



## Installation, Service and Operation Manual

### CF Series Mixed Bed Carbon System



CF8  
CF10  
CF105  
CF12



Systems manufactured by CFCI

Brooklyn, Michigan USA

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[www.aquacera.com](http://www.aquacera.com)

## **About the Product:**

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CF Series Mixed Bed Carbon Systems by AquaCera® are designed to provide years of protection from chemicals, bad tastes, odors, and color. They are also specifically designed to remove trace chemicals such as chlorine or chloramines introduced into the water by municipal treatment plants as a means of disinfection. These chemicals create taste and odor issues and carcinogenic compounds that are not beneficial for consumption or absorption into the body. Waters containing chemicals from agricultural cultivation may also enter into the water supply and the CF systems are designed to reduce these contaminants. The systems are meant for installation at the entry point of water coming into the home whereby it can treat your entire home for both hot and cold water.

At the end of this manual is a list of contaminants reduced or removed with the CF Series Carbon Filters.

## **Benefits of an AquaCera CF Series Treatment System:**

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- ✓ **No Chemicals**
- ✓ **No Maintenance**
- ✓ **Retains Essential Minerals**
- ✓ **Protects Water Using Appliances**
- ✓ **No Electricity**
- ✓ **No Periodic Backwashing – NO DRAIN LINE TO CONNECT TO**
- ✓ **Simple Installation**
- ✓ **Takes very limited space**
- ✓ **Compatible with all on-site/community waste water treatment systems**
- ✓ **Water quality is enhanced**
- ✓ **Removes trace chemical contaminants**
- ✓ **Removes bad tastes and odors**

## **Installation Notes:**

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Unlike a water softener, there are no drain line, brine line or electricity requirements for this system.

- These units are installed in a “DOWNFLOW” configuration. Please follow the labels on the top of the tank for correct installation.
- This unit comes fully loaded with media, ready for installation.
- This unit may be laid on its side as it is a fully packed media bed with upper and lower distribution baskets.

## **Warning:**

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**Do Not let the system freeze. Damage to the tank(s) may result!**

## **System Parts Overview:**

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### **Carbon Filter Tank**



### **Bypass Valve Assembly**



Installation Fitting Assemblies

Order No: V3007

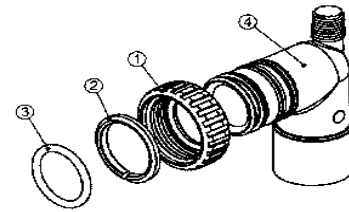
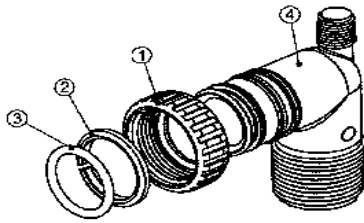
Description: WS1 Fitting 1" PVC Male NPT Elbow Assembly

Drawing No.	Order No.	Description	Quantity
1	CLK V3151	WS1 Nut 1" Quick Connect	2
2	CLK V3150	WS1 Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V3149	WS1 Fitting 1 PVC Mule NPT Elbow	2

Order No: V3007-01

Description: WS1 Fitting ¼ " & 1" PVC Solvent 90 ASY

Drawing No.	Order No.	Description	Quantity
1	CLK V3151	WS1 Nut 1" Quick Connect	2
2	CLK V3150	WS1 Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V3189	WS1 Fitting ¼ & 1 PVC Solvent 90	2



Order No: V3007-02

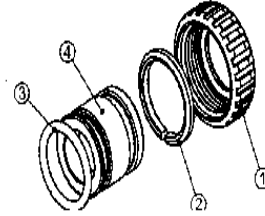
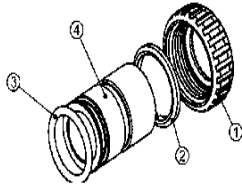
Description: WS1 Fitting 1" Brass Sweat Assembly

Drawing No.	Order No.	Description	Quantity
1	CLK V3151	WS1 Nut 1" Quick Connect	2
2	CLK V3150	WS1 Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V3188	WS1 Fitting 1 Brass Sweat	2

Order No: V3007-03

Description: WS1 Fitting ¾ " Brass Sweat Assembly

Drawing No.	Order No.	Description	Quantity
1	CLK V3151	WS1 Nut 1" Quick Connect	2
2	CLK V3150	WS1 Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V318801	WS1 Fitting ¾ Brass Sweat	2

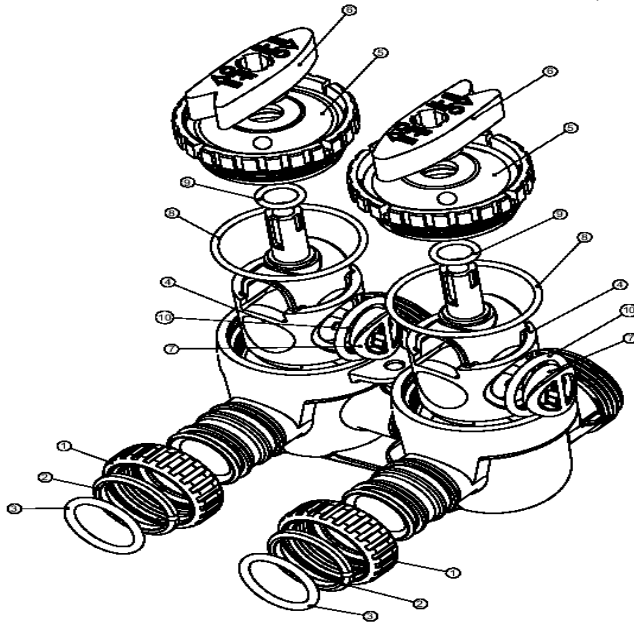


### Bypass Valve

Drawing No.	Order No.	Description	Quantity
1	CLK V3151	WS1 Nut 1" Quick Connect	2
2	CLK V3150	WS1 Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V3145	WS1 Bypass 1" Rotor	2
5	CLK V3146	WS1 Bypass Cap	2
6	CLK V3147	WS1 Bypass Handle	2
7	CLK V3148	WS1 Bypass Rotor Seal Retainer	2
8	CLK V3152	O-Ring 135	2
9	CLK V3155	O-Ring 112	2
10	CLK V3156	O-Ring 214	2

(Not Shown) Order No. V3191-01, Description: WS1 Bypass Vertical Adapter Assembly

Order No.	Description	Quantity
CLK V3151	WS1 Nut 1" Quick Connect	2
CLK V3150	WS1 Split Ring	2
CLK V3105	O-Ring 215	2
CLK V319101	WS1 Bypass Vertical Adapter Assembly	2



## Bypass Valve

The bypass valve is typically used to isolate the control valve from the plumbing system's water pressure in order to perform control valve repairs or maintenance. The WS1 bypass valve is particularly unique in the water treatment industry due to its versatility and state of the art design features. The 1" full flow bypass valve incorporates four positions including a diagnostic position that allows service personnel to work on a pressurized system while still providing untreated bypass water to the facility or residence. Its completely non-metallic, all plastic design allows for easy access and serviceability without the need for tools.

The bypass body and rotors are glass filled Noryl and the nuts and caps are glass filled polypropylene. All seals are self-lubricating EPDM to help prevent seizing after long periods of non-use. Internal o-rings can easily be replaced if service is required.

The bypass consists of two interchangeable plug valves that are operated independently by red arrow shaped handles. The handles identify the flow direction of the water. The plug valves enable the bypass valve to operate in four positions.

1. **Normal Operation Position:** The inlet and outlet handles point in the direction of flow indicated by the engraved arrows on the control valve. Water flows through the control valve during normal operation and this position also allows the control valve to isolate the media bed during the regeneration cycle. (see Figure 1)
2. **Bypass Position:** The inlet and outlet handles point to the centre of the bypass, the control valve is isolated from the water pressure contained in the plumbing system. Untreated water is supplied to the plumbing system. (see Figure 2)

3. **Diagnostic Position:** The inlet handle points in the direction of flow and the outlet handle points to the centre of bypass valve, system water pressure is allowed to the control valve and the plumbing system while not allowing water to exit from the control valve to the plumbing. (see Figure 3)
4. **Shut Off Position:** The inlet handle points to the centre of the bypass valve and the outlet points to the direction of flow, the water is shut off to the plumbing system. If water is available on the outlet side of the softener it is an indication of water bypass around the system (i.e. a plumbing connection somewhere in the building bypasses the system). (see Figure 4)

#### **NOTE TO INSTALLER:**

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Bypass Valves will only connect to the system in one direction. It is most important for proper installation that the inlet feed water supply is connected to the "INLET" labeled side on the unit and the outlet supply to the home is connected to the "OUTLET" labeled side on the unit.

#### **INSTALLATION INSTRUCTIONS:**

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##### **Carbon Tank Flushing Procedure**

**Carbon unit is shipped dry. Before placing this unit into service, it must be flushed to a drain or outlet where the dust and grey water that occurs when water first comes into contact with this system can be discarded. Failure to do so will result in dust fines and grey water to appear in the supply lines for several hours or more depending on water pressure.**

**Connect the unit at the inlet side and flush the system directly to a laundry sink, floor drain or outside location (safe for irrigation purposes).**

**Connection directly to the plumbing and opening the inlet and outlet valves without flushing the unit WILL result in excess carbon fines and dark colored water to be present in your water supply.**

### Basic Install Steps:

1. Place the system in desired location
2. Connect bypass valve to the unit  
Please note that this system is designed to operate in a “DOWNFLOW” configuration
3. Make plumbing connections to the system as per local and state plumbing regulations.
4. Open the inlet side of the unit allowing the system to fill with water.
5. Slowly open the outlet valve (red handle) as the tank is almost full.
6. When you hear water flowing through the outlet side of the unit- turn on the closest faucet to the system **COLD SIDE ONLY** and allow water to run until clear. This should only take a matter of minutes if you flushed the system prior to installation.
7. Check for leaks. Repair as necessary.
8. Once all steps are completed, system is ready for service.

### HOME OWNER:

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We would like to take a moment to thank you for your purchase of this top quality carbon filtration system.

You should expect an immediate improvement in water quality. Water will taste better and there should be no remaining chlorine based taste or smell in your water.



## Warranty

CFCI, through its dealers and distributors warrants the following units:

RS-CITY Carbon/Conditioner Systems  
RS-I Well Water Iron Removal and Conditioning Systems  
FSC Conditioner Systems  
CF Series Mixed Bed Carbon Filters





The medias for each of the above systems is a pro-rated warranty against defects for a period of 5 years from date of purchase to the home owner. Proof of purchase is required for warranty service.

The tank(s) and controls for AquaCera branded products are covered by a 10 year manufacturer warranty to cover defects in materials and workmanship for the time period.

Dated proof of purchase is required for any warranty related service.

Conditions

CFCI, of course does not cover neglect or abuse of their products. The warranty refers to defects in material or workmanship only. Excessive heat (110F) or cold is not covered (33F). The warranty does not include acts of God such as floods or lightning. The warranty does not apply to plumbing supplies or soldering joints. Problems such as leaks or floods are to be covered by the purchaser's home insurance. Warranty is the decision of CFCI not that of any other party or representative. CFCI customers are to maintain their product. Failure to do so may cause media failure without defect rather by way of neglect. Water by its nature is changeable by way of quality and quantity and CFCI, is not responsible for excessive dirty water conditions that may affect the performance or life of its products. Warranty refers to defects on material and workmanship not general wear or use. Please keep in mind the importance of your bill of sale. Your bill of sale is required for all warranty validation. Warranty applies to original purchaser and is not transferable.

Please complete the following and return to your dealer for validation.

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_



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Date of Installation: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Installed By: \_\_\_\_\_

Your Dealer: \_\_\_\_\_