

# OWNER'S MANUAL

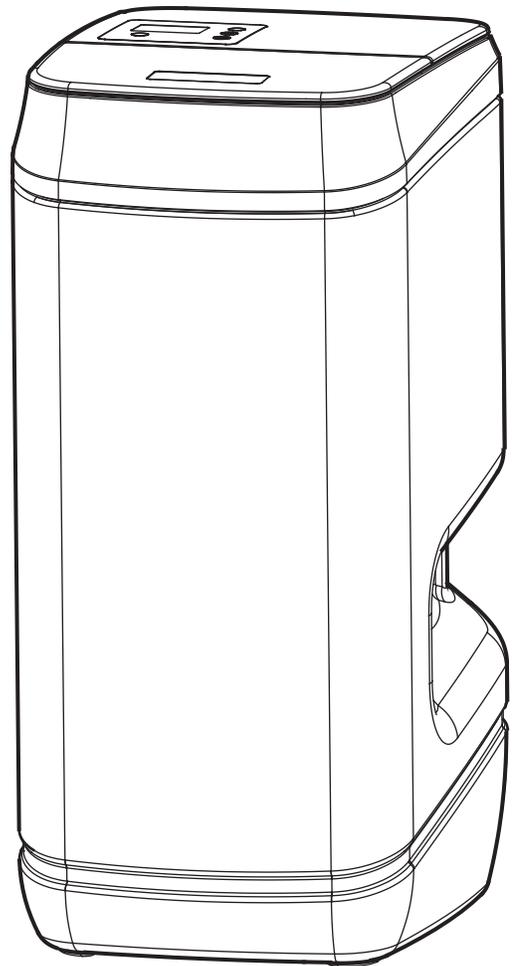
How to install, operate and maintain your  
**Atlas Water Softener**

Models

**Atlas 9**

**Atlas 15**

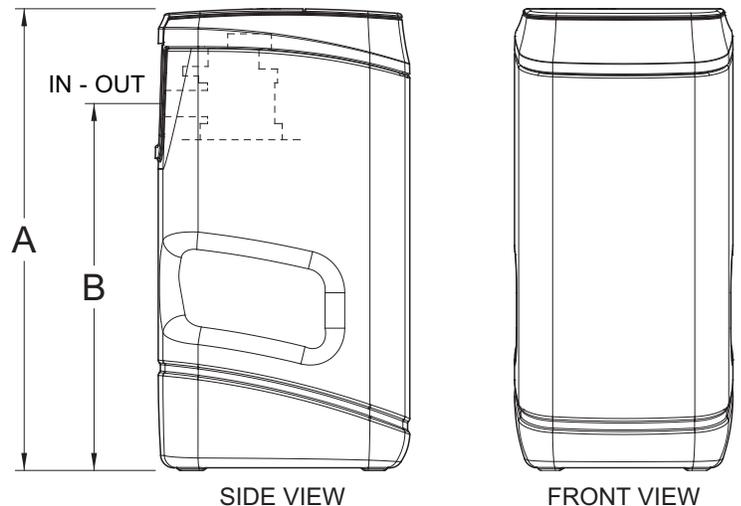
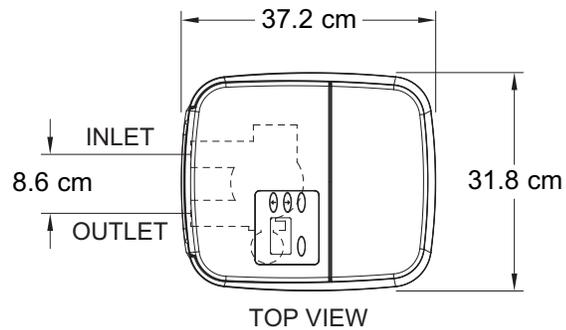
**Atlas 20**



# Water Softener Specifications

	Atlas 9	Atlas 15	Atlas 20
Model Code	EL 9	EL15	EL20
Rated Softening Capacity (mol @ kg. salt dose)	1.36 @ 0.27 4.60 @ 2.27	4.72 @ 0.68 10.81 @ 3.63	6.80 @ 1.13 17.22 @ 5.08
Rated Efficiency (mol/kg. of salt at min. salt dose)	4.99	6.94	5.99
Service Flow Rate (L/min.)	15.1	18.9	22.7
Pressure Drop at Service Flow Rate (bar)	0.21	0.48	0.63
Amount of High Capacity Ion Exchange Resin (L)	9.0	14.2	19.9
Water Supply Max. Hardness (ppm)	856	856	1626
Water Supply Max. Clear Water Iron (ppm)	3	4	5
Min.-Max. Working Pressure (bar)	1.3 - 8.5		
Min.-Max. Operating Temperature (°C)	4 - 49		
Min. Water Supply Flow Rate (L/min.)	11.36		
Max. Flow Rate (L/min.) to Drain during Recharge	7.6		

## Water Softener Dimensions



Model	Nominal Resin Tank Size	Dimension A	Dimension B
Atlas 9	22.9 x 35.6 cm	54.8 cm	41.0 cm
Atlas 15	20.3 x 63.5 cm	83.5 cm	69.7 cm
Atlas 20	20.3 x 88.9 cm	108.0 cm	94.2 cm

# Installation

## THE PROPER ORDER TO INSTALL WATER TREATMENT EQUIPMENT

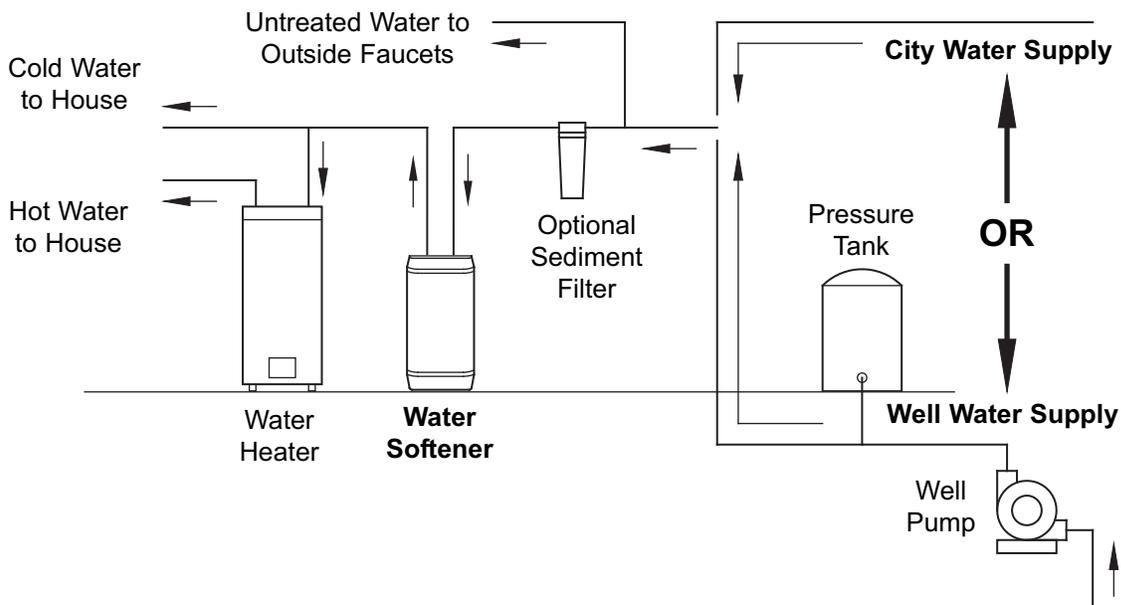


FIG. 1

## REQUIREMENTS

- Always install either a single bypass valve (See Figure 3A) or a 3-valve bypass system (See Figure 3B). Bypass valves allow you to turn off water to the softener for repairs if needed, but still have water in house pipes.
- A drain is needed for recharge discharge water. A floor drain is preferred, close to the water softener (See Figure 4). A laundry tub, standpipe, etc., are other options (See Figure 2).
- A 230V, 50 Hz, grounded, continuously “live” electrical outlet is needed, in a dry location within 2 meters of the water softener.

### SINGLE BYPASS VALVE

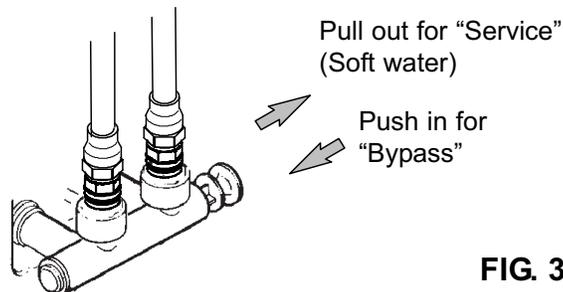


FIG. 3A

### 3 VALVE BYPASS

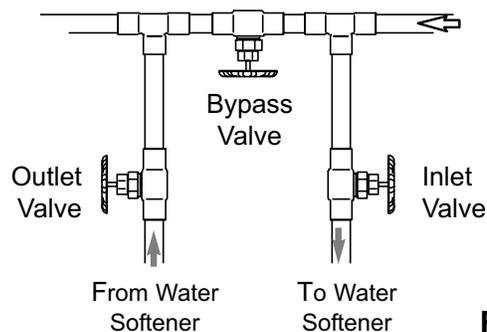


FIG. 3B

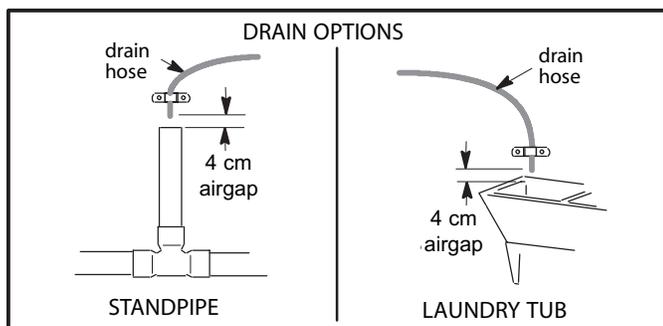


FIG. 2

# Installation

## TYPICAL INSTALLATION

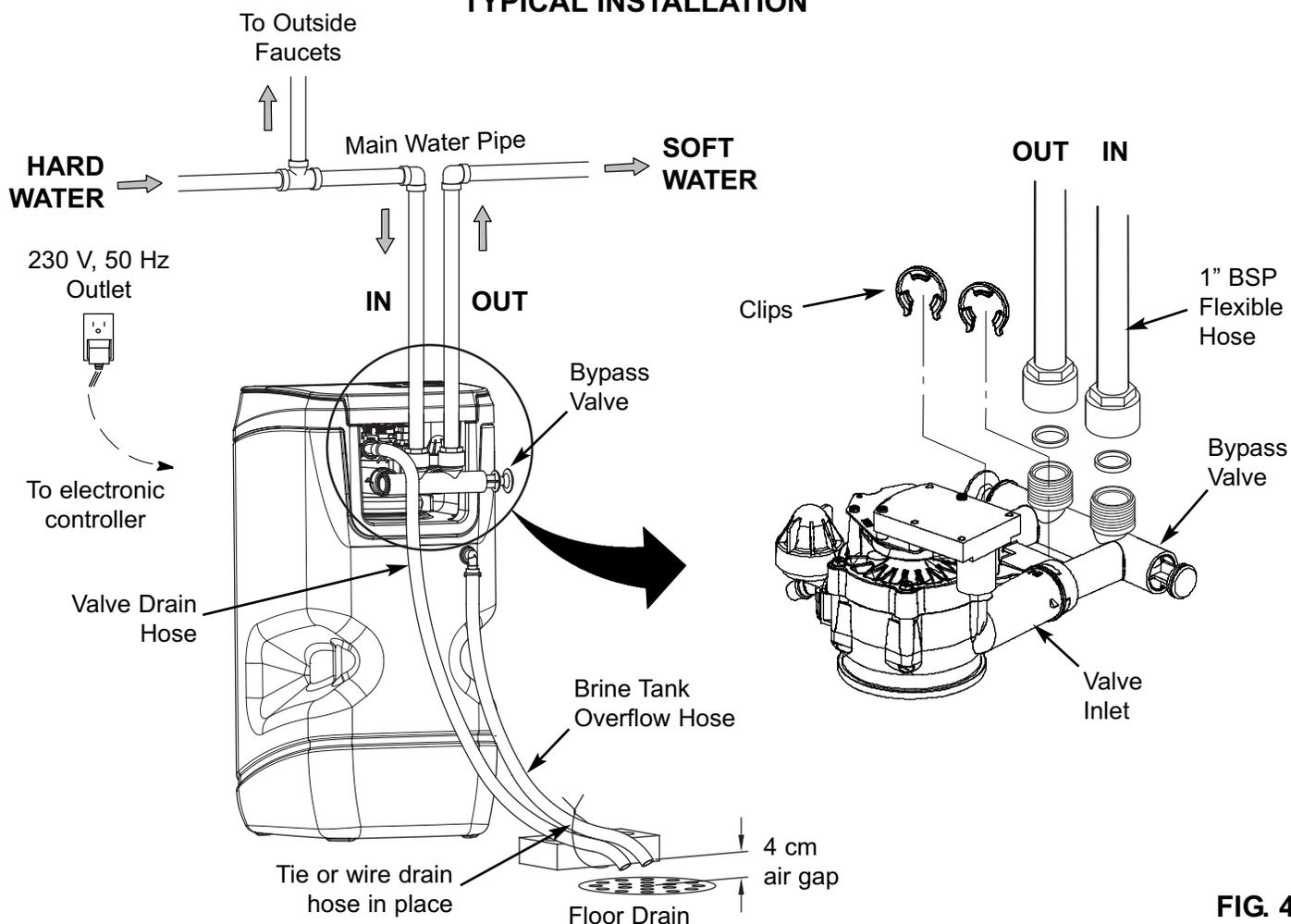


FIG. 4

### 1. INSTALL BYPASS VALVE

- a. If installing a single bypass valve, put lubricated o-ring seals onto both bypass valve ports. Carefully slide the bypass valve into the softener valve and install the "C" clips (See Figure 4).
  - b. Connect flexible hoses to the bypass valve (See Figure 4).
- NOTE:** For lubrication, use silicone grease approved for potable water supplies.

### 2. TURN OFF WATER SUPPLY

- a. Close the main water supply valve near the well pump or water meter.
- b. Shut off the electric or fuel supply to the water heater.
- c. Open high and low faucets to drain all water from the house pipes.

### 3. INSTALLING THREE-VALVE BYPASS

If installing a 3-valve bypass system, plumb as needed using Figure 3B as a guide. When installing sweat copper, be sure to use lead-free solder and flux, required by federal and state codes. Use pipe joint compound on outside pipe threads.

### 4. ASSEMBLE INLET & OUTLET PLUMBING

Measure, cut, and loosely assemble pipe and fittings from the main water pipe.  
Be sure **hard water** supply pipe **goes to the valve inlet side**. Trace the water flow direction to be sure.

### 5. CONNECT INLET & OUTLET PLUMBING

#### a. SOLDERED COPPER

- (1) Thoroughly clean and flux all joints.
- (2) Pull the plastic "C" clips and remove the inlet and outlet tubes from the valve. Remove o-rings from the tubes. **DO NOT solder with tubes in the valve.** Soldering heat will damage the valve.
- (3) Make all solder connections. Be sure to keep fittings fully together, and pipes square and straight.

#### b. THREADED PIPE

- (1) Apply pipe joint compound to all outside pipe threads.
- (2) Tighten all threaded joints.
- (3) If soldering to the inlet and outlet tubes, observe Step 5a above.

continued on next page

### c. CPVC PLASTIC PIPE

- (1) Clean, prime and cement all joints, following the manufacturer's instructions supplied with the plastic pipe and fittings.
- (2) If soldering to the inlet and outlet tubes, observe Step 5a above.

## 6. INSTALL VALVE DRAIN HOSE

**NOTE:** See valve drain options on Page 2.

- a. Elevating the drain hose may cause back pressure that could reduce the brine draw during recharge. If raising the drain line overhead is required to get to the drain point, measure the inlet water pressure to the softener first. For inlet pressures between 1.4 and 3.4 bar, do not raise higher than 2 meters above the floor. For inlet pressure above 3.4 bar, the drain line may be raised to a maximum height of 3 meters.
- b. Connect a length of 1/2" I.D. hose (check codes) to the valve drain elbow, on the controller. Use a hose clamp to hold the hose in place. Route the hose out through the notch in the back of the top cover.
- c. Run the hose to the floor drain, and as typically shown in Figure 4, tie or wire the end to a brick or other heavy object. This will prevent "whipping" during recharges. Be sure to provide a 4 cm minimum air gap, to prevent possible sewer water backup.

## 7. INSTALL BRINE TANK OVERFLOW HOSE

- a. Connect a length of 1/2" I. D. hose to the brine tank overflow elbow and secure in place with a hose clamp.
- b. Run the hose to the floor drain, or other suitable drain point **no higher than the drain fitting** on the tank. If the tank overfills with water, the excess water flows to the drain point.

## 8. PRESSURE TESTING FOR LEAKS

**To prevent excessive air pressure in the water softener and plumbing system, do the following steps EXACTLY in order:**

- a. Fully open two or more **softened** cold water faucets nearby the water softener.
- b. Place the bypass valve(s) in **bypass** position (See Figure 2).
- c. Fully open the main water supply valve. Watch until the flow from the opened faucets becomes steady, with no spurting or air bubbles.
- d. **EXACTLY** as follows, place bypass valve(s) into **service**:
  - (1) SINGLE BYPASS VALVE: **Slowly** move the valve stem toward **service** position, pausing several times to allow the unit to pressurize slowly.
  - (2) 3-VALVE BYPASS: Fully close the **bypass** valve and open the **outlet** valve. **Slowly** open the **inlet** valve, pausing several times to allow the unit to pressurize slowly.
- e. After about three minutes, open a hot water faucet for one minute, or until all air is expelled, then close.
- f. Close all cold water faucets and check your plumbing work for leaks.

## 9. ADD WATER TO THE BRINE TANK

Using a pail or garden hose, add about 10 liters of water into the brine tank.

## 10. SANITIZING THE SOFTENER

Care is taken at the factory to keep your water softener clean and sanitary. However, during shipping, storage, installing and operating, bacteria could get into the unit. For this reason, sanitizing as follows is suggested\* when installing.

- a. Open the salt lid and pour about 40 ml (2 to 3 tablespoons) of common household bleach into the softener brine tank. Clorox, Linco, Bo Peep, White Sail, Eagle, etc., are brand names of bleach readily available.
- b. The final step in the sanitizing procedure is done as you complete the following steps, including electronic controller programming on Pages 5 and 6.

## 11. ADD SALT TO THE BRINE TANK

Add salt to the brine tank. It is recommended to fill the brine tank no more than 1/2 full. Level the salt when finished adding. You can use most water softener salts, but it must be clean. Recommended nugget, pellet or coarse solar salts have less than 1% impurities.

## 12. CONNECT TRANSFORMER

Plug the transformer into a continuously "live," grounded, 230V, 50Hz house electrical outlet, in a dry location and approved by local codes. **The unit works on 24V only. Do not connect without the transformer.**

## 13. PROGRAM THE ELECTRONIC CONTROLLER

Follow the Programming the Water Softener procedure on Pages 5 and 6 to program the electronic controller with basic operating information, such as time and water hardness. After completing Steps A through E on Pages 5 and 6, continue with Step 14 below.

## 14. START A RECHARGE

Press and hold the RECHARGE button for a few seconds. You should hear the valve motor run as the water softener begins recharging. This recharge draws the sanitizing bleach into and through the softener. Any air remaining in the unit is purged to the drain.

## 15. RESTART THE WATER HEATER

Turn on the electric or fuel supply to the water heater, and light the pilot, if applies.

**NOTE:** The water heater is filled with hard water and, as hot water is used, it refills with softened water. In a few days, the hot water will be fully softened. To have fully softened hot water immediately, wait until the recharge (Step 14) is complete, then drain the water heater until water runs cold.

\*Recommended by the Water Quality Association. On some water supplies, the water unit may need periodic disinfecting.

# Programming the Water Softener

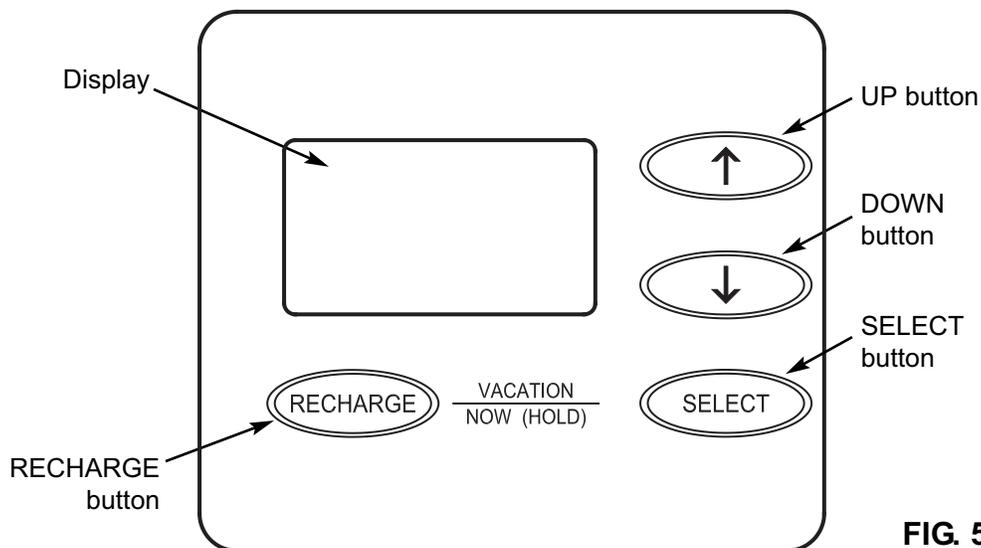


FIG. 5

When the transformer is plugged into the electrical outlet, a model code and a test number (example: J1.1), begin to flash in the faceplate display (See Figure 6). Then, "12:00" and the words "PRESENT TIME" begin to flash.

**NOTE:** If " - - - " shows in the display, press the ↑ UP or ↓ DOWN button until the model code (See table at right) shows in the display. Then, press the SELECT button to set, and change to the flashing "PRESENT TIME" display.

Model	Code
Atlas 9	EL 9
Atlas 15	EL15
Atlas 20	EL20

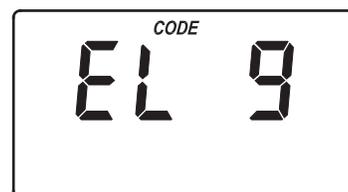


FIG. 6

## A. SET TIME OF DAY

If the words "PRESENT TIME" do not show in the display, press the SELECT button several times until they do.

1. Press the ↑ UP or ↓ DOWN buttons to set the present time. Up moves the display ahead; down sets the time back.

**NOTE:** Press buttons and quickly release to slowly advance the display. Hold the buttons down for fast advance.

2. When the correct time is displayed, press the SELECT button, and the display will change to show the "Hardness" screen.



FIG. 7

# Programming the Water Softener

## B. SET WATER HARDNESS NUMBER

If you completed the previous step, the word "HARDNESS" should show in the display (See Figure 8). Otherwise, press the SELECT button several times until it does.

1. Press the  $\uparrow$  UP or  $\downarrow$  DOWN buttons to set the hardness of your water supply, in German degrees ( $^{\circ}$ dH). The default is 25.

**Conversion factors:** French degrees:  $^{\circ}$ f =  $^{\circ}$ dH x 1.72  
German degrees:  $^{\circ}$ dH =  $^{\circ}$ f/1.72

**NOTE:** If your water supply contains iron, compensate for it by adding to the water hardness number. For example, assume your water is 20  $^{\circ}$ dH hard and contains 2 ppm iron. Add 5 to the hardness number for each 1 ppm of iron. In this example, you would use 30 for your hardness number.

$$\begin{array}{r} 20 \text{ }^{\circ}\text{dH hardness} \\ 2 \text{ ppm iron} \times 5 = 10 \\ \text{(times)} \quad \quad \quad \underline{+10} \\ \hline 30 \text{ HARDNESS NUMBER} \end{array}$$

2. Hardness level can be turned off by repeatedly pressing the  $\downarrow$  DOWN button until the number goes below 1 (See Figure 9). This would be chosen if you wish to have the softener recharge at a specific number of days.
3. When the correct hardness number (or "OFF" option) is displayed, press the SELECT button, and the display will change. If "OFF" is selected, the next setup screen will be "Days Between Recharges" (See Step D). If a hardness number is selected, the next screen will be "Number of People" (See Step C).

## C. SET NUMBER OF PEOPLE

1. If a hardness level was selected in the previous step, you will see the screen to set the number of people in the household (See Figure 10). Press the  $\uparrow$  UP or  $\downarrow$  DOWN buttons to set the correct number. The default is 3.
2. When the correct number of people is displayed, press the SELECT button, and the display will change to show the "Recharge Time" screen (See Step E).

## D. SET DAYS BETWEEN RECHARGES

1. If a hardness level was set to "OFF", in Step B, you will see the screen to set the number of days between recharges (See Figure 11). Press the  $\uparrow$  UP or  $\downarrow$  DOWN buttons to set the correct number. The default is 3.
2. When the correct number of days is displayed, press the SELECT button, and the display will change to show the "Recharge Time" screen (See Step E).

## E. SET RECHARGE START TIME

1. The softener's default recharge start time is 02:00 (See Figure 12). This is normally a time of day when water is not being used in the household. Hard water bypasses the softener if the household draws water during the recharge cycle. If a different recharge start time is desired, press the  $\uparrow$  UP or  $\downarrow$  DOWN buttons to change the time, in 1-hour increments.
2. When the desired recharge start time is displayed, press the SELECT button, and the display will return to the normal run (time of day) screen.



FIG. 8



FIG. 9



FIG. 10

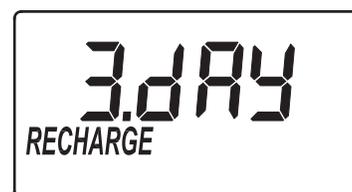


FIG. 11

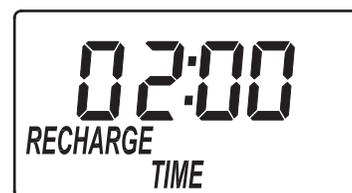


FIG. 12

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# Water Softener Features / Options

## RECHARGE NOW

If you have guests, or during other times of higher-than-normal water use, you could run out of softened water before the softener's next scheduled recharge. If this occurs, do the following to start an immediate recharge cycle:

1. Press and hold the RECHARGE button for a few seconds, until the display changes to show "RECHARGE NOW" (See Figure 13). During the recharge cycle, the screen will flash "RECHARGE NOW". When the recharge cycle is complete, full softened water capacity will be restored.

**NOTE:** Avoid using hot water when the softener is recharging, because the water heater's tank will be refilled with hard water during this time.



FIG. 13

## VACATION

To suspend automatic recharges while you are away from the house for extended periods of time (this will save water and salt):

1. Press (do not hold) the RECHARGE button. The display will change to show "VAC" (See Figure 14). The clock will keep time, but the unit will not recharge.
2. On returning home, press the RECHARGE button. "VAC" will disappear, and the display will change back to the normal run screen. Remember to do this, or the unit will not recharge automatically and you will soon run out of softened water.



FIG. 14

**NOTE:** While the unit is in vacation mode, it is possible to start a "Recharge Now" by pressing and holding the RECHARGE button for several seconds. This will also cancel the vacation mode after the recharge is complete. As described in Step 2, the usual way to cancel vacation mode is to press the RECHARGE button without holding it.

## POWER OUTAGE MEMORY

If electrical power to the softener's control is lost, internal memory will maintain most settings such as the hardness and recharge time. However, unless the power outage was very brief, the clock's present time will need to be reset. During a power outage, the display will be blank and the softener will not recharge. When electrical power is restored:

1. Check the display.
- 2a. If the present time is displayed steadily (not flashing), the controller did not lose time and you do not need to reset the clock.
- 2b. If a time is flashing in the display, then the clock needs to be reset to the correct present time. See "Set Time of Day" on page 5. The flashing display is to remind you to reset the clock. If you do not reset the clock, then recharges will most likely occur at the wrong time of day.

**NOTE:** If the softener was recharging when power was lost, it will finish the cycle when power returns.

# Water Softener Features / Options

## SET CAPACITY

The electronic control calculates this number, based on the initial programming. If you want to change the capacity, do the following:

1. Press and hold the SELECT button to display the screen shown in Figure 15.
2. Press the SELECT button again to display the “Capacity” screen (See Figure 16).
3. Press the ↑ UP or ↓ DOWN buttons to set either “CAP 1”, “CAP 2” or “CAP 3”. See the table below:

	Softening Capacity	Frequency of Regenerations	Water Usage	Salt Efficiency
<b>CAP 1</b>	Lowest	Regenerates most frequently	Uses most water	Uses least salt
<b>CAP 2</b>	Medium	Medium	Medium	Medium
<b>CAP 3</b>	Highest	Regenerates least frequently	Uses least water	Uses most salt

4. When the desired capacity is displayed, press the SELECT button.
5. To return to the normal run (time of day) screen, press the SELECT button a few more times.

## VIEW DAYS TO RECHARGE

This “view-only” display shows the number of days until the softener’s next automatic recharge. This display will not show if hardness was set to “OFF”.

1. Press and hold the SELECT button to display the screen shown in Figure 11.
2. Press the SELECT button two more times to display the “Days to Recharge” screen (See Figure 17).
3. To return to the normal run (time of day) screen, press the SELECT button again.



FIG. 15

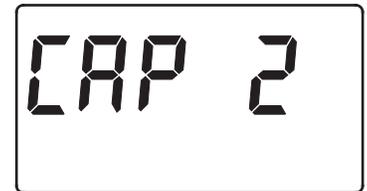


FIG. 16

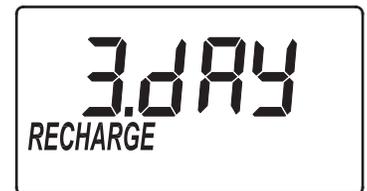


FIG. 17

# Routine Maintenance

## ADDING SALT

Lift the salt hole cover and check the salt storage level frequently. If the water softener uses all the salt before you refill it, you will experience hard water. Until you have established a refilling routine, check the salt every two or three weeks. Always add if less than 1/4 full. Be sure the brinewell cover is on.

**NOTE:** In humid areas, it is best to keep the salt storage level lower, and to refill more often to avoid salt "bridging".

Recommended Salt: Nugget, pellet or coarse solar salts with less than 1% impurities.

Salt Not Recommended: Rock salt, high in impurities, block, granulated, table, ice melting, ice cream making salts, etc.

## BREAKING A SALT BRIDGE

Sometimes, a hard crust or salt "bridge" forms in the brine tank. It is usually caused by high humidity or the wrong kind of salt. When the salt "bridges," an empty space forms between the water and the salt. Then, salt will not dissolve in the water to make brine. Without brine, the resin bed is not recharged and hard water will result.

If the storage tank is full of salt, it is difficult to tell if you have a salt bridge. A bridge may be underneath loose salt. Take a broom handle, or like tool, and hold it next to the water softener. Measure the distance from the floor to the rim of the water softener. Then, carefully push the broom handle straight down into the salt. If a hard object is felt before the pencil mark is even with the top, it is most likely a salt bridge. Carefully push into the bridge in several places to break it. Do not use any sharp or pointed objects as you may puncture the brine tank. Do not try to break the salt bridge by pounding on the outside of the salt tank. You may damage the tank.

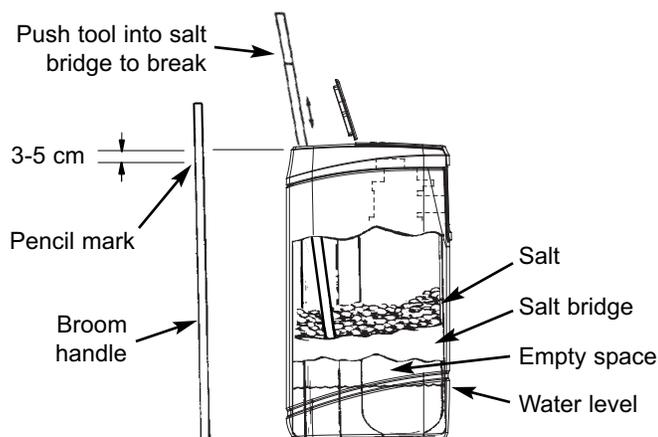


FIG. 18

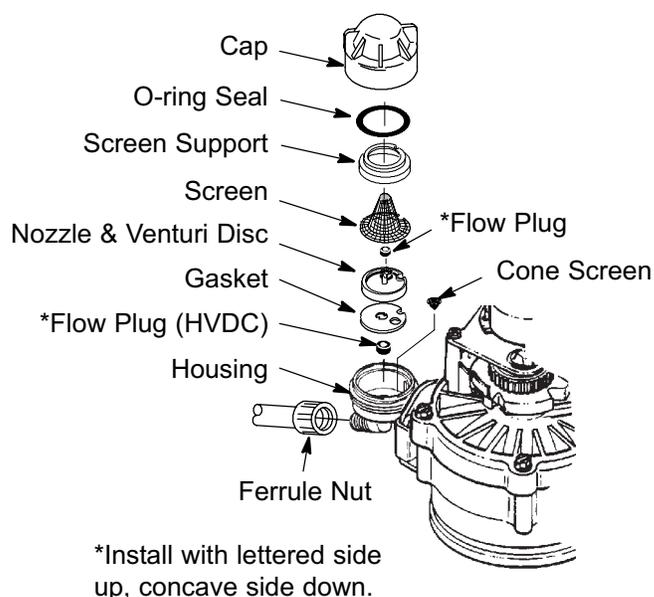
## CLEANING THE NOZZLE & VENTURI

A clean nozzle & venturi (See Figure 19) is a necessity for the water softener to work properly. This small component creates the suction to move brine from the brine tank, into the resin tank. If it should become plugged with sand, silt, dirt, etc., the water softener will not work, and hard water will result.

To get access to the nozzle & venturi, remove the water softener's top cover. Put the bypass valve(s) into the bypass position. Be sure the water softener is in soft water (service) cycle (no water pressure at nozzle & venturi). Then, holding the nozzle & venturi housing with one hand, unscrew the cap. Do not lose the o-ring seal. Lift out the screen support and screen. Then, remove the nozzle & venturi disc, gasket and flow plug(s). Wash the parts in warm, soapy water and rinse in fresh water. Be sure to clean both the top and bottom of the nozzle & venturi disc. If needed, use a small brush to remove iron or dirt. Do not scratch, misshape, etc., surfaces of the nozzle & venturi.

Carefully replace all parts in the correct order. Lubricate the o-ring seal with silicone grease and locate in place. Install and tighten the cap by hand, while supporting the housing. Overtightening may break the cap or housing. Put the bypass valve(s) into service (soft water) position.

Recharge the softener to reduce water level in the tank. This will also assure that the softener is completely recharged and ready to provide softened water again.



**IMPORTANT:** Be sure small hole in the gasket is centered directly over the small hole in the nozzle & venturi housing. Be sure the numbers are facing up

FIG. 19

# Troubleshooting

## TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	CORRECTION
<b>No soft water</b>	No salt in the storage tank.	Add salt (See Page 9) and then initiate a "Recharge now," as shown on Page 7.
	Salt is "bridged."	Break salt bridge (See Page 9) and then initiate a "Recharge now," as shown on Page 7.
	If display is blank, transformer may be unplugged at wall outlet, power cable leads may be disconnected from the electronic control board, fuse may be blown, circuit breaker may be popped, or transformer may be plugged into a switched outlet which is "off."	Check for power loss due to any of these and correct. When power is restored, if the time is flashing in the display, it means time was lost during the outage. Set the current time (See Page 5). Other settings such as hardness are retained in memory during a power loss.
	Manual bypass valve(s) in bypass position.	Referring to Figures 3A and 3B on Page 2, place bypass valve(s) in service position.
	Dirty, plugged or damaged nozzle & venturi.	Take apart, clean and inspect the nozzle & venturi assembly, as shown on Page 9.
	Valve drain hose plugged or restricted.	Drain hose must not have any kinks, sharp bends, or be raised too high above the softener (See "Install Drain Hose" on Page 4).
<b>Water hard sometimes</b>	Bypassed hard water being used during recharge, due to current time or recharge time settings being incorrect.	Check the current time displayed. If not correct, refer to "Set Current Time" on Page 5. Check the recharge time, as described on Page 6.
	Hardness number setting is too low.	Referring to "Setting Hardness" on Page 6, check the current hardness setting and increase if needed.
	Hot water being used when softener is recharging.	Avoid using hot water during recharges, because water heater refills with hard water.
	Increase in actual hardness of water supply.	Have unsoftened water sample tested. Referring to Page 6, check the current hardness setting and increase if needed.
<b>Motor stalled or clicking</b>	Motor malfunction or internal valve fault causing high torque on motor.	Contact your dealer for service.
<b>Error code E1, E3 or E4 displayed.</b>	Fault in wiring harness, connections to position switch, switch, valve or motor.	Contact your dealer for service.
<b>Error code E5 displayed.</b>	Electronic control malfunction.	Contact your dealer for service.

### TROUBLESHOOTING - INITIAL CHECKS

**Always make these initial checks first:**

1. Is display blank? Check power source.
2. Is Error code displayed? If so, go to "Automatic Electronic Diagnostics" on the next page.
3. Is correct time displayed? If not, recharges occur at the wrong time. Set current time (See Page 5.)
4. Is there salt in the brine tank? If not, refill.
5. Is salt "bridged" (See Page 9)?
6. Are plumbing bypass valve(s) in service position (See Figures 3A and 3B on Page 2)?
7. Are inlet and outlet pipes connected to the water softener inlet and outlet respectively?
8. Is valve drain hose free of kinks and sharp bends, and not elevated over 2 meters above the floor.
9. Is the brine tube connected ?
10. Check the hardness setting (See "Setting Hardness" on Page 6). Be sure it is correct for the household's water supply. Perform a hardness test on a raw water sample to compare with the setting.
11. Perform a hardness test on a softened water sample to determine whether a problem exists.

If no problem is found after making the initial checks, proceed to "Manual Advance Diagnostics" on the next page.

# Troubleshooting

## AUTOMATIC ELECTRONIC DIAGNOSTICS

This water softener has a self-diagnostic function for the electrical system (except input power). The water softener monitors electronic components and circuits for correct operation. If a malfunction occurs, an error code appears in the display.

The troubleshooting chart shows the error codes that could appear, and the possible malfunctions for each code.

While an error code appears in the display, all buttons are inoperable except the SELECT button. SELECT remains operational so the service person can perform the Manual Advance Diagnostics, see below, to further isolate the problem.

## MANUAL ADVANCE DIAGNOSTICS

Use the following procedures to advance the water softener through the regeneration cycles to check operation.

Lift off the Salt Hole Cover, remove the top cover faceplate assembly by unlocking the tabs and lifting, to observe cam and switch operation during valve rotation.

1. Press and hold SELECT for 3 seconds until "000" shows in the display.
2. The letter "P" and a dash (or dashes) indicate POSITION switch operation (See Figure 20). If the letter appears, the switch is closed. If the dash shows, the switch is open.
3. Use the RECHARGE button to manually advance the valve into each cycle and check correct switch operation.

**NOTE:** Be sure water is in contact with the salt, and not separated by a salt bridge (See "Breaking A Salt Bridge" section).

4. While in this diagnostic screen, the following information is available and may be beneficial for various reasons. This information is retained by the computer from the first time electrical power is applied to the electronic controller.
  - a. Press the  $\uparrow$  UP button to display the number of days this electronic control has had electrical power applied (See Figure 21).
  - b. Press the  $\downarrow$  DOWN button to display the number of regenerations initiated by this electronic control since the code number was entered (See Figure 22).
5. Press and hold the SELECT button until the model code ("EL 9", "EL15" or EL20" - See Figure 6 on Page 5) shows in the display. This code identifies the softener model. If the wrong number shows, the softener will operate on incorrect configuration data.
6. To change the code number, press the  $\uparrow$  UP or  $\downarrow$  DOWN button until the correct code shows.
7. To return to the present time display, press the SELECT button.

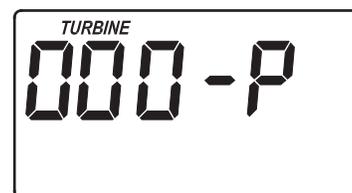
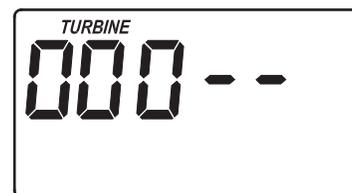


FIG. 20



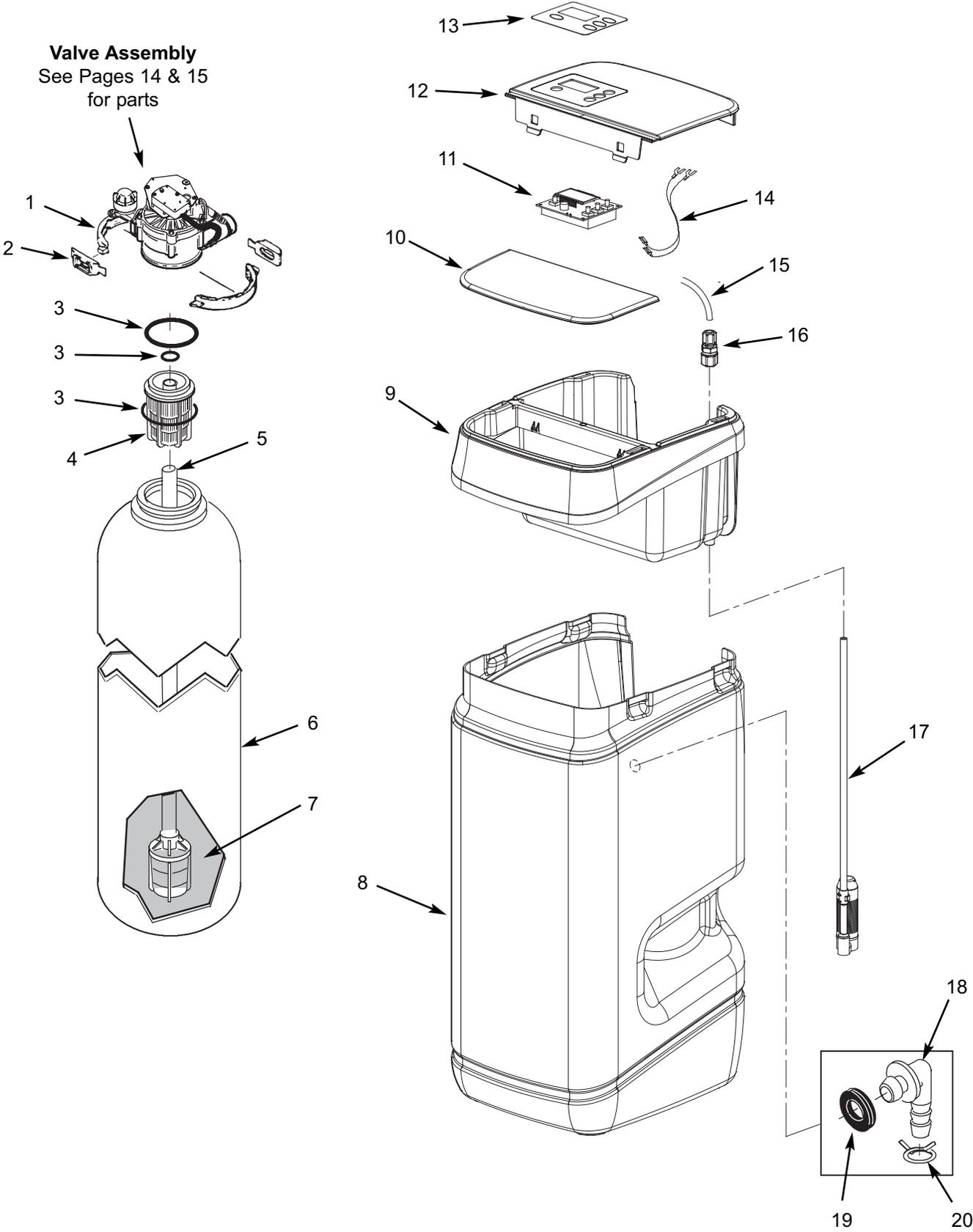
FIG. 21



FIG. 22

# Softener Exploded View

**Valve Assembly**  
See Pages 14 & 15  
for parts

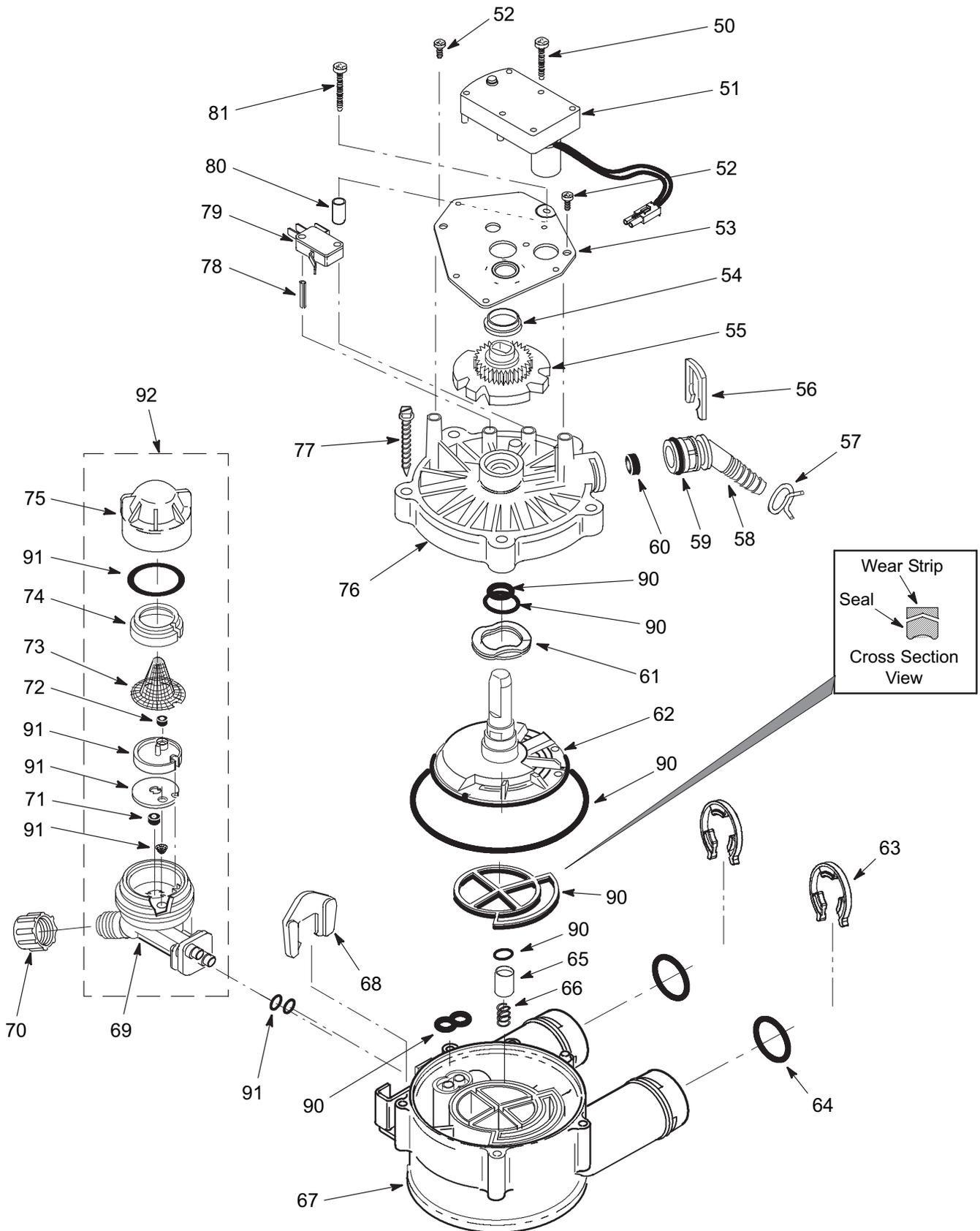


# Softener Parts List

Key No.	Part No.	Description
1	7176292	Clamp Section (2 req.)
2	7088033	Retainer, Clamp (2 req.)
3	7112963	Distributor O-Ring Kit, includes
	-	O-Ring, 20.6 mm x 27.0 mm
	-	O-Ring, 73.0 mm x 82.6 mm
	-	O-Ring, 69.9 mm x 76.2 mm
4	7077870	Top Distributor
5	7105047	Repl. Bottom Distributor
6	7268950	Repl. Resin Tank, 22.9 x 35.6 cm, Model Atlas 9
	7264037	Repl. Resin Tank, 20.3 x 63.5 cm, Model Atlas 15
	7114787	Repl. Resin Tank, 20.3 x 88.9 cm, Model Atlas 20
7	30437	Resin bag of 25L
8	7307576	Brine Tank, Model Atlas 9
	7307039	Brine Tank, Model Atlas 15
	7307550	Brine Tank, Model Atlas 20
9	7305079	Rim
10	7305053	Salt Hole Cover
11	?	Electronic Control Board (PWA)
12	7305061	Top Cover / Faceplate (order decal below)
13	7307102	Faceplate Decal
14	7250826	Power Cord
15	7094961	Brine Line, 91 cm long
16	7304984	Reducing Union
17	7304968	Sandpoint Check Valve
18	1103200	Hose Adaptor *
19	9003500	Grommet *
20	0900431	Hose Clamp *

\* Included in parts bag.

# Valve Exploded View



# Valve Parts List

Key No.	Part No.	Description
50	7224087	Screw, #8-32 x 25.4 mm (2 req.)
51	7286039	Repl. Motor (incl. 2 ea. of Key No. 50)
52	0900857	Screw, #6-20 x 9.5 mm (2 req.)
53	7231385	Motor Plate
54	0503288	Bearing
55	7284964	Cam & Gear
56	7142942	Clip, Drain
57	0900431	Hose Clamp *
58	7024160	Drain Hose Adaptor
59	7170327	O-Ring, 15.9 x 20.6 mm
60	0501228	Flow Plug, 2.0 gpm
61	7082087	Wave Washer
62	7199232	Repl. Rotor & Disc
63	7116713	Clip (2 req.) *
64	7133498	O-Ring, 23.8 x 30.2 mm (2 req.) *
65	7092642	Plug, Drain Seal
66	7129889	Spring
67	7082053	Valve Body
68	7081201	Retainer, Nozzle & Venturi
69	7081104	Housing, Nozzle & Venturi
70	1202600	Nut-Ferrule
71	7084607	Fill Flow Plug, .15 gpm, Model Atlas 9
	1148800	Fill Flow Plug, .3 gpm Models Atlas 15 & Atlas 20
72	0521829	Flow Plug, .1 gpm
73	7146043	Screen
74	7167659	Screen Support

Key No.	Part No.	Description
75	7199729	Cap
76	7085263	Valve Cover
77	7074123	Screw, #10-14 x 50.8 mm (5 req.)
78	7077472	Expansion Pin
79	7030713	Switch
80	7117816	Spacer
81	7070412	Screw, #4-24 x 28.6 mm, flat head
90	7290949	Seal Kit, includes the following:
	-	O-Ring, 11.1 x 15.9 mm
	-	O-Ring, 19.1 x 23.8 mm
	-	O-Ring, 85.7 x 92.1 mm
	-	Repl. Rotor Seal
	-	O-Ring, 9.5 x 14.3 mm
	-	Seal, Nozzle & Venturi
91	7298549	Repl. Nozzle, Venturi & Gasket Kit, Model Atlas 9
	7290957	Repl. Nozzle, Venturi & Gasket Kit, Models Atlas 15 & Atlas 20
	-	O-Ring, 6.4 x 9.5 mm, (2 req.)
	-	Cone Screen
	-	Gasket, Nozzle & Venturi
	-	Disc, Nozzle & Venturi
	-	O-Ring, 28.6 x 34.9 mm
92	7268421	Nozzle & Venturi Assembly, Model Atlas 9
	7187065	Nozzle & Venturi Assembly, Models Atlas 15 & Atlas 20

\* Included in parts bag.