Culligan®

Culligan® High Efficiency Iron-Cleer Water Filter Owners Guide





Attention Culligan Customer

The installation, service and maintenance of this equipment should be rendered by a qualified and trained service technician. Your local independently operated Culligan dealer employs trained service and maintenance personnel who are experienced in the installation, function and repair of Culligan equipment. This publication is written specifically for these individuals and is intended for their use.

We encourage Culligan users to learn about Culligan products, but we believe that product knowledge is best obtained by consulting with your Culligan dealer. Untrained individuals who use this manual assume the risk of any resulting property damage or personal injury.



WARNING! Electrical shock hazard! Prior to servicing equipment, disconnect power supply to prevent electrical shock.

This system is not intended for use where water is microbiologically unsafe or with water of unknown quality.



WARNING!

If incorrectly installed, operated or maintained, this product can cause severe injury. Those who install, operate, or maintain this product should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to install, operate, or maintain this product.



WARNING! This device complies with part 15 of the FCC rules subject to the two following conditions: 1) This device may not cause harmful interference, and 2) This device must accept all interference received including interference that may cause undesired operation.

This equipment complies with Part 15 of the FCC rules. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



CAUTION! To reduce the risk of fire, use only No. 26 AWG or larger telecommunications line cord.



CAUTION!

This product is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction.



CAUTION! Children should be instructed not to play with this appliance.



CAUTION! If the power cord from the transformer to the unit looks or becomes damaged, the cord and transformer should be replaced by a Culligan Service Agent or similarly qualified person in order to avoid a hazard.

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Culligan International Company

9399 West Higgins Road, Suite 1100 Rosemont, Illinois 60018 1-847-430-2800 www.culligan.com



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About this Manual

This manual:

- familiarizes the operator with the equipment
- explains installation and setup procedures
- provides basic programming information
- explains the various modes of operation
- gives specifications

Read this Manual First

Before you operate the Culligan High Efficiency Iron-Cleer Water Filter, read this manual to become familiar with the device and its capabilities.

Installation or maintenance done on this system by an untrained service person can cause major damage to equipment or property damage. Not adhering to the recommended service/ maintenance can cause damage to equipment or property damage.

Safe Practices

Throughout this manual there are paragraphs set off by special headings.

Notice (or Note) is used to emphasize installation, operation or maintenance information which is important, but does not present any hazard. For example,

NOTICE The nipple must extend no more than 1 inch above the cover plate.

Caution is used when failure to follow directions could result in damage to equipment or property.



CAUTION! Disassembly while under water pressure can result in flooding.

Warning is used to indicate a hazard which could cause injury or death if ignored.



WARNING! Electrical shock hazard! Unplug the unit before removing the timer mechanism or cover plates!

The CAUTION and WARNING paragraphs are not meant to cover all possible conditions and situations that may occur. Understand that common sense, caution, and careful attention are conditions which cannot be built into the equipment. These MUST be supplied by the personnel installing, operating, or maintaining the system.

Be sure to check and follow the applicable plumbing codes and ordinances when installing this equipment. Local codes may prohibit the discharge of sanitizing or descaling solutions to drain.

Use protective clothing and proper face or eye protection equipment when handling chemicals or tools.

with water that is microbiologically unsafe or of unknown quality without adequate disinfection either before or after the system.
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NOTE:	Check with your public works department for applicable local plumbing and sanitation codes. Follow local codes if they differ from the standards used in this manual. To ensure proper and efficient operation of the Culligan High Efficiency Iron-Cleer Filter to your full satisfaction,
	carefully follow the instructions in this manual.



Thank You

Welcome To Your New World of Better Living with Culligan Water.

The Culligan High Efficiency (HE) Iron-Cleer® filter has been tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 42 for the effective reduction of iron up to 1,400 gallons for the 10" filter and 2,000 gallons for the 12" filter as verified and substantiated by test data.

The Culligan High Efficiency (HE) Iron-Cleer® filter has been certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 42 for the effective reduction of iron up to 1,400 gallons for the 10" filter and 2,000 gallons for the 12" filter as verified and substantiated by test data.

For installations in Massachusetts, Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of this system. This system and its installation must comply with state and local regulations. The use of saddle valves is not permitted.

Congratulations, too, on selecting one of the "first family" of water treatment in the prestigious Culligan High Efficiency Water Filters. With Culligan's many years of knowledge and experience in water treatment, you can be confident that the model you selected has been designed and engineered to provide years of service with a minimum of care and attention.

Some localities have corrosive water. A water filter cannot correct this problem and so its written warranty disclaims liability for corrosion of plumbing lines, fixtures or appliances. If you suspect corrosion, your Culligan Dealer has equipment to control the problem.





Specifications

	10" Iron-Cleer	12" Iron-Cleer
Control Valve	1" reinforced thermoplastic	1" reinforced thermoplastic
Overall Filter Height	67"	65"
Media Tank Dimensions (D x H)	2 ea. 10" x 54" tanks	2 ea. 12" x 52" tanks
Filter Media Type	1.0 cu. ft. birm	1.5 cu. ft. birm
Underbedding		
G-50	35 lbs.	35 lbs.
Cullsan U	25 lbs.	25 lbs.
Capacity ¹	1400 gallons	2000 gallons
Freeboard ²	21"	18"
Max. Clear Water (Soluble) Iron	10 ppm	10 ppm
Max. Hydrogen Sulfide ³	5.0 ppm	5.0 ppm
Minimum Alkalinity	100 ppm	100 ppm
pH for Iron Removal	7.0–8.5	7.0–8.5
Service Flow @ Pressure Drop (Clea	an Bed)	
Normal	4 gpm @ 6 psi	4 gpm @ 4 psi
Maximum⁴	6 gpm @ 9 psi	9 gpm @ 14 psi
Operating Pressure	20-60 psi	20-60 psi
Operating Temperature	33-120° F (1-48° C)	33-120° F (1-48° C)
Electrical Requirements	120 Volts/60 Hz	120 Volts/60 Hz
Power Consumption, Continuous/ Maximum	175 Watts/245 Watts	175 Watts/245 Watts
Drain Flow, Maximum	10 gpm (5.5 gpm minimum required)	10 gpm (8.0 gpm minimum required
Conditioning Time		
Backwash	5–20 minutes	5–20 minutes
Fast Rinse	5–20 minutes	5–20 minutes

¹ Capacity based on 4 gpm and 10 mg/L of dissolved iron.

² Measure from top of media bed to top of inlet fitting.

³ Hydrogen sulfide will be reduced significantly in water containing less than 5 ppm as tested by Culligan.

⁴ Max flow rates and pressure drop characteristics have not been validated by the Water Quality Association or IAPMO R&T. The maximum specified flow rate at which the system will deliver treated water is defined as service flow.



Introduction

Advantages Over Other Systems

- 1. No chemicals or salt.
- 2. No air injectors, venturis, or micronizers.
- 3. No floats to regulate air volume in aeration tank which "foul" from iron.
- 4. Two-tank system consisting of a pressurized aeration tank and multi-media depth filter.
- 5. 110V aeration pump to recharge aeration tank.
- 6. Can be used on shared wells, municipal water supplies or with buried pressure tanks without additional equipment.
- 7. Better filtration results.



How your Water Filter Works



CAUTION! The Iron-Cleer system must be supplied with cold water only.

Step 1

Aeration Operation Service Cycle

In the service cycle, raw water enters the inlet port of the aeration tank and is directed through the inlet diffuser. The oxidation process begins when the water passes through the inlet diffuser and cascades through a head of air. This air/ water contact oxidizes the iron, manganese, hydrogen sulfide in the water. The water is directed toward the bottom of the tank and travels through the pick-up tube. It then passes through the outlet of the aeration tank to the inlet of the filter tank. See Figure 1.

Filter Tank Operation Service Cycle

Raw water enters the filter tank through the inlet port of the filter control valve. Upon system demand for filtered water, water is directed to the top of the tank and flows downward through the multimedia filter bed toward the lower distributor. Oxidized iron particles are trapped by the filter bed as the water passes through. Filtered water enters the lower distributor and travels up the distributor tube to the outlet port on the filter valve.

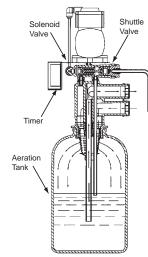


Figure 1. Aeration Service Cycle.

Step 2

Aeration Operation Air Recharge Cycle

When energized, the air pump sends air through the solenoid valve into one end of the shuttle valve. Once air pressure in the shuttle valve is greater than the water supply pressure at the other end of the shuttle valve, the piston shifts to the open position. In the open position, the bleed-off port discharges excess water and old air to the drain port through a flow restrictor. Simultaneously, the air inlet port opens to provide a direct connection between the air pump and the top of the aeration tank. The air pump runs for a preset period of time recharging the head of air in the aeration tank. See Figure 2.

Air Recharge Shut Off

The timer turns power off to the air pump and the solenoid valve at the end of the recharge cycle. The solenoid valve then closes the port between the air pump and the shuttle valve. The port between the shuttle valve and the atmosphere opens and releases air pressure. This allows water pressure to shift the piston to the closed position. With the piston in the closed position, the air recharge inlet port is closed and direct communication between the bleed off tube and the drain port is also closed.

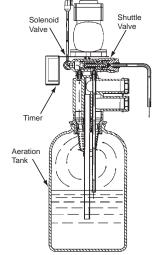


Figure 2. Air Recharge Cycle.

Timer Operation

A timer controls the air recharge cycle and how frequently it occurs. The timer simultaneously energizes the air pump and the solenoid valve. After a preset amount of time, the timer shuts off the air pump and de-energizes the solenoid valve.

Solenoid Valve Operation

The solenoid valve is a three-way valve having ports that connect to the air pump, shuttle valve and the atmosphere. In the service cycle, the solenoid valve is de-energized and closes the port to the air pump, providing a positive shut-off to the pump. This prevents water from backing up into the air pump and damaging the pump. In the air recharge cycle, the solenoid valve closes the port to the atmosphere and opens the port from the air pump.



Shuttle Valve Operation

In the service position, water pressure holds the shuttle valve piston in the closed position, trapping the airhead in the aeration tank and closes the air recharge inlet port and drain port. During air recharge cycle, air pressure is greater than the water pressure and forces the shuttle valve piston in the open piston. The shuttle valve has an internal pressure relief valve that will relieve pressure (greater than 100 psi) that may build up in the aeration tank. This precautionary function protects components from failure due to excessive pressure.

Step 3

Filter Tank Operation—Backwash Cycle

Reversing the flow of water through the filter bed and backwashing dirty water to the drain cleans the filter bed. Raw water enters the filter control valve through the inlet port and is directed down the distributor tube and out the lower distributor at the bottom of the tank, flowing upward through the multimedia filter bed toward the top of the tank into the control valve. Water is then directed through a specific flow restrictor and out the drain port to be discharged to drain.

Step 4

Filter Tank Operation—Rinse Cycle

The rinse cycle packs the clean filter bed. Raw water enters the control valve through the inlet port and is directed downward through the filter bed into the bottom distributor, up the distributor tube into the control valve. Water is then directed through a specific flow restrictor and out the drain port to be discharged to drain.

Operation Of Aeration Pump

The Iron-Cleer™ system introduces air into the aeration tank and bleeds off the old head of air automatically. The exchange of the air into the aeration tank is controlled independently of the recharge frequency of the filter media tank, allowing the air to be exchanged on a more frequent basis. During an air exchange cycle, the air compressor pumps fresh air into the aeration tank and the air eliminator solenoid exhausts the old air.



Operating Conditions

The concentration limits listed below reflect the maximum individual limit that each contaminant was tested for separately without any interference of other contaminants in the influent water.

In reality, however, we know that these contaminants may be present in combination which may limit the filter's ability to remove these contaminants in higher concentrations. In some cases, individual sellers of this equipment have had success removing higher concentrations of contaminants—iron, for example—above the limitations we have listed. If you are considering the installation of this system for the reduction/removal of iron beyond the written operating conditions below, we recommend that you consult the manufacturer for proper application. Installation of this system under these circumstances may void part(s) and/or all of the system warranty.

pH—The pH level of the influent water must be 7.0–8.5. A pH level of 7.0–8.5 is optimal for iron reduction.

Iron—This system is rated for a maximum of 10 ppm of ferrous (clear water) and/or ferric (red water) iron. Consult the factory if iron bacteria is present.

Hydrogen Sulfide—Often referred to as rotten egg odor. Consult the manufacturer.

Organic Matter (Tannins)—The presence of organic matter such as tannins will prevent the oxidation process of converting the dissolved element, such as iron or manganese, to a nonsoluble precipitate or solid substance, allowing it to be filtered out. The Iron-Cleer® is not designed to remove organic bound iron.

NOTE:

Waste connections or drain outlets shall be designed and constructed to provide for connection to the sanitary waste system through an air gap of two pipe diameters or 25.4 mm (1 inch), whichever is larger.



Location and Placement

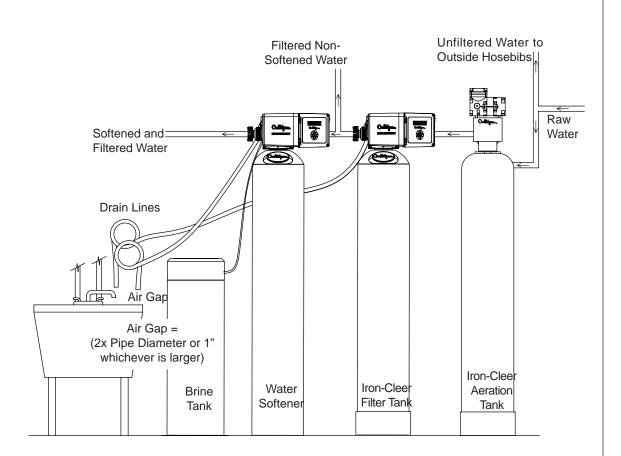
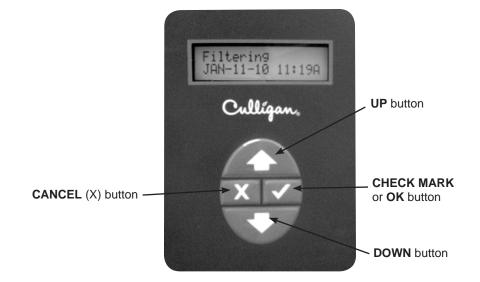


Figure 3. Iron-Cleer system filter placement.



Navigating the Menus and Keypad





UP ARROW button: scrolls up the menu



DOWN ARROW button: scrolls down the menu



CHECK MARK button: selects the highlighted option, opens a new screen, or accepts a changed setting



CANCEL or X button: returns to the previous screen or cancels a changed setting



Controller



Remote

NOTE:

Hold down the or to quickly scroll through the setting without repeatedly pressing the button.



To update the date and time on the HE Filter, follow this procedure.

Set Date and Time

Screen Display	Range	Setting Description		
FILTERING JAN-01-18 11:19A	N/A	1.	Start at the HOME SCREEN. Press to advance to the MAIN MENU SCREEN.	
2)MANUAL MODE >3)SET DATE/ TIME	N/A	2. 3.	Press to scroll to 3) SET DATE/TIME. Press to display the date and time settings.	
Set Month	_			
SET MONTH JAN	Jan-Dec	4.	The screen displays the month setting. Press to display the next setting, or press to change the month setting.	
SET MONTH	Jan-Dec	5.	The screen displays a cursor next to the month. Press to display the next value (here, changing January to February).	
SET MONTH >FEB	Jan-Dec	6.	Press to display the next value (here, changing January to February).	
SET MONTH FEB		7.	Press to accept the new value. The screen displays the month without the cursor and advances to the Day setting.	
Set Day	T 1–30	1.	Press to advance to the next setting if the day is	
SET DAY >2	1 00		correct, or press to change the day setting. Press to display the next value (for example, change 1 to 2).	
	J	2.	Press to accept the new value. The screen displays the day without the cursor and advances to the Year setting	
Set Year SET YEAR >2018	2009–30	1.	Press to advance to the next setting if the year is correct, or press to change the year setting. Press to display the next value (for example, change 2010 to 2012).	
		2.	Press to accept the new value. The screen displays the year without the	

cursor and advances to the Clock Type setting.



Screen Display	Range	Setting Description
Set Clock Type CLOCK TYPE >12 HR	12 or 24	Press to advance to the next setting if the clock type is correct, or press and then to change the clock type setting (leave at default setting, 12 hour). Press to accept the new value. The screen displays the clock type without the cursor and advances to the Set Hour setting.
Set Hour SET HOUR >10AM	12PM- 11AM	Press to advance to the next setting if the hour is correct, or press and then to change the hour (in this example, from 12PM to 10AM). Press to accept the new value. The screen displays the hour setting without the cursor and advances to the Set Minutes setting.
Set Minutes SET MINUTES >20	0–60	Press to advance to the next setting if the clock type is correct, or press and then to change the minutes (in this example, from 0 to 20). Press to accept the new value. The screen displays the minutes without the cursor
Set Daylight Savings DAYLIGHT SAVINGS >YES	S Time Yes No	Press to advance to the next setting if the daylight savings time setting is correct, or press to accept the new value. The screen displays the daylight savings
FILTERING JAN-01-18 11:19A	Screen	Press X until the screen displays the HOME SCREEN and saves the settings.



The following information can be displayed at the control valve or remote display. These settings are read-only. Press or to scroll through the settings. Press to view the previous setting.

Programming

Screen Display	Range		Setting Description
FILTERING JAN-01-18 11:19A	N/A	1.	From the HOME screen, press to view the main menu.
>1)INFORMATION 2)MANUAL MODE	1–6	2.	The screen displays the main menu. Press to select 1)INFORMATION.
FILTER LIFE LEFT 50000 GAL	0– 50,000	3.	The screen displays the FILTER LIFE LEFT in gallons. Press to select the next information screen.
FILTER LIFE LEFT 100 DAYS	0–100	4.	The screen displays the FILTER LIFE LEFT in days. Press to see the next information screen.
REMAIN CAPACITY 700 GAL	0-no limit	5.	The screen displays the filtering capacity remaining, measured in gallons (liters), before initiating conditioning. Press to see the next information screen.
CURRENT FLOWRATE 10.0 GPM	0-no limit	6.	The screen displays the current flow rate, measured in gallons (liters) per minute. Press to see the next information screen.
TODAY'S USAGE 100 GAL	0-no limit	7.	The screen displays today's water usage, measured in gallons (liters). Press to see the next information screen.
AVERAGE DAILY 300 GAL	0–no limit	8.	The screen displays average water usage for this configuration. Press to see the next information screen.
NEXT REGEN ON JAN-03	N/A	9.	The screen displays the date of the next conditioning cycle, based on average daily water usage. Press to see the next information screen.



Screen Display	Range	Setting Description
TOTAL WATER USED 1000 GAL	0–no limit	 The screen the total water used for this configuration. Whole numbers are displayed above 100 gallons. Press to see the next information screen.
DEALER ID		11. The screen displays the local dealer's ID number as entered during the First Time Setup.Press to see the next information screen.
EXT FILT CAP REM 20000 GAL	0–no limit	12. If an external filter is used, the screen displays the remaining capacity of the filter. When the remaining capacity reaches zero, the system triggers the External Filter Alarm. Press to return to the main menu.
>1)INFORMATION 2)MANUAL MODE		13. The screen displays the main menu. Press X to exit to the home screen.
FILTERING JAN-01-18 11:19A		14. The screen displays the home screen.



Conditioning

There are several conditions that will cause the control to trip a conditioning cycle. The screen displays REGEN TONITE when the control has signaled for a conditioning cycle. REGENERATING is displayed while the control is conditioning. The following are conditions that will call for conditioning:

- 1. When the Soft-Minder® meter has recorded the passage of a predetermined number of gallons.
- 2. At the preset time, when the number of days without a conditioning cycle is equal to the conditioning interval (timeclock backup) setting.
- 3. At the preset time, when **REGEN TONITE** is selected. The screen displays **REGEN TONITE**.
- 4. Immediately, when the REGEN NOW is selected. The screen displays REGENERATING.
- 5. Immediately, if power to the unit has been off for more than three (3) hours and time of day has been restored.
- 6. At the preset time based on **DAY-OF-WEEK** conditioning setting.

Follow either procedure to bypass the filter or to initiate a manual conditioning or automatically bypass the filter at the control valve or the remote display.

Delayed Conditioning

Screen Display	Range		Changing the Setting
FILTERING JAN-01-18 12:01P	N/A	1.	At the HOME SCREEN , press and hold for at least three seconds, then release the button.
REGEN TONITE JAN-01-18 12:01P	Regen Tonite	2.	The first line of the display will toggle between FILTERING and REGEN TONITE .
REGEN OFF JAN-01-18 12:01P	Regen Off	3.	To cancel a delayed conditioning cycle, press and hold the \checkmark for three (3) seconds, then release the button. The screen displays REGEN OFF .

Immediate Conditioning

Screen Display	Range	Changing the Setting
FILTERING JAN-01-18 12:01P	N/A	 At the HOME SCREEN, press
REGEN NOW JAN-01-18 12:01P	Regen Now	 The first line of the screen displays REGEN NOW. The filter will initiate an immediate conditioning cycle.
REGENERATING JAN-01-18 12:01P	N/A	3. The first line of the screen displays REGENERATING .



Standard Manual Conditioning

Screen Display	Range		Changing the Setting
Filtering JAN-01-18 12:01P	N/A	1.	This is the HOME SCREEN . Press any button except X to advance to the MAIN MENU SCREEN.
1)INFORMATION >2)MANUAL MODE	1–6	2.	Press to 2)MANUAL MODE then press . The screen displays the Manual Mode settings.
	Regen Off	3.	Press ✓ and ♠ or ▶ to change the setting.
MANUAL MODE >REGEN NOW	Regen Now	4.	The default is REGEN NOW . Press the v to select this option to begin Conditioning cycle immediately.
		5.	If the screen displays REGEN OFF then the filter will not regenerate.
	Regen Tonite	6.	If the screen displays REGEN TONITE then the filter will regenerate that night at 2:00 a.m. (or at the preset Conditioning cycle time). The screen displays two status messages: FILTERING and REGEN TONITE .
	Bypass	7.	If the screen displays BYPASS then for a specified time the filter will be bypassed. Press to select the total time the filter is to be in the bypass state.
MANUAL BYPASS	Off 30 (min)	8.	Press and or to select the total time the filter is to be in the bypass state.
>OFF	60 90 120 180 Manual Bypass	9.	Press to accept this setting. The screen displays the Manual Mode menu.
1)INFORMATION >2)MANUAL MODE		10.	Press X until the screen displays the HOME SCREEN and saves the settings.



The HE controller display, as well as the Remote Display (if connected), may display the following errors.

Error Codes

PROBLEM FOUND
APR-01-18 10:01A

 When the HE Controller identifies an error, it is programmed to attempt to correct the error without user input. If the problem persists, the HOME SCREEN displays PROBLEM FOUND. Press to display the first error present.

REPLACE FILTER MEDIA

Press to display any additional errors present.

-->CLEAR ERRORS

3. Press ✓ and ✓ to view action: CLEAR ERRORS, GO TO MENU, or EXIT. If you select CLEAR ERRORS, the controller checks the error status and attempts to clear the error. If the error still exists, the home screen displays PROBLEM FOUND. If the error no longer exists the screen displays SYSTEM OK.

-->GO TO MENU

4. Contact your local Culligan Dealer.



When and How to Bypass Your **Water Filter**

Normally, all water except outside lines passes through the water filter. There are times when the water filter should be bypassed, using the Cul-Flo-Valv® Bypass, or a three-way bypass valve. You should bypass:

- If lines to outside faucets do not bypass the water filter, and you do not want to waste filtered water on lawn sprinkling or other outside uses.
- 2. If you are going away on vacation and do not want the unit to recharge.

Bypass Valve

In the back of Culligan water filter is a Cul-Flo-Valv® Bypass valve. To bypass the unit, turn the blue knob clockwise.

To return to soft water service, turn the blue knob counter-clockwise.

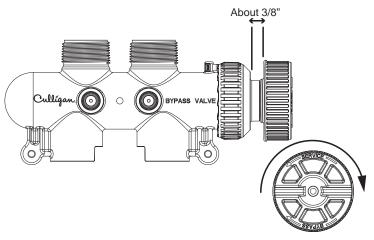


Figure 4. Bypass valve.

Bypassed

To BYPASS, turn the blue knob clockwise (see directional arrow on end of knob) until the knob stops as shown in Figure 4. DO NOT OVERTIGHTEN!

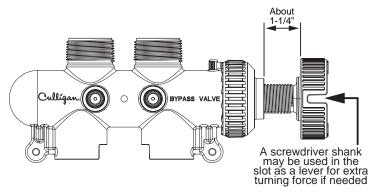


Figure 5. Service valve.

Filtered Water

To return to SERVICE, turn the blue knob counter-clockwise (see directional arrow on end of knob) until the knob stops as shown in Figure 5. DO NOT OVERTIGHTEN!



Things to Check Before You Call for Service

If you unexpectedly experience changes in your water, make these simple checks before calling your Culligan dealer. One of the following conditions may be the reason for your interruption of service.

Important

If any of the following conditions is found, the water filter should be manually conditioned according to instructions on <u>page 18</u> after you have corrected the problem.

Power Supply

Check your power supply cord. Is it plugged fully into the electric outlet? Be certain that the outlet is not controlled by a wall switch which has been turned off. Plug in the transformer then reset filter to proper time of day.

Blown Fuse

Check the house fuse or circuit breaker panel. Replace a blown-out fuse or reset an open circuit breaker.

Power Failure

Any interruption in your power supply or time change—such as daylight savings—will disrupt your filter's conditioning schedule by causing the timer to run off schedule. Reset the timer to the proper time of day.

Bypass Valves

Check to see if they are in the proper position.

Cul-Flo-Valv® Bypass, if used, should be in the "Service" position (see <u>page 20</u>).

If hand valves are used, see that inlet and outlet valve are opened and that the bypass valve is closed.

No Water

If you aren't getting any water flow at all, make sure your water supply is working. Open a tap ahead of the filter (outside tap) to see if you have any water pressure. If you have water pressure, check the bypass valve. If it is in the Service position, put it into the bypass and call your Culligan dealer for service.

Increased Usage

Guests, family additions, new water-using appliances, etc., will result in more water usage and may require additional programming by your local Culligan dealer. Please contact your local Culligan dealer.



Performance Data Sheet

High Efficiency 10" and 12" Iron-Cleer Filter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

NOTE: Read this Performance Data Sheet and compare the capabilities of this unit with your actual water treatment needs. It is recommended that before purchasing a water treatment unit, you have your water supply tested to determine your actual water treatment needs.

Manufacturer: **Culligan International Company**

9399 West Higgins Road, Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Culligan High Efficiency 10" and 12" Iron-Cleer Filter Product:

Testing Conditions & Results:

Capacity: 1,400 gallons for the 10" Filter Pressure: 20-60 psi 2,000 gallons for the 12" Filter 33-120°F Temperature:

pH: 8.0

Service Flow: 4.0 gpm @ 6.0 psi for the 10" Filter

4.0 gpm @ 4.0 psi for the 12" Filter

Operating Conditions:

Operating Temperature Range: 33-120°F (1-48°C) Water Pressure Range: 20-60 psi (138-413 kPa) Water Pressure Range (Canada): 20-60 psi (138-413 kPa)

Electrical Characteristics: 120V/60 Hz, 10.0 Watts continuous, 175 Watts maximum

Substance Reduction

While testing was performed under standard laboratory conditions, actual performance may vary. This system has been tested according to NSF/ANSI standard 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	Maximum Permissible Product Water Concentration
Iron	3–5 mg/L	0.3 mg/L

The Culligan High Efficiency (HE) Iron-Cleer® filter has been tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 42 for the effective reduction of iron as verified and substantiated by test data.

The Culligan High Efficiency (HE) Iron-Cleer® filter has been certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 42 for the effective reduction of iron as verified and substantiated by test data.



Performance Indicator: If water flow decreases or a notable taste change occurs, the filter should be backwashed. If conditions do not improve, contact your local Culligan Dealer. He or she can determine if your filter requires servicing. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Refer to the specifications and warranty sections of this owners guide for more specific product information.

To avoid contamination from improper handling and installation, your system should only be installed and serviced by a Culligan representative. Performance will vary based on local water conditions. The substances reduced by this product are not necessarily in your water.



Culligan Limited Warranty

Culligan High Efficiency® Automatic Water Filters

You have just purchased one of the finest water filters made. As an expression of our confidence in Culligan International Company products, your water filter is warranted to the original end-user, when installed in accordance with Culligan specifications, against defects in material and workmanship from the date of original installation, as follows:

For a period of ONE YEAR	The entire softener	
For a period of FIVE YEARS	Soft-Minder® meter, if so equipped. Remote display or modem.	
For a period of TEN YEARS	The High Efficiency® Plus circuit board, The control valve body, excluding internal parts, The filter tank.	

If a part described above is found defective within the specified period, you should notify your independently operated Culligan dealer and arrange a time during normal business hours for the dealer to inspect the water filter on your premises. Any part found defective within the terms of this warranty will be repaired or replaced by the dealer. You pay only freight from our factory and local dealer charges.

We are not responsible for damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components), alteration, installation or operation contrary to our written instructions, or by the use of accessories or components which do not meet Culligan specifications, is not covered by this warranty. Refer to the specifications section in the Installation and Operating manual for application parameters.

Our product performance specifications are furnished with each water filtering unit.

To the extent permitted by law, culligan disclaims all implied warranties, including without limitation warranties of merchantability and fitness for particular purpose; to the extent required by law, any such implied warranties are limited in duration to the one-year period specified above for the entire filter. As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing a water filter. The quality of water supplies may vary seasonally or over a period of time, and your water usage rate may vary as well. Water characteristics can also differ considerably if your water filter is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us. Further, we assume no liability and extend no warranties, express or implied, for the use of this product with a non-potable water source.

Our obligations under this warranty are limited to the repair or replacement of the failed parts of the water filter, and we assume no liability whatsoever for direct, indirect, incidental, consequential, special, general, or other damages.

Some states do not allow the exclusion of implied warranties or limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Similarly, some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Consult your telephone directory for your local independently operated Culligan dealer, or write Culligan International Company for warranty and service information.

Culligan International Company

9399 West Higgins Road, Suite 1100 Rosemont, IL 60018 USA

(847) 430-2800

<u>www.culligan.com</u> 01023188 F 09/19 **23**



Records and Data

Important Data on Your Water Filter

It is advisable to have the salesperson or installer fill in the information below for your future reference. If this has not been done, please ask for it, as it is necessary if you contact your dealer.

Identification		
Model Name	Catalog No	
Control Model No.	Control Serial No	
Date of Installation	Tank Serial No	
Settings		
Time of Recharge:	a.m. /	p.m.
Conditioning cycle Interval		_days
Number of people in household		
Tank Size		inch
Water Analysis		
Total Hardness		(gpg
Total Iron		(ppm
Hydrogen Sulfide		(ppn
pH (acidity)		



Notes