



This product was manufactured in an ISO 9001:2000 certified facility.

RainSoft Division of Aquion Partners, L.P.®

2080 East Lunt Avenue

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# RainSoft®

Water Treatment Systems  
Since 1953

## **GOLD SERIES WATER CONDITIONING SYSTEM**

# Owners Manual



**AQUION**

This product was manufactured in an ISO 9001:2000 certified facility.



This product was tested and validated by the WQA against ANSI/NSF Standard 44 for Hardness, Barium & Radium 226/228 Reduction. See performance data sheet for actual reduction claims. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Part No.: 15261  
Revised: 03/04

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## **ENJOYING YOUR NEW WATER TREATMENT SYSTEM**

You now own the finest Water Treatment System available to homeowners. This system will give you years of soft, crystal clear water, with minimal amounts of attention.

This system was shipped, from the factory, ready for operation and will start delivering treated water to your home immediately.

To make using, operating and maintaining your unit as enjoyable as possible, please read the contents of this Owners Manual.

### **USING CONDITIONED WATER**

**AT THE BATHROOM SINK:** Use less soap! After rinsing, you may think that your skin still feels slick or "soapy". Actually, this feeling is not soap, but the natural feeling of clean skin! When your skin dries, it will feel soft and moist, like you just used lotion!

**IN THE BATH OR SHOWER:** Use a bath mat to provide traction. With conditioned water, there is no sticky hard water scum.

**IN THE KITCHEN:** Try using less coffee grounds. You will find that less coffee grounds are needed for a smooth, rich taste. If you do dishes by hand, try a mild, pure soap and see the difference it makes on your hands. If you have an automatic dishwasher, try using less soap than usual. You will find that your dishes still come out just as clean!

**IN THE LAUNDRY:** Here again, use less of your cleaning product. With soft water, you will not have to use as much detergent to produce clean, bright fabrics!

### **COMMON MISCONCEPTIONS OF WATER TREATMENT**

There are many misconceptions that people have developed about Water Treatment Systems. The most common topic of confusion is the amount of sodium (Na), not table salt (NaCl), that is added to the water from a conditioner. In reality, ion exchange does replace the hardness ions in your water with sodium ions, but the common misconception is the amount used.

For every 10 grains of hardness, the exchange process will deliver approximately 8 mg of sodium (Na) per 1 liter of water. The amount of sodium (Na) present in a standard 8 oz. glass of treated water, that was 10 grains hard prior to treatment, would be around 80 mg of sodium (Na). This is an insignificant amount of sodium (Na), considering a typical slice of wheat bread has about 140 mg. You would be amazed at the sodium content of some of your favorite foods!

Another major misconception is the idea that soft water will produce clear ice cubes. Cloudy or white, hazy ice cubes are caused by air that is slowly being released from the water during the freezing process, which has nothing to do with your Water Treatment System.

The last misconception that needs mentioning is the amount of salt used by the conditioner to regenerate the system. People seem to think that water conditioners use an enormous amount of salt, which may have been the case in the past, but that was due to old technology and standards. Water conditioners do use salt for regeneration, but the amount of salt varies by water consumption, which then determines how many regenerations the system will have to go through on a monthly basis. The more water that needs to be conditioned, the more times the system will need to clean itself, resulting in the use of more salt. Fortunately, today's technology allows us to dispense just the right amount of salt for maximum efficiency, based on your individual water consumption needs.

## OPERATING YOUR UNIT

**WATER PRESSURE:** 20-100 psi (138-689 kPa)

**OPERATING TEMPERATURE:** 40-100° F (4.4-38° C)

**ELECTRICAL REQUIREMENTS:** A constant, properly grounded alternating current (A/C) supply is required for this system (USA: 110V/International: 220V). **Note: The system operates on low voltage and requires the use of a transformer (24V) that was installed at the time of installation.**

**EXISTING PLUMBING CONDITIONS:** Plumbing should be free from lime and/or iron buildup. Piping that contains large amounts of lime and/or iron should be replaced. If piping is clogged with iron, a separate iron filter should be installed in-line, before the water conditioner.

**SALT REQUIREMENTS:** For maximum satisfaction, add salt before the salt container is empty. Two kinds of salt are recommended for water conditioners:

1. Block Salt: Water softener block salt is reasonably priced, low in impurities and will not cake. Block salt is pressed into the shape of a cattle block.
2. Solar Salt: Solar salt is 98% pure salt, reasonably priced and low in impurities.

**Note: Rock salt, which contains impurities that deposit into the brine tank, is not recommended for water conditioners. If rock salt is used, the brine tank must be cleaned out periodically. DO NOT use granulated salt! The use of granulated salt may cause service problems.**

## USE OF RESIN CLEANERS

It is always wise to provide preventative maintenance for your system. **IF YOU USE A CLEANER CONTAINING NITRIC ACID OR OTHER STRONG OXIDIZING AGENTS, PLEASE USE CAUTION AND FOLLOW INSTRUCTIONS CAREFULLY.**

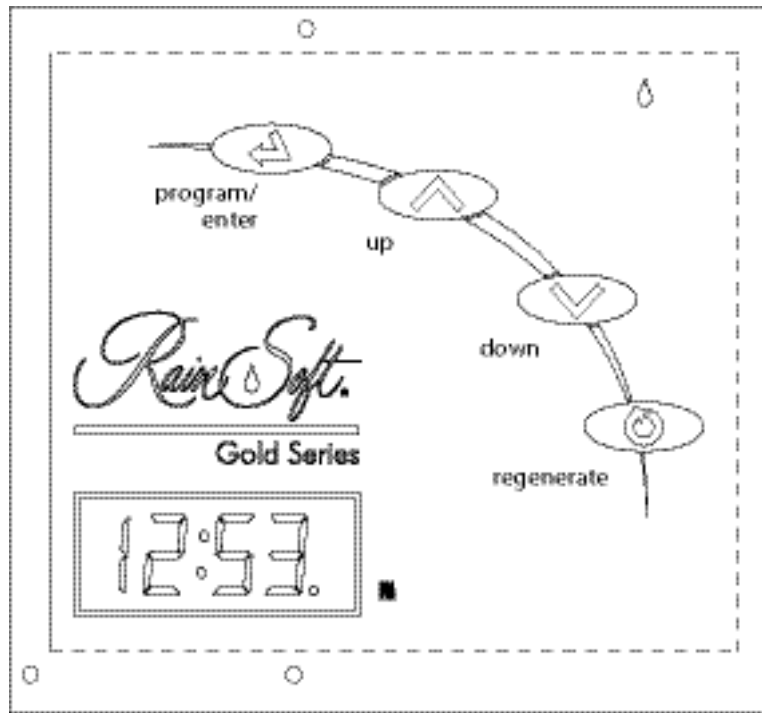
If small amounts of iron are present in your water, use a salt containing iron remover or add iron remover to the resin cleaner when adding salt. (This will prevent the treatment media from becoming iron fouled.) If an excessive amount of iron is present in your water, we recommend the installation of an iron filter before the conditioner.

## MAINTENANCE REQUIREMENTS

The regeneration valve is designed to last a lifetime, but from time to time it may be necessary to clean and lubricate the moving parts. Your water quality and the amount of regenerations necessary will affect this maintenance schedule. Your local RainSoft Dealer is knowledgeable in the different water qualities and will have the necessary parts to complete this service.

## OPERATION OF THE TIMER

The Gold Series is designed for years of maintenance free service, with minimal initial setup. Once the parameters are established and set by a RainSoft representative, there is no need to adjust or change the parameters of the computer. If a noticeable change in the quality of your water has taken place, please contact your RainSoft Dealer immediately.



## HOW TO ADJUST THE CORRECT TIME OF DAY

To set or change the correct time of day, simply press "program/enter" one time. You will see a P, followed by the time. Use the up or down arrow to scroll through the AM and PM times.

By pushing and holding the up or down arrow, you will activate the fast-scroll option and the numbers will start counting by 10's. You will notice the individual beeps are gone, this is normal in the fast-scroll option. If you let go of the up or down arrow and use individual arrow depressions, the computer will return to counting by 1's. Once the correct time of day is visible, you must press "program/enter" for the computer to accept the time. **Note: If you change from standard to daylight savings time, you may want to reset the time of day. If the power goes out, the unit will hold the time of day for a minimum of 3 days.**

## HOW TO ADJUST THE HOUR OF REGENERATION

To set or change the time of regeneration, use the "program/enter" button to scroll through the present time (**P**) to the hour of regeneration (**h**). Wait until the computer displays the time, prompting you to enter the desired hour. Use the up or down arrow to scroll through the AM and PM times. The fast-scroll option is available during this function. Once the correct time of regeneration is visible, you must press "program/enter" for the computer to accept the time.

## HOW TO ADD SALT AND ADJUST THE SALT POUNDS

**ADDING SALT:** There are two scales located on the brine tank. One scale is for block salt (designated by levels 1-4) and the other is for solar salt (designated by 1-5). Each level represents 50 pounds of salt.

Once you have loaded the salt into the brine tank, the closest level value that is indicated on the scale will be the number that you will enter into the computer (see below).

To set or change the amount of salt pounds in the brine tank, use the “program/enter” button to scroll through the present time (**P**) and the hour of regeneration (**h**) to the salt pound prompt - **S**. Wait until the computer displays a salt level, then use the up or down arrow to select the corresponding level of salt that is present in the brine tank. You must press “program/enter” for the computer to accept the entered salt level.

## LOW SALT ALARM

A low salt alarm will sound when the salt in the brine tank becomes too low. The alarm has been set to sound at 5:00 PM. To turn off the alarm, press the “program/enter” button and wait for the time to appear, then press “program/enter” button again.

## CAPACITY AND HARDNESS SETTINGS

The capacity of the unit is specific to the size of the tank and the amount of media present. The capacity setting will be preset by your RainSoft Dealer at the time of installation. **Note: The capacity does not require adjustments by the homeowner.**

The hardness of water is unique to the individual and is based on several parameters. The two most common types of parameters are: the well delivery system (well or city) and geography. The hardness of the water must be predetermined by your dealer through a water analysis. Your dealer will program the hardness setting based on your water analysis. If there is a noticeable change in the quality of your water, please contact your local RainSoft Dealer immediately. **Note: In most applications the hardness will not require adjustments. The hardness of water rarely changes for most individuals.**

## BACKWASH, RINSE AND THE NUMBER OF REGENERATIONS PER WEEK

The computer automatically determines the timing scheme needed for each of these cycles to effectively and efficiently regenerate the system. If there is a noticeable change in the quality of your water, please contact your local RainSoft Dealer immediately. **Note: These settings will not require adjustments by the homeowner.**

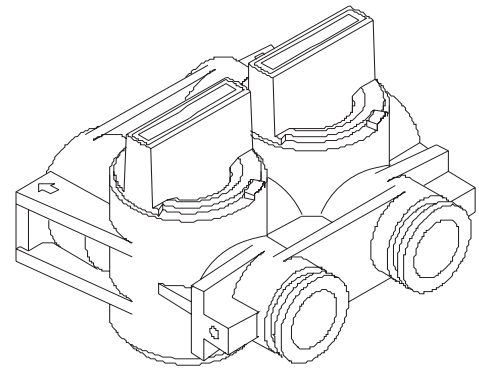
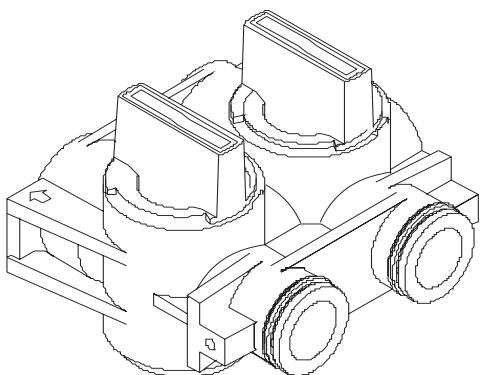
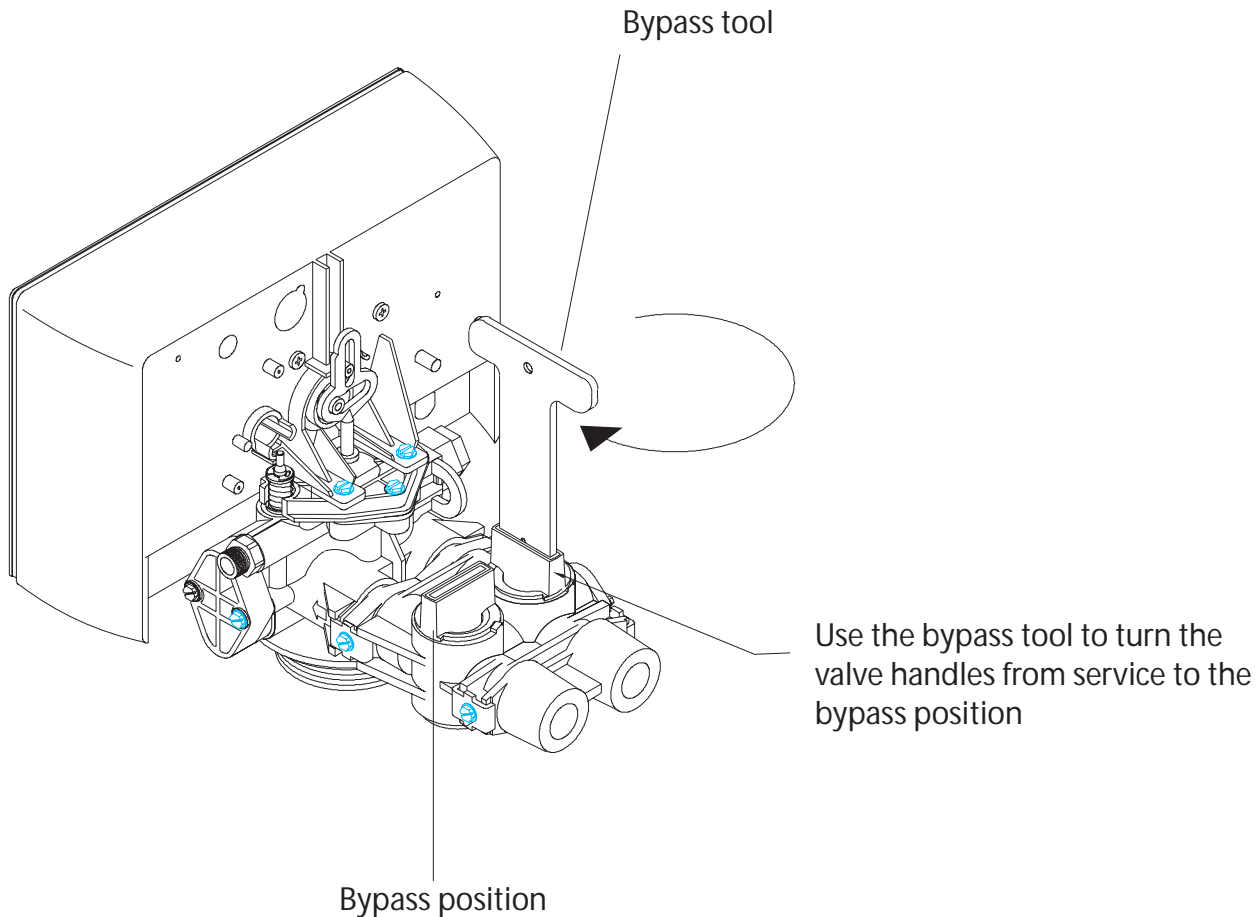
## HOW TO MANUALLY INITIATE A REGENERATION

To manually initiate a regeneration, press the “regeneration” button and then walk away. The unit will go into regeneration, just like it would have during its normal, scheduled regeneration time.

## OPERATION OF THE BYPASS VALVE

A bypass valve was attached to your Water Treatment System during the installation of your unit. The bypass valve enables you to bypass your Water Treatment System in the case of: emergency leaks in the equipment, service calls and/or outdoor water use.

The pressure of the water may increase the difficulty of turning the bypass valve handles. The bypass tool, supplied with your unit, can assist you in this process.



# TROUBLESHOOTING YOUR UNIT

SYMPTOM	CAUSE	SOLUTION
<b>1. System Fails to Regenerate Automatically</b>	1. Power supply is plugged into intermittent or dead power source.	1. Connect to a constant power source.
<b>2. System Regenerates at the Wrong Time</b>	1. The computer is not set properly. 2. Time is off due to daylight savings.	1. Reset time of day/time of regeneration. 2. Reset the time of day.
<b>3. System is Using Large Amounts of Salt</b>	1. Improper computer set-up. 2. Excessive water in the brine tank.	1. Call your local RainSoft Dealer to readjust the computer settings. 2. Call your local RainSoft Dealer.
<b>4. Loss of Water Pressure</b>	1. Low pressure to the unit.	1. Bypass the system and call your local RainSoft Dealer. If the problem still exists, it is not related to a RainSoft product. Have your water distribution system checked.
<b>5. Excessive Water in the Brine Tank and/or Salty Water</b>	1. Plugged drain line. 2. Dirty brine valve. 3. Low inlet pressure. 4. The computer is not set properly. 5. The injector is plugged.	1. Check the water flow to the drain. Check for any crimps in the drain line. Call your local RainSoft Dealer. 2. Clean the brine valve. 3. Call your local RainSoft Dealer to increase the inlet pressure (20 psi min.). 4. Call your local RainSoft Dealer to reset the computer settings. 5. Call your local RainSoft Dealer.

If the troubleshooting section did not resolve your unit's symptoms, please contact your local RainSoft Dealer for service. If you cannot locate your local RainSoft Dealer, please contact RainSoft Customer Service at 1-800-860-7638 for the name and location of your nearest Dealer.

# TROUBLESHOOTING YOUR UNIT

SYMPTOM	CAUSE	SOLUTION
<b>6. The System Fails to Use Salt</b>	<ol style="list-style-type: none"> <li>1. Plugged/restricted drain line.</li> <li>2. The injector is plugged.</li> <li>3. Low inlet pressure.</li> <li>4. No water in the brine tank.</li> <li>5. The brine line injects air during brine draw.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the water flow to the drain. Check for any crimps in the drain line. Call your local RainSoft Dealer.</li> <li>2. Call your local RainSoft Dealer.</li> <li>3. Call your local RainSoft Dealer to increase the inlet pressure (20 psi min.).</li> <li>4. Call your local RainSoft Dealer.</li> <li>5. Call your local RainSoft Dealer.</li> </ol>
<b>7. Constant Flow to the Drain</b>	<ol style="list-style-type: none"> <li>1. Foreign material in the valve.</li> </ol>	<ol style="list-style-type: none"> <li>1. Call your local RainSoft Dealer to clean the valve.</li> </ol>

If the troubleshooting section did not resolve your unit's symptoms, please contact your local RainSoft Dealer for service. If you cannot locate your local RainSoft Dealer, please contact RainSoft Customer Service at 1-800-860-7638 for the name and location of your nearest Dealer.

**IF YOU REQUIRE SERVICE ON YOUR RAINSOFT PRODUCT, PLEASE CONTACT YOUR LOCAL RAINSOFT DEALER IMMEDIATELY.**

**IF A PRODUCT MALFUNCTION HAS CAUSED DAMAGE TO YOUR PERSONAL PROPERTY, PLEASE FOLLOW THESE INSTRUCTIONS:**

1. **DO NOT REPAIR UNIT.**
2. **DO NOT REPAIR DAMAGED PROPERTY OR MERCHANDISE.**  
Damaged property or merchandise should be preserved "as is" for inspection by a properly credentialed Factory Representative. (Not a Dealer or agent of a Dealer.)
3. **IMMEDIATELY NOTIFY THE CUSTOMER SERVICE DAMAGE CLAIM DEPARTMENT** in Elk Grove Village by calling 1-800-860-7638 or 847-437-5539, followed by a confirming letter sent by registered mail to:

CUSTOMER SERVICE-DAMAGE CLAIM DEPARTMENT  
RAINSOFT DIVISION OF AQUION PARTNERS, L.P.  
2080 EAST LUNT AVENUE  
ELK GROVE VILLAGE, ILLINOIS 60007

4. **A FACTORY REPRESENTATIVE** will examine the damage and then determine liability of the company.

**IMPORTANT: DAMAGE CLAIMS WILL NOT BE HONORED BY THE FACTORY UNLESS THE ABOVE PROCEDURE IS FOLLOWED!**

# *Limited Lifetime Warranty*

*For as long as you own the equipment*

**RainSoft Division of Aquion Partners L.P.**<sup>®</sup>, believing its

## **RAINSOFT WATER TREATMENT SYSTEM**

to be of exceptional quality, hereby warrants said equipment to its first purchaser at retail as follows:

The following components: **TREATMENT TANK, VALVE and SALT CONTAINER are WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR THE LIFETIME OF THE FIRST PURCHASER AT RETAIL.**

**ELECTRICAL PARTS** are warranted against defects in manufacture for **FIVE YEARS** and pro-rata warranted for an additional **FIVE YEARS**.

### **RESINS:**

**ION-X 34** is warranted against defects in manufacture for **TEN YEARS**.

**ION-X 100** is warranted against defects in manufacture for the **LIFETIME** of the first purchaser at retail.

**ION-X 2000** is warranted against defects in manufacture for the **LIFETIME** of the first purchaser at retail.

This warranty begins at the time the equipment is first connected for use, and is contingent upon the return of a signed owner's registration card.

This warranty does not require replacement of the entire unit. If the equipment does not perform properly, you should request service from the dealer that sold you the equipment. If you are not satisfied, you should notify our Customer Service Manager. If we are not able to arrange local servicing, you should send the defective part(s) (or, if you prefer, send the entire unit,) directly to the manufacturer, freight prepaid, with proof of purchase and a copy of this warranty. The defective part(s) (or entire unit) will either be repaired or new RainSoft part(s) furnished, for a nominal charge to cover labor, handling, packing and the increase, if any, in the retail price of the part(s) since the date of purchase. Genuine RainSoft parts must be used. Failure to use genuine RainSoft parts will void the warranty and certifications.

This warranty does not include labor charges, and does not cover installation, transportation, or any other claims or torts. Some states do not allow the exclusion or limitation of incidental or consequential damages, so parts of 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. You also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a State court, or a Federal District Court.

This warranty is void if equipment is not installed and operated according to instructions. It does not apply to damage caused by abuse, accident, neglect, freezing, fire, or other abnormal conditions beyond the company's control. This warranty is void on any part from which the manufacturing date has been removed or made illegible.

Benefits will be provided by various types of RainSoft equipment when installed and operated according to the manufacturer's recommendations. Operational, maintenance and replacement requirements are essential for the product to perform as advertised. All claims are based on the best available information at the time of printing. Manufacturer makes no representations as to the suitability of this equipment for a particular application. Buyer relies entirely on the dealer's recommendations in the purchase of this equipment.

Independent RainSoft dealers may include, together with your RainSoft product, a product or component that is not manufactured by RainSoft or their parent company, Aquion Partners, L.P. Any non-RainSoft product may be covered by the manufacturer of that product, and is not covered by the RainSoft warranty. Aquion Partners, L.P. does not warrant that your RainSoft product and the non-RainSoft product will perform properly when used together, and assume no liability therefore.

RainSoft Division of Aquion Partners Limited Partnership<sup>®</sup>  
2080 East Lunt Avenue  
Elk Grove Village, Illinois 60007 USA

# NOTES:

# INSTALLER SPECIFICATION SHEET

*This sheet is to be filled out in its entirety at the time of installation.*

Dealer Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Installation Number: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Model Number: \_\_\_\_\_

Serial Number: (See Label) \_\_\_\_\_

Hardness: \_\_\_\_\_ Iron: \_\_\_\_\_ TDS: \_\_\_\_\_

Line Pressure: \_\_\_\_\_ (psi)

Capacity of the Unit: \_\_\_\_\_ (grains)

Tank Size: Diameter \_\_\_\_\_ (inch)      Height \_\_\_\_\_ (inch)

Flow Control Size: (Circle) 1.5    2.0    3.0 (gpm)

Time of Regeneration: \_\_\_\_\_ (Circle):    AM      PM

Starting Capacity Setting: (Circle) 33%    60%    70%    80%

Adjusted Brine Refill Time (1): \_\_\_\_\_ (min.)

Adjusted Brine Make-up Time (2): \_\_\_\_\_ (min.)

Adjusted Backwash Time (3): \_\_\_\_\_ (min.)

Adjusted Brine/Slow Rinse Time (4): \_\_\_\_\_ (min.)

Adjusted Fast Rinse Time (5): \_\_\_\_\_ (min.)