

Culligan

Culligan Gold Series™ Automatic Water Conditioner Owners Guide





THANK YOU

AND WELCOME TO YOUR NEW WORLD OF BETTER LIVING WITH CULLIGAN WATER.

The Culligan Gold Series $_{\text{\tiny TM}}$ water softeners are tested and validated by WQA against ANSI/NSF Standard 44.

For installations in Massachusetts, the Commonwealth of Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of the system. This system and its installation must comply with state and local regulations.

If this is your first experience having soft, conditioned water in your home, you'll be amazed at the marvelous difference it makes. We promise that you'll never want to be without it again.

Congratulations, too, on selecting one of the "first family" of water conditioners in the prestigious Culligan Gold Series. 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 softener cannot correct this problem and so its printed warranty disclaims liability for corrosion of plumbing lines, fixtures or appliances. If you suspect corrosion, your Culligan Dealer has equipment to control the problem.

SODIUM INFORMATION: Water softeners using sodium chloride for regeneration add sodium to the water. Persons who are on sodium restricted diets should consider the added sodium as part of their overall sodium intake.



Softener Model

models.	nance Data Sheets are included in this manual for various Culligan Gold Series, Softener Refer to the Performance Data Sheet for your specific softener, as there are slight ces between the models. The softener waranty is located on page 23 of this Owner's Guide.
	Culligan Gold Series _™ 9" Water Softener Performance Data Sheet - Page 16
	Culligan Gold Series $_{\scriptscriptstyle{\text{TM}}}$ 9" Water Softener with Soft-Minder $_{\scriptscriptstyle{\text{\tiny{\otimes}}}}$ Meter Performance Data Sheet - Page 17
	Culligan Gold Series _™ 9" Water Softener with Aqua-Sensor _® Sensing Device Performance Data Sheet - Page 18
	Culligan Gold Series _™ 12" Water Softener Performance Data Sheet - Page 19
	Culligan Gold Series _™ 12" Water Softener with Soft-Minder _® Meter Performance Data Sheet - Page 20
	Culligan Gold Series _™ 12" Water Softener with Aqua-Sensor _® Sensing Device Performance Data Sheet - Page 21



Specifications

Culligan, Gold Series Water Conditioners with Time Clock, Aqua-Sensor, Device or Soft-Minder_® Meter

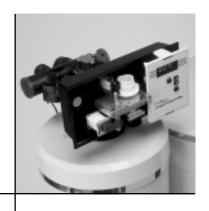
Soft-Millidel® Meter		
	9" Model	12" Model
Control Valve	5-cycle Reinforced	5-cycle Reinforced
	Thermoplastic	Thermoplastic
Overall Conditioner Height	51 in. (1,295 mm)	51 in. (1,295 mm)
Media Tank Dimensions (Dia. x Ht.)	9 x 45 in.	12 x 45 in.
,	229 x 1,143 mm	305 x 1,143 mm
Salt Storage Tank Dimensions	16 x 43 in.	18 x 43 in.
(Dia. x Ht.)	406 x 1,092 mm	457 x 1,092 mm
(=	18 x 43 in.	
	457 x 1,092 mm	
Exchange Media, Type & Quantity	Cullex _∞ Media, 1.0 ft ³	Cullex Media, 1.5 ft ³
zacana, zpe a quantity	Cullex Media, 28.32 L	Cullex Media, 42.48 L
Underbedding, Type & Quantity	No Underbedding	Cullsan Underbedding, 30 lb.
onderbouding, type at quantity	No Underbedding	Cullsan Underbedding, 14 kg
Exchange Capacity @ Salt	18,200 gr @ 4 lb.	26,900 gr @ 6 lb.
Dosage Per Recharge	1,179 g @ 1.8 kg	1,743 g @ 2.7 kg
2 osuge Fer recondinge	27,300 gr @ 8 lb.	39,600 gr @ 12 lb.
	1,769 g @3.6 kg	2,566 g @ 5.4 kg
	30,900 gr @ 12 lb.	45,400 gr @ 18 lb.
	2,002 g @ 5.4 kg	2,942 g @ 8.1 kg
Efficiency rated dosage ¹	4,550 gr/lb (650 g/kg)	4,490 gr/lb (641 g/kg)
Freeboard to Media ²	13.5 - 15.5 in.	13.0 - 15.0 in.
Treebourd to Media	343 - 394 mm	330 - 381 mm
Freeboard to Underbedding ³	No Underbedding	38.5 in. (978 mm)
Salt Storage Capacity	250 lb. or 350 lb.	375 lb.
suit storage capacity	114 kg or 170 kg	170 kg
Rated Service Flow @ Pressure Drop	9 gpm @ 15 psi	10.5 gpm @ 15 psi
rated betwee flow of freshare Brop	34 Lpm @ 102 kPa	39.7 Lpm @ 102 kPa
Total Hardness, Maximum	75 gpg (1,283 mg/L)	99 gpg (1,692 mg/L)
Total Iron, Maximum (dissolved)	5 ppm (5 mg/L)	5 ppm (5 mg/L)
Hardness to Iron Ratio, Minimum	8 gpg to 1 ppm	8 gpg to 1 ppm
111111111111111111111111111111111111111	140 mg/L to 1 mg/L	140 mg/L to 1 mg/L
Operating Pressure	20 - 125 psi (140 - 860 kPa)	20 - 125 psi (140 - 860 kPa)
Operating Temperature	33 - 120°F (1 - 50°C)	33 - 120°F (1 - 50°C)
Electrical Requirements	24V/60 Hz	24V/60 Hz
Electrical Power Consumption, Min./Max.		3 Watts/35 Watts
Drain Flow, Maximum ⁴	2.0 gpm (8 Lpm)	3.5 gpm (14 Lpm)
Recharge Time, Average ⁵	68 min.	57 min.
Recharge Water Consumption	43 gal. (162L)	83 gal. (314 L)
worming vinter Consumption	10 8m. (102L)	00 gui. (014 L)

¹ The efficiency rated dosage is only valid at the 4 lb. salt dosage for the 9" model and 6 lb. salt dosage for the 12" model.

² Measured from top of media to top surface of tank threads (backwashed and drained). 3 Measured from top of underbedding to top of inlet fitting.

⁴ Backwash at 120 psi (830 kPa).

^{5 10} minute backwash, 4 lb. (1.8 kg) 9" model or 6 lb. (2.7 kg) 12" model salt dosage at 30 psi (204 kPa).



Introduction

IT'S ALL SO EASY. SO ECONOMICAL. SO EFFICIENT. SO ENJOYABLE!

KIND TO SKIN AND COMPLEXION

Soft water will help prevent red, itchy or dry skin because there are no hardness impurities to cause soreness, no soap curd to coat the skin. Shaving is easier, smoother - either with blade or electric shaver.

BATHING AND SHOWERING

You'll use far less soap with conditioned water. Use your soap very sparingly - not as you did before soft water. Just a quick rinse removes all lather, leaving your skin pleasantly smooth and silky - because now it's free of sticky soap curd and film.

SAVES WASHING COSTS. HELPS CONTROL ENVIRONMENTAL POLLUTION

Soft water washes whiter and cleaner with less soap or detergent. Because the hardness impurities are removed, your soap can concentrate solely on washing. People usually find that they can reduce the amount of soap they use substantially. If you normally used a cup per wash load with hard water, try using only 1/3 cup depending on the size of your wash load and the degree of soil. Different amounts are required, but you can use less with softened water. An added bonus is the fact that your washable fabrics will last longer.

SUPER HAIR CONDITIONING

Soft water is great for scalp and hair care. No insoluble deposits are formed. Hair is shinier, softer, more manageable. Reduce the amount of shampoo you have normally used.

DISHES ARE A DELIGHT

Washed by hand or in a dishwasher, glassware, dishes and silver wash cleaner, easier. Follow your dishwasher manufacturer's instructions. Soft water promotes sanitation because no greasy hard water film can form to collect or harbor bacteria.

EASIER HOUSEKEEPING. GLEAMING FIXTURES

You'll be amazed at the marvelous difference. Just a swish of the cloth, and the bathtub or shower and fixtures are clean and sparkling. Imagine, no scouring! No hard water scum to cause rings, streaks, spots and stains. To keep their gleaming luster, simply wipe fixtures with a towel after use. Formica, tile, walls, floors, woodwork surfaces clean easier, stay clean longer. You'll save on cleaning aids and save on time.

SAVES WATER-HEATING ENERGY HELPS WATER-USING APPLIANCES

Soft water reduces the formation of rock-like hard water scale which encrusts water heaters, hot water pipes, shower heads, and water-using appliances. This scale can cause premature maintenance and failure.

Elimination of hard water also provides substantial energy savings because scale acts as an insulator, wasting electricity or gas used to heat water.



Introduction (cont.)

SAVINGS GALORE

A water conditioner is frequently referred to as "the appliance that pays for itself". You'll find that your savings on soaps, detergents, cleaning aids, and personal care products will help your family's household budget. And if you place a price on your time, you'll be most happy with the time saved by your new family servant.

WATER FOR LAWNS AND HOUSEHOLD PLANTS

If possible, lawn sprinkling faucets should be supplied with hard water primarily because it is uneconomical to soften so much water.

Household plants are much more sensitive than lawns with respect to the kind of water which is best. First, because they receive no rainfall and, second, there is little or no drainage of the soil. Preferably they should be watered with rainwater or water which is low in mineral content such as distilled or demineralized water. Softened water is not recommended for house plants because a build-up of sodium in the soil may interfere with efficient absorption of water by the plant root system. Additional information may be obtained from your independently operated Culligan dealer.



How Your Water Conditioner Works

Why Water Gets Hard And How It's Softened

All of the fresh water in the world originally falls as rain, snow, or sleet. Surface water is drawn upward by the sun, forming clouds. Then, nearly pure and soft as it starts to fall, it begins to collect impurities as it passes through smog and dust-laden atmosphere. And as it seeps through soil and rocks it gathers hardness, rust, acid, unpleasant tastes and odors.

Water hardness is caused primarily by limestone dissolved from the earth by rainwater. Because of this, in earlier times people who wanted soft water collected rainwater from roofs in rain barrels and cisterns before it picked up hardness from the earth.

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

Iron is a common water problem. The chemical/physical nature of iron found in natural water supplies is exhibited in four general types:

- Dissolved Iron Also called ferrous or "clear water" iron. This type of iron can be removed from the
 water by the same ion exchange principle that removes the hardness elements, calcium and
 magnesium. Dissolved iron is soluble in water and is detected by taking a sample of the water to be
 treated in a clear glass. The water in the glass is initially clear, but on standing exposed to the air, it may
 gradually turn cloudy or colored as it oxidizes.
- 2. Particulate Iron Also called ferric or colloidal iron. This type of iron is an undissolved particle of iron. A softener will remove larger particles, but they may not be washed out in regeneration effectively and will eventually foul the ion exchange resin. A filtering treatment will be required to remove this type of iron.
- 3. Organic Bound Iron This type of iron is strongly attached to an organic compound in the water. The ion exchange process alone cannot break this attachment and the softener will not remove this type of iron.
- 4. Bacterial Iron This type of iron is protected inside a bacteria cell. Like the organic bound iron, it is not removed by a water softener.

When using a softener to remove both hardness and dissolved iron it is important that it regenerates more frequently than ordinarily would be calculated for hardness removal alone. Although many factors and formulas have been used to determine this frequency, it is recommended that the softener be regenerated when it has reached 50 - 75% of the calculated hardness alone capacity. This will minimize the potential for bed fouling.

If you are operating a water softener on clear water iron, regular resin bed cleaning is needed to keep the be from coating with iron. Even when operating a softener on water with less than the maximum of dissolved iron, regular cleanings should be performed. Clean every six months or more often if iron appears in your conditioned water supply. Use resin bed cleaning compounds carefully following the directions on the container.

<u>A</u> CAUTION: Do not use where the water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.

Hardness sample kits are available through your local Culligan dealer.



The Culligan Process

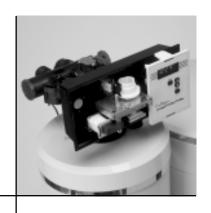
Your Culligan water conditioner consists of three basic components, (A) the Control Valve, (B) the Mineral Tank, and (C) the Brine System.

A. The exclusive Culligan control valve automatically performs a variety of tasks that are necessary for the proper operation of your water conditioner. These tasks, commonly referred to as cycles or operating positions, are:

SERVICE, REGENERATION, AND BRINE REFILL.

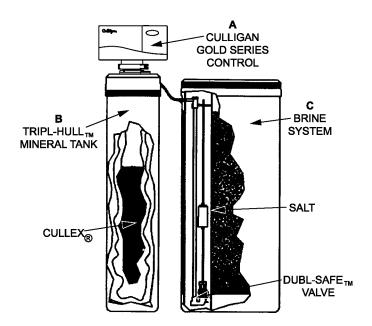
- 1. SERVICE: While the control valve is in the "Service cycle", hard water is directed down through the column of Cullex_® resin where hardness minerals are removed from the water. The softened water is then directed into your household plumbing lines. The ability of the Cullex resin to remove hardness minerals needs to be periodically replenished; this is referred to as . . .
- 2. REGENERATION: While the control valve is in the "Regeneration cycle", water is first directed up through the column of Cullex resin to flush accumulated sediment out of the resin and down the drain. Then, the regenerant brine solution is slowly drawn from the bottom of the salt storage tank of the Brine System and is directed down through the column of Cullex resin, restoring the ability of the resin to remove hardness minerals from your water supply. Once completed, the regeneration cycle is followed by . . .
- 3. BRINE REFILL: While the control valve is in the "Brine Refill cycle", a predetermined amount of water is directed to the salt storage tank of the Brine System so that additional salt can be dissolved to provide the brine solution that will be needed for the next regeneration cycle.
- B. The exclusive Tripl-Hull_™ Mineral Tank contains the Cullex resin column, Cullsan_® underbedding, and an outlet manifold. Note: The Mineral Tank of Aqua-Sensor_® models also contains a mineral sensor device that determines when the Cullex resin needs regeneration. The number of gallons of hard water that can be softened by the Cullex resin column before it needs regeneration is called the "capacity" of the resin column, and depends upon the amount of hardness minerals in each gallon of water (expressed as grains per gallon) and upon the amount of regenerant brine solution (expressed as pounds of salt) passed through the resin column during regeneration.

Your Culligan serviceperson, taking into account the hardness of your water and the amount of softened water your household may reasonably expect to use each day, has carefully established how often the softener will regenerate and how much salt will be used for each regeneration. This will ensure that all of your soft water needs will be fulfilled without using an excessive amount of salt.



C. The Brine System consists of a salt storage container and hydraulic Dubl-Safe $_{\text{m}}$ valve. The salt storage container holds the salt that is used to make the regenerant brine solution. The hydraulic Dubl-Safe valve limits the amount of water that is returned to the salt storage tank during the brine refill cycle.

Since a predetermined amount of salt is dissolved with each brine refill cycle, the salt must be periodically replenished in order to maintain efficient operation. Your Culligan serviceperson will be able to tell you about how often salt must be added to the salt storage container.





Familiarization

Display

As shipped from the factory, the display of the board will turn off if there has been no keyboard activity for a 1 minute period. To have the display constantly lit, press the STATUS button until the number 10 icon is lit. Next, press the UP arrow. A "d" for disable will appear in the display. To have the display blank again, press the UP arrow. An "E" will appear in the display.

Power Loss

The AccuSoft_® circuit board is equipped with a Hi-Cap Capacitor and EEPROM memory chip. The capacitor is capable of maintaining the time, for at least one day, in the event of a power outage. The EEPROM ensures that the individual programming parameters of your softener are not lost.

If the power outage lasts long enough to drain the Hi-Cap Capacitor, the control will flash "12:00 PM" when power is returned to the control. The unit will continue to keep time from the moment power is restored, and will initiate a full regeneration at the preset regeneration time. The time of day will need to be reset in order to return the regeneration to its preset time.

If you live in an area where power outages occur with a regular frequency, a battery backup option is available for ensuring that the time of day is properly maintained. Contact your Culligan Dealer for more information.

Meter Operation

For units equipped as a Soft-Minder_∞ meter, the gallons remaining can be viewed by pressing the STATUS button until the screen is blank. Press the "▼" key. The #12 icon will light and the gallons per minute flow rate will be displayed. Pushing the "▼" key until the number 15 icon is lit will display the gallons remaining before regeneration (multiply the displayed number by 10).

Regeneration

To initiate an immediate regeneration, press and hold the "REGEN" button for at least five seconds. The "REGEN" will light and blink. An immediate regeneration will also occur if a power outage has lasted for more than four hours and the Immediate Regeneration option is chosen. Ask your Culligan Dealer about this feature.

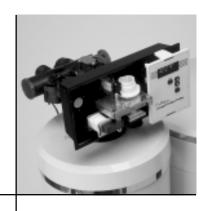
A regeneration at the Time of Regeneration will occur if so signaled by the Soft-Minder meter. The "REGEN" enunciator on the display will also be lit.



Service

The Culligan_® Gold Series water softener is equipped with a self diagnostic program to insure optimal operation of your water softener. Should service become necessary, a phone icon will appear in the display. If this condition occurs, call your local Culligan Dealer for assistance. The phone icon will be the only item displayed when service is required on the control.





Programming

The Culligan $_{\circledR}$ AccuSoft $_{\circledR}$ circuit board controls all of the softener functions. These settings are programmed at the time of installation. The following is a list of all the microprocessor functions, in the event that any of the settings need to be adjusted. If a small padlock icon appears in the lower right corner of the display, the microprocessor settings are locked and only the Time-of-Day setting can be adjusted, call your Culligan Dealer if setting changes are required.

1. With a flashing or blank display, pressing the status button twice will move to the Time-of-Day adjustment. A number "1" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease

2. Press status again, this displays the Time-of-Regeneration. A number "2" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease

3. Press status again, the number "3" will appear at the bottom of the display. This setting is not used.



4. Pressing status again will show the Salt Dosage. This can be adjusted from 3-15 lbs. for the 9" and 5-24 lbs. on 12" models. A number "4" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease

5. Press status again, this displays the Backwash Time. The setting can be adjusted between 5 and 40 minutes. A number "5" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease

6. Press status again to display the Brine/Rinse Time. The settings can be adjusted from 37-85 min for 9", and 35-89 min for 12". A number "6" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease



- 7. Press status again to display the **Hardness Level**. The setting can be adjusted from 2-99 gpg. **Meter Models Only.** A number "7" will appear at the bottom of the display while in this mode.
- 0,20
- Press ▲ to increase or ▼ to decrease
- 8. Press status again, for time clock models the display will show the **Regeneration Interval**. Controls with a Soft-Minder_® meter will display the **Gallons to Signal** (multiply the displayed value by 10). A number "8" will appear at the bottom of the display while in this mode.



Press ▲ to increase or ▼ to decrease

9. Press status again, the number "9" will appear at the bottom of the display. **This setting is not used**.



10. Pressing status again brings up the ability to **Enable/ Disable** the screen blanking. To have the display constantly lit, press the up arrow, a "d" for disable will appear in the display. Pressing the up arrow again displays an "E", signifying that display blanking is enabled. A number "10" will appear at the bottom of the display while in this mode.



Press **\(\Lambda \)** to change



Salt Supply, Usage and Service

Salt is the mineral used to "recharge" your water conditioner. A brine solution is automatically made up in the bottom of the salt storage container, the $Cullex_{\infty}$ resin beads in the mineral tank are flushed with the brine solution as a step in the recharging process.

Your Culligan Water Conditioner has been carefully designed to get the greatest amount of softening capacity from the salt it uses. Here is some pertinent information about salt usage, types and service.

Salt Economizer

This control is set at the time of installation, and determines salt usage according to the water hardness, number of persons in the household, and water usage.

What Kind of Salt is Best

All Culligan Water Conditioners are designed to use any water conditioner salt of good quality, including "rock", "pellet", "solar", or "evaporated" types.

All rock salt, regardless of source, contains insoluble material which collects at the bottom of the salt storage tank and requires periodic clean-out.

If purified salt products are used, the salt storage compartment will require less frequent cleanout, but you must check more frequently for "bridging".

Regardless of what type of salt is used, we recommend Culligan Brand Salt as suggested by your Culligan Dealer. He or she is the expert and can provide you with the best product for your Culligan Water Conditioner.

Automatic Salt Delivery Service

Ask your Culligan Dealer for details about salt delivery service. You can have your salt supply replenished on a regular basis. Whether you have automatic delivery service or pick up salt from your Culligan Dealer, you will be getting quality salt packaged according to rigid Culligan specifications. Using Culligan Brand Salt will help assure continued efficiency and trouble-free operation of your water conditioner.

SODIUM INFORMATION: "Water softeners using sodium chloride for regeneration add sodium to the water. Persons who are on sodium restricted diets should consider the added sodium as part of their overall sodium intake."



Care and Cleaning of Your Water Conditioner

Following these simple precautions will help assure continued trouble-free service and keep your Culligan Water Conditioner looking like new for years.

- Do not place heavy objects on top of the salt storage tank or timer cover.
- 2 Use only mild soap and warm water when cleaning the exterior of the conditioner. Never use harsh, abrasive cleaning compounds or those which contain acid, such as vinegar, bleach and similar products.
- Important: Protect your water conditioner and the entire drainline from freezing temperatures. DANGER: If your unit should freeze, do not attempt to disassemble it. Call your Culligan Dealer.
- Important: Culligan water softeners are sold for use on potable water, only. If at any time the water becomes contaminated, such as during a "boil water" situation, the operation of the water softener should be discontinued until it is verified that the water is again potable. To do this, push the red knob on the back of the water softener against the barrel of the bypass valve. Then, call your Culligan dealer to have your system sanitized before it is placed back into service.
- Should service, adjustment or trouble-shooting information be needed which is not covered in the Use and Care Guide, call your Culligan Dealer.

Note: Following the manufacturer's instructions regarding operation, maintenance and replacement requirements, including replacement of filters if applicable, is essential for Culligan's products to perform as advertised.

If you have further questions, please call your local independently operated Culligan dealer. He or she will be glad to be of assistance to you.



To Clean Out the Salt Storage Tank

A periodic clean-out of the Salt Storage Tank is necessary to keep your Culligan Water Conditioner at peak operating efficiency. Do it at least every 2 years when the salt supply is low. Follow these step-by-step procedures:

Tools needed:

- Scoop
- Clean, bucket-size container
- Phillips-head screwdriver
- Garden hose
- Household scrub brush or sponge
- 1. Remove the salt storage tank cover and the cap from the brine valve chamber.
- 2. Lift the brine valve out of the brine valve chamber and set aside in an upright position.
- 3. If you'd like to save any clean, dry salt remaining in the tank, remove it and place it in a clean container.
- 4. Using the scoop, dig out and discard as much remaining salt, water and debris as possible.
- 5. Remove the brine valve chamber by removing the screws on either side of the salt tank.
- 6. Remove the salt plate at the bottom of the brine tank.
- 7. Lay the salt tank on its side and direct a brisk stream of water from your garden hose to its inside to rinse out all residue.
- 8. Using a household scrub brush and a mild soapy solution, clean the salt plate. This will complete the tank cleaning.
- 9. Stand salt tank upright. Replace the salt plate. Place brine valve chamber in position and affix with screws.
- 10. Insert the brine valve into the chamber and replace brine valve chamber cap.
- 11. Fill the salt storage tank with 4 to 6 inches of water.
- 12. Fill the tank with salt to within a few inches of the top.
- 13. Replace salt storage tank cover.



Things to Check Before You Call For Service

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

IMPORTANT

If any of the following conditions is found, the water conditioner should be manually recharged according to instructions on page 9 after you have corrected the problem.

POWER SUPPLY

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

BLOWN FUSE

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

POWER FAILURE

Any interruption in your power supply or time changes - such as daylight savings - will disrupt your conditioner's recharge schedule by causing the timer to run off-schedule. Reset timer to proper time of day.

BYPASS VALVES

Check to see if they are in the proper position. Cul-Flo-Valv_® Bypass, if used, should be in the "Push for Service" position. 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., all will result in more water usage and will require more capacity from your conditioner. You can reprogram your recharging schedule by following the directions on pages 9 and 10. Call your Culligan dealer for advice and save a service call.

SALT SUPPLY

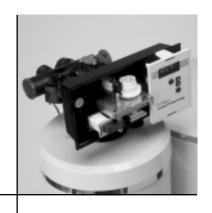
Check it. Refill if necessary and wait approximately 4 hours for salt to dissolve before initiating a recharge cycle.

SALT BRIDGING

Salt bridging occurs when a space is formed between the salt and the water underneath, preventing the salt from dissolving to make brine. No brine, no soft conditioned water!

High humidity and/or use of some brands of purified salt products may cause a salt bridge to form.

The best way to check and eliminate a salt bridging problem is to take a broom handle or similar instrument and make a mark 34 inches from the end. Then carefully begin to probe down through the salt with



the instrument. Should an obstruction be found before the mark on your instrument reaches the rim of the salt storage tank, a salt bridge is likely to have formed. Continue to probe and break the salt bridge completely. Caution! Do not force the implement past the mark as damage to the horizontal salt plate may occur.

When and How to Bypass Your Water Conditioner

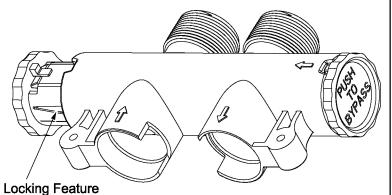
Normally, all water except outside lines passes through the water conditioner. There are times when the water conditioner should be bypassed, using the push-button Cul-Flo-Valv_® Bypass, or a 3-way bypass valve. You should bypass:

- 1. If lines to outside faucets do not bypass the water conditioner, and you do not want to waste soft water on lawn sprinkling or other outside uses.
- 2. If you are going away on vacation and want to save salt by not having the unit recharge while you're away.

PUSH-BUTTON BYPASS

In the back of Culligan water conditioners is a push-button Cul-Flo-Valv Bypass. To bypass unit, simply push the red knob (marked "Push to Bypass") against the bypass valve body. To return to soft water service, reverse the procedure - push the blue knob (marked "Push for Service") against the bypass valve body.

The service knob (blue) has a locking feature, which must be depressed in order to shift.





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.

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

MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series, 9" Water Softener

TESTING CONDITIONS & RESULTS:

Flow Rate: 9.0 gpm Capacity: 18,200 grains @ 4.0 lb. salt Pressure: 30 - 40 psi 27,300 grains @ 8.0 lb. salt Acidity: Non-Corrosive 30,900 grains @ 12.0 lb. salt

Temperature: 68° (20°C) pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 9.0 gpm (34 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 2.0 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)

The Culligan Gold Series water softeners are tested and validated by WQA against ANSI/NSF Standard 44 for the effective reduction of calcium and magnesium (hardness).

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide 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 Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE: This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.





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.

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

MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series_™ 9" Water Softener with Soft-Minder_® Meter

TESTING CONDITIONS & RESULTS:

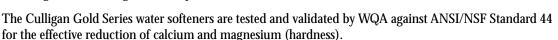
Flow Rate: 9.0 gpm Capacity: 18,200 grains @ 4.0 lb. salt
Pressure: 30 - 40 psi 27,300 grains @ 8.0 lb. salt
Acidity: Non-Corrosive 30,900 grains @ 12.0 lb. salt
Temperature: 68° (20°C) Efficiency Rated Dosage†: 4,550 gr/lb

pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 9.0 gpm (34 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 1.2 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)



This softener is efficiency rated, it has a Demand Initiated Regeneration (D.I.R.) feature which complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in their operation. The softener has a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt used (based on NaCl equavalency), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in ANSI/NSF Standard 44. This test represents the maximum possible efficiency that the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. Operational efficiency is typically less than the efficiency due to individual application factors including water hardness, water usage, and other contaminants that reduce the softener's capacity.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide 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.*

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MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series_™ 9" Water Softener with Aqua-Sensor_® Sensing Device

TESTING CONDITIONS & RESULTS:

Flow Rate: 9.0 gpm Capacity: 18,200 grains @ 4.0 lb. salt
Pressure: 30 - 40 psi 27,300 grains @ 8.0 lb. salt
Acidity: Non-Corrosive 30,900 grains @ 12.0 lb. salt
Temperature: 68° (20°C) Efficiency Rated Dosage†: 4,550 gr/lb

pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 9.0 gpm (34 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 2.0 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)

The Culligan Gold Series water softeners are tested and validated by WQA against ANSI/NSF Standard 44 for the effective reduction of calcium and magnesium (hardness).

This softener is efficiency rated, it has a Demand Initiated Regeneration (D.I.R.) feature which complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in their operation. The softener has a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt used (based on NaCl equavalency), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in ANSI/NSF Standard 44. This test represents the maximum possible efficiency that the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. Operational efficiency is typically less than the efficiency due to individual application factors including water hardness, water usage, and other contaminants that reduce the softener's capacity.

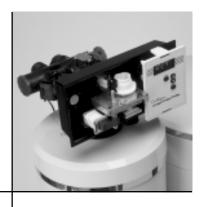
Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. *Performance will vary based on local 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 Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE: This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

† The efficiency rated dosage is only valid at the 4 lb salt dosage for 9" models.





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.

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

MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series_™ 12" Water Softener

TESTING CONDITIONS & RESULTS:

Flow Rate: 10.5 gpm Capacity: 26,900 grains @ 6.0 lb. salt Pressure: 30 - 40 psi 39,600 grains @ 12.0 lb. salt Acidity: Non-Corrosive 45,400 grains @ 18.0 lb. salt

Temperature: 68° (20°C) pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 10.5 gpm (40 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 2.0 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)

The Culligan Gold Series water softeners are tested and validated by WQA against ANSI/NSF Standard 44 for the effective reduction of calcium and magnesium (hardness).

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide 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 Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE: This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.





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

MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series_™ 12" Water Softener with Soft-Minder_® Meter

TESTING CONDITIONS & RESULTS:

Flow Rate: 10.5 gpm

Capacity: 26,900 grains @ 6.0 lb. salt

Pressure: 30 - 40 psi

Acidity: Non-Corrosive

Temperature: 68° (20°C)

Capacity: 26,900 grains @ 6.0 lb. salt

39,600 grains @ 12.0 lb. salt

45,400 grains @ 18.0 lb. salt

Efficiency Rated Dosage†: 4,490 gr/lb

pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 10.5 gpm (40 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 2.0 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)

OA against ANCL/NCE Standard 44

Water Quality

The Culligan Gold Series water softeners are tested and validated by WQA against ANSI/NSF Standard 44 for the effective reduction of calcium and magnesium (hardness).

This softener is efficiency rated, it has a Demand Initiated Regeneration (D.I.R.) feature which complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in their operation. The softener has a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt used (based on NaCl equavalency), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in ANSI/NSF Standard 44. This test represents the maximum possible efficiency that the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. Operational efficiency is typically less than the efficiency due to individual application factors including water hardness, water usage, and other contaminants that reduce the softener's capacity.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide 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.*

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† The efficiency rated dosage is only valid at the 6 lb salt dosage for 12" models.



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

MANUFACTURER: Culligan International Company,

One Culligan Parkway, Northbrook, IL 60062-6209 USA

(847) 205-6000

PRODUCT: Culligan Gold Series, 12" Water Softener with Aqua-Sensor, Sensing Device

TESTING CONDITIONS & RESULTS:

Flow Rate: 10.5 gpm Capacity: 26,900 grains @ 6.0 lb. salt
Pressure: 30 - 40 psi 39,600 grains @ 12.0 lb. salt
Acidity: Non-Corrosive 45,400 grains @ 18.0 lb. salt
Temperature: 68° (20°C) Efficiency Rated Dosage†: 4,490 gr/lb

pH: 7.6

SOFTENER SPECIFICATIONS:

Maximum Flow Rate: 10.5 gpm (40 Lpm)

Pressure Drop at Maximum Flow Rate: 15 psi (102 kPa) Operating Temperature Range: 33 - 120°F (1 - 50°C) Maximum Drain Flow Rate: 2.0 gpm (8 Lpm) Working Pressure Range: 20 - 120 psi (140 - 860 kPa)

The Culligan Gold Series water softeners are tested and validated by WQA against ANSI/NSF Standard 44 for the effective reduction of calcium and magnesium (hardness).

This softener is efficiency rated, it has a Demand Initiated Regeneration (D.I.R.) feature which complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in their operation. The softener has a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt used (based on NaCl equavalency), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in ANSI/NSF Standard 44. This test represents the maximum possible efficiency that the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. Operational efficiency is typically less than the efficiency due to individual application factors including water hardness, water usage, and other contaminants that reduce the softener's capacity.

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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						
Control Model No.	Control Serial No						
Date of Installation	Tank Serial No.						
SETTINGS							
Salt Setting lbs.							
Time of Recharge: a.m p.m.							
Upon Demand (Aqua-Sensor _® models)							
Regeneration Interval	days (Time clock models)						
Gallons to signal gallon	ns (Soft-Minder _® models)						
Number of people in household							
WATER ANALYSIS							
Total Hardness (gpg) To	otal Iron (ppm) pH (acidity)						



Culligan Limited Warranty

CULLIGAN GOLD SERIES™ AUTOMATIC WATER 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

The entire conditioner
For a period of FIVE YEARS

The control valve timer

The AccuSoft circuit board, or Soft-Minder meter,

if so equipped

For a period of TEN YEARS The control valve body, excluding internal parts

The salt storage container, brine valve and all its

component parts

For the LIFETIME of the Tripl-Hull_™ conditioner tank including all internal

original consumer purchaser components and the Cullex resin

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 printed 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 conditioning 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.

CULLIGAN INTERNATIONAL COMPANY
One Culligan Parkway
Northbrook, Illinois 60062



With Culligan You Get More Than a Quality Product

You Get Your Water Expert, The Culligan Man

We're here to provide you with fast, dependable service, making sure any problems you have are taken care of. The Culligan Man has been around for over sixty years, delivery dependable service all along. That's why people say "Hey, Culligan Man!," Because we're the water experts. And that's who you want taking care of your water.

The Culligan Promise

At Culligan, we understand that a water quality improvement system is an investment in your family's well-being. That's why our 1,350 independently operated dealers worldwide don't just sell products; they sell water quality you can count on. We stand behind our products with written limited warranties and our unequaled Culligan service. No matter where you live, you can depend on Culligan expertise to work for you — today and tomorrow.



Materials & description: 8-1/2 x 11, 28 page book, saddle stitched, three hole punched - Prints black ink on 50# offset white

LET	CHANGE	BY	APRVD	DATE
Α	DCO 2117	TPD	MW	3/6/01

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