

# Culligan®

**Culligan  
Non-  
Backwashing  
Systems  
Owner's  
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.

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.

**NOTE:** 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.



**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.

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## Contents

About this Manual.....	4
Thank You.....	5
Specifications .....	6
Introduction.....	9
Things to Check Before You Call for Service.....	10
When and How to Bypass Your Water Filter .....	11
Records and Data.....	12
Culligan Limited Warranty .....	13



## About this Manual

This manual:

- Familiarizes the user with the equipment
- Explains the various types of filter media that may be used in the system
- Gives specifications and troubleshooting information

### Read this Manual First

Before you operate the Culligan Non-Backwashing System, 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 clamp and valve will be able to rotate on the tank until pressure is applied.

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.

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.

**NOTE:** The Culligan Non-Backwashing System is not intended for use with water that is microbiologically unsafe or of unknown quality without adequate disinfection either before or after the system.

**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 Non-Backwashing to your full satisfaction, carefully follow the instructions in this manual.



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

Culligan Non-Backwashing Systems are tested and certified by WQA against NSF/ANSI 372 for Lead Free Compliance and to CSA B483.1 for material safety and structural integrity.

Downflow-Fiberglass 8x44" Empty, Downflow-Fiberglass 9x48" Empty, Downflow-Fiberglass 9x48" Empty, Downflow-Fiberglass 10x54" Empty, Downflow-Fiberglass 12x52" Empty. Downflow-Quadra-Hull 9x48" Empty, Downflow-Quadra-Hull 10x54" Empty, Downflow-Quadra-Hull 12x52" Empty, Downflow-Quadra-Hull 14x65" Empty, Downflow-Quadra-Hull 16x65" Empty, Upflow-Fiberglass 8x44" Empty, Upflow-Fiberglass 9x48" Empty, Upflow-Fiberglass 10x54" Empty, Upflow-Quadra-Hull 9x48" Empty, Upflow-Quadra-Hull 10x54" Empty are certified by WQA to NSF/ANSI 372 for Lead free compliance and to CSA B483.1 for material safety and structural integrity. Not certified for contaminant reductions.



Downflow-Fiberglass 8x44" Cullar D+, 1 CF; Downflow-Fiberglass 9x48" Cullar D+, 1 CF; Downflow-Fiberglass 9x48" Cullar D+, 1.5 CF; Downflow-Fiberglass 10x54" Cullar D+, 1.5 CF; Downflow-Fiberglass 10x54" Cullar D+, 1.5 CF; Downflow-Fiberglass 10x54" Cullar D+, 2.0 CF; Downflow-Fiberglass 12x52" Cullar D+, 2.75 CF; Downflow-Quadra-Hull 9x48" Cullar D+, 1 CF; Downflow-Quadra-Hull 9x48" Cullar D+, 1.5 CF; Downflow-Quadra-Hull 10x54" Cullar D+, 1.5 CF; Downflow-Quadra-Hull 10x54" Cullar D+, 2.0 CF; Downflow-Quadra-Hull 12x52" Cullar D+, 2.75 CF; Downflow-Quadra-Hull 14x65" Cullar D+, 4.5 CF; and Downflow-Quadra-Hull 16x65" Cullar D+, 6 CF are certified by WQA to NSF/ANSI 372 for Lead free compliance and to CSA B483.1 for material safety and structural integrity. Not certified for contaminant reductions. System must use Culligan Cullar D+ media only otherwise WQA certification will be void.

Downflow-Fiberglass 8x44" Cullar S, 1 CF; Downflow-Fiberglass 9x48" Cullar S, 1.5 CF; Downflow-Fiberglass 10x54" Cullar S, 2 CF; Downflow-Fiberglass 12x52" Cullar S, 2.75 CF; Downflow-QuadraHull 9x48" Cullar S, 1.5 CF; Downflow-Quadra-Hull 10x54" Cullar S, 2 CF; Downflow-Quadra-Hull 12x52" Cullar S, 2.75 CF; Downflow-Quadra-Hull 14x65" Cullar S, 4.5 CF and Downflow-Quadra-Hull 16x65" Cullar S, 6 CF are certified by WQA to NSF/ANSI 372 for Lead free compliance and to CSA B483.1 for material safety and structural integrity. Not certified for contaminant reductions. System must use Culligan Cullar S media only otherwise WQA certification will be void.

Downflow-Fiberglass 9x48" Centaur, 1 CF; Downflow-Fiberglass 10x54" Centaur, 2 CF; Downflow-Fiberglass 12x52" Centaur, 2.75 CF; Downflow-Quadra-Hull 9x48" Centaur, 1 CF; Downflow-Quadra-Hull 10x54" Centaur, 2 CF; Downflow-Quadra-Hull 12x52" Centaur, 2.75 CF; Downflow-Quadra-Hull 14x65" Centaur, 5 CF; and Downflow-Quadra-Hull 16x65" Centaur, 6 CF are certified by WQA to NSF/ANSI 372 for Lead free compliance and to CSA B483.1 for material safety and structural integrity. Not certified for contaminant reductions. System must use Culligan Centaur NDS media only otherwise WQA certification will be void.

Upflow-Fiberglass 8x44" Cullneu, 50 lbs; Upflow-Fiberglass 10x54" Cullneu, 75 lbs; Upflow-Fiberglass 10x54" Cullneu, 100 lbs; Upflow-Quadra-Hull 9x48" Cullneu, 75 lbs and Upflow-Quadra-Hull 10x54" Cullneu, 100 lbs are certified by WQA to NSF/ANSI 372 for Lead free compliance and to CSA B483.1 for material safety and structural integrity. Not certified for contaminant reductions. System must use Culligan Cullneu media only otherwise WQA certification will be void.

**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 on selecting one of Culligan's Non-Backwashing Filter Systems. 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.

Thank You



## Specifications

## System Operating and Regulatory Specifications

Culligan Non-Backwashing Systems are approved for low lead as defined by NSF 372 and to CSA B483.1 for material safety and structural integrity. In order to meet regulatory condition, some operational parameters must be followed. They include:

1. An operating water pressure between 22 and 125 psi (1,5–8,62 Bar). Correction: Culligan recommends following the IAPMO Uniform Plumbing code section 806.2 by installing a Pressure Regulating Valve if the water pressure is greater than 80 psi. Operating on pressures above the UPC for extended periods of time can increase the service frequency and failure of replacement parts. On a private water system, make sure the minimum pressure (when the pump starts) is greater than 20 psi (140 kPa).
2. Operating temperature between 33° and 120°F or 0.5°–49°C.
3. Clear (non-turbid) water supplies (Less than 5 NTU).
4. A minimum a 10 minute rinse of system with prescribed media (using non-Culligan branded media or different amounts voids WQA certification)

Table 1. System Loading & Performance Information

<b>Cullar D+ - Activated Carbon - Downflow System</b>									
<b>System Part Number</b>	<b>Tank Type</b>	<b>Tank Size (in)</b>	<b>Media Loading (ft<sup>3</sup>)</b>	<b>Tank Volume (ft<sup>3</sup>)</b>	<b>Height (in)</b>	<b>Width (in)</b>	<b>Length (in)</b>	<b>Under-bedding (lbs)</b>	<b>Recommended Flow (gpm)</b>
01036200	Downflow-Fiberglass	8x44	1	1.33	49.5	10.1	10.5	6	3.75
01036201	Downflow-Fiberglass	9x48	1	1.87	53.5	11	11.3	12	3.75
01036202	Downflow-Fiberglass	9x48	1.5	1.87	53.5	11	11.3	12	5.5
01036203	Downflow-Fiberglass	10x54	1.5	2.59	60	12.3	12.3	15	5.5
01036204	Downflow-Fiberglass	10x54	2.0	2.59	60	12.3	12.3	15	7.5
01036205	Downflow-Fiberglass	12x52	2.75	3.60	58	14	14	20	10
01036206	Downflow-Quadra-Hull	9x48	1.0	1.87	53.5	11.5	11.8	12	3.75
01036207	Downflow-Quadra-Hull	9x48	1.5	1.87	53.5	11.5	11.8	12	5.5
01036208	Downflow-Quadra-Hull	10x54	1.5	2.59	60	12.8	12.8	15	5.5
01036209	Downflow-Quadra-Hull	10x54	2.0	2.59	60	12.8	12.8	15	7.5
01036210	Downflow-Quadra-Hull	12x52	2.75	3.60	58	14.3	14.3	20	10
01036211	Downflow-Quadra-Hull	14x65	4.5	5.96	70	16.5	16.5	30	16.75
01036212	Downflow-Quadra-Hull	16x65	6.0	7.75	70	18.4	18.4	36	22.5



<b>Cullar S - Activated Carbon - Downflow System</b>									
System Part Number	Tank Type	Tank Size (in)	Media Loading (ft³)	Tank Volume (ft³)	Height (in)	Width (in)	Length (in)	Under-bedding (lbs)	Recommended Flow (gpm)
01036220	Downflow-Fiberglass	8x44	1.0	1.33	49.5	10.1	10.5	6	1.75
01036221	Downflow-Fiberglass	9x48	1.5	1.87	53.5	11	11.3	12	2.75
01036222	Downflow-Fiberglass	10x54	2.0	2.59	60	12.3	12.3	15	3.75
01036223	Downflow-Fiberglass	12x52	2.75	3.60	58	14	14	20	5
01036224	Downflow-Quadra-Hull	9x48	1.5	1.87	53.5	11.5	11.8	15	2.75
01036225	Downflow-Quadra-Hull	10x54	2.0	2.59	60	12.8	12.8	15	3.75
01036226	Downflow-Quadra-Hull	12x52	2.75	3.60	58	14.3	14.3	20	5
01036227	Downflow-Quadra-Hull	14x65	4.5	1.87	70	16.5	16.5	30	8.5
01036228	Downflow-Quadra-Hull	16x65	6.0	7.75	70	18.4	18.4	36	11

<b>Centaur NDS - Activated Carbon - Downflow System</b>									
System Part Number	Tank Type	Tank Size (in)	Media Loading (ft³)	Tank Volume (ft³)	Height (in)	Width (in)	Length (in)	Under-bedding (lbs)	Recommended Flow (gpm)
01036230	Downflow-Fiberglass	9x48	1.0	1.87	53.5	11	11.3	12	1
01036231	Downflow-Fiberglass	10x54	2.0	2.59	60	12.3	12.3	15	2
01036232	Downflow-Fiberglass	12x52	2.75	3.60	58	14	14	20	3
01036233	Downflow-Quadra-Hull	9x48	1.0	1.87	53.5	11.5	11.8	12	1
01036234	Downflow-Quadra-Hull	10x54	2.0	2.59	60	12.8	12.8	15	2
01036235	Downflow-Quadra-Hull	12x52	2.75	3.60	58	14.3	14.3	20	3
01036236	Downflow-Quadra-Hull	14x65	5.0	5.96	70	16.5	16.5	30	5
01036237	Downflow-Quadra-Hull	16x65	6.0	7.75	70	18.4	18.4	36	6.5

<b>UF Neutralizer - Cullneu Media - Upflow System</b>									
System Part Number	Tank Type	Tank Size (in)	Media Loading (lbs)	Tank Volume (ft³)	Height (in)	Width (in)	Length (in)		Recommended Flow (gpm)
01036240	Upflow-Fiberglass	8x44	50	1.33	49.5	10.1	10.5		3
01036241	Upflow-Fiberglass	10x54	75	2.59	60	12.3	12.3		5
01036242	Upflow-Fiberglass	10x54	100	2.59	60	12.3	12.3		7
01036243	Upflow-Quadra-Hull	9x48	75	1.87	53.5	11.5	11.8		5
01036244	Upflow-Quadra-Hull	10x54	100	2.59	60	12.8	12.8		7



**Empty DF Systems - Media not included - Downflow System**

System Part Number	Tank Type	Tank Size (in)	Recommended Maximum Media loading	Tank Volume (ft <sup>3</sup> )	Height (in)	Width (in)	Length (in)		
01036250	Downflow-Fiberglass	8x44	1.0	1.33	49.5	10.1	10.5		
01036251	Downflow-Fiberglass	9x48	1.5	1.87	53.5	11	11.3		
01036252	Downflow-Fiberglass	10x54	2.0	2.59	60	12.3	12.3		
01036253	Downflow-Fiberglass	12x52	2.75	3.60	58	14	14		
01036254	Downflow-Quadra-Hull	9x48	1.5	1.87	53.5	11.5	11.8		
01036255	Downflow-Quadra-Hull	10x54	2.0	2.59	60	12.8	12.8		
01036256	Downflow-Quadra-Hull	12x52	2.75	3.60	58	14.3	14.3		
01036257	Downflow-Quadra-Hull	14x65	4.5	1.87	70	16.5	16.5		
01036258	Downflow-Quadra-Hull	16x65	6.0	7.75	70	18.4	18.4		

**Empty UF Systems - Media not included - Upflow System**

System Part Number	Tank Type	Tank Size (in)		Tank Volume (ft <sup>3</sup> )	Height (in)	Width (in)	Length (in)		
01036259	Upflow-Fiberglass	8x44		1.33	49.5	10.1	10.5		
01036260	Upflow-Fiberglass	9x48		1.87	53.5	11	11.3		
01036261	Upflow-Fiberglass	10x54		2.59	60	12.3	12.3		
01036262	Upflow-Quadra-Hull	9x48		1.87	53.5	11.5	11.8		
01036263	Upflow-Quadra-Hull	10x54		2.59	60	12.8	12.8		



## System Overview

Non-Backwashing Systems serve as an alternative to disposable type cartridge filters and automatic backwashing filter systems in certain applications. The Culligan Non-Backwashing System filter line-up is primarily designed for downflow applications using granular activated carbon filter media.

Systems consist of the Culligan In & Out Valve paired with a variety of tank sizes and media volumes to provide a wide range of treated water flow rates for residential and light commercial applications. Non-Backwashing systems are available in four sizes with Culligan fiberglass tanks and five sizes of Culligan Quadra-Hull tanks. Complete systems include the Culligan In & Out Valve, the filter tank with manifold, bypass valve, tank adapter, and miscellaneous parts to complete the system. Systems supplied with media include the proper amount of media and gravel underbedding.

The Culligan In & Out Head can be used universally for downflow or upflow system applications. Non-Backwashing Systems are available as Upflow Neutralizing filters using Cullneu media in five tank options. Complete systems are available with and without filter media.

## Introduction



## 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.

### **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 [page 11](#)). 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 conditioner (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 maintenance by your local Culligan dealer. Please contact your local Culligan dealer.

### **If You Have a Cartridge Filter Installed**

If your system has a cartridge type filter installed prior to the Non-Backwashing System, make sure the cartridge is not clogged as this can be the cause of low water pressure. Replace the filter cartridge with a new one and check to see if water pressure returns.



## 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:

1. 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.

### 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 filtered water service, turn the blue knob counter-clockwise.

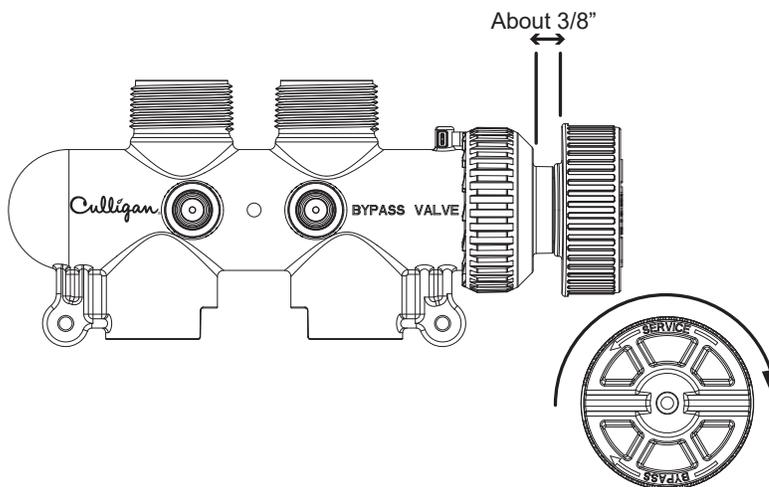


Figure 1. Bypass Position.

### Bypassed

To BYPASS, turn the blue knob clockwise (see directional arrow on end of knob) until the knob stops as shown in Figure 1. **DO NOT OVERTIGHTEN!**

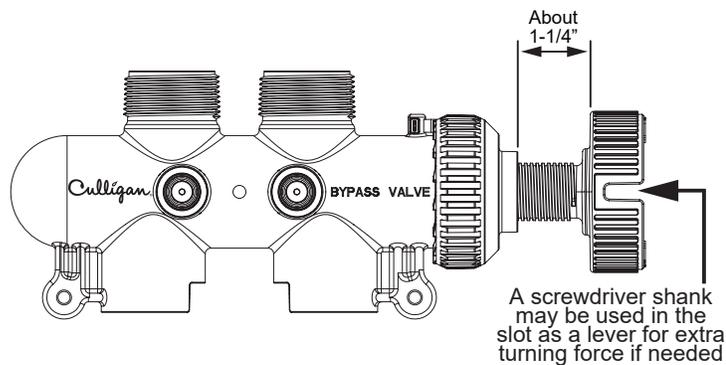


Figure 2. Service Position.

### 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 2. **DO NOT OVERTIGHTEN!**



## 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. \_\_\_\_\_ In & Out Valve Serial No. \_\_\_\_\_  
(if applicable)

Date of Installation \_\_\_\_\_ Tank Serial No. \_\_\_\_\_

Number of people in household \_\_\_\_\_

Tank Size \_\_\_\_\_ inches

#### Water Analysis

Total Hardness \_\_\_\_\_ (gpg)

Total Iron \_\_\_\_\_ (ppm)

pH (acidity) \_\_\_\_\_

Chlorine \_\_\_\_\_, Chloramine \_\_\_\_\_, Total Trihalomethanes (TTHM) \_\_\_\_\_

Other \_\_\_\_\_

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## Culligan Non-Backwashing Systems

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:

<b>For a period of ONE YEAR</b>	The Entire Filter
<b>For a period of FIVE YEARS</b>	In/Out Valve
<b>For a period of TEN YEARS</b>	Fiberglass tank
<b>For the LIFETIME of the original consumer purchaser</b>	The Quadra-Hull® 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 conditioner 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 conditioner.** As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing a water conditioner. 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 conditioner 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 conditioner, 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.**

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## Culligan Limited Warranty



## Notes