Culligan

Culligan Salt Free Conditioner 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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About this Manual

This manual:

- · Familiarizes the user with the equipment
- · Explains how the Salt-Free Conditioner operates
- · Gives specifications and troubleshooting information

Read this Manual First

Before you operate the Culligan Salt Free Conditioner, 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.

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 Salt Free Conditioner 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 Salt Free Conditioner 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 9x16" Condo Unit, 9x16" Standard Home, 9X36" Large Home, 9X42" Twin Premium Home, and 14X65" Light Commercial have been tested and certified by WQA against NSF/ANSI Standard 372 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 on selecting one of Culligan's Salt Free Conditioners. 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 conditioner 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

System Operating and Regulatory Specifications

Culligan Salt Free Conditioner is approved for low lead as defined by NSF 372. In order to meet regulatory condition, some operational parameters must be followed. They include:

- 1. 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 1°-49°C.
- 3. Clear (non-turbid) water supplies (Less than 5 NTU).
- 4. A minimum of a 10 minute rinse of system with CullACT media (using non-Culligan branded media or different amounts voids WQA certification).

Table 1. System Loading & Performance Information.

System Part Number	Name	CullACT Media Loading (L)	Pre-filter	Max Flow Rating (gpm)
01036140	Salt Free Conditioner 9x16" Condo Unit	2.0	None	8
01036141	Salt Free Conditioner 9x16" Standard Home	3.0	None	10
01036142	Salt Free Conditioner 9x36" Large Home	4.0	5 micron sediment filter	15
01036143	Salt Free Conditioner 9x42" Premium Home with Carbon Filter	4.5 (1)	9x42 carbon filter	15
01036144	Salt Free Conditioner 14x65" Light Commercial	7.5	None	20

Ideal Water Conditions

Table 2. Ideal Water Conditions.

Flow Direction	Upflow
Low Temperature (through system)	41° F
Max Temperature (through water heater)	176° F
pH range	6.5 - 8.5
Max hardness (gpg)	75
Max iron (ppm)	0.3
Max manganese (ppm)	0.05
Max free chlorine (ppm)	3
Max copper (ppm)	1.3
Oil	None
Hydrogen sulfide	None

NOTE: Install systems in new residences/facilities with copper pipe after six weeks of water use.



System Overview Introduction

The Culligan Salt Free Conditioner uses Culligan's CullACT media to help reduce scale build up in hot water heaters and pipes and on household surfaces and appliances. The Salt Free Conditioner is an alternative technology to traditional ion-exchange water softeners that use salt. Unlike a water softener, the Salt-Free Conditioner will not remove hardness minerals from the water.

The CullACT media serves as a catalyst to change the physical structure of the hardness minerals in water that can cause scaling. This process is known as Template Assisted Crystallization (TAC) and it changes the chemical structure of hardness minerals to a crystallized micro-structure that is resistant to scale formation. The result is that the water contains the same amount of minerals, but in a form that is much less likely to cause scaling. Because the mineral content of the water remains unchanged, water spots can still be present on fixtures and glassware but they will be much easier to wipe off and remove after being treated by the Culligan Salt Free Conditioner.

Frequently Asked Questions

- 1. Q: Can I test my water for hardness minerals to determine if my Salt Free Conditioner is working correctly?
 - A: No. Since Salt Free Conditioners do not remove hardness the test results will be the same.
- 2. Q: How do I know if my Salt Free Conditioner is working properly?
 - A: After installation you should notice that water spots on shower walls and fixtures are easier to wipe off.
- 3. Q: Will my water taste different after Salt Free Conditioning?
 - A: No. The Salt-Free Conditioner will not change the taste of the water.

 If your system includes an Activated Carbon Filter and your water contains chlorine you will notice an improvement in taste and the elimination of odors associated with chlorine.
- 4. Q: Is there any maintenance to be done to my Salt-Free Conditioner?
 - A: No regular maintenance needs to be done to the Salt-Free Conditioner. If your system includes a cartridge type pre-filter the cartridge should be changed when water pressure is reduced or at least every six months.
- 5. Q: What is the expected service life of the CullACT media used in the Salt Free Conditioner?
 - A: The CullACT media life expectancy is 3 to 5 years for most water supplies when all application guidelines are followed.
- 6. Q: What indicates the CullACT media is near the end of its service life?
 - A: When it becomes more difficult to clean water spots from shower walls and fixtures it is most likely time for media replacement. Call your local Culligan dealer for service.



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 <u>page 9</u>). If hand valves are used, see that inlet and outlet valves 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 position and call your Culligan dealer for service.



When and How to Bypass Your Water Conditioner

Normally, all water except outside lines passes through the water conditioner. There are times when the water conditioner 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 conditioner, and you do not want to waste conditioned 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.

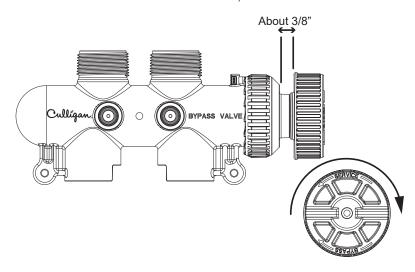


Figure 1. Bypass Position.

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!

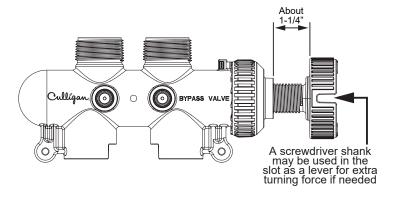


Figure 2. Service Position.

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 Conditioner

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
In & Out Valve Model No.	In & Out Valve Serial No
	(if applicable)
Data of Installation	Tank Carial Na
Date of installation	Tank Serial No
Settings	
Number of people in household	
Tank Size	inches
Water Analysis	
Total Hardness	(gpg)
Total Iron	(ppm)
pH (acidity)	
Other	
<u> </u>	



Culligan Limited Warranty

Culligan Salt Free Conditioners

You have just purchased one of the finest water conditioners made. As an expression of our confidence in Culligan International Company products, your water conditioner 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	Bypass and other auxiliary components
	Fiberglass tank In & Out Valve

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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