSEQUENT OWNER WITH WRITTEN APPROVAL OF *US WATER* AND PAYMENT OF STANDARD TRANSFER FEE.



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