# Culligan®

Culligan®
Gold Series™
Automatic
Water Softener
Owners Guide



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#### **Contents**

Performance Data
Sheets are included in
this manual for various
Culligan Gold Series™
Softener models. Refer
to the Performance
Data Sheet for your
specific softener,
as there are slight
differences between
the models. The
softener warranty is
located on page 37
of this Owner's Guide.



# About this Manual

#### **Read this Manual First**

Before you operate the Gold Series Water Softening System, read this manual to become familiar with the device and its capabilities.

NOTE:

This system must be supplied with COLD WATER only.

#### Watch for Special Paragraphs

Please read the special paragraphs in this manual. Examples are shown below.

#### **Safe Practices**

Throughout this manual there are paragraphs set off by special headings.

Notice (or Note) is used to emphasize installation, operation or maintenance information which is important, but does not present any hazard. Examples:

NOTE:

Check and comply with your state and local codes. You must follow these guidelines. For installations in Massachusetts, Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of this system. This system and its installation must comply with state and local regulations. The use of saddle valves is not permitted.

NOTICE The nipple must extend no more than 1 inch above the cover plate.

Caution is used when failure to follow directions could result in damage to equipment or property. Example:



CAUTION! Disassembly while under water pressure can result in flooding.

Warning is used to indicate a hazard which could cause injury or death if ignored. Example:



WARNING! Electrical shock hazard!

Unplug the unit before removing the timer mechanism or cover plates!

#### **Serial Numbers**

The control valve serial number is located on the back of the electrical enclosure.

The media tank serial number is located on the top surface of the tank.

This publication is based on information available when approved for printing. Continuing design refinement could cause changes that may not be included in this publication.

NOTE: DO NOT remove or destroy the serial number.

It must be referenced on request for warranty repair or replacement.

Products manufactured and marked 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, Aqua-Sensor, Tripl-Hull, Flo-Pak and Soft-Minder are trademarks of Culligan International Company or its affiliates.



#### Thank You

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

The Culligan Gold Series™ Water Softeners with Soft-Minder® Meter and Aqua- Sensor® sensing device are tested and certified by WQA against NSF/ANSI 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium and radium 226/228 as verified and substantiated by test data.

The Culligan Gold Series™ Water Softeners with Soft-Minder® Meter and Aqua- Sensor® sensing device are tested and certified by WQA against NSF/ ANSI Standard 61 for material requirements.

The Culligan Gold Series™ Water Softeners with Soft-Minder® Meter and Aqua- Sensor® sensing device are certified by IAPMO R&T against NSF/ ANSI 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium and radium 226/228 as verified and substantiated by test data.

The Culligan Gold Series™ Water Softeners with Soft-Minder® Meter and Aqua- Sensor® sensing device are certified by IAPMO R&T against NSF/ ANSI Standard 61 for material requirements.

The Culligan Gold Series is also registered with the State of California and the State of Iowa.

For installations in Massachusetts, the Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of this system. This system and its installation must comply with state and local regulations. The use of saddle valves is not permitted.

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 softeners 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.

**NOTICE** 

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.

#### **Attention Culligan Customer:**

The installation, service and maintenance of this equipment should be rendered by a qualified and trained service technician. Your local independently operated Culligan dealer employs trained service and maintenance personnel who are experienced in the installation, function and repair of Culligan equipment. This publication is written specifically for these individuals and is intended for their use.

We encourage Culligan users to learn about Culligan products, but we believe that product knowledge is best obtained by consulting with your Culligan dealer. Untrained individuals who use this manual assume the risk of any resulting property damage or personal injury.



# **Specifications**

Culligan Gold Series™ Water Softeners with Aqua-Sensor® Device or Soft-Minder® Meter

Model	9" Model	10" Model	12" Model	14" Model
Control Valve	1" 5-cycle Reinforced Thermoplastic	1" 5-cycle Reinforced Thermoplastic	1" 5-cycle Reinforced Thermoplastic	1" 5-cycle Reinforced Thermoplastic
Overall Softener Height	54 in	60 in	58 in	71 in
Media Tank Design	Quadra-Hull	Quadra-Hull	Quadra-Hull	Quadra-Hull
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	16 x 43 in	18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex <sup>®</sup> Media, 1.0 ft <sup>3</sup>	Cullex Media, 1.5 ft <sup>3</sup>	Cullex Media, 2.0 ft <sup>3</sup>	Cullex Media, 3.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan <sup>®</sup> Underbedding, 12 lb	Cullsan Underbedding, 15 lb	Cullsan Underbedding, 16 lb	Cullsan Underbedding, 25 lb
Exchange Capacity @ Salt Dosage Per Recharge	19,086 gr @ 4.0 lb	28,629 gr @ 6.0 lb	35,614 gr @ 8.0 lb	53,540 gr @ 12.0 lb
	26,301 gr @ 8.0 lb	39,451 gr @ 12.0 lb	50,189 gr @ 16.0 lb	77,660 gr @ 24.0 lb
	30,787 gr @ 12.0 lb	46,180 gr @ 18.0 lb	60,384 gr @ 24.0 lb	90,986 gr @ 36.0 lb
Efficiency at rated salt dosage <sup>1, 6</sup>	4,770 gr/lb @ 4 lb salt dosage	4,770 gr/lb @ 6 lb salt dosage	4,450 gr/lb @ 8 lb salt dosage	4,460 gr/lb @ 12 lb salt dosage
Freeboard to Media <sup>2</sup>	14.5 in	14.5 in	20 in	25 in
Freeboard to Underbedding <sup>3</sup>	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity	250 lb or 375 lb	375 lb	375 lb	600 lb
Rated Service Flow@Pressure Drop	9.0 gpm @ 14 psi	9.5 gpm @ 15 psi	10.0 gpm @ 11 psi	10.6 gpm @11 psi
Auxiliary Service Flow @ Pressure Drop	9.0 gpm @ 14 psi	9.5 gpm @ 15 psi	10.0 gpm @ 11 psi	10.6 gpm @ 11 psi
Total Hardness, Maximum	75 gpg	99 gpg	99 gpg	99 gpg
Total Iron, Maximum	5 ppm	5 ppm	5 ppm	5 ppm
Hardness to Iron Ratio, Min.	8 gpg to 1 ppm	8 gpg to 1 ppm	8 gpg to 1 ppm	8 gpg to 1 ppm
Operating Pressure	20-125 psi	20-125 psi	20-125 psi	20-125 psi
Operating Pressure (Canada)	20-90 psi	20-90 psi	20-90 psi	20-90 psi
Operating Temperature	33-120°F	33-120°F	33-120°F	33-120°F
Electrical Requirements	24V/60 Hz	24V/60 Hz	24V/60 Hz	24V/60 Hz
Electrical Power Consumption, Min/Max	3 Watts/ 35 Watts	3 Watts/ 35 Watts	3 Watts/ 35 Watts	3 Watts/ 35 Watts
Drain Flow, Maximum <sup>4</sup>	1.6 gpm	1.6 gpm	2.6 gpm	6.6 gpm
Recharge Time, Average⁵	68 min	57 min	52 min	66 min
Recharge Water Consumption, Average⁵	35 gal	46 gal	51 gal	176 gal

<sup>1</sup> The efficiency rated dosage is only valid at the 4 lb. salt dosage for the 9" model, 6 lb. salt dosage for the 10" model, 7 lb. salt dosage for 12" model and 12 lb. salt dosage for 14" model and is efficiency rated according to NSF/ANSI Standard 44.

<sup>2</sup> 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).

<sup>5 10</sup> minute backwash, 4 lb. (1.8 kg) 9" model, 6 lb. (2.7 kg) 10" model, 7 lb. 12" model or 12 lb. 14" model salt dosage at 30 psi (204 kPa).



# 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 a 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 use a cup per wash load with hard water, try using 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 that 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.

#### Water For Lawns And Household Plants

If possible, lawn sprinkling faucets should be supplied with hard water primarily because it is not economical 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.

#### **Culligan Total Home**

With the Culligan Total Home you will experience the above benefits in addition to the reduction of chlorine taste and odor for a fresh, clean taste and smell.

#### Introduction



# How Your Water Softener 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:

- 1. **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.
- 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. (Iron removal claims have not been verified by the Water Quality Association.)

If you are operating a water softener on clear water iron, regular resin bed cleaning is needed to keep the bed 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.

NOTICE

Do not use where the water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.



Component **Description** 

The water softener is shipped from the factory in a minimum of three cartons. Remove all components from their cartons and inspect them before starting installation.

Control Valve Assembly - Includes the regeneration control valve and the Accusoft® Plus circuit board. Small parts packages will contain additional installation hardware, and the Softener Owner's Guide.

Media Tank - Includes Quadra-Hull™ media tank complete with Cullex® ion exchange resin, underbedding and outlet manifold (12" and 14" tanks are shipped without media).

Salt Storage Tank Assembly - Includes salt storage container with support plate and Dubl-Safe™ brine refill valve and chamber.

Bypass Valve - Includes the molded bypass valve, the interconnecting couplings, and the assembly pins.

#### Refer to Figure 1 for system placement.

- Set the media tank on a solid, level surface near water, drain and electrical facilities.
- Set the brine system on a flat, smooth, solid surface as near the media tank as possible.

#### Tank Assembly

- 9" and 10" tanks are filled with media at the factory.
- Before the unit can be connected to the plumbing the manifold must be inserted and media loaded into the tank for 12" and 14" units.



**CAUTION!** Do not lay the tank down unless a suitable lifting device is available. Personal injury and damage to the unit can result if dropped.

#### Position the Mineral Tank(s)

Determine the location for the mineral tanks(s) prior to loading, since they will be difficult to move after the underbedding and gravel are loaded.

#### NOTE:

#### Air gap = 2x pipe diameter or 1 inch diameter, whichever is larger.

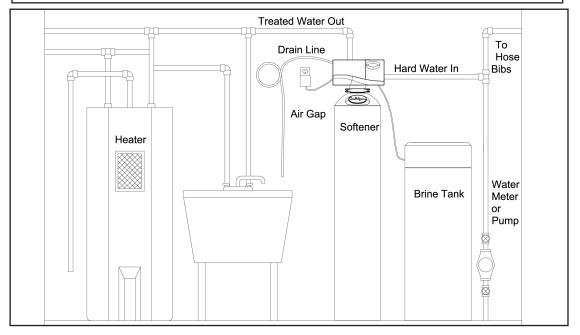


Figure 1. Positioning the Tank



# The Culligan **Process**

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

- The exclusive Culligan control valve automatically performs a variety of tasks that are necessary for the proper operation of your water softener. These tasks, commonly referred to as cycles or operating positions, are Service, Regeneration, and Brine Refill.
  - 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 Regeneration.



Figure 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 Brine Refill.
- 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.
- The Mineral Tank contains the Cullex resin column, Cullsan® underbedding, and an outlet manifold (the Culligan Total Home also includes carbon media for chlorine taste & odor reduction). 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 service person, 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.

The Brine System consists of a salt storage container and hydraulic Dubl-Safe™ 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 service person will be able to tell you about how often salt must be added to the salt storage container.



# Modes of Operation

#### **Water Meter Mode**

In water meter mode, the controller keeps track of the quantity of water that has flowed through the resin bed. Based on the influent water hardness and the hardness capacity of the resin bed, a service life expectancy in the quantity of softened water is calculated and programmed into the control. When the set point is reached, regeneration is triggered. In delay regeneration mode, if the predict mode is turned on, the average daily water usage will be compared to the remaining capacity at the regeneration delay time to predict if another day's water usage can occur before requiring regeneration. If enough capacity is not present then the regeneration will occur at that time. If the predict mode is not selected the regeneration will start at time of regeneration. In immediate mode the regeneration starts when the capacity is exhausted. If time clock backup is set and the capacity has not been exhausted but the days since last regen is greater than time clock backup, setting the softener will immediately regenerate.

#### Aqua-Sensor® Mode

The Aqua-Sensor is a conductivity probe that senses when a hardness front passes through the resin bed. It functions independently of the influent water hardness so therefore, is useful in conditions when the influent water hardness varies throughout the year. It provides for the most efficient mode of operation. In addition to sensing when a resin bed is exhausted, it can also be used to determine when the brine solution is rinsed from the resin bed during the Brine Draw/Slow Rinse cycle triggering the control to move to fast rinse. This patented feature provides water savings by optimizing the amount of rinse water required to completely rinse out the resin bed.

#### **Manual Regeneration**

Pressing and holding the regen button for 5 seconds will initiate an immediate regeneration. The beeper will give one beep at the start of manual regeneration (when the motor starts to turn). In delay mode, pressing and releasing the regen button will light the regen icon for regeneration to occur at the set delay time. Pressing and releasing the regen button again will turn off the regen icon.

#### **Predict Mode**

The Predict Mode is used with the flow meter to determine the optimum regeneration point. Before the regeneration starts, the control will compare the remaining capacity value with the average daily water use. If the average daily water usage is less than the reserve capacity, the controller will wait 24 more hours before regeneration. If the reserve capacity is less than the average daily water usage, the control will initiate regeneration. This works in delay mode only. At any time, if the total capacity value is reached, the control will initiate an immediate regeneration.

#### **Efficiency Mode**

Water softeners historically use an optimum time range to control the Regeneration cycle steps, with a minimum and maximum time required to perform each step dependent on the salt being used, the hardness total and iron level. Culligan typically uses the maximum time range to insure effective Regeneration. However, if the iron content of the water to be softened is zero, and the hardness level is less than 20 gpg, Culligan has developed a new set of regeneration times geared to reducing salt and water usage. These times are defined under a new operating mode coined "Efficiency Mode". Compared to the present time values used, these new regeneration times and salt dosages are considerably less.



# Salt Supply, Usage and Service

Salt is the mineral used to "recharge" your water softener. A brine solution is automatically made up in the bottom of the salt storage container, the Cullex® resin beads in the mineral tank are flushed with the brine solution as a step in the recharging process.

Your Culligan Water Softener 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 Softeners are designed to use any water softener 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 clean-out, 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 Softener.

#### **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 softener.

The modern allows for the system to be remotely monitored, detecting problems before they occur, to schedule salt delivery when it is needed and to keep the system software up to date with the latest advances.

#### **NOTICE**

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** Softener

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

- 1. Do not place heavy objects on top of the salt storage tank or timer cover.
- Use only mild soap and warm water when cleaning the exterior of the softener. Never use harsh, abrasive cleaning compounds or those which contain acid, such as vinegar, bleach and similar products.
- 3. Important: Protect your water softener and the entire drainline from freezing temperatures.



#### WARNING! 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" advisory, the operation of the water softener should be discontinued until it is verified that the water is again potable. To do this, turn the blue knob in a clockwise position, 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.

For parts and service availability please call your local independently operated Culligan dealer. For your nearest Culligan dealer, call 877-386-0823.

#### Recommended Preventative Maintenance Inspection Schedule

The Culligan High Efficiency household water softener has been designed to provide a good, consistent service life. Routinely inspecting the system may help avoid potentially costly breakdowns related to circumstances outside of the control of the dealer and/or user.

Component	Suggested Inspection Frequency	Reason for Maintenance
Entire System	At Start-up, after infrequent use (idle for one week or more) or every 3–6 months.	On private supplies, the appearance of off-tastes and odors, particularly if musty or "rotten egg" (caused by harmless sulfate-reducing bacteria) may indicate a need for the system to be sanitized. See page 48.
Backwash Flow Controller	Every 12 months or every time service is performed on the system.	Build up of sediment, iron and/or other foreign materials (found in some water supplies but not necessarily all) could negatively affect system performance. Monitor item for normal or unexpected wear.
Brine eductor nozzle and throat	Every 12 months or every time service is performed on the system.	Build up of sediment, iron and/or other foreign materials (found in some water supplies but not necessarily all) could negatively affect system performance. Monitor item for normal or unexpected wear.
Softening Media (Cullex)	Every 2–3 years	Chlorinated water supplies can breakdown and destroy resin material. Resin material may also perform poorly if subjected to other materials (sediment, iron, alum, etc.) found in some water supplies (but not necessarily all).



# Cleaning Out the Salt Storage Tank

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

#### **Tools Needed**

- Scoop
- · Clean, bucket-size container
- · Garden hose
- · Household scrub brush or sponge

#### **Procedure**

- 1. Remove the salt storage tank cover and the cap from the brine valve chamber.
- Disconnect the brine line from the brine valve by holding the outer ring of the push fitting; push the tubing in slightly before pulling it out.
- 3. Lift the brine valve out of the brine valve chamber and set aside in an upright position.
- 4. If you'd like to save any clean, dry salt remaining in the tank, remove it and place it in a clean container.
- 5. Using the scoop, dig out and discard as much remaining salt, water and debris as possible.
- 6. Remove the brine valve chamber by removing the screws on either side of the salt tank.
- 7. Remove the salt plate at the bottom of the brine tank.
- 8. 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.
- 9. Using a household scrub brush and a mild soapy solution, clean the salt plate. This will complete the tank cleaning.
- 10. Insert the brine valve into the chamber and replace brine valve chamber cap. (Re-insert the brine valve into the chamber, re-insert the brine line fully, 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. Insert Brine Line into Brine Valve. Verify brine line fully seated and tight in valve.
- 14. Replace salt storage tank cover.

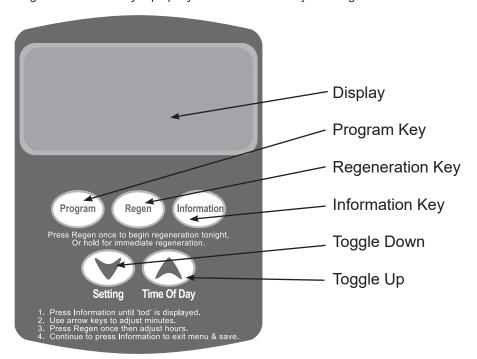


#### **Power Loss Programming**

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.



Display	Back lit LCD display.
Program Key	Depress to enter and move through the programming steps.
Regeneration	Press and hold the key for three (3) seconds to initiate an immediate regeneration.
Key	When pressed during programming the time of day, this key will allow the user to toggle between the hours and minutes setting of timing program segments.
Information Key	Each time depressed, the Information key will display statistical information such a flow rate, time of day. Use with the Toggle Down key to display other statistical information.
Toggle Down Key	In the programming mode this key will move the user through the programming function in a descending mode. If depressed for greater than three seconds, the rate at which the display scrolls through data will increase.
Toggle Up Key	In the programming mode this key will move the user through the programming function in an ascending mode. If depressed for greater than three seconds, the rate at which the display scrolls through the data will increase.
	This key will also allow the user to manually step through the cycles of regeneration.



# Regeneration

#### Regeneration

There are several conditions that will cause the control to trip a regeneration.

The "REGEN" enunciator will light when the control has signaled for a regeneration.

The "REGEN" enunciator will flash while the control is in regeneration.

The following are conditions that will call for regeneration:

- 1. When the Soft-Minder® meter has recorded the passage of a predetermined number of gallons.
- When the Agua-Sensor® Probe senses the hardness in the Cullex Media.
- At the preset time, when the number of days without a regeneration is equal to the Time Clock Backup setting.
- At the preset time, when the "REGEN" button is depressed once. "REGEN" will light.
- Immediately, when the "REGEN" button is depressed for three seconds. "REGEN" will light and blink.
- 6. Immediately, if power to the unit has been off for more than 3 hours and time of day has been restored.



**Error Codes** 

The Accusoft Plus microprocessor is equipped with an advanced error detection system. During all operating modes the softener's electronics are performing self-diagnostics to ensure that the unit is operating correctly. There may be times, however, when something may occur that could cause the unit to improperly operate. In those instances the microprocessor will identify the exact problem and alert the user with an error code. Shown below is a description of the error codes.

Display	Alert Code Description	Mode of Detection	Comments
ERR 1	Motor Failure to Start	If the valve fails to reach the desired state within 70 seconds of driving the motor. The control will attempt to start the motor 3 times for 70 seconds each time with a 60 second off period between each attempt.	Press and hold 'Program' key for 10 seconds.
ERR 2	Motor Failure to Stop	If the control detects changes in the Cam inputs when the motor is not supposed to be turning.	Press and hold 'Program' key for 10 seconds.
ERR 3	Incorrect Cycle Position	The control expects to be in a different position than that indicated by the Cam switch closures.	Press and hold 'Program' key for 10 seconds.
ERR 4	Control type does not match.	-If dips# 3 & 4 are set for 'Gold' and 4-cycle valve is detected.  -If dips# 3 & 4 are set for 'Gold' or 'Europe' and 5-cycle valve is detected.	Press and hold 'Program' key for 10 seconds.
CHECK SALT	A/S mode; control detected no brine during brine rinse cycle.	A very distinct signal is expected from the probe during brine rinse; lack of this signal means no brine was detected.	Once this alert is triggered, the A/S is no longer a valid regen trigger. The alert can only be cleared after a successful regeneration of the resin bed.

Beeping only occurs between the hours of 8:00 am and 8:00 pm. Beeping can be silenced by pressing any key.

To reset an error, press and hold for 10 seconds the 'Program' button. The unit will beep and check to see if indeed the error has been fixed. If the error was not fixed, the board will re-display the error code. If the error code does not reset please contact your local Culligan Dealer.



# When and How to Bypass Your **Water Softener**

Normally, all water except outside lines passes through the water softener. There are times when the water softener should be bypassed, using the Cul-Flo-Valv® Bypass, or a three-way bypass valve. You should bypass:

- 1. If lines to outside faucets do not bypass the water softener, and you do not want to waste softened water on lawn sprinkling or other outside uses.
- If you are going away on vacation and do not want the unit to recharge.

#### **Bypass Valve**

In the back of Culligan water softener is a Cul-Flo-Valv® Bypass valve. To bypass the unit, turn the blue knob clockwise. To return to softened water service, turn the blue knob counter-clockwise.

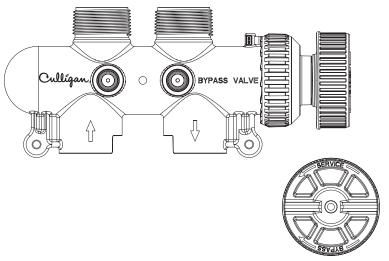


Figure 3. Bypass valve.

#### **Bypassed**

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

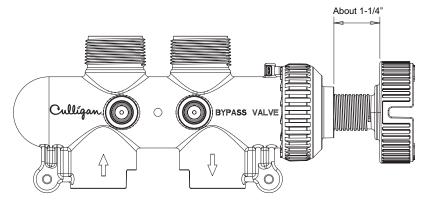


Figure 4. Service valve.

#### **Softened Water**

To return to SERVICE, turn the blue knob counter-clockwise (see directional arrow on end of knob) until the knob stops as shown in Figure 2. DO NOT OVERTIGHTEN!



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.

If any of the following conditions is found, the water softener should be manually recharged 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 the softener 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 softener'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<sup>®</sup> Bypass, if used, should be in the "Push service" position (see page 42). 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 softener (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 softener. You can reprogram your recharging schedule by following the directions on page 15. 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

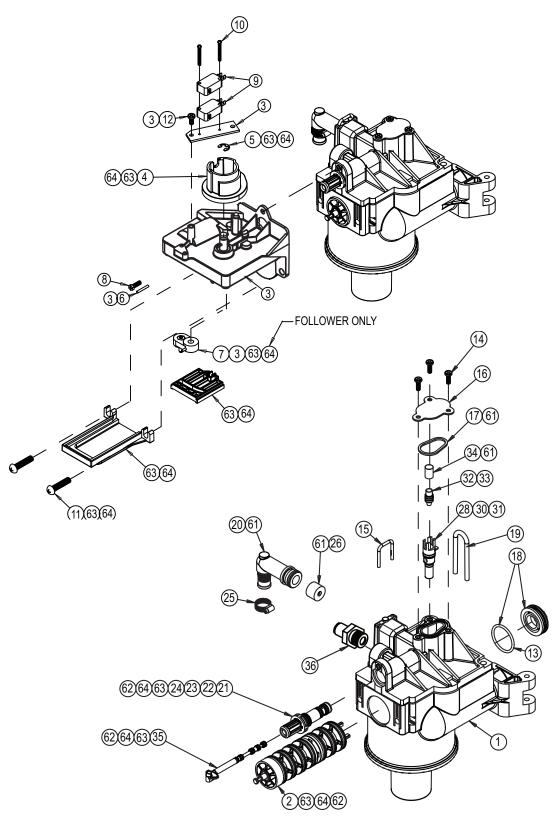
Salt bridging occurs when a space is formed between the salt and the water underneath, preventing the salt from dissolving to make brine. No brine, no soft conditioned water!

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.

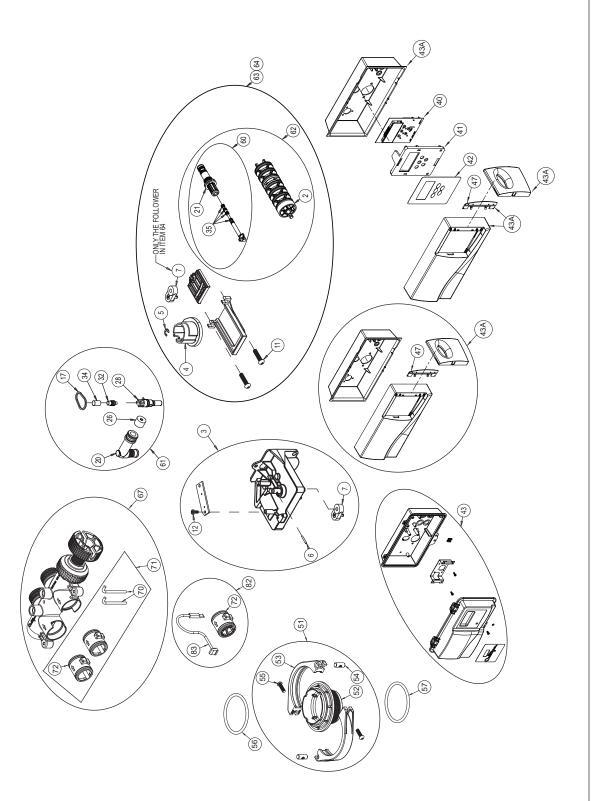


Parts List Gold Series Softener Valve





Parts List Power Valve Service Parts List





Item #	Part #	DESCRIPTION	Quantity/Pack
*	01018857	Gold Series Control - Complete	1 Each
*	01018920	Outdoor Gold Series Control - Complete	1 Each
1	01013976	Control Valve Body 1"	1 Each
2	01013083	Seal Pack Assembly	1 Each
3	01030206	Drive Motor Kit 24V	1 Each
4	P1013031	Drive Cam	10 Each/Pack
5	P1013043	Retaining E-ring	10 Each/Pack
6	P0445246	Pin	25 Each/Pack
7	P1013677	Bell Crank/Follower Kit	10 Each/Pack
8	P1001784	Screw, motor retaining, top	25 Each/Pack
9	P1003244	Micro switch 24v	10 Each/Pack
10	P0448686	Screw, Micro switch retaining	25 Each/Pack
11	P0318452	Screw, Motor retaining, bottom	25 Each/Pack
12	P0318455	Screw, Micro switch Plate	25 Each/Pack
13	P0444914	O-ring, Rear Seal	10 Each/Pack
14	P0448687	Screw, Eductor Cover	25 Each/Pack
15	P0447387	Clip, Drain Elbow	25 Each/Pack
16	P0401022	Eductor Cover	10 Each/Pack
17	P0445797	Seal, Eductor Port	10 Each/Pack
18	00448126	Plug, Body, Rear	1 Each
19	P0448128	Clip, Body, Rear	10 Each/Pack
20	P1017758	Drain Elbow Assembly	10 Each/Pack
21	P0448853	Repl Eductor Sleeve (Softener)	10 Each/Pack
22	P0447986	O-ring, Eductor Sleeve, Small	25 Each/Pack
23	P0308407	O-ring, Eductor Sleeve, Large	25 Each/Pack
24	P0448750	Screen, Eductor Sleeve	10 Each/Pack
25	P0451701	Hose Clamp, Drain	25 Each/Pack
26	P0331634	FC Washer, 1.2 GPM Black	10 Each/Pack
*	P0331635	FC Washer, 2.0 GPM Brown	10 Each/Pack
*	P0331636	FC Washer, 3.5 GPM Green	10 Each/Pack
28	P0401248	Eductor Throat, Brown (9"10"12")w/O-rings	10 Each/Pack
30	P0308437	O-Ring, Eductor Throat/Plug, Large	25 Each/Pack
31	P0308438	O-Ring, Eductor Throat, Small	10 Each/Pack
32	P1013894	Eductor Nozzle, Blue (9",10") w/ O-ring	10 Each/Pack
32	P1013895	Eductor Nozzle, Beige (10", 12") w/ O-ring	10 Each/Pack
33	P0308438	O-ring, Eductor Nozzle	10 Each/Pack
34	P0445269	Eductor Screen	10 Each/Pack
35	P0447987	O-ring, brine piston	10 Each/Pack
36	P1034571	Connector, Brine Line, 3/8"	10 Each/Pack



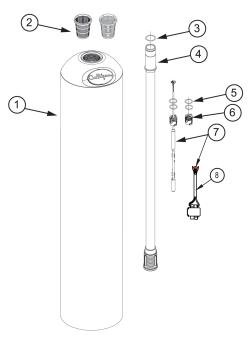
Item #	Part #	DESCRIPTION	Quantity/Pack
40	01018852	Circuit Board Kit	1 Each
41	01016476	Circuit Board Holder	1 Each
42	P1016478	Circuit Board Decal	5 Each/Pack
43	01019709	Enclosure Kit - Outdoor	1 Each
43A	01019707	Enclosure Kit - Indoor	1 Each
44	P1014734	Wire Harness - CB Gold/Medallist	5 Each/Pack
46	P1000372	Cord Grip (Power Cord)	25 Each/Pack
47	P1014030	Hinge	10 Each/Pack
51	01014153	Adapter Assy, 1" valve to tank w/o O-ring	1 Each
52	01013958	Tank Adapter, 1" Valve	1 Each
53	P1013959	Tank Clamp, 1" Valve	10 Each/Pack
54	P1013669	Tank Clamp Pin, 1" Valve	10 Each/Pack
55	P0318383	Tank Clamp Screw, 1" Valve/3/4" bkt	10 Each/Pack
56	P1014848	O-ring, Large, 1" Valve to Tank Adapter	25 Each/Pack
57	P0440052	O-ring, 3/4"/1" Valve Adapter to ACME Tank	25 Each/Pack
61	01016266	Eductor Rebuild Kit (Softeners)	1 Each
62	01016267	Rebuild Kit - Brine Piston/Seal Pack	1 Each
63	01016269	Seal Pack/Bell Crank Kit	1 Each
64	01013033	Seal Pack/Brine/Cam (Softeners)	1 Each
67	01018760	Bypass Valve - 1"/1-1/4" Rotary	1 Each
*	01018249	1 1/4" Straight Through Adapter	1 Each
*	01018755	Rebuild Kit - 1"/1-1/4" Rotary Bypass	1 Each
*	P1019646	Bypass O-Ring	50 Each/Pack
70	P1009075	Retaining Clip, 1" Bypass valve	10 Each/Pack
71	01014033	Coupling Kit - 1" Bypass	1 Kit
72	P1009099	O-ring, 1" Couplings/Meters	50 Each/Pack
*	01010783	1" Copper Adapter Kit, (1" Bypass)	1 Each
*	01016564	3/4" Copper Adapter Kit (1" Bypass)	1 Pair
*	01016565	3/4" Elbow Copper Adapter Kit (1" Bypass)	1 Pair
*			5 Pair/Pack
*	P1018758	1" NPT Kit (1" Bypass)	5 Pair/Pack
*	P1009856	Gasket, Copper Plumbing Adapters	25 Each/Pack
82	01011188	Meter Kit - 1" w/wire harness	1 Each
83	01008070	Wire Harness, 3/4"/1" Meters	1 Each
*	01030202	Transformer, Single Output, 24 VAC	1 Each
*	01013839	Backup Battery, Gold	1 Each



# **Parts List Tank Assembly**

# **Tank Assembly**

Item	Part No.	Description	Qty.
1	01016617	Tank Assembly, 9" w/ Fillport, Complete	
	01016618	Tank Assembly, 10" w/ Fillport, Complete	
	01017192	Tank Assembly, 12" w/ Fillport, Complete, Less Media	
	01017194	Tank Assembly, 14" w/ Fillport, Complete, Less Media	
	01016351	Tank Assembly, 9" w/o Fillport, Complete	
	01016352	Tank Assembly, 10" w/o Fillport, Complete	
	01016349	Tank Replacement, 9", w/ Fillport, Empty	
	01016350	Tank Replacement, 10", w/ Fillport, Empty	
	01016347	Tank Replacement, 9", w/o Fillport, Empty	
	01016348	Tank Replacement, 10", w/o Fillport, Empty	
2	P1009847	Top Strainer - Fine Slot (10 ea/Pack)	
	P1011195	Top Strainer - Wide Slot (10 ea/Pack)	1
3	P1009099	O-Ring, Manifold (50 ea/ Pack)	1
4	01016176	Outlet Manifold - 9"	1
4	01014539	Outlet Manifold - 10"	1
4	01018846	Outlet Manifold - 12"	1
4	01016429	Outlet Manifold - 14"	1
5	P1017434	O-Ring, Plug and Sensor (10 ea/Pack)	2
6	01015122	Plug	1
7	01031252	Aqua-Sensor® Probe with Transformer, Indoor	1
	01031253	Aqua-Sensor® Probe with Transformer, Outdoor	1
8	01031248	Aqua-Sensor Transformer, 2.5 VAC	1



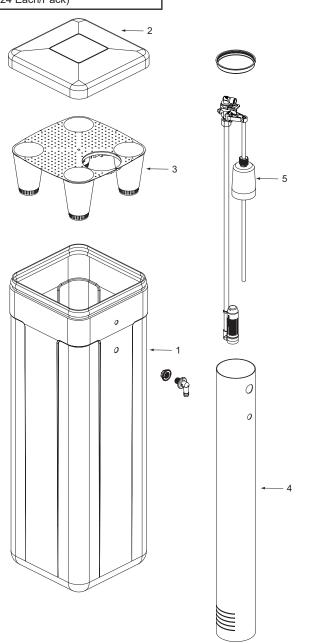
# **Total Home Advanced Replacement Media Packs** (Includes, underbedding, Cullex, and Carbon)

•	•	•			
Part	Description	Number of	Me	edia Quar	ntity
Number	Description	Boxes Shipped	Cullex	Carbon	Cullsan
01019848	Media Pack for 9" Tank	2	0.8 ft3	6 lbs	12 lbs
01019849	Media Pack for 10" Tank	2	1.0 ft3	8 lbs	15 lbs
01019850	Media Pack for 12" Tank	2	1.5 ft3	12 lbs	20 lbs
01019851	Media Pack for 14" Tank	3	2.3 ft3	18 lbs	25 lbs



Parts List 11" Brine System

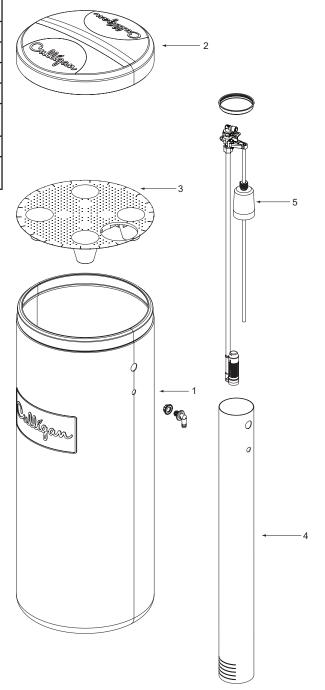
Item	Part Number	Description
-	01018770	Brine System, 156 lb
1	01018769	Replacement Tank, 156 lb
2		Cover, 156 lb
3	01018764	Salt Plate, 156 lb
4	01018768	Brine Chamber, 156 lb
5	01035282	Brine Valve
6	P1020190	Overflow Fitting w/Nut (24 Each/Pack)





**Parts List** 16" and 18" Brine **Systems** 

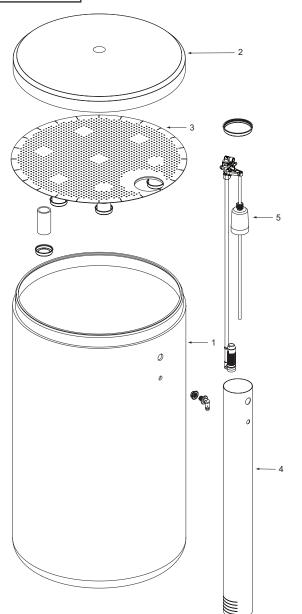
Item	Part Number	Description
-	01018705	Brine System, 250 lb
-	01018715	Brine System, 375 lb
1	01018709	Replacement Tank, 250 lb
	01018716	Replacement Tank, 375 lb
2		Cover, 250 lb
	01018717	Cover, 375 lb
3	01018707	Salt Plate, 250 lb
	01018713	Salt Plate, 375 lb
4	01018707	Brine Chamber, 250 lb & 375 lb
5	01035282	Brine Valve
6	P1020190	Overflow Fitting w/Nut (24 Each/Pack)





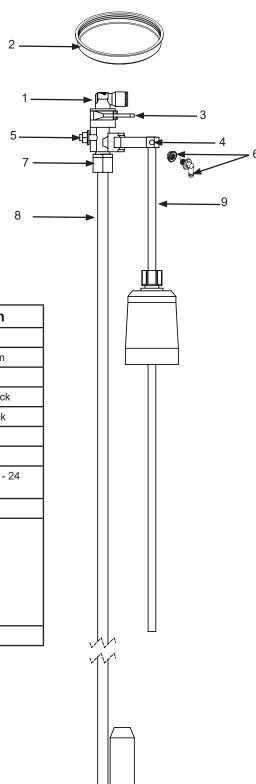
Parts List 24" Brine System

Item	Part Number	Description
-	01018720	Brine System, 650 lb
1	01018718	Replacement Tank, 650 lb
2	01018719	Cover, 650 lb
3		Salt Plate, 650 lb
4	01018708	Brine Chamber
5	01035282	Brine Valve
6	P1020190	Overflow Fitting w/Nut (24 Each/Pack)





# **Parts List Brine Valve**



		1
Item No.	Part No.	Description
-	01018706	Brine Valve
1	01035204	BLFC Elbow - 0.45 gpm
	01018711	BLFC Elbow - 0.8 gpm
2	P1020194	Brine Well Cap - 24 Pack
3	P1020191	Retaining Clip - 24 Pack
4	P1020192	Pin - 24 Pack
5	P1020193	5/16" Nut - 24 Pack
6	P1020190	Overflow Fitting w/ Nut - 24 Pack
7	P1020195	3/8" Nut - 24 Pack
8	P1020198	Air check Assembly - 24 Pack
9	P1020197	Float - 24 Pack



Performance **Data Sheet Culligan Gold** 9" Soft-Minder®

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.

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

9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan Gold 9" Soft-Minder®

#### **Testing Conditions and Results**

Flow Rate: 9.0 gpm @ 14 psi Pressure: 30 - 40 psi Acidity: Non-Corrosive Temperature: 68°F (20°C)

Efficiency Rated Dosage†: 4,770 gr/lb

Capacity: 19,086 grains @ 4.0 lb. salt 26,301 grains @ 8.0 lb. salt 30,787 grains @ 12.0 lb. salt

pH:

Softener Specifications

Service Flow Rate: 9.0 gpm (34 Lpm) Pressure Drop at Max. Flow Rate: 14.0 psi (90 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 1.6 gpm (6.1 Lpm)

Working Pressure Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

Name of Substance	e USEPA Max. Contaminant Level		Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	14 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	14 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer

The Culligan Gold Series 9" Water Softeners are tested and certified by WQA against NSF/ANSI 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 9" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 9" Water Softeners are certified by IAPMO R&T against NSF/ANSI 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 9" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 9" Soft-Minder Water Softeners are registered under California Water Treatment Device Registration Number 1986a and Iowa Water Treatment Device Registration Number 20338.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 and maximum service flow rate for 9" models.

**Buyer Signature** Date

Seller Signature Date



Performance
Data Sheet
Culligan Gold
9" AquaSensor®

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.

**NOTICE** 

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Manufacturer: Culligan International Company

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 9" Aqua-Sensor®



 Flow Rate:
 9.0 gpm @ 14 psi
 Capacity: 19,086 grains @ 4.0 lb. salt

 Pressure:
 30 - 40 psi
 26,301 grains @ 8.0 lb. salt

 Acidity:
 Non-Corrosive
 30,787 grains @ 12.0 lb. salt

Temperature: 68° (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,770 gr/lb

#### **Softener Specifications**

Max. Flow Rate: 9.0 gpm (34 Lpm) Pressure Drop at Max. Flow Rate: 14.0 psi (90 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 1.6 gpm (6.1 Lpm)

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The Culligan Gold Series 9" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 9" Water Softeners are certified IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 9" Aqua-Sensor Water Softeners are registered under California Water Treatment Device Registration Number 1986b and Iowa Water Treatment Device Registration Number 20337.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 4lb. salt dosage for 9" models.

Buyer Signature Date

Seller Signature Date



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.

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 10" Soft-Minder®

Mater Quality (ST) Moustry Structure (ST)

Capacity: 28,629 grains @ 6.0 lb. salt



#### **Testing Conditions and Results**

Flow Rate: 9.5 gpm @ 15 psi
Pressure: 30 - 40 psi
Acidity: Non-Corrosive

 30 - 40 psi
 39,451 grains @ 12.0 lb. salt

 Non-Corrosive
 46,180 grains @ 18.0 lb. salt

Temperature: 68° (20°C) pH: 7.

Efficiency Rated Dosage†: 4,770 gr/lb

**Softener Specifications** 

Max. Flow Rate: 9.5 gpm (35.5 Lpm)

Pressure Drop at Max. Flow Rate: 15 psi (109 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 1.6 gpm (6.1 Lpm)

Working Press. Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

	Name of Substance USEPA Max. Contaminant Lev		рН	Flow Rate	Pressure
Ī	Barium	2.0 mg/L	7.5 + 0.5	9.5 gpm	15 (psig)
	Radium 226/228	5 pCi/L	7.5 + 0.5	9.5 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan Gold Series 10" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 10" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 10" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 10" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 10" Soft-Minder Water Softeners are registered under California Water Treatment Device Registration Number 2027b and Iowa Water Treatment Device Registration Number 20333.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 6lb. salt dosage for 10" models.

Buyer Signature Date

Seller Signature Date 01018854 F 02/20 31

Performance Data Sheet Culligan Gold 10" Soft-Minder®



**Performance Data Sheet** Culligan Gold 10" Aqua-Sensor®

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.

**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.

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Capacity: 28,629 grains @ 6.0 lb. salt 39,451 grains @ 12.0 lb. salt

46,180 grains @ 18.0 lb. salt

7.6

:Hg

Manufacturer: Culligan International Company

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 10" Aqua-Sensor®



Flow Rate: 9.5 gpm @ 15 psi

Pressure: 30 - 40 psi Non-Corrosive Acidity: 68° (20°C) Temperature:

Efficiency Rated Dosage †: 4,770 gr/lb

#### **Softener Specifications**

Max. Flow Rate: 9.5 gpm (35.5 Lpm) Pressure Drop at Max. Flow Rate: 15 psi (109 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 1.6 gpm (6.1 Lpm)

Working Press. Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.5 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.5 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan Gold Series 10" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 10" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis

The Culligan Gold Series 10" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 10" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 10" Aqua-Sensor Water Softeners are registered under California Water Treatment Device Registration Number 2027a and Iowa Water Treatment Device Registration Number 20334.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 6lb. salt dosage for 10" models.

**Buyer Signature** Date

Seller Signature Date



Performance Data Sheet Culligan Gold 12" Soft-Minder®

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.

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

9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan Gold 12" Soft-Minder®

#### **Testing Conditions and Results**

Flow Rate: 10.0 gpm @11 psi Capacity: 35,614 grains @ 8.0 lb. salt
Pressure: 30 - 40 psi 50.189 grains @ 16.0 lb. salt
Acidity: Non-Corrosive 60,384 grains @ 24.0 lb. salt

Temperature: 68° (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,450 gr/lb

#### **Softener Specifications**

Service Flow Rate: 10.0 gpm

Max. Drain Flow Rate: 2.5 gpm

Operating Temp. Range: 33-120°F (0–49°C)

Pressure Drop at Max. Flow Rate: 11 psi

Working Press. Range: 20-125 psi (1.41–8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41–6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan Gold Series 12" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 12" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 12" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 12" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 12" Soft-Minder Water Softeners are registered under California Water Treatment Device Registration Number 1988a and Iowa Water Treatment Device Registration Number 20340.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 7lb. salt dosage for 12" models.

Buyer Signature Date

Seller Signature Date



Performance
Data Sheet
Culligan Gold
12" AquaSensor®

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**NOTICE** 

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Manufacturer: Culligan International Company

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 12" Aqua-Sensor®



 Flow Rate:
 10.0 gpm @ 11 psi
 Capacity: 35,614 grains @ 8.0 lb. salt

 Pressure:
 30 - 40 psi
 50,189 grains @ 16.0 lb. salt

 Acidity:
 Non-Corrosive
 60,384 grains @ 24.0 lb. salt

Temperature: 68° (20°C) pH:

Efficiency Rated Dosage†: 4,450 gr/lb

## **Softener Specifications**

Max. Flow Rate: 10.0 gpm (38 Lpm)

Pressure Drop at Max. Flow Rate: 11 psi (109 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 2.6 gpm (6.1 Lpm)

Working Press. Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan Gold Series 12" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 12" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 12" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 12" Water Softeners are certified by IAPMO R&T against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 12" Aqua-Sensor Water Softeners are registered under California Water Treatment Device Registration Number 1988b and Iowa Water Treatment Device Registration Number 20339.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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 (P/N 01018854) 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 7lb. salt dosage for 12" models.

Buyer Signature Date

Seller Signature Date



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Manufacturer:

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 14" Soft-Minder®

Water Quality of Manager Street Stree



**Testing Conditions and Results** 

 Flow Rate:
 10.6 gpm @ 11 psi
 Capacity: 53,540 grains @ 12.0 lb. salt

 Pressure:
 30 - 40 psi
 77,660 grains @ 24.0 lb. salt

 Acidity:
 Non-Corrosive
 90,986 grains @ 36.0 lb. salt

Temperature: 68° (20°C)

Efficiency Rated Dosage†: 4,460 gr/lb

**Softener Specifications** 

Max. Flow Rate: 10.6 gpm (40.1 Lpm)

Pressure Drop at Max. Flow Rate: 11 psi (109 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 6.6 gpm (6.1 Lpm)

Working Press. Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

pH:

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Name of Substance USEPA Max. Contaminant Level		рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan Gold Series 14" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium) and barium/radium as verified and substantiated by test data. The Culligan Gold Series 14" Water Softeners are tested and certified by WQA against NSF/ANSI Standard 61 for material requirements. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan Gold Series 14" Soft-Minder Water Softeners are registered under California Water Treatment Device Registration Number 1985a and Iowa Water Treatment Device Registration Number 20344.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It 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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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 12lb. salt dosage for 14" models.

Buyer Signature Date
Seller Signature Date

Performance Data Sheet Culligan Gold 14" Soft-Minder®



Performance
Data Sheet
Culligan Gold
14" AquaSensor®

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Manufacturer: Culligan International Company

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

(847) 430-2800 www.culligan.com

Product: Culligan Gold 14" Aqua-Sensor®



 Flow Rate:
 10.6 gpm @ 11 psi
 Capacity: 53,540 grains @ 12.0 lb. salt

 Pressure:
 30 - 40 psi
 77,660 grains @ 24.0 lb. salt

 Acidity:
 Non-Corrosive
 90,986 grains @ 36.0 lb. salt

Temperature: 68° (20°C) pH:

Efficiency Rated Dosage†: 4,460 gr/lb

## **Softener Specifications**

Max. Flow Rate: 10.6 gpm (40.1 Lpm)

Pressure Drop at Max. Flow Rate: 11 psi (109 kPa)

Operating Temp. Range: 33-125°F (1-50°C) Max. Drain Flow Rate: 6.6 gpm (6.1 Lpm)

Working Press. Range: 20-120 psi (140-860 kPa) Oper. Pressure Range (Canada): 20 - 90 psi (140 - 620 kPa)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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The Culligan Gold Series 14" Aqua-Sensor Water Softeners are registered under California Water Treatment Device Registration Number 1985b and Iowa Water Treatment Device Registration Number 20343.

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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 12lb. salt dosage for 14" models.

Buyer Signature	Date
Seller Signature	Date



# Culligan Limited Warranty

#### Culligan Gold Series™ Automatic Water Softeners

You have just purchased one of the finest water softeners made. As an expression of our confidence in Culligan International Company products, your water softener 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 softener.
For a period of FIVE YEARS	Soft-Minder® meter, or Aqua-Sensor® probe if so equipped.
For a period of TEN YEARS	The AccuSoft® Plus circuit board,
	The control valve body, excluding internal parts.
	The salt storage container, brine valve and all its component parts
For the LIFETIME of the original consumer purchaser	The Quadra-Hull™ softener tank and the Cullex® resin original consumer purchaser

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 softener 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 SOFTENER. As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing a water softener. 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 softener 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 SOFTENER, 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**

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# **Notes**