



Culligan Good Water Machine_® 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. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

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_® 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.

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System Specifications

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
System Daily Production Rate to Pressurized Storage Tank	. 12.8 gpd (48.45L) (2 gallon) 12.1 gpd (45.8 L) (3 gallon) 11.7 gpd (44.2 L) (9 gallon)
Product Production Rate without storage tank to atmosphere ¹ - AC-30 Models	. 30 gpd (114 L/day)
Ratio of Product to Flush Flow ² Soft Water Applications Hard Water Applications	. 2:3 ³ . 1:3 - 1:5
Polishing Filter	. Cullar G Activated Carbon
Dispensing Faucet	. Culligan <i>Aqua-Cleer</i> Faucet Rotary Operation, Stainless Steel and Resin Flow Passages, with Built-in Siphon Break
Colors	. Polished Chrome or White
Storage Capacity - Standard Tank - Medium Tank - Large Tank	. 2 gallons . 3 gallons . 9 gallons
Dimensions - Filter Assembly - Storage Tank - Std - Medium - Large	. 7.5"W x 3"D x 16.5"H . 9" Diameter x 14"H . 11" Diameter x 14"H . 15.5" Diameter x 24"H
 Rating at 50 psi, 77°F, 500 mg/L TDS Influent, V specification for membrane production. Actual temperature, water pressure, TDS level, membr May vary with pressure. See Technical Manual TDS exceeds 1000 mg/L (ppm). Except nitrate models. 	Without Storage Tank to atmosphere. This is a factory production rate and TDS rejection will depend on rane variation and usage pattern. for all hard water applications and applications where



Introduction

Thank you for choosing a Culligan Good Water Machine_® drinking water system. Your new system is designed to bring you years of healthful, 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 6

Particle Filter The particle filter screens out 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 squeezes out dissolved substances, including radium, lead, arsenic, 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.



Introduction (cont'd)

Polishing Filter

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

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 to ANSI/NSF International Standard 58 for effective reduction of TDS, Arsenic, Barium, Cadmium, Hexavalent and Trivalent Chromium, Cysts, Fluoride, Lead, Radium 226/228, and Selenium as verified and substantiated by test data. The Model AC-30 Nitrate, AC-30M Nitrate and AC-30L Nitrate have been tested and certified to ANSI/NSFInternational Standard 58 for effective reduction of the above substances and Nitrate/Nitrite. Nitrate models are acceptable for treatment of influent concentrations of no more than 27 mg/L Nitrate and 3 mg/L Nitrite in combination measured as N and are certified for Nitrate/Nitrite reduction only for water supplies with a pressure of 40 psig (280 kPa) or greater.

NSF®

This system shall only be used for arsenic reduction on chlorinated water supplies containing detectable residual free chlorine at the system inlet. Water systems using an in-line chlorinator should provide a one minute chlorine contact time before the RO system.

Average removal percentages are as follows:

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Arsenic	98.0%	Fluoride	95.2%
Barium	90.0%	Lead	98.1%
Cadmium	96.4%	Nitrate	80.7%
Chromium III	85.7%	Nitrite	75.8%
Chromium VI	86.6%	Radium 226/228*	80.0%
Copper	99.2%	Selenium	96.8%
Cysts (including	99.99%	TDS/Sodium Chloride	85.5% (2 gallon tank)
Cryptosporidium	, Giardia Lamblia		90.9% (3 gallon tank)
and Entamoeba I	Histolytica)		91.4% (9 gallon tank)

*Minimum removal based on approved testing methods with Barium as surrogate.

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



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
- tea
- recipesbaby formula
- pasta ice cubes
- soup houseplants
- juice
- pets
- steam irons 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.

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_{TM} 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.

The AC-30 Nitrate 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 $Man_{_{TM}}$ for service.



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.

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.

Influent Water Characteristic				
Pressure ¹	40 - 120 psi (280 - 827 kPa)			
Temperature	33 - 100°F (1 - 38°C)			
Total Dissolved Solids (TDS) ²	0 - 2500 ppm (0 - 2500 mg/L)			
рН	5 - 10			
Chlorine ³	0 - 3 ppm (0 - 3 mg/L)			
Chloramine	0 - 3 ppm (0 - 3 mg/L)			
Turbidity	0 - 10 NTU			
Hardness	0 - 20 gpg			
Iron	0 - 1 ppm (0 - 1 mg/L)			
Bacterial Quality	Potable			

TABLE 1

1 Nitrate units are not certified for nitrate reduction in water supplies with a pressure less than 40 psi (280 kPa). A booster pump is strongly recommended.

2 See the Technical Manual for all applications where TDS exceeds 1000 ppm (1000 mg/L). A booster pump is strongly recommended.

3 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.

4 A softener is strongly recommended for water over 10 gpg.







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, please contact your local Culligan Dealer or 1-800-205-6000 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, and polishing 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 - 2 gallon flush to remove carbon dust RO Membrane Filter - 24 hour flush to remove preservative solution Polishing Filter - 2 gallon flush to remove carbon dust





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.





Servicing Your System (cont'd)

Filter Replacement and Sanitizing Procedure

Use the following procedure and the reference in Fig. 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)

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 1gallon 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, Fig. 3). Replace all three housings on the manifold and insert the u-clips.
- 2. Turn on the supply valve and fill the storage tank with 1 to 2 gallons of water. NOTICE: *The weight of the storage tank will increase by 8 to 16 pounds.* Turn off the water supply valve.
- 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 (Fig. 4).

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.

 \triangle 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.



Servicing Your System (cont'd)

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





Culligan Good Water Machine Service Log

MODEL ______SERIAL NO. _____

DATE INSTALLED _____

FOR SERVICE CALL CULLIGAN AT: (____)

DATE SERVICED	PARTICULATE FILTER	ACTIVATED CARBON FILTER	RO MEMBRANE FILTER	POLISHING FILTER	SANITIZED
			l		



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 sixty years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

MANUFACT	RER: Culligan International Company,
	One Culligan Parkway, Northbrook, IL 60062-6209 USA
	(847) 205-6000
PRODUCT:	Culligan Good Water Machine Reverse Osmosis Drinking Water System

MODELS:	AC-30	AC-30 Plus	AC-30 Nitrate
	AC-30M	AC-30M Plus	AC-30M Nitrate
	AC-30L	AC-30L Plus	AC-30L Nitrate

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 sytem 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. Varifying chlorine, sediment or TDS levels may effect replacement frequency.

		MSRP
•	Particulate Prefilter Element00-4015-38	30.00
•	Activated Carbon Prefilter Element01-0008-27 or 01-0125-80	40.00
•	Activated Carbon Postfilter Element01-0042-91	20.00
•	Reverse Osmosis Module01-0074-02	150.00

- 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. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. EPA Est 2938-IL-01.
- 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.
- The AC-30 Nitrate Models are supplied with a nitrate test kit. Product water must be tested frequently according to the instructions provided with the kit.

SUGGESTED INSTALLATION EQUIPMENT

Tools

Slik Cutting 1001s	10015
Porcelain Cutter Kit, 1-1/4 inch diameter, PN 00-5916-25	Screwdriver, blade and Phillips (#1)
Greenlee Hole Punch, 1-1/4 inch diameter	1/8 inch diameter pilot drill for #10 screws
Plumbers Putty	Center Punch
Heavy Duty Drill with speed control to 400 rpm	Razor Blade Knife
	Faucet Installation Tool, PN 00-4033-75
	Aqua-Cleer H Series or "System" series filter
	housing



SUBSTANCE REMOVAL¹

	Average Influent	USEPA SDWA ²	Reduction	Minimum Percent	Average Percent
Substance	Concentration	MCL (mg/L)	Requirement	Removal	Removal
Arsenic ²	0.03 +/- 10%	0.025		96.6%	98.0%
Barium	10.0+/- 10%	2.0		90.0%	90.0%
Cadmium	0.03 +/- 10%	0.005		90.0%	96.4%
Hexavalent Chromium	0.30 +/- 10%	0.1	86.7%	86.7%	86.6%
Trivalent Chromium	0.30 +/- 10%	0.1		85.7%	85.7%
Copper	3.00 +/- 10%	1.3		96.5%	99.2%
Cysts ⁶	>50,000/ml		99.95%	99.99%	99.99%
Fluoride	8.0 +/- 10%	1.5		89.8%	95.2%
Lead	0.15 +/- 10%	0.010		97.0%	98.1%
Nitrate plus Nitrite (both as N)	30.0 +\- 10%	10.0			
Nitrate ³	27.0 +/- 10%	10.0		74.03%	80.4%
Nitrite	3.0 +/- 10%	1.0		68.3%	75.8%
Radium 226/2284	25pCi/L +/- 10%	5pCi/L		80.0%	80.0%
Selenium	0.10 +-/10%	0.05		93.02%	96.8%

1. 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.

2. This system shall only be used for arsenic reduction on chlorinated water supplies containing detectable residual free chlorine.

3. Nitrate units are not certified for nitrate/nitrite reduction in water supplies with a pressure less than 4 psi (280 kPa). A booster pump is strongly recommended.

4. Based upon testing methods using Barium as a surrogate. All concentrations in pCi.l: pico cutirs/L.

5. United States Environmental Protection Agency (USEPA) Safe Drinking Water Act.

6. Includes Giardia, Lamblia, Entamoeba Histolyca and Cryptosporidium.

OUTPUT (Total Dissolved Solids (TDS) Reduction and Output Production

		Product			TDS Re	duction		
Tank	System Daily Prod. Rate to Pressurized	Prod. Rate w/o Storage Tank to	USEPA SDWA	Average Inffluent Conc.	Maximum Effluent Conc.	Minimum Percent	Effluent Conc.	Average Average Percent
Size	Storage Tank	Atmosphere	MCL (mg/L)	(mg/L)	(mg/L)	Removal	(mg/L)	Removal
2 gallon	12.8 gpd (48.45L)	30 gpd	187	776	160	79%	112	85.5%
3 gallon	12.1 gpd (45.8L)	30 gpd	187	770	100	87%	70	90.9%
9 gallon	11.7 gpd (44.2L)	30 gpd	187	758	82	89%	65	91.4%

* 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.

TESTING CONDITIONS (Complete Systems)

Temperature: 77°F ± 2°F	pH: 7.5 ± 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.

DIMENSIONSFilter Assembly7.5" W x 3" D x 16.5" H (20 cm W x 8 cm D x 42 cm H)Storage Tank- Standard- Medium9" Diameter x 15" H (23 cm Diameter x 38 cm H)- Large11" Diameter x 15" H (28 cm Diameter x 38 cm H)15.5" Diameter x 22" H (40 cm Diameter x 56 cm H)

The *Good Water Machine* models listed above have been tested according to ANSI/NSF Standard 58 for effective reduction of TDS, arsenic, barium, cadmium, hexavalent and trivalent chromium, copper, cysts, fluoride, lead, radium 226/228 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 ANSI/NSF 58.



Performance Data Sheet (cont'd)

In addition, the *Good Water Machine* Nitrate models listed above have been tested and certified to ANSI/ NSF Standard 58 for effective reduction of Nitrate/Nitrite. Nitrate models are acceptable for treatment of influent concentrations of no more than 27 mg/L Nitrate and 3 mg/L Nitrite in combination measured as N and are certified for Nitrate/Nitrite reduction only for water supplies with a pressure of 40 psig (280 kPa) or greater.

This sytem shall only be used for arsenic reduction on chlorinated water supplies containing detectable residual freee chlorine at the system inlet.

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.*

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local independent Culligan dealer. *Performance will vary depending on local water conditions. The substances reduced by this system are not necessarily in your water.*

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.

Influent Water Characteristic				
Pressure ¹	40 - 120 psi (280 - 827 kPa)			
Temperature	33 - 100°F (1 - 38°C)			
Total Dissolved Solids (TDS) ²	0 - 4000 ppm (0 - 4000 mg/L)			
рН	5 - 10			
Chlorine ³	0 - 3 ppm (0 - 3 mg/L)			
Chloramine	0 - 3 ppm (0 - 3 mg/L)			
Turbidity	0 - 10 NTU			
Hardness	0 - 20 gpg			
Iron	0 - 1 ppm (0 - 1 mg/L)			
Bacterial Quality	Potable			

TABLE 1

1 Nitrate units are not certified for nitrate reduction in water supplies with a pressure less than 40 psi (280 kPa). A booster pump is strongly recommended.

- 2 See the Technical Manual for all applications where TDS exceeds 1000 ppm (1000 mg/L). A booster pump is strongly recommended.
- 3 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.
- 4 A softener is strongly recommended for water over 10 gpg.



CULLIGAN GOOD WATER MACHINE $_{\!\scriptscriptstyle \otimes}\, \text{AC-30}$ 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 One Culligan Parkway Northbrook, Illinois 60062

Materials & description: 8-1/2 x 11, 20 page book, saddle stitched. Prints black ink on 50# offset white

LET	CHANGE	BY	APRVD	DATE
А	DCO	TPD	JS	1/19/01
В	DCO 2817	SMP	JS	08/13/01

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