# Whole House Water Filter Installation & Service Manual



### Installation and Operating Conditions

#### **A** Notice: Please read this entire service guide prior to beginning installation.

Maximum Incoming Pressure: 90 psi. If your feed water supply is over 90 PSI or prone to spikes, a pressure regulator is required. Excessive incoming water pressure can cause leaks, flooding, and property damage. It is highly recommended to monitor your home's incoming water pressure over a period of 24 hours to determine if a pressure regulator is required. Water Temperature Range: 40-100°F (4-37°C) - Never use hot water or allow the unit to freeze. Maximum Flow Rate: 15 gpm

It is recommended to use a professional licensed plumber for the whole house water filter installation. The installation must comply with all state and local codes. Follow the appropriate safety measures and methods for installation. Ensure that the installation area is level and dry. Manufacturer assumes no responsibility for damages incurred through improper installation or use of these products.

The water filtration system must be installed in a sheltered location where it will not be exposed to direct sunlight, extreme hot or cold conditions, or freezing temperatures. The system must be installed upright.

Manufacturer assumes no liability for the determination of the proper equipment necessary for your home. These systems are intended for use on potable water and cannot disinfect water from sources that are microbiologically unsafe or of unknown quality. If disinfection is required, we recommend installing an appropriately sized ultraviolet water disinfection system upstream from the water filter system. Our UV product line can be viewed at www.wateranywhere.com/uv

Installation will vary from home to home, so additional steps or parts may be required in addition to or instead of those listed in this instruction manual. This manual describes a typical installation. If you are unsure of what is needed for, it is recommended to consult a professional licensed plumber.





## **About Your System and Filters**

Congratulations on your purchase of your new whole-house water filtration. You've just taken the first step to providing clean water for your entire home and protecting your family and your appliances from contaminants.

#### **Components Identification**

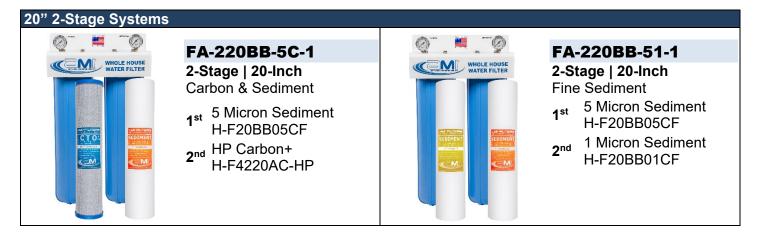


#### **System and Filter Cartridge Identification**

Our whole house water filters are offered in several optionserify the filters and correct sequence for your model below. The model number of your system can be found on the back of the bracket.



#### Installation and Service Manual – Whole House Water Filter



#### 10" 3-Stage Systems



### FA-310BB-5CC-1

3-Stage | 10-Inch Carbon & Sediment

1<sup>st</sup> 5 Micron Sediment H-F10BB05CF

2<sup>nd</sup> Carbon H-F4210AC

**3<sup>rd</sup> HP Carbon+** H-F4210AC-HP



#### FA-310BB-5CPB-1

**3-Stage | 10-Inch** Lead, Carbon & Sediment

- 1<sup>st</sup> 5 Micron Sediment H-F10BB05CF
- 2<sup>nd</sup> Undissolved Lead/Carbon H-F4210AC-PB
- 3<sup>rd</sup> Dissolved Lead C-C4210-PB

#### 10" 2-Stage Systems



FA-210BB-5C-1 2-Stage | 10-Inch Carbon & Sediment

- 1<sup>st</sup> 5 Micron Sediment H-F10BB05CF 2<sup>nd</sup> HP Carbon+
- H-F4210AC-HP



#### FA-210BB-51-1

2-Stage | 10-Inch Fine Sediment

- 1<sup>st</sup> 5 Micron Sediment H-F10BB05CF
- 2<sup>nd</sup> 1 Micron Sediment H-F10BB01CF

#### FA-210BB-CI-1

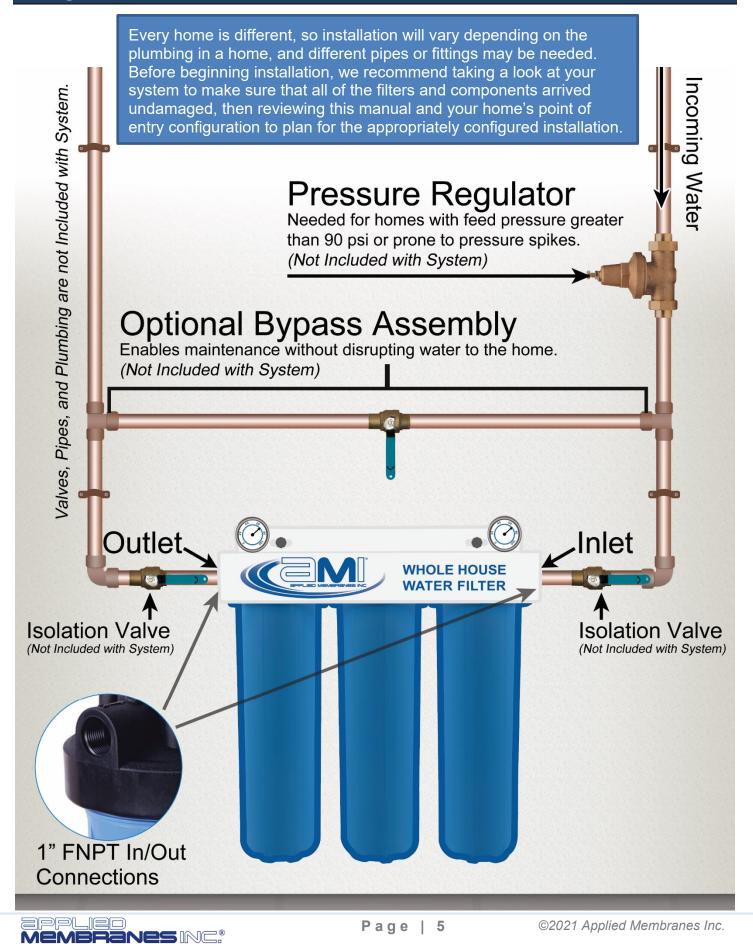
2-Stage | 10-Inch Iron & Carbon

1<sup>st</sup> Iron & Manganese C-C4210-I

2<sup>nd</sup> HP Carbon+ H-F4210AC-HP Visit www.wateranywhere.com/whole-house/ for replacement filters & kits.



## **Sample Installation**

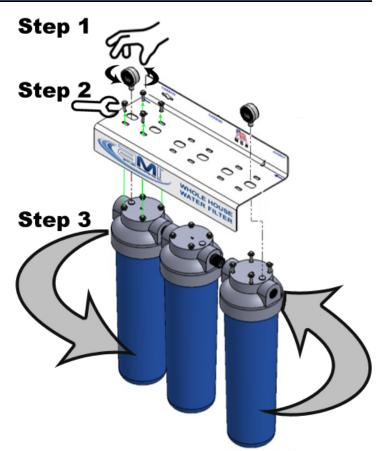


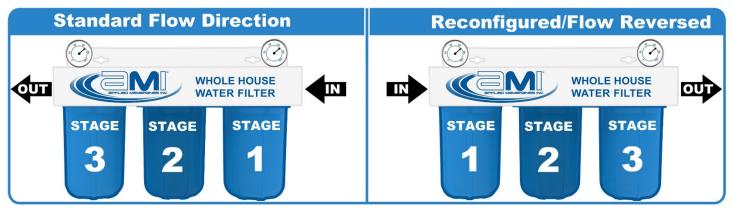
#### Installation and Service Manual – Whole House Water Filter

## How to Reverse the Flow Direction Configuration

Our whole-house water treatment systems are rightto-left flow configuration - the water enters from the right side and exits from the left side of the system. Some homes may require left-to-right flow configuration. Performing these steps will reverse the flow direction so that the feed water may enter the other side.

- Unscrew the in-and-out pressure gauges on top of the system by hand and set them aside.
- 2) Unscrew each of the 12 bolts on top of the bracket to remove the filter housings. Leave the housings connected to each other.
- Reverse the filter housings by rotating the assembly 180°.
- 4) Reattach the housings to the bracket using the hardware that was removed.
- 5) Reattach the pressure gauges by screwing them in by hand.
- 6) Relabel the bracket to show the filters in the correct positions.







## **Preparing for Installation**

#### **Plan the Installation**

- Determine the appropriate location for the installation. The system should be installed at any point after the main water supply enters the home and before the water line splits or meets the water heater.
- If your water line splits to separate indoor and outdoor lines, determine whether you would like to install the system before the split (to filter both inside and outside water), or after the split to filter the inside water only (this will decrease frequency at which maintenance is needed).
- Select a location to wall-mount the system with adequate space for any adapters, valves, bypass, or additional plumbing components.
- Select a wall that can support the weight of the system when it is full of water.
- Plan for at least 5" clearance below the bottom of the housings once the systems are mounted, to ensure easy access for filter changes.
- Verify the flow direction of the system against the piping at the installation location. Reverse the flow direction configuration if necessary, following the procedure on page 6.
- We recommend planning a bypass loop around the system to allow maintenance without disrupting the water to the home.

#### Gather the required tools and plumbing equipment needed for installation.

#### Tools

- Monkey Wrench
- Crescent Wrench
- Pipe Cutter appropriate for the pipes being used. (such as ratchet, hacksaw or wheel cutters)
- Teflon Tape
- Plumber's Silicone Grease
- Anchors, bolts, or appropriate mounting equipment to wall-mount the system.
- Buckets and Towels

## Additional Tools May be Required depending on your setup:

- Torch or Soldering Iron
- Drill

#### Plumbing Parts:

- Additional Piping
- Shut-Off Valves
- Pressure Regulator
- Pipe Adapters (if home piping is not 1-inch)
- Pipe Hangers
- Note: This is not intended to be a complete list of tools or parts required and will vary from installation to installation. The parts and steps described here are those of a typical installation.



## **Begin Installation**

- Turn off your hot water heater. For electric, turn off the electricity to the heater. For gas, turn the knob on the water heater to 'pilot'.
- Shut off the main water line to your home. Open several of the lowest faucets in your home to release pressure and drain as much water as possible in your lines. Leave these faucets open during installation.
- Prepare for water to discharge once the plumbing line is cut. Use a bucket or towels to catch the water.
- Measure the amount of line you will need to remove ensuring that you plan enough space for the system, any adapters, shut-off valves, by-pass valves, and other fittings you will need.
- Cut the line and allow the line to drain before proceeding. Verify that the cut ends of the line are smooth.
- Wall-Mount the system, and install all necessary plumbing, valves, and fittings to the system. Use Teflon tape on any threaded connections. Install the by-pass loop, if you are including one.
- Once all the pipe connections are complete and the isolation valves are set to open, the water to the home can be turned back on. Ensure the faucets that were opened before installation are still open. Turn on the water slowly to avoid water hammer. You will be able to hear the pipes and system filling with water, and the air being purged from the pipes.
- Check for leaks. If any leaks are present, turn off the water to the home, fix the leaks, and turn on the water to verify there are no further leaks. Repeat as necessary.
- Once air has been purged from the pipes, turn off all but one faucet.
- Flush your new filters by turning on the closest cold-water faucet. The flush water may show dark carbon fines or cloudiness as the loose particles and air are flushed out of the system. Run water until it is clear, then run for an additional 5 minutes to flush the filters.
- Make sure to turn the water heater on again.

#### Your System is Now Ready for Use!

A Notice: Occasionally check for leaks during the first week of operation.



## **Operation and Maintenance**

Upon startup, use the back of this manual to record the pressure showing on each gauge (inlet and outlet) and note the difference between the two readings. For example, if the inlet is 65 psi and the outlet is 60 psi, the difference is 5 psi. Also note the calendar date of the installation and startup.

It is very important to change the filters regularly. This eliminates particle bypass of filters and downstream contamination. Applied Membranes Whole House Water Filters are designed to run for approximately 6 months (or their rated gallons) depending on incoming water quality and operating conditions. Depending on your feed water quality, the first sediment filter may need to be changed more frequently than the rest. Applied Membranes Water Filters are equipped with in-and-out pressure gauges. Service is recommended if the pressure drop increases to greater than 10 psid above the initial reading upon installation.

Example: Initial readings upon installation are 65 psi inlet and 60 psi outlet; initial pressure drop is 5 psi. Current reading after 6 months is 65 psi inlet and 50 psi outlet; new pressure drop is 15 psi. Pressure drop has increased by 10 psi from installation; service is recommended.

#### **Filter Replacement Instructions:**

- 1. Turn off the water supply to the system.
- 2. Open the nearest faucet until the flow stops to depressurize your plumbing, then close the faucet once the flow stops.
- 3. Using the filter wrench provided with the system, unscrew the filter housing sump from the cap by twisting the sump in a clockwise motion. Use caution when removing the housings as they can be very heavy when full of water.
- 4. Remove the old filter cartridges and throw them away.
- 5. Clean inside of all housings with a mild soap solution or 1 tablespoon of household bleach diluted in one gallon of warm water. Rinse well with water.
- 6. Inspect the housing o-rings to ensure they are free of damage (replace if necessary). Using a food grade silicone-based lubricant, lubricate the o-ring and replace it in the filter housing. Make sure the o-ring is seated properly.
- 7. Insert the new filters into the appropriate housings, making sure the filter is correctly positioned and aligned. Note: The carbon block and sediment filter cartridges do not have a specific top or bottom and can be installed with either end facing up. The special purpose filters with plastic bodies must be installed with the gasket-side facing the top of the system.
- 8. Reinstall the filter housing sump onto the housing cap. Hand-tighten the filter housing by twisting the housing sump in a counterclockwise motion. Use the filter housing wrench to give another 1/4 to 1/2 turn being careful not to over-tighten. Repeat this step with all filter housings.
- 9. Once all the filters have been replaced and the housings are tightened in place, you may turn on the water supply to the system. Turn the valve slowly to avoid water hammer. Check the system for leaks as it fills with water. If you discover any leaks, turn the water off, inspect the connections, tighten as needed, and try again.
- 10. Flush your new filters by turning on the closest cold-water faucet. The flush water may show dark carbon fines or cloudiness as the loose particles and air are flushed out of the system. Run water until it is clear, then run for an additional 5 minutes to flush the filters.

#### **System Sanitization**

We recommend sanitizing the system at least once a year. This can be done while changing your filters. Turn off water to the system using the ball valves. Wash inside of the filter housings with warm soapy water and rinse well to remove the soap. Pour about 1 tablespoon of Hydrogen Peroxide or household bleach into each filter housing and fill with water. Soak for a minimum of 10 minutes.

Drain the housings and rinse thoroughly. Install new cartridge filters; ensuring the o-rings are lubricated (using a food grade silicone-based lubricant) and twist housing back on to hand-tight only.



## Whole House Water Filter Replacements List

Filters are available for purchase in kits, or individually at www.wateranywhere.com/whole-house/

System Part #	Filter Pack	Individual Filters	Filter Life	
FA-320BB-5CC-1		Sediment: H-F20BB05CF	3-6 Months	
Sediment + Carbon Filter	RFK-320BB-5CC	Carbon: H-F4220AC	6 Months	
3-Stage   20" Big Blue		HP Carbon: H-F4220AC-HP	240,000 Gallons	
FA-310BB-5CC-1		Sediment: H-F10BB05CF	3-6 Months	
Sediment + Carbon Filter	RFK-310BB-5CC	Carbon: H-F4210AC	3-6 Months	
3-Stage   10" Big Blue		HP Carbon: H-F4210AC-HP	120,000 Gallons	
FA-220BB-5C-1		Sediment: H-F20BB05CF	3-6 Months	
Sediment + Carbon Filter 2-Stage   20" Big Blue	RFK-220BB-5C	HP Carbon: H-F4220AC-HP	240,000 Gallons	
FA-210BB-5C-1	RFK-210BB-5C	Sediment: H-F10BB05CF	3-6 Months	
Sediment + Carbon Filter 2-Stage   10" Big Blue	KFN-21000-90	HP Carbon: H-F4210AC-HP	120,000 Gallons	
FA-220BB-51-1		5 Micron: H-F20BB05CF	3-6 Months	
Fine Sediment Filter 2-Stage   20" Big Blue	RFK-220BB-51	1 Micron: H-F20BB01CF	3-6 Months	
FA-210BB-51-1		5 Micron: H-F10BB05CF	3-6 Months	
Fine Sediment Filter 2-Stage   10" Big Blue	RFK-210BB-51	1 Micron: H-F10BB01CF	3-6 Months	
FA-320BB-5CI-1		Sediment: H-F20BB05CF	3-6 Months	
Iron Reduction (+sediment +carbon)	RFK-320BB-5CI	Iron Filter: C-C4220-I	50,000 gallons @ 3ppm Iron	
3-Stage   20" Big Blue		HP Carbon: H-F4220AC-HP	240,000 Gallons	
FA-210BB-CI-1		Iron Filter: C-C4210-I	30,000 gallons @ 3ppm Iron	
Iron Reduction (+carbon) 2-Stage   10" Big Blue	RFK-210BB-CI	HP Carbon: H-F4210AC-HP	120,000 Gallons	
FA-320BB-5CPB-1		Sediment: H-F20BB05CF	3-6 Months	
Iron Reduction (+sediment+carbon)	RFK-320BB-5CPB	Lead/Carbon: H-F4220AC-PB	25,500 Gallons	
3-Stage   20" Big Blue		Dissolved Lead: C-C4220-PB	150,000 gallons @ 10ppb Lead	
FA-310BB-5CPB-1 Iron Reduction (+sediment+carbon)	RFK-310BB-5CPB	Sediment: H-F10BB05CF	3-6 Months	
		Lead/Carbon: H-F4210AC-PB	12,000 Gallons	
3-Stage   10" Big Blue		Dissolved Lead: C-C4210-PB	80,000 gallons @ 10ppb Lead	
FA-320BB-5CK-1		Sediment: H-F20BB05CF	3-6 Months	
Heavy Metals (+sediment+carbon)	RFK-320BB-5CK	HP Carbon: H-F4220AC-HP	240,000 Gallons	
3-Stage   20" Big Blue		Heavy Metals: C-C4220-K	100,000 Gallons	

Applied Membranes Whole House Water Filters are designed to run for approximately 6 months (or their rated gallons) depending on incoming water quality and operating conditions. Depending on your feed water quality, the first sediment filter may need to be changed more frequently than the rest. Applied Membranes Water Filters are equipped with in-and-out pressure gauges. Service is recommended if the pressure drop increases to greater than 10 psid above the initial reading upon installation.

## Also Available at WaterAnywhere.com



**Under-Sink Reverse Osmosis** 



**Ultraviolet Disinfection Systems** 



**Housings & Components** 

## **PRODUCT WARRANTY**

SELLER hereby warrants to CUSTOMER that the goods herein described will be free from any liens or encumbrances, that good title to said goods will be conveyed to CUSTOMER by sale of same.

SELLER warrants materials of its own manufacture against defects in material and workmanship under normal conditions of usage and service as specified in this manual for one year from whichever of the following events occur first:

First use of the system

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Three (3) months following date of shipment from Vista, CA.

Materials not manufactured by SELLER receive only such warranty, if any, of the manufacturer thereof and which are hereby assigned to CUSTOMER without recourse to SELLER.

SELLER'S obligation under this warranty is limited to and shall be fully discharged by repairing or replacing any defective part FOB its works. SELLER shall not be liable for repair or alterations made without SELLER'S prior written approval; for membrane elements becoming plugged by suspended matter, precipitates, or biological growth; or for failure to properly maintain the element. SELLER shall not be liable for damages or delay caused by defective material. Products returned to SELLER for warranty examination must be shipped freight prepaid.

- SELLER'S Liability. SELLER SHALL NOT BE LIABLE FOR PROSPECTIVE PROFITS OR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, NOR SHALL RECOVERY OF ANY KIND AGAINST SELLER BE GREATER IN AMOUNT THAT THE PURCHASE PRICE OF THE SPECIFIC GOODS SOLD AND CAUSING THE ALLEGED DAMAGE, WHETHER SUCH CLAIM BE BASED ON CONTRACT OR TORT; provided, however, the aforesaid to the contrary notwithstanding, SELLER shall not be liable for any bodily injuries or property damage directly caused by its willful, wanton or negligent acts.
- All Other Warranties and Damages. THERE ARE NO WARRANTIES ESTABLISHED, EXPRESS OR IMPLIED OR STATURTORY, INCLUDING THE WARRANTY OF MERCHANTABILITY, EXCEPT THOSE SET FORTH ABOVE OR ANY PERFORMANCE WARRANTY WHICH IS ATTACHED TO THIS ORDER.
- Permits, Ordinances and Code Compliance. CUSTOMER has full responsibility for obtaining any licenses, permits and inspections required with respect to installation and use of the goods herein described.
- Governing Law. Any agreement based upon this Order and the obligations thereby imposed on SELLER and CUSTOMER shall be governed by and construed according to the laws of the State of California.

## Installation and Service Records

## **Record Data Upon Installation**

Installation Date	Inlet Pressure	Outlet Pressure	Pressure Drop
	psi	psi	psid

Installation Notes:

#### **Record Filters in Your System (Reference Page 10)**

Stage 1	Stage 2		Stage 3	
□ H-F10BB05CF 10" 5 Micron □ H-F20BB05CF 20" 5 Micron □ C-C4210-I 10" Iron □ (other/custom)	□ H-4210AC □ H-4220AC □ H-4210AC-HP □ H-4220AC-HP □ H-F10BB01CF □ H-F20BB01CF □ H-4210AC-PB □ H-4220AC-PB □ C-C4220-I □ (other/custom)	10" Carbon 20" Carbon 10" HP Carbon 20" HP Carbon 10" 1 Micron 20" 1 Micron 10" Lead Carbon 20" Lead Carbon 20" Iron	□ N/A - None □ H-4210AC-HP □ H-4220AC-HP □ C-C4210-PB □ C-C4220-PB □ C-C4220-K □ (other/custom) _	(2-Stage Systems) 10" HP Carbon 20" HP Carbon 10" Dissolved Lead 20" Dissolved Lead 20" Heavy Metals

#### Filter Kit Part #: RFK-

order at www.wateranywhere.com/whole-house/

#### Service Records

Service Date	Pre-S	Service P	ressures	Filters Replaced	Sanitized	Pos	t-Service	Pressure	Notes
/ /	In:	Out:	Differential:			ln:	Out:	Differential:	
/ /	In:	Out:	Differential:	□1 □2 □3		ln:	Out:	Differential:	
/ /	In:	Out:	Differential:	□1 □2 □3		ln:	Out:	Differential:	
/ /	ln:	Out:	Differential:			ln:	Out:	Differential:	
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