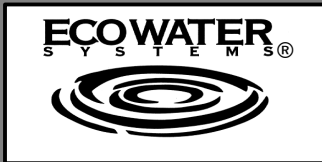


**EWS  
MODELS  
ESD1502R30  
&  
ESD1502R39**



# EcoWater MODELS ESD1502R30 & ESD1502R39 Water System

**ECOWATER CUSTOMER . . .** Your EcoWater dealer has assembled, installed, and adjusted the water system to your household's specific needs. Just keep the brine tank filled with salt and the EcoWater System unit will provide you with a continuous supply of conditioned water. *Check the salt storage level every few weeks*, and always refill the tank before all the salt is gone. Use cube, pellet, or other **clean** water softener salt. **Do not** use rock salts, or salt with iron removing additives. Iron removing additives

release fumes that may corrode and shorten the life of some EcoWater System unit parts.

Your dealer has set the demand timer to the correct time and water hardness for your water supply, to provide you with continuous soft water. If electrical power to your house. . . or just to the EcoWater System unit. . . is interrupted, use the procedures on pages 5 and 6 to reset the time.

## LIMITED WARRANTY EcoWater Systems, Inc. ADVANTAGE WARRANTY Series ESD1502 Water System

Congratulations! You have just purchased the highest quality water conditioning product on the market. To register your warranty, complete the enclosed Warranty Registration Card and mail it within 30 days of purchase.

### To whom is this warranty extended?

EcoWater Systems, Inc. warrants its products to the original owner and guarantees that the products will be free from defects in materials and workmanship from the original date of installation.

### How does this warranty work?

If, during the respective warranty period, a part proves, after inspection by EcoWater, to be defective, EcoWater will, at its sole option repair or replace that part at no charge, other than normal shipping, installation or service charges.

### What is covered by the warranty?

EcoWater Systems, Inc. guarantees that,

for a period of TEN (10) years, the SALT TANK and the MINERAL TANK will not rust, corrode, leak, burst, or in any other manner fail to perform their proper functions and that,

for a period of ONE (1) year, the VALVE BODY, CONTROL PANEL and ALL OTHER PARTS will be free of defects in materials and workmanship and will perform their proper functions.

### How do I obtain warranty service?

Should you need service, your local, independent EcoWater Dealer is only a phone call away. PHONE: \_\_\_\_\_

To obtain warranty service, notice must be given, within thirty (30) days of the discovery of the defect, to your local EcoWater Systems dealer.

### If I need a part replaced after the factory warranty expires, is the replacement part warranted?

Yes, EcoWater Systems, Inc. warrants FACTORY REPAIRS as well as all REPLACEMENT PARTS for a period of 90 DAYS. This warranty does not include normal shipping, installation or service charges.

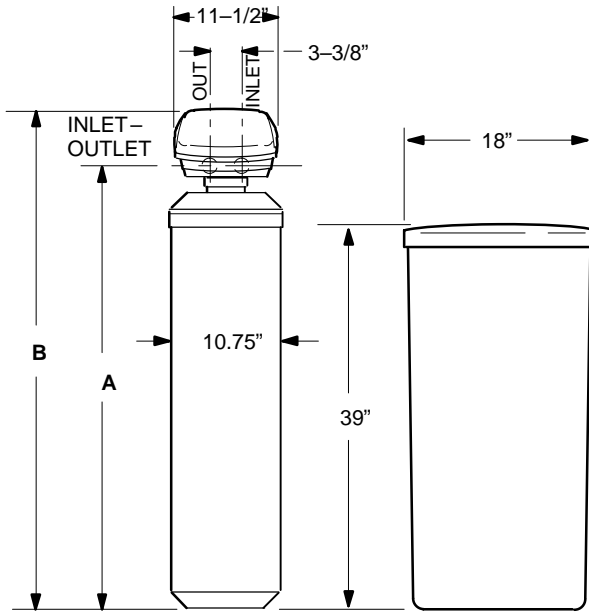
### General Provisions

The above warranties are effective **provided** the water conditioner is operated at water pressures not exceeding 125 psi, and at water temperatures not exceeding 120°F; provided further that the water conditioner is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the water conditioner is not damaged as the result of any unusual force of nature such as, but not limited to, flood, hurricane, tornado or earthquake. EcoWater Systems, Inc., is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages, or other circumstances beyond its control.

**There are no warranties on the water conditioner beyond those specifically described above. All implied warranties, including any implied warranty of merchantability or of fitness for a particular purpose, are disclaimed to the extent they might extend beyond the above periods. The sole obligation of EcoWater Systems, Inc. under these warranties is to replace or repair the component or part which proves to be defective within the specified time period, and EcoWater is not liable for consequential or incidental damages. No EcoWater dealer, agent, representative, or other person is authorized to extend or expand the warranties expressly described above.**

Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damage, so the limitations and exclusions in this warranty may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state. This warranty applies to consumer-owned installations only.

## DIMENSIONS – SPECIFICATIONS



**ESD1502R30 & ESD1502R39**

MODEL	NOMINAL RESIN TANK SIZE	A	B
<b>ESD1502R30</b>	8" DIA. X 40"	41.87"	49.12"
<b>ESD1502R39</b>	10" DIA. X 47"	49.25"	56.5"

	<b>ESD150 2R30</b>	<b>ESD1502 R39</b>
<i>Rated Capacity</i>	see rating decal on the softener	
<i>Service Flow Rate</i>		
<i>Pressure Drop at Service Flow Rate</i>		
<i>Rated Efficiency (GR/LB) ▣</i>	5060	
<i>Amount of High Capacity Resin (cu ft)</i>	.78	1.01
<i>Water Supply Max. Hardness (gpg)</i>	60	80
<i>Water Supply Max. Clear Water Iron (ppm)</i>	2	2
<i>Water Pressure Limits (min./max. psi)</i>	20 – 125	
<i>Min./Max. Water Temperature (°F)</i>	40° – 120°	
<i>Min. Water Supply Flow Rate (gpm)</i>	3	
<i>Max. Drain Flow Rate (gpm)</i>	1.8	2.3

These systems conform to ANSI/NSF 44 for the specific performance claims as verified and substantiated by test data.

▣ Efficiency rating is only valid at 2.3 lb of salt dosage for ESD1502R30 and 3.0 salt dosage for ESD1502R39. These softeners were efficiency rated according to ASNI/NSF standard 44.

## ECOWATER DEALER INFORMATION

### **SAFETY GUIDES, INSTALLATION AND OPERATION REQUIREMENTS**

FOLLOW THE INSTALLATION INSTRUCTIONS CAREFULLY. FAILURE TO INSTALL THE UNIT PROPERLY VOIDS THE WARRANTY.

**CHECK LOCAL PLUMBING AND ELECTRICAL CODES. THE INSTALLATION MUST CONFORM TO THEM.** In Massachusetts, plumbing codes of Massachusetts shall be adhered to. Consult with your licensed plumber.

**USE ONLY LEAD-FREE SOLDER AND FLUX** FOR ALL SWEAT-SOLDER CONNECTIONS, AS REQUIRED BY STATE AND FEDERAL CODES.

USE CARE WHEN HANDLING THE UNIT. DO NOT TURN UPSIDE DOWN, DROP, OR SET ON SHARP PROTRUSIONS.

DO NOT LOCATE THE UNIT WHERE FREEZING TEMPERATURES OCCUR. DO NOT ATTEMPT TO TREAT WATER OVER 120°F. **FREEZING, OR HOT WATER DAMAGE VOIDS THE WARRANTY.**

AVOID INSTALLING IN DIRECT SUNLIGHT. EXCESSIVE SUN HEAT MAY CAUSE DISTORTION OR OTHER DAMAGE TO NON-METALLIC PARTS.

THE SYSTEM REQUIRES A MINIMUM WATER FLOW OF 3 GALLONS PER MINUTE AT THE INLET. **MAXIMUM ALLOWABLE INLET WATER PRESSURE IS 125 PSI.** IF DAYTIME PRESSURE IS OVER 80 PSI, NIGHTTIME PRESSURE MAY EXCEED THE MAXIMUM. USE A PRESSURE REDUCING VALVE IF NECESSARY. (ADDING A PRESSURE REDUCING VALVE MAY REDUCE THE FLOW.)

**THE UNIT WORKS ON 24 VOLT-60 Hz ELECTRICAL POWER ONLY.** BE SURE TO USE THE INCLUDED TRANSFORMER.

THIS SYSTEM IS NOT INTENDED TO BE USED FOR TREATING WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

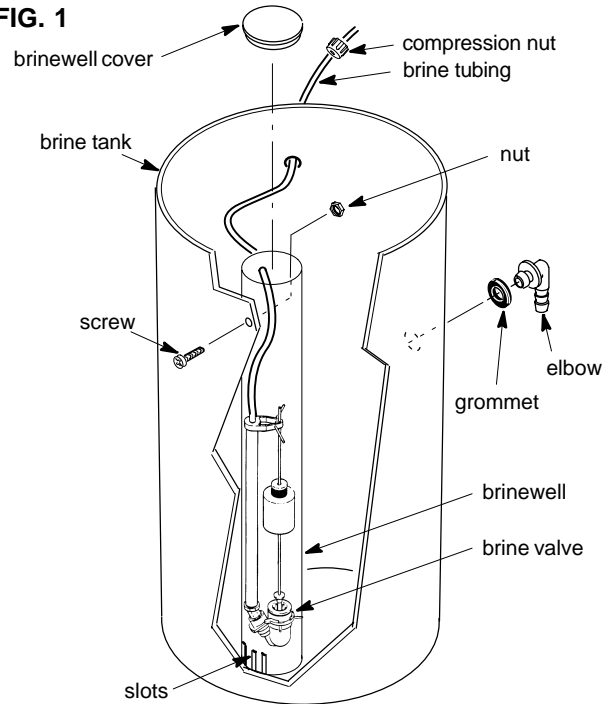
# ECOWATER DEALER INFORMATION

## BRINE TANK ASSEMBLY

1. Locate the brinewell in position and secure with a screw and nut (from parts skin-pack).
2. Lower the brine valve into the brinewell and install the brinewell cover.
3. Insert the grommet into the hole in the tank sidewall. Then, push the hose adaptor elbow into the grommet.

**Do the remaining assembly during installation.**

**FIG. 1**



## INSTALLATION

BE SURE TO READ AND COMPLY WITH ALL GUIDES LISTED ON PAGE 2.

1. Install the installation adaptors, or the optional bypass valve (fig. 2). **Be sure clips hold parts firmly in place.** Pull on the adaptors or bypass valve to insure they are secure.

**Note:** If the optional bypass valve is not used, be sure to install a 3-valve bypass (fig. 3).

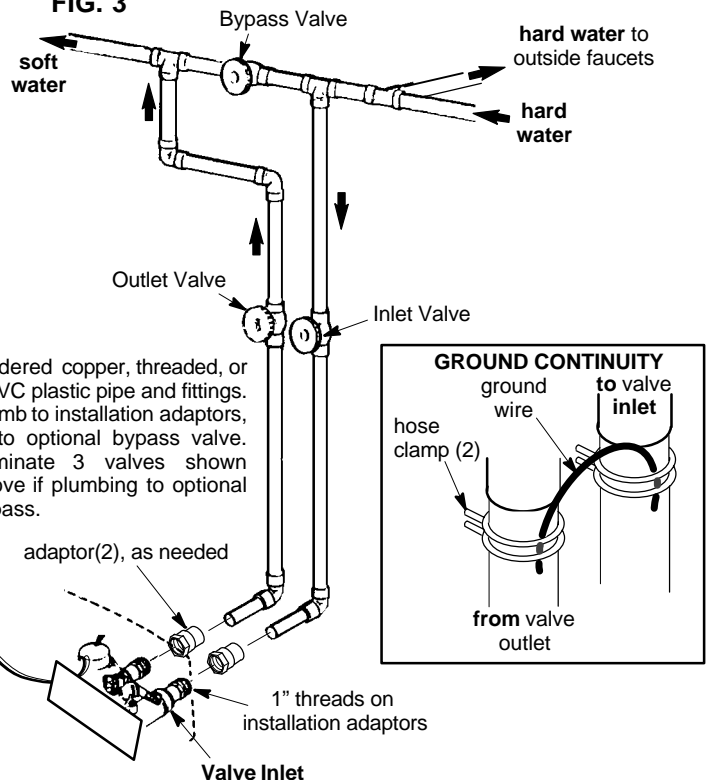
2. Run the **hard water** supply to the **valve inlet**, and **conditioned water** out from the **valve outlet**.

**Note:** Use the copper tubes, nuts and gaskets that are on the skin-pack. You can also plumb directly to the 1" NPT threads on the installation adaptors.

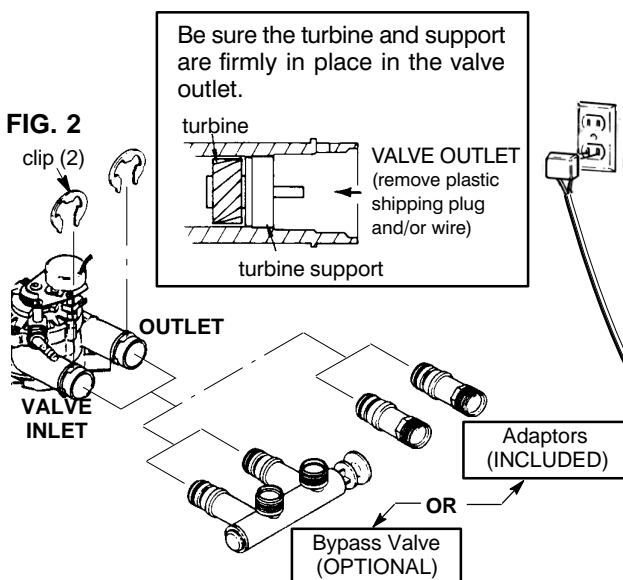
**CAUTION:** Do all soldering, and allow to cool, before connecting pipe to the adaptors or bypass valve.

3. Install the hose clamps and wire if cold water pipe ground continuity was interrupted. **Note:** hose clamps must be placed on pipes before soldering.

**FIG. 3**



**FIG. 2**



## ECOWATER DEALER INFORMATION

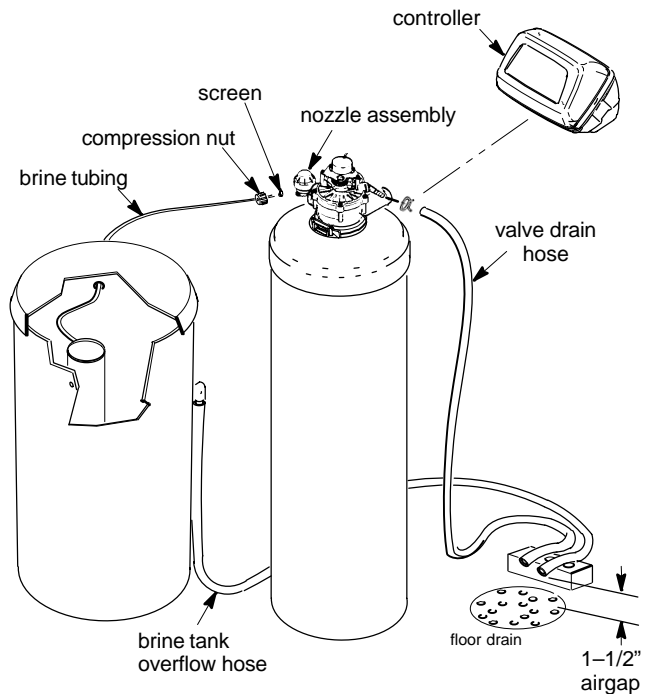
### INSTALLATION (continued)

- Run the valve and brine tank overflow drain hoses (fig. 4). Secure the valve drain hose to the drain fitting with the included hose clamp. Provide a minimum 1" air gap at the floor drain, sump, standpipe, laundry tub, or other approved drain. If you need to elevate the valve drain hose to get to the drain point, do not raise more than 8' above the floor. The *gravity* overflow hose must be lower than the drain fitting along the entire run.

Note: Flexible drain hose is not allowed by some state or local codes. A fitting (1/4" NPT x 1/2" O.D. tube, part no. 0504574) is available from EcoWater for adapting copper tubing to the valve drain fitting.

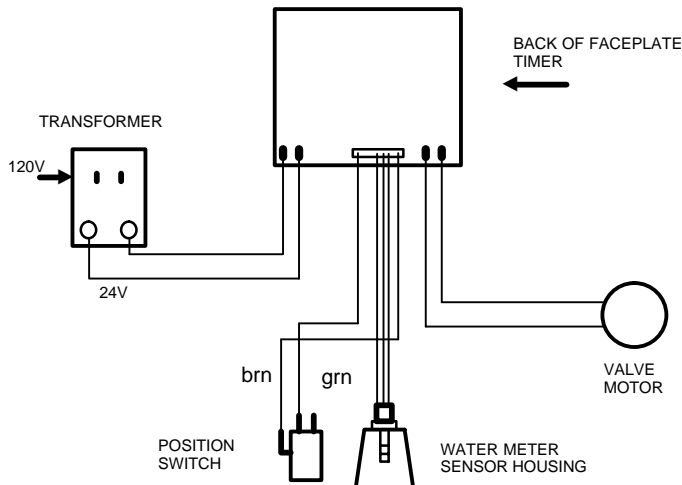
- Route the brine valve tubing out of the brine tank and connect to the nozzle assembly. Place the included (on skin-pack) screen in the end of the tubing, and use the compression nut to fasten.
- Hold the controller assembly over the valve assembly and connect wiring to the valve motor and switch (see diagram below). Install o-ring on to valve outlet port sensor well. Fasten the sensor housing in place on the valve outlet port.
- Lower the controller assembly onto the tank and lock the bottom cover into slots in the shroud cover.
- Connect the power cable to the transformer and plug into a 120V – 60Hz electrical outlet.

FIG. 4



- Open nearby faucets and advance (use **CHARGE** button) the softener valve to backwash position to vent air from the tank. Turn on the water supply and allow the softener to fill. When water at nearby faucets runs smooth, with no more air bubbles, close the faucets and advance the softener valve to "service".
- Check your installation work for leaks.
- Make all timer settings, pages 5 and 6.
- Sanitize the unit following procedures below, and use "Recharge Now" to start a recharge.
- Fill the brine tank with clean water softener salt.
- Install the brine tank cover.

### WIRING SCHEMATIC



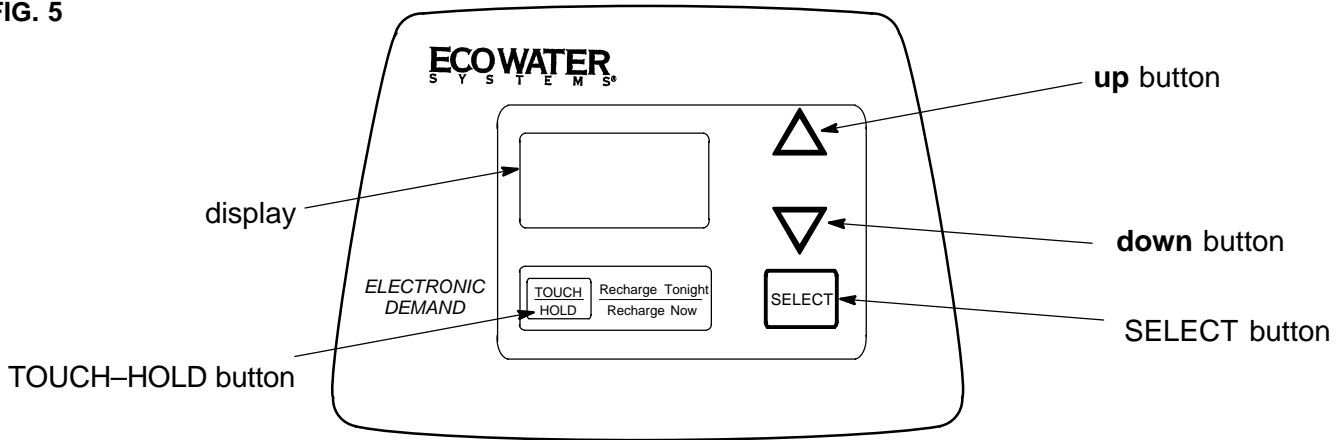
### DISINFECTING THE SOFTENER

Care is taken at the factory to keep your softener clean and sanitary. Materials used to make the unit will not infect or contaminate your water supply, and will not cause bacteria to form or grow. However, during shipping, storage, installing and operating, bacteria could get into the unit. For this reason, sanitizing as follows is suggested when installing.

- Use a pail or hose to fill the brine tank with about 3 gallons of water.
- Remove the brinewell cover and pour about 1–1/2 oz. (2 to 3 tablespoons) of common household bleach into the softener brinewell. Clorox, Linco, BoPeep, White Sail, Eagle, etc. are brand names of bleach readily available. **Replace the brinewell cover.**
- Start an automatic regeneration to draw the bleach into and through the softener, and to the drain.

## SETTING THE TIMER

FIG. 5



► **TIMER SETTINGS REQUIRED**...upon installation, and after an extended power outage (see Program Memory, page 8).

**NOTES:**

- WHEN THE TRANSFORMER IS PLUGGED INTO THE ELECTRICAL OUTLET, **12:00AM** (flashing), and **PRESENT TIME** show in the display area. Program the timer as instructed below. **If SR -- is flashing**, use the UP button to set the correct SR code as follows: **SR22** for ESD1502R30 and **SR31** for ESD1502R39 models. If you pass by the correct code number, use the DOWN button. Then, press the SELECT button and program the timer below. ...*If the wrong SR code shows for your model, see Manual Initiated Electronic Diagnostics on pages 8 and 9.*
- A “beeper” sounds while pressing buttons for timer programming. One beep signals a change in the timer display. Repeated beeps means the timer will not accept a change from the button you have pressed, and you should use another button.
- To set the timer, you will use the UP , DOWN and SELECT buttons.

► **SET PRESENT TIME OF DAY**

NOTE: If the words PRESENT TIME do not show in the display, press the SELECT button until they do.

**1.** Press the UP or DOWN button to set. The UP button moves the display ahead; the DOWN moves the time backward. ....

NOTE: Each press of the buttons changes the time by 1 minute. Holding the buttons in changes the time 32 minutes each second.

**2.** When the present time shows, press SELECT to set.

If the present time is between noon and midnight, be sure PM shows.



If the present time is between midnight and noon, be sure AM shows.



**TIMER SETTINGS CONTINUED, NEXT PAGE**

## SETTING THE TIMER

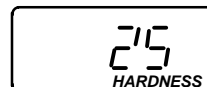
### ► **SET WATER HARDNESS NUMBER**

NOTE: If 25 (factory default) and HARDNESS do not show in the display, press SELECT until they do.

1. Press the UP or DOWN button to set your water hardness number in the display. DOWN moves the display down to 1. UP moves the display up to 95 (SR22) or 110 (SR31).

NOTE: Each press of a button changes the display by 1 between 1 and 25. Above 25, the display changes 5 at a time ... 25, 30, 35, etc. Holding a button in changes the numbers twice each second. See the specified maximum hardness, page 2.

2. When your water hardness number shows, press SELECT to set.



You can get the grains per gallon (gpg) hardness of your water supply from a water analysis laboratory, or call and ask your local water department, if you are on a municipal supply.

NOTE: If you use potassium chloride (KCl) instead of standard sodium chloride (NaCl) water softener salt, increase the hardness setting by 25%.

### ► **SET REGENERATION (STARTING) TIME**

NOTE: RECHARGE TIME and a flashing 2:00 AM (factory default) should show in the display. This is a good time for regeneration to start (over in about 2 hours) in most households because water is not in use. HARD WATER is bypassed to house faucets during regeneration.

**If no change is needed, go to step 2 following.** To change this time, if desired, do step 1.

1. Press the UP or DOWN button to set the desired regeneration start time.

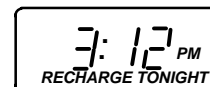
NOTE: Each press of the buttons changes the time by one hour. Holding the buttons in changes the time twice each second.

2. Press the SELECT button once more.



Be sure to observe the AM or PM, as you did when setting the time of day.

The display shows the present time of day and RECHARGE TONIGHT.



### ► **SET EFFICIENCY, BACKWASH TIME AND RINSE TIME**

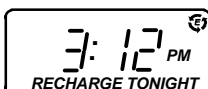
NOTE: Press and hold the SELECT button. "000—" should show in display. Press SELECT button once more to go to Efficiency screen.

NOTE: California regulations require the efficiency setting to be ON for sale in California.

**If no change is needed, go to step 5 following.** To change one or all of these settings, if desired, do steps 1 thru 4.

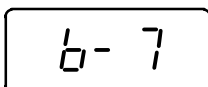
1. Press the UP or DOWN button to set the efficiency setting either on or off.

NOTE: When efficiency setting is set to on, an icon will show in the upper right hand corner of the display.



2. Press the SELECT button once to go to the backwash time setting.

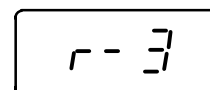
NOTE: Factory default for this setting is 7 minutes.



3. Press the UP or DOWN button to set the desired backwash time.

4. Press the SELECT button once to go to the rinse time setting.

NOTE: Factory default for this setting is 3 minutes.



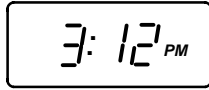
5. Press the SELECT button once more.

**TO COMPLETE THE INSTALLATION, GO TO THE SANITIZING PROCEDURES ON PAGE 4.**

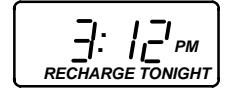
## TIMER FEATURES, AND SERVICE

### NORMAL OPERATION, TIMER DISPLAYS .....

During normal operation, the present time of day, and AM or PM, show in the time display area. When the demand computer determines a regeneration is needed, RECHARGE TONIGHT begins to flash in the display, along with the present time.



RECHARGE TONIGHT flashes until the next regeneration start time, then changes to RECHARGE NOW, which flashes until the regeneration is over.

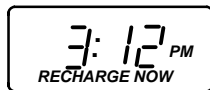


### feature: OPTIONAL RECHARGE CONTROLS .....

Sometimes, a manually started regeneration (recharge) may be desired, or needed. Two examples are:  
 ... You have used more water than usual (house guests, extra washing, etc.) and you may run out of soft water before the next regeneration.  
 ... You did not refill the storage tank with salt before it was all gone.

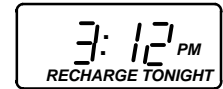
Use one of the following features to start a regeneration immediately, or at the next preset regeneration start time.

#### RECHARGE NOW



Press and *hold* in the TOUCH – HOLD button until **RECHARGE NOW** starts to flash in the time display area. The softener begins an immediate regeneration, and when over in about 2 hours, you will have a new supply of soft water. Once started, you cannot cancel this regeneration.

#### RECHARGE TONIGHT



Touch (do not hold) the TOUCH – HOLD button, and **RECHARGE TONIGHT** flashes in the time display area. A regeneration will occur at the next preset regeneration start time. If you decide to cancel this regeneration, touch the same button once more.

### VACATION NOTE .....

EcoWater Demand water softeners regenerate only while water is used and softening capacity must be restored. For this reason, the softener will not regenerate when you are away from home for extended periods.

### feature: PROGRAM MEMORY .....

If electrical power to the softener is interrupted, the time display is blank, but the timer keeps correct time for about 6 hours. When power is restored, you have to reset the present time **only if** the display is flashing. **All** other settings are maintained and never require resetting unless a change is desired.

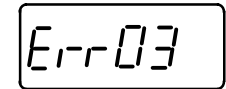
If the time *is* flashing after a long power outage, the softener continues to work as it should to provide you with soft water. However, regenerations may occur at the wrong time of day until you reset the timer to the correct time of day, page 5.

### feature / service: AUTOMATIC ELECTRONIC DIAGNOSTICS .....

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

appear, and possible defects for each code. While an error code is displayed, all timer buttons are inoperable except for the SELECT button.

SELECT remains operational so the service person can make the Manual Initiated Electronic Diagnostics to further isolate the defect, and check the water meter.



The following chart shows the error codes that could

	ERROR CODE DISPLAYED				
	Err 01	Err 02	Err 03	Err 04	Err 05
<b>POSSIBLE DEFECT</b>	♦ wiring harness, or connection to switch ing high torque	♦ motor inoperative	♦ position switch	♦ valve defect caus-	♦ timer (PWA)
<b>TO REMOVE AN ERROR CODE:</b> (1) unplug transformer (2) correct defect (3) plug transformer in (4) Wait for at least 6 minutes. The error code will return if the reason for the error code was not corrected.					

continued



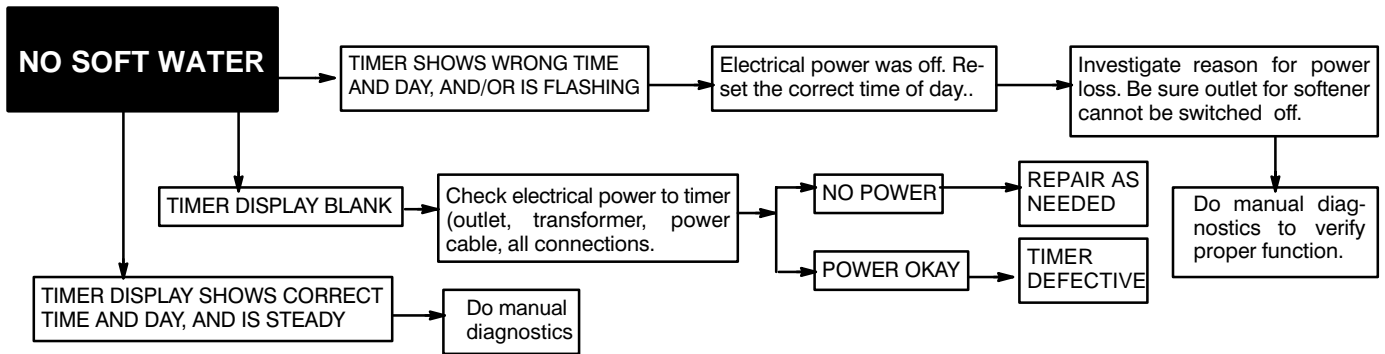
## ELECTRONIC DEMAND TIMER FEATURES, AND SERVICE, continued

### service: **TIMER / SOFTENER, SERVICE CHECKOUT PROCEDURE** .....

If you are not getting soft water, and an error code is not displayed, use the procedures below to find the problem. First, make the following visual checks.

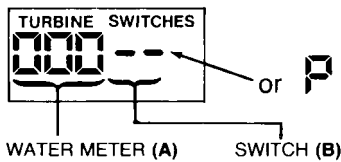
**VISUAL CHECKS:** (1) Is there electrical power to the outlet the softener transformer is plugged into?

(2) Is there salt in the storage tank? (3) Is the plumbing bypass valve(s) directing water for soft water service? —see page 3— (4) Is the valve drain hose open to the drain, not elevated too high, and unobstructed? If you do not find a problem with the visual checks, continue below.



### service: **MANUAL INITIATED ELECTRONICS DIAGNOSTIC** .....

1. To enter diagnostics, press and hold the SELECT button until (000 – –) shows in the display.

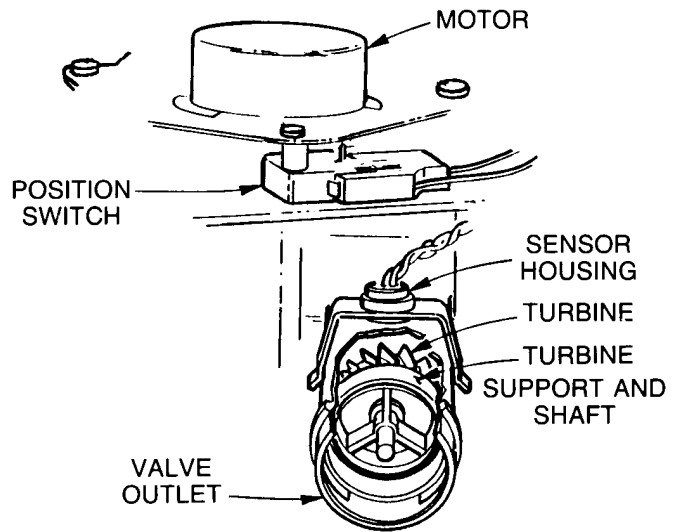


**(A)** The first 3 digits indicate water meter operation as follows:

▶ 000 (steady) = soft water not in use...no flow through the meter.

— **OPEN A NEARBY SOFT WATER FAUCET** —

▶ 000 to 199 (continual) = repeats display for each gallon of water passing through the meter.



If you don't get a reading in the display, with faucet open, pull the sensor from the valve outlet port. Pass a small magnet back and forth in front of the sensor. You should get a reading in the display. If you get a reading, unhook the in and out plumbing and check the turbine for binding.

**(B)** The letter (P) and dash(es) indicate POSITION switch operation. The letter appearing means the switch is closed; the dash means the switch is open.

Use the TOUCH - HOLD (Recharge Tonight – Now)

button to manually advance the valve into each cycle and check correct switch operation.

CORRECT SWITCH DISPLAYS	VALVE CYCLE STATUS
—	Valve in service, fill, brining, backwash or fast rinse position.
-P	Valve rotating from one position to another.

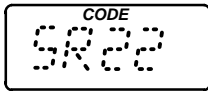
## ELECTRONIC DEMAND TIMER FEATURES, AND SERVICE, continued

C. 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 face plate.

...Press the UP  $\blacktriangle$  button to display the number of days this face plate has had electrical power applied.

...Press the DOWN  $\blacktriangledown$  button to display the number of regenerations initiated by this face plate since the SR code number was entered.

2. Press the SELECT button and *hold* in 3 seconds until a **Service Rating code** appears in the display.



**For correct softener operation, the SR number must match the model as follows.**

SR22	ESD1502R30
SR31	ESD1502R39

**To reset the code**, press the UP or DOWN button until the correct number shows.

3. Press SELECT to return the present time display. **If the code was changed, make ALL the timer settings**, pages 5 and 6.

NOTE: If the face plate is left in a diagnostic display (or a flashing display when setting times or hardness), present time automatically returns if a button is not pressed within 4 minutes.

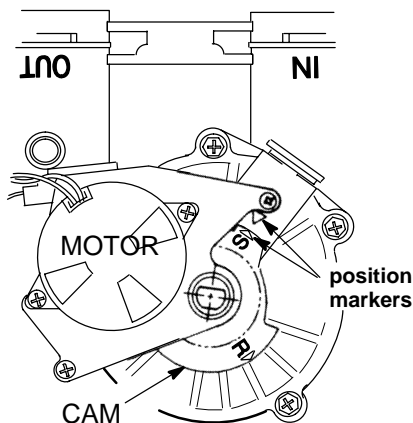
### service: **MANUAL ADVANCE REGENERATION CHECK** .....

This check verifies proper operation of the valve motor, brine tank fill, brine draw, regeneration flow rates, and other controller functions. **First, make the initial checks, and the manual initiated diagnostics.**

**NOTE:** The face plate display must show a steady time (not flashing).

1. Press the TOUCH – HOLD button and *hold* in for 3 seconds. RECHARGE NOW begins to flash as the softener enters the fill cycle of regeneration. Remove the brinewell cover and, using a flashlight, observe fill water entering the brine tank.

◆ If water **does not** enter the tank, look for an obstructed nozzle, venturi, fill flow plug, brine tubing, or brine valve riser pipe.



2. After observing fill, press the TOUCH – HOLD button to move the softener into brining. A slow flow of

water to the drain will begin. Verify brine draw from the brine tank by shining a flashlight into the brinewell and observing a noticeable drop in the liquid level.

**NOTE:** Be sure a salt bridge is not preventing water with salt contact.

- ◆ If the softener does not draw brine...
  - ...nozzle and/or venturi dirty or defective.
  - ...nozzle and venturi not seated properly on gasket.
  - ...restricted drain (check drain fitting and hose).
  - ...defective nozzle and venturi seal.
  - ...other inner valve defect (rotor seal, rotor & disc, wave washer, etc.).

**NOTE:** If water system pressure is low, an elevated drain hose may cause back pressure, stopping brine draw.

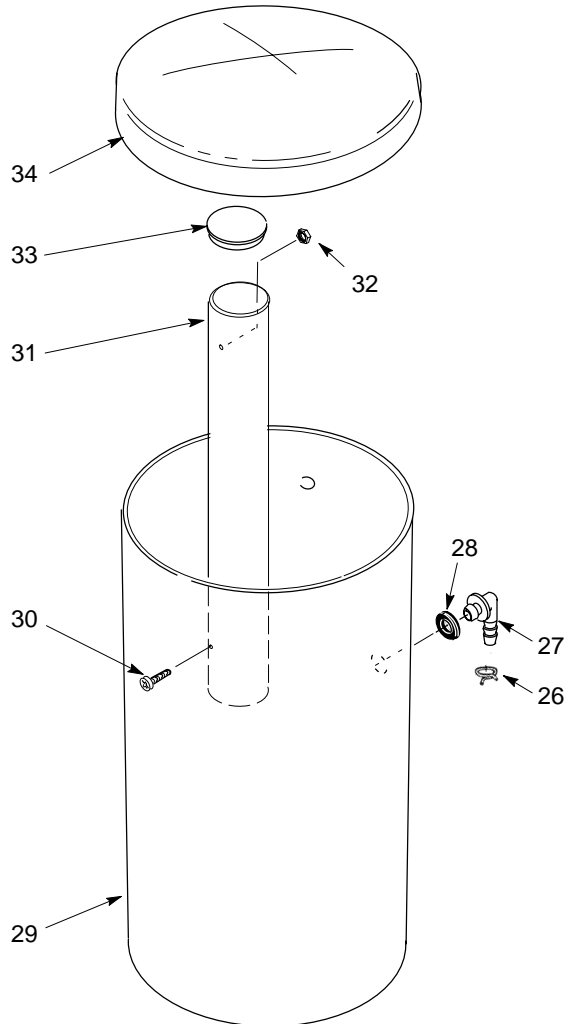
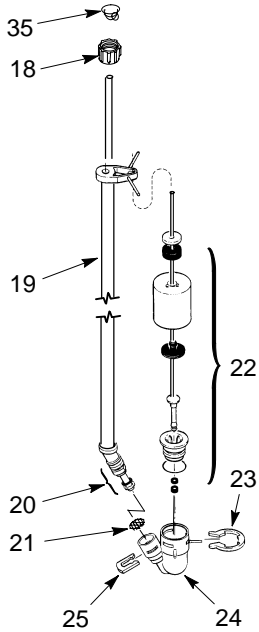
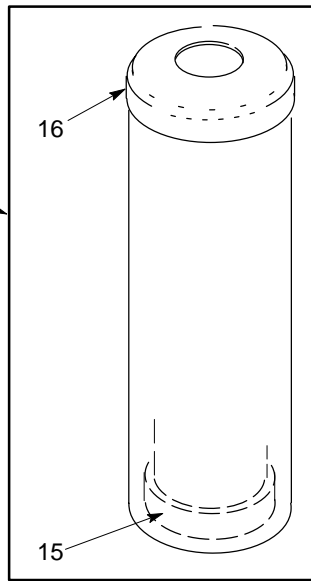
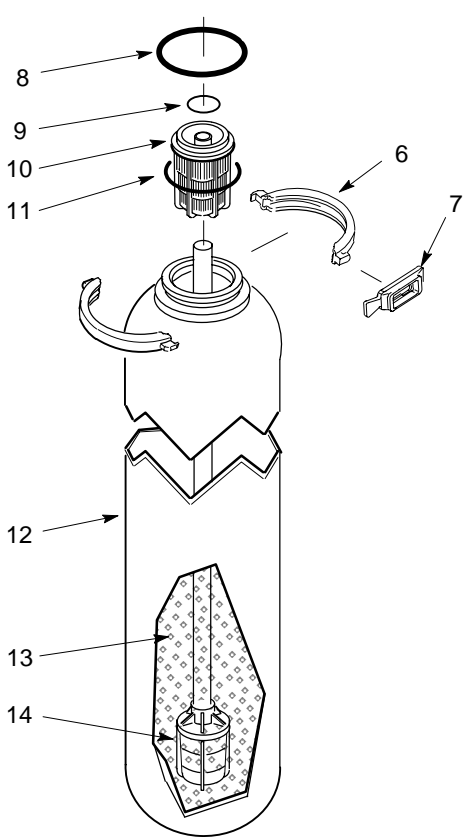
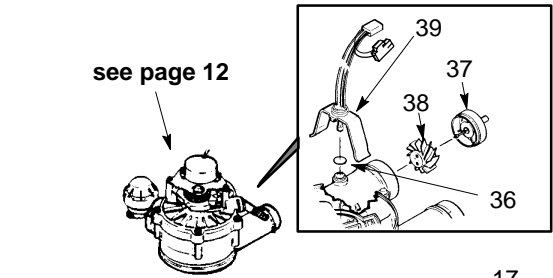
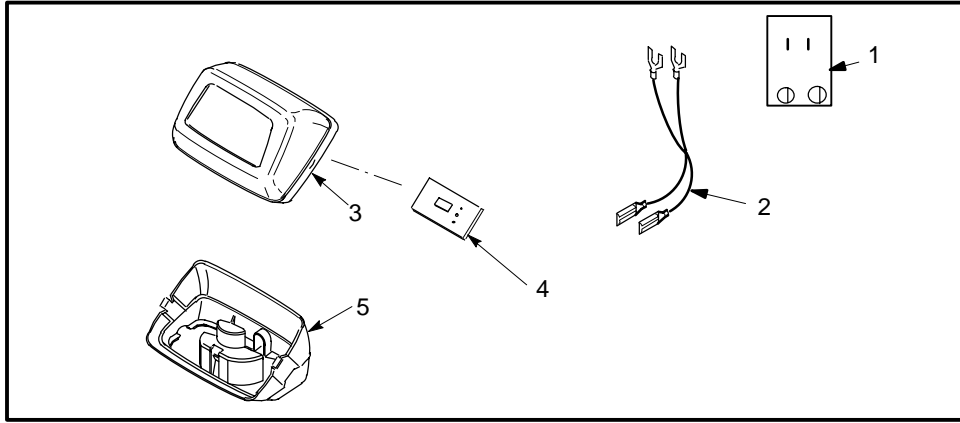
3. Again, press the TOUCH – HOLD button to move the softener into backwash. Look for a fast flow of water from the drain hose.

◆ A slow flow indicates a plugged top distributor, backwash flow plug, or drain hose.

4. Press TOUCH – HOLD to move the softener into fast rinse. Again look for a fast drain flow. Allow the softener to rinse for a few minutes to flush out any brine that may remain in the resin tank from the brining cycle test.

5. To return the softener to service, press TOUCH – HOLD.

# REPAIR PARTS



## REPAIR PARTS

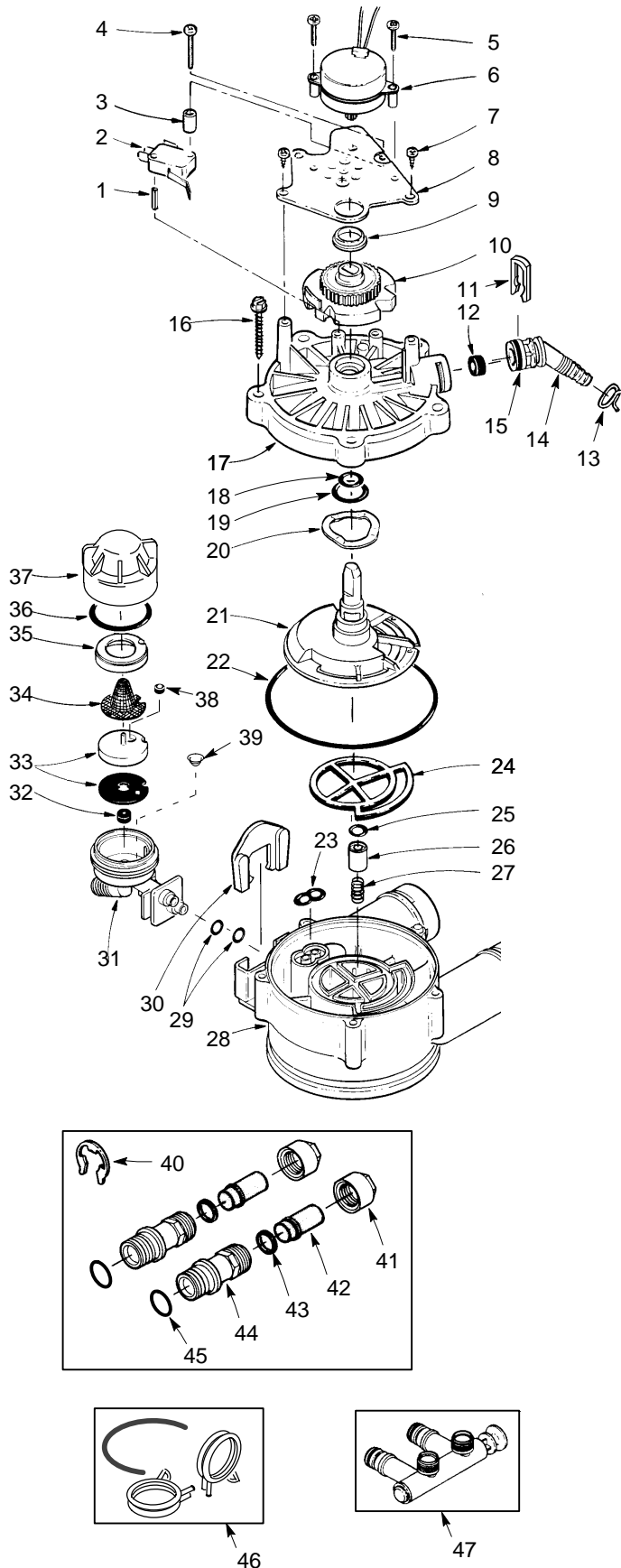
Key No.	Part Number	Part Description
1	7095373	Transformer, 24V – 10VA
2	7132840	Power Cable
3	7180291	Faceplate–Cover
–	7215614	Decal, Faceplate
4	7239773	Rep'l PWA
5	7180314	Cover, Base
6	7176292	Clamp Section, 2 req.
7	7088033	Clamp Retainer, 2 req
8	7170296	O–ring Seal, 2–7/8" x 3–1/4"
9	7170254	O–ring, 13/16" x 1–1/16"
10	7077870	Top Distributor
11	7170270	O–ring Seal, 2–3/4" x 3"
12	7113058	Resin Tank, 8" dia. x 40" (ESD1502R30)
–	7092202	Resin Tank, 10" dia. x 47" (ESD1502R39)
13	0502272	Resin, 1 cu ft (53 lbs) <sup>1</sup>
–	0501741	Resin, 1/2 cu ft <sup>1</sup>
14	7105047	Repl. Distributor
15	7026196	Tank Support
16	7096298	Top Cover
17	7112971	Shroud Kit (includes key nos. 15 – 16)
18	1202600	Nut–Ferrule
19	7113016	Tubing Assembly, B.V.

<sup>1</sup> ESD1502R30 uses 3/4 cu ft (40 lbs),  
ESD1502R39 uses 1 cu ft

Key No.	Part Number	Part Description
20	7095470	Brine Tube
21	7131365	Screen
22	7113008	Float, Stem & Guide
23	1205500	Clip
24	7092252	Brine Valve Body
25	7080653	Clip
■	7116488	Brine Valve Assembly (includes 19 – 25)
26	0900431	Hose Clamp
27	1103200	Hose Adaptor
28	9003500	Grommet
29	7112612	Brine Tank
30	7155034	Screw
31	7100819	Brinewell
32	7082150	Nut
33	7155115	Brinewell Cover
34	7180437	Brine Tank Cover
35	7171349	Screen
36	0900060	O–ring Seal
37	2204101	Turbine Support
38	7117858	Turbine
39	7248714	Wiring Harness/Sensor Housing

EcoWater Systems, Inc.  
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(651) 739–5330

# REPAIR PARTS



Key No.	Part Number	Part Description
1	7077472	Expansion Pin
2	7030713	Switch
3	7117816	Spacer
4	7070412	Screw, #4-24 x 1-1/8"
5	7131755	Screw, #6-20 x 7/8" (2)
6	7218793	Motor
7	0900857	Screw, #6-20 x 3/8" (2)
8	7117808	Motor Plate
9	0503288	Bearing
10	7113927	Cam and Gear
11	7142942	Clip (drain)
12	0501228	Flow Plug, #18 (ESD1502R30)
-	7204524	Flow Plug, #23 (ESD1502R39)
13	0900431	Hose Clamp
14	7024160	Drain Hose Adaptor
15	7170327	O-ring, 5/8" x 13/16"
16	7074123	Screw, #10-14 x 2 (5)
17	7085263	Valve Cover
18	7170238	O-ring, 7/16" x 5/8"
19	7170212	O-ring, 3/4" x 15/16"
20	7082087	Wave Washer
21	7199232	Rotor & Disc
22	7170246	O-ring, 3-3/8" x 3-5/8"
23	7081764	Seal (nozzle & venturi)
24	7134224	Rotor Seal
25	7170204	O-ring, 3/8" x 9/16"
26	7092642	Plug (drain seal)
27	7129889	Spring
28	7082053	Valve Body
29	7170319	O-ring, 1/4" x 3/8" (2)
30	7081201	Retainer (nozzle & venturi)
31	7081104	Nozzle & Venturi Housing
32	1148800	Flow Plug, .3 gpm
33	7198642	Nozzle & Venturi-Gasket Kit (ESD1502R30)
-	7190547	Gasket only (Black)
-	7187772	Nozzle & Venturi-Gasket Kit (ESD1502R39)
-	7204362	Gasket only (Black)
34	7146043	Screen
35	7167659	Screen Support
36	7170262	O-ring, 1-3/16" x 1-3/8"
37	7199729	Cap
38	0521829	Flow Plug, .1 gpm (ESD1502R30)
-	7084607	Flow Plug, .15 gpm (ESD1502R39)
39	7095030	Cone Screen
40	7116713	Clip (2)
41	0507369	Installation Nut (2)
42	0507615	Installation Tube (2)
43	7170335	Washer (2)
44	2207800	Installation Adaptor (2) - includes key no. 45
45	7170288	O-ring, 15/16" x 1-3/16" (2)
46	7207726	Wire
-	7207718	Hose Clamp
47	7129871	Bypass Valve (optional - not included)
■	7187065	Nozzle & Venturi Assem. (ESD1502R30)
	7137507	Nozzle & Vent. Assem. (ESD1502R39)
■	7129716	Seal Kit (incl. key nos. 18, 19, 22 - 25)
■	7125982	Repl. Valve (includes key nos. 16 - 28)