



MASTER
Water Conditioning Corp.

Installation and Operation Manual



DECHLOR Series Flow-Through Residential Carbon Filters

2010 Version

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**Installation and Operating Instructions for
DECHLOR FLOW THROUGH CARBON FILTER**

Model #:

_____	DECHLOR 1040	Carbon Filter/Vortech
_____	DECHLOR 1054	Carbon Filter/Vortech
_____	DECHLOR 1248	Carbon Filter/Vortech
_____	DECHLOR 1665	Carbon Filter/Vortech

Table 1

Model Number	Service Flow GPM	Service Pipe Size	CF Filter Media	Vortech	
				Yes	No
Dechlor 1040	5.0	3/4"-1"	1.0	X	
Dechlor 1054	5.0	3/4"-1"	1.5	X	
Dechlor 1248	8.0	3/4"-1"	2.0	X	
Dechlor 1665	12.0	3/4"-1"	4.0	X	

COMPONENTS SUPPLIED WITH DECHLOR 1040, 1054 & 1248 UNIT:

- Tank assembly with top and bottom connections
- 3/4" or 1" PVC inlet and outlet connection kit
- Carbon media

COMPONENTS SUPPLIED WITH DECHLOR 1665 ONLY:

- Tank assembly
- Dechlor top mount valve
- Dechlor bypass valve assembly
- 3/4" or 1" PVC inlet and outlet connection kit
- Carbon media

COMPONENTS SUPPLIED BY THE INSTALLER:

- 20 Micron Cartridge Filter with either 3/4" or 1" connections
- Bypass Ball valves, outlet pipe union and face piping
- Painters mask needed in the loading of the mineral tank

System Description:

The Dechlor Carbon Filter is an upflow dechlorination system which requires no backwashing. The water enters the unit from the bottom of the tank and passes upward through the carbon bed. This unique design eliminates the need for an automatic control valve and the extra water needed to regenerate an automatic filter. The unit is designed to function within a water pressure range of 20 to 100 psi and a water temperature range of 50F to 100F. Untreated water must be clear, sediment free, <0.3 ppm iron and <0.05 ppm manganese and pH > 7.0.

NOTE: THIS DECHLOR IS NOT INTENDED TO BE USED FOR TREATING WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION WHETHER BEFORE OR AFTER THE SYSTEM

Filter Positioning:

1. Place Filter in desired position, far enough from walls and other obstructions to allow for servicing the unit.

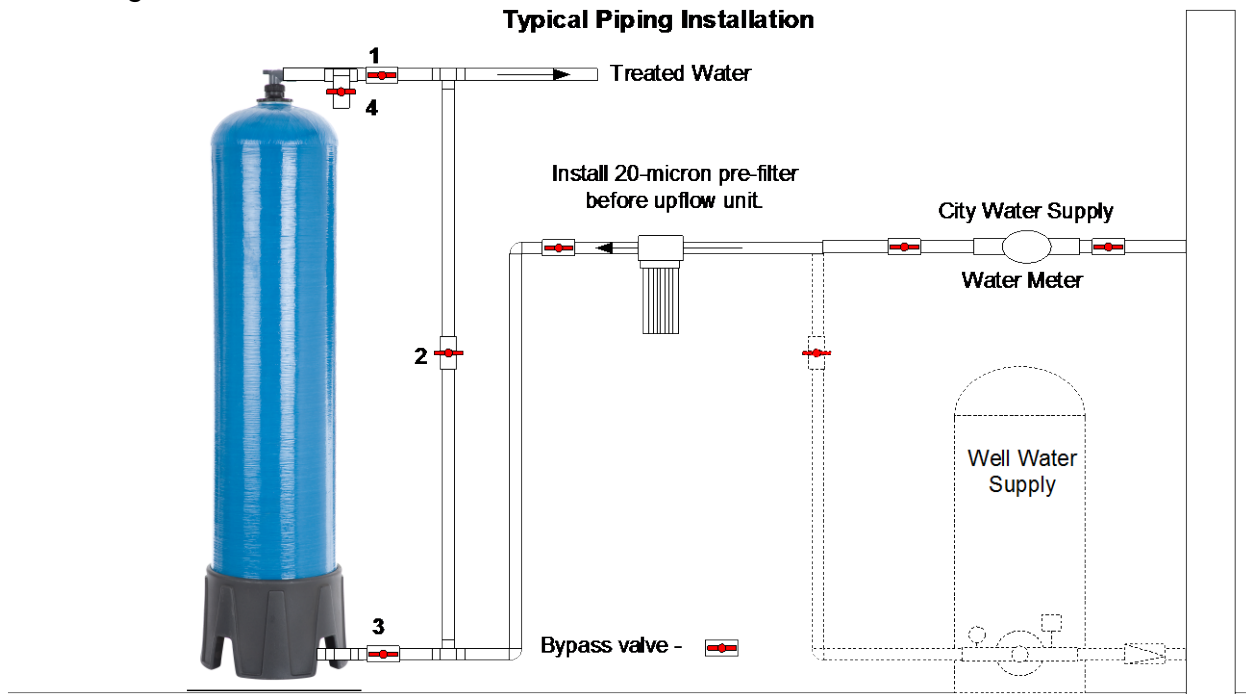
Filter Tank Loading Dechlor 1040, 1054 & 1248 Only:

1. Remove swivel elbow assembly with D1225-10 basket from the top of the mineral tank by turning counter clockwise.
2. Pour all filter media provided with the unit into the top of the tank. See below for your specific model number to determine the amount of media to load into the mineral tank.
SEE TABLE 1 FOR MEDIA VOLUME

Service Piping Dechlor 1040, 1054 & 1248 Only:

1. Pipe Dechlor into the service lines following all local plumbing codes.
2. The inlet and outlet connections of the Dechlor unit are 3/4" ID or 1" OD PVC. Please make sure to follow the PVC primer and solvent instructions. Only use ASTM/NSF certified primer and solvent.
3. Optional copper and SharkBite fitting packages are available.
4. We recommend installing a union on the outlet (top of unit) to allow for easy removal of the top fitting for future servicing of the Dechlor.

Figure 1



Filling Tank with Water Dechlor 1040, 1054 & 1248 Only:

1. Connect a garden hose to valve 4.
2. Put unit in the Flush position by closing valves 1&2 and opening valve 3 fully and valve 4 one quarter.
3. The flushing process will purge black dust from the new Carbon bed. Seeing black water is normal. Keep in this position until the water clears.
4. Once water runs clear from the garden hose put the unit into the Service position by closing valves 2&4 and opening valves 1&3 fully.

Table 2

Position	Valve # 1	Valve # 2	Valve # 3	Valve # 4
Service	Open	Closed	Open	Closed
Bypass	Closed	Open	Closed	Closed
Flushing	Closed	Closed	Open	Open

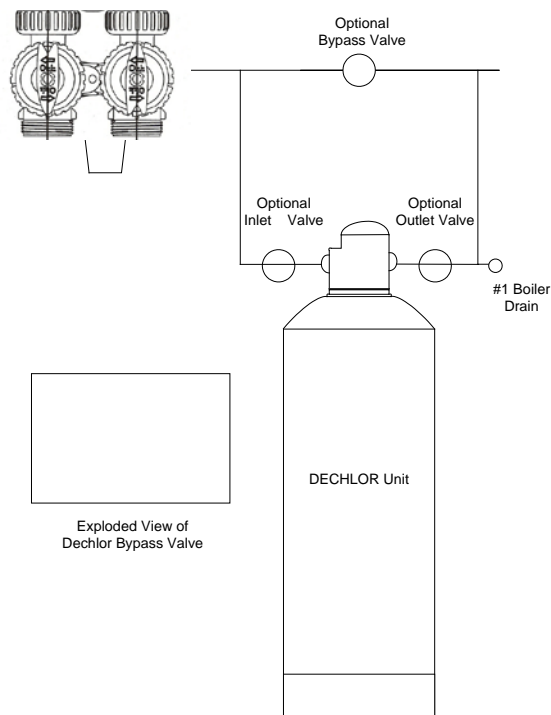
Filter Tank Loading Dechlor 1665 Only:

1. Remove the valve assembly from the top of the mineral tank.
2. Cover the opening of the distributor pipe before filling the tank with media.
3. Pour the appropriate amount of carbon media into the tank, as shown in Table 1.
4. Remove the material used to cover the top opening of the distributor pipe.
5. Reattach the valve assembly on top of the mineral tank.

SEE TABLE 1 FOR MEDIA VOLUME

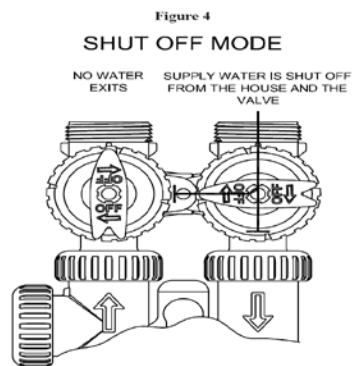
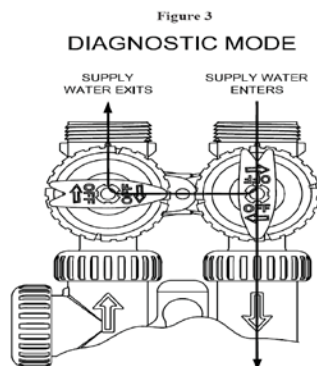
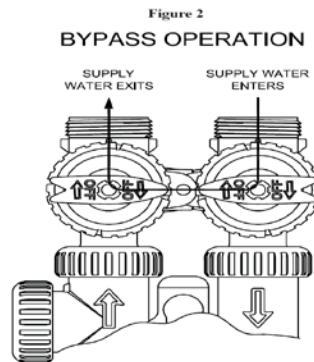
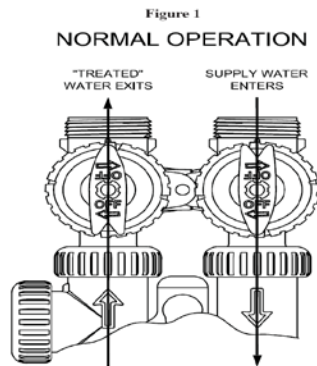
Service Piping Dechlor 1665 Only:

Figure 2



1. Pipe Dechlor into the service lines, following all local plumbing codes.
2. The inlet and outlet connections of the Dechlor unit are 3/4" ID or 1" OD PVC. Please make sure to follow the PVC primer and solvent instructions. Only use ASTM/NSF certified primer and solvent.
3. Optional copper and SharkBite fitting packages are available.

BYPASS VALVE OPERATION



Filling Tank with Water Dechlor 1665 Only:

1. The water will fill the tank upwards and purge air from the boiler drain.
2. Connect a garden hose to the #1 boiler drain, open valve 1/4 turn to control water flow through garden hose.
3. Open the inlet valve on the Dechlor bypass and water will begin flushing from the garden hose. This will purge black dust from the new Carbon bed. Seeing black water is normal. Keep in this position until the water clears.

4. Once water runs clear from the garden hose close the #1 boiler drain.
 5. Put the Dechlor system into the Service position by opening the outlet valve on the Dechlor bypass.
- Note: If optional external inlet/outlet/bypass valves are used, please assure that the bypass is closed and the inlet/outlet valves are open.

Table 3

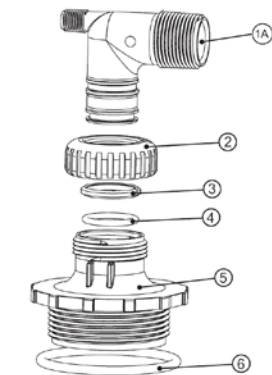
Position	Inlet Valve	Outlet Valve	#1 Boiler Drain
Service	Open	Open	Closed
Bypass	Closed	Closed	Closed
Flushing	Open	Closed	Open

Final Check:

1. Check all piping for leaks.
2. Make sure the bypass valves are in the proper position.
3. Run water at a sink to assure that all Carbon media fines have been purged. Water should be clear.

PARTS LIST:

Swivel Elbow Assembly



No.	Order No.	Description
1A	V3149	WS1 Fitting 1" PVC Male NPT Elbow
1B	V3189	WS1 Fitting 3/4" & 1" PVC Solvent Elbow
2	V3151	WS1 Nut 1" Quick Connect
3	V3150	WS1 Split Ring
4	V3105	O-ring 215
5	D1285	Fitting 2-1/2" - 8
6	V3180	O-ring 337



D1288
2.5" Bottom Outlet Fitting



D1225-10
D1288 Strainer – 10 Segments



Order No. V3007-01



Bottom Outlet Fitting With Sharkbite



Bottom Outlet Fitting With Copper

12 YEAR LIMITED WARRANTY

As of Oct. 1, 1995

This Residential Water Conditioner is warranted for a period of **one year** from date of purchase by first user against defects in materials and workmanship. In addition, the complete control valve is warranted for **five years**. The control valve body (excluding internals and electrical parts) is warranted for **six years**. The mineral tank, plastic brine tank or cabinet tank (excluding mineral) is warranted against rust, corrosion or bursting for a period of **twelve years** from date of manufacture. Except, as specifically set forth in this paragraph, Master Water Conditioning Corporation makes no other warranties, express or implied.

This warranty shall be void if the conditioner is moved from the place of original installation, or if damage is caused by misuse, misapplication, accident, freezing, flood, fire or if not installed in accordance with instructions furnished by Master Water Conditioning Corporation.

This warranty shall be void in the event of damages from external sources or where the conditioner has been operated at pressure in excess of 100 pounds per square inch or at a temperature greater than 100 degrees F. or less than 32 degrees F. Incidental costs or consequential damages are not covered by this warranty.

All defective parts shall be returned prepaid to Master Water Conditioning Corporation for inspection. **Master shall not be liable for labor charges other than Master factory repairs.**

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow limitations on duration of implied warranties or exclusion of incidental or consequential damages, so the above limitations may not apply to you.

All claims must be submitted in writing to Master Water Conditioning Corporation at 224 Shoemaker Road, Pottstown, Pennsylvania 19464 within thirty (30) days from the discovery of the defect. Master Water Conditioning Corporation thereafter will correct defective parts and workmanship or rusting, corrosion or bursting within sixty (60) days.

Failure to notify Master by completing, signing and returning the registration card within twenty (20) days of the purchase shall void the warranty.



224 Shoemaker Rd. Pottstown, Pa. 19464