



THE PROFESSIONAL  
LINE OF WATER SOFTENERS



**MODEL 5100**  
**OWNER'S MANUAL AND INSTALLATION GUIDE**  
*VERSION 3.3*

# Limited Warranty

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## To Whom Warranty Is Extended

TO PLACE THE EQUIPMENT UNDER WARRANTY, THE WARRANTY REGISTRATION CARD MUST BE COMPLETED AND RETURNED BY THE ORIGINAL OWNER TO **PuraTech®** WITHIN 30 DAYS OF INSTALLATION.

## Coverage

This limited warranty covers the **PuraTech®** system delivered to the original owner when the system is purchased for personal, family, or household use. It is intended to cover defects occurring in workmanship or materials or both.

## Warrantor's Performance and Length of Limited Warranty

**PuraTech®** warrants that upon receipt from the original owner of any mechanical or electronic part which is found to be defective in materials or workmanship, **PuraTech®** will repair or replace the defective item for 3 years from date of original installation. Media is not warranted.

**PuraTech®** further warrants that upon receipt from the original owner of any **PuraTech®** media tank, main control valve, or brine tank, found to be defective in material or workmanship, **PuraTech®** will repair or replace the defective item for 10 years from date of original installation.

All defective parts must be returned, along with the equipment serial number and date of original installation, to **PuraTech®** PREPAID, and replacement parts will be returned by **PuraTech®** to the original owner FREIGHT COLLECT.

## Further Exclusions and Limitations on Warranty

THERE ARE NO WARRANTIES OTHER THAN THOSE DESCRIBED IN THIS WARRANTY INSTRUMENT.

This warranty does not cover any service call or labor costs incurred with respect to the removal and replacement of any defective part or parts. **PuraTech®** will not be liable for, nor will it pay service call or labor charges incurred or expended with respect to this warranty.

If the water supply being processed through this product contains bacterial iron, algae, sulphur, tannins, organic matter, or other unusual substances, then, unless the system is represented as being capable of handling these substances in the system specifications, other special treatment of the water supply must be used to remove these substances before they enter this product. Otherwise, **PuraTech®** shall have no obligations under this warranty.

This warranty does not cover damage to a part or parts of the system from causes such as fire, accidents, freezing, or unreasonable use, abuse, or neglect by the owner.

This warranty does not cover damage to a part or parts of the system resulting from improper installation. All plumbing and electrical connections should be made in accordance with all local codes and the installation instructions provided with the system. The warranty does not cover damage resulting from use with inadequate or defective plumbing; inadequate or defective water supply or pressure; inadequate or defective house wiring; improper voltage, electrical service, or electrical connections; or violation of applicable building, plumbing, or electrical codes laws, ordinances, or regulations.

**THIS WARRANTY DOES NOT COVER INCIDENTAL, CONSEQUENTIAL, OR SECONDARY DAMAGES.**

**ANY IMPLIED WARRANTIES ON THE PRODUCT DESCRIBED IN THIS WARRANTY WILL NOT BE EFFECTIVE AFTER THE EXPIRATION OF THIS WARRANTY.**

No dealer, agent, representative, or other person is authorized to extend or expand this limited warranty.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and 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.

## Claims Procedures

Any defects covered by this warranty should be promptly reported to:

**PuraTech®**  
4343 S. Hamilton Rd.  
Groveport, OH 43125

When writing about the defects, please provide the original owner's name, telephone number, and original address, serial number and model number of the product, and date of purchase. (This information should be listed in *General Information* on page 4 of this manual.) **PuraTech®** reserves the right to replace defective parts with exact duplicates or their equivalent.

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# OWNER INFORMATION

## General Information



**Congratulations** on choosing a superior **PuraTech®** water treatment appliance! Soon you and your family will be enjoying clean, clear water. Use this guide to attain the maximum benefit from the appliance. As an owner, you may find the first few pages to be the most helpful. If you have trouble with the operation of the appliance, see *Troubleshooting* in the back of this manual or contact your independent dealer.

**Warning:** This appliance must be applied to potable water only. It is recommended that an independent dealer install and maintain this appliance.

**Note:** The manufacturer reserves the right to make specification and product changes without prior notice.

This manual is for installation, operation, and maintenance of the following water conditioning appliance model:

- **PuraTech® 5100**

## For Owner's Reference

Date of Installation: \_\_\_\_\_

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

Serial Number<sup>1</sup>: \_\_\_\_\_

Installer's Signature: \_\_\_\_\_

Dealership Name: \_\_\_\_\_

Dealership Address: \_\_\_\_\_

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

Hardness: \_\_\_\_\_

Iron: \_\_\_\_\_

pH: \_\_\_\_\_

Water Pressure: \_\_\_\_\_

Water Temp: \_\_\_\_\_

Returned Warranty Card Date<sup>2</sup>: \_\_\_\_\_

<sup>1</sup> The serial number is located on the main control valve in front of the bypass.

<sup>2</sup> Completely fill out the Warranty Card and return it by mail to ensure that the appliance is registered with the factory and the warranty becomes validated.

## Getting Maximum Efficiency from the Appliance

To achieve the maximum benefit and performance from this appliance, familiarize yourself with this manual and the appliance.

1. The salt level should always be at least 1/3 full. Refill the salt when the level drops below the water level in the brine tank. A resin cleaner can be used on a monthly basis. Clean white pellet salt, cube-style salt, or solar salt is recommended. Do not use rock salt.

**Caution: Do not mix different types of salt.**

2. You may use a salt substitute (such as potassium chloride) in place of water conditioner salt. An independent dealer should be contacted before a switch is made to a salt substitute. If potassium chloride is used in place of salt, the technician must select the potassium chloride option during the programming of the controller. See *Service Settings*.

**Caution: Do not use potassium chloride if there is iron and/or manganese in the water.**

3. Should the electricity be off for any reason, check the controller for the correct time and reset as necessary. See *Customer Settings*.
4. Program the appliance to regenerate at a time when the water is not being used. If there is more than one appliance, allow two hours between each regeneration.

5. If dirt, sand, or large particles are present in the water supply, pre-treat with the appropriate filter.
6. The appliance may be disinfected with 5.25% sodium hypochlorite, which is the active ingredient in household chlorine bleach. To disinfect the appliance, add 4.0 fluid ounces (120 mL) of chlorine bleach solution to the brine well of the brine tank. The brine tank should have water in it. Start a manual regeneration.
7. Protect the appliance, including the drain line, from freezing.
8. The bypass valve (located on the main control valve) enables you to bypass the appliance if any work is being performed on the appliance, well pump, or plumbing. See *Bypass Valve*. Use the Bypass mode for watering plants or lawns with untreated water.
9. Before putting the appliance back in service after work has been performed, turn on the nearest cold water tap until water runs clear.
10. Adhere to all operational, maintenance, and placement requirements.
11. Inspect and clean the brine tank and air check/draw tube assembly annually or when sediment is present in the brine tank.

## Five-Button Controller

This appliance features a five-button controller with an LCD display. The controller can be used to view the appliance's status, perform regenerations, and change settings. An independent dealer should set the Service Settings during installation of the appliance.

**Note:** Ensure that the bottom of the controller is firmly locked onto the four tabs on the top of the drive end cap assembly. See *Cabinet and Cover Assemblies* diagram later in this manual.

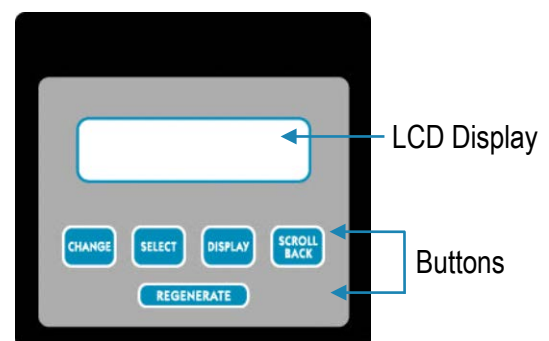


Figure 1: Five-Button Controller

## Five-Button Controller, Cont.

Controller Part	Function
<b>LCD Display</b>	Shows the status of the controller; it is very important to know which mode the controller is in for proper operations
Normal Operating Mode	Shows <ul style="list-style-type: none"> <li>• The amount of soft water remaining until the next automatic regeneration (Each person in the household uses about 75 gallons [290 liters] per day)</li> <li>• The number of days until the next regeneration (Mode 1, Filter = No)</li> <li>• The flow rate in gallons (or liters) per minute (Filter = No)</li> <li>• Whether the appliance will regenerate tonight (If the Regenerate button has been pressed and released)</li> <li>• If the appliance will regenerate based on usage, the display will show “Regen. Scheduled”</li> </ul>
Service Settings Mode	Includes settings such as the language, mode, water hardness, and time of each regeneration step. Service Settings must be set before Customer Settings. Otherwise, some values may not be available. Service Settings Mode is intended for use by qualified service personnel
Customer Setting Mode	Includes setting the time of day, the regeneration time, and the number of people in the household; depending on the Service Settings, this option may not be available
Water Flowing Indicator	Indicates that water is flowing through the appliance; useful for checking for proper plumbing and leaks
Recharge/Regeneration Status	Shows regeneration cycle positions during regeneration
<b>Buttons</b>	The Change, Select, Display, and Scroll Back buttons are used when changing Customer Settings and Service Settings.
Change	The Change button is used with the Select button to set the value of certain parameters. <ul style="list-style-type: none"> <li>• When you press the Change button, the value under the cursor changes to the next available value, typically increasing by one until all values have been displayed and the process begins again.</li> </ul>
Select	The Select button is used to move the cursor when setting parameters. <ol style="list-style-type: none"> <li>1. Press and release the Select button to move the cursor one digit to the right of the parameter to be changed.</li> <li>2. When the cursor is at the extreme right position, press the Select button again to reset the cursor to the extreme left position.</li> </ol>
Display	The Display button is used to enter programming modes and also to save a value and display the next value to be changed. <ol style="list-style-type: none"> <li>1. To program Service Settings, press and hold both the Display button and the Select button for about five seconds while “Service Setting” is displayed.</li> <li>2. To program Customer Settings, press and hold the Display button for about five seconds while “Customer Setting” is displayed.</li> </ol>
Scroll Back	The Scroll Back function is used to step back to a previous parameter setting. It is typically used to go back to correct a setting without the need to scroll forward through all settings.
Regenerate	The Regenerate button at the bottom of the controller is used when starting the water conditioning appliance, to start an immediate regeneration, or to restore capacity if you run out of salt.

# Customer Settings

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Service Settings must be set before Customer Settings; Service Settings should be set during installation of the appliance.

To set Customer Settings, press and hold the Display button for about five seconds while “Customer Setting” displays. Release the button when “Set Time” displays. If the setting displayed is correct, press Display to move to the next setting. If metric units are selected when the Service Settings are set, the time of day and regeneration time will be based on a 24-hour clock.

## Step 1 *Set Time of Day*

Display reads “Set Time” followed by the current time that is set; the cursor will be under the second hours digit.

### To Change the Time of Day

- A. Press Change repeatedly until the current hour is displayed.
- B. Press Select to set the hour and move the cursor to the right.
- C. Do the same to set the minutes. Select AM or PM. When the desired time is displayed, press Display to step to the next parameter.

**Note:** Whenever you experience an electrical outage, check the controller for the correct time. Make any necessary corrections.

## Step 2 *Set Regeneration Time*

Display reads “Reg. Time” followed by the current regeneration time that is set; the cursor will be under the second hours digit. Usually you want to set a regeneration time when water will not be used.

### To Change the Regeneration Time

- A. Follow the procedure outlined above for setting the time.
- B. When the desired regeneration time is displayed, press Display.

## Step 3 *Set Number of People*

Display reads “# People” followed by the current setting for the number of people in the household; the cursor will be under the tens digit.

### To Change the Number of People

- A. Press Change repeatedly until the desired value is displayed; values will cycle from 0 to 9.
- B. Press Select and the cursor moves to the right.
- C. When the desired number of people is displayed, press Display to exit the Customer Setting mode.

When you press the Display button at “# People,” the values are saved, and the controller returns to normal operating mode.

# INSTALLATION AND MAINTENANCE INFORMATION

## Checklist Before Installation

Refer to this checklist before installation.

- Water Quality**—If the water supply contains sand, sulfur, bacteria, iron bacteria, tannins, algae, oil, acid, or other unusual substances, pre-treat the water to remove these contaminants before the water supply enters the appliance, unless the appliance is represented as being capable of treating these contaminants in its specifications.
- Iron**—A common problem found in many water supplies is iron. It is important to know what type of and how much iron is in the water supply.

Iron Type	Description
<b>Ferrous Iron*</b> (sometimes called clear water or dissolved iron)	Only type of iron that can be treated with a water softener
<b>Ferric Iron</b>	Insoluble and the particles can eventually foul a resin bed. It should be filtered out before the water reaches the softener
<b>Organic Iron or Bacterial Iron</b>	Attached to other organic compounds in the water. Additional treatment is needed to remove this type of iron
<b>Colloidal Iron</b>	Not dissolved, yet stays in suspension. A softener cannot remove this type of iron

\* If the water supply contains ferrous iron, a commercially available resin bed cleaner should be used every six months. Follow the instructions on the container. You should also increase the water hardness setting by 5 grains per gallon (86 mg/L) for every 1 ppm (mg/L) of ferrous iron.

- Water Characteristics**—The 5100 Water Softeners require a pH of 7 or above to function properly. An iron test to determine iron levels is also necessary.
- Water Hardness**—Double check the hardness of water to verify that the appliance is right for the job. See *Water Conditioner Specifications*.
- Water Pressure**—Not less than 20 psi (1.4 bar) or greater than 120 psi (8.3 bar) constant. If water pressure exceeds 70 psi (4.8 bar), a pressure regulator is recommended.
- Water Supply Flow Rate**—A minimum of 2.4 gallons (9.1 L) per minute is recommended. For the purposes of plumbing sizing, only the rated service flow rate and corresponding pressure loss may be used. Prolonged operation of a water conditioner at flow rates exceeding the tested service flow rate may compromise performance.
- Water Temperature**—Not less than 40°F (4°C) or greater than 120°F (49°C).
- Drain**—Drain the appliance to an appropriate drain, such as a floor drain or washer drain that will comply with all local and state plumbing codes. To prevent back-siphoning, provide an adequate air gap or a siphon break. See *Installation Steps and Start-Up Procedures*.
- Electricity**—The transformer supplied is for a standard 115 volt, 60-cycle AC outlet for locations in North America or 220 volt, 50-cycle AC outlet for locations outside North America.



# Precautions

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## Do

1. Comply with all state and local building, plumbing, and electrical codes.
2. Install the appliance before the water heater.
3. Install the appliance after the pressure tank on well-water installations.
4. Install a pressure-reducing valve if the inlet pressure exceeds 70 psi (4.8 bar).
5. Examine the inlet line to ensure water will flow through it freely and that the inlet pipe is sized correctly. For well water with iron, the recommended minimum inlet pipe size is 3/4-inch I.D. and for municipal water the recommended minimum inlet pipe size is 1/2-inch I.D.
6. Install a gravity drain on the cabinet.
7. Secure the drain line on the appliance and at the drain outlet. See *Installation Steps and Start-Up Procedures*.
8. Allow a minimum of 8 to 10 feet (2.4 to 3.0 m) of 3/4-inch pipe from the outlet of the appliance to the inlet of the water heater.

## Do Not

1. Do not install if checklist items are not satisfactory. See *Checklist Before Installation*.
2. Do not install if the incoming or outlet piping water temperature exceeds 120°F (49°C). See *Water Conditioner Specifications*.
3. Do not allow soldering torch heat to be transferred to valve components or plastic parts when using the optional copper adapters.
4. Do not over tighten the plastic fittings.
5. Do not plumb the appliance against a wall that would prohibit access to plumbing. See *Installation Steps and Start-Up Procedures*.
6. Do not install the appliance backward. Follow the arrows on the inlet and outlet.
7. Do not plug the transformer into an outlet that is activated by an On/Off switch.
8. Do not connect the drain line and the gravity overflow drain line together.
9. Do not use to treat water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the appliance.
10. Do not allow the appliance or drain line to freeze.

**Note:** A bacteriostasis claim does not mean that these devices will make microbiologically unsafe water safe to consume or use.

# Installation Steps and Start-Up Procedures

## Step 1

### *Prepare the Placement Area*

- A. Make sure the placement area is clean.
- B. Turn off the electricity and water supply to the water heater. For gas water heaters, turn the gas cock to "Pilot."
- C. Examine the inlet plumbing to ensure that the pipe is not plugged with lime, iron, or any other substance. Clean or replace plugged plumbing.
- D. Make sure the inlet/outlet and drain connections meet the applicable state and local codes.
- E. Check the arrows on the bypass valve to ensure that the water flows in the proper direction. See Figure 6.

**Caution: Do not plumb the appliance in backward.**

- F. Place the appliance in the desired location using Figure 2 as a guide. The diagram in Figure 2 applies to basement, slab, crawl space, and outside installations.
- G. For most installations, install the appliance after the pressure tank and any water filter appliance or water meter and before the water heater unless otherwise recommended. When installing any additional filters, such as a carbon filter for well water, place the filter after any water conditioning appliance unless otherwise recommended.

**Water Heaters:** If less than 10 feet (3 m) of pipe connects the water treatment appliance(s) to the water heater, install a check valve between the water treatment appliance and the water heater as close to the water heater as possible. Ensure that the water heater has an adequately rated temperature and pressure safety relief valve.

- H. For outside installations, the appliance should be enclosed so it is protected from the weather.

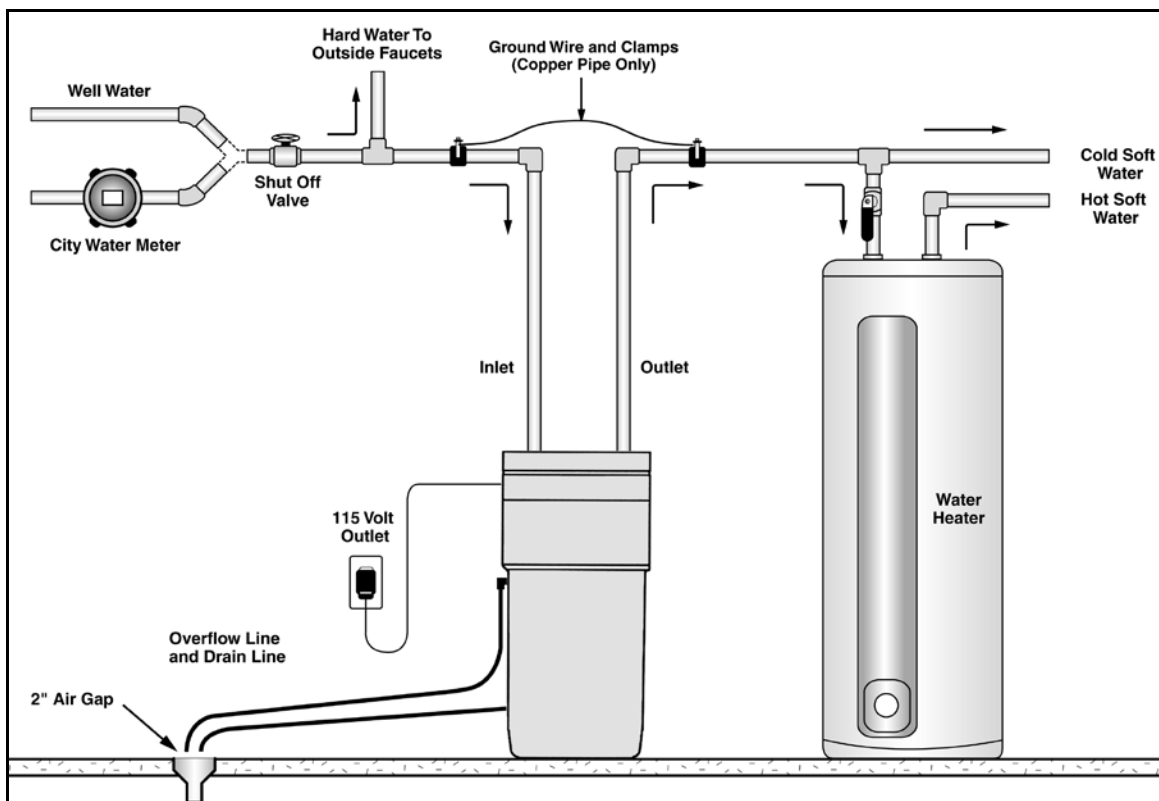


Figure 2: Appliance Placement

## Installation Steps and Start-Up Procedures, Cont.

### Step 2 *Turn Off Water Supply*

- A. Turn off the water supply.
- B. Open the hot and cold water taps to depressurize the lines.

### Step 3 *Connect Water Lines*

**Note:** See *Optional Plumbing Procedures* for information on copper fittings and joining plastic pipe.

- A. Lift and remove the cabinet cover.
- B. Install Qest fittings. Qest connection fittings are provided with your appliance. Qest fittings provide a convenient, easy-to-use three-piece assembly for 3/4-inch copper plumbing or 3/4-inch CTS CPVC plastic tubing (copper is shown in Figure 3). Ensure that the three components (1: collar, 2: metal retaining ring, and 3: nylon sleeve) are correctly installed in sequence on the pipe. (See Figure 3.)

**Note:** Teflon tape or plumber's putty is NOT necessary and should NOT be used with Qest fittings.

- C. Attach the water lines to the appliance in compliance with all applicable building, plumbing, and electrical codes. (See Figure 4). Do NOT overtighten the connections on the plastic threads.
  - D. Check the arrows on the valve to ensure that the water flows in the proper direction.
- Caution: Do NOT plumb your appliance in backward.**



Figure 3: Qest Fittings



Figure 4: Connect Water Lines

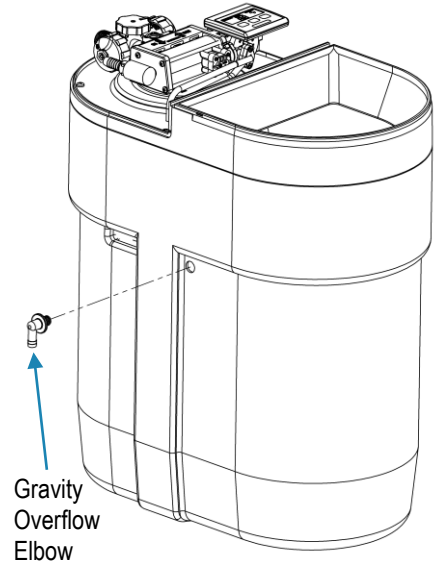
## Installation Steps and Start-Up Procedures, Cont.

### Step 4

#### **Connect Gravity Overflow Connection and Secure Brine Well Into Proper Position**

The gravity overflow line drains away excess water should the tank fill with too much water or the appliance malfunction.

- A. Attach the overflow elbow to the cabinet by removing the safety shutoff from the brine well. (See Figure 5.)
  1. Place the elbow through the hole in the cabinet wall and the hole in the brine well.
  2. Screw the overflow nut onto the overflow elbow and tighten. This will also hold the brine well in the proper position.
  3. Reassemble the safety shutoff into the brine well.  
**Note:** Ensure that the elbow is in the down position.
- B. Connect 1/2-inch I.D. tubing (size cannot be reduced) between the overflow elbow and a floor drain, laundry tub, or other suitable waste receptor. This tubing is not supplied with the appliance. Ensure that the overflow line ends at a drain that is at least 3 inches (8 cm) lower than the bottom of the overflow elbow. Maintain a minimum of 2-inch (5 cm) air gap between the overflow line and the flood level rim of the waste receptor to prevent back-siphoning. The gravity line cannot be run overhead.



**Figure 5: Gravity Overflow Elbow**

### Step 5

#### **Connect Drain Line**

The drain line carries away the backwash water as part of the regeneration cycle.

- A. Connect the drain line to the drain end cap with a 5/8-inch I.D. tubing (supplied). The size cannot be reduced.  
**Note:** If the drain line is 25 feet (7.6 meters) or longer, increase the drain line to 3/4-inch I.D tubing using the appropriate fittings. The end of the drain line must be equal to or lower in height than the control valve.  
**Caution: The drain line must not be kinked, crimped, or restricted in any way.**
- B. Route the drain line to a floor drain, laundry tub, or other suitable waste receptor. Maintain a minimum 2-inch (5 cm) air gap as with the overflow line. This drain line should make the shortest run to the suitable drain.
- C. The drain line may be elevated up to 8 feet (2.4 m) from the discharge on the appliance as long as the water pressure in the system is 40 psi (2.8 bar) or more.

### Step 6

#### **Flush Lines**

- A. Place the bypass valve in the Bypass position.
- B. Turn on the main water supply.
- C. Open the nearest cold water faucet to flush the plumbing of any excess soldering flux, air, or any other foreign material until the water runs clear.

## Installation Steps and Start-Up Procedures, Cont.

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### Step 7

#### ***Check for Leaks***

- A. Close all faucets.
- B. Check all lines and connections for leaks. If leaks are found:
  1. Turn off the main water supply.
  2. Open a cold water faucet to depressurize the lines.
  3. Close the faucet to eliminate any siphoning action.
  4. Repair all leaks.
  5. Turn on the main water supply.
  6. Place the bypass valve in the Service position to slowly fill the media tank.
  7. Open a cold water faucet to purge air out of the media tank.
  8. Close the faucet and recheck for leaks.

### Step 8

#### ***Plug in the Transformer***

- A. Connect the transformer power cord to the back of the controller.
- B. Plug the transformer into an outlet that is not operated by an On/Off switch.

### Step 9

#### ***Set Up the Controller***

- A. Program the appliance controller. See *Setting and Using the Controller*.

### Step 10

#### ***Add Water to the Brine Cabinet***

- A. Add 2 gallons (8 L) of water to the brine cabinet. After the first regeneration, the appliance will automatically refill the correct amount of water into the brine cabinet.  
**Note:** This initial startup is the only time you will add water to the brine cabinet. Do not add water at any other time.
- B. Ensure the appliance is in Service position and your water supply is turned on.
- C. Initiate a manual regeneration (see *Five-Button Controller*) and inspect for proper operation. Allow the appliance to draw all the water out of the brine tank until the air check/draw tube sets (8–10 minutes).
- D. Press the Regenerate button to advance to the Brine Refill position. Let the tank fill with the proper amount of water. The controller will then step the main control valve to the Home position.

### Step 11

#### ***Fill the Brine Cabinet With Salt***

- A. Fill the brine cabinet with salt. Use clean, white pellet salt, cube-style salt, or solar salt.  
**Caution: Do not mix different types of salt.**  
**Note:** Always keep the salt level above the water level. For convenience, completely fill the tank when refilling with salt.
- B. After you add salt, including adding it after the tank has run out of salt, wait two hours for saturated brine before starting any regeneration.  
**Caution: Use of potassium chloride when iron and/or manganese are present in the raw water supply is not recommended.**

## Installation Steps and Start-Up Procedures, Cont.

### Step 12 *Complete the Installation*

- A. Ensure that the appliance is in the Service position. See *Bypass Valve*.
- B. Ensure that the water supply is on.
- C. Turn on the electricity and water supply to the water heater. For gas water heaters, return the gas cock to “On.”
- D. Open a cold water tap and allow the appliance to flush for 20 minutes or until approximately 72 gallons (270 L) have passed through the appliance. This procedure is required to meet NSF requirements. Verify the flow rate on the controller, which indicates water flow. (See Figure 1.)
- E. Replace the cabinet cover.

## Bypass Valve

The bypass valve can isolate the appliance should the appliance malfunction or leak. It can also permit the use of untreated water for watering plants, shrubs, or lawns.

The bypass valve is attached to the main control valve. See Figure 6. To engage the bypass valve, turn the knob to the Bypass position. The appliance will be bypassed and all water to the home is raw, untreated water. To prevent untreated water from entering the home, water should not be used inside the home when the appliance is in Bypass mode. Ensure that the appliance is returned to Service mode when the appliance is repaired or the use of untreated water is complete by turning the knob to the Service position.

To blend hardness back into the water using the bypass, turn the knob slightly from the Service position toward the Bypass position.

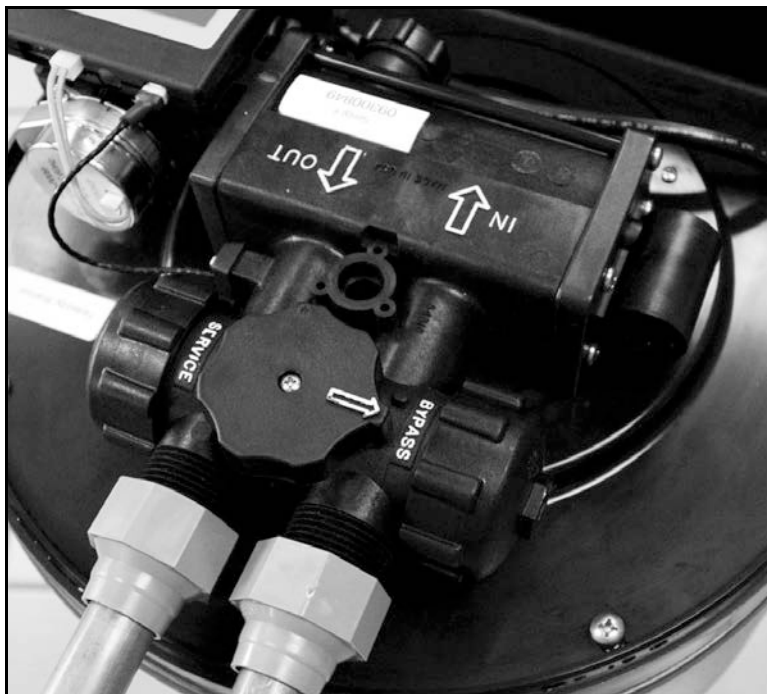


Figure 6: Bypass Valve

## Setting and Using the Controller

The controller must be set up correctly for the appliance to perform properly.

**Note:** Ensure that the bottom of the controller is firmly locked onto the four tabs on the top of the drive end cap assembly. See Figure 9.

### Regenerate Button

The Regenerate button is used when starting the water filtration appliance and to start an immediate regeneration. The Regenerate button can be used in three ways:

1. The Regenerate button can be used to put the appliance into an immediate regeneration.
  - A. Press and hold the Regenerate button for about five seconds until the display changes from “Regenerate” to “Going to.”
  - B. The appliance is in regeneration mode and will display the status of each cycle. After all regeneration cycles are complete, the display will return to Normal operating mode.
2. The Regenerate button can be used to quickly advance through all of the regeneration cycles to speed up the cycles, which is used when starting up or diagnosing the appliance only.
  - A. To advance through the regeneration cycles, press and hold the Regenerate button for about five seconds until the display changes to “Going to.”
  - B. The cycle position will display (for example, Backwash 1).
  - C. Each cycle can be advanced by pressing the Regenerate button. Always wait until the cycle position displays before advancing to the next cycle position.
3. Press and release the Regenerate button in Normal operating mode to schedule a regeneration tonight or toggle it off.

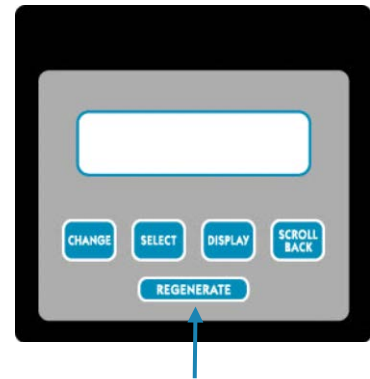


Figure 7: Regenerate Button



## Service Settings

To program Service Settings on the controller, press and hold the Select and Display buttons while “Service Settings” is displayed until “Set Language Eng” is displayed. Programming Service Settings is similar to programming Customer Settings (see *Customer Settings* for programming details). The values that can be set are listed below.

**Note:** The Service Settings must be set before the Customer Settings.

Display	Meaning	Possible Values	Comments
Set Language Eng	Set the language of the display	Set Language Eng Entrer Langue Fra Entre La Leng. Esp	
Units ENG	Units of measure	ENG or MET	
Soft. v. # 1.22B	Displays the current software version	Cannot be set	
Mode <u>2</u>	Operating Mode: Timer (Mode 1) Demand Delayed (Mode 2)	1 or 2	See <i>Operating Modes</i>
Regen Freq. <u>01</u>	How often regeneration occurs	1–12 days	Only displays when in Mode 1
Hard. Gr. <u>040</u>	Hardness of the water that was tested	003 to 999 Grains (00000 to 99999 mg/L)	This is the actual hardness reading and is not compensated for iron and/or manganese
Iron ppm <u>00</u>	Amount of iron in parts per million of the water that was tested	00 to 99 ppm (mg/L)	This value is used to calculate compensated hardness automatically
Mang. ppm <u>00</u>	Amount of manganese in parts per million of incoming water	00 to 99 ppm (mg/L)	This value is used to calculate compensated hardness automatically
Salt =           Sodium	Regenerant filling the brine tank	Sodium or Potassium	See <i>Warning</i>
Comp. Hard.    00040	Compensated hardness using the hardness, iron, and manganese settings	Cannot be set ppm or mg/L	The formula used is: Hardness + (4 x each ppm iron) + (4 x each ppm manganese) = compensated hardness
Capac. Gr. <u>24480</u>	The desired softening capacity number	00000 to 99999 Grains (0000 to 9999 gm)	See <i>Water Conditioner Specifications</i> or <i>Modes 1 and 2 Setting Chart</i> for capacities based on salt usage
72–96 hr Regen   No	A way to force regeneration at regularly scheduled intervals	No (or Yes, for iron)	See <i>72–96 Hour Regeneration</i>
Backwash 1 <u>03.0</u>	Number of minutes the first backwash cycle lasts	00.0 to 99.9	Set to the nearest tenth of a minute

**Warning:** When iron and/or manganese is present in the water supply, do not use potassium chloride as a regenerant. Iron and/or manganese bacteria may develop and foul the conditioning media and may void the warranty.

This table continues on the next page.



## Service Settings, Cont.

Display	Meaning	Possible Values	Comments
Brine/Rinse <u>30.0</u>	Number of minutes the brine and slow rinse cycle lasts	00.0 to 99.9	Set to the nearest tenth of a minute
Backwash 2 <u>02.0</u>	Number of minutes the second backwash cycle lasts	00.0 to 99.9	Set to the nearest tenth of a minute
Salt lbs. <u>06.0</u>	Amount of salt set to be used in each regeneration to achieve the capacity setting	00.0 to 99.9 lb (kg)	Set to the nearest tenth
Turbine Test     No	Used by qualified personnel for diagnostic purposes	No or Yes	Do not engage this feature
Reg. Tonight     No	Sets the appliance to regenerate tonight	No or Yes	If set to Yes, it will force a regeneration at the next set regeneration time (such as 02:00 AM). After the regeneration, the value will be set to No
Filter?            No	Used by qualified service personnel to set the model number	No or Yes	Has no effect on the function of the appliance

When you press the Display button at “Filter?”, the values are saved, and the controller returns to Normal operating mode.

## Operating Modes

The appliance has two operating modes: Timer mode and Demand Delayed mode. Both modes are equipped with Capacity Guard®, which ensures that a supply of conditioned water will be available even with excessive water usage.

### Mode 1—Timer Mode

When the appliance is in Timer mode, it will regenerate based on the frequency that is set, for example every day or up to every 12 days. The time of regeneration can be set.

### Mode 2—Demand Delayed Mode

When the appliance is in Demand Delayed mode, it will regenerate based on the actual water usage and the total capacity of the appliance. The time that the regeneration takes place can be set, for example 2:00 AM. Should the total capacity be depleted before the set regeneration time, a forced regeneration will occur.

## 72–96 Hour Regeneration

If this value is set to Yes, the appliance will be forced to regenerate every 72–96 hours unless a regeneration based on water usage occurs within the time interval. The value should always be set to Yes if iron is present in the water.

## Service Settings, Cont.

### Mode 1 (Timer Mode) and Mode 2 (Demand Delayed Mode) Setting Chart

This section provides guidance for using different Service Settings to achieve the desired capacity.

PuraTech	Model 5100
<b>Mode 1 and Mode 2</b>	Yes
Regeneration Frequency	Mode 1 only
96 hour regeneration (if iron present—yes) <sup>1</sup>	Yes or No
<b>#1 Salt Setting</b>	
Backwash 1 (minutes)	01.0
Brine/Rinse (minutes)	19.5
Backwash 2 (minutes)	03.0
Capacity—grains @ salt—lb (grams @ salt—kg)	5,500 @ 1 lb (356 @ 0.5 kg)
<b>#2 Salt Setting</b>	
Backwash 1 (minutes)	01.0
Brine/Rinse (minutes)	22.0
Backwash 2 (minutes)	03.0
Capacity—grains @ salt—lb (grams @ salt—kg)	13,700 @ 3 lb (887 @ 1.4 kg)
<b>#3 Salt Setting<sup>2</sup></b>	
Backwash 1 (minutes)	01.0
Brine/Rinse (minutes)	26.0
Backwash 2 (minutes)	03.0
Capacity—grains @ salt—lb (grams @ salt—kg)	23,700 @ 6 lb (1535 @ 2.7 kg)
<b>#4 Salt Setting<sup>2,3</sup></b>	
Backwash 1 (minutes)	01.0
Brine/Rinse (minutes)	30.0
Backwash 2 (minutes)	03.0
Capacity—grains @ salt—lb (grams @ salt—kg)	30,800 @ 9 lb (1995 @ 4.1 kg)

<sup>1</sup> If iron is present in water supply, use salt setting #3 or #4.

<sup>2</sup> If iron is present in the water supply, set Backwash 1 to 7 minutes.

<sup>3</sup> Do not use this salt setting in California.

## Optional Plumbing Procedures

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This section provides information on plumbing with copper fittings and with plastic pipe.

### Hard Plumbing the Bypass With Copper Fittings

Do not use Qest fittings for hard plumbing with copper fittings. When preparing the male threaded fittings of the I/O adapter, use the following guidelines to avoid damage to the plastic pipe threads.

- A. Wrap the threads three times with 1/2-inch wide Teflon tape. Place each consecutive wrap on top of the previous wrap.
- B. To prevent tearing of the tape, use Teflon paste on the first two male threads only. The paste lubricates the tape and fills the small void areas that might exist between the threads. When the joint is complete, there will be a small bead of sealant at the fitting interface, which indicates a properly joined connection.
- C. Use a union with a threaded connection to facilitate repair of potential leaks in soldered joints.
- D. Prepare the copper tail assemblies in advance to enable them to cool prior to final assembly. Advance preparation and cooling will prevent heat damage to the plastic pipe threads of the adapter.
- E. Ensure that the copper tube is at least 4 inch (10 cm) long.
- F. Turn the fitting counterclockwise until you feel the threads engage and then tighten to prevent cross threading. Do NOT over tighten the fittings.

**Caution: Do NOT allow heat from the torch to transfer to the plastic valve component, which could be damaged.**

## Optional Plumbing Procedures, Cont.

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### *Plastic (PVC/CPVC) Pipe Joining Procedure*

To ensure reliable joint integrity when using solvent cement for PVC/CPVC plumbing, follow these recommendations:

- A. **Cutting**—The pipe must be cut square to allow for the proper interfacing of the pipe end and the fitting socket bottom. Use a wheel cutter, miter saw, or a ratchet shear for best results.
- B. **Deburring and Beveling**—Use a knife, plastic pipe deburring tool, or a file to remove burrs from the end of the pipe. Be sure to remove all burrs from the inside as well as the outside of the pipe. Remove all loose plastic debris since it could clog the injector. All pipe ends should be beveled to permit easier insertion of the pipe into the fitting. Failure to bevel the pipe end may cause a “wiping” effect in the fitting where the cement is forced to the end of the fitting socket. This creates a weak joint.
- C. **Test Dry Fit of the Joint**—Tapered fitting sockets are designed so that an interference fit should occur when the pipe is inserted about one-third to two-thirds of the way into the socket. Occasionally, when pipe and fitting dimensions are at the tolerance extremes, it will be possible to fully insert dry pipe to the bottom of the fitting socket. When this happens, a sufficient quantity of cement must be applied to the joint to fill the gap between the pipe and fitting.
- D. **Inspection, Cleaning, and Priming**—Inspect the inside of the pipe and fitting sockets and remove dirt, grease, or moisture with a clean dry cloth. If wiping fails to clean the surfaces, use a chemical cleaner. Check for possible damage such as splits or cracks and replace if necessary. Use purple primer to penetrate and soften the bonding surfaces of the PVC or CPVC pipe and fittings. Proceed without hesitation to the cementing procedure while the primed surfaces are still wet.
- E. **Application of Solvent Cement**—Apply the solvent cement evenly and quickly around the outside of the pipe while the primer is still wet. Apply a light coat of cement evenly around the inside of the fitting socket. Do not allow excess cement to “puddle” in the fitting. Apply a second coat of cement to the pipe end.
- F. **Joint Assembly**—Working quickly, insert the pipe into the fitting socket and give a 1/4-turn of the pipe or fitting while pushing toward the fitting stop. This action will evenly distribute the cement. Do NOT continue to rotate the pipe or fitting after the stop has been reached. Hold the joint tightly together for about 15 seconds to prevent the pipe from “creeping” out of the fitting. A good joint will have sufficient cement to make a small bead all the way around the outside of the fitting hub. The joint should not be disturbed immediately after the cementing procedure. Allow adequate time for the joint to cure properly. Exact drying time is hard to predict because of environmental variables. Follow the recommended joint curing times on the primer and cement container labels.

# Assembly and Parts

## Cabinet/Cover/Salt Lid Assemblies

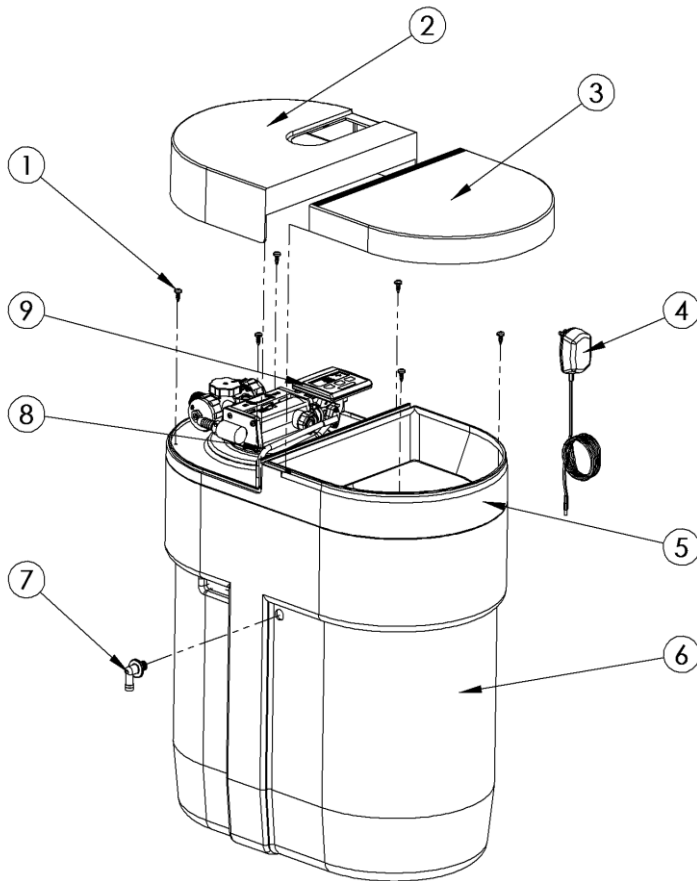


Figure 8: Cabinet and Cover Assemblies

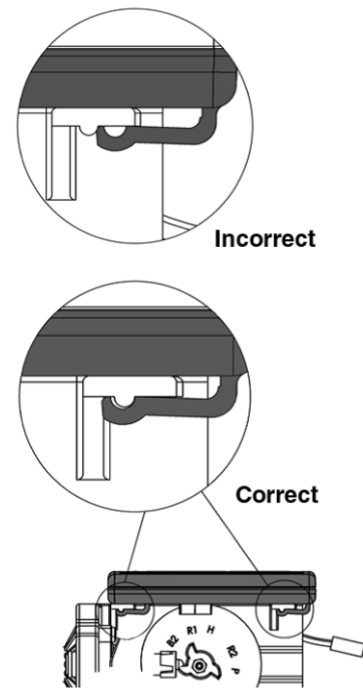
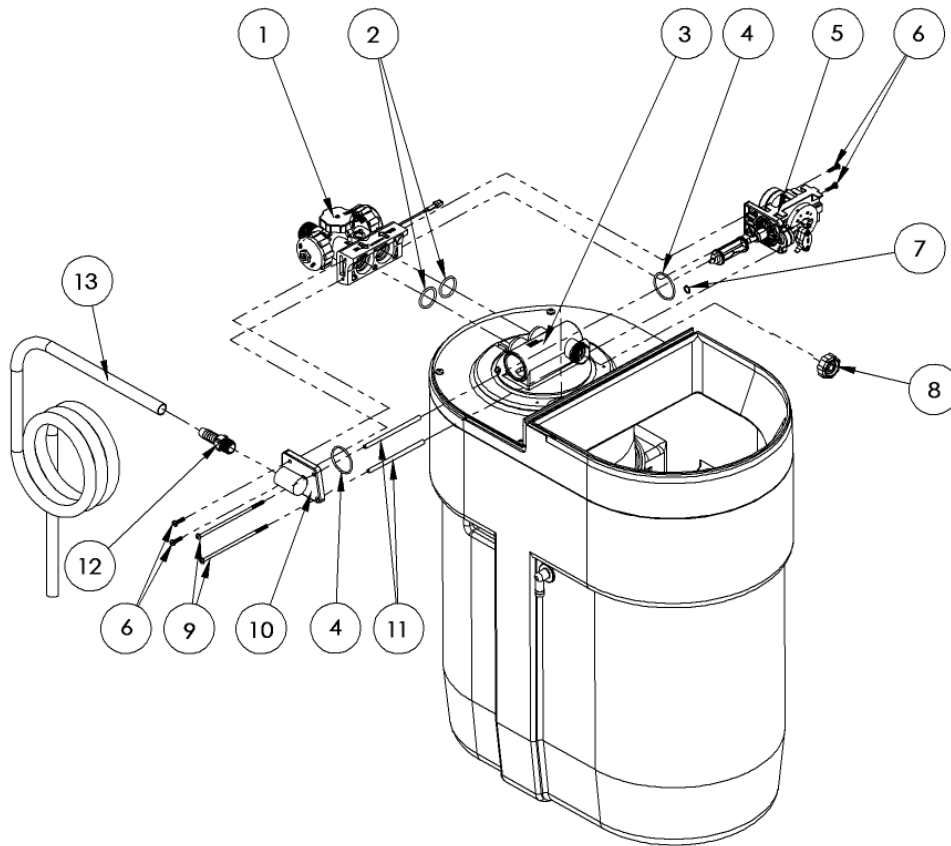


Figure 9: Controller Tab Lock Detail

	Part #	Description	Quantity
1	90801	Screw	6
2	95204	Valve Cover Assembly	1
3	95205	Salt Port Lid	1
4	93245	12 Volt Transformer/Power Cord	1
5	95203	Support Panel	1
6	95202	Cabinet	1
7	C0700	2 Piece Overflow	1
8	93848	3/8-inch Brine Tubing, 2 feet (0.6 m)	1
9	54550	Computer Control Assembly	1

## Assembly and Parts, Cont.

### Cabinet and Assemblies



**Figure 10: Cabinet and Assemblies**

	Part #	Description	Quantity
1	54512	Bypass Assembly	1
2	93838	O-Ring	2
3	95505	Resin Tank Assembly	1
4	93808	O-Ring	2
5	95301T	Drive End Cap Assembly	1
6	93809	Screw	4
7	90828	O-Ring	1
8	93504	Injector Assembly	1
9	93809	Screw	2
10	93524	Drain End Cap Assembly	1
11	93835	Spacer Tube	2
12	V185	Drain Line Fitting	1
13	93842	Drain Line	1

# Assembly and Parts, Cont.

## Injector Assembly

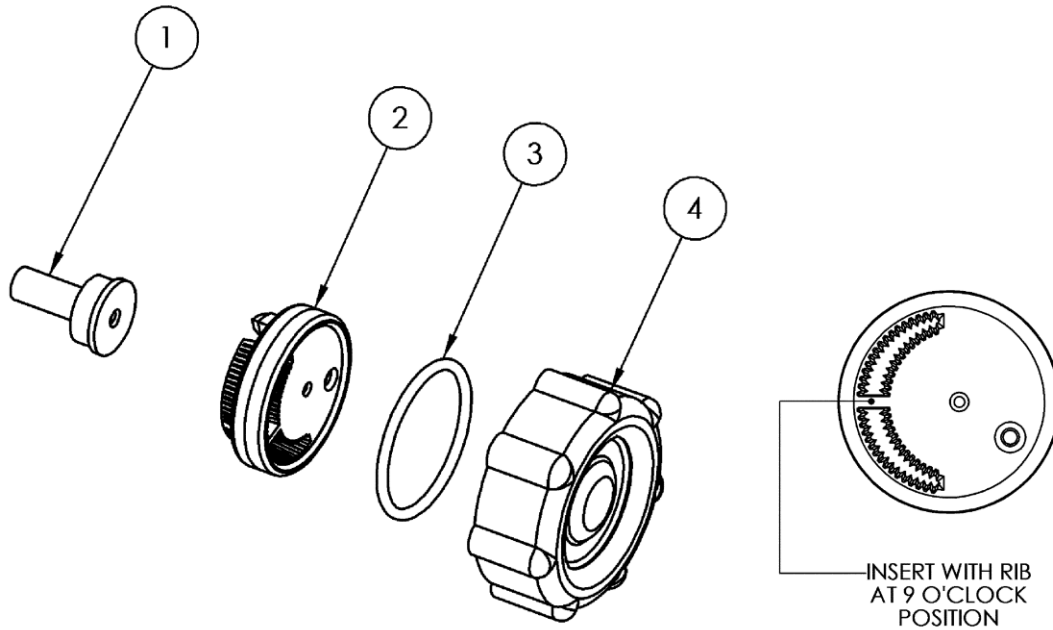


Figure 11: Injector Assembly

	Part #	Description	Quantity
1	93223	Injector Throat	1
2	53224	Injector Nozzle with Over-Mold Gasket	1
3	93806	O-Ring	1
4	53235	Injector Cap	1
	93504	All of the above parts	

<b>93223 Injector Throat</b>	In conjunction with the Injector Nozzle it creates the vacuum that draws the brine solution from the brine tank. The center hole should be clear of debris, round, and undamaged. The Throat should be pressed flush into the opening in the valve. If the Throat is removed, it must be replaced with a new one.
<b>53224 Injector Nozzle with Over-Mold Gasket</b>	Together with the Throat creates the vacuum that draws the brine solution from the Brine Tank. The small hole in the Injector Nozzle is the one that creates the "injection-stream" that enters the Throat. It is important that this hole is round, undamaged, and clear of debris. If this hole becomes "clogged," do not use anything (such as metal objects) to clear this opening. Damage may occur. Use a clean cloth and flush with water. If necessary, a wooden toothpick may be used. When assembling to the Valve, the Nozzle hole should line up with the Throat. Flush screen with water to clean. The over-mold gasket seals between the Injector Nozzle and the Injector Cap.
<b>53235 Injector Cap</b>	Holds the injector assembly together and seals the assembly to the Main Control Valve.

## Assembly and Parts, Cont.

### Drive End Cap Assembly

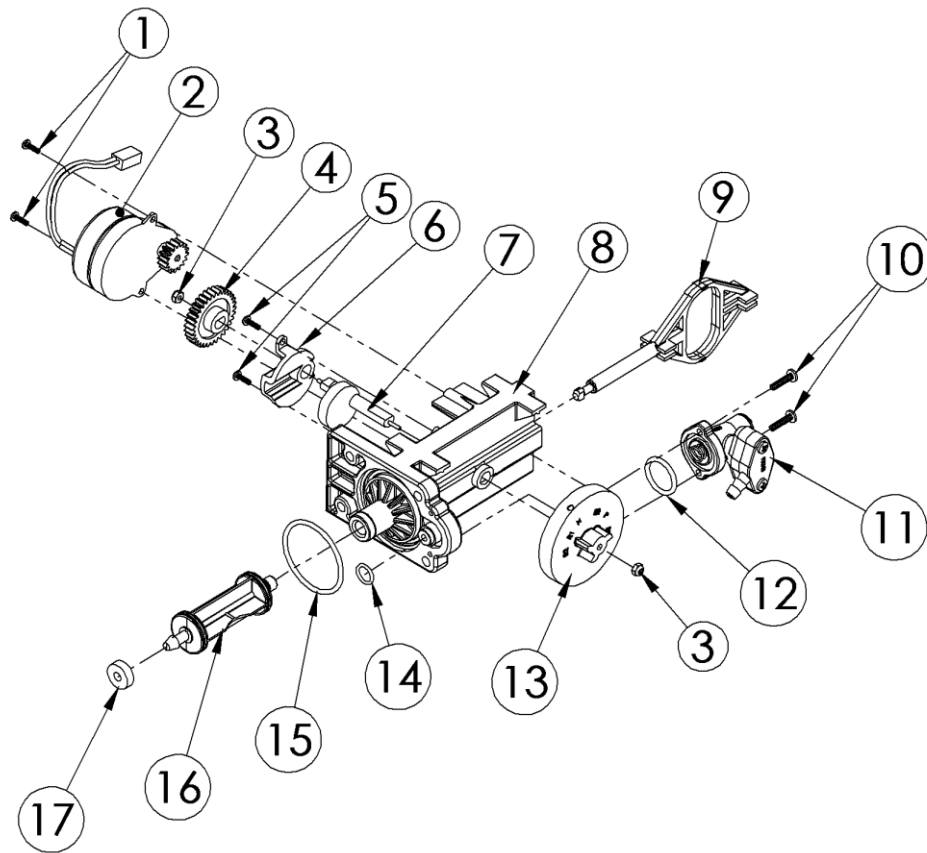


Figure 12: Drive End Cap Assembly

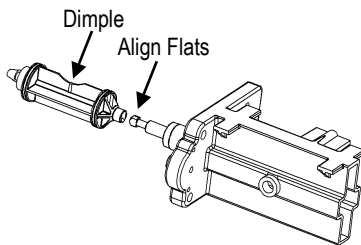
	Part #	Description	Quantity
1	90802	Screw	2
2	90217	Drive Motor	1
3	93891	1/4-inch Hex Nut	2
4	93238	Drive Gear	1
5	90809	Screw, Cam Cover	2
6	93219	Piston Slide Cam Cover	1
7	93217	Piston Slide Cam	1
8	93583	Drive End Cap	1
9	54202	Piston Slide	1
10	90818	Screw	2
11	93699	Brine Valve Assembly (Barbed)	1
12	90821	O-Ring	1
13	54502 KIT	Magnet Disk Assembly	1
14	90828	O-Ring	1
15	93808	O-Ring	1
16	53322	Drive Piston Assembly	1
17	93839	Drain Gasket	1
	95301T	Entire Assembly (all of the above parts except 1, 2, and 13)	



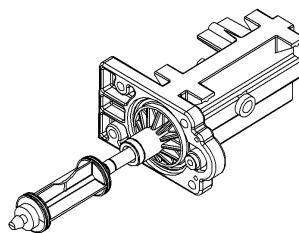
## Assembly and Parts, Cont.

### Drive End Cap Assembly Cont.

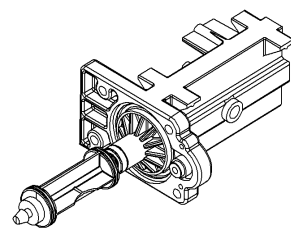
<b>90217 Drive Motor</b>	The Motor is held in place by two 1/2-inch thread-cutting screws. The screws should be “snug.” The brass pinion gear on the Motor should engage the plastic Drive Gear. The wires should be securely fastened to the Controller.
<b>93238 Drive Gear</b>	The Drive Gear is assembled to the Slide Cam by means of a “keyed” opening, which transfers the “torque” generated by the Motor to the rest of the drive system. If the drive system becomes jammed, this opening can become “rounded” causing the gear to turn, but not the Piston Slide Cam. If this occurs, clear the jam and replace the Drive Gear and Piston Slide Cam.
<b>93219 Piston Slide Cam Cover</b>	The cover secures the Piston Slide Cam in place and acts as a bushing for the Cam Shaft.
<b>93217 Piston Slide Cam</b>	This is the “heart” of the drive system. A threaded stainless steel shaft runs through the main drive axle. The Drive Gear is attached at the short end and the Magnet Disk at the other end. The Slide Cam is assembled inside of the Piston Slide. This Cam Shaft should turn freely before the Motor is assembled.
<b>93583 Drive End Cap</b>	Seals the two openings on the Main Control Valve. The larger diameter opening is sealed with an O-Ring used as an axial or “face” seal. The O-Ring sits in a groove in the End Cap. This groove must be free of defects such as pits or scratches and also free of debris. The smaller diameter seal is accomplished with an O-Ring used as a radial seal. The O-Ring should be placed on the male boss on the End Cap. When assembling the End Cap to the Main Control Valve, care should be taken to make sure the small O-Ring is aligned with the opening in the Main Control Valve and that the large O-Ring stays in the groove in the End Cap. If misaligned, the O-Rings can become pinched and leak.
<b>54202 Piston Slide</b>	The Slide should move freely inside the End Cap Housing.
<b>53322 Drive Piston Assembly</b>	The Drive Piston attaches to the Piston Slide by placing the “slot” of the Piston onto the matching flat of the Slide. To remove Piston, rotate Piston 90° counterclockwise. To replace Piston, rotate 90° clockwise until you hear an audible “click.” See reference drawings below.



Position Piston Assembly (53322) Vertical



Slide Piston Assembly Onto Piston Slide.  
Push Toward End Cap to Stop.



Rotate The Piston Assembly 90 Degrees  
Clockwise Until You Hear An Audible Click  
As It Snaps Into Place

## Assembly and Parts, Cont.

### Bypass Assembly

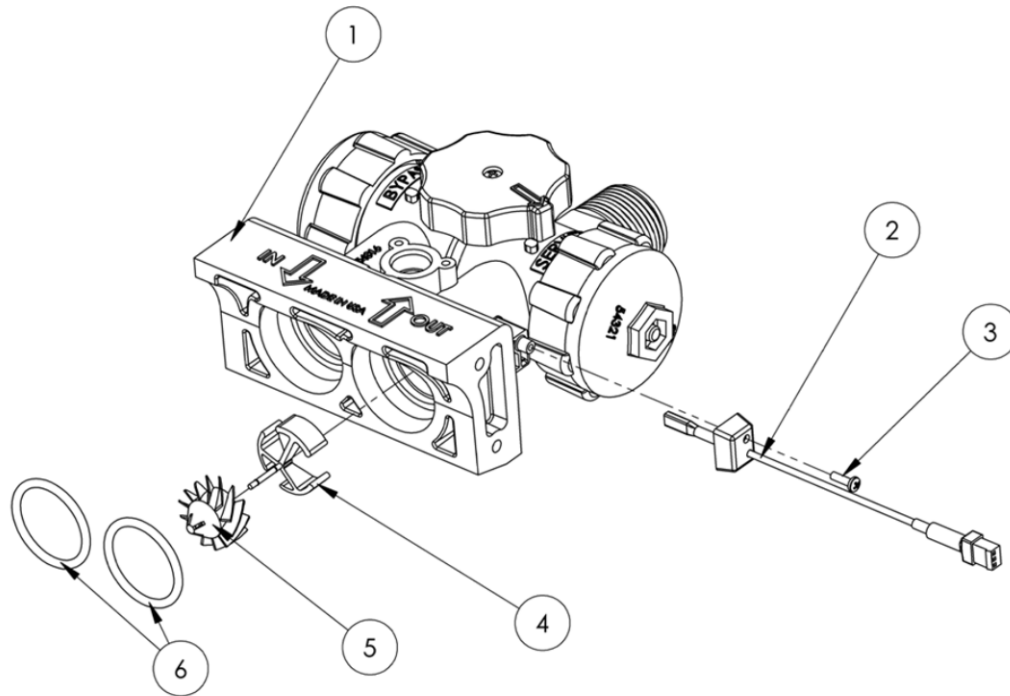


Figure 13: Bypass Assembly

	Part #	Description	Quantity
1	54512	Bypass Assembly (also includes items 2–6)	1
2	93860	Turbine Sensor/Cap Assembly	1
3	90809	Sensor Cap Screw, self-tapping	1
4	54320	Plastic Turbine Axle	1
5	90522	Turbine Assembly	1
6	93838	O-Ring	2

## Assembly and Parts, Cont.

### Brine Valve Housing Assembly

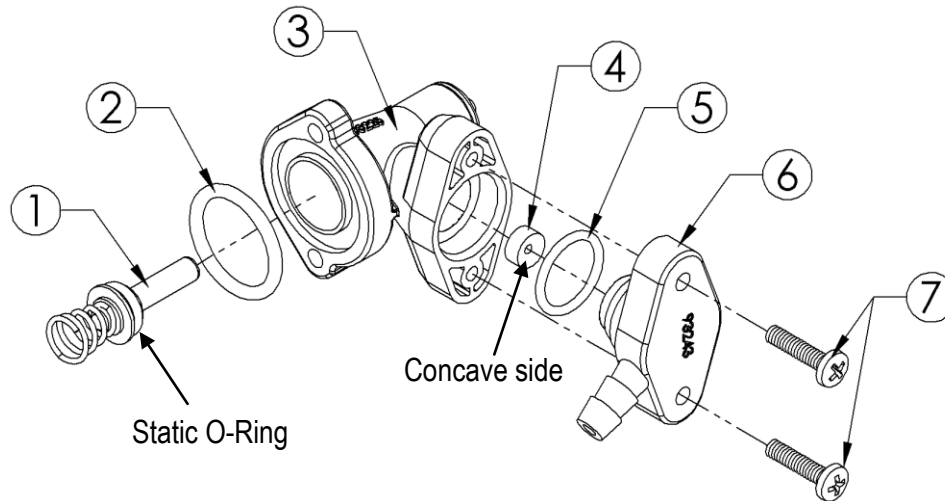


Figure 14: Brine Valve Housing Assembly

Part #	Description	Quantity
1	53511 Brine Piston Assembly (includes O-Ring & Spring)	1
2	90821 O-Ring	1
3	53510 Housing	1
4	90843 0.5 gpm Flow Control	1
5	93805 O-Ring	1
6	93243 Housing End Cap (Barbed)	1
7	90818 Screw, self-tapping	2
93601	Entire Assembly (all of the above parts)	

<b>53511 Brine Piston</b>	The Piston should have an O-Ring on the shaft side of the flange and a spring pressed onto a boss on the other side. The O-Ring should be free of defects such as cuts or debris on the shaft side.
<b>53510 Housing</b>	Just inside the entrance hole for the Brine Piston is a concave seat area that must be free of defects such as nicks, indentations, or debris. This seat area ensures a leak-free seal for the static O-Ring on the Brine Piston. If any defects are detected by visual inspection, repair or replace as needed.
<b>90843 0.5 gpm Flow Control</b>	The Flow Button has two distinct and different sides. One is "flat"; the other is "concave." The button should be centered in the housing opening with the four locator "ribs" with the concave side facing the Housing End Cap (Barbed).
<b>93243 Housing End Cap</b>	The Cap is held in place by two 3/4-inch thread-cutting screws that engage the Housing flange. An O-Ring seals the Cap and Housing. Place the O-Ring onto the housing end cap, lubricate with silicone grease, and insert the Cap into the housing using a twisting action.

## Assembly and Parts, Cont.

### Safety Shutoff Assembly

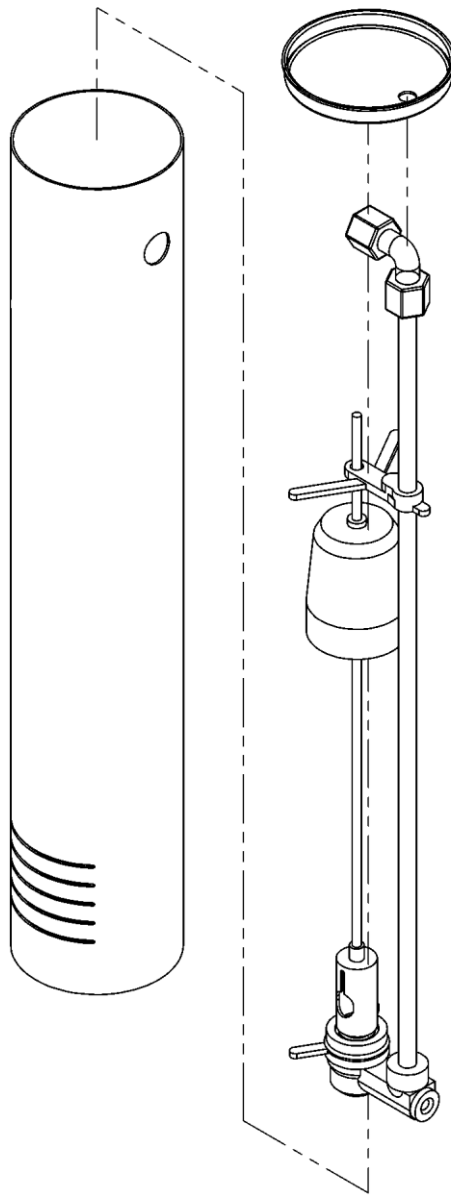


Figure 15: Safety Shutoff Assembly

	Part #	Description	Quantity
	93811-20.0	Safety Shutoff/Brine Well Assembly	1

# Troubleshooting

Problem	Possible Cause	Solution
<b>No soft water after regeneration</b>	No salt in brine tank	Add salt
	Sediment in brine tank has plugged the brine line and air check/draw tube	Remove the brine line and flush clean Remove the air check/draw tube and flush with clean water. Clean injector assembly. Clean any sediment from brine tank
	Flow control is plugged	Remove brine piston housing and clear debris from the flow control
	Drain line is pinched, frozen, or restricted	Straighten, thaw, or unclog the drain line
	Clogged injector assembly	Remove injector cap and clean nozzle and throat with a wooden toothpick. Replace throat if removed
	Salt bridge has formed due to high humidity or the wrong kind of salt	Test with a blunt object like a broom handle. Push the handle into the salt to dislodge the salt bridge, or use hot water around the inside perimeter to loosen salt
<b>No soft water</b>	The bypass valve is in the Bypass position	Place the bypass valve in the Service position
	Appliance is plumbed backward	Check that appliance is plumbed correctly
	Extended power outage	Reset the time of day
	Water hardness has increased	Re-test the water and re-enter a new setting number
	Not metering water	Flow should be indicated with water usage. If no flow, see below
<b>No flow is indicated when water is flowing</b>	The bypass valve is in the Bypass position	Place the bypass valve in the Service position
	Appliance is plumbed backward	Check that appliance is plumbed correctly
	Sensor not receiving signal from magnet on turbine	Remove sensor from bypass housing. Test with magnet on either flat side of sensor. If flow is indicated, check turbine. If no flow, replace sensor
<b>Flow indicated when water is not being used</b>	The household plumbing system has a leak	Repair the leak
<b>No read-out in display</b>	Electric cord is unplugged	Plug in the transformer
	No electric power at outlet	Check power source. Make sure outlet is not controlled by a switch
	Defective transformer	Test with voltmeter for 12 VAC at control. If less than 10 VAC, replace the transformer
	Defective circuit board	With 12 VAC present at controller, replace the controller
	High ambient room temperature. If the temperature exceeds 120°F (49°C), the display will blank out. This does not affect the operation of the controller	No action necessary

## Troubleshooting, Cont.

Problem	Possible Cause	Solution
<b>Appliance stays in regeneration</b>	Controller not attached properly	Make sure the controller is pushed all the way onto the drive end cap
	Defective magnet disk	Replace magnet disk
	Foreign object in main control valve	Remove foreign object(s) from the main control valve
	Broken valve assembly. Motor running	Repair the drive end cap
<b>Excess water in brine tank</b>	Drain line is pinched, frozen, or restricted	Straighten, thaw, or unclog the drain line
	Plugged brine line, brine line flow control, or air check/draw tube	Clean flow control, air check/draw tube, and brine line. Clean any sediment from the brine tank
	Plugged injector assembly	Clean or replace injector. Replace throat if removed
<b>Not regenerating in proper sequence</b>	Magnet disk defective	Replace magnet disk
	Defective controller	Replace controller
<b>Salty water</b>	Plugged injector	Replace injector screen, nozzle, and throat
	Low water pressure	Maintain minimum pressure of 20 psi (1.4 bar)
	Drain line or flow control is restricted	Remove restriction
	Brine line restricted or crimped	Remove restriction, replace if crimped
	Excessive amount of water in brine tank	Verify correct water level relative to salt setting. Check brine line and fittings for loose connections
	Insufficient rinse time	Check mode setting chart for proper brine rinse time. Adjust time, if necessary
	Intermittent pressure drop from feed source	Install check valve on the inlet water line to the appliance (Check local plumbing codes first)
	Brine valve drips water back to brine tank	Clean brine valve housing, replace piston assembly

## Water Conditioner Specifications

	Model 5100
Max Compensated Hardness gpg (g/L)	90 (1.5)
Maximum ferrous iron reduction <sup>1</sup>	10 ppm
Minimum pH (standard units)	7
Media type and amounts	Self Cleaning Filter Media. Super Fine Mesh Resin Total—1 cu. ft. (28 L)
#1 Setting—Salt <sup>2</sup> lb/grains (kg/g) removed	1/5,500 (0.5/356)
#2 Setting—Salt <sup>2</sup> lb/grains (kg/g) removed	3/13,700 (1.4/887)
#3 Setting—Salt <sup>2</sup> lb/grains (kg/g) removed	6/23,700 (2.7/1535)
#4 Setting—Salt <sup>2</sup> lb/grains (kg/g) removed	9/30,800 (4.1/1995)
#1 Salt Setting—Total length of reg. Min/gal	25/20
#2 Salt Setting—Total length of reg. Min/gal	27.5/21
#3 Salt Setting—Total length of reg. Min/gal	31.5/23
#4 Salt Setting—Total length of reg. Min/gal	35.5/25
Minimum / Maximum water and ambient temperature—°F (°C)	40/120 (4/49)
Mineral tank size—in. (cm)	10.5 I.D. x 26 (26.7 I.D. x 66)
Peak flow rate	8.2 gpm (31 L/min)
Pressure drop at service flow rate of 8 gpm (30.3 L/min)—psi (bar)	14.6 (1.0)
Maximum flow rate to drain during regeneration—backwash gpm (L/min)	2.4 (9.1)
Maximum flow rate to drain during regeneration—backwash gpm (L/min) (Models 51PTB1 and 51PTP1 only)	3.0 (11.4)
Water Pressure (min—max psi) (bar)	20—120 (1.4/8.3)
Minimum water flow required—gpm (L/min)	2.4 (9.1)
Minimum water flow required—gpm (L/min) (Models 51PTB1 and 51PTP1 only)	3.0 (11.4)
Maximum chlorine (ppm)	0.0
Controller type	5 Button
Frequency of regeneration	Demand
Salt storage—lb (kg)	170 (77.1)
Height—in. (cm)	30.5 (77.5)
Footprint—in. (cm)	15 x 26 (38 x 66)
Electrical rating	12 VAC, 50/60 Hz, 0.015kW-hr
Plumbing connections	1" male (MNPT)
Shipping weight—approximate—lb (kg)	105 (48)

<sup>1</sup> The state of Wisconsin limits iron reduction claims to 5 ppm.

<sup>2</sup> Use clean white pellet salt, cube-style salt, or solar salt.

# PuraTech®

has these third-party listings:



Tested and certified by WQA  
according to CSA B483.1.



**Hague Quality Water, International**  
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