

# Culligan.

Culligan<sup>®</sup>
Good Water
Machine<sup>®</sup>
Drinking
Water
System
Owners
Guide





NOTICE: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

For installations in Massachusetts, Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of this system. The use of piercing valves is not permitted in Massachusetts.

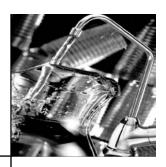
Check with your public works department for applicable local plumbing and sanitation codes. Follow your local codes if they differ from the standards used in this manual.

Operational, maintenance and replacement requirements are essential for this product to perform properly. The Good Water Machine<sup>\*</sup> contains replaceable particulate and activated carbon filters. It also includes a replaceable reverse osmosis membrane filter which is critical for the effective reduction of Total Dissolved Solids. The filtered water should be tested periodically to verify that the system is performing properly.

### Culligan International Company

9399 W. Higgins Road, Suite 1100 Rosemont, Illinois USA 60018 847/430-2800 www.culligan.com

Products manufactured and marketed by Culligan International Company (Culligan) and its affiliates are protected by patents issued or pending in the United States and other countries. Culligan reserves the right to change the specifications referred to in this literature at any time, without prior notice. Culligan, Good Water Machine, Aqua Cleer, Culligan Man and www.culligan.com are trademarks of Culligan International Company or its affiliates.



# Table of Contents

Safety/Warnings ii
System Specifications
Introduction
About Your System 3
Component Description
Certified Performance4
How to Use Your System 5
Performance Check5
Installation
Application Guidelines
Servicing Your System
Service Schedule8
Filter Replacement
Parts List12
Service Log
Performance Data Sheet14
California Certificates18
Warranty21



# System Specifications

- Filter Assembly ..............7.5"W x 3"D x 16.5"H **Dimensions** - Storage Tank - Std ......9" Diameter x 14"H - Medium ......11" Diameter x 14"H Storage Capacity - Standard Tank ...... 2 gallons - Medium Tank . . . . . . . . . . 3 gallons - Large Tank...... 9 gallons System Flow Sequence ......Particle Filter, Activated Carbon Filter, ......Reverse Osmosis Membrane Filter, Storage Tank, ......Polishing Filter, Dispensing Faucet Particle Filter ...... 5 Micron Spun Polypropylene Activated Carbon Filter ......Solid Carbon Block Reverse Osmosis Membrane Filter ............Culligan Aqua-Cleer® Thin Film Composite Polishing Filter ......Cullar G Activated Carbon Stainless Steel and Resin Flow Passages, with **Built-in Siphon Break** Colors ...... Polished Chrome or White

Model	2 Gallon	3 Gallon	9 Gallon
System DPR* to Storage Tank	14.5 (54.88 L)	14.5 (54.88 L)	14.5 (54.88 L)
Efficiency Rating <sup>3</sup>	17.9%	17.9%	17.9%
Recovery Rating4	30.8%	30.8%	30.8%

<sup>\*</sup> DPR - Daily Production Rate

Product Production Rate without storage tank to atmosphere1

- AC-30 Models......30 gpd (114 L/day)

Ratio of Product to Flush Flow2

Soft Water Applications .....2:3

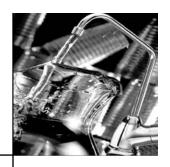
Hard Water Applications.....1:3 - 1:5

Rating at 50 psi, 77°F, 500 mg/L TDS Influent, Without Storage Tank to atmosphere. This is a factory specification for membrane production. Actual production rate and TDS rejection will depend on temperature, water pressure, TDS level, membrane variation and usage pattern.

May vary with pressure. See Technical Manual for all hard water applications and applications where TDS exceeds 1000 mg/L (ppm).

Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.

Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.



Introduction

Thank you for choosing a Culligan Good Water Machine® drinking water system. Your new system is designed to bring you years of deliciously crystal-clear Culligan® water. With its special faucet installed on your sink, it's like getting bottled water straight from your kitchen tap.

With three separate filter technologies and its unique space-saving design, the Good Water Machine is the most advanced drinking water system available today from Culligan.

#### **About Your System**

The reverse osmosis method of water treatment has long been regarded as one of the most efficient and effective ways to reduce impurities. It's the technology we've used to build your new Culligan Good Water Machine. In addition, we've incorporated activated carbon and fine particle filtration to bring you one of the most effective systems available today.

#### **Good Water Machine System Components**

Refer to Figure 1, page 7

#### Particle Filter

The particle filter reduces dirt, sand, rust, and other microscopic particles 15 times smaller than a grain of sand.

#### **Activated Carbon Filter**

The activated carbon filter reduces elements that cause water to taste and smell unpleasant, including the taste and odor of chlorine, if present in your untreated water supply.

#### Reverse Osmosis Membrane Filter

The reverse osmosis (RO) membrane filter reduces dissolved substances, including radium, lead, and many others. These substances may not be in your water. See Performance Data Sheet for list of substances and removal percentages.

#### Manifold Assembly

The manifold serves as the functional hub of the system, directing and regulating the flow through each of the system's components. It makes the Good Water Machine extremely space efficient and simplifies filter changes.

#### Storage Tank

The storage tank holds up to 2 gallons of triple-filtered Culligan water under pressure for rapid delivery. Optional three and nine-gallon tanks are available.

#### Polishing Filter

The Good Water Machine includes a second activated carbon filter as added assurance that your water will be crystal clear.



# Introduction (cont.)

#### **Faucet**

The special drinking water faucet mounts conveniently on your kitchen sink. A simple twist of the handle is all it takes to enjoy refreshing Culligan drinking water.

#### **Certified Performance**

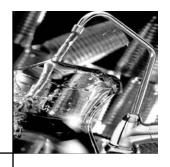
The Culligan Good Water Machine Model AC-30, AC-30M, AC-30L, AC-30 Plus, AC-30M Plus and AC-30L Plus Drinking Water Systems have been tested and certified by WQA to NSF/ANSI 372, and CSA B483.1, and NSF/ANSI Standard 58 for the effective reduction of TDS, Barium, Cadmium, Hexavalent and Trivalent Chromium, Lead, Radium 226/228, Copper and Selenium as verified and substantiated by test data.



Average removal percentages are as follows:

AC-30 (M,L) & AC-30 Plus (M,L)		
Barium97.90%	Radium 226/228	80.00%
Cadmium	Selenium	97.50%
Chromium III 96.70%	TDS/Sodium Chloride	87.3% (2 Gallon Tank)
Chromium VI88.50%		87.3% (3 Gallon Tank)
Copper95.30%		87.3% (9 Gallon Tank)
Lead98.40%		

The substances removed by this system are not necessarily in your untreated water. See Performance Data Sheet for exact percentages of contaminant removal.



# Introduction (cont.)

#### How To Use Your System

With the Good Water Machine, you'll get a continuous supply of clear, refreshing water for drinking and cooking. But Culligan improves a lot more than just water. Crystal clear Culligan water is ideal for:

coffee

recipes

pasta

• tea

- · baby formula
- ice cubes

• soup

- house plants
- steam irons

• juice • pets

drink mixes

everything you make with water

#### Performance Check

This system contains a replaceable treatment component, critical for the effective reduction of Total Dissolved Solids, and that product water shall be tested periodically to verify that the system is performing properly.

"This reverse osmosis treatment system contains a replaceable component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specification, as defined by the manufacturer, to assure the same efficiency and contaminant reduction performance."

To check the performance of your Good Water Machine, it is necessary to measure the total dissolved solids (TDS) level of the filtered water. This simple test can be done quickly by your dealer.

The Good Water Sentry™ Water Quality Monitor is another way to keep track of your system's performance. This optional accessory checks your drinking water each time you use the special faucet, and signals when the membrane filter may need to be replaced.

AC-30 Plus, AC-30L Plus, and AC-30M Plus come with the Good Sentry Water Quality Monitor.

The Good Water Machine® Models are supplied with a nitrate test kit. Product water must be tested frequently according to the instructions provided with the kit.

If the water quality of your system seems to have declined, drain the storage tank and allow the system to refill. If the problem persists, call your Culligan Man™ for service.

#### Suggested Installation Equipment

#### Sink Cutting Tools

- Porcelain Cutter Kit, 1-1/4 inch diameter, PN 00591625
- Greenlee Hole Punch, 1-1/4 inch diameter
- Plumbers Putty
- Heavy Duty Drill with speed control to 400 rpm

#### Tools

- Screwdriver, blade and Phillips (#1)
- 1/8 inch diameter pilot drill for #10 screws
- Center Punch
- Razor Blade Knife
- Faucet Installation Tool, PN 00-4033-75
- Aqua-Cleer H Series or "System" series filter housing



#### Installation

This Owner's Guide provides visual assembly reference only. Since specialized skills are required in the assembly of the drinking water system, we recommend that you contact your local independently operated Culligan dealer to complete this installation.

Please refer to the Aqua-Cleer/Good Water Machine Drinking Water Systems Technical Manual (01018587) for installation guidelines on the following topics:

- Faucet Installation
- Flushing Procedure for Pre-Filters
- Storage Tank Settings
- Post Installation Performance Measurements

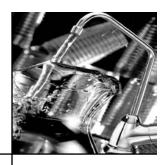
#### **Application Guidelines**

The Good Water Machine is designed for use on potable water supplies meeting the guidelines outlined in Table 1. The system should be installed on your home's cold water line. The flushing stream should discharge through an approved siphon break as illustrated in Figure 1. Installation of this system must comply with state and local laws and regulations.

The Good Water Machine may also be used to provide crystal-clear Culligan water to other drinking water using appliances such as an icemaker or refrigerator. Installing the unit to supply filtered water to other appliances may be complicated and require additional components for proper use. We again recommend that you contact your local independently operated Culligan dealer to complete this type of installation. Use of the Good Water Machine with these and other appliances must follow the guidelines set forth in the Aqua-Cleer/Good Water Machine Drinking Water Systems Technical Manual (01018587). Installations that do not follow these guidelines run the risk of working improperly or even causing damage to the appliances.

Table 1 – Influent Water Characteristic		
Pressure	40 - 120 psi (280 - 827 kPa)	
Temperature	33 - 100°F (1 - 38°C)	
Total Dissolved Solids (TDS) <sup>1</sup>	0 - 2500 ppm ( 0 - 2500 mg/L)	
рН	5 - 10	
Chlorine <sup>2</sup>	0 - 3 ppm ( 0 - 3 mg/L)	
Chloramine	0 - 3 ppm ( 0 - 3 mg/L)	
Turbidity	0 - 10 NTU	
Hardness <sup>3</sup>	0 - 10 gpg	
Iron	0 - 1 ppm (0 - 1 mg/L)	
Bacterial Quality	Potable	

- See the Technical Manual for all applications where TDS exceeds 1000 ppm (1000 mg/L). A booster pump is strongly recommended.
- The reverse osmosis membrane filter used in this system may be damaged by chlorine. This system includes activated carbon which protects this element by reducing chlorine. Influent chlorine should not exceed 3 mg/L.
- A softener is strongly recommended for water over 10 gpg.



Installation

The exact placement of the components will vary by installation. Although shown beneath a sink, it may be installed in a basement, crawl space, or in an adjacent cabinet. Regardless of where the system is installed, the flow sequence described by (Figure 1) must be observed.

The Aqua-Cleer\*/Good Water Machine\* drinking water system is designed to be mounted near a sink for easy access to cold water and drain lines. Lengths of 1/4-inch and 3/8-inch OD plastic tubing will be required to make this installation. A length of Culligan\* drain tubing is required to install the air gap siphon break.

Evaluate the installation site to determine the easiest path for the plumbing to follow. Take care to make the installation as neat as possible.

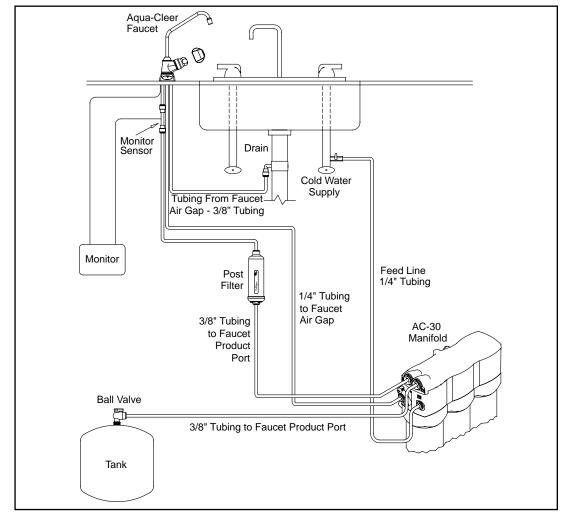


Figure 1

Notice: Install the drain line so that it runs downward with no loops or low spots. Otherwise the unit will overflow at the air gap siphon break built into the faucet, or make irritating gurgling sounds. The concentrate line that leads to the faucet should be installed in a straight vertical path to avoid making a gurgling noise.



## Servicing Your System

#### Service Schedule

When properly maintained, your Good Water Machine will give you years of dependable service. Use the following as a guide to get the most out of your system. Service frequency may vary depending on your local water conditions. High sediment, chlorine, turbidity, or hardness levels may require more frequent service. Refer to Figures 3 & 4.

At Least Once Per Year

#### Replace:

- Particle Filter (1)
- Activated Carbon Filter (2)
- Polishing Filter (4)

#### Check:

- RO Membrane Filter (3)
  - TDS Reduction Performance
  - Flow Rates
- Capillary Assembly

Sanitize the System.

Use the convenient chart inside the back cover of this booklet to keep track of your system's maintenance.

#### Filter Replacement

Culligan recommends that you have your Good Water Machine serviced by your local Culligan Man. You can rely on his or her experience and expertise to keep your system in top operating condition.

If you wish to service your system, the filters are available from your Culligan dealer. For replacement components, or to measure the Total Dissolved Solid (TDS) Reduction Performance please contact your local Culligan Dealer or 1-800-CULLIGAN (1-800-285-5442) for the dealer near you. See the Parts List at the end of this section for replacement numbers.

#### **Cartridge Conditioning**

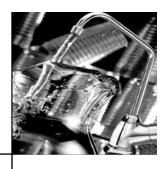
The activated carbon, reverse osmosis, polishing filter, and particle filter cartridges must be conditioned as follows prior to installation into the Good Water Machine. Your Culligan Man can do these important procedures at the time of purchase.

Activated Carbon Cartridge—10-minute flush to remove carbon dust

RO Membrane Filter—Minimum 24-hour flush to remove preservative solution

Polishing Filter—2-gallon flush to remove carbon dust

Particle Filter—10-minute flush



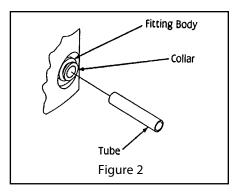
Servicing Your System (cont.)

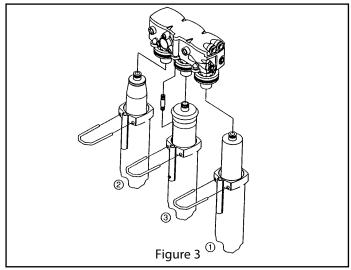
#### **Tubing Connectors**

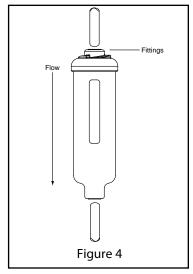
The Good Water Machine features easy-to-use push-in tubing connectors (Fig. 2) on the manifold assembly and the polishing filter.

To disconnect the connector, hold the collar against the fitting body and pull the tube from the fitting.

To assemble lubricate the tubing end with water and push the tubing into the connector until it bottoms out. Be sure the tubing is smooth and free of abrasions, otherwise a leak may result.







#### Filter Replacement and Sanitizing Procedure

Use the following procedure and the reference in Figure 3 when servicing the Good Water Machine.

Notice: Cleanliness is essential in the filter replacement procedure. Be sure to wash your hands thoroughly before handling filters. The use of protective gloves is strongly recommended.

#### Materials:

Pre-flushed activated carbon cartridge and polishing filter cartridge Particle filter

Household (5.25%) bleach—hydrogen peroxide is not recommended

Clean 1-gallon plastic container with cap

100-ml graduated cylinder

Plastic pan to hold manifold assembly

Tubing connector, 3/8" tube x 3/8" tube

Flat-blade and #2 Phillips screwdrivers

Paper towels

Disposable plastic gloves (like those used in the food service industry)



## Servicing Your System (cont.)

#### Preparation

- 1. Locate the system's supply valve and turn off the system's water supply.
- 2. Using the graduated cylinder, add 5 ml (about 1 teaspoon) of bleach to the 1-gallon container. Open the dispenser faucet and fill with one gallon of product water. If there is not enough RO water, fill the container the rest of the way with soft water. Cap the container and shake to mix.

Notice: If any RO water remains after filling the container, you may want to fill a pitcher with the drinking water as it will take several hours for the system to refill after servicing. In any case, leave the faucet open until the storage tank is empty and then, close the faucet.

- 3. Remove the polishing filter (Fig. 4) and discard. Connect the tubing ends together with the tubing connector.
- 4. Lift the filter assembly from the mounting bracket and place it in the plastic pan to catch any dripping water.
- 5. Using the flat-blade screwdriver, pull the u-clips from all three housings. Insert the u-clip into the two square holes at the bottom rear of the manifold and push up to release the filter housings. Remove the housings with a downward twisting pull.
- 6. Remove the particle filter cartridge and the activated carbon cartridge and discard. If the RO membrane filter will be reused, clean the outside with a wet paper towel and place the membrane filter in a clean, unused plastic bag.
- 7. Wet some paper towels with the diluted bleach solution. Clean the inside of the housings and the underside of the manifold with the paper towels.

#### Sanitizing the Storage Tank and Faucet

1. Add 15 ml (about one tablespoon) of bleach to the particle filter housing (#1, Figure 3). Replace all three housings on the manifold and insert the u-clips.

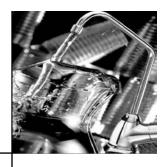
Notice: The weight of the storage tank will increase by 8 to 16 pounds. Turn off the water supply valve.

- 2. Turn on the supply valve and fill the storage tank with 1 to 2 gallons of water.
- 3. Wait ten minutes before opening the faucet and draining the storage tank. Do not rinse any remaining solution from the tank.

Notice: During this time, proceed to the "Sanitizing the Manifold Assembly" section.

Wait to do step 4 until indicated.

4. Remove the temporary tubing connector and replace it with a new polishing filter. Make sure the flow arrow on the polishing filter points to the faucet (Figure 4).



Servicing Your System (cont.)

#### Sanitizing the Manifold Assembly

- 1. Using the flat-blade screwdriver, pull the u-clips from all three housings. Insert the u-clip into the two square holes at the bottom rear of the manifold and push up to release the filter housings. Remove the housings with a downward twisting pull. Discard any solution remaining in the housings.
- 2. Open the particle filter cartridge bag half way, being careful not to touch the filter element. Lubricate the particle filter cartridge o-rings with water and insert the cartridge into position #1 in the manifold.
- 3. Fill housing #1 about 2/3 full of the diluted bleach solution from the 1-gallon container. Assemble the housing to the manifold and replace the u-clip.
- 4. Repeat steps 2 and 3 for housing #2 (activated carbon cartridge) and housing #3 (RO membrane filter).

Notice: For RO membrane filters that have a single open-end, pour diluted bleach solution into the center tube.



Caution! The solution should remain in contact with the RO membrane filter for at least five (5) but no longer than ten (10) minutes. Longer contact time will shorten the life of the membrane.

Notice: While waiting for the filters to be sanitized, complete step 4 of the "Sanitizing the Storage Tank and Faucet" section. Then complete step 5 below.

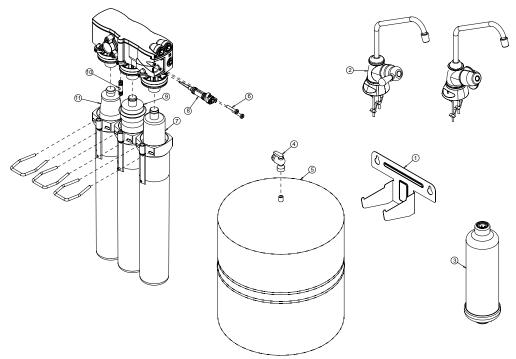
- 5. Using the #2 Phillips screwdriver, loosen the capillary assembly retaining screws, then twist and remove the assembly. Inspect the tubing for plugging and kinks and replace the tubing as needed. Reinstall the capillary assembly, but leave the screws 1/4 turn loose.
- 6. In this step, you will need to observe water flowing to the drain. If the drain flow is not visible with the current tubing connections, install a temporary drain tube in the waste port of the manifold. Turn on the supply valve. When water is seen flowing to the drain, carefully loosen the capillary tube assembly retaining screws until the flow to the drain increases.

Notice: When the assembly is about 3/16" out of the manifold, the o-ring seal for the capillary tube is bypassed, but there should be no external leaks.

- 7. Rinse the manifold assembly for five minutes or until no chlorine is detected in the water passing to the drain. Tighten the capillary assembly retaining screws.
- 8. Check the performance of the system according to the procedure outlined in the "Performance and Technical Information" section of this manual. Replace the RO membrane if necessary.
- 9. Instruct the customer to discard the first glassful of water from the system to flush out any residual chlorine that might remain in the polishing filter tubing and faucet. The polishing filter will remove any chlorine remaining in the storage tank.
- 10. Record your service on the chart at the end of the Owner's Guide.

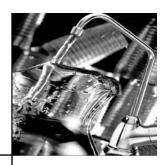


# Parts List



ltem	Description	Part Number
1	Mounting Bracket	01-0040-81
2	Faucet - Chrome	01-0184-01
	Faucet - White	01-0184-02
	Faucet - Chrome w/ Light	01-0184-68
	Faucet - White w/ Light	01-0184-69
3	Polishing Filter	01-0042-91
4	Plastic Ball Valve	01-0045-50
5	Storage Tank - Std.	01-0050-95
	Storage Tank - Medium	01-0047-76
	Storage Tank - Large	01-0047-65
6	Screw, #10.9 x .625" Pan Head Phil.	00-4010-16
7	Particle Filter Element	00-4015-38
8	Capillary Assembly	01-0090-25
9	Reverse Osmosis Membrane Element AC-30 Non-Nitrate	01-0074-02 or
		01-0167-31
10	Drain Adapter	01-0040-80
11	Activated Carbon Element	01-0125-80
*	Icemaker Tee -3/8 x 3/8 x 1/4	01-0047-28
*	Tubing, Blue - 1/4" O.D.	00-4021-84
*	Tubing, Blue - 3/8" O.D.	01-0002-87
*	Good Water Sentry Monitor	01-0047-12
*	Aqua-Cleer Booster Pump	01-0093-34

<sup>\*</sup> Not Illustrated



Culligan®
<b>Good Water</b>
Machine®
Service Loa

Model	Serial No.
Date Installed	
·	
For Service Call Culligan At: ()	

Data Camina il	Filter(s) Changed				Camisias
Date Serviced	Particulate Filter	Activated Carbon	RO Membrane	Polishing Filter	Sanitized
		Filter	Filter	,	
1					
	<u> </u>				



### Performance Data Sheet

Important Notice: Read this Performance Data Sheet and compare the capabilities of the unit with your actual water treatment needs. Culligan recommends that you have your water supply tested to determine these needs before purchasing a water treatment unit.

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.

Manufacturer: Culligan International Company,

9399 W. Higgins Rd, Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800

Product: Culligan Good Water Machine Reverse Osmosis Drinking Water System

MODELS: • AC-30 • AC-30 Plus

• AC-30M • AC-30M Plus • AC-30L • AC-30L Plus

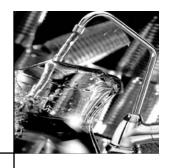
#### **Use Guidelines**

Working Pressure: 40-120 psig (280-827 kPa)

- Do not allow exposure to temperatures below 33°F (1°C)
- Maximum operating temperature: 100°F (38°C)
- This system must be installed according to local plumbing codes on the cold water line.
- This system requires regular replacement of all filters to maintain proper operation. Depending on usage and influent water quality, the carbon and particulate filters should be changed at least annually and the reverse osmosis membrane should be replaced every 3-5 years. Varying chlorine, sediment or TDS levels may affect replacement frequency.

			MSRP
•	Particulate Prefilter Element	00-4015-38	. 30.00
•	Activated Carbon Prefilter Element	01-0125-80	. 40.00
•	Activated Carbon Postfilter Element	01-0042-91	. 20.00
•	RO membrane	01-0074-02	. 95.00

- If water production decreases or a noticeable taste change occurs, contact your local Culligan
  Dealer. A Culligan professional can determine if your drinking water system requires servicing.
  Optional water quality monitors are also available to monitor the performance of the reverse
  osmosis membrane.
- Caution! Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- The Good Water Sentry Water Quality Monitor is another way to keep track of your systems performance. This optional accessory checks your drinking water each time you use the special faucet, and signals when the membrane filter may need to be replaced.



These systems have been tested and certified by WQA according to NSF/ANSI 372, and CSA B483.1, and NSF/ANSI Standard 58 for the 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 58.



Performance Data Sheet (cont.)

#### Substance Removal<sup>1</sup>

Substance	Influent Challenge Concentration (mg/L)	Max. Permissible Product Water Concentration (mg/L)	Minimum Percent Removal	Average Percent Removal
Barium	10.0 +/- 10%	2.0	88.40%	97.90%
Cadmium	0.03 +/- 10%	0.005	92.20%	99.20%
Hexavalent Chromium	0.30 +/- 10%	0.1	83.00%	88.50%
Trivalent Chromium	0.30 +/- 10%	0.1	92.50%	96.70%
Chromium (Hexavalent & Trivalent)	0.3 +/- 10%	0.05 (Hex.) & 0.05 (Tri.)		
Copper	3.00 +/- 10%	1.3	95.30%	95.30%
Lead	0.15 +/- 10%	0.010	93.50%	98.40%
Radium 226/228 <sup>4</sup>	25 pCi/L +/- 10%	5 pCi/L	80.00%	80.00%
Selenium	0.10 +-/10%	0.05	93.90%	97.50%

While testing was performed under standard laboratory conditions, actual performance may vary depending on water pressures, temperatures, and other substances which may be found in your water.

<sup>2</sup> Based upon testing methods using Barium as a surrogate. All concentrations in pCi/L: Pico curies per liter.



## Performance Data Sheet (cont.)

#### Output (Total Dissolved Solids (TDS) Reduction and Output Production)<sup>1</sup>

Tank Size	2 Gallon	3 Gallon	9 Gallon
Product system daily prod. rate to pressurized storage tank	14.5 gpd (54.8 L)	14.5 gpd (54.8 L)	14.5 gpd (54.8 L)
Prod. rate w/o storage tank to atmosphere	30 gpd	30 gpd	30 gpd
Efficiency rating <sup>2</sup>	17.9%	17.9%	17.9%
Recovery rating <sup>3</sup>	30.8%	30.8%	30.8%
Influent challenge concentration (mg/L)	750 +/- 40 mg/L	750 +/- 40 mg/L	750 +/- 40 mg/L
Max. permissible product water concentration (mg/L)	187	187	187
Minimum percent removal	76.6%	76.6%	76.6%
Average percent removal	81.6%	81.6%	81.6%

- This is a factory specification for membrane production. Actual production rate and TDS rejection will depend on temperature, water pressure, TDS level, membrane variation and usage pattern.
- 2 Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.
- 3 Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.

#### **Testing Conditions (Complete Systems)**

Temperature:  $77^{\circ} F \pm 2^{\circ} F$  pH:  $7.5 \pm 0.5$ 

Pressure: 50 psi Turbidity: < 1 NTU

This system has been tested and shown to operate at its calculated recovery rating under standard test conditions.

#### **Dimensions**

Filter Assembly 7.5" W x 3" D x 16.5" H (20 cm W x 8 cm D x 42 cm H)

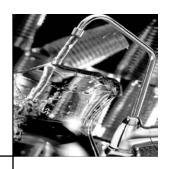
Storage Tank Standard 9" Diameter x 15" H (23 cm Diameter x 38 cm H)

Medium 11" Diameter x 15" H (28 cm Diameter x 38 cm H) Large 15.5" Diameter x 22" H (40 cm Diameter x 56 cm H)

The Good Water Machine models listed above have been tested and certified by WQA according to NSF/ANSI 372, and CSA B483.1, and NSF/ANSI Standard 58 for the effective reduction of TDS, Barium, Cadmium, Hexavalent and Trivalent Chromium, Lead, Radium 226/228, Copper and Selenium as verified and substantiated by test data. 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 58.



Refer to your Installation and Operating Instructions and printed limited Warranties for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.



Performance Data Sheet (cont.)

Table 1 – Influent Water Characteristic			
Pressure	40 - 120 psi (280 - 827 kPa)		
Temperature	33 - 100°F (1 - 38°C)		
Total Dissolved Solids (TDS) <sup>1</sup>	0 - 2500 ppm ( 0 - 2500 mg/L)		
рН	5 - 10		
Chlorine <sup>2</sup>	0 - 3 ppm ( 0 - 3 mg/L)		
Chloramine	0 - 3 ppm ( 0 - 3 mg/L)		
Turbidity	0 - 10 NTU		
Hardness <sup>3</sup>	0 - 10 gpg		
Iron	0 - 1 ppm (0 - 1 mg/L)		
Bacterial Quality	Potable		

- See the Technical Manual for all applications where TDS exceeds 1000 ppm (1000 mg/L). A booster pump is strongly recommended.
- 2 The reverse osmosis membrane filter used in this system may be damaged by chlorine. This system includes activated carbon which protects this element by reducing chlorine. Influent chlorine should not exceed 3 mg/L.
- 3 A softener is strongly recommended for water over 10 gpg.

#### **Application Guidelines**

The Good Water Machine is designed for use on potable water supplies meeting the guidelines outlined in Table 1. The system should be installed on your home's cold water line. The flushing stream should discharge through an approved siphon break as illustrated in Figure 1. Installation of this system must comply with state and local laws and regulations.



#### California Certifications

State of California Department of Public Health

#### Water Treatment Device Certificate Number

08 - 1900

Date Issued: August 13, 2008

**Trademark/Model Designation** 

Good Water Machine AC-30 Good Water Machine AC-30 PLUS

Particulate Prefilter: 00-4015-38

GAC Prefilter: 01-0125-80 RO Module: 01-0074-02 or 01-0167-31

GAC Postfilter: 01-0042-91

Manufacturer: Culligan International

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

Microbiological Contaminants and Turbidity

None

Organic Contaminants

None

Inorganic/Radiological Contaminants

Barium

Cadmium

Chromium (hexavalent)

Chromium (trivalent)

Copper Lead

Radium 226/228

Selenium

Rated Service Capacity: n/a Rated Service Flow: 1.7 gpd

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system.



#### California Certifications

State of California Department of Public Health

#### Water Treatment Device Certificate Number

08 - 1901

Date Issued: August 13, 2008

#### **Trademark/Model Designation**

Good Water Machine AC-30M Good Water Machine AC-30M Plus

Particulate Prefilter: 00-4015-38

GAC Prefilter: 01-0125-80 RO Module: 01-0074-02 or 01-0167-31

GAC Postfilter: 01-0042-91

Manufacturer: Culligan International

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

Microbiological Contaminants and Turbidity Inorganic/Radiological Contaminants

None

Barium Cadmium

Chromium (hexavalent) Chromium (trivalent)

Copper Lead

Radium 226/228 Selenium

**Organic Contaminants** 

Rated Service Capacity: n/a

None

Rated Service Flow: 1.7 gpd

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system.



#### California Certifications

State of California Department of Public Health

#### Water Treatment Device Certificate Number

08 - 1909

Date Issued: August 13, 2008

**Trademark/Model Designation** 

Good Water Machine AC-30L Good Water Machine AC-30L PLUS

Particulate Prefilter: 00-4015-38

GAC Prefilter: 01-0125-80 RO Module: 01-0074-02 or 01-0167-31

GAC Postfilter: 01-0042-91

Manufacturer: Culligan International

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

Microbiological Contaminants and Turbidity

None

Organic Contaminants

None

Inorganic/Radiological Contaminants

Barium

Cadmium

Chromium (hexavalent)

Chromium (trivalent)

Copper Lead

Radium 226/228

Selenium

Rated Service Capacity: n/a Rated Service Flow: 1.7 gpd

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system.



#### Culligan Good Water Machine® AC-30 Model Series

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

 For the LIFETIME of the original end-user The entire reverse osmosis water conditioning unit, EXCLUDING THE EXPENDABLE FILTER CARTRIDGES AND REVERSE OSMOSIS MEMBRANE FILTER USED IN THE UNIT.

• For a period of ONE YEAR

The Culligan brand reverse osmosis

membrane filter.

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 drinking water system 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.

Damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, alteration, installation or operation contrary to our printed instructions, or by the use of accessories or components which do not meet Culligan specifications, is not covered by this warranty.

Our product performance specifications are furnished with each drinking water system. 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 PARTS DESCRIBED IN THIS LIMITED WARRANTY. As manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing a drinking water system. Please understand that the quality of water supplies may vary seasonally or over a period of time, and that your water usage rate may vary as well. Water characteristics can also change considerably if your drinking water system 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 on a non-potable water source. OUR OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT OF THE FAILED PARTS OF THE DRINKING WATER SYSTEM, AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, GENERAL, OR OTHER DAMAGES, WHETHER FROM CORROSION OR OTHER CAUSES.

#### CONSUMERS:

Some states do not allow 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 W. Higgins Road, Suite 1100 Rosemont, Illinois 60018 Culligan Lifetime Limited Warranty

# This page contains materials and DCO information.

## IT DOES NOT PRINT AS PART OF THE DOCUMENT!

Materials & Description: Good Water Machine Owners Guide 01018588

Size: 11" x 17" Booklet folded to 8.5" x 11"

Color: Black; 2 Sided

Stock: 20# White

Other: Saddle Stitch (2 Staples) Booklet

Revision	Change	Ву	Appv'd	DCO	Date
$A^3$	New Art Created	LR	JS	8707	09/27/05
B <sup>1</sup>	Replace NSF with WQA	<del>LR</del>	<del>JS</del>	<del>8761</del>	<del>10/12/05</del>
C <sup>2</sup>	Reglatory Changes	LR	JS	9430	02/21/07
D <sup>1</sup>	Regl. Changes	LR	JS/AL	10083	06/18/07
D <sup>2</sup>	Minor revisions	BSM	JS/AL	10083	08/02/07
D <sup>3</sup>	Minor revisions	BSM	JS/AL	10083	10/15/07
E	Minor revisions	MWS		010297	12/05/07
E <sup>2</sup>	Minor revisions	BSM	JS/AL	010297	01/15/08
E <sup>3</sup>	Minor revisions	BSM	JS/AL	010297	01/31/08
E <sup>4</sup>	Minor revisions	BSM	JS/AL	010297	02/07/08
<b>E</b> <sup>5</sup>	Minor revisions	BSM	JS/AL	010297	04/23/08
E <sup>6</sup>	Minor revisions	BSM	JS/AL	010297	08/21/08
F	Minor resisions	JWV	ZS		02/25/11
G	Minor revisions		ZS	013023	02/15/12