

Multi-Cartridge Water Filter Systems and Combination Multi-Cartridge and UV Disinfection Filter Systems

INSTALLATION AND OWNER'S MANUAL

For TriPlex[™] and DuPlex[™] FS-BB Series Filter Systems and FS-BB*UV Series and FS-YT Series Combination Filter/UV Systems

THIS MANUAL IS TO BE LEFT WITH THE OWNER OF THE EQUIPMENT FOR REFERENCE PURPOSES AND TECHNICAL GUIDANCE. IT IS STRONGLY RECOMMENDED THAT QUALIFIED DEALER SERVICE PERSONNEL CONTACTED IN THE EVENT OF AN UNKNOWN INTERRUPTION OF SERVICE OR PRODUCT MALFUNCTION. APPARENT AN ANNUAL **PREVENTATIVE** MAINTENANCE INSPECTION BY A WATER PROFESSIONAL IS RECOMMENDED TO **ENSURE TROUBLE-FREE AND CONTINUOUS OPERATION.**





Congratulations!

You have purchased the finest multi-cartridge water system available for your home. It will provide you years of reliable service if properly installed, operated and maintained. <u>Please read this entire manual before attempting installation and operation.</u>

Section 1. Frequently Asked Questions

Before getting started, take the time to familiarize yourself with your new Waterite system by reading some FAQs listed below. Call us or ask your dealer if you have any other questions about your system's operation.

Q: How do the DuPlex[™] and TriPlex[™] Water Filter Systems differ from an ordinary water system?

Ordinary water filters generally use one cartridge to filter contaminants or particles from the water. DuPlexTM and TriPlexTM systems use multiple cartridges in series to filter different types of contaminants at the same time, allowing users to select cartridge types to match the application requirement. When the UV system is included, the filter system provides the added benefit of bacteria, virus and cyst control.

Q: Will TriPlex™ or DuPlex™ systems remove hardness, sodium and salts from the water?

No. Unlike reverse osmosis systems, inline filter systems do not filter out contaminants in solution. They are designed to filter particulate, colour, oxidized iron, algae, cysts, taste and odor. Some specialized cartridges are available to soften water but these generally have low capacity and this job is best left for a regenerating water softener.

Q: Does cartridge filtration remove bacteria? Cryptosporidium? Viruses?

Where known microbiological contamination exists, specialized pre-treatment is recommended to ensure a safe water supply to the water filter system. Untreated contamination will cause pre-filters and other system components to become contaminated from exposure. Cross contamination of the entire plumbing system may occur when the filters are changed or disturbed. An added UV system will act as an effective barrier when properly installed and maintained but should act as a secondary barrier only when know contamination exists.



THIS WATER FILTER SYSTEM IS DESIGNED ONLY TO IMPROVE AESTHETIC PROPERTIES AND IS NOT DESIGNED TO ACT AS A PRIMARY BARRIER TO WATERBORNE MICROBIOLOGICAL OR TOXIC CHEMICAL CONTAMINATION. WHERE THESE CONDITIONS MAY EXIST CONSULT A WATER PROFESSIONAL TO ENSURE SUFFICIENT RAW WATER PRE-TREATMENT AND DISINFECTION.

Q: Where is the system installed?

Typically, the system is installed where the water enters the building. Some homeowners or installers prefer the basement or crawlspace, as may allow for easier access to the system for maintenance purposes. If the system is used all year in freezing temperatures it must be installed in a heated area that is not subject to freezing. Keep in mind that for systems with a UV sterilizer, lateral clearance must be allowed for lamp and sleeve changes.

Q: How much water does TriPlex[™] and DuPlex[™] systems produce?

FS-YT series filter systems with 20" housings will produce a flow rate of approximately 12 USGPM (45 liters/min) with new sediment and carbon block cartridges. Full-flow (Big Blue) FS-BB series systems with 10" or 20" housings are capable of about 20 USGPM (76 liters/min). Specialty cartridges such as resin cartridges or GAC cartridges can reduce this flow rate substantially.

Q: What is the standard warranty with TriPlex™ and DuPlex™ systems?

Every water filter system comes with a standard one-year limited warranty on all parts and repair labour. A detailed warranty card is included with the unit. Normal filter cartridge replacement is excluded from your warranty.

Q: What is the maintenance schedule for the system?

A good rule of thumb is to replace all filter cartridges every three months. Dependent upon local water conditions and total water used, cartridges may require changes more often. More severe water conditions (algae, oxidized iron, turbidity, colour) may shorten this life significantly. If the cartridges have not be used for several months (such as storage over a winter season) new cartridges should be installed.

Q: When should the cartridges be changed?

If you notice gradually decreasing water pressure from your system or, taste or odor to your water, it probably means that your cartridges are becoming exhausted and are losing their effectiveness. If the differential pressure between cartridges (the difference in pressure reading between two successive pressure gauges) reaches 10PSI the cartridges should be changed.

Section 2. Unpacking and Installation

Your assembled water filter system includes:

Carton Contents:

√ The main filter unit assembly with 2 or 3 filter housings. Units fitted with a UV disinfection system will also have this assembled.

FS-BB TriPlex[™] Systems:

- ✓ 3 10" or 20" x 4" Big Blue Filter Housings
- √ 3 0-100 psi Pressure Gauges (installed)
- √ 1 TriPlex[™] Mounting Bracket
- √ 1 Filter Housing Wrench

FS-BB DuPlex^{™™} Systems:

- ✓ 2 –10" or 20" x 4" Big Blue Filter Housings
- √ 2– 0-100 psi Pressure Gauges (installed)
- √ 1- DuPlex™ Mounting Bracket
- √ 1– Filter Housing Wrench

Triplex - 23.13"
Duplex - 14.00"

4.63

69/32
619/32
Triplex - 16.00"
Duplex - 8.40"

15.38

ALLOW A MIN 3.0" CLEARANCE

Figure 1: General Dimensional Specifications

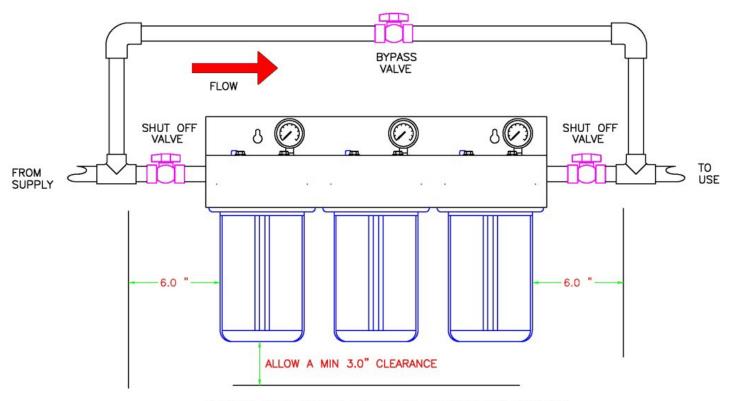
Step 1. Selecting the System Location

- 1. The filter system should be mounted close to where the water line enters the building, such as the basement or adjoining utility room, to ensure all water used in the dwelling is treated. If you wish to tee off a water line to be used for outdoor hoses or an irrigation system, make sure this occurs prior to the filter system. Keep in mind that filter housings will need periodic replacement and that easy access must be maintained. Do not install in a location with high humidity, direct sun or a direct source of heat. If you are installing a UV filter systems you will need a standard 110V plug nearby.
- Additionally, choose an area that has adequate clearance all around the unit. Allow 6" of clearance on either side and a minimum of 8" of clearance below the unit. For UV models, allow enough clearance on the sides to extract the lamp and sleeve in the stainless chamber, as these will require periodic cleaning and replacement.

Step 2. Installation

1. Clear working area. Unpack all components and check for visual damage. Ensure all listed components are included.

Figure 2 Typical Installation



EXAMPLE ONLY: FITTINGS AND VALVES NOT SUPPLIED WITH UNIT

- Inspect the cold water supply line to the dwelling and the condition of the pipe. Consult your plumber or plumbing supply store to purchase the appropriate connections to cut into the water line and connect the filter system. The inlet and outlet of the system are 1" NPT (National Pipe Thread).
- 3. Mount the system bracket to the wall ensuring that the mounting holes are located into a stud, masonry or reinforced wall section and that the bracket is level.
- 4. **Figure 2** shows a typical installation of a DuPlex[™]/TriPlex[™] Filtering System. It is recommended that shutoff valves be located on either side of the unit and that a bypass line be installed in case of emergencies. This allows the filtering system to be taken off line without interruption of service.
- 5. Make sure the connections to the filter system comply with the local plumbing code and the necessary inspections are made to the final installation.

Step 3. Installing/Changing Filter Cartridges

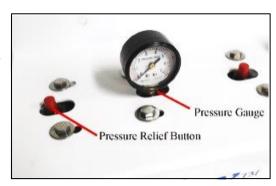


AVOID PLUMBING SYSTEM CONTAMINATION BY THOROUGHLY WASHING HANDS BEFORE LOADING CARTRIDGES AND MEMBRANE ELEMENTS.

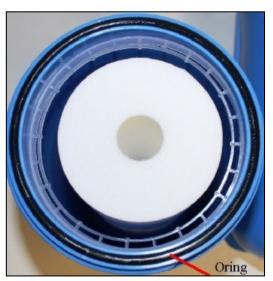
- Turn water supply off by closing shut off valves.
 If flow is required when changing filters, open bypass valve. Relieve pressure inside the filter housings by pressing down on the red buttons until pressure reaches zero.
- Using the wrench supplied, place around the housing and turn clockwise to loosen housing. Remove the lower part of the filter housing. Have a pail nearby, as each housing will be full of water with a cartridge to be disposed of.
- 3. Remove the used cartridge and pour out the water remaining in the filter bowl. Clean the inside of the bowl with warm, soapy water. Rinse the inside thoroughly before reassembling.
- 4. Remove replacement cartridge from its packaging and place inside the housing, ensuring the filter is centered. Verify the o-ring is seated inside the grove on the top of the filter bowl.
- 5. Place the filter bowl under the filter cap and begin to rotate in a counter clockwise direction. Continue turning until you feel the bowl tightening. Using only your hands tighten the bowl to the cap. This should suffice in making a water proof seal. Use the wrench to gently tighten the bowl further if there are any leaks when the water is turned back on.

DO NOT OVER-TIGHTEN HOUSINGS

Repeat for each housing on your filter system.







Section 3: Operation and Maintenance



DO NOT USE ANY WATER FROM THE SYSTEM UNTIL THE NEXT STEP IS COMPLETE.

- 1. With the plumbing complete and the cartridges loaded, your filter system is ready for a pressure test. If a bypass has been installed, turn off the bypass valve.
- 2. Open a faucet nearby in the plumbing system. Open the downstream (outlet) shut-off valve on the filter system. Slowly open the upstream (inlet) shut-off valve until fully open. You will hear water filling the filter housings and will soon begin flowing from the faucet that has been opened.
- 3. Let the system free-flow to the faucet for 10 minutes. This will allow any carbon fines from new carbon cartridges to be flushed clear. While flushing, check for plumbing or housing leaks and repair if necessary.
- 4. When system flushing is complete, close the open faucet. Check again for leaks around the filter system it is now under full system water pressure. Repair if necessary.

Your Warranty

Keep your bill of sale and your warranty certificate, included in this kit. This is needed to claim any parts or repair service during the warranty period. Read the document completely for warranty claim limitations and instructions.



BE SURE TO RETURN THE WATERITE WARRANTY CARD LOCATED IN YOUR LITERATURE KIT. THIS IS NECESSARY TO VALIDATE YOUR PRODUCT WARRANTY.

VISIT THE WATERITE WEBSITE FOR INFORMATION, CONSUMER ONLINE REPLACEMENT PARTS AND PRODUCT UPDATES AT:

www.waterite.com

Replacement Parts and Filter Cartridges



WHEN REPLACING FILTER CARTRIDGES AND REPAIR PARTS ALWAYS INSIST ON GENUINE WATERITE PRODUCTS TO ENSURE SAFE, OPTIMAL PERFORMANCE AND EXACT FIT. SEE YOUR WATERITE DEALER FOR CARTRIDGES LISTED BELOW OR GO TO WWW.WATERITE.COM

REPLACEMENT PARTS	
Description	Waterite Part #
Plastic Wrench, HL Series, BB	HAN13W
Pressure Gauge, 1/4" Bottom Mount, 0-100 psi	PGM100S
O-ring, Excelflow for HL (BB) Housing - Groove fit	RKE0013HLB
REPLACEMENT FILTER CARTRIDGES	
Sediment and Cyst Reduction Cartridges	
Excelpure PP Sediment Cartridge, 10", BB, 1mic.	PP10B01
Excelpure PP Sediment Cartridge, 20", BB, 1mic.	PP20B01
Excelpure PP Sediment Cartridge, 10", BB, 5mic.	PP10B05
Excelpure PP Sediment Cartridge, 20", BB, 5mic.	PP20B05
Excelplus+ Cyst Pleated Reduction Cartridge, 10", BB, 1mic absolute	PLA10B01
Excelplus+ Cyst Pleated Reduction Cartridge, 20", BB, 1mic absolute	PLA20B01
Excelpure PP Sediment Cartridge, 20", 1mic. (FS-YT)	PP2001
Excelpure PP Sediment Cartridge, 20", 5mic. (FS-YT)	PP2005
Carbon Odor and Taste Reduction Cartridge	s
Excelpure Taste and Odor CBC Carbon Cartridge, 10" BB	CBC10B05
Excelpure Taste and Odor CBC Carbon Cartridge, 20" BB	CBC20BCTO
Excelpure Taste and Odor CBC Carbon Cartridge, 20" (FS-YT)	CBC20



Purifiner
A Division of Waterite, Inc.

Winnipeg, Manitoba Canada

www.waterite.com