Owner's Manual

Tier1 WATER
WHOLE HOME SOLUTIONS

Whole House Carbon and KDF Water Purification System

Whole House Carbon and KDF Filter WH-CB-KDF

1. Read all instructions carefully before operation.
2. This system is not intended for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Tier1 Technical Support:
1-855-378-9116

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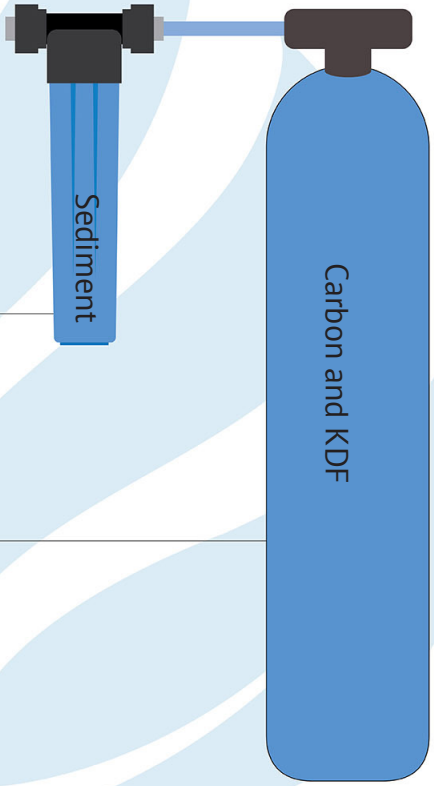
Tier1®

EFFORTLESS INSTALLATION



CLEANER, GREAT TASTING WATER IN TWO STEPS

1 Connect sediment pre-filter to water supply using included valve and fittings.

2 Connect sediment pre-filter to next levels of filtration

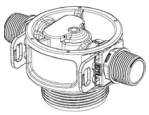
TIER1-WH-CB-KDF-948
TIER1-WH-CB-KDF-1054

TIER1_T1W_WH_CB_KDF_948
TIER1_T1W_WH_CB_KDF_1054

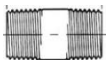
UNPACKING/INSPECTION

Check the entire unit for any shipping-related damage, missing parts, or damage to shipping cartons.. Small parts needed to assemble the softener are contained in a parts box. To avoid loss of small parts, keep them in the parts box until you are ready to use them.

Inlet/Outlet adapters (3)
Two 3/4", One 1"

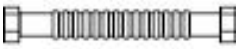


Adapter (cap) (1)



Stainless Steel Nipple (2)

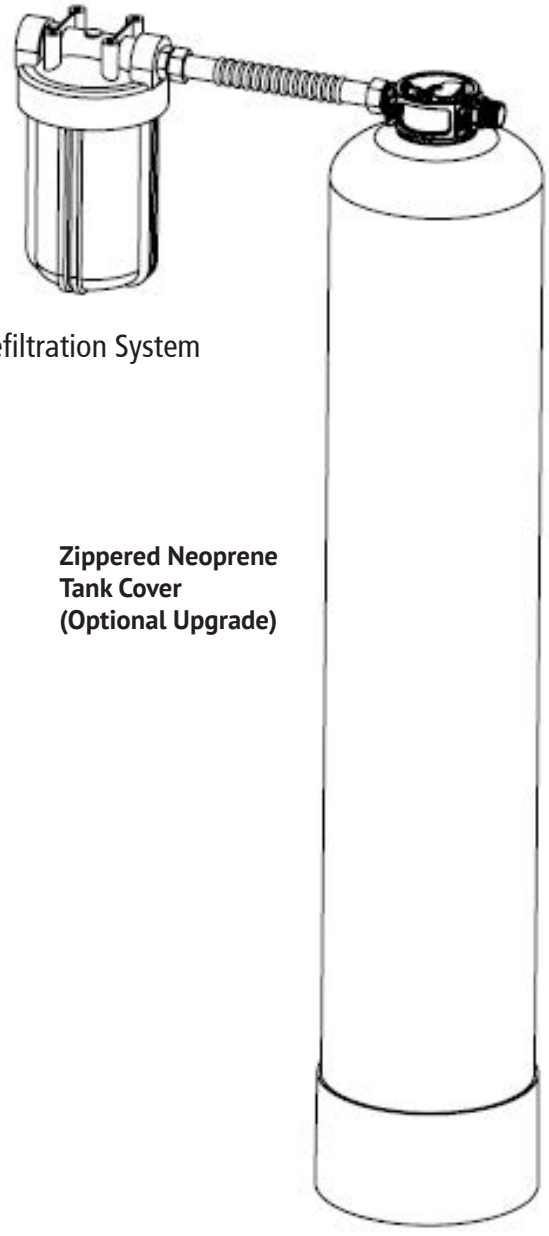
Locking Clips (2)



Flex Connectors (1)

Ball Valve

Prefilter bracket, wrench, screws



Prefiltration System

Zippered Neoprene Tank Cover (Optional Upgrade)

Tank pre-filled with media (1)

OPERATING CONDITIONS

Specifications & Performance Data Sheet

Please review operating pressures, temperatures, and water chemistry limitations to ensure compatibility.

Carbon and KDF Tank		
Specifications	CB-KDF-948	CB-KDF-1054
Service Flow Rate	5.2 gpm	7.2 gpm
Filter Media Volume - Cubic Feet	1.00 cft	1.5 cft
Filter Tank Size	9" x 48"	10" x 54"
Media Type	Activated Carbon with KDF	
Media Preloaded	Yes	
Water Temperature	41-100 degrees F	
Max Water Pressure	125 psi	
Plumbing Connections	3/4" straight adaptors	
Electrical Requirements	None	

**Do not subject the unit to freezing temperatures*

Models Tier1-WH-CB-KDF-948 and Tier1-WH-CB-KDF-1054 have been certified by IAPMO R&T against NSF/ANSI 42 for the effective reduction of Chlorine Taste and Odor.

Performance Data Sheet

Model Number	Capacity (Gallons)	Claims
TIER1-WH-CB-KDF-948	750,000	Chlorine,Taste and Odor
TIER1-WH-CB-KDF-1054	1,100,000	Chlorine,Taste and Odor

Point-of-use and point-of-entry systems intended to reduce substances affecting the aesthetic quality of the water or to add chemicals for scale control, or both.

Certification demonstrates that all materials safety and structural integrity (as applicable) requirements have been met.
To be installed in accordance with the manufacturer's installation instructions and the requirements of the latest edition of the Uniform Plumbing Code®.
Point-of-Entry products certified to this standard also comply with the health effects materials safety requirements listed in NSF/ANSI 61.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

This system has been tested according to NSF/ANSI 42 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42

Substance Influent Challenge Concentration Reduction Requirement : Chlorine 2.0 mg/L +/- 10% >/= 50%

TOOLS, PIPE AND FITTINGS AND OTHER MATERIALS

Our systems are complete, self-contained, loaded with media and ready to use. Inlet and outlet fittings are included with the filter. To maintain full valve flow, 3/4" or 1" pipes to and from the filter fittings are recommended. You should maintain the same, or larger pipe size as the water supply pipe, up to the inlet and outlet. Use copper, brass, or PEX pipe and fittings. Some codes may also allow PVC plastic pipe.

Helpful Tools: screwdriver, Teflon tape, adjustable wrenches, razor knife
To avoid pinched o-rings during installation, apply NSF certified lubricant to all seals.

Additional tools may be required if modification into home plumbing is required.

INSTALLATION GUIDELINES

SAFETY GUIDE

For your safety the information in this manual must be followed to minimize the risk of electric shock, property damage, or personal injury.

Check and comply with your state and local codes. You must follow these guidelines.
Use care when handling the filter tank. Do not turn upside down, drop, drag, or set on sharp protrusions.

PROPER INSTALLATION

This system must be properly installed and located in accordance with the installation instructions before it is used.

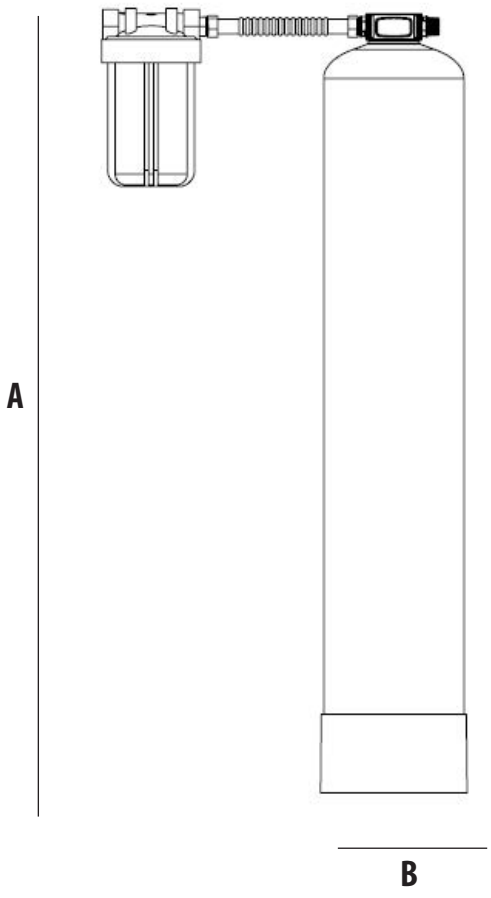
Use only lead-free solder and flux for all sweat-solder connections, as required by state and federal codes. Maximum allowable inlet water pressure is 125 psi. If daytime pressure is over 80 psi, night time pressure may exceed the maximum. If necessary, use a pressure reducing valve to reduce the flow.

WARNING: Pre-filter must be installed level with tank head, as shown in below diagram.

Discard all unused parts and packaging material after installation. Small parts remaining after the installation could be a choking hazard.

SYSTEM DIMENSIONS

Models	A	B
948	48"	9"
1054	58"	10"



INSTALLATION

WHERE TO INSTALL

Place the filter tank as close as possible to the pressure tank (well system) or water meter (city water). Connect the filter to the main water supply pipe BEFORE the water heater.

DO NOT RUN HOT WATER THROUGH THE FILTER. Temperature of water passing through the filter must be less than 100° F. Keep the filter out of direct sunlight as its heat may soften and distort plastic parts.

Do not install the filter in a place where it could freeze as water freezing may damage the system. Install the filter in a place water damage is least likely to occur if a leak develops. The manufacturer will not repair or pay for water damage.

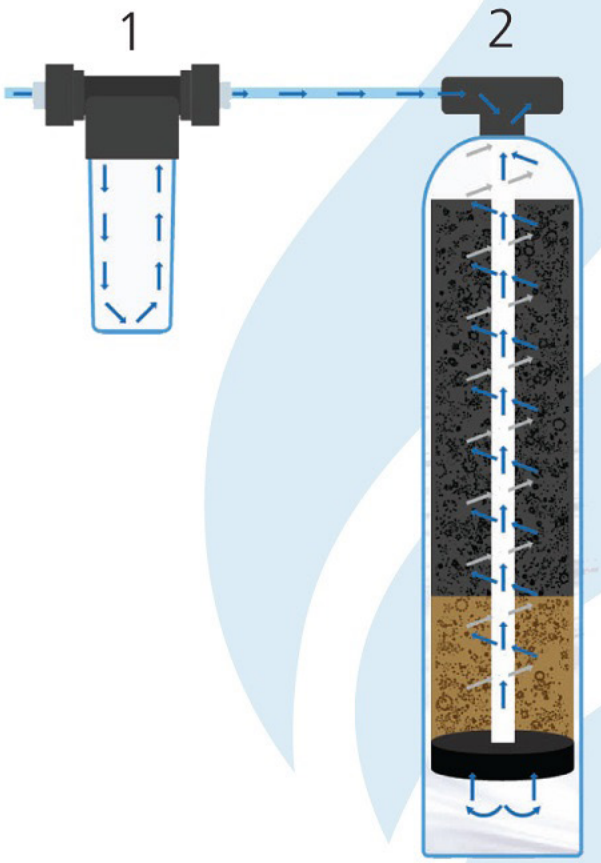
If installing in an outside location, you must take the steps necessary to ensure the filter, installation plumbing, wiring, etc., are as well protected from the elements, contamination, vandalism, etc., as when installed indoors.

INSTALLATION INSTRUCTIONS

1. If your hot water tank is electric, turn off the power to it to avoid damage to the tank's element.
2. If you have a private well, turn off the power to the pump, then shut off the main water valve. If you have municipal water, shut off the main valve. Turn on a cold water faucet,(preferably on the lowest floor of the house) until all pressure is relieved and the water flow stops.
3. ON COPPER PLUMBING SYSTEMS BE SURE TO INSTALL A GROUNDING WIRE BETWEEN THE INLET AND OUTLET PIPING TO MAINTAIN GROUNDING.
4. Solder joints near the adapter must be done before connecting piping to the adapter. Always leave at least 6" (152 mm) between the adapter and joints when soldering pipes connected to the valve. Failure to do so could damage the valve.
5. Attach the pre-filtration system to wall at height equal with tank adapter. Make sure you have the appropriate amount of space needed before attaching to walls/pipes.
6. Thread steel nipples into inlet and outlet on pre-filter housing cap.
7. Lubricate tank cap adapter o-rings with NSF certified lubricant and insert into inlet/outlets of tank caps. Insert red locking clips to lock in adapters. Note water flow direction indicated by arrow on caps.
8. Attach flex connectors to tank cap adaptors. Do not apply tape as they include a sealing washer.
9. Install system ball valve/shut-off valve prior to prefilter OR to inlet connection of first tank. Close ball valve.
10. Perform all plumbing according to local plumbing codes. Make sure not to over tighten any plastic parts, and do not over bend the flex connectors.
11. Slowly turn on the main water supply. Check pre-filter system for leaks.
12. Slowly turn the ball valve, allowing water to flow through the system tanks watching for leaks.
13. **Note : Carbon filter special instruction:** Once the unit has filled sufficiently that water is at least equal to the height of the media, shut down the water for 15 – 20 minutes for the carbon to soak.
14. After soaking, remove the aerator screen from the nearest faucet, and run water at this faucet for at least 10 minutes until all carbon fines (black specks) are gone from the water and the system is free of any air or foreign material resulting from the plumbing work.
15. To verify water is clear, fill an 8 oz. glass with water. Wait 30 seconds, visually verify no sediment has settled to the bottom of glass. If sediment still present, flush and repeat until water remains clear.
16. If provided, cover tanks with zip-on neoprene sleeves. Your system is now ready for use.

INSTALLATION

Tier1® MAXIMUM FILTRATION



1 Sediment Pre-Filter
Decreases the amount of rust, sediment and silt ensuring clearer, cleaner throughout your home.

2 Carbon & KDF Filter
Helps reduce herbicides, pesticides and other chemical compounds that may be in your water, providing safe drinking water for you and your family.

TROUBLESHOOTING

ISSUES

ISSUE	POTENTIAL CAUSE	SOLUTION
Filter bleeds taste and odor or sediment	Bypass valve open	Close bypass valve
	Defective or stripped media bed.	Replace Media
	Quality of water has changed.	Analyze water sample to determine change.
	Filter capacity too small	Replace with larger unit or add another
	Leak between valve and central tube	Check if central tube is cracked or o-ring is damaged. Replace faulty parts.
Low water pressure	Iron or scale build-up in line feeding unit.	Clean pipes

REPLACING THE MEDIA BED

Under normal operating conditions the effective life of the carbon and KDF filter media will be several years, depending upon water quality and usage. After this time, taste and odor problems may return. When this happens, contact Tier1 for a replacement media bed. www.tier1water.com.

REPLACING THE SEDIMENT PRE-FILTER

The sediment filter in the pre-filter housing should be replaced every six months or sooner as necessary. Filter specs: 20" x 4.5" spun polypropylene 5 micron sediment filter. We recommend replacing your O-ring with each filter change. Sediment filter replacement kit is available at www.tier1water.com.
Part number: TIER1_FH_20_45_SEDIMENT_KIT.

QUESTIONS?

For questions about your Tier1 whole home water system product installation or performance troubleshooting, please call Tier1 Technical Support at **1-855-378-9116** Monday - Friday, 8 am - 5 pm central time or send an email to support@tier1water.com.

Tier1® WATER
WHOLE HOME SOLUTIONS

www.tier1water.com

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