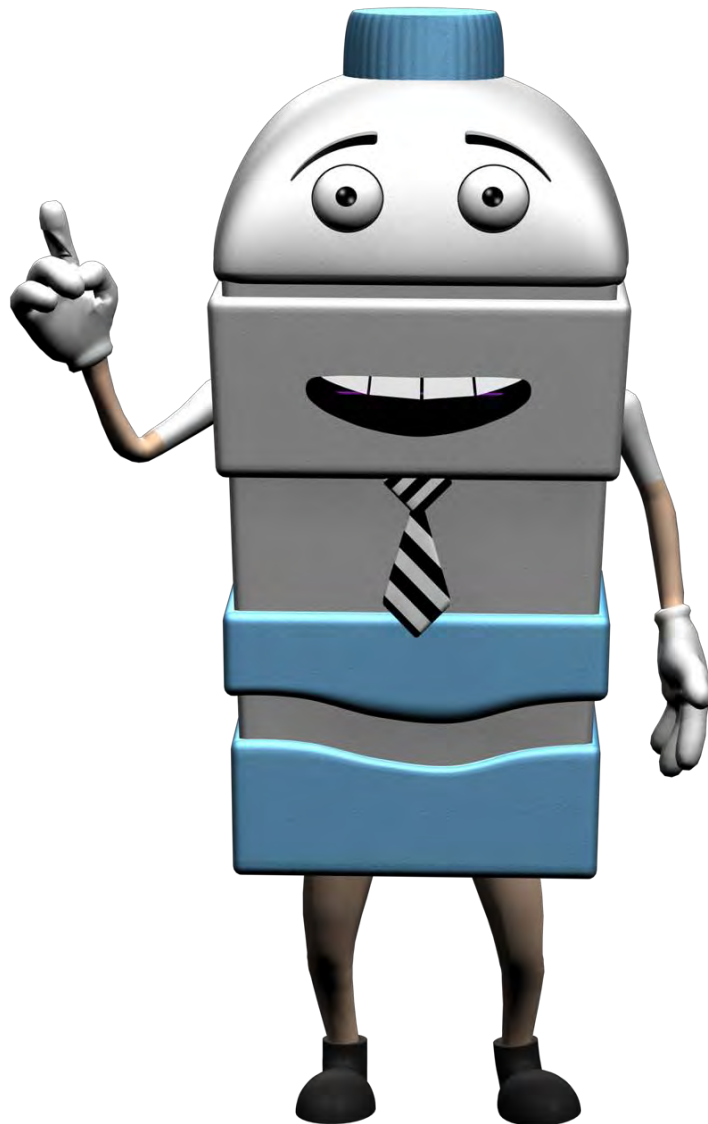


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# Smart Bottle System Owner's Manual



**Software Version 3.9a**

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Every day, thousands of billions of tons of water evaporate from the earth's surface.

As the heat of the sun evaporates the water and draws it from the earth's surface into the atmosphere, many impurities are left behind. The water vapor eventually cools to form clouds and then falls back to earth as precipitation. On its way from the clouds to your faucet, soft rain water dissolves and absorbs a part of almost everything it passes. The falling rain cleans the air as it falls. Unfortunately the impurities that were removed from the air have not left; they have just been relocated through the water onto the ground. Gases and other contaminants can cause undesirable tastes, colors and odors.

Rain falls onto the ground, collecting sediments like rust, sand and algae. The water eventually finds its way to a surface water supply or percolates downward and collects in an aquifer. As it percolates through the earth, the water can absorb hardness minerals, iron, heavy metals, radioactivity, organic contaminants, and many other complex elements and compounds.

Water can also collect numerous harmful man-made chemical impurities throughout this cycle. These synthetic chemicals are generally odorless, colorless, and tasteless; and can often be life-threatening. The statement, "my parents drank this water for 75 years and it never hurt them", is no longer a valid excuse to not be concerned with water quality.

There has been a massive global increase in harmful chemical waste over the last 50 years.

The scientific and medical community has not had time or the ability to study the long-term health effects of the more than 70,000 harmful chemicals that can be found in use today.

Approximately 1,000 new synthetic chemical compounds are entering the industrial marketplace each and every year. Precipitation falls upon commercial and municipal dumpsites, toxic waste sites, industrial refuse depots, military test sites, leach fields, mining operations, farmer's fields etc... Where it dissolves minute amounts of the toxic chemicals present and carries them along.

The United States Government estimated in 1986 that close to two percent of the nation's ground water supplies were moderately polluted by sources such as hazardous waste dumps and leaking landfills.

Industrial wastewater is also a major source of water contamination. When certain chemicals come in contact with others, they create new compounds.

Chemicals that are considered generally acceptable in controlled amounts may react with other elements and/or chemicals to form new compounds that could be highly carcinogenic.

Chlorine is one of the best-publicized examples; it reacts with organic matter in water and forms deadly trihalomethanes.

Hard water is probably the single largest threat facing the American home in the 21st century. Hard water can coat your family, your home and your appliances with thousands of pounds of inorganic mineral rock-scale each and every year; hard water slowly destroys everything it touches. Left untreated, hard water costs you money, ruins your lifestyle and can even lower the value of your home.

No one needs to tell you that you're living with Hard Water though. Soap doesn't lather easily, glasses are cloudy after washing, a ring forms around the bathtub, faucets and shower heads are crusty, laundering results are poor and there are many other easily recognized signs.

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There are several degrees of water hardness. Even moderately hard, can seriously damage the plumbing system in your home and, in time, cause inconvenient and expensive problems.

Hard water is a poor cleaner because it is loaded with a variety of impurities. These dissolved impurities react with certain chemicals found in soap to form a gummy, insoluble curd.

This soap curd clings stubbornly to everything it touches. The ring around your bathtub is curd. That same curd causes your hair to become dull and hard to manage.

Soap curd clogs skin pores and prevents your natural oils from moisturizing your skin. This dryness causes itching and also aggravates skin conditions like psoriasis, eczema and acne.

Soap curd is especially noticeable by the scummy film it forms on dishes, glassware, walls and floors. Hardness and other dissolved solids combine to form the residue you see as spots on glasses, crockery, cutlery and shower enclosures.

### **Hard water harms fabrics**

Laundry washed in hard water takes on a gray color and wears out faster than expected. With hard water in your washing machine, it's almost impossible to wash clothes white - even when you use large amounts of detergent and bleach. Minerals and insoluble particles in hard water trap dirt and soap curd in the fabric of your clothes and linens. These deposits give fabric a dull gray "washed-out" look and cause the clothing fibers to be brittle. Your clothes and linens then feel harsh and rough - they deteriorate faster.

### **Hard water harms foods**

Some vegetables such as peas and beans become tough and unpalatable when cooked in hard water. Baking with hard water imparts an undesirable taste from the hardness minerals into your food. Tea, Coffee and other beverages prepared with hard water taste awful and often contain flakes of hardness.

### **Hard water affects your house plumbing**

Perhaps the greatest damage done by hard water is the damage that you can't easily see. Water heaters, humidifiers, boilers and household pipes become lined with an increasingly thick layer of calcium and magnesium scale.

As this scale builds up, the water flow in your pipes diminishes to such a point that new piping is usually the only realistic option to remedy the situation.

Hard water scale inside a water heater forms an insulating layer that prevents the burners or heating elements from heating the water efficiently. Just 1/8" of scale inside the tank can require up to 30% more fuel to heat the water to the desired temperature.

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### How water hardness is measured

Water hardness is measured in imperial Grains per Gallon (gpg). A grain, in this case, is the weight of an average dry grain of wheat, approximately 1/7000th of a pound. The water treatment industry generally uses the following standards to classify water hardness.

Soft Water	0 - 0.5 gpg
Slightly Hard Water	.5 - 3.5 gpg
Moderately Hard Water	3.5 - 7 gpg
Very Hard Water	7 - 10.5 gpg
Extremely Hard Water	10.5 gpg and greater

## THE CRIMES OF HARD WATER, METALS & CHLORINE

- Increased Water Heating Costs
- Damaged Clothing
- Excessive Soap Consumption
- Pipe Scaling
- Faucet and Fixture Damage
- Skin Problems
- Unpalatable Food
- Undesirable Tastes and Odors
- Premature Appliance Failure
- Unsatisfactory Laundry Results
- Unpleasant Tastes & Odors in Water
- Staining on Faucets, Fixtures & Appliances

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## Principles of Ion Exchange

The smallest units that make up chemical compounds and still retain the properties of those compounds are called molecules. Molecules are made up of atoms or groups of atoms. Electrically charged atoms are called ions. The charge of a single ion can be either positive or negative - Ions of metals and of hydrogen are usually positively charged and are called cations. Ions such as chlorine, nitrate, phosphate, fluoride and sulfates are negatively charged and called anions.

Certain insoluble materials are made up of large ions forming a skeletal structure containing oppositely charged ions. These ions can be exchanged with other similar ions in an ion exchange.

The first commercial application of ion exchange was water softening in 1905. Since then, ion exchange has been the most reliable method of softening and conditioning water in homes and industry.

The Conditioning of water by ion exchange relies on the replacement of the calcium and magnesium ions in the water by an equivalent number of sodium ions.

The Conditioning process may be illustrated by the following equation:-

$R_2.Na +$	$Ca(HCO_3)_2 =$	$R_2 . Ca +$	$2NaHCO_3$
Sodium Ion Exchange Resin	Calcium Bicarbonate in water	Calcium Ion Exchange Resin	Sodium Bicarbonate in Water

Obviously, the system can only exchange a certain amount of hardness and other contaminants. This is referred to as the capacity of the resin. The capacity of the resin is referred to as grains of calcium carbonate hardness removed per cubic foot of resin or Milliequivalents per liter. When the capacity has been exhausted, the resin needs to be regenerated with a solution of sodium chloride (brine) as follows:-

$R_2.Ca +$	$2NaCl =$	$2 R.Na +$	$CaCl_2$
Calcium Ion Exchange Resin	Sodium Chloride Brine	Sodium Ion Exchange Resin	Calcium Chloride Waste

### Your Smart Bottle System can be regenerated with Potassium Chloride if desired.

Over the years the composition of ion exchange media has advanced, reflecting sophisticated global technological advances.

Ion exchange resins used in your Smart Bottle System are made in the USA, without harmful toxic solvents. This media is designed to be physically and chemically strong while making water that feels good, tastes great and works hard for you.

Engineered above and beyond all others, the Smart Bottle System Home Bottled Water System incorporates cutting-edge technology to bring you water that feels good, tastes great and works hard to protect your home.

It is not surprising that the Smart Bottle System is our flagship product – The Best of the Best, delivering bottled water at every tap.

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Exclusive PuraFeel™ technology helps keep your water feeling the way it should. Immerse yourself in bottled water for the luxury bathing experience that few others have the privilege to enjoy.

The proprietary Pur-Gard™ performance enhancing injection system incorporated into every Smart Bottle System ensures that you have the best water quality all year long.

Your smart bottle system includes a proprietary Pur-Gard injection system. This injection system is specially engineered to work in conjunction with the Evertech electronic control centre to inject precise amounts of Pur-Gard systemic performance enhancer into your system during various phases of the cleaning cycle and during anti-bacterial flushes.

Your smart bottle system will use varying amounts of Pur-Gard, depending on your water consumption habits; always maximizing efficiency and performance while providing you with the water quality that you deserve.

**Voltages Available**  
AC 50/60 Hz: 12,24,120, or 240  
DC: 6, 12, 24

**Power Consumption**  
AC: 5 Watts DC: 6 Watts

**Coil Construction**  
Class A (105°C)

**Coil Encapsulant**  
Thermoplastic Polyester (PBT)

**Operating Temperature**  
to 120°F (49°C)

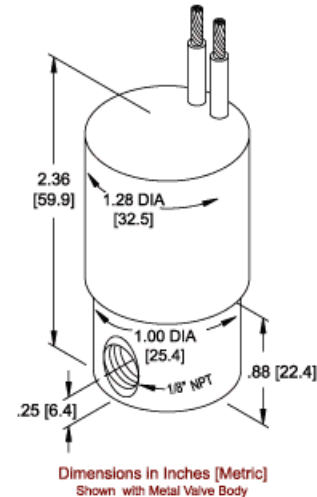
**Seals**  
Nitrile, EPDM, Fluoroelastomer

**Internal Components**  
Stainless Steel

**Shading Ring (AC Units)**  
Copper or Silver

**Yoke**  
Internal

**Valve Body**  
Brass, Stainless Steel, Glass Filled Polypropylene



Pur-Gard is designed to:-

- Clean ion-exchange resin without damaging structured matrix media
- Create an inert protective coating on metallic moving parts
- Clean and lubricate all moving components
- Create an unhealthy environment for bacteria in the system
- Activate Purafeel technology on compatible systems
- Enhance self-sanitization process on compatible systems

Always keep your Pur-Gard reservoir full to ensure proper system performance, longevity & efficiency.

By adopting a Smart Bottle, you too can now enjoy the refreshing taste of bottled water in your home without the inconvenience and hassle of home delivery or complicated filter changes.

## System Features & Benefits

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### **Efficient**

Your Smart Bottle System learns your lifestyle and adapts itself to meet your needs, allowing the Smart Bottle System to deliver exceptional water quality while saving you salt, water and electricity.

### **Upgradeable**

Designed for the future, the Smart Bottle System is capable of being modularly upgraded, as new technologies are developed to accommodate for rapidly degrading water conditions. The Control Centre can be updated with the latest software updates & upgrades as they become available.

### **Reliable**

The mechanical subsystem in the Smart Bottle System is revolutionary in its own right. The Smart Bottle System is built around Open-platform™ technology, building on a 40-year legacy of reliable design and using 21st century composite materials to ensure reliable and dependable performance.

### **Safe**

Every Smart Bottle System is handcrafted by skilled artisans in a world-class ISO 9001:2000 facility to provide you with a water treatment system that exceeds industry safety, manufacturing & quality control standards to give you peace of mind.

### **Simple**

Advanced manufacturing methods and skillfully crafted computer hardware & software makes the Smart Bottle System one of the easiest water filtration systems to own and operate.

### **Cleaning Power**

Water from your Smart Bottle System is pH balanced, free of minerals and metal impurities to bring you the cleaning power of bottled water throughout your entire home.

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# Your responsibilities as an equipment owner

Your Smart Bottle System is manufactured to be efficient and very reliable. To ensure continued performance and keep your system operating within manufacturer's specifications, the following operating conditions must be ensured by you, the equipment owner:

## **Water Pressure Regulator**

The influent water pressure into this water system must be regulated by a code-compliant pressure-regulating device not to exceed 75psi.

## **Power Protection**

Power to this system must be supplied by an unswitched 110VAC supply. Surge protection is mandatory and is to be supplied by you, the equipment owner. The use of a UPS (Uninterruptible Power Supply) is encouraged.

## **Salt**

This water system uses salt to clean itself. The brine tank must be filled with a high quality pellet or cubed salt to ensure system operation. Rock salt is usually not suitable for this system, as it usually contains high levels of impurities that can possibly compromise the system functionality. Consult with your local water professional to decide on the best salt for your application.

## **Pur-Gard**

The Pur-Gard injection feeder should be kept full to ensure proper system operation and maximum efficiency. Pur-Gard works synergistically with the Matrix 525-3 media and Chlorgon to ensure the very best water taste and feel. Check the level of your Pur-Gard feeder each time you fill your brine tank with salt.

## **Annual Inspection**

Water chemistry changes over the years and will have an effect on your system's ability to do its job. Natural attrition on the system due to chlorine & wear will usually occur at 3-5% per year, even when protected with Pur-Gard. Your system should be inspected and recalibrated annually to ensure your system is performing at optimum levels and that you stay current with the latest technologies and software updates, and upgrades as they become available.



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# System Installation & Start-up Guidelines

Clear the installation area and carefully sweep the floor where the system will be installed.

Test home water pressure and make sure it is 50 – 75 psi static. A code-compliant pressure regulator must be installed to protect the system on all municipal water installations.

Check to confirm that the water heater has adequate heat expansion protection to protect the system from hot water damage.

Connect to house plumbing using code approved methods & materials and ensure that a bypass device is installed.

Install surge protector or uninterruptable power supply.

Install ½” poly pipe or equivalent to the system drain fitting and terminate to sewer drain in a code-approved manner.

Bypass System.

Run bathtub cold to purge piping of debris and chemical residue from installation, this will take approx. 15 minutes at 3gpm.

Leave bathtub running and slowly open the inlet valve to the system.

Slowly open the outlet valve from the system.

Observe flow of water from the bathtub. Water will become a dark brown/black color. This color is caused by the system disinfectant/preservative as well as dust from shipping & handling. Allow water to run until clear. Observe water for particles. If resin or chlorogon particles are found in the water, bypass the system and call tech-support.

Turn off bathtub cold

Press the star button to enter programming mode

Program the system according to the programming instructions in this manual

Short cycle the system by stepping it through each cycle step

Observe the system during each cycle and advance to the next cycle by pressing the fountain button.

Once the system has been advanced to normal operating mode, test the water at any faucet that is filtered by the system to ensure proper output water quality.

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# System Control & Operation

Your Smart Bottle System incorporates a highly sophisticated microprocessor control system, making it as efficient and reliable as possible. All system settings are pre-programmed at the factory and then carefully calibrated by your installer for your exact water chemistry.

Your Smart Bottle System incorporates flash EEPROM memory and an innovative power back-up system, which means that your system programming should never have to be reset, even in the event of a power outage.

## Normal Operating Mode

In **normal operating mode**, the display shows the time of day and remaining capacity:

<b>8:00 am</b>	<b>1600GL</b>
<b>Imagine Bottled Wa...</b>	

When the system determines that it is necessary to clean itself, the display will show the time of day and the word “CLEAN”, indicating that a delayed cleaning cycle will be started at the programmed time of cleaning:

<b>8:00 am</b>	<b>CLEAN</b>
<b>Imagine Bottled Wa...</b>	

## Cleaning mode

In **cleaning mode** the display shows the current cleaning cycle step description and the remaining time for that cycle to execute:

<b>Cycle Time:</b>	<b>9</b>
<b>Tank Fill</b>	

The control valve can be **advanced to service mode** at any time by repeatedly pushing the star button, and manually advancing it through the cleaning cycle steps.

## Flow meter

In **service mode** the display will show the time of day and remaining capacity; the remaining capacity counter counts back per unit, i.e. per gallon. By opening a faucet after the unit, the correct functioning of the flow meter can be checked by means of this counter.

## Power-Failure Handling

In the event of a power failure, your system’s integrated Snapshot memory system will retain all programmed data for an indefinite period of time. The system will maintain the correct time of day during a period of several hours; in the case of a prolonged power failure, the time of day might not be maintained; if this happens, the time of day indication will, when the power supply is re-established, be *flashing*, indicating that the time of day needs to be set. All other programming is unaffected.

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If a power failure occurs during the execution of an automatic cleaning, the control valve will immediately return to the service position; when the power supply is re-established, the control valve will stay in the service position for 60 sec. and restart a complete cleaning cycle to ensure that your quality is returned to normal as quickly as possible.

## **Critical Software/Hardware failure**

In the event of a critical failure, the display will show the message:

<p><b>CALL FOR SERVICE</b> <b>1-800-454-3429</b></p>
----------------------------------------------------------

Call you local service provider for help.

End-user programming is generally not necessary. If you need to change programming, the following procedure should be used:-

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# Programming

## Programming instructions at the End-User level

### 1. Accessing the End-User level:

Make sure that the system is in the service mode.  
Push the STAR button; the display will show:

**Time: 8:00 am**


You are now in the End-User level; use the STAR button to advance through the different programming parameters.

### 2. Available programming parameters:

#### Time of day setting:

The display will show:



**Time: 8:00 am**

Push the  button or  button to set the correct time of day.

#### System Efficiency

The display will show:



**Efficiency:  
Low-----|-----High**

Push the  button or  button to select the level of efficiency that you'd like to operate your system at. Best performance is usually realized when the efficiency level is kept in the middle.

#### Water Hardness

The display will show:



**Water Hard:20 Grn**

Push the  button or  button to enter the harness to tested level in grains per gallon.

#### Iron Chemistry

The display will show:

**Iron Level: 000  
Parts/Billion**

Push the  button or  button to enter the tested amount of ferrous (clean water) iron in your water

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### Antibacterial Override

The display will show:

**Override: 7 Days  
Antibacterial**

Push the ▲ button or ▼ button to adjust the number of days the system will clean if water usage does not initiate the system to perform a cleaning cycle. Due to advance fractional brining technology, the system will only use the exact amount of salt to match the amount of water that you have used. If you haven't used any water, the system will simply backwash and inject Pur-Gard, keeping you water fresh & saving you money.

### Delayed Cleaning Mode

The display will show:

**Clean At: 11:00pm**

Push the ▲ button or ▼ button to adjust the time in which you want the system to clean at, if left in this mode the system will perform its regeneration at the programmed time of regeneration.

### Immediate Cleaning Mode

The display will show:

**Clean In 10 Sec.**

If the control is left in this position, the counter timer will count down to 0 sec and start a manual cleaning cycle. To cancel this mode, push the ⏸ button before the counter timer has reached 0 sec.

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## **Diagnostics Mode**

Your Smart Bottle System incorporates highly advanced logic, record-keeping and diagnostics functions. Diagnostics mode is accessed as follows:-

Press the UP arrow and hold it for 5 seconds after which you will see the following display:-

<p style="text-align: center;"><b>DIAGNOSTICS MODE PRESS STAR</b></p>
---------------------------------------------------------------------------

Pressing the STAR button will allow you to advance through each of the informational displays as follows:-

Clean xxx days ago	Days since the system last cleaned
In Srvc xxxx days	Total number of days that system has been in service
Cleanings : xxx	Total number of cleanings since system was first installed
TotVol: xxxxxxxx GL	Total volume of water processed by the system since first installation
LastCln@ xxxxx GL	The number of gallons processed since the last cleaning
PeakFlow xxx GPM	The HIGHEST flow rate ever sensed through the system
AvgVol: xxxx GL/d	The average daily water consumption recorded by the system
WaterHard: xx gpg	The programmed water hardness level
Clean at : xx:xx am/pm	The designated system cleaning time
Override: xx Days	The antibacterial cleaning override interval
Cycle Time:	Individual cycle times and descriptions
Srg/Sag:	Number of power surge or sag conditions recorded by the system that have forced a micro-processor reset
Power Outages:	Number of Power Outages sensed by the system since installation
EMA Empxx.xx	Firmware and Software version ID
Flow Rate xx gpm	Realtime Flowmeter display

After the last diagnostic display, you will see the following:-

<p style="text-align: center;"><b>EXIT PRESS UP ARROW</b></p>
-------------------------------------------------------------------

Pressing the UP Arrow will return you to Normal Operating Mode, or you can press STAR to advance to the first diagnostic display again.

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# **Troubleshooting**

## **Hard (untreated) water to service**

<b>Cause</b>	<b>Solution</b>
1. Open or defective bypass	1. Close or verify bypass
2. Loss of resin	2. Refer to problem "Loss of resin"
3. Valve in regeneration	3. Wait until regeneration terminates normally
4. Change in raw water hardness	4. Adjust programming accordingly
5. Unit fails to regenerate	5. Refer to problem "Unit fails to regenerate"
6. Valve fails to draw brine	6. Refer to problem "Valve fails to draw brine"
7. Decreasing exchange capacity of resin	7. Clean or replace resin bed
8. No salt in brine tank	8. Add salt
9. Leak at riser tube	9. Verify that riser tube is seated correctly and is not cracked

## **Unit fails to regenerate**

<b>Cause</b>	<b>Solution</b>
1. Faulty electrical supply	1. Verify electrical service (fuse, transformer)
2. Defective flow meter	2. Clean and/or replace flow meter
3. Defective PCB	3. Replace PCB
4. Defective drain motor	4. Replace drain motor
5. Body stem assembly switches continuously	6. Check minimum operating pressure; refer to Installation "Drain flow adjuster"

## **Valve fails to draw brine**

<b>Cause</b>	<b>Solution</b>
1. Low operating pressure	1. Verify operating pressure; must exceed 1,4 bar
2. Drain flow adjuster too much closed	2. Open drain flow adjuster slowly until unit draws brine
3. Plugged injector	3. Clean injector
4. Plugged injector filter	4. Clean injector filter
5. Bw/fr solenoid plunger stuck in open position	5. Clean or replace plunger and solenoid diaphragm
6. Restricted drain line	6. Verify drain line for kinks or restrictions
7. Restricted brine line	7. Verify brine line for kinks or restrictions
8. Leak in brine line	8. Verify brine line and connections for air leakage
9. Not enough water in brine tank	9. Refer to problem "Valve fails to refill brine tank"

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## **Excessive water in brine tank**

<b>Cause</b>	<b>Solution</b>
1. Valve fails to draw brine	1. Refer to problem “Valve fails to draw brine”
2. Improper brine refill time setting	2. Verify that brine refill time corresponds to the proper salt level and amount of resin
3. Missing brine refill flow control	3. Verify that flow control is installed and properly sized
4. Leak from valve to brine tank	4. Clean or replace plunger and solenoid diaphragm of refill solenoid

## **Valve fails to refill brine tank**

<b>Cause</b>	<b>Solution</b>
1. Improper brine refill time setting	1. Verify that refill time corresponds to salt level and amount of resin
2. Plugged refill flow control	2. Clean flow control

## **Unit uses too much salt**

<b>Cause</b>	<b>Solution</b>
1. Excessive water in brine tank	1. Refer to problem “Excessive water in brine tank”
2. Unit regenerates too frequently	2. Verify capacity, reserve capacity and day setting

## **Salt water to service**

<b>Cause</b>	<b>Solution</b>
1. Excessive water in brine tank	1. Refer to problem “Excessive water in brine tank”
2. Injector undersized	2. Verify injector selection
3. Improper brine/slow rinse time setting	3. Verify that brine/slow rinse time corresponds to the proper salt level and amount of resin
4. Improper fast rinse time setting	4. Verify that fast rinse time corresponds to the proper salt level and amount of resin

## **Loss of resin through drain line**

<b>Cause</b>	<b>Solution</b>
1. Excessive backwash/fast rinse flow	1. Adjust drain flow adjuster
2. Lower and/or upper distributor damaged	2. Replace distributor(s)
3. Leak between riser tube and upper distributor	3. Verify that riser tube is seated correctly and is not cracked



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## **Loss of water pressure**

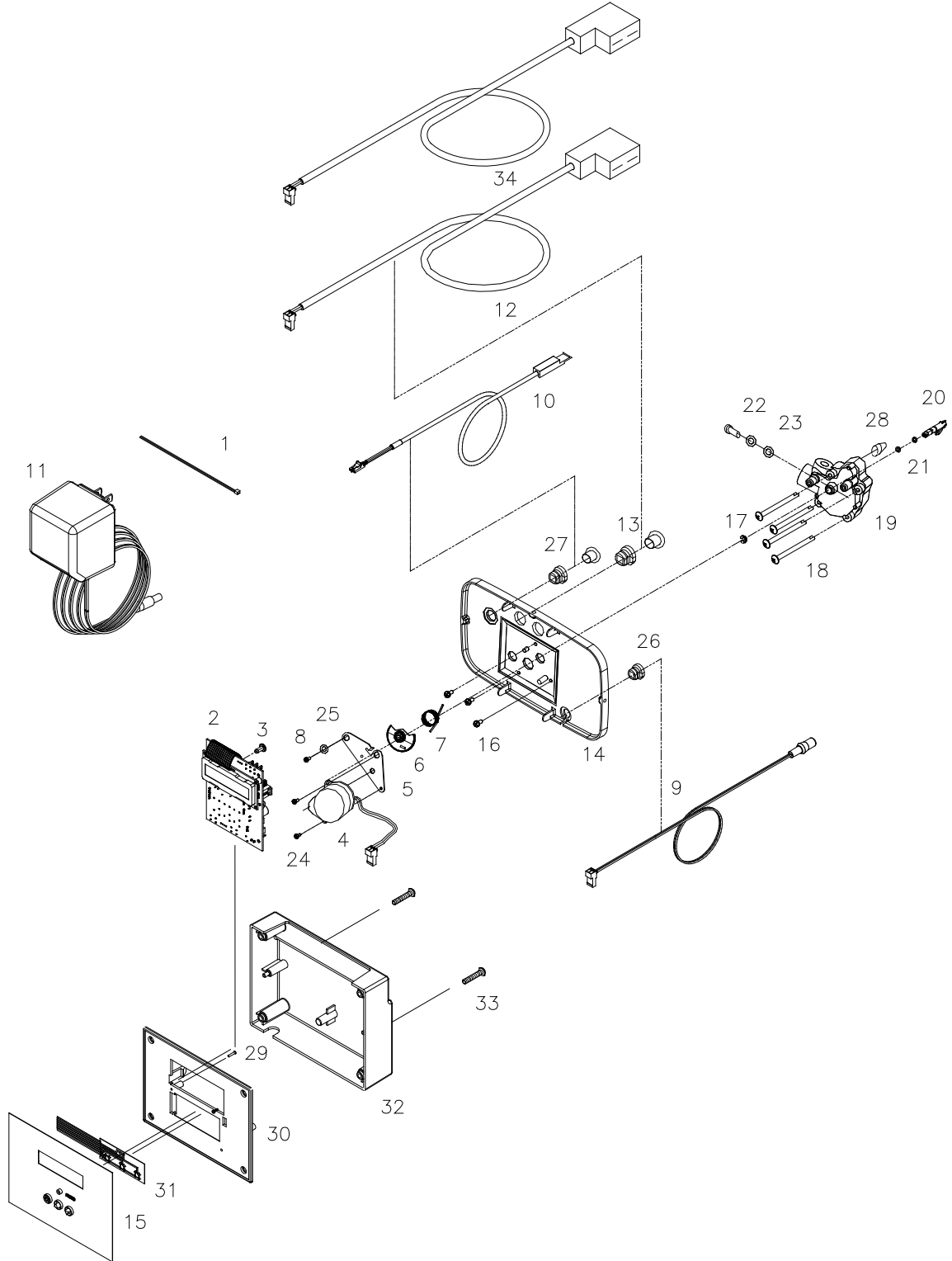
<b>Cause</b>	<b>Solution</b>
1. Mineral or iron build-up in resin tank	1. Clean resin bed and control valve; increase regeneration frequency
2. Plugged lower and/or upper distributor	2. Verify that distributors are free of debris
3. Crushed lower and/or upper distributor	3. Replace distributor(s)

## **Drain flows continuously**

<b>Cause</b>	<b>Solution</b>
1. Drain paddle stuck in open position	1. Clean drain paddle seat
2. Drain motor doesn't return	2. Verify correct installation of drain paddle return spring

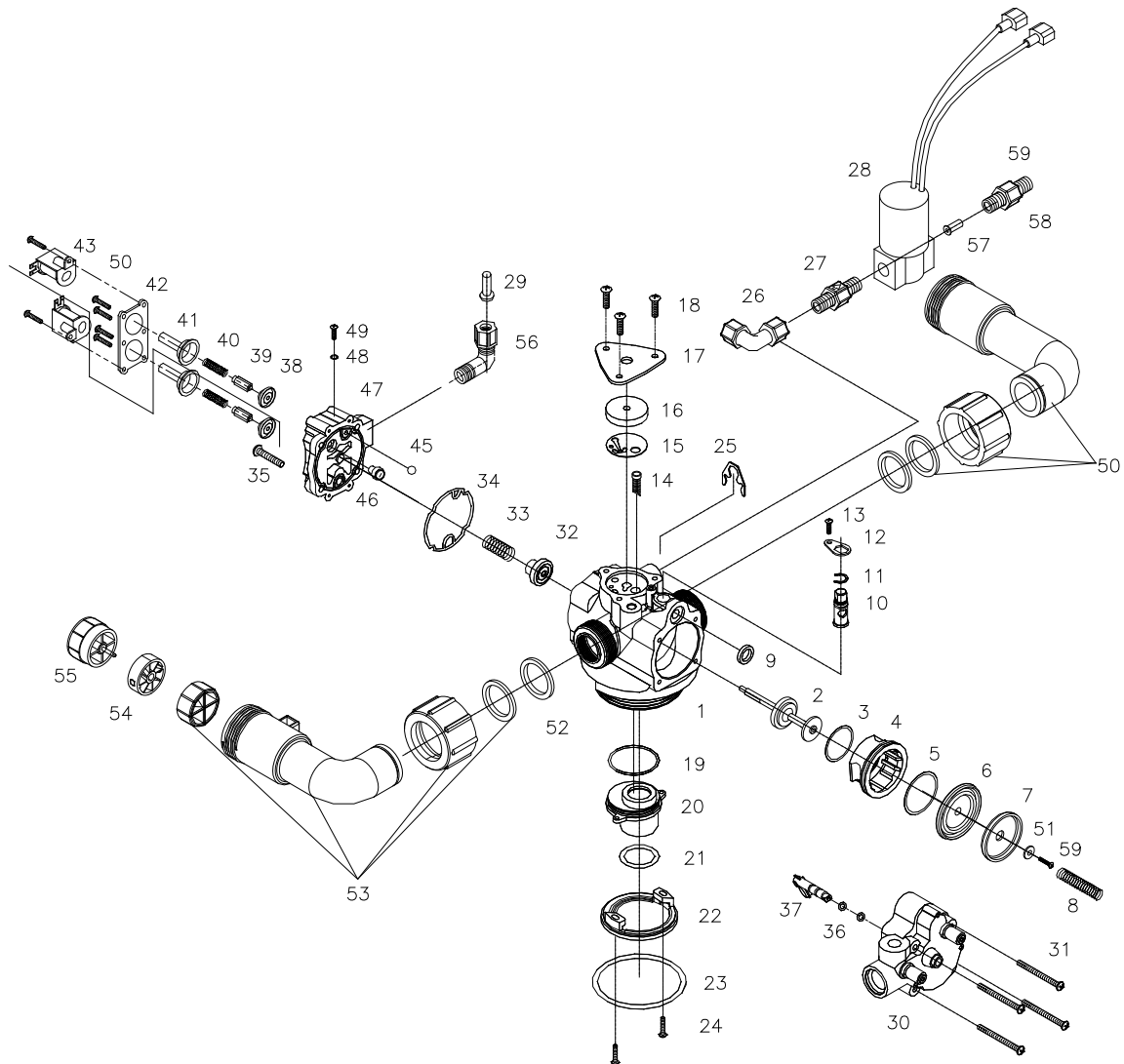
# Exploded Views & Part Numbers

## Evertech control Center



<b>ITEM</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
1	71348	Cable Tie
2	72415	PCB Assy
3	70618	Screw 4-24x.38
4	71675	Motor Drain 24V/60Hz
5	72244	Motor Plate
6	71753	Gear Assy
7	71755	Torsion Spring
8	71507	Screw
9	38052	Power Lead
10	72576	Sensor Cable 45in Latched
11	72518	Transformer Euro 220V
12	38198	Solenoid Cable Assy Black 45in
13	71638	Heyco Bushing
14	71687	Backplate
15	38239	Label PCB
16	71507	Screw
17	71550	Retaining Ring
18	71509	Screw
19	72045	Valve Head
20	71734	Stem Assy
21	13366	O-Ring -007
22	71698	Seat
23	71539	O-Ring 5/16 x 3/32
24	70627	Screw #5-40x0.25
25	72245	Washer .125x.437x.04 SS
26	70312	Heyco 2P-4
27	72134	Heyco SR5P4
28	71972	Backwash Flow Control 2.0
29	70618	Screw 4-24x3/8
30	38049	PCB Frame
31	70968	PCB Switch
32	38048	PCB Box Rear
33	38377	Screw 1/4x1-1/2
34	38199	Solenoid Cable Assy White 45in

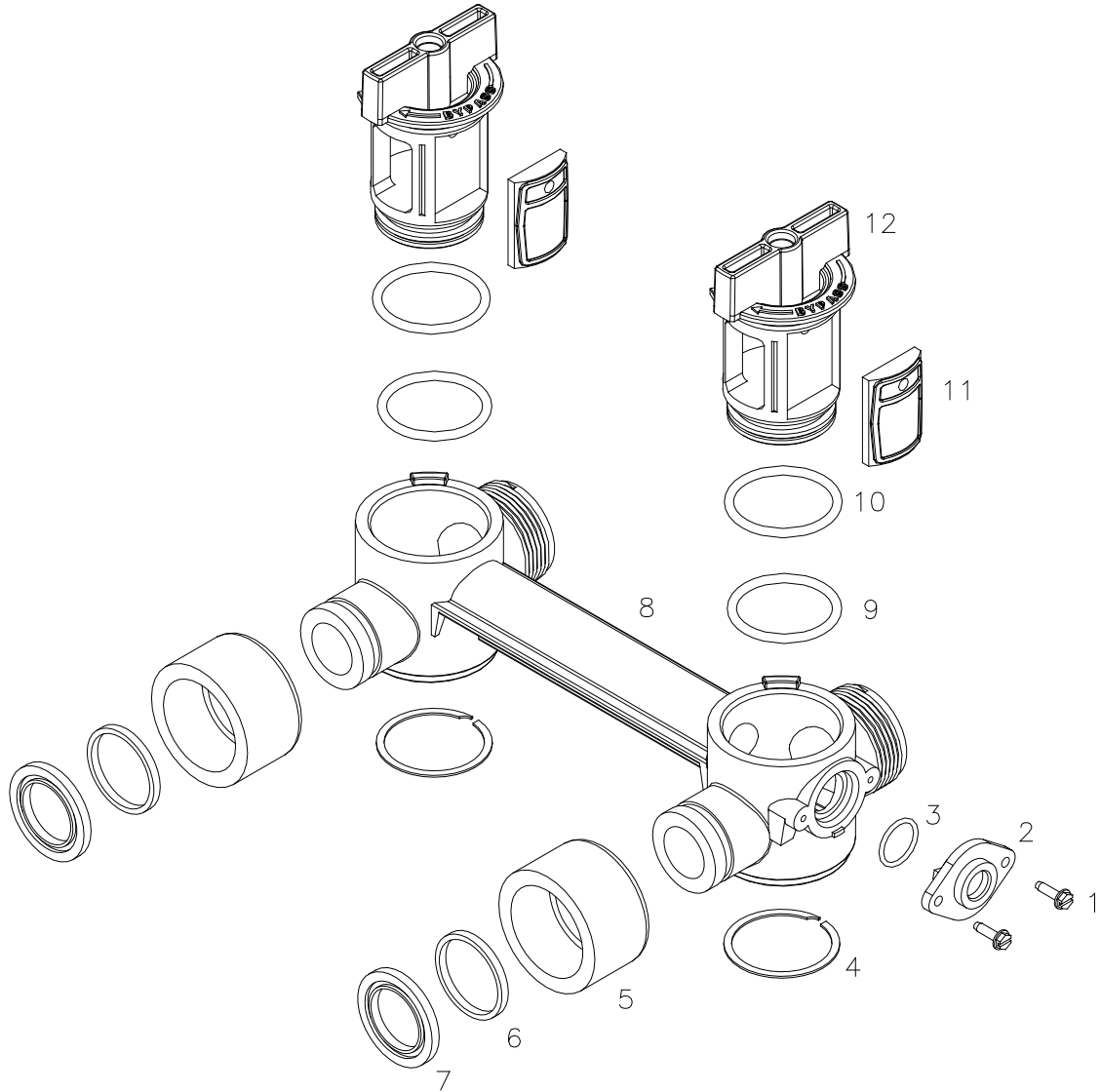
# Valve body



ITEM	PART NUMBER	DESCRIPTION
1	71949	Valve Body
2	72605	Stem Assy
3	71536	O-Ring
4	71922	Insert
5	71537	O-Ring Seat Insert
6	72602	Diaphragm
7	72507	Retaining Ring
8	71774	Spring
9	71887	Port Seal
10	75030	Backwash Valve
11	71547	Retaining Ring
12	71969	Locking Lever

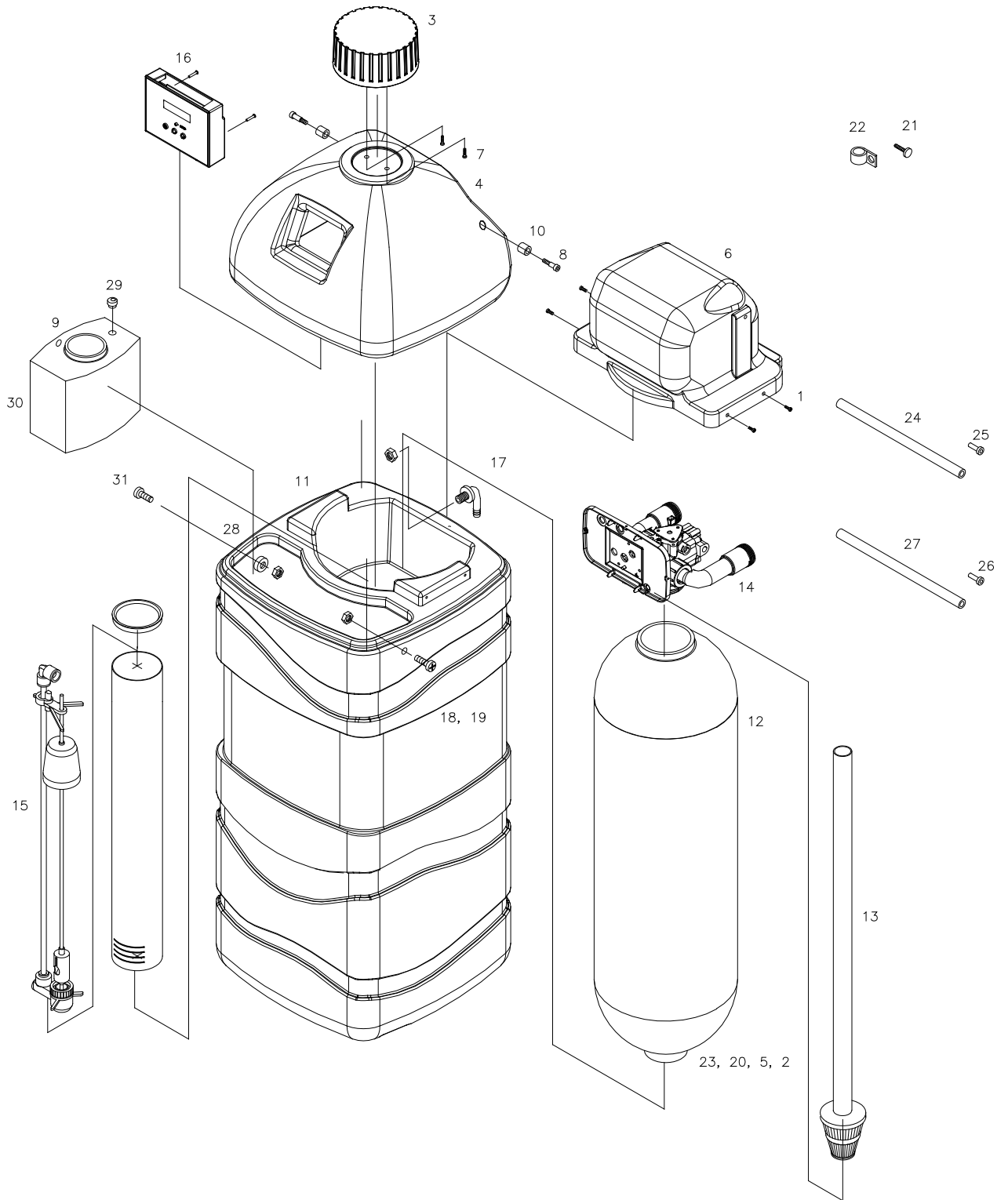
13	71507	Screw
14	18865	Filter Screen
15	71986	Injector Gasket
16	71718	Injector #4
17	71937	Injector Cap
18	71511	Screw
19	71538	O-Ring Riser Adapter
20	71935	Riser Adapter
21	70662	O-Ring Riser Adapter
22	71010	Adapter, Upper Basket
23	71541	Tank O-Ring
24	71512	Screw
25	71947	Spring Clip
26	37375	Elbow 1/8 NPT x 1/4 Comp PP
27	37374	Check Valve 1/8 x 1/8
28	38225	Solenoid PP 1/8 NPT 24 VAC
29	12625	Tube Support 3/8
30	71459	Valve Head
31	72308	Screw #8-18x2-3/4
32	75033	Check Disk
33	71942	Spring Check Disk
34	71925	Back Cap Seal
35	71497	Screw
36	13366	O-Ring Drain Paddle
37	71734	Stem Assy
38	71707	Solenoid Diaphragm
39	71709	Plunger
40	70984	Spring Solenoid
41	71706	Guide
42	71938	Spacer
43	71702	Solenoid Coil 24V
44	71513	Screw
45	71961	Check Ball, Brine Refill
46	71204	Brine Refill Flow Control 0.25 GPM
47	71960	Backcap Timed Brine Refill
48	71532	O-Ring
49	71496	Screw #4-14x.38
50	72542	Elbow Inlet Assy
51	72245	Washer
52	72467	Gasket 541
53	72543	Elbow Outlet Assy
54	72544	Impeller Assy
55	72545	Hub Assy
56	38224	Flow Restrictor 50 ml
57	38234	Brine Line Fitting 1/8 NPT
58	70667	O-Ring
59	72552	Screw

## Bypass Valve



ITEM	PART NUMBER	DESCRIPTION
1	72595	Screw 6x32 Hex Head Slotted
2	72580	Bypass End Cap 541
3	13328	O-Ring -017
4	72584	Retaining Ring VS-156-S02
5	71161	Nut Bypass Valve
6	71162	Ring Nut Retainer
7	71110	Gasket Bypass
8	72578	Bypass Body 541
9	72585	O-Ring - 220 EPC 70 Duro
10	72286	O-Ring -222 EPC 70 Duro
11	72583	Seal Bypass Valve
12	72579	Handle Bypass 541

# Chassis Parts



<b>ITEM</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
<b>1</b>	38147	Screw ¼-20x3/4 Phl CS-SS
<b>2</b>	14826	Chlorgon
<b>3</b>	38026	Cap Bottle
<b>4</b>	38027	Cover Bottle 35in
<b>5</b>	19101	KDF 55-C Media
<b>6</b>	38197	Valve Cover Bottle IM 35in
<b>7</b>	38117	Screw ¼-20x3/4 Phl SS
<b>8</b>	38037	Screw Socket 5/16 x ¾
<b>9</b>	38300	Bottle Cap
<b>10</b>	38148	Spacer Plast .5x.320x.270
<b>11</b>	38402	Cabinet Assy 35in Zero Empowered
<b>12</b>	14589	Tank 10x35 Gray
<b>13</b>	38236	Vortex Distributor Assembly
<b>14</b>	83313	Evertech Control Center
<b>15</b>	38040	Brine Valve Assy 35in SEME
<b>16</b>	38200	Screws 6-32 x 2.0 Thumb SS
<b>17</b>	19046	Drain Elbow W/Gasket
<b>18</b>	38243	Screw ¼-20x5/8 Plast Nat
<b>19</b>	38107	Nut ¼-20 Plast
<b>20</b>	14819	Hydrolyte 525-3 resin
<b>21</b>	38166	Rachet Fastener 3/16
<b>22</b>	38167	Spring Clip
<b>23</b>	18964	Gravel 1/8 x 1/16 #20
<b>24</b>	38214	Tubing .375 x 18.5in
<b>25</b>	12625	Tube Support 3/8
<b>26</b>	12624	Tube Support ¼
<b>27</b>	38227	Tube ¼ JG CTF 32in
<b>28</b>	38226	Rubber Gasket
<b>29</b>	71636	Heaco Bushing
<b>30</b>	38299	Pur-Gard Reservoir Tank
<b>31</b>	38243	Screw ¼-20x1 Plast



## **ProSystems Water Treatment Systems Limited Product Warranty**

### **STATEMENT OF LIMITED PRODUCT WARRANTY**

#### **Limited Warranty Coverage**

For ProSystems product(s) number 38402 and 14589, which refers to the cabinet and 10 x 35 resin tank of the Zero Empowered System, will carry a ten (10) years warranty from the date of shipment. The products are warranted to be free from defects in material and/or workmanship under normal use and service for a period of ten (10) years from the date of shipment. The valve body will also carry a 10 year warranty. The electrical will carry a five (5) year warranty. Any replacement product(s) provided by ProSystems Water Treatment Systems pursuant to this Limited Warranty will be warranted only for the remainder of the original limited warranty period or thirty (30) days from the date of shipment, whichever is longer.

The following are specifically excluded from the Limited Warranty coverage provided herein:

- Defects or problems not reported to ProSystems Water Treatment Systems during the applicable warranty period.
- Any products manufactured by other companies that are used in connection with ProSystems Water Treatment Systems product.
- Problems resulting from the alteration, modification, misuse, abuse, neglect, improper care, maintenance or negligent use, including but not limited to unprotected outdoor installation of any ProSystems Water Treatment Systems product.

#### **Procedure for Obtaining Limited Warranty Coverage**

In order to obtain the benefits of this Limited Warranty, defective part(s) and/or product(s) must be returned to ProSystems Water Treatment Systems as soon as possible after discovery of the defect, but not later than the expiration date of the warranty period provided in this Limited Warranty. The Technical Service Department at ProSystems Water Treatment Systems will issue a Warranty Return Authorization (WRA) number for the defective part(s) or product(s) which must be clearly marked on the outside of the package being returned. Packages must be shipped freight prepaid, along with a letter stating the part number, serial number, if any, the date of purchase of the item which is claimed to be defective and a brief description of the problem detected. ProSystems Water Treatment Systems is not responsible under this Limited Warranty for any cost incurred for shipping or transportation in connection with the return of the part(s) or product(s).

#### **Repair or Replacement**

Upon receipt of the product and warranty claim, ProSystems Water Treatment Systems will verify the reported failure and determine if the part(s) or product(s) is/are covered by this Limited Warranty. If this Limited Warranty applies, ProSystems Water Treatment Systems will, at its option, repair or replace the part(s) or product(s).

#### **No Liability for Consequential Damages**

Unless otherwise required by applicable law, ProSystems Water Treatment Systems shall not be liable for any damages whatsoever (including without limitation, loss time, inconvenience, expenses such as telephone calls, labor or material charges incurred in connection with the removal or replacement of the part(s) or product(s), special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use the defective part(s) or product(s), even if ProSystems Water Treatment Systems has been advised of the possibility of such damages. ProSystems Water Treatment Systems entire liability under any provision of this Limited Warranty shall be limited to the amount actually paid for the part(s) or product(s). NOTE: Because some states/jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not apply.

#### **No Other Warranties:**

ProSystems Water Treatment Systems specifically disclaims all other warranties, either express or implied, including, but not limited to implied warranties of merchantability and fitness for a particular purpose, with regard to the part(s), product(s) and/or any accompanying written materials. This limited warranty gives you specific legal rights. You may have other rights that vary from state/jurisdiction to state/jurisdiction.

**Order Department Direct Line: 847-758-5973 • Fax: 847-437-5539  
Toll-free: 800-811-3489**