

**USWater**<sup>™</sup>  
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# US Water Systems Dual Limeblaster Salt-Free Water Conditioner

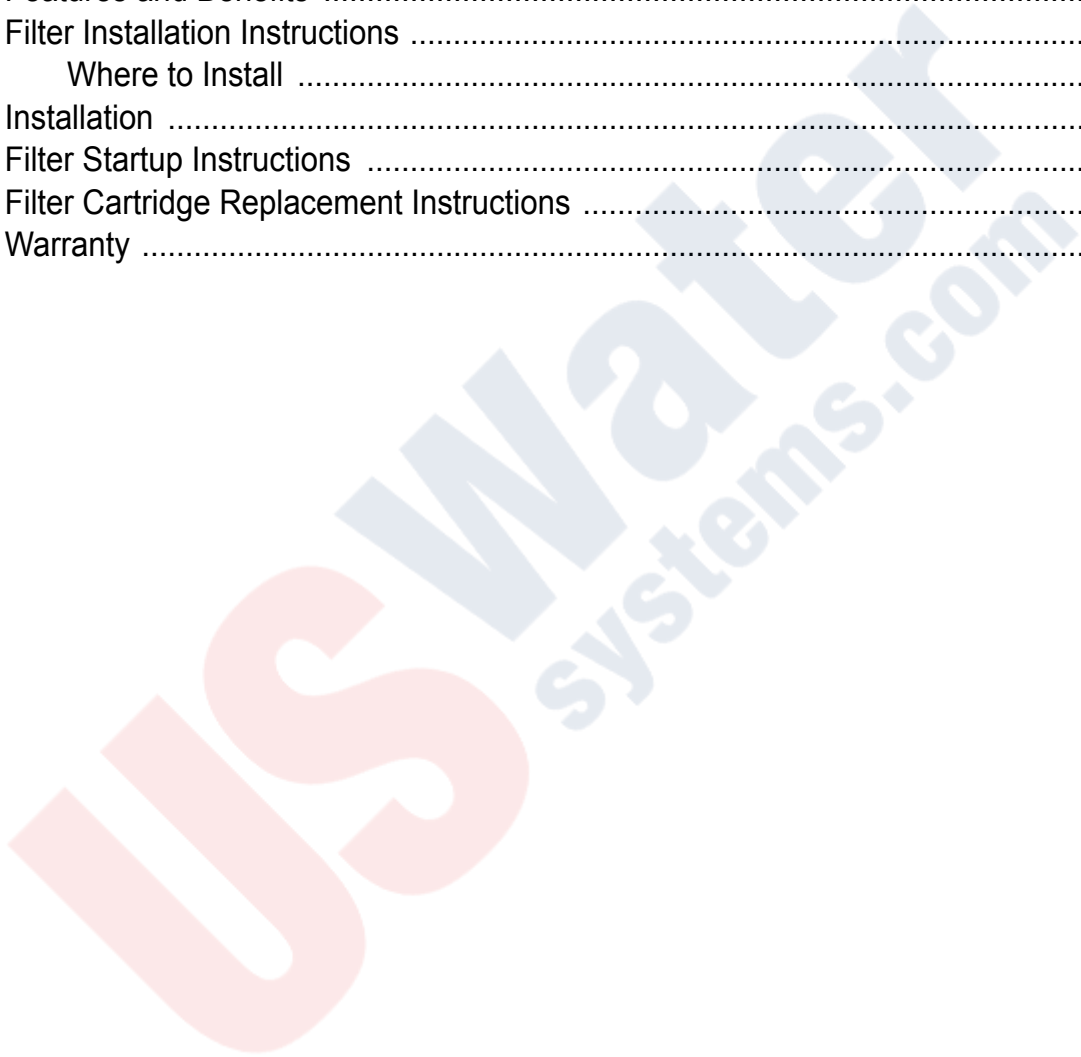
320-LB-2-C



**LIMEBLASTER**<sup>™</sup>

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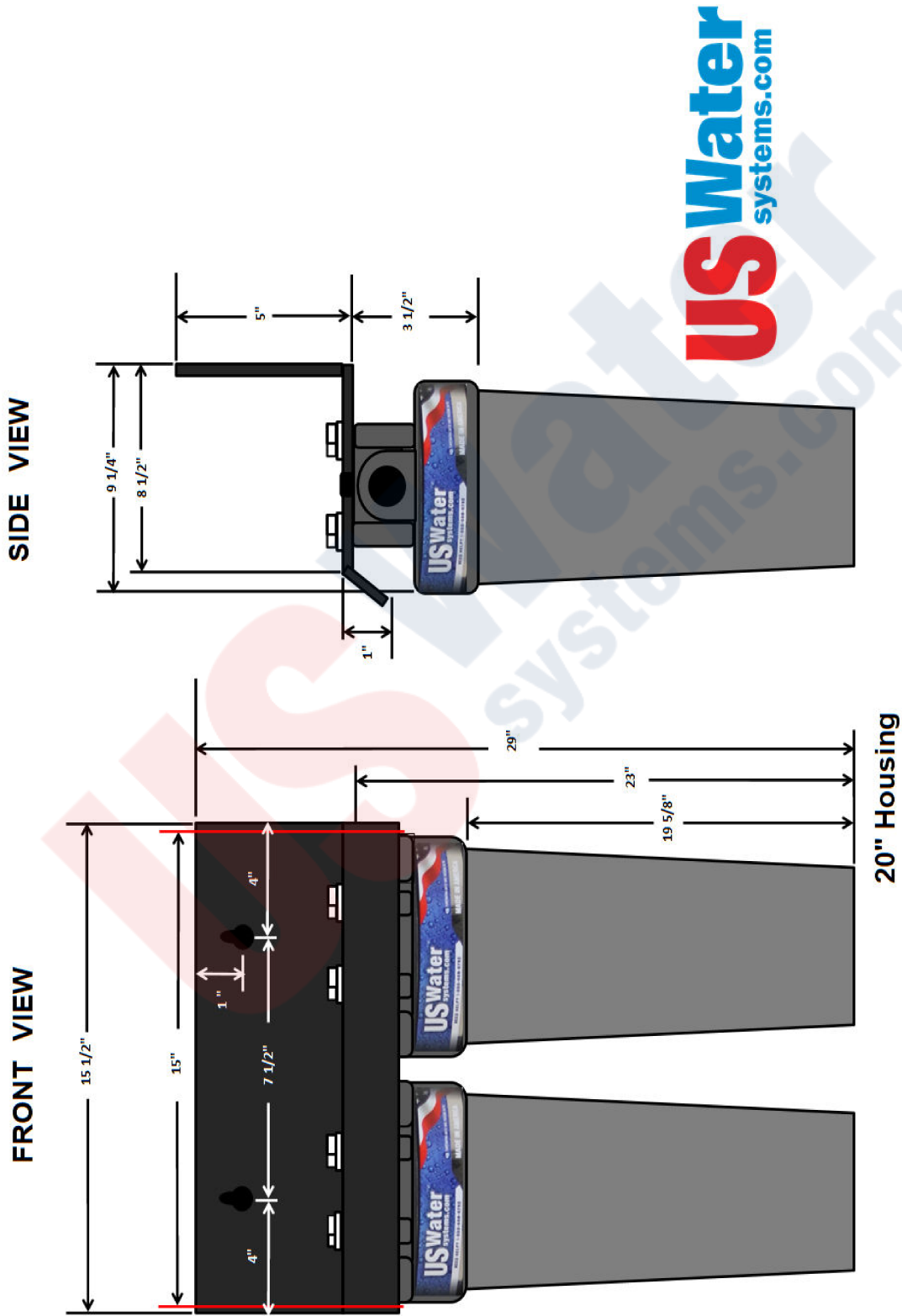
## Unpacking and Inspection

Be sure to check the entire unit for any shipping damage or lost parts. 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 unit, will be in a parts bag. 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 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



Drawn by: C. Dietz | February 18, 2019

No Scale

US Water Systems 4.5" x 20" Dual Filtration System



## Specifications and Operation

The Dual Limeblaster Modular Dual Salt-Free Conditioning and Chlorine Removal System is designed for applications where space may be limited but limescale prevention and chlorine and chemical removal are desired. It uses a radial flow carbon filter and our Limeblaster Scale Prevention filter. It is compact and designed to be mounted to the wall and most importantly, it flows up to 12 GPM so that you will not experience pressure loss. Our US Water Systems housings are 4.5" x 20" and very robust - in fact, they have a Lifetime Warranty.

### How It Works

The US Water Dual Limeblaster system uses a unique and patented dosing system which adds a small amount of siliphos (a food grade material) to the water, effectively "sealing" the calcium and magnesium and preventing it from sticking to any surface or pipes. Silicopolyphosphate is a "food grade" product and is safe for human consumption according to the WHO and FAO recommendations. It meets all FDA requirements for being "food grade". Cities have used it for years on a smaller scale - it is completely safe.\*

### The Truth About Phosphates

\*Phosphates are natural minerals needed by the human body. There are absolutely no health considerations in case phosphate-treated potable water is consumed continuously. The phosphorus intake by the human body is per average 3,400 - 4,300 mg P<sub>2</sub>O<sub>5</sub> per day. Based on the fact that per day, two liters of water treated with max 5 PPM phosphate (as P<sub>2</sub>O<sub>5</sub>) are consumed, the average daily P<sub>2</sub>O<sub>5</sub> intake by potable water is 10 mg, less than 0.3% of the total P<sub>2</sub>O<sub>5</sub> intake. It should also be noted that the average phosphate intake per person and day should not drop below 1,500 - 2,000 mg P<sub>2</sub>O<sub>5</sub> per day to avoid deterioration of the human body.

## Specifications

	<b>320-LB-2-C</b>
Flow Rate	Up to 25 GPM
Maximum Hardness	80 GPG
Maximum Iron	< 1 PPM
Maximum Sulfur	0
Maximum Manganese	< 0.03
Maximum Oil	0
Maximum Copper	1.3 mg/l
pH	6 - 9
Feed Water Pressure	20 - 90 PSI
Feed Water Temperature	38°F - 100°F

## Features and Benefits

- **Black and Gray** - Made in the USA
- **Best Materials** - Built with chemical resistant reinforced Polypropylene
- **High Pressure Housings** - Pressure tested well beyond industry standards: 100°F (37.8°C) and 90 psi (6.2 bar).
- **Commercial Grade** - These rugged housings are heavy duty and built to last a lifetime.
- **Warranty** - If you build them better, you can guarantee them better and our American Craftsmanship is unbeatable.
- **Full 1"** - All 20 inch housings have the option of 1" or 3/4" inlet/outlet and flow up to 25 GPM
- **Posi-Seal™** - Double O-Ring Posi-Seal eliminates bypass and blowby to ensure 100% filtration, unlike double open-end (DOE) filters.

**Includes filter wrench.**

## Filter Installation Instructions

### Where to Install

The Dual Limeblaster Scale Prevention System should be installed as the final filter in a water treatment system where iron removal and other processes are involved. On a city water application, the Dual Limeblaster may be the only treatment for the home. In that case, the system would be installed at the water inlet of the home after irrigation and outside hose spigots. If the US Water Quantum Disinfection System or the US Water Disruptor are being used, they should be installed prior to the US Water Dual Limeblaster. For installation questions, please call 1-800-698-8792.

**WARNING!** The filter system should not be installed in direct sunlight. The heat and UV light may cause the material to disfigure. **Make sure the system is sheltered from the sun.**

**WARNING:** Iron removal and sediment control should be installed prior to the US Water Dual Limeblaster.

## Installation

1. Install the system in the desired location in the water treatment system. The caps are marked "IN" and "OUT" on the top of the housings.
2. The system will be built when it arrives flowing left to right. This can be disassembled and changed to match a right to left flow application.



3. Install threaded nipples or other threaded fittings in the housing. Be sure to use Teflon tape on the fittings. Tighten them with a pair of channel 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.



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 an adjustable wrench.





6. Connect the outlet plumbing to the outlet on the filter housing. Tighten with an adjustable wrench.



**NOTE:** If pipe fittings are used, be sure to use Teflon tape on the threads prior to installing the fitting on the filter housing.

7. Remove the sumps from the filter housings and install the filters. 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. Install the Radial Flow Carbon filter in the first housing and the Limeblaster filter in the second housing.



- 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.

**NOTE:** Adding a little bit of lubricant/silicone to the sump threads will make the sump easier to remove when replacing the filter.



**NOTE:** The filter will fit tightly in the housing cap. It will take force to push the filter in the cap. This ensures a positive seal. Be sure the the filter is pushed all the way in the cap.



## 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 and the water is running clear, 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.

**NOTE: The initial water coming from the system will have a slight black tint. This is normal. After the carbon filter flushes for 3 - 5 minutes, it should run clear. This is in no way harmful but should be flushed prior to use.**

## Filter Cartridge Replacement Instructions

1. Shut off the water supply
2. Open the faucet or spigot closest to the filter housing and allow all the water to empty from the plumbing systems

**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 clockwise until the sump is completely removed.



4. Remove the old filter and discard.



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



**NOTE: The radial flow carbon filter is installed in the first position and the Limeblaster in the second position.**

6. Lubricate the O-Ring for the sump and the sump threads with food grade silicone grease.



7. Install the filter sump in the filter cap by turning it counter-clockwise until it is hand tight.



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

## Warranty

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

**Filter Housing** - We warrant that for life 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.